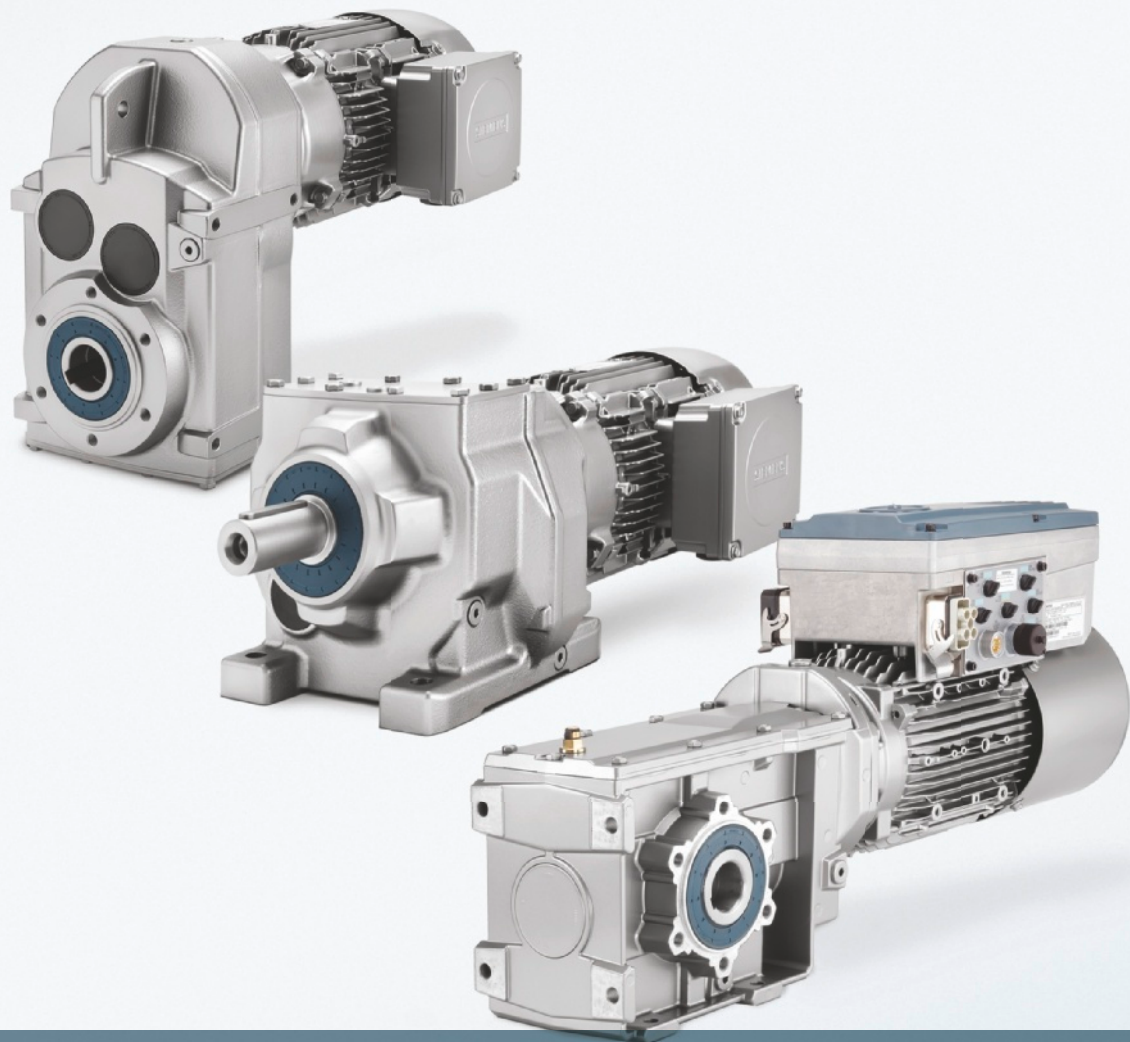


SIEMENS



SIMOGEAR

Geared Motors

Sizes 19 to 189 · Torques up to 19500 Nm · Power ratings up to 55 kW



product
design award


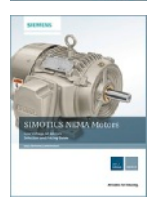
2013

Catalog
MD 50.1

Edition
2015

Related catalogs

<p>SIMOGEAR Gearboxes with adapter</p> <p>MD 50.11</p> <p>E86060-K5250-A211-A3-7600</p>	
<p>MOTOX Geared Motors</p> <p>D 87.1</p> <p>E86060-K5287-A111-A4-7600</p>	
<p>SIMOTICS Low-Voltage Motors Type series 1LE1, 1MB1 and 1PC1 Frame sizes 71 to 315 Power range 0.18 to 200 kW</p> <p>D 81.1</p> <p>E86060-K5581-A111-A7-7600</p>	
<p>FLENDER Couplings Standard Couplings</p> <p>MD 10.1</p> <p>E86060-K5710-A111-A5-7600</p>	
<p>FLENDER SIG Standard industrial gear units</p> <p>MD 30.1</p> <p>E86060-K5730-A111-A3-7600</p>	
<p>FLENDER SIP Standard Industrial Planetary Gear Units</p> <p>MD 31.1</p> <p>E86060-K5731-A111-A3-7600</p>	
<p>Motion Control Drives SINAMICS Inverters for Single-Axis Drives and SIMOTICS Motors</p> <p>D 31</p> <p>E86060-K5531-A101-A2-7600</p>	

<p>Industrial Communication SIMATIC NET</p> <p>IK PI</p> <p>E86060-K6710-A101-B8-7600</p>	
<p>SIMOTICS NEMA Motors Low Voltage AC Motors Selection and Pricing Guide</p> <p>D 81.2</p> <p>Further details available on the Internet at: www.usa.siemens.com/motors</p>	
<p>SIMOGEAR Konfigurator SIMOGEAR Konfigurator Informieren / Projektieren (CD)</p> <p>SIMOGEAR</p> <p>E86060-D5750-A100-A2-7400</p>	

Additional documentation

You will find all information material, such as brochures, catalogs, manuals and operating instructions for standard drive systems up-to-date on the Internet at the address:

<http://www.siemens.com/gearedmotors>

You can order the listed documentation or download it in common file formats (PDF, ZIP).



SIMOGEAR

Geared Motors

Catalog MD 50.1 · 2015

Dear Customer,

We are happy to present you with the new Catalog MD 50.1 Edition 2015. This catalog supersedes Catalog MD 50.1 · 2014.



The catalog has been revised and expanded:

- The series of helical, parallel shaft and bevel geared motors have been expanded with two further sizes with torques up to 19 500 Nm.
- Worm geared motors of series S with torques of up to 116 Nm have now been added,
- as well as the functionally safe rotary encoders IN 8.5834 and IA 8.5883 up to motor size 200.



We hope that you often use our new Catalog MD 50.1 and find it helpful. We will be glad to receive your suggestions and recommendations for improvement at catalogs.industry@siemens.com (please make reference to the catalog name).

As a supplement to this catalog, our SIMOGEAR Configurator electronic catalog helps you when selecting the optimum geared motor. You can call up the 2D and 3D data in all of the usual file formats and directly process it further. Using the integrated ARCHIMEDES engineering tool, you can simply determine the optimum geared motor for frequently occurring applications – such as travel and hoisting drives – in just a few steps.

The SIMOGEAR Configurator software is available as CD-ROM that can be installed on your PC. Please contact your local Siemens office if you would like to obtain this software.

Up-to-date information about SIMOGEAR geared motors is available on the Internet at: www.siemens.com/gearedmotors

You can access our online version of the SIMOGEAR Configurator and online ordering system on the Internet at: www.siemens.com/gearedmotors

With kind regards,



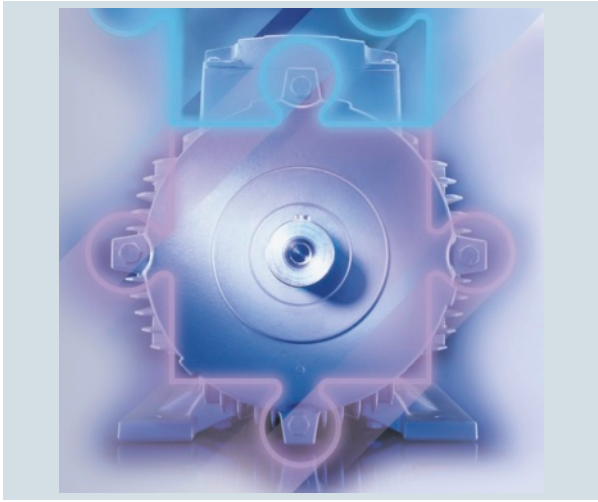
Volker Schacher
Head of Product Management

Siemens AG, Digital Factory, Motion Control, Geared Motors

SIMOGEAR

Geared Motors

Motion Control



Catalog MD 50.1 · 2015

Supersedes:
Catalog MD 50.1 · 2014

Refer to the Industry Mall for current updates of
this catalog:

www.siemens.com/industrymall

The products contained in this catalog
can also be found in the e-Catalog SIMOGEAR
Configurator 2.0.

Order No.:
E86060-D5750-A100-A2-7400 (CD-ROM)

Please contact your local Siemens branch.

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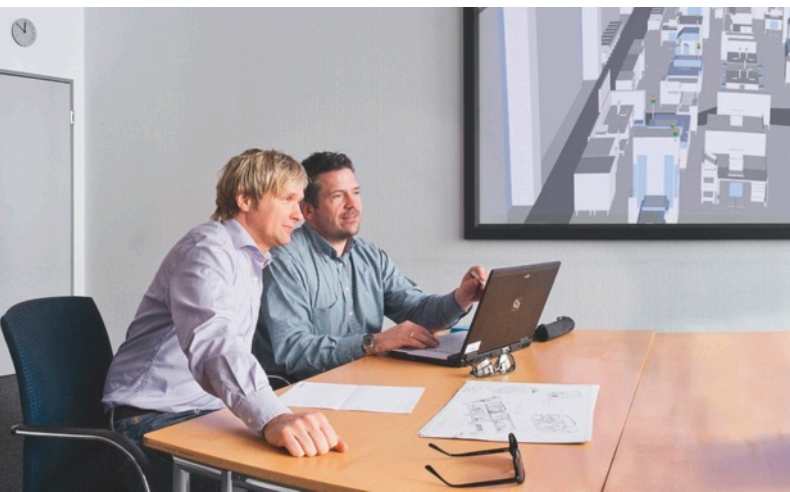
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www.pefc.org



The products and systems described in
this catalog are manufactured/distributed
under application of a certified quality
management system in accordance with
DIN EN ISO 9001 (Certified Registration
No. DE-409908 QM08). The certificate is
recognized by all IQNet countries.

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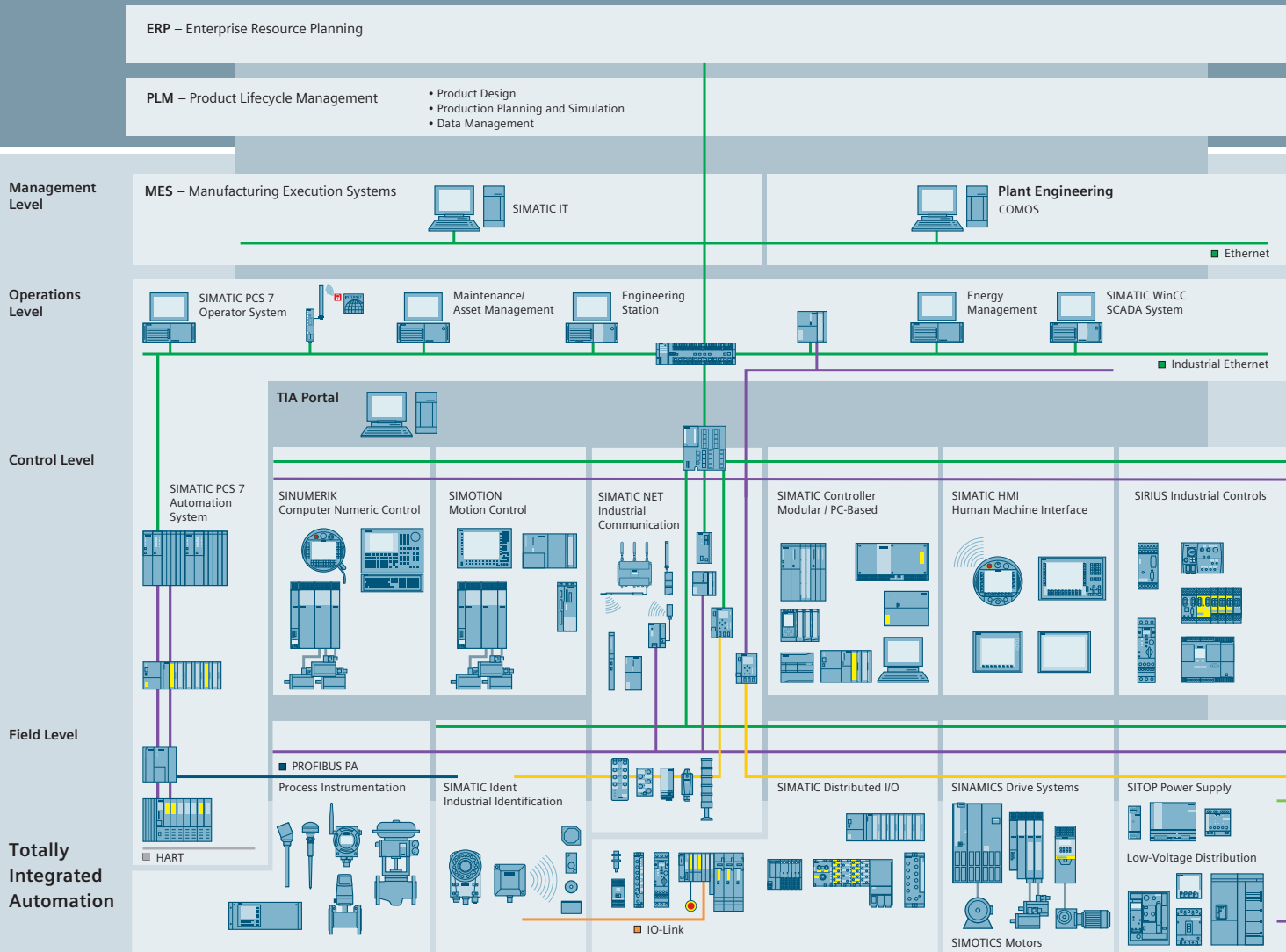
Answers for industry.

Integrated technologies, vertical market expertise and services for greater productivity, energy efficiency, and flexibility.

Siemens is the world's leading supplier of innovative and environmentally friendly products and solutions for industrial companies. End-to-end automation technology and industrial software, solid market expertise, and technology-based services are the levers we use to increase our customers' productivity, efficiency and flexibility.

We consistently rely on integrated technologies and, thanks to our bundled portfolio, we can respond more quickly and flexibly to our customers' wishes. With our globally unmatched range of automation technology, industrial control and drive technology as well as industrial software, we equip companies with exactly what they need over their entire value chain – from product design and development to production, sales and service. Our industrial customers benefit from our comprehensive portfolio, which is tailored to their market and their needs.

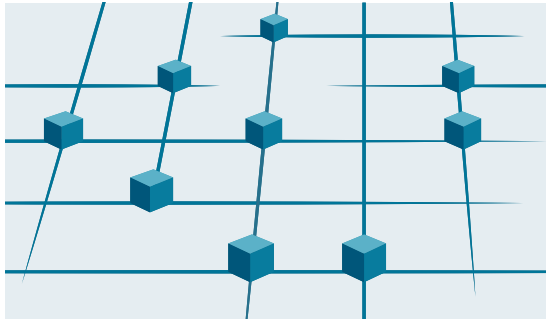
Market launch times can be reduced by up to 50% due to the combination of powerful automation technology and industrial software. At the same time, the costs for energy or waste water for a manufacturing company can be reduced significantly. In this way, we increase our customers' competitive strength and make an important contribution to environmental protection with our energy-efficient products and solutions.



Efficient automation starts with efficient engineering.

Totally Integrated Automation: Efficiency driving productivity.

Efficient engineering is the first step toward better production that is faster, more flexible, and more intelligent. With all components interacting efficiently, Totally Integrated Automation (TIA) delivers enormous time savings right from the engineering phase. The result is lower costs, faster time-to-market, and greater flexibility.



Totally Integrated Automation
Efficient interoperability of all automation components



■ PROFINET
■ Industrial Ethernet
■ PROFIBUS
■ AS-Interface
■ KNX GAMMA instabus

Totally
 Integrated
 Power

A unique complete approach for all industries

As one of the world's leading automation suppliers, Siemens provides an integrated, comprehensive portfolio for all requirements in process and manufacturing industries. All components are mutually compatible and system-tested. This ensures that they reliably perform their tasks in industrial use and interact efficiently, and that each automation solution can be implemented with little time and effort based on standard products. The integration of many separate individual engineering tasks into a single engineering environment, for example, provides enormous time and cost savings.

With its comprehensive technology and industry-specific expertise, Siemens is continuously driving progress in manufacturing industries – and Totally Integrated Automation plays a key role.

Totally Integrated Automation creates real value added in all automation tasks, especially for:

- **Integrated engineering**
Consistent, comprehensive engineering throughout the entire product development and production process
- **Industrial data management**
Access to all important data occurring in productive operation – along the entire value chain and across all levels
- **Industrial communication**
Integrated communication based on international cross-vendor standards that are mutually compatible
- **Industrial security**
Systematic minimization of the risk of an internal or external attack on plants and networks
- **Safety Integrated**
Reliable protection of personnel, machinery, and the environment thanks to seamless integration of safety technologies into the standard automation

Making things right with Totally Integrated Automation

Totally Integrated Automation, industrial automation from Siemens, stands for the efficient interoperability of all automation components. The open system architecture covers the entire production process and is based on end-to-end shared characteristics: consistent data management, global standards, and uniform hardware and software interfaces.

Totally Integrated Automation lays the foundation for comprehensive optimization of the production process:

- Time and cost savings due to efficient engineering
- Minimized downtime due to integrated diagnostic functions
- Simplified implementation of automation solutions due to global standards
- Better performance due to interoperability of system-tested components

Introduction



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Introduction

Orientation

Overview

1

Geared motors

SIMOGEAR is the new generation of geared motors from Siemens. SIMOGEAR gearboxes are available as helical, parallel shaft, bevel, helical worm and worm geared motors.

State-of-the-art production technology and improved testing methods ensure the highest degree of quality and reliability.

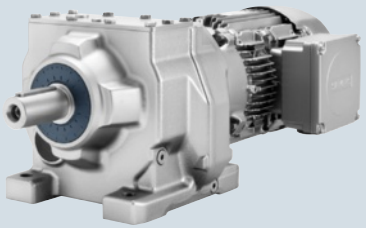
Gearbox type	Gearbox designation	Number of sizes	Maximum output torque	Transmission ratio	Maximum motor power ¹⁾
			T_{2N} Nm	i -	P_1 kW
Helical geared motors					
	Z19 ... Z189 (2-stage)	13	100 ... 19 000	3.4 ... 57	55
	D19 ... D189 (3-stage)	13	100 ... 19 000	36 ... 328	55

Fig.1/1 Helical geared motor D/Z

Parallel shaft geared motors					
	FZ29 ... FZ189 (2-stage)	11	150 ... 19 000	4 ... 48	55
	FD29 ... FD189 (3-stage)	11	150 ... 19 000	58 ... 377	55

Fig.1/2 Parallel shaft geared motor FD/FZ

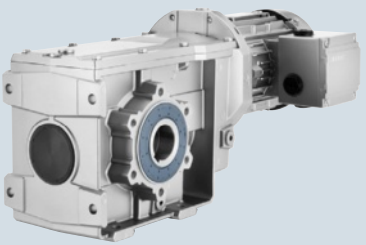
Bevel geared motors					
	B19 ... B49 (2-stage)	4	50 ... 450	3.6 ... 59	9.2

Fig.1/3 Bevel geared motor B

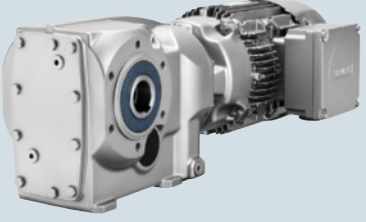
	K39 ... K189 (3-stage)	10	150 ... 19 500	5.7 ... 237	55
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Fig.1/4 Bevel geared motor K

¹⁾ With 4-pole motor for a 50 Hz line frequency in integral type of construction

Geared motors

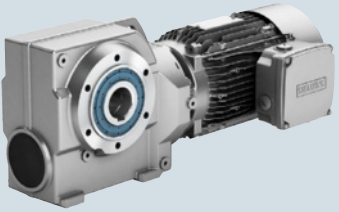
Gearbox type	Gearbox designation	Number of sizes	Maximum output torque	Transmission ratio	Maximum motor power ¹⁾
			T_{2N} Nm	i -	P_1 kW
Helical worm geared motors					
	C29 ... C89 (2-stage)	5	61 ... 1 450	6.5 ... 363	7.5

Fig. 1/5 Helical worm geared motor C

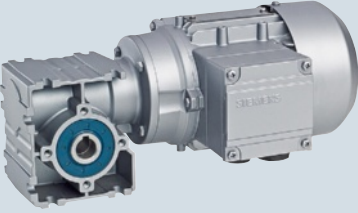
Worm geared motors					
	S09 ... S29 (1-stage)	3	33 ... 116	5.0 ... 100	0.55

Fig. 1/6 Worm geared motor S

¹⁾ With 4-pole motor for a 50 Hz line frequency in integral type of construction

Torque classes

SIMOGEAR geared motors are classified according to fixed torque steps.

Within a torque class, for the various gearbox types, almost the same output torques are achieved.

Helical gearboxes Z and D (2-stage and 3-stage)

Size	-	19	29	39	49	59	69	79	89	109	129	149	169	189	
Maximum output torque	Nm	-	100	140	200	320	450	600	840	1 680	3 100	5 000	8 000	14 000	19 000

Parallel shaft gearboxes FZ and FD (2-stage and 3-stage)

Size	-	-	29	39	-	49	69	79	89	109	129	149	169	189	
Maximum output torque	Nm	-	-	150	290	-	480	600	1 000	1 850	3 100	4 850	8 000	13 600	19 000

Bevel gearbox B (2-stage)

Size	-	19	29	39	-	49	-	-	-	-	-	-	-	-
Maximum output torque	Nm	-	50	110	250	-	450	-	-	-	-	-	-	-

Bevel gearbox K (3-stage)

Size	-	-	-	39	-	49	69	79	89	109	129	149	169	189
Maximum output torque	Nm	-	-	220	-	420	600	820	1 600	2 900	4 400	8 000	13 000	19 500

Helical worm gearbox C (2-stage)

Size	-	-	29	39	-	49	69	-	89	-	-	-	-	-
Maximum output torque	Nm	-	-	110	235	-	400	675	-	1 450	-	-	-	-

Worm gearbox S (1-stage)

Size		09	19	29	-	-	-	-	-	-	-	-	-	-
Maximum output torque	Nm	33	72	116	-	-	-	-	-	-	-	-	-	-

Introduction

Orientation

Overview

1

Benefits

High efficiency for a fast return on investment

When developing SIMOGEAR geared motors, significant emphasis was placed on achieving the highest possible energy efficiency.

Using the plug-on pinion principle in the first SIMOGEAR gearbox stage, higher transmission ratios are achieved when compared to gearboxes with slip-on pinion.

This means that frequently instead of 3-stage gearboxes with an efficiency of approx. 94 %, 2-stage helical and parallel shaft gearboxes with a high efficiency of ≥ 96 % can be used.

2-stage SIMOGEAR bevel geared motors B have a mechanical efficiency of ≥ 96 %. With a range of transmission ratios from $i = 3.5$ to 60, they have been specifically designed to address the requirements in conveyor technology.

Together with the new Siemens 1LE1 motors for efficiency classes IE2 (High Efficiency) and IE3 (Premium Efficiency), SIMOGEAR geared motors allow a high amount of energy to be saved and reduce the stress on our environment.

Extremely compact and low weight for easy handling in the machine or system in the smallest space

An integrated end shield instead of an adapter plate and end shield reduces the weight and space required in your machine or system. In addition, interfaces and sealing joints are reduced as a result of the integrated end shield.

With the SIMOGEAR bevel gearboxes, the length was able to be significantly reduced through an optimized bearing design.

SIMOGEAR helical gearboxes D/Z29 to D/Z39 (200 Nm), parallel shaft gearboxes F29 (150 Nm), bevel gearboxes B19 to B49 (450 Nm) and helical worm gearboxes C29 (100 Nm) have an aluminum gearbox housing.

Harmoniously coordinated modular system to provide the optimum solution for your particular drive task

The fine size graduations of SIMOGEAR gearboxes provide you the optimum drive for every application regarding gearbox type, rated output torque and transmission ratio.

When developing SIMOGEAR geared motors, significant emphasis was placed on achieving well-balanced gearbox properties.

With SIMOGEAR geared motors you can depend on harmonized and coordinated properties regarding:

- Maximum output torque
- Permissible radial force
- Output shaft diameter
- Bearing service life
- Housing stiffness
- Gearing reliability (fatigue endurable)
- Shaft strength (fatigue endurable)

Fine ratio stages to always obtain the output speed required

With their wide range of transmission ratios, from very low up to very high, SIMOGEAR geared motors provide the necessary flexibility for your drive application.

As a result of the wide ratio range, 4-pole induction motors can be mainly used – the most cost-effective solution.

Further, the gearboxes are quieter as a result of the lower circumferential velocity of the first gearbox stage.

Intelligent sealing concept for a high degree of maintenance friendliness

An optimally coordinated sealing concept is available for the SIMOGEAR gearbox output shaft to address the various application areas and ambient conditions.

Gearbox sizes 19 and 29 are lubricated for life.

All SIMOGEAR geared motors with venting have as standard a pressure breather valve.

The MODULOG modular principle for the highest degree of flexibility

The motors used for the SIMOGEAR geared motors have a modular design using our well-proven MODULOG modular principle.

The core of the modular system is a basic motor dimensioned for international line supply conditions with power ratings extending from 0.09 up to 55 kW (4/2/6/8-pole).

At the non-drive end, you have an individually configurable mounting shaft system, e.g. for brakes, backstop, rotary pulse encoder, external fan and canopy.

This guarantees high availability as well as short delivery times.

Integration

SIMOGEAR geared motors are part of the Siemens Integrated Drive System (IDS).

Siemens Integrated Drive System (IDS) stands for standardized, tailored and modular components, systems and services. It encompasses the world's most extensive portfolio – from geared motors through motor starters and inverters, identification systems and switchgear up to the automation.

The complete portfolio is exhaustively tested – also in the field – for maximum availability. The components are harmonized and coordinated with one another with standard interfaces and power bus systems.

Siemens Integrated Drive System (IDS) therefore allows you to reduce your installation and commissioning costs, and at the same time increase flexibility and system availability.

Energy-efficient motors, motor starters, soft-starters and inverters as well as the Power Management system based on SIMATIC PCS 7, SIMATIC WinCC and multi-function measuring devices ensure a high energy saving potential.

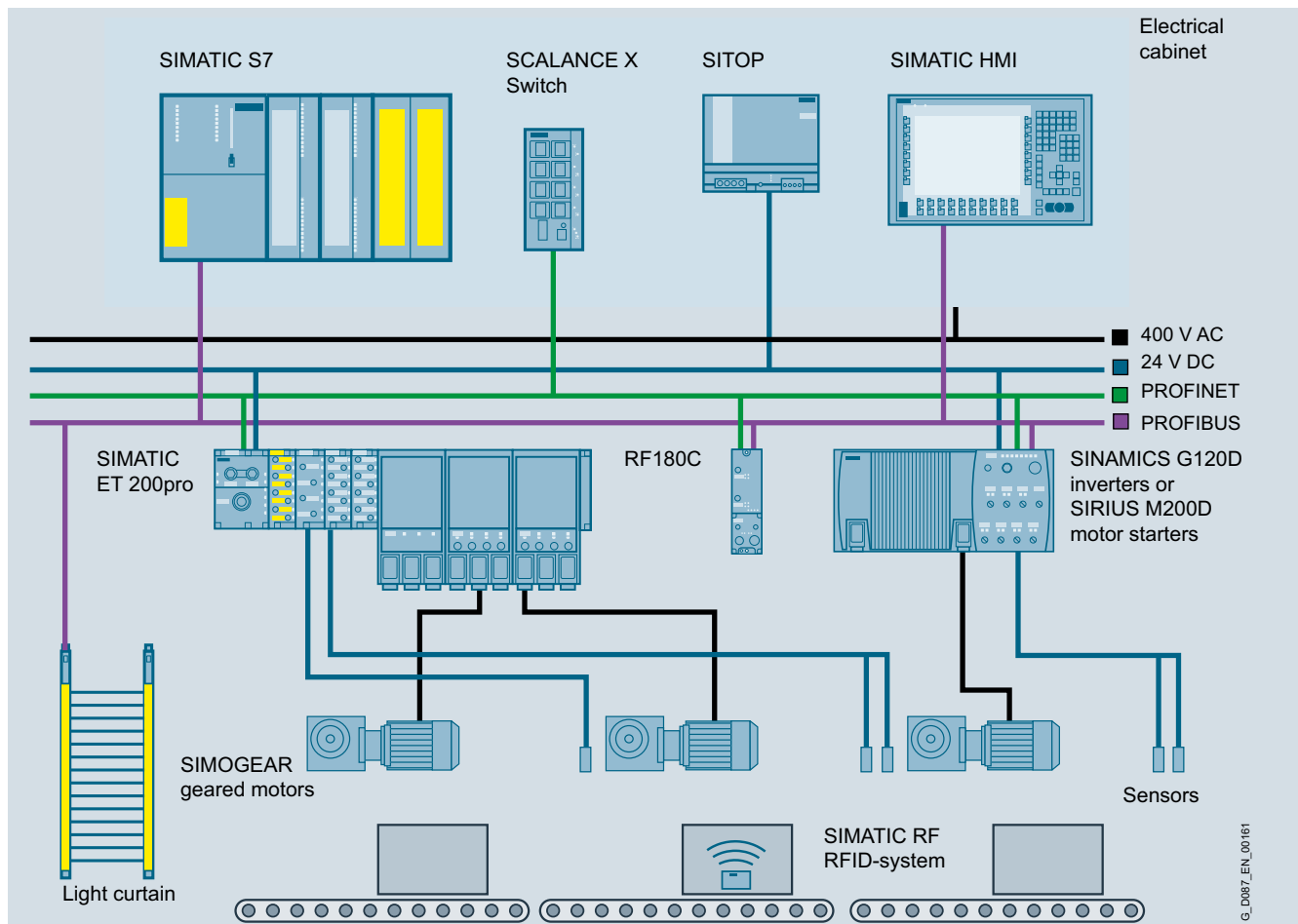


Fig. 1/7 Example of the Siemens Integrated Drive System (IDS) for sophisticated conveyor applications

Introduction

Orientation

1

Configuration

SIMOGEAR Configurator (CD-ROM)

The selection tables list an optimized selection of geared motor combinations regarding size, service factor and number of poles. The SIMOGEAR Configurator contains all of the technically possible combinations and provides you with various wizards to select the optimum drive.

The SIMOGEAR Configurator makes it easy to select the optimum SIMOGEAR geared motor, and in addition to the technical specifications, also supplies the correct article No. and the prices of the geared motors.

Data sheets, circuit diagrams, dimensional drawings to scale and 3D models in the usual formats can be generated for the various products.

Note:

Utilize the new functionality of our SIMOGEAR Configurator electronic catalog.

For the selected mounting position, the 3D dimensional drawings show the exact position of the oil valves.

The ARCHIMEDES engineering tool integrated in the SIMOGEAR Configurator supports you when selecting and dimensioning geared motors for your particular application.

The SIMOGEAR Configurator can be accessed in the Internet at: www.siemens.com/gearedmotors

You can order a version of the SIMOGEAR Configurator that you can install on your PC from your local Siemens office or in the Internet.

Description	Article No.
SIMOGEAR Configurator (CD-ROM)	E86060-D5750-A100-A2-7400
Version 2.0 German/English	

STARTER commissioning tool

The STARTER commissioning tool (V4.3 SP3 and higher) simplifies the commissioning and maintenance of the SINAMICS G110M motor integrated frequency inverter. The operator guidance combined with comprehensive, user-friendly functions for the relevant drive solution allow you to commission the device quickly and easily.

SINAMICS Startdrive commissioning tool

SINAMICS Startdrive is a tool for configuring, commissioning, and diagnosing the SINAMICS family of drives and is integrated into the TIA Portal. SINAMICS Startdrive can be used to implement drive tasks with the SINAMICS G110M (SINAMICS Startdrive V13 and higher), SINAMICS G120, SINAMICS G120C, SINAMICS G120D and SINAMICS G120P inverter series. The commissioning tool has been optimized with regard to user friendliness and consistent use of the TIA Portal benefits of a common working environment for PLC, HMI and drives.

SIZER for Siemens Drives

For the project engineering of SIMOGEAR geared motors operating on SINAMICS frequency inverters, the engineering software "Sizer for Siemens Drives" should be used which is available free of charge. This ensures that all the relevant aspects are taken into consideration (line voltage, type of DC link (regulated/unregulated), utilization of the motor in accordance with temperature class B or F, motor current for inverter operation in Y circuit or D circuit, calculation of the regenerative power, dimensioning of the braking resistor with reference to the entered cyclic operation, etc.)

You can download the engineering software "Sizer for Siemens Drives" at:

<http://support.automation.siemens.com/WW/view/en/10804987/133100>

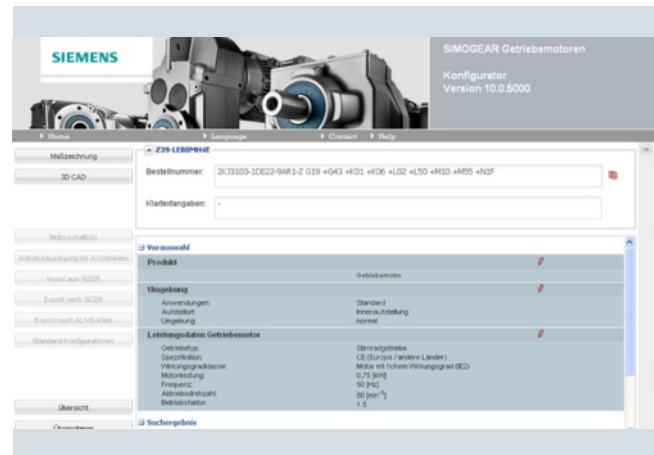


Fig. 1/8 SIMOGEAR Configurator

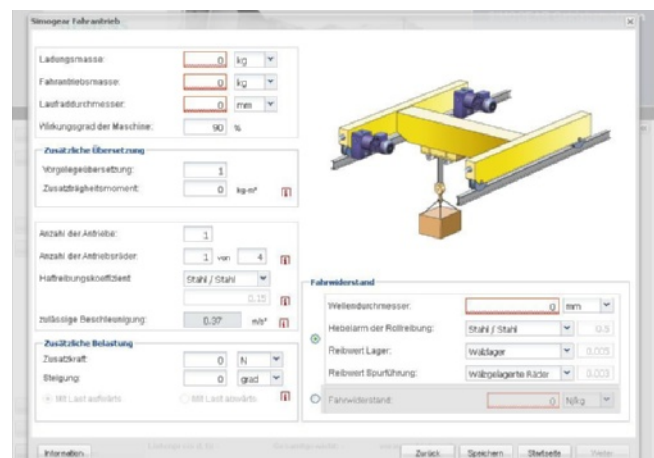


Fig. 1/9 ARCHIMEDES configuration tool

Overview

The article No. comprises a combination of digits and letters. To obtain a better overview, the article No. is split up into three, hyphenated blocks.

Example:

2KJ3105-1EM22-2AS1-Z +D01+M55

The first block (data positions 1 to 7) designates the gearbox type; the second (data positions 8 to 12) designates the output shaft and the motor type; and additional design characteristics are coded in the third block (data positions 13 to 16).

Ordering data

- Complete article No., with a **-Z** suffix, and order code(s) or plain text.
- If a quotation is available, please specify the quotation number in addition to the article No.
- When ordering a complete geared motor as replacement unit, the serial number of the original geared motor must be specified.

Structure of the article No.

Position of the article No.	1	2	3	4	5	6	7	-	8	9	10	11	12	-	13	14	15	16	-	Z			
SIMOGEAR geared motors																							
1st to 5th position:	Helical gearbox Z, 2-stage							2	K	J	3	1											
Digit, letter,	Helical gearbox D, 3-stage							2	K	J	3	2											
Letter, digit, digit	Parallel shaft gearbox FZ, 2-stage							2	K	J	3	3											
	Parallel shaft gearbox FD, 3-stage							2	K	J	3	4											
	Bevel gearbox B, 2-stage							2	K	J	3	5											
	Bevel gearbox K, 3-stage							2	K	J	3	5											
	Helical worm gearbox C, 2-stage							2	K	J	3	6											
	Worm gearbox S, 1-stage							2	K	J	3	7											
6th to 7th position:	Gearbox size																						
Digit, digit																							
8th position:	Output shaft																						
Digit																							
9th to 10th position:	Motor size																						
Letter, letter																							
11th position:	Induction motor LA																				1		
Digit	Induction motor LE General Purpose (Aluminum)																					2	
	Induction motor LES Severe Duty; Basic Line (Cast iron)																					3	
12th position:	Motor with improved efficiency (Standard Efficiency IE1)																					1	
Digit	Motor with high efficiency (High Efficiency IE2)																					2	
	Motor with premium efficiency (Premium Efficiency IE3)																					3	
13th position:	Frequency, voltage																						
Digit																							
14th position:	Foot-mounted design																					A	
Letter	Foot/flange-mounted design																					B	
	Torque arm																						D
	Flange-mounted design																						F
	Housing flange design																						H
15th to 16th position:	Transmission ratio																						
Letter, digit																							
Special designs																							
Coded	Order code required																					- Z	
Non-coded	Plain text required																						

Introduction

Guidelines for selection and ordering

Article No. code

Overview (continued)

Ordering example

A helical geared motor is required:

- Gearbox type, size Z59
- Motor 1.5 kW, 4-pole with 50 Hz line frequency
- Output speed 49, transmission ratio $i = 28.89$
- Solid shaft V35 x 70
- Mounting position M1
- Terminal box position 1A

This results in the following article No. with order codes:

Position of the article No.		1	2	3	4	5	6	7	-	8	9	10	11	12	-	13	14	15	16	-	Z	+	Order codes		
Selection criteria	Requirements																								
Gearbox type	Helical gearbox Z, 2-stage	2	K	J	3	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Gearbox size	Size 59	2	K	J	3	1	0	5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Output shaft	Solid shaft V35 x 70	2	K	J	3	1	0	5	-	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Motor size	Size 90; 1.5 kW; 4-pole	2	K	J	3	1	0	5	-	1	E	M	.	.	.	.	.	.	.	.	.	.	.
Motor type	Induction motor LE General Purpose	2	K	J	3	1	0	5	-	1	E	M	2	.	.	.	.	.	.	.	.	.	.
Motor efficiency	High Efficiency IE2	2	K	J	3	1	0	5	-	1	E	M	2	2	.	.	.	.	.	.	.	.	.
Line voltage, frequency	230 V Δ/400 V Y // 460 V Y, 50/60 Hz	2	K	J	3	1	0	5	-	1	E	M	2	2	-	2	A	.	.	.	.	.	.
Mounting type	Foot-mounted design	2	K	J	3	1	0	5	-	1	E	M	2	2	-	2	A	.	.	.	.	.	.
Transmission ratio	$i = 28.89$	2	K	J	3	1	0	5	-	1	E	M	2	2	-	2	A	S	1	.	.	.	.
Mounting position	M1	2	K	J	3	1	0	5	-	1	E	M	2	2	-	2	A	S	1	-	Z	+	D01		
Terminal box position	1A	2	K	J	3	1	0	5	-	1	E	M	2	2	-	2	A	S	1	-	Z	+	D01	+	M55

Overview

Type designation of the gearboxes

Gearbox type	
Helical gearbox	-
Parallel shaft gearbox	F
Bevel gearbox, 2-stage	B
Bevel gearbox, 3-stage	K
Helical worm gearbox 2-stage	C
Worm gearbox 1-stage	S
Stage	
2-stage	Z
3-stage	D
Type	
Shaft	
Solid shaft	-
Hollow shaft	A
Plug-in shaft	E
Mounting	
Foot-mounted design	-
Foot/flange-mounted design	B
Flange-mounted design (A type)	F
Housing flange (C type)	Z
Torque arm	D
Connection	
Feather key/without feather key	-
Shrink disk	S
Splined shaft	T
SIMOLOC assembly system	R
Special features	
Reduced-backlash version	W

Type designation of the motors

Motor type	
Three-phase motors, integrated, mounted	LA, LE, LES
Special features	
High efficiency	E
Premium efficiency	P
Forced ventilation	F
High inertia fan	I
Canopy	W
Handwheel	D
Backstop	X
SINAMICS G110M ¹⁾	M
Brake	
Spring-operated, single-disk brake, DC energized	L, FDX
Size = rated braking torque	16
Adjusted braking torque	./10
Standard version	N
Enclosed version	G
Manual brake release	H
Manual brake release with locking mechanism	HA
Microswitch	M
Encoder	
Incremental encoder	IN
Resolver	IR
Absolute encoder	IA
Prepared for encoder mounting	IV
Functional safety	
Functionally safe rotary encoder	SI04

¹⁾ You will find further information about the SINAMICS G110M motor integrated frequency inverter in [Chapter 8](#).

Example:

F	D	A	D	S	89	-	LE	80M	4	EF	-	L8/4NH	-	IN
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)			

- (1) Gearbox type
- (2) Stage
- (3) Shaft
- (4) Mounting
- (5) Connection
- (6) Gearbox size
- (7) Motor type
- (8) Motor size
- (9) Number of poles
- (10) Special features
- (11) Brake
- (12) Encoder

Introduction

Guidelines for selection and ordering

Designs

Overview

Helical geared motors

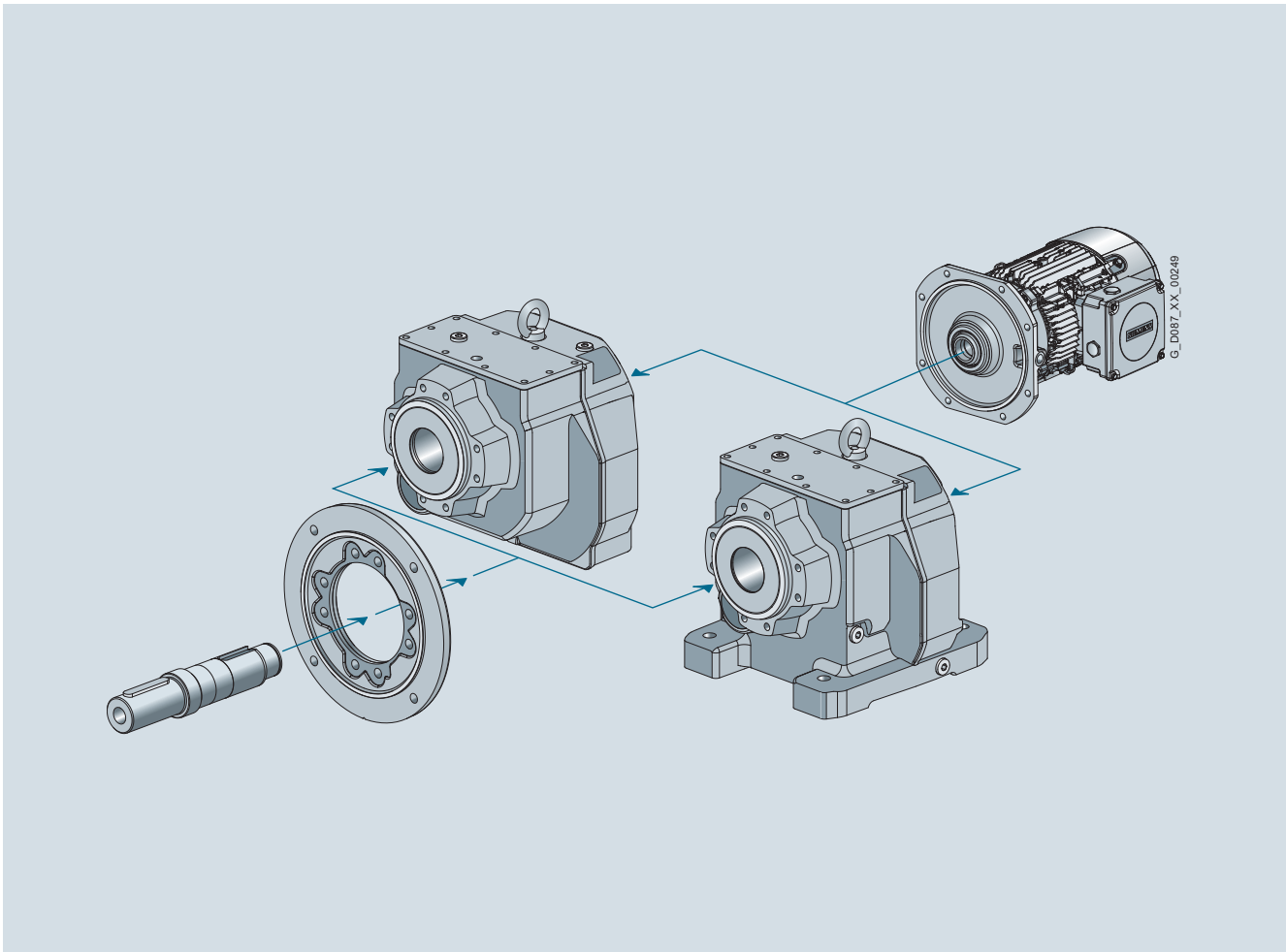


Fig. 1/10 Modular system, helical geared motor

SIMOGEAR helical geared motors are available in the following versions for mounting in any position:

- 2 or 3 stages
- Foot-mounted design
- Flange-mounted design
- Design with integrated housing flange
- Combined foot/flange-mounted design (size 29 to 89)
- Solid shaft design with and without feather key

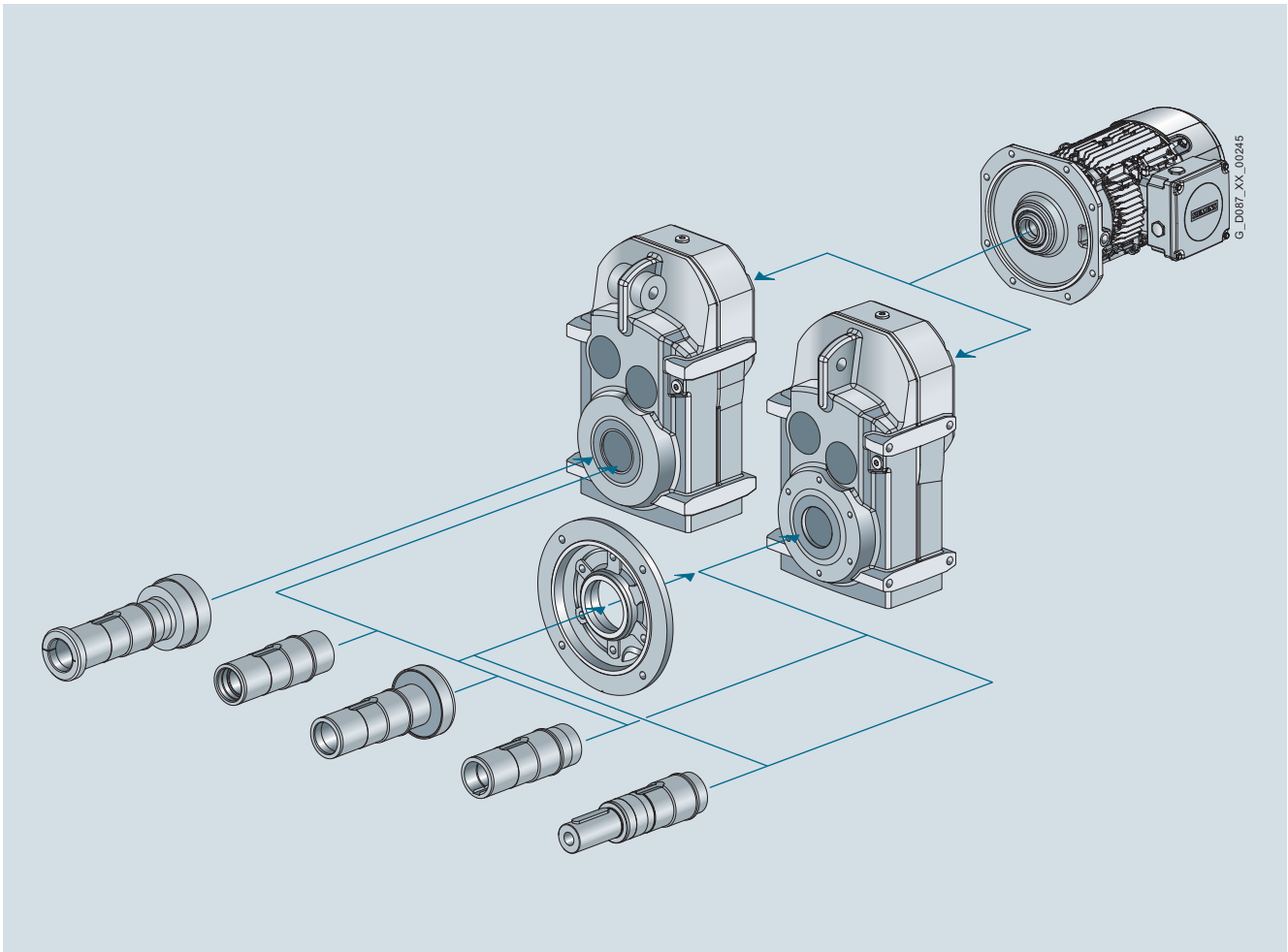
Overview (continued)**Parallel shaft geared motors**

Fig. 1/11 Modular system, parallel shaft geared motor

SIMOGEAR parallel shaft geared motors are available in the following versions for mounting in any position:

- 2 or 3 stages
- Shaft-mounted design with torque arm
- Flange-mounted design
- Design with integrated housing flange
- Foot-mounted design
- Hollow-shaft design with feather key, splined shaft, shrink disk or SIMOLOC assembly system
- Solid shaft design with and without feather key

Introduction

Guidelines for selection and ordering

Designs

Overview (continued)

Bevel geared motors B

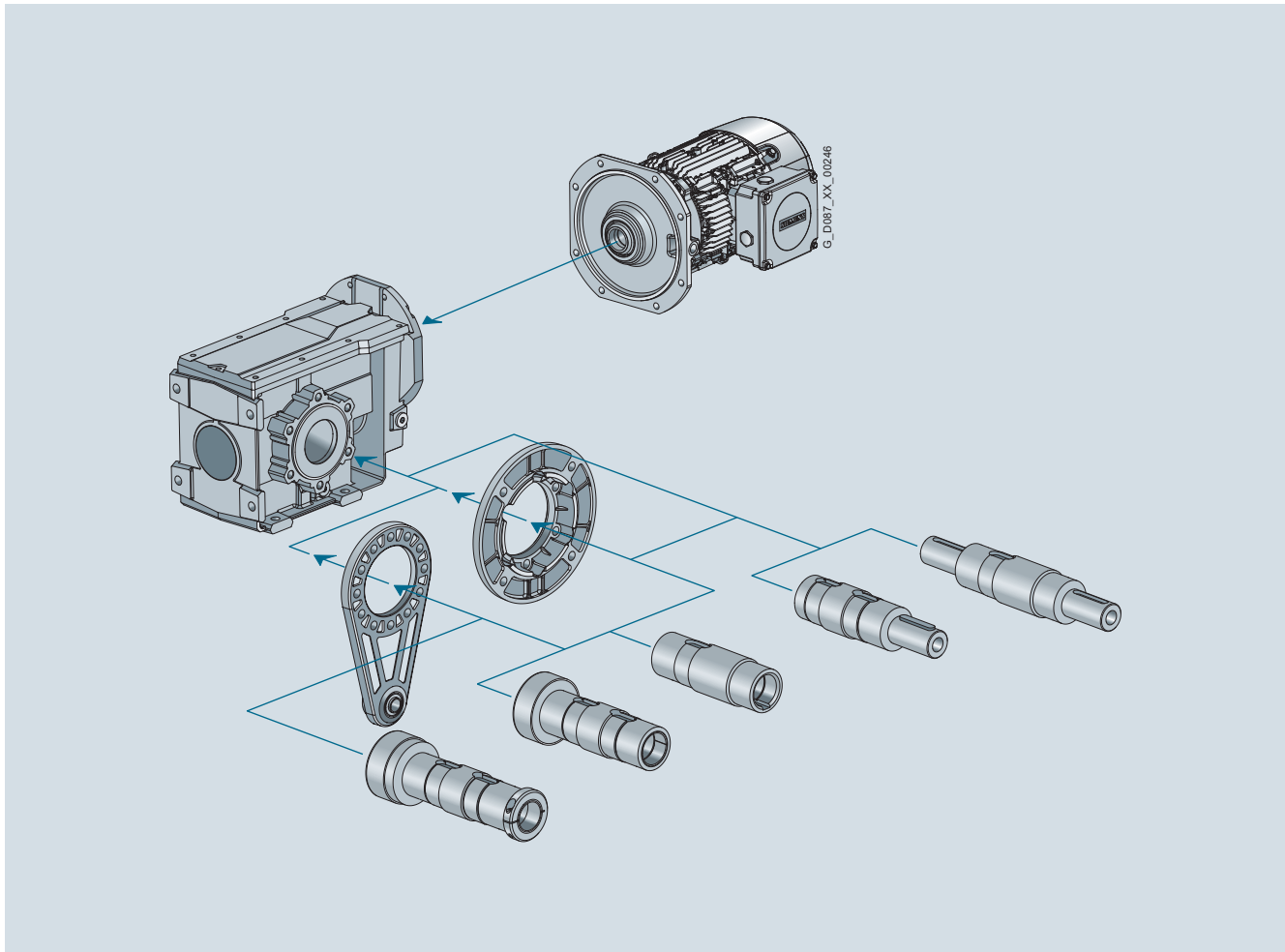


Fig. 1/12 Modular system, bevel geared motor B

SIMOGEAR bevel geared motors B are available in the following versions for mounting in any position:

- 2 stages
- Shaft-mounted design with torque arm
- Flange-mounted design
- Design with integrated housing flange
- Foot-mounted design
- Hollow-shaft design with feather key, splined shaft, shrink disk or SIMOLOC assembly system
- Solid shaft design with and without feather key (at one end or both ends)

For 2-stage bevel gearboxes B, the torque arm is supplied loose to enable it to be mounted as required on site. The position of the torque arm can be freely selected.

Overview (continued)

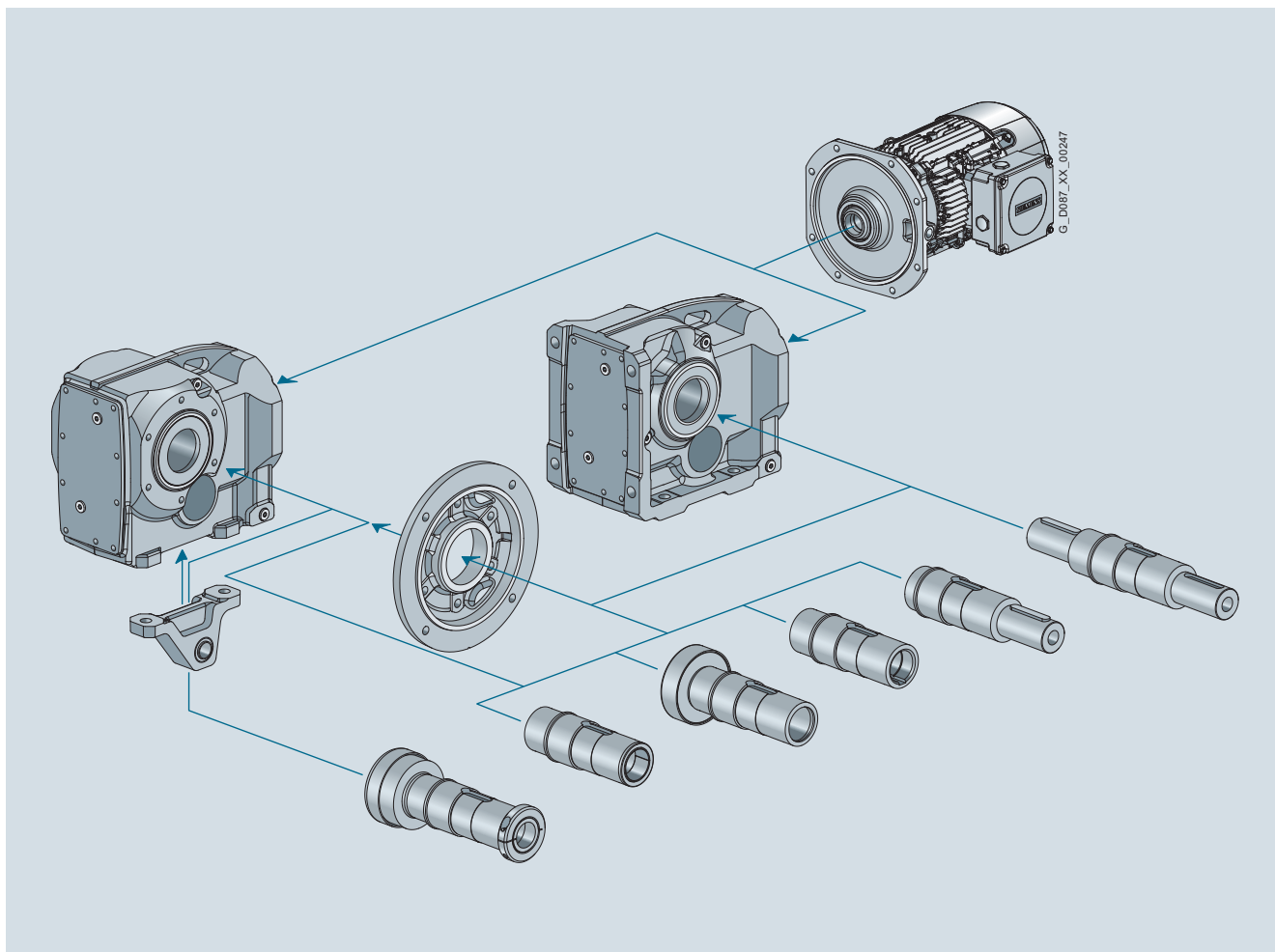
Bevel geared motors K


Fig. 1/13 Modular system, bevel geared motor K

SIMOGEAR bevel geared motors K are available in the following versions for mounting in any position:

- 3 stages
- Shaft-mounted design with torque arm
- Flange-mounted design
- Design with integrated housing flange
- Foot-mounted design
- Hollow-shaft design with feather key, splined shaft, shrink disk or SIMOLOC assembly system
- Solid shaft design with and without feather key (at one end or both ends)

Introduction

Guidelines for selection and ordering

Designs

Overview (continued)

Helical worm geared motors

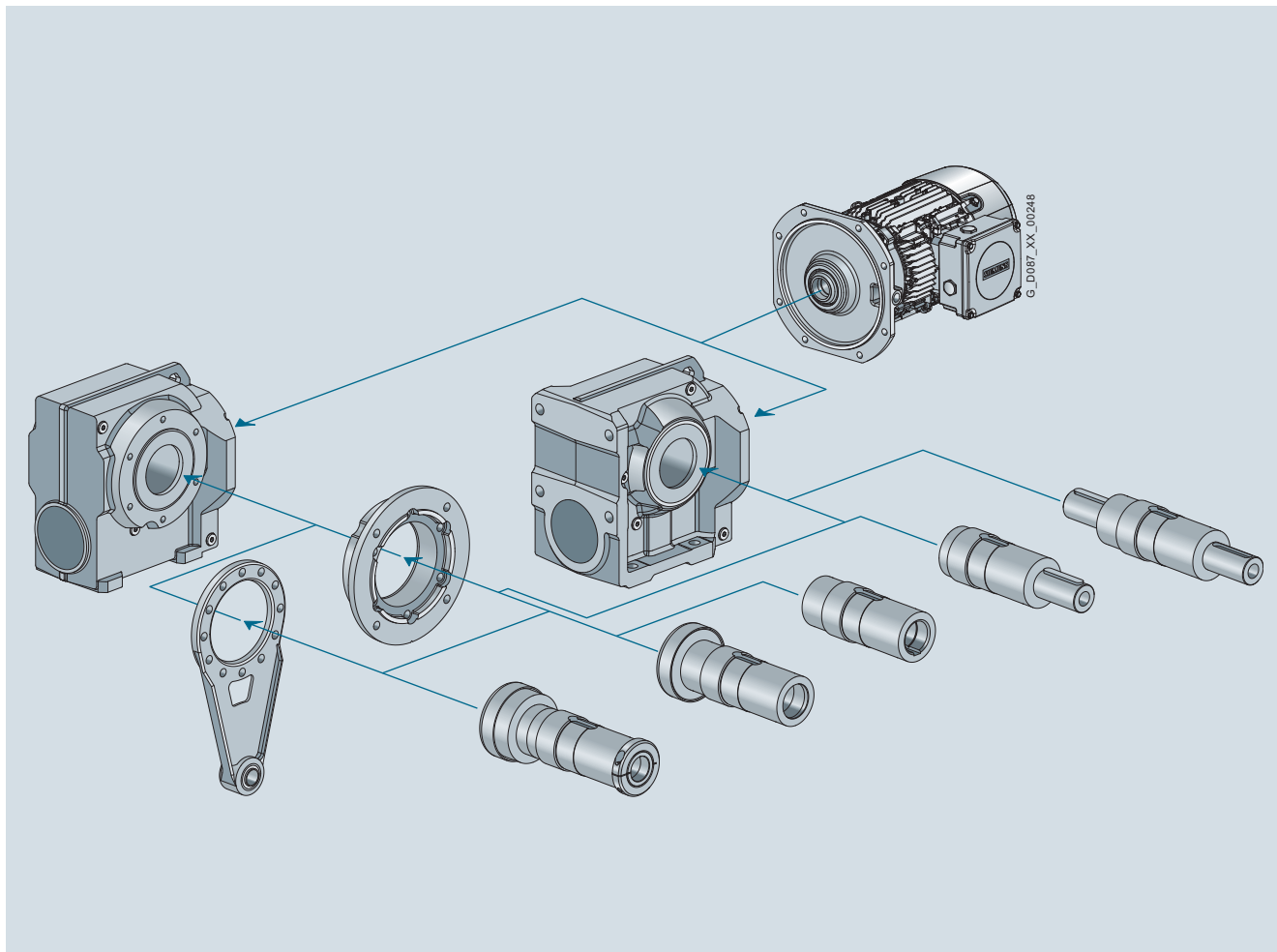


Fig. 1/14 Modular system, helical worm gearbox

SIMOGEAR helical worm gearboxes are available in the following versions for mounting in any position:

- 2 stages
- Shaft-mounted design with torque arm
- Flange-mounted design
- Design with integrated housing flange
- Foot-mounted design
- Hollow-shaft design with feather key, shrink disk or SIMOLOC assembly system
- Solid shaft design with and without feather key (at one end or both ends)

For helical worm gearboxes, the torque arm is supplied loose to enable it to be mounted as required on site. The position of the torque arm can be freely selected.

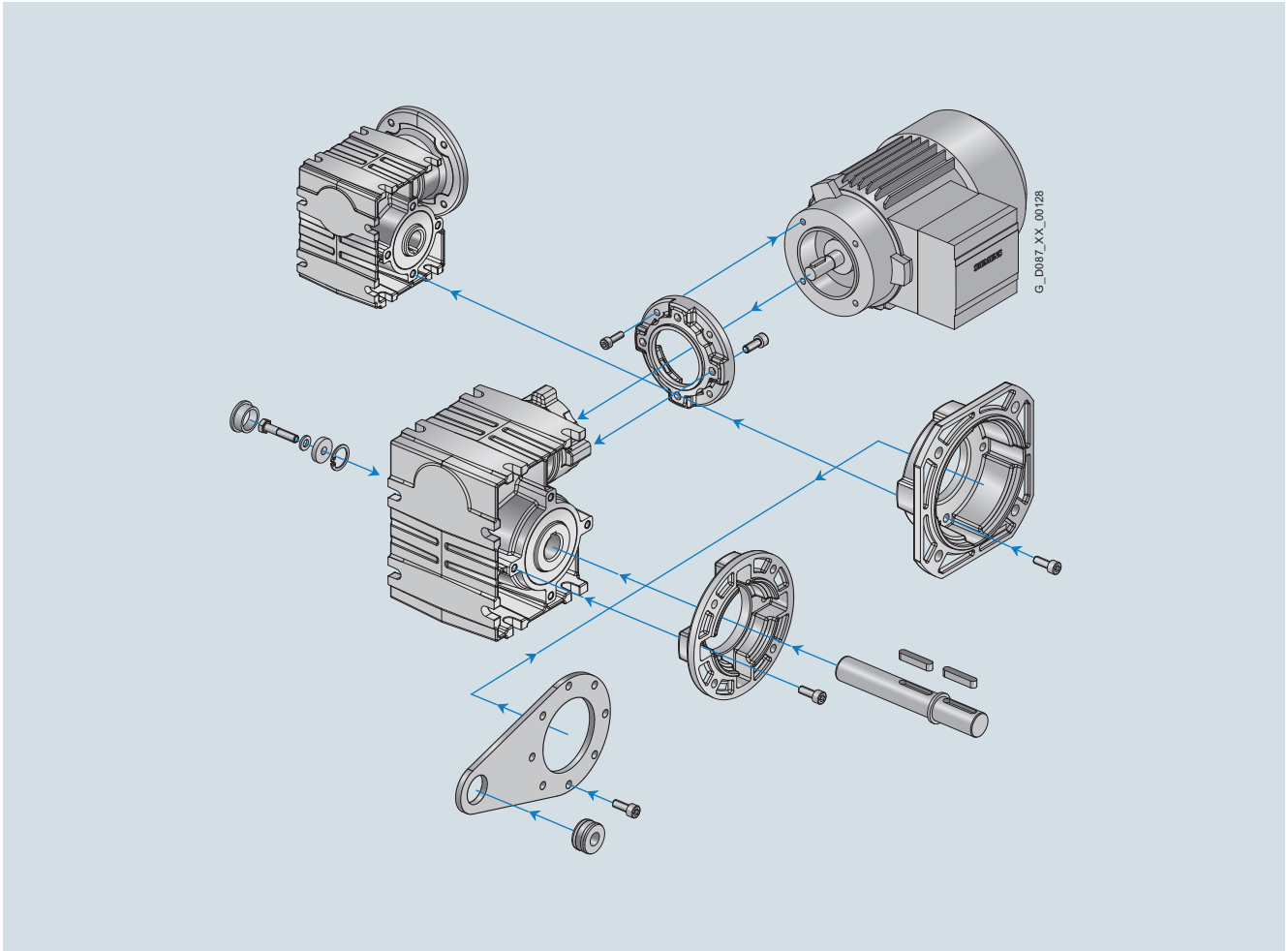
Overview (continued)**Worm geared motors**

Fig. 1/15 Modular system, worm gearbox

SIMOGEAR worm gearboxes are available in the following versions for mounting in any position:

- 1 stage
- Shaft-mounted design with torque arm
- Flange-mounted design
- Design with integrated housing flange
- Foot-mounted design
- Solid shaft design with feather key (at one end or both ends)
- Hollow-shaft design with feather key
- Hollow-shaft design with plug-in shaft

For worm gearboxes, the torque arm is supplied loose to enable it to be mounted as required on site. The position of the torque arm can be freely selected.

Introduction

Guidelines for selection and ordering

Notes on selection tables

1

Structure of the tables for geared motors up to 55 kW

In the selection tables you will find the most frequently used versions and combinations of geared motors sorted according to the motor power. Additional combinations can be selected with our SIMOGEAR Configurator.

The power ratings and torques specified in the catalog refer to mounting position M1 and comparable types of construction, where the input stage does not run completely immersed in oil. Further, standard equipment and standard lubrication of the geared motors as well as normal ambient conditions are assumed.

The specified output speeds are guide values. You can calculate the rated drive speed based on the rated motor speed and the transmission ratio. Please note that the actual output speed will depend on the motor load and the line supply conditions.

P_{rated}	n_2	T_2	i	F_{R2}	f_B	m	Article No.	Order code
kW	rpm	Nm	-	N	-	kg		Number of poles
0.37	Type designation FD.49-LA71MH4							
	13	270	105	8 640	1.8	29	2KJ3403 - ■ CE11 - ■ ■ G1	

↓	↓	↓	↓	↓	↓	↓	↓	↓
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

- (1) Rated motor power at 50 Hz
- (2) Geared motor output speed
- (3) Geared motor output torque
- (4) Transmission ratio
- (5) Permissible radial force at the center of shaft extension (foot-mounted design with solid shaft)
- (6) Service factor
- (7) Drive weight without any oil
- (8) Article No.
- (9) Order code for pole number

Structure of the tables for transmission ratios and torques

In the selection tables for transmission ratios and torques, the gearboxes are sorted according to gearbox type and ratio.

<i>i</i>	n_2 rpm	T_{2N} Nm	F_{R2} N	ϕ	J_G 10^{-4} kgm ²	R_{ex}	Motor size										Article No.		
							63	71	80	90	100	112	132	160	180	200		225	250
76.38	19	450	7 660	8	0.59	611/8	✓	✓	✓	✓	✓	✓							2KJ3205 - ■■■■■■ - E1
↓	↓	↓	↓		↓	↓	↓												↓
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)												(9)

- (1) Transmission ratio
- (2) Geared motor output speed at a motor speed of 1 450 rpm
- (3) Maximum gearbox output torque for service factor $f_B = 1$
- (4) Permissible radial force at the center of shaft extension (foot-mounted design with solid shaft)
- (5) Torsional backlash in minutes of arc for reduced-backlash version (order code G99)
If torsional backlash is not specified, the option "reduced-backlash version" is not possible with this ratio.
- (6) Moment of inertia of the gearbox reduced to the input shaft
- (7) Ratio, number of teeth
- (8) Geometrically possible geared motor combination
- (9) Article No.

Structure of the efficiency tables

Left-hand side

<i>i</i>	$n_{mot} = 2\,800 \text{ min}^{-1}$				$n_{mot} = 1\,400 \text{ min}^{-1}$				$n_{mot} = 900 \text{ min}^{-1}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
127.64	22	290	0.95	71	11.0	295	0.51	67	7.1	295	0.36	62	2KJ3603 - ■■■■■■ - ■■■ F2
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
(1)	(2)	(3)	(4)	(5)	(2)	(3)	(4)	(5)	(2)	(3)	(4)	(5)	(6)

- (1) Transmission ratio
- (2) Geared motor output speed at specified motor speed n_{mot}
- (3) Maximum gearbox output torque for service factor $f_B = 1$
- (4) Input power
- (5) Efficiency
- (6) Article No.

Introduction

Guidelines for selection and ordering

Notes on selection tables

Structure of the motor power tables

Motors with High Efficiency IE2

Left-hand side

Size	Motor	P_{rated}	n_{rated}	T_{rated}	I_{rated}	$\cos \varphi$	η		I_{St}/I_{rated}	Article No.				Order code
							4/4 load	3/4 load		Data position				
		kW	rpm	Nm	A	-	%	%	-	9.	10.	11.	12.	Number of poles
4-pole, 1 500 rpm at 50 Hz														
80	LE80MD4E	0.55	1 440	3.65	1.37	0.74	78.1	78.6	5.3	D	C	2	2	-
	LE80MH4E	0.75	1 440	4.97	1.79	0.76	79.6	79.6	5.6	D	E	2	2	-
2-pole, 3 000 rpm at 50 Hz														
80	LE80MA2E	0.75	2 805	2.55	1.67	0.84	77.4	77.9	4.9	D	B	2	2	P00
	LE80ME2E	1.10	2 835	3.71	2.40	0.83	79.6	79.6	6.0	D	M	2	2	P00

↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
 (1) (2) (3) (4) (5) (6) (7) (8) (8) (9) (10) (10) (11) (12) (13)

- (1) Motor size
- (2) Motor designation
- (3) Rated power
- (4) Rated speed
- (5) Rated torque
- (6) Rated current
- (7) Power factor
- (8) Efficiency
- (9) Relative starting current
- (10) Article No. of the motor size
- (11) Article No. of the motor type
- (12) Article No. of the motor series
- (13) Order code for pole number

For different voltages, the starting, average acceleration and breakdown torque change acc. to a square law from their rated value.

Right-hand side

Size	Motor	T_{St}/T_{rated}	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code
										Data position				
		-	-	-	dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg	9.	10.	11.	12.	Number of poles
4-pole, 1 500 rpm at 50 Hz														
80	LE80MD4E	2.2	3.1	2.4	53	64	10 000	17	9.3	D	C	2	2	-
	LE80MH4E	2.2	3.1	2.4	53	64	10 000	21	10	D	E	2	2	-
2-pole, 3 000 rpm at 50 Hz														
80	LE80MA2E	1.9	2.3	2.0	60	71	6 000	8	8.3	D	B	2	2	P00
	LE80ME2E	2.7	3.1	2.9	60	71	6 000	11	10	D	M	2	2	P00

↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (11) (12) (13) (14)

- (1) Motor size
- (2) Motor designation
- (3) Relative starting torque
- (4) Relative breakdown torque
- (5) Relative average acceleration torque
- (6) Measuring surface sound pressure level
- (7) Sound power level
- (8) No-load switching frequency
- (9) Moment of inertia
- (10) Weight (without end shield at DE)
- (11) Article No. of the motor size
- (12) Article No. of the motor type
- (13) Article No. of the motor series
- (14) Order code for pole number

Structure of the motor power tables (continued)

NEMA Energy Efficient motors MG1

Left-hand side

Size	Motor	P_{rated}		n_{rated}	T_{rated}	EISA CC no.	I_{rated}	$\cos\phi$	η	I_{St}/I_{rated}		T_{St}/T_{rated}
		kW	hp							rpm	Nm	
4-pole, 1 800 rpm at 60 Hz, 50 Hz power												
80	LE80MH4E	0.75	1.00	1 750	4.09	-	1.58	0.72	82.5	82.5	6.8	2.5
2-pole, 3 600 rpm at 60 Hz, 50 Hz power												
80	LE80MA2E	0.75	1.00	3 445	2.08	-	1.50	0.83	75.5	75.5	6.0	2.1
	LE80ME2E	1.10	1.50	3 465	3.03	-	2.05	0.82	82.5	82.5	7.2	3.1

↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
(1)	(2)	(3)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(9)	(10)	(11)

- (1) Motor size
- (2) Motor designation
- (3) Rated power
- (4) Rated speed
- (5) Rated torque
- (6) Energy Independence and Security Act
- (7) Rated current
- (8) Power factor
- (9) Efficiency
- (10) Starting current
- (11) Relative starting torque

For different voltages, the starting, average acceleration and breakdown torque change acc. to a square law from their rated value.

Right-hand side

Size	Motor	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{ptA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code		
									Data position				Number of poles		Specification
		-	-	dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg	9.	10.	11.	12.		NEMA	UL-R/CSA
4-pole, 1 800 rpm at 60 Hz, 50 Hz power															
80	LE80MH4E	3.8	2.8	55	66	10 000	21	10	D	E	2	2	-	N65	N35
2-pole, 3 600 rpm at 60 Hz, 50 Hz power															
80	LE80MA2E	3.0	2.3	64	75	3 000	8	8.3	D	B	2	2	P00	N65	N35
	LE80ME2E	3.8	3.4	64	75	3 000	11	10	D	M	2	2	P00	N65	N35

↓	↓			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

- (1) Motor size
- (2) Motor designation
- (3) Relative breakdown torque
- (4) Relative average acceleration torque
- (5) Measuring surface sound pressure level
- (6) Sound power level
- (7) No-load switching frequency
- (8) Moment of inertia
- (9) Weight (without end shield at DE)
- (10) Article No. of the motor size
- (11) Article No. of the motor type
- (12) Article No. of the motor series
- (13) Order code for pole number
- (14) Order code for special specifications

Introduction

Guidelines for selection and ordering

Notes on dimensional drawings

1

Overview

Shaft heights

DIN 747 shaft heights for machines

Shaft height mm	Tolerance mm
≤ 250	-0.5
> 250	-1

Note:

For foot-mounted gearboxes, the mounted motor can extend below the mounting surface of the gearbox.

Shaft extensions

DIN 748-1 cylindrical shaft extensions

Diameter tolerance:

Diameter mm	Tolerance mm
≤ 50	ISO k6
> 50	ISO m6

Centering holes according to DIN 332, form DR:

Diameter mm	Thread size
> 16 ... 21	M6
> 21 ... 24	M8
> 24 ... 30	M10
> 30 ... 38	M12
> 38 ... 50	M16
> 50 ... 85	M20
> 85 ... 130	M24
> 130	M30

Undercut acc. to DIN 509:

Diameter mm	Undercut acc. to DIN 509	Suggested construction, minimum hollow on mating piece mm
> 16 ... 18	E1.0x0.2	0.9 x 45°
> 18 ... 50	E1.2x0.2	1.1 x 45°
> 50 ... 80	E1.6x0.3	1.4 x 45°
> 80 ... 125	E2.5x0.4	2.2 x 45°

Hollow shafts

Hollow shaft with feather key

Diameter tolerance Ø: ISO H7 measured using a mandrel gauge

Feather key: acc. to DIN 6885 (high form)

Hollow shafts with shrink disk

Diameter tolerance Ø: ISO H7 with mandrel gauge, measured in the area of the shrink disk seat. Hub seat, output side equipped with journal bearing sleeve.

Minimum requirement for the design of the customer shaft:

- Elastic limit $Re \geq 360 \text{ N/mm}^2$
- Module of elasticity, approx. 206 kN/mm^2
- Without tapped hole on the face

Hollow shafts with splines

Splines according to DIN 5480

Hollow shafts for the SIMOLOC assembly system

The diameters of the taper bushing and the bronze bushing are designed to hold a customer shaft with tolerance h11.

Minimum requirement for the design of the customer shaft:

- Bright steel drawn EN10278 (tolerance Ø: ISO h11)
- Elastic limit $Re \geq 360 \text{ N/mm}^2$
- Module of elasticity, approx. 206 kN/mm^2
- Straightness less than 0.5 mm/m

Note:

Deviation from the specified straightness will cause radial runout of the customer's shaft. Customer shafts with minor radial runout ensure optimum operating conditions for geared motors. This has a positive impact on the service life of the drive train.

Flange

Centering edge tolerance:

Outer flange diameter mm	Tolerance mm
≤ 230	ISO j6
> 230	ISO h6

Vent valves

The gearboxes are shown in the dimensional drawings with screw plugs.

If venting is required, then depending on the type of construction, an activated vent valve is installed.

The contour dimension can slightly change as a result.

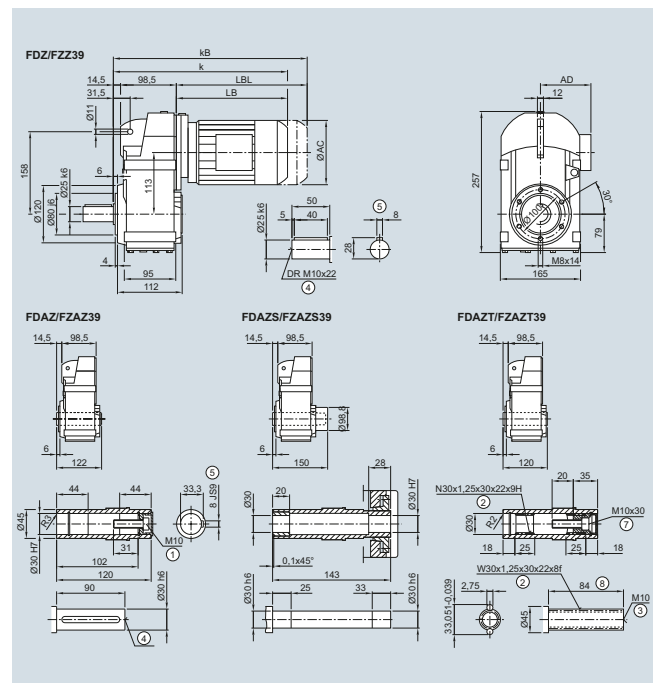


Fig. 1/16 Example, dimensional drawings

Overview

Specifications

Country/economic area	Marking Examples	Legal/normative requirements
Europe/EU 		Low Voltage Directive (LVD) 2006/95/EC
		Eco-design Directive 2009/125/EC EU Regulation (EC) No. 640/2009 to implement the eco-design directive and amending regulation (EU) No. 4/2014
USA 	MG1-12	NEMA MG1-12 National standard
		UL 1004 Standard of the Underwriters Laboratories Inc. (testing and certification body)
	CC032 A	EISA Energy Independence Security Act
Canada 		CSA-C22.2 No. 100 Standard of the Canadian Standards Association
		EER Energy Efficiency Regulations
China 		CCC China Compulsory Certification
		CEL – China Energy Label Based on the national standard GB 18613-2012 ECL Energy Conservation Law of PRC
Russian Federation 		EAC Eurasian Conformity
Belarus 		
Kazakhstan 		

Introduction

General technical specifications

Geared motors for use worldwide

1

Motors for the North American market

Motors with sizes 63 to 250 are available in designs which meet the NEMA and CSA electrical standard and UL-R.

Order code:

Design in accordance with NEMA electrically

N65

Design in accordance with UL-R and CSA

N38

Note:

In the USA, a distinction is made between the rated voltage of the supply system and the rated voltage of the motor. See the table below for the assignment:

Country	Rated voltage of the supply system	Rated voltage of the motor
USA	208 V	200 V
	240 V	230 V
	480 V	460 V
Canada	600 V	575 V

NEMA – National Electrical Manufacturing Association

Data on the rating plate:

- Rated voltage(s)
- Design letter
- Code letter
- CONT
- NEMA MG1-12

UL-R – Underwriters Laboratories Inc. listing

The motors are listed for up to 600 V by Underwriters Laboratories Inc. ("Recognition Mark" = R/C). Motor voltages up to 600 V are certified according to UL. "UL Recognition Mark" is included on the rating plate of the motor.

In addition, the motor is designed to meet the NEMA MG1-12 electrical standard and includes the following data on the rating plate:

- Rated voltage(s)
- Nominal efficiency
- Design letter
- Code letter
- CONT
- NEMA MG1-12

Externally or internally mounted components such as:

- Motor protection
- Heating element
- Forced ventilation
- Brake
- Encoder
- Plug connection

are UL-R/C, CSA, or C-US listed or used by manufacturers in accordance with regulations. UL-R/C cable glands must be used for the cable entry.

CSA – Canadian Standard Association

The motors are approved for up to 690 V in accordance with the "Canadian Standard Association" (CSA). Externally or internally mounted components which are used are listed by CSA or are used by manufacturers in accordance with regulations. The CSA mark and the rated voltage are stamped on the rating plate.

When energy-saving motors are ordered, they also have the "CSA-E mark" on the rating plate.

Motors for the Chinese market

CCC-certified motors, sizes 63 to 90, are available for export to China.

The "China Energy Label" required for import into China is available for motors with sizes from 80 to 250.

The motors are marked according to the requirements with CCC, CEL or both specifications.

Order code:

Design for the Chinese market

N67

CCC – China Compulsory Certification

"Small power motors" which are exported to China must be certified up to a rated power of:

2-pole: ≤ 2.2 kW

4-pole: ≤ 1.1 kW

6-pole: ≤ 0.75 kW

8-pole: ≤ 0.55 kW

LA motors requiring certification are certified by CQC (China Quality Certification Center)

When ordered, the "CCC (Safety Mark)" logo is stamped on the rating plate and packaging.

Note:

Chinese customs checks the need for certification of imported products using the commodity code.

The following do not need to be certified:

- Motors imported to China which have already been installed in a machine
- Repair parts

CEL – China Energy Label

China introduced mandatory energy efficiency labeling for electric motors in June 2008.

From September 1, 2008, and until the transition phase expires, the affected electric motors may only be imported into China and sold in the country with a valid "China Energy Label".

The motor must be labeled with the "China Energy Label" sticker, which states the efficiency class.

In addition to the Energy Label (dimensions, 80 x 54 mm) the efficiency is also stamped on the rating plate.

2-pole, 4-pole and 6-pole motors with a line frequency of 50 Hz and a rated voltage of up to 1000 V must be appropriately marked. Efficiency classes 2 and 3 apply here to motors with rated powers from 0.75 to 375 kW.

Motors for the Eurasian market

SIMOGEAR geared motors are certified for the Eurasian economic area.

In the Russia, Kasachstan and Belarus customs union, new technical regulations and uniform conformity requirements (EAC) have been introduced. These replace the previous GOST-R certificates which thus lose their validity.

The certificate is mandatory for export and is required by the customs authorities.

The EAC certificate is valid for all geared motors. For gearboxes with adapters the EAC certificate is not necessary because the EAC certificate only refers to the motor.

Order code:

Version in accordance with EAC

N30

Explosion protection according to ATEX

SIMOGEAR gearboxes are available for operation in hazardous areas. The explosion-proof versions of the helical, parallel shaft, bevel, helical worm and worm gearboxes comply with Directive 94/9/EC (ATEX) which came into force on January 1, 2003.

The gearboxes are approved for use in zones 1 and 2 (gases) and zones 21 and 22 (dust).

Ex atmosphere/Zone		Category	Frequency	SIMOGEAR gearbox available
G (gas and steam)	D (dust)			
0	20	1	constantly or long-term	no
1	21	2	infrequently	yes
2	22	3	rarely or briefly	yes

Use in explosive atmosphere G (gases) is permissible for temperature classes T1 to T4. With use in explosive atmosphere D (dust), it must be noted that the maximum permissible temperature for the gearbox is 120 °C.

Introduction

General technical specifications

Energy efficiency

1

Efficiency classes acc. to IEC 60034-30:2008

Various energy efficiency standards exist worldwide for induction motors. To promote international harmonization, the international standard IEC 60034-30:2008 (Rotating electrical machines – Part 30: Efficiency classes of single-speed, three-phase, cage-induction motors (IE code)) was drawn up. This classifies low-voltage induction motors according to new efficiency classes (valid since October 2008). The efficiencies of IEC 60034-30:2008 are based on losses determined in accordance with the IEC 60034-2-1:2007 standard. This has been valid since November 2007 and will replace the standard IEC 60034-2:1996 effective November 2010. The supplementary losses are now measured and no longer added as a percentage.

IE efficiency classes

- IE1 = Standard Efficiency
- IE2 = High Efficiency
- IE3 = Premium Efficiency
- IE4 = Super Premium Efficiency *

Measuring method according to IEC 60034-2-1:2007 for determining the efficiency

With the measuring method, the supplementary losses are no longer applied as a percentage (0.5 %), but instead they are determined with measurements according to IEC 60034-2-1: 2007. The nominal efficiencies are therefore reduced from EFF1 to IE2 and from EFF2 to IE1, even though there have been no technical or physical changes to the motors.

Previously: $P_{LL} = 0.5 \% \text{ of } P$ was added

Now: $P_{LL} = \text{individual measurement}$

P_{LL} = load-dependent supplementary losses

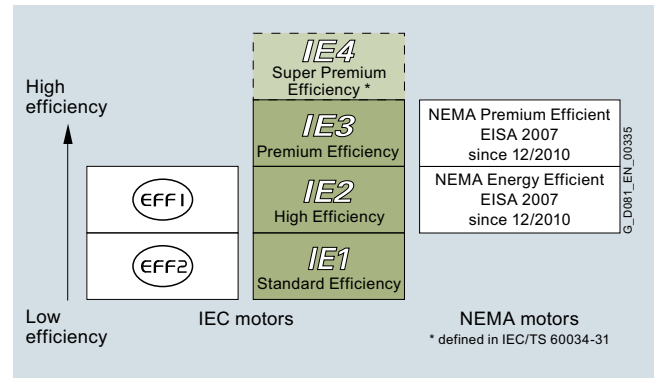


Fig.1/17 IE efficiency classes in accordance with the power rating

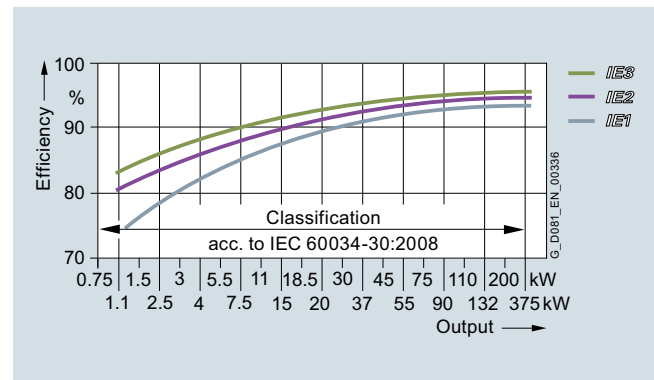


Fig.1/18 IE1-IE3 efficiencies 4-pole at 50 Hz

The following table shows examples of the efficiency values according to the new and old methods for calculating losses.

Power	Number of poles	EFF measuring method (incl. percentage losses) EN/IEC 60034-2:1996 50 Hz	Loss calculation method acc. to IEC 60034-2-1:2007 50 Hz	Loss calculation method acc. to IEC 60034-2:2007 60 Hz
5.5 kW	4-pole	89.2 %	87.7 %	89.5 %
45 kW	4-pole	93.9 %	93.1 %	93.6 %
110 kW	4-pole	not defined	94.5 %	95.0 %

Background information

Comprehensive laws have been introduced in the European Union with the objective of reducing energy consumption and therefore CO₂ emissions.

EU Directive 640/2009 concerns the energy consumption or efficiency of induction motors in the industrial environment. This has been amended in part by Directive 4/2014. These directives are now in force in every country of the European economic area.

For further details on internationally applicable standards and legal requirements, visit:

www.siemens.com/international-efficiency

Efficiency classes according to IEC 60034-30:2008 (continued)Exceptions in the EU directive:

- Motors designed to be operated totally submerged in a liquid
- Motors fully integrated into a product (e.g. a pump, fan or compressor) whose energy efficiency cannot be measured independently of the product
- Motors that are specially designed for operation under the following conditions:
 - At altitudes greater than 4 000 meters above sea level
 - At ambient temperatures above 60 °C
 - At maximum operating temperatures above 400 °C
 - At ambient temperatures below -30 °C (any motor)
 - With cooling liquid temperatures at the product intake of below 0 °C or above 32 °C
 - In hazardous areas in the context of directive 94/9/EU of the European Parliament and Council
- Brake motors

The following motors are not involved:

- 8-pole motors
- Pole-changing motors
- Synchronous motors
- Motors for intermittent duty S2 to S9
- Single-phase motors
- Motors specially developed for inverter operation in accordance with IEC 60034-25

Note:

The geared motors described in this catalog fall under EU Directives 640/2009 and 4/2014 and are in compliance with it.

The changes came/will come into effect on the following dates:

From June 16, 2011:

Compliance with the legally required minimum efficiency class IE2 for induction motors in S1 duty in accordance with the EU directive

From January 1, 2015:

Compliance with the legally required minimum efficiency class IE3 for power ratings from 7.5 to 375 kW or, as an alternative, IE2 motor in combination with an inverter

From January 1, 2017:

Compliance with the legally required minimum efficiency class IE3 for power ratings from 0.75 to 375 kW or, as an alternative, IE2 motor in combination with an inverter

Motors for the North American market

The Energy Policy Act (EPAAct) was superseded in December 2010 by the Energy Independence Security Act (EISA).

Since December 2010, EISA has extended the minimum legal efficiency class requirements and the following motors must fulfill the NEMA Premium Efficient Level:

- 1 to 200 hp
- 2, 4 and 6-pole
- 230 V, 460 V

In addition, the following motors, for example, must fulfill the NEMA Energy Efficient Level:

- 201 to 500 hp
- 2, 4, 6 and 8-pole
- All voltages < 600 V except 230 V and 460 V
- Footless motors (IM B5 and other flange types)
- NEMA design C (increased starting torque)
- Geared motors

Noise

Geared motor noise

SIMOGEAR geared motors have noise levels below the permissible noise levels defined for gearboxes in VDI Guideline 2159 and for motors in IEC 60034-9.

When used in conjunction with the gearboxes, the motor noise values L_{pFA} or L_{WA} increase on average by 3 to 5 dB (A).

The circumferential velocity of the motor pinion has a significant influence on the additional gearbox noise level. This is the reason that higher speeds or low transmission ratios result in higher noise.

Here, SIMOGEAR geared motors provide a decisive advantage, as the motor plug-on pinion allows transmission ratios of up to 12 in the input stage.

Code	Description	Unit
L_{pFA}	A-weighted measuring-surface sound-pressure level	dB (A)
L_{WA}	Sound power level	dB (A)

Motor noise in line operation

The noise level is measured according to ISO 1680 in a low-reflection room and is specified as A-weighted measuring surface sound pressure level L_{pFA} in dB (A). This value is the spatial average value of the sound pressure levels measured at the measuring surface. The measuring surface is a cube 1 m away from the surface of the motor. The sound power level is also specified as L_{WA} in dB (A).

The values specified in the motor selection tables apply to the motor without gearbox at 50 Hz

[Selection and ordering data page 8/14.](#)

The tolerance is +3 dB. At 60 Hz, the values are approximately 4 dB (A) higher. Noise values for inverter operation on request.

Introduction

General technical specifications

Direction of rotation

Overview

All geared motors are connected as standard so that the motor rotates in the clockwise direction.

It is necessary to specify the desired direction of rotation of the output shaft when ordering a geared motor with backstop.

Direction of rotation	Clockwise	Counterclockwise
Abbreviation	CW (clockwise)	CCW (counter clockwise)
Description	Clockwise direction of rotation (when viewing the input/output shaft)	Counter clockwise direction of rotation (when viewing the input/output shaft)
Order code	K18	K19

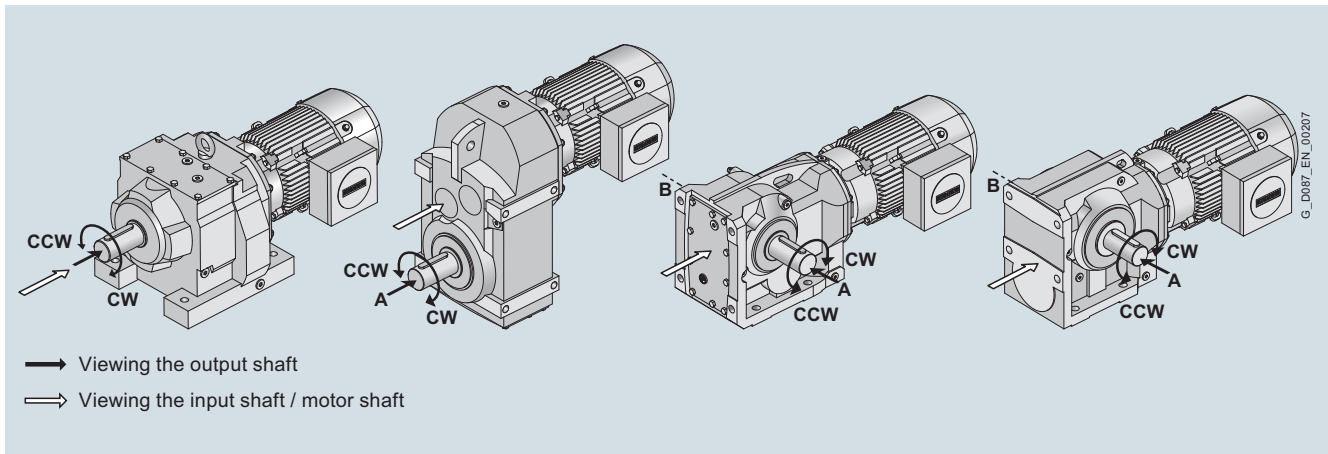


Fig.1/19 Definition of the direction of rotation

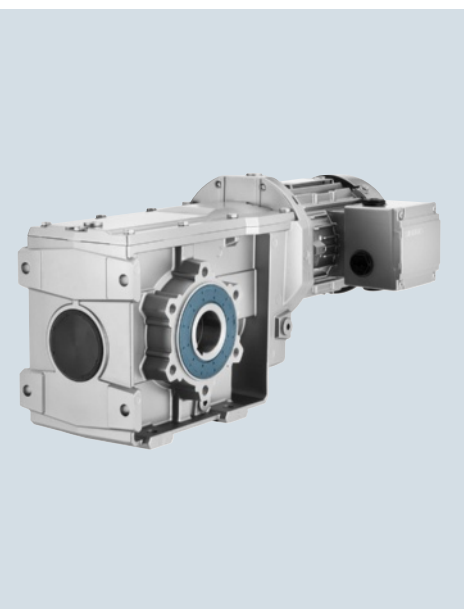
Direction of rotation, input to output

Gearbox type	Size	Gearbox stages	Output side	Direction of rotation	
				Input shaft	Output shaft
Z	19 ... 189	2	-	CW	CW
D	19 ... 189	3	-	CW	CCW
FZ	29 ... 189	2	-	CW	CW
FD	29 ... 189	3	-	CW	CCW
B	19 ... 49	2	A	CW	CW
			B	CW	CCW
K	39 ... 189	3	A	CW	CCW
			B	CW	CCW
C	29 ... 89	2	A	CW	CW
			B	CW	CCW
S	09 ... 29	1	A	CW	CCW
			B	CW	CW

Note:

For bevel gearboxes B and K, helical worm gearboxes C and worm gearboxes S, the direction of rotation must be specified when viewing the DE or NDE.

Configuring guide

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- 2/3 Checklist

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Configuring guide

Determining the drive data

Configuring sequence

Overview

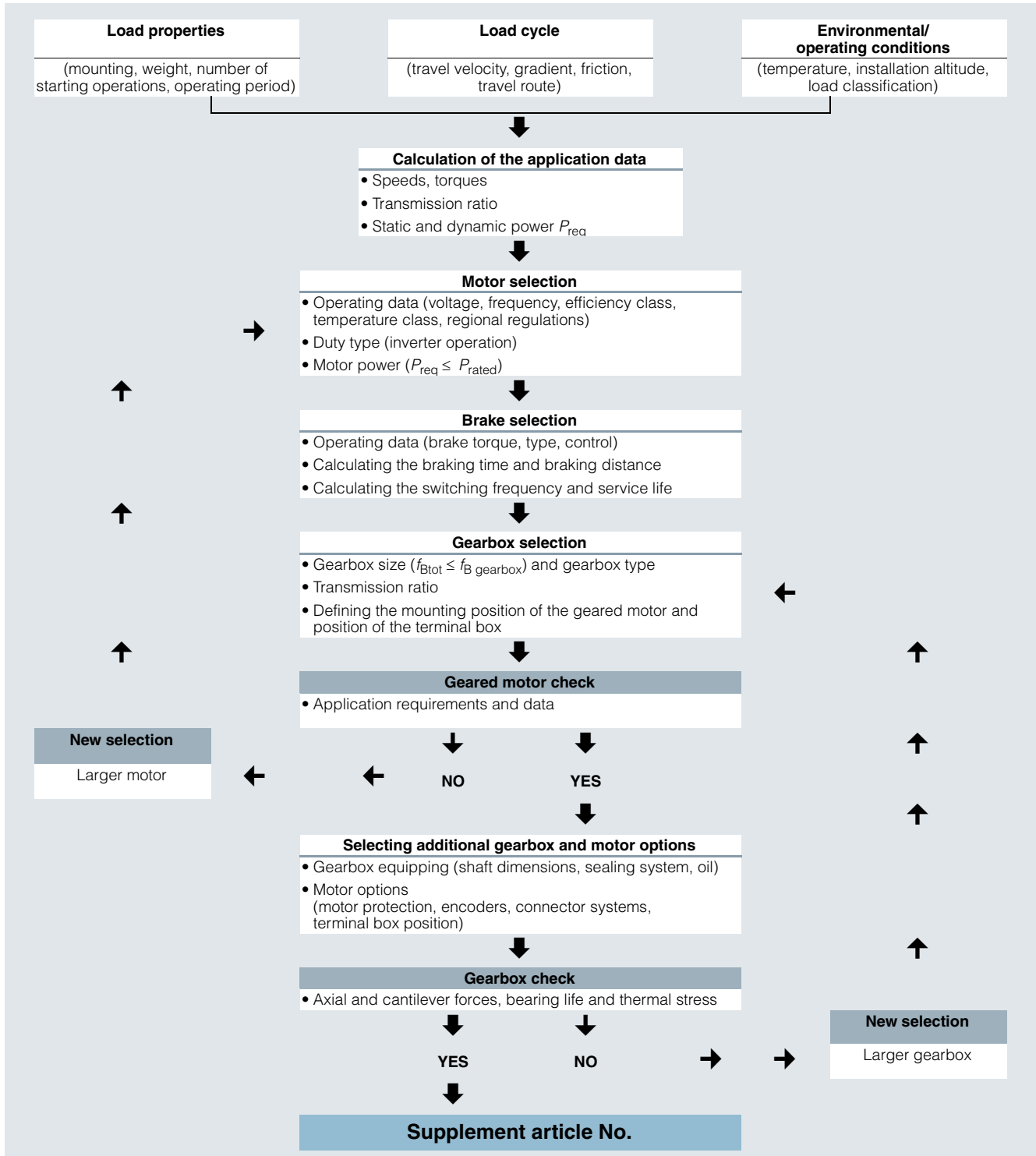
General configuring notes are provided for the standard versions in this catalog.

SIMOGEAR geared motors permit individual solutions to be created for a wide range of drive applications. In order to select the correct drive, initially specific data for the application must be known or determined.

For drives operating under special conditions, e.g. frequent reversing, short-time or intermittent duty, abnormal temperatures, reversal braking, extreme cantilever forces at the gearbox output shaft, etc. please contact your Siemens contact person with all of your technical questions.

You will find additional information on our website at www.siemens.com/gearedmotors

The flow diagram schematically shows how to select and dimension a geared motor using a traction drive as example. However, the specific requirements and boundary conditions associated with the application in question must always be taken into account.



General information		Basic version and load data		
General information	Gearbox type:	<input type="checkbox"/> Helical gearbox <input type="checkbox"/> Parallel shaft gearbox <input type="checkbox"/> Bevel gearbox <input type="checkbox"/> Helical worm gearbox <input type="checkbox"/> Worm gearbox		
	Power rating:	_____ kW		
	Output speed:	_____ rpm	Output torque:	_____ Nm
	Service factor:	_____		
	Starting operations/hour:	_____ s/h		
	Line voltage:	_____ V		
	Line frequency:	<input type="checkbox"/> 50 Hz <input type="checkbox"/> 60 Hz <input type="checkbox"/> For inverter operation <input type="checkbox"/> Maximum frequency _____ Hz		
	Operating period/day:	<input type="checkbox"/> 8 hours <input type="checkbox"/> 16 hours <input type="checkbox"/> 24 hours		
	Environmental conditions			
	Installation altitude:	_____ m	<input type="checkbox"/> Outdoor operation	<input type="checkbox"/> Increased environmental stress
Air humidity:	_____ %	<input type="checkbox"/> Normal environmental stress	<input type="checkbox"/> Aggressive environmental stress	
Temperature:	from _____ to _____ °C			
Brief description of the system: (e.g. sector, conveyor system, ...)		_____		

Gearbox		Mounting and mounting position		
Gearbox	Mounting position:	<input type="checkbox"/> M1 <input type="checkbox"/> M2 <input type="checkbox"/> M3 <input type="checkbox"/> M4 <input type="checkbox"/> M5 <input type="checkbox"/> M6 Terminal box position: _____		
	Mounting type:	<input type="checkbox"/> Foot-mounted design <input type="checkbox"/> Flange-mounted design <input type="checkbox"/> Housing flange design <input type="checkbox"/> Shaft-mounted design		
	Shafts			
	Design:	<input type="checkbox"/> Solid shaft with/without feather key <input type="checkbox"/> Hollow shaft with feather key <input type="checkbox"/> Hollow shaft with shrink disk		
		<input type="checkbox"/> Hollow shaft with splined shaft <input type="checkbox"/> SIMOLOC assembly system		
Shaft dimensions: (d x l)	_____ x _____ mm			
Other options: (e.g. axial/radial force)		_____		

Motor		Electrical design		
Motor	Motor protection:	<input type="checkbox"/> PTC thermistor <input type="checkbox"/> Winding thermostat <input type="checkbox"/> Temperature sensor KTY 84-130 <input type="checkbox"/> 1x resistance thermometer PT100		
	Mechanical design			
	Degree of protection:	<input type="checkbox"/> IP55 <input type="checkbox"/> IP65 <input type="checkbox"/> IP56		
	Cooling & ventilation:	<input type="checkbox"/> Self ventilation <input type="checkbox"/> Forced ventilation		
	Motor plugs:	<input type="checkbox"/> HAN 10E <input type="checkbox"/> HAN K4/4 <input type="checkbox"/> Others _____		
		<input type="checkbox"/> HAN Q8 <input type="checkbox"/> HAN Q12		
	Mounted components			
	Brake:	<input type="checkbox"/> Brake <input type="checkbox"/> Manual release		Voltage: _____ V
	Encoder:	<input type="checkbox"/> Incremental encoder <input type="checkbox"/> Absolute encoder <input type="checkbox"/> Resolver <input type="checkbox"/> Prepared for encoder mounting		
		<input type="checkbox"/> Functionally safe rotary encoder		
Other options:		_____		
SINAMICS G110M				
Power Module:	Power rating: _____ kW	Motor connection: _____		
Control Unit:	Type of connection: _____	Communication: _____		
Supported options	<input type="checkbox"/> Internal braking resistor <input type="checkbox"/> Externally mounted components _____		Accessories: <input type="checkbox"/> IOP Handheld <input type="checkbox"/> SD card <input type="checkbox"/> PC connecting cable	

General options		Surface treatment	
General options	Surface protection:	<input type="checkbox"/> C1 <input type="checkbox"/> C2 <input type="checkbox"/> C3 <input type="checkbox"/> C4 <input type="checkbox"/> C5	
		<input type="checkbox"/> unpainted <input type="checkbox"/> C3 primed <input type="checkbox"/> C4 primed <input type="checkbox"/> RAL color: _____	
	Other options:	_____	

Configuring guide

Configuring a gearbox

2

Standards

DIN/ISO	
DIN 743	Output shafts
ISO 281, ISO 76	Bearings
DIN 7190	Interference fits
DIN 6892	Parallel key connection
DIN 3990	Cylindrical gear toothing
DIN 3991	Bevel gear toothing
DIN 3996	Worm gear toothing

Designs to AGMA available on request.

Gearbox efficiency

The efficiency of the gearbox is determined in part by the gear teeth, the rolling-contact bearing friction, and the shaft seal friction.

Helical, parallel shaft and bevel gearboxes

SIMOGear helical, parallel shaft, and bevel geared motors have a very high efficiency. Generally, efficiencies of 96 % (2-stage) and 94 % (3-stage) can be assumed. These gearbox types can be operated with energy-efficient motors to create an excellent solution.

Helical worm and worm gearboxes

The first stage of the helical worm gearbox is designed as a helical stage. With the optimally tuned transmission ratios of the worm stage, the best possible overall efficiency is achieved, which is considerably higher than that of worm gearboxes alone.

SIMOGear helical worm gearboxes exhibit efficiency levels of between 65 and 90 %. Precise efficiency data can be found in the tables in chapter "Helical worm gearboxes".

The high degrees of efficiency ensure that the SIMOGear helical worm gearboxes are not self-locking.

Running-in period

The tooth flanks on new helical worm and worm gearboxes will not yet be fully smoothed, meaning that the friction angle will be greater and efficiency lower during the running-in period. The higher the transmission ratio, the more pronounced the effect.

The running-in process should take approximately 24 hours of operation at full load. In most cases, the catalog values will then be reached.

Self-locking with worm gearboxes

In respect of restoring torques on worm gearboxes, the efficiency is considerably reduced in comparison to standard efficiency. The restoring efficiency can be calculated as follows: $\eta' = 2 - 1/\eta$. At a standard efficiency of $\eta \leq 0.5$, worm gearboxes are usually self-locking, which is determined by the particular lead angle of the worm gear teeth.

Self-locking only occurs with certain combinations of SIMOGear gearboxes and is not always of benefit, as the associated loss of efficiency is then relatively high, which in turn requires increased motor power.

A worm gearbox is "self-locking while stationary" (static self-locking), if it is not possible to start from stationary when the worm wheel is driving.

A worm gearbox is "self-braking while running" (dynamic self-locking), if it is not possible to continue running when the worm wheel is driving while the gearbox is running - that is, if the running gearbox comes to a stop while the worm wheel is driving.

Shocks can neutralize self-locking.

A self-locking gearbox is, therefore, no substitute for a brake or backstop. If you want to use the self-locking braking effect for a technical purpose, please contact us.

Efficiency optimization

As result of the large range of transmission ratios, in many cases, instead of a 3-stage gearbox, a 2-stage SIMOGear gearbox can be used.

This means that the efficiency is improved by approximately 2 % when compared to conventional drives.

Further, the efficiency can be improved by optimizing the mounting position and the input speed.

Splashing losses

For certain gearbox types of construction, the first stage can be completely immersed in the gearbox oil. In the case of large gearboxes with a high input speed, particularly with vertical mounting positions, this may lead to increased splashing losses, which cannot be neglected.

If you wish to use gearboxes such as these, then please contact Siemens. If at all possible, you should choose horizontal types of construction in order to keep splashing losses to a minimum.

Service factor

Determining the required service factor

The operating conditions are crucial in determining the service factor and for selecting the geared motor. These are taken into account with service factor f_{Btot} .

In standard operation, i.e. with a uniform load of the driven machine, small masses to be accelerated, and a low number of starting operations, a service factor of $f_{Btot} = 1$ can be selected.

For different operating conditions, the service sector can be taken from the tables. When the motor power and the gearbox output speed are known, a gearbox type is selected with a service factor that meets the following condition:

$$f_{Btot} = f_{B1} \leq f_B$$

The gearbox size or rated gearbox torque and the resulting service factor are not standardized and depend on the manufacturer.

Determining the load classification

The service factor of the driven machine f_{Btot} is determined from the load classification, number of starting operations, and operating period per day.

The operating conditions can vary greatly. To determine the service factor, empirical values can be derived from the configuration of other similar applications. The driven machines can be assigned to three load groups according to their load classification. These groups are evaluated according to the mass acceleration factor m_{AF} .

Load groups of driven machines

Load classification	Mass acceleration factor	Driven machine (examples)
I Almost shock-free	≤ 0.3	Electric generators, belt conveyors, apron conveyors, screw conveyors, lightweight elevators, electric hoists, machine tool feed drives, turbo blowers, centrifugal compressors, mixers and agitators when mixing materials with uniform density
II Moderate shock loads	≤ 3	Machine tool main drives, heavy elevators, slewing gear, cranes, shaft ventilators, mixers and agitators when mixing materials with non-uniform densities, reciprocating pumps with multiple cylinders, metering pumps
III Heavy shock loads	≤ 10	Punching presses, shears, rubber kneaders, machinery used in rolling mills and the iron and steel industry, mechanical shovels, heavy centrifuges, heavyweight metering pumps, rotary drilling rigs, briquetting presses, pug mills

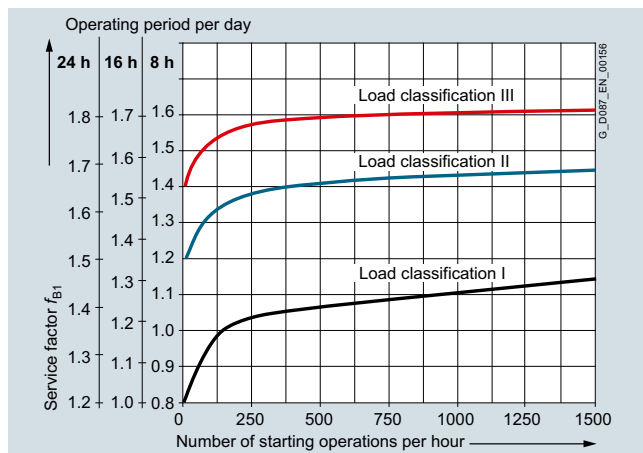


Fig. 2/1 Service factor f_{B1}

Note:

When selecting and dimensioning drives with the following special application conditions, please contact Siemens.

- Frequent reversing
- Short time and intermittent operation
- Abnormal temperatures
- Reversal braking
- Extreme and/or circulating radial forces at the gearbox output shaft
- Fluctuating loads

Mass acceleration factor

The mass acceleration factor m_{AF} is calculated as follows:

$$m_{AF} = \frac{J_X}{(J_{mot} + J_B + J_Z)}$$

All external moments of inertia are moments of inertia of the driven machine and the gearbox, which are to be reduced to the motor speed.

The calculation is made using the following formula:

$$J_X = J_2 \cdot \left(\frac{n_2}{n_1}\right)^2 = \frac{J_2}{(i)^2}$$

In most cases the relatively insignificant moment of inertia of the gearbox can be ignored.

The mass acceleration factor m_{AF} is calculated as follows with reference to the gearbox and the adapter:

$$m_{AF} = \frac{J_X + J_G + J_{AD}}{(J_{mot} + J_B + J_Z)}$$

Code	Description	Unit
i	Transmission ratio	-
J_2	Moment of inertia of the load referred to the output speed of the gearbox	kgm ²
J_{AD}	Moment of inertia of the adapter referred to the input speed	kgm ²
J_B	Moment of inertia of the brake	kgm ²
J_G	Moment of inertia of the gear unit based on the input speed	kgm ²
J_{mot}	Moment of inertia of the motor	kgm ²
J_X	Moment of inertia of the load referred to the input speed	kgm ²
J_Z	Additional moment of inertia of a high inertia fan	kgm ²
m_{AF}	Mass acceleration factor	-
n_1	Input speed of the gearbox	rpm
n_2	Output speed of the gearbox	rpm

Configuring guide

Configuring a gearbox

2

Service factor (continued)

Service factors for helical worm gearboxes and worm gearboxes

With helical worm gearboxes and worm gearboxes, two additional service factors are used which take the duty cycle and ambient temperature into account. These additional factors can be determined from the graphs opposite. The total service factor is thus calculated as follows:

$$f_{Btot} = f_{B1} \cdot f_{B2} \cdot f_{B3}$$

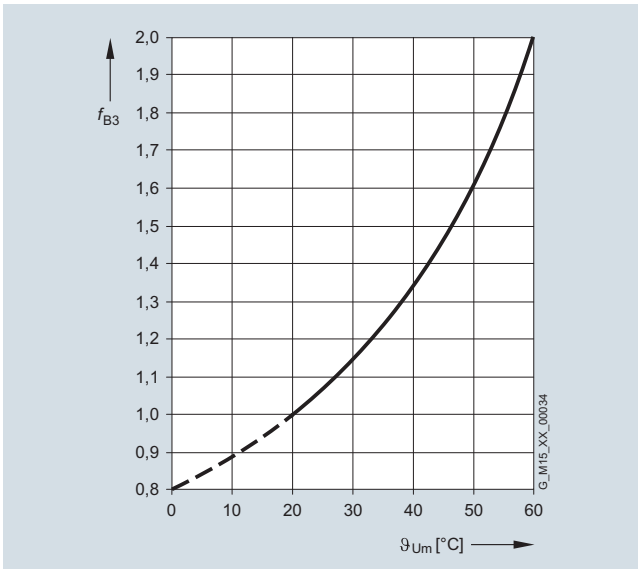


Fig. 2/2 Service factor "ambient temperature"

Example calculation for helical worm gearbox

Mass acceleration factor 2.5 (load classification II), runtime 15 hours per day (read at 16 hours) and 70 starts per hour result in a service factor of $f_{B1} = 1.4$ according to the service factor table.

A load duration of 30 minutes per hour gives a duty cycle (DC) of 50%. Thus, the service factor is $f_{B2} = 0.94$ according to the service factor diagram.

At an ambient temperature of $\vartheta_{amb} = 20^\circ\text{C}$, the service factor diagram gives a service factor of $f_{B3} = 1.0$.

The service factor required is therefore

$$f_{Btot} = 1.4 \cdot 0.94 \cdot 1.0 = 1.32$$

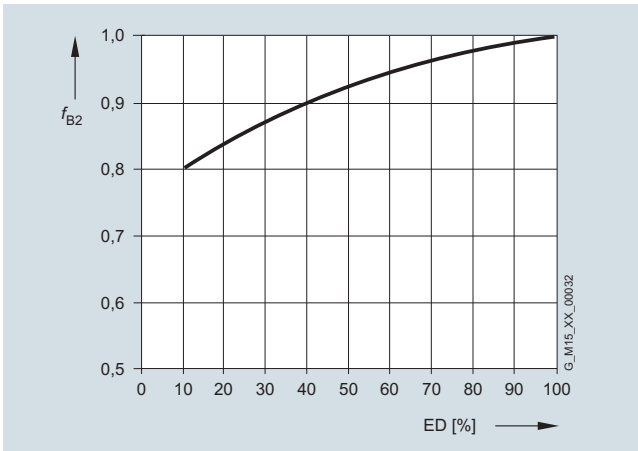


Fig. 2/3 Service factor "short-time duty"

Required torque

Once the load situation (drive data) and the service fact have been clarified, then the required output torque can be determined.

$$T_2 = \frac{P_{mot} \cdot 9550}{(n_1/i) \cdot \eta} = \frac{P_{mot} \cdot 9550}{n_2} \cdot \eta$$

Code	Description	Unit
η	Gearbox efficiency	%
i	Transmission ratio	-
n_1	Input speed of the gearbox	rpm
n_2	Output speed of the gearbox	rpm
P_{mot}	Motor output	kW
T_2	Required input torque of the driven machine	Nm

Input speed

For an identical power and output speed, in the selection tables 4-pole geared motors have priority over 6-pole motors.

As result of the very wide range of transmission ratios of SIMOGEAR gearboxes, it is hardly necessary to use motors with other pole numbers. In addition to the good availability worldwide, 4-pole motors generally offer the optimum solution regarding price, length, noise level and service life.

Further, from the modular system, motors with other pole numbers can be mounted. As a consequence, the following special combinations can be implemented:

- Extremely high output speeds (2-pole motors)
- Extremely low output speeds (8-pole motors)
- Lower noise solutions (6-pole or 8-pole motors)

For inverter operation, the gearboxes are driven at variable speeds.

When configuring the system, we recommend that the maximum input speed in continuous operation is maintained, wherever possible, at 1 500 rpm.

At higher motor speeds above 1 500 rpm you will generally experience higher than average noise levels and a lower than average bearing service life. This depends to a large extent on the transmission ratio and gearbox size in question. Furthermore, higher speeds additionally influence the thermal properties of the gearbox and service intervals.

Gearbox fastening

Gearboxes and geared motors are normally secured by bolts of grade 8.8.

When the largest possible motor size is attached to the gearbox and with a higher load classification, elevated levels of vibration and/or smaller service factors, further measures need to be taken for flange-mounted designs of gearboxes and geared motors.

Recommended bolt quality for DZ/ZZ and DF/ZF:

Helical gearboxes DZ/ZZ and DF/ZF with the smallest available output flanges must be bolted to the mounting surface with bolts of grade 10.9 (see table).

Gearbox type		Flange	Strength class of bolt/nut
DZ/ZZ29	DF/ZF29	A120	10.9 ¹⁾
DZ/ZZ39	DF/ZF39	A120	10.9 ¹⁾
DZ/ZZ49	DF/ZF49	A140	10.9
DZ/ZZ59	DF/ZF59	A160	10.9
DZ/ZZ69	DF/ZF69	A200	10.9
DZ/ZZ79	DF/ZF79	A250	10.9
DZ/ZZ89	DF/ZF89	A300	10.9
DZ/ZZ109	DF/ZF109	A350	10.9
DZ/ZZ129	DF/ZF129	A350	10.9
DZ/ZZ149	DF/ZF149	A450	10.9
DZ/ZZ169	DF/ZF169	A450	10.9
DZ/ZZ189	DF/ZF189	A550	10.9

¹⁾ Use suitable washers underneath the bolt head

Recommended bolt quality for FF/FAF and KF/KAF:

Parallel shaft gearboxes FF/FAF and bevel gearboxes KF/KAF in combination with larger motors must be bolted to the mounting surface with bolts of grade 10.9 (see table).

Gearbox type		Flange	Motor size											
			63	71	80	90	100	112	132	160	180	200	225	250
FF/FAF39	KF/KAF39	A160	8.8	8.8	8.8	10.9	10.9							
FF/FAF49	KF/KAF49	A200	8.8	8.8	8.8	8.8	10.9	10.9						
FF/FAF69	KF/KAF69	A250	8.8	8.8	8.8	8.8	8.8	8.8	10.9					
FF/FAF79	KF/KAF79	A250	8.8	8.8	8.8	8.8	8.8	8.8	10.9					
FF/FAF89	KF/KAF89	A300		8.8	8.8	8.8	8.8	10.9	10.9	10.9				
FF/FAF109	KF/KAF109	A350			8.8	8.8	8.8	8.8	8.8	10.9	10.9			
FF/FAF129	KF/KAF129	A450				8.8	8.8	8.8	8.8	8.8	8.8	8.8		
FF/FAF149	KF/KAF149	A450				8.8	8.8	8.8	8.8	8.8	8.8	10.9	10.9	10.9
FF/FAF169	KF/KAF169	A550					8.8	8.8	8.8	8.8	10.9	10.9	10.9	10.9
FF/FAF189	KF/KAF189	A660						8.8	8.8	8.8	8.8	8.8	8.8	10.9

Configuring guide

Configuring a gearbox

2

Shaft load and bearing service life

Available radial force

The radial forces either come from the driven machine (mixer, hoisting gear) or they are caused by the transmission elements.

The available radial force F_{Ravail} at the output shaft is obtained as follows:

- The required geared motor output torque T_2
- Average diameter of the mounted transmission element d_0
- Transmission element type, e.g. sprocket wheel

The transmission element type determines the additional factor C (see table).

$$F_{Ravail} = 2000 \cdot \frac{T_2}{d_0} \cdot C$$

Additional factor C for the transmission element type

Transmission element	Explanation	Additional factor C
Gear wheel	> 17 teeth	1.00
	≤ 17 teeth	1.15
Sprocket wheel	≥ 20 teeth	1.00
	14 ... 19 teeth	1.25
	≤ 13 teeth	1.40
Toothed belts	Preloading force	1.50
V-belts	Preloading force	2.00
Flat belts	Preloading force	2.50
Agitator/mixer	Rotating radial force	2.50

Permissible radial force

The permissible radial force F_{R2} is determined by the required bearing service life, among other things. The nominal service life L_{h10} is determined in accordance with ISO 281. Normally, calculating the nominal bearing service life is completely adequate.

The bearing service life can be calculated for special operating conditions and in special cases on request, based on the modified service life L_{na} .

The selection tables specify the permissible radial force F_{R2} for the output shafts of foot-mounted gearboxes with solid shaft. These table values refer to the force application point at the center of the shaft extension and are minimum values, which apply under the most unfavorable conditions (force application angle, mounting position, direction of rotation).

If the values in the table are not sufficient, or if other gearbox designs are being used, please contact Siemens.

Permissible axial force

If no radial force is present, then as permissible axial force F_{ax} (tension or compression), max. 50 % of the permissible radial force can be applied.

Higher permissible radial and axial force

The permissible radial force load can be increased, taking the force application angle α and the direction of rotation into account. Installing reinforced bearings also means that higher loads are permitted on the output shaft.

If higher radial or axial forces or combined loads comprising radial and axial forces occur, then please contact Siemens.

Note:

Bevel gearboxes B and K and helical worm gearboxes C in type of construction M1 with foot mounting on the face side: Maximum of 50 % of the radial force F_{R2} specified in the tables is permissible.

Helical geared motors ZB and DB in foot/flange-mounting designs:

When transmitting torque through the flange surface, a maximum of 50 % of the radial force F_{R2} specified in the tables is permissible.

Variables for defining shaft load and bearing service life

Code	Description	Unit
α	Force application angle	°
a	Gearbox constant	kNmm
b, d, l, y, z	Gearbox constants	mm
C	Additional factor to calculate the radial force	-
d_0	Average diameter of the mounted transmission element	mm
F_{ax}	Permissible axial force	N
F_x	Permissible radial force from out of center force application point	N
F_{xperm1}	Permissible radial force, limited by the bearing service life, at a distance of x from the shaft shoulder	N
F_{xperm2}	Permissible radial force, limited by the shaft strength, at a distance of x from the shaft shoulder	N
F_{Ravail}	Available radial force from the mounted transmission element	N
F_{R2}	Permissible radial force at the center of shaft extension (l/2)	N
L_{h10}	Nominal service life	h
L_{na}	Modified service life	h
T_2	Geared motor output torque	Nm
x	Distance from the shaft shoulder up to the point where force is applied	mm

Definition of the point of application of the radial and axial forces

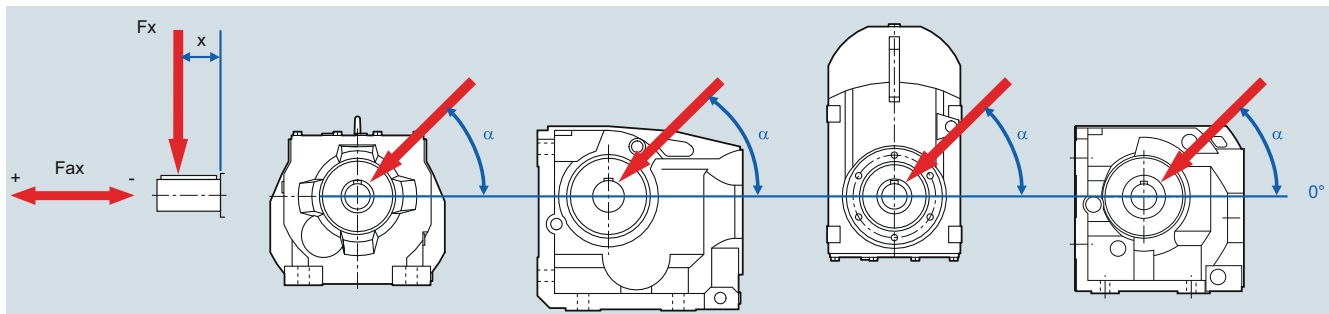


Fig. 2/4 Diagram showing force application point

Shaft load and bearing service life (continued)

Radial force conversion for out of center force application point

If the force is not applied at the center of the shaft extension, the permissible radial force must be calculated using the following formula.

The lower value of F_{xperm1} (bearing service life) and F_{xperm2} (strength) is the permissible radial force. The calculation is applicable without axial force.

Permissible radial force according to the bearing service life

$$F_{xperm1} = F_{R2} \cdot \frac{y}{(z + x)}$$

Permissible radial force according to the shaft strength

$$F_{xperm2} = \frac{a}{(b + x)}$$

Gearbox constants for calculating the radial force

Gearbox size	Constants					
	y mm	z mm	a kNmm	b mm	d mm	l mm
Helical gearboxes Z and D						
19	91	71	52.8	12	20	40
29	104	79	137	12	25	50
39	116	91	109	0	25	50
49	138	108	260	15	30	60
59	143.5	108.5	414	19	35	70
69	169	134	385	0	35	70
79	172.5	132.5	536	0	40	80
89	212.5	162.5	929	0	50	100
109	250	190	1 212	0	60	120
129	297	227	2 051	0	70	140
149	319	234	4 930	0	90	170
169	398	293	7 350	0	110	210
189	469	364	11 235	0	120	210
Parallel shaft gearbox F						
29	108.5	83.5	159	0	25	50
39	123.5	98.5	146	0	25	50
49	154.5	124.5	239	0	30	60
69	175	140	378	0	35	70
79	191	151	544	0	40	80
89	226	176	884	0	50	100
109	256	196	1 500	0	60	120
129	324	254	2 625	0	70	140
149	385	300	5 525	0	90	170
169	459.5	354.4	7 728	0	110	210
189	538	433	11 655	0	120	210
Bevel gearbox B						
19	97.5	77.5	38	0	20	40
29	117	97	83	0	20	40
39	143.5	113.5	209	0	30	60
49	175	140	392	0	35	70
Bevel gearbox K						
39	123.5	98.5	152	0	25	50
49	154.5	124.5	235	0	30	60
69	175	140	378	0	35	70
79	191	151	556	0	40	80
89	226	176	916	0	50	100
109	256	196	1 470	0	60	120
129	324	254	2 800	0	70	140
149	385	300	5 525	0	90	170
169	459.5	354.5	7 350	0	110	210
189	538	433	10 920	0	120	210

Configuring guide

Configuring a gearbox

Shaft load and bearing service life (continued)

Gearbox constants for calculating the radial force

Gearbox size	Constants					
	y mm	z mm	a kNm	b mm	d mm	l mm
Helical worm gearbox C						
29	117.5	97.5	84	0	20	40
39	123.5	98.5	157	0	25	50
49	154.5	124.5	236	0	30	60
69	171.5	136.5	410	0	35	70
89	220.0	175.0	736	0	45	90
Worm gearbox S						
09	83.5	63.5	36	0	16	40
19	98.0	78.0	76	0	20	40
29	120.5	100.5	72	0	20	40

Permissible torque for SIMOLOC assembly system

It is important to note that the maximum permissible torque is dependent on the selected machine shaft diameter.

Diameter of customers shaft	Max. possible torque T2					
	Nm					
	29	39	49	69	79	89
Metric shafts						
20	115					
25	150	205				
30		290	375			
35			480	460	840	
40				600	1 000	1 110
50						1 750
Imperial shafts						
0.75"	100					
1"	150	205				
1.1875"		290	375			
1.25"		290	415			
1.375"			480	460	840	
1.4375"			480	500	915	
1.5"				545	1 000	
1.625"				600	1 000	1 180
1.75"						1 375
1.9375"						1 680
2"						1 750

Determining the duty type

The power ratings for continuous duty with constant load (duty type S1) are listed in the power tables. The motor power ratings listed in the catalog can be converted to the lower duty cycle using the corresponding k_{DC} factors for S1, S2, and S3 duty types.

$$P_{DC} = P_{rated} \cdot k_{DC}$$

Code	Description	Unit
P_{DC}	Power for the new duty cycle	kW
P_{rated}	Rated motor power	kW
k_{DC}	Factor for increased power	-

For increased power, you should note that the breakdown torque ratio must not fall below 1.6. This same regulation applies when differentiating between the following groups of duty types:

Cyclic duration factor

The cyclic duration factor DC is the ratio of the load duration and cyclic duration. The cyclic duration is the sum of the on times (operational periods) and the no-voltage periods.

$$DC = \frac{t_1 + t_2 + t_3}{t_s} \cdot 100$$

Code	Description	Unit
DC	Cyclic duration factor	%
t_1	Application time of the brake	ms
t_2	Disconnection time	ms
t_3	Slipping time	ms
t_s	Cycle duration	ms

Duty types according to EN 60034-1 (IEC 60034-1)

Duty type	Description	Information required	Factor for increased power	
				k_{DC}
S1	Continuous duty with 100 % DC	-	-	-
S2	Constant load for a brief time, e.g. S2 – 30 min	Load duration	60 min	1.10
			30 min	1.20
			10 min	1.40
S3	Intermittent periodic duty, where starting has no significant influence (cyclic operation), e.g. S3 - 40 %	Cyclic duration factor DC in % (referred to 10 min)	60 %	1.10
			40 %	1.15
			25 %	1.30
			15 %	1.40
S4 ... S10	Intermittent periodic duty with the influence of starting	Cyclic duration factor DC in % (referred to 10 min), switch-on operations per hour, load torque and moment of inertia The duty type and motor power can be determined if the number of starting operations per hour, starting time, load duration, type of braking, braking time, idle time, cycle time, standstill time, and required power are specified.	On request	-

Duty types

S1

Continuous duty with constant load

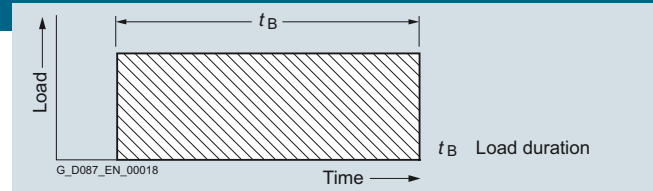


Fig. 2/5 Duty type S1

Where starting and electrical braking do not affect the stator winding temperature rise:

S2

Short-time duty

Recommendation: Operating times 10, 30, 60 and 90 minutes

After each period of duty the motor remains at zero current until the winding has cooled down to the coolant temperature.

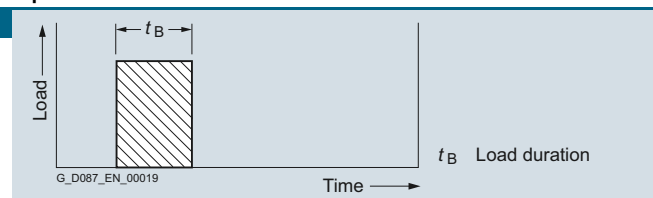


Fig. 2/6 Duty type S2

Configuring guide

Configuring a three-phase motor

Determining the duty type (continued)

Duty types

Where starting and electrical braking do not affect the stator winding temperature rise:

S3

Intermittent duty

Where starting does not affect the temperature. Unless any agreement is made to the contrary, the cycle duration is 10 minutes. Values of 15 %, 25 %, 40 %, and 60 % are recommended for the cyclic duration factor.

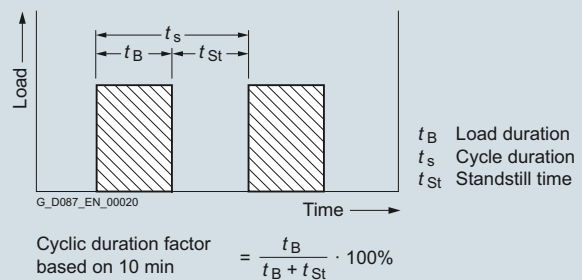


Fig. 2/7 Duty type S3

S6

Continuous duty with intermittent load

The cycle duration, if nothing else has been agreed, is 10 minutes. Values of 15 %, 25 %, 40 %, and 60 % are recommended for the load duration factor.

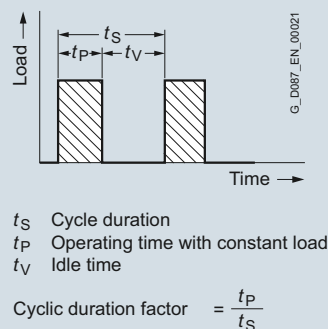


Fig. 2/8 Duty type S6

S10

Operation with discrete constant loads

In this case, a maximum of four discrete loads are available, where each load results in the thermal steady state. For this duty type, a load of the same value as the one used for the S1 duty type should be selected.

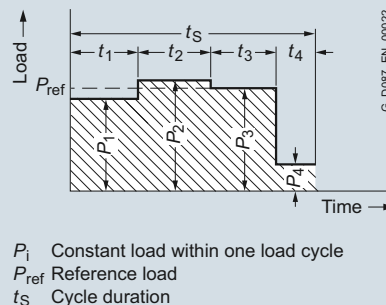


Fig. 2/9 Duty type S10

Starting and braking influence the temperature rise of the stator winding and the rotor cage:

S4

Intermittent duty where starting influences the temperature

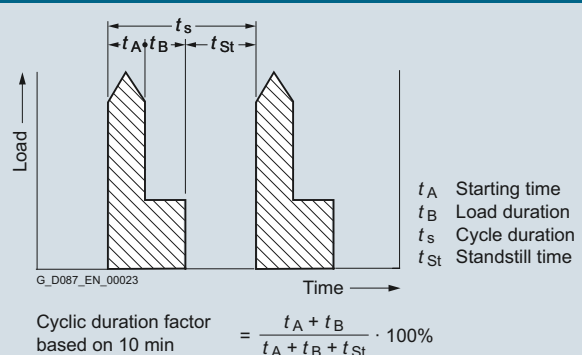


Fig. 2/10 Duty type S4

Determining the duty type (continued)

Duty types (continued)

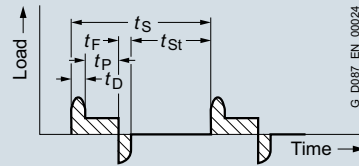
Starting and braking influence the temperature rise of the stator winding and the rotor cage:

S5

Intermittent duty where starting and braking influences the temperature

For the **S4** and **S5 duty types**, this code should be followed by the cyclic duration factor, the moment of inertia of the motor (J_{mot}), and the moment of inertia of the load (J_x), both referred to the motor shaft.

The cycle duration, if nothing else has been agreed, is 10 minutes. Values of 15 %, 25 %, 40 %, and 60 % are recommended for the cyclic duration factor.



t_S Cycle duration
 t_D Starting time
 t_P Operating time with constant load
 t_F Time with electrical braking
 t_{St} Standstill time with windings at zero current

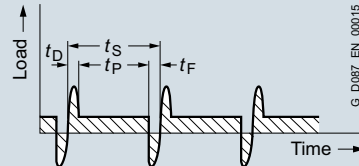
$$\text{Cyclic duration factor} = \frac{t_D + t_P + t_F}{t_S}$$

Fig. 2/11 Duty type S5

S7

Continuous duty with starting and braking

For S7 and S8 duty types, the moment of inertia of the load (J_x) referred to the motor shaft must be known.



t_S Cycle duration
 t_D Starting time
 t_P Operating time with constant load
 t_F Time with electrical braking

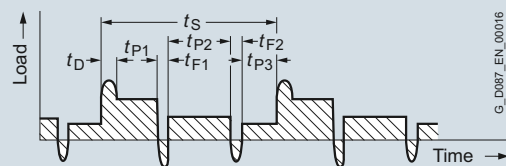
Cyclic duration factor = 1

Fig. 2/12 Duty type S7

S8

Continuous duty with non-periodic load and speed changes (inverter operation)

Most of the intermittent operating conditions occurring in practice are a combination of the above mentioned duty types. All of the operating conditions must be known in order to precisely determine a suitable motor.



t_S Cycle duration
 t_D Starting time
 t_P Operating time with constant load (P1, P2, P3)
 t_F Time with electrical braking (F1, F2)

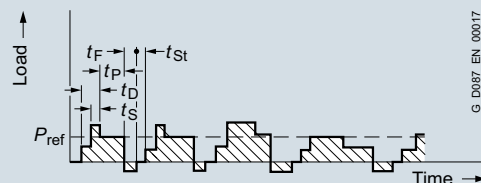
$$\text{Cyclic duration factor} = \frac{t_D + t_{P1}}{t_S} \cdot \frac{t_{F1} + t_{P2}}{t_S} \cdot \frac{t_{F2} + t_{P3}}{t_S}$$

Fig. 2/13 Duty type S8

S9

Continuous duty with non-periodic load and speed changes (inverter operation)

Most of the intermittent operating conditions occurring in practice are a combination of the above mentioned duty types. All of the operating conditions must be known in order to precisely determine a suitable motor.



t_D Starting time
 t_P Operating time with constant load
 t_F Time with electrical braking
 t_{St} Standstill time with windings at zero current
 t_S Time with overload

Fig. 2/14 Duty type S9

Configuring guide

Configuring a three-phase motor

Number of starting operations

A higher number of starting operations means that the motor winding will be subject to a thermal load.

The permissible number of starting operations Z_{perm} has to be determined for different operating cases.

This value is influenced by the corresponding load torque, the additional moment of inertia, the power requirement, and the cyclic duration factor. These can be evaluated using the factors k_M , k_{FI} , and k_P .

For 60 Hz operation, the calculated permissible switching frequency Z_{perm} must be reduced by 25 %. See the technical specifications for brakes in [Chapter 11](#) for the permissible switching frequency for operation with function rectifiers.

The permissible no-load switching frequency Z_A for motors with brake L must be obtained from table „No-load switching frequency for brakes L“ on page 11/33.

$$Z_{perm} = Z_A \cdot k_M \cdot k_{FI} \cdot k_P$$

The permissible no-load switching frequency Z_0 for motors without brakes must be obtained from the [selection and ordering data page 8/14](#).

$$Z_{perm} = Z_0 \cdot k_M \cdot k_{FI} \cdot k_P$$

Code	Description	Unit
DC	Cyclic duration factor	%
J_{mot}	Moment of inertia of motor and brake	kgm ²
J_Z	Additional moment of inertia of a high inertia fan	kgm ²
J_X	Reduced moment of inertia on motor shaft	kgm ²
J_{add}	Additional moment of inertia	kgm ²
k_{FI}	Factor for taking into account the additional moment of inertia	-
k_M	Factor for taking into account the load torque while accelerating	-
k_P	Factor for taking into account the required power and duty cycle	-
P_S	Actual steady-state power of the motor	kW
P_{rated}	Rated motor power	kW
T_A	Acceleration torque of the motor	Nm
T_{load}	Rated motor torque	Nm
t_R	Duty cycle (decimal)	
Z_A	No-load switching frequency, motor with brake	1/h
Z_0	No-load switching frequency, motor without brake	1/h
Z_{perm}	Permissible switching frequency	1/h

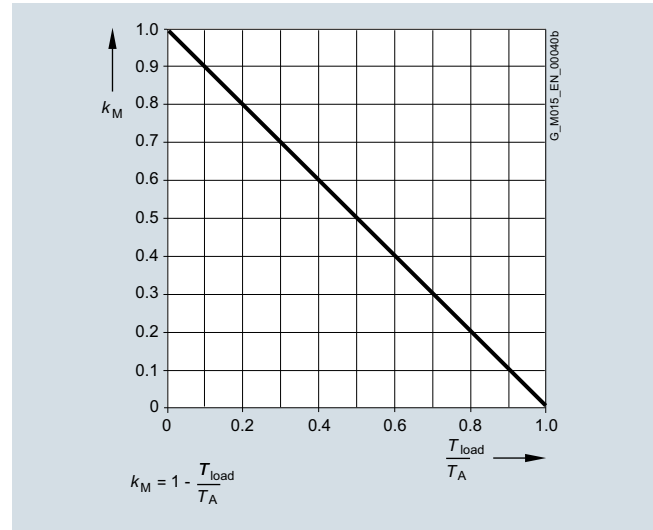


Fig. 2/15 Torque when accelerating

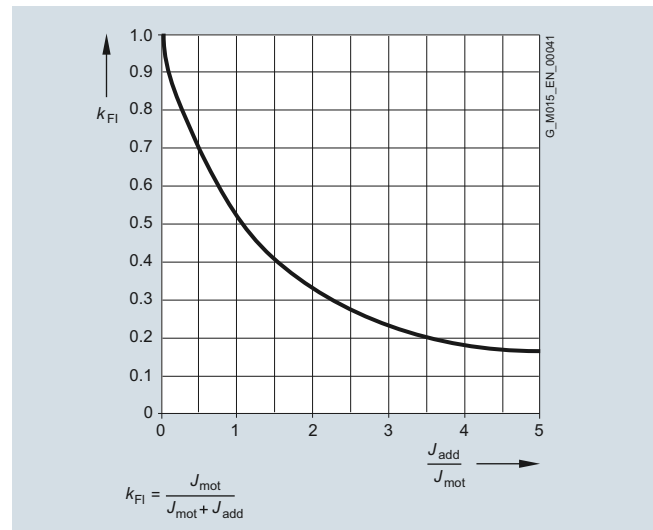


Fig. 2/16 Additional moment of inertia

$$J_{add} = J_X + J_Z$$

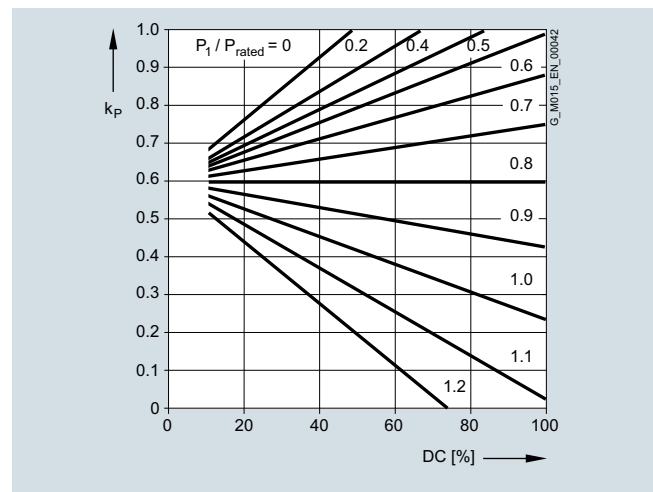


Fig. 2/17 Power requirement and duty cycle

$$k_P = t_R \cdot (1 - (P_S / P_{rated})^2) + 0.6 \cdot (1 - t_R) + 0.24 \cdot t_R$$

Additional moments of inertia

The motor moment of inertia with standard fan is specified in the motor selection lists. The higher moment of inertia should be used for metal or high-inertia fans. This is also valid for mounted brakes, backstops and encoder systems.

Line feeder cables

Line feeder cables must be adequately dimensioned. The number of required parallel (if applicable) feeder cables is determined by the maximum connectable conductor cross-section, the type of cable, the cable installation, the ambient temperature and the permissible current. In Germany, DIN VDE 0298 must be applied when dimensioning cables.

Undervoltage

For an undervoltage condition as a result of weak line supplies, catalog values such as motor power, torque and speed are not reached. This is especially important when considering motor starting.

Motor protection

A distinction is made between current-dependent and temperature-dependent protective devices for motors.

Current-dependent protective devices

Fuses are only used to protect line cables in the event of a short-circuit. They are not suitable for protecting the motor against overload. The motors are usually protected by thermally-delayed overload protective devices (circuit breakers for motor protection or overload relays).

This protection is current-dependent and is particularly effective in the case of a locked rotor. For normal operation with short starting operations, starting currents that are not excessive and for low numbers of starting operations, motor circuit breakers provide adequate protection. Motor circuit breakers are not suitable for heavy duty starting or high numbers of starting operations. Differences in the thermal time constants for the protective devices and the motor results in unnecessary early tripping when the circuit breaker is set to the rated current.

Temperature-dependent protective devices

Temperature-dependent protective devices are integrated in the motor winding and can be implemented as **temperature sensors** and **temperature switches**.

The number of temperature-dependent protective devices depends on the number of windings and their function.

The alarm is normally set to 10 K below the switch-off temperature. The rated response temperatures of the protective devices depend on the thermal class of the motors.

In order to achieve full thermal protection it is necessary to combine a thermally-delayed overcurrent release and a PTC thermistor.

Coolant temperature and installation altitude

The rated power specified in the [selection tables in Chapter 8](#) is valid for a coolant temperature of +40 °C and an installation altitude of 1 000 m above sea level.

Please contact Siemens for higher coolant temperatures.

The table with correction factors provides a rough idea of the derating required if conditions are different.

This results in a permissible motor power of:

$$P_{\text{perm}} = P_{\text{rated}} \cdot k_{\text{HT}}$$

Code	Description	Unit
P_{perm}	Permissible motor power	kW
P_{rated}	Rated motor power	kW
k_{HT}	Factor for abnormal coolant temperature and installation altitude	-

Factor k_{HT} for different installation altitude and coolant temperature

Installation altitude SA	Coolant temperature CT					
	< +30 °C	+30 ... +40 °C	+45 °C	+50 °C	+55 °C	+60 °C
m						
1 000	1.07	1.00	0.96	0.92	0.87	0.82
1 500	1.04	0.97	0.93	0.89	0.84	0.79
2 000	1.00	0.94	0.90	0.86	0.82	0.77
2 500	0.96	0.90	0.86	0.83	0.78	0.74
3 000	0.92	0.86	0.82	0.79	0.75	0.70
3 500	0.88	0.82	0.79	0.75	0.71	0.67
4 000	0.82	0.77	0.74	0.71	0.67	0.63

Configuring guide

Configuring a three-phase motor

2

Degrees of protection

The motors are supplied in IP55 to standard IEC 60034-5. They can be installed in dusty or humid environments. The motors are suitable for operation in tropical climates. Guide value below 60 % relative air humidity for a coolant temperature of +40 °C.

Other requirements on request.

First digit	Brief description	Second digit	Brief description
4	The motor is protected against solid objects greater than 1 mm.	4	The motor is protected against water splashed from all sides.
5	The motor is protected against dust.	5	The motor is protected against strong jets of water.
6	The machine is dust-tight.	6	The motor is protected against "heavy seas" or powerful jets of water.
		7	The motor is protected against immersion.
		8	The motor is protected against long periods of immersion under pressure.

The first digit of the degree of protection indicates the degree to which an enclosure provides protection against contact and the ingress of foreign bodies.

The second digit indicates the protection that an enclosure offers regarding the ingress of water.

Increased corrosion protection as well as additional protective measures for the winding (protection against moisture and acid, corrosion protection in the motor) can support the selected degree of protection.

The degree of protection only refers to the motor. When selecting higher degrees of protection, the equipping on the gearbox side should be taken into account (seals, vents).

Cooling and ventilation

When the geared motor is mounted and the air intake is restricted, you must ensure that a minimum clearance is maintained between the fan cover and the wall and that the cooling air is not immediately drawn in again.

Further, it must be guaranteed that the cooling air flow to the gearbox is not obstructed. As a consequence, the gearbox operating temperature can be further reduced.

Forced ventilation

The use of an external fan is recommended to increase motor utilization at low speeds and to limit noise generation at speeds significantly higher than the synchronous speed. Both are mainly used in conjunction with inverter operation.

Typical areas of application for forced ventilation:

- High number of starting operations
- Inverter drives with a control range > 1:20
- Inverter drives with rated torque at low speeds
- Noise reduction

Overview

The brakes can be used as working brakes or holding brakes. A holding brake is suitable for holding masses and loads at a fixed position. A working brake is also capable of decelerating masses and loads.

The brakes are designed as fail-safe spring-operated brakes. When the brake is mounted, it increases the length of the motor. The dimensions are shown in the dimensional drawings. The spring-operated disk brakes are suitable for a standard ambient temperature range of -20 to +40 °C.

Variables

Code	Description	Unit
f_{br}	Braking torque correction factor	-
J_{AD}	Moment of inertia of the adapter	kgm ²
J_G	Moment of inertia of the gearbox	kgm ²
J_{mot}	Moment of inertia of the motor	kgm ²
J_x	Moment of inertia of the load referred to the motor shaft	kgm ²
J_z	Additional moment of inertia of a high inertia fan	kgm ²
k	Factor for taking into account operating conditions	-
L_{rated}	Service life of the brake lining until readjustment	h
$L_{ratedmax}$	Service life of the brake lining until replacement	h
n_{br}	Braking speed	rpm
η	Efficiency	%
Q_{perm}	Permissible operating energy	J
s_{br}	Braking distance	m
t_1	Application time of the brake	ms
t_{br}	Braking time	s
T_{br}	Rated braking torque	Nm
T_x	Load torque	Nm
v	Travel velocity	m/s
W	Friction energy per braking operation	J
W_{tot}	Friction energy until the brake lining is replaced	MJ
W_V	Friction energy until the brake is readjusted	MJ
Z	Switching frequency	1/h

Determining the braking torque

The braking torque must be selected in accordance with the particular drive application.

The following criteria are decisive when it comes to making the selection:

- Static safety
- Required braking time
- Permissible brake delay
- Possible braking distance
- Brake wear

The braking torque is determined using the safety factor k , which can be selected in the range 1.0 up to 2.5. As a general rule of thumb, the factor for horizontal motion is approx. 1.0 to 1.5 and for vertical motion approx. 2.0 to 2.5. However, the precise braking torque depends to a large extent on the particular operating conditions.

The rated braking torque is referred to a speed of $n = 100$ rpm and decreases with increasing motor speed. When calculating the braking torque, this is taken account using correction factor f_{br} . This means that the rated braking torque is applicable for most braking operations for inverter operation.

For line operation, braking is directly from the motor speed. In addition, for vertical conveyors, the increased speed when moving downwards must be taken into account.

$$T_{br} > T_x \cdot k \cdot f_{br}$$

Braking torques as a function of the speed and permissible speed limits

The braking torque available decreases with increasing motor speed.

The maximum permissible speeds from which emergency stops can be made are listed in the [table on page 11/30](#). These speeds should be considered as guide values and must be checked for the specific operating conditions.

The maximum permissible friction energy depends on the switching frequency and is shown for individual brakes in the [diagram "Permissible operating energy" on page 11/30](#). Increased wear can be expected when the brakes are used for emergency stops.

Braking energy per braking operation

The braking energy W per braking operation comprises the energy of the moments of inertia to be braked and the energy which must be applied in order to brake against a load torque:

T_x is positive if the load torque is working against the braking torque (horizontal motion, upward vertical motion).

T_x is negative if it supports the braking operation (downward vertical motion).

The permissible operating energy Q_{perm} must be checked against the relevant switching frequency using the [diagram "Permissible operating energy" on page 11/30](#). This is of particular importance for emergency-stop circuits.

$$W = \frac{T_{br}}{T_{br} \pm T_x \cdot \eta} \cdot \frac{(J_G + J_{AD} + J_{mot} + J_z + J_x \cdot \eta) \cdot n_{br}^2}{182.5}$$

$$W < Q_{perm}$$

Service life of the brake lining

The service life of the brake lining L_{rated} until the air gap has to be readjusted depends on various factors. The main influencing factors include the masses to be braked, the motor speed, the switching frequency, and, therefore, the temperature at the friction surfaces.

This means it is not possible to specify a value for the friction energy until re-adjustment that is valid for all operating conditions. However, a wear calculation can be made according to the friction energy, so that the service life can be defined in normal operation.

Brake service life

The brake lining is subject to wear as a result of friction. As a consequence, the air gap increases and the brake application time lengthens. The air gap can be readjusted. The friction lining should be replaced after a certain number of readjustments.

Service life of the brake lining until readjustment

$$L_{rated} = \frac{W_V}{W \cdot Z}$$

Service life of the brake lining until replacement

$$L_{rated\ max} = \frac{W_{tot}}{W \cdot Z}$$

Configuring guide

Configuring a brake

Brake control

Definition of switching times (VDI 2241)

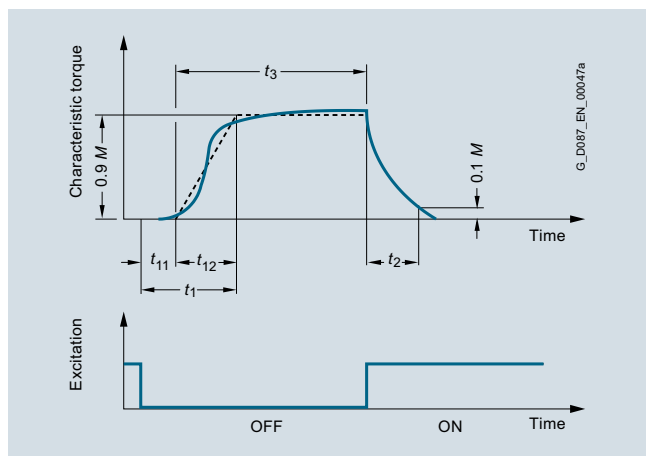


Fig. 2/18 Brake switching times

Switching times:

- t_1 Application time of the brake
- t_2 Disconnection time
- t_3 Slipping time
- t_{11} Response time
- t_{12} Rise time

Fast brake application

Disconnection on the AC side

If the brake is disconnected from the line supply, the brake is applied. With AC brake voltages, the brake application time is extended as a result of the inductance of the solenoid (disconnection on the AC side). This results in a considerable delay before the brake is mechanically applied. In order to achieve short brake application times, the circuit must also be disconnected on the DC side.

Rectifier for disconnection on the DC side

Electromagnetically released spring-operated disk brakes can be disconnected on the AC side and the DC side. Disconnection on the DC side means that the inductance and thus the magnetic field in the brake solenoid are reduced very quickly.

For disconnection on the DC side, a wire jumper can be removed from rectifier and replaced by the contacts of an external switch. This enables significantly shorter application times to be achieved than those achieved for disconnection on the AC side.

Function rectifiers for fast brake application

If function rectifiers are used for fast brake application, then there is no need for an external switch and therefore less wiring is required.

Disconnection on the DC side using current sensing

One option of disconnecting on the DC side is to sense the motor current. If the motor current falls below the rectifier's sensor current when disconnected from the three-phase line supply, the brake solenoid is disconnected from the DC voltage electronically without any contacts.

Used in conjunction with disconnection on the DC side by means of current sensing, rectifiers are generally suitable for being connected in parallel with the motor connection, even in applications involving moving loads or large moments of inertia.

Brakes controlled in this way are completely wired to the motor terminal board. Inverter operation is not permissible.

Disconnection on the DC side using voltage sensing

Another option of disconnecting on the DC side is by sensing the rectifier supply voltage.

An integrated switching transistor switches off the load if the input voltage falls below a specified switching threshold. Used in conjunction with disconnection on the DC side using voltage sensing, rectifiers are generally suitable for operation with separate AC-side brake control using an additional switching contact.

Connection in parallel with the motor connection is also possible, but it is not recommended, as the rectifier disconnection response will be impaired by the influence of the motor winding. In addition, many applications involve driving loads or large moments of inertia. This can cause the no-load voltage generated when the motor coasts down to considerably delay brake application if the switching threshold for voltage sensing is not fallen below.

If connection in parallel with the motor connection is nevertheless desired or required, disconnection on the DC side using current sensing is recommended.

Fast brake release

Function rectifier for fast brake release

Rectifier with overexcitation (high-speed excitation)

Rectifiers with overexcitation operate for approximately 300 to 400 ms with bridge rectification, i.e. when being released, the brakes are supplied with twice the rated solenoid voltage. After this time the rectifiers automatically switch from bridge to half-wave rectification and the brakes are operated with the rated solenoid voltage. This results in shorter release times and higher brake switching frequencies. The friction lining wear is also reduced, the permissible friction energy until the air gap is re-adjusted increases, and starting losses are reduced.

Rectifiers with overexcitation are generally suitable for being connected in parallel to the motor connection or for a separate circuit in the case of inverter operation (note connection information for disconnection on the DC side).

Brake switching time

The total time it takes the motor to come to a standstill comprises the following times:

- Application time of the brake t_1
- Braking time t_{br}

The first is the time it takes the brake to reach 90 % of its braking torque. This time may be circuit- and control-dependent.

The braking time is determined as follows:

$$t_{br} = \frac{(J_G + J_{AD} + J_{mot} + J_z + J_x \cdot \eta) \cdot n_{br}}{9.55 \cdot (T_{br} \pm T_x \cdot \eta)}$$

If T_x supports the braking operation, T_x is positive, otherwise it is negative.

Braking distance and positioning accuracy

Braking distance s_{br} is the distance traveled by the driven machine during braking time t_{br} and application time t_1 .

With linear motion, a positioning accuracy of around ± 15 % can be assumed. However, this can be heavily influenced by the condition of the brake.

The formula below applies to horizontal motion and upward vertical motion.

$$s_{br} = v \cdot t_1 + 0.5 \cdot t_{br}$$

Incremental encoders

Incremental encoders are used to determine the position of rotor shafts and are used to approach a precisely defined angular position. This is achieved by photoelectrically scanning the graduation on an indexing disk. With incremental measuring methods, the graduation consists of a regular grid structure. The position information is obtained by counting the individual increments (measuring steps) from a set zero point. Since an absolute reference is required to determine positions, the indexing disks are provided with an additional track that has a reference mark. The absolute position determined by the reference mark is assigned exactly one measuring step. The reference mark must, therefore, be scanned before an absolute reference can be established or the last selected reference point found.

The incremental signals are transmitted as square-wave pulse train sequences U_{a1} (A) and U_{a2} (B), phase-shifted through 90° elec. The reference mark signal consists of a reference pulse U_{a0} (N), which is gated with the incremental signals. The integrated electronics also generate inverse signals $\overline{U_{a1}}$ (\overline{A}), $\overline{U_{a2}}$ (\overline{B}) and $\overline{U_{a0}}$ (\overline{N}) for interference-proof transmission. The illustrated sequence of output signals – with U_{a2} lagging behind U_{a1} – applies for clockwise rotation of the motor.

The fault-detection signal $\overline{U_{aS}}$ indicates fault conditions such as breakage of the supply cables or failure of the light source, etc. It can be used to shut down machines in automated production environments.

The distance between two successive edges of the incremental signals U_{a1} and U_{a2} using 1-fold, 2-fold, or 4-fold evaluation is one measuring step.

The maximum permissible speed or travel velocity must never be exceeded, not even for a short time.

Incremental encoders are used for applications which require a precisely defined position to be approached or restored. With incremental encoders, a reference point approach is required each time the line supply is switched off since the position in the control is usually not stored and movements of the machine are not detected during power off.

For the technical specifications of the incremental encoder, please refer to chapter "Motor options" on [page 11/35](#).

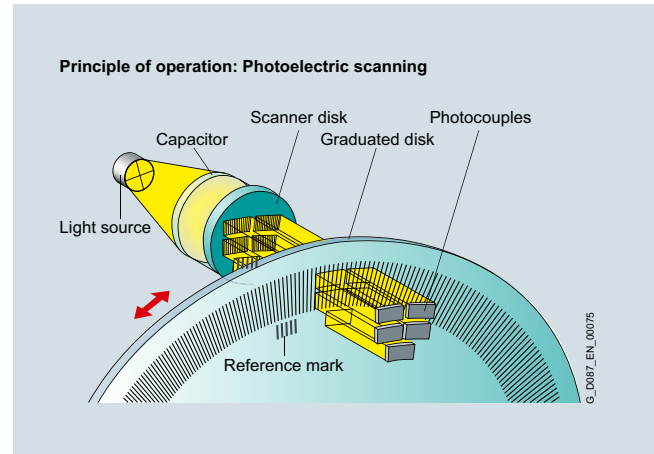


Fig. 2/19 Principle of operation, photoelectric scanning

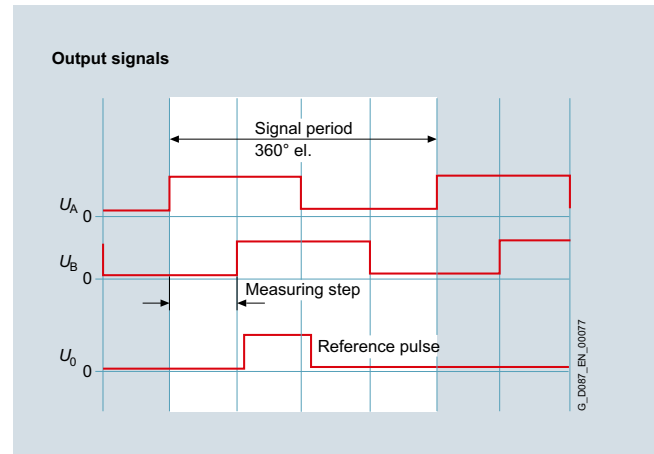


Fig. 2/20 Output signals

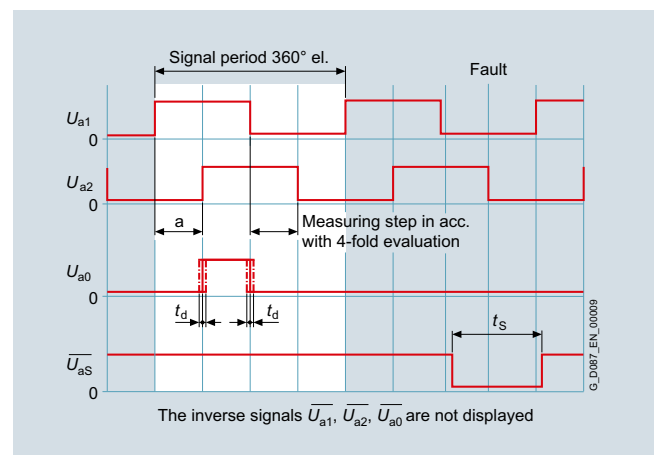


Fig. 2/21 Inverse output signals

Configuring guide

Configuring an encoder

2

Resolvers

Resolvers are rotary measuring systems where the angle of rotation is inductively sensed without contact. They operate with analog measured value acquisition, i.e. a measuring signal value can be continuously assigned to each value of the measured variable.

The method of operation mainly corresponds to that of a rotary transformer consisting of rotor and stator. If an AC voltage is applied to the stator winding, the magnetic flux created in the rotor winding induces an amplitude-modulated voltage of the same frequency.

The amplitude change with time is modulated by the angle-dependent change of the rotor. The envelope curve shows the respective angle. At the zero crossing of these envelope ends, the modulated voltage makes a phase step of 180° el.

In practice, resolvers with several stator windings are generally used. The voltage at the secondary winding continuously changes with the spatial angle in the phase position with regard to the voltage at one of the primary windings. A phase discriminator delivers a signal that is proportional to the angle of rotation.

Resolvers are used for applications which do not require such accurate position sensing as is possible with incremental encoders due to their higher resolution. They are used under harsh conditions regarding vibration, shock loads, and/or temperature.

For the technical specifications of the resolver, please refer to chapter "Motor options" on [page 11/38](#).

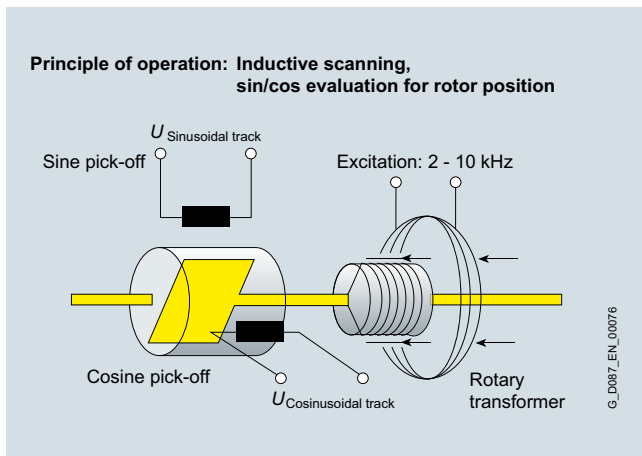


Fig. 2/22 Principle of operation, inductive sampling

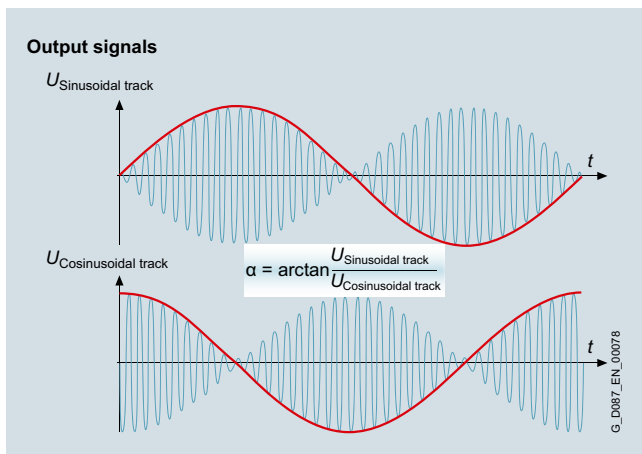


Fig. 2/23 Output signals

Absolute encoders

Absolute encoders are used to determine the position of rotor shafts and to approach a precisely defined angular position.

With the absolute measuring method, the position value is available from the encoder immediately after switch-on and can be called at any time by the subsequent electronics. There is no need to move the axes to find the reference position. The absolute position information is read from the graduation on the indexing disk, which consists of several parallel indexing tracks. The track with the finest scale division is interpolated for the position value and is used to generate an optional incremental signal at the same time. The indexing disks are photoelectrically scanned.

With singleturn rotary encoders the absolute position information is repeated at each revolution. Multiturn rotary encoders can also differentiate between revolutions.

Absolute encoders are used with applications which require a precisely defined position to be approached/relocated.

For the technical specifications of the absolute encoder, please refer to chapter "Motor options" on [page 11/39](#).

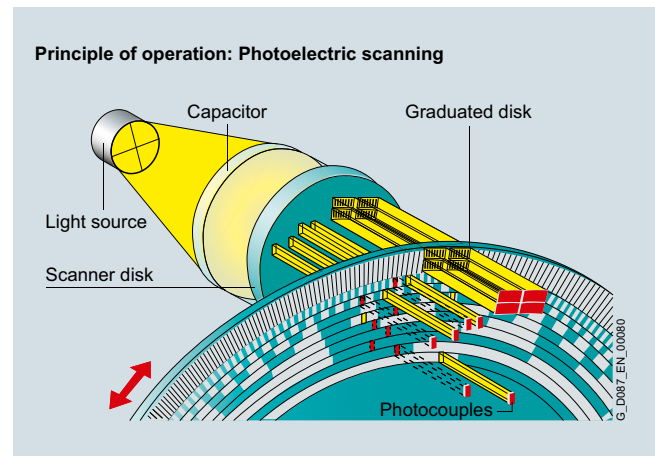


Fig. 2/24 Principle of operation, photoelectric scanning

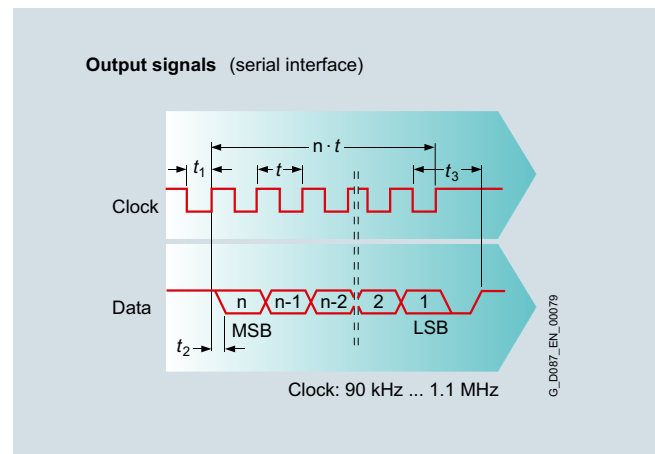


Fig. 2/25 Output signals

Functionally safe rotary encoders



Fig. 2/26 Functionally safe rotary encoder IN 8.5834FS2

Legal framework

The purpose of the Machinery Directive (2006/42/EC) is to ensure that all machines placed on the market within the European Economic Area meet common minimum safety requirements.

Functional safety - electric drives

The standards listed under the Machinery Directive define appropriate safety functions that must be implemented for electric, variable-speed drive systems. When viewed in this context, a drive train essentially comprises the elements "sensor - controller - actuator" which work together to ensure functional safety.

The distributor or operator of the machine/installation bears responsibility for the required safety functions and their properties.

In cases where Siemens provides support with the definition of safety-relevant components at the project planning stage, Siemens shall not accept any responsibility for the selection of components or the implementation of safety functions.

Trend toward integrated safety systems

The trend toward greater complexity and higher modularity of machines has seen a shift in safety functions away from the classical central safety functions (for example, shutdown of the complete machine using a main disconnecting means) and into the machine control system and the drives. Frequently, this also significantly increases the productivity. This is because, for instance, equipping times can be reduced and during these set-up times, depending on the machine type, other parts can still continue to produce.

Please note the following with respect to functionally safe rotary encoders:

- Functional safety can be ensured only if the functionally safe rotary encoder is evaluated by a suitable control and evaluation unit.
- The motors must be equipped as standard with thermal motor protection and a suitable evaluation unit.
- The maximum permissible input speed is 3 000 rpm.
- The maximum permissible air gaps for brake motors with functionally safe rotary encoder are different, see [Table](#) , "Technical specifications of brake with functionally safe rotary encoder," on page 11/ 48.
- The motors are supplied as standard with the option "Encoder under cover" (**Q95**) as mechanical protection.
- Brake motors with functionally safe rotary encoder are not compatible with option "wear-resistant friction lining" (**C03**).
- The functionally safe rotary encoder is suitable for typical industrial environments, but not for harsh industrial conditions such as those typical of offshore or chemical industry applications.
- Resonance effects must be avoided in systems supplied by an inverter or similar power control devices.

Environmental conditions

With respect to mechanical environmental conditions, the motors are approved for vibration and shocks in accordance with EN 60721-3-3 Class 3M3.

Geared motors with a functionally safe rotary encoder may be operated within an ambient temperature range of -20 °C to +40 °C.

Installation of SIMOGEAR geared motors

Geared motors must be installed such that the drive fastening elements in the machine are aligned uniformly and precisely. Vibration and resonance with rotational frequency and with multiples of the line frequency must be prevented. Care must be taken to ensure unobstructed ventilation (flow of cooling air and exhaust air must not be hindered).

Electrical connection of motors

The electrical connection of the motors must conform to the tolerance limits defined by EN 60034-1 for zone A (voltage $\pm 5\%$, frequency $\pm 2\%$).

Encoder connections

The encoders must be connected by suitable connecting cables (max. 50 m cable length). The shield of the connecting cables must be bonded over a large area/grounded at both ends (at encoder and at controller).

The following cables are recommended for use with SINAMICS S120 (SMC20):

Description	Article No.:
Connecting cable for incremental encoders IN 8.5834FS2, IN 8.5834FS3	6FX5002-2CG00-■■■■■
Connecting cable for absolute encoders IA 8.5883FS2, IA 8.5883FS3	6FX5002-2CH00-■■■■■

For connectors for connecting cables, see chapter [Motor options page 11/51](#).

Note:

Before you commission SIMOGEAR geared motors with the functionally safe rotary encoder, please read the information in operating instructions BA 2730.

Configuring guide

Configuring an encoder

Functionally safe rotary encoder (continued)

Function

Safe actual value sensing with encoder

A drive monitor with encoder is necessary for operation of a series of safety functions.

Further information about safety functions can be found in the [Safety Integrated Function Manual](#).

<http://support.automation.siemens.com/WW/view/en/27103700/133300>

[siemens.com/WW/view/en/27103700/133300](http://support.automation.siemens.com/WW/view/en/27103700/133300)

Safe actual value sensing with functionally safe rotary encoder

A functionally safe rotary encoder (sensor) must be used in conjunction with a suitable encoder evaluation system (controller) and an inverter (actuator) in order to implement certain safety function.

Safety functions

The following safety functions can be implemented with the functionally safe rotary encoders integrated in SIMOGEAR:

- SS2: Safe Stop 2
- SOS: Safe Operating Stop
- SLS: Safely-Limited Speed
- SSM: Safe Speed Monitor
- SSR: Safe Speed Range
- SDI: Safe Direction
- SLA: Safely-Limited Acceleration
- SAR: Safe Acceleration Range
- SLI: Safely-Limited Increment
- SLP: Safely-Limited Position
- SCA: Safe Cam

For detailed descriptions of individual functions, please refer to Catalog [D31](#).

For the technical specifications of the functionally safe rotary encoder, please refer to chapter "Motor options" on [page 11/44](#).

Operation of geared motors on a frequency inverter

It is possible in principle to operate the geared motors on a frequency inverter.

Please note the following supplementary conditions:

- Maximum speed of the geared motor in the field weakening range
- Maximum speed of the brake, see [page 11/30](#)
- Speed limits of the backstop, see [page 11/55](#)

Motor characteristic

During the acceleration process, frequency inverters shift the speed-torque characteristic of the three-phase asynchronous motor over the traversing range to enable jerk-free acceleration. This enables the motor to be operated at different speeds (e.g. rapid traverse/creep speed), but also protects the mechanical components of the plant and gearbox.

Two main motor operating ranges are applicable for inverter operation:

Constant flux (constant torque)

For frequency inverters with an unregulated DC link (e.g. SINAMICS G110M) the output voltage can be as high as the line-side input voltage minus any voltage drops in the inverter (for example, for SINAMICS G110M:

$$U_{Output} = 0.87 \times U_{Input}$$

If the maximum output voltage has not yet been achieved, the inverter output voltage can be increased as the motor speed increases until **V/f = constant** applies. As a consequence, the magnetic flux, the motor current and therefore the transferred **continuous torque is constant** (provided that the motor is adequately cooled → in the case of self-cooling, the torque must be reduced in accordance with the motor characteristic at low speeds due to the reduced cooling). Alternatively, if an external fan is used, the full motor torque can be utilized.

Field-weakening range

If the speed increases further when the maximum output voltage has been reached, $V/f \neq$ remains constant. The magnetic flux reduces with increasing motor speed, the motor current and therefore the transferred continuous torque reduces with respect to $1/n$, and the breakdown torque reduces according to $1/n^2$ (see motor characteristic). The motor can be operated in the field weakening range at constant power as far as the limit of stability (see under "Mechanical load, grease service life").

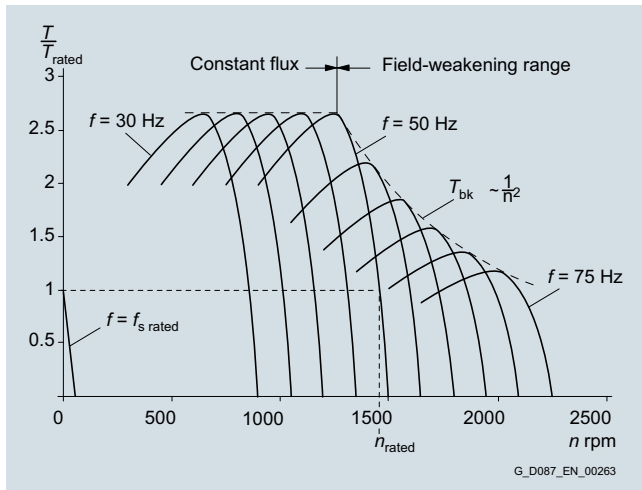


Fig. 2/27 Example for a 4-pole, three-phase asynchronous motor

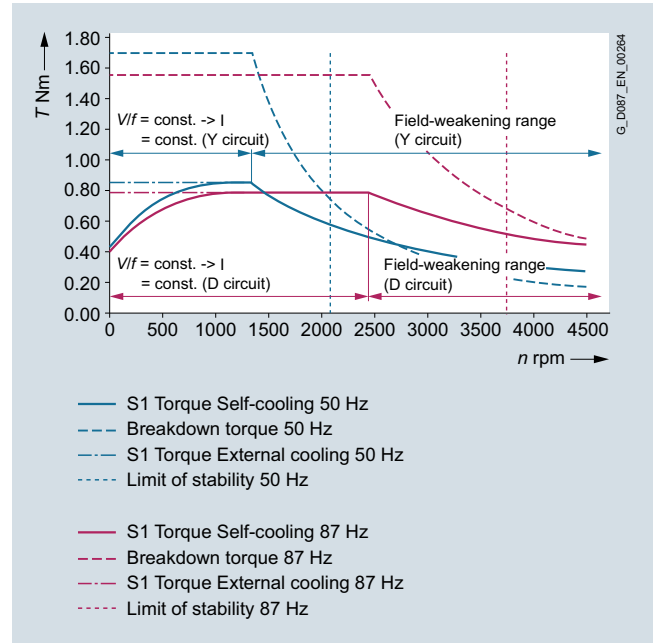


Fig. 2/28 Torque-speed characteristic for asynchronous motor (based on the example of LA63ME4)

Utilization in accordance with temperature class F

For rated power and line operation, the motor is utilized in accordance with temperature class B (130 °C maximum permissible constant temperature referred to a maximum cooling air temperature of 40 °C).

Siemens motors are designed as standard to temperature class F (155 °C maximum permissible constant temperature referred to a maximum cooling air temperature of 40 °C).

For inverter-fed operation at reduced output voltage, the power reserve of the motor can be used to achieve the rated power.

In this case, the rated torque is applied to the motor and the frequency inverter outputs a frequency at which the motor achieves rated speed.

At this operating point the slip and current input are higher than under line operation, so that the constant motor temperature increases accordingly. Prerequisite for utilization of the motor in accordance with temperature class F is that the frequency inverter is capable of outputting a sufficiently high level of current:

$$I_{FloutRated} \geq I_{Motor Rated Inc}$$

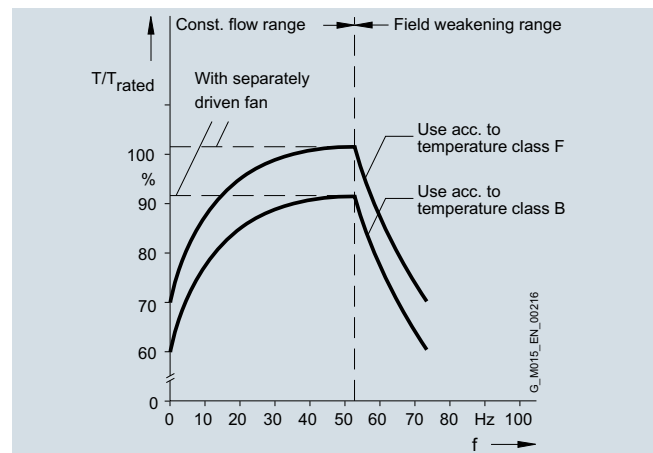


Fig. 2/29

Configuring guide

Configuring the motor for inverter operation

2

Peak load / acceleration torque

Based on experience, a safety margin of 30 % must be maintained from the breakdown torque:

$$T_{\max} = 0.7 \times T_{\text{bk}}$$

The engineering software "Sizer for Siemens Drives" incorporates a safety margin for the actual breakdown torque when the breakdown torque characteristic is displayed.

At a sufficiently high level of inverter output current, the motor can therefore be accelerated with approximately 0.7 times its breakdown torque.

When operating with a high switching frequency, the motor's acceleration torque may have to be limited to its rated torque. As a general rule, the rms current must not exceed the rated motor current. It is recommended that the respective traversing cycle is entered in the engineering software "Sizer for Siemens Drives", because the rms values will then be calculated automatically and represented in combination with the respective motor characteristic.

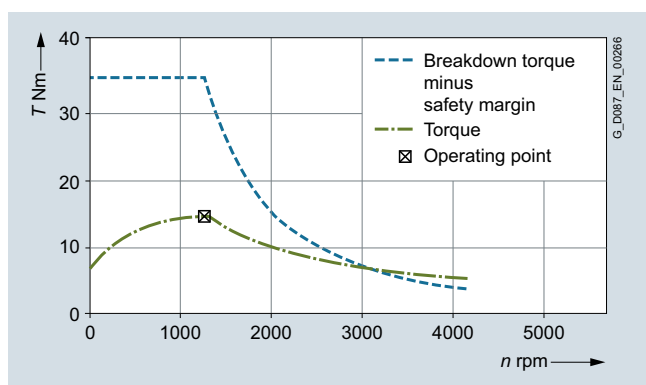


Fig. 2/30

Permissible voltage stress

More stress is placed on the insulation of the motor winding with inverter-fed operation than with line operation. The voltage stress also depends on the type of inverter used. The inverter subjects the motor winding to stress specially as voltage pulses are quickly switched.

The maximum voltage is influenced by the rise time of the pulses, the cable length and the type of cable used between motor and inverter.

Output filters at the inverter can reduce the maximum motor voltage to uncritical values. When using output filters, the control type, pulse frequency, output frequency, and limit torque that can be realized need to be observed, among other factors.

With inverters without output filters, impermissible voltage peaks can occur even with a relatively short motor cable. Regenerative operation, in particular, can stress the motor insulation. This stress occurs predominantly during vertical motion and is dependent on the line voltage, inverter type, cable length, and cable type.

For further details, see Chapter [Motor options page 11/7](#).

Bearing currents

Additional bearing currents can flow when motors are operated from inverters. They are mainly caused by the steep voltage rises which occur during switching. Without output filters, significant voltage variations can occur at the winding terminals. This phenomenon mainly occurs for larger machines.

EMC-compliant installation of the drive system is a basic prerequisite for preventing premature bearing damage as a result of bearing currents.

Important measures for reducing bearing currents are:

- Using cables with a symmetrical cable cross-section
- Using grounding cables with low impedance over a wide frequency range (0 Hz up to approximately 70 MHz), e.g. braided copper straps, HF finely-stranded conductors
- Separate HF equipotential-bonding cable between motor housing and driven machine
- Separate HF equipotential-bonding cable between motor housing and inverter PE busbar
- 360° HF contact of the cable shield at the motor housing and the inverter PE busbar. This can be achieved using EMC glands at the motor and EMC shield clips at the inverter, for example
- Use of motor reactors
- Common-mode filters at the inverter output
- Insulated motor bearing at the non-drive end (NDE)

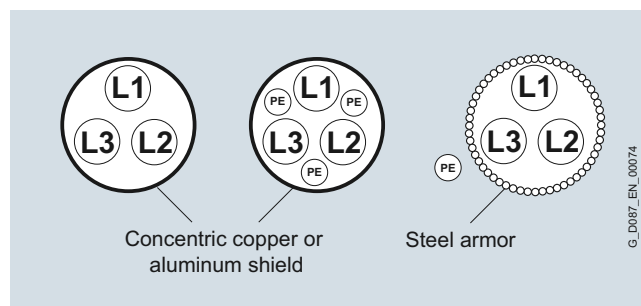


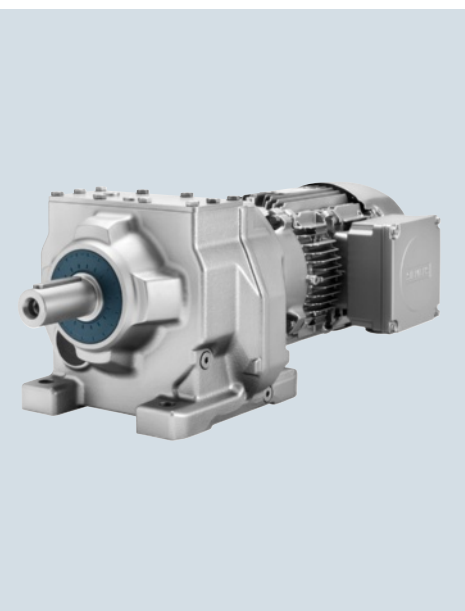
Fig. 2/31 Motors connected to an inverter

Mechanical load, grease service life

High speeds that exceed the rated speed and the resulting increased vibration alter the mechanical smooth running operation and the bearings are subject to increased mechanical stress. This reduces the grease service life and the bearing service life.

More detailed information on request.

Helical geared motors



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3/87	DZ/ZZ39
3/88	D/Z49 and DB/ZB49
3/89	DF/ZF49
3/90	DZ/ZZ49
3/91	D/Z59 and DB/ZB59
3/92	DF/ZF59
3/93	DZ/ZZ59
3/94	D/Z69 and DB/ZB69
3/95	DF/ZF69
3/96	DZ/ZZ69
3/97	D/Z79 and DB/ZB79
3/98	DF/ZF79
3/99	DZ/ZZ79
3/100	D/Z89 and DB/ZB89
3/101	DF/ZF89
3/102	DZ/ZZ89
3/103	D/Z109
3/104	DF/ZF109
3/105	DZ/ZZ109
3/106	D/Z129
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SIMOGEAR Geared Motors

Helical geared motors

Orientation

SIMOGEAR helical geared motor Z and D

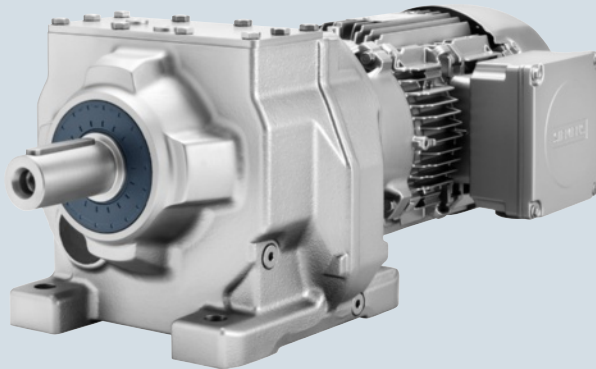


Fig. 3/1 Helical geared motor Z and D

SIMOGEAR helical geared motors are available in the following versions for mounting in any position:

- 2 or 3 stages Z/D
- Foot-mounted design Z/D
- Flange-mounted design ZF/DF
- Design with integrated housing flange ZZ/DZ
- Combined foot/flange-mounted design ZB/DB

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.09	D.79-LA71MH8							
	1.9	450	330.23	13 900	1.9	39	2KJ3207 - ■ CE11 - ■ ■ S1	P02
	D.69-LA71MH8							
	1.9	445	328.49	11 200	1.3	29	2KJ3206 - ■ CE11 - ■ ■ S1	P02
	2.2	395	292.08	11 300	1.5	29	2KJ3206 - ■ CE11 - ■ ■ R1	P02
	2.5	350	256.46	11 300	1.7	29	2KJ3206 - ■ CE11 - ■ ■ Q1	P02
	D.69-LA63MF6							
	2.6	330	328.49	11 400	1.8	27	2KJ3206 - ■ BD11 - ■ ■ S1	P01
	2.9	295	292.08	11 400	2.0	27	2KJ3206 - ■ BD11 - ■ ■ R1	P01
	D.59-LA71MH8							
	2.1	415	307.02	7 720	1.1	25	2KJ3205 - ■ CE11 - ■ ■ S1	P02
	2.3	370	272.99	7 790	1.2	25	2KJ3205 - ■ CE11 - ■ ■ R1	P02
	2.6	325	239.70	7 860	1.4	25	2KJ3205 - ■ CE11 - ■ ■ Q1	P02
	D.59-LA63MF6							
	2.8	310	307.02	7 890	1.4	22	2KJ3205 - ■ BD11 - ■ ■ S1	P01
	3.1	275	272.99	7 950	1.6	22	2KJ3205 - ■ BD11 - ■ ■ R1	P01
	3.5	240	239.70	8 000	1.9	22	2KJ3205 - ■ BD11 - ■ ■ Q1	P01
	3.9	220	217.91	8 030	2.0	22	2KJ3205 - ■ BD11 - ■ ■ P1	P01
	D.49-LA71MH8							
2.2	380	280.89	4 260	0.84	22	2KJ3204 - ■ CE11 - ■ ■ S1	P02	
2.5	340	249.76	5 270	0.94	22	2KJ3204 - ■ CE11 - ■ ■ R1	P02	
2.9	295	219.30	5 950	1.1	22	2KJ3204 - ■ CE11 - ■ ■ Q1	P02	
D.49-LA63MF6								
3.0	280	280.89	5 980	1.1	20	2KJ3204 - ■ BD11 - ■ ■ S1	P01	
3.4	250	249.76	6 040	1.3	20	2KJ3204 - ■ BD11 - ■ ■ R1	P01	
3.9	220	219.30	6 100	1.4	20	2KJ3204 - ■ BD11 - ■ ■ Q1	P01	
4.3	200	199.36	6 150	1.6	20	2KJ3204 - ■ BD11 - ■ ■ P1	P01	
D.49-LA63MD4								
5.0	172	280.89	6 200	1.9	19	2KJ3204 - ■ BB11 - ■ ■ S1		
5.6	153	249.76	6 240	2.1	19	2KJ3204 - ■ BB11 - ■ ■ R1		
D.39-LA63MF6								
3.6	235	235.29	3 490	0.84	10	2KJ3203 - ■ BD11 - ■ ■ R1	P01	
4.1	210	208.69	4 120	0.95	10	2KJ3203 - ■ BD11 - ■ ■ Q1	P01	
4.7	183	181.07	4 790	1.1	10	2KJ3203 - ■ BD11 - ■ ■ P1	P01	
5.2	166	164.61	5 220	1.2	10	2KJ3203 - ■ BD11 - ■ ■ N1	P01	
D.39-LA63MD4								
6.0	144	235.29	5 770	1.4	10	2KJ3203 - ■ BB11 - ■ ■ R1		
6.7	128	208.69	5 800	1.6	10	2KJ3203 - ■ BB11 - ■ ■ Q1		
7.7	111	181.07	5 800	1.8	10	2KJ3203 - ■ BB11 - ■ ■ P1		
8.5	101	164.61	5 800	2.0	10	2KJ3203 - ■ BB11 - ■ ■ N1		
D.29-LA63MF6								
5.1	170	167.63	2 910	0.83	8	2KJ3202 - ■ BD11 - ■ ■ N1	P01	
5.6	154	152.39	3 340	0.91	8	2KJ3202 - ■ BD11 - ■ ■ M1	P01	
D.29-LA63MD4								
6.4	134	217.89	3 870	1.0	8	2KJ3202 - ■ BB11 - ■ ■ Q1		
7.3	118	192.93	4 060	1.2	8	2KJ3202 - ■ BB11 - ■ ■ P1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.09								
D.29-LA63MD4								
8.4	103	167.63	4 060	1.4	8	2KJ3202 - ■ BB11 - ■ ■ N1		
9.2	94	152.39	4 060	1.5	8	2KJ3202 - ■ BB11 - ■ ■ M1		
11	80	129.68	4 060	1.8	8	2KJ3202 - ■ BB11 - ■ ■ L1		
12	72	117.89	4 060	1.9	8	2KJ3202 - ■ BB11 - ■ ■ K1		
14	63	102.79	4 060	2.2	8	2KJ3202 - ■ BB11 - ■ ■ J1		
15	56	92.01	4 060	2.5	8	2KJ3202 - ■ BB11 - ■ ■ H1		
17	50	81.71	4 060	2.8	8	2KJ3202 - ■ BB11 - ■ ■ G1		
19	46	75.42	4 060	3.0	8	2KJ3202 - ■ BB11 - ■ ■ F1		
21	40	65.52	4 060	3.5	8	2KJ3202 - ■ BB11 - ■ ■ E1		
25	35	56.93	4 060	4.0	8	2KJ3202 - ■ BB11 - ■ ■ D1		
27	32	51.40	4 060	4.4	8	2KJ3202 - ■ BB11 - ■ ■ C1		
29	30	48.37	4 060	4.7	8	2KJ3202 - ■ BB11 - ■ ■ B1		
Z.29-LA63MD4								
34	25	41.40	4 060	5.5	8	2KJ3102 - ■ BB11 - ■ ■ A2		
38	22	36.72	4 060	6.2	8	2KJ3102 - ■ BB11 - ■ ■ X1		
44	20	31.86	4 060	7.2	8	2KJ3102 - ■ BB11 - ■ ■ W1		
48	18	28.96	4 060	7.9	8	2KJ3102 - ■ BB11 - ■ ■ V1		
56	15	24.84	4 060	9.2	8	2KJ3102 - ■ BB11 - ■ ■ U1		
62	14	22.58	4 020	10	8	2KJ3102 - ■ BB11 - ■ ■ T1		
71	12	19.80	3 850	12	8	2KJ3102 - ■ BB11 - ■ ■ S1		
79	11	17.67	3 710	13	8	2KJ3102 - ■ BB11 - ■ ■ R1		
89	10	15.75	3 580	14	8	2KJ3102 - ■ BB11 - ■ ■ Q1		
96	9	14.54	3 490	13	8	2KJ3102 - ■ BB11 - ■ ■ P1		
D.19-LA71MH8								
7.2	119	87.21	1 260	0.84	9	2KJ3201 - ■ CE11 - ■ ■ J1	P02	
8.1	107	78.07	1 510	0.94	9	2KJ3201 - ■ CE11 - ■ ■ H1	P02	
9.1	95	69.32	1 760	1.1	9	2KJ3201 - ■ CE11 - ■ ■ G1	P02	
9.8	87	63.99	1 920	1.1	9	2KJ3201 - ■ CE11 - ■ ■ F1	P02	
11	76	55.59	2 140	1.3	9	2KJ3201 - ■ CE11 - ■ ■ E1	P02	
13	66	48.30	2 300	1.5	9	2KJ3201 - ■ CE11 - ■ ■ D1	P02	
14	60	43.61	2 330	1.7	9	2KJ3201 - ■ CE11 - ■ ■ C1	P02	
15	56	41.04	2 350	1.8	9	2KJ3201 - ■ CE11 - ■ ■ B1	P02	
D.19-LA63MD4								
7.6	113	184.86	1 390	0.88	7	2KJ3201 - ■ BB11 - ■ ■ Q1		
8.6	100	163.69	1 650	1.0	7	2KJ3201 - ■ BB11 - ■ ■ P1		
9.8	87	142.23	1 920	1.1	7	2KJ3201 - ■ BB11 - ■ ■ N1		
11	79	129.30	2 080	1.3	7	2KJ3201 - ■ BB11 - ■ ■ M1		
13	68	110.02	2 290	1.5	7	2KJ3201 - ■ BB11 - ■ ■ L1		
14	61	100.02	2 330	1.6	7	2KJ3201 - ■ BB11 - ■ ■ K1		
16	54	87.21	2 360	1.9	7	2KJ3201 - ■ BB11 - ■ ■ J1		
18	48	78.07	2 390	2.1	7	2KJ3201 - ■ BB11 - ■ ■ H1		
20	43	69.32	2 420	2.3	7	2KJ3201 - ■ BB11 - ■ ■ G1		
22	39	63.99	2 440	2.5	7	2KJ3201 - ■ BB11 - ■ ■ F1		
25	34	55.59	2 460	2.9	7	2KJ3201 - ■ BB11 - ■ ■ E1		
29	30	48.30	2 480	3.4	7	2KJ3201 - ■ BB11 - ■ ■ D1		
32	27	43.61	2 500	3.7	7	2KJ3201 - ■ BB11 - ■ ■ C1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.09	D.19-LA63MD4							
	34	25	41.04	2 510	4.0	7	2KJ3201 - ■ BB11 - ■ ■ B1	
	Z.19-LA71MH8							
	18	48	34.97	2 390	2.1	9	2KJ3101 - ■ CE11 - ■ ■ W1 P02	
	20	42	30.97	2 420	2.4	9	2KJ3101 - ■ CE11 - ■ ■ V1 P02	
	23	37	26.91	2 450	2.7	9	2KJ3101 - ■ CE11 - ■ ■ U1 P02	
	26	33	24.46	2 470	3.0	9	2KJ3101 - ■ CE11 - ■ ■ T1 P02	
	30	28	20.82	2 490	3.5	9	2KJ3101 - ■ CE11 - ■ ■ S1 P02	
	33	26	18.92	2 500	3.9	9	2KJ3101 - ■ CE11 - ■ ■ R1 P02	
	38	22	16.50	2 520	4.4	9	2KJ3101 - ■ CE11 - ■ ■ Q1 P02	
	43	20	14.77	2 530	4.7	9	2KJ3101 - ■ CE11 - ■ ■ P1 P02	
	48	18	13.12	2 540	5.1	9	2KJ3101 - ■ CE11 - ■ ■ N1 P02	
	52	16	12.11	2 550	5.3	9	2KJ3101 - ■ CE11 - ■ ■ M1 P02	
	60	14	10.52	2 560	5.8	9	2KJ3101 - ■ CE11 - ■ ■ L1 P02	
	69	12	9.14	2 570	6.3	9	2KJ3101 - ■ CE11 - ■ ■ K1 P02	
	76	11	8.25	2 510	6.6	9	2KJ3101 - ■ CE11 - ■ ■ J1 P02	
	81	11	7.76	2 460	6.9	9	2KJ3101 - ■ CE11 - ■ ■ H1 P02	
	93	9	6.77	2 350	7.4	9	2KJ3101 - ■ CE11 - ■ ■ G1 P02	
	101	9	6.25	2 260	6.6	9	2KJ3101 - ■ CE11 - ■ ■ F1 P02	
116	7	5.43	2 170	7.2	9	2KJ3101 - ■ CE11 - ■ ■ E1 P02		
134	6	4.71	2 080	7.6	9	2KJ3101 - ■ CE11 - ■ ■ D1 P02		
148	6	4.26	2 010	8.1	9	2KJ3101 - ■ CE11 - ■ ■ C1 P02		
157	6	4.01	1 970	8.4	9	2KJ3101 - ■ CE11 - ■ ■ B1 P02		
Z.19-LA63MD4								
40	22	34.97	2 520	4.7	6	2KJ3101 - ■ BB11 - ■ ■ W1		
45	19	30.97	2 540	5.3	6	2KJ3101 - ■ BB11 - ■ ■ V1		
52	16	26.91	2 550	6.1	6	2KJ3101 - ■ BB11 - ■ ■ U1		
57	15	24.46	2 560	6.7	6	2KJ3101 - ■ BB11 - ■ ■ T1		
67	13	20.82	2 570	7.8	6	2KJ3101 - ■ BB11 - ■ ■ S1		
74	12	18.92	2 530	8.6	6	2KJ3101 - ■ BB11 - ■ ■ R1		
85	10	16.50	2 420	9.8	6	2KJ3101 - ■ BB11 - ■ ■ Q1		
95	9	14.77	2 340	10	6	2KJ3101 - ■ BB11 - ■ ■ P1		
107	8	13.12	2 250	11	6	2KJ3101 - ■ BB11 - ■ ■ N1		
116	7	12.11	2 200	12	6	2KJ3101 - ■ BB11 - ■ ■ M1		
133	7	10.52	2 100	13	6	2KJ3101 - ■ BB11 - ■ ■ L1		
153	6	9.14	2 010	14	6	2KJ3101 - ■ BB11 - ■ ■ K1		
170	5	8.25	1 940	15	6	2KJ3101 - ■ BB11 - ■ ■ J1		
180	5	7.76	1 910	15	6	2KJ3101 - ■ BB11 - ■ ■ H1		
224	4	6.25	1 760	15	6	2KJ3101 - ■ BB11 - ■ ■ F1		
0.12	D.79-LA71MJ8							
	2.0	585	330.23	13 700	1.4	39	2KJ3207 - ■ CF11 - ■ ■ S1 P02	
	2.1	530	300.21	13 800	1.6	39	2KJ3207 - ■ CF11 - ■ ■ R1 P02	
	2.5	450	255.33	13 900	1.9	39	2KJ3207 - ■ CF11 - ■ ■ Q1 P02	
	D.69-LA71MJ8							
	2.0	580	328.49	11 000	1.0	29	2KJ3206 - ■ CF11 - ■ ■ S1 P02	
	2.2	515	292.08	11 100	1.2	29	2KJ3206 - ■ CF11 - ■ ■ R1 P02	
2.5	455	256.46	11 200	1.3	29	2KJ3206 - ■ CF11 - ■ ■ Q1 P02		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.12								
D.69-LA63MG6								
3.0	375	328.49	11 300	1.6	27	2KJ3206	- ■ BE11 - ■ ■ S1	P01
3.4	335	292.08	11 400	1.8	27	2KJ3206	- ■ BE11 - ■ ■ R1	P01
3.9	290	256.46	11 400	2.0	27	2KJ3206	- ■ BE11 - ■ ■ Q1	P01
D.59-LA71MJ8								
2.1	545	307.02	6 400	0.82	24	2KJ3205	- ■ CF11 - ■ ■ S1	P02
2.4	485	272.99	7 470	0.93	24	2KJ3205	- ■ CF11 - ■ ■ R1	P02
2.7	425	239.70	7 700	1.1	24	2KJ3205	- ■ CF11 - ■ ■ Q1	P02
D.59-LA63MG6								
3.3	350	307.02	7 820	1.3	22	2KJ3205	- ■ BE11 - ■ ■ S1	P01
3.7	310	272.99	7 890	1.4	22	2KJ3205	- ■ BE11 - ■ ■ R1	P01
4.2	275	239.70	7 950	1.6	22	2KJ3205	- ■ BE11 - ■ ■ Q1	P01
D.59-LA63ME4								
4.4	260	307.02	7 970	1.7	22	2KJ3205	- ■ BC11 - ■ ■ S1	
4.9	230	272.99	8 020	1.9	22	2KJ3205	- ■ BC11 - ■ ■ R1	
D.49-LA71MJ8								
2.9	390	219.30	4 010	0.82	22	2KJ3204	- ■ CF11 - ■ ■ Q1	P02
D.49-LA63MG6								
3.6	320	280.89	5 780	0.99	20	2KJ3204	- ■ BE11 - ■ ■ S1	P01
4.0	285	249.76	5 970	1.1	20	2KJ3204	- ■ BE11 - ■ ■ R1	P01
4.6	250	219.30	6 040	1.3	20	2KJ3204	- ■ BE11 - ■ ■ Q1	P01
D.49-LA63ME4								
4.8	235	280.89	6 070	1.3	19	2KJ3204	- ■ BC11 - ■ ■ S1	
5.4	210	249.76	6 120	1.5	19	2KJ3204	- ■ BC11 - ■ ■ R1	
6.2	186	219.30	6 170	1.7	19	2KJ3204	- ■ BC11 - ■ ■ Q1	
6.8	169	199.36	6 210	1.9	19	2KJ3204	- ■ BC11 - ■ ■ P1	
D.39-LA63MG6								
4.8	235	208.69	3 490	0.84	10	2KJ3203	- ■ BE11 - ■ ■ Q1	P01
5.5	205	181.07	4 240	0.96	10	2KJ3203	- ■ BE11 - ■ ■ P1	P01
D.39-LA63ME4								
5.7	200	235.29	4 370	1.0	10	2KJ3203	- ■ BC11 - ■ ■ R1	
6.5	177	208.69	4 940	1.1	10	2KJ3203	- ■ BC11 - ■ ■ Q1	
7.5	154	181.07	5 510	1.3	10	2KJ3203	- ■ BC11 - ■ ■ P1	
8.2	140	164.61	5 800	1.4	10	2KJ3203	- ■ BC11 - ■ ■ N1	
9.6	120	141.17	5 800	1.7	10	2KJ3203	- ■ BC11 - ■ ■ M1	
11	109	128.34	5 800	1.8	10	2KJ3203	- ■ BC11 - ■ ■ L1	
12	96	112.53	5 800	2.1	10	2KJ3203	- ■ BC11 - ■ ■ K1	
D.29-LA63ME4								
7.0	164	192.93	3 070	0.85	8	2KJ3202	- ■ BC11 - ■ ■ P1	
8.1	142	167.63	3 650	0.98	8	2KJ3202	- ■ BC11 - ■ ■ N1	
8.9	129	152.39	4 000	1.1	8	2KJ3202	- ■ BC11 - ■ ■ M1	
10	110	129.68	4 060	1.3	8	2KJ3202	- ■ BC11 - ■ ■ L1	
11	100	117.89	4 060	1.4	8	2KJ3202	- ■ BC11 - ■ ■ K1	
13	87	102.79	4 060	1.6	8	2KJ3202	- ■ BC11 - ■ ■ J1	
15	78	92.01	4 060	1.8	8	2KJ3202	- ■ BC11 - ■ ■ H1	
17	69	81.71	4 060	2.0	8	2KJ3202	- ■ BC11 - ■ ■ G1	

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.12								
D.29-LA63ME4								
18	64	75.42	4 060	2.2	8	2KJ3202 - ■ BC11 - ■ F1		
21	56	65.52	4 060	2.5	8	2KJ3202 - ■ BC11 - ■ E1		
24	48	56.93	4 060	2.9	8	2KJ3202 - ■ BC11 - ■ D1		
26	44	51.40	4 060	3.2	8	2KJ3202 - ■ BC11 - ■ C1		
28	41	48.37	4 060	3.4	8	2KJ3202 - ■ BC11 - ■ B1		
Z.29-LA63ME4								
33	35	41.40	4 060	4.0	8	2KJ3102 - ■ BC11 - ■ A2		
37	31	36.72	4 060	4.5	8	2KJ3102 - ■ BC11 - ■ X1		
42	27	31.86	4 060	5.2	8	2KJ3102 - ■ BC11 - ■ W1		
47	25	28.96	4 060	5.7	8	2KJ3102 - ■ BC11 - ■ V1		
54	21	24.84	4 060	6.6	8	2KJ3102 - ■ BC11 - ■ U1		
60	19	22.58	4 040	7.3	8	2KJ3102 - ■ BC11 - ■ T1		
68	17	19.80	3 870	8.3	8	2KJ3102 - ■ BC11 - ■ S1		
76	15	17.67	3 740	9.3	8	2KJ3102 - ■ BC11 - ■ R1		
86	13	15.75	3 600	10	8	2KJ3102 - ■ BC11 - ■ Q1		
93	12	14.54	3 510	9.7	8	2KJ3102 - ■ BC11 - ■ P1		
106	11	12.73	3 360	13	8	2KJ3102 - ■ BC11 - ■ N1		
121	10	11.16	3 220	15	8	2KJ3102 - ■ BC11 - ■ M1		
195	6	6.92	2 750	13	8	2KJ3102 - ■ BC11 - ■ G1		
D.19-LA71MJ8								
9.3	123	69.32	1 180	0.81	9	2KJ3201 - ■ CF11 - ■ G1 P02		
10	114	63.99	1 370	0.88	9	2KJ3201 - ■ CF11 - ■ F1 P02		
12	99	55.59	1 670	1.0	9	2KJ3201 - ■ CF11 - ■ E1 P02		
13	86	48.30	1 940	1.2	9	2KJ3201 - ■ CF11 - ■ D1 P02		
15	78	43.61	2 100	1.3	9	2KJ3201 - ■ CF11 - ■ C1 P02		
16	73	41.04	2 210	1.4	9	2KJ3201 - ■ CF11 - ■ B1 P02		
D.19-LA63ME4								
9.5	121	142.23	1 220	0.83	7	2KJ3201 - ■ BC11 - ■ N1		
10	110	129.30	1 450	0.91	7	2KJ3201 - ■ BC11 - ■ M1		
12	93	110.02	1 800	1.1	7	2KJ3201 - ■ BC11 - ■ L1		
13	85	100.02	1 960	1.2	7	2KJ3201 - ■ BC11 - ■ K1		
15	74	87.21	2 180	1.4	7	2KJ3201 - ■ BC11 - ■ J1		
17	66	78.07	2 300	1.5	7	2KJ3201 - ■ BC11 - ■ H1		
19	59	69.32	2 340	1.7	7	2KJ3201 - ■ BC11 - ■ G1		
21	54	63.99	2 360	1.8	7	2KJ3201 - ■ BC11 - ■ F1		
24	47	55.59	2 400	2.1	7	2KJ3201 - ■ BC11 - ■ E1		
28	41	48.30	2 430	2.4	7	2KJ3201 - ■ BC11 - ■ D1		
31	37	43.61	2 450	2.7	7	2KJ3201 - ■ BC11 - ■ C1		
33	35	41.04	2 460	2.9	7	2KJ3201 - ■ BC11 - ■ B1		
Z.19-LA71MJ8								
18	62	34.97	2 320	1.6	9	2KJ3101 - ■ CF11 - ■ W1 P02		
21	55	30.97	2 360	1.8	9	2KJ3101 - ■ CF11 - ■ V1 P02		
24	48	26.91	2 390	2.1	9	2KJ3101 - ■ CF11 - ■ U1 P02		
26	44	24.46	2 410	2.3	9	2KJ3101 - ■ CF11 - ■ T1 P02		
31	37	20.82	2 450	2.7	9	2KJ3101 - ■ CF11 - ■ S1 P02		
34	34	18.92	2 460	3.0	9	2KJ3101 - ■ CF11 - ■ R1 P02		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.12 Z.19-LA71MJ8								
39	29	16.50	16.50	2 490	3.4	9	2KJ3101 - ■ CF11 - ■ ■ Q1	P02
44	26	14.77	14.77	2 500	3.6	9	2KJ3101 - ■ CF11 - ■ ■ P1	P02
49	23	13.12	13.12	2 520	3.9	9	2KJ3101 - ■ CF11 - ■ ■ N1	P02
53	22	12.11	12.11	2 520	4.1	9	2KJ3101 - ■ CF11 - ■ ■ M1	P02
61	19	10.52	10.52	2 540	4.4	9	2KJ3101 - ■ CF11 - ■ ■ L1	P02
71	16	9.14	9.14	2 540	4.8	9	2KJ3101 - ■ CF11 - ■ ■ K1	P02
78	15	8.25	8.25	2 460	5.0	9	2KJ3101 - ■ CF11 - ■ ■ J1	P02
83	14	7.76	7.76	2 410	5.3	9	2KJ3101 - ■ CF11 - ■ ■ H1	P02
95	12	6.77	6.77	2 320	5.7	9	2KJ3101 - ■ CF11 - ■ ■ G1	P02
103	11	6.25	6.25	2 220	5.0	9	2KJ3101 - ■ CF11 - ■ ■ F1	P02
119	10	5.43	5.43	2 130	5.5	9	2KJ3101 - ■ CF11 - ■ ■ E1	P02
137	8	4.71	4.71	2 040	5.9	9	2KJ3101 - ■ CF11 - ■ ■ D1	P02
151	8	4.26	4.26	1 980	6.2	9	2KJ3101 - ■ CF11 - ■ ■ C1	P02
161	7	4.01	4.01	1 940	6.5	9	2KJ3101 - ■ CF11 - ■ ■ B1	P02
Z.19-LA63ME4								
39	30	34.97	34.97	2 480	3.4	6	2KJ3101 - ■ BC11 - ■ ■ W1	
44	26	30.97	30.97	2 500	3.8	6	2KJ3101 - ■ BC11 - ■ ■ V1	
50	23	26.91	26.91	2 520	4.4	6	2KJ3101 - ■ BC11 - ■ ■ U1	
55	21	24.46	24.46	2 530	4.8	6	2KJ3101 - ■ BC11 - ■ ■ T1	
65	18	20.82	20.82	2 540	5.7	6	2KJ3101 - ■ BC11 - ■ ■ S1	
71	16	18.92	18.92	2 530	6.2	6	2KJ3101 - ■ BC11 - ■ ■ R1	
82	14	16.50	16.50	2 430	7.1	6	2KJ3101 - ■ BC11 - ■ ■ Q1	
91	12	14.77	14.77	2 350	7.6	6	2KJ3101 - ■ BC11 - ■ ■ P1	
103	11	13.12	13.12	2 260	8.2	6	2KJ3101 - ■ BC11 - ■ ■ N1	
111	10	12.11	12.11	2 210	8.6	6	2KJ3101 - ■ BC11 - ■ ■ M1	
128	9	10.52	10.52	2 110	9.3	6	2KJ3101 - ■ BC11 - ■ ■ L1	
148	8	9.14	9.14	2 020	10	6	2KJ3101 - ■ BC11 - ■ ■ K1	
164	7	8.25	8.25	1 950	11	6	2KJ3101 - ■ BC11 - ■ ■ J1	
174	7	7.76	7.76	1 920	11	6	2KJ3101 - ■ BC11 - ■ ■ H1	
199	6	6.77	6.77	1 830	12	6	2KJ3101 - ■ BC11 - ■ ■ G1	
216	5	6.25	6.25	1 770	11	6	2KJ3101 - ■ BC11 - ■ ■ F1	
249	5	5.43	5.43	1 690	12	6	2KJ3101 - ■ BC11 - ■ ■ E1	
287	4	4.71	4.71	1 620	12	6	2KJ3101 - ■ BC11 - ■ ■ D1	
317	4	4.26	4.26	1 570	13	6	2KJ3101 - ■ BC11 - ■ ■ C1	
337	3	4.01	4.01	1 540	14	6	2KJ3101 - ■ BC11 - ■ ■ B1	
0.18 D.79-LA71MG6								
2.6	665	330.23	330.23	13 600	1.3	38	2KJ3207 - ■ CD11 - ■ ■ S1	P01
2.8	605	300.21	300.21	13 700	1.4	38	2KJ3207 - ■ CD11 - ■ ■ R1	P01
3.3	515	255.33	255.33	13 800	1.6	38	2KJ3207 - ■ CD11 - ■ ■ Q1	P01
3.7	465	232.12	232.12	13 900	1.8	38	2KJ3207 - ■ CD11 - ■ ■ P1	P01
D.69-LA71MG6								
2.6	660	328.49	328.49	10 800	0.9	28	2KJ3206 - ■ CD11 - ■ ■ S1	P01
2.9	590	292.08	292.08	11 000	1.0	28	2KJ3206 - ■ CD11 - ■ ■ R1	P01
3.3	515	256.46	256.46	11 100	1.2	28	2KJ3206 - ■ CD11 - ■ ■ Q1	P01
3.6	470	233.14	233.14	11 200	1.3	28	2KJ3206 - ■ CD11 - ■ ■ P1	P01

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.18	D.69-LAMF4							
	4.1	415	328.49	11 200	1.4	27	2KJ3206 - ■ BD11 - ■ ■ S1	
	4.6	370	292.08	11 300	1.6	27	2KJ3206 - ■ BD11 - ■ ■ R1	
	5.3	325	256.46	11 400	1.8	27	2KJ3206 - ■ BD11 - ■ ■ Q1	
	5.8	295	233.14	11 400	2.0	27	2KJ3206 - ■ BD11 - ■ ■ P1	
	D.59-LA71MG6							
	3.1	550	272.99	6 310	0.82	23	2KJ3205 - ■ CD11 - ■ ■ R1	P01
	3.5	485	239.70	7 470	0.93	23	2KJ3205 - ■ CD11 - ■ ■ Q1	P01
	3.9	440	217.91	7 680	1.0	23	2KJ3205 - ■ CD11 - ■ ■ P1	P01
	D.59-LA63MF4							
	4.4	390	307.02	7 760	1.2	22	2KJ3205 - ■ BD11 - ■ ■ S1	
	4.9	345	272.99	7 830	1.3	22	2KJ3205 - ■ BD11 - ■ ■ R1	
	5.6	305	239.70	7 900	1.5	22	2KJ3205 - ■ BD11 - ■ ■ Q1	
	6.2	275	217.91	7 950	1.6	22	2KJ3205 - ■ BD11 - ■ ■ P1	
	7.2	235	186.43	8 010	1.9	22	2KJ3205 - ■ BD11 - ■ ■ N1	
	8.0	215	169.48	8 040	2.1	22	2KJ3205 - ■ BD11 - ■ ■ M1	
D.49-LA63MF4								
4.8	355	280.89	4 890	0.89	20	2KJ3204 - ■ BD11 - ■ ■ S1		
5.4	315	249.76	5 910	1.0	20	2KJ3204 - ■ BD11 - ■ ■ R1		
6.2	275	219.30	5 990	1.1	20	2KJ3204 - ■ BD11 - ■ ■ Q1		
6.8	250	199.36	6 040	1.3	20	2KJ3204 - ■ BD11 - ■ ■ P1		
7.9	215	170.57	6 110	1.5	20	2KJ3204 - ■ BD11 - ■ ■ N1		
8.7	197	155.06	6 150	1.6	20	2KJ3204 - ■ BD11 - ■ ■ M1		
9.8	175	137.06	6 200	1.8	20	2KJ3204 - ■ BD11 - ■ ■ L1		
11	159	124.60	6 230	2.0	20	2KJ3204 - ■ BD11 - ■ ■ K1		
D.39-LA63MF4								
7.5	230	181.07	3 610	0.87	10	2KJ3203 - ■ BD11 - ■ ■ P1		
8.2	210	164.61	4 120	0.95	10	2KJ3203 - ■ BD11 - ■ ■ N1		
9.6	180	141.17	4 870	1.1	10	2KJ3203 - ■ BD11 - ■ ■ M1		
11	163	128.34	5 290	1.2	10	2KJ3203 - ■ BD11 - ■ ■ L1		
12	143	112.53	5 790	1.4	10	2KJ3203 - ■ BD11 - ■ ■ K1		
13	128	100.44	5 800	1.6	10	2KJ3203 - ■ BD11 - ■ ■ J1		
15	114	89.51	5 800	1.8	10	2KJ3203 - ■ BD11 - ■ ■ H1		
16	105	82.63	5 800	1.9	10	2KJ3203 - ■ BD11 - ■ ■ G1		
19	92	72.34	5 800	2.2	10	2KJ3203 - ■ BD11 - ■ ■ F1		
D.29-LA63MF4								
10	165	129.68	3 040	0.85	8	2KJ3202 - ■ BD11 - ■ ■ L1		
11	150	117.89	3 440	0.93	8	2KJ3202 - ■ BD11 - ■ ■ K1		
13	131	102.79	3 950	1.1	8	2KJ3202 - ■ BD11 - ■ ■ J1		
15	117	92.01	4 060	1.2	8	2KJ3202 - ■ BD11 - ■ ■ H1		
17	104	81.71	4 060	1.3	8	2KJ3202 - ■ BD11 - ■ ■ G1		
18	96	75.42	4 060	1.5	8	2KJ3202 - ■ BD11 - ■ ■ F1		
21	83	65.52	4 060	1.7	8	2KJ3202 - ■ BD11 - ■ ■ E1		
24	72	56.93	4 060	1.9	8	2KJ3202 - ■ BD11 - ■ ■ D1		
26	65	51.40	4 060	2.1	8	2KJ3202 - ■ BD11 - ■ ■ C1		
28	62	48.37	4 060	2.3	8	2KJ3202 - ■ BD11 - ■ ■ B1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.18								
Z.29-LA63MF4								
	33	53	41.40	4 060	2.7	8	2KJ3102 - ■ BD11 - ■ ■ A2	
	37	47	36.72	4 060	3.0	8	2KJ3102 - ■ BD11 - ■ ■ X1	
	42	41	31.86	4 060	3.5	8	2KJ3102 - ■ BD11 - ■ ■ W1	
	47	37	28.96	4 060	3.8	8	2KJ3102 - ■ BD11 - ■ ■ V1	
	54	32	24.84	4 060	4.4	8	2KJ3102 - ■ BD11 - ■ ■ U1	
	60	29	22.58	3 980	4.9	8	2KJ3102 - ■ BD11 - ■ ■ T1	
	68	25	19.80	3 830	5.6	8	2KJ3102 - ■ BD11 - ■ ■ S1	
	76	22	17.67	3 700	6.2	8	2KJ3102 - ■ BD11 - ■ ■ R1	
	86	20	15.75	3 560	7.0	8	2KJ3102 - ■ BD11 - ■ ■ Q1	
	93	18	14.54	3 480	6.5	8	2KJ3102 - ■ BD11 - ■ ■ P1	
	106	16	12.73	3 330	8.6	8	2KJ3102 - ■ BD11 - ■ ■ N1	
	121	14	11.16	3 200	9.9	8	2KJ3102 - ■ BD11 - ■ ■ M1	
	133	13	10.12	3 100	11	8	2KJ3102 - ■ BD11 - ■ ■ L1	
	142	12	9.53	3 040	12	8	2KJ3102 - ■ BD11 - ■ ■ K1	
	161	11	8.40	2 920	13	8	2KJ3102 - ■ BD11 - ■ ■ J1	
	185	9	7.29	2 790	14	8	2KJ3102 - ■ BD11 - ■ ■ H1	
	195	9	6.92	2 730	8.5	8	2KJ3102 - ■ BD11 - ■ ■ G1	
	223	8	6.06	2 620	13	8	2KJ3102 - ■ BD11 - ■ ■ F1	
	254	7	5.31	2 510	14	8	2KJ3102 - ■ BD11 - ■ ■ E1	
	280	6	4.82	2 430	14	8	2KJ3102 - ■ BD11 - ■ ■ D1	
	297	6	4.54	2 390	14	8	2KJ3102 - ■ BD11 - ■ ■ C1	
	338	5	4.00	2 290	15	8	2KJ3102 - ■ BD11 - ■ ■ B1	
Z.29-LA63ME2								
	160	11	17.67	2 930	13	8	2KJ3102 - ■ BC11 - ■ ■ R1	P00
	179	10	15.75	2 820	15	8	2KJ3102 - ■ BC11 - ■ ■ Q1	P00
	194	9	14.54	2 750	14	8	2KJ3102 - ■ BC11 - ■ ■ P1	P00
D.19-LA63MF4								
	15	111	87.21	1 430	0.9	7	2KJ3201 - ■ BD11 - ■ ■ J1	
	17	99	78.07	1 670	1.0	7	2KJ3201 - ■ BD11 - ■ ■ H1	
	19	88	69.32	1 900	1.1	7	2KJ3201 - ■ BD11 - ■ ■ G1	
	21	82	63.99	2 020	1.2	7	2KJ3201 - ■ BD11 - ■ ■ F1	
	24	71	55.59	2 250	1.4	7	2KJ3201 - ■ BD11 - ■ ■ E1	
	28	62	48.30	2 320	1.6	7	2KJ3201 - ■ BD11 - ■ ■ D1	
	31	56	43.61	2 350	1.8	7	2KJ3201 - ■ BD11 - ■ ■ C1	
	33	52	41.04	2 370	1.9	7	2KJ3201 - ■ BD11 - ■ ■ B1	
Z.19-LA63MF4								
	39	44	34.97	2 410	2.2	7	2KJ3101 - ■ BD11 - ■ ■ W1	
	44	39	30.97	2 440	2.5	7	2KJ3101 - ■ BD11 - ■ ■ V1	
	50	34	26.91	2 460	2.9	7	2KJ3101 - ■ BD11 - ■ ■ U1	
	55	31	24.46	2 480	3.2	7	2KJ3101 - ■ BD11 - ■ ■ T1	
	65	26	20.82	2 500	3.8	7	2KJ3101 - ■ BD11 - ■ ■ S1	
	71	24	18.92	2 480	4.2	7	2KJ3101 - ■ BD11 - ■ ■ R1	
	82	21	16.50	2 380	4.7	7	2KJ3101 - ■ BD11 - ■ ■ Q1	
	91	19	14.77	2 300	5.1	7	2KJ3101 - ■ BD11 - ■ ■ P1	
	103	17	13.12	2 220	5.4	7	2KJ3101 - ■ BD11 - ■ ■ N1	
	111	15	12.11	2 170	5.7	7	2KJ3101 - ■ BD11 - ■ ■ M1	

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.18	Z.19-LA63MF4							
	128	13	10.52	2 080	6.2	7	2KJ3101 - ■ BD11 - ■ ■ L1	
	148	12	9.14	1 990	6.7	7	2KJ3101 - ■ BD11 - ■ ■ K1	
	164	10	8.25	1 930	7.0	7	2KJ3101 - ■ BD11 - ■ ■ J1	
	174	10	7.76	1 890	7.4	7	2KJ3101 - ■ BD11 - ■ ■ H1	
	199	9	6.77	1 810	7.9	7	2KJ3101 - ■ BD11 - ■ ■ G1	
	216	8	6.25	1 740	7.0	7	2KJ3101 - ■ BD11 - ■ ■ F1	
	249	7	5.43	1 670	7.7	7	2KJ3101 - ■ BD11 - ■ ■ E1	
	287	6	4.71	1 600	8.2	7	2KJ3101 - ■ BD11 - ■ ■ D1	
	317	5	4.26	1 550	8.7	7	2KJ3101 - ■ BD11 - ■ ■ C1	
	337	5	4.01	1 520	9.0	7	2KJ3101 - ■ BD11 - ■ ■ B1	
	Z.19-LA63ME2							
	171	10	16.50	1 900	9.8	6	2KJ3101 - ■ BC11 - ■ ■ Q1	P00
	191	9	14.77	1 840	11	6	2KJ3101 - ■ BC11 - ■ ■ P1	P00
	215	8	13.12	1 770	11	6	2KJ3101 - ■ BC11 - ■ ■ N1	P00
	233	7	12.11	1 730	12	6	2KJ3101 - ■ BC11 - ■ ■ M1	P00
	268	6	10.52	1 650	13	6	2KJ3101 - ■ BC11 - ■ ■ L1	P00
	309	6	9.14	1 580	14	6	2KJ3101 - ■ BC11 - ■ ■ K1	P00
	342	5	8.25	1 530	15	6	2KJ3101 - ■ BC11 - ■ ■ J1	P00
363	5	7.76	1 500	15	6	2KJ3101 - ■ BC11 - ■ ■ H1	P00	
451	4	6.25	1 390	15	6	2KJ3101 - ■ BC11 - ■ ■ F1	P00	
0.25	D.79-LA71MH6							
	2.6	915	330.23	12 800	0.92	39	2KJ3207 - ■ CE11 - ■ ■ S1	P01
	2.9	830	300.21	13 400	1.0	39	2KJ3207 - ■ CE11 - ■ ■ R1	P01
	3.4	705	255.33	13 600	1.2	39	2KJ3207 - ■ CE11 - ■ ■ Q1	P01
	3.7	640	232.12	13 600	1.3	39	2KJ3207 - ■ CE11 - ■ ■ P1	P01
	D.79-LA71MG4							
	4.1	580	330.23	13 700	1.4	38	2KJ3207 - ■ CD11 - ■ ■ S1	
	4.5	530	300.21	13 800	1.6	38	2KJ3207 - ■ CD11 - ■ ■ R1	
	5.3	450	255.33	13 900	1.9	38	2KJ3207 - ■ CD11 - ■ ■ Q1	
	5.8	410	232.12	13 900	2.0	38	2KJ3207 - ■ CD11 - ■ ■ P1	
	D.69-LA71MH6							
	3.4	710	256.46	10 700	0.84	29	2KJ3206 - ■ CE11 - ■ ■ Q1	P01
	3.7	645	233.14	10 900	0.93	29	2KJ3206 - ■ CE11 - ■ ■ P1	P01
	D.69-LA71MG4							
	4.1	580	328.49	11 000	1.0	28	2KJ3206 - ■ CD11 - ■ ■ S1	
	4.6	515	292.08	11 100	1.2	28	2KJ3206 - ■ CD11 - ■ ■ R1	
	5.3	450	256.46	11 200	1.3	28	2KJ3206 - ■ CD11 - ■ ■ Q1	
	5.8	410	233.14	11 300	1.5	28	2KJ3206 - ■ CD11 - ■ ■ P1	
	6.8	350	199.47	11 300	1.7	28	2KJ3206 - ■ CD11 - ■ ■ N1	
	7.4	320	181.33	11 400	1.9	28	2KJ3206 - ■ CD11 - ■ ■ M1	
	8.4	280	160.29	11 500	2.1	28	2KJ3206 - ■ CD11 - ■ ■ L1	
	D.59-LA71MG4							
	4.4	540	307.02	6 490	0.83	23	2KJ3205 - ■ CD11 - ■ ■ S1	
	4.9	480	272.99	7 560	0.93	23	2KJ3205 - ■ CD11 - ■ ■ R1	
	5.6	420	239.70	7 710	1.1	23	2KJ3205 - ■ CD11 - ■ ■ Q1	
	6.2	385	217.91	7 770	1.2	23	2KJ3205 - ■ CD11 - ■ ■ P1	

Article No. supplement

Shaft design	1 or 9	
Frequency and voltage	2 or 9	
Gearbox mounting type	A, B, F or H	

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25								
D.59-LA71MG4								
7.2	330	186.43	7 860	1.4	23	2KJ3205 - ■ CD11 - ■ ■ N1		
8	300	169.48	7 910	1.5	23	2KJ3205 - ■ CD11 - ■ ■ M1		
9	265	149.81	7 960	1.7	23	2KJ3205 - ■ CD11 - ■ ■ L1		
9.9	240	136.19	8 000	1.9	23	2KJ3205 - ■ CD11 - ■ ■ K1		
11	210	119.30	8 050	2.1	23	2KJ3205 - ■ CD11 - ■ ■ J1		
D.49-LA71MG4								
6.2	385	219.30	4 130	0.83	21	2KJ3204 - ■ CD11 - ■ ■ Q1		
6.8	350	199.36	5 020	0.91	21	2KJ3204 - ■ CD11 - ■ ■ P1		
7.9	300	170.57	5 940	1.1	21	2KJ3204 - ■ CD11 - ■ ■ N1		
8.7	270	155.06	6 000	1.2	21	2KJ3204 - ■ CD11 - ■ ■ M1		
9.8	240	137.06	6 060	1.3	21	2KJ3204 - ■ CD11 - ■ ■ L1		
11	220	124.60	6 100	1.5	21	2KJ3204 - ■ CD11 - ■ ■ K1		
12	193	109.14	6 160	1.7	21	2KJ3204 - ■ CD11 - ■ ■ J1		
13	178	100.75	6 190	1.8	21	2KJ3204 - ■ CD11 - ■ ■ H1		
15	158	89.20	6 230	2.0	21	2KJ3204 - ■ CD11 - ■ ■ G1		
D.39-LA71MG4								
9.6	250	141.17	3 110	0.8	11	2KJ3203 - ■ CD11 - ■ ■ M1		
11	225	128.34	3 740	0.88	11	2KJ3203 - ■ CD11 - ■ ■ L1		
12	199	112.53	4 390	1.0	11	2KJ3203 - ■ CD11 - ■ ■ K1		
13	178	100.44	4 920	1.1	11	2KJ3203 - ■ CD11 - ■ ■ J1		
15	158	89.51	5 410	1.3	11	2KJ3203 - ■ CD11 - ■ ■ H1		
16	146	82.63	5 720	1.4	11	2KJ3203 - ■ CD11 - ■ ■ G1		
19	128	72.34	5 800	1.6	11	2KJ3203 - ■ CD11 - ■ ■ F1		
21	112	63.43	5 800	1.8	11	2KJ3203 - ■ CD11 - ■ ■ E1		
Z.39-LA71MG4								
24	99	55.95	5 800	2.0	11	2KJ3103 - ■ CD11 - ■ ■ A2		
27	88	49.75	5 800	2.3	11	2KJ3103 - ■ CD11 - ■ ■ X1		
D.29-LA71MG4								
15	163	92.01	3 100	0.86	9	2KJ3202 - ■ CD11 - ■ ■ H1		
17	145	81.71	3 570	0.97	9	2KJ3202 - ■ CD11 - ■ ■ G1		
18	133	75.42	3 890	1.0	9	2KJ3202 - ■ CD11 - ■ ■ F1		
21	116	65.52	4 060	1.2	9	2KJ3202 - ■ CD11 - ■ ■ E1		
24	101	56.93	4 060	1.4	9	2KJ3202 - ■ CD11 - ■ ■ D1		
26	91	51.40	4 060	1.5	9	2KJ3202 - ■ CD11 - ■ ■ C1		
28	86	48.37	4 060	1.6	9	2KJ3202 - ■ CD11 - ■ ■ B1		
Z.29-LA71MG4								
33	73	41.40	4 060	1.9	9	2KJ3102 - ■ CD11 - ■ ■ A2		
37	65	36.72	4 060	2.2	9	2KJ3102 - ■ CD11 - ■ ■ X1		
42	56	31.86	4 060	2.5	9	2KJ3102 - ■ CD11 - ■ ■ W1		
47	51	28.96	4 060	2.7	9	2KJ3102 - ■ CD11 - ■ ■ V1		
54	44	24.84	4 030	3.2	9	2KJ3102 - ■ CD11 - ■ ■ U1		
60	40	22.58	3 920	3.5	9	2KJ3102 - ■ CD11 - ■ ■ T1		
68	35	19.80	3 770	4.0	9	2KJ3102 - ■ CD11 - ■ ■ S1		
76	31	17.67	3 650	4.5	9	2KJ3102 - ■ CD11 - ■ ■ R1		
86	28	15.75	3 520	5.0	9	2KJ3102 - ■ CD11 - ■ ■ Q1		
93	26	14.54	3 430	4.7	9	2KJ3102 - ■ CD11 - ■ ■ P1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25								
Z.29-LA71MG4								
106	22	12.73	3 300	6.2	9	2KJ3102 - ■ CD11 - ■ ■ N1		
121	20	11.16	3 160	7.1	9	2KJ3102 - ■ CD11 - ■ ■ M1		
133	18	10.12	3 070	7.8	9	2KJ3102 - ■ CD11 - ■ ■ L1		
142	17	9.53	3 010	8.3	9	2KJ3102 - ■ CD11 - ■ ■ K1		
161	15	8.40	2 900	9.3	9	2KJ3102 - ■ CD11 - ■ ■ J1		
185	13	7.29	2 770	10	9	2KJ3102 - ■ CD11 - ■ ■ H1		
195	12	6.92	2 710	6.1	9	2KJ3102 - ■ CD11 - ■ ■ G1		
223	11	6.06	2 600	9.3	9	2KJ3102 - ■ CD11 - ■ ■ F1		
254	9	5.31	2 490	9.7	9	2KJ3102 - ■ CD11 - ■ ■ E1		
280	9	4.82	2 420	10	9	2KJ3102 - ■ CD11 - ■ ■ D1		
297	8	4.54	2 370	10	9	2KJ3102 - ■ CD11 - ■ ■ C1		
338	7	4.00	2 280	11	9	2KJ3102 - ■ CD11 - ■ ■ B1		
389	6	3.47	2 180	11	9	2KJ3102 - ■ CD11 - ■ ■ A1		
Z.29-LA63MF2								
160	15	17.67	2 900	9.4	8	2KJ3102 - ■ BD11 - ■ ■ R1	P00	
180	13	15.75	2 800	10	8	2KJ3102 - ■ BD11 - ■ ■ Q1	P00	
195	12	14.54	2 730	9.8	8	2KJ3102 - ■ BD11 - ■ ■ P1	P00	
222	11	12.73	2 610	13	8	2KJ3102 - ■ BD11 - ■ ■ N1	P00	
254	9	11.16	2 510	15	8	2KJ3102 - ■ BD11 - ■ ■ M1	P00	
409	6	6.92	2 140	13	8	2KJ3102 - ■ BD11 - ■ ■ G1	P00	
D.19-LA71MG4								
19	123	69.32	1 180	0.82	8	2KJ3201 - ■ CD11 - ■ ■ G1		
21	113	63.99	1 390	0.88	8	2KJ3201 - ■ CD11 - ■ ■ F1		
24	98	55.59	1 690	1.0	8	2KJ3201 - ■ CD11 - ■ ■ E1		
28	85	48.30	1 960	1.2	8	2KJ3201 - ■ CD11 - ■ ■ D1		
31	77	43.61	2 120	1.3	8	2KJ3201 - ■ CD11 - ■ ■ C1		
33	73	41.04	2 210	1.4	8	2KJ3201 - ■ CD11 - ■ ■ B1		
Z.19-LA71MG4								
39	62	34.97	2 320	1.6	8	2KJ3101 - ■ CD11 - ■ ■ W1		
44	55	30.97	2 360	1.8	8	2KJ3101 - ■ CD11 - ■ ■ V1		
50	48	26.91	2 390	2.1	8	2KJ3101 - ■ CD11 - ■ ■ U1		
55	43	24.46	2 420	2.3	8	2KJ3101 - ■ CD11 - ■ ■ T1		
65	37	20.82	2 450	2.7	8	2KJ3101 - ■ CD11 - ■ ■ S1		
71	34	18.92	2 410	3.0	8	2KJ3101 - ■ CD11 - ■ ■ R1		
82	29	16.50	2 320	3.4	8	2KJ3101 - ■ CD11 - ■ ■ Q1		
91	26	14.77	2 250	3.6	8	2KJ3101 - ■ CD11 - ■ ■ P1		
103	23	13.12	2 180	3.9	8	2KJ3101 - ■ CD11 - ■ ■ N1		
111	21	12.11	2 130	4.1	8	2KJ3101 - ■ CD11 - ■ ■ M1		
128	19	10.52	2 040	4.5	8	2KJ3101 - ■ CD11 - ■ ■ L1		
148	16	9.14	1 960	4.8	8	2KJ3101 - ■ CD11 - ■ ■ K1		
164	15	8.25	1 900	5.1	8	2KJ3101 - ■ CD11 - ■ ■ J1		
174	14	7.76	1 870	5.3	8	2KJ3101 - ■ CD11 - ■ ■ H1		
199	12	6.77	1 790	5.7	8	2KJ3101 - ■ CD11 - ■ ■ G1		
216	11	6.25	1 710	5.1	8	2KJ3101 - ■ CD11 - ■ ■ F1		
249	10	5.43	1 640	5.5	8	2KJ3101 - ■ CD11 - ■ ■ E1		
287	8	4.71	1 570	5.9	8	2KJ3101 - ■ CD11 - ■ ■ D1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25	Z.19-LA71MG4							
	317	8	4.26	1 530	6.2	8	2KJ3101 - ■ CD11 - ■ ■ C1	
	337	7	4.01	1 500	6.5	8	2KJ3101 - ■ CD11 - ■ ■ B1	
	Z.19-LA63MF2							
	150	16	18.92	1 950	6.3	7	2KJ3101 - ■ BD11 - ■ ■ R1	P00
	172	14	16.50	1 870	7.1	7	2KJ3101 - ■ BD11 - ■ ■ Q1	P00
	192	12	14.77	1 820	7.6	7	2KJ3101 - ■ BD11 - ■ ■ P1	P00
	216	11	13.12	1 750	8.2	7	2KJ3101 - ■ BD11 - ■ ■ N1	P00
	234	10	12.11	1 710	8.6	7	2KJ3101 - ■ BD11 - ■ ■ M1	P00
	269	9	10.52	1 630	9.4	7	2KJ3101 - ■ BD11 - ■ ■ L1	P00
	310	8	9.14	1 560	10	7	2KJ3101 - ■ BD11 - ■ ■ K1	P00
	343	7	8.25	1 520	11	7	2KJ3101 - ■ BD11 - ■ ■ J1	P00
	365	7	7.76	1 490	11	7	2KJ3101 - ■ BD11 - ■ ■ H1	P00
	418	6	6.77	1 420	12	7	2KJ3101 - ■ BD11 - ■ ■ G1	P00
	453	5	6.25	1 370	11	7	2KJ3101 - ■ BD11 - ■ ■ F1	P00
521	5	5.43	1 310	12	7	2KJ3101 - ■ BD11 - ■ ■ E1	P00	
601	4	4.71	1 250	12	7	2KJ3101 - ■ BD11 - ■ ■ D1	P00	
664	4	4.26	1 220	13	7	2KJ3101 - ■ BD11 - ■ ■ C1	P00	
706	3	4.01	1 190	14	7	2KJ3101 - ■ BD11 - ■ ■ B1	P00	
0.37	D.79-LA71MH4							
	4.1	850	330.23	13 400	0.99	39	2KJ3207 - ■ CE11 - ■ ■ S1	
	4.6	770	300.21	13 500	1.1	39	2KJ3207 - ■ CE11 - ■ ■ R1	
	5.4	655	255.33	13 600	1.3	39	2KJ3207 - ■ CE11 - ■ ■ Q1	
	5.9	595	232.12	13 700	1.4	39	2KJ3207 - ■ CE11 - ■ ■ P1	
	6.6	530	207.10	13 800	1.6	39	2KJ3207 - ■ CE11 - ■ ■ N1	
	7.4	475	185.70	13 900	1.8	39	2KJ3207 - ■ CE11 - ■ ■ M1	
	8.2	430	167.39	13 900	1.9	39	2KJ3207 - ■ CE11 - ■ ■ L1	
	8.9	395	154.51	14 000	2.1	39	2KJ3207 - ■ CE11 - ■ ■ K1	
	D.69-LA71MH4							
	4.7	750	292.08	10 600	0.8	29	2KJ3206 - ■ CE11 - ■ ■ R1	
	5.3	660	256.46	10 800	0.91	29	2KJ3206 - ■ CE11 - ■ ■ Q1	
	5.9	600	233.14	11 000	1.0	29	2KJ3206 - ■ CE11 - ■ ■ P1	
	6.9	510	199.47	11 100	1.2	29	2KJ3206 - ■ CE11 - ■ ■ N1	
	7.6	465	181.33	11 200	1.3	29	2KJ3206 - ■ CE11 - ■ ■ M1	
8.5	410	160.29	11 300	1.5	29	2KJ3206 - ■ CE11 - ■ ■ L1		
9.4	375	145.71	11 300	1.6	29	2KJ3206 - ■ CE11 - ■ ■ K1		
11	325	127.63	11 400	1.8	29	2KJ3206 - ■ CE11 - ■ ■ J1		
12	300	117.82	11 400	2.0	29	2KJ3206 - ■ CE11 - ■ ■ H1		
13	265	104.31	11 500	2.2	29	2KJ3206 - ■ CE11 - ■ ■ G1		
D.59-LA71MH4								
6.3	560	217.91	6 130	0.8	25	2KJ3205 - ■ CE11 - ■ ■ P1		
7.3	480	186.43	7 560	0.94	25	2KJ3205 - ■ CE11 - ■ ■ N1		
8.1	435	169.48	7 690	1.0	25	2KJ3205 - ■ CE11 - ■ ■ M1		
9.1	385	149.81	7 770	1.2	25	2KJ3205 - ■ CE11 - ■ ■ L1		
10	350	136.19	7 820	1.3	25	2KJ3205 - ■ CE11 - ■ ■ K1		
11	305	119.30	7 900	1.5	25	2KJ3205 - ■ CE11 - ■ ■ J1		
12	280	110.12	7 940	1.6	25	2KJ3205 - ■ CE11 - ■ ■ H1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.37	D.59-LA71MH4							
	14	250	97.50	7 990	1.8	25	2KJ3205 - ■ CE11 - ■ ■ G1	
	17	205	81.15	8 060	2.2	25	2KJ3205 - ■ CE11 - ■ ■ F1	
	18	197	76.38	8 070	2.3	25	2KJ3205 - ■ CE11 - ■ ■ E1	
	D.49-LA71MH4							
	8.8	400	155.06	3 750	0.8	22	2KJ3204 - ■ CE11 - ■ ■ M1	
	10	350	137.06	5 020	0.91	22	2KJ3204 - ■ CE11 - ■ ■ L1	
	11	320	124.60	5 780	1.0	22	2KJ3204 - ■ CE11 - ■ ■ K1	
	13	280	109.14	5 980	1.1	22	2KJ3204 - ■ CE11 - ■ ■ J1	
	14	260	100.75	6 020	1.2	22	2KJ3204 - ■ CE11 - ■ ■ H1	
	15	230	89.20	6 080	1.4	22	2KJ3204 - ■ CE11 - ■ ■ G1	
	18	191	74.24	6 160	1.7	22	2KJ3204 - ■ CE11 - ■ ■ F1	
	20	180	69.88	6 190	1.8	22	2KJ3204 - ■ CE11 - ■ ■ E1	
	22	161	62.61	6 220	2.0	22	2KJ3204 - ■ CE11 - ■ ■ D1	
	Z.49-LA71MH4							
	26	134	52.14	6 280	2.4	22	2KJ3104 - ■ CE11 - ■ ■ B2	
	D.39-LA71MH4							
	15	230	89.51	3 610	0.87	13	2KJ3203 - ■ CE11 - ■ ■ H1	
	17	210	82.63	4 120	0.94	13	2KJ3203 - ■ CE11 - ■ ■ G1	
	19	187	72.34	4 690	1.1	13	2KJ3203 - ■ CE11 - ■ ■ F1	
	22	164	63.43	5 270	1.2	13	2KJ3203 - ■ CE11 - ■ ■ E1	
	Z.39-LA71MH4							
	24	144	55.95	5 770	1.4	12	2KJ3103 - ■ CE11 - ■ ■ A2	
	28	128	49.75	5 800	1.6	12	2KJ3103 - ■ CE11 - ■ ■ X1	
	31	113	43.68	5 800	1.8	12	2KJ3103 - ■ CE11 - ■ ■ W1	
	35	102	39.71	5 800	2.0	12	2KJ3103 - ■ CE11 - ■ ■ V1	
	40	88	33.97	5 800	2.3	12	2KJ3103 - ■ CE11 - ■ ■ U1	
	44	80	30.88	5 800	2.5	12	2KJ3103 - ■ CE11 - ■ ■ T1	
	50	70	27.30	5 800	2.8	12	2KJ3103 - ■ CE11 - ■ ■ S1	
	D.29-LA71MH4							
	21	169	65.52	2 940	0.83	11	2KJ3202 - ■ CE11 - ■ ■ E1	
	24	147	56.93	3 520	0.95	11	2KJ3202 - ■ CE11 - ■ ■ D1	
	27	133	51.40	3 890	1.1	11	2KJ3202 - ■ CE11 - ■ ■ C1	
	28	125	48.37	4 060	1.1	11	2KJ3202 - ■ CE11 - ■ ■ B1	
	Z.29-LA71MH4							
	33	107	41.40	4 060	1.3	11	2KJ3102 - ■ CE11 - ■ ■ A2	
	37	95	36.72	4 060	1.5	11	2KJ3102 - ■ CE11 - ■ ■ X1	
	43	82	31.86	4 060	1.7	11	2KJ3102 - ■ CE11 - ■ ■ W1	
	47	75	28.96	4 060	1.9	11	2KJ3102 - ■ CE11 - ■ ■ V1	
	55	64	24.84	3 900	2.2	11	2KJ3102 - ■ CE11 - ■ ■ U1	
	61	58	22.58	3 800	2.4	11	2KJ3102 - ■ CE11 - ■ ■ T1	
	69	51	19.80	3 660	2.7	11	2KJ3102 - ■ CE11 - ■ ■ S1	
	78	46	17.67	3 540	3.1	11	2KJ3102 - ■ CE11 - ■ ■ R1	
	87	41	15.75	3 430	3.4	11	2KJ3102 - ■ CE11 - ■ ■ Q1	
	94	38	14.54	3 350	3.2	11	2KJ3102 - ■ CE11 - ■ ■ P1	
	108	33	12.73	3 220	4.3	11	2KJ3102 - ■ CE11 - ■ ■ N1	
	123	29	11.16	3 100	4.9	11	2KJ3102 - ■ CE11 - ■ ■ M1	

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.37								
Z.29-LA71MH4								
135	26	10.12		3 010	5.4	11	2KJ3102 - ■ CE11 - ■ ■ L1	
144	25	9.53		2 950	5.7	11	2KJ3102 - ■ CE11 - ■ ■ K1	
163	22	8.40		2 840	6.4	11	2KJ3102 - ■ CE11 - ■ ■ J1	
188	19	7.29		2 720	6.9	11	2KJ3102 - ■ CE11 - ■ ■ H1	
198	18	6.92		2 660	4.2	11	2KJ3102 - ■ CE11 - ■ ■ G1	
226	16	6.06		2 550	6.4	11	2KJ3102 - ■ CE11 - ■ ■ F1	
258	14	5.31		2 450	6.6	11	2KJ3102 - ■ CE11 - ■ ■ E1	
284	12	4.82		2 380	6.9	11	2KJ3102 - ■ CE11 - ■ ■ D1	
302	12	4.54		2 330	7.2	11	2KJ3102 - ■ CE11 - ■ ■ C1	
342	10	4.00		2 250	7.4	11	2KJ3102 - ■ CE11 - ■ ■ B1	
395	9	3.47		2 150	7.8	11	2KJ3102 - ■ CE11 - ■ ■ A1	
Z.29-LA71MG2								
155	23	17.67		2 890	6.1	9	2KJ3102 - ■ CD11 - ■ ■ R1	P00
174	20	15.75		2 790	6.9	9	2KJ3102 - ■ CD11 - ■ ■ Q1	P00
188	19	14.54		2 720	6.4	9	2KJ3102 - ■ CD11 - ■ ■ P1	P00
215	16	12.73		2 610	8.5	9	2KJ3102 - ■ CD11 - ■ ■ N1	P00
246	14	11.16		2 510	9.7	9	2KJ3102 - ■ CD11 - ■ ■ M1	P00
271	13	10.12		2 430	11	9	2KJ3102 - ■ CD11 - ■ ■ L1	P00
288	12	9.53		2 390	11	9	2KJ3102 - ■ CD11 - ■ ■ K1	P00
326	11	8.40		2 290	13	9	2KJ3102 - ■ CD11 - ■ ■ J1	P00
376	9	7.29		2 190	14	9	2KJ3102 - ■ CD11 - ■ ■ H1	P00
396	9	6.92		2 140	8.4	9	2KJ3102 - ■ CD11 - ■ ■ G1	P00
452	8	6.06		2 060	13	9	2KJ3102 - ■ CD11 - ■ ■ F1	P00
516	7	5.31		1 970	13	9	2KJ3102 - ■ CD11 - ■ ■ E1	P00
568	6	4.82		1 910	14	9	2KJ3102 - ■ CD11 - ■ ■ D1	P00
604	6	4.54		1 870	14	9	2KJ3102 - ■ CD11 - ■ ■ C1	P00
685	5	4.00		1 800	15	9	2KJ3102 - ■ CD11 - ■ ■ B1	P00
D.19-LA71MH4								
28	125	48.30		1 140	0.8	9	2KJ3201 - ■ CE11 - ■ ■ D1	
31	112	43.61		1 410	0.89	9	2KJ3201 - ■ CE11 - ■ ■ C1	
33	106	41.04		1 530	0.94	9	2KJ3201 - ■ CE11 - ■ ■ B1	
Z.19-LA71MH4								
39	90	34.97		1 860	1.1	9	2KJ3101 - ■ CE11 - ■ ■ W1	
44	80	30.97		2 060	1.3	9	2KJ3101 - ■ CE11 - ■ ■ V1	
51	69	26.91		2 290	1.4	9	2KJ3101 - ■ CE11 - ■ ■ U1	
56	63	24.46		2 320	1.6	9	2KJ3101 - ■ CE11 - ■ ■ T1	
66	54	20.82		2 340	1.9	9	2KJ3101 - ■ CE11 - ■ ■ S1	
72	49	18.92		2 290	2.0	9	2KJ3101 - ■ CE11 - ■ ■ R1	
83	43	16.50		2 210	2.3	9	2KJ3101 - ■ CE11 - ■ ■ Q1	
93	38	14.77		2 160	2.5	9	2KJ3101 - ■ CE11 - ■ ■ P1	
104	34	13.12		2 090	2.7	9	2KJ3101 - ■ CE11 - ■ ■ N1	
113	31	12.11		2 050	2.8	9	2KJ3101 - ■ CE11 - ■ ■ M1	
130	27	10.52		1 970	3.1	9	2KJ3101 - ■ CE11 - ■ ■ L1	
150	24	9.14		1 900	3.3	9	2KJ3101 - ■ CE11 - ■ ■ K1	
166	21	8.25		1 850	3.5	9	2KJ3101 - ■ CE11 - ■ ■ J1	
177	20	7.76		1 810	3.6	9	2KJ3101 - ■ CE11 - ■ ■ H1	

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.37	Z.19-LA71MH4							
	202	18	6.77	1 740	3.9	9	2KJ3101 - ■ CE11 - ■ ■ G1	
	219	16	6.25	1 650	3.5	9	2KJ3101 - ■ CE11 - ■ ■ F1	
	252	14	5.43	1 590	3.8	9	2KJ3101 - ■ CE11 - ■ ■ E1	
	291	12	4.71	1 530	4.0	9	2KJ3101 - ■ CE11 - ■ ■ D1	
	322	11	4.26	1 480	4.3	9	2KJ3101 - ■ CE11 - ■ ■ C1	
	342	10	4.01	1 460	4.4	9	2KJ3101 - ■ CE11 - ■ ■ B1	
	Z.19-LA71MG2							
	166	21	16.50	1 850	4.7	8	2KJ3101 - ■ CD11 - ■ ■ Q1	P00
	186	19	14.77	1 790	5.0	8	2KJ3101 - ■ CD11 - ■ ■ P1	P00
	209	17	13.12	1 730	5.4	8	2KJ3101 - ■ CD11 - ■ ■ N1	P00
	226	16	12.11	1 690	5.6	8	2KJ3101 - ■ CD11 - ■ ■ M1	P00
	260	14	10.52	1 620	6.1	8	2KJ3101 - ■ CD11 - ■ ■ L1	P00
	300	12	9.14	1 550	6.6	8	2KJ3101 - ■ CD11 - ■ ■ K1	P00
	332	11	8.25	1 500	7.0	8	2KJ3101 - ■ CD11 - ■ ■ J1	P00
	353	10	7.76	1 480	7.3	8	2KJ3101 - ■ CD11 - ■ ■ H1	P00
	405	9	6.77	1 420	7.8	8	2KJ3101 - ■ CD11 - ■ ■ G1	P00
	438	8	6.25	1 360	6.9	8	2KJ3101 - ■ CD11 - ■ ■ F1	P00
	505	7	5.43	1 300	7.6	8	2KJ3101 - ■ CD11 - ■ ■ E1	P00
582	6	4.71	1 250	8.1	8	2KJ3101 - ■ CD11 - ■ ■ D1	P00	
643	6	4.26	1 210	8.6	8	2KJ3101 - ■ CD11 - ■ ■ C1	P00	
683	5	4.01	1 190	8.9	8	2KJ3101 - ■ CD11 - ■ ■ B1	P00	
0.55	D.89-LE80MB4							
	4.6	1 130	311.60	18 500	1.5	65	2KJ3208 - ■ DB21 - ■ ■ S1	
	5.1	1 030	283.28	18 500	1.6	65	2KJ3208 - ■ DB21 - ■ ■ R1	
	5.7	925	254.09	18 500	1.8	65	2KJ3208 - ■ DB21 - ■ ■ Q1	
	6.3	830	228.45	18 500	2.0	65	2KJ3208 - ■ DB21 - ■ ■ P1	
	D.79-LE80MB4							
	5.6	930	255.33	12 600	0.9	42	2KJ3207 - ■ DB21 - ■ ■ Q1	
	6.2	845	232.12	13 400	0.99	42	2KJ3207 - ■ DB21 - ■ ■ P1	
	7.0	755	207.10	13 500	1.1	42	2KJ3207 - ■ DB21 - ■ ■ N1	
	7.8	675	185.70	13 600	1.2	42	2KJ3207 - ■ DB21 - ■ ■ M1	
	8.6	610	167.39	13 700	1.4	42	2KJ3207 - ■ DB21 - ■ ■ L1	
	9.3	560	154.51	13 700	1.5	42	2KJ3207 - ■ DB21 - ■ ■ K1	
	10	510	141.04	13 800	1.6	42	2KJ3207 - ■ DB21 - ■ ■ J1	
	12	425	117.03	13 900	2.0	42	2KJ3207 - ■ DB21 - ■ ■ H1	
	13	400	110.14	13 900	2.1	42	2KJ3207 - ■ DB21 - ■ ■ G1	
	14	375	104.03	14 000	2.2	42	2KJ3207 - ■ DB21 - ■ ■ F1	
	D.69-LE80MB4							
	7.2	725	199.47	10 700	0.82	32	2KJ3206 - ■ DB21 - ■ ■ N1	
	7.9	660	181.33	10 800	0.91	32	2KJ3206 - ■ DB21 - ■ ■ M1	
	9	585	160.29	11 000	1.0	32	2KJ3206 - ■ DB21 - ■ ■ L1	
	9.9	530	145.71	11 100	1.1	32	2KJ3206 - ■ DB21 - ■ ■ K1	
	11	465	127.63	11 200	1.3	32	2KJ3206 - ■ DB21 - ■ ■ J1	
	12	430	117.82	11 200	1.4	32	2KJ3206 - ■ DB21 - ■ ■ H1	
	14	380	104.31	11 300	1.6	32	2KJ3206 - ■ DB21 - ■ ■ G1	
	17	315	86.82	11 400	1.9	32	2KJ3206 - ■ DB21 - ■ ■ F1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.55								
D.69-LE80MB4								
	18	295	81.71	11 400	2.0	32	2KJ3206 - ■ DB21 - ■ ■ E1	
	20	265	73.22	11 500	2.2	32	2KJ3206 - ■ DB21 - ■ ■ D1	
D.59-LE80MB4								
	9.6	545	149.81	6 400	0.82	27	2KJ3205 - ■ DB21 - ■ ■ L1	
	11	495	136.19	7 300	0.91	27	2KJ3205 - ■ DB21 - ■ ■ K1	
	12	435	119.30	7 690	1.0	27	2KJ3205 - ■ DB21 - ■ ■ J1	
	13	400	110.12	7 740	1.1	27	2KJ3205 - ■ DB21 - ■ ■ H1	
	15	355	97.50	7 820	1.3	27	2KJ3205 - ■ DB21 - ■ ■ G1	
	18	295	81.15	7 910	1.5	27	2KJ3205 - ■ DB21 - ■ ■ F1	
	19	275	76.38	7 950	1.6	27	2KJ3205 - ■ DB21 - ■ ■ E1	
	21	250	68.43	7 990	1.8	27	2KJ3205 - ■ DB21 - ■ ■ D1	
Z.59-LE80MB4								
	25	205	56.99	8 060	2.2	27	2KJ3105 - ■ DB21 - ■ ■ A2	
	28	189	51.81	8 080	2.4	27	2KJ3105 - ■ DB21 - ■ ■ X1	
D.49-LE80MB4								
	13	395	109.14	3 880	0.8	25	2KJ3204 - ■ DB21 - ■ ■ J1	
	14	365	100.75	4 640	0.87	25	2KJ3204 - ■ DB21 - ■ ■ H1	
	16	325	89.20	5 660	0.98	25	2KJ3204 - ■ DB21 - ■ ■ G1	
	19	270	74.24	6 000	1.2	25	2KJ3204 - ■ DB21 - ■ ■ F1	
	21	255	69.88	6 030	1.3	25	2KJ3204 - ■ DB21 - ■ ■ E1	
	23	225	62.61	6 090	1.4	25	2KJ3204 - ■ DB21 - ■ ■ D1	
Z.49-LE80MB4								
	28	190	52.14	6 170	1.7	25	2KJ3104 - ■ DB21 - ■ ■ B2	
	30	173	47.40	6 200	1.9	25	2KJ3104 - ■ DB21 - ■ ■ A2	
	36	147	40.31	6 250	2.2	25	2KJ3104 - ■ DB21 - ■ ■ X1	
	39	134	36.65	6 280	2.4	25	2KJ3104 - ■ DB21 - ■ ■ W1	
	44	119	32.70	6 310	2.7	25	2KJ3104 - ■ DB21 - ■ ■ V1	
D.39-LE80MB4								
	23	230	63.43	3 610	0.86	15	2KJ3203 - ■ DB21 - ■ ■ E1	
	25	210	57.54	4 120	0.95	15	2KJ3203 - ■ DB21 - ■ ■ D1	
Z.39-LE80MB4								
	29	181	49.75	4 840	1.1	14	2KJ3103 - ■ DB21 - ■ ■ X1	
	33	159	43.68	5 140	1.3	14	2KJ3103 - ■ DB21 - ■ ■ W1	
	36	145	39.71	5 200	1.4	14	2KJ3103 - ■ DB21 - ■ ■ V1	
	42	124	33.97	5 280	1.6	14	2KJ3103 - ■ DB21 - ■ ■ U1	
	47	113	30.88	5 300	1.8	14	2KJ3103 - ■ DB21 - ■ ■ T1	
	53	100	27.30	5 290	2.0	14	2KJ3103 - ■ DB21 - ■ ■ S1	
	58	90	24.82	5 300	2.2	14	2KJ3103 - ■ DB21 - ■ ■ R1	
	66	79	21.74	5 250	2.5	14	2KJ3103 - ■ DB21 - ■ ■ Q1	
	72	73	20.07	5 180	2.7	14	2KJ3103 - ■ DB21 - ■ ■ P1	
	81	65	17.77	5 000	3.1	14	2KJ3103 - ■ DB21 - ■ ■ N1	
D.29-LE80MB4								
	34	154	42.17	3 340	0.91	13	2KJ3202 - ■ DB21 - ■ ■ A1	
Z.29-LE80MB4								
	39	134	36.72	3 860	1.0	13	2KJ3102 - ■ DB21 - ■ ■ X1	
	45	116	31.86	3 900	1.2	13	2KJ3102 - ■ DB21 - ■ ■ W1	

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.55	Z.29-LE80MB4							
	50	106	28.96	3 810	1.3	13	2KJ3102 - ■ DB21 - ■ ■ V1	
	58	91	24.84	3 670	1.5	13	2KJ3102 - ■ DB21 - ■ ■ U1	
	64	82	22.58	3 590	1.7	13	2KJ3102 - ■ DB21 - ■ ■ T1	
	73	72	19.80	3 480	1.9	13	2KJ3102 - ■ DB21 - ■ ■ S1	
	81	64	17.67	3 380	2.2	13	2KJ3102 - ■ DB21 - ■ ■ R1	
	91	57	15.75	3 280	2.4	13	2KJ3102 - ■ DB21 - ■ ■ Q1	
	99	53	14.54	3 200	2.3	13	2KJ3102 - ■ DB21 - ■ ■ P1	
	113	46	12.73	3 090	3.0	13	2KJ3102 - ■ DB21 - ■ ■ N1	
	129	41	11.16	2 980	3.4	13	2KJ3102 - ■ DB21 - ■ ■ M1	
	142	37	10.12	2 900	3.8	13	2KJ3102 - ■ DB21 - ■ ■ L1	
	151	35	9.53	2 850	4.0	13	2KJ3102 - ■ DB21 - ■ ■ K1	
	208	25	6.92	2 560	3.0	13	2KJ3102 - ■ DB21 - ■ ■ G1	
	238	22	6.06	2 460	4.5	13	2KJ3102 - ■ DB21 - ■ ■ F1	
	271	19	5.31	2 370	4.7	13	2KJ3102 - ■ DB21 - ■ ■ E1	
	299	18	4.82	2 300	4.9	13	2KJ3102 - ■ DB21 - ■ ■ D1	
317	17	4.54	2 260	5.1	13	2KJ3102 - ■ DB21 - ■ ■ C1		
360	15	4.00	2 170	5.2	13	2KJ3102 - ■ DB21 - ■ ■ B1		
415	13	3.47	2 080	5.5	13	2KJ3102 - ■ DB21 - ■ ■ A1		
	Z.19-LE80MB4							
	46	113	30.97	1 390	0.89	11	2KJ3101 - ■ DB21 - ■ ■ V1	
	54	98	26.91	1 690	1.0	11	2KJ3101 - ■ DB21 - ■ ■ U1	
	59	89	24.46	1 880	1.1	11	2KJ3101 - ■ DB21 - ■ ■ T1	
	69	76	20.82	2 140	1.3	11	2KJ3101 - ■ DB21 - ■ ■ S1	
	76	69	18.92	2 110	1.4	11	2KJ3101 - ■ DB21 - ■ ■ R1	
	87	60	16.50	2 050	1.6	11	2KJ3101 - ■ DB21 - ■ ■ Q1	
	97	54	14.77	2 010	1.8	11	2KJ3101 - ■ DB21 - ■ ■ P1	
	110	48	13.12	1 950	1.9	11	2KJ3101 - ■ DB21 - ■ ■ N1	
	119	44	12.11	1 920	2.0	11	2KJ3101 - ■ DB21 - ■ ■ M1	
	137	38	10.52	1 860	2.2	11	2KJ3101 - ■ DB21 - ■ ■ L1	
	158	33	9.14	1 800	2.3	11	2KJ3101 - ■ DB21 - ■ ■ K1	
	175	30	8.25	1 750	2.5	11	2KJ3101 - ■ DB21 - ■ ■ J1	
	186	28	7.76	1 730	2.6	11	2KJ3101 - ■ DB21 - ■ ■ H1	
	213	25	6.77	1 660	2.8	11	2KJ3101 - ■ DB21 - ■ ■ G1	
	230	23	6.25	1 540	2.5	11	2KJ3101 - ■ DB21 - ■ ■ F1	
	265	20	5.43	1 490	2.7	11	2KJ3101 - ■ DB21 - ■ ■ E1	
	306	17	4.71	1 450	2.9	11	2KJ3101 - ■ DB21 - ■ ■ D1	
	338	16	4.26	1 400	3.0	11	2KJ3101 - ■ DB21 - ■ ■ C1	
	359	15	4.01	1 380	3.1	11	2KJ3101 - ■ DB21 - ■ ■ B1	
	413	13	3.49	1 330	3.4	11	2KJ3101 - ■ DB21 - ■ ■ A1	
	Z.19-LE71MH2							
	170	31	16.50	1 760	3.2	9	2KJ3101 - ■ CE11 - ■ ■ Q1	P00
	190	28	14.77	1 710	3.4	9	2KJ3101 - ■ CE11 - ■ ■ P1	P00
	213	25	13.12	1 660	3.7	9	2KJ3101 - ■ CE11 - ■ ■ N1	P00
	231	23	12.11	1 620	3.9	9	2KJ3101 - ■ CE11 - ■ ■ M1	P00
	266	20	10.52	1 560	4.2	9	2KJ3101 - ■ CE11 - ■ ■ L1	P00
	306	17	9.14	1 510	4.5	9	2KJ3101 - ■ CE11 - ■ ■ K1	P00

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.55	Z.19-LE71MH2							
	339	16	8.25	1 460	4.8	9	2KJ3101 - ■ CE11 - ■ ■ J1	P00
	361	15	7.76	1 430	5.0	9	2KJ3101 - ■ CE11 - ■ ■ H1	P00
	414	13	6.77	1 380	5.4	9	2KJ3101 - ■ CE11 - ■ ■ G1	P00
	448	12	6.25	1 300	4.8	9	2KJ3101 - ■ CE11 - ■ ■ F1	P00
	516	10	5.43	1 260	5.2	9	2KJ3101 - ■ CE11 - ■ ■ E1	P00
	594	9	4.71	1 210	5.5	9	2KJ3101 - ■ CE11 - ■ ■ D1	P00
	657	8	4.26	1 170	5.9	9	2KJ3101 - ■ CE11 - ■ ■ C1	P00
698	8	4.01	1 150	6.1	9	2KJ3101 - ■ CE11 - ■ ■ B1	P00	
0.75	D.129-LE100LA8							
	1.9	3 790	373.00	27 700	1.3	182	2KJ3211 - ■ FB21 - ■ ■ S1	P02
	2.0	3 490	344.17	27 900	1.4	182	2KJ3211 - ■ FB21 - ■ ■ R1	P02
	2.2	3 220	316.90	28 100	1.6	182	2KJ3211 - ■ FB21 - ■ ■ Q1	P02
	D.129-LE90SH6E							
	2.5	2 880	373.00	28 300	1.7	175	2KJ3211 - ■ EC22 - ■ ■ S1	P01
	2.7	2 660	344.17	28 400	1.9	175	2KJ3211 - ■ EC22 - ■ ■ R1	P01
	2.9	2 450	316.90	28 500	2.0	175	2KJ3211 - ■ EC22 - ■ ■ Q1	P01
	D.109-LE100LA8							
	2.0	3 540	348.88	20 200	0.87	118	2KJ3210 - ■ FB21 - ■ ■ T1	P02
	2.2	3 200	314.98	20 200	0.97	118	2KJ3210 - ■ FB21 - ■ ■ S1	P02
	2.5	2 900	285.72	20 200	1.1	118	2KJ3210 - ■ FB21 - ■ ■ R1	P02
	D.109-LE90SH6E							
	2.7	2 700	348.88	20 200	1.1	112	2KJ3210 - ■ EC22 - ■ ■ T1	P01
	2.9	2 430	314.98	20 200	1.3	112	2KJ3210 - ■ EC22 - ■ ■ S1	P01
	3.2	2 210	285.72	20 200	1.4	112	2KJ3210 - ■ EC22 - ■ ■ R1	P01
	3.5	2 040	263.74	20 200	1.5	112	2KJ3210 - ■ EC22 - ■ ■ Q1	P01
	3.9	1 850	239.75	20 200	1.7	112	2KJ3210 - ■ EC22 - ■ ■ P1	P01
	D.89-LE100LA8							
	3.4	2 090	206.62	18 000	0.8	76	2KJ3208 - ■ FB21 - ■ ■ N1	P02
	D.89-LE90SH6E							
	3.6	1 960	254.09	18 500	0.85	70	2KJ3208 - ■ EC22 - ■ ■ Q1	P01
	4.0	1 760	228.45	18 500	0.95	70	2KJ3208 - ■ EC22 - ■ ■ P1	P01
	D.89-LE80MH4E							
	4.6	1 550	311.60	18 500	1.1	67	2KJ3208 - ■ DE22 - ■ ■ S1	
	5.1	1 400	283.28	18 500	1.2	67	2KJ3208 - ■ DE22 - ■ ■ R1	
	5.7	1 260	254.09	18 500	1.3	67	2KJ3208 - ■ DE22 - ■ ■ Q1	
	6.3	1 130	228.45	18 500	1.5	67	2KJ3208 - ■ DE22 - ■ ■ P1	
7.0	1 020	206.62	18 500	1.6	67	2KJ3208 - ■ DE22 - ■ ■ N1		
7.5	945	190.73	18 500	1.8	67	2KJ3208 - ■ DE22 - ■ ■ M1		
8.2	865	174.71	18 500	1.9	67	2KJ3208 - ■ DE22 - ■ ■ L1		
D.79-LE80MH4E								
7.0	1 030	207.10	11 000	0.82	44	2KJ3207 - ■ DE22 - ■ ■ N1		
7.8	920	185.70	12 700	0.91	44	2KJ3207 - ■ DE22 - ■ ■ M1		
8.6	830	167.39	13 400	1.0	44	2KJ3207 - ■ DE22 - ■ ■ L1		
9.3	765	154.51	13 500	1.1	44	2KJ3207 - ■ DE22 - ■ ■ K1		
10	700	141.04	13 600	1.2	44	2KJ3207 - ■ DE22 - ■ ■ J1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75								
D.79-LE80MH4E								
	12	580	117.03	13 700	1.4	44	2KJ3207 - ■ DE22 - ■ ■ H1	
	13	545	110.14	13 800	1.5	44	2KJ3207 - ■ DE22 - ■ ■ G1	
	14	515	104.03	13 800	1.6	44	2KJ3207 - ■ DE22 - ■ ■ F1	
	16	440	88.52	13 900	1.9	44	2KJ3207 - ■ DE22 - ■ ■ E1	
	19	375	75.83	14 000	2.2	44	2KJ3207 - ■ DE22 - ■ ■ D1	
D.69-LE80MH4E								
	9.9	725	145.71	10 700	0.83	34	2KJ3206 - ■ DE22 - ■ ■ K1	
	11	635	127.63	10 900	0.95	34	2KJ3206 - ■ DE22 - ■ ■ J1	
	12	585	117.82	11 000	1.0	34	2KJ3206 - ■ DE22 - ■ ■ H1	
	14	515	104.31	11 100	1.2	34	2KJ3206 - ■ DE22 - ■ ■ G1	
	17	430	86.82	11 200	1.4	34	2KJ3206 - ■ DE22 - ■ ■ F1	
	18	405	81.71	11 300	1.5	34	2KJ3206 - ■ DE22 - ■ ■ E1	
	20	360	73.22	11 300	1.6	34	2KJ3206 - ■ DE22 - ■ ■ D1	
Z.69-LE80MH4E								
	24	300	60.97	11 400	2.0	33	2KJ3106 - ■ DE22 - ■ ■ A2	
	26	275	55.43	11 500	2.2	33	2KJ3106 - ■ DE22 - ■ ■ X1	
D.59-LE80MH4E								
	13	545	110.12	6 400	0.82	29	2KJ3205 - ■ DE22 - ■ ■ H1	
	15	485	97.50	7 470	0.93	29	2KJ3205 - ■ DE22 - ■ ■ G1	
	18	400	81.15	7 740	1.1	29	2KJ3205 - ■ DE22 - ■ ■ F1	
	19	380	76.38	7 780	1.2	29	2KJ3205 - ■ DE22 - ■ ■ E1	
	21	340	68.43	7 840	1.3	29	2KJ3205 - ■ DE22 - ■ ■ D1	
Z.59-LE80MH4E								
	25	280	56.99	7 940	1.6	29	2KJ3105 - ■ DE22 - ■ ■ A2	
	28	255	51.81	7 980	1.7	29	2KJ3105 - ■ DE22 - ■ ■ X1	
	33	215	44.06	8 040	2.1	29	2KJ3105 - ■ DE22 - ■ ■ W1	
	36	199	40.06	8 050	2.3	29	2KJ3105 - ■ DE22 - ■ ■ V1	
	40	178	35.74	7 810	2.5	29	2KJ3105 - ■ DE22 - ■ ■ U1	
	45	159	32.05	7 580	2.8	29	2KJ3105 - ■ DE22 - ■ ■ T1	
D.49-LE80MH4E								
	19	365	74.24	4 640	0.87	27	2KJ3204 - ■ DE22 - ■ ■ F1	
	21	345	69.88	5 150	0.92	27	2KJ3204 - ■ DE22 - ■ ■ E1	
	23	310	62.61	5 920	1.0	27	2KJ3204 - ■ DE22 - ■ ■ D1	
Z.49-LE80MH4E								
	28	255	52.14	6 030	1.2	27	2KJ3104 - ■ DE22 - ■ ■ B2	
	30	235	47.40	6 070	1.4	27	2KJ3104 - ■ DE22 - ■ ■ A2	
	36	200	40.31	6 150	1.6	27	2KJ3104 - ■ DE22 - ■ ■ X1	
	39	182	36.65	6 180	1.8	27	2KJ3104 - ■ DE22 - ■ ■ W1	
	44	163	32.70	6 180	2.0	27	2KJ3104 - ■ DE22 - ■ ■ V1	
	49	146	29.32	6 000	2.2	27	2KJ3104 - ■ DE22 - ■ ■ U1	
	54	131	26.43	5 830	2.4	27	2KJ3104 - ■ DE22 - ■ ■ T1	
	59	121	24.39	5 710	2.6	27	2KJ3104 - ■ DE22 - ■ ■ S1	
	65	111	22.27	5 560	2.9	27	2KJ3104 - ■ DE22 - ■ ■ R1	
Z.39-LE80MH4E								
	29	245	49.75	3 240	0.81	16	2KJ3103 - ■ DE22 - ■ ■ X1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75								
Z.39-LE80MH4E								
33	215	43.68	3 740	0.92	16	2KJ3103 - ■ DE22 - ■ ■ W1		
36	198	39.71	3 880	1.0	16	2KJ3103 - ■ DE22 - ■ ■ V1		
42	169	33.97	4 160	1.2	16	2KJ3103 - ■ DE22 - ■ ■ U1		
47	154	30.88	4 270	1.3	16	2KJ3103 - ■ DE22 - ■ ■ T1		
53	136	27.30	4 390	1.5	16	2KJ3103 - ■ DE22 - ■ ■ S1		
58	123	24.82	4 470	1.6	16	2KJ3103 - ■ DE22 - ■ ■ R1		
66	108	21.74	4 520	1.8	16	2KJ3103 - ■ DE22 - ■ ■ Q1		
72	100	20.07	4 530	2.0	16	2KJ3103 - ■ DE22 - ■ ■ P1		
81	88	17.77	4 550	2.3	16	2KJ3103 - ■ DE22 - ■ ■ N1		
97	74	14.79	4 500	2.6	16	2KJ3103 - ■ DE22 - ■ ■ M1		
103	69	13.92	4 500	2.7	16	2KJ3103 - ■ DE22 - ■ ■ L1		
115	62	12.47	4 420	2.9	16	2KJ3103 - ■ DE22 - ■ ■ K1		
136	53	10.62	4 220	3.2	16	2KJ3103 - ■ DE22 - ■ ■ J1		
158	45	9.10	4 030	3.5	16	2KJ3103 - ■ DE22 - ■ ■ H1		
184	39	7.84	3 860	3.8	16	2KJ3103 - ■ DE22 - ■ ■ G1		
223	32	6.46	3 640	4.5	16	2KJ3103 - ■ DE22 - ■ ■ F1		
Z.29-LE80MH4E								
45	158	31.86	2 880	0.88	15	2KJ3102 - ■ DE22 - ■ ■ W1		
50	144	28.96	3 030	0.97	15	2KJ3102 - ■ DE22 - ■ ■ V1		
58	124	24.84	3 220	1.1	15	2KJ3102 - ■ DE22 - ■ ■ U1		
64	112	22.58	3 340	1.2	15	2KJ3102 - ■ DE22 - ■ ■ T1		
73	98	19.80	3 330	1.4	15	2KJ3102 - ■ DE22 - ■ ■ S1		
81	88	17.67	3 240	1.6	15	2KJ3102 - ■ DE22 - ■ ■ R1		
91	78	15.75	3 160	1.8	15	2KJ3102 - ■ DE22 - ■ ■ Q1		
99	72	14.54	3 100	1.7	15	2KJ3102 - ■ DE22 - ■ ■ P1		
113	63	12.73	3 000	2.2	15	2KJ3102 - ■ DE22 - ■ ■ N1		
129	56	11.16	2 890	2.5	15	2KJ3102 - ■ DE22 - ■ ■ M1		
142	50	10.12	2 820	2.8	15	2KJ3102 - ■ DE22 - ■ ■ L1		
151	47	9.53	2 780	3.0	15	2KJ3102 - ■ DE22 - ■ ■ K1		
171	42	8.40	2 680	3.3	15	2KJ3102 - ■ DE22 - ■ ■ J1		
198	36	7.29	2 580	3.6	15	2KJ3102 - ■ DE22 - ■ ■ H1		
208	34	6.92	2 500	2.2	15	2KJ3102 - ■ DE22 - ■ ■ G1		
238	30	6.06	2 410	3.3	15	2KJ3102 - ■ DE22 - ■ ■ F1		
271	26	5.31	2 320	3.4	15	2KJ3102 - ■ DE22 - ■ ■ E1		
299	24	4.82	2 260	3.6	15	2KJ3102 - ■ DE22 - ■ ■ D1		
317	23	4.54	2 210	3.7	15	2KJ3102 - ■ DE22 - ■ ■ C1		
360	20	4.00	2 140	3.8	15	2KJ3102 - ■ DE22 - ■ ■ B1		
415	17	3.47	2 050	4.1	15	2KJ3102 - ■ DE22 - ■ ■ A1		
Z.29-LE80MA2E								
159	45	17.67	2 740	3.1	13	2KJ3102 - ■ DB22 - ■ ■ R1	P00	
178	40	15.75	2 650	3.5	13	2KJ3102 - ■ DB22 - ■ ■ Q1	P00	
193	37	14.54	2 600	3.2	13	2KJ3102 - ■ DB22 - ■ ■ P1	P00	
220	32	12.73	2 500	4.3	13	2KJ3102 - ■ DB22 - ■ ■ N1	P00	
405	18	6.92	2 060	4.2	13	2KJ3102 - ■ DB22 - ■ ■ G1	P00	
Z.19-LE80MH4E								
59	122	24.46	1 200	0.82	13	2KJ3101 - ■ DE22 - ■ ■ T1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75	Z.19-LE80MH4E							
	69	104	20.82	1 570	0.97	13	2KJ3101 - ■ DE22 - ■ ■ S1	
	76	94	18.92	1 770	1.1	13	2KJ3101 - ■ DE22 - ■ ■ R1	
	87	82	16.50	1 900	1.2	13	2KJ3101 - ■ DE22 - ■ ■ Q1	
	97	74	14.77	1 870	1.3	13	2KJ3101 - ■ DE22 - ■ ■ P1	
	110	65	13.12	1 840	1.4	13	2KJ3101 - ■ DE22 - ■ ■ N1	
	119	60	12.11	1 810	1.5	13	2KJ3101 - ■ DE22 - ■ ■ M1	
	137	52	10.52	1 760	1.6	13	2KJ3101 - ■ DE22 - ■ ■ L1	
	158	46	9.14	1 710	1.7	13	2KJ3101 - ■ DE22 - ■ ■ K1	
	175	41	8.25	1 680	1.8	13	2KJ3101 - ■ DE22 - ■ ■ J1	
	186	39	7.76	1 650	1.9	13	2KJ3101 - ■ DE22 - ■ ■ H1	
	213	34	6.77	1 600	2.0	13	2KJ3101 - ■ DE22 - ■ ■ G1	
	230	31	6.25	1 460	1.8	13	2KJ3101 - ■ DE22 - ■ ■ F1	
	265	27	5.43	1 420	2.0	13	2KJ3101 - ■ DE22 - ■ ■ E1	
	306	23	4.71	1 380	2.1	13	2KJ3101 - ■ DE22 - ■ ■ D1	
	338	21	4.26	1 350	2.2	13	2KJ3101 - ■ DE22 - ■ ■ C1	
	359	20	4.01	1 330	2.3	13	2KJ3101 - ■ DE22 - ■ ■ B1	
	413	17	3.49	1 290	2.5	13	2KJ3101 - ■ DE22 - ■ ■ A1	
	Z.19-LE80MA2E							
	170	42	16.50	1 690	2.3	12	2KJ3101 - ■ DB22 - ■ ■ Q1	P00
	190	38	14.77	1 640	2.5	12	2KJ3101 - ■ DB22 - ■ ■ P1	P00
	214	34	13.12	1 590	2.7	12	2KJ3101 - ■ DB22 - ■ ■ N1	P00
	232	31	12.11	1 570	2.8	12	2KJ3101 - ■ DB22 - ■ ■ M1	P00
	267	27	10.52	1 510	3.1	12	2KJ3101 - ■ DB22 - ■ ■ L1	P00
	307	23	9.14	1 460	3.3	12	2KJ3101 - ■ DB22 - ■ ■ K1	P00
	340	21	8.25	1 420	3.5	12	2KJ3101 - ■ DB22 - ■ ■ J1	P00
	361	20	7.76	1 400	3.7	12	2KJ3101 - ■ DB22 - ■ ■ H1	P00
	414	17	6.77	1 350	3.9	12	2KJ3101 - ■ DB22 - ■ ■ G1	P00
	449	16	6.25	1 260	3.5	12	2KJ3101 - ■ DB22 - ■ ■ F1	P00
	517	14	5.43	1 220	3.8	12	2KJ3101 - ■ DB22 - ■ ■ E1	P00
	596	12	4.71	1 170	4.1	12	2KJ3101 - ■ DB22 - ■ ■ D1	P00
	658	11	4.26	1 140	4.3	12	2KJ3101 - ■ DB22 - ■ ■ C1	P00
	700	10	4.01	1 130	4.5	12	2KJ3101 - ■ DB22 - ■ ■ B1	P00
	804	9	3.49	1 080	4.8	12	2KJ3101 - ■ DB22 - ■ ■ A1	P00
1.1	D.149-LE100LK8							
	2.1	4 890	328.38	52 700	1.6	271	2KJ3212 - ■ FP21 - ■ ■ W1	P02
	2.5	4 180	281.04	53 000	1.9	271	2KJ3212 - ■ FP21 - ■ ■ V1	P02
	2.7	3 940	264.51	53 100	2.0	271	2KJ3212 - ■ FP21 - ■ ■ U1	P02
	D.129-LE100LK8							
	1.9	5 550	373.00	26 700	0.9	187	2KJ3211 - ■ FP21 - ■ ■ S1	P02
	2.0	5 120	344.17	26 900	0.97	187	2KJ3211 - ■ FP21 - ■ ■ R1	P02
	2.2	4 720	316.90	27 200	1.1	187	2KJ3211 - ■ FP21 - ■ ■ Q1	P02
	D.129-LE90LLB6E							
	2.5	4 190	373.00	27 500	1.2	178	2KJ3211 - ■ EP22 - ■ ■ S1	P01
	2.7	3 860	344.17	27 700	1.3	178	2KJ3211 - ■ EP22 - ■ ■ R1	P01
	3.0	3 560	316.90	27 900	1.4	178	2KJ3211 - ■ EP22 - ■ ■ Q1	P01
	3.5	3 030	270.24	28 200	1.6	178	2KJ3211 - ■ EP22 - ■ ■ P1	P01

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1								
D.129-LE90SG4E								
	3.8	2 750	373.00	28 300	1.8	174	2KJ3211 - ■ EK22 - ■ ■ S1	
	4.1	2 530	344.17	28 500	2.0	174	2KJ3211 - ■ EK22 - ■ ■ R1	
D.109-LE90LLB6E								
	3.0	3 530	314.98	20 200	0.88	115	2KJ3210 - ■ EP22 - ■ ■ S1	P01
	3.3	3 210	285.72	20 200	0.97	115	2KJ3210 - ■ EP22 - ■ ■ R1	P01
	3.5	2 960	263.74	20 200	1.0	115	2KJ3210 - ■ EP22 - ■ ■ Q1	P01
	3.9	2 690	239.75	20 200	1.2	115	2KJ3210 - ■ EP22 - ■ ■ P1	P01
D.109-LE90SG4E								
	4.1	2 570	348.88	20 200	1.2	111	2KJ3210 - ■ EK22 - ■ ■ T1	
	4.5	2 320	314.98	20 200	1.3	111	2KJ3210 - ■ EK22 - ■ ■ S1	
	5.0	2 100	285.72	20 200	1.5	111	2KJ3210 - ■ EK22 - ■ ■ R1	
	5.4	1 940	263.74	20 200	1.6	111	2KJ3210 - ■ EK22 - ■ ■ Q1	
	5.9	1 760	239.75	20 200	1.8	111	2KJ3210 - ■ EK22 - ■ ■ P1	
	7.0	1 490	203.01	20 200	2.1	111	2KJ3210 - ■ EK22 - ■ ■ N1	
D.89-LE90SG4E								
	5.0	2 080	283.28	18 000	0.8	69	2KJ3208 - ■ EK22 - ■ ■ R1	
	5.6	1 870	254.09	18 500	0.9	69	2KJ3208 - ■ EK22 - ■ ■ Q1	
	6.2	1 680	228.45	18 500	1.0	69	2KJ3208 - ■ EK22 - ■ ■ P1	
	6.9	1 520	206.62	18 500	1.1	69	2KJ3208 - ■ EK22 - ■ ■ N1	
	7.5	1 400	190.73	18 500	1.2	69	2KJ3208 - ■ EK22 - ■ ■ M1	
	8.2	1 280	174.71	18 500	1.3	69	2KJ3208 - ■ EK22 - ■ ■ L1	
	9.7	1 080	146.59	18 500	1.6	69	2KJ3208 - ■ EK22 - ■ ■ K1	
	10	1 010	137.97	18 500	1.7	69	2KJ3208 - ■ EK22 - ■ ■ J1	
	11	930	126.58	18 500	1.8	69	2KJ3208 - ■ EK22 - ■ ■ H1	
	13	815	110.57	18 500	2.1	69	2KJ3208 - ■ EK22 - ■ ■ G1	
D.79-LE90SG4E								
	10	1 040	141.04	10 900	0.81	46	2KJ3207 - ■ EK22 - ■ ■ J1	
	12	860	117.03	13 400	0.97	46	2KJ3207 - ■ EK22 - ■ ■ H1	
	13	810	110.14	13 400	1.0	46	2KJ3207 - ■ EK22 - ■ ■ G1	
	14	765	104.03	13 500	1.1	46	2KJ3207 - ■ EK22 - ■ ■ F1	
	16	650	88.52	13 600	1.3	46	2KJ3207 - ■ EK22 - ■ ■ E1	
	19	555	75.83	13 700	1.5	46	2KJ3207 - ■ EK22 - ■ ■ D1	
	21	490	66.67	13 800	1.7	46	2KJ3207 - ■ EK22 - ■ ■ C1	
Z.79-LE90SG4E								
	26	400	54.47	13 900	2.1	45	2KJ3107 - ■ EK22 - ■ ■ A2	
	29	365	49.52	14 000	2.3	45	2KJ3107 - ■ EK22 - ■ ■ X1	
D.69-LE90SG4E								
	16	640	86.82	10 900	0.94	34	2KJ3206 - ■ EK22 - ■ ■ F1	
	17	600	81.71	11 000	1.0	34	2KJ3206 - ■ EK22 - ■ ■ E1	
	19	540	73.22	11 100	1.1	34	2KJ3206 - ■ EK22 - ■ ■ D1	
Z.69-LE90SG4E								
	23	445	60.97	11 200	1.3	34	2KJ3106 - ■ EK22 - ■ ■ A2	
	26	405	55.43	11 300	1.5	34	2KJ3106 - ■ EK22 - ■ ■ X1	
	30	345	47.14	11 400	1.7	34	2KJ3106 - ■ EK22 - ■ ■ W1	
	33	315	42.86	11 400	1.9	34	2KJ3106 - ■ EK22 - ■ ■ V1	
	37	280	38.24	11 500	2.1	34	2KJ3106 - ■ EK22 - ■ ■ U1	

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1								
Z.69-LE90SG4E								
42	250	34.29	11 500	2.4	34	2KJ3106 - ■ EK22 - ■ ■ T1		
46	225	30.90	11 500	2.6	34	2KJ3106 - ■ EK22 - ■ ■ S1		
D.59-LE90SG4E								
19	560	76.38	6 130	0.8	30	2KJ3205 - ■ EK22 - ■ ■ E1		
21	500	68.43	7 210	0.89	30	2KJ3205 - ■ EK22 - ■ ■ D1		
Z.59-LE90SG4E								
25	420	56.99	7 710	1.1	29	2KJ3105 - ■ EK22 - ■ ■ A2		
28	380	51.81	7 780	1.2	29	2KJ3105 - ■ EK22 - ■ ■ X1		
32	325	44.06	7 860	1.4	29	2KJ3105 - ■ EK22 - ■ ■ W1		
36	295	40.06	7 700	1.5	29	2KJ3105 - ■ EK22 - ■ ■ V1		
40	260	35.74	7 510	1.7	29	2KJ3105 - ■ EK22 - ■ ■ U1		
44	235	32.05	7 300	1.9	29	2KJ3105 - ■ EK22 - ■ ■ T1		
49	210	28.89	7 120	2.1	29	2KJ3105 - ■ EK22 - ■ ■ S1		
53	197	26.66	6 970	2.3	29	2KJ3105 - ■ EK22 - ■ ■ R1		
59	179	24.34	6 800	2.5	29	2KJ3105 - ■ EK22 - ■ ■ Q1		
71	149	20.20	6 470	3.0	29	2KJ3105 - ■ EK22 - ■ ■ P1		
75	140	19.01	6 360	3.2	29	2KJ3105 - ■ EK22 - ■ ■ N1		
Z.49-LE90SG4E								
27	380	52.14	5 630	0.83	27	2KJ3104 - ■ EK22 - ■ ■ B2		
30	345	47.40	5 850	0.92	27	2KJ3104 - ■ EK22 - ■ ■ A2		
35	295	40.31	5 950	1.1	27	2KJ3104 - ■ EK22 - ■ ■ X1		
39	270	36.65	6 000	1.2	27	2KJ3104 - ■ EK22 - ■ ■ W1		
44	240	32.70	5 900	1.3	27	2KJ3104 - ■ EK22 - ■ ■ V1		
49	215	29.32	5 750	1.5	27	2KJ3104 - ■ EK22 - ■ ■ U1		
54	195	26.43	5 600	1.6	27	2KJ3104 - ■ EK22 - ■ ■ T1		
58	180	24.39	5 500	1.8	27	2KJ3104 - ■ EK22 - ■ ■ S1		
64	164	22.27	5 370	1.9	27	2KJ3104 - ■ EK22 - ■ ■ R1		
77	136	18.48	5 120	2.3	27	2KJ3104 - ■ EK22 - ■ ■ Q1		
82	128	17.39	5 040	2.5	27	2KJ3104 - ■ EK22 - ■ ■ P1		
87	121	16.42	4 960	2.6	27	2KJ3104 - ■ EK22 - ■ ■ N1		
102	103	13.98	4 750	3.1	27	2KJ3104 - ■ EK22 - ■ ■ M1		
119	88	11.97	4 550	3.6	27	2KJ3104 - ■ EK22 - ■ ■ L1		
Z.39-LE90SG4E								
42	250	33.97	2 160	0.8	18	2KJ3103 - ■ EK22 - ■ ■ U1		
46	225	30.88	2 530	0.88	18	2KJ3103 - ■ EK22 - ■ ■ T1		
52	200	27.30	2 820	0.99	18	2KJ3103 - ■ EK22 - ■ ■ S1		
57	183	24.82	3 000	1.1	18	2KJ3103 - ■ EK22 - ■ ■ R1		
66	160	21.74	3 250	1.2	18	2KJ3103 - ■ EK22 - ■ ■ Q1		
71	148	20.07	3 360	1.4	18	2KJ3103 - ■ EK22 - ■ ■ P1		
80	131	17.77	3 500	1.5	18	2KJ3103 - ■ EK22 - ■ ■ N1		
96	109	14.79	3 650	1.8	18	2KJ3103 - ■ EK22 - ■ ■ M1		
102	103	13.92	3 670	1.8	18	2KJ3103 - ■ EK22 - ■ ■ L1		
114	92	12.47	3 720	2.0	18	2KJ3103 - ■ EK22 - ■ ■ K1		
134	78	10.62	3 760	2.2	18	2KJ3103 - ■ EK22 - ■ ■ J1		
157	67	9.10	3 740	2.4	18	2KJ3103 - ■ EK22 - ■ ■ H1		
182	58	7.84	3 710	2.6	18	2KJ3103 - ■ EK22 - ■ ■ G1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1								
Z.39-LE90SG4E								
221	48	6.46	6.46	3 330	3.1	18	2KJ3103 - ■ EK22 - ■ ■ F1	
234	45	6.08	6.08	3 330	3.3	18	2KJ3103 - ■ EK22 - ■ ■ E1	
261	40	5.45	5.45	3 310	3.5	18	2KJ3103 - ■ EK22 - ■ ■ D1	
307	34	4.64	4.64	3 240	3.8	18	2KJ3103 - ■ EK22 - ■ ■ C1	
358	29	3.98	3.98	3 100	4.1	18	2KJ3103 - ■ EK22 - ■ ■ B1	
415	25	3.43	3.43	2 960	4.4	18	2KJ3103 - ■ EK22 - ■ ■ A1	
Z.39-LE80ME2E								
160	66	17.77	17.77	3 740	3.0	16	2KJ3103 - ■ DM22 - ■ ■ N1	P00
192	55	14.79	14.79	3 690	3.5	16	2KJ3103 - ■ DM22 - ■ ■ M1	P00
204	52	13.92	13.92	3 650	3.7	16	2KJ3103 - ■ DM22 - ■ ■ L1	P00
227	46	12.47	12.47	3 540	3.9	16	2KJ3103 - ■ DM22 - ■ ■ K1	P00
267	39	10.62	10.62	3 380	4.3	16	2KJ3103 - ■ DM22 - ■ ■ J1	P00
312	34	9.10	9.10	3 230	4.7	16	2KJ3103 - ■ DM22 - ■ ■ H1	P00
362	29	7.84	7.84	3 090	5.1	16	2KJ3103 - ■ DM22 - ■ ■ G1	P00
Z.29-LE90SG4E								
63	166	22.58	22.58	1 930	0.84	17	2KJ3102 - ■ EK22 - ■ ■ T1	
72	146	19.80	19.80	2 190	0.96	17	2KJ3102 - ■ EK22 - ■ ■ S1	
81	130	17.67	17.67	2 380	1.1	17	2KJ3102 - ■ EK22 - ■ ■ R1	
90	116	15.75	15.75	2 540	1.2	17	2KJ3102 - ■ EK22 - ■ ■ Q1	
98	107	14.54	14.54	2 630	1.1	17	2KJ3102 - ■ EK22 - ■ ■ P1	
112	94	12.73	12.73	2 730	1.5	17	2KJ3102 - ■ EK22 - ■ ■ N1	
128	82	11.16	11.16	2 750	1.7	17	2KJ3102 - ■ EK22 - ■ ■ M1	
141	75	10.12	10.12	2 690	1.9	17	2KJ3102 - ■ EK22 - ■ ■ L1	
150	70	9.53	9.53	2 660	2.0	17	2KJ3102 - ■ EK22 - ■ ■ K1	
170	62	8.40	8.40	2 580	2.2	17	2KJ3102 - ■ EK22 - ■ ■ J1	
195	54	7.29	7.29	2 490	2.4	17	2KJ3102 - ■ EK22 - ■ ■ H1	
206	51	6.92	6.92	2 390	1.5	17	2KJ3102 - ■ EK22 - ■ ■ G1	
235	45	6.06	6.06	2 310	2.2	17	2KJ3102 - ■ EK22 - ■ ■ F1	
268	39	5.31	5.31	2 240	2.3	17	2KJ3102 - ■ EK22 - ■ ■ E1	
296	36	4.82	4.82	2 180	2.4	17	2KJ3102 - ■ EK22 - ■ ■ D1	
314	34	4.54	4.54	2 150	2.5	17	2KJ3102 - ■ EK22 - ■ ■ C1	
356	30	4.00	4.00	2 080	2.6	17	2KJ3102 - ■ EK22 - ■ ■ B1	
411	26	3.47	3.47	2 000	2.7	17	2KJ3102 - ■ EK22 - ■ ■ A1	
Z.29-LE80ME2E								
160	66	17.67	17.67	2 610	2.1	14	2KJ3102 - ■ DM22 - ■ ■ R1	P00
180	58	15.75	15.75	2 540	2.4	14	2KJ3102 - ■ DM22 - ■ ■ Q1	P00
195	54	14.54	14.54	2 490	2.2	14	2KJ3102 - ■ DM22 - ■ ■ P1	P00
223	47	12.73	12.73	2 410	3.0	14	2KJ3102 - ■ DM22 - ■ ■ N1	P00
254	41	11.16	11.16	2 330	3.4	14	2KJ3102 - ■ DM22 - ■ ■ M1	P00
280	38	10.12	10.12	2 260	3.7	14	2KJ3102 - ■ DM22 - ■ ■ L1	P00
297	35	9.53	9.53	2 230	4.0	14	2KJ3102 - ■ DM22 - ■ ■ K1	P00
338	31	8.40	8.40	2 150	4.4	14	2KJ3102 - ■ DM22 - ■ ■ J1	P00
389	27	7.29	7.29	2 070	4.8	14	2KJ3102 - ■ DM22 - ■ ■ H1	P00
410	26	6.92	6.92	2 000	2.9	14	2KJ3102 - ■ DM22 - ■ ■ G1	P00
468	22	6.06	6.06	1 930	4.5	14	2KJ3102 - ■ DM22 - ■ ■ F1	P00
534	20	5.31	5.31	1 860	4.6	14	2KJ3102 - ■ DM22 - ■ ■ E1	P00

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1								
Z.29-LE80ME2E								
	588	18	4.82	1 810	4.8	14	2KJ3102 - ■ DM22 - ■ ■ D1	P00
	624	17	4.54	1 780	5.0	14	2KJ3102 - ■ DM22 - ■ ■ C1	P00
	709	15	4.00	1 710	5.1	14	2KJ3102 - ■ DM22 - ■ ■ B1	P00
	817	13	3.47	1 640	5.4	14	2KJ3102 - ■ DM22 - ■ ■ A1	P00
Z.19-LE80ME2E								
	150	70	18.92	1 580	1.4	13	2KJ3101 - ■ DM22 - ■ ■ R1	P00
	172	61	16.50	1 550	1.6	13	2KJ3101 - ■ DM22 - ■ ■ Q1	P00
	192	55	14.77	1 520	1.7	13	2KJ3101 - ■ DM22 - ■ ■ P1	P00
	216	49	13.12	1 480	1.9	13	2KJ3101 - ■ DM22 - ■ ■ N1	P00
	234	45	12.11	1 460	2.0	13	2KJ3101 - ■ DM22 - ■ ■ M1	P00
	269	39	10.52	1 420	2.1	13	2KJ3101 - ■ DM22 - ■ ■ L1	P00
	310	34	9.14	1 380	2.3	13	2KJ3101 - ■ DM22 - ■ ■ K1	P00
	344	31	8.25	1 350	2.4	13	2KJ3101 - ■ DM22 - ■ ■ J1	P00
	365	29	7.76	1 330	2.5	13	2KJ3101 - ■ DM22 - ■ ■ H1	P00
	419	25	6.77	1 290	2.7	13	2KJ3101 - ■ DM22 - ■ ■ G1	P00
	454	23	6.25	1 180	2.4	13	2KJ3101 - ■ DM22 - ■ ■ F1	P00
	522	20	5.43	1 150	2.6	13	2KJ3101 - ■ DM22 - ■ ■ E1	P00
	602	18	4.71	1 110	2.8	13	2KJ3101 - ■ DM22 - ■ ■ D1	P00
	665	16	4.26	1 080	3.0	13	2KJ3101 - ■ DM22 - ■ ■ C1	P00
	707	15	4.01	1 070	3.1	13	2KJ3101 - ■ DM22 - ■ ■ B1	P00
	812	13	3.49	1 040	3.3	13	2KJ3101 - ■ DM22 - ■ ■ A1	P00
1.5								
D.149-LE112MG8								
	2.1	6 720	328.38	51 800	1.2	280	2KJ3212 - ■ GJ21 - ■ ■ W1	P02
	2.5	5 750	281.04	52 200	1.4	280	2KJ3212 - ■ GJ21 - ■ ■ V1	P02
	2.6	5 410	264.51	52 400	1.5	280	2KJ3212 - ■ GJ21 - ■ ■ U1	P02
	2.8	5 070	247.95	52 600	1.6	280	2KJ3212 - ■ GJ21 - ■ ■ T1	P02
D.149-LE100LLB6E								
	3.0	4 850	328.38	52 700	1.6	274	2KJ3212 - ■ FP22 - ■ ■ W1	P01
	3.5	4 150	281.04	53 000	1.9	274	2KJ3212 - ■ FP22 - ■ ■ V1	P01
	3.7	3 900	264.51	53 100	2.0	274	2KJ3212 - ■ FP22 - ■ ■ U1	P01
D.129-LE100LLB6E								
	2.6	5 500	373.00	26 700	0.91	190	2KJ3211 - ■ FP22 - ■ ■ S1	P01
	2.8	5 080	344.17	27 000	0.98	190	2KJ3211 - ■ FP22 - ■ ■ R1	P01
	3.1	4 680	316.90	27 200	1.1	190	2KJ3211 - ■ FP22 - ■ ■ Q1	P01
	3.6	3 990	270.24	27 600	1.3	190	2KJ3211 - ■ FP22 - ■ ■ P1	P01
D.129-LE90LH4E								
	3.8	3 720	373.00	27 800	1.3	177	2KJ3211 - ■ EM22 - ■ ■ S1	
	4.2	3 430	344.17	27 900	1.5	177	2KJ3211 - ■ EM22 - ■ ■ R1	
	4.5	3 160	316.90	28 100	1.6	177	2KJ3211 - ■ EM22 - ■ ■ Q1	
	5.3	2 690	270.24	28 400	1.9	177	2KJ3211 - ■ EM22 - ■ ■ P1	
	5.6	2 530	254.34	28 500	2.0	177	2KJ3211 - ■ EM22 - ■ ■ N1	
	6.1	2 350	236.03	28 600	2.1	177	2KJ3211 - ■ EM22 - ■ ■ M1	
D.109-LE100LLB6E								
	3.7	3 890	263.74	20 000	0.8	126	2KJ3210 - ■ FP22 - ■ ■ Q1	P01
D.109-LE90LH4E								
	4.1	3 480	348.88	20 200	0.89	114	2KJ3210 - ■ EM22 - ■ ■ T1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5								
D.109-LE90LH4E								
4.6	3 140	314.98	20 200	0.99	114	2KJ3210 - ■ EM22 - ■ ■ S1		
5.0	2 850	285.72	20 200	1.1	114	2KJ3210 - ■ EM22 - ■ ■ R1		
5.4	2 630	263.74	20 200	1.2	114	2KJ3210 - ■ EM22 - ■ ■ Q1		
6.0	2 390	239.75	20 200	1.3	114	2KJ3210 - ■ EM22 - ■ ■ P1		
7.1	2 020	203.01	20 200	1.5	114	2KJ3210 - ■ EM22 - ■ ■ N1		
7.5	1 900	191.07	20 200	1.6	114	2KJ3210 - ■ EM22 - ■ ■ M1		
8.1	1 760	176.45	20 200	1.8	114	2KJ3210 - ■ EM22 - ■ ■ L1		
9.1	1 560	157.00	20 200	2.0	114	2KJ3210 - ■ EM22 - ■ ■ K1		
10	1 390	139.44	20 200	2.2	114	2KJ3210 - ■ EM22 - ■ ■ J1		
D.89-LE90LH4E								
6.9	2 060	206.62	18 100	0.81	72	2KJ3208 - ■ EM22 - ■ ■ N1		
7.5	1 900	190.73	18 500	0.88	72	2KJ3208 - ■ EM22 - ■ ■ M1		
8.2	1 740	174.71	18 500	0.96	72	2KJ3208 - ■ EM22 - ■ ■ L1		
9.8	1 460	146.59	18 500	1.1	72	2KJ3208 - ■ EM22 - ■ ■ K1		
10	1 370	137.97	18 500	1.2	72	2KJ3208 - ■ EM22 - ■ ■ J1		
11	1 260	126.58	18 500	1.3	72	2KJ3208 - ■ EM22 - ■ ■ H1		
13	1 100	110.57	18 500	1.5	72	2KJ3208 - ■ EM22 - ■ ■ G1		
14	985	98.99	18 500	1.7	72	2KJ3208 - ■ EM22 - ■ ■ F1		
17	860	86.56	18 500	1.9	72	2KJ3208 - ■ EM22 - ■ ■ E1		
19	740	74.30	18 500	2.3	72	2KJ3208 - ■ EM22 - ■ ■ D1		
D.79-LE90LH4E								
14	1 030	104.03	11 000	0.81	49	2KJ3207 - ■ EM22 - ■ ■ F1		
16	880	88.52	13 300	0.95	49	2KJ3207 - ■ EM22 - ■ ■ E1		
19	755	75.83	13 500	1.1	49	2KJ3207 - ■ EM22 - ■ ■ D1		
22	665	66.67	13 600	1.3	49	2KJ3207 - ■ EM22 - ■ ■ C1		
Z.79-LE90LH4E								
26	540	54.47	13 800	1.5	48	2KJ3107 - ■ EM22 - ■ ■ A2		
29	490	49.52	13 800	1.7	48	2KJ3107 - ■ EM22 - ■ ■ X1		
32	440	44.42	13 900	1.9	48	2KJ3107 - ■ EM22 - ■ ■ W1		
36	395	39.94	14 000	2.1	48	2KJ3107 - ■ EM22 - ■ ■ V1		
40	360	36.12	14 000	2.3	48	2KJ3107 - ■ EM22 - ■ ■ U1		
43	330	33.34	14 000	2.5	48	2KJ3107 - ■ EM22 - ■ ■ T1		
47	305	30.54	14 100	2.8	48	2KJ3107 - ■ EM22 - ■ ■ S1		
D.69-LE90LH4E								
20	730	73.22	10 700	0.82	37	2KJ3206 - ■ EM22 - ■ ■ D1		
Z.69-LE90LH4E								
24	605	60.97	11 000	0.99	37	2KJ3106 - ■ EM22 - ■ ■ A2		
26	550	55.43	11 000	1.1	37	2KJ3106 - ■ EM22 - ■ ■ X1		
30	470	47.14	11 200	1.3	37	2KJ3106 - ■ EM22 - ■ ■ W1		
33	425	42.86	11 200	1.4	37	2KJ3106 - ■ EM22 - ■ ■ V1		
38	380	38.24	11 300	1.6	37	2KJ3106 - ■ EM22 - ■ ■ U1		
42	340	34.29	11 400	1.8	37	2KJ3106 - ■ EM22 - ■ ■ T1		
46	305	30.90	11 400	1.9	37	2KJ3106 - ■ EM22 - ■ ■ S1		
50	285	28.53	11 400	2.1	37	2KJ3106 - ■ EM22 - ■ ■ R1		
55	260	26.04	11 500	2.3	37	2KJ3106 - ■ EM22 - ■ ■ Q1		
66	215	21.61	11 600	2.8	37	2KJ3106 - ■ EM22 - ■ ■ P1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5								
Z.69-LE90LH4E								
	71	200	20.34	11 600	3.0	37	2KJ3106 - ■ EM22 - ■ ■ N1	
	75	192	19.21	11 600	3.1	37	2KJ3106 - ■ EM22 - ■ ■ M1	
Z.59-LE90LH4E								
	28	515	51.81	7 560	0.87	32	2KJ3105 - ■ EM22 - ■ ■ X1	
	33	440	44.06	7 400	1.0	32	2KJ3105 - ■ EM22 - ■ ■ W1	
	36	400	40.06	7 270	1.1	32	2KJ3105 - ■ EM22 - ■ ■ V1	
	40	355	35.74	7 120	1.3	32	2KJ3105 - ■ EM22 - ■ ■ U1	
	45	320	32.05	6 950	1.4	32	2KJ3105 - ■ EM22 - ■ ■ T1	
	50	285	28.89	6 810	1.6	32	2KJ3105 - ■ EM22 - ■ ■ S1	
	54	265	26.66	6 680	1.7	32	2KJ3105 - ■ EM22 - ■ ■ R1	
	59	240	24.34	6 550	1.9	32	2KJ3105 - ■ EM22 - ■ ■ Q1	
	71	200	20.20	6 250	2.2	32	2KJ3105 - ■ EM22 - ■ ■ P1	
	75	190	19.01	6 150	2.4	32	2KJ3105 - ■ EM22 - ■ ■ N1	
	80	179	17.95	6 060	2.5	32	2KJ3105 - ■ EM22 - ■ ■ M1	
	94	152	15.27	5 810	3.0	32	2KJ3105 - ■ EM22 - ■ ■ L1	
	110	131	13.09	5 580	3.4	32	2KJ3105 - ■ EM22 - ■ ■ K1	
Z.49-LE90LH4E								
	36	400	40.31	5 300	0.8	30	2KJ3104 - ■ EM22 - ■ ■ X1	
	39	365	36.65	5 650	0.87	30	2KJ3104 - ■ EM22 - ■ ■ W1	
	44	325	32.70	5 540	0.98	30	2KJ3104 - ■ EM22 - ■ ■ V1	
	49	290	29.32	5 090	1.1	30	2KJ3104 - ■ EM22 - ■ ■ U1	
	54	260	26.43	5 330	1.2	30	2KJ3104 - ■ EM22 - ■ ■ T1	
	59	240	24.39	5 240	1.3	30	2KJ3104 - ■ EM22 - ■ ■ S1	
	64	220	22.27	5 140	1.4	30	2KJ3104 - ■ EM22 - ■ ■ R1	
	78	184	18.48	4 920	1.7	30	2KJ3104 - ■ EM22 - ■ ■ Q1	
	83	174	17.39	4 840	1.8	30	2KJ3104 - ■ EM22 - ■ ■ P1	
	87	164	16.42	4 780	2.0	30	2KJ3104 - ■ EM22 - ■ ■ N1	
	103	140	13.98	4 590	2.3	30	2KJ3104 - ■ EM22 - ■ ■ M1	
	120	119	11.97	4 410	2.7	30	2KJ3104 - ■ EM22 - ■ ■ L1	
	136	105	10.53	4 260	3.0	30	2KJ3104 - ■ EM22 - ■ ■ K1	
	162	89	8.88	4 070	3.6	30	2KJ3104 - ■ EM22 - ■ ■ J1	
	185	77	7.74	3 920	4.1	30	2KJ3104 - ■ EM22 - ■ ■ H1	
	188	76	7.64	3 880	3.9	30	2KJ3104 - ■ EM22 - ■ ■ G1	
	199	72	7.21	3 810	4.0	30	2KJ3104 - ■ EM22 - ■ ■ F1	
	234	61	6.14	3 640	4.3	30	2KJ3104 - ■ EM22 - ■ ■ E1	
	273	52	5.26	3 490	4.7	30	2KJ3104 - ■ EM22 - ■ ■ D1	
	311	46	4.62	3 360	4.9	30	2KJ3104 - ■ EM22 - ■ ■ C1	
	368	39	3.90	3 190	5.3	30	2KJ3104 - ■ EM22 - ■ ■ B1	
Z.49-LE90SG2E								
	156	92	18.48	4 110	3.5	27	2KJ3104 - ■ EK22 - ■ ■ Q1	P00
	166	86	17.39	4 040	3.7	27	2KJ3104 - ■ EK22 - ■ ■ P1	P00
	176	82	16.42	3 970	3.9	27	2KJ3104 - ■ EK22 - ■ ■ N1	P00
Z.39-LE90LH4E								
	58	245	24.82	1 430	0.81	21	2KJ3103 - ■ EM22 - ■ ■ R1	
	66	215	21.74	1 860	0.92	21	2KJ3103 - ■ EM22 - ■ ■ Q1	
	71	200	20.07	2 040	1.0	21	2KJ3103 - ■ EM22 - ■ ■ P1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5								
Z.39-LE90LH4E								
81	177	17.77	17.77	2 340	1.1	21	2KJ3103 - ■ EM22 - ■ ■ N1	
97	148	14.79	14.79	2 660	1.3	21	2KJ3103 - ■ EM22 - ■ ■ M1	
103	139	13.92	13.92	2 760	1.4	21	2KJ3103 - ■ EM22 - ■ ■ L1	
115	124	12.47	12.47	2 910	1.4	21	2KJ3103 - ■ EM22 - ■ ■ K1	
135	106	10.62	10.62	3 040	1.6	21	2KJ3103 - ■ EM22 - ■ ■ J1	
158	91	9.10	9.10	3 130	1.7	21	2KJ3103 - ■ EM22 - ■ ■ H1	
183	78	7.84	7.84	3 190	1.9	21	2KJ3103 - ■ EM22 - ■ ■ G1	
222	64	6.46	6.46	2 820	2.3	21	2KJ3103 - ■ EM22 - ■ ■ F1	
236	61	6.08	6.08	2 820	2.4	21	2KJ3103 - ■ EM22 - ■ ■ E1	
263	54	5.45	5.45	2 860	2.6	21	2KJ3103 - ■ EM22 - ■ ■ D1	
309	46	4.64	4.64	2 880	2.8	21	2KJ3103 - ■ EM22 - ■ ■ C1	
361	40	3.98	3.98	2 850	3.0	21	2KJ3103 - ■ EM22 - ■ ■ B1	
418	34	3.43	3.43	2 840	3.3	21	2KJ3103 - ■ EM22 - ■ ■ A1	
Z.39-LE90SG2E								
162	88	17.77	17.77	3 160	2.3	18	2KJ3103 - ■ EK22 - ■ ■ N1	P00
195	73	14.79	14.79	3 210	2.6	18	2KJ3103 - ■ EK22 - ■ ■ M1	P00
207	69	13.92	13.92	3 210	2.7	18	2KJ3103 - ■ EK22 - ■ ■ L1	P00
231	62	12.47	12.47	3 210	2.9	18	2KJ3103 - ■ EK22 - ■ ■ K1	P00
272	53	10.62	10.62	3 180	3.2	18	2KJ3103 - ■ EK22 - ■ ■ J1	P00
317	45	9.10	9.10	3 150	3.5	18	2KJ3103 - ■ EK22 - ■ ■ H1	P00
368	39	7.84	7.84	3 020	3.8	18	2KJ3103 - ■ EK22 - ■ ■ G1	P00
447	32	6.46	6.46	2 820	4.6	18	2KJ3103 - ■ EK22 - ■ ■ F1	P00
475	30	6.08	6.08	2 800	4.9	18	2KJ3103 - ■ EK22 - ■ ■ E1	P00
529	27	5.45	5.45	2 710	5.2	18	2KJ3103 - ■ EK22 - ■ ■ D1	P00
622	23	4.64	4.64	2 580	5.6	18	2KJ3103 - ■ EK22 - ■ ■ C1	P00
725	20	3.98	3.98	2 460	6.1	18	2KJ3103 - ■ EK22 - ■ ■ B1	P00
Z.29-LE90LH4E								
91	157	15.75	15.75	1 440	0.89	20	2KJ3102 - ■ EM22 - ■ ■ Q1	
99	145	14.54	14.54	1 610	0.83	20	2KJ3102 - ■ EM22 - ■ ■ P1	
113	127	12.73	12.73	1 850	1.1	20	2KJ3102 - ■ EM22 - ■ ■ N1	
129	111	11.16	11.16	2 050	1.3	20	2KJ3102 - ■ EM22 - ■ ■ M1	
142	101	10.12	10.12	2 150	1.4	20	2KJ3102 - ■ EM22 - ■ ■ L1	
151	95	9.53	9.53	2 220	1.5	20	2KJ3102 - ■ EM22 - ■ ■ K1	
171	84	8.40	8.40	2 310	1.6	20	2KJ3102 - ■ EM22 - ■ ■ J1	
197	73	7.29	7.29	2 370	1.8	20	2KJ3102 - ■ EM22 - ■ ■ H1	
207	69	6.92	6.92	2 110	1.1	20	2KJ3102 - ■ EM22 - ■ ■ G1	
237	60	6.06	6.06	2 200	1.7	20	2KJ3102 - ■ EM22 - ■ ■ F1	
270	53	5.31	5.31	2 140	1.7	20	2KJ3102 - ■ EM22 - ■ ■ E1	
298	48	4.82	4.82	2 090	1.8	20	2KJ3102 - ■ EM22 - ■ ■ D1	
316	45	4.54	4.54	2 060	1.9	20	2KJ3102 - ■ EM22 - ■ ■ C1	
359	40	4.00	4.00	2 000	1.9	20	2KJ3102 - ■ EM22 - ■ ■ B1	
414	35	3.47	3.47	1 930	2.0	20	2KJ3102 - ■ EM22 - ■ ■ A1	
Z.29-LE90SG2E								
163	88	17.67	17.67	2 280	1.6	17	2KJ3102 - ■ EK22 - ■ ■ R1	P00
183	78	15.75	15.75	2 370	1.8	17	2KJ3102 - ■ EK22 - ■ ■ Q1	P00
198	72	14.54	14.54	2 370	1.7	17	2KJ3102 - ■ EK22 - ■ ■ P1	P00

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5	Z.29-LE90SG2E							
	227	63	12.73	2 300	2.2	17	2KJ3102 - ■ EK22 - ■ ■ N1	P00
	259	55	11.16	2 230	2.5	17	2KJ3102 - ■ EK22 - ■ ■ M1	P00
	285	50	10.12	2 180	2.8	17	2KJ3102 - ■ EK22 - ■ ■ L1	P00
	303	47	9.53	2 150	3.0	17	2KJ3102 - ■ EK22 - ■ ■ K1	P00
	343	42	8.40	2 080	3.3	17	2KJ3102 - ■ EK22 - ■ ■ J1	P00
	396	36	7.29	2 000	3.6	17	2KJ3102 - ■ EK22 - ■ ■ H1	P00
	417	34	6.92	1 930	2.2	17	2KJ3102 - ■ EK22 - ■ ■ G1	P00
	476	30	6.06	1 860	3.3	17	2KJ3102 - ■ EK22 - ■ ■ F1	P00
	543	26	5.31	1 800	3.5	17	2KJ3102 - ■ EK22 - ■ ■ E1	P00
	599	24	4.82	1 750	3.6	17	2KJ3102 - ■ EK22 - ■ ■ D1	P00
	635	22	4.54	1 730	3.7	17	2KJ3102 - ■ EK22 - ■ ■ C1	P00
	721	20	4.00	1 670	3.8	17	2KJ3102 - ■ EK22 - ■ ■ B1	P00
831	17	3.47	1 600	4.1	17	2KJ3102 - ■ EK22 - ■ ■ A1	P00	
2.2	D.169-LE132SL8							
	2.2	9 610	327.18	70 000	1.5	475	2KJ3213 - ■ HG21 - ■ ■ V1	P02
	2.3	8 970	305.28	70 000	1.6	475	2KJ3213 - ■ HG21 - ■ ■ U1	P02
	2.6	7 970	271.40	70 000	1.8	475	2KJ3213 - ■ HG21 - ■ ■ T1	P02
	D.169-LE112ME6E							
	2.9	7 120	327.18	70 000	2.0	453	2KJ3213 - ■ GH22 - ■ ■ V1	P01
	D.149-LE132SL8							
	2.2	9 640	328.38	50 400	0.83	297	2KJ3212 - ■ HG21 - ■ ■ W1	P02
	2.5	8 250	281.04	51 000	0.97	297	2KJ3212 - ■ HG21 - ■ ■ V1	P02
	2.7	7 770	264.51	51 300	1.0	297	2KJ3212 - ■ HG21 - ■ ■ U1	P02
	D.149-LE112ME6E							
	2.9	7 140	328.38	51 500	1.1	275	2KJ3212 - ■ GH22 - ■ ■ W1	P01
	3.4	6 110	281.04	52 100	1.3	275	2KJ3212 - ■ GH22 - ■ ■ V1	P01
	3.6	5 750	264.51	52 200	1.4	275	2KJ3212 - ■ GH22 - ■ ■ U1	P01
	3.9	5 390	247.95	52 400	1.5	275	2KJ3212 - ■ GH22 - ■ ■ T1	P01
	D.149-LE100LE4E							
	4.4	4 740	328.38	52 700	1.7	269	2KJ3212 - ■ FL22 - ■ ■ W1	
	5.2	4 050	281.04	53 100	2.0	269	2KJ3212 - ■ FL22 - ■ ■ V1	
	5.5	3 810	264.51	53 100	2.1	269	2KJ3212 - ■ FL22 - ■ ■ U1	
	D.129-LE112ME6E							
	3.6	5 880	270.24	26 500	0.85	189	2KJ3211 - ■ GH22 - ■ ■ P1	P01
	D.129-LE100LE4E							
	3.9	5 380	373.00	26 800	0.93	185	2KJ3211 - ■ FL22 - ■ ■ S1	
	4.2	4 970	344.17	27 000	1.0	185	2KJ3211 - ■ FL22 - ■ ■ R1	
	4.6	4 570	316.90	27 300	1.1	185	2KJ3211 - ■ FL22 - ■ ■ Q1	
	5.4	3 900	270.24	27 600	1.3	185	2KJ3211 - ■ FL22 - ■ ■ P1	
	5.7	3 670	254.34	27 800	1.4	185	2KJ3211 - ■ FL22 - ■ ■ N1	
	6.2	3 400	236.03	28 000	1.5	185	2KJ3211 - ■ FL22 - ■ ■ M1	
	7.0	3 010	208.67	28 200	1.7	185	2KJ3211 - ■ FL22 - ■ ■ L1	
	7.8	2 690	186.28	28 400	1.9	185	2KJ3211 - ■ FL22 - ■ ■ K1	
8.7	2 420	167.63	28 500	2.1	185	2KJ3211 - ■ FL22 - ■ ■ J1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
D.109-LE100LE4E								
5.5	3 800	263.74	20 100	0.81	121	2KJ3210 - ■ FL22 - ■ ■ Q1		
6.1	3 460	239.75	20 200	0.90	121	2KJ3210 - ■ FL22 - ■ ■ P1		
7.2	2 930	203.01	20 200	1.1	121	2KJ3210 - ■ FL22 - ■ ■ N1		
7.6	2 750	191.07	20 200	1.1	121	2KJ3210 - ■ FL22 - ■ ■ M1		
8.2	2 540	176.45	20 200	1.2	121	2KJ3210 - ■ FL22 - ■ ■ L1		
9.3	2 260	157.00	20 200	1.4	121	2KJ3210 - ■ FL22 - ■ ■ K1		
10	2 010	139.44	20 200	1.5	121	2KJ3210 - ■ FL22 - ■ ■ J1		
12	1 800	124.82	20 200	1.7	121	2KJ3210 - ■ FL22 - ■ ■ H1		
14	1 540	106.70	20 200	2.0	121	2KJ3210 - ■ FL22 - ■ ■ G1		
D.89-LE100LE4E								
11	1 820	126.58	18 500	0.92	79	2KJ3208 - ■ FL22 - ■ ■ H1		
11	1 990	137.97	18 500	0.84	79	2KJ3208 - ■ FL22 - ■ ■ J1		
13	1 590	110.57	18 500	1.1	79	2KJ3208 - ■ FL22 - ■ ■ G1		
15	1 420	98.99	18 500	1.2	79	2KJ3208 - ■ FL22 - ■ ■ F1		
17	1 250	86.56	18 500	1.3	79	2KJ3208 - ■ FL22 - ■ ■ E1		
20	1 070	74.30	18 500	1.6	79	2KJ3208 - ■ FL22 - ■ ■ D1		
22	945	65.67	18 500	1.8	79	2KJ3208 - ■ FL22 - ■ ■ C1		
Z.89-LE100LE4E								
25	825	57.36	18 500	2.0	78	2KJ3108 - ■ FL22 - ■ ■ A2		
28	745	51.78	18 500	2.2	78	2KJ3108 - ■ FL22 - ■ ■ X1		
31	675	46.97	18 500	2.5	78	2KJ3108 - ■ FL22 - ■ ■ W1		
D.79-LE100LE4E								
22	960	66.67	12 100	0.87	56	2KJ3207 - ■ FL22 - ■ ■ C1		
26	810	56.25	13 400	1.0	56	2KJ3207 - ■ FL22 - ■ ■ B1		
30	705	49.02	13 600	1.2	56	2KJ3207 - ■ FL22 - ■ ■ A1		
Z.79-LE100LE4E								
33	640	44.42	13 600	1.3	55	2KJ3107 - ■ FL22 - ■ ■ W1		
36	575	39.94	13 700	1.5	55	2KJ3107 - ■ FL22 - ■ ■ V1		
40	520	36.12	13 800	1.6	55	2KJ3107 - ■ FL22 - ■ ■ U1		
44	480	33.34	13 800	1.7	55	2KJ3107 - ■ FL22 - ■ ■ T1		
48	440	30.54	13 900	1.9	55	2KJ3107 - ■ FL22 - ■ ■ S1		
57	370	25.62	14 000	2.3	55	2KJ3107 - ■ FL22 - ■ ■ R1		
60	345	24.12	14 000	2.4	55	2KJ3107 - ■ FL22 - ■ ■ Q1		
66	320	22.13	14 100	2.6	55	2KJ3107 - ■ FL22 - ■ ■ P1		
75	275	19.33	13 600	3.0	55	2KJ3107 - ■ FL22 - ■ ■ N1		
D.79-LE100LE4E								
32	660	46.01	10 800	0.9	46	2KJ3206 - ■ FL22 - ■ ■ A1		
Z.69-LE100LE4E								
38	550	38.24	11 000	1.1	46	2KJ3106 - ■ FL22 - ■ ■ U1		
42	495	34.29	11 100	1.2	46	2KJ3106 - ■ FL22 - ■ ■ T1		
47	445	30.90	11 200	1.3	46	2KJ3106 - ■ FL22 - ■ ■ S1		
51	410	28.53	11 300	1.5	46	2KJ3106 - ■ FL22 - ■ ■ R1		
56	375	26.04	11 300	1.6	46	2KJ3106 - ■ FL22 - ■ ■ Q1		
67	310	21.61	11 400	1.9	46	2KJ3106 - ■ FL22 - ■ ■ P1		
72	290	20.34	11 400	2.0	46	2KJ3106 - ■ FL22 - ■ ■ N1		
76	275	19.21	11 500	2.2	46	2KJ3106 - ■ FL22 - ■ ■ M1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
Z.69-LE100LE4E								
89	235	16.34	11 000	2.5	46	2KJ3106	- ■ FL22 - ■ ■ L1	
104	200	14.00	10 500	3.0	46	2KJ3106	- ■ FL22 - ■ ■ K1	
118	178	12.31	10 100	3.4	46	2KJ3106	- ■ FL22 - ■ ■ J1	
171	123	8.50	9 090	3.6	46	2KJ3106	- ■ FL22 - ■ ■ F1	
201	104	7.23	8 650	4.3	46	2KJ3106	- ■ FL22 - ■ ■ E1	
Z.59-LE100LE4E								
41	515	35.74	6 450	0.87	41	2KJ3105	- ■ FL22 - ■ ■ U1	
45	460	32.05	6 010	0.97	41	2KJ3105	- ■ FL22 - ■ ■ T1	
50	415	28.89	6 260	1.1	41	2KJ3105	- ■ FL22 - ■ ■ S1	
55	385	26.66	6 170	1.2	41	2KJ3105	- ■ FL22 - ■ ■ R1	
60	350	24.34	6 080	1.3	41	2KJ3105	- ■ FL22 - ■ ■ Q1	
72	290	20.20	5 860	1.5	41	2KJ3105	- ■ FL22 - ■ ■ P1	
77	275	19.01	5 780	1.6	41	2KJ3105	- ■ FL22 - ■ ■ N1	
81	255	17.95	5 730	1.7	41	2KJ3105	- ■ FL22 - ■ ■ M1	
95	220	15.27	5 520	2.0	41	2KJ3105	- ■ FL22 - ■ ■ L1	
111	189	13.09	5 320	2.4	41	2KJ3105	- ■ FL22 - ■ ■ K1	
126	166	11.51	5 150	2.7	41	2KJ3105	- ■ FL22 - ■ ■ J1	
150	140	9.71	4 940	3.2	41	2KJ3105	- ■ FL22 - ■ ■ H1	
172	122	8.46	4 760	3.7	41	2KJ3105	- ■ FL22 - ■ ■ G1	
180	117	8.07	4 670	3.5	41	2KJ3105	- ■ FL22 - ■ ■ F1	
212	99	6.86	4 480	4.1	41	2KJ3105	- ■ FL22 - ■ ■ E1	
Z.59-LE90LH2E								
152	138	19.01	4 920	3.3	32	2KJ3105	- ■ EM22 - ■ ■ N1	P00
161	130	17.95	4 850	3.4	32	2KJ3105	- ■ EM22 - ■ ■ M1	P00
189	111	15.27	4 640	4.1	32	2KJ3105	- ■ EM22 - ■ ■ L1	P00
Z.49-LE100LE4E								
55	380	26.43	4 830	0.84	39	2KJ3104	- ■ FL22 - ■ ■ T1	
60	350	24.39	4 780	0.91	39	2KJ3104	- ■ FL22 - ■ ■ S1	
65	320	22.27	4 710	1.0	39	2KJ3104	- ■ FL22 - ■ ■ R1	
79	265	18.48	4 570	1.2	39	2KJ3104	- ■ FL22 - ■ ■ Q1	
84	250	17.39	4 070	1.3	39	2KJ3104	- ■ FL22 - ■ ■ P1	
89	235	16.42	4 250	1.3	39	2KJ3104	- ■ FL22 - ■ ■ N1	
104	200	13.98	4 330	1.6	39	2KJ3104	- ■ FL22 - ■ ■ M1	
122	173	11.97	4 180	1.9	39	2KJ3104	- ■ FL22 - ■ ■ L1	
138	152	10.53	4 060	2.1	39	2KJ3104	- ■ FL22 - ■ ■ K1	
164	128	8.88	3 890	2.5	39	2KJ3104	- ■ FL22 - ■ ■ J1	
188	112	7.74	3 760	2.9	39	2KJ3104	- ■ FL22 - ■ ■ H1	
190	110	7.64	3 710	2.7	39	2KJ3104	- ■ FL22 - ■ ■ G1	
202	104	7.21	3 660	2.8	39	2KJ3104	- ■ FL22 - ■ ■ F1	
237	89	6.14	3 510	3.0	39	2KJ3104	- ■ FL22 - ■ ■ E1	
277	76	5.26	3 370	3.2	39	2KJ3104	- ■ FL22 - ■ ■ D1	
315	67	4.62	3 250	3.4	39	2KJ3104	- ■ FL22 - ■ ■ C1	
373	56	3.90	3 100	3.6	39	2KJ3104	- ■ FL22 - ■ ■ B1	
428	49	3.40	2 980	3.9	39	2KJ3104	- ■ FL22 - ■ ■ A1	
Z.49-LE90LH2E								
156	134	18.48	3 940	2.4	30	2KJ3104	- ■ EM22 - ■ ■ Q1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
Z.49-LE90LH2E								
166	126	17.39	3 880	2.5	30	2KJ3104 - ■ EM22 - ■ ■ P1	P00	
176	119	16.42	3 830	2.7	30	2KJ3104 - ■ EM22 - ■ ■ N1	P00	
207	102	13.98	3 670	3.1	30	2KJ3104 - ■ EM22 - ■ ■ M1	P00	
241	87	11.97	3 520	3.7	30	2KJ3104 - ■ EM22 - ■ ■ L1	P00	
274	77	10.53	3 400	4.2	30	2KJ3104 - ■ EM22 - ■ ■ K1	P00	
325	65	8.88	3 240	5.0	30	2KJ3104 - ■ EM22 - ■ ■ J1	P00	
378	56	7.64	3 090	5.3	30	2KJ3104 - ■ EM22 - ■ ■ G1	P00	
Z.39-LE100LE4E								
98	210	14.79	1 080	0.9	27	2KJ3103 - ■ FL22 - ■ ■ M1		
105	200	13.92	1 200	0.94	27	2KJ3103 - ■ FL22 - ■ ■ L1		
117	180	12.47	1 480	1.0	27	2KJ3103 - ■ FL22 - ■ ■ K1		
137	153	10.62	1 840	1.1	27	2KJ3103 - ■ FL22 - ■ ■ J1		
160	131	9.10	2 110	1.2	27	2KJ3103 - ■ FL22 - ■ ■ H1		
186	113	7.84	2 300	1.3	27	2KJ3103 - ■ FL22 - ■ ■ G1		
225	93	6.46	1 890	1.6	27	2KJ3103 - ■ FL22 - ■ ■ F1		
239	88	6.08	1 950	1.7	27	2KJ3103 - ■ FL22 - ■ ■ E1		
267	79	5.45	2 060	1.8	27	2KJ3103 - ■ FL22 - ■ ■ D1		
314	67	4.64	2 200	1.9	27	2KJ3103 - ■ FL22 - ■ ■ C1		
366	58	3.98	2 270	2.1	27	2KJ3103 - ■ FL22 - ■ ■ B1		
424	50	3.43	2 320	2.3	27	2KJ3103 - ■ FL22 - ■ ■ A1		
Z.39-LE90LH2E								
163	129	17.77	2 130	1.5	21	2KJ3103 - ■ EM22 - ■ ■ N1	P00	
195	108	14.79	2 330	1.8	21	2KJ3103 - ■ EM22 - ■ ■ M1	P00	
208	101	13.92	2 410	1.9	21	2KJ3103 - ■ EM22 - ■ ■ L1	P00	
232	91	12.47	2 480	2.0	21	2KJ3103 - ■ EM22 - ■ ■ K1	P00	
272	77	10.62	2 580	2.2	21	2KJ3103 - ■ EM22 - ■ ■ J1	P00	
318	66	9.10	2 630	2.4	21	2KJ3103 - ■ EM22 - ■ ■ H1	P00	
369	57	7.84	2 650	2.6	21	2KJ3103 - ■ EM22 - ■ ■ G1	P00	
447	47	6.46	2 350	3.1	21	2KJ3103 - ■ EM22 - ■ ■ F1	P00	
475	44	6.08	2 360	3.3	21	2KJ3103 - ■ EM22 - ■ ■ E1	P00	
530	40	5.45	2 350	3.5	21	2KJ3103 - ■ EM22 - ■ ■ D1	P00	
623	34	4.64	2 350	3.9	21	2KJ3103 - ■ EM22 - ■ ■ C1	P00	
726	29	3.98	2 340	4.2	21	2KJ3103 - ■ EM22 - ■ ■ B1	P00	
843	25	3.43	2 310	4.5	21	2KJ3103 - ■ EM22 - ■ ■ A1	P00	
Z.29-LE100LE4E								
130	161	11.16	700	0.87	25	2KJ3102 - ■ FL22 - ■ ■ M1		
144	146	10.12	940	0.96	25	2KJ3102 - ■ FL22 - ■ ■ L1		
153	138	9.53	1 050	1.0	25	2KJ3102 - ■ FL22 - ■ ■ K1		
173	121	8.40	1 310	1.1	25	2KJ3102 - ■ FL22 - ■ ■ J1		
200	105	7.29	1 530	1.2	25	2KJ3102 - ■ FL22 - ■ ■ H1		
240	88	6.06	1 320	1.1	25	2KJ3102 - ■ FL22 - ■ ■ F1		
274	77	5.31	1 490	1.2	25	2KJ3102 - ■ FL22 - ■ ■ E1		
302	70	4.82	1 580	1.2	25	2KJ3102 - ■ FL22 - ■ ■ D1		
320	66	4.54	1 630	1.3	25	2KJ3102 - ■ FL22 - ■ ■ C1		
364	58	4.00	1 730	1.3	25	2KJ3102 - ■ FL22 - ■ ■ B1		
419	50	3.47	1 810	1.4	25	2KJ3102 - ■ FL22 - ■ ■ A1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2	Z.29-LE90LH2E							
	164	128	17.67	1 210	1.1	20	2KJ3102 - ■ EM22 - ■ ■ R1	P00
	183	115	15.75	1 380	1.2	20	2KJ3102 - ■ EM22 - ■ ■ Q1	P00
	199	106	14.54	1 510	1.1	20	2KJ3102 - ■ EM22 - ■ ■ P1	P00
	227	92	12.73	1 690	1.5	20	2KJ3102 - ■ EM22 - ■ ■ N1	P00
	259	81	11.16	1 800	1.7	20	2KJ3102 - ■ EM22 - ■ ■ M1	P00
	286	74	10.12	1 860	1.9	20	2KJ3102 - ■ EM22 - ■ ■ L1	P00
	303	69	9.53	1 920	2.0	20	2KJ3102 - ■ EM22 - ■ ■ K1	P00
	344	61	8.40	1 970	2.3	20	2KJ3102 - ■ EM22 - ■ ■ J1	P00
	396	53	7.29	1 900	2.5	20	2KJ3102 - ■ EM22 - ■ ■ H1	P00
	418	50	6.92	1 820	1.5	20	2KJ3102 - ■ EM22 - ■ ■ G1	P00
	477	44	6.06	1 770	2.3	20	2KJ3102 - ■ EM22 - ■ ■ F1	P00
	544	39	5.31	1 710	2.4	20	2KJ3102 - ■ EM22 - ■ ■ E1	P00
	600	35	4.82	1 680	2.5	20	2KJ3102 - ■ EM22 - ■ ■ D1	P00
	637	33	4.54	1 650	2.5	20	2KJ3102 - ■ EM22 - ■ ■ C1	P00
	722	29	4.00	1 600	2.6	20	2KJ3102 - ■ EM22 - ■ ■ B1	P00
	833	25	3.47	1 550	2.8	20	2KJ3102 - ■ EM22 - ■ ■ A1	P00
3	D.189-LE132MJ8							
	2.3	12 500	313.63	109 000	1.5	698	2KJ3214 - ■ HK21 - ■ ■ T1	P02
	2.5	11 200	280.59	109 000	1.7	698	2KJ3214 - ■ HK21 - ■ ■ S1	P02
	2.8	10 100	253.06	109 000	1.9	698	2KJ3214 - ■ HK21 - ■ ■ R1	P02
	D.169-LE132MJ8							
	2.2	13 100	327.18	70 000	1.1	485	2KJ3213 - ■ HK21 - ■ ■ V1	P02
	2.3	12 200	305.28	70 000	1.1	485	2KJ3213 - ■ HK21 - ■ ■ U1	P02
	2.6	10 800	271.40	70 000	1.3	485	2KJ3213 - ■ HK21 - ■ ■ T1	P02
	D.169-LE132SC6E							
	3.0	9 660	327.18	70 000	1.4	461	2KJ3213 - ■ HF22 - ■ ■ V1	P01
	3.2	9 010	305.28	70 000	1.6	461	2KJ3213 - ■ HF22 - ■ ■ U1	P01
	3.6	8 010	271.40	70 000	1.7	461	2KJ3213 - ■ HF22 - ■ ■ T1	P01
	4.0	7 190	243.68	70 000	1.9	461	2KJ3213 - ■ HF22 - ■ ■ S1	P01
	D.149-LE132SC6E							
	3.0	9 690	328.38	50 300	0.82	283	2KJ3212 - ■ HF22 - ■ ■ W1	P01
	3.5	8 300	281.04	51 000	0.96	283	2KJ3212 - ■ HF22 - ■ ■ V1	P01
	3.7	7 810	264.51	51 300	1.0	283	2KJ3212 - ■ HF22 - ■ ■ U1	P01
	3.9	7 320	247.95	51 500	1.1	283	2KJ3212 - ■ HF22 - ■ ■ T1	P01
	D.149-LE100LK4E							
	4.4	6 460	328.38	51 900	1.2	273	2KJ3212 - ■ FM22 - ■ ■ W1	
	5.2	5 530	281.04	52 300	1.4	273	2KJ3212 - ■ FM22 - ■ ■ V1	
	5.5	5 200	264.51	52 500	1.5	273	2KJ3212 - ■ FM22 - ■ ■ U1	
	5.9	4 880	247.95	52 700	1.6	273	2KJ3212 - ■ FM22 - ■ ■ T1	
	6.6	4 320	219.80	52 900	1.8	273	2KJ3212 - ■ FM22 - ■ ■ S1	
	7.5	3 840	195.24	53 100	2.1	273	2KJ3212 - ■ FM22 - ■ ■ R1	
	D.129-LE100LK4E							
	4.6	6 240	316.90	26 300	0.8	189	2KJ3211 - ■ FM22 - ■ ■ Q1	
	5.4	5 320	270.24	26 800	0.94	189	2KJ3211 - ■ FM22 - ■ ■ P1	
	5.7	5 000	254.34	27 000	1.0	189	2KJ3211 - ■ FM22 - ■ ■ N1	
	6.2	4 640	236.03	27 200	1.1	189	2KJ3211 - ■ FM22 - ■ ■ M1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3								
D.129-LE100LK4E								
7.0	4 100	208.67	27 500	1.2	189	2KJ3211 - ■ FM22 - ■ ■ L1		
7.8	3 660	186.28	27 800	1.4	189	2KJ3211 - ■ FM22 - ■ ■ K1		
8.7	3 300	167.63	28 000	1.5	189	2KJ3211 - ■ FM22 - ■ ■ J1		
10	2 860	145.49	28 300	1.7	189	2KJ3211 - ■ FM22 - ■ ■ H1		
11	2 570	130.84	28 400	1.9	189	2KJ3211 - ■ FM22 - ■ ■ G1		
13	2 250	114.36	28 600	2.2	189	2KJ3211 - ■ FM22 - ■ ■ F1		
D.109-LE100LK4E								
7.6	3 760	191.07	20 100	0.82	125	2KJ3210 - ■ FM22 - ■ ■ M1		
8.2	3 470	176.45	20 200	0.89	125	2KJ3210 - ■ FM22 - ■ ■ L1		
9.3	3 090	157.00	20 200	1.0	125	2KJ3210 - ■ FM22 - ■ ■ K1		
10	2 740	139.44	20 200	1.1	125	2KJ3210 - ■ FM22 - ■ ■ J1		
12	2 450	124.82	20 200	1.3	125	2KJ3210 - ■ FM22 - ■ ■ H1		
14	2 100	106.70	20 200	1.5	125	2KJ3210 - ■ FM22 - ■ ■ G1		
15	1 870	95.28	20 200	1.7	125	2KJ3210 - ■ FM22 - ■ ■ F1		
17	1 650	84.21	20 200	1.9	125	2KJ3210 - ■ FM22 - ■ ■ E1		
20	1 450	73.90	20 200	2.1	125	2KJ3210 - ■ FM22 - ■ ■ D1		
23	1 260	64.34	20 200	2.4	125	2KJ3210 - ■ FM22 - ■ ■ C1		
D.89-LE100LK4E								
15	1 940	98.99	18 500	0.86	83	2KJ3208 - ■ FM22 - ■ ■ F1		
17	1 700	86.56	18 500	0.99	83	2KJ3208 - ■ FM22 - ■ ■ E1		
20	1 460	74.30	18 500	1.1	83	2KJ3208 - ■ FM22 - ■ ■ D1		
22	1 290	65.67	18 500	1.3	83	2KJ3208 - ■ FM22 - ■ ■ C1		
Z.89-LE100LK4E								
25	1 120	57.36	18 500	1.5	82	2KJ3108 - ■ FM22 - ■ ■ A2		
28	1 020	51.78	18 500	1.6	82	2KJ3108 - ■ FM22 - ■ ■ X1		
31	925	46.97	18 500	1.8	82	2KJ3108 - ■ FM22 - ■ ■ W1		
34	850	43.36	18 500	2.0	82	2KJ3108 - ■ FM22 - ■ ■ V1		
37	775	39.41	18 500	2.2	82	2KJ3108 - ■ FM22 - ■ ■ U1		
44	655	33.38	18 500	2.6	82	2KJ3108 - ■ FM22 - ■ ■ T1		
46	615	31.41	18 500	2.7	82	2KJ3108 - ■ FM22 - ■ ■ S1		
D.79-LE100LK4E								
30	965	49.02	10 700	0.87	60	2KJ3207 - ■ FM22 - ■ ■ A1		
Z.79-LE100LK4E								
33	875	44.42	11 200	0.96	59	2KJ3107 - ■ FM22 - ■ ■ W1		
36	785	39.94	11 700	1.1	59	2KJ3107 - ■ FM22 - ■ ■ V1		
40	710	36.12	12 100	1.2	59	2KJ3107 - ■ FM22 - ■ ■ U1		
44	655	33.34	12 300	1.3	59	2KJ3107 - ■ FM22 - ■ ■ T1		
48	600	30.54	12 500	1.4	59	2KJ3107 - ■ FM22 - ■ ■ S1		
57	500	25.62	12 800	1.7	59	2KJ3107 - ■ FM22 - ■ ■ R1		
60	475	24.12	12 800	1.8	59	2KJ3107 - ■ FM22 - ■ ■ Q1		
66	435	22.13	12 800	1.9	59	2KJ3107 - ■ FM22 - ■ ■ P1		
75	380	19.33	12 800	2.2	59	2KJ3107 - ■ FM22 - ■ ■ N1		
84	340	17.31	12 700	2.5	59	2KJ3107 - ■ FM22 - ■ ■ M1		
96	295	15.13	12 400	2.8	59	2KJ3107 - ■ FM22 - ■ ■ L1		
112	255	12.99	11 900	3.3	59	2KJ3107 - ■ FM22 - ■ ■ K1		
127	225	11.48	11 500	3.7	59	2KJ3107 - ■ FM22 - ■ ■ J1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3								
Z.69-LE100LK4E								
38	750	38.24	9 110	0.8	50	2KJ3106 - ■ FM22 - ■ ■ U1		
42	675	34.29	9 760	0.89	50	2KJ3106 - ■ FM22 - ■ ■ T1		
47	605	30.90	10 300	0.99	50	2KJ3106 - ■ FM22 - ■ ■ S1		
51	560	28.53	10 600	1.1	50	2KJ3106 - ■ FM22 - ■ ■ R1		
56	510	26.04	11 000	1.2	50	2KJ3106 - ■ FM22 - ■ ■ Q1		
67	425	21.61	11 200	1.4	50	2KJ3106 - ■ FM22 - ■ ■ P1		
72	400	20.34	11 300	1.5	50	2KJ3106 - ■ FM22 - ■ ■ N1		
76	375	19.21	11 200	1.6	50	2KJ3106 - ■ FM22 - ■ ■ M1		
89	320	16.34	10 700	1.9	50	2KJ3106 - ■ FM22 - ■ ■ L1		
104	275	14.00	10 300	2.2	50	2KJ3106 - ■ FM22 - ■ ■ K1		
118	240	12.31	9 970	2.5	50	2KJ3106 - ■ FM22 - ■ ■ J1		
140	205	10.39	9 490	2.9	50	2KJ3106 - ■ FM22 - ■ ■ H1		
161	178	9.05	9 120	3.3	50	2KJ3106 - ■ FM22 - ■ ■ G1		
171	167	8.50	8 940	2.7	50	2KJ3106 - ■ FM22 - ■ ■ F1		
201	142	7.23	8 530	3.1	50	2KJ3106 - ■ FM22 - ■ ■ E1		
235	122	6.20	8 140	3.6	50	2KJ3106 - ■ FM22 - ■ ■ D1		
267	107	5.45	7 830	4.0	50	2KJ3106 - ■ FM22 - ■ ■ C1		
316	91	4.60	7 430	4.9	50	2KJ3106 - ■ FM22 - ■ ■ B1		
Z.59-LE100LK4E								
55	525	26.66	5 620	0.86	45	2KJ3105 - ■ FM22 - ■ ■ R1		
60	475	24.34	5 590	0.94	45	2KJ3105 - ■ FM22 - ■ ■ Q1		
72	395	20.20	5 140	1.1	45	2KJ3105 - ■ FM22 - ■ ■ P1		
77	370	19.01	5 350	1.2	45	2KJ3105 - ■ FM22 - ■ ■ N1		
81	350	17.95	5 360	1.3	45	2KJ3105 - ■ FM22 - ■ ■ M1		
95	300	15.27	5 200	1.5	45	2KJ3105 - ■ FM22 - ■ ■ L1		
111	255	13.09	5 060	1.7	45	2KJ3105 - ■ FM22 - ■ ■ K1		
126	225	11.51	4 920	2.0	45	2KJ3105 - ■ FM22 - ■ ■ J1		
150	191	9.71	4 730	2.4	45	2KJ3105 - ■ FM22 - ■ ■ H1		
172	167	8.46	4 580	2.7	45	2KJ3105 - ■ FM22 - ■ ■ G1		
180	159	8.07	4 500	2.6	45	2KJ3105 - ■ FM22 - ■ ■ F1		
212	135	6.86	4 330	3.0	45	2KJ3105 - ■ FM22 - ■ ■ E1		
247	116	5.88	4 160	3.5	45	2KJ3105 - ■ FM22 - ■ ■ D1		
281	102	5.17	4 020	4.0	45	2KJ3105 - ■ FM22 - ■ ■ C1		
334	86	4.36	3 840	4.7	45	2KJ3105 - ■ FM22 - ■ ■ B1		
383	75	3.80	3 700	5.4	45	2KJ3105 - ■ FM22 - ■ ■ A1		
Z.49-LE100LK4E								
79	360	18.48	4 200	0.88	43	2KJ3104 - ■ FM22 - ■ ■ Q1		
84	340	17.39	4 160	0.93	43	2KJ3104 - ■ FM22 - ■ ■ P1		
89	320	16.42	4 140	0.99	43	2KJ3104 - ■ FM22 - ■ ■ N1		
104	275	13.98	4 030	1.2	43	2KJ3104 - ■ FM22 - ■ ■ M1		
122	235	11.97	3 930	1.4	43	2KJ3104 - ■ FM22 - ■ ■ L1		
138	205	10.53	3 610	1.5	43	2KJ3104 - ■ FM22 - ■ ■ K1		
164	175	8.88	3 710	1.8	43	2KJ3104 - ■ FM22 - ■ ■ J1		
188	152	7.74	3 600	2.1	43	2KJ3104 - ■ FM22 - ■ ■ H1		
190	150	7.64	3 230	2.0	43	2KJ3104 - ■ FM22 - ■ ■ G1		
202	142	7.21	3 330	2.0	43	2KJ3104 - ■ FM22 - ■ ■ F1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3								
Z.49-LE100LK4E								
237	121	121	6.14	3 370	2.2	43	2KJ3104 - ■ FM22 - ■ ■ E1	
277	104	104	5.26	3 250	2.4	43	2KJ3104 - ■ FM22 - ■ ■ D1	
315	91	91	4.62	3 150	2.5	43	2KJ3104 - ■ FM22 - ■ ■ C1	
373	77	77	3.90	3 010	2.7	43	2KJ3104 - ■ FM22 - ■ ■ B1	
428	67	67	3.40	2 900	2.9	43	2KJ3104 - ■ FM22 - ■ ■ A1	
Z.39-LE100LK4E								
137	205	205	10.62	545	0.81	31	2KJ3103 - ■ FM22 - ■ ■ J1	
160	179	179	9.10	910	0.88	31	2KJ3103 - ■ FM22 - ■ ■ H1	
186	154	154	7.84	1 270	0.96	31	2KJ3103 - ■ FM22 - ■ ■ G1	
225	127	127	6.46	825	1.1	31	2KJ3103 - ■ FM22 - ■ ■ F1	
239	120	120	6.08	950	1.2	31	2KJ3103 - ■ FM22 - ■ ■ E1	
267	107	107	5.45	1 180	1.3	31	2KJ3103 - ■ FM22 - ■ ■ D1	
314	91	91	4.64	1 450	1.4	31	2KJ3103 - ■ FM22 - ■ ■ C1	
366	78	78	3.98	1 640	1.5	31	2KJ3103 - ■ FM22 - ■ ■ B1	
424	68	68	3.43	1 750	1.7	31	2KJ3103 - ■ FM22 - ■ ■ A1	
Z.29-LE100LK4E								
173	165	165	8.40	150	0.83	29	2KJ3102 - ■ FM22 - ■ ■ J1	
200	144	144	7.29	495	0.91	29	2KJ3102 - ■ FM22 - ■ ■ H1	
240	119	119	6.06	360	0.84	29	2KJ3102 - ■ FM22 - ■ ■ F1	
274	105	105	5.31	620	0.87	29	2KJ3102 - ■ FM22 - ■ ■ E1	
302	95	95	4.82	805	0.91	29	2KJ3102 - ■ FM22 - ■ ■ D1	
320	89	89	4.54	915	0.94	29	2KJ3102 - ■ FM22 - ■ ■ C1	
364	79	79	4.00	1 070	0.96	29	2KJ3102 - ■ FM22 - ■ ■ B1	
419	68	68	3.47	1 250	1.0	29	2KJ3102 - ■ FM22 - ■ ■ A1	
4								
D.189-LE160MD8								
2.3	16 600	16 600	313.63	109 000	1.1	717	2KJ3214 - ■ JF21 - ■ ■ T1	P02
2.6	14 800	14 800	280.59	109 000	1.3	717	2KJ3214 - ■ JF21 - ■ ■ S1	P02
2.8	13 400	13 400	253.06	109 000	1.4	717	2KJ3214 - ■ JF21 - ■ ■ R1	P02
D.189-LE132MB6E								
3.1	12 300	12 300	313.63	109 000	1.5	679	2KJ3214 - ■ HH22 - ■ ■ T1	P01
3.5	11 000	11 000	280.59	109 000	1.7	679	2KJ3214 - ■ HH22 - ■ ■ S1	P01
3.8	9 960	9 960	253.06	109 000	1.9	679	2KJ3214 - ■ HH22 - ■ ■ R1	P01
D.169-LE160MD8								
2.2	17 300	17 300	327.18	68 900	0.81	504	2KJ3213 - ■ JF21 - ■ ■ V1	P02
2.4	16 100	16 100	305.28	69 300	0.86	504	2KJ3213 - ■ JF21 - ■ ■ U1	P02
2.7	14 300	14 300	271.40	70 000	0.97	504	2KJ3213 - ■ JF21 - ■ ■ T1	P02
D.169-LE132MB6E								
3.0	12 800	12 800	327.18	70 000	1.1	466	2KJ3213 - ■ HH22 - ■ ■ V1	P01
3.2	12 000	12 000	305.28	70 000	1.2	466	2KJ3213 - ■ HH22 - ■ ■ U1	P01
3.6	10 600	10 600	271.40	70 000	1.3	466	2KJ3213 - ■ HH22 - ■ ■ T1	P01
4.0	9 590	9 590	243.68	70 000	1.5	466	2KJ3213 - ■ HH22 - ■ ■ S1	P01
D.169-LE112ME4E								
4.5	8 560	8 560	327.18	70 000	1.6	453	2KJ3213 - ■ GH22 - ■ ■ V1	
4.8	7 980	7 980	305.28	70 000	1.8	453	2KJ3213 - ■ GH22 - ■ ■ U1	
5.4	7 100	7 100	271.40	70 000	2.0	453	2KJ3213 - ■ GH22 - ■ ■ T1	

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4	D.149-LE132MB6E							
	3.9	9 760	247.95	50 300	0.82	288	2KJ3212 - ■ HH22 - ■ ■ T1	P01
	D.149-LE112ME4E							
	4.4	8 590	328.38	50 900	0.93	275	2KJ3212 - ■ GH22 - ■ ■ W1	
	5.2	7 350	281.04	51 500	1.1	275	2KJ3212 - ■ GH22 - ■ ■ V1	
	5.5	6 920	264.51	51 700	1.2	275	2KJ3212 - ■ GH22 - ■ ■ U1	
	5.9	6 480	247.95	51 900	1.2	275	2KJ3212 - ■ GH22 - ■ ■ T1	
	6.6	5 750	219.80	52 200	1.4	275	2KJ3212 - ■ GH22 - ■ ■ S1	
	7.5	5 100	195.24	52 600	1.6	275	2KJ3212 - ■ GH22 - ■ ■ R1	
	8.3	4 610	176.18	52 800	1.7	275	2KJ3212 - ■ GH22 - ■ ■ Q1	
	9.4	4 080	156.11	53 000	2.0	275	2KJ3212 - ■ GH22 - ■ ■ P1	
	11	3 610	138.26	53 300	2.2	275	2KJ3212 - ■ GH22 - ■ ■ N1	
	D.129-LE112ME4E							
	6.2	6 170	236.03	26 300	0.81	189	2KJ3211 - ■ GH22 - ■ ■ M1	
	7.0	5 460	208.67	26 700	0.92	189	2KJ3211 - ■ GH22 - ■ ■ L1	
	7.8	4 870	186.28	27 100	1.0	189	2KJ3211 - ■ GH22 - ■ ■ K1	
	8.7	4 380	167.63	27 400	1.1	189	2KJ3211 - ■ GH22 - ■ ■ J1	
	10	3 800	145.49	27 700	1.3	189	2KJ3211 - ■ GH22 - ■ ■ H1	
	11	3 420	130.84	27 900	1.5	189	2KJ3211 - ■ GH22 - ■ ■ G1	
13	2 990	114.36	28 200	1.7	189	2KJ3211 - ■ GH22 - ■ ■ F1		
14	2 670	102.05	28 400	1.9	189	2KJ3211 - ■ GH22 - ■ ■ E1		
16	2 350	89.91	28 600	2.1	189	2KJ3211 - ■ GH22 - ■ ■ D1		
D.109-LE112ME4E								
10	3 640	139.44	20 200	0.85	125	2KJ3210 - ■ GH22 - ■ ■ J1		
12	3 260	124.82	20 200	0.95	125	2KJ3210 - ■ GH22 - ■ ■ H1		
14	2 790	106.70	20 200	1.1	125	2KJ3210 - ■ GH22 - ■ ■ G1		
15	2 490	95.28	20 200	1.2	125	2KJ3210 - ■ GH22 - ■ ■ F1		
17	2 200	84.21	20 200	1.4	125	2KJ3210 - ■ GH22 - ■ ■ E1		
20	1 930	73.90	20 200	1.6	125	2KJ3210 - ■ GH22 - ■ ■ D1		
23	1 680	64.34	20 200	1.8	125	2KJ3210 - ■ GH22 - ■ ■ C1		
Z.109-LE112ME4E								
29	1 330	51.17	20 200	2.3	123	2KJ3110 - ■ GH22 - ■ ■ X1		
D.89-LE112ME4E								
20	1 940	74.30	18 500	0.86	83	2KJ3208 - ■ GH22 - ■ ■ D1		
22	1 710	65.67	18 500	0.98	83	2KJ3208 - ■ GH22 - ■ ■ C1		
Z.89-LE112ME4E								
25	1 500	57.36	18 500	1.1	82	2KJ3108 - ■ GH22 - ■ ■ A2		
28	1 350	51.78	18 500	1.2	82	2KJ3108 - ■ GH22 - ■ ■ X1		
31	1 220	46.97	18 500	1.4	82	2KJ3108 - ■ GH22 - ■ ■ W1		
34	1 130	43.36	18 500	1.5	82	2KJ3108 - ■ GH22 - ■ ■ V1		
37	1 030	39.41	18 500	1.6	82	2KJ3108 - ■ GH22 - ■ ■ U1		
44	870	33.38	18 500	1.9	82	2KJ3108 - ■ GH22 - ■ ■ T1		
46	820	31.41	18 500	2.0	82	2KJ3108 - ■ GH22 - ■ ■ S1		
50	755	29.01	18 500	2.2	82	2KJ3108 - ■ GH22 - ■ ■ R1		
57	675	25.81	18 500	2.5	82	2KJ3108 - ■ GH22 - ■ ■ Q1		
64	600	22.92	18 500	2.8	82	2KJ3108 - ■ GH22 - ■ ■ P1		
71	535	20.52	18 500	3.1	82	2KJ3108 - ■ GH22 - ■ ■ N1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4								
Z.79-LE112ME4E								
	37	1 040	39.94	13 100	0.8	60	2KJ3107 - ■ GH22 - ■ ■ V1	
	40	945	36.12	13 200	0.89	60	2KJ3107 - ■ GH22 - ■ ■ U1	
	44	870	33.34	13 300	0.96	60	2KJ3107 - ■ GH22 - ■ ■ T1	
	48	795	30.54	13 400	1.1	60	2KJ3107 - ■ GH22 - ■ ■ S1	
	57	670	25.62	10 200	1.3	60	2KJ3107 - ■ GH22 - ■ ■ R1	
	61	630	24.12	10 400	1.3	60	2KJ3107 - ■ GH22 - ■ ■ Q1	
	66	575	22.13	10 700	1.5	60	2KJ3107 - ■ GH22 - ■ ■ P1	
	76	505	19.33	10 900	1.7	60	2KJ3107 - ■ GH22 - ■ ■ N1	
	84	450	17.31	11 000	1.9	60	2KJ3107 - ■ GH22 - ■ ■ M1	
	96	395	15.13	11 100	2.1	60	2KJ3107 - ■ GH22 - ■ ■ L1	
	112	340	12.99	11 000	2.5	60	2KJ3107 - ■ GH22 - ■ ■ K1	
	127	300	11.48	11 000	2.8	60	2KJ3107 - ■ GH22 - ■ ■ J1	
	150	255	9.76	10 700	3.2	60	2KJ3107 - ■ GH22 - ■ ■ H1	
	174	215	8.37	10 300	3.6	60	2KJ3107 - ■ GH22 - ■ ■ G1	
	178	210	8.19	10 000	3.3	60	2KJ3107 - ■ GH22 - ■ ■ F1	
	204	187	7.16	9 780	3.9	60	2KJ3107 - ■ GH22 - ■ ■ E1	
	237	161	6.15	9 350	4.4	60	2KJ3107 - ■ GH22 - ■ ■ D1	
	269	142	5.43	9 020	4.8	60	2KJ3107 - ■ GH22 - ■ ■ C1	
Z.69-LE112ME4E								
	51	745	28.53	10 600	0.8	51	2KJ3106 - ■ GH22 - ■ ■ R1	
	56	680	26.04	7 580	0.88	51	2KJ3106 - ■ GH22 - ■ ■ Q1	
	68	565	21.61	8 620	1.1	51	2KJ3106 - ■ GH22 - ■ ■ P1	
	72	530	20.34	8 930	1.1	51	2KJ3106 - ■ GH22 - ■ ■ N1	
	76	500	19.21	9 160	1.2	51	2KJ3106 - ■ GH22 - ■ ■ M1	
	89	425	16.34	9 670	1.4	51	2KJ3106 - ■ GH22 - ■ ■ L1	
	104	365	14.00	9 960	1.6	51	2KJ3106 - ■ GH22 - ■ ■ K1	
	119	320	12.31	9 700	1.9	51	2KJ3106 - ■ GH22 - ■ ■ J1	
	141	270	10.39	9 270	2.2	51	2KJ3106 - ■ GH22 - ■ ■ H1	
	161	235	9.05	8 930	2.5	51	2KJ3106 - ■ GH22 - ■ ■ G1	
	172	220	8.50	8 750	2.0	51	2KJ3106 - ■ GH22 - ■ ■ F1	
	202	189	7.23	8 360	2.4	51	2KJ3106 - ■ GH22 - ■ ■ E1	
	235	162	6.20	8 000	2.7	51	2KJ3106 - ■ GH22 - ■ ■ D1	
	268	143	5.45	7 700	3.0	51	2KJ3106 - ■ GH22 - ■ ■ C1	
	317	120	4.60	7 330	3.7	51	2KJ3106 - ■ GH22 - ■ ■ B1	
	364	105	4.01	7 030	4.2	51	2KJ3106 - ■ GH22 - ■ ■ A1	
Z.59-LE112ME4E								
	72	525	20.20	4 930	0.85	46	2KJ3105 - ■ GH22 - ■ ■ P1	
	77	495	19.01	4 910	0.9	46	2KJ3105 - ■ GH22 - ■ ■ N1	
	81	470	17.95	4 880	0.96	46	2KJ3105 - ■ GH22 - ■ ■ M1	
	96	400	15.27	3 960	1.1	46	2KJ3105 - ■ GH22 - ■ ■ L1	
	112	340	13.09	4 470	1.3	46	2KJ3105 - ■ GH22 - ■ ■ K1	
	127	300	11.51	4 620	1.5	46	2KJ3105 - ■ GH22 - ■ ■ J1	
	150	250	9.71	4 500	1.8	46	2KJ3105 - ■ GH22 - ■ ■ H1	
	173	220	8.46	4 370	2.0	46	2KJ3105 - ■ GH22 - ■ ■ G1	
	181	210	8.07	4 280	1.9	46	2KJ3105 - ■ GH22 - ■ ■ F1	
	213	179	6.86	4 140	2.3	46	2KJ3105 - ■ GH22 - ■ ■ E1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4	Z.59-LE112ME4E							
	248	154	5.88	4 000	2.7	46	2KJ3105 - ■ GH22 - ■ ■ D1	
	282	135	5.17	3 880	3.0	46	2KJ3105 - ■ GH22 - ■ ■ C1	
	335	114	4.36	3 720	3.6	46	2KJ3105 - ■ GH22 - ■ ■ B1	
	384	99	3.80	3 600	4.1	46	2KJ3105 - ■ GH22 - ■ ■ A1	
	Z.49-LE112ME4E							
	104	365	13.98	3 670	0.87	44	2KJ3104 - ■ GH22 - ■ ■ M1	
	122	310	11.97	3 630	1.0	44	2KJ3104 - ■ GH22 - ■ ■ L1	
	139	275	10.53	3 560	1.2	44	2KJ3104 - ■ GH22 - ■ ■ K1	
	164	230	8.88	3 490	1.4	44	2KJ3104 - ■ GH22 - ■ ■ J1	
	189	200	7.74	3 410	1.6	44	2KJ3104 - ■ GH22 - ■ ■ H1	
	191	200	7.64	3 320	1.5	44	2KJ3104 - ■ GH22 - ■ ■ G1	
	202	189	7.21	3 290	1.5	44	2KJ3104 - ■ GH22 - ■ ■ F1	
	238	161	6.14	3 190	1.6	44	2KJ3104 - ■ GH22 - ■ ■ E1	
	278	138	5.26	2 670	1.8	44	2KJ3104 - ■ GH22 - ■ ■ D1	
	316	121	4.62	2 900	1.9	44	2KJ3104 - ■ GH22 - ■ ■ C1	
	374	102	3.90	2 900	2.0	44	2KJ3104 - ■ GH22 - ■ ■ B1	
	429	89	3.40	2 810	2.1	44	2KJ3104 - ■ GH22 - ■ ■ A1	
5.5	D.189-LE1160ML8							
	2.3	22 800	313.63	107 900	0.83	727	2KJ3214 - ■ JH21 - ■ ■ T1	P02
	2.6	20 400	280.59	108 800	0.93	727	2KJ3214 - ■ JH21 - ■ ■ S1	P02
	2.8	18 400	253.06	109 000	1.0	727	2KJ3214 - ■ JH21 - ■ ■ R1	P02
	D.189-LE132MJ6E							
	3.1	16 900	313.63	109 000	1.1	688	2KJ3214 - ■ HL22 - ■ ■ T1	P01
	3.5	15 100	280.59	109 000	1.3	688	2KJ3214 - ■ HL22 - ■ ■ S1	P01
	3.8	13 700	253.06	109 000	1.4	688	2KJ3214 - ■ HL22 - ■ ■ R1	P01
	4.3	12 100	223.66	109 000	1.6	688	2KJ3214 - ■ HL22 - ■ ■ Q1	P01
	D.189-LE132SF4E							
	4.7	11 200	313.63	109 000	1.7	678	2KJ3214 - ■ HG22 - ■ ■ T1	
	5.2	10 000	280.59	109 000	1.9	678	2KJ3214 - ■ HG22 - ■ ■ S1	
	5.8	9 070	253.06	109 000	2.1	678	2KJ3214 - ■ HG22 - ■ ■ R1	
	D.169-LE132MJ6E							
	3.2	16 500	305.28	69 200	0.85	475	2KJ3213 - ■ HL22 - ■ ■ U1	P01
	3.6	14 600	271.40	69 900	0.95	475	2KJ3213 - ■ HL22 - ■ ■ T1	P01
	4.0	13 100	243.68	70 000	1.1	475	2KJ3213 - ■ HL22 - ■ ■ S1	P01
	D.169-LE132SF4E							
	4.5	11 700	327.18	70 000	1.2	465	2KJ3213 - ■ HG22 - ■ ■ V1	
4.8	10 900	305.28	70 000	1.3	465	2KJ3213 - ■ HG22 - ■ ■ U1		
5.4	9 730	271.40	70 000	1.4	465	2KJ3213 - ■ HG22 - ■ ■ T1		
6.0	8 730	243.68	70 000	1.6	465	2KJ3213 - ■ HG22 - ■ ■ S1		
6.6	7 900	220.58	70 000	1.8	465	2KJ3213 - ■ HG22 - ■ ■ R1		
7.6	6 940	193.75	70 000	2.0	465	2KJ3213 - ■ HG22 - ■ ■ Q1		
D.149-LE132SF4E								
5.5	9 480	264.51	50 400	0.84	287	2KJ3212 - ■ HG22 - ■ ■ U1		
5.9	8 890	247.95	50 700	0.9	287	2KJ3212 - ■ HG22 - ■ ■ T1		
6.7	7 880	219.80	51 200	1.0	287	2KJ3212 - ■ HG22 - ■ ■ S1		

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
5.5								
D.149-LE132SF4E								
7.5	7 000	195.24	51 600	1.1	287	2KJ3212	- ■ HG22 - ■ ■ R1	
8.3	6 310	176.18	52 000	1.3	287	2KJ3212	- ■ HG22 - ■ ■ Q1	
9.4	5 590	156.11	52 300	1.4	287	2KJ3212	- ■ HG22 - ■ ■ P1	
11	4 950	138.26	52 600	1.6	287	2KJ3212	- ■ HG22 - ■ ■ N1	
12	4 410	123.04	52 900	1.8	287	2KJ3212	- ■ HG22 - ■ ■ M1	
13	3 950	110.26	53 100	2.0	287	2KJ3212	- ■ HG22 - ■ ■ L1	
D.129-LE132SF4E								
8.7	6 010	167.63	26 400	0.83	202	2KJ3211	- ■ HG22 - ■ ■ J1	
10	5 210	145.49	26 900	0.96	202	2KJ3211	- ■ HG22 - ■ ■ H1	
11	4 690	130.84	27 200	1.1	202	2KJ3211	- ■ HG22 - ■ ■ G1	
13	4 100	114.36	27 500	1.2	202	2KJ3211	- ■ HG22 - ■ ■ F1	
14	3 650	102.05	27 800	1.4	202	2KJ3211	- ■ HG22 - ■ ■ E1	
16	3 220	89.91	28 100	1.6	202	2KJ3211	- ■ HG22 - ■ ■ D1	
19	2 820	78.78	28 300	1.8	202	2KJ3211	- ■ HG22 - ■ ■ C1	
Z.129-LE132SF4E								
23	2 240	62.48	28 600	2.2	198	2KJ3111	- ■ HG22 - ■ ■ X1	
D.109-LE132SF4E								
14	3 820	106.70	20 000	0.81	138	2KJ3210	- ■ HG22 - ■ ■ G1	
15	3 410	95.28	20 200	0.91	138	2KJ3210	- ■ HG22 - ■ ■ F1	
17	3 010	84.21	20 200	1.0	138	2KJ3210	- ■ HG22 - ■ ■ E1	
20	2 650	73.90	20 200	1.2	138	2KJ3210	- ■ HG22 - ■ ■ D1	
23	2 300	64.34	20 200	1.3	138	2KJ3210	- ■ HG22 - ■ ■ C1	
Z.109-LE132SF4E								
29	1 830	51.17	20 200	1.7	136	2KJ3110	- ■ HG22 - ■ ■ X1	
34	1 560	43.64	20 200	2.0	136	2KJ3110	- ■ HG22 - ■ ■ W1	
36	1 470	41.07	20 200	2.1	136	2KJ3110	- ■ HG22 - ■ ■ V1	
38	1 360	38.12	20 200	2.3	136	2KJ3110	- ■ HG22 - ■ ■ U1	
43	1 200	33.70	20 200	2.6	136	2KJ3110	- ■ HG22 - ■ ■ T1	
D.89-LE132SF4E								
26	2 000	55.84	18 500	0.84	97	2KJ3208	- ■ HG22 - ■ ■ B1	
31	1 710	47.87	18 500	0.98	97	2KJ3208	- ■ HG22 - ■ ■ A1	
Z.89-LE132SF4E								
37	1 410	39.41	18 500	1.2	96	2KJ3108	- ■ HG22 - ■ ■ U1	
44	1 190	33.38	18 500	1.4	96	2KJ3108	- ■ HG22 - ■ ■ T1	
47	1 120	31.41	18 500	1.5	96	2KJ3108	- ■ HG22 - ■ ■ S1	
50	1 040	29.01	18 500	1.6	96	2KJ3108	- ■ HG22 - ■ ■ R1	
57	925	25.81	18 500	1.8	96	2KJ3108	- ■ HG22 - ■ ■ Q1	
64	820	22.92	18 500	2.0	96	2KJ3108	- ■ HG22 - ■ ■ P1	
71	735	20.52	18 500	2.3	96	2KJ3108	- ■ HG22 - ■ ■ N1	
84	625	17.54	18 500	2.7	96	2KJ3108	- ■ HG22 - ■ ■ M1	
94	560	15.66	18 400	3.0	96	2KJ3108	- ■ HG22 - ■ ■ L1	
106	495	13.84	17 800	3.4	96	2KJ3108	- ■ HG22 - ■ ■ K1	
121	435	12.15	17 200	3.7	96	2KJ3108	- ■ HG22 - ■ ■ J1	
213	245	6.89	14 600	4.3	96	2KJ3108	- ■ HG22 - ■ ■ E1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
5.5								
Z.79-LE132SF4E								
	57	915	25.62	13 100	0.91	74	2KJ3107 - ■ HG22 - ■ ■ R1	
	61	865	24.12	12 900	0.97	74	2KJ3107 - ■ HG22 - ■ ■ Q1	
	66	790	22.13	12 700	1.1	74	2KJ3107 - ■ HG22 - ■ ■ P1	
	76	690	19.33	12 400	1.2	74	2KJ3107 - ■ HG22 - ■ ■ N1	
	85	620	17.31	8 480	1.4	74	2KJ3107 - ■ HG22 - ■ ■ M1	
	97	540	15.13	8 910	1.5	74	2KJ3107 - ■ HG22 - ■ ■ L1	
	113	465	12.99	9 190	1.8	74	2KJ3107 - ■ HG22 - ■ ■ K1	
	128	410	11.48	9 370	2.0	74	2KJ3107 - ■ HG22 - ■ ■ J1	
	150	350	9.76	9 450	2.3	74	2KJ3107 - ■ HG22 - ■ ■ H1	
	175	300	8.37	9 470	2.6	74	2KJ3107 - ■ HG22 - ■ ■ G1	
	179	290	8.19	8 530	2.4	74	2KJ3107 - ■ HG22 - ■ ■ F1	
	205	255	7.16	8 570	2.8	74	2KJ3107 - ■ HG22 - ■ ■ E1	
	238	220	6.15	8 550	3.2	74	2KJ3107 - ■ HG22 - ■ ■ D1	
	270	195	5.43	8 510	3.5	74	2KJ3107 - ■ HG22 - ■ ■ C1	
	317	166	4.62	8 410	4.7	74	2KJ3107 - ■ HG22 - ■ ■ B1	
Z.69-LE132SF4E								
	72	725	20.34	10 300	0.82	64	2KJ3106 - ■ HG22 - ■ ■ N1	
	76	685	19.21	10 200	0.87	64	2KJ3106 - ■ HG22 - ■ ■ M1	
	90	585	16.34	9 890	1.0	64	2KJ3106 - ■ HG22 - ■ ■ L1	
	105	500	14.00	7 210	1.2	64	2KJ3106 - ■ HG22 - ■ ■ K1	
	119	440	12.31	7 700	1.4	64	2KJ3106 - ■ HG22 - ■ ■ J1	
	141	370	10.39	8 200	1.6	64	2KJ3106 - ■ HG22 - ■ ■ H1	
	162	320	9.05	8 510	1.8	64	2KJ3106 - ■ HG22 - ■ ■ G1	
	172	305	8.50	7 090	1.5	64	2KJ3106 - ■ HG22 - ■ ■ F1	
	203	255	7.23	7 560	1.7	64	2KJ3106 - ■ HG22 - ■ ■ E1	
	236	220	6.20	7 730	2.0	64	2KJ3106 - ■ HG22 - ■ ■ D1	
	269	195	5.45	7 520	2.2	64	2KJ3106 - ■ HG22 - ■ ■ C1	
	318	165	4.60	7 170	2.7	64	2KJ3106 - ■ HG22 - ■ ■ B1	
	365	144	4.01	6 890	3.1	64	2KJ3106 - ■ HG22 - ■ ■ A1	
Z.59-LE132SF4E								
	96	545	15.27	4 220	0.82	59	2KJ3105 - ■ HG22 - ■ ■ L1	
	112	465	13.09	4 220	0.96	59	2KJ3105 - ■ HG22 - ■ ■ K1	
	127	410	11.51	4 180	1.1	59	2KJ3105 - ■ HG22 - ■ ■ J1	
	151	345	9.71	3 370	1.3	59	2KJ3105 - ■ HG22 - ■ ■ H1	
	173	300	8.46	3 750	1.5	59	2KJ3105 - ■ HG22 - ■ ■ G1	
	182	285	8.07	2 750	1.4	59	2KJ3105 - ■ HG22 - ■ ■ F1	
	214	245	6.86	3 150	1.7	59	2KJ3105 - ■ HG22 - ■ ■ E1	
	249	210	5.88	3 490	1.9	59	2KJ3105 - ■ HG22 - ■ ■ D1	
	283	185	5.17	3 670	2.2	59	2KJ3105 - ■ HG22 - ■ ■ C1	
	336	156	4.36	3 540	2.6	59	2KJ3105 - ■ HG22 - ■ ■ B1	
Z.59-LE132SF4E								
	386	136	3.80	3 440	3.0	59	2KJ3105 - ■ HG22 - ■ ■ A1	

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Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
5.5								
Z.49-LE132SF4E								
	139	375	10.53	3 160	0.85	57	2KJ3104 - ■ HG22 - ■ ■ K1	
	165	315	8.88	3 150	1.0	57	2KJ3104 - ■ HG22 - ■ ■ J1	
	189	275	7.74	3 110	1.2	57	2KJ3104 - ■ HG22 - ■ ■ H1	
	192	270	7.64	3 010	1.1	57	2KJ3104 - ■ HG22 - ■ ■ G1	
	203	255	7.21	3 000	1.1	57	2KJ3104 - ■ HG22 - ■ ■ F1	
	239	220	6.14	2 930	1.2	57	2KJ3104 - ■ HG22 - ■ ■ E1	
	279	189	5.26	2 870	1.3	57	2KJ3104 - ■ HG22 - ■ ■ D1	
	317	166	4.62	2 820	1.4	57	2KJ3104 - ■ HG22 - ■ ■ C1	
	376	140	3.90	2 730	1.5	57	2KJ3104 - ■ HG22 - ■ ■ B1	
	431	122	3.40	2 210	1.6	57	2KJ3104 - ■ HG22 - ■ ■ A1	
7.5								
D.189-LE132ZMS4P								
	4.7	15 200	313.63	109 000	1.2	700	2KJ3214 - ■ HL23 - ■ ■ T1	
	5.2	13 600	280.59	109 000	1.4	700	2KJ3214 - ■ HL23 - ■ ■ S1	
	5.8	12 300	253.06	109 000	1.5	700	2KJ3214 - ■ HL23 - ■ ■ R1	
	6.6	10 800	223.66	109 000	1.7	700	2KJ3214 - ■ HL23 - ■ ■ Q1	
	7.2	9 960	204.44	109 000	1.9	700	2KJ3214 - ■ HL23 - ■ ■ P1	
	8.0	8 960	183.92	109 000	2.1	700	2KJ3214 - ■ HL23 - ■ ■ N1	
D.169-LE132ZMS4P								
	4.5	15 900	327.18	69 400	0.88	487	2KJ3213 - ■ HL23 - ■ ■ V1	
	4.8	14 800	305.28	69 800	0.94	487	2KJ3213 - ■ HL23 - ■ ■ U1	
	5.4	13 200	271.40	70 000	1.1	487	2KJ3213 - ■ HL23 - ■ ■ T1	
	6.0	11 800	243.68	70 000	1.2	487	2KJ3213 - ■ HL23 - ■ ■ S1	
	6.7	10 700	220.58	70 000	1.3	487	2KJ3213 - ■ HL23 - ■ ■ R1	
	7.6	9 440	193.75	70 000	1.5	487	2KJ3213 - ■ HL23 - ■ ■ Q1	
	8.4	8 550	175.57	70 000	1.6	487	2KJ3213 - ■ HL23 - ■ ■ P1	
	9.4	7 610	156.36	70 000	1.8	487	2KJ3213 - ■ HL23 - ■ ■ N1	
	10	6 840	140.41	70 000	2.0	487	2KJ3213 - ■ HL23 - ■ ■ M1	
D.149-LE132ZMS4P								
	7.5	9 510	195.24	50 400	0.84	309	2KJ3212 - ■ HL23 - ■ ■ R1	
	8.3	8 580	176.18	50 900	0.93	309	2KJ3212 - ■ HL23 - ■ ■ Q1	
	9.4	7 600	156.11	51 400	1.1	309	2KJ3212 - ■ HL23 - ■ ■ P1	
	11	6 730	138.26	51 800	1.2	309	2KJ3212 - ■ HL23 - ■ ■ N1	
	12	5 990	123.04	52 100	1.3	309	2KJ3212 - ■ HL23 - ■ ■ M1	
	13	5 370	110.26	52 400	1.5	309	2KJ3212 - ■ HL23 - ■ ■ L1	
	15	4 760	97.75	52 700	1.7	309	2KJ3212 - ■ HL23 - ■ ■ K1	
	17	4 200	86.29	53 000	1.9	309	2KJ3212 - ■ HL23 - ■ ■ J1	
	19	3 690	75.87	53 200	2.2	309	2KJ3212 - ■ HL23 - ■ ■ H1	
	21	3 340	68.71	53 400	2.4	309	2KJ3212 - ■ HL23 - ■ ■ G1	
D.129-LE132ZMS4P								
	13	5 570	114.36	26 700	0.9	224	2KJ3211 - ■ HL23 - ■ ■ F1	
	14	4 970	102.05	27 000	1.0	224	2KJ3211 - ■ HL23 - ■ ■ E1	
	16	4 380	89.91	27 400	1.1	224	2KJ3211 - ■ HL23 - ■ ■ D1	
	19	3 830	78.78	27 700	1.3	224	2KJ3211 - ■ HL23 - ■ ■ C1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
7.5	Z.129-LE132ZMS4P							
	24	3 040	62.48	28 200	1.6	220	2KJ3111 - ■ HL23 - ■ ■ X1	
	27	2 600	53.47	28 400	1.9	220	2KJ3111 - ■ HL23 - ■ ■ W1	
	29	2 450	50.33	28 500	2.0	220	2KJ3111 - ■ HL23 - ■ ■ V1	
	31	2 290	47.18	28 600	2.2	220	2KJ3111 - ■ HL23 - ■ ■ U1	
	35	2 030	41.82	28 800	2.5	220	2KJ3111 - ■ HL23 - ■ ■ T1	
	D.109-LE132ZMS4P							
	20	3 600	73.90	20 200	0.86	160	2KJ3210 - ■ HL23 - ■ ■ D1	
	23	3 130	64.34	20 200	0.99	160	2KJ3210 - ■ HL23 - ■ ■ C1	
	Z.109-LE132ZMS4P							
	29	2 490	51.17	20 200	1.2	158	2KJ3110 - ■ HL23 - ■ ■ X1	
	34	2 120	43.64	20 200	1.5	158	2KJ3110 - ■ HL23 - ■ ■ W1	
	36	2 000	41.07	20 200	1.5	158	2KJ3110 - ■ HL23 - ■ ■ V1	
	39	1 850	38.12	20 200	1.7	158	2KJ3110 - ■ HL23 - ■ ■ U1	
	44	1 640	33.70	20 200	1.9	158	2KJ3110 - ■ HL23 - ■ ■ T1	
	49	1 460	30.08	20 200	2.1	158	2KJ3110 - ■ HL23 - ■ ■ S1	
	54	1 310	27.07	20 200	2.3	158	2KJ3110 - ■ HL23 - ■ ■ R1	
	63	1 140	23.49	20 200	2.6	158	2KJ3110 - ■ HL23 - ■ ■ Q1	
	70	1 030	21.13	20 200	2.7	158	2KJ3110 - ■ HL23 - ■ ■ P1	
	80	900	18.47	20 200	3.0	158	2KJ3110 - ■ HL23 - ■ ■ N1	
	89	800	16.48	20 200	3.3	158	2KJ3110 - ■ HL23 - ■ ■ M1	
	Z.89-LE132ZMS4P							
	37	1 920	39.41	18 500	0.87	118	2KJ3108 - ■ HL23 - ■ ■ U1	
	44	1 620	33.38	18 500	1.0	118	2KJ3108 - ■ HL23 - ■ ■ T1	
	47	1 530	31.41	18 500	1.1	118	2KJ3108 - ■ HL23 - ■ ■ S1	
	51	1 410	29.01	18 500	1.2	118	2KJ3108 - ■ HL23 - ■ ■ R1	
	57	1 250	25.81	18 500	1.3	118	2KJ3108 - ■ HL23 - ■ ■ Q1	
	64	1 110	22.92	18 500	1.5	118	2KJ3108 - ■ HL23 - ■ ■ P1	
	72	1 000	20.52	18 500	1.7	118	2KJ3108 - ■ HL23 - ■ ■ N1	
	84	855	17.54	18 300	2.0	118	2KJ3108 - ■ HL23 - ■ ■ M1	
	94	760	15.66	17 800	2.2	118	2KJ3108 - ■ HL23 - ■ ■ L1	
	106	670	13.84	17 300	2.5	118	2KJ3108 - ■ HL23 - ■ ■ K1	
	121	590	12.15	16 700	2.8	118	2KJ3108 - ■ HL23 - ■ ■ J1	
	139	515	10.58	16 100	3.1	118	2KJ3108 - ■ HL23 - ■ ■ H1	
	163	440	9.04	15 400	3.5	118	2KJ3108 - ■ HL23 - ■ ■ G1	
	190	375	7.74	14 700	4.1	118	2KJ3108 - ■ HL23 - ■ ■ F1	
	213	335	6.89	14 300	3.1	118	2KJ3108 - ■ HL23 - ■ ■ E1	
	243	295	6.05	13 800	3.6	118	2KJ3108 - ■ HL23 - ■ ■ D1	
	279	255	5.26	13 200	4.1	118	2KJ3108 - ■ HL23 - ■ ■ C1	
	327	215	4.50	12 600	4.8	118	2KJ3108 - ■ HL23 - ■ ■ B1	
	Z.79-LE132ZMS4P							
	76	940	19.33	11 600	0.89	96	2KJ3107 - ■ HL23 - ■ ■ N1	
	85	840	17.31	11 400	1.0	96	2KJ3107 - ■ HL23 - ■ ■ M1	
	97	735	15.13	11 100	1.1	96	2KJ3107 - ■ HL23 - ■ ■ L1	
	113	630	12.99	10 700	1.3	96	2KJ3107 - ■ HL23 - ■ ■ K1	
	128	555	11.48	10 400	1.5	96	2KJ3107 - ■ HL23 - ■ ■ J1	
	151	475	9.76	10 000	1.7	96	2KJ3107 - ■ HL23 - ■ ■ H1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
7.5								
Z.79-LE132ZMS4P								
176	405	405	8.37	7 870	1.9	96	2KJ3107 - ■ HL23 - ■ ■ G1	
179	395	395	8.19	6 570	1.8	96	2KJ3107 - ■ HL23 - ■ ■ F1	
205	345	345	7.16	6 890	2.1	96	2KJ3107 - ■ HL23 - ■ ■ E1	
239	300	300	6.15	7 060	2.4	96	2KJ3107 - ■ HL23 - ■ ■ D1	
271	265	265	5.43	7 200	2.6	96	2KJ3107 - ■ HL23 - ■ ■ C1	
318	225	225	4.62	7 300	3.4	96	2KJ3107 - ■ HL23 - ■ ■ B1	
371	193	193	3.96	7 320	4.0	96	2KJ3107 - ■ HL23 - ■ ■ A1	
Z.69-LE132ZMS4P								
105	680	680	14.00	8 970	0.88	86	2KJ3106 - ■ HL23 - ■ ■ K1	
119	600	600	12.31	8 760	1.0	86	2KJ3106 - ■ HL23 - ■ ■ J1	
141	505	505	10.39	8 480	1.2	86	2KJ3106 - ■ HL23 - ■ ■ H1	
162	440	440	9.05	6 060	1.3	86	2KJ3106 - ■ HL23 - ■ ■ G1	
173	410	410	8.50	8 100	1.1	86	2KJ3106 - ■ HL23 - ■ ■ F1	
203	350	350	7.23	7 800	1.3	86	2KJ3106 - ■ HL23 - ■ ■ E1	
237	300	300	6.20	5 730	1.5	86	2KJ3106 - ■ HL23 - ■ ■ D1	
270	265	265	5.45	6 050	1.6	86	2KJ3106 - ■ HL23 - ■ ■ C1	
320	220	220	4.60	6 470	2.0	86	2KJ3106 - ■ HL23 - ■ ■ B1	
367	195	195	4.01	6 560	2.3	86	2KJ3106 - ■ HL23 - ■ ■ A1	
Z.59-LE132ZMS4P								
128	560	560	11.51	3 580	0.8	81	2KJ3105 - ■ HL23 - ■ ■ J1	
151	470	470	9.71	3 620	0.95	81	2KJ3105 - ■ HL23 - ■ ■ H1	
174	410	410	8.46	3 610	1.1	81	2KJ3105 - ■ HL23 - ■ ■ G1	
182	390	390	8.07	3 520	1.0	81	2KJ3105 - ■ HL23 - ■ ■ F1	
214	330	330	6.86	3 500	1.2	81	2KJ3105 - ■ HL23 - ■ ■ E1	
250	285	285	5.88	3 440	1.4	81	2KJ3105 - ■ HL23 - ■ ■ D1	
284	250	250	5.17	2 270	1.6	81	2KJ3105 - ■ HL23 - ■ ■ C1	
337	210	210	4.36	2 720	1.9	81	2KJ3105 - ■ HL23 - ■ ■ B1	
387	185	185	3.80	2 930	2.2	81	2KJ3105 - ■ HL23 - ■ ■ A1	
Z.49-LE132ZMS4P								
190	375	375	7.74	2 710	0.85	79	2KJ3104 - ■ HL23 - ■ ■ H1	
204	350	350	7.21	2 580	0.83	79	2KJ3104 - ■ HL23 - ■ ■ F1	
239	295	295	6.14	2 610	0.89	79	2KJ3104 - ■ HL23 - ■ ■ E1	
279	255	255	5.26	2 580	0.96	79	2KJ3104 - ■ HL23 - ■ ■ D1	
318	225	225	4.62	2 560	1.0	79	2KJ3104 - ■ HL23 - ■ ■ C1	
377	190	190	3.90	2 510	1.1	79	2KJ3104 - ■ HL23 - ■ ■ B1	
432	166	166	3.40	2 470	1.2	79	2KJ3104 - ■ HL23 - ■ ■ A1	
9.2								
D.189-LE160MPA4P								
4.7	18 700	18 700	313.63	109 000	1.0	717	2KJ3214 - ■ JQ23 - ■ ■ T1	
5.2	16 700	16 700	280.59	109 000	1.1	717	2KJ3214 - ■ JQ23 - ■ ■ S1	
5.8	15 100	15 100	253.06	109 000	1.3	717	2KJ3214 - ■ JQ23 - ■ ■ R1	
6.6	13 300	13 300	223.66	109 000	1.4	717	2KJ3214 - ■ JQ23 - ■ ■ Q1	
7.2	12 200	12 200	204.44	109 000	1.6	717	2KJ3214 - ■ JQ23 - ■ ■ P1	
8.0	10 900	10 900	183.92	109 000	1.7	717	2KJ3214 - ■ JQ23 - ■ ■ N1	
8.9	9 820	9 820	164.36	109 000	1.9	717	2KJ3214 - ■ JQ23 - ■ ■ M1	
9.9	8 880	8 880	148.63	109 000	2.1	717	2KJ3214 - ■ JQ23 - ■ ■ L1	

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Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
9.2								
D.169-LE160MPA4P								
5.4	16 200	271.40	69 300	0.86	504	2KJ3213 - ■ JQ23 - ■ ■ T1		
6.0	14 500	243.68	69 900	0.96	504	2KJ3213 - ■ JQ23 - ■ ■ S1		
6.7	13 100	220.58	70 000	1.1	504	2KJ3213 - ■ JQ23 - ■ ■ R1		
7.6	11 500	193.75	70 000	1.2	504	2KJ3213 - ■ JQ23 - ■ ■ Q1		
8.4	10 400	175.57	70 000	1.3	504	2KJ3213 - ■ JQ23 - ■ ■ P1		
9.4	9 340	156.36	70 000	1.5	504	2KJ3213 - ■ JQ23 - ■ ■ N1		
10	8 390	140.41	70 000	1.7	504	2KJ3213 - ■ JQ23 - ■ ■ M1		
12	7 480	125.28	70 000	1.9	504	2KJ3213 - ■ JQ23 - ■ ■ L1		
13	6 670	111.69	70 000	2.1	504	2KJ3213 - ■ JQ23 - ■ ■ K1		
D.149-LE160MPA4P								
9.4	9 330	156.11	50 500	0.86	325	2KJ3212 - ■ JQ23 - ■ ■ P1		
11	8 260	138.26	51 000	0.97	325	2KJ3212 - ■ JQ23 - ■ ■ N1		
12	7 350	123.04	51 500	1.1	325	2KJ3212 - ■ JQ23 - ■ ■ M1		
13	6 590	110.26	51 800	1.2	325	2KJ3212 - ■ JQ23 - ■ ■ L1		
15	5 840	97.75	52 200	1.4	325	2KJ3212 - ■ JQ23 - ■ ■ K1		
17	5 150	86.29	52 500	1.6	325	2KJ3212 - ■ JQ23 - ■ ■ J1		
19	4 530	75.87	52 800	1.8	325	2KJ3212 - ■ JQ23 - ■ ■ H1		
21	4 100	68.71	53 000	1.9	325	2KJ3212 - ■ JQ23 - ■ ■ G1		
Z.149-LE160MPA4P								
26	3 380	56.64	53 400	2.4	319	2KJ3112 - ■ JQ23 - ■ ■ W1		
28	3 150	52.84	53 500	2.4	319	2KJ3112 - ■ JQ23 - ■ ■ V1		
D.129-LE160MPA4P								
14	6 090	102.05	26 400	0.82	241	2KJ3211 - ■ JQ23 - ■ ■ E1		
16	5 370	89.91	26 800	0.93	241	2KJ3211 - ■ JQ23 - ■ ■ D1		
19	4 700	78.78	27 200	1.1	241	2KJ3211 - ■ JQ23 - ■ ■ C1		
Z.149-LE160MPA4P								
24	3 730	62.48	27 800	1.3	237	2KJ3111 - ■ JQ23 - ■ ■ X1		
27	3 190	53.47	28 100	1.6	237	2KJ3111 - ■ JQ23 - ■ ■ W1		
29	3 000	50.33	28 200	1.7	237	2KJ3111 - ■ JQ23 - ■ ■ V1		
31	2 820	47.18	28 300	1.8	237	2KJ3111 - ■ JQ23 - ■ ■ U1		
35	2 500	41.82	28 500	2.0	237	2KJ3111 - ■ JQ23 - ■ ■ T1		
40	2 220	37.15	28 600	2.3	237	2KJ3111 - ■ JQ23 - ■ ■ S1		
44	2 000	33.52	28 800	2.5	237	2KJ3111 - ■ JQ23 - ■ ■ R1		
49	1 770	29.70	28 900	2.8	237	2KJ3111 - ■ JQ23 - ■ ■ Q1		
D.109-LE160MPA4P								
23	3 840	64.34	20 000	0.81	178	2KJ3210 - ■ JQ23 - ■ ■ C1		
Z.109-LE160MPA4P								
29	3 050	51.17	20 200	1.0	175	2KJ3110 - ■ JQ23 - ■ ■ X1		
34	2 600	43.64	20 200	1.2	175	2KJ3110 - ■ JQ23 - ■ ■ W1		
36	2 450	41.07	20 200	1.3	175	2KJ3110 - ■ JQ23 - ■ ■ V1		
39	2 270	38.12	20 200	1.4	175	2KJ3110 - ■ JQ23 - ■ ■ U1		
44	2 010	33.70	20 200	1.5	175	2KJ3110 - ■ JQ23 - ■ ■ T1		
49	1 790	30.08	20 200	1.7	175	2KJ3110 - ■ JQ23 - ■ ■ S1		
54	1 610	27.07	20 200	1.9	175	2KJ3110 - ■ JQ23 - ■ ■ R1		
63	1 400	23.49	20 200	2.1	175	2KJ3110 - ■ JQ23 - ■ ■ Q1		
70	1 260	21.13	20 200	2.2	175	2KJ3110 - ■ JQ23 - ■ ■ P1		

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Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
9.2								
Z.109-LE160MPA4P								
	80	1 100	18.47	20 200	2.5	175	2KJ3110 - ■ JQ23 - ■ ■ N1	
	89	985	16.48	20 200	2.7	175	2KJ3110 - ■ JQ23 - ■ ■ M1	
	101	865	14.52	19 800	3.0	175	2KJ3110 - ■ JQ23 - ■ ■ L1	
	116	760	12.72	19 200	3.3	175	2KJ3110 - ■ JQ23 - ■ ■ K1	
	133	660	11.09	18 600	3.7	175	2KJ3110 - ■ JQ23 - ■ ■ J1	
	145	605	10.12	18 200	4.0	175	2KJ3110 - ■ JQ23 - ■ ■ H1	
Z.89-LE160MPA4P								
	44	1 990	33.38	18 500	0.84	137	2KJ3108 - ■ JQ23 - ■ ■ T1	
	47	1 870	31.41	18 500	0.89	137	2KJ3108 - ■ JQ23 - ■ ■ S1	
	51	1 730	29.01	18 500	0.97	137	2KJ3108 - ■ JQ23 - ■ ■ R1	
	57	1 540	25.81	18 500	1.1	137	2KJ3108 - ■ JQ23 - ■ ■ Q1	
	64	1 370	22.92	18 500	1.2	137	2KJ3108 - ■ JQ23 - ■ ■ P1	
	72	1 220	20.52	18 400	1.4	137	2KJ3108 - ■ JQ23 - ■ ■ N1	
	84	1 040	17.54	17 800	1.6	137	2KJ3108 - ■ JQ23 - ■ ■ M1	
	94	935	15.66	17 300	1.8	137	2KJ3108 - ■ JQ23 - ■ ■ L1	
	106	825	13.84	16 800	2.0	137	2KJ3108 - ■ JQ23 - ■ ■ K1	
	121	725	12.15	16 300	2.2	137	2KJ3108 - ■ JQ23 - ■ ■ J1	
	139	630	10.58	15 800	2.5	137	2KJ3108 - ■ JQ23 - ■ ■ H1	
	163	540	9.04	15 100	2.9	137	2KJ3108 - ■ JQ23 - ■ ■ G1	
	190	460	7.74	14 500	3.3	137	2KJ3108 - ■ JQ23 - ■ ■ F1	
	213	410	6.89	14 100	2.5	137	2KJ3108 - ■ JQ23 - ■ ■ E1	
	243	360	6.05	13 600	2.9	137	2KJ3108 - ■ JQ23 - ■ ■ D1	
	279	310	5.26	13 100	3.4	137	2KJ3108 - ■ JQ23 - ■ ■ C1	
	327	265	4.50	12 500	3.9	137	2KJ3108 - ■ JQ23 - ■ ■ B1	
	382	230	3.85	11 900	4.6	137	2KJ3108 - ■ JQ23 - ■ ■ A1	
Z.79-LE160MPA4P								
	85	1 030	17.31	10 800	0.81	114	2KJ3107 - ■ JQ23 - ■ ■ M1	
	97	900	15.13	10 600	0.93	114	2KJ3107 - ■ JQ23 - ■ ■ L1	
	113	775	12.99	10 300	1.1	114	2KJ3107 - ■ JQ23 - ■ ■ K1	
	128	685	11.48	10 000	1.2	114	2KJ3107 - ■ JQ23 - ■ ■ J1	
	151	580	9.76	9 760	1.4	114	2KJ3107 - ■ JQ23 - ■ ■ H1	
	176	500	8.37	6 440	1.6	114	2KJ3107 - ■ JQ23 - ■ ■ G1	
	179	490	8.19	4 820	1.5	114	2KJ3107 - ■ JQ23 - ■ ■ F1	
	205	425	7.16	5 410	1.7	114	2KJ3107 - ■ JQ23 - ■ ■ E1	
	239	365	6.15	5 860	1.9	114	2KJ3107 - ■ JQ23 - ■ ■ D1	
	271	325	5.43	6 090	2.1	114	2KJ3107 - ■ JQ23 - ■ ■ C1	
	318	275	4.62	6 380	2.8	114	2KJ3107 - ■ JQ23 - ■ ■ B1	
	371	235	3.96	6 540	3.3	114	2KJ3107 - ■ JQ23 - ■ ■ A1	
11								
D.189-LE160MPB4P								
	4.7	22 400	313.63	108 000	0.85	709	2KJ3214 - ■ JR23 - ■ ■ T1	
	5.2	20 000	280.59	108 900	0.95	709	2KJ3214 - ■ JR23 - ■ ■ S1	
	5.8	18 000	253.06	109 000	1.1	709	2KJ3214 - ■ JR23 - ■ ■ R1	
	6.6	15 900	223.66	109 000	1.2	709	2KJ3214 - ■ JR23 - ■ ■ Q1	
	7.2	14 600	204.44	109 000	1.3	709	2KJ3214 - ■ JR23 - ■ ■ P1	
	8.0	13 100	183.92	109 000	1.4	709	2KJ3214 - ■ JR23 - ■ ■ N1	
	8.9	11 700	164.36	109 000	1.6	709	2KJ3214 - ■ JR23 - ■ ■ M1	

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Shaft design

1 or 9

Frequency and voltage

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Gearbox mounting type

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
11	D.189-LE160MPB4P							
	9.9	10 600	148.63	109 000	1.8	709	2KJ3214 - ■ JR23 - ■ ■ L1	
	11	9 370	131.17	109 000	2.0	709	2KJ3214 - ■ JR23 - ■ ■ K1	
	D.169-LE160MPB4P							
	6.0	17 400	243.68	68 900	0.8	496	2KJ3213 - ■ JR23 - ■ ■ S1	
	6.7	15 700	220.58	69 500	0.89	496	2KJ3213 - ■ JR23 - ■ ■ R1	
	7.6	13 800	193.75	70 000	1.0	496	2KJ3213 - ■ JR23 - ■ ■ Q1	
	8.4	12 500	175.57	70 000	1.1	496	2KJ3213 - ■ JR23 - ■ ■ P1	
	9.4	11 100	156.36	70 000	1.3	496	2KJ3213 - ■ JR23 - ■ ■ N1	
	10	10 000	140.41	70 000	1.4	496	2KJ3213 - ■ JR23 - ■ ■ M1	
	12	8 950	125.28	70 000	1.6	496	2KJ3213 - ■ JR23 - ■ ■ L1	
13	7 980	111.69	70 000	1.8	496	2KJ3213 - ■ JR23 - ■ ■ K1		
15	7 070	99.06	70 000	2.0	496	2KJ3213 - ■ JR23 - ■ ■ J1		
16	6 490	90.94	70 000	2.2	496	2KJ3213 - ■ JR23 - ■ ■ H1		
D.149-LE160MPB4P								
11	9 880	138.26	50 300	0.81	317	2KJ3212 - ■ JR23 - ■ ■ N1		
12	8 790	123.04	50 800	0.91	317	2KJ3212 - ■ JR23 - ■ ■ M1		
13	7 870	110.26	51 200	1.0	317	2KJ3212 - ■ JR23 - ■ ■ L1		
15	6 980	97.75	51 600	1.1	317	2KJ3212 - ■ JR23 - ■ ■ K1		
17	6 160	86.29	52 000	1.3	317	2KJ3212 - ■ JR23 - ■ ■ J1		
19	5 420	75.87	52 400	1.5	317	2KJ3212 - ■ JR23 - ■ ■ H1		
21	4 910	68.71	52 600	1.6	317	2KJ3212 - ■ JR23 - ■ ■ G1		
Z.149-LE160MPB4P								
26	4 040	56.64	53 100	2.0	311	2KJ3112 - ■ JR23 - ■ ■ W1		
28	3 770	52.84	53 200	2.0	311	2KJ3112 - ■ JR23 - ■ ■ V1		
31	3 350	46.98	53 200	2.3	311	2KJ3112 - ■ JR23 - ■ ■ U1		
35	3 010	42.18	51 800	2.5	311	2KJ3112 - ■ JR23 - ■ ■ T1		
D.129-LE160MPB4P								
19	5 630	78.78	26 600	0.89	233	2KJ3211 - ■ JR23 - ■ ■ C1		
Z.129-LE160MPB4P								
24	4 460	62.48	27 300	1.1	229	2KJ3111 - ■ JR23 - ■ ■ X1		
27	3 820	53.47	27 700	1.3	229	2KJ3111 - ■ JR23 - ■ ■ W1		
29	3 590	50.33	27 800	1.4	229	2KJ3111 - ■ JR23 - ■ ■ V1		
31	3 370	47.18	28 000	1.5	229	2KJ3111 - ■ JR23 - ■ ■ U1		
35	2 980	41.82	28 200	1.7	229	2KJ3111 - ■ JR23 - ■ ■ T1		
40	2 650	37.15	28 400	1.9	229	2KJ3111 - ■ JR23 - ■ ■ S1		
44	2 390	33.52	28 500	2.1	229	2KJ3111 - ■ JR23 - ■ ■ R1		
49	2 120	29.70	28 600	2.4	229	2KJ3111 - ■ JR23 - ■ ■ Q1		
56	1 870	26.30	27 900	2.7	229	2KJ3111 - ■ JR23 - ■ ■ P1		
63	1 670	23.41	27 100	3.0	229	2KJ3111 - ■ JR23 - ■ ■ N1		
Z.109-LE160MPB4P								
29	3 650	51.17	20 200	0.85	167	2KJ3110 - ■ JR23 - ■ ■ X1		
34	3 110	43.64	20 200	0.99	167	2KJ3110 - ■ JR23 - ■ ■ W1		
36	2 930	41.07	20 200	1.1	167	2KJ3110 - ■ JR23 - ■ ■ V1		
39	2 720	38.12	20 200	1.1	167	2KJ3110 - ■ JR23 - ■ ■ U1		
44	2 400	33.70	20 200	1.3	167	2KJ3110 - ■ JR23 - ■ ■ T1		
49	2 150	30.08	20 200	1.4	167	2KJ3110 - ■ JR23 - ■ ■ S1		

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Shaft design

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Frequency and voltage

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Gearbox mounting type

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
11	Z.109-LE160MPB4P								
	54	1 930	27.07	20 200	1.6	167	2KJ3110 - ■ JR23 - ■ ■ R1		
	63	1 670	23.49	20 200	1.7	167	2KJ3110 - ■ JR23 - ■ ■ Q1		
	70	1 510	21.13	20 200	1.9	167	2KJ3110 - ■ JR23 - ■ ■ P1		
	80	1 320	18.47	20 200	2.1	167	2KJ3110 - ■ JR23 - ■ ■ N1		
	89	1 170	16.48	19 900	2.2	167	2KJ3110 - ■ JR23 - ■ ■ M1		
	101	1 030	14.52	19 400	2.5	167	2KJ3110 - ■ JR23 - ■ ■ L1		
	116	905	12.72	18 800	2.8	167	2KJ3110 - ■ JR23 - ■ ■ K1		
	133	790	11.09	18 300	3.1	167	2KJ3110 - ■ JR23 - ■ ■ J1		
	145	720	10.12	17 900	3.4	167	2KJ3110 - ■ JR23 - ■ ■ H1		
	169	620	8.71	17 300	3.8	167	2KJ3110 - ■ JR23 - ■ ■ G1		
	175	600	8.41	17 000	3.8	167	2KJ3110 - ■ JR23 - ■ ■ F1		
	198	530	7.41	16 500	4.3	167	2KJ3110 - ■ JR23 - ■ ■ E1		
		Z.89-LE160MPB4P							
		51	2 070	29.01	15 600	0.81	129	2KJ3108 - ■ JR23 - ■ ■ R1	
		57	1 840	25.81	16 900	0.91	129	2KJ3108 - ■ JR23 - ■ ■ Q1	
		64	1 630	22.92	18 000	1.0	129	2KJ3108 - ■ JR23 - ■ ■ P1	
		72	1 460	20.52	17 700	1.1	129	2KJ3108 - ■ JR23 - ■ ■ N1	
		84	1 250	17.54	17 200	1.3	129	2KJ3108 - ■ JR23 - ■ ■ M1	
94		1 110	15.66	16 800	1.5	129	2KJ3108 - ■ JR23 - ■ ■ L1		
106		985	13.84	16 400	1.7	129	2KJ3108 - ■ JR23 - ■ ■ K1		
121		865	12.15	15 900	1.9	129	2KJ3108 - ■ JR23 - ■ ■ J1		
139		755	10.58	15 400	2.1	129	2KJ3108 - ■ JR23 - ■ ■ H1		
163		645	9.04	14 800	2.4	129	2KJ3108 - ■ JR23 - ■ ■ G1		
190		550	7.74	14 200	2.8	129	2KJ3108 - ■ JR23 - ■ ■ F1		
213		490	6.89	13 900	2.1	129	2KJ3108 - ■ JR23 - ■ ■ E1		
243		430	6.05	13 400	2.5	129	2KJ3108 - ■ JR23 - ■ ■ D1		
279		375	5.26	12 900	2.8	129	2KJ3108 - ■ JR23 - ■ ■ C1		
327		320	4.50	12 400	3.3	129	2KJ3108 - ■ JR23 - ■ ■ B1		
382		275	3.85	11 800	3.9	129	2KJ3108 - ■ JR23 - ■ ■ A1		
	Z.79-LE160MPB4P								
	113	925	12.99	9 870	0.9	106	2KJ3107 - ■ JR23 - ■ ■ K1		
	128	820	11.48	9 680	1.0	106	2KJ3107 - ■ JR23 - ■ ■ J1		
	151	695	9.76	9 420	1.2	106	2KJ3107 - ■ JR23 - ■ ■ H1		
	176	595	8.37	5 010	1.3	106	2KJ3107 - ■ JR23 - ■ ■ G1		
	179	585	8.19	8 880	1.2	106	2KJ3107 - ■ JR23 - ■ ■ F1		
	205	510	7.16	8 660	1.4	106	2KJ3107 - ■ JR23 - ■ ■ E1		
	239	435	6.15	4 570	1.6	106	2KJ3107 - ■ JR23 - ■ ■ D1		
	271	385	5.43	4 980	1.8	106	2KJ3107 - ■ JR23 - ■ ■ C1		
	318	330	4.62	5 360	2.3	106	2KJ3107 - ■ JR23 - ■ ■ B1		
	371	280	3.96	5 710	2.7	106	2KJ3107 - ■ JR23 - ■ ■ A1		
15	D.189-LE160ZLL4P								
	6.6	21 700	223.66	108 300	0.87	734	2KJ3214 - ■ JU23 - ■ ■ Q1		
	7.2	19 800	204.44	109 000	0.96	734	2KJ3214 - ■ JU23 - ■ ■ P1		
	8.0	17 800	183.92	109 000	1.1	734	2KJ3214 - ■ JU23 - ■ ■ N1		
	9.0	15 900	164.36	109 000	1.2	734	2KJ3214 - ■ JU23 - ■ ■ M1		
	9.9	14 400	148.63	109 000	1.3	734	2KJ3214 - ■ JU23 - ■ ■ L1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
15	D.189-LE160ZLL4P							
	11	12 700	131.17	109 000	1.5	734	2KJ3214 - ■ JU23 - ■ ■ K1	
	13	11 300	116.88	109 000	1.7	734	2KJ3214 - ■ JU23 - ■ ■ J1	
	14	10 200	105.89	109 000	1.8	734	2KJ3214 - ■ JU23 - ■ ■ H1	
	15	9 250	95.24	109 000	2.1	734	2KJ3214 - ■ JU23 - ■ ■ G1	
	D.169-LE160ZLL4P							
	8.4	17 000	175.57	69 000	0.82	521	2KJ3213 - ■ JU23 - ■ ■ P1	
	9.4	15 100	156.36	69 700	0.92	521	2KJ3213 - ■ JU23 - ■ ■ N1	
	11	13 600	140.41	70 000	1.0	521	2KJ3213 - ■ JU23 - ■ ■ M1	
	12	12 100	125.28	70 000	1.2	521	2KJ3213 - ■ JU23 - ■ ■ L1	
	13	10 800	111.69	70 000	1.3	521	2KJ3213 - ■ JU23 - ■ ■ K1	
	15	9 620	99.06	70 000	1.5	521	2KJ3213 - ■ JU23 - ■ ■ J1	
	16	8 830	90.94	70 000	1.6	521	2KJ3213 - ■ JU23 - ■ ■ H1	
	18	7 780	80.12	70 000	1.8	521	2KJ3213 - ■ JU23 - ■ ■ G1	
	22	6 380	65.72	70 000	2.2	521	2KJ3213 - ■ JU23 - ■ ■ F1	
	D.149-LE160ZLL4P							
15	9 490	97.75	50 400	0.84	342	2KJ3212 - ■ JU23 - ■ ■ K1		
17	8 380	86.29	51 000	0.95	342	2KJ3212 - ■ JU23 - ■ ■ J1		
19	7 360	75.87	51 500	1.1	342	2KJ3212 - ■ JU23 - ■ ■ H1		
21	6 670	68.71	51 800	1.2	342	2KJ3212 - ■ JU23 - ■ ■ G1		
Z.149-LE160ZLL4P								
26	5 500	56.64	52 400	1.5	336	2KJ3112 - ■ JU23 - ■ ■ W1		
28	5 130	52.84	52 500	1.5	336	2KJ3112 - ■ JU23 - ■ ■ V1		
31	4 560	46.98	51 500	1.7	336	2KJ3112 - ■ JU23 - ■ ■ U1		
35	4 090	42.18	50 300	1.9	336	2KJ3112 - ■ JU23 - ■ ■ T1		
39	3 700	38.18	49 200	2.0	336	2KJ3112 - ■ JU23 - ■ ■ S1		
44	3 250	33.54	47 700	2.5	336	2KJ3112 - ■ JU23 - ■ ■ R1		
49	2 950	30.39	46 600	2.7	336	2KJ3112 - ■ JU23 - ■ ■ Q1		
Z.129-LE160ZLL4P								
24	6 060	62.48	26 400	0.82	254	2KJ3111 - ■ JU23 - ■ ■ X1		
28	5 190	53.47	26 900	0.96	254	2KJ3111 - ■ JU23 - ■ ■ W1		
29	4 880	50.33	27 100	1.0	254	2KJ3111 - ■ JU23 - ■ ■ V1		
31	4 580	47.18	27 300	1.1	254	2KJ3111 - ■ JU23 - ■ ■ U1		
35	4 060	41.82	27 600	1.2	254	2KJ3111 - ■ JU23 - ■ ■ T1		
40	3 600	37.15	27 800	1.4	254	2KJ3111 - ■ JU23 - ■ ■ S1		
44	3 250	33.52	27 800	1.5	254	2KJ3111 - ■ JU23 - ■ ■ R1		
50	2 880	29.70	27 300	1.7	254	2KJ3111 - ■ JU23 - ■ ■ Q1		
56	2 550	26.30	26 700	2.0	254	2KJ3111 - ■ JU23 - ■ ■ P1		
63	2 270	23.41	26 100	2.2	254	2KJ3111 - ■ JU23 - ■ ■ N1		
70	2 030	20.98	25 500	2.5	254	2KJ3111 - ■ JU23 - ■ ■ M1		
79	1 800	18.60	24 900	2.8	254	2KJ3111 - ■ JU23 - ■ ■ L1		
90	1 590	16.42	24 200	3.1	254	2KJ3111 - ■ JU23 - ■ ■ K1		
102	1 400	14.43	23 500	3.5	254	2KJ3111 - ■ JU23 - ■ ■ J1		
Z.109-LE160ZLL4P								
39	3 700	38.12	20 100	0.84	192	2KJ3110 - ■ JU23 - ■ ■ U1		
44	3 270	33.70	20 200	0.95	192	2KJ3110 - ■ JU23 - ■ ■ T1		
49	2 920	30.08	20 200	1.1	192	2KJ3110 - ■ JU23 - ■ ■ S1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
15	Z.109-LE160ZLL4P								
	54	2 620	27.07	20 200	1.2	192	2KJ3110 - ■ JU23 - ■ ■ R1		
	63	2 280	23.49	19 900	1.3	192	2KJ3110 - ■ JU23 - ■ ■ Q1		
	70	2 050	21.13	19 600	1.4	192	2KJ3110 - ■ JU23 - ■ ■ P1		
	80	1 790	18.47	19 200	1.5	192	2KJ3110 - ■ JU23 - ■ ■ N1		
	90	1 600	16.48	18 900	1.6	192	2KJ3110 - ■ JU23 - ■ ■ M1		
	102	1 410	14.52	18 500	1.8	192	2KJ3110 - ■ JU23 - ■ ■ L1		
	116	1 230	12.72	18 100	2.0	192	2KJ3110 - ■ JU23 - ■ ■ K1		
	133	1 070	11.09	17 600	2.3	192	2KJ3110 - ■ JU23 - ■ ■ J1		
	146	980	10.12	17 300	2.5	192	2KJ3110 - ■ JU23 - ■ ■ H1		
	169	845	8.71	16 700	2.8	192	2KJ3110 - ■ JU23 - ■ ■ G1		
	175	815	8.41	16 400	2.8	192	2KJ3110 - ■ JU23 - ■ ■ F1		
	199	720	7.41	16 000	3.2	192	2KJ3110 - ■ JU23 - ■ ■ E1		
	227	630	6.50	15 500	3.6	192	2KJ3110 - ■ JU23 - ■ ■ D1		
	261	550	5.66	15 000	4.2	192	2KJ3110 - ■ JU23 - ■ ■ C1		
	285	500	5.17	14 700	4.5	192	2KJ3110 - ■ JU23 - ■ ■ B1		
	331	430	4.45	14 200	5.0	192	2KJ3110 - ■ JU23 - ■ ■ A1		
		Z.89-LE160ZLL4P							
		72	1 990	20.52	12 100	0.84	154	2KJ3108 - ■ JU23 - ■ ■ N1	
		84	1 700	17.54	13 800	0.99	154	2KJ3108 - ■ JU23 - ■ ■ M1	
94		1 520	15.66	14 700	1.1	154	2KJ3108 - ■ JU23 - ■ ■ L1		
107		1 340	13.84	15 300	1.2	154	2KJ3108 - ■ JU23 - ■ ■ K1		
121		1 180	12.15	15 000	1.4	154	2KJ3108 - ■ JU23 - ■ ■ J1		
139		1 020	10.58	14 600	1.5	154	2KJ3108 - ■ JU23 - ■ ■ H1		
163		875	9.04	14 100	1.8	154	2KJ3108 - ■ JU23 - ■ ■ G1		
191		750	7.74	13 600	2.0	154	2KJ3108 - ■ JU23 - ■ ■ F1		
214		665	6.89	13 400	1.6	154	2KJ3108 - ■ JU23 - ■ ■ E1		
244		585	6.05	13 000	1.8	154	2KJ3108 - ■ JU23 - ■ ■ D1		
280		510	5.26	12 500	2.1	154	2KJ3108 - ■ JU23 - ■ ■ C1		
328		435	4.50	12 000	2.4	154	2KJ3108 - ■ JU23 - ■ ■ B1		
383		370	3.85	11 500	2.8	154	2KJ3108 - ■ JU23 - ■ ■ A1		
		Z.79-LE160ZLL4P							
		151	945	9.76	8 640	0.86	131	2KJ3107 - ■ JU23 - ■ ■ H1	
	176	810	8.37	8 480	0.97	131	2KJ3107 - ■ JU23 - ■ ■ G1		
	180	795	8.19	8 150	0.9	131	2KJ3107 - ■ JU23 - ■ ■ F1		
	206	695	7.16	8 020	1.0	131	2KJ3107 - ■ JU23 - ■ ■ E1		
	240	595	6.15	7 840	1.2	131	2KJ3107 - ■ JU23 - ■ ■ D1		
	272	525	5.43	7 680	1.3	131	2KJ3107 - ■ JU23 - ■ ■ C1		
	319	445	4.62	7 460	1.7	131	2KJ3107 - ■ JU23 - ■ ■ B1		
	372	385	3.96	3 760	2.0	131	2KJ3107 - ■ JU23 - ■ ■ A1		
	18.5	D.189-LES180MQ4P							
8.0		22 100	183.92	108 100	0.86	783	2KJ3214 - ■ KL33 - ■ ■ N1		
8.9		19 800	164.36	109 000	0.96	783	2KJ3214 - ■ KL33 - ■ ■ M1		
9.9		17 900	148.63	109 000	1.1	783	2KJ3214 - ■ KL33 - ■ ■ L1		
11		15 800	131.17	109 000	1.2	783	2KJ3214 - ■ KL33 - ■ ■ K1		
13		14 000	116.88	109 000	1.3	783	2KJ3214 - ■ KL33 - ■ ■ J1		
14		12 700	105.89	109 000	1.5	783	2KJ3214 - ■ KL33 - ■ ■ H1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
18.5	D.189-LES180MQ4P							
	15	11 400	95.24	109 000	1.7	783	2KJ3214 - ■ KL33 - ■ ■ G1	
	19	9 540	79.14	109 000	2.0	783	2KJ3214 - ■ KL33 - ■ ■ F1	
	21	8 480	70.36	109 000	2.2	783	2KJ3214 - ■ KL33 - ■ ■ E1	
	D.169-LES180MQ4P							
	10	16 900	140.41	69 000	0.83	570	2KJ3213 - ■ KL33 - ■ ■ M1	
	12	15 100	125.28	69 700	0.93	570	2KJ3213 - ■ KL33 - ■ ■ L1	
	13	13 400	111.69	70 000	1.0	570	2KJ3213 - ■ KL33 - ■ ■ K1	
	15	11 900	99.06	70 000	1.2	570	2KJ3213 - ■ KL33 - ■ ■ J1	
	16	10 900	90.94	70 000	1.3	570	2KJ3213 - ■ KL33 - ■ ■ H1	
	18	9 660	80.12	70 000	1.4	570	2KJ3213 - ■ KL33 - ■ ■ G1	
	22	7 920	65.72	70 000	1.8	570	2KJ3213 - ■ KL33 - ■ ■ F1	
	25	6 950	57.63	70 000	2.0	570	2KJ3213 - ■ KL33 - ■ ■ E1	
	33	5 430	45.06	70 000	2.6	570	2KJ3213 - ■ KL33 - ■ ■ D1	
	Z.169-LES180MQ4P							
	40	4 400	36.55	70 000	2.7	553	2KJ3113 - ■ KL33 - ■ ■ Q1	
	D.149-LES180MQ4P							
	19	9 150	75.87	50 600	0.87	397	2KJ3212 - ■ KL33 - ■ ■ H1	
	21	8 280	68.71	51 000	0.97	397	2KJ3212 - ■ KL33 - ■ ■ G1	
	24	7 210	59.82	51 500	1.1	397	2KJ3212 - ■ KL33 - ■ ■ F1	
	30	5 910	49.05	50 500	1.4	397	2KJ3212 - ■ KL33 - ■ ■ E1	
	34	5 240	43.51	49 400	1.5	397	2KJ3212 - ■ KL33 - ■ ■ D1	
	37	4 750	39.41	48 400	1.7	397	2KJ3212 - ■ KL33 - ■ ■ C1	
	43	4 130	34.31	47 000	1.9	397	2KJ3212 - ■ KL33 - ■ ■ B1	
	Z.149-LES180MQ4P							
	48	3 660	30.39	45 800	2.2	415	2KJ3112 - ■ KL33 - ■ ■ Q1	
	54	3 260	27.07	44 600	2.5	415	2KJ3112 - ■ KL33 - ■ ■ P1	
	60	2 930	24.30	43 500	2.7	415	2KJ3112 - ■ KL33 - ■ ■ N1	
	68	2 610	21.69	42 300	3.1	415	2KJ3112 - ■ KL33 - ■ ■ M1	
	Z.129-LES180MQ4P							
	56	3 170	26.30	25 700	1.6	331	2KJ3111 - ■ KL33 - ■ ■ P1	
	63	2 820	23.41	25 200	1.8	331	2KJ3111 - ■ KL33 - ■ ■ N1	
	70	2 530	20.98	24 700	2.0	331	2KJ3111 - ■ KL33 - ■ ■ M1	
	79	2 240	18.60	24 200	2.2	331	2KJ3111 - ■ KL33 - ■ ■ L1	
	89	1 980	16.42	23 600	2.5	331	2KJ3111 - ■ KL33 - ■ ■ K1	
	102	1 740	14.43	23 000	2.8	331	2KJ3111 - ■ KL33 - ■ ■ J1	
	112	1 570	13.07	22 500	3.1	331	2KJ3111 - ■ KL33 - ■ ■ H1	
	129	1 370	11.38	21 800	3.5	331	2KJ3111 - ■ KL33 - ■ ■ G1	
	157	1 120	9.33	20 900	4.1	331	2KJ3111 - ■ KL33 - ■ ■ F1	
	172	1 020	8.53	20 200	3.5	331	2KJ3111 - ■ KL33 - ■ ■ E1	
	195	900	7.50	19 600	4.0	331	2KJ3111 - ■ KL33 - ■ ■ D1	
	216	815	6.79	19 100	4.4	331	2KJ3111 - ■ KL33 - ■ ■ C1	
	Z.109-LES180MQ4P							
	69	2 540	21.13	18 500	1.1	271	2KJ3110 - ■ KL33 - ■ ■ P1	
	79	2 220	18.47	18 300	1.2	271	2KJ3110 - ■ KL33 - ■ ■ N1	
	89	1 980	16.48	18 100	1.3	271	2KJ3110 - ■ KL33 - ■ ■ M1	
	101	1 750	14.52	17 700	1.5	271	2KJ3110 - ■ KL33 - ■ ■ L1	

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
18.5	Z.109-LES180MQ4P								
	115	1 530	12.72	17 400	1.6	271	2KJ3110 - ■ KL33 - ■ ■ K1		
	132	1 330	11.09	17 000	1.8	271	2KJ3110 - ■ KL33 - ■ ■ J1		
	145	1 220	10.12	16 700	2.0	271	2KJ3110 - ■ KL33 - ■ ■ H1		
	168	1 050	8.71	16 300	2.3	271	2KJ3110 - ■ KL33 - ■ ■ G1		
	174	1 010	8.41	16 000	2.3	271	2KJ3110 - ■ KL33 - ■ ■ F1		
	198	890	7.41	15 600	2.6	271	2KJ3110 - ■ KL33 - ■ ■ E1		
	225	780	6.50	15 200	2.9	271	2KJ3110 - ■ KL33 - ■ ■ D1		
	259	680	5.66	14 700	3.4	271	2KJ3110 - ■ KL33 - ■ ■ C1		
	283	620	5.17	14 400	3.7	271	2KJ3110 - ■ KL33 - ■ ■ B1		
	329	535	4.45	13 900	4.0	271	2KJ3110 - ■ KL33 - ■ ■ A1		
		Z.89-LES180MQ4P							
		94	1 880	15.66	10 300	0.89	230	2KJ3108 - ■ KL33 - ■ ■ L1	
106		1 660	13.84	11 700	1.0	230	2KJ3108 - ■ KL33 - ■ ■ K1		
121		1 460	12.15	12 800	1.1	230	2KJ3108 - ■ KL33 - ■ ■ J1		
138		1 270	10.58	13 800	1.2	230	2KJ3108 - ■ KL33 - ■ ■ H1		
162		1 090	9.04	13 500	1.4	230	2KJ3108 - ■ KL33 - ■ ■ G1		
189		930	7.74	13 200	1.6	230	2KJ3108 - ■ KL33 - ■ ■ F1		
213		830	6.89	12 600	1.3	230	2KJ3108 - ■ KL33 - ■ ■ E1		
242		730	6.05	12 700	1.5	230	2KJ3108 - ■ KL33 - ■ ■ D1		
279		630	5.26	12 300	1.7	230	2KJ3108 - ■ KL33 - ■ ■ C1		
326		540	4.50	11 800	2.0	230	2KJ3108 - ■ KL33 - ■ ■ B1		
381		460	3.85	11 300	2.3	230	2KJ3108 - ■ KL33 - ■ ■ A1		
22		D.189-LES180ZLN4P							
	8.9	23 500	164.36	107 600	0.81	788	2KJ3214 - ■ KN33 - ■ ■ M1		
	9.9	21 300	148.63	108 400	0.89	788	2KJ3214 - ■ KN33 - ■ ■ L1		
	11	18 800	131.17	109 000	1.0	788	2KJ3214 - ■ KN33 - ■ ■ K1		
	13	16 700	116.88	109 000	1.1	788	2KJ3214 - ■ KN33 - ■ ■ J1		
	14	15 100	105.89	109 000	1.3	788	2KJ3214 - ■ KN33 - ■ ■ H1		
	15	13 600	95.24	109 000	1.4	788	2KJ3214 - ■ KN33 - ■ ■ G1		
	19	11 300	79.14	109 000	1.7	788	2KJ3214 - ■ KN33 - ■ ■ F1		
	21	10 000	70.36	109 000	1.9	788	2KJ3214 - ■ KN33 - ■ ■ E1		
	26	8 040	56.08	109 000	2.4	788	2KJ3214 - ■ KN33 - ■ ■ D1		
		D.169-LES180ZLN4P							
		13	16 000	111.69	69 400	0.87	575	2KJ3213 - ■ KN33 - ■ ■ K1	
		15	14 200	99.06	70 000	0.99	575	2KJ3213 - ■ KN33 - ■ ■ J1	
16		13 000	90.94	70 000	1.1	575	2KJ3213 - ■ KN33 - ■ ■ H1		
18		11 400	80.12	70 000	1.2	575	2KJ3213 - ■ KN33 - ■ ■ G1		
22		9 420	65.72	70 000	1.5	575	2KJ3213 - ■ KN33 - ■ ■ F1		
25		8 260	57.63	70 000	1.7	575	2KJ3213 - ■ KN33 - ■ ■ E1		
33		6 460	45.06	70 000	2.2	575	2KJ3213 - ■ KN33 - ■ ■ D1		
35		5 940	41.43	70 000	2.4	575	2KJ3213 - ■ KN33 - ■ ■ C1		
40		5 210	36.33	70 000	2.7	575	2KJ3213 - ■ KN33 - ■ ■ B1		
	D.149-LES180ZLN4P								
	21	9 850	68.71	50 300	0.81	402	2KJ3212 - ■ KN33 - ■ ■ G1		
	24	8 570	59.82	50 500	0.93	402	2KJ3212 - ■ KN33 - ■ ■ F1		
	30	7 030	49.05	49 000	1.1	402	2KJ3212 - ■ KN33 - ■ ■ E1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
22	D.149-LES180ZLN4P							
	34	6 240	43.51	48 000	1.3	402	2KJ3212 - ■ KN33 - ■ ■ D1	
	37	5 650	39.41	47 200	1.4	402	2KJ3212 - ■ KN33 - ■ ■ C1	
	43	4 920	34.31	45 900	1.6	402	2KJ3212 - ■ KN33 - ■ ■ B1	
	Z.149-LES180ZLN4P							
	54	3 880	27.07	43 700	2.1	420	2KJ3112 - ■ KN33 - ■ ■ P1	
	60	3 480	24.30	42 700	2.3	420	2KJ3112 - ■ KN33 - ■ ■ N1	
	68	3 110	21.69	41 600	2.6	420	2KJ3112 - ■ KN33 - ■ ■ M1	
	76	2 770	19.33	40 500	2.9	420	2KJ3112 - ■ KN33 - ■ ■ L1	
	85	2 460	17.15	39 400	3.3	420	2KJ3112 - ■ KN33 - ■ ■ K1	
	Z.129-LES180ZLN4P							
	63	3 350	23.41	24 300	1.5	336	2KJ3111 - ■ KN33 - ■ ■ N1	
	70	3 000	20.98	23 900	1.7	336	2KJ3111 - ■ KN33 - ■ ■ M1	
	79	2 660	18.60	23 500	1.9	336	2KJ3111 - ■ KN33 - ■ ■ L1	
	89	2 350	16.42	23 000	2.1	336	2KJ3111 - ■ KN33 - ■ ■ K1	
	102	2 060	14.43	22 400	2.4	336	2KJ3111 - ■ KN33 - ■ ■ J1	
	112	1 870	13.07	22 000	2.6	336	2KJ3111 - ■ KN33 - ■ ■ H1	
	129	1 630	11.38	21 400	2.9	336	2KJ3111 - ■ KN33 - ■ ■ G1	
	157	1 330	9.33	20 500	3.5	336	2KJ3111 - ■ KN33 - ■ ■ F1	
	172	1 220	8.53	19 800	3.0	336	2KJ3111 - ■ KN33 - ■ ■ E1	
	195	1 070	7.50	19 200	3.4	336	2KJ3111 - ■ KN33 - ■ ■ D1	
	216	970	6.79	18 800	3.7	336	2KJ3111 - ■ KN33 - ■ ■ C1	
	248	845	5.91	18 200	4.3	336	2KJ3111 - ■ KN33 - ■ ■ B1	
	302	695	4.85	17 300	4.7	336	2KJ3111 - ■ KN33 - ■ ■ A1	
	Z.109-LES180ZLN4P							
	79	2 640	18.47	17 300	1.0	276	2KJ3110 - ■ KN33 - ■ ■ N1	
	89	2 360	16.48	17 200	1.1	276	2KJ3110 - ■ KN33 - ■ ■ M1	
	101	2 080	14.52	17 000	1.2	276	2KJ3110 - ■ KN33 - ■ ■ L1	
	115	1 820	12.72	16 700	1.4	276	2KJ3110 - ■ KN33 - ■ ■ K1	
	132	1 590	11.09	16 400	1.5	276	2KJ3110 - ■ KN33 - ■ ■ J1	
	145	1 450	10.12	16 200	1.7	276	2KJ3110 - ■ KN33 - ■ ■ H1	
	168	1 240	8.71	15 800	1.9	276	2KJ3110 - ■ KN33 - ■ ■ G1	
	174	1 200	8.41	15 500	1.9	276	2KJ3110 - ■ KN33 - ■ ■ F1	
	198	1 060	7.41	15 200	2.1	276	2KJ3110 - ■ KN33 - ■ ■ E1	
	225	930	6.50	14 800	2.4	276	2KJ3110 - ■ KN33 - ■ ■ D1	
	259	810	5.66	14 400	2.8	276	2KJ3110 - ■ KN33 - ■ ■ C1	
	283	740	5.17	14 100	3.1	276	2KJ3110 - ■ KN33 - ■ ■ B1	
	329	635	4.45	13 700	3.4	276	2KJ3110 - ■ KN33 - ■ ■ A1	
	Z.89-LES180ZLN4P							
	106	1 980	13.84	7 760	0.85	235	2KJ3108 - ■ KN33 - ■ ■ K1	
	121	1 740	12.15	9 370	0.94	235	2KJ3108 - ■ KN33 - ■ ■ J1	
	138	1 510	10.58	10 800	1.0	235	2KJ3108 - ■ KN33 - ■ ■ H1	
	162	1 290	9.04	12 000	1.2	235	2KJ3108 - ■ KN33 - ■ ■ G1	
	189	1 110	7.74	12 600	1.4	235	2KJ3108 - ■ KN33 - ■ ■ F1	
	213	985	6.89	10 200	1.1	235	2KJ3108 - ■ KN33 - ■ ■ E1	
	242	865	6.05	11 000	1.2	235	2KJ3108 - ■ KN33 - ■ ■ D1	
	279	750	5.26	11 700	1.4	235	2KJ3108 - ■ KN33 - ■ ■ C1	

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
22	Z.89-LES180ZLN4P							
	326	645	4.50	11 500	1.6	235	2KJ3108 - ■ LN33 - ■ ■ B1	
	381	550	3.85	11 100	1.9	235	2KJ3108 - ■ LN33 - ■ ■ A1	
30	D.189-LES200ZLU4P							
	13	22 700	116.88	107 900	0.83	858	2KJ3214 - ■ LN33 - ■ ■ J1	
	14	20 600	105.89	108 700	0.92	858	2KJ3214 - ■ LN33 - ■ ■ H1	
	15	18 500	95.24	109 000	1.0	858	2KJ3214 - ■ LN33 - ■ ■ G1	
	19	15 400	79.14	109 000	1.2	858	2KJ3214 - ■ LN33 - ■ ■ F1	
	21	13 700	70.36	109 000	1.4	858	2KJ3214 - ■ LN33 - ■ ■ E1	
	26	10 900	56.08	109 000	1.7	858	2KJ3214 - ■ LN33 - ■ ■ D1	
	33	8 690	44.63	109 000	2.2	858	2KJ3214 - ■ LN33 - ■ ■ C1	
	40	7 140	36.67	109 000	2.7	858	2KJ3214 - ■ LN33 - ■ ■ B1	
	D.169-LES200ZLU4P							
	18	15 600	80.12	69 500	0.9	645	2KJ3213 - ■ LN33 - ■ ■ G1	
	22	12 800	65.72	70 000	1.1	645	2KJ3213 - ■ LN33 - ■ ■ F1	
	26	11 200	57.63	70 000	1.2	645	2KJ3213 - ■ LN33 - ■ ■ E1	
	33	8 780	45.06	70 000	1.6	645	2KJ3213 - ■ LN33 - ■ ■ D1	
	35	8 070	41.43	70 000	1.7	645	2KJ3213 - ■ LN33 - ■ ■ C1	
	40	7 080	36.33	70 000	2.0	645	2KJ3213 - ■ LN33 - ■ ■ B1	
	Z.169-LES200ZLU4P							
	50	5 720	29.38	70 000	2.4	634	2KJ3113 - ■ LN33 - ■ ■ N1	
	55	5 170	26.57	70 000	2.7	634	2KJ3113 - ■ LN33 - ■ ■ M1	
	D.149-LES200ZLU4P							
	30	9 560	49.05	45 500	0.84	472	2KJ3212 - ■ LN33 - ■ ■ E1	
	34	8 480	43.51	44 900	0.94	472	2KJ3212 - ■ LN33 - ■ ■ D1	
	37	7 680	39.41	44 300	1.0	472	2KJ3212 - ■ LN33 - ■ ■ C1	
	43	6 680	34.31	43 500	1.2	472	2KJ3212 - ■ LN33 - ■ ■ B1	
	52	5 480	28.13	42 100	1.5	472	2KJ3212 - ■ LN33 - ■ ■ A1	
	Z.149-LES200ZLU4P							
	60	4 730	24.30	41 000	1.7	494	2KJ3112 - ■ LN33 - ■ ■ N1	
68	4 220	21.69	40 100	1.9	494	2KJ3112 - ■ LN33 - ■ ■ M1		
76	3 760	19.33	39 100	2.1	494	2KJ3112 - ■ LN33 - ■ ■ L1		
86	3 340	17.15	38 100	2.4	494	2KJ3112 - ■ LN33 - ■ ■ K1		
93	3 060	15.74	37 400	2.6	494	2KJ3112 - ■ LN33 - ■ ■ J1		
106	2 700	13.87	36 400	3.0	494	2KJ3112 - ■ LN33 - ■ ■ H1		
129	2 210	11.38	34 700	3.6	494	2KJ3112 - ■ LN33 - ■ ■ G1		
202	1 410	7.27	31 200	3.9	494	2KJ3112 - ■ LN33 - ■ ■ D1		
247	1 160	5.96	29 600	4.7	494	2KJ3112 - ■ LN33 - ■ ■ C1		
Z.129-LES200ZLU4P								
70	4 080	20.98	22 000	1.2	411	2KJ3111 - ■ LN33 - ■ ■ M1		
79	3 620	18.60	21 800	1.4	411	2KJ3111 - ■ LN33 - ■ ■ L1		
90	3 200	16.42	21 500	1.6	411	2KJ3111 - ■ LN33 - ■ ■ K1		
102	2 810	14.43	21 100	1.8	411	2KJ3111 - ■ LN33 - ■ ■ J1		
112	2 540	13.07	20 800	1.9	411	2KJ3111 - ■ LN33 - ■ ■ H1		
129	2 210	11.38	20 400	2.1	411	2KJ3111 - ■ LN33 - ■ ■ G1		
158	1 810	9.33	19 600	2.6	411	2KJ3111 - ■ LN33 - ■ ■ F1		
172	1 660	8.53	18 900	2.2	411	2KJ3111 - ■ LN33 - ■ ■ E1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
30	Z.129-LES200ZLU4P							
	196	1 460	7.50	18 400	2.5	411	2KJ3111 - ■ LN33 - ■ ■ D1	
	216	1 320	6.79	18 100	2.7	411	2KJ3111 - ■ LN33 - ■ ■ C1	
	249	1 150	5.91	17 600	3.1	411	2KJ3111 - ■ LN33 - ■ ■ B1	
	303	945	4.85	16 800	3.5	411	2KJ3111 - ■ LN33 - ■ ■ A1	
	Z.109-LES200ZLU4P							
	89	3 210	16.48	15 200	0.82	351	2KJ3110 - ■ LN33 - ■ ■ M1	
	101	2 830	14.52	15 200	0.91	351	2KJ3110 - ■ LN33 - ■ ■ L1	
	116	2 470	12.72	15 200	1.0	351	2KJ3110 - ■ LN33 - ■ ■ K1	
	133	2 160	11.09	15 100	1.1	351	2KJ3110 - ■ LN33 - ■ ■ J1	
	145	1 970	10.12	15 000	1.2	351	2KJ3110 - ■ LN33 - ■ ■ H1	
	169	1 690	8.71	14 800	1.4	351	2KJ3110 - ■ LN33 - ■ ■ G1	
	175	1 630	8.41	14 400	1.4	351	2KJ3110 - ■ LN33 - ■ ■ F1	
	198	1 440	7.41	14 200	1.6	351	2KJ3110 - ■ LN33 - ■ ■ E1	
	226	1 260	6.50	13 900	1.8	351	2KJ3110 - ■ LN33 - ■ ■ D1	
	260	1 100	5.66	13 600	2.1	351	2KJ3110 - ■ LN33 - ■ ■ C1	
284	1 000	5.17	13 500	2.3	351	2KJ3110 - ■ LN33 - ■ ■ B1		
330	865	4.45	13 100	2.5	351	2KJ3110 - ■ LN33 - ■ ■ A1		
37	D.189-LES225SD4P							
	15	22 800	95.24	107 900	0.83	1475	2KJ3214 - ■ MF33 - ■ ■ G1	
	19	19 000	79.14	109 000	1.0	1475	2KJ3214 - ■ MF33 - ■ ■ F1	
	21	16 900	70.36	109 000	1.1	1475	2KJ3214 - ■ MF33 - ■ ■ E1	
	26	13 400	56.08	109 000	1.4	1475	2KJ3214 - ■ MF33 - ■ ■ D1	
	33	10 700	44.63	109 000	1.8	1475	2KJ3214 - ■ MF33 - ■ ■ C1	
	Z.189-LES225SD4P							
	43	8 230	34.25	109 000	2.3	1393	2KJ3114 - ■ MF33 - ■ ■ L1	
	48	7 380	30.73	108 400	2.6	1393	2KJ3114 - ■ MF33 - ■ ■ K1	
	54	6 600	27.46	105 300	2.9	1393	2KJ3114 - ■ MF33 - ■ ■ J1	
	D.169-LES225SD4P							
	22	15 700	65.72	69 500	0.89	1261	2KJ3213 - ■ MF33 - ■ ■ F1	
	26	13 800	57.63	70 000	1.0	1261	2KJ3213 - ■ MF33 - ■ ■ E1	
	33	10 800	45.06	70 000	1.3	1261	2KJ3213 - ■ MF33 - ■ ■ D1	
	35	9 950	41.43	70 000	1.4	1261	2KJ3213 - ■ MF33 - ■ ■ C1	
	40	8 730	36.33	70 000	1.6	1261	2KJ3213 - ■ MF33 - ■ ■ B1	
	Z.169-LES225SD4P							
	50	7 060	29.38	70 000	2.0	1217	2KJ3113 - ■ MF33 - ■ ■ N1	
	55	6 380	26.57	70 000	2.2	1217	2KJ3113 - ■ MF33 - ■ ■ M1	
	63	5 630	23.45	70 000	2.5	1217	2KJ3113 - ■ MF33 - ■ ■ L1	
	70	5 020	20.90	68 300	2.8	1217	2KJ3113 - ■ MF33 - ■ ■ K1	
	78	4 550	18.93	66 700	3.1	1217	2KJ3113 - ■ MF33 - ■ ■ J1	
	D.149-LES225SD4P							
	37	9 470	39.41	41 900	0.84	1086	2KJ3212 - ■ MF33 - ■ ■ C1	
	43	8 240	34.31	41 300	0.97	1086	2KJ3212 - ■ MF33 - ■ ■ B1	
	52	6 760	28.13	40 300	1.2	1086	2KJ3212 - ■ MF33 - ■ ■ A1	
	Z.149-LES225SD4P							
	60	5 840	24.30	39 400	1.4	1079	2KJ3112 - ■ MF33 - ■ ■ N1	
	68	5 210	21.69	38 700	1.5	1079	2KJ3112 - ■ MF33 - ■ ■ M1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
37	Z.149-LES225SD4P								
	76	4 640	19.33	37 900	1.7	1079	2KJ3112 - ■ MF33 - ■ ■ L1		
	86	4 120	17.15	37 100	1.9	1079	2KJ3112 - ■ MF33 - ■ ■ K1		
	93	3 780	15.74	36 500	2.1	1079	2KJ3112 - ■ MF33 - ■ ■ J1		
	106	3 330	13.87	35 500	2.4	1079	2KJ3112 - ■ MF33 - ■ ■ H1		
	129	2 730	11.38	34 000	2.9	1079	2KJ3112 - ■ MF33 - ■ ■ G1		
	147	2 390	9.98	33 000	3.3	1079	2KJ3112 - ■ MF33 - ■ ■ F1		
	188	1 870	7.80	31 100	4.3	1079	2KJ3112 - ■ MF33 - ■ ■ E1		
	202	1 740	7.27	30 700	3.1	1079	2KJ3112 - ■ MF33 - ■ ■ D1		
	247	1 430	5.96	29 200	3.8	1079	2KJ3112 - ■ MF33 - ■ ■ C1		
	281	1 250	5.23	28 300	4.3	1079	2KJ3112 - ■ MF33 - ■ ■ B1		
		Z.129-LES225SD4P							
		70	5 040	20.98	20 400	0.99	995	2KJ3111 - ■ MF33 - ■ ■ M1	
79		4 470	18.60	20 300	1.1	995	2KJ3111 - ■ MF33 - ■ ■ L1		
90		3 940	16.42	20 200	1.3	995	2KJ3111 - ■ MF33 - ■ ■ K1		
102		3 460	14.43	20 000	1.4	995	2KJ3111 - ■ MF33 - ■ ■ J1		
112		3 140	13.07	19 800	1.5	995	2KJ3111 - ■ MF33 - ■ ■ H1		
129		2 730	11.38	19 500	1.7	995	2KJ3111 - ■ MF33 - ■ ■ G1		
158		2 240	9.33	18 900	2.1	995	2KJ3111 - ■ MF33 - ■ ■ F1		
172		2 050	8.53	18 100	1.8	995	2KJ3111 - ■ MF33 - ■ ■ E1		
196		1 800	7.50	17 800	2.0	995	2KJ3111 - ■ MF33 - ■ ■ D1		
216		1 630	6.79	17 500	2.2	995	2KJ3111 - ■ MF33 - ■ ■ C1		
249		1 420	5.91	17 000	2.5	995	2KJ3111 - ■ MF33 - ■ ■ B1		
303		1 160	4.85	16 400	2.8	995	2KJ3111 - ■ MF33 - ■ ■ A1		
	Z.109-LES225SD4P								
	116	3 050	12.72	13 800	0.82	933	2KJ3110 - ■ MF33 - ■ ■ K1		
	133	2 660	11.09	13 900	0.92	933	2KJ3110 - ■ MF33 - ■ ■ J1		
	145	2 430	10.12	13 900	1.0	933	2KJ3110 - ■ MF33 - ■ ■ H1		
	169	2 090	8.71	13 800	1.1	933	2KJ3110 - ■ MF33 - ■ ■ G1		
	175	2 020	8.41	13 400	1.1	933	2KJ3110 - ■ MF33 - ■ ■ F1		
	198	1 780	7.41	13 300	1.3	933	2KJ3110 - ■ MF33 - ■ ■ E1		
	226	1 560	6.50	13 200	1.5	933	2KJ3110 - ■ MF33 - ■ ■ D1		
	260	1 360	5.66	13 000	1.7	933	2KJ3110 - ■ MF33 - ■ ■ C1		
	284	1 240	5.17	12 800	1.8	933	2KJ3110 - ■ MF33 - ■ ■ B1		
	330	1 070	4.45	12 600	2.0	933	2KJ3110 - ■ MF33 - ■ ■ A1		
	45	D.189-LES225YMF4P							
		19	23 100	79.14	107 800	0.82	980	2KJ3214 - ■ MT33 - ■ ■ F1	
21		20 500	70.36	108 700	0.92	980	2KJ3214 - ■ MT33 - ■ ■ E1		
26		16 300	56.08	109 000	1.2	980	2KJ3214 - ■ MT33 - ■ ■ D1		
33		13 000	44.63	109 000	1.5	980	2KJ3214 - ■ MT33 - ■ ■ C1		
40		10 700	36.67	109 000	1.8	980	2KJ3214 - ■ MT33 - ■ ■ B1		
	Z.189-LES225YMF4P								
	48	8 980	30.73	106 900	2.1	898	2KJ3114 - ■ MT33 - ■ ■ K1		
	54	8 020	27.46	103 900	2.4	898	2KJ3114 - ■ MT33 - ■ ■ J1		
	60	7 170	24.53	101 000	2.6	898	2KJ3114 - ■ MT33 - ■ ■ H1		
	66	6 560	22.44	98 800	2.9	898	2KJ3114 - ■ MT33 - ■ ■ G1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
45	D.169-LES225YMF4P							
	26	16 800	57.63	69 100	0.83	766	2KJ3213 - ■ MT33 - ■ ■ E1	
	33	13 100	45.06	70 000	1.1	766	2KJ3213 - ■ MT33 - ■ ■ D1	
	35	12 100	41.43	70 000	1.2	766	2KJ3213 - ■ MT33 - ■ ■ C1	
	40	10 600	36.33	70 000	1.3	766	2KJ3213 - ■ MT33 - ■ ■ B1	
	Z.169-LES225YMF4P							
	55	7 760	26.57	70 000	1.8	722	2KJ3113 - ■ MT33 - ■ ■ M1	
	63	6 850	23.45	68 600	2.0	722	2KJ3113 - ■ MT33 - ■ ■ L1	
	70	6 110	20.90	66 900	2.3	722	2KJ3113 - ■ MT33 - ■ ■ K1	
	78	5 530	18.93	65 500	2.5	722	2KJ3113 - ■ MT33 - ■ ■ J1	
	86	4 970	17.03	63 900	2.8	722	2KJ3113 - ■ MT33 - ■ ■ H1	
	104	4 130	14.15	61 100	3.4	722	2KJ3113 - ■ MT33 - ■ ■ G1	
	199	2 150	7.37	51 800	3.7	722	2KJ3113 - ■ MT33 - ■ ■ C1	
	250	1 710	5.88	48 800	4.6	722	2KJ3113 - ■ MT33 - ■ ■ B1	
	D.149-LES225YMF4P							
	43	10 000	34.31	38 900	0.8	591	2KJ3212 - ■ MT33 - ■ ■ B1	
	52	8 220	28.13	38 300	0.97	591	2KJ3212 - ■ MT33 - ■ ■ A1	
	Z.149-LES225YMF4P							
	68	6 340	21.69	37 200	1.3	584	2KJ3112 - ■ MT33 - ■ ■ M1	
	76	5 650	19.33	36 600	1.4	584	2KJ3112 - ■ MT33 - ■ ■ L1	
	86	5 010	17.15	35 900	1.6	584	2KJ3112 - ■ MT33 - ■ ■ K1	
	93	4 600	15.74	35 300	1.7	584	2KJ3112 - ■ MT33 - ■ ■ J1	
	106	4 050	13.87	34 500	2.0	584	2KJ3112 - ■ MT33 - ■ ■ H1	
	129	3 320	11.38	33 200	2.4	584	2KJ3112 - ■ MT33 - ■ ■ G1	
	147	2 910	9.98	32 300	2.7	584	2KJ3112 - ■ MT33 - ■ ■ F1	
	188	2 280	7.80	30 600	3.5	584	2KJ3112 - ■ MT33 - ■ ■ E1	
	202	2 120	7.27	30 200	2.6	584	2KJ3112 - ■ MT33 - ■ ■ D1	
	247	1 740	5.96	28 800	3.1	584	2KJ3112 - ■ MT33 - ■ ■ C1	
	281	1 520	5.23	27 900	3.6	584	2KJ3112 - ■ MT33 - ■ ■ B1	
	359	1 190	4.09	26 200	4.5	584	2KJ3112 - ■ MT33 - ■ ■ A1	
	Z.129-LES225YMF4P							
	79	5 430	18.60	16 500	0.92	500	2KJ3111 - ■ MT33 - ■ ■ L1	
	90	4 800	16.42	18 700	1.0	500	2KJ3111 - ■ MT33 - ■ ■ K1	
	102	4 210	14.43	18 700	1.2	500	2KJ3111 - ■ MT33 - ■ ■ J1	
	112	3 820	13.07	18 600	1.3	500	2KJ3111 - ■ MT33 - ■ ■ H1	
	129	3 320	11.38	18 500	1.4	500	2KJ3111 - ■ MT33 - ■ ■ G1	
	158	2 720	9.33	18 100	1.7	500	2KJ3111 - ■ MT33 - ■ ■ F1	
	172	2 490	8.53	17 300	1.5	500	2KJ3111 - ■ MT33 - ■ ■ E1	
	196	2 190	7.50	17 000	1.7	500	2KJ3111 - ■ MT33 - ■ ■ D1	
	216	1 980	6.79	16 800	1.8	500	2KJ3111 - ■ MT33 - ■ ■ C1	
	249	1 720	5.91	16 500	2.1	500	2KJ3111 - ■ MT33 - ■ ■ B1	
	303	1 410	4.85	15 900	2.3	500	2KJ3111 - ■ MT33 - ■ ■ A1	
	Z.109-LES225YMF4P							
	145	2 950	10.12	12 700	0.82	438	2KJ3110 - ■ MT33 - ■ ■ H1	
	169	2 540	8.71	12 800	0.93	438	2KJ3110 - ■ MT33 - ■ ■ G1	
	198	2 160	7.41	12 400	1.1	438	2KJ3110 - ■ MT33 - ■ ■ E1	
	226	1 900	6.50	12 300	1.2	438	2KJ3110 - ■ MT33 - ■ ■ D1	

Article No. supplement

Shaft design	1 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
45	Z.109-LES225YMF4P							
	260	1 650	5.66	12 300	1.4	438	2KJ3110 - ■ MT33 - ■ ■ C1	
	284	1 510	5.17	12 200	1.5	438	2KJ3110 - ■ MT33 - ■ ■ B1	
	330	1 300	4.45	12 000	1.7	438	2KJ3110 - ■ MT33 - ■ ■ A1	
55	D.189-LES250MD4P							
	26	20 000	56.08	108 900	0.95	1083	2KJ3214 - ■ NM33 - ■ ■ D1	
	33	15 900	44.63	109 000	1.2	1083	2KJ3214 - ■ NM33 - ■ ■ C1	
	40	13 100	36.67	109 000	1.5	1083	2KJ3214 - ■ NM33 - ■ ■ B1	
	50	10 400	29.18	103 800	1.8	1083	2KJ3214 - ■ NM33 - ■ ■ A1	
	Z.189-LES250MD4P							
	60	8 760	24.53	99 600	2.2	1001	2KJ3114 - ■ NM33 - ■ ■ H1	
	66	8 010	22.44	97 400	2.4	1001	2KJ3114 - ■ NM33 - ■ ■ G1	
	74	7 120	19.95	94 600	2.7	1001	2KJ3114 - ■ NM33 - ■ ■ F1	
	87	6 040	16.93	90 700	3.1	1001	2KJ3114 - ■ NM33 - ■ ■ E1	
	D.169-LES250MD4P							
	33	16 100	45.06	69 300	0.87	870	2KJ3213 - ■ NM33 - ■ ■ D1	
	35	14 800	41.43	69 800	0.95	870	2KJ3213 - ■ NM33 - ■ ■ C1	
	40	12 900	36.33	70 000	1.1	870	2KJ3213 - ■ NM33 - ■ ■ B1	
	52	10 100	28.41	69 200	1.4	870	2KJ3213 - ■ NM33 - ■ ■ A1	
	Z.169-LES250MD4P							
	70	7 460	20.90	65 200	1.9	826	2KJ3113 - ■ NM33 - ■ ■ K1	
	78	6 760	18.93	63 900	2.1	826	2KJ3113 - ■ NM33 - ■ ■ J1	
	86	6 080	17.03	62 500	2.3	826	2KJ3113 - ■ NM33 - ■ ■ H1	
	104	5 050	14.15	60 000	2.8	826	2KJ3113 - ■ NM33 - ■ ■ G1	
117	4 490	12.58	58 400	3.1	826	2KJ3113 - ■ NM33 - ■ ■ F1		
147	3 580	10.03	55 300	3.9	826	2KJ3113 - ■ NM33 - ■ ■ E1		
199	2 630	7.37	51 200	3.0	826	2KJ3113 - ■ NM33 - ■ ■ C1		
250	2 100	5.88	48 300	3.8	826	2KJ3113 - ■ NM33 - ■ ■ B1		
314	1 670	4.68	45 400	4.7	826	2KJ3113 - ■ NM33 - ■ ■ A1		
D.149-LES250MD4P								
52	10 000	28.13	35 900	0.8	693	2KJ3212 - ■ NM33 - ■ ■ A1		
Z.149-LES250MD4P								
86	6 120	17.15	34 300	1.3	686	2KJ3112 - ■ NM33 - ■ ■ K1		
93	5 620	15.74	33 900	1.4	686	2KJ3112 - ■ NM33 - ■ ■ J1		
106	4 950	13.87	33 300	1.6	686	2KJ3112 - ■ NM33 - ■ ■ H1		
129	4 060	11.38	32 200	2.0	686	2KJ3112 - ■ NM33 - ■ ■ G1		
147	3 560	9.98	31 400	2.2	686	2KJ3112 - ■ NM33 - ■ ■ F1		
188	2 780	7.80	29 900	2.9	686	2KJ3112 - ■ NM33 - ■ ■ E1		
202	2 590	7.27	29 600	2.1	686	2KJ3112 - ■ NM33 - ■ ■ D1		
247	2 130	5.96	28 300	2.6	686	2KJ3112 - ■ NM33 - ■ ■ C1		
281	1 860	5.23	27 500	2.9	686	2KJ3112 - ■ NM33 - ■ ■ B1		
359	1 460	4.09	25 900	3.7	686	2KJ3112 - ■ NM33 - ■ ■ A1		
Z.129-LES250MD4P								
102	5 150	14.43	14 300	0.96	601	2KJ3111 - ■ NM33 - ■ ■ J1		
112	4 670	13.07	16 800	1.0	601	2KJ3111 - ■ NM33 - ■ ■ H1		
129	4 060	11.38	17 200	1.2	601	2KJ3111 - ■ NM33 - ■ ■ G1		

Article No. supplement

Shaft design

1 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, B, F or H

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SIMOGEAR Geared Motors

Helical geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
55	Z.129-LES250MD4							
	158	3 330	9.33	17 000	1.4	601	2KJ3111 - ■ NM33 - ■ ■ F1	
	196	2 680	7.50	16 000	1.4	601	2KJ3111 - ■ NM33 - ■ ■ D1	
	216	2 420	6.79	15 900	1.5	601	2KJ3111 - ■ NM33 - ■ ■ C1	
	249	2 110	5.91	15 700	1.7	601	2KJ3111 - ■ NM33 - ■ ■ B1	
	303	1 730	4.85	15 300	1.9	601	2KJ3111 - ■ NM33 - ■ ■ A1	

Article No. supplement

Shaft design	1 or 9	→ Page 10/39
Frequency and voltage	2 or 9	→ Page 11/2
Gearbox mounting type	A, B, F or H	→ Page 10/34

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SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex} -	Motor size												Article No.
							63	71	80	90	100	112	132	160	180	200	225	250	
D.19																			
184.86	7.8	100	1 650	26	0.02	50468/273	✓	✓									2KJ3201 - ■■■■■ - ■■ Q1		
163.69	8.9	100	1 650	26	0.03	74481/455	✓	✓									2KJ3201 - ■■■■■ - ■■ P1		
142.23	10	100	1 650	26	0.04	64713/455	✓	✓									2KJ3201 - ■■■■■ - ■■ N1		
129.30	11	100	1 650	26	0.04	11766/91	✓	✓									2KJ3201 - ■■■■■ - ■■ M1		
110.02	13	100	1 650	26	0.06	50061/455	✓	✓									2KJ3201 - ■■■■■ - ■■ L1		
100.02	14	100	1 650	26	0.07	9102/91	✓	✓									2KJ3201 - ■■■■■ - ■■ K1		
87.21	17	100	1 650	26	0.08	1221/14	✓	✓									2KJ3201 - ■■■■■ - ■■ J1		
78.07	19	100	1 650	26	0.11	7104/91	✓	✓									2KJ3201 - ■■■■■ - ■■ H1		
69.32	21	100	1 650	26	0.13	12617/182	✓	✓									2KJ3201 - ■■■■■ - ■■ G1		
63.99	23	100	1 650	26	0.16	75702/1183	✓	✓									2KJ3201 - ■■■■■ - ■■ F1		
55.59	26	100	1 650	26	0.17	35409/637	✓	✓									2KJ3201 - ■■■■■ - ■■ E1		
48.30	30	100	1 650	26	0.18	21978/455	✓	✓									2KJ3201 - ■■■■■ - ■■ D1		
43.61	33	100	1 650	26	0.22	1221/28	✓	✓									2KJ3201 - ■■■■■ - ■■ C1		
41.04	35	100	1 650	26	0.26	4884/119	✓	✓									2KJ3201 - ■■■■■ - ■■ B1		
35.78	41	100	1 650	26	0.29	3256/91	✓	✓									2KJ3201 - ■■■■■ - ■■ A1		
Z.19																			
34.97	41	100	1 650	25	0.02	1364/39	✓	✓									2KJ3101 - ■■■■■ - ■■ W1		
30.97	47	100	1 650	26	0.03	2013/65	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ V1		
26.91	54	100	1 650	26	0.04	1749/65	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ U1		
24.46	59	100	1 650	26	0.05	318/13	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ T1		
20.82	70	100	1 650	26	0.06	1353/65	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ S1		
18.92	77	100	1 790	26	0.08	246/13	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ R1		
16.50	88	99	1 900	26	0.09	33/2	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ Q1		
14.77	98	95	1 870	26	0.12	192/13	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ P1		
13.12	111	91	1 830	26	0.15	341/26	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ N1		
12.11	120	88	1 810	26	0.18	2046/169	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ M1		
10.52	138	82	1 760	27	0.20	957/91	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ L1		
9.14	159	78	1 710	26	0.21	594/65	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ K1		
8.25	176	74	1 670	27	0.27	33/4	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ J1		
7.76	187	73	1 650	27	0.32	132/17	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ H1		
6.77	214	68	1 600	27	0.36	88/13	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ G1		
6.25	232	56	1 460	36	0.19	1705/273	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ F1		
5.43	267	53	1 420	37	0.22	1595/294	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ E1		
4.71	308	49	1 380	36	0.22	33/7	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ D1		
4.26	340	47	1 350	36	0.29	715/168	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ C1		
4.01	362	46	1 330	36	0.32	1430/357	✓	✓	✓								2KJ3101 - ■■■■■ - ■■ B1		
3.49	415	43	1 290	37	0.39	220/63			✓								2KJ3101 - ■■■■■ - ■■ A1		

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex} -	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
D.29																		
217.89	6.7	140	3 710	21	0.02	7626/35	✓	✓									2KJ3202 - ■■■■■■ - ■■ Q1	
192.93	7.5	140	3 710	21	0.03	67527/350	✓	✓									2KJ3202 - ■■■■■■ - ■■ P1	
167.63	8.7	140	3 710	21	0.04	58671/350	✓	✓									2KJ3202 - ■■■■■■ - ■■ N1	
152.39	9.5	140	3 710	21	0.05	58671/385	✓	✓	✓	✓							2KJ3202 - ■■■■■■ - ■■ M1	
129.68	11	140	3 710	21	0.06	45387/350	✓	✓	✓	✓							2KJ3202 - ■■■■■■ - ■■ L1	
117.89	12	140	3 710	21	0.08	45387/385	✓	✓	✓	✓							2KJ3202 - ■■■■■■ - ■■ K1	
102.79	14	140	3 710	21	0.09	14391/140	✓	✓	✓	✓	✓						2KJ3202 - ■■■■■■ - ■■ J1	
92.01	16	140	3 710	21	0.12	35424/385	✓	✓	✓	✓	✓						2KJ3202 - ■■■■■■ - ■■ H1	
81.71	18	140	3 710	21	0.14	11439/140	✓	✓	✓	✓	✓						2KJ3202 - ■■■■■■ - ■■ G1	
75.42	19	140	3 710	21	0.17	34317/455	✓	✓	✓	✓	✓						2KJ3202 - ■■■■■■ - ■■ F1	
65.52	22	140	3 710	21	0.19	32103/490	✓	✓	✓	✓	✓						2KJ3202 - ■■■■■■ - ■■ E1	
56.93	25	140	3 710	21	0.19	9963/175	✓	✓	✓	✓	✓						2KJ3202 - ■■■■■■ - ■■ D1	
51.40	28	140	3 710	21	0.25	14391/280	✓	✓	✓	✓	✓						2KJ3202 - ■■■■■■ - ■■ C1	
48.37	30	140	3 710	21	0.29	28782/595	✓	✓	✓	✓	✓						2KJ3202 - ■■■■■■ - ■■ B1	
42.17	34	140	3 710	21	0.33	1476/35	✓	✓	✓	✓	✓						2KJ3202 - ■■■■■■ - ■■ A1	
Z.29																		
41.40	35	140	3 710	23	0.04	207/5	✓	✓									2KJ3102 - ■■■■■■ - ■■ A2	
36.72	39	140	3 690	21	0.05	918/25	✓	✓	✓	✓							2KJ3102 - ■■■■■■ - ■■ X1	
31.86	46	140	3 350	21	0.06	1593/50	✓	✓	✓	✓							2KJ3102 - ■■■■■■ - ■■ W1	
28.96	50	140	3 120	21	0.07	1593/55	✓	✓	✓	✓							2KJ3102 - ■■■■■■ - ■■ V1	
24.84	58	140	2 780	21	0.09	621/25	✓	✓	✓	✓							2KJ3102 - ■■■■■■ - ■■ U1	
22.58	64	140	2 580	21	0.11	1242/55	✓	✓	✓	✓							2KJ3102 - ■■■■■■ - ■■ T1	
19.80	73	140	2 310	21	0.13	99/5	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ S1	
17.67	82	140	2 090	22	0.15	972/55	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ R1	
15.75	92	140	1 870	22	0.18	63/4	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ Q1	
14.54	100	120	2 250	22	0.23	189/13	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ P1	
12.73	114	140	1 480	22	0.26	891/70	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ N1	
11.16	130	140	1 260	22	0.27	279/25	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ M1	
10.12	143	140	1 100	22	0.34	81/8	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ L1	
9.53	152	140	1 010	22	0.40	162/17	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ K1	
8.40	173	138	870	22	0.45	42/5	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ J1	
7.29	199	130	870	22	0.60	729/100	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ H1	
6.92	210	75	1 910	30	0.29	90/13	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ G1	
6.06	239	100	955	31	0.34	297/49	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ F1	
5.31	273	91	1 060	32	0.37	186/35	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ E1	
4.82	301	86	1 090	32	0.46	135/28	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ D1	
4.54	319	84	1 070	32	0.54	540/119	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ C1	
4.00	362	76	1 170	31	0.63	4/1	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ B1	
3.47	418	70	1 240	32	0.84	243/70	✓	✓	✓	✓	✓						2KJ3102 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex} -	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
D.39																		
235.29	6.2	200	4 370	10	0.03	179998/765	✓	✓									2KJ3203 - ■■■■■■ - ■■ R1	
208.69	6.9	200	4 370	10	0.05	15652/75	✓	✓									2KJ3203 - ■■■■■■ - ■■ Q1	
181.07	8	200	4 370	10	0.05	230867/1275	✓	✓									2KJ3203 - ■■■■■■ - ■■ P1	
164.61	8.8	200	4 370	10	0.07	461734/2805	✓	✓	✓	✓							2KJ3203 - ■■■■■■ - ■■ N1	
141.17	10	200	4 370	10	0.08	179998/1275	✓	✓	✓	✓							2KJ3203 - ■■■■■■ - ■■ M1	
128.34	11	200	4 370	10	0.10	359996/2805	✓	✓	✓	✓							2KJ3203 - ■■■■■■ - ■■ L1	
112.53	13	200	4 370	10	0.12	86086/765	✓	✓	✓	✓							2KJ3203 - ■■■■■■ - ■■ K1	
100.44	14	200	4 370	10	0.15	93912/935	✓	✓	✓	✓	✓	✓					2KJ3203 - ■■■■■■ - ■■ J1	
89.51	16	200	4 370	11	0.17	27391/306	✓	✓	✓	✓	✓	✓					2KJ3203 - ■■■■■■ - ■■ H1	
82.63	18	200	4 370	11	0.21	4214/51	✓	✓	✓	✓	✓	✓					2KJ3203 - ■■■■■■ - ■■ G1	
72.34	20	200	4 370	11	0.25	6149/85	✓	✓	✓	✓	✓	✓					2KJ3203 - ■■■■■■ - ■■ F1	
63.43	23	200	4 370	11	0.23	242606/3825	✓	✓	✓	✓	✓	✓					2KJ3203 - ■■■■■■ - ■■ E1	
57.54	25	200	4 370	11	0.33	3913/68	✓	✓	✓	✓	✓	✓					2KJ3203 - ■■■■■■ - ■■ D1	
54.16	27	200	4 370	11	0.39	15652/289	✓	✓	✓	✓	✓	✓					2KJ3203 - ■■■■■■ - ■■ C1	
47.74	30	200	4 370	11	0.43	109564/2295	✓	✓	✓	✓	✓	✓					2KJ3203 - ■■■■■■ - ■■ B1	
41.43	35	200	3 940	11	0.58	35217/850	✓	✓	✓	✓	✓	✓					2KJ3203 - ■■■■■■ - ■■ A1	
Z.39																		
55.95	26	200	4 370	9	0.06	7553/135	✓	✓									2KJ3103 - ■■■■■■ - ■■ A2	
49.75	29	200	4 370	10	0.07	3731/75	✓	✓	✓	✓							2KJ3103 - ■■■■■■ - ■■ X1	
43.68	33	200	4 100	10	0.08	1092/25	✓	✓	✓	✓							2KJ3103 - ■■■■■■ - ■■ W1	
39.71	37	200	3 810	10	0.10	2184/55	✓	✓	✓	✓							2KJ3103 - ■■■■■■ - ■■ V1	
33.97	43	200	3 360	10	0.12	2548/75	✓	✓	✓	✓							2KJ3103 - ■■■■■■ - ■■ U1	
30.88	47	200	3 100	10	0.14	5096/165	✓	✓	✓	✓							2KJ3103 - ■■■■■■ - ■■ T1	
27.30	53	200	2 780	10	0.17	273/10	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ S1	
24.82	58	200	2 530	10	0.22	273/11	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ R1	
21.74	67	200	2 210	10	0.25	3913/180	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ Q1	
20.07	72	200	2 020	10	0.31	301/15	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ P1	
17.77	82	200	1 740	10	0.36	533/30	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ N1	
14.79	98	193	1 510	11	0.47	1183/80	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ M1	
13.92	104	189	1 490	11	0.55	1183/85	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ L1	
12.47	116	180	1 490	11	0.60	3367/270	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ K1	
10.62	137	169	1 450	11	0.78	637/60	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ J1	
9.10	159	158	1 440	11	1.02	91/10			✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ H1	
7.84	185	148	1 430	17	1.30	2821/360			✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ G1	
6.46	224	146	235	17	0.57	2379/368	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ F1	
6.08	238	147	110	17	0.66	2379/391	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ E1	
5.45	266	140	160	17	0.74	2257/414	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ D1	
4.64	312	130	475	18	0.97	427/92	✓	✓	✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ C1	
3.98	364	121	805	18	1.28	183/46			✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ B1	
3.43	423	112	1 060	19	1.65	1891/552			✓	✓	✓	✓					2KJ3103 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex} -	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
D.49																		
280.89	5.2	320	5 780	9	0.06	60673/216	✓	✓									2KJ3204 - ■■■■■■ - ■■ S1	
249.76	5.8	320	5 780	9	0.07	29971/120	✓	✓									2KJ3204 - ■■■■■■ - ■■ R1	
219.30	6.6	320	5 780	9	0.08	2193/10	✓	✓									2KJ3204 - ■■■■■■ - ■■ Q1	
199.36	7.3	320	5 780	9	0.10	2193/11	✓	✓	✓	✓							2KJ3204 - ■■■■■■ - ■■ P1	
170.57	8.5	320	5 780	9	0.12	5117/30	✓	✓	✓	✓							2KJ3204 - ■■■■■■ - ■■ N1	
155.06	9.4	320	5 780	9	0.14	5117/33	✓	✓	✓	✓							2KJ3204 - ■■■■■■ - ■■ M1	
137.06	11	320	5 780	9	0.17	2193/16	✓	✓	✓	✓	✓	✓					2KJ3204 - ■■■■■■ - ■■ L1	
124.60	12	320	5 780	9	0.22	10965/88	✓	✓	✓	✓	✓	✓					2KJ3204 - ■■■■■■ - ■■ K1	
109.14	13	320	5 780	9	0.25	31433/288	✓	✓	✓	✓	✓	✓					2KJ3204 - ■■■■■■ - ■■ J1	
100.75	14	320	5 780	9	0.31	31433/312	✓	✓	✓	✓	✓	✓					2KJ3204 - ■■■■■■ - ■■ H1	
89.20	16	320	5 780	9	0.37	29971/336	✓	✓	✓	✓	✓	✓	✓				2KJ3204 - ■■■■■■ - ■■ G1	
74.24	20	320	5 780	9	0.50	9503/128	✓	✓	✓	✓	✓	✓	✓				2KJ3204 - ■■■■■■ - ■■ F1	
69.88	21	320	5 780	9	0.58	559/8	✓	✓	✓	✓	✓	✓	✓				2KJ3204 - ■■■■■■ - ■■ E1	
62.61	23	320	5 780	9	0.65	27047/432	✓	✓	✓	✓	✓	✓	✓				2KJ3204 - ■■■■■■ - ■■ D1	
53.30	27	320	5 780	9	0.85	5117/96	✓	✓	✓	✓	✓	✓	✓				2KJ3204 - ■■■■■■ - ■■ C1	
45.69	32	320	5 780	9	1.12	731/16			✓	✓	✓	✓	✓				2KJ3204 - ■■■■■■ - ■■ B1	
39.34	37	320	5 570	9	1.43	22661/576			✓	✓	✓	✓	✓				2KJ3204 - ■■■■■■ - ■■ A1	
Z.49																		
52.14	28	320	5 900	8	0.17	4171/80	✓	✓	✓	✓							2KJ3104 - ■■■■■■ - ■■ B2	
47.40	31	320	5 780	8	0.21	4171/88	✓	✓	✓	✓							2KJ3104 - ■■■■■■ - ■■ A2	
40.31	36	320	5 680	8	0.25	645/16	✓	✓	✓	✓							2KJ3104 - ■■■■■■ - ■■ X1	
36.65	40	320	5 250	8	0.31	3225/88	✓	✓	✓	✓							2KJ3104 - ■■■■■■ - ■■ W1	
32.70	44	320	5 540	9	0.36	3139/96	✓	✓	✓	✓	✓	✓					2KJ3104 - ■■■■■■ - ■■ V1	
29.32	49	320	5 300	9	0.43	645/22	✓	✓	✓	✓	✓	✓					2KJ3104 - ■■■■■■ - ■■ U1	
26.43	55	320	5 070	9	0.50	2537/96	✓	✓	✓	✓	✓	✓					2KJ3104 - ■■■■■■ - ■■ T1	
24.39	59	320	4 910	9	0.59	2537/104	✓	✓	✓	✓	✓	✓					2KJ3104 - ■■■■■■ - ■■ S1	
22.27	65	320	4 720	9	0.71	1247/56	✓	✓	✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ R1	
18.48	78	320	4 360	9	0.90	2365/128	✓	✓	✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ Q1	
17.39	83	320	4 250	9	1.03	2365/136	✓	✓	✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ P1	
16.42	88	320	4 140	9	1.17	2365/144	✓	✓	✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ N1	
13.98	104	320	3 860	9	1.44	559/40	✓	✓	✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ M1	
11.97	121	320	3 600	9	1.76	2107/176			✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ L1	
10.53	138	320	3 400	9	2.10	2021/192			✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ K1	
8.88	163	320	3 140	10	2.70	817/92			✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ J1	
7.74	187	320	3 100	10	3.60	387/50			✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ H1	
7.64	190	295	3 000	14	1.18	649/85	✓	✓	✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ G1	
7.21	201	290	2 990	14	1.34	649/90	✓	✓	✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ F1	
6.14	236	265	2 940	14	1.67	767/125	✓	✓	✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ E1	
5.26	276	245	2 880	15	2.10	2891/550			✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ D1	
4.62	314	225	2 820	15	2.60	2773/600			✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ C1	
3.90	372	205	2 740	16	3.30	2242/575			✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ B1	
3.40	426	191	2 200	17	4.40	2124/625			✓	✓	✓	✓	✓				2KJ3104 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex} -	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
D.59																		
307.02	4.7	450	7 660	8	0.06	66317/216	✓	✓									2KJ3205 - ■■■■■■ - ■■ S1	
272.99	5.3	450	7 660	8	0.07	32759/120	✓	✓	✓	✓							2KJ3205 - ■■■■■■ - ■■ R1	
239.70	6	450	7 660	8	0.08	2397/10	✓	✓	✓	✓							2KJ3205 - ■■■■■■ - ■■ Q1	
217.91	6.7	450	7 660	8	0.10	2397/11	✓	✓	✓	✓							2KJ3205 - ■■■■■■ - ■■ P1	
186.43	7.8	450	7 660	8	0.12	5593/30	✓	✓	✓	✓							2KJ3205 - ■■■■■■ - ■■ N1	
169.48	8.6	450	7 660	8	0.14	5593/33	✓	✓	✓	✓							2KJ3205 - ■■■■■■ - ■■ M1	
149.81	9.7	450	7 660	8	0.17	2397/16	✓	✓	✓	✓	✓	✓					2KJ3205 - ■■■■■■ - ■■ L1	
136.19	11	450	7 660	8	0.22	11985/88	✓	✓	✓	✓	✓	✓					2KJ3205 - ■■■■■■ - ■■ K1	
119.30	12	450	7 660	8	0.26	34357/288	✓	✓	✓	✓	✓	✓					2KJ3205 - ■■■■■■ - ■■ J1	
110.12	13	450	7 660	8	0.31	34357/312	✓	✓	✓	✓	✓	✓					2KJ3205 - ■■■■■■ - ■■ H1	
97.50	15	450	7 660	8	0.37	32759/336	✓	✓	✓	✓	✓	✓	✓				2KJ3205 - ■■■■■■ - ■■ G1	
81.15	18	450	7 660	8	0.50	10387/128	✓	✓	✓	✓	✓	✓	✓				2KJ3205 - ■■■■■■ - ■■ F1	
76.38	19	450	7 660	8	0.59	611/8	✓	✓	✓	✓	✓	✓	✓				2KJ3205 - ■■■■■■ - ■■ E1	
68.43	21	450	7 660	8	0.65	29563/432	✓	✓	✓	✓	✓	✓	✓				2KJ3205 - ■■■■■■ - ■■ D1	
58.26	25	450	7 660	8	0.85	5593/96	✓	✓	✓	✓	✓	✓	✓				2KJ3205 - ■■■■■■ - ■■ C1	
49.94	29	450	7 660	8	1.12	799/16			✓	✓	✓	✓	✓				2KJ3205 - ■■■■■■ - ■■ B1	
43.00	34	450	7 250	8	1.44	24769/576			✓	✓	✓	✓	✓				2KJ3205 - ■■■■■■ - ■■ A1	
Z.59																		
56.99	25	450	7 660	8	0.18	4559/80	✓	✓	✓	✓							2KJ3105 - ■■■■■■ - ■■ A2	
51.81	28	450	7 660	8	0.21	4559/88	✓	✓	✓	✓							2KJ3105 - ■■■■■■ - ■■ X1	
44.06	33	450	7 330	8	0.26	705/16	✓	✓	✓	✓							2KJ3105 - ■■■■■■ - ■■ W1	
40.06	36	450	7 040	8	0.32	3525/88	✓	✓	✓	✓							2KJ3105 - ■■■■■■ - ■■ V1	
35.74	41	450	6 710	8	0.37	3431/96	✓	✓	✓	✓	✓	✓					2KJ3105 - ■■■■■■ - ■■ U1	
32.05	45	450	6 210	8	0.44	705/22	✓	✓	✓	✓	✓	✓					2KJ3105 - ■■■■■■ - ■■ T1	
28.89	50	450	5 720	8	0.52	2773/96	✓	✓	✓	✓	✓	✓					2KJ3105 - ■■■■■■ - ■■ S1	
26.66	54	450	5 360	8	0.62	2773/104	✓	✓	✓	✓	✓	✓					2KJ3105 - ■■■■■■ - ■■ R1	
24.34	60	450	4 960	8	0.73	1363/56	✓	✓	✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ Q1	
20.20	72	450	5 240	8	0.94	2585/128	✓	✓	✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ P1	
19.01	76	450	5 100	8	1.08	2585/136	✓	✓	✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ N1	
17.95	81	450	4 970	8	1.23	2585/144	✓	✓	✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ M1	
15.27	95	450	4 620	8	1.51	611/40	✓	✓	✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ L1	
13.09	111	450	4 300	8	1.85	2303/176			✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ K1	
11.51	126	450	4 040	9	2.30	2209/192			✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ J1	
9.71	149	450	3 720	9	2.90	893/92			✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ H1	
8.46	171	450	3 600	9	3.90	423/50			✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ G1	
8.07	180	410	3 510	13	1.45	121/15	✓	✓	✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ F1	
6.86	211	410	3 480	13	1.81	858/125	✓	✓	✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ E1	
5.88	247	410	3 440	13	2.30	147/25			✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ D1	
5.17	280	410	2 190	14	2.80	517/100			✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ C1	
4.36	333	405	2 630	14	3.60	2508/575			✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ B1	
3.80	382	405	2 900	16	4.90	2376/625			✓	✓	✓	✓	✓				2KJ3105 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex} -	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
D.69																	
328.49	4.4	600	11 000	7	0.06	62084/189	✓	✓									2KJ3206 - ■■■■■ - ■■ S1
292.08	5.0	600	11 000	7	0.07	30668/105	✓	✓	✓	✓							2KJ3206 - ■■■■■ - ■■ R1
256.46	5.7	600	11 000	7	0.08	8976/35	✓	✓	✓	✓							2KJ3206 - ■■■■■ - ■■ Q1
233.14	6.2	600	11 000	7	0.10	1632/7	✓	✓	✓	✓							2KJ3206 - ■■■■■ - ■■ P1
199.47	7.3	600	11 000	7	0.12	2992/15	✓	✓	✓	✓							2KJ3206 - ■■■■■ - ■■ N1
181.33	8	600	11 000	7	0.14	544/3	✓	✓	✓	✓							2KJ3206 - ■■■■■ - ■■ M1
160.29	9	600	11 000	7	0.17	1122/7	✓	✓	✓	✓	✓						2KJ3206 - ■■■■■ - ■■ L1
145.71	10	600	11 000	7	0.22	1020/7	✓	✓	✓	✓	✓						2KJ3206 - ■■■■■ - ■■ K1
127.63	11	600	11 000	7	0.26	8041/63	✓	✓	✓	✓	✓						2KJ3206 - ■■■■■ - ■■ J1
117.82	12	600	11 000	7	0.31	32164/273	✓	✓	✓	✓	✓						2KJ3206 - ■■■■■ - ■■ H1
104.31	14	600	11 000	7	0.37	15334/147	✓	✓	✓	✓	✓	✓					2KJ3206 - ■■■■■ - ■■ G1
86.82	17	600	11 000	7	0.50	2431/28	✓	✓	✓	✓	✓	✓					2KJ3206 - ■■■■■ - ■■ F1
81.71	18	600	11 000	7	0.59	572/7	✓	✓	✓	✓	✓	✓					2KJ3206 - ■■■■■ - ■■ E1
73.22	20	600	11 000	7	0.66	13838/189	✓	✓	✓	✓	✓	✓					2KJ3206 - ■■■■■ - ■■ D1
62.33	23	600	11 000	8	0.86	187/3			✓	✓	✓	✓	✓				2KJ3206 - ■■■■■ - ■■ C1
53.43	27	600	11 000	8	1.14	374/7			✓	✓	✓	✓	✓				2KJ3206 - ■■■■■ - ■■ B1
46.01	32	600	11 000	8	1.46	5797/126			✓	✓	✓	✓	✓				2KJ3206 - ■■■■■ - ■■ A1
Z.69																	
60.97	24	600	11 000	8	0.18	2134/35	✓	✓	✓	✓							2KJ3106 - ■■■■■ - ■■ A2
55.43	26	600	11 000	8	0.22	388/7	✓	✓	✓	✓							2KJ3106 - ■■■■■ - ■■ X1
47.14	31	600	11 000	8	0.28	330/7	✓	✓	✓	✓							2KJ3106 - ■■■■■ - ■■ W1
42.86	34	600	11 000	8	0.34	300/7	✓	✓	✓	✓							2KJ3106 - ■■■■■ - ■■ V1
38.24	38	600	11 000	8	0.39	803/21	✓	✓	✓	✓	✓						2KJ3106 - ■■■■■ - ■■ U1
34.29	42	600	11 000	8	0.47	240/7	✓	✓	✓	✓	✓						2KJ3106 - ■■■■■ - ■■ T1
30.90	47	600	10 500	8	0.56	649/21	✓	✓	✓	✓	✓						2KJ3106 - ■■■■■ - ■■ S1
28.53	51	600	9 910	8	0.66	2596/91	✓	✓	✓	✓	✓						2KJ3106 - ■■■■■ - ■■ R1
26.04	56	600	9 250	8	0.79	1276/49	✓	✓	✓	✓	✓	✓					2KJ3106 - ■■■■■ - ■■ Q1
21.61	67	600	7 960	8	1.01	605/28	✓	✓	✓	✓	✓	✓					2KJ3106 - ■■■■■ - ■■ P1
20.34	71	600	7 550	8	1.16	2420/119	✓	✓	✓	✓	✓	✓					2KJ3106 - ■■■■■ - ■■ N1
19.21	75	600	7 180	8	1.32	1210/63	✓	✓	✓	✓	✓	✓					2KJ3106 - ■■■■■ - ■■ M1
16.34	89	600	9 880	8	1.64	572/35	✓	✓	✓	✓	✓	✓					2KJ3106 - ■■■■■ - ■■ L1
14.00	104	600	9 290	9	2.00	14/1			✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ K1
12.31	118	600	8 810	9	2.50	517/42			✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ J1
10.39	140	600	8 220	9	3.20	1672/161			✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ H1
9.05	160	591	7 930	10	4.30	1584/175			✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ G1
8.50	171	446	8 020	12	1.67	1760/207	✓	✓	✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ F1
7.23	201	447	7 550	13	2.10	832/115	✓	✓	✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ E1
6.20	234	445	7 300	13	2.70	1568/253			✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ D1
5.45	266	429	7 100	13	3.40	376/69			✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ C1
4.60	315	446	6 820	14	4.40	2432/529			✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ B1
4.01	362	445	5 420	15	5.80	2304/575			✓	✓	✓	✓	✓				2KJ3106 - ■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex} -	Motor size												Article No.
							63	71	80	90	100	112	132	160	180	200	225	250	
D.79																			
330.23	4.4	840	13 400	8	0.17	369861/1120	✓	✓	✓								2KJ3207 - ■■■■■ - ■■ S1		
300.21	4.8	840	13 400	8	0.20	369861/1232	✓	✓	✓								2KJ3207 - ■■■■■ - ■■ R1		
255.33	5.7	840	13 400	8	0.25	57195/224	✓	✓	✓								2KJ3207 - ■■■■■ - ■■ Q1		
232.12	6.2	840	13 400	8	0.30	285975/1232	✓	✓	✓								2KJ3207 - ■■■■■ - ■■ P1		
207.10	7	840	13 400	8	0.35	92783/448	✓	✓	✓	✓	✓						2KJ3207 - ■■■■■ - ■■ N1		
185.70	7.8	840	13 400	8	0.42	57195/308	✓	✓	✓	✓	✓						2KJ3207 - ■■■■■ - ■■ M1		
167.39	8.7	840	13 400	8	0.49	74989/448	✓	✓	✓	✓	✓						2KJ3207 - ■■■■■ - ■■ L1		
154.51	9.4	840	13 400	8	0.58	224967/1456	✓	✓	✓	✓	✓						2KJ3207 - ■■■■■ - ■■ K1		
141.04	10	840	13 400	8	0.69	110577/784	✓	✓	✓	✓	✓	✓	✓				2KJ3207 - ■■■■■ - ■■ J1		
117.03	12	840	13 400	8	0.87	209715/1792	✓	✓	✓	✓	✓	✓	✓				2KJ3207 - ■■■■■ - ■■ H1		
110.14	13	840	13 400	8	1.00	209715/1904	✓	✓	✓	✓	✓	✓	✓				2KJ3207 - ■■■■■ - ■■ G1		
104.03	14	840	13 400	8	1.14	69905/672	✓	✓	✓	✓	✓	✓	✓				2KJ3207 - ■■■■■ - ■■ F1		
88.52	16	840	13 400	8	1.39	49569/560	✓	✓	✓	✓	✓	✓	✓				2KJ3207 - ■■■■■ - ■■ E1		
75.83	19	840	13 400	8	1.69	26691/352		✓	✓	✓	✓	✓	✓				2KJ3207 - ■■■■■ - ■■ D1		
66.67	22	840	13 400	8	2.10	59737/896		✓	✓	✓	✓	✓	✓				2KJ3207 - ■■■■■ - ■■ C1		
56.25	26	840	13 400	8	2.60	72447/1288		✓	✓	✓	✓	✓	✓				2KJ3207 - ■■■■■ - ■■ B1		
49.02	30	840	12 600	8	3.50	34317/700		✓	✓	✓	✓	✓	✓				2KJ3207 - ■■■■■ - ■■ A1		
Z.79																			
54.47	27	840	13 400	8	0.43	3813/70	✓	✓	✓								2KJ3107 - ■■■■■ - ■■ A2		
49.52	29	840	12 700	8	0.53	3813/77	✓	✓	✓								2KJ3107 - ■■■■■ - ■■ X1		
44.42	33	840	11 800	8	0.73	533/12	✓	✓	✓	✓	✓						2KJ3107 - ■■■■■ - ■■ W1		
39.94	36	840	10 900	8	0.83	3075/77	✓	✓	✓	✓	✓						2KJ3107 - ■■■■■ - ■■ V1		
36.12	40	840	10 200	8	0.92	1517/42	✓	✓	✓	✓	✓						2KJ3107 - ■■■■■ - ■■ U1		
33.34	43	840	13 400	8	1.08	3034/91	✓	✓	✓	✓	✓						2KJ3107 - ■■■■■ - ■■ T1		
30.54	47	840	13 400	8	1.41	2993/98	✓	✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ S1		
25.62	57	840	13 400	8	1.52	205/8	✓	✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ R1		
24.12	60	840	13 100	8	1.73	410/17	✓	✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ Q1		
22.13	66	840	12 600	8	1.90	1394/63	✓	✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ P1		
19.33	75	840	11 900	8	2.7	1353/70	✓	✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ N1		
17.31	84	840	11 400	8	3.3	2665/154		✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ M1		
15.13	96	840	10 800	8	3.9	1271/84		✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ L1		
12.99	112	840	10 100	8	4.3	2091/161		✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ K1		
11.48	126	840	9 670	8	5.5	287/25		✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ J1		
9.76	149	815	9 100	9	7.0	205/21				✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ H1		
8.37	173	790	8 600	9	9.3	410/49				✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ G1		
8.19	177	715	8 490	11	4.0	3965/484		✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ F1		
7.16	203	730	8 030	12	4.8	1891/264		✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ E1		
6.15	236	715	7 860	12	5.4	3111/506		✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ D1		
5.43	267	685	7 700	13	6.9	2989/550		✓	✓	✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ C1		
4.62	314	775	7 470	13	9.1	305/66				✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ B1		
3.96	366	775	3 710	14	12.0	305/77				✓	✓	✓	✓				2KJ3107 - ■■■■■ - ■■ A1		

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
D.89																		
311.60	4.7	1 680	18 500	7	0.41	132432/425			✓	✓							2KJ3208 - ■■■■■■ - ■■ S1	
283.28	5.1	1 680	18 500	7	0.50	264864/935			✓	✓							2KJ3208 - ■■■■■■ - ■■ R1	
254.09	5.7	1 680	18 500	7	0.70	64792/255			✓	✓	✓	✓					2KJ3208 - ■■■■■■ - ■■ Q1	
228.45	6.3	1 680	18 500	7	0.79	42720/187			✓	✓	✓	✓					2KJ3208 - ■■■■■■ - ■■ P1	
206.62	7	1 680	18 500	7	0.87	52688/255			✓	✓	✓	✓					2KJ3208 - ■■■■■■ - ■■ N1	
190.73	7.6	1 680	18 500	7	1.03	210752/1105			✓	✓	✓	✓					2KJ3208 - ■■■■■■ - ■■ M1	
174.71	8.3	1 680	18 500	7	1.35	103952/595			✓	✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ L1	
146.59	9.9	1 680	18 500	7	1.43	2492/17			✓	✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ K1	
137.97	11	1 680	18 500	7	1.63	39872/289			✓	✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ J1	
126.58	11	1 680	18 500	7	1.78	5696/45			✓	✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ H1	
110.57	13	1 680	18 500	7	2.5	46992/425			✓	✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ G1	
98.99	15	1 680	18 500	7	3.1	18512/187			✓	✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ F1	
86.56	17	1 680	18 500	7	3.7	22072/255			✓	✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ E1	
74.30	20	1 680	18 500	7	4.0	8544/115			✓	✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ D1	
65.67	22	1 680	18 500	7	5.0	139552/2125			✓	✓	✓	✓	✓	✓	✓		2KJ3208 - ■■■■■■ - ■■ C1	
55.84	26	1 680	18 500	7	6.4	2848/51				✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ B1	
47.87	30	1 680	18 500	7	8.5	5696/119				✓	✓	✓	✓	✓			2KJ3208 - ■■■■■■ - ■■ A1	
Z.89																		
57.36	25	1 680	18 500	6	1.34	2581/45			✓	✓	✓	✓					2KJ3108 - ■■■■■■ - ■■ A2	
51.78	28	1 680	18 500	6	1.46	2848/55			✓	✓	✓	✓					2KJ3108 - ■■■■■■ - ■■ X1	
46.97	31	1 680	18 500	6	1.71	1691/36			✓	✓	✓	✓					2KJ3108 - ■■■■■■ - ■■ W1	
43.36	33	1 680	18 500	6	2.0	1691/39			✓	✓	✓	✓					2KJ3108 - ■■■■■■ - ■■ V1	
39.41	37	1 680	18 500	6	2.3	2759/70			✓	✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ U1	
33.38	43	1 680	18 500	6	2.8	267/8			✓	✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ T1	
31.41	46	1 680	18 500	6	2.8	534/17			✓	✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ S1	
29.01	50	1 680	18 500	6	4.3	3916/135			✓	✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ R1	
25.81	56	1 680	18 500	6	5.3	2581/100			✓	✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ Q1	
22.92	63	1 680	17 500	6	6.4	1513/66			✓	✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ P1	
20.52	71	1 680	16 100	6	6.4	7387/360			✓	✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ N1	
17.54	83	1 680	14 200	7	7.5	6052/345			✓	✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ M1	
15.66	93	1 680	12 900	7	9.5	1958/125			✓	✓	✓	✓	✓	✓	✓		2KJ3108 - ■■■■■■ - ■■ L1	
13.84	105	1 680	11 600	7	11	623/45				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ K1	
12.15	119	1 630	10 800	7	15	3827/315				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ J1	
10.58	137	1 590	10 600	7	19	3649/345				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ H1	
9.04	160	1 560	11 900	7	24	2848/315				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ G1	
7.74	187	1 530	12 700	7	30	178/23				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ F1	
6.89	210	1 050	10 100	11	12	62/9				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ E1	
6.05	240	1 060	10 900	11	17	2666/441				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ D1	
5.26	276	1 060	11 600	11	21	2542/483				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ C1	
4.50	322	1 060	11 500	12	28	1984/441				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ B1	
3.85	377	1 060	11 100	12	35	620/161				✓	✓	✓	✓	✓			2KJ3108 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex} -	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
D.109																		
348.88	4.2	3 100	20 200	-	1.27	263755/756				✓	✓	✓					2KJ3210 - ■■■■■ - ■■ T1	
314.98	4.6	3 100	20 200	-	1.36	72760/231				✓	✓	✓					2KJ3210 - ■■■■■ - ■■ S1	
285.72	5.1	3 100	20 200	-	1.60	864025/3024				✓	✓	✓					2KJ3210 - ■■■■■ - ■■ R1	
263.74	5.5	3 100	20 200	-	1.88	864025/3276				✓	✓	✓					2KJ3210 - ■■■■■ - ■■ Q1	
239.75	6	3 100	20 200	-	2.1	281945/1176				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ P1	
203.01	7.1	3 100	20 200	-	2.6	45475/224				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ N1	
191.07	7.6	3 100	20 200	-	2.6	2675/14				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ M1	
176.45	8.2	3 100	20 200	-	4.0	100045/567				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ L1	
157.00	9.2	3 100	20 200	-	5.0	52751/336				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ K1	
139.44	10	3 100	20 200	-	5.9	773075/5544				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ J1	
124.82	12	3 100	20 200	-	5.8	754885/6048				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ H1	
106.70	14	3 100	20 200	-	6.7	154615/1449				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ G1	
95.28	15	3 100	20 200	-	8.5	20009/210				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ F1	
84.21	17	3 100	20 200	-	9.6	9095/108				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ E1	
73.90	20	3 100	20 200	-	13	391085/5292				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ D1	
64.34	23	3 100	20 200	-	16	372895/5796				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ C1	
55.00	26	3 090	20 200	-	20	72760/1323				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ B1	
47.08	31	2 930	20 200	-	25	45475/966				✓	✓	✓	✓	✓			2KJ3210 - ■■■■■ - ■■ A1	
Z.109																		
51.17	28	3 100	20 200	-	4.7	5015/98				✓	✓	✓	✓	✓			2KJ3110 - ■■■■■ - ■■ X1	
43.64	33	3 100	20 200	-	6.0	9775/224				✓	✓	✓	✓	✓			2KJ3110 - ■■■■■ - ■■ W1	
41.07	35	3 100	20 200	-	6.8	575/14				✓	✓	✓	✓	✓			2KJ3110 - ■■■■■ - ■■ V1	
38.12	38	3 100	20 200	-	7.4	9605/252				✓	✓	✓	✓	✓			2KJ3110 - ■■■■■ - ■■ U1	
33.70	43	3 100	20 200	-	9.0	1887/56				✓	✓	✓	✓	✓			2KJ3110 - ■■■■■ - ■■ T1	
30.08	48	3 100	20 000	-	11	9265/308				✓	✓	✓	✓	✓			2KJ3110 - ■■■■■ - ■■ S1	
27.07	54	3 040	19 300	-	13	9095/336				✓	✓	✓	✓	✓			2KJ3110 - ■■■■■ - ■■ R1	
23.49	62	2 920	18 500	-	15	7565/322				✓	✓	✓	✓	✓			2KJ3110 - ■■■■■ - ■■ Q1	
21.13	69	2 830	17 900	-	18	1479/70				✓	✓	✓	✓	✓	✓		2KJ3110 - ■■■■■ - ■■ P1	
18.47	79	2 720	17 200	-	21	6205/336				✓	✓	✓	✓	✓	✓		2KJ3110 - ■■■■■ - ■■ N1	
16.48	88	2 630	16 600	-	25	1615/98				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ M1	
14.52	100	2 570	15 900	-	30	4675/322				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ L1	
12.72	114	2 510	15 200	-	37	1870/147				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ K1	
11.09	131	2 460	14 500	-	44	255/23				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ J1	
10.12	143	2 430	14 000	-	51	425/42				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ H1	
8.71	166	2 380	13 200	-	64	2805/322					✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ G1	
8.41	172	2 290	12 800	-	29	589/70				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ F1	
7.41	196	2 280	12 300	-	34	341/46				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ E1	
6.50	223	2 280	12 300	-	42	682/105				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ D1	
5.66	256	2 290	12 300	-	51	651/115				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ C1	
5.17	280	2 280	12 200	-	60	31/6				✓	✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ B1	
4.45	326	2 150	12 000	-	75	1023/230					✓	✓	✓	✓	✓	✓	2KJ3110 - ■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
D.129																	
373.00	3.9	5 000	27 000	-	3.3	523481/1404			✓	✓	✓						2KJ3211 - ■■■■■■ - ■■ S1
344.17	4.2	5 000	27 000	-	3.9	523481/1521			✓	✓	✓						2KJ3211 - ■■■■■■ - ■■ R1
316.90	4.6	5 000	27 000	-	4.5	259541/819			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ Q1
270.24	5.4	5 000	27 000	-	5.6	505885/1872			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ P1
254.34	5.7	5 000	27 000	-	6.4	505885/1989			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ N1
236.03	6.1	5 000	27 000	-	6.9	497087/2106			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ M1
208.67	6.9	5 000	27 000	-	8.4	162763/780			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ L1
186.28	7.8	5 000	27 000	-	9.9	479491/2574			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ K1
167.63	8.7	5 000	27 000	-	12	470693/2808			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ J1
145.49	10	5 000	27 000	-	14	391511/2691			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ H1
130.84	11	5 000	27 000	-	16	127571/975			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ G1
114.36	13	5 000	27 000	-	19	321127/2808			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ F1
102.05	14	5 000	27 000	-	23	83581/819			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ E1
89.91	16	5 000	27 000	-	27	241945/2691			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ D1
78.78	18	5 000	27 000	-	31	193556/2457			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ C1
68.66	21	5 000	27 000	-	37	61586/897			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ B1
62.66	23	5 000	27 000	-	44	21995/351			✓	✓	✓	✓	✓				2KJ3211 - ■■■■■■ - ■■ A1
Z.129																	
62.48	23	5 000	27 000	-	7.5	11371/182			✓	✓	✓	✓	✓				2KJ3111 - ■■■■■■ - ■■ X1
53.47	27	5 000	27 000	-	9.5	5561/104			✓	✓	✓	✓	✓				2KJ3111 - ■■■■■■ - ■■ W1
50.33	29	5 000	27 000	-	11	11122/221			✓	✓	✓	✓	✓				2KJ3111 - ■■■■■■ - ■■ V1
47.18	31	5 000	27 000	-	12	11039/234			✓	✓	✓	✓	✓				2KJ3111 - ■■■■■■ - ■■ U1
41.82	35	5 000	27 000	-	14	10873/260			✓	✓	✓	✓	✓				2KJ3111 - ■■■■■■ - ■■ T1
37.15	39	5 000	26 000	-	17	5312/143			✓	✓	✓	✓	✓				2KJ3111 - ■■■■■■ - ■■ S1
33.52	43	5 000	25 000	-	20	1743/52			✓	✓	✓	✓	✓				2KJ3111 - ■■■■■■ - ■■ R1
29.70	49	5 000	23 800	-	25	8881/299			✓	✓	✓	✓	✓				2KJ3111 - ■■■■■■ - ■■ Q1
26.30	55	5 000	22 600	-	28	8549/325			✓	✓	✓	✓	✓	✓			2KJ3111 - ■■■■■■ - ■■ P1
23.41	62	5 000	21 600	-	33	913/39			✓	✓	✓	✓	✓	✓			2KJ3111 - ■■■■■■ - ■■ N1
20.98	69	5 000	20 600	-	40	1909/91			✓	✓	✓	✓	✓	✓	✓		2KJ3111 - ■■■■■■ - ■■ M1
18.60	78	5 000	19 500	-	47	5561/299			✓	✓	✓	✓	✓	✓	✓		2KJ3111 - ■■■■■■ - ■■ L1
16.42	88	5 000	18 200	-	57	1494/91			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ K1
14.43	100	4 940	16 400	-	69	332/23			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ J1
13.07	111	4 850	16 400	-	78	3569/273			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ H1
11.38	127	4 760	17 200	-	95	3403/299			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ G1
9.33	155	4 660	17 100	-	126	1577/169			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ F1
8.53	170	3 640	16 200	-	66	162/19			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ E1
7.50	193	3 630	16 100	-	80	3276/437			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ D1
6.79	214	3 630	15 900	-	91	129/19			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ C1
5.91	245	3 610	15 700	-	112	2583/437			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ B1
4.85	299	3 270	15 300	-	151	63/13			✓	✓	✓	✓	✓	✓	✓	✓	2KJ3111 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex} -	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
D.149																	
328.38	4.4	8 000	51 200	-	7.1	321813/980					✓	✓	✓	✓			2KJ3212 - ■■■■■■ - ■■ W1
281.04	5.2	8 000	51 200	-	9	157383/560					✓	✓	✓	✓			2KJ3212 - ■■■■■■ - ■■ V1
264.51	5.5	8 000	51 200	-	10	157383/595					✓	✓	✓	✓			2KJ3212 - ■■■■■■ - ■■ U1
247.95	5.8	8 000	51 200	-	11	4959/20					✓	✓	✓	✓			2KJ3212 - ■■■■■■ - ■■ T1
219.80	6.6	8 000	51 200	-	14	307719/1400					✓	✓	✓	✓			2KJ3212 - ■■■■■■ - ■■ S1
195.24	7.4	8 000	51 200	-	16	75168/385					✓	✓	✓	✓			2KJ3212 - ■■■■■■ - ■■ R1
176.18	8.2	8 000	51 200	-	19	7047/40					✓	✓	✓	✓			2KJ3212 - ■■■■■■ - ■■ Q1
156.11	9.3	8 000	51 200	-	23	251343/1610					✓	✓	✓	✓			2KJ3212 - ■■■■■■ - ■■ P1
138.26	10	8 000	51 200	-	26	241947/1750					✓	✓	✓	✓	✓		2KJ3212 - ■■■■■■ - ■■ N1
123.04	12	8 000	51 200	-	31	8613/70					✓	✓	✓	✓	✓		2KJ3212 - ■■■■■■ - ■■ M1
110.26	13	8 000	51 200	-	37	54027/490					✓	✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ L1
97.75	15	8 000	51 200	-	43	157383/1610					✓	✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ K1
86.29	17	8 000	51 200	-	52	21141/245					✓	✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ J1
75.87	19	8 000	51 200	-	63	61074/805					✓	✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ H1
68.71	21	8 000	51 200	-	70	33669/490					✓	✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ G1
59.82	24	8 000	51 200	-	85	96309/1610						✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ F1
49.05	30	8 000	47 900	-	110	44631/910						✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ E1
43.51	33	8 000	45 800	-	72	55042/1265					✓	✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ D1
39.41	37	8 000	44 100	-	82	91031/2310					✓	✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ C1
34.31	42	8 000	41 900	-	101	86797/2530						✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ B1
28.13	52	8 000	38 800	-	133	40223/1430						✓	✓	✓	✓	✓	2KJ3212 - ■■■■■■ - ■■ A1
Z.149																	
56.64	26	8 000	50 500	-	19	4814/85					✓	✓	✓	✓			2KJ3112 - ■■■■■■ - ■■ W1
52.84	27	7 710	49 600	-	21	2378/45					✓	✓	✓	✓			2KJ3112 - ■■■■■■ - ■■ V1
46.98	31	7 570	47 700	-	25	2349/50					✓	✓	✓	✓			2KJ3112 - ■■■■■■ - ■■ U1
42.18	34	7 660	45 700	-	30	464/11					✓	✓	✓	✓			2KJ3112 - ■■■■■■ - ■■ T1
38.18	38	7 550	44 200	-	35	2291/60					✓	✓	✓	✓			2KJ3112 - ■■■■■■ - ■■ S1
33.54	43	8 000	41 500	-	43	3857/115					✓	✓	✓	✓			2KJ3112 - ■■■■■■ - ■■ R1
30.39	48	8 000	40 000	-	50	3799/125					✓	✓	✓	✓	✓		2KJ3112 - ■■■■■■ - ■■ Q1
27.07	54	8 000	38 200	-	59	406/15					✓	✓	✓	✓	✓		2KJ3112 - ■■■■■■ - ■■ P1
24.30	60	8 000	36 700	-	70	2552/105					✓	✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ N1
21.69	67	8 000	35 100	-	81	2494/115					✓	✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ M1
19.33	75	8 000	33 500	-	96	58/3					✓	✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ L1
17.15	85	8 000	32 000	-	113	1972/115					✓	✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ K1
15.74	92	8 000	30 900	-	127	551/35					✓	✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ J1
13.87	105	8 000	29 300	-	150	319/23						✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ H1
11.38	127	8 000	28 700	-	203	1479/130						✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ G1
9.98	145	8 000	28 400	-	227	1247/125						✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ F1
7.80	186	8 000	27 500	-	360	39/5						✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ E1
7.27	199	4 880	27 500	-	173	836/115						✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ D1
5.96	243	4 870	26 600	-	237	1938/325						✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ C1
5.23	277	4 870	26 000	-	273	3268/625						✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ B1
4.09	355	4 870	24 700	-	432	2964/725						✓	✓	✓	✓	✓	2KJ3112 - ■■■■■■ - ■■ A1

1) Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex} -	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
D.169																	
327.18	4.4	14 000	70 100	-	18	472768 / 1445					✓	✓	✓				2KJ3213 - ■■■■■■ - ■■ V1
305.28	4.7	14 000	70 100	-	19	233536 / 765					✓	✓	✓				2KJ3213 - ■■■■■■ - ■■ U1
271.40	5.3	14 000	70 100	-	23	115344 / 425					✓	✓	✓				2KJ3213 - ■■■■■■ - ■■ T1
243.68	6	14 000	70 100	-	28	45568 / 187					✓	✓	✓				2KJ3213 - ■■■■■■ - ■■ S1
220.58	6.6	14 000	70 100	-	33	56248 / 255					✓	✓	✓				2KJ3213 - ■■■■■■ - ■■ R1
193.75	7.5	14 000	70 100	-	40	378784 / 1955					✓	✓	✓				2KJ3213 - ■■■■■■ - ■■ Q1
175.57	8.3	14 000	70 100	-	46	373088 / 2125					✓	✓	✓	✓			2KJ3213 - ■■■■■■ - ■■ P1
156.36	9.3	14 000	70 100	-	54	39872 / 255					✓	✓	✓	✓	✓		2KJ3213 - ■■■■■■ - ■■ N1
140.41	10.3	14 000	70 100	-	64	250624 / 1785					✓	✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ M1
125.28	11.6	14 000	70 100	-	74	244928 / 1955					✓	✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ L1
111.69	13	14 000	70 100	-	85	5696 / 51					✓	✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ K1
99.06	14.6	14 000	70 100	-	101	11392 / 115					✓	✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ J1
90.94	15.9	14 000	70 100	-	112	54112 / 595					✓	✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ H1
80.12	18.1	14 000	70 100	-	132	31328 / 391						✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ G1
65.72	22	14 000	70 100	-	176	4272 / 65						✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ F1
57.63	25	14 000	70 100	-	193	122464 / 2125						✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ E1
45.06	32	14 000	70 100	-	301	111072 / 2465						✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ D1
41.43	35	14 000	70 100	-	200	134657 / 3250						✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ C1
36.33	40	14 000	70 400	-	225	340603 / 9375						✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ B1
28.41	51	14 000	69 300	-	353	102973 / 3625						✓	✓	✓	✓	✓	2KJ3213 - ■■■■■■ - ■■ A1
Z.169																	
36.55	40	12 100	70 800	-	79	13706/375					✓	✓	✓	✓			2KJ3113 - ■■■■■■ - ■■ Q1
32.88	44	14 000	68 300	-	94	11837/360					✓	✓	✓	✓	✓		2KJ3113 - ■■■■■■ - ■■ P1
29.38	49	14 000	65 500	-	109	9256/315					✓	✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ N1
26.57	55	14 000	63 000	-	131	9167/345					✓	✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ M1
23.45	62	14 000	60 200	-	154	7387/315					✓	✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ L1
20.90	69	14 000	59 400	-	183	2403/115					✓	✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ K1
18.93	77	14 000	58 700	-	203	5963/315					✓	✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ J1
17.03	85	14 000	57 800	-	245	1958/115						✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ H1
14.15	102	14 000	56 100	-	308	2759/195						✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ G1
12.58	115	13 900	55 000	-	377	4717/375						✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ F1
10.03	145	13 900	52 600	-	521	4361/435						✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ E1
7.98	182	13 800	50 200	-	689	1157/145							✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ D1
7.37	197	7 960	49 200	-	409	848/115						✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ C1
5.88	247	7 900	46 700	-	571	3920/667						✓	✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ B1
4.68	310	7 820	44 200	-	768	3120/667							✓	✓	✓	✓	2KJ3113 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Helical geared motors

Transmission ratios and torques

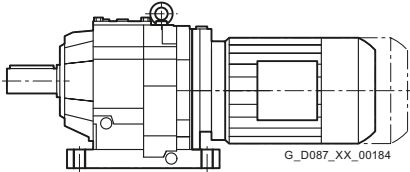
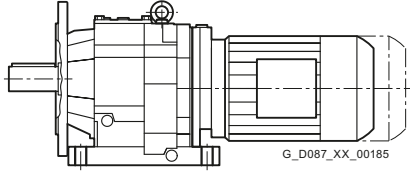
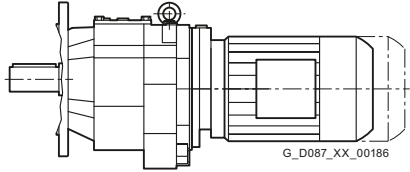
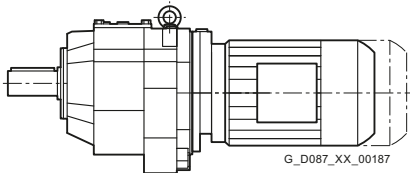
Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex} -	Motor size												Article No.
							63	71	80	90	100	112	132	160	180	200	225	250	
D.189																			
313.63	4.6	19 000	107 000	-	36	533169/1700					✓	✓	✓				2KJ3214 - ■■■■■■ - ■■ T1		
280.59	5.2	19 000	107 000	-	43	262353/935					✓	✓	✓				2KJ3214 - ■■■■■■ - ■■ S1		
253.06	5.7	19 000	107 000	-	49	172081/680					✓	✓	✓				2KJ3214 - ■■■■■■ - ■■ R1		
223.66	6.5	19 000	107 000	-	61	87451/391					✓	✓	✓				2KJ3214 - ■■■■■■ - ■■ Q1		
204.44	7.1	19 000	107 000	-	71	434434/2125					✓	✓	✓	✓			2KJ3214 - ■■■■■■ - ■■ P1		
183.92	7.9	19 000	107 000	-	84	375193/2040					✓	✓	✓	✓	✓		2KJ3214 - ■■■■■■ - ■■ N1		
164.36	8.8	19 000	107 000	-	98	41912/255					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ M1		
148.63	9.8	19 000	107 000	-	116	290563/1955					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ L1		
131.17	11	19 000	107 000	-	136	33449/255					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ K1		
116.88	12	19 000	107 000	-	160	228501/1955					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ J1		
105.89	14	19 000	107 000	-	175	27001/255					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ H1		
95.24	15	19 000	107 000	-	210	186186/1955					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ G1		
79.14	18	19 000	107 000	-	257	6727/85					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ F1		
70.36	21	19 000	107 000	-	314	149513/2125					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ E1		
56.08	26	19 000	107 000	-	421	138229/2465					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ D1		
44.63	32	19 000	107 000	-	531	110019/2465							✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ C1		
36.67	40	19 000	104 400	-	475	10633/290					✓	✓	✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ B1		
29.18	50	19 000	97 900	-	617	8463/290							✓	✓	✓	✓	2KJ3214 - ■■■■■■ - ■■ A1		
Z.189																			
34.25	42	19 000	102 000	-	140	3596/105					✓	✓	✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ L1		
30.73	47	19 000	98 100	-	166	3534/115					✓	✓	✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ K1		
27.46	53	19 000	94 300	-	199	961/35					✓	✓	✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ J1		
24.53	59	19 000	90 600	-	236	2821/115					✓	✓	✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ H1		
22.44	65	19 000	87 700	-	262	2356/105					✓	✓	✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ G1		
19.95	73	19 000	84 100	-	314	2294/115					✓	✓	✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ F1		
16.93	86	19 000	79 200	-	400	2201/130					✓	✓	✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ E1		
14.63	99	19 000	75 000	-	481	1829/125					✓	✓	✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ D1		
11.97	121	19 000	72 600	-	666	1736/145					✓	✓	✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ C1		
9.83	148	18 800	70 200	-	875	1426/145							✓	✓	✓	✓	2KJ3114 - ■■■■■■ - ■■ B1		
7.65	190	16 000	66 900	-	1 283	1147/150										✓	2KJ3114 - ■■■■■■ - ■■ A1		

¹⁾ Only in conjunction with reduced-backlash version

Dimensional drawing overview

 Information about dimensional drawings can be found in chapter [Introduction on page 1/20](#).

Design	Size	Dimensional drawing on page
Foot-mounted design		
 <p>G_D087_XX_00184</p>	D/Z19	3/77
	D/Z29	3/80
	D/Z39	3/84
	D/Z49	3/88
	D/Z59	3/91
	D/Z69	3/94
	D/Z79	3/97
	D/Z89	3/100
	D/Z109	3/103
	D/Z129	3/106
	D/Z149	3/109
	D/Z169	3/111
	D/Z189	3/113
	Foot/flange-mounted design	
 <p>G_D087_XX_00185</p>	DB/ZB29	3/81
	DB/ZB39	3/85
	DB/ZB49	3/88
	DB/ZB59	3/91
	DB/ZB69	3/94
	DB/ZB79	3/97
	DB/ZB89	3/100
Flange-mounted design		
 <p>G_D087_XX_00186</p>	DF/ZF19	3/78
	DF/ZF29	3/82
	DF/ZF39	3/86
	DF/ZF49	3/89
	DF/ZF59	3/92
	DF/ZF69	3/95
	DF/ZF79	3/98
	DF/ZF89	3/76
	DF/ZF109	3/104
	DF/ZF129	3/107
	DF/ZF149	3/110
	DF/ZF169	3/112
	DF/ZF189	3/114
	Housing flange design	
 <p>G_D087_XX_00187</p>	DZ/ZZ19	3/79
	DZ/ZZ29	3/83
	DZ/ZZ39	3/87
	DZ/ZZ49	3/90
	DZ/ZZ59	3/93
	DZ/ZZ69	3/96
	DZ/ZZ79	3/99
	DZ/ZZ89	3/77
	DZ/ZZ109	3/105
	DZ/ZZ129	3/108

SIMOGEAR Geared Motors

Helical geared motors

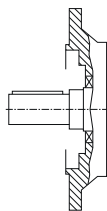
Dimensions

Dimensional drawing overview (continued)

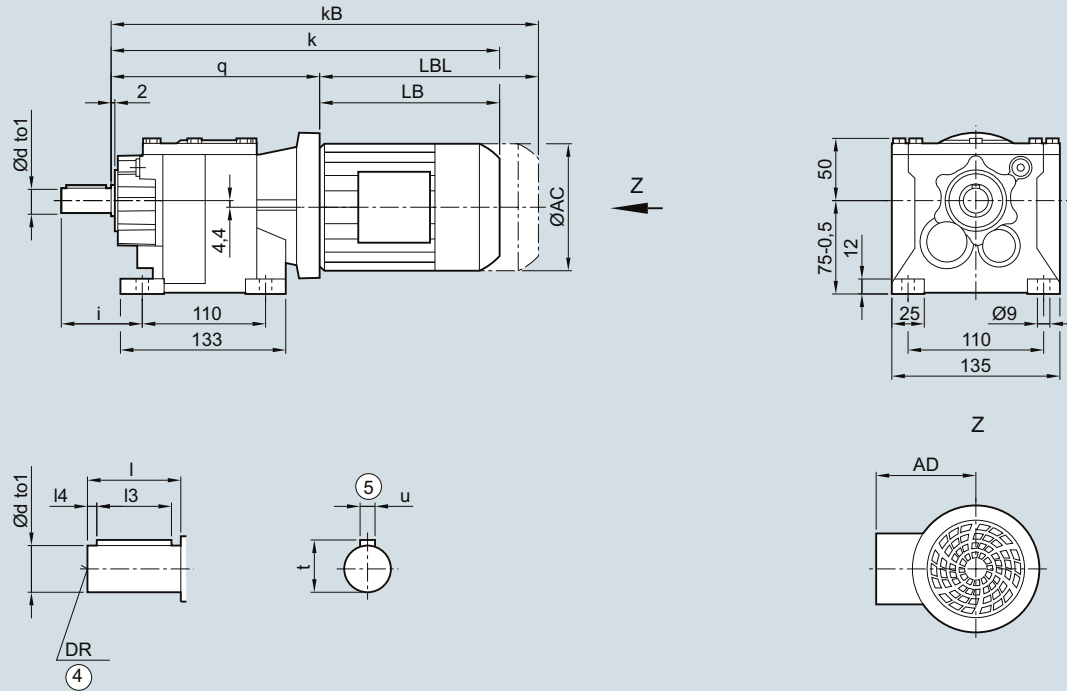
Design	Size	Dimensional drawing on page
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zusätzliche Ausführungen und Optionen

Inner contour of the flange design 3/115



3

D/Z19 gearbox in a foot-mounted design
DZ030
D/Z19


Shaft	d	to1	l	l3	l4	t	u	i	DR
	16	k6	28	22	3	18.0	5	46	M5
	16	k6	40	32	4	18.0	5	58	M8
	20	k6	40	32	4	22.5	6	58	M6x16
Motor	LA 63M		71M		LE 80M			80ZM	
q	159.5		167.5		168.0			168.0	
AC	117.8		138.8		156.3			156.3	
AD ¹⁾	124.0		134.0		149.2			149.2	
k	320.0		352.0		408.0			443.0	
kB	364.5		407.0		468.0			503.0	
LB	160.5		184.5		240.0			275.0	
LBL	205.0		239.5		300.0			335.0	

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions, see page 8/42.

SIMOGEAR Geared Motors

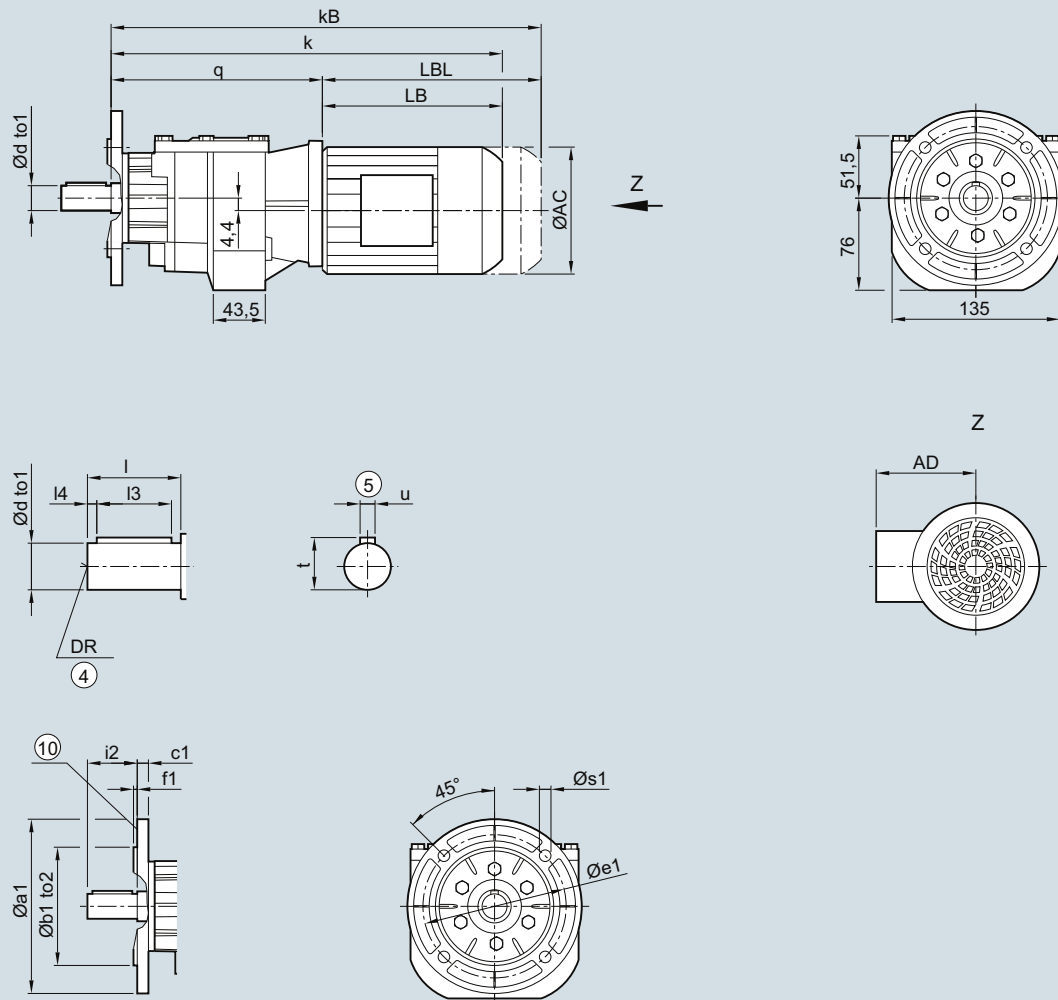
Helical geared motors

Dimensions

DF/ZF19 gearbox in a flange-mounted design

DZF030

DF/ZF19



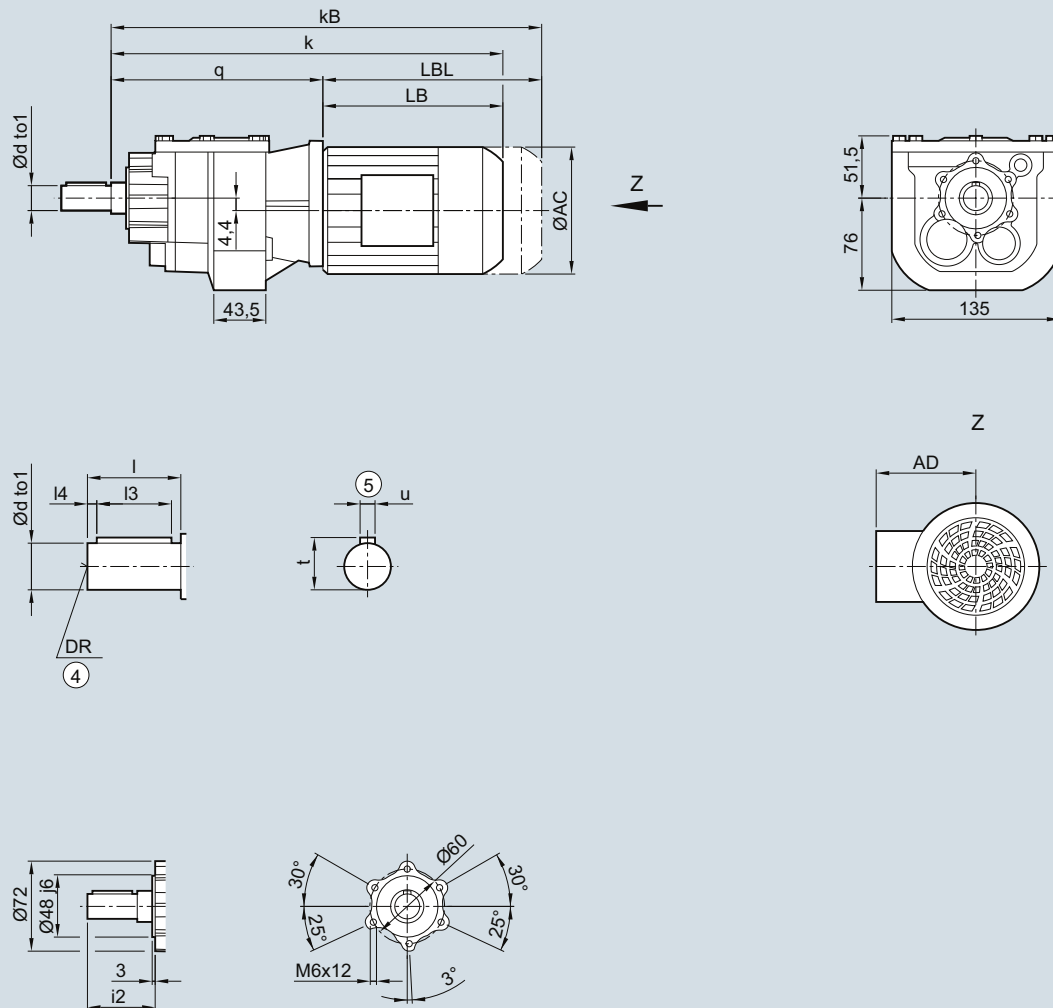
Flange	a1	b1	to2	c1	e1	f1	s1	Shaft	d	to1	l	l3	l4	t	u	i2	DR	
	120	80	j6	8	100	3.0	6.6		16	k6	28	22	3	18.0	5	28	M5	
	140	95	j6	9	115	3.0	9.0		16	k6	40	32	4	18.0	5	40	M8	
	160	110	j6	9	130	3.5	9.0		20	k6	40	32	4	22.5	6	40	M6x16	
Motor	LA		71M				LE		80M		80ZM							
q	168.5		176.5				177.0		177.0		177.0							
AC	117.8		138.8				156.3		156.3		156.3							
AD ¹⁾	124.0		134.0				149.2		149.2		149.2							
k	329.0		361.0				417.0		417.0		452.0							
kB	373.5		416.0				477.0		477.0		512.0							
LB	160.5		184.5				240.0		240.0		275.0							
LBL	205.0		239.5				300.0		300.0		335.0							

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑩ For inner contour, see page 3/115

DZ/ZZ19 gearbox in a housing flange design
DZZ030
DZ/ZZ19


Shaft	d	to1	l	l3	l4	t	u	i2	DR
	16	k6	28	22	3	18.0	5	42	M5
	16	k6	40	32	4	18.0	5	54	M8
	20	k6	40	32	4	22.5	6	54	M6x16
Motor	LA		71M		LE			80ZM	
	63M				80M				
q	168.5		176.5		177.0			177.0	
AC	117.8		138.8		156.3			156.3	
AD ¹⁾	124.0		134.0		149.2			149.2	
k	329.0		361.0		417.0			452.0	
kB	373.5		416.0		477.0			512.0	
LB	160.5		184.5		240.0			275.0	
LBL	205.0		239.5		300.0			335.0	

④ DIN 332

1) AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

SIMOGEAR Geared Motors

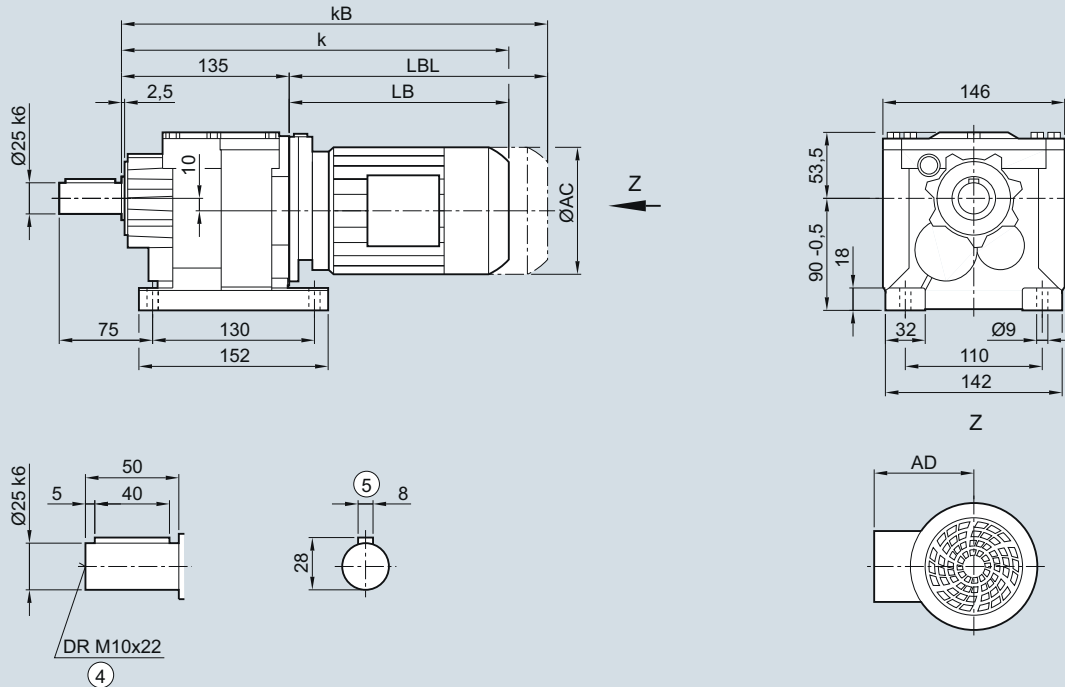
Helical geared motors

Dimensions

D/Z29 gearbox in a foot-mounted design

DZ030

D/Z29



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	329.0	361.0	425.0	460.0	486.5	526.5	543.0	578.0
kB	373.5	416.0	485.0	520.0	556.5	596.5	621.5	656.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

SIMOGEAR Geared Motors

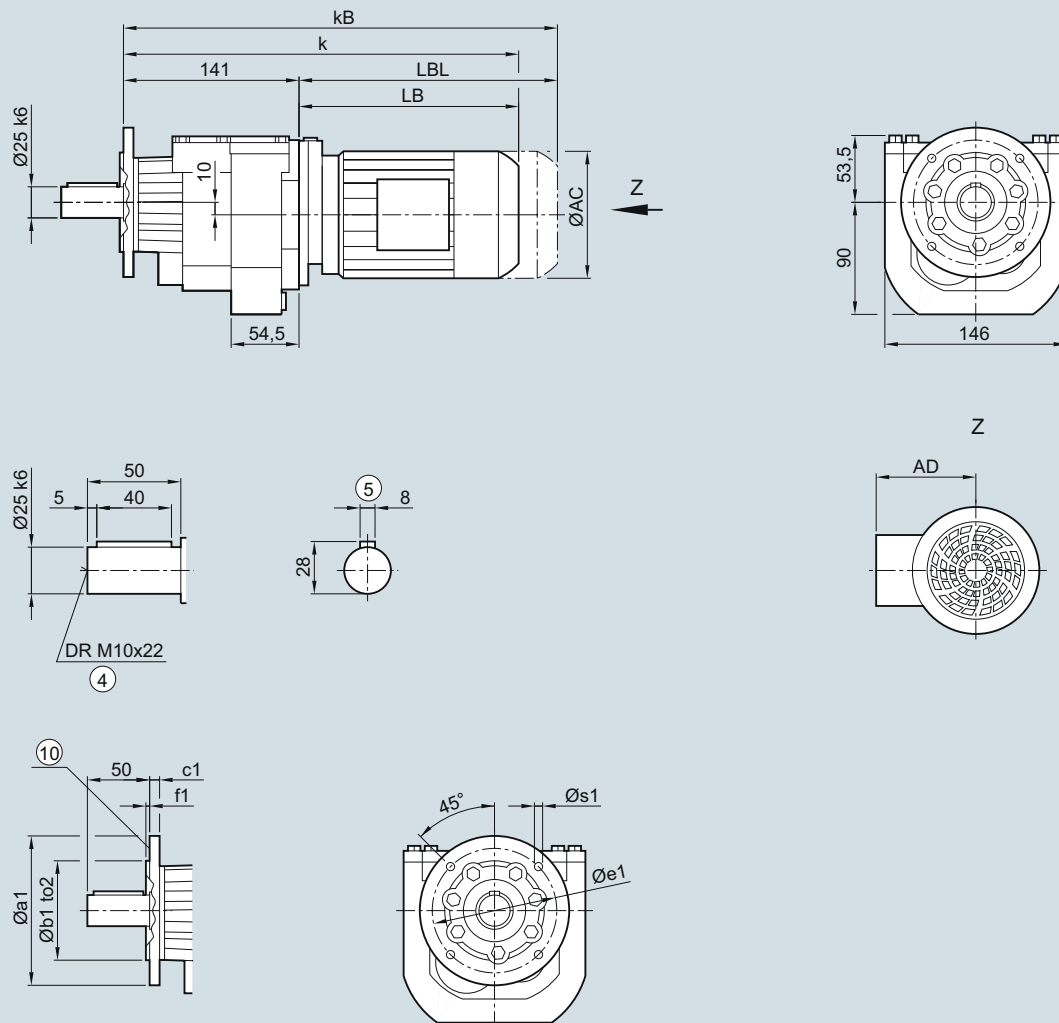
Helical geared motors

Dimensions

DF/ZF29 gearbox in a flange-mounted design

DZF030

DF/ZF29



Flange	a1	b1	to2	c1	e1	f1	s1
	120	80	j6	8	100	3.0	6.6
	140	95	j6	9	115	3.0	9.0
	160	110	j6	9	130	3.5	9.0

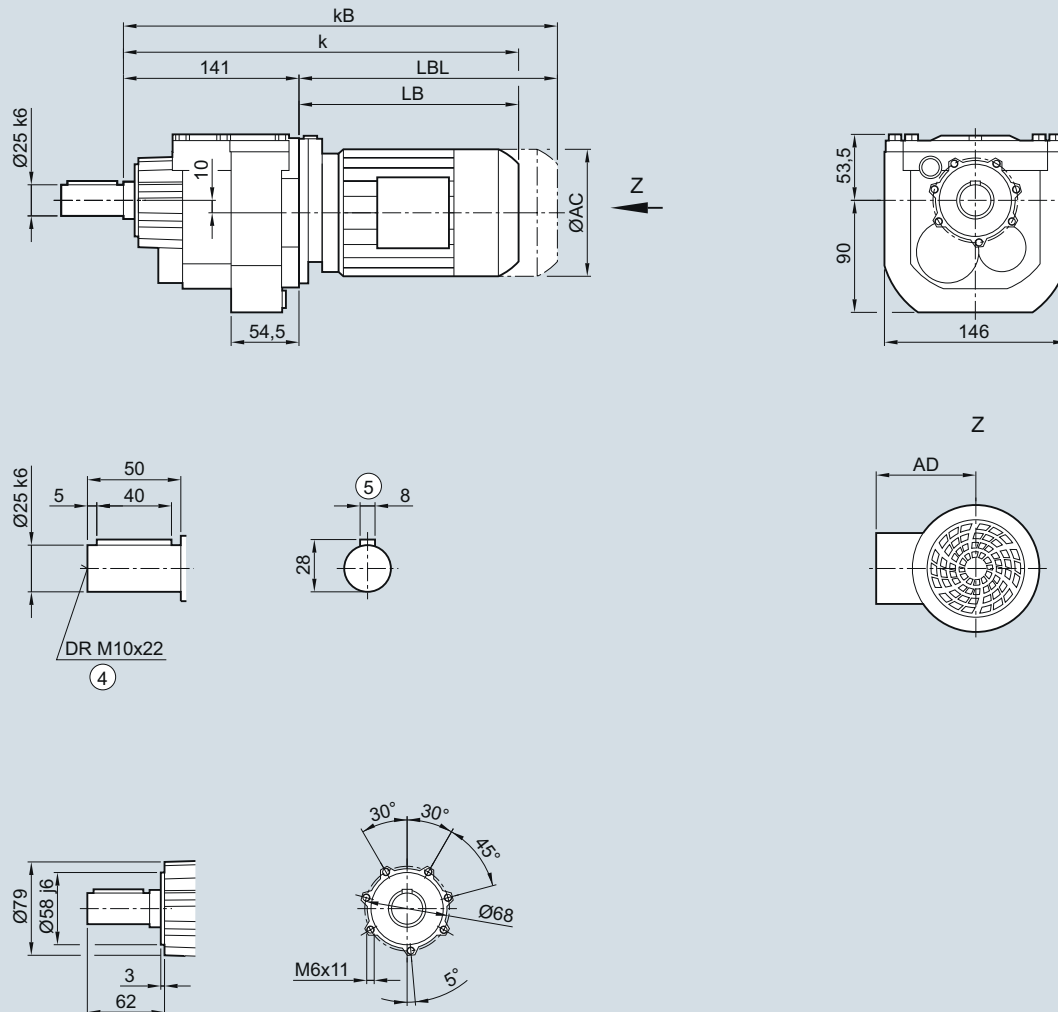
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	335.0	367.0	431.0	466.0	492.5	532.5	549.0	584.0
kB	379.5	422.0	491.0	526.0	562.5	602.5	627.5	662.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 3/115

DZ/ZZ29 gearbox in a housing flange design
DZZ030
DZ/ZZ29


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	335.0	367.0	431.0	466.0	492.5	532.5	549.0	584.0
kB	379.5	422.0	491.0	526.0	562.5	602.5	627.5	662.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

④ DIN 332

1) AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

SIMOGEAR Geared Motors

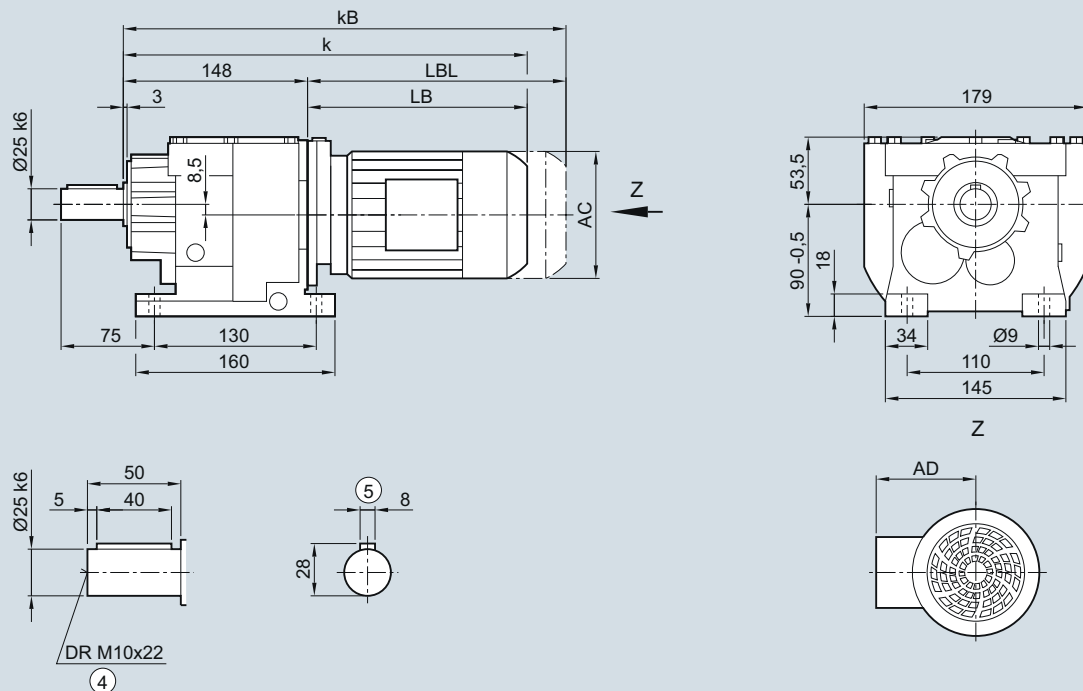
Helical geared motors

Dimensions

D/Z39 gearbox in a foot-mounted design

DZ030

D/Z39

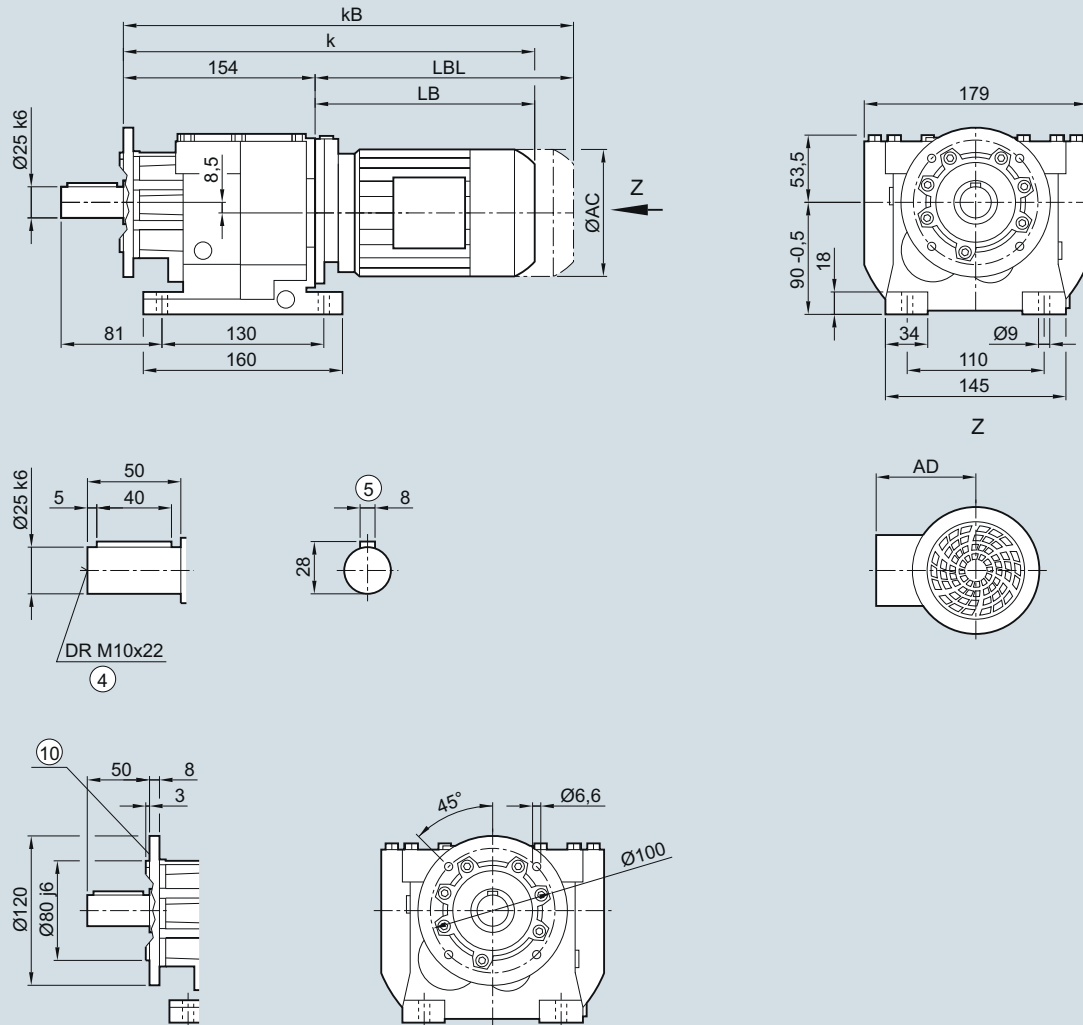


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	342.0	374.0	438.0	473.0	499.5	539.5	556.0	591.0	566.0	591.0
kB	386.5	429.0	498.0	533.0	569.5	609.5	634.5	669.5	639.0	664.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

DB/ZB39 gearbox in a foot/flange-mounted design
DZB030
DB/ZB39


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	348.0	380.0	444.0	479.0	505.5	545.5	562.0	597.0	572.0	597.0
kB	392.5	435.0	504.0	539.0	575.5	615.5	640.5	675.5	645.0	670.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

④ DIN 332

1) AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 3/115

SIMOGEAR Geared Motors

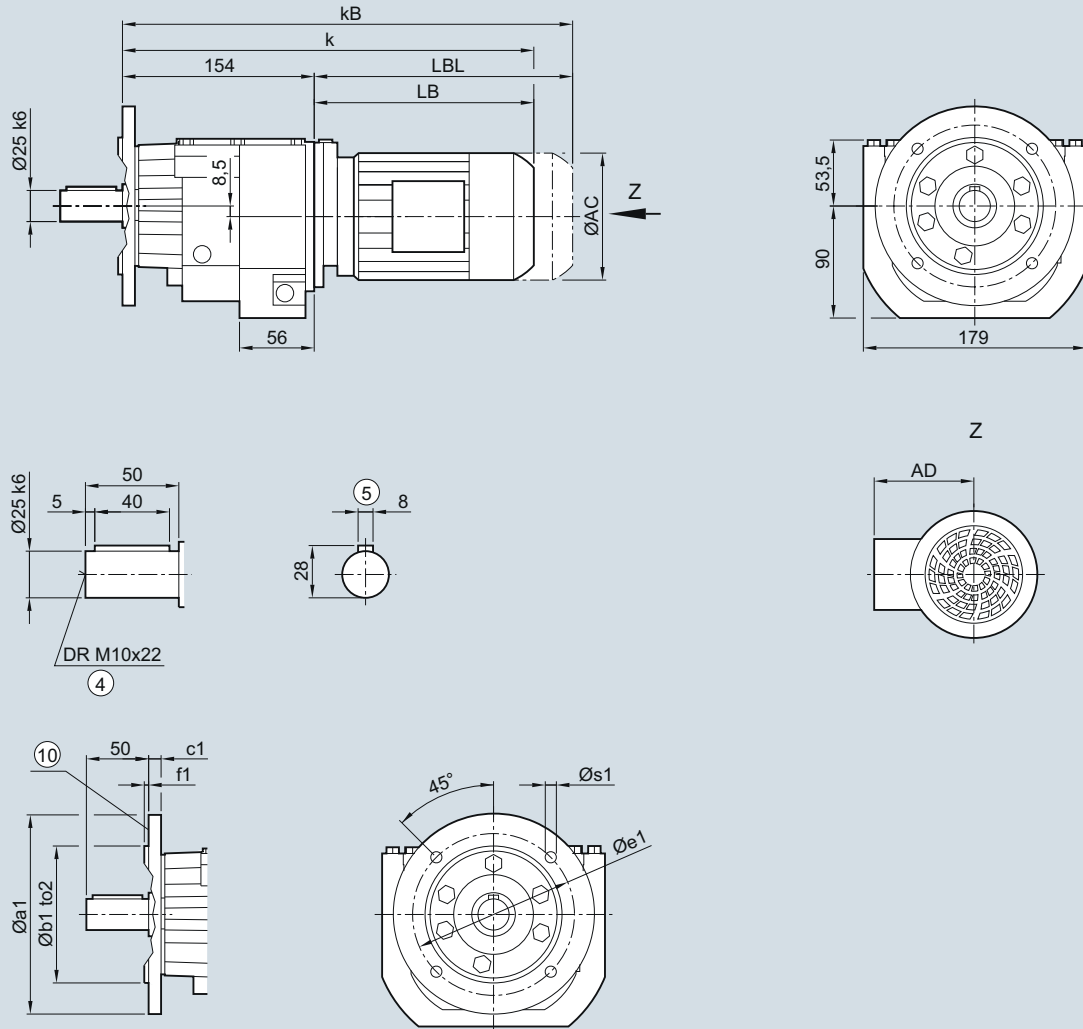
Helical geared motors

Dimensions

DF/ZF39 gearbox in a flange-mounted design

DZF030

DF/ZF39



Flange	a1	b1	to2	c1	e1	f1	s1
	120	80	j6	8	100	3.0	6.6
	160	110	j6	10	130	3.5	9.0
	200	130	j6	12	165	3.5	11.0

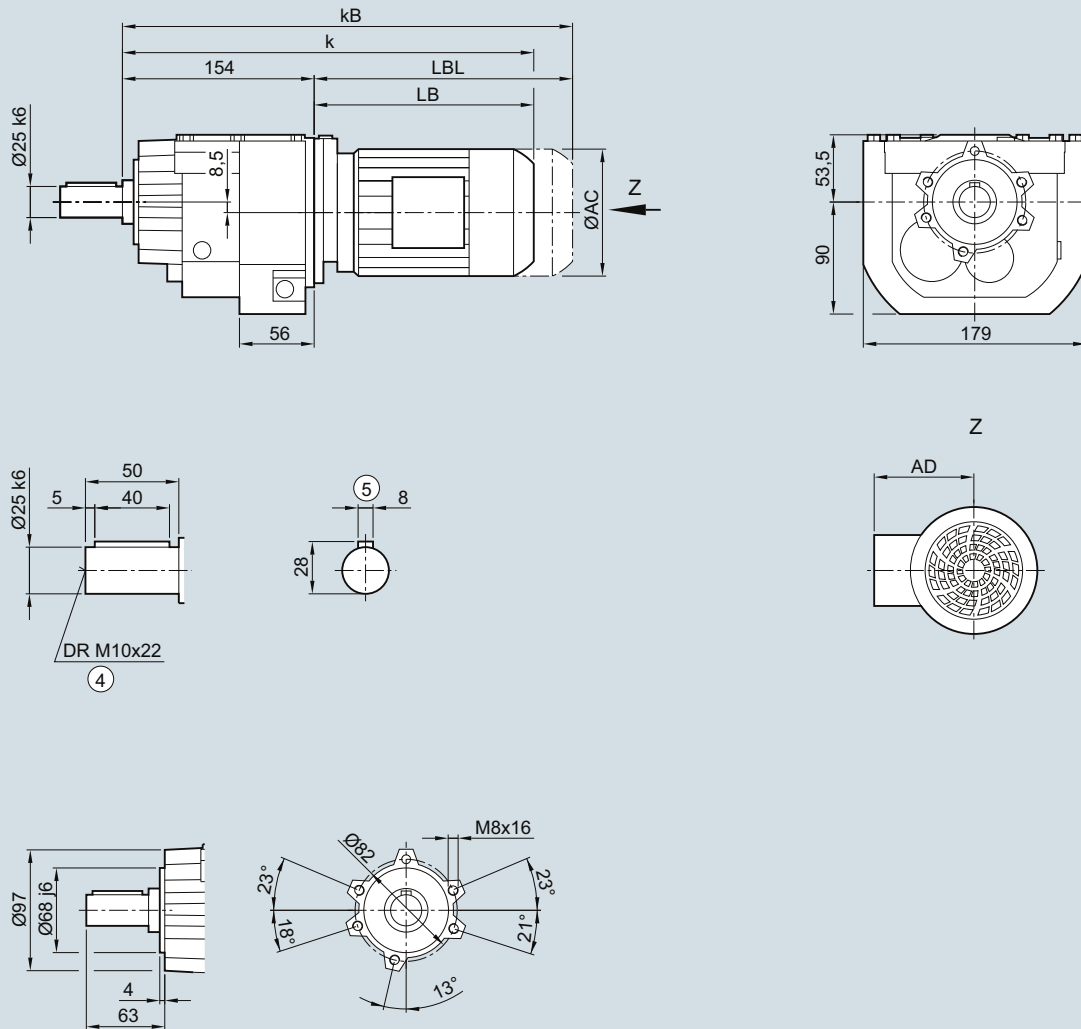
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	348.0	380.0	444.0	479.0	505.5	545.5	562.0	597.0	572.0	597.0
kB	392.5	435.0	504.0	539.0	575.5	615.5	640.5	675.5	645.0	670.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑩ For inner contour, see page 3/115

DZ/ZZ39 gearbox in a housing flange design
DZZ030
DZ/ZZ39


Motor	LA 63M	71M	LE LE80M	LE80ZM	LE90S/L	LE90ZL	LE100L	LE100ZL	LE112M	LE112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	348.0	380.0	444.0	479.0	505.5	545.5	562.0	597.0	572.0	597.0
kB	392.5	435.0	504.0	539.0	575.5	615.5	640.5	675.5	645.0	670.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

^④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

^⑤ Feather key/keyway DIN 6885

SIMOGEAR Geared Motors

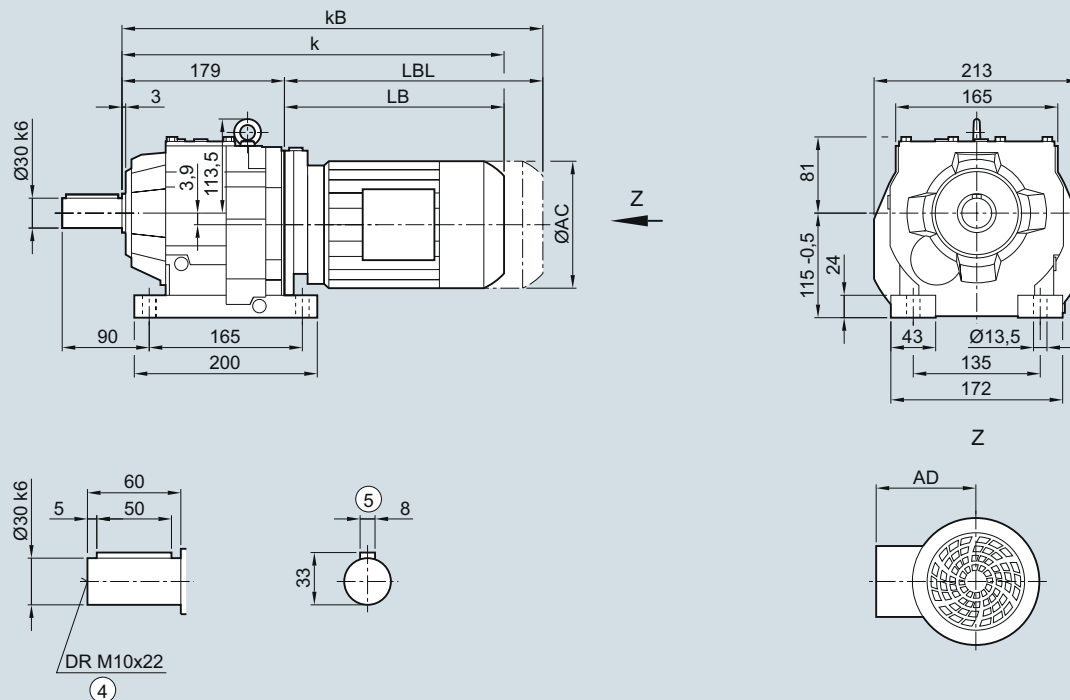
Helical geared motors

Dimensions

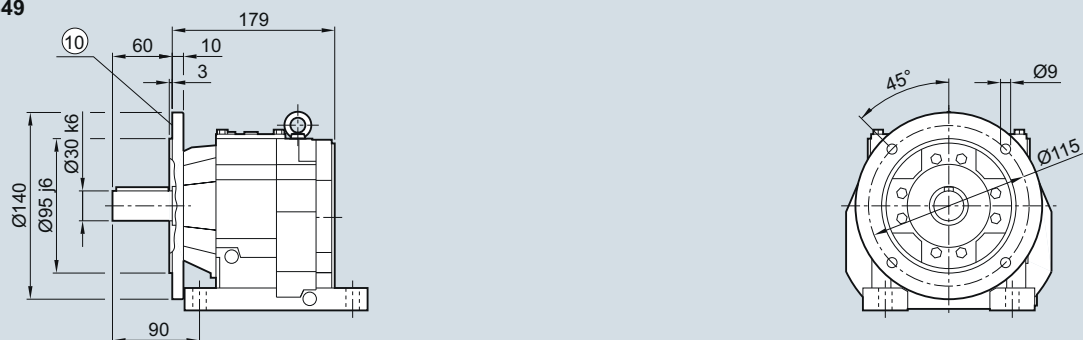
D/Z49 and DB/ZB49 gearboxes in a foot and foot/flange-mounted design

DZ030, DZB030

D/Z49



DB/ZB49



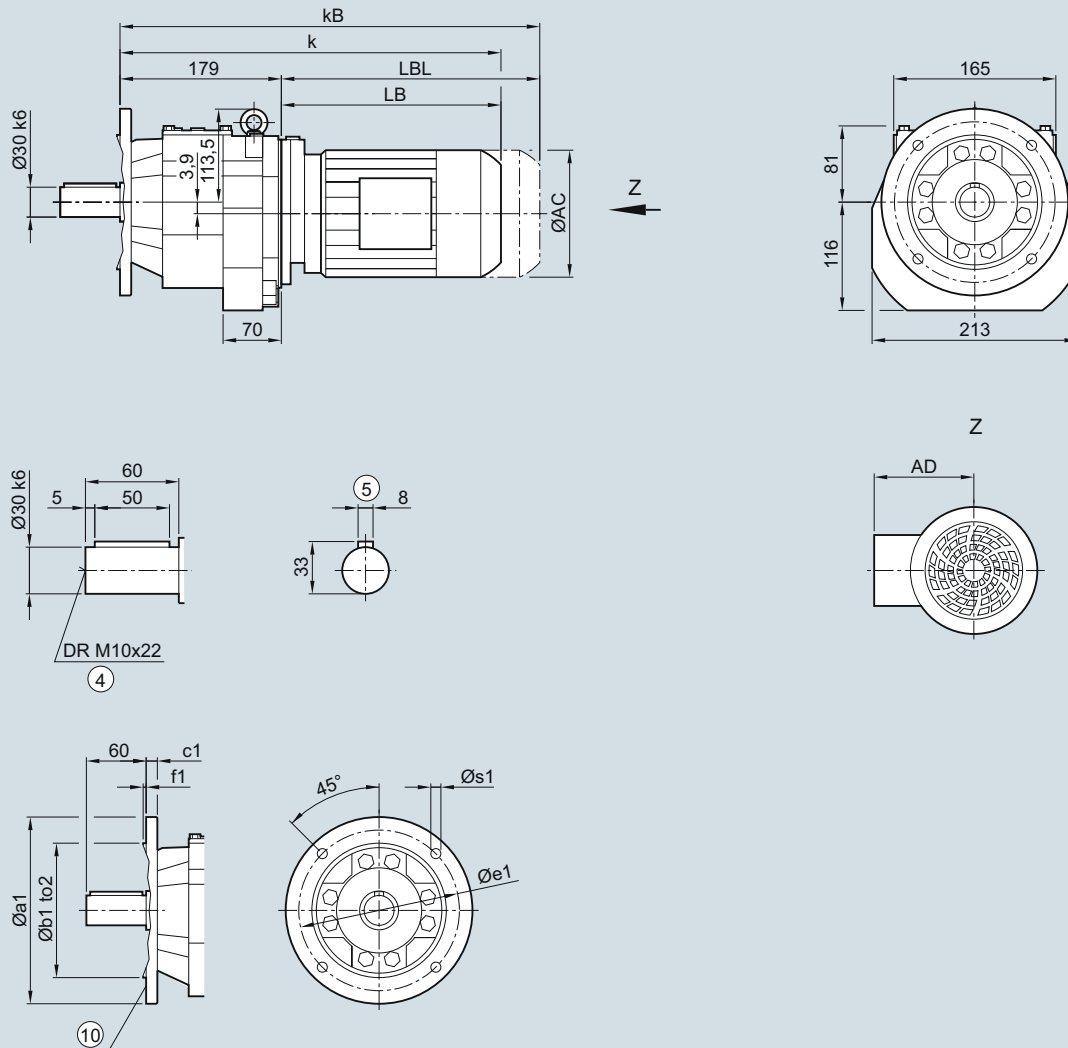
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 3/115

DF/ZF49 gearbox in a flange-mounted design
DZF030
DF/ZF49


Flange	a1	b1	to2	c1	e1	f1	s1
	140	95	j6	10	115	3.0	9.0
	160	110	j6	10	130	3.5	9.0
	200	130	j6	12	165	3.5	11.0

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions, see page 8/42.

⑩ For inner contour, see page 3/115

SIMOGEAR Geared Motors

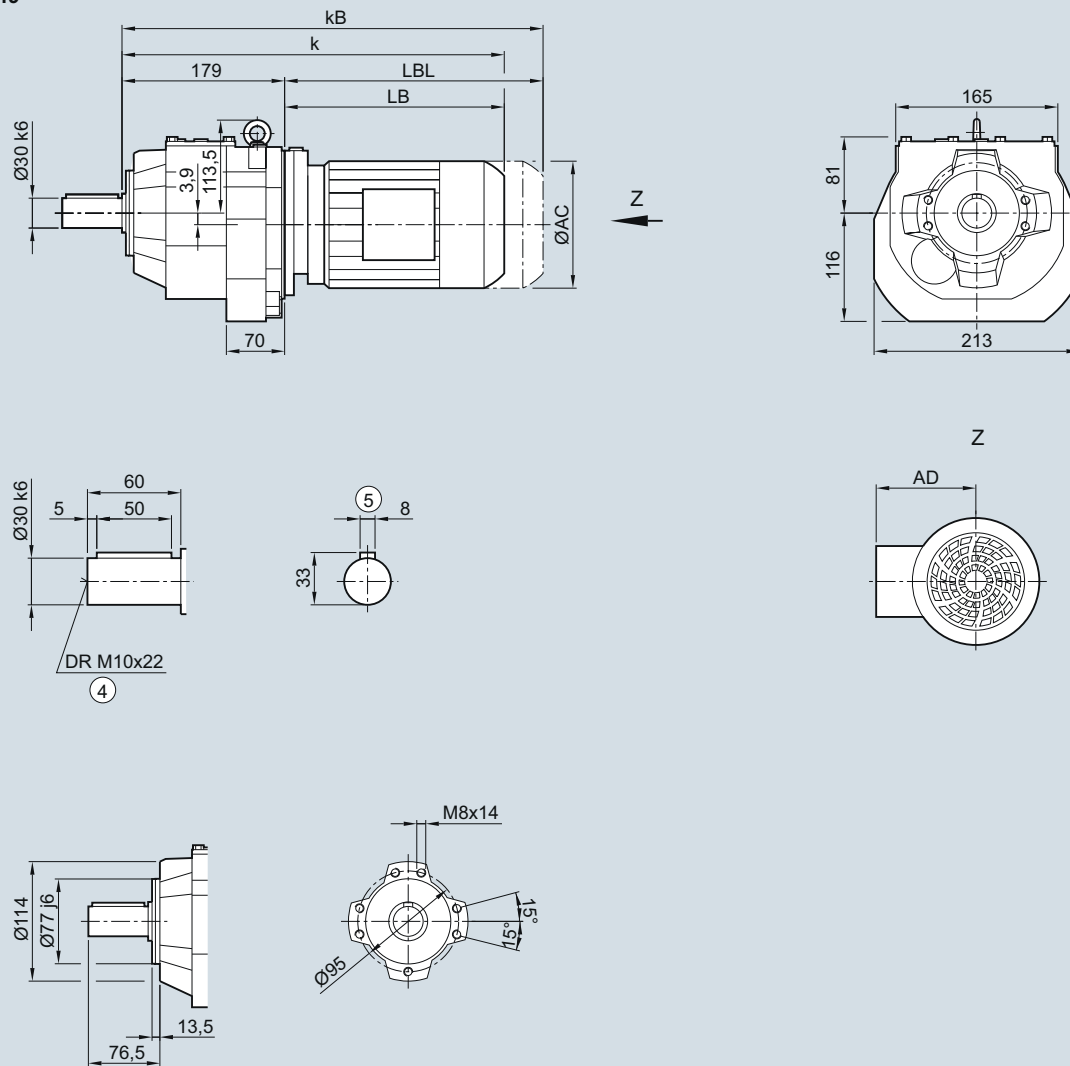
Helical geared motors

Dimensions

DZ/ZZ49 gearbox in a housing flange design

DZZ030

DZ/ZZ49

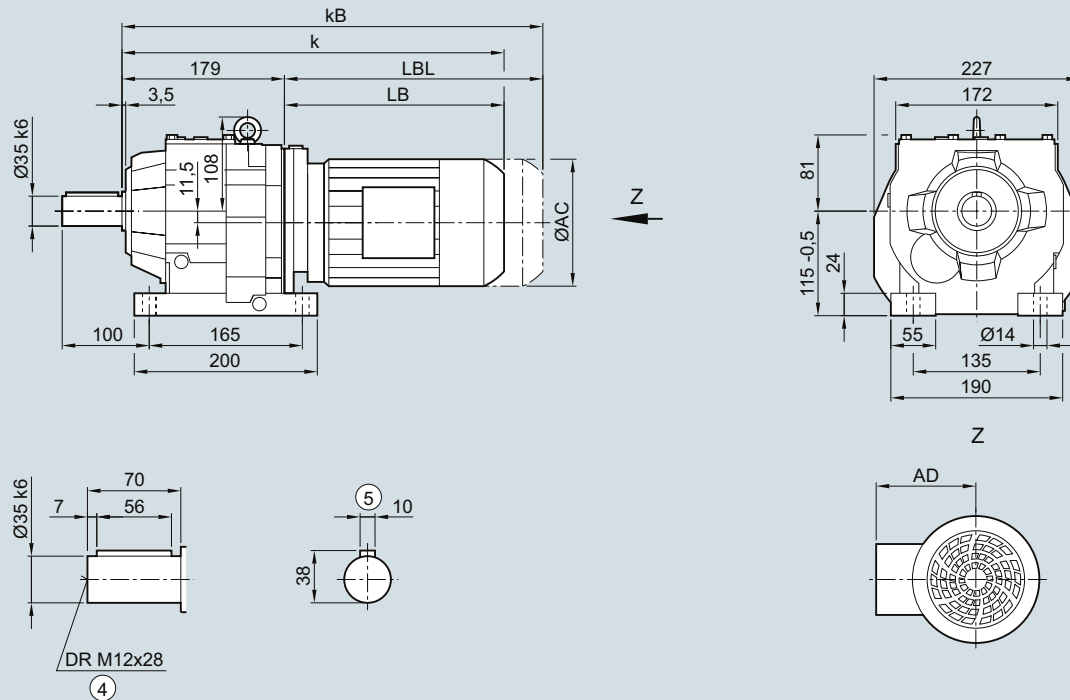
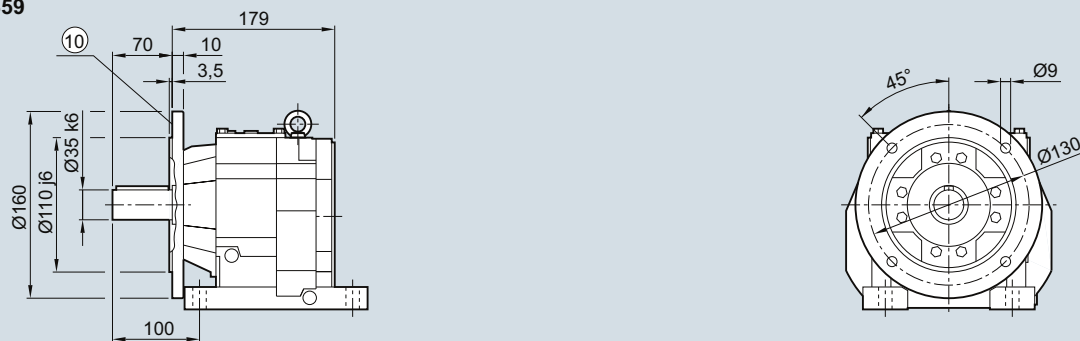


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

D/Z59 and DB/ZB59 gearboxes in a foot and foot/flange-mounted design
DZ030, DZB030
D/Z59

DB/ZB59


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

^④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

^⑤ Feather key/keyway DIN 6885

^⑩ For inner contour, see page 3/115

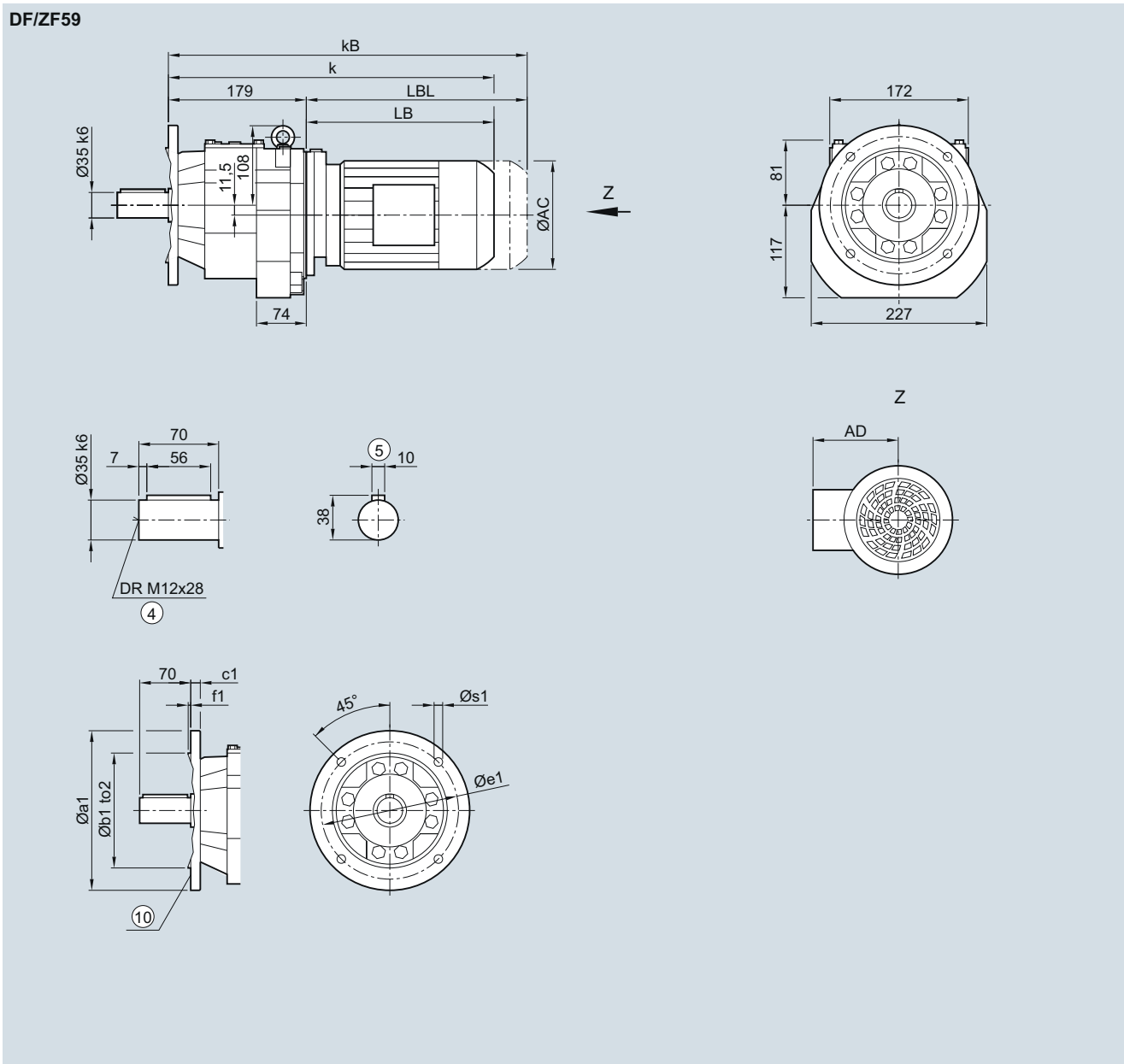
SIMOGEAR Geared Motors

Helical geared motors

Dimensions

DF/ZF59 gearbox in a flange-mounted design

DZF030



Flange	a1	b1	to2	c1	e1	f1	s1
	160	110	j6	10	130	3.5	9.0
	200	130	j6	12	165	3.5	11.0
	250	180	j6	15	215	4.0	13.5

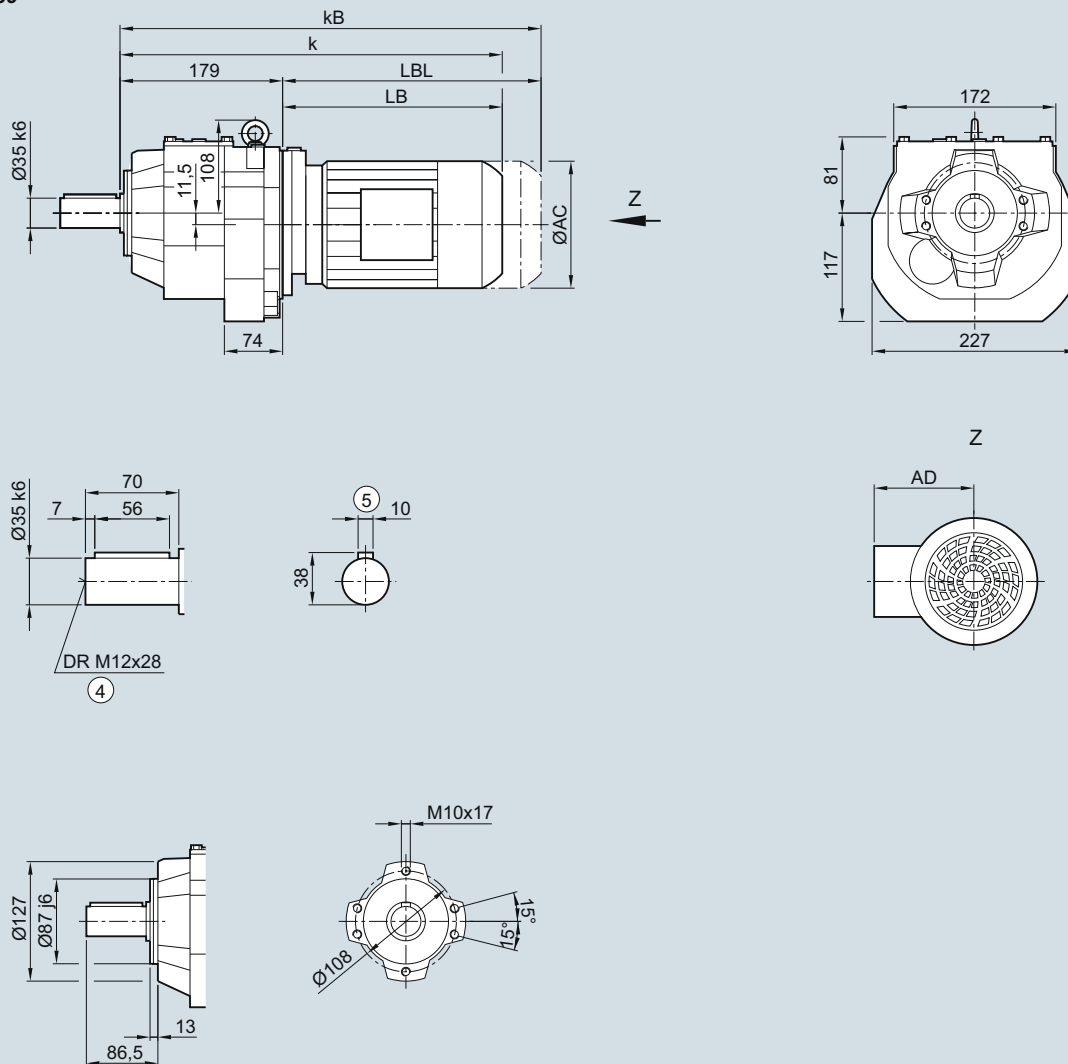
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 3/115

DZ/ZZ59 gearbox in a housing flange design
DZZ030
DZ/ZZ59


Motor	LA 63M	71M	LE80 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	363.5	395.5	459.5	494.5	521.0	561.0	577.5	612.5	587.5	622.0	640.5	690.5
kB	408.0	450.5	519.5	554.5	591.0	631.0	656.0	691.0	660.5	695.0	745.0	795.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions, see page 8/42.

SIMOGEAR Geared Motors

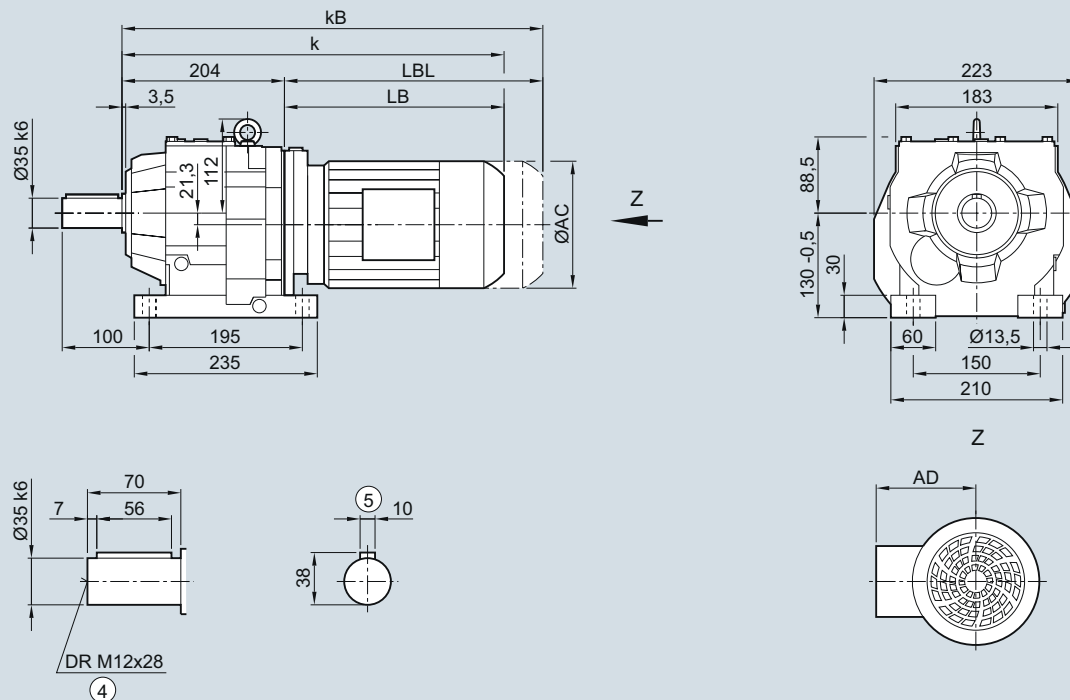
Helical geared motors

Dimensions

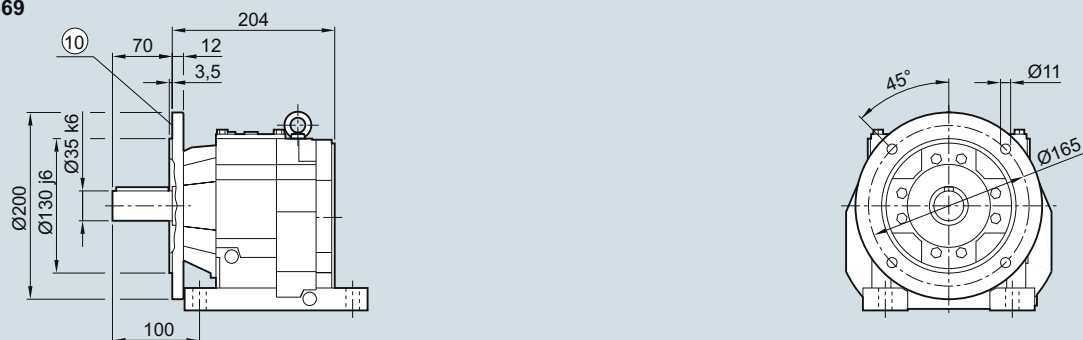
D/Z69 and DB/ZB69 gearboxes in a foot and foot/flange-mounted design

DZ030, DZB030

D/Z69



DB/ZB69



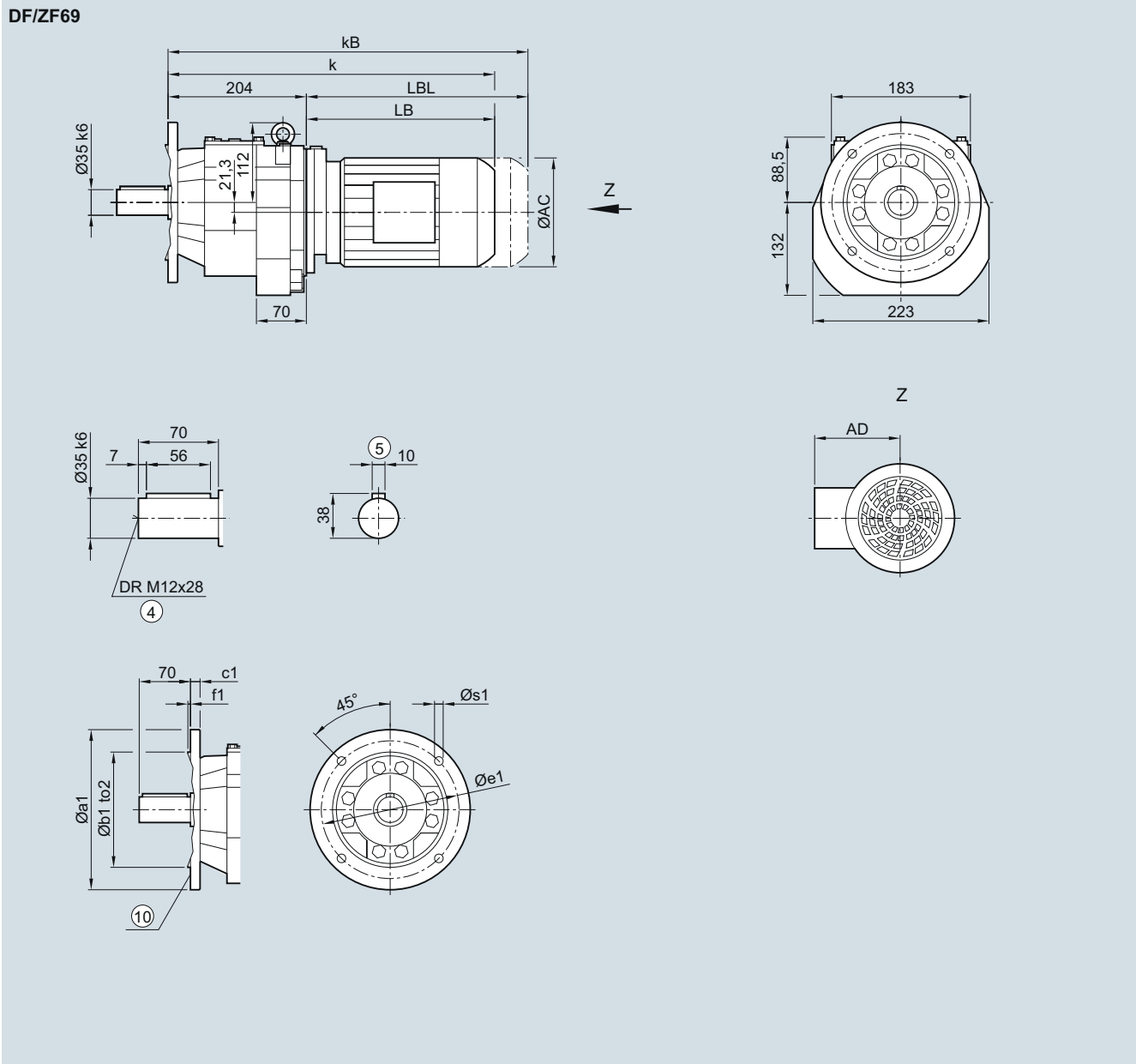
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	388.5	420.5	484.5	519.5	546.0	586.0	602.5	637.5	612.5	647.0	665.5	715.5
kB	433.0	475.5	544.5	579.5	616.0	656.0	681.0	716.0	685.5	720.0	770.0	820.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 3/115

DF/ZF69 gearbox in a flange-mounted design
DZF030


Flange	a1	b1	to2	c1	e1	f1	s1
	200	130	j6	12	165	3.5	11.0
	250	180	j6	15	215	4.0	13.5

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	388.5	420.5	484.5	519.5	546.0	586.0	602.5	637.5	612.5	647.0	665.5	715.5
kB	433.0	475.5	544.5	579.5	616.0	656.0	681.0	716.0	685.5	720.0	770.0	820.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions, see page 8/42.

⑩ For inner contour, see page 3/115

SIMOGEAR Geared Motors

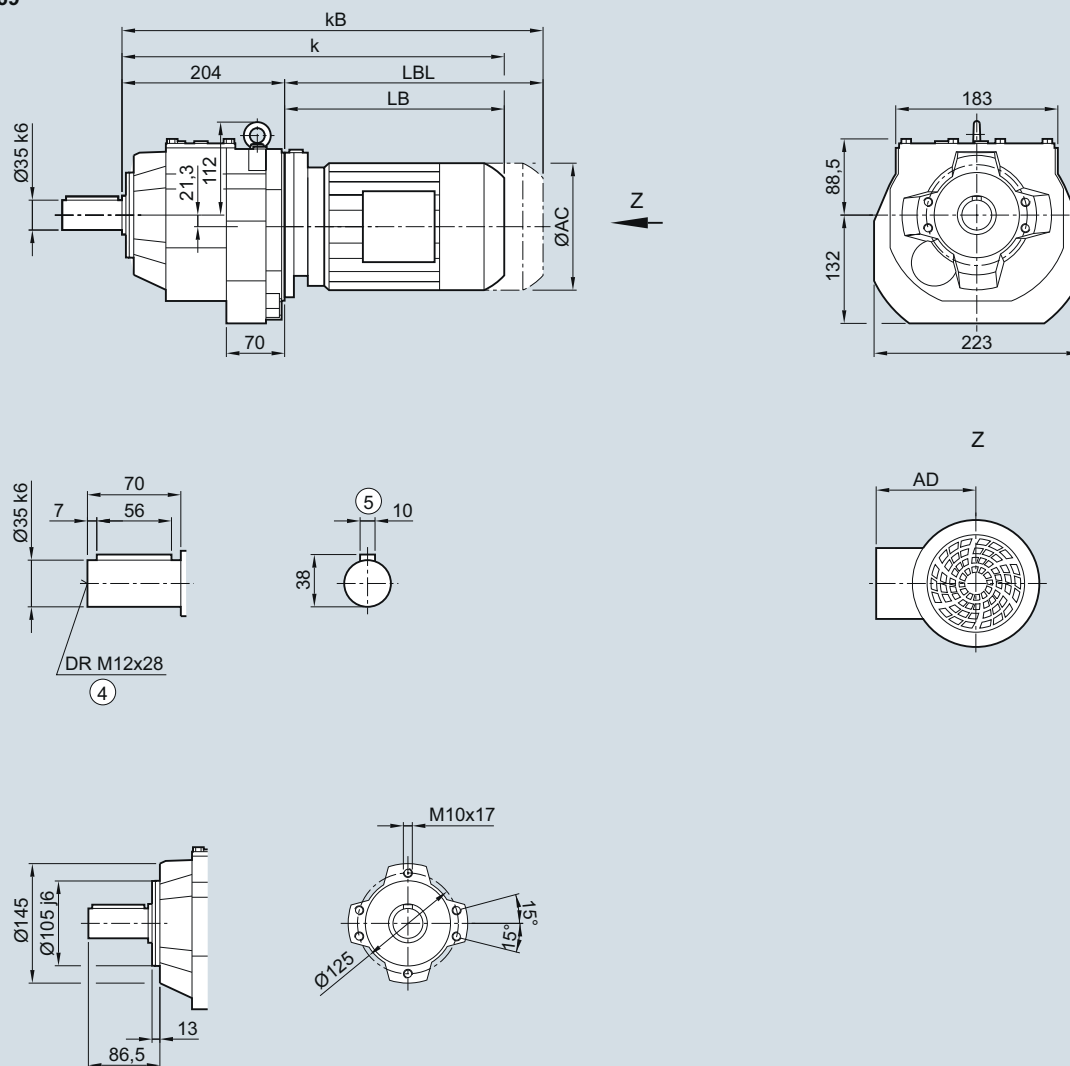
Helical geared motors

Dimensions

DZ/ZZ69 gearbox in a housing flange design

DZZ030

DZ/ZZ69

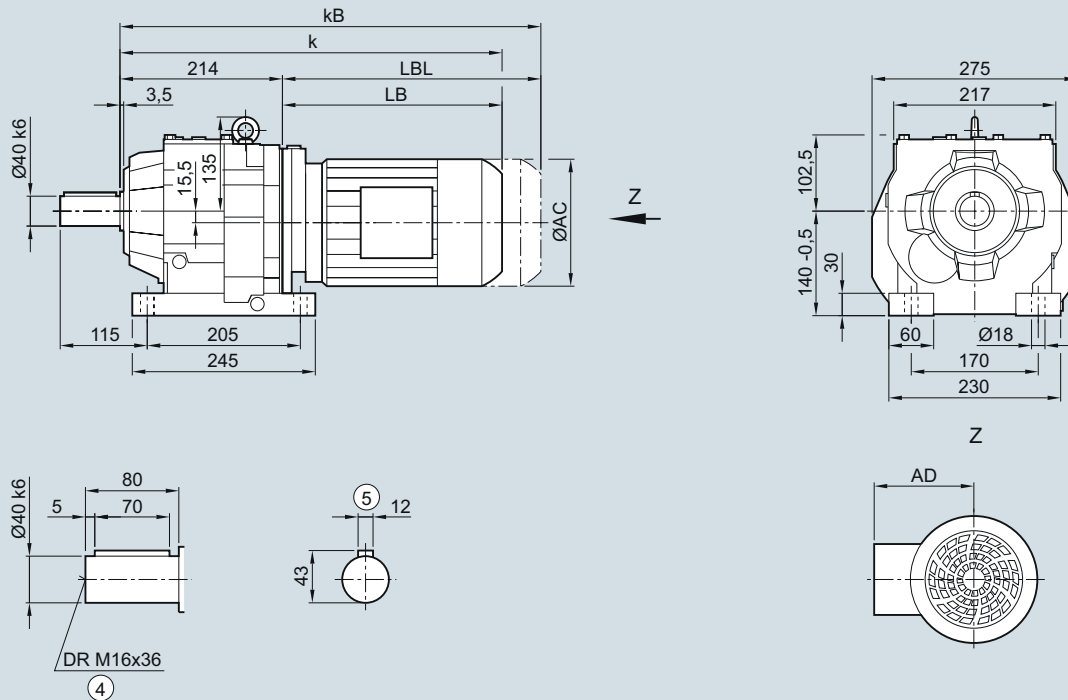
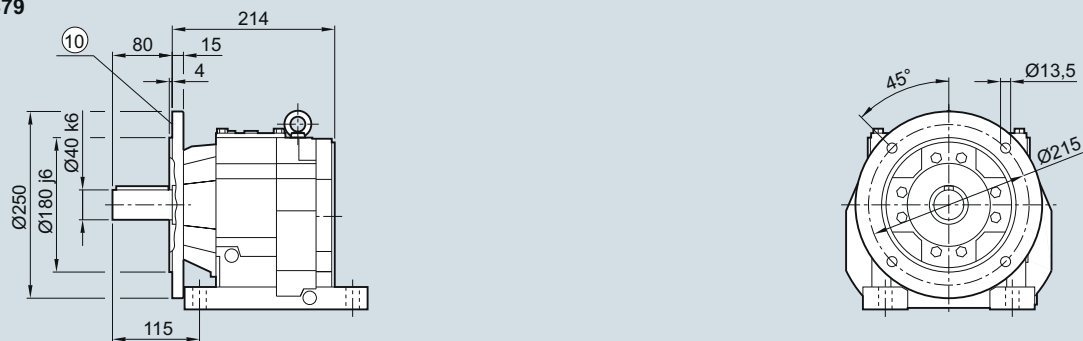


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	388.5	420.5	484.5	519.5	546.0	586.0	602.5	637.5	612.5	647.0	665.5	715.5
kB	433.0	475.5	544.5	579.5	616.0	656.0	681.0	716.0	685.5	720.0	770.0	820.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

D/Z79 and DB/ZB79 gearboxes in a foot and foot/flange-mounted design
DZ030, DZB030
D/Z79

DB/ZB79


Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	428.5	488.5	523.5	550.0	590.0	606.5	641.5	616.5	641.5	669.5	719.5	751.5	811.5
kB	483.5	548.5	583.5	620.0	660.0	685.0	720.0	689.5	714.5	774.0	824.0	867.5	927.5
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

^④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

^⑤ Feather key/keyway DIN 6885

^⑩ For inner contour, see page 3/115

SIMOGEAR Geared Motors

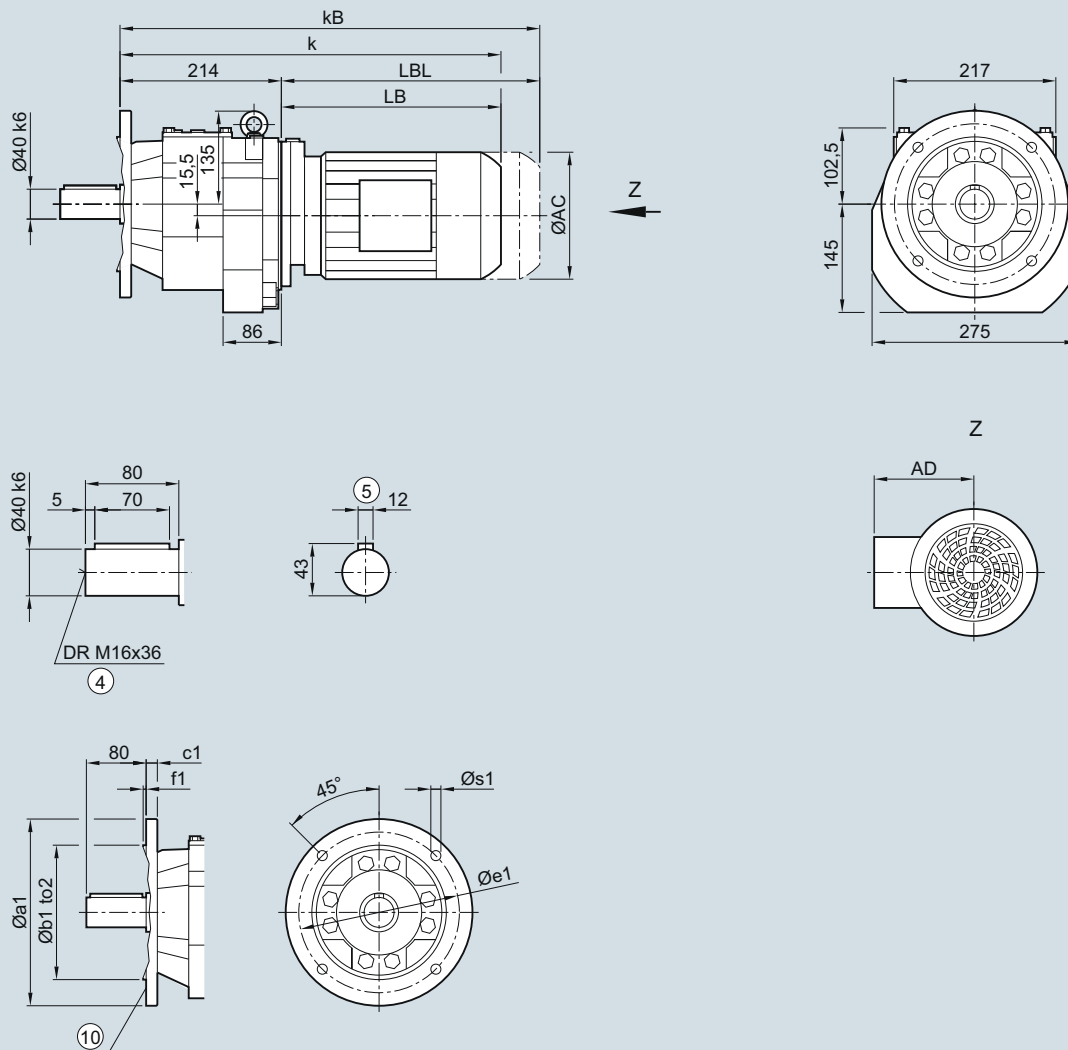
Helical geared motors

Dimensions

DF/ZF79 gearbox in a flange-mounted design

DZF030

DF/ZF79



Flange	a1	b1	to2	c1	e1	f1	s1
	250	180	j6	15	215	4.0	13.5
	300	230	j6	16	265	4.0	13.5

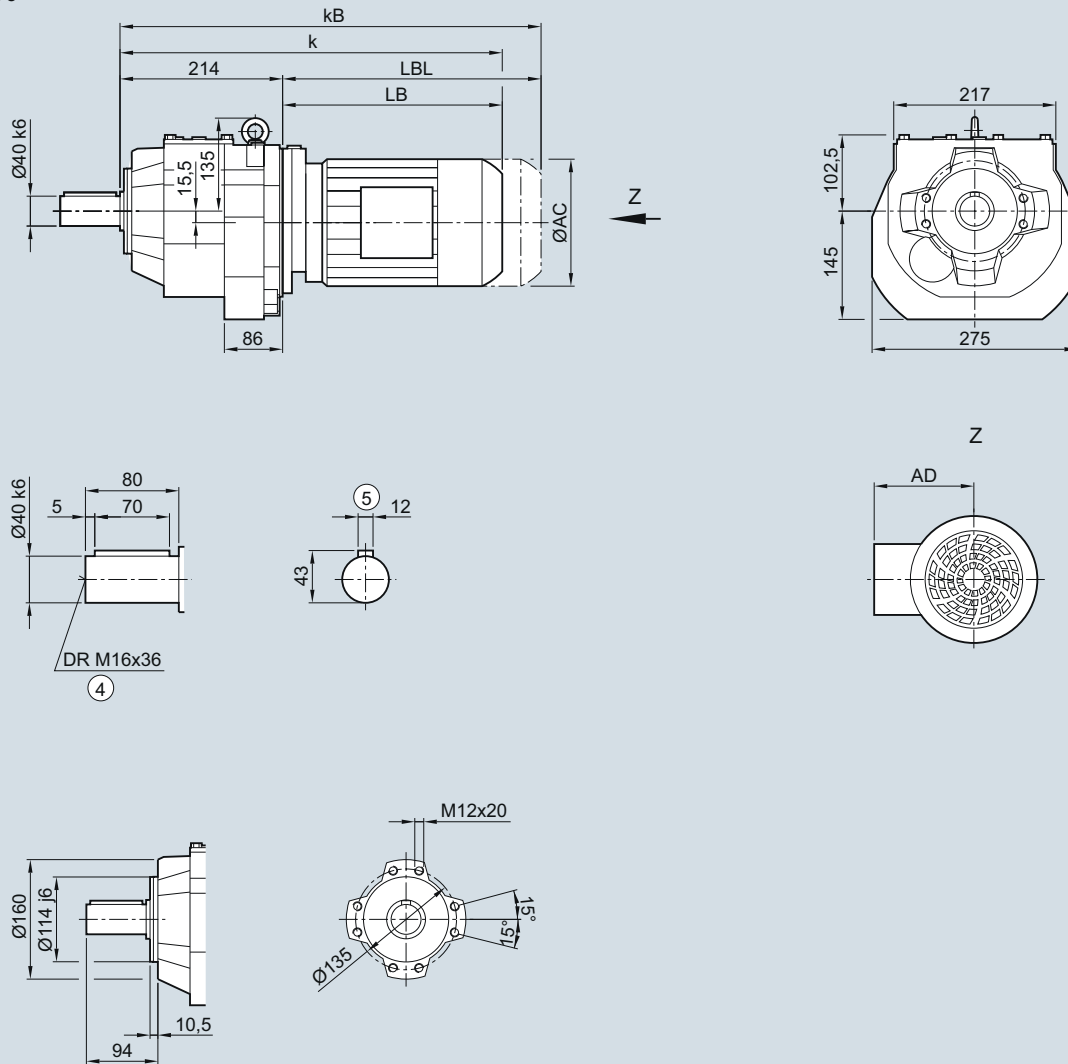
Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	428.5	488.5	523.5	550.0	590.0	606.5	641.5	616.5	641.5	669.5	719.5	751.5	811.5
kB	483.5	548.5	583.5	620.0	660.0	685.0	720.0	689.5	714.5	774.0	824.0	867.5	927.5
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 3/115

DZ/ZZ79 gearbox in a housing flange design
DZZ030
DZ/ZZ79


Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	428.5	488.5	523.5	550.0	590.0	606.5	641.5	616.5	641.5	669.5	719.5	751.5	811.5
kB	483.5	548.5	583.5	620.0	660.0	685.0	720.0	689.5	714.5	774.0	824.0	867.5	927.5
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

^④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

^⑤ Feather key/keyway DIN 6885

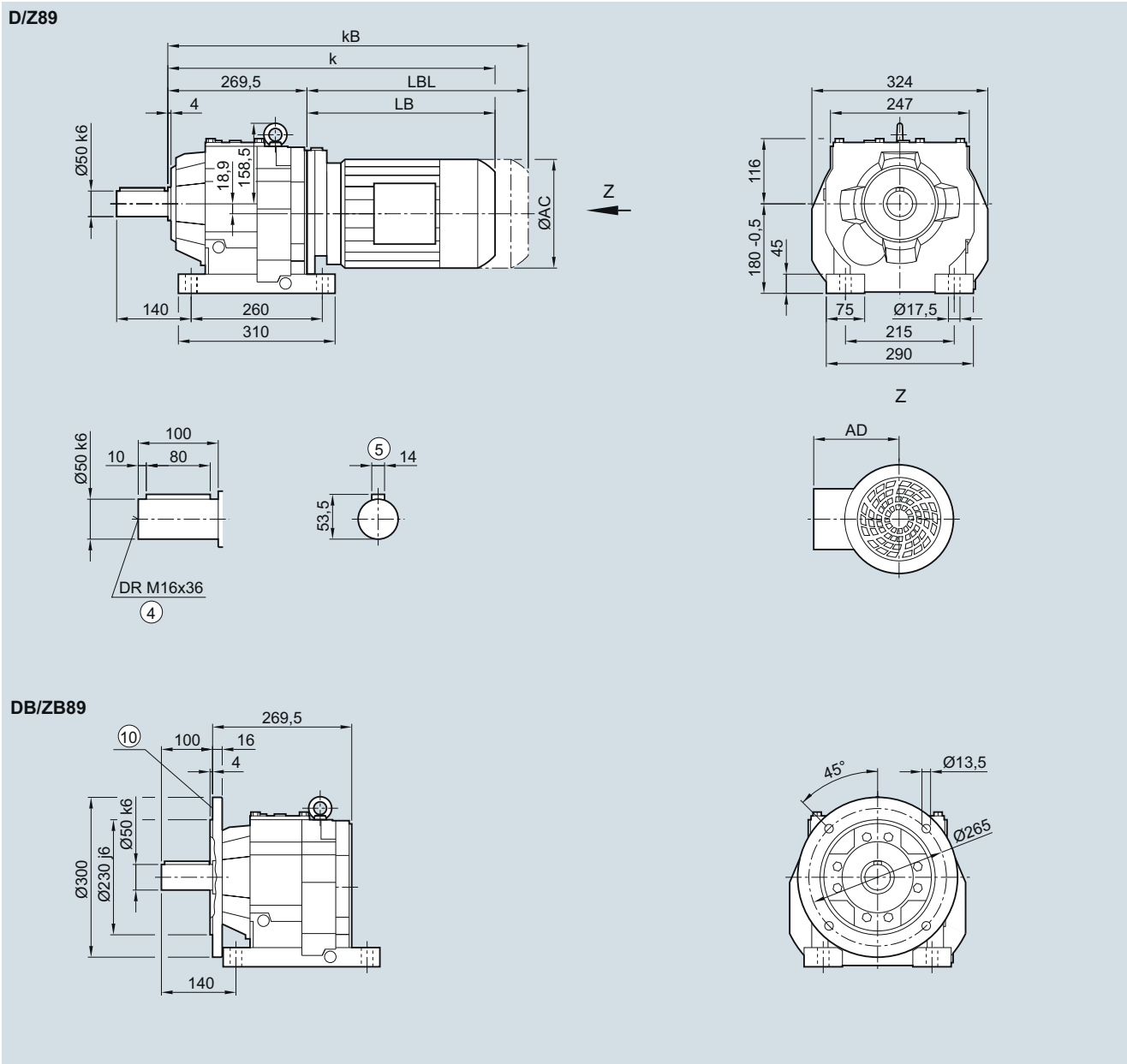
SIMOGEAR Geared Motors

Helical geared motors

Dimensions

D/Z89 and DB/ZB89 gearboxes in a foot and foot/flange-mounted design

DZ030, DZB030



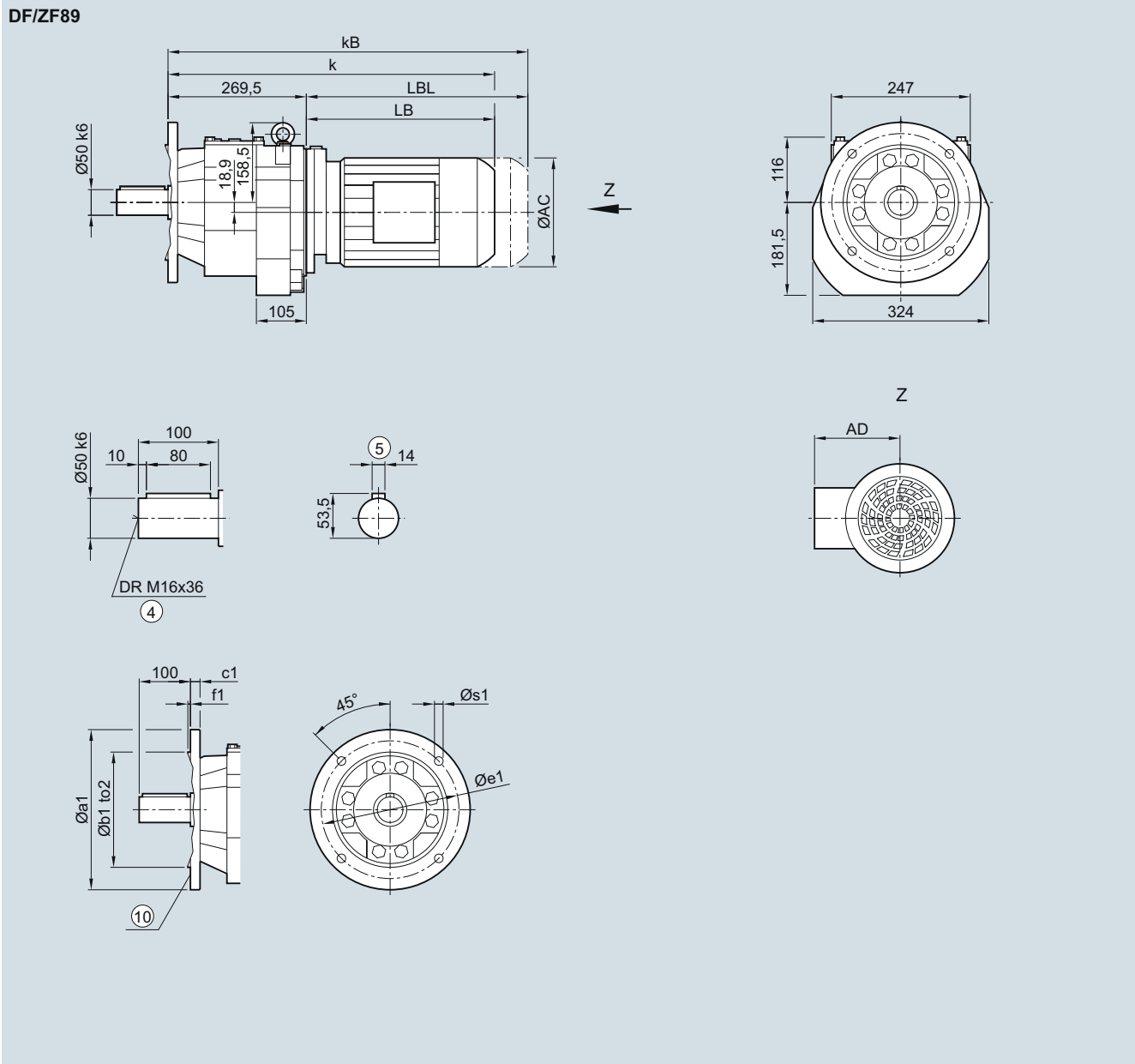
Motor	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	531.0	566.0	592.5	632.5	645.0	680.0	655.0	680.0	708.0	758.0	790.0	850.0	863.0	893.0
kB	591.0	626.0	662.5	702.5	723.5	758.5	728.0	753.0	812.5	862.5	906.0	966.0	992.0	1 022.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑩ For inner contour, see page 3/115

DF/ZF89 gearbox in a flange-mounted design
DZF030


Flange	a1	b1	to2	c1	e1	f1	s1							
	300	230	j6	16	265	4.0	13.5							
	350	250	j6	18	300	5.0	17.5							
Motor	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	531.0	566.0	592.5	632.5	645.0	680.0	655.0	680.0	708.0	758.0	790.0	850.0	863.0	893.0
kB	591.0	626.0	662.5	702.5	723.5	758.5	728.0	753.0	812.5	862.5	906.0	966.0	992.0	1 022.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

^④ DIN 332

^⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

^⑩ For inner contour, see page 3/115

SIMOGEAR Geared Motors

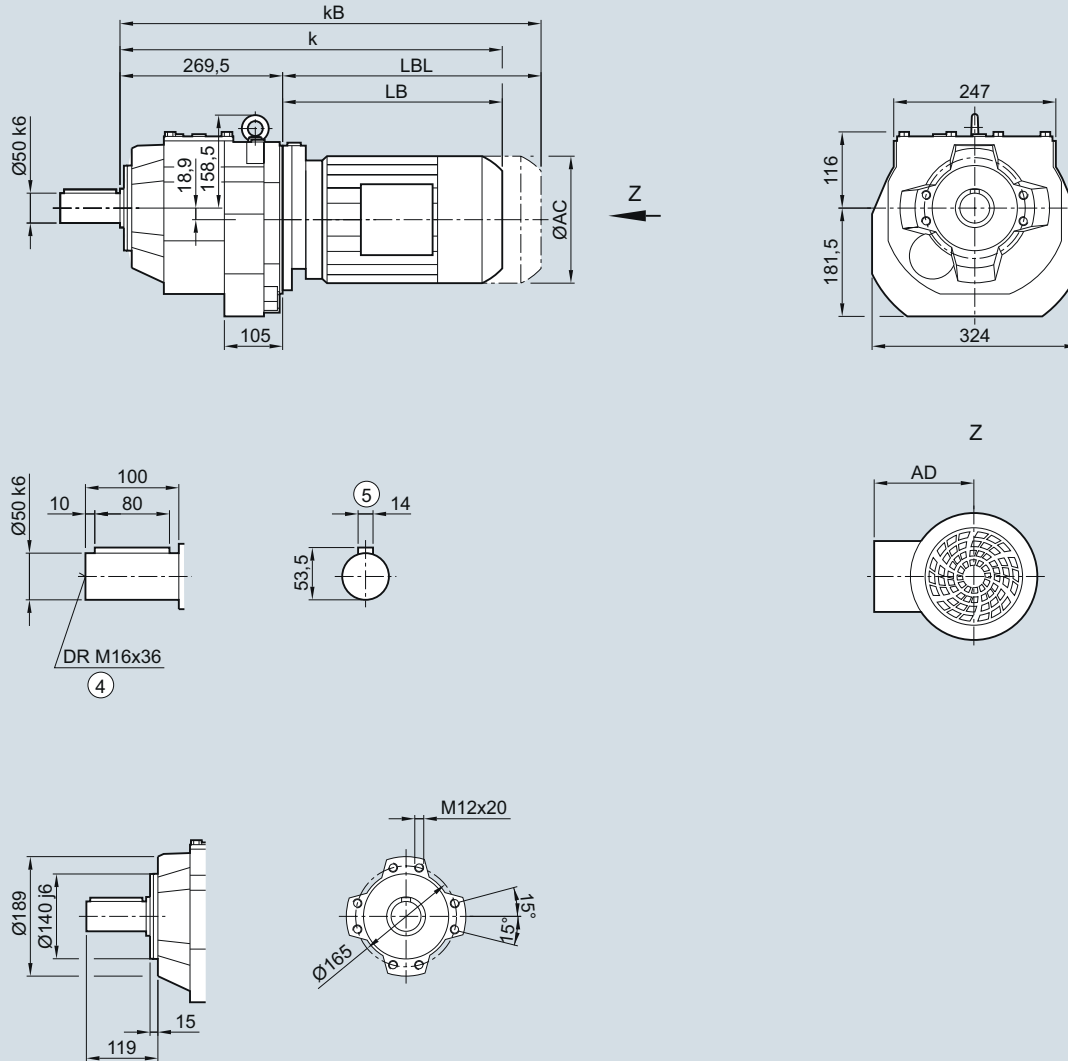
Helical geared motors

Dimensions

DZ/ZZ89 gearbox in a housing flange design

DZZ030

DZ/ZZ89

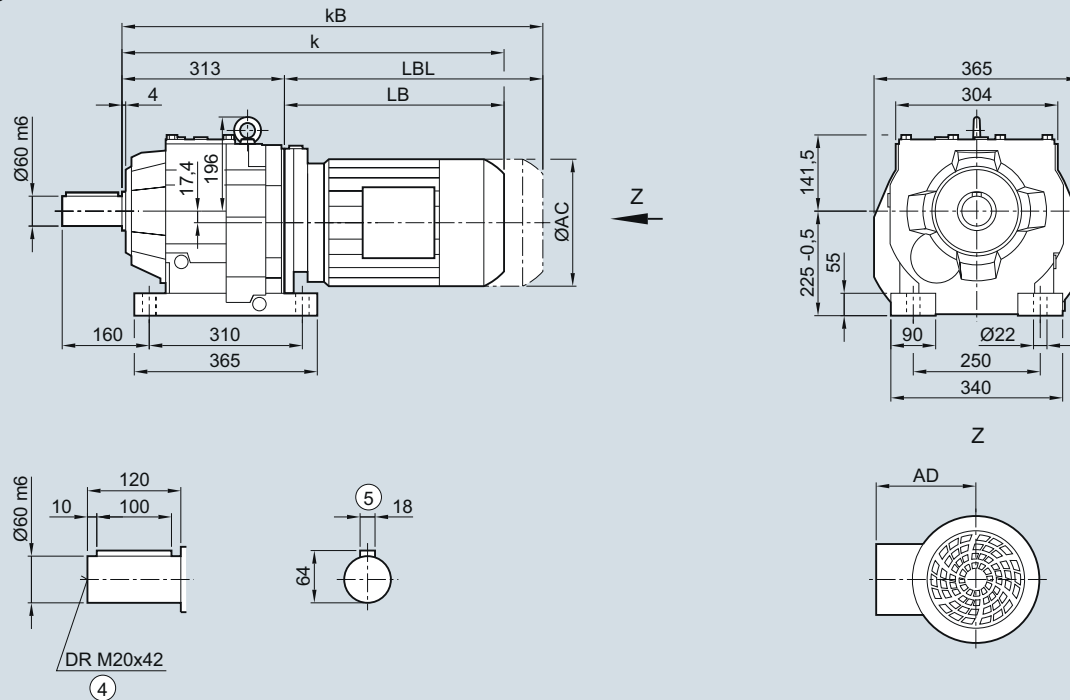


Motor	LE												LES	
	80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	531.0	566.0	592.5	632.5	645.0	680.0	655.0	680.0	708.0	758.0	790.0	850.0	863.0	893.0
kB	591.0	626.0	662.5	702.5	723.5	758.5	728.0	753.0	812.5	862.5	906.0	966.0	992.0	1 022.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

D/Z109 gearbox in a foot-mounted design
DZ030
D/Z109


Motor	LE										LES					
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0
k	629.0	669.0	679.5	714.5	689.5	714.5	742.5	792.5	824.5	884.5	897.5	927.5	965.5	990.5	1 011.0	1 071.0
kB	699.0	739.0	758.0	793.0	762.5	787.5	847.0	897.0	940.5	1 000.5	1 026.5	1 056.5	1 112.5	1 137.5	1 239.0	1 299.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

^④ DIN 332

^⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

SIMOGEAR Geared Motors

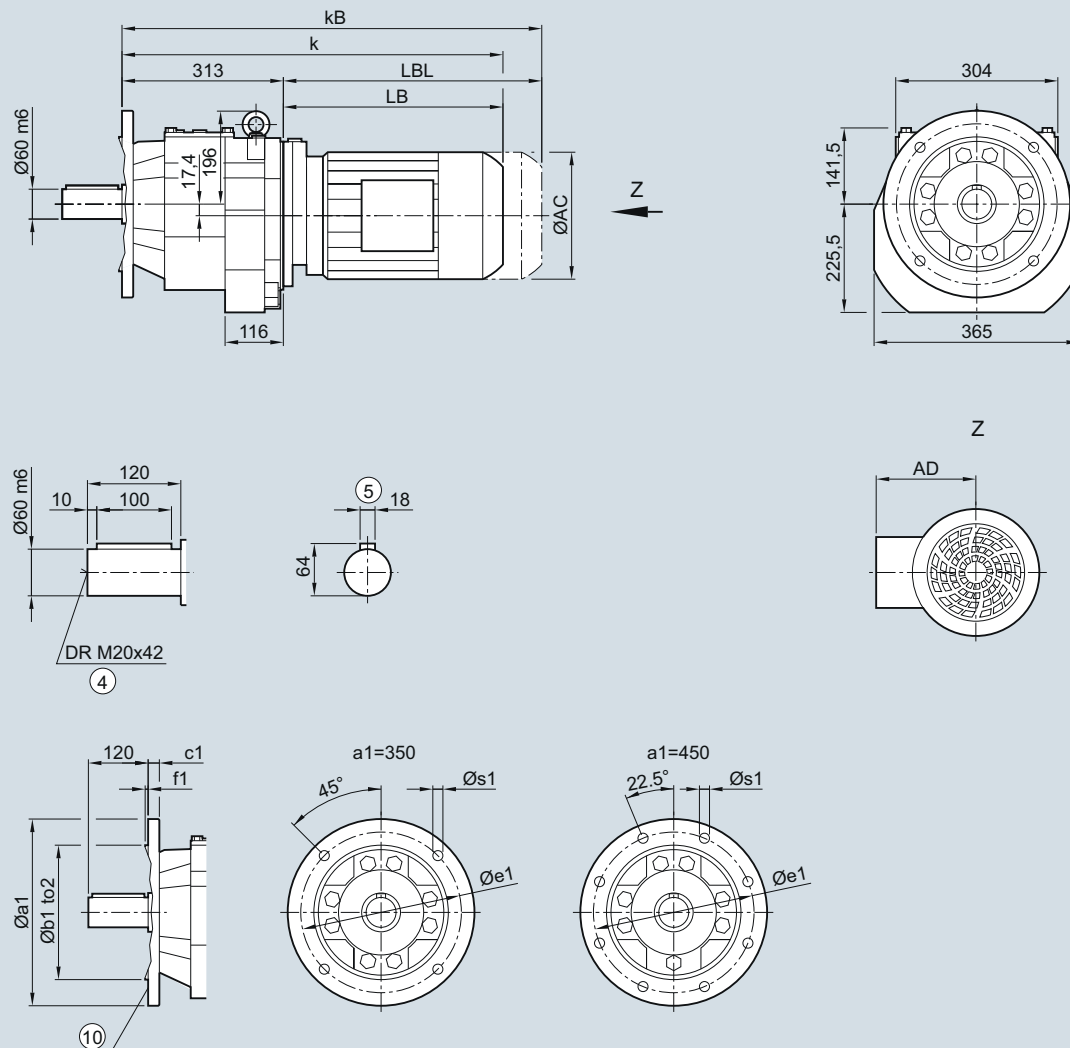
Helical geared motors

Dimensions

DF/ZF109 gearbox in a flange-mounted design

DZF030

DF/ZF109



Flange	a1	b1	to2	c1	e1	f1	s1
	350	250	h6	18	300	5	17.5
	450	350	h6	22	400	5	17.5

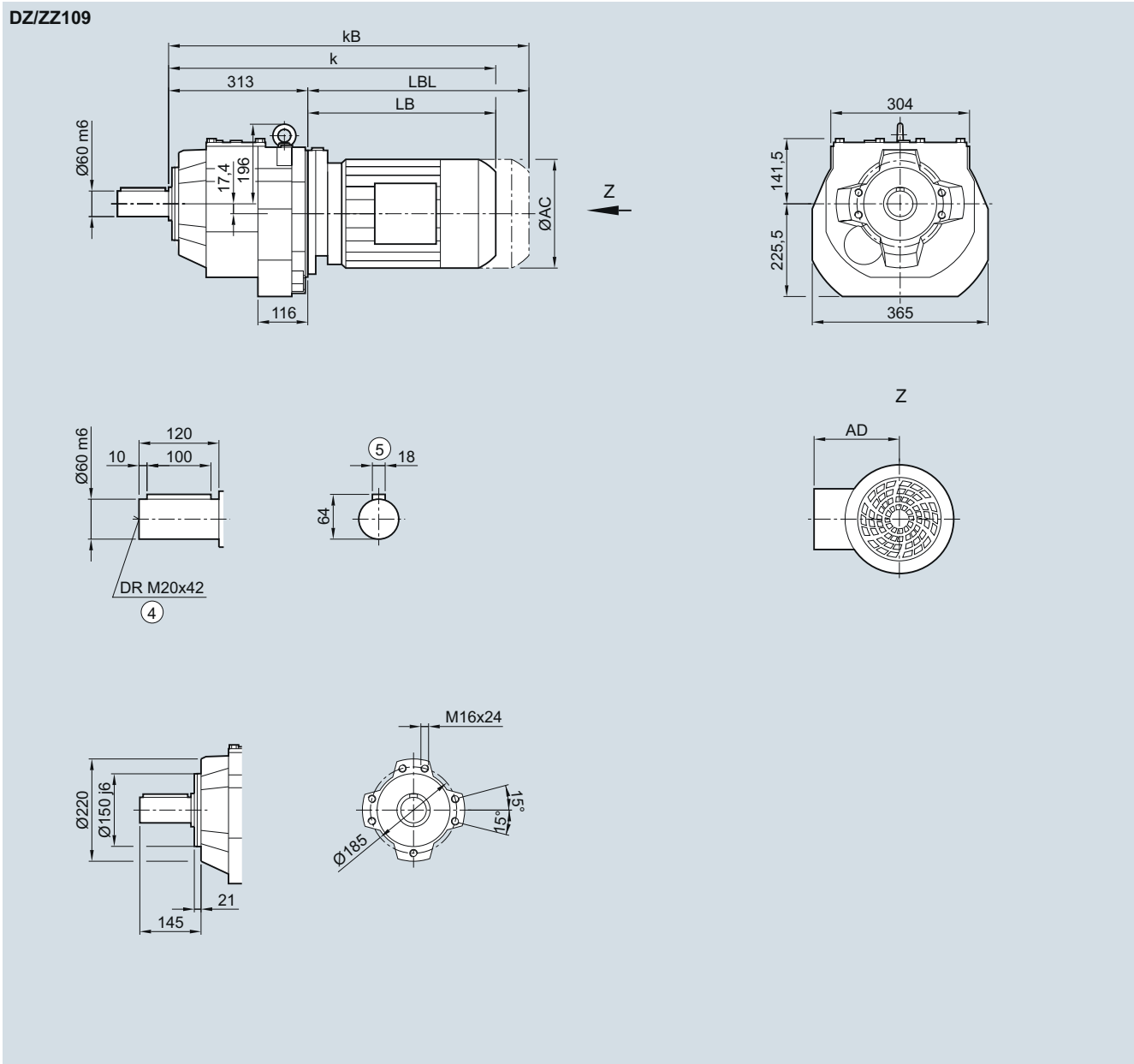
Motor	LE										LES					
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0
k	629.0	669.0	679.5	714.5	689.5	714.5	742.5	792.5	824.5	884.5	897.5	927.5	965.5	990.5	1 011.0	1 071.0
kB	699.0	739.0	758.0	793.0	762.5	787.5	847.0	897.0	940.5	1 000.5	1 026.5	1 056.5	1 112.5	1 137.5	1 239.0	1 299.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑩ For inner contour, see page 3/115

DZ/ZZ109 gearbox in a housing flange design
DZZ030


Motor	LE										LES					
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0
k	629.0	669.0	679.5	714.5	689.5	714.5	742.5	792.5	824.5	884.5	897.5	927.5	965.5	990.5	1 011.0	1 071.0
kB	699.0	739.0	758.0	793.0	762.5	787.5	847.0	897.0	940.5	1 000.5	1 026.5	1 056.5	1 112.5	1 137.5	1 239.0	1 299.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

^④ DIN 332

^⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

SIMOGEAR Geared Motors

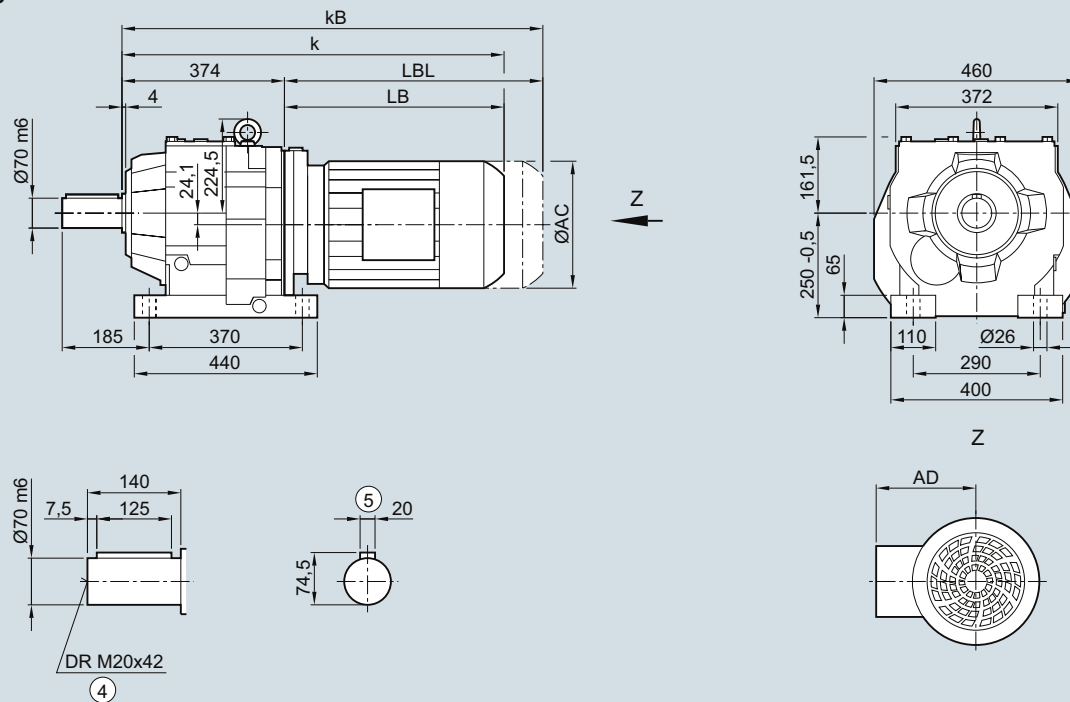
Helical geared motors

Dimensions

D/Z129 gearbox in a foot-mounted design

DZ030

D/Z129

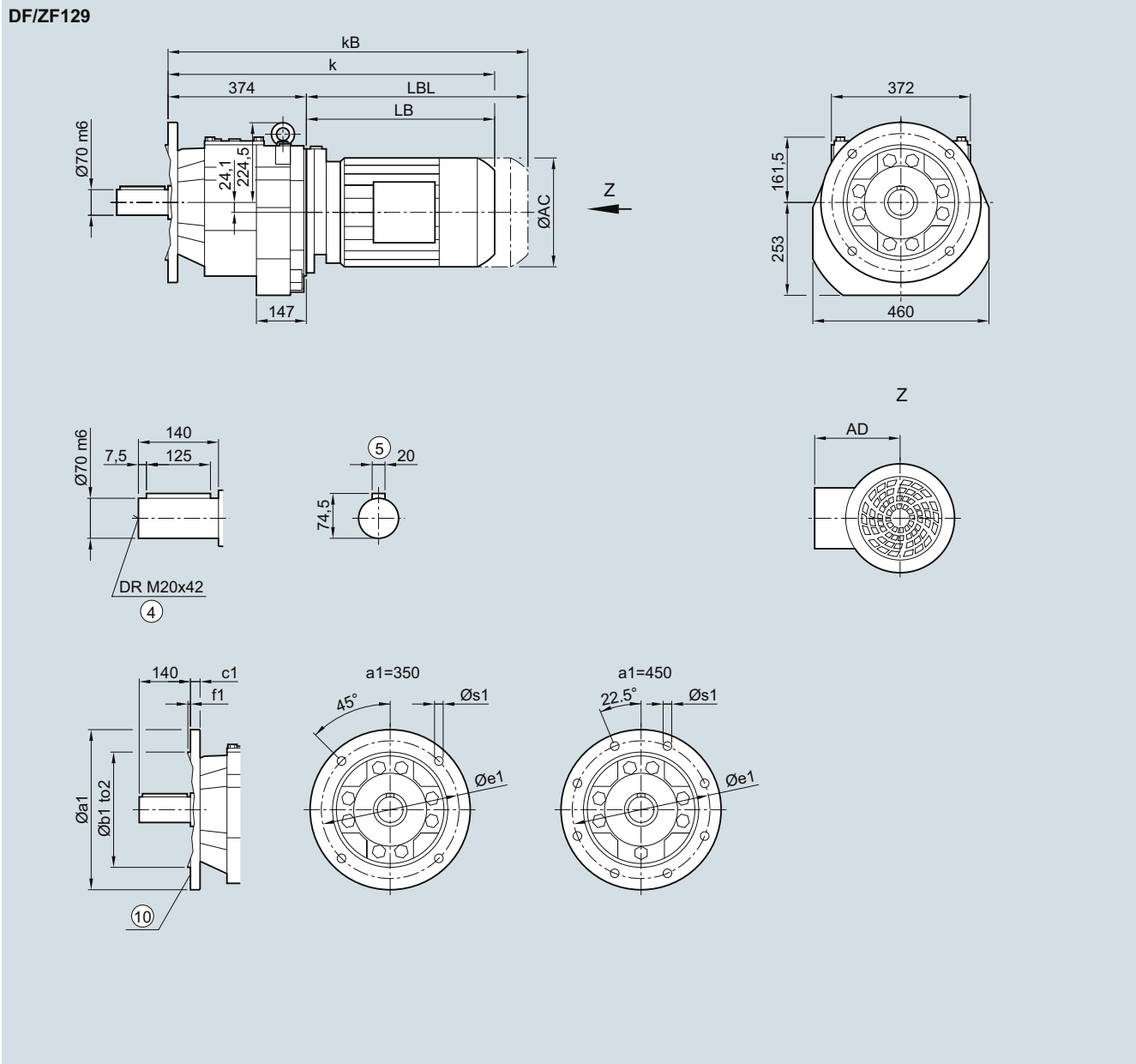


Motor	LE									LES								
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M	
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0	
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5	
k	683.0	723.0	731.5	766.5	741.5	766.5	792.5	842.5	874.5	934.5	947.5	977.5	1 015.5	1 040.5	1 067.0	1 127.0	1 172.5	
kB	753.0	793.0	810.0	845.0	814.5	839.5	897.0	947.0	990.5	1 050.5	1 076.5	1 106.5	1 162.5	1 187.5	1 295.0	1 355.0	1 397.5	
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5	
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5	

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

DF/ZF129 gearbox in a flange-mounted design
DZF030


Flange	a1	b1	to2	c1	e1	f1	s1
	350	250	h6	20	300	5	17.5
	450	350	h6	22	400	5	17.5

Motor	LE								LES								
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	683.0	723.0	731.5	766.5	741.5	766.5	792.5	842.5	874.5	934.5	947.5	977.5	1 015.5	1 040.5	1 067.0	1 127.0	1 172.5
kB	753.0	793.0	810.0	845.0	814.5	839.5	897.0	947.0	990.5	1 050.5	1 076.5	1 106.5	1 162.5	1 187.5	1 295.0	1 355.0	1 397.5
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions, see page 8/42.

⑩ For inner contour, see page 3/115

SIMOGEAR Geared Motors

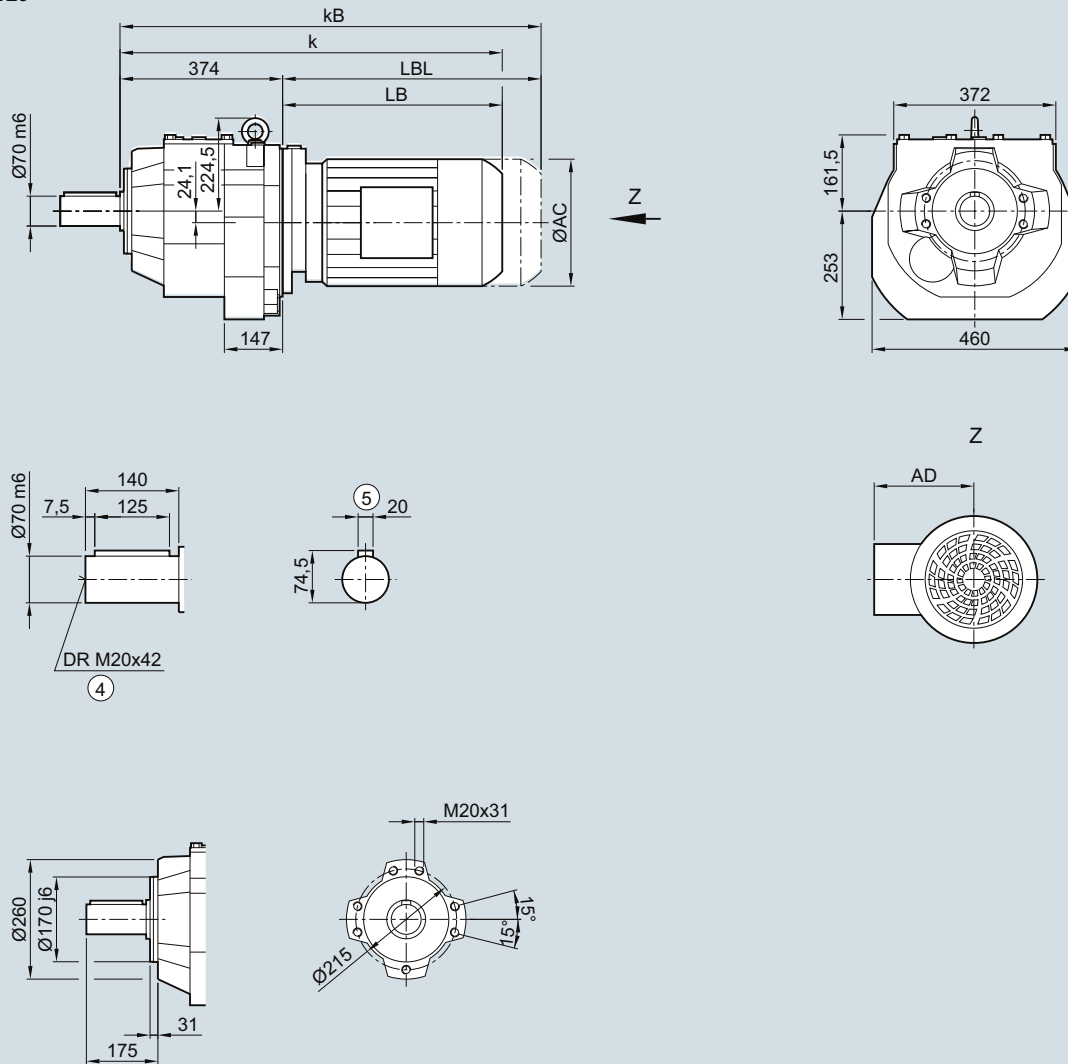
Helical geared motors

Dimensions

DZ/ZZ129 gearbox in a housing flange design

DZZ030

DZ/ZZ129

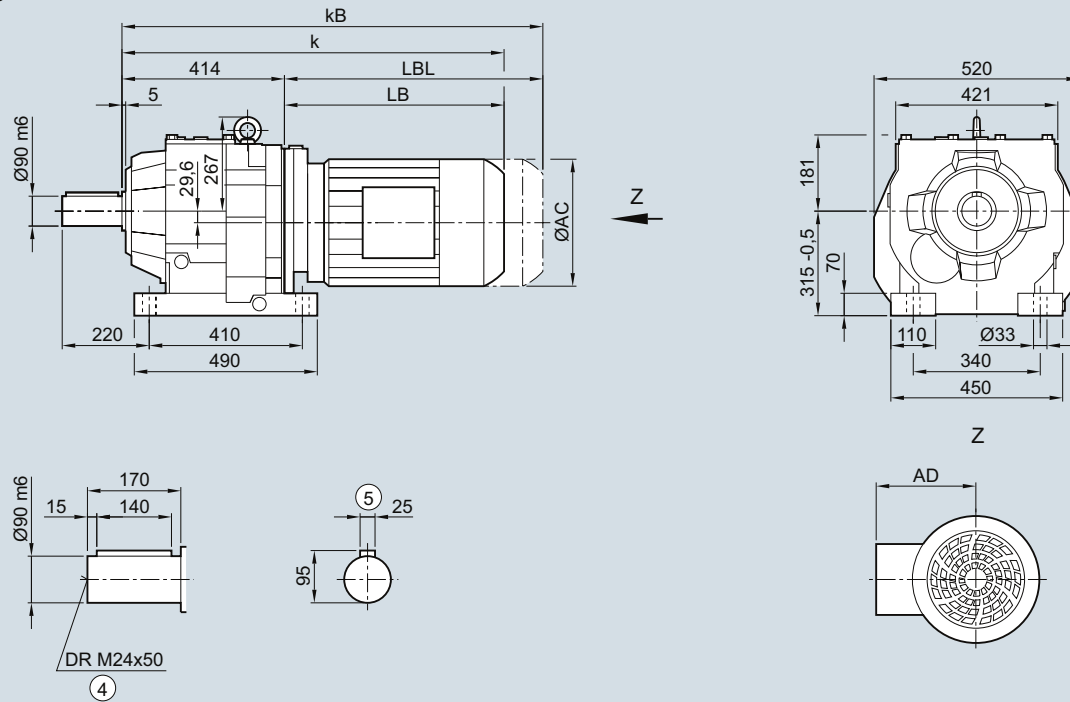


Motor	LE										LES						
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	683.0	723.0	731.5	766.5	741.5	766.5	792.5	842.5	874.5	934.5	947.5	977.5	1 015.5	1 040.5	1 067.0	1 127.0	1 172.5
k _B	753.0	793.0	810.0	845.0	814.5	839.5	897.0	947.0	990.5	1 050.5	1 076.5	1 106.5	1 162.5	1 187.5	1 295.0	1 355.0	1 397.5
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

D/Z149 gearbox in a foot-mounted design
DZ030
D/Z149


Motor	LE							LES							
	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	770.0	805.0	780.0	805.0	826.0	876.0	908.0	968.0	981.0	1 011.0	1 049.0	1 074.0	1 094.5	1 154.5	1 206.0
kB	848.5	883.5	853.0	878.0	930.5	980.5	1 024.0	1 084.0	1 110.0	1 140.0	1 196.0	1 221.0	1 322.5	1 382.5	1 431.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions, see page 8/42.

SIMOGEAR Geared Motors

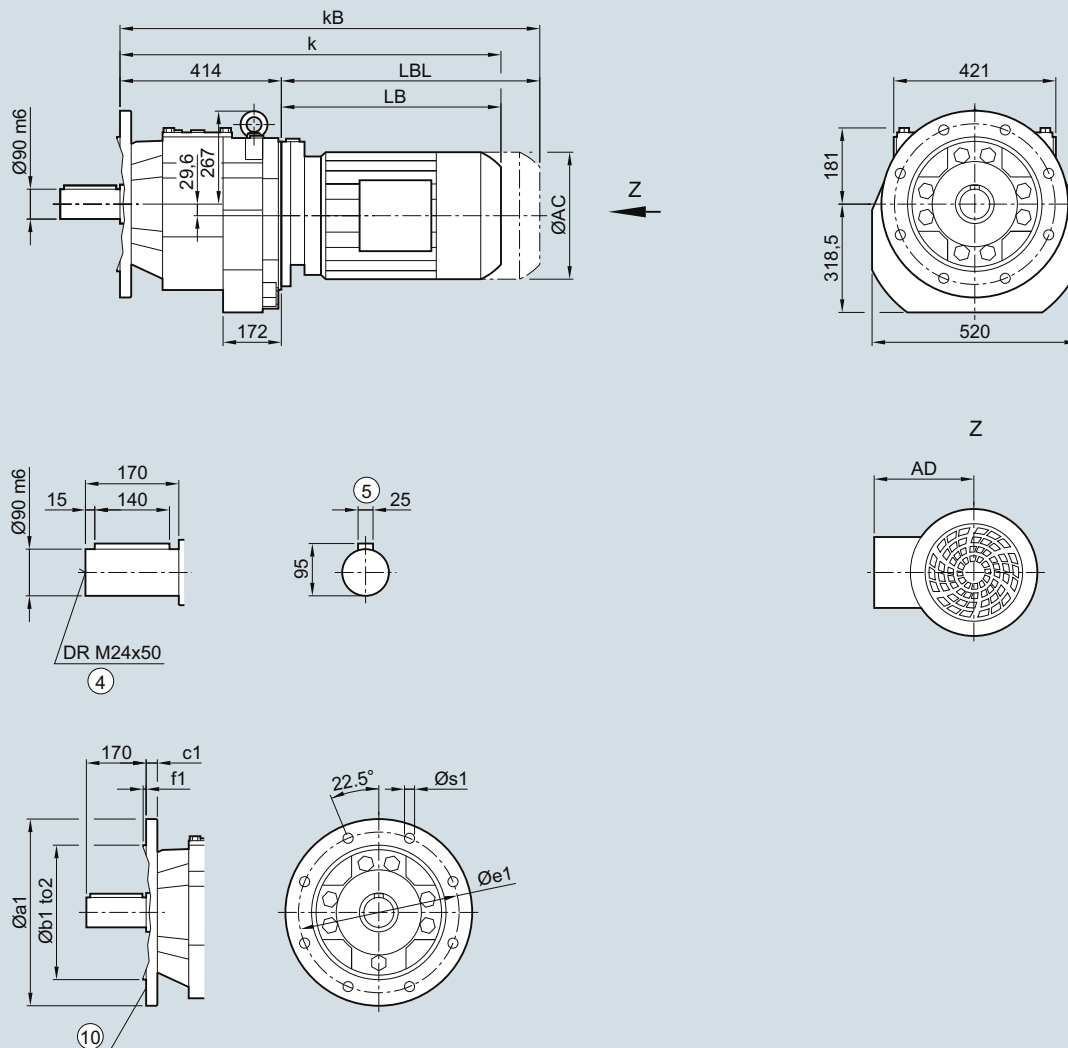
Helical geared motors

Dimensions

DF/ZF149 gearbox in a flange-mounted design

DZF030

DF/ZF149



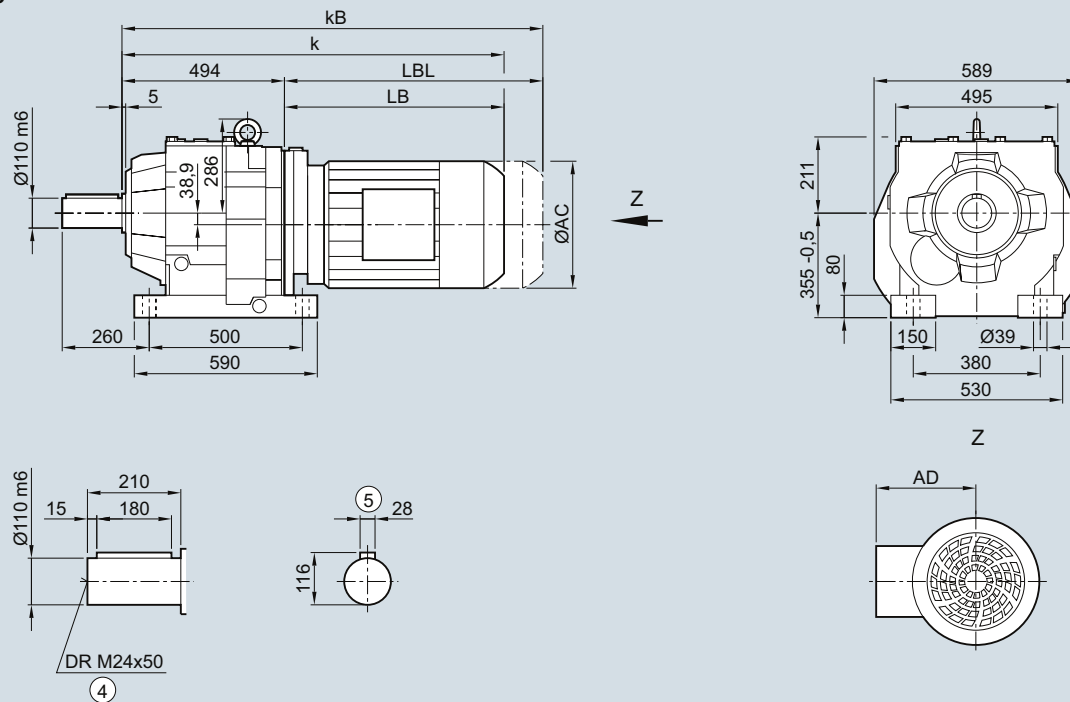
Flange	a1	b1	to2	c1	e1	f1	s1								
	450	350	h6	22	400	5	17.5								
	550	450	h6	25	500	5	17.5								
Motor	LE 100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	770.0	805.0	780.0	805.0	826.0	876.0	908.0	968.0	981.0	1 011.0	1 049.0	1 074.0	1 094.5	1 154.5	1 206.0
kB	848.5	883.5	853.0	878.0	930.5	980.5	1 024.0	1 084.0	1 110.0	1 140.0	1 196.0	1 221.0	1 322.5	1 382.5	1 431.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑩ For inner contour, see page 3/115

D/Z169 gearbox in a foot-mounted design
DZ030
D/Z169


Motor	LE						LES						
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	847.5	872.5	893.0	943.0	975.0	1 035.0	1 047.5	1 077.5	1 115.5	1 140.5	1 160.0	1 220.0	1 267.5
kB	920.5	945.5	997.5	1 047.5	1 091.0	1 151.0	1 176.5	1 206.5	1 262.5	1 287.5	1 388.0	1 448.0	1 492.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

^④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

^⑤ Feather key/keyway DIN 6885

SIMOGEAR Geared Motors

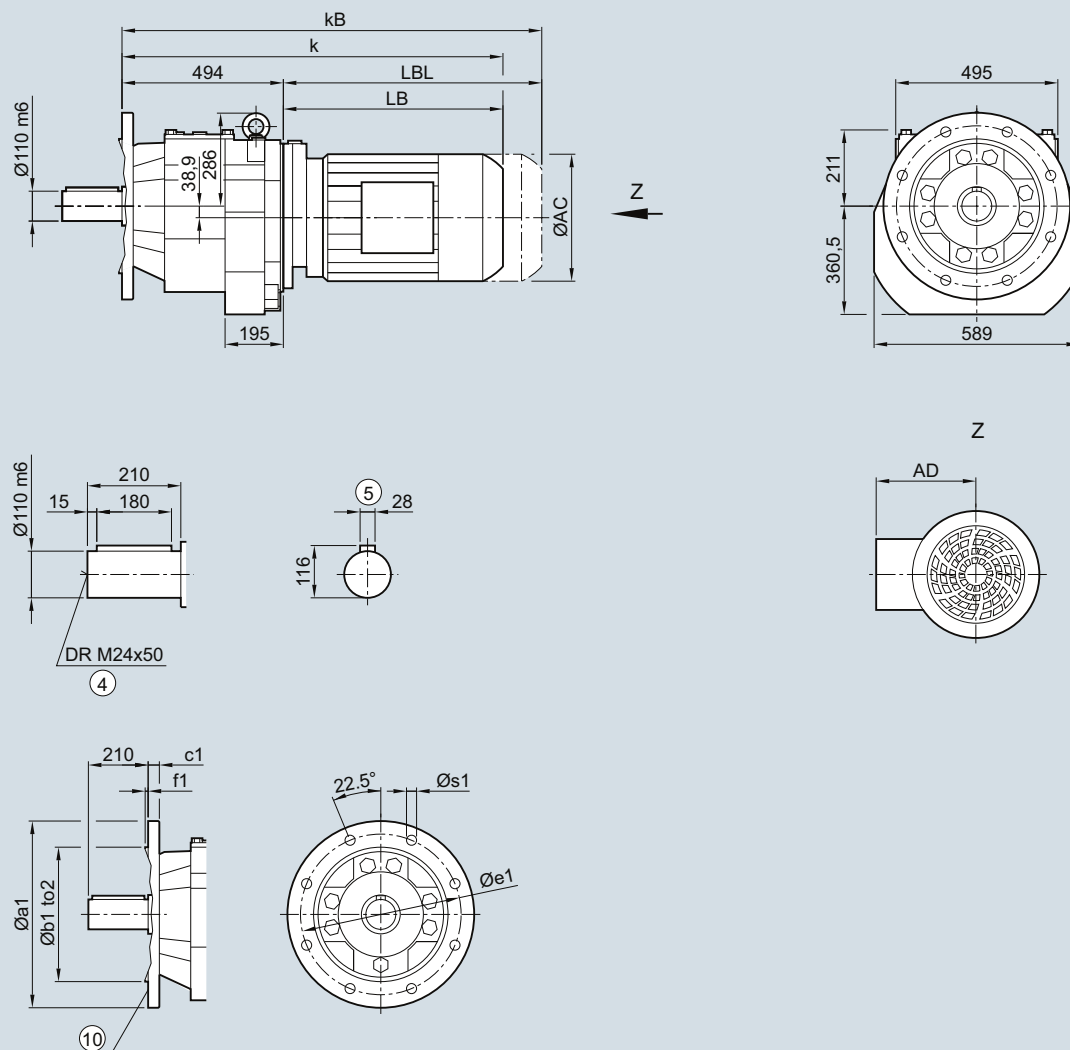
Helical geared motors

Dimensions

DF/ZF169 gearbox in a flange-mounted design

DZF030

DF/ZF169



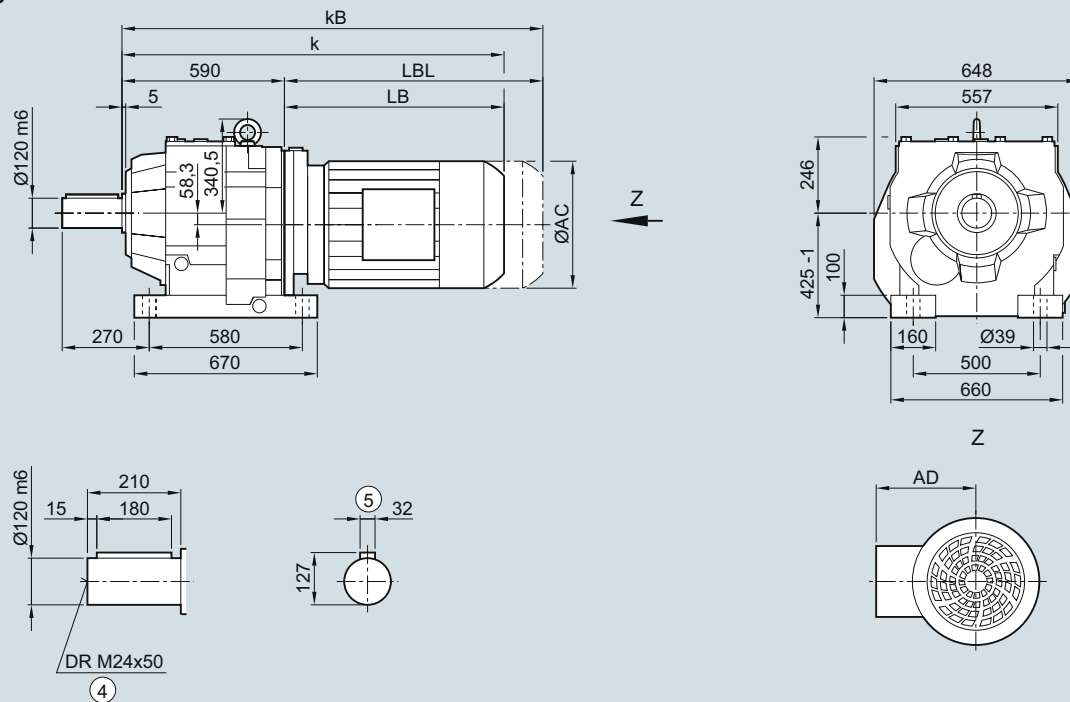
Flange	a1	b1	to2	c1	e1	f1	s1						
	450	350	h6	22	400	5	17.5						
	550	450	h6	25	500	5	17.5						
Motor	LE 112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	847.5	872.5	893.0	943.0	975.0	1 035.0	1 047.5	1 077.5	1 115.5	1 140.5	1 160.0	1 220.0	1 267.5
kB	920.5	945.5	997.5	1 047.5	1 091.0	1 151.0	1 176.5	1 206.5	1 262.5	1 287.5	1 388.0	1 448.0	1 492.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 3/115

D/Z189 gearbox in a foot-mounted design
DZ030
D/Z189


Motor	LE						LES						
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	943.5	968.5	989.0	1 039.0	1 071.0	1 131.0	1 143.5	1 173.5	1 211.5	1 236.5	1 256.0	1 316.0	1 363.5
kB	1 016.5	1 041.5	1 093.5	1 143.5	1 187.0	1 247.0	1 272.5	1 302.5	1 358.5	1 383.5	1 484.0	1 544.0	1 588.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

^④ DIN 332

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

^⑤ Feather key/keyway DIN 6885

SIMOGEAR Geared Motors

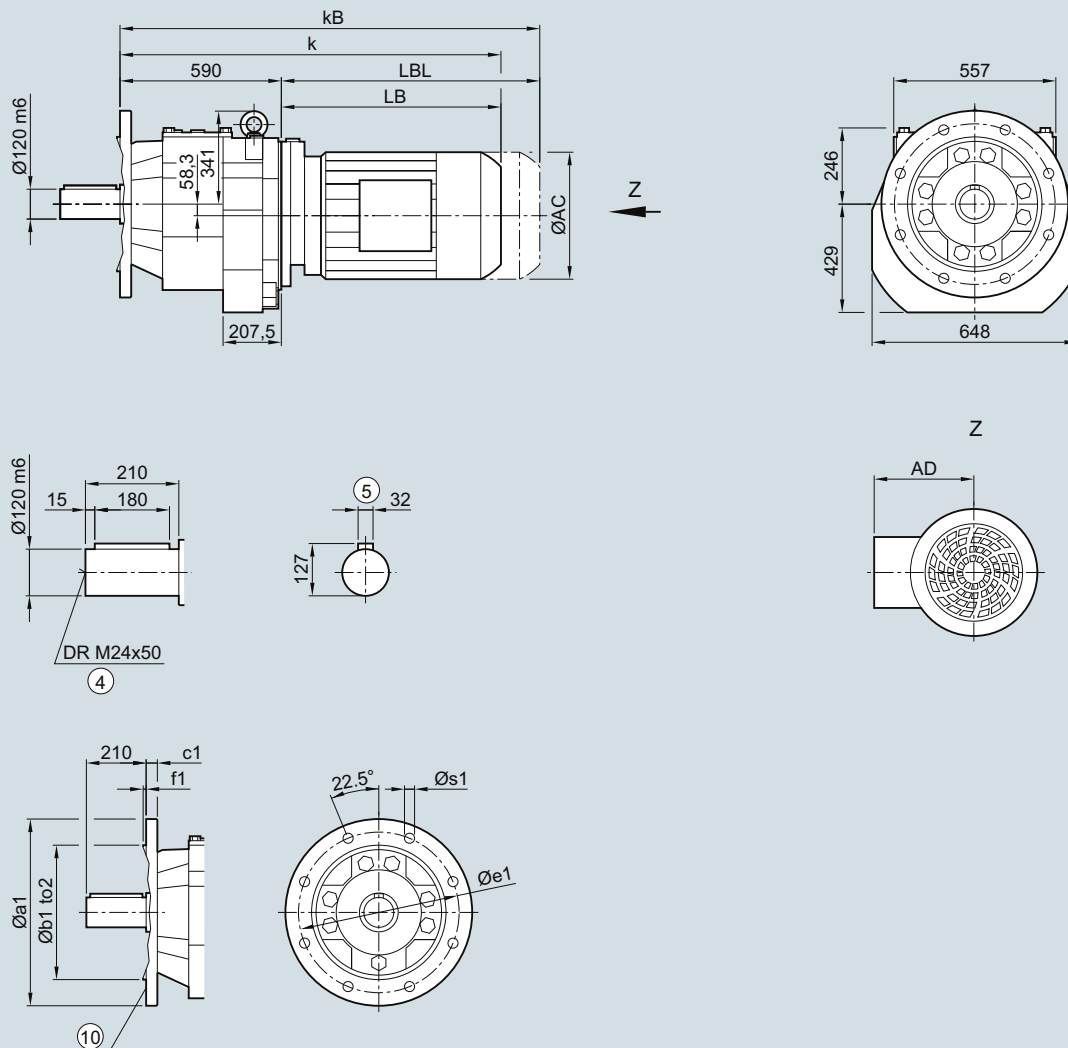
Helical geared motors

Dimensions

DF/ZF189 gearbox in a flange-mounted design

DZF030

DF/ZF189



Flange	a1	b1	to2	c1	e1	f1	s1						
	550	450	h6	25	500	5	17.5						
	660	550	h6	28	600	6	22.0						
Motor	LE 112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	337.0	337.0	407.5
k	943.5	968.5	989.0	1 039.0	1 071.0	1 131.0	1 143.5	1 173.5	1 211.5	1 236.5	1 256.0	1 316.0	1 363.5
kB	1 016.5	1 041.5	1 093.5	1 143.5	1 187.0	1 247.0	1 272.5	1 302.5	1 358.5	1 383.5	1 484.0	1 544.0	1 588.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

④ DIN 332

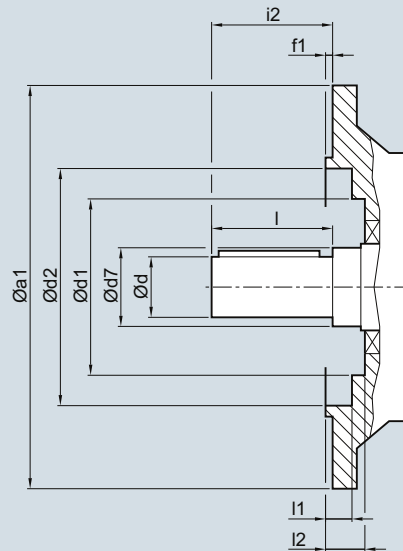
¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 3/115

Inner contour of the flange design

Notes regarding the design of the customer's interface.



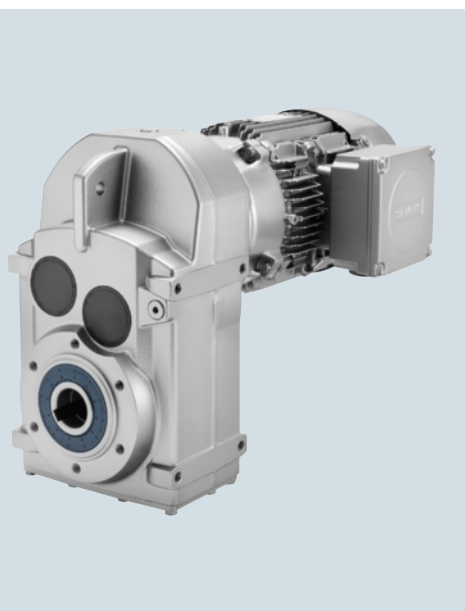
Gearbox	a1	d	d7	d1 DF/ZF	d1 DB/ZB	d2	f1	i2	l	l1 DF/ZF	l1 DB/ZB	l2
DF/ZF19, DB/ZB19	120	16	25	48.0	48.0	72.0	3.0	40	28	1.0	1.0	6.0
	120	16	25	48.0	48.0	72.0	3.0	40	40	1.0	1.0	6.0
	120	20	25	48.0	48.0	72.0	3.0	40	40	1.0	1.0	6.0
DF/ZF19	140	20	25	48.0	-	87.0	3.0	40	40	1.0	-	6.0
	160	20	25	48.0	-	102.0	3.5	40	40	1.0	-	6.5
DF/ZF29, /DB/ZB29	120	25	30	56.0	56.0	72.0	3.0	50	50	2.0	2.0	8.0
DF/ZF29	140	25	30	56.0	-	87.0	3.5	50	50	2.0	-	7.0
	160	25	30	56.0	-	102.0	3.5	50	50	2.0	-	7.5
DF/ZF39, DB/ZB39	120	25	35	69.0	66.0	72.0	3.0	50	50	4.0	4.0	9.0
DF/ZF39	160	25	35	66.5	-	102.0	3.5	50	50	1.5	-	6.5
	200	25	35	66.5	-	120.0	3.5	50	50	1.5	-	6.5
DF/ZF49, DB/ZB49	140	30	35	79.0	79.0	84.5	3.0	60	60	4.0	4.0	9.5
DF/ZF49	160	30	35	79.0	-	94.5	3.5	60	60	5.5	-	11.0
	200	30	35	79.0	-	121.0	3.5	60	60	4.5	-	10.0
DF/ZF59, DB/ZB59	160	35	40	88.0	88.0	94.5	3.5	70	70	4.5	4.5	11.0
DF/ZF59	200	35	40	88.0	-	115.0	3.5	70	70	4.5	-	9.0
	250	35	40	88.0	-	168.0	4.0	70	70	4.0	-	10.5
DF/ZF69, DB/ZB69	200	35	47	105.0	105.0	115.0	3.5	70	70	4.5	4.5	11.0
DF/ZF69	250	35	47	105.0	-	168.0	4.0	70	70	4.0	-	10.5
DF/ZF79, DB/ZB79	250	40	52	113.0	114.5	168.0	4.0	80	80	0.5	2.5	8.0
DF/ZF79	300	40	52	113.0	-	217.0	4.0	80	80	0.5	-	8.0
DF/ZF89, DB/ZB89	300	50	62	143.0	143.0	218.0	4.0	100	100	1.5	1.5	9.0
DF/ZF89	350	50	62	143.0	-	238.0	5.0	100	100	2.5	-	10.0
DF/ZF109	350	60	65	157.0	-	236.0	5.0	120	120	2.0	-	12.0
	450	60	65	168.0	-	335.0	5.0	120	120	2.0	-	12.0
DF/ZF129	350	70	75	180.0	-	236.0	5.0	140	140	7.5	-	20.0
	450	70	75	180.0	-	330.0	5.0	140	140	7.5	-	20.0
DF/ZF149	450	90	100	225	-	330	5.0	170	170	2.5	-	10.0
	550	90	100	225	-	430	5.0	170	170	2.5	-	10.0
DF/ZF169	450	110	120	235	-	330	5	210	210	0.5	-	10.0
	550	110	120	235	-	430	5	210	210	0.5	-	10
DF/ZF189	550	120	140	274	-	430	5	210	210	0	-	10
	660	120	140	274	-	530	6	210	210	1	-	11

SIMOGEAR Geared Motors

Notes

3

Parallel shaft geared motors



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4/93	FD.Z./FZ.Z.109
4/94	FD.F./FZ.F.109
4/95	FD../FZ..109
4/96	FDAD./FZAD.129
4/97	FD.Z./FZ.Z.129
4/98	FD.F./FZ.F.129
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SIMOGEAR Geared Motors

Parallel shaft geared motors

Orientation

SIMOGEAR parallel shaft geared motor F

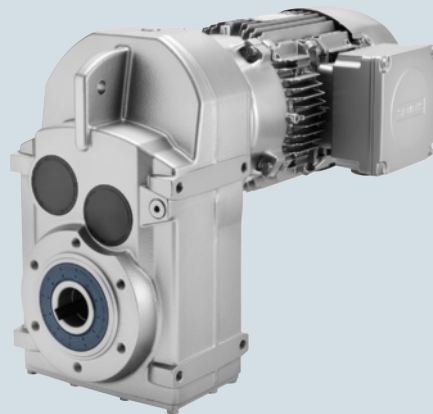


Fig. 4/1 Parallel shaft geared motor F

SIMOGEAR parallel shaft geared motors are available in the following versions for mounting in any position:

- 2 or 3 stages FZ/FD
- Shaft-mounted design with torque arm FZAD/FDAD
- Flange-mounted design FZF/FDF
- Design with integrated housing flange FZZ/FDZ
- Foot-mounted design FZ/FD
- Hollow-shaft design with feather key FZA/FDA
- Hollow-shaft design with splined shaft FZAT/FDAT
- Hollow-shaft design with shrink disk FZAS/FDAS
- Hollow-shaft design with SIMOLOC assembly system FZADR/FDADR
- Solid shaft design with and without feather key FZ/FD

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.09	FD.69-LA71MH8							
	1.8	475	348.40	11 100	1.3	32	2KJ3404 - ■ CE11 - ■ ■ S1	P02
	2.0	420	309.78	11 200	1.4	32	2KJ3404 - ■ CE11 - ■ ■ R1	P02
	2.3	370	272.00	11 400	1.6	32	2KJ3404 - ■ CE11 - ■ ■ Q1	P02
	FD.69-LA63MF6							
	2.4	350	348.40	11 400	1.7	30	2KJ3404 - ■ BD11 - ■ ■ S1	P01
	2.7	310	309.78	11 500	1.9	30	2KJ3404 - ■ BD11 - ■ ■ R1	P01
	FD.49-LA71MH8							
	1.9	450	330.98	8 120	1.1	27	2KJ3403 - ■ CE11 - ■ ■ S1	P02
	2.1	400	294.29	8 270	1.2	27	2KJ3403 - ■ CE11 - ■ ■ R1	P02
	2.4	350	258.40	8 410	1.4	27	2KJ3403 - ■ CE11 - ■ ■ Q1	P02
	FD.49-LA63MF6							
	2.6	335	330.98	8 460	1.4	25	2KJ3403 - ■ BD11 - ■ ■ S1	P01
	2.9	295	294.29	8 570	1.6	25	2KJ3403 - ■ BD11 - ■ ■ R1	P01
	3.3	260	258.40	8 670	1.8	25	2KJ3403 - ■ BD11 - ■ ■ Q1	P01
	3.6	235	234.91	8 750	2.0	25	2KJ3403 - ■ BD11 - ■ ■ P1	P01
	FD.39-LA71MH8							
	2.6	330	243.26	5 670	0.87	18	2KJ3402 - ■ CE11 - ■ ■ Q1	P02
3.0	285	211.06	5 830	1.0	18	2KJ3402 - ■ CE11 - ■ ■ P1	P02	
FD.39-LA63MF6								
3.1	275	274.26	5 870	1.0	16	2KJ3402 - ■ BD11 - ■ ■ R1	P01	
3.5	245	243.26	5 980	1.2	16	2KJ3402 - ■ BD11 - ■ ■ Q1	P01	
4.0	210	211.06	6 110	1.4	16	2KJ3402 - ■ BD11 - ■ ■ P1	P01	
4.4	194	191.87	6 170	1.5	16	2KJ3402 - ■ BD11 - ■ ■ N1	P01	
FD.39-LA63MD4								
5.1	168	274.26	6 270	1.7	15	2KJ3402 - ■ BB11 - ■ ■ R1		
5.8	149	243.26	6 340	1.9	15	2KJ3402 - ■ BB11 - ■ ■ Q1		
FD.29-LA71MH8								
5.0	172	126.09	5 220	0.87	12	2KJ3401 - ■ CE11 - ■ ■ H1	P02	
5.6	153	111.97	5 220	0.98	12	2KJ3401 - ■ CE11 - ■ ■ G1	P02	
6.1	141	103.36	5 220	1.1	12	2KJ3401 - ■ CE11 - ■ ■ F1	P02	
7.0	122	89.78	5 220	1.2	12	2KJ3401 - ■ CE11 - ■ ■ E1	P02	
8.1	106	78.02	5 220	1.4	12	2KJ3401 - ■ CE11 - ■ ■ D1	P02	
8.9	96	70.43	5 220	1.6	12	2KJ3401 - ■ CE11 - ■ ■ C1	P02	
9.5	90	66.29	5 220	1.7	12	2KJ3401 - ■ CE11 - ■ ■ B1	P02	
11	79	57.79	5 220	1.9	12	2KJ3401 - ■ CE11 - ■ ■ A1	P02	
FD.29-LA63MD4								
4.7	183	298.58	5 220	0.82	9	2KJ3401 - ■ BB11 - ■ ■ Q1		
5.3	162	264.39	5 220	0.92	9	2KJ3401 - ■ BB11 - ■ ■ P1		
6.1	141	229.72	5 220	1.1	9	2KJ3401 - ■ BB11 - ■ ■ N1		
6.7	128	208.83	5 220	1.2	9	2KJ3401 - ■ BB11 - ■ ■ M1		
7.9	109	177.71	5 220	1.4	9	2KJ3401 - ■ BB11 - ■ ■ L1		
8.7	99	161.55	5 220	1.5	9	2KJ3401 - ■ BB11 - ■ ■ K1		
9.9	86	140.86	5 220	1.7	9	2KJ3401 - ■ BB11 - ■ ■ J1		
11	77	126.09	5 220	1.9	9	2KJ3401 - ■ BB11 - ■ ■ H1		
13	69	111.97	5 220	2.2	9	2KJ3401 - ■ BB11 - ■ ■ G1		

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.09								
FD.29-LA63MD4								
14	64	103.36	5 220	2.4	9	2KJ3401 - ■ BB11 - ■ ■ F1		
16	55	89.78	5 220	2.7	9	2KJ3401 - ■ BB11 - ■ ■ E1		
18	48	78.02	5 220	3.1	9	2KJ3401 - ■ BB11 - ■ ■ D1		
20	43	70.43	5 220	3.5	9	2KJ3401 - ■ BB11 - ■ ■ C1		
21	41	66.29	5 220	3.7	9	2KJ3401 - ■ BB11 - ■ ■ B1		
24	36	57.79	5 220	4.2	9	2KJ3401 - ■ BB11 - ■ ■ A1		
FZ.29-LA71MH8								
11	77	56.73	5 220	1.9	11	2KJ3301 - ■ CE11 - ■ ■ C2	P02	
13	69	50.32	5 220	2.2	11	2KJ3301 - ■ CE11 - ■ ■ B2	P02	
14	60	43.66	5 220	2.5	11	2KJ3301 - ■ CE11 - ■ ■ A2	P02	
16	54	39.69	5 220	2.8	11	2KJ3301 - ■ CE11 - ■ ■ X1	P02	
19	46	34.04	5 220	3.2	11	2KJ3301 - ■ CE11 - ■ ■ W1	P02	
20	42	30.95	5 220	3.6	11	2KJ3301 - ■ CE11 - ■ ■ V1	P02	
23	37	27.13	5 220	4.1	11	2KJ3301 - ■ CE11 - ■ ■ U1	P02	
26	33	24.22	5 220	4.5	11	2KJ3301 - ■ CE11 - ■ ■ T1	P02	
29	29	21.58	5 220	5.1	11	2KJ3301 - ■ CE11 - ■ ■ S1	P02	
32	27	19.92	5 220	5.5	11	2KJ3301 - ■ CE11 - ■ ■ R1	P02	
36	24	17.44	5 220	6.3	11	2KJ3301 - ■ CE11 - ■ ■ Q1	P02	
41	21	15.29	5 220	7.2	11	2KJ3301 - ■ CE11 - ■ ■ P1	P02	
45	19	13.88	5 220	7.9	11	2KJ3301 - ■ CE11 - ■ ■ N1	P02	
48	18	13.06	5 220	8.4	11	2KJ3301 - ■ CE11 - ■ ■ M1	P02	
55	16	11.51	5 220	9.1	11	2KJ3301 - ■ CE11 - ■ ■ L1	P02	
63	14	9.99	5 220	10	11	2KJ3301 - ■ CE11 - ■ ■ K1	P02	
65	13	9.69	5 220	11	11	2KJ3301 - ■ CE11 - ■ ■ J1	P02	
73	12	8.63	5 040	11	11	2KJ3301 - ■ CE11 - ■ ■ H1	P02	
79	11	7.97	4 910	11	11	2KJ3301 - ■ CE11 - ■ ■ G1	P02	
90	9.5	6.98	4 710	13	11	2KJ3301 - ■ CE11 - ■ ■ F1	P02	
103	8.3	6.12	4 510	14	11	2KJ3301 - ■ CE11 - ■ ■ E1	P02	
114	7.6	5.55	4 370	14	11	2KJ3301 - ■ CE11 - ■ ■ D1	P02	
121	7.1	5.22	4 290	15	11	2KJ3301 - ■ CE11 - ■ ■ C1	P02	
137	6.3	4.60	4 120	16	11	2KJ3301 - ■ CE11 - ■ ■ B1	P02	
158	5.5	4.00	3 930	17	11	2KJ3301 - ■ CE11 - ■ ■ A1	P02	
FZ.29-LA63MD4								
25	35	56.73	5 220	4.3	9	2KJ3301 - ■ BB11 - ■ ■ C2		
28	31	50.32	5 220	4.9	9	2KJ3301 - ■ BB11 - ■ ■ B2		
32	27	43.66	5 220	5.6	9	2KJ3301 - ■ BB11 - ■ ■ A2		
35	24	39.69	5 220	6.2	9	2KJ3301 - ■ BB11 - ■ ■ X1		
41	21	34.04	5 220	7.2	9	2KJ3301 - ■ BB11 - ■ ■ W1		
45	19	30.95	5 220	7.9	9	2KJ3301 - ■ BB11 - ■ ■ V1		
52	17	27.13	5 220	9.0	9	2KJ3301 - ■ BB11 - ■ ■ U1		
58	15	24.22	5 220	10	9	2KJ3301 - ■ BB11 - ■ ■ T1		
65	13	21.58	5 220	11	9	2KJ3301 - ■ BB11 - ■ ■ S1		
70	12	19.92	5 120	12	9	2KJ3301 - ■ BB11 - ■ ■ R1		
80	11	17.44	4 900	14	9	2KJ3301 - ■ BB11 - ■ ■ Q1		
92	9.4	15.29	4 700	16	9	2KJ3301 - ■ BB11 - ■ ■ P1		
101	8.5	13.88	4 550	18	9	2KJ3301 - ■ BB11 - ■ ■ N1		

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.09	FZ.29-LA63MD4							
	107	8	13.06	4 470	19	9	2KJ3301 - ■ BB11 - ■ ■ M1	
	122	7.1	11.51	4 290	20	9	2KJ3301 - ■ BB11 - ■ ■ L1	
	140	6.1	9.99	4 090	22	9	2KJ3301 - ■ BB11 - ■ ■ K1	
	144	5.9	9.69	4 050	24	9	2KJ3301 - ■ BB11 - ■ ■ J1	
	162	5.3	8.63	3 900	24	9	2KJ3301 - ■ BB11 - ■ ■ H1	
	176	4.9	7.97	3 800	24	9	2KJ3301 - ■ BB11 - ■ ■ G1	
0.12	FD.79-LA71MJ8							
	1.8	630	357.00	14 300	1.6	39	2KJ3405 - ■ CF11 - ■ ■ S1 P02	
	2.0	575	324.62	14 400	1.7	39	2KJ3405 - ■ CF11 - ■ ■ R1 P02	
	2.3	490	276.09	14 500	2.0	39	2KJ3405 - ■ CF11 - ■ ■ Q1 P02	
	FD.69-LA71MJ8							
	1.9	615	348.40	10 800	0.97	32	2KJ3404 - ■ CF11 - ■ ■ S1 P02	
	2.1	550	309.78	10 900	1.1	32	2KJ3404 - ■ CF11 - ■ ■ R1 P02	
	FD.69-LA63MG6							
	2.9	395	348.40	11 300	1.5	30	2KJ3404 - ■ BE11 - ■ ■ S1 P01	
	3.2	355	309.78	11 400	1.7	30	2KJ3404 - ■ BE11 - ■ ■ R1 P01	
	3.7	310	272.00	11 500	1.9	30	2KJ3404 - ■ BE11 - ■ ■ Q1 P01	
	FD.69-LA63ME4							
	3.9	295	348.40	11 500	2	29	2KJ3404 - ■ BC11 - ■ ■ S1	
	FD.49-LA71MJ8							
	1.9	585	330.98	7 270	0.82	27	2KJ3403 - ■ CF11 - ■ ■ S1 P02	
	2.2	520	294.29	7 700	0.92	27	2KJ3403 - ■ CF11 - ■ ■ R1 P02	
	2.5	455	258.40	8 110	1.0	27	2KJ3403 - ■ CF11 - ■ ■ Q1 P02	
	FD.49-LA63MG6							
	3.0	375	330.98	8 340	1.3	25	2KJ3403 - ■ BE11 - ■ ■ S1 P01	
	3.4	335	294.29	8 460	1.4	25	2KJ3403 - ■ BE11 - ■ ■ R1 P01	
	3.9	295	258.40	8 570	1.6	25	2KJ3403 - ■ BE11 - ■ ■ Q1 P01	
	FD.49-LA63ME4							
	4.1	280	330.98	8 610	1.7	24	2KJ3403 - ■ BC11 - ■ ■ S1	
	4.6	250	294.29	8 700	1.9	24	2KJ3403 - ■ BC11 - ■ ■ R1	
	FD.39-LA63MG6							
	3.6	310	274.26	5 740	0.92	16	2KJ3402 - ■ BE11 - ■ ■ R1 P01	
	4.1	275	243.26	5 870	1.0	16	2KJ3402 - ■ BE11 - ■ ■ Q1 P01	
	4.7	240	211.06	6 000	1.2	16	2KJ3402 - ■ BE11 - ■ ■ P1 P01	
	FD.39-LA63ME4							
	4.9	230	274.26	6 040	1.2	15	2KJ3402 - ■ BC11 - ■ ■ R1	
	5.5	205	243.26	6 130	1.4	15	2KJ3402 - ■ BC11 - ■ ■ Q1	
	6.4	179	211.06	6 230	1.6	15	2KJ3402 - ■ BC11 - ■ ■ P1	
	7.0	163	191.87	6 290	1.8	15	2KJ3402 - ■ BC11 - ■ ■ N1	
	8.2	140	164.56	6 370	2.1	15	2KJ3402 - ■ BC11 - ■ ■ M1	
	FD.29-LA71MJ8							
	6.2	184	103.36	5 220	0.82	11	2KJ3401 - ■ CF11 - ■ ■ F1 P02	
	7.2	160	89.78	5 220	0.94	11	2KJ3401 - ■ CF11 - ■ ■ E1 P02	
	8.3	139	78.02	5 220	1.1	11	2KJ3401 - ■ CF11 - ■ ■ D1 P02	
	9.2	125	70.43	5 220	1.2	11	2KJ3401 - ■ CF11 - ■ ■ C1 P02	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.12								
FD.29-LA71MJ8								
9.7	118	66.29	66.29	5 220	1.3	11	2KJ3401 - ■ CF11 - ■ ■ B1	P02
11	103	57.79	57.79	5 220	1.5	11	2KJ3401 - ■ CF11 - ■ ■ A1	P02
FD.29-LA63ME4								
6.5	177	208.83	208.83	5 220	0.85	9	2KJ3401 - ■ BC11 - ■ ■ M1	
7.6	151	177.71	177.71	5 220	0.99	9	2KJ3401 - ■ BC11 - ■ ■ L1	
8.4	137	161.55	161.55	5 220	1.1	9	2KJ3401 - ■ BC11 - ■ ■ K1	
9.6	120	140.86	140.86	5 220	1.3	9	2KJ3401 - ■ BC11 - ■ ■ J1	
11	107	126.09	126.09	5 220	1.4	9	2KJ3401 - ■ BC11 - ■ ■ H1	
12	95	111.97	111.97	5 220	1.6	9	2KJ3401 - ■ BC11 - ■ ■ G1	
13	88	103.36	103.36	5 220	1.7	9	2KJ3401 - ■ BC11 - ■ ■ F1	
15	76	89.78	89.78	5 220	2.0	9	2KJ3401 - ■ BC11 - ■ ■ E1	
17	66	78.02	78.02	5 220	2.3	9	2KJ3401 - ■ BC11 - ■ ■ D1	
19	60	70.43	70.43	5 220	2.5	9	2KJ3401 - ■ BC11 - ■ ■ C1	
20	56	66.29	66.29	5 220	2.7	9	2KJ3401 - ■ BC11 - ■ ■ B1	
23	49	57.79	57.79	5 220	3.1	9	2KJ3401 - ■ BC11 - ■ ■ A1	
FZ.29-LA71MJ8								
11	101	56.73	56.73	5 220	1.5	11	2KJ3301 - ■ CF11 - ■ ■ C2	P02
13	89	50.32	50.32	5 220	1.7	11	2KJ3301 - ■ CF11 - ■ ■ B2	P02
15	78	43.66	43.66	5 220	1.9	11	2KJ3301 - ■ CF11 - ■ ■ A2	P02
16	70	39.69	39.69	5 220	2.1	11	2KJ3301 - ■ CF11 - ■ ■ X1	P02
19	60	34.04	34.04	5 220	2.5	11	2KJ3301 - ■ CF11 - ■ ■ W1	P02
21	55	30.95	30.95	5 220	2.7	11	2KJ3301 - ■ CF11 - ■ ■ V1	P02
24	48	27.13	27.13	5 220	3.1	11	2KJ3301 - ■ CF11 - ■ ■ U1	P02
27	43	24.22	24.22	5 220	3.5	11	2KJ3301 - ■ CF11 - ■ ■ T1	P02
30	38	21.58	21.58	5 220	3.9	11	2KJ3301 - ■ CF11 - ■ ■ S1	P02
32	35	19.92	19.92	5 220	4.2	11	2KJ3301 - ■ CF11 - ■ ■ R1	P02
37	31	17.44	17.44	5 220	4.8	11	2KJ3301 - ■ CF11 - ■ ■ Q1	P02
42	27	15.29	15.29	5 220	5.5	11	2KJ3301 - ■ CF11 - ■ ■ P1	P02
46	25	13.88	13.88	5 220	6.1	11	2KJ3301 - ■ CF11 - ■ ■ N1	P02
49	23	13.06	13.06	5 220	6.5	11	2KJ3301 - ■ CF11 - ■ ■ M1	P02
56	20	11.51	11.51	5 220	7.0	11	2KJ3301 - ■ CF11 - ■ ■ L1	P02
65	18	9.99	9.99	5 220	7.7	11	2KJ3301 - ■ CF11 - ■ ■ K1	P02
67	17	9.69	9.69	5 150	8.3	11	2KJ3301 - ■ CF11 - ■ ■ J1	P02
75	15	8.63	8.63	4 970	8.5	11	2KJ3301 - ■ CF11 - ■ ■ H1	P02
81	14	7.97	7.97	4 840	8.5	11	2KJ3301 - ■ CF11 - ■ ■ G1	P02
92	12	6.98	6.98	4 650	9.9	11	2KJ3301 - ■ CF11 - ■ ■ F1	P02
105	11	6.12	6.12	4 450	10	11	2KJ3301 - ■ CF11 - ■ ■ E1	P02
116	9.9	5.55	5.55	4 320	11	11	2KJ3301 - ■ CF11 - ■ ■ D1	P02
124	9.3	5.22	5.22	4 230	11	11	2KJ3301 - ■ CF11 - ■ ■ C1	P02
140	8.2	4.60	4.60	4 070	12	11	2KJ3301 - ■ CF11 - ■ ■ B1	P02
161	7.1	4.00	4.00	3 890	13	11	2KJ3301 - ■ CF11 - ■ ■ A1	P02
FZ.29-LA63ME4								
24	48	56.73	56.73	5 220	3.1	9	2KJ3301 - ■ BC11 - ■ ■ C2	
27	43	50.32	50.32	5 220	3.5	9	2KJ3301 - ■ BC11 - ■ ■ B2	
31	37	43.66	43.66	5 220	4	9	2KJ3301 - ■ BC11 - ■ ■ A2	
34	34	39.69	39.69	5 220	4.5	9	2KJ3301 - ■ BC11 - ■ ■ X1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.12	FZ.29-LA63ME4							
	40	29	34.04	5 220	5.2	9	2KJ3301 - ■ BC11 - ■ ■ W1	
	44	26	30.95	5 220	5.7	9	2KJ3301 - ■ BC11 - ■ ■ V1	
	50	23	27.13	5 220	6.5	9	2KJ3301 - ■ BC11 - ■ ■ U1	
	56	21	24.22	5 220	7.3	9	2KJ3301 - ■ BC11 - ■ ■ T1	
	63	18	21.58	5 220	8.2	9	2KJ3301 - ■ BC11 - ■ ■ S1	
	68	17	19.92	5 140	8.9	9	2KJ3301 - ■ BC11 - ■ ■ R1	
	77	15	17.44	4 930	10	9	2KJ3301 - ■ BC11 - ■ ■ Q1	
	88	13	15.29	4 730	12	9	2KJ3301 - ■ BC11 - ■ ■ P1	
	97	12	13.88	4 580	13	9	2KJ3301 - ■ BC11 - ■ ■ N1	
	103	11	13.06	4 500	14	9	2KJ3301 - ■ BC11 - ■ ■ M1	
	117	9.8	11.51	4 320	15	9	2KJ3301 - ■ BC11 - ■ ■ L1	
	135	8.5	9.99	4 130	16	9	2KJ3301 - ■ BC11 - ■ ■ K1	
	139	8.2	9.69	4 070	17	9	2KJ3301 - ■ BC11 - ■ ■ J1	
	156	7.3	8.63	3 930	18	9	2KJ3301 - ■ BC11 - ■ ■ H1	
	169	6.8	7.97	3 830	18	9	2KJ3301 - ■ BC11 - ■ ■ G1	
	193	5.9	6.98	3 660	21	9	2KJ3301 - ■ BC11 - ■ ■ F1	
	221	5.2	6.12	3 510	22	9	2KJ3301 - ■ BC11 - ■ ■ E1	
	243	4.7	5.55	3 400	23	9	2KJ3301 - ■ BC11 - ■ ■ D1	
	259	4.4	5.22	3 340	24	9	2KJ3301 - ■ BC11 - ■ ■ C1	
	293	3.9	4.60	3 200	25	9	2KJ3301 - ■ BC11 - ■ ■ B1	
0.18	FD.79-LA71MG6							
	2.4	720	357.00	14 100	1.4	38	2KJ3405 - ■ CD11 - ■ ■ S1	P01
	2.6	655	324.62	14 300	1.5	38	2KJ3405 - ■ CD11 - ■ ■ R1	P01
	3.1	555	276.09	14 500	1.8	38	2KJ3405 - ■ CD11 - ■ ■ Q1	P01
	3.4	505	250.99	14 500	2.0	38	2KJ3405 - ■ CD11 - ■ ■ P1	P01
	FD.69-LA71MG6							
	2.4	705	348.40	10 600	0.85	31	2KJ3404 - ■ CD11 - ■ ■ S1	P01
	2.7	625	309.78	10 800	0.96	31	2KJ3404 - ■ CD11 - ■ ■ R1	P01
	3.1	550	272.00	10 900	1.1	31	2KJ3404 - ■ CD11 - ■ ■ Q1	P01
	3.4	500	247.27	11 000	1.2	31	2KJ3404 - ■ CD11 - ■ ■ P1	P01
	FD.69-LA63MF4							
	3.9	440	348.40	11 200	1.4	30	2KJ3404 - ■ BD11 - ■ ■ S1	
	4.4	390	309.78	11 300	1.5	30	2KJ3404 - ■ BD11 - ■ ■ R1	
	5.0	345	272.00	11 400	1.7	30	2KJ3404 - ■ BD11 - ■ ■ Q1	
	5.5	315	247.27	11 500	1.9	30	2KJ3404 - ■ BD11 - ■ ■ P1	
	FD.49-LA71MG6							
	2.9	595	294.29	7 200	0.81	26	2KJ3403 - ■ CD11 - ■ ■ R1	P01
	3.3	520	258.40	7 700	0.92	26	2KJ3403 - ■ CD11 - ■ ■ Q1	P01
	3.6	475	234.91	7 990	1.0	26	2KJ3403 - ■ CD11 - ■ ■ P1	P01
	FD.49-LA63MF4							
	4.1	420	330.98	8 210	1.1	25	2KJ3403 - ■ BD11 - ■ ■ S1	
	4.6	375	294.29	8 340	1.3	25	2KJ3403 - ■ BD11 - ■ ■ R1	
	5.2	325	258.40	8 480	1.5	25	2KJ3403 - ■ BD11 - ■ ■ Q1	
	5.7	295	234.91	8 570	1.6	25	2KJ3403 - ■ BD11 - ■ ■ P1	
	6.7	255	200.98	8 690	1.9	25	2KJ3403 - ■ BD11 - ■ ■ N1	
	7.4	230	182.71	8 760	2.1	25	2KJ3403 - ■ BD11 - ■ ■ M1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.18								
FD.39-LA63MF4								
4.9	345	274.26	5 610	0.83	16	2KJ3402	- ■ BD11 - ■ ■ R1	
5.5	310	243.26	5 740	0.94	16	2KJ3402	- ■ BD11 - ■ ■ Q1	
6.4	265	211.06	5 910	1.1	16	2KJ3402	- ■ BD11 - ■ ■ P1	
7.0	240	191.87	6 000	1.2	16	2KJ3402	- ■ BD11 - ■ ■ N1	
8.2	210	164.56	6 110	1.4	16	2KJ3402	- ■ BD11 - ■ ■ M1	
9.0	190	149.60	6 190	1.5	16	2KJ3402	- ■ BD11 - ■ ■ L1	
10	167	131.17	6 270	1.7	16	2KJ3402	- ■ BD11 - ■ ■ K1	
12	149	117.08	6 340	1.9	16	2KJ3402	- ■ BD11 - ■ ■ J1	
13	133	104.34	6 400	2.2	16	2KJ3402	- ■ BD11 - ■ ■ H1	
FD.29-LA63MF4								
9.6	179	140.86	5 220	0.84	9	2KJ3401	- ■ BD11 - ■ ■ J1	
11	161	126.09	5 220	0.93	9	2KJ3401	- ■ BD11 - ■ ■ H1	
12	143	111.97	5 220	1.1	9	2KJ3401	- ■ BD11 - ■ ■ G1	
13	132	103.36	5 220	1.1	9	2KJ3401	- ■ BD11 - ■ ■ F1	
15	114	89.78	5 220	1.3	9	2KJ3401	- ■ BD11 - ■ ■ E1	
17	99	78.02	5 220	1.5	9	2KJ3401	- ■ BD11 - ■ ■ D1	
19	90	70.43	5 220	1.7	9	2KJ3401	- ■ BD11 - ■ ■ C1	
20	84	66.29	5 220	1.8	9	2KJ3401	- ■ BD11 - ■ ■ B1	
23	74	57.79	5 220	2	9	2KJ3401	- ■ BD11 - ■ ■ A1	
FZ.29-LA63MF4								
24	72	56.73	5 220	2.1	9	2KJ3301	- ■ BD11 - ■ ■ C2	
27	64	50.32	5 220	2.3	9	2KJ3301	- ■ BD11 - ■ ■ B2	
31	56	43.66	5 220	2.7	9	2KJ3301	- ■ BD11 - ■ ■ A2	
34	50	39.69	5 220	3.0	9	2KJ3301	- ■ BD11 - ■ ■ X1	
40	43	34.04	5 220	3.5	9	2KJ3301	- ■ BD11 - ■ ■ W1	
44	39	30.95	5 220	3.8	9	2KJ3301	- ■ BD11 - ■ ■ V1	
50	34	27.13	5 220	4.3	9	2KJ3301	- ■ BD11 - ■ ■ U1	
56	31	24.22	5 220	4.9	9	2KJ3301	- ■ BD11 - ■ ■ T1	
63	28	21.58	5 190	5.5	9	2KJ3301	- ■ BD11 - ■ ■ S1	
68	25	19.92	5 070	5.9	9	2KJ3301	- ■ BD11 - ■ ■ R1	
77	22	17.44	4 870	6.8	9	2KJ3301	- ■ BD11 - ■ ■ Q1	
88	20	15.29	4 670	7.7	9	2KJ3301	- ■ BD11 - ■ ■ P1	
97	18	13.88	4 530	8.5	9	2KJ3301	- ■ BD11 - ■ ■ N1	
103	17	13.06	4 450	9.0	9	2KJ3301	- ■ BD11 - ■ ■ M1	
117	15	11.51	4 270	9.8	9	2KJ3301	- ■ BD11 - ■ ■ L1	
135	13	9.99	4 090	11	9	2KJ3301	- ■ BD11 - ■ ■ K1	
139	12	9.69	4 040	12	9	2KJ3301	- ■ BD11 - ■ ■ J1	
156	11	8.63	3 890	12	9	2KJ3301	- ■ BD11 - ■ ■ H1	
169	10	7.97	3 790	12	9	2KJ3301	- ■ BD11 - ■ ■ G1	
193	8.9	6.98	3 640	14	9	2KJ3301	- ■ BD11 - ■ ■ F1	
221	7.8	6.12	3 490	15	9	2KJ3301	- ■ BD11 - ■ ■ E1	
243	7.1	5.55	3 380	15	9	2KJ3301	- ■ BD11 - ■ ■ D1	
259	6.6	5.22	3 320	16	9	2KJ3301	- ■ BD11 - ■ ■ C1	
293	5.9	4.60	3 180	17	9	2KJ3301	- ■ BD11 - ■ ■ B1	
338	5.1	4.00	3 040	18	9	2KJ3301	- ■ BD11 - ■ ■ A1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.18								
FZ.29-LA63ME2								
	162	11	17.44	3 860	14	9	2KJ3301 - ■ BC11 - ■ ■ Q1	P00
	184	9.3	15.29	3 710	16	9	2KJ3301 - ■ BC11 - ■ ■ P1	P00
	203	8.5	13.88	3 590	18	9	2KJ3301 - ■ BC11 - ■ ■ N1	P00
	216	8	13.06	3 520	19	9	2KJ3301 - ■ BC11 - ■ ■ M1	P00
	245	7	11.51	3 380	20	9	2KJ3301 - ■ BC11 - ■ ■ L1	P00
	282	6.1	9.99	3 230	22	9	2KJ3301 - ■ BC11 - ■ ■ K1	P00
	291	5.9	9.69	3 190	24	9	2KJ3301 - ■ BC11 - ■ ■ J1	P00
	327	5.3	8.63	3 070	25	9	2KJ3301 - ■ BC11 - ■ ■ H1	P00
	354	4.9	7.97	3 000	25	9	2KJ3301 - ■ BC11 - ■ ■ G1	P00
0.25								
FD.79-LA71MH6								
	2.4	990	357.00	13 600	1.0	39	2KJ3405 - ■ CE11 - ■ ■ S1	P01
	2.6	900	324.62	13 800	1.1	39	2KJ3405 - ■ CE11 - ■ ■ R1	P01
	3.1	765	276.09	14 000	1.3	39	2KJ3405 - ■ CE11 - ■ ■ Q1	P01
	3.4	695	250.99	14 200	1.4	39	2KJ3405 - ■ CE11 - ■ ■ P1	P01
FD.79-LA71MG4								
	3.8	630	357.00	14 300	1.6	38	2KJ3405 - ■ CD11 - ■ ■ S1	
	4.2	570	324.62	14 400	1.7	38	2KJ3405 - ■ CD11 - ■ ■ R1	
	4.9	485	276.09	14 500	2.0	38	2KJ3405 - ■ CD11 - ■ ■ Q1	
FD.69-LA71MH6								
	3.5	685	247.27	10 600	0.87	32	2KJ3404 - ■ CE11 - ■ ■ P1	P01
FD.69-LA71MG4								
	3.9	615	348.40	10 800	0.97	31	2KJ3404 - ■ CD11 - ■ ■ S1	
	4.4	545	309.78	10 900	1.1	31	2KJ3404 - ■ CD11 - ■ ■ R1	
	5.0	480	272.00	11 100	1.2	31	2KJ3404 - ■ CD11 - ■ ■ Q1	
	5.5	435	247.27	11 200	1.4	31	2KJ3404 - ■ CD11 - ■ ■ P1	
	6.4	370	211.56	11 400	1.6	31	2KJ3404 - ■ CD11 - ■ ■ N1	
	7.0	340	192.32	11 400	1.8	31	2KJ3404 - ■ CD11 - ■ ■ M1	
	7.9	300	170.00	11 500	2	31	2KJ3404 - ■ CD11 - ■ ■ L1	
FD.49-LA71MG4								
	4.1	585	330.98	7 270	0.82	26	2KJ3403 - ■ CD11 - ■ ■ S1	
	4.6	520	294.29	7 700	0.92	26	2KJ3403 - ■ CD11 - ■ ■ R1	
	5.2	455	258.40	8 110	1.1	26	2KJ3403 - ■ CD11 - ■ ■ Q1	
	5.7	415	234.91	8 220	1.2	26	2KJ3403 - ■ CD11 - ■ ■ P1	
	6.7	355	200.98	8 400	1.4	26	2KJ3403 - ■ CD11 - ■ ■ N1	
	7.4	320	182.71	8 500	1.5	26	2KJ3403 - ■ CD11 - ■ ■ M1	
	8.4	285	161.50	8 600	1.7	26	2KJ3403 - ■ CD11 - ■ ■ L1	
	9.2	260	146.82	8 670	1.8	26	2KJ3403 - ■ CD11 - ■ ■ K1	
	10	225	128.60	8 770	2.1	26	2KJ3403 - ■ CD11 - ■ ■ J1	
FD.39-LA71MG4								
	7.0	335	191.87	5 650	0.85	17	2KJ3402 - ■ CD11 - ■ ■ N1	
	8.2	290	164.56	5 820	1.0	17	2KJ3402 - ■ CD11 - ■ ■ M1	
	9.0	265	149.60	5 910	1.1	17	2KJ3402 - ■ CD11 - ■ ■ L1	
	10	230	131.17	6 040	1.3	17	2KJ3402 - ■ CD11 - ■ ■ K1	
	12	205	117.08	6 130	1.4	17	2KJ3402 - ■ CD11 - ■ ■ J1	
	13	185	104.34	6 210	1.6	17	2KJ3402 - ■ CD11 - ■ ■ H1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25								
FD.39-LA71MG4								
14	170	96.31	96.31	6 260	1.7	17	2KJ3402 - ■ CD11 - ■ ■ G1	
16	149	84.32	84.32	6 340	1.9	17	2KJ3402 - ■ CD11 - ■ ■ F1	
18	131	73.93	73.93	6 410	2.2	17	2KJ3402 - ■ CD11 - ■ ■ E1	
FZ.39-LA71MG4								
23	103	57.99	57.99	6 510	2.2	17	2KJ3302 - ■ CD11 - ■ ■ A2	
FD.29-LA71MG4								
13	183	103.36	103.36	5 220	0.82	10	2KJ3401 - ■ CD11 - ■ ■ F1	
15	159	89.78	89.78	5 220	0.94	10	2KJ3401 - ■ CD11 - ■ ■ E1	
17	138	78.02	78.02	5 220	1.1	10	2KJ3401 - ■ CD11 - ■ ■ D1	
19	125	70.43	70.43	5 220	1.2	10	2KJ3401 - ■ CD11 - ■ ■ C1	
20	117	66.29	66.29	5 220	1.3	10	2KJ3401 - ■ CD11 - ■ ■ B1	
23	102	57.79	57.79	5 220	1.5	10	2KJ3401 - ■ CD11 - ■ ■ A1	
FZ.29-LA71MG4								
24	100	56.73	56.73	5 220	1.5	10	2KJ3301 - ■ CD11 - ■ ■ C2	
27	89	50.32	50.32	5 220	1.7	10	2KJ3301 - ■ CD11 - ■ ■ B2	
31	77	43.66	43.66	5 220	1.9	10	2KJ3301 - ■ CD11 - ■ ■ A2	
34	70	39.69	39.69	5 220	2.1	10	2KJ3301 - ■ CD11 - ■ ■ X1	
40	60	34.04	34.04	5 220	2.5	10	2KJ3301 - ■ CD11 - ■ ■ W1	
44	55	30.95	30.95	5 220	2.7	10	2KJ3301 - ■ CD11 - ■ ■ V1	
50	48	27.13	27.13	5 220	3.1	10	2KJ3301 - ■ CD11 - ■ ■ U1	
56	43	24.22	24.22	5 220	3.5	10	2KJ3301 - ■ CD11 - ■ ■ T1	
63	38	21.58	21.58	5 110	3.9	10	2KJ3301 - ■ CD11 - ■ ■ S1	
68	35	19.92	19.92	4 990	4.3	10	2KJ3301 - ■ CD11 - ■ ■ R1	
77	31	17.44	17.44	4 800	4.9	10	2KJ3301 - ■ CD11 - ■ ■ Q1	
88	27	15.29	15.29	4 610	5.5	10	2KJ3301 - ■ CD11 - ■ ■ P1	
97	24	13.88	13.88	4 480	6.1	10	2KJ3301 - ■ CD11 - ■ ■ N1	
103	23	13.06	13.06	4 400	6.5	10	2KJ3301 - ■ CD11 - ■ ■ M1	
117	20	11.51	11.51	4 230	7	10	2KJ3301 - ■ CD11 - ■ ■ L1	
135	18	9.99	9.99	4 050	7.7	10	2KJ3301 - ■ CD11 - ■ ■ K1	
139	17	9.69	9.69	3 990	8.3	10	2KJ3301 - ■ CD11 - ■ ■ J1	
156	15	8.63	8.63	3 850	8.5	10	2KJ3301 - ■ CD11 - ■ ■ H1	
169	14	7.97	7.97	3 750	8.5	10	2KJ3301 - ■ CD11 - ■ ■ G1	
193	12	6.98	6.98	3 610	10	10	2KJ3301 - ■ CD11 - ■ ■ F1	
221	11	6.12	6.12	3 460	10	10	2KJ3301 - ■ CD11 - ■ ■ E1	
243	9.8	5.55	5.55	3 350	11	10	2KJ3301 - ■ CD11 - ■ ■ D1	
259	9.2	5.22	5.22	3 290	12	10	2KJ3301 - ■ CD11 - ■ ■ C1	
293	8.1	4.60	4.60	3 160	12	10	2KJ3301 - ■ CD11 - ■ ■ B1	
338	7.1	4.00	4.00	3 020	13	10	2KJ3301 - ■ CD11 - ■ ■ A1	
FZ.29-LA63MF2								
162	15	17.44	17.44	3 820	10	9	2KJ3301 - ■ BD11 - ■ ■ Q1	P00
185	13	15.29	15.29	3 670	12	9	2KJ3301 - ■ BD11 - ■ ■ P1	P00
204	12	13.88	13.88	3 560	13	9	2KJ3301 - ■ BD11 - ■ ■ N1	P00
217	11	13.06	13.06	3 490	14	9	2KJ3301 - ■ BD11 - ■ ■ M1	P00
246	9.7	11.51	11.51	3 360	15	9	2KJ3301 - ■ BD11 - ■ ■ L1	P00

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.37								
FD.79-LA71MH4								
3.8	920	357.00	13 700	1.1	39	2KJ3405	- ■ CE11 - ■ ■ S1	
4.2	835	324.62	13 900	1.2	39	2KJ3405	- ■ CE11 - ■ ■ R1	
5.0	710	276.09	14 100	1.4	39	2KJ3405	- ■ CE11 - ■ ■ Q1	
5.5	645	250.99	14 300	1.5	39	2KJ3405	- ■ CE11 - ■ ■ P1	
6.1	575	223.94	14 400	1.7	39	2KJ3405	- ■ CE11 - ■ ■ N1	
6.8	515	200.80	14 500	1.9	39	2KJ3405	- ■ CE11 - ■ ■ M1	
7.6	465	180.99	14 500	2.1	39	2KJ3405	- ■ CE11 - ■ ■ L1	
FD.69-LA71MH4								
5.0	700	272.00	10 600	0.86	32	2KJ3404	- ■ CE11 - ■ ■ Q1	
5.5	635	247.27	10 700	0.94	32	2KJ3404	- ■ CE11 - ■ ■ P1	
6.5	545	211.56	10 900	1.1	32	2KJ3404	- ■ CE11 - ■ ■ N1	
7.1	495	192.32	11 100	1.2	32	2KJ3404	- ■ CE11 - ■ ■ M1	
8.1	435	170.00	11 200	1.4	32	2KJ3404	- ■ CE11 - ■ ■ L1	
8.9	395	154.55	11 300	1.5	32	2KJ3404	- ■ CE11 - ■ ■ K1	
10	345	135.37	11 400	1.7	32	2KJ3404	- ■ CE11 - ■ ■ J1	
11	320	124.96	11 500	1.9	32	2KJ3404	- ■ CE11 - ■ ■ H1	
12	285	110.63	11 600	2.1	32	2KJ3404	- ■ CE11 - ■ ■ G1	
FD.49-LA71MH4								
6.8	515	200.98	7 720	0.93	27	2KJ3403	- ■ CE11 - ■ ■ N1	
7.5	470	182.71	8 020	1.0	27	2KJ3403	- ■ CE11 - ■ ■ M1	
8.5	415	161.50	8 220	1.2	27	2KJ3403	- ■ CE11 - ■ ■ L1	
9.3	375	146.82	8 340	1.3	27	2KJ3403	- ■ CE11 - ■ ■ K1	
11	330	128.60	8 470	1.4	27	2KJ3403	- ■ CE11 - ■ ■ J1	
12	305	118.71	8 540	1.6	27	2KJ3403	- ■ CE11 - ■ ■ H1	
13	270	105.10	8 640	1.8	27	2KJ3403	- ■ CE11 - ■ ■ G1	
16	225	87.48	8 770	2.1	27	2KJ3403	- ■ CE11 - ■ ■ F1	
17	210	82.33	8 820	2.3	27	2KJ3403	- ■ CE11 - ■ ■ E1	
FD.39-LA71MH4								
10	335	131.17	5 650	0.86	18	2KJ3402	- ■ CE11 - ■ ■ K1	
12	300	117.08	5 780	0.96	18	2KJ3402	- ■ CE11 - ■ ■ J1	
13	265	104.34	5 910	1.1	18	2KJ3402	- ■ CE11 - ■ ■ H1	
14	245	96.31	5 980	1.2	18	2KJ3402	- ■ CE11 - ■ ■ G1	
16	215	84.32	6 100	1.3	18	2KJ3402	- ■ CE11 - ■ ■ F1	
19	191	73.93	6 180	1.5	18	2KJ3402	- ■ CE11 - ■ ■ E1	
20	173	67.07	6 250	1.7	18	2KJ3402	- ■ CE11 - ■ ■ D1	
22	163	63.13	6 290	1.8	18	2KJ3402	- ■ CE11 - ■ ■ C1	
25	144	55.65	6 360	2.0	18	2KJ3402	- ■ CE11 - ■ ■ B1	
28	125	48.29	6 430	2.3	18	2KJ3402	- ■ CE11 - ■ ■ A1	
FZ.39-LA71MH4								
21	168	65.21	6 270	1.7	18	2KJ3302	- ■ CE11 - ■ ■ B2	
24	150	57.99	6 340	1.5	18	2KJ3302	- ■ CE11 - ■ ■ A2	
27	131	50.91	6 410	1.8	18	2KJ3302	- ■ CE11 - ■ ■ X1	
30	119	46.29	6 450	2.1	18	2KJ3302	- ■ CE11 - ■ ■ W1	
FD.29-LA71MH4								
19	182	70.43	5 220	0.83	12	2KJ3401	- ■ CE11 - ■ ■ C1	
21	171	66.29	5 220	0.88	12	2KJ3401	- ■ CE11 - ■ ■ B1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.37	FD.29-LA71MH4							
	24	149	57.79	5 220	1	12	2KJ3401 - ■ CE11 - ■ ■ A1	
	FZ.29-LA71MH4							
	24	146	56.73	5 220	1.0	11	2KJ3301 - ■ CE11 - ■ ■ C2	
	27	130	50.32	5 220	1.2	11	2KJ3301 - ■ CE11 - ■ ■ B2	
	31	113	43.66	5 220	1.3	11	2KJ3301 - ■ CE11 - ■ ■ A2	
	35	102	39.69	5 220	1.5	11	2KJ3301 - ■ CE11 - ■ ■ X1	
	40	88	34.04	5 220	1.7	11	2KJ3301 - ■ CE11 - ■ ■ W1	
	44	80	30.95	5 220	1.9	11	2KJ3301 - ■ CE11 - ■ ■ V1	
	50	70	27.13	5 220	2.1	11	2KJ3301 - ■ CE11 - ■ ■ U1	
	57	62	24.22	5 100	2.4	11	2KJ3301 - ■ CE11 - ■ ■ T1	
	63	56	21.58	4 930	2.7	11	2KJ3301 - ■ CE11 - ■ ■ S1	
	69	51	19.92	4 830	2.9	11	2KJ3301 - ■ CE11 - ■ ■ R1	
	79	45	17.44	4 650	3.3	11	2KJ3301 - ■ CE11 - ■ ■ Q1	
	90	39	15.29	4 490	3.8	11	2KJ3301 - ■ CE11 - ■ ■ P1	
	99	36	13.88	4 360	4.2	11	2KJ3301 - ■ CE11 - ■ ■ N1	
	105	34	13.06	4 280	4.5	11	2KJ3301 - ■ CE11 - ■ ■ M1	
	119	30	11.51	4 130	4.8	11	2KJ3301 - ■ CE11 - ■ ■ L1	
	137	26	9.99	3 960	5.3	11	2KJ3301 - ■ CE11 - ■ ■ K1	
	141	25	9.69	3 890	5.7	11	2KJ3301 - ■ CE11 - ■ ■ J1	
	159	22	8.63	3 760	5.8	11	2KJ3301 - ■ CE11 - ■ ■ H1	
	172	21	7.97	3 670	5.8	11	2KJ3301 - ■ CE11 - ■ ■ G1	
	196	18	6.98	3 530	6.8	11	2KJ3301 - ■ CE11 - ■ ■ F1	
	224	16	6.12	3 390	7.2	11	2KJ3301 - ■ CE11 - ■ ■ E1	
	247	14	5.55	3 300	7.5	11	2KJ3301 - ■ CE11 - ■ ■ D1	
	262	14	5.22	3 230	7.9	11	2KJ3301 - ■ CE11 - ■ ■ C1	
	298	12	4.60	3 110	8.2	11	2KJ3301 - ■ CE11 - ■ ■ B1	
	342	10	4.00	2 980	8.8	11	2KJ3301 - ■ CE11 - ■ ■ A1	
	FZ.29-LA71MG2							
	157	22	17.44	3 810	6.7	10	2KJ3301 - ■ CD11 - ■ ■ Q1	P00
	179	20	15.29	3 650	7.6	10	2KJ3301 - ■ CD11 - ■ ■ P1	P00
	197	18	13.88	3 550	8.4	10	2KJ3301 - ■ CD11 - ■ ■ N1	P00
	210	17	13.06	3 480	8.9	10	2KJ3301 - ■ CD11 - ■ ■ M1	P00
	238	15	11.51	3 350	9.6	10	2KJ3301 - ■ CD11 - ■ ■ L1	P00
274	13	9.99	3 200	11	10	2KJ3301 - ■ CD11 - ■ ■ K1	P00	
283	12	9.69	3 160	11	10	2KJ3301 - ■ CD11 - ■ ■ J1	P00	
317	11	8.63	3 050	12	10	2KJ3301 - ■ CD11 - ■ ■ H1	P00	
344	10	7.97	2 980	12	10	2KJ3301 - ■ CD11 - ■ ■ G1	P00	
393	9	6.98	2 850	14	10	2KJ3301 - ■ CD11 - ■ ■ F1	P00	
448	7.9	6.12	2 740	14	10	2KJ3301 - ■ CD11 - ■ ■ E1	P00	
494	7.2	5.55	2 650	15	10	2KJ3301 - ■ CD11 - ■ ■ D1	P00	
0.55	FD.89-LE80MB4							
	4.3	1 220	335.30	17 400	1.5	73	2KJ3406 - ■ DB21 - ■ ■ S1	
	4.7	1 110	304.82	17 400	1.7	73	2KJ3406 - ■ DB21 - ■ ■ R1	
	5.3	995	273.41	17 400	1.9	73	2KJ3406 - ■ DB21 - ■ ■ Q1	
	5.9	895	245.82	17 400	2.1	73	2KJ3406 - ■ DB21 - ■ ■ P1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.55	FD.79-LE80MB4							
4.4	1 180	324.62	13 200	0.84	42	2KJ3405 - ■ DB21 - ■ ■ R1		
5.2	1 000	276.09	13 600	0.99	42	2KJ3405 - ■ DB21 - ■ ■ Q1		
5.7	915	250.99	13 700	1.1	42	2KJ3405 - ■ DB21 - ■ ■ P1		
6.4	815	223.94	13 900	1.2	42	2KJ3405 - ■ DB21 - ■ ■ N1		
7.2	730	200.80	14 100	1.4	42	2KJ3405 - ■ DB21 - ■ ■ M1		
8	660	180.99	14 200	1.5	42	2KJ3405 - ■ DB21 - ■ ■ L1		
8.6	605	167.07	14 400	1.6	42	2KJ3405 - ■ DB21 - ■ ■ K1		
9.4	555	152.51	14 500	1.8	42	2KJ3405 - ■ DB21 - ■ ■ J1		
11	460	126.54	14 500	2.2	42	2KJ3405 - ■ DB21 - ■ ■ H1		
	FD.69-LE80MB4							
7.5	700	192.32	10 600	0.86	35	2KJ3404 - ■ DB21 - ■ ■ M1		
8.5	620	170.00	10 800	0.97	35	2KJ3404 - ■ DB21 - ■ ■ L1		
9.3	560	154.55	10 900	1.1	35	2KJ3404 - ■ DB21 - ■ ■ K1		
11	490	135.37	11 100	1.2	35	2KJ3404 - ■ DB21 - ■ ■ J1		
12	455	124.96	11 200	1.3	35	2KJ3404 - ■ DB21 - ■ ■ H1		
13	400	110.63	11 300	1.5	35	2KJ3404 - ■ DB21 - ■ ■ G1		
16	335	92.08	11 400	1.8	35	2KJ3404 - ■ DB21 - ■ ■ F1		
17	315	86.67	11 500	1.9	35	2KJ3404 - ■ DB21 - ■ ■ E1		
19	280	77.65	11 600	2.1	35	2KJ3404 - ■ DB21 - ■ ■ D1		
	FD.49-LE80MB4							
8.9	585	161.50	7 270	0.81	30	2KJ3403 - ■ DB21 - ■ ■ L1		
9.8	535	146.82	7 600	0.9	30	2KJ3403 - ■ DB21 - ■ ■ K1		
11	465	128.60	8 060	1.0	30	2KJ3403 - ■ DB21 - ■ ■ J1		
12	430	118.71	8 180	1.1	30	2KJ3403 - ■ DB21 - ■ ■ H1		
14	380	105.10	8 330	1.3	30	2KJ3403 - ■ DB21 - ■ ■ G1		
16	315	87.48	8 510	1.5	30	2KJ3403 - ■ DB21 - ■ ■ F1		
17	300	82.33	8 560	1.6	30	2KJ3403 - ■ DB21 - ■ ■ E1		
20	265	73.77	8 660	1.8	30	2KJ3403 - ■ DB21 - ■ ■ D1		
23	225	62.81	8 770	2.1	30	2KJ3403 - ■ DB21 - ■ ■ C1		
27	196	53.83	8 450	2.4	30	2KJ3403 - ■ DB21 - ■ ■ B1		
	FZ.49-LE80MB4							
23	220	61.43	8 730	2.1	29	2KJ3303 - ■ DB21 - ■ ■ X1		
26	200	55.85	8 540	2.4	29	2KJ3303 - ■ DB21 - ■ ■ W1		
	FD.39-LE80MB4							
15	350	96.31	5 590	0.83	20	2KJ3402 - ■ DB21 - ■ ■ G1		
17	305	84.32	5 760	0.94	20	2KJ3402 - ■ DB21 - ■ ■ F1		
19	270	73.93	5 890	1.1	20	2KJ3402 - ■ DB21 - ■ ■ E1		
21	245	67.07	5 980	1.2	20	2KJ3402 - ■ DB21 - ■ ■ D1		
23	230	63.13	6 040	1.3	20	2KJ3402 - ■ DB21 - ■ ■ C1		
26	200	55.65	6 150	1.4	20	2KJ3402 - ■ DB21 - ■ ■ B1		
30	176	48.29	6 240	1.6	20	2KJ3402 - ■ DB21 - ■ ■ A1		
	FZ.39-LE80MB4							
25	210	57.99	6 110	1.1	20	2KJ3302 - ■ DB21 - ■ ■ A2		
28	186	50.91	6 200	1.3	20	2KJ3302 - ■ DB21 - ■ ■ X1		
31	169	46.29	6 270	1.5	20	2KJ3302 - ■ DB21 - ■ ■ W1		
36	144	39.60	6 360	2	20	2KJ3302 - ■ DB21 - ■ ■ V1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.55	FZ.39-LE80MB4							
	40	131	36.00	6 410	1.9	20	2KJ3302 - ■ DB21 - ■ ■ U1	
	45	116	31.82	6 460	2.5	20	2KJ3302 - ■ DB21 - ■ ■ T1	
	50	106	28.93	6 500	2.6	20	2KJ3302 - ■ DB21 - ■ ■ S1	
	57	92	25.34	6 390	2.9	20	2KJ3302 - ■ DB21 - ■ ■ R1	
	62	85	23.39	6 260	3.0	20	2KJ3302 - ■ DB21 - ■ ■ Q1	
	FZ.29-LE80MB4							
	29	184	50.32	5 220	0.82	14	2KJ3301 - ■ DB21 - ■ ■ B2	
	33	159	43.66	5 220	0.94	14	2KJ3301 - ■ DB21 - ■ ■ A2	
	36	145	39.69	5 220	1.0	14	2KJ3301 - ■ DB21 - ■ ■ X1	
	42	124	34.04	5 150	1.2	14	2KJ3301 - ■ DB21 - ■ ■ W1	
	47	113	30.95	5 050	1.3	14	2KJ3301 - ■ DB21 - ■ ■ V1	
	53	99	27.13	4 910	1.5	14	2KJ3301 - ■ DB21 - ■ ■ U1	
	59	88	24.22	4 790	1.7	14	2KJ3301 - ■ DB21 - ■ ■ T1	
	67	79	21.58	4 650	1.9	14	2KJ3301 - ■ DB21 - ■ ■ S1	
	72	73	19.92	4 560	2.1	14	2KJ3301 - ■ DB21 - ■ ■ R1	
	83	64	17.44	4 410	2.4	14	2KJ3301 - ■ DB21 - ■ ■ Q1	
94	56	15.29	4 270	2.7	14	2KJ3301 - ■ DB21 - ■ ■ P1		
104	51	13.88	4 160	3.0	14	2KJ3301 - ■ DB21 - ■ ■ N1		
110	48	13.06	4 090	3.1	14	2KJ3301 - ■ DB21 - ■ ■ M1		
125	42	11.51	3 960	3.4	14	2KJ3301 - ■ DB21 - ■ ■ L1		
144	36	9.99	3 810	3.7	14	2KJ3301 - ■ DB21 - ■ ■ K1		
149	35	9.69	3 720	4.0	14	2KJ3301 - ■ DB21 - ■ ■ J1		
167	32	8.63	3 600	4.1	14	2KJ3301 - ■ DB21 - ■ ■ H1		
181	29	7.97	3 530	4.1	14	2KJ3301 - ■ DB21 - ■ ■ G1		
0.75	FD.129-LE100LA8							
	1.7	4 190	413.00	37 500	1.2	179	2KJ3408 - ■ FB21 - ■ ■ T1	P02
	1.9	3 870	381.00	37 500	1.3	179	2KJ3408 - ■ FB21 - ■ ■ S1	P02
	2.0	3 560	351.00	37 500	1.4	179	2KJ3408 - ■ FB21 - ■ ■ R1	P02
	FD.129-LE90SH6E							
	2.2	3 190	413.00	37 500	1.5	172	2KJ3408 - ■ EC22 - ■ ■ T1	P01
	2.4	2 950	381.00	37 500	1.6	172	2KJ3408 - ■ EC22 - ■ ■ S1	P01
	2.6	2 710	351.00	37 500	1.8	172	2KJ3408 - ■ EC22 - ■ ■ R1	P01
	FD.109-LE100LA8							
	1.9	3 750	370.00	25 000	0.82	125	2KJ3407 - ■ FB21 - ■ ■ S1	P02
	2.1	3 410	335.70	25 000	0.91	125	2KJ3407 - ■ FB21 - ■ ■ R1	P02
	FD.109-LE90SH6E							
	2.3	3 170	410.00	25 000	0.98	119	2KJ3407 - ■ EC22 - ■ ■ T1	P01
	2.5	2 860	370.00	25 000	1.1	119	2KJ3407 - ■ EC22 - ■ ■ S1	P01
	2.8	2 590	335.70	25 000	1.2	119	2KJ3407 - ■ EC22 - ■ ■ R1	P01
	3.0	2 390	309.87	25 000	1.3	119	2KJ3407 - ■ EC22 - ■ ■ Q1	P01
	3.3	2 180	281.68	25 000	1.4	119	2KJ3407 - ■ EC22 - ■ ■ P1	P01
FD.89-LE100LA8								
3.2	2 250	222.33	17 400	0.82	84	2KJ3406 - ■ FB21 - ■ ■ N1	P02	
FD.89-LE90SH6E								
3.4	2 110	273.41	17 400	0.87	79	2KJ3406 - ■ EC22 - ■ ■ Q1	P01	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75	FD.89-LE90SH6E							
	3.8	1 900	245.82	17 400	0.97	79	2KJ3406 - ■ EC22 - ■ P1	P01
	FD.89-LE80MH4E							
	4.3	1 660	335.30	17 400	1.1	75	2KJ3406 - ■ DE22 - ■ S1	
	4.7	1 510	304.82	17 400	1.2	75	2KJ3406 - ■ DE22 - ■ R1	
	5.3	1 360	273.41	17 400	1.4	75	2KJ3406 - ■ DE22 - ■ Q1	
	5.9	1 220	245.82	17 400	1.5	75	2KJ3406 - ■ DE22 - ■ P1	
	6.5	1 100	222.33	17 400	1.7	75	2KJ3406 - ■ DE22 - ■ N1	
	7	1 020	205.23	17 400	1.8	75	2KJ3406 - ■ DE22 - ■ M1	
	7.7	935	188.00	17 400	2.0	75	2KJ3406 - ■ DE22 - ■ L1	
FD.79-LE80MH4E								
5.7	1 240	250.99	13 100	0.8	44	2KJ3405 - ■ DE22 - ■ P1		
6.4	1 110	223.94	13 400	0.9	44	2KJ3405 - ■ DE22 - ■ N1		
7.2	995	200.80	13 600	1.0	44	2KJ3405 - ■ DE22 - ■ M1		
8	900	180.99	13 800	1.1	44	2KJ3405 - ■ DE22 - ■ L1		
8.6	830	167.07	13 900	1.2	44	2KJ3405 - ■ DE22 - ■ K1		
9.4	755	152.51	14 100	1.3	44	2KJ3405 - ■ DE22 - ■ J1		
11	625	126.54	14 300	1.6	44	2KJ3405 - ■ DE22 - ■ H1		
12	590	119.10	14 400	1.7	44	2KJ3405 - ■ DE22 - ■ G1		
13	555	112.48	14 500	1.8	44	2KJ3405 - ■ DE22 - ■ F1		
15	475	95.71	14 500	2.1	44	2KJ3405 - ■ DE22 - ■ E1		
FD.69-LE80MH4E								
11	670	135.37	10 600	0.89	37	2KJ3404 - ■ DE22 - ■ J1		
12	620	124.96	10 800	0.97	37	2KJ3404 - ■ DE22 - ■ H1		
13	550	110.63	10 900	1.1	37	2KJ3404 - ■ DE22 - ■ G1		
16	455	92.08	11 200	1.3	37	2KJ3404 - ■ DE22 - ■ F1		
17	430	86.67	11 200	1.4	37	2KJ3404 - ■ DE22 - ■ E1		
19	385	77.65	11 300	1.6	37	2KJ3404 - ■ DE22 - ■ D1		
22	325	66.11	11 400	1.8	37	2KJ3404 - ■ DE22 - ■ C1		
25	280	56.67	11 000	2.1	37	2KJ3404 - ■ DE22 - ■ B1		
30	240	48.80	10 600	2.5	37	2KJ3404 - ■ DE22 - ■ A1		
FZ.69-LE80MH4E								
22	320	64.67	11 400	1.9	36	2KJ3304 - ■ DE22 - ■ X1		
24	290	58.79	11 100	2.1	36	2KJ3304 - ■ DE22 - ■ W1		
29	245	50.00	10 700	2.4	36	2KJ3304 - ■ DE22 - ■ V1		
FD.49-LE80MH4E								
12	590	118.71	7 240	0.81	32	2KJ3403 - ■ DE22 - ■ H1		
14	520	105.10	7 700	0.92	32	2KJ3403 - ■ DE22 - ■ G1		
16	435	87.48	8 170	1.1	32	2KJ3403 - ■ DE22 - ■ F1		
17	410	82.33	8 240	1.2	32	2KJ3403 - ■ DE22 - ■ E1		
20	365	73.77	8 370	1.3	32	2KJ3403 - ■ DE22 - ■ D1		
23	310	62.81	8 210	1.5	32	2KJ3403 - ■ DE22 - ■ C1		
27	265	53.83	7 990	1.8	32	2KJ3403 - ■ DE22 - ■ B1		
31	230	46.36	7 750	2.1	32	2KJ3403 - ■ DE22 - ■ A1		
FZ.49-LE80MH4E								
23	305	61.43	8 170	1.6	31	2KJ3303 - ■ DE22 - ■ X1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75								
FZ.49-LE80MH4E								
	26	275	55.85	8 050	1.7	31	2KJ3303 - ■ DE22 - ■ ■ W1	
	30	235	47.50	7 790	2.0	31	2KJ3303 - ■ DE22 - ■ ■ V1	
	33	215	43.18	7 630	2.2	31	2KJ3303 - ■ DE22 - ■ ■ U1	
	37	192	38.53	7 450	2.5	31	2KJ3303 - ■ DE22 - ■ ■ T1	
FD.39-LE80MH4E								
	21	330	67.07	5 670	0.87	22	2KJ3402 - ■ DE22 - ■ ■ D1	
	23	310	63.13	5 740	0.92	22	2KJ3402 - ■ DE22 - ■ ■ C1	
	26	275	55.65	5 870	1.0	22	2KJ3402 - ■ DE22 - ■ ■ B1	
	30	240	48.29	6 000	1.2	22	2KJ3402 - ■ DE22 - ■ ■ A1	
FZ.39-LE80MH4E								
	25	285	57.99	5 830	0.80	22	2KJ3302 - ■ DE22 - ■ ■ A2	
	28	250	50.91	5 970	0.95	22	2KJ3302 - ■ DE22 - ■ ■ X1	
	31	230	46.29	6 040	1.1	22	2KJ3302 - ■ DE22 - ■ ■ W1	
	36	197	39.60	6 160	1.5	22	2KJ3302 - ■ DE22 - ■ ■ V1	
	40	179	36.00	6 230	1.4	22	2KJ3302 - ■ DE22 - ■ ■ U1	
	45	158	31.82	6 310	1.8	22	2KJ3302 - ■ DE22 - ■ ■ T1	
	50	144	28.93	6 320	1.9	22	2KJ3302 - ■ DE22 - ■ ■ S1	
	57	126	25.34	6 140	2.1	22	2KJ3302 - ■ DE22 - ■ ■ R1	
	62	116	23.39	6 030	2.2	22	2KJ3302 - ■ DE22 - ■ ■ Q1	
	70	103	20.71	5 850	2.4	22	2KJ3302 - ■ DE22 - ■ ■ P1	
	84	86	17.24	5 580	2.7	22	2KJ3302 - ■ DE22 - ■ ■ N1	
	89	81	16.22	5 500	2.9	22	2KJ3302 - ■ DE22 - ■ ■ M1	
	99	72	14.54	5 340	3.0	22	2KJ3302 - ■ DE22 - ■ ■ L1	
	116	62	12.38	5 110	3.4	22	2KJ3302 - ■ DE22 - ■ ■ K1	
	136	53	10.61	4 900	3.8	22	2KJ3302 - ■ DE22 - ■ ■ J1	
	178	40	8.10	4 500	4.1	22	2KJ3302 - ■ DE22 - ■ ■ G1	
	214	34	6.74	4 270	4.5	22	2KJ3302 - ■ DE22 - ■ ■ F1	
FZ.29-LE100LA8								
	40	177	17.44	4 800	0.85	23	2KJ3301 - ■ FB21 - ■ ■ Q1 P02	
	46	155	15.29	4 720	0.97	23	2KJ3301 - ■ FB21 - ■ ■ P1 P02	
	51	141	13.88	4 640	1.1	23	2KJ3301 - ■ FB21 - ■ ■ N1 P02	
	54	133	13.06	4 590	1.1	23	2KJ3301 - ■ FB21 - ■ ■ M1 P02	
	61	117	11.51	4 490	1.2	23	2KJ3301 - ■ FB21 - ■ ■ L1 P02	
	71	101	9.99	4 370	1.3	23	2KJ3301 - ■ FB21 - ■ ■ K1 P02	
	73	98	9.69	4 210	1.5	23	2KJ3301 - ■ FB21 - ■ ■ J1 P02	
	82	88	8.63	4 110	1.5	23	2KJ3301 - ■ FB21 - ■ ■ H1 P02	
	88	81	7.97	4 050	1.5	23	2KJ3301 - ■ FB21 - ■ ■ G1 P02	
	101	71	6.98	3 930	1.7	23	2KJ3301 - ■ FB21 - ■ ■ F1 P02	
	115	62	6.12	3 820	1.8	23	2KJ3301 - ■ FB21 - ■ ■ E1 P02	
	127	56	5.55	3 740	1.9	23	2KJ3301 - ■ FB21 - ■ ■ D1 P02	
	135	53	5.22	3 680	2.0	23	2KJ3301 - ■ FB21 - ■ ■ C1 P02	
	153	47	4.60	3 570	2.1	23	2KJ3301 - ■ FB21 - ■ ■ B1 P02	
	176	41	4.00	3 440	2.2	23	2KJ3301 - ■ FB21 - ■ ■ A1 P02	
FZ.29-LE80MH4E								
	42	169	34.04	4 780	0.89	16	2KJ3301 - ■ DE22 - ■ ■ W1	
	47	154	30.95	4 710	0.97	16	2KJ3301 - ■ DE22 - ■ ■ V1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75								
FZ.29-LE80MH4E								
	53	135	27.13	4 610	1.1	16	2KJ3301 - ■ DE22 - ■ ■ U1	
	59	120	24.22	4 520	1.2	16	2KJ3301 - ■ DE22 - ■ ■ T1	
	67	107	21.58	4 420	1.4	16	2KJ3301 - ■ DE22 - ■ ■ S1	
	72	99	19.92	4 350	1.5	16	2KJ3301 - ■ DE22 - ■ ■ R1	
	83	87	17.44	4 220	1.7	16	2KJ3301 - ■ DE22 - ■ ■ Q1	
	94	76	15.29	4 100	2.0	16	2KJ3301 - ■ DE22 - ■ ■ P1	
	104	69	13.88	4 010	2.2	16	2KJ3301 - ■ DE22 - ■ ■ N1	
	110	65	13.06	3 950	2.3	16	2KJ3301 - ■ DE22 - ■ ■ M1	
	125	57	11.51	3 830	2.5	16	2KJ3301 - ■ DE22 - ■ ■ L1	
	144	50	9.99	3 690	2.7	16	2KJ3301 - ■ DE22 - ■ ■ K1	
	149	48	9.69	3 600	3.0	16	2KJ3301 - ■ DE22 - ■ ■ J1	
	167	43	8.63	3 490	3.0	16	2KJ3301 - ■ DE22 - ■ ■ H1	
	181	40	7.97	3 420	3.0	16	2KJ3301 - ■ DE22 - ■ ■ G1	
	206	35	6.98	3 300	3.5	16	2KJ3301 - ■ DE22 - ■ ■ F1	
	235	30	6.12	3 200	3.7	16	2KJ3301 - ■ DE22 - ■ ■ E1	
	259	28	5.55	3 100	3.9	16	2KJ3301 - ■ DE22 - ■ ■ D1	
	276	26	5.22	3 050	4.1	16	2KJ3301 - ■ DE22 - ■ ■ C1	
	313	23	4.60	2 950	4.2	16	2KJ3301 - ■ DE22 - ■ ■ B1	
	360	20	4.00	2 830	4.6	16	2KJ3301 - ■ DE22 - ■ ■ A1	
FZ.29-LE80MA2E								
	161	44	17.44	3 590	3.4	14	2KJ3301 - ■ DB22 - ■ ■ Q1 P00	
	183	39	15.29	3 460	3.8	14	2KJ3301 - ■ DB22 - ■ ■ P1 P00	
	202	35	13.88	3 380	4.2	14	2KJ3301 - ■ DB22 - ■ ■ N1 P00	
	215	33	13.06	3 320	4.5	14	2KJ3301 - ■ DB22 - ■ ■ M1 P00	
1.1								
FD.149-LE100LK8								
	1.9	5 610	377.00	65 000	1.4	271	2KJ3410 - ■ FP21 - ■ ■ W1 P02	
	2.2	4 810	323.04	65 000	1.7	271	2KJ3410 - ■ FP21 - ■ ■ V1 P02	
	2.3	4 530	304.03	65 000	1.8	271	2KJ3410 - ■ FP21 - ■ ■ U1 P02	
	2.5	4 240	285.00	65 000	1.9	271	2KJ3410 - ■ FP21 - ■ ■ T1 P02	
FD.129-LE100LK8								
	1.9	5 670	381.00	36 400	0.85	184	2KJ3408 - ■ FP21 - ■ ■ S1 P02	
	2.0	5 230	351.00	36 800	0.93	184	2KJ3408 - ■ FP21 - ■ ■ R1 P02	
FD.129-LE90LLB6E								
	2.3	4 640	413.00	37 400	1.0	175	2KJ3408 - ■ EP22 - ■ ■ T1 P01	
	2.5	4 280	381.00	37 500	1.1	175	2KJ3408 - ■ EP22 - ■ ■ S1 P01	
	2.7	3 940	351.00	37 500	1.2	175	2KJ3408 - ■ EP22 - ■ ■ R1 P01	
	3.1	3 360	299.31	37 500	1.4	175	2KJ3408 - ■ EP22 - ■ ■ Q1 P01	
	3.3	3 160	281.70	37 500	1.5	175	2KJ3408 - ■ EP22 - ■ ■ P1 P01	
FD.129-LE90SG4E								
	3.5	3 040	413.00	37 500	1.6	171	2KJ3408 - ■ EK22 - ■ ■ T1	
	3.7	2 800	381.00	37 500	1.7	171	2KJ3408 - ■ EK22 - ■ ■ S1	
	4.1	2 580	351.00	37 500	1.9	171	2KJ3408 - ■ EK22 - ■ ■ R1	
FD.109-LE90LLB6E								
	2.8	3 770	335.70	25 000	0.82	122	2KJ3407 - ■ EP22 - ■ ■ R1 P01	
	3.0	3 480	309.87	25 000	0.89	122	2KJ3407 - ■ EP22 - ■ ■ Q1 P01	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1								
FD.109-LE90LLB6E								
3.3	3 160	281.68	25 000	0.98	122	2KJ3407 - ■ EK22 - ■ P1	P01	
FD.109-LE90SG4E								
3.5	3 020	410.00	25 000	1.0	118	2KJ3407 - ■ EK22 - ■ T1		
3.9	2 720	370.00	25 000	1.1	118	2KJ3407 - ■ EK22 - ■ S1		
4.2	2 470	335.70	25 000	1.3	118	2KJ3407 - ■ EK22 - ■ R1		
4.6	2 280	309.87	25 000	1.4	118	2KJ3407 - ■ EK22 - ■ Q1		
5.1	2 070	281.68	25 000	1.5	118	2KJ3407 - ■ EK22 - ■ P1		
6.0	1 750	238.52	25 000	1.8	118	2KJ3407 - ■ EK22 - ■ N1		
6.3	1 650	224.49	25 000	1.9	118	2KJ3407 - ■ EK22 - ■ M1		
6.9	1 520	207.31	25 000	2.0	118	2KJ3407 - ■ EK22 - ■ L1		
FD.89-LE90SG4E								
4.7	2 240	304.82	17 400	0.82	78	2KJ3406 - ■ EK22 - ■ R1		
5.2	2 010	273.41	17 400	0.92	78	2KJ3406 - ■ EK22 - ■ Q1		
5.8	1 810	245.82	17 400	1.0	78	2KJ3406 - ■ EK22 - ■ P1		
6.4	1 630	222.33	17 400	1.1	78	2KJ3406 - ■ EK22 - ■ N1		
6.9	1 510	205.23	17 400	1.2	78	2KJ3406 - ■ EK22 - ■ M1		
7.6	1 380	188.00	17 400	1.3	78	2KJ3406 - ■ EK22 - ■ L1		
9.0	1 160	157.74	17 400	1.6	78	2KJ3406 - ■ EK22 - ■ K1		
9.6	1 090	148.46	17 400	1.7	78	2KJ3406 - ■ EK22 - ■ J1		
10	1 000	136.21	17 400	1.8	78	2KJ3406 - ■ EK22 - ■ H1		
12	875	118.98	17 400	2.1	78	2KJ3406 - ■ EK22 - ■ G1		
FD.79-LE90SG4E								
8.5	1 230	167.07	13 100	0.81	46	2KJ3405 - ■ EK22 - ■ K1		
9.3	1 120	152.51	13 300	0.89	46	2KJ3405 - ■ EK22 - ■ J1		
11	930	126.54	13 700	1.1	46	2KJ3405 - ■ EK22 - ■ H1		
12	875	119.10	13 800	1.1	46	2KJ3405 - ■ EK22 - ■ G1		
13	825	112.48	13 900	1.2	46	2KJ3405 - ■ EK22 - ■ F1		
15	705	95.71	14 200	1.4	46	2KJ3405 - ■ EK22 - ■ E1		
17	600	81.99	14 400	1.7	46	2KJ3405 - ■ EK22 - ■ D1		
20	530	72.09	14 500	1.9	46	2KJ3405 - ■ EK22 - ■ C1		
23	445	60.82	14 500	2.2	46	2KJ3405 - ■ EK22 - ■ B1		
FZ.79-LE90SG4E								
27	395	53.55	14 500	2.5	45	2KJ3305 - ■ EK22 - ■ X1		
FD.69-LE90SG4E								
15	675	92.08	10 600	0.88	37	2KJ3404 - ■ EK22 - ■ F1		
16	635	86.67	10 700	0.94	37	2KJ3404 - ■ EK22 - ■ E1		
18	570	77.65	10 700	1.0	37	2KJ3404 - ■ EK22 - ■ D1		
22	485	66.11	10 500	1.2	37	2KJ3404 - ■ EK22 - ■ C1		
25	415	56.67	10 200	1.4	37	2KJ3404 - ■ EK22 - ■ B1		
29	360	48.80	9 990	1.7	37	2KJ3404 - ■ EK22 - ■ A1		
FZ.69-LE90SG4E								
22	475	64.67	10 400	1.3	37	2KJ3304 - ■ EK22 - ■ X1		
24	430	58.79	10 300	1.4	37	2KJ3304 - ■ EK22 - ■ W1		
28	365	50.00	10 000	1.6	37	2KJ3304 - ■ EK22 - ■ V1		
31	335	45.45	9 860	1.8	37	2KJ3304 - ■ EK22 - ■ U1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1								
FZ.69-LE90SG4E								
35	295	40.56	40.56	9 660	2.0	37	2KJ3304 - ■ EK22 - ■ ■ T1	
39	265	36.36	36.36	9 440	2.2	37	2KJ3304 - ■ EK22 - ■ ■ S1	
43	240	32.78	32.78	9 220	2.5	37	2KJ3304 - ■ EK22 - ■ ■ R1	
47	220	30.26	30.26	9 060	2.7	37	2KJ3304 - ■ EK22 - ■ ■ Q1	
52	200	27.62	27.62	8 870	2.9	37	2KJ3304 - ■ EK22 - ■ ■ P1	
FD.49-LE90SG4E								
19	540	73.77	73.77	7 310	0.88	32	2KJ3403 - ■ EK22 - ■ ■ D1	
23	460	62.81	62.81	7 270	1.0	32	2KJ3403 - ■ EK22 - ■ ■ C1	
26	395	53.83	53.83	7 180	1.2	32	2KJ3403 - ■ EK22 - ■ ■ B1	
31	340	46.36	46.36	7 060	1.4	32	2KJ3403 - ■ EK22 - ■ ■ A1	
FZ.49-LE90SG4E								
23	450	61.43	61.43	7 260	1.1	32	2KJ3303 - ■ EK22 - ■ ■ X1	
26	410	55.85	55.85	7 200	1.2	32	2KJ3303 - ■ EK22 - ■ ■ W1	
30	350	47.50	47.50	7 070	1.4	32	2KJ3303 - ■ EK22 - ■ ■ V1	
33	315	43.18	43.18	7 010	1.5	32	2KJ3303 - ■ EK22 - ■ ■ U1	
37	280	38.53	38.53	6 900	1.7	32	2KJ3303 - ■ EK22 - ■ ■ T1	
41	255	34.55	34.55	6 750	1.9	32	2KJ3303 - ■ EK22 - ■ ■ S1	
46	230	31.14	31.14	6 630	2.1	32	2KJ3303 - ■ EK22 - ■ ■ R1	
50	210	28.74	28.74	6 550	2.3	32	2KJ3303 - ■ EK22 - ■ ■ Q1	
54	193	26.24	26.24	6 420	2.5	32	2KJ3303 - ■ EK22 - ■ ■ P1	
65	160	21.77	21.77	6 170	3.0	32	2KJ3303 - ■ EK22 - ■ ■ N1	
FD.39-LE90SG4E								
30	355	48.29	48.29	5 570	0.81	25	2KJ3402 - ■ EK22 - ■ ■ A1	
FZ.39-LE90SG4E								
36	290	39.60	39.60	5 820	0.99	24	2KJ3302 - ■ EK22 - ■ ■ V1	
40	265	36.00	36.00	5 910	0.96	24	2KJ3302 - ■ EK22 - ■ ■ U1	
45	235	31.82	31.82	5 910	1.2	24	2KJ3302 - ■ EK22 - ■ ■ T1	
49	210	28.93	28.93	5 860	1.3	24	2KJ3302 - ■ EK22 - ■ ■ S1	
56	187	25.34	25.34	5 710	1.4	24	2KJ3302 - ■ EK22 - ■ ■ R1	
61	172	23.39	23.39	5 630	1.5	24	2KJ3302 - ■ EK22 - ■ ■ Q1	
69	153	20.71	20.71	5 500	1.6	24	2KJ3302 - ■ EK22 - ■ ■ P1	
83	127	17.24	17.24	5 300	1.8	24	2KJ3302 - ■ EK22 - ■ ■ N1	
88	120	16.22	16.22	5 230	1.9	24	2KJ3302 - ■ EK22 - ■ ■ M1	
98	107	14.54	14.54	5 100	2.1	24	2KJ3302 - ■ EK22 - ■ ■ L1	
115	91	12.38	12.38	4 910	2.3	24	2KJ3302 - ■ EK22 - ■ ■ K1	
134	78	10.61	10.61	4 730	2.5	24	2KJ3302 - ■ EK22 - ■ ■ J1	
156	67	9.13	9.13	4 550	2.8	24	2KJ3302 - ■ EK22 - ■ ■ H1	
176	60	8.10	8.10	4 350	2.8	24	2KJ3302 - ■ EK22 - ■ ■ G1	
211	50	6.74	6.74	4 150	3.1	24	2KJ3302 - ■ EK22 - ■ ■ F1	
224	47	6.35	6.35	4 080	3.2	24	2KJ3302 - ■ EK22 - ■ ■ E1	
250	42	5.69	5.69	3 960	3.3	24	2KJ3302 - ■ EK22 - ■ ■ D1	
294	36	4.84	4.84	3 790	3.6	24	2KJ3302 - ■ EK22 - ■ ■ C1	
343	31	4.15	4.15	3 630	3.9	24	2KJ3302 - ■ EK22 - ■ ■ B1	
399	26	3.57	3.57	3 480	4.1	24	2KJ3302 - ■ EK22 - ■ ■ A1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1 FZ.39-LE80ME2E								
164	64	17.24	17.24	4 490	3.7	21	2KJ3302 - ■ DM22 - ■ ■ N1	P00
175	60	16.22	16.22	4 420	3.8	21	2KJ3302 - ■ DM22 - ■ ■ M1	P00
195	54	14.54	14.54	4 290	4.1	21	2KJ3302 - ■ DM22 - ■ ■ L1	P00
229	46	12.38	12.38	4 100	4.6	21	2KJ3302 - ■ DM22 - ■ ■ K1	P00
FZ.29-LE100LK8								
61	172	11.51	11.51	4 030	0.83	28	2KJ3301 - ■ FP21 - ■ ■ L1	P02
71	149	9.99	9.99	3 970	0.91	28	2KJ3301 - ■ FP21 - ■ ■ K1	P02
73	144	9.69	9.69	3 760	0.99	28	2KJ3301 - ■ FP21 - ■ ■ J1	P02
82	129	8.63	8.63	3 710	1.0	28	2KJ3301 - ■ FP21 - ■ ■ H1	P02
88	119	7.97	7.97	3 680	1.0	28	2KJ3301 - ■ FP21 - ■ ■ G1	P02
101	104	6.98	6.98	3 610	1.2	28	2KJ3301 - ■ FP21 - ■ ■ F1	P02
115	91	6.12	6.12	3 540	1.3	28	2KJ3301 - ■ FP21 - ■ ■ E1	P02
127	83	5.55	5.55	3 480	1.3	28	2KJ3301 - ■ FP21 - ■ ■ D1	P02
135	78	5.22	5.22	3 440	1.4	28	2KJ3301 - ■ FP21 - ■ ■ C1	P02
153	68	4.60	4.60	3 360	1.4	28	2KJ3301 - ■ FP21 - ■ ■ B1	P02
176	60	4.00	4.00	3 260	1.5	28	2KJ3301 - ■ FP21 - ■ ■ A1	P02
FZ.29-LE90SG4E								
59	179	24.22	24.22	4 050	0.84	18	2KJ3301 - ■ EK22 - ■ ■ T1	
66	159	21.58	21.58	4 010	0.94	18	2KJ3301 - ■ EK22 - ■ ■ S1	
72	147	19.92	19.92	3 970	1.0	18	2KJ3301 - ■ EK22 - ■ ■ R1	
82	129	17.44	17.44	3 890	1.2	18	2KJ3301 - ■ EK22 - ■ ■ Q1	
93	113	15.29	15.29	3 810	1.3	18	2KJ3301 - ■ EK22 - ■ ■ P1	
103	102	13.88	13.88	3 750	1.5	18	2KJ3301 - ■ EK22 - ■ ■ N1	
109	96	13.06	13.06	3 710	1.6	18	2KJ3301 - ■ EK22 - ■ ■ M1	
124	85	11.51	11.51	3 610	1.7	18	2KJ3301 - ■ EK22 - ■ ■ L1	
143	74	9.99	9.99	3 510	1.8	18	2KJ3301 - ■ EK22 - ■ ■ K1	
147	71	9.69	9.69	3 390	2.0	18	2KJ3301 - ■ EK22 - ■ ■ J1	
165	64	8.63	8.63	3 300	2.0	18	2KJ3301 - ■ EK22 - ■ ■ H1	
179	59	7.97	7.97	3 250	2.0	18	2KJ3301 - ■ EK22 - ■ ■ G1	
204	52	6.98	6.98	3 150	2.4	18	2KJ3301 - ■ EK22 - ■ ■ F1	
233	45	6.12	6.12	3 060	2.5	18	2KJ3301 - ■ EK22 - ■ ■ E1	
257	41	5.55	5.55	2 990	2.6	18	2KJ3301 - ■ EK22 - ■ ■ D1	
273	38	5.22	5.22	2 950	2.8	18	2KJ3301 - ■ EK22 - ■ ■ C1	
310	34	4.60	4.60	2 850	2.9	18	2KJ3301 - ■ EK22 - ■ ■ B1	
356	30	4.00	4.00	2 740	3.1	18	2KJ3301 - ■ EK22 - ■ ■ A1	
FZ.29-LE80ME2E								
163	65	17.44	17.44	3 400	2.3	15	2KJ3301 - ■ DM22 - ■ ■ Q1	P00
185	57	15.29	15.29	3 300	2.6	15	2KJ3301 - ■ DM22 - ■ ■ P1	P00
204	51	13.88	13.88	3 230	2.9	15	2KJ3301 - ■ DM22 - ■ ■ N1	P00
217	48	13.06	13.06	3 180	3.1	15	2KJ3301 - ■ DM22 - ■ ■ M1	P00
246	43	11.51	11.51	3 080	3.4	15	2KJ3301 - ■ DM22 - ■ ■ L1	P00
284	37	9.99	9.99	2 970	3.7	15	2KJ3301 - ■ DM22 - ■ ■ K1	P00
293	36	9.69	9.69	2 890	4.0	15	2KJ3301 - ■ DM22 - ■ ■ J1	P00
329	32	8.63	8.63	2 810	4.1	15	2KJ3301 - ■ DM22 - ■ ■ H1	P00
356	30	7.97	7.97	2 750	4.1	15	2KJ3301 - ■ DM22 - ■ ■ G1	P00
406	26	6.98	6.98	2 650	4.8	15	2KJ3301 - ■ DM22 - ■ ■ F1	P00

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1 FZ.29-LE80ME2E								
463	23	6.12	2 560	5	15	2KJ3301 - ■ DM22 - ■ E1	P00	
511	21	5.55	2 490	5.3	15	2KJ3301 - ■ DM22 - ■ D1	P00	
543	19	5.22	2 450	5.5	15	2KJ3301 - ■ DM22 - ■ C1	P00	
616	17	4.60	2 360	5.7	15	2KJ3301 - ■ DM22 - ■ B1	P00	
709	15	4.00	2 270	6.1	15	2KJ3301 - ■ DM22 - ■ A1	P00	
1.5 FD.169-LE112MG8								
1.9	7 530	368.00	73 500	1.8	426	2KJ3411 - ■ GJ21 - ■ V1	P02	
2.0	7 010	343.01	73 500	1.9	426	2KJ3411 - ■ GJ21 - ■ U1	P02	
FD.149-LE112MG8								
1.9	7 710	377.00	65 000	1.0	280	2KJ3410 - ■ GJ21 - ■ W1	P02	
2.2	6 610	323.04	65 000	1.2	280	2KJ3410 - ■ GJ21 - ■ V1	P02	
2.3	6 220	304.03	65 000	1.3	280	2KJ3410 - ■ GJ21 - ■ U1	P02	
2.5	5 830	285.00	65 000	1.4	280	2KJ3410 - ■ GJ21 - ■ T1	P02	
FD.149-LE100LLB6E								
2.6	5 560	377.00	65 000	1.4	274	2KJ3410 - ■ FP22 - ■ W1	P01	
3.0	4 770	323.04	65 000	1.7	274	2KJ3410 - ■ FP22 - ■ V1	P01	
3.2	4 490	304.03	65 000	1.8	274	2KJ3410 - ■ FP22 - ■ U1	P01	
3.4	4 200	285.00	65 000	1.9	274	2KJ3410 - ■ FP22 - ■ T1	P01	
FD.129-LE100LLB6E								
2.3	6 090	413.00	35 900	0.8	187	2KJ3408 - ■ FP22 - ■ T1	P01	
2.5	5 620	381.00	36 400	0.86	187	2KJ3408 - ■ FP22 - ■ S1	P01	
2.8	5 180	351.00	36 800	0.94	187	2KJ3408 - ■ FP22 - ■ R1	P01	
3.2	4 420	299.31	37 500	1.1	187	2KJ3408 - ■ FP22 - ■ Q1	P01	
FD.129-LE90LH4E								
3.5	4 120	413.00	37 500	1.2	174	2KJ3408 - ■ EM22 - ■ T1		
3.8	3 800	381.00	37 500	1.3	174	2KJ3408 - ■ EM22 - ■ S1		
4.1	3 500	351.00	37 500	1.4	174	2KJ3408 - ■ EM22 - ■ R1		
4.8	2 980	299.31	37 500	1.6	174	2KJ3408 - ■ EM22 - ■ Q1		
5.1	2 810	281.70	37 500	1.7	174	2KJ3408 - ■ EM22 - ■ P1		
5.5	2 610	261.42	37 500	1.9	174	2KJ3408 - ■ EM22 - ■ N1		
6.2	2 300	231.12	37 500	2.1	174	2KJ3408 - ■ EM22 - ■ M1		
FD.109-LE90LH4E								
3.9	3 690	370.00	25 000	0.84	121	2KJ3407 - ■ EM22 - ■ S1		
4.3	3 350	335.70	25 000	0.93	121	2KJ3407 - ■ EM22 - ■ R1		
4.6	3 090	309.87	25 000	1.0	121	2KJ3407 - ■ EM22 - ■ Q1		
5.1	2 810	281.68	25 000	1.1	121	2KJ3407 - ■ EM22 - ■ P1		
6.0	2 380	238.52	25 000	1.3	121	2KJ3407 - ■ EM22 - ■ N1		
6.4	2 240	224.49	25 000	1.4	121	2KJ3407 - ■ EM22 - ■ M1		
6.9	2 060	207.31	25 000	1.5	121	2KJ3407 - ■ EM22 - ■ L1		
7.8	1 840	184.46	25 000	1.7	121	2KJ3407 - ■ EM22 - ■ K1		
8.8	1 630	163.83	25 000	1.9	121	2KJ3407 - ■ EM22 - ■ J1		
9.8	1 460	146.65	25 000	2.1	121	2KJ3407 - ■ EM22 - ■ H1		
FD.89-LE90LH4E								
6.5	2 210	222.33	17 400	0.83	81	2KJ3406 - ■ EM22 - ■ N1		
7.0	2 040	205.23	17 400	0.90	81	2KJ3406 - ■ EM22 - ■ M1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5								
FD.89-LE90LH4E								
7.6	1 870	188.00	17 400	0.99	81	2KJ3406 - ■ EM22 - ■ ■ L1		
9.1	1 570	157.74	17 400	1.2	81	2KJ3406 - ■ EM22 - ■ ■ K1		
9.7	1 480	148.46	17 400	1.2	81	2KJ3406 - ■ EM22 - ■ ■ J1		
11	1 360	136.21	17 400	1.4	81	2KJ3406 - ■ EM22 - ■ ■ H1		
12	1 180	118.98	17 400	1.6	81	2KJ3406 - ■ EM22 - ■ ■ G1		
13	1 060	106.52	17 400	1.7	81	2KJ3406 - ■ EM22 - ■ ■ F1		
15	930	93.14	17 400	2.0	81	2KJ3406 - ■ EM22 - ■ ■ E1		
18	795	79.95	17 400	2.3	81	2KJ3406 - ■ EM22 - ■ ■ D1		
FD.79-LE90LH4E								
12	1 180	119.10	13 200	0.84	49	2KJ3405 - ■ EM22 - ■ ■ G1		
13	1 120	112.48	13 300	0.89	49	2KJ3405 - ■ EM22 - ■ ■ F1		
15	955	95.71	13 700	1.0	49	2KJ3405 - ■ EM22 - ■ ■ E1		
18	815	81.99	13 900	1.2	49	2KJ3405 - ■ EM22 - ■ ■ D1		
20	720	72.09	14 100	1.4	49	2KJ3405 - ■ EM22 - ■ ■ C1		
24	605	60.82	14 400	1.6	49	2KJ3405 - ■ EM22 - ■ ■ B1		
27	525	53.01	14 500	1.9	49	2KJ3405 - ■ EM22 - ■ ■ A1		
FZ.79-LE90LH4E								
27	535	53.55	14 500	1.9	48	2KJ3305 - ■ EM22 - ■ ■ X1		
30	475	48.03	14 500	2.1	48	2KJ3305 - ■ EM22 - ■ ■ W1		
33	430	43.18	14 500	2.3	48	2KJ3305 - ■ EM22 - ■ ■ V1		
37	390	39.06	14 500	2.6	48	2KJ3305 - ■ EM22 - ■ ■ U1		
FD.69-LE90LH4E								
22	660	66.11	9 410	0.91	40	2KJ3404 - ■ EM22 - ■ ■ C1		
25	565	56.67	9 320	1.1	40	2KJ3404 - ■ EM22 - ■ ■ B1		
29	485	48.80	9 190	1.2	40	2KJ3404 - ■ EM22 - ■ ■ A1		
FZ.69-LE90LH4E								
22	645	64.67	9 410	0.93	40	2KJ3304 - ■ EM22 - ■ ■ X1		
24	585	58.79	9 360	1.0	40	2KJ3304 - ■ EM22 - ■ ■ W1		
29	495	50.00	9 230	1.2	40	2KJ3304 - ■ EM22 - ■ ■ V1		
32	450	45.45	9 130	1.3	40	2KJ3304 - ■ EM22 - ■ ■ U1		
35	405	40.56	8 960	1.5	40	2KJ3304 - ■ EM22 - ■ ■ T1		
39	360	36.36	8 830	1.7	40	2KJ3304 - ■ EM22 - ■ ■ S1		
44	325	32.78	8 670	1.8	40	2KJ3304 - ■ EM22 - ■ ■ R1		
47	300	30.26	8 540	2.0	40	2KJ3304 - ■ EM22 - ■ ■ Q1		
52	275	27.62	8 380	2.2	40	2KJ3304 - ■ EM22 - ■ ■ P1		
63	225	22.92	8 080	2.6	40	2KJ3304 - ■ EM22 - ■ ■ N1		
67	215	21.57	7 960	2.8	40	2KJ3304 - ■ EM22 - ■ ■ M1		
70	200	20.37	7 870	3.0	40	2KJ3304 - ■ EM22 - ■ ■ L1		
FD.49-LE90LH4E								
27	535	53.83	6 240	0.89	35	2KJ3403 - ■ EM22 - ■ ■ B1		
31	460	46.36	6 260	1.0	35	2KJ3403 - ■ EM22 - ■ ■ A1		
FZ.49-LE90LH4E								
26	555	55.85	6 230	0.86	35	2KJ3303 - ■ EM22 - ■ ■ W1		
30	470	47.50	6 270	1.0	35	2KJ3303 - ■ EM22 - ■ ■ V1		
33	430	43.18	6 240	1.1	35	2KJ3303 - ■ EM22 - ■ ■ U1		
37	385	38.53	6 190	1.2	35	2KJ3303 - ■ EM22 - ■ ■ T1		

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5								
FZ.49-LE90LH4E								
42	345	34.55	6 140	1.4	35	2KJ3303 - ■ EM22 - ■ ■ S1		
46	310	31.14	6 090	1.5	35	2KJ3303 - ■ EM22 - ■ ■ R1		
50	285	28.74	6 040	1.7	35	2KJ3303 - ■ EM22 - ■ ■ Q1		
55	260	26.24	5 960	1.8	35	2KJ3303 - ■ EM22 - ■ ■ P1		
66	215	21.77	5 800	2.2	35	2KJ3303 - ■ EM22 - ■ ■ N1		
70	205	20.49	5 720	2.3	35	2KJ3303 - ■ EM22 - ■ ■ M1		
74	193	19.35	5 660	2.5	35	2KJ3303 - ■ EM22 - ■ ■ L1		
87	164	16.47	5 490	2.9	35	2KJ3303 - ■ EM22 - ■ ■ K1		
102	141	14.11	5 310	3.4	35	2KJ3303 - ■ EM22 - ■ ■ J1		
FZ.39-LE90LH4E								
45	315	31.82	5 290	0.90	27	2KJ3302 - ■ EM22 - ■ ■ T1		
50	285	28.93	5 280	0.95	27	2KJ3302 - ■ EM22 - ■ ■ S1		
57	250	25.34	5 220	1.0	27	2KJ3302 - ■ EM22 - ■ ■ R1		
61	230	23.39	5 180	1.1	27	2KJ3302 - ■ EM22 - ■ ■ Q1		
69	205	20.71	5 090	1.2	27	2KJ3302 - ■ EM22 - ■ ■ P1		
83	172	17.24	4 950	1.4	27	2KJ3302 - ■ EM22 - ■ ■ N1		
88	162	16.22	4 900	1.4	27	2KJ3302 - ■ EM22 - ■ ■ M1		
99	145	14.54	4 800	1.5	27	2KJ3302 - ■ EM22 - ■ ■ L1		
116	124	12.38	4 650	1.7	27	2KJ3302 - ■ EM22 - ■ ■ K1		
135	106	10.61	4 510	1.9	27	2KJ3302 - ■ EM22 - ■ ■ J1		
157	91	9.13	4 360	2.1	27	2KJ3302 - ■ EM22 - ■ ■ H1		
177	81	8.10	4 170	2.1	27	2KJ3302 - ■ EM22 - ■ ■ G1		
213	67	6.74	4 000	2.3	27	2KJ3302 - ■ EM22 - ■ ■ F1		
226	63	6.35	3 940	2.4	27	2KJ3302 - ■ EM22 - ■ ■ E1		
252	57	5.69	3 830	2.5	27	2KJ3302 - ■ EM22 - ■ ■ D1		
296	48	4.84	3 680	2.6	27	2KJ3302 - ■ EM22 - ■ ■ C1		
346	41	4.15	3 530	2.8	27	2KJ3302 - ■ EM22 - ■ ■ B1		
402	36	3.57	3 390	3.0	27	2KJ3302 - ■ EM22 - ■ ■ A1		
FZ.39-LE90SG2E								
167	86	17.24	4 290	2.7	24	2KJ3302 - ■ EK22 - ■ ■ N1 P00		
178	80	16.22	4 240	2.9	24	2KJ3302 - ■ EK22 - ■ ■ M1 P00		
198	72	14.54	4 130	3.0	24	2KJ3302 - ■ EK22 - ■ ■ L1 P00		
233	62	12.38	3 960	3.4	24	2KJ3302 - ■ EK22 - ■ ■ K1 P00		
272	53	10.61	3 800	3.8	24	2KJ3302 - ■ EK22 - ■ ■ J1 P00		
316	45	9.13	3 660	4.2	24	2KJ3302 - ■ EK22 - ■ ■ H1 P00		
356	40	8.10	3 500	4.2	24	2KJ3302 - ■ EK22 - ■ ■ G1 P00		
428	34	6.74	3 330	4.5	24	2KJ3302 - ■ EK22 - ■ ■ F1 P00		
454	32	6.35	3 270	4.7	24	2KJ3302 - ■ EK22 - ■ ■ E1 P00		
507	28	5.69	3 180	5.0	24	2KJ3302 - ■ EK22 - ■ ■ D1 P00		
596	24	4.84	3 030	5.3	24	2KJ3302 - ■ EK22 - ■ ■ C1 P00		
695	21	4.15	2 890	5.7	24	2KJ3302 - ■ EK22 - ■ ■ B1 P00		
808	18	3.57	2 770	6.1	24	2KJ3302 - ■ EK22 - ■ ■ A1 P00		
FZ.29-LE90LH4E								
82	174	17.44	3 500	0.86	21	2KJ3301 - ■ EM22 - ■ ■ Q1		
94	153	15.29	3 470	0.98	21	2KJ3301 - ■ EM22 - ■ ■ P1		
103	139	13.88	3 430	1.1	21	2KJ3301 - ■ EM22 - ■ ■ N1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5								
FZ.29-LE90LH4E								
110	130	13.06	3 410	1.2	21	2KJ3301 - ■ EM22 - ■ ■ M1		
125	115	11.51	3 350	1.2	21	2KJ3301 - ■ EM22 - ■ ■ L1		
144	100	9.99	3 280	1.4	21	2KJ3301 - ■ EM22 - ■ ■ K1		
148	97	9.69	3 130	1.5	21	2KJ3301 - ■ EM22 - ■ ■ J1		
166	86	8.63	3 080	1.5	21	2KJ3301 - ■ EM22 - ■ ■ H1		
180	80	7.97	3 040	1.5	21	2KJ3301 - ■ EM22 - ■ ■ G1		
206	70	6.98	2 970	1.8	21	2KJ3301 - ■ EM22 - ■ ■ F1		
234	61	6.12	2 900	1.9	21	2KJ3301 - ■ EM22 - ■ ■ E1		
259	55	5.55	2 840	1.9	21	2KJ3301 - ■ EM22 - ■ ■ D1		
275	52	5.22	2 810	2.0	21	2KJ3301 - ■ EM22 - ■ ■ C1		
312	46	4.60	2 730	2.1	21	2KJ3301 - ■ EM22 - ■ ■ B1		
359	40	4.00	2 640	2.3	21	2KJ3301 - ■ EM22 - ■ ■ A1		
FZ.29-LE90SG2E								
165	87	17.44	3 200	1.7	18	2KJ3301 - ■ EK22 - ■ ■ Q1		
189	76	15.29	3 120	2.0	18	2KJ3301 - ■ EK22 - ■ ■ P1		
208	69	13.88	3 060	2.2	18	2KJ3301 - ■ EK22 - ■ ■ N1		
221	65	13.06	3 020	2.3	18	2KJ3301 - ■ EK22 - ■ ■ M1		
251	57	11.51	2 940	2.5	18	2KJ3301 - ■ EK22 - ■ ■ L1		
289	50	9.99	2 840	2.7	18	2KJ3301 - ■ EK22 - ■ ■ K1		
298	48	9.69	2 760	3.0	18	2KJ3301 - ■ EK22 - ■ ■ J1		
334	43	8.63	2 680	3.0	18	2KJ3301 - ■ EK22 - ■ ■ H1		
362	40	7.97	2 630	3.0	18	2KJ3301 - ■ EK22 - ■ ■ G1		
413	35	6.98	2 550	3.5	18	2KJ3301 - ■ EK22 - ■ ■ F1		
471	30	6.12	2 470	3.8	18	2KJ3301 - ■ EK22 - ■ ■ E1		
520	28	5.55	2 400	3.9	18	2KJ3301 - ■ EK22 - ■ ■ D1		
553	26	5.22	2 370	4.1	18	2KJ3301 - ■ EK22 - ■ ■ C1		
627	23	4.60	2 290	4.2	18	2KJ3301 - ■ EK22 - ■ ■ B1		
721	20	4.00	2 200	4.6	18	2KJ3301 - ■ EK22 - ■ ■ A1		
2.2								
FD.189-LE132SL8								
2.1	10 200	347.35	110 900	1.9	655	2KJ3412 - ■ HG21 - ■ ■ T1	P02	
FD.169-LE132SL8								
1.9	10 800	368.00	73 500	1.3	443	2KJ3411 - ■ HG21 - ■ ■ V1	P02	
2.1	10 000	343.01	73 500	1.3	443	2KJ3411 - ■ HG21 - ■ ■ U1	P02	
2.3	8 960	304.94	73 500	1.5	443	2KJ3411 - ■ HG21 - ■ ■ T1	P02	
FD.169-LE112ME6E								
2.6	8 010	368.00	73 500	1.7	421	2KJ3411 - ■ GH22 - ■ ■ V1	P01	
2.8	7 460	343.01	73 500	1.8	421	2KJ3411 - ■ GH22 - ■ ■ U1	P01	
3.2	6 630	304.94	73 500	2.0	421	2KJ3411 - ■ GH22 - ■ ■ T1	P01	
FD.149-LE132SL8								
2.2	9 490	323.04	65 000	0.84	296	2KJ3410 - ■ HG21 - ■ ■ V1	P02	
2.4	8 930	304.03	65 000	0.9	296	2KJ3410 - ■ HG21 - ■ ■ U1	P02	
2.5	8 370	285.00	65 000	0.96	296	2KJ3410 - ■ HG21 - ■ ■ T1	P02	
FD.149-LE112ME6E								
2.6	8 200	377.00	65 000	0.97	275	2KJ3410 - ■ GH22 - ■ ■ W1	P01	
3.0	7 030	323.04	65 000	1.1	275	2KJ3410 - ■ GH22 - ■ ■ V1	P01	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
FD.149-LE112ME6E								
3.2	6 610	304.03	65 000	1.2	275	275	2KJ3410 - ■ GH22 - ■ ■ U1	P01
3.4	6 200	285.00	65 000	1.3	275	275	2KJ3410 - ■ GH22 - ■ ■ T1	P01
FD.149-LE100LE4E								
3.9	5 440	377.00	65 000	1.5	269	269	2KJ3410 - ■ FL22 - ■ ■ W1	
4.5	4 660	323.04	65 000	1.7	269	269	2KJ3410 - ■ FL22 - ■ ■ V1	
4.8	4 390	304.03	65 000	1.8	269	269	2KJ3410 - ■ FL22 - ■ ■ U1	
5.1	4 110	285.00	65 000	1.9	269	269	2KJ3410 - ■ FL22 - ■ ■ T1	
FD.129-LE100LE4E								
3.5	5 960	413.00	36 100	0.81	182	182	2KJ3408 - ■ FL22 - ■ ■ T1	
3.8	5 500	381.00	36 500	0.88	182	182	2KJ3408 - ■ FL22 - ■ ■ S1	
4.1	5 060	351.00	36 900	0.96	182	182	2KJ3408 - ■ FL22 - ■ ■ R1	
4.9	4 320	299.31	37 500	1.1	182	182	2KJ3408 - ■ FL22 - ■ ■ Q1	
5.2	4 060	281.70	37 500	1.2	182	182	2KJ3408 - ■ FL22 - ■ ■ P1	
5.6	3 770	261.42	37 500	1.3	182	182	2KJ3408 - ■ FL22 - ■ ■ N1	
6.3	3 330	231.12	37 500	1.5	182	182	2KJ3408 - ■ FL22 - ■ ■ M1	
7.1	2 970	206.32	37 500	1.6	182	182	2KJ3408 - ■ FL22 - ■ ■ L1	
7.8	2 680	185.66	37 500	1.8	182	182	2KJ3408 - ■ FL22 - ■ ■ K1	
9.0	2 320	161.14	37 500	2.1	182	182	2KJ3408 - ■ FL22 - ■ ■ J1	
FD.109-LE100LE4E								
6.1	3 440	238.52	25 000	0.9	128	128	2KJ3407 - ■ FL22 - ■ ■ N1	
6.5	3 240	224.49	25 000	0.96	128	128	2KJ3407 - ■ FL22 - ■ ■ M1	
7.0	2 990	207.31	25 000	1.0	128	128	2KJ3407 - ■ FL22 - ■ ■ L1	
7.9	2 660	184.46	25 000	1.2	128	128	2KJ3407 - ■ FL22 - ■ ■ K1	
8.9	2 360	163.83	25 000	1.3	128	128	2KJ3407 - ■ FL22 - ■ ■ J1	
9.9	2 110	146.65	25 000	1.5	128	128	2KJ3407 - ■ FL22 - ■ ■ H1	
12	1 810	125.37	25 000	1.7	128	128	2KJ3407 - ■ FL22 - ■ ■ G1	
FD.109-LE100LE4E								
13	1 610	111.95	25 000	1.9	128	128	2KJ3407 - ■ FL22 - ■ ■ F1	
15	1 420	98.94	25 000	2.2	128	128	2KJ3407 - ■ FL22 - ■ ■ E1	
FD.89-LE100LE4E								
9.2	2 270	157.74	17 400	0.81	87	87	2KJ3406 - ■ FL22 - ■ ■ K1	
9.8	2 140	148.46	17 400	0.86	87	87	2KJ3406 - ■ FL22 - ■ ■ J1	
11	1 960	136.21	17 400	0.94	87	87	2KJ3406 - ■ FL22 - ■ ■ H1	
12	1 710	118.98	17 400	1.1	87	87	2KJ3406 - ■ FL22 - ■ ■ G1	
14	1 530	106.52	17 400	1.2	87	87	2KJ3406 - ■ FL22 - ■ ■ F1	
16	1 340	93.14	17 400	1.4	87	87	2KJ3406 - ■ FL22 - ■ ■ E1	
18	1 150	79.95	17 400	1.6	87	87	2KJ3406 - ■ FL22 - ■ ■ D1	
21	1 020	70.67	17 400	1.8	87	87	2KJ3406 - ■ FL22 - ■ ■ C1	
24	865	60.09	17 400	2.1	87	87	2KJ3406 - ■ FL22 - ■ ■ B1	
28	740	51.51	17 400	2.5	87	87	2KJ3406 - ■ FL22 - ■ ■ A1	
FZ.89-LE100LE4E								
24	890	61.72	17 400	2.1	86	86	2KJ3306 - ■ FL22 - ■ ■ B2	
26	805	55.72	17 400	2.3	86	86	2KJ3306 - ■ FL22 - ■ ■ A2	
29	730	50.54	17 400	2.5	86	86	2KJ3306 - ■ FL22 - ■ ■ X1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
FD.79-LE100LE4E								
18	1 180	81.99	13 200	0.84	56	2KJ3405	- ■ FL22 - ■ ■ D1	
20	1 040	72.09	13 500	0.96	56	2KJ3405	- ■ FL22 - ■ ■ C1	
24	875	60.82	13 800	1.1	56	2KJ3405	- ■ FL22 - ■ ■ B1	
27	765	53.01	14 000	1.3	56	2KJ3405	- ■ FL22 - ■ ■ A1	
FZ.79-LE100LE4E								
30	690	48.03	14 200	1.4	55	2KJ3305	- ■ FL22 - ■ ■ W1	
34	620	43.18	14 300	1.6	55	2KJ3305	- ■ FL22 - ■ ■ V1	
37	560	39.06	14 400	1.8	55	2KJ3305	- ■ FL22 - ■ ■ U1	
40	520	36.05	14 500	1.9	55	2KJ3305	- ■ FL22 - ■ ■ T1	
44	475	33.02	14 500	2.1	55	2KJ3305	- ■ FL22 - ■ ■ S1	
53	400	27.71	14 500	2.5	55	2KJ3305	- ■ FL22 - ■ ■ R1	
56	375	26.08	14 500	2.7	55	2KJ3305	- ■ FL22 - ■ ■ Q1	
61	345	23.93	14 500	2.9	55	2KJ3305	- ■ FL22 - ■ ■ P1	
FD.69-LE100LE4E								
30	705	48.80	7 780	0.85	49	2KJ3404	- ■ FL22 - ■ ■ A1	
FZ.69-LE100LE4E								
36	585	40.56	7 790	1.0	48	2KJ3304	- ■ FL22 - ■ ■ T1	
40	525	36.36	7 760	1.1	48	2KJ3304	- ■ FL22 - ■ ■ S1	
44	470	32.78	7 720	1.3	48	2KJ3304	- ■ FL22 - ■ ■ R1	
48	435	30.26	7 660	1.4	48	2KJ3304	- ■ FL22 - ■ ■ Q1	
53	395	27.62	7 600	1.5	48	2KJ3304	- ■ FL22 - ■ ■ P1	
63	330	22.92	7 390	1.8	48	2KJ3304	- ■ FL22 - ■ ■ N1	
67	310	21.57	7 330	1.9	48	2KJ3304	- ■ FL22 - ■ ■ M1	
71	290	20.37	7 280	2.0	48	2KJ3304	- ■ FL22 - ■ ■ L1	
84	250	17.33	7 050	2.4	48	2KJ3304	- ■ FL22 - ■ ■ K1	
98	210	14.85	6 860	2.8	48	2KJ3304	- ■ FL22 - ■ ■ J1	
111	189	13.06	6 650	3.2	48	2KJ3304	- ■ FL22 - ■ ■ H1	
132	159	11.01	6 400	3.8	48	2KJ3304	- ■ FL22 - ■ ■ G1	
163	129	8.90	6 040	3.7	48	2KJ3304	- ■ FL22 - ■ ■ E1	
191	110	7.62	5 820	4.2	48	2KJ3304	- ■ FL22 - ■ ■ D1	
217	97	6.70	5 630	4.5	48	2KJ3304	- ■ FL22 - ■ ■ C1	
FZ.49-LE100LE4E								
38	555	38.53	5 040	0.86	44	2KJ3303	- ■ FL22 - ■ ■ T1	
42	495	34.55	5 120	0.96	44	2KJ3303	- ■ FL22 - ■ ■ S1	
47	450	31.14	5 130	1.1	44	2KJ3303	- ■ FL22 - ■ ■ R1	
51	415	28.74	5 150	1.2	44	2KJ3303	- ■ FL22 - ■ ■ Q1	
55	375	26.24	5 180	1.3	44	2KJ3303	- ■ FL22 - ■ ■ P1	
67	310	21.77	5 140	1.5	44	2KJ3303	- ■ FL22 - ■ ■ N1	
71	295	20.49	5 100	1.6	44	2KJ3303	- ■ FL22 - ■ ■ M1	
75	275	19.35	5 090	1.7	44	2KJ3303	- ■ FL22 - ■ ■ L1	
88	235	16.47	4 990	2	44	2KJ3303	- ■ FL22 - ■ ■ K1	
103	200	14.11	4 890	2.4	44	2KJ3303	- ■ FL22 - ■ ■ J1	
117	179	12.40	4 770	2.7	44	2KJ3303	- ■ FL22 - ■ ■ H1	
139	151	10.46	4 630	3.2	44	2KJ3303	- ■ FL22 - ■ ■ G1	
160	132	9.12	4 500	3.6	44	2KJ3303	- ■ FL22 - ■ ■ F1	
173	121	8.40	4 340	3.7	44	2KJ3303	- ■ FL22 - ■ ■ E1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
FZ.49-LE100LE4E								
	202	104	7.20	4 200	4.3	44	2KJ3303 - ■ FL22 - ■ ■ D1	
FZ.49-LE90LH2E								
	175	120	16.47	4 410	4.0	35	2KJ3303 - ■ EM22 - ■ ■ K1	
FZ.39-LE100LE4E								
	70	295	20.71	4 390	0.84	33	2KJ3302 - ■ FL22 - ■ ■ P1	
	84	245	17.24	4 370	0.94	33	2KJ3302 - ■ FL22 - ■ ■ N1	
	90	230	16.22	4 360	0.98	33	2KJ3302 - ■ FL22 - ■ ■ M1	
	100	210	14.54	4 290	1.0	33	2KJ3302 - ■ FL22 - ■ ■ L1	
	118	179	12.38	4 220	1.2	33	2KJ3302 - ■ FL22 - ■ ■ K1	
	137	153	10.61	4 130	1.3	33	2KJ3302 - ■ FL22 - ■ ■ J1	
	159	132	9.13	4 030	1.4	33	2KJ3302 - ■ FL22 - ■ ■ H1	
	180	117	8.10	3 840	1.4	33	2KJ3302 - ■ FL22 - ■ ■ G1	
	216	97	6.74	3 730	1.6	33	2KJ3302 - ■ FL22 - ■ ■ F1	
	229	92	6.35	3 680	1.6	33	2KJ3302 - ■ FL22 - ■ ■ E1	
	256	82	5.69	3 600	1.7	33	2KJ3302 - ■ FL22 - ■ ■ D1	
	301	70	4.84	3 480	1.8	33	2KJ3302 - ■ FL22 - ■ ■ C1	
	351	60	4.15	3 360	2	33	2KJ3302 - ■ FL22 - ■ ■ B1	
	408	52	3.57	3 240	2.1	33	2KJ3302 - ■ FL22 - ■ ■ A1	
FZ.39-LE90LH2E								
	168	125	17.24	4 000	1.9	27	2KJ3302 - ■ EM22 - ■ ■ N1	
	178	118	16.22	3 950	2.0	27	2KJ3302 - ■ EM22 - ■ ■ M1	
	199	106	14.54	3 870	2.1	27	2KJ3302 - ■ EM22 - ■ ■ L1	
	233	90	12.38	3 740	2.3	27	2KJ3302 - ■ EM22 - ■ ■ K1	
	272	77	10.61	3 620	2.6	27	2KJ3302 - ■ EM22 - ■ ■ J1	
	317	66	9.13	3 500	2.8	27	2KJ3302 - ■ EM22 - ■ ■ H1	
	357	59	8.10	3 340	2.8	27	2KJ3302 - ■ EM22 - ■ ■ G1	
	429	49	6.74	3 200	3.1	27	2KJ3302 - ■ EM22 - ■ ■ F1	
FZ.39-LE90LH2E								
	455	46	6.35	3 150	3.2	27	2KJ3302 - ■ EM22 - ■ ■ E1	
	508	41	5.69	3 060	3.4	27	2KJ3302 - ■ EM22 - ■ ■ D1	
	597	35	4.84	2 940	3.6	27	2KJ3302 - ■ EM22 - ■ ■ C1	
	696	30	4.15	2 820	3.9	27	2KJ3302 - ■ EM22 - ■ ■ B1	
	810	26	3.57	2 700	4.2	27	2KJ3302 - ■ EM22 - ■ ■ A1	
FZ.29-LE100LE4E								
	111	189	13.06	2 900	0.8	26	2KJ3301 - ■ FL22 - ■ ■ M1	
	126	166	11.51	2 910	0.86	26	2KJ3301 - ■ FL22 - ■ ■ L1	
	146	144	9.99	2 900	0.94	26	2KJ3301 - ■ FL22 - ■ ■ K1	
	150	140	9.69	2 690	1.0	26	2KJ3301 - ■ FL22 - ■ ■ J1	
	169	125	8.63	2 680	1.0	26	2KJ3301 - ■ FL22 - ■ ■ H1	
	183	115	7.97	2 680	1.0	26	2KJ3301 - ■ FL22 - ■ ■ G1	
	208	101	6.98	2 650	1.2	26	2KJ3301 - ■ FL22 - ■ ■ F1	
	238	88	6.12	2 620	1.3	26	2KJ3301 - ■ FL22 - ■ ■ E1	
	262	80	5.55	2 590	1.3	26	2KJ3301 - ■ FL22 - ■ ■ D1	
	279	75	5.22	2 570	1.4	26	2KJ3301 - ■ FL22 - ■ ■ C1	
	316	66	4.60	2 520	1.5	26	2KJ3301 - ■ FL22 - ■ ■ B1	
	364	58	4.00	2 450	1.6	26	2KJ3301 - ■ FL22 - ■ ■ A1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
FZ.29-LE90LH2E								
166	127	17.44	17.44	2 860	1.2	21	2KJ3301 - ■ EM22 - ■ ■ Q1	P00
189	111	15.29	15.29	2 830	1.3	21	2KJ3301 - ■ EM22 - ■ ■ P1	P00
208	101	13.88	13.88	2 790	1.5	21	2KJ3301 - ■ EM22 - ■ ■ N1	P00
221	95	13.06	13.06	2 770	1.6	21	2KJ3301 - ■ EM22 - ■ ■ M1	P00
251	84	11.51	11.51	2 710	1.7	21	2KJ3301 - ■ EM22 - ■ ■ L1	P00
289	73	9.99	9.99	2 650	1.9	21	2KJ3301 - ■ EM22 - ■ ■ K1	P00
298	70	9.69	9.69	2 540	2.0	21	2KJ3301 - ■ EM22 - ■ ■ J1	P00
335	63	8.63	8.63	2 490	2.1	21	2KJ3301 - ■ EM22 - ■ ■ H1	P00
363	58	7.97	7.97	2 460	2.1	21	2KJ3301 - ■ EM22 - ■ ■ G1	P00
414	51	6.98	6.98	2 390	2.4	21	2KJ3301 - ■ EM22 - ■ ■ F1	P00
472	44	6.12	6.12	2 340	2.6	21	2KJ3301 - ■ EM22 - ■ ■ E1	P00
521	40	5.55	5.55	2 290	2.7	21	2KJ3301 - ■ EM22 - ■ ■ D1	P00
554	38	5.22	5.22	2 250	2.8	21	2KJ3301 - ■ EM22 - ■ ■ C1	P00
628	33	4.60	4.60	2 190	2.9	21	2KJ3301 - ■ EM22 - ■ ■ B1	P00
722	29	4.00	4.00	2 110	3.1	21	2KJ3301 - ■ EM22 - ■ ■ A1	P00
3								
FD.189-LE132MJ8								
2.1	13 900	347.35	347.35	110 900	1.4	665	2KJ3412 - ■ HK21 - ■ ■ T1	P02
2.3	12 400	310.76	310.76	110 900	1.5	665	2KJ3412 - ■ HK21 - ■ ■ S1	P02
2.6	11 200	280.27	280.27	110 900	1.7	665	2KJ3412 - ■ HK21 - ■ ■ R1	P02
FD.189-LE132SC6E								
2.8	10 200	347.35	347.35	110 900	1.9	641	2KJ3412 - ■ HF22 - ■ ■ T1	P01
FD.169-LE132MJ8								
1.9	14 700	368.00	368.00	73 500	0.92	453	2KJ3411 - ■ HK21 - ■ ■ V1	P02
2.1	13 700	343.01	343.01	73 500	0.99	453	2KJ3411 - ■ HK21 - ■ ■ U1	P02
2.3	12 200	304.94	304.94	73 500	1.1	453	2KJ3411 - ■ HK21 - ■ ■ T1	P02
FD.169-LE132SC6E								
2.6	10 800	368.00	368.00	73 500	1.3	429	2KJ3411 - ■ HF22 - ■ ■ V1	P01
2.8	10 100	343.01	343.01	73 500	1.3	429	2KJ3411 - ■ HF22 - ■ ■ U1	P01
3.2	9 000	304.94	304.94	73 500	1.5	429	2KJ3411 - ■ HF22 - ■ ■ T1	P01
3.5	8 080	273.80	273.80	73 500	1.7	429	2KJ3411 - ■ HF22 - ■ ■ S1	P01
FD.149-LE132SC6E								
3.0	9 540	323.04	323.04	65 000	0.84	282	2KJ3410 - ■ HF22 - ■ ■ V1	P01
3.2	8 980	304.03	304.03	65 000	0.89	282	2KJ3410 - ■ HF22 - ■ ■ U1	P01
3.4	8 410	285.00	285.00	65 000	0.95	282	2KJ3410 - ■ HF22 - ■ ■ T1	P01
FD.149-LE100LK4E								
3.9	7 420	377.00	377.00	65 000	1.1	273	2KJ3410 - ■ FM22 - ■ ■ W1	
4.5	6 360	323.04	323.04	65 000	1.3	273	2KJ3410 - ■ FM22 - ■ ■ V1	
4.8	5 980	304.03	304.03	65 000	1.3	273	2KJ3410 - ■ FM22 - ■ ■ U1	
5.1	5 610	285.00	285.00	65 000	1.4	273	2KJ3410 - ■ FM22 - ■ ■ T1	
5.8	4 970	252.64	252.64	65 000	1.6	273	2KJ3410 - ■ FM22 - ■ ■ S1	
6.5	4 410	224.42	224.42	65 000	1.8	273	2KJ3410 - ■ FM22 - ■ ■ R1	
7.2	3 980	202.50	202.50	65 000	2	273	2KJ3410 - ■ FM22 - ■ ■ Q1	
FD.129-LE100LK4E								
4.9	5 890	299.31	299.31	36 100	0.82	186	2KJ3408 - ■ FM22 - ■ ■ Q1	
5.2	5 540	281.70	281.70	36 500	0.87	186	2KJ3408 - ■ FM22 - ■ ■ P1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3								
FD.129-LE100LK4E								
5.6	5 140	261.42	36 900	0.94	186	2KJ3408	- ■ FM22 - ■ ■ N1	
6.3	4 550	231.12	37 400	1.1	186	2KJ3408	- ■ FM22 - ■ ■ M1	
7.1	4 060	206.32	37 500	1.2	186	2KJ3408	- ■ FM22 - ■ ■ L1	
7.8	3 650	185.66	37 500	1.3	186	2KJ3408	- ■ FM22 - ■ ■ K1	
9	3 170	161.14	37 500	1.5	186	2KJ3408	- ■ FM22 - ■ ■ J1	
10	2 850	144.92	37 500	1.7	186	2KJ3408	- ■ FM22 - ■ ■ H1	
11	2 490	126.66	37 500	1.9	186	2KJ3408	- ■ FM22 - ■ ■ G1	
13	2 220	113.03	37 500	2.2	186	2KJ3408	- ■ FM22 - ■ ■ F1	
FD.109-LE100LK4E								
7.9	3 630	184.46	25 000	0.85	132	2KJ3407	- ■ FM22 - ■ ■ K1	
8.9	3 220	163.83	25 000	0.96	132	2KJ3407	- ■ FM22 - ■ ■ J1	
9.9	2 880	146.65	25 000	1.1	132	2KJ3407	- ■ FM22 - ■ ■ H1	
12	2 460	125.37	25 000	1.3	132	2KJ3407	- ■ FM22 - ■ ■ G1	
13	2 200	111.95	25 000	1.4	132	2KJ3407	- ■ FM22 - ■ ■ F1	
15	1 940	98.94	25 000	1.6	132	2KJ3407	- ■ FM22 - ■ ■ E1	
17	1 710	86.83	25 000	1.8	132	2KJ3407	- ■ FM22 - ■ ■ D1	
19	1 480	75.59	25 000	2.1	132	2KJ3407	- ■ FM22 - ■ ■ C1	
23	1 270	64.62	25 000	2.4	132	2KJ3407	- ■ FM22 - ■ ■ B1	
FZ.109-LE100LK4E								
21	1 390	70.74	25 000	2.2	129	2KJ3307	- ■ FM22 - ■ ■ B2	
22	1 280	65.30	25 000	2.4	129	2KJ3307	- ■ FM22 - ■ ■ A2	
FD.89-LE100LK4E								
14	2 090	106.52	17 400	0.88	91	2KJ3406	- ■ FM22 - ■ ■ F1	
16	1 830	93.14	17 400	1.0	91	2KJ3406	- ■ FM22 - ■ ■ E1	
18	1 570	79.95	17 400	1.2	91	2KJ3406	- ■ FM22 - ■ ■ D1	
21	1 390	70.67	17 400	1.3	91	2KJ3406	- ■ FM22 - ■ ■ C1	
FD.89-LE100LK4E								
24	1 180	60.09	17 400	1.6	91	2KJ3406	- ■ FM22 - ■ ■ B1	
28	1 010	51.51	17 400	1.8	91	2KJ3406	- ■ FM22 - ■ ■ A1	
FZ.89-LE100LK4E								
24	1 210	61.72	17 400	1.5	90	2KJ3306	- ■ FM22 - ■ ■ B2	
26	1 090	55.72	17 400	1.7	90	2KJ3306	- ■ FM22 - ■ ■ A2	
29	995	50.54	17 400	1.9	90	2KJ3306	- ■ FM22 - ■ ■ X1	
31	915	46.66	17 400	2.0	90	2KJ3306	- ■ FM22 - ■ ■ W1	
34	835	42.41	17 400	2.2	90	2KJ3306	- ■ FM22 - ■ ■ V1	
41	705	35.91	17 400	2.6	90	2KJ3306	- ■ FM22 - ■ ■ U1	
FD.79-LE100LK4E								
24	1 190	60.82	13 200	0.84	60	2KJ3405	- ■ FM22 - ■ ■ B1	
27	1 040	53.01	13 500	0.96	60	2KJ3405	- ■ FM22 - ■ ■ A1	
FZ.79-LE100LK4E								
30	945	48.03	13 700	1.1	59	2KJ3305	- ■ FM22 - ■ ■ W1	
34	850	43.18	13 900	1.2	59	2KJ3305	- ■ FM22 - ■ ■ V1	
37	765	39.06	14 000	1.3	59	2KJ3305	- ■ FM22 - ■ ■ U1	
40	710	36.05	14 100	1.4	59	2KJ3305	- ■ FM22 - ■ ■ T1	
44	650	33.02	14 300	1.5	59	2KJ3305	- ■ FM22 - ■ ■ S1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3	FZ.79-LE100LK4E							
	53	545	27.71	14 500	1.8	59	2KJ3305 - ■ FM22 - ■ ■ R1	
	56	510	26.08	14 500	1.9	59	2KJ3305 - ■ FM22 - ■ ■ Q1	
	61	470	23.93	14 500	2.1	59	2KJ3305 - ■ FM22 - ■ ■ P1	
	70	410	20.90	14 500	2.4	59	2KJ3305 - ■ FM22 - ■ ■ N1	
	78	365	18.71	14 500	2.7	59	2KJ3305 - ■ FM22 - ■ ■ M1	
	89	320	16.36	14 500	3.1	59	2KJ3305 - ■ FM22 - ■ ■ L1	
	FZ.69-LE100LK4E							
	40	715	36.36	6 580	0.84	52	2KJ3304 - ■ FM22 - ■ ■ S1	
	44	645	32.78	6 640	0.93	52	2KJ3304 - ■ FM22 - ■ ■ R1	
	48	595	30.26	6 670	1.0	52	2KJ3304 - ■ FM22 - ■ ■ Q1	
	53	540	27.62	6 700	1.1	52	2KJ3304 - ■ FM22 - ■ ■ P1	
	63	450	22.92	6 650	1.3	52	2KJ3304 - ■ FM22 - ■ ■ N1	
	67	425	21.57	6 620	1.4	52	2KJ3304 - ■ FM22 - ■ ■ M1	
	71	400	20.37	6 600	1.5	52	2KJ3304 - ■ FM22 - ■ ■ L1	
	84	340	17.33	6 490	1.8	52	2KJ3304 - ■ FM22 - ■ ■ K1	
	98	290	14.85	6 370	2.1	52	2KJ3304 - ■ FM22 - ■ ■ J1	
	111	255	13.06	6 240	2.3	52	2KJ3304 - ■ FM22 - ■ ■ H1	
	132	215	11.01	6 060	2.8	52	2KJ3304 - ■ FM22 - ■ ■ G1	
	152	189	9.60	5 890	3.2	52	2KJ3304 - ■ FM22 - ■ ■ F1	
	163	175	8.90	5 740	2.7	52	2KJ3304 - ■ FM22 - ■ ■ E1	
	191	150	7.62	5 560	3.1	52	2KJ3304 - ■ FM22 - ■ ■ D1	
	217	132	6.70	5 400	3.3	52	2KJ3304 - ■ FM22 - ■ ■ C1	
	257	111	5.66	5 190	3.7	52	2KJ3304 - ■ FM22 - ■ ■ B1	
	295	97	4.93	5 020	4.0	52	2KJ3304 - ■ FM22 - ■ ■ A1	
	FZ.49-LE100LK4E							
	51	565	28.74	4 170	0.85	48	2KJ3303 - ■ FM22 - ■ ■ Q1	
	55	515	26.24	4 260	0.93	48	2KJ3303 - ■ FM22 - ■ ■ P1	
	67	425	21.77	4 390	1.1	48	2KJ3303 - ■ FM22 - ■ ■ N1	
	71	400	20.49	4 410	1.2	48	2KJ3303 - ■ FM22 - ■ ■ M1	
	75	380	19.35	4 410	1.3	48	2KJ3303 - ■ FM22 - ■ ■ L1	
	88	320	16.47	4 440	1.5	48	2KJ3303 - ■ FM22 - ■ ■ K1	
	103	275	14.11	4 400	1.7	48	2KJ3303 - ■ FM22 - ■ ■ J1	
	117	240	12.40	4 370	2.0	48	2KJ3303 - ■ FM22 - ■ ■ H1	
	139	205	10.46	4 270	2.3	48	2KJ3303 - ■ FM22 - ■ ■ G1	
	160	180	9.12	4 190	2.7	48	2KJ3303 - ■ FM22 - ■ ■ F1	
	173	165	8.40	4 020	2.7	48	2KJ3303 - ■ FM22 - ■ ■ E1	
	202	142	7.20	3 920	3.2	48	2KJ3303 - ■ FM22 - ■ ■ D1	
	230	125	6.33	3 840	3.4	48	2KJ3303 - ■ FM22 - ■ ■ C1	
	272	105	5.34	3 720	3.8	48	2KJ3303 - ■ FM22 - ■ ■ B1	
	313	92	4.65	3 610	4.1	48	2KJ3303 - ■ FM22 - ■ ■ A1	
	FZ.39-LE100LK4E							
	118	240	12.38	3 760	0.86	37	2KJ3302 - ■ FM22 - ■ ■ K1	
	137	205	10.61	3 750	0.95	37	2KJ3302 - ■ FM22 - ■ ■ J1	
	159	180	9.13	3 670	1.1	37	2KJ3302 - ■ FM22 - ■ ■ H1	
	180	159	8.10	3 490	1.0	37	2KJ3302 - ■ FM22 - ■ ■ G1	
	216	133	6.74	3 430	1.1	37	2KJ3302 - ■ FM22 - ■ ■ F1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3								
FZ.39-LE100LK4E								
	229	125	6.35	3 400	1.2	37	2KJ3302 - ■ FM22 - ■ ■ E1	
	256	112	5.69	3 350	1.2	37	2KJ3302 - ■ FM22 - ■ ■ D1	
	301	95	4.84	3 270	1.3	37	2KJ3302 - ■ FM22 - ■ ■ C1	
	351	82	4.15	3 170	1.4	37	2KJ3302 - ■ FM22 - ■ ■ B1	
	408	70	3.57	3 080	1.5	37	2KJ3302 - ■ FM22 - ■ ■ A1	
FZ.29-LE100LK4E								
	208	137	6.98	2 300	0.89	30	2KJ3301 - ■ FM22 - ■ ■ F1	
	238	121	6.12	2 300	0.95	30	2KJ3301 - ■ FM22 - ■ ■ E1	
	262	109	5.55	2 310	0.99	30	2KJ3301 - ■ FM22 - ■ ■ D1	
	279	103	5.22	2 300	1.0	30	2KJ3301 - ■ FM22 - ■ ■ C1	
	316	91	4.60	2 280	1.1	30	2KJ3301 - ■ FM22 - ■ ■ B1	
	364	79	4.00	2 250	1.2	30	2KJ3301 - ■ FM22 - ■ ■ A1	
4								
FD.189-LE160MD8								
	2.1	18 400	347.35	110 900	1.0	684	2KJ3412 - ■ JF21 - ■ ■ T1 P02	
	2.3	16 400	310.76	110 900	1.2	684	2KJ3412 - ■ JF21 - ■ ■ S1 P02	
	2.6	14 800	280.27	110 900	1.3	684	2KJ3412 - ■ JF21 - ■ ■ R1 P02	
FD.189-LE132MB6E								
	2.8	13 600	347.35	110 900	1.4	646	2KJ3412 - ■ HH22 - ■ ■ T1 P01	
	3.1	12 200	310.76	110 900	1.6	646	2KJ3412 - ■ HH22 - ■ ■ S1 P01	
	3.5	11 000	280.27	110 900	1.7	646	2KJ3412 - ■ HH22 - ■ ■ R1 P01	
	3.9	9 750	247.71	110 900	1.9	646	2KJ3412 - ■ HH22 - ■ ■ Q1 P01	
FD.169-LE160MD8								
	2.4	16 100	304.94	73 500	0.84	472	2KJ3411 - ■ JF21 - ■ ■ T1 P02	
FD.169-LE132MB6E								
	2.6	14 400	368.00	73 500	0.94	434	2KJ3411 - ■ HH22 - ■ ■ V1 P01	
	2.8	13 500	343.01	73 500	1.0	434	2KJ3411 - ■ HH22 - ■ ■ U1 P01	
	3.2	12 000	304.94	73 500	1.1	434	2KJ3411 - ■ HH22 - ■ ■ T1 P01	
	3.5	10 700	273.80	73 500	1.3	434	2KJ3411 - ■ HH22 - ■ ■ S1 P01	
FD.169-LE112ME4E								
	4.0	9 620	368.00	73 500	1.4	421	2KJ3411 - ■ GH22 - ■ ■ V1	
	4.3	8 970	343.01	73 500	1.5	421	2KJ3411 - ■ GH22 - ■ ■ U1	
	4.8	7 970	304.94	73 500	1.7	421	2KJ3411 - ■ GH22 - ■ ■ T1	
	5.3	7 160	273.80	73 500	1.9	421	2KJ3411 - ■ GH22 - ■ ■ S1	
	5.9	6 480	247.84	73 500	2.1	421	2KJ3411 - ■ GH22 - ■ ■ R1	
FD.149-LE112ME4E								
	3.9	9 860	377.00	65 000	0.81	275	2KJ3410 - ■ GH22 - ■ ■ W1	
	4.5	8 450	323.04	65 000	0.95	275	2KJ3410 - ■ GH22 - ■ ■ V1	
	4.8	7 950	304.03	65 000	1.0	275	2KJ3410 - ■ GH22 - ■ ■ U1	
	5.1	7 450	285.00	65 000	1.1	275	2KJ3410 - ■ GH22 - ■ ■ T1	
	5.8	6 610	252.64	65 000	1.2	275	2KJ3410 - ■ GH22 - ■ ■ S1	
	6.5	5 870	224.42	65 000	1.4	275	2KJ3410 - ■ GH22 - ■ ■ R1	
	7.2	5 290	202.50	65 000	1.5	275	2KJ3410 - ■ GH22 - ■ ■ Q1	
	8.1	4 690	179.44	65 000	1.7	275	2KJ3410 - ■ GH22 - ■ ■ P1	
	9.2	4 150	158.91	65 000	1.9	275	2KJ3410 - ■ GH22 - ■ ■ N1	
	10	3 700	141.43	65 000	2.2	275	2KJ3410 - ■ GH22 - ■ ■ M1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4	FD.129-LE112ME4E							
	6.3	6 040	231.12	36 000	0.8	187	2KJ3408 - ■ GH22 - ■ ■ M1	
	7.1	5 390	206.32	36 600	0.9	187	2KJ3408 - ■ GH22 - ■ ■ L1	
	7.9	4 850	185.66	37 200	1.0	187	2KJ3408 - ■ GH22 - ■ ■ K1	
	9.1	4 210	161.14	37 500	1.2	187	2KJ3408 - ■ GH22 - ■ ■ J1	
	10	3 790	144.92	37 500	1.3	187	2KJ3408 - ■ GH22 - ■ ■ H1	
	12	3 310	126.66	37 500	1.5	187	2KJ3408 - ■ GH22 - ■ ■ G1	
	13	2 950	113.03	37 500	1.6	187	2KJ3408 - ■ GH22 - ■ ■ F1	
	15	2 600	99.58	37 500	1.9	187	2KJ3408 - ■ GH22 - ■ ■ E1	
	17	2 280	87.25	37 500	2.1	187	2KJ3408 - ■ GH22 - ■ ■ D1	
	FD.109-LE112ME4E							
	10	3 830	146.65	25 000	0.81	132	2KJ3407 - ■ GH22 - ■ ■ H1	
	12	3 280	125.37	25 000	0.95	132	2KJ3407 - ■ GH22 - ■ ■ G1	
	13	2 920	111.95	25 000	1.1	132	2KJ3407 - ■ GH22 - ■ ■ F1	
	15	2 580	98.94	25 000	1.2	132	2KJ3407 - ■ GH22 - ■ ■ E1	
	17	2 270	86.83	25 000	1.4	132	2KJ3407 - ■ GH22 - ■ ■ D1	
	19	1 970	75.59	25 000	1.6	132	2KJ3407 - ■ GH22 - ■ ■ C1	
	23	1 690	64.62	25 000	1.8	132	2KJ3407 - ■ GH22 - ■ ■ B1	
	26	1 440	55.31	25 000	2.1	132	2KJ3407 - ■ GH22 - ■ ■ A1	
	FZ.109-LE112ME4E							
	21	1 850	70.74	25 000	1.7	129	2KJ3307 - ■ GH22 - ■ ■ B2	
	22	1 700	65.30	25 000	1.8	129	2KJ3307 - ■ GH22 - ■ ■ A2	
	24	1 570	60.12	25 000	2.0	129	2KJ3307 - ■ GH22 - ■ ■ X1	
	28	1 340	51.27	25 000	2.3	129	2KJ3307 - ■ GH22 - ■ ■ W1	
	30	1 260	48.25	25 000	2.5	129	2KJ3307 - ■ GH22 - ■ ■ V1	
	33	1 170	44.78	25 000	2.6	129	2KJ3307 - ■ GH22 - ■ ■ U1	
	FD.89-LE112ME4E							
	18	2 090	79.95	17 400	0.88	91	2KJ3406 - ■ GH22 - ■ ■ D1	
	21	1 840	70.67	17 400	1.0	91	2KJ3406 - ■ GH22 - ■ ■ C1	
	24	1 570	60.09	17 400	1.2	91	2KJ3406 - ■ GH22 - ■ ■ B1	
	28	1 340	51.51	17 400	1.4	91	2KJ3406 - ■ GH22 - ■ ■ A1	
	FZ.89-LE112ME4E							
	24	1 610	61.72	17 400	1.1	90	2KJ3306 - ■ GH22 - ■ ■ B2	
	26	1 450	55.72	17 400	1.3	90	2KJ3306 - ■ GH22 - ■ ■ A2	
	29	1 320	50.54	17 400	1.4	90	2KJ3306 - ■ GH22 - ■ ■ X1	
	31	1 220	46.66	17 400	1.5	90	2KJ3306 - ■ GH22 - ■ ■ W1	
	34	1 110	42.41	17 400	1.7	90	2KJ3306 - ■ GH22 - ■ ■ V1	
	41	940	35.91	17 400	2.0	90	2KJ3306 - ■ GH22 - ■ ■ U1	
	43	880	33.80	17 400	2.1	90	2KJ3306 - ■ GH22 - ■ ■ T1	
	47	815	31.21	17 400	2.3	90	2KJ3306 - ■ GH22 - ■ ■ S1	
	53	725	27.77	17 400	2.5	90	2KJ3306 - ■ GH22 - ■ ■ R1	
	59	645	24.67	17 400	2.9	90	2KJ3306 - ■ GH22 - ■ ■ Q1	
	FZ.79-LE112ME4E							
	30	1 250	48.03	13 100	0.80	60	2KJ3305 - ■ GH22 - ■ ■ W1	
	34	1 130	43.18	13 300	0.89	60	2KJ3305 - ■ GH22 - ■ ■ V1	
	37	1 020	39.06	13 500	0.98	60	2KJ3305 - ■ GH22 - ■ ■ U1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4								
FZ.79-LE112ME4E								
40	940	36.05	13 700	1.1	60	2KJ3305	- ■ GH22 - ■ ■ T1	
44	860	33.02	13 800	1.2	60	2KJ3305	- ■ GH22 - ■ ■ S1	
53	725	27.71	14 100	1.4	60	2KJ3305	- ■ GH22 - ■ ■ R1	
56	680	26.08	14 200	1.5	60	2KJ3305	- ■ GH22 - ■ ■ Q1	
61	625	23.93	14 300	1.6	60	2KJ3305	- ■ GH22 - ■ ■ P1	
70	545	20.90	14 500	1.8	60	2KJ3305	- ■ GH22 - ■ ■ N1	
78	490	18.71	14 500	2.0	60	2KJ3305	- ■ GH22 - ■ ■ M1	
89	425	16.36	14 500	2.3	60	2KJ3305	- ■ GH22 - ■ ■ L1	
104	365	14.04	14 500	2.7	60	2KJ3305	- ■ GH22 - ■ ■ K1	
118	325	12.41	14 400	3.1	60	2KJ3305	- ■ GH22 - ■ ■ J1	
138	275	10.56	13 900	3.6	60	2KJ3305	- ■ GH22 - ■ ■ H1	
172	220	8.51	13 100	3.2	60	2KJ3305	- ■ GH22 - ■ ■ F1	
196	195	7.44	12 700	3.7	60	2KJ3305	- ■ GH22 - ■ ■ E1	
228	167	6.39	12 200	4.3	60	2KJ3305	- ■ GH22 - ■ ■ D1	
259	148	5.64	11 800	4.7	60	2KJ3305	- ■ GH22 - ■ ■ C1	
FZ.69-LE112ME4E								
53	720	27.62	5 580	0.83	53	2KJ3304	- ■ GH22 - ■ ■ P1	
64	600	22.92	5 710	1.0	53	2KJ3304	- ■ GH22 - ■ ■ N1	
68	560	21.57	5 770	1.1	53	2KJ3304	- ■ GH22 - ■ ■ M1	
72	530	20.37	5 780	1.1	53	2KJ3304	- ■ GH22 - ■ ■ L1	
84	450	17.33	5 800	1.3	53	2KJ3304	- ■ GH22 - ■ ■ K1	
98	385	14.85	5 770	1.5	53	2KJ3304	- ■ GH22 - ■ ■ J1	
112	340	13.06	5 710	1.8	53	2KJ3304	- ■ GH22 - ■ ■ H1	
133	285	11.01	5 620	2.1	53	2KJ3304	- ■ GH22 - ■ ■ G1	
152	250	9.60	5 500	2.4	53	2KJ3304	- ■ GH22 - ■ ■ F1	
164	230	8.90	5 380	2.0	53	2KJ3304	- ■ GH22 - ■ ■ E1	
192	199	7.62	5 230	2.3	53	2KJ3304	- ■ GH22 - ■ ■ D1	
218	175	6.70	5 110	2.5	53	2KJ3304	- ■ GH22 - ■ ■ C1	
258	148	5.66	4 950	2.8	53	2KJ3304	- ■ GH22 - ■ ■ B1	
296	129	4.93	4 800	3	53	2KJ3304	- ■ GH22 - ■ ■ A1	
FZ.49-LE112ME4E								
67	570	21.77	3 430	0.84	48	2KJ3303	- ■ GH22 - ■ ■ N1	
71	535	20.49	3 520	0.90	48	2KJ3303	- ■ GH22 - ■ ■ M1	
75	505	19.35	3 580	0.95	48	2KJ3303	- ■ GH22 - ■ ■ L1	
89	430	16.47	3 710	1.1	48	2KJ3303	- ■ GH22 - ■ ■ K1	
103	365	14.11	3 810	1.3	48	2KJ3303	- ■ GH22 - ■ ■ J1	
118	320	12.40	3 840	1.5	48	2KJ3303	- ■ GH22 - ■ ■ H1	
140	270	10.46	3 840	1.8	48	2KJ3303	- ■ GH22 - ■ ■ G1	
160	235	9.12	3 820	2.0	48	2KJ3303	- ■ GH22 - ■ ■ F1	
174	220	8.40	3 610	2.0	48	2KJ3303	- ■ GH22 - ■ ■ E1	
203	188	7.20	3 580	2.4	48	2KJ3303	- ■ GH22 - ■ ■ D1	
231	166	6.33	3 530	2.6	48	2KJ3303	- ■ GH22 - ■ ■ C1	
273	140	5.34	3 460	2.9	48	2KJ3303	- ■ GH22 - ■ ■ B1	
314	122	4.65	3 390	3.1	48	2KJ3303	- ■ GH22 - ■ ■ A1	
FZ.39-LE112ME4E								
217	176	6.74	3 060	0.86	40	2KJ3302	- ■ GH22 - ■ ■ F1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4	FZ.39-LE112ME4E							
	230	166	6.35	3 050	0.90	40	2KJ3302 - ■ GH22 - ■ ■ E1	
	257	149	5.69	3 040	0.94	40	2KJ3302 - ■ GH22 - ■ ■ D1	
	302	127	4.84	3 000	1.0	40	2KJ3302 - ■ GH22 - ■ ■ C1	
	352	109	4.15	2 940	1.1	40	2KJ3302 - ■ GH22 - ■ ■ B1	
409	93	3.57	2 890	1.2	40	2KJ3302 - ■ GH22 - ■ ■ A1		
5.5	FD.189-LE160ML8							
	2.3	22 600	310.76	110 500	0.84	694	2KJ3412 - ■ JH21 - ■ ■ S1	P02
	2.6	20 400	280.27	110 900	0.93	694	2KJ3412 - ■ JH21 - ■ ■ R1	P02
	FD.189-LE132MJ6E							
	2.8	18 800	347.35	110 900	1.0	655	2KJ3412 - ■ HL22 - ■ ■ T1	P01
	3.1	16 800	310.76	110 900	1.1	655	2KJ3412 - ■ HL22 - ■ ■ S1	P01
	3.5	15 100	280.27	110 900	1.3	655	2KJ3412 - ■ HL22 - ■ ■ R1	P01
	3.9	13 400	247.71	110 900	1.4	655	2KJ3412 - ■ HL22 - ■ ■ Q1	P01
	FD.189-LE132SF4E							
	4.2	12 400	347.35	110 900	1.5	645	2KJ3412 - ■ HG22 - ■ ■ T1	
	4.7	11 100	310.76	110 900	1.7	645	2KJ3412 - ■ HG22 - ■ ■ S1	
	5.2	10 000	280.27	110 900	1.9	645	2KJ3412 - ■ HG22 - ■ ■ R1	
	5.9	8 880	247.71	110 900	2.1	645	2KJ3412 - ■ HG22 - ■ ■ Q1	
	FD.169-LE132MJ6E							
	3.2	16 500	304.94	73 500	0.82	443	2KJ3411 - ■ HL22 - ■ ■ T1	P01
	3.5	14 800	273.80	73 500	0.92	443	2KJ3411 - ■ HL22 - ■ ■ S1	P01
	FD.169-LE132SF4E							
	4.0	13 100	368.00	73 500	1.0	433	2KJ3411 - ■ HG22 - ■ ■ V1	
	4.3	12 200	343.01	73 500	1.1	433	2KJ3411 - ■ HG22 - ■ ■ U1	
	4.8	10 900	304.94	73 500	1.2	433	2KJ3411 - ■ HG22 - ■ ■ T1	
5.4	9 810	273.80	73 500	1.4	433	2KJ3411 - ■ HG22 - ■ ■ S1		
5.9	8 880	247.84	73 500	1.5	433	2KJ3411 - ■ HG22 - ■ ■ R1		
6.7	7 800	217.70	73 500	1.7	433	2KJ3411 - ■ HG22 - ■ ■ Q1		
7.4	7 070	197.27	73 500	1.9	433	2KJ3411 - ■ HG22 - ■ ■ P1		
FD.149-LE132SF4E								
5.8	9 050	252.64	65 000	0.88	286	2KJ3410 - ■ HG22 - ■ ■ S1		
6.5	8 040	224.42	65 000	0.99	286	2KJ3410 - ■ HG22 - ■ ■ R1		
7.2	7 260	202.50	65 000	1.1	286	2KJ3410 - ■ HG22 - ■ ■ Q1		
8.2	6 430	179.44	65 000	1.2	286	2KJ3410 - ■ HG22 - ■ ■ P1		
9.2	5 690	158.91	65 000	1.4	286	2KJ3410 - ■ HG22 - ■ ■ N1		
10	5 070	141.43	65 000	1.6	286	2KJ3410 - ■ HG22 - ■ ■ M1		
12	4 540	126.73	65 000	1.8	286	2KJ3410 - ■ HG22 - ■ ■ L1		
13	4 020	112.36	65 000	2.0	286	2KJ3410 - ■ HG22 - ■ ■ K1		
15	3 550	99.18	65 000	2.2	286	2KJ3410 - ■ HG22 - ■ ■ J1		
FD.129-LE132SF4E								
9.1	5 770	161.14	36 300	0.84	200	2KJ3408 - ■ HG22 - ■ ■ J1		
10	5 190	144.92	36 800	0.93	200	2KJ3408 - ■ HG22 - ■ ■ H1		
12	4 540	126.66	37 500	1.1	200	2KJ3408 - ■ HG22 - ■ ■ G1		
13	4 050	113.03	37 500	1.2	200	2KJ3408 - ■ HG22 - ■ ■ F1		
15	3 570	99.58	37 500	1.4	200	2KJ3408 - ■ HG22 - ■ ■ E1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
5.5	FD.129-LE132SF4E							
	17	3 120	87.25	37 500	1.6	200	2KJ3408 - ■ HG22 - ■ ■ D1	
	19	2 720	76.04	37 500	1.8	200	2KJ3408 - ■ HG22 - ■ ■ C1	
	21	2 480	69.40	37 500	1.9	200	2KJ3408 - ■ HG22 - ■ ■ B1	
	25	2 140	59.75	37 500	2.3	200	2KJ3408 - ■ HG22 - ■ ■ A1	
	FZ.129-LE132SF4E							
	21	2 480	69.20	37 500	2.0	195	2KJ3308 - ■ HG22 - ■ ■ A2	
	25	2 120	59.22	37 500	2.3	195	2KJ3308 - ■ HG22 - ■ ■ X1	
	26	1 990	55.74	37 500	2.4	195	2KJ3308 - ■ HG22 - ■ ■ W1	
	FD.109-LE132SF4E							
	15	3 540	98.94	25 000	0.87	146	2KJ3407 - ■ HG22 - ■ ■ E1	
	17	3 110	86.83	25 000	1.0	146	2KJ3407 - ■ HG22 - ■ ■ D1	
	19	2 710	75.59	25 000	1.1	146	2KJ3407 - ■ HG22 - ■ ■ C1	
	23	2 310	64.62	25 000	1.3	146	2KJ3407 - ■ HG22 - ■ ■ B1	
	26	1 980	55.31	25 000	1.6	146	2KJ3407 - ■ HG22 - ■ ■ A1	
	FZ.109-LE132SF4E							
	24	2 150	60.12	25 000	1.4	142	2KJ3307 - ■ HG22 - ■ ■ X1	
	29	1 830	51.27	25 000	1.7	142	2KJ3307 - ■ HG22 - ■ ■ W1	
	30	1 730	48.25	25 000	1.8	142	2KJ3307 - ■ HG22 - ■ ■ V1	
	33	1 600	44.78	25 000	1.9	142	2KJ3307 - ■ HG22 - ■ ■ U1	
	37	1 410	39.59	25 000	2.2	142	2KJ3307 - ■ HG22 - ■ ■ T1	
	41	1 260	35.34	25 000	2.4	142	2KJ3307 - ■ HG22 - ■ ■ S1	
	46	1 140	31.80	25 000	2.7	142	2KJ3307 - ■ HG22 - ■ ■ R1	
	FD.89-LE132SF4E							
	24	2 150	60.09	17 400	0.86	105	2KJ3406 - ■ HG22 - ■ ■ B1	
	28	1 840	51.51	17 400	1.0	105	2KJ3406 - ■ HG22 - ■ ■ A1	
	FZ.89-LE132SF4E							
	35	1 520	42.41	17 400	1.2	104	2KJ3306 - ■ HG22 - ■ ■ V1	
41	1 280	35.91	17 400	1.4	104	2KJ3306 - ■ HG22 - ■ ■ U1		
43	1 210	33.80	17 400	1.5	104	2KJ3306 - ■ HG22 - ■ ■ T1		
47	1 110	31.21	17 400	1.7	104	2KJ3306 - ■ HG22 - ■ ■ S1		
53	995	27.77	17 400	1.9	104	2KJ3306 - ■ HG22 - ■ ■ R1		
59	880	24.67	17 400	2.1	104	2KJ3306 - ■ HG22 - ■ ■ Q1		
66	790	22.08	17 400	2.3	104	2KJ3306 - ■ HG22 - ■ ■ P1		
78	675	18.88	17 400	2.7	104	2KJ3306 - ■ HG22 - ■ ■ N1		
87	600	16.86	17 400	3.1	104	2KJ3306 - ■ HG22 - ■ ■ M1		
98	530	14.90	17 400	3.5	104	2KJ3306 - ■ HG22 - ■ ■ L1		
193	270	7.60	17 400	4.0	104	2KJ3306 - ■ HG22 - ■ ■ F1		
FZ.79-LE132SF4E								
44	1 180	33.02	13 200	0.84	74	2KJ3305 - ■ HG22 - ■ ■ S1		
53	990	27.71	13 600	1.0	74	2KJ3305 - ■ HG22 - ■ ■ R1		
56	935	26.08	13 700	1.1	74	2KJ3305 - ■ HG22 - ■ ■ Q1		
61	855	23.93	13 900	1.2	74	2KJ3305 - ■ HG22 - ■ ■ P1		
70	745	20.90	14 100	1.3	74	2KJ3305 - ■ HG22 - ■ ■ N1		
78	670	18.71	14 200	1.5	74	2KJ3305 - ■ HG22 - ■ ■ M1		
90	585	16.36	14 400	1.7	74	2KJ3305 - ■ HG22 - ■ ■ L1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
5.5								
FZ.79-LE132SF4E								
104	500	14.04	14 000	2.0	74	2KJ3305	- ■ HG22 - ■ ■ K1	
118	445	12.41	13 700	2.2	74	2KJ3305	- ■ HG22 - ■ ■ J1	
139	375	10.56	13 300	2.6	74	2KJ3305	- ■ HG22 - ■ ■ H1	
162	320	9.05	12 900	3.1	74	2KJ3305	- ■ HG22 - ■ ■ G1	
172	305	8.51	12 600	2.4	74	2KJ3305	- ■ HG22 - ■ ■ F1	
197	265	7.44	12 300	2.7	74	2KJ3305	- ■ HG22 - ■ ■ E1	
229	225	6.39	11 900	3.1	74	2KJ3305	- ■ HG22 - ■ ■ D1	
260	200	5.64	11 500	3.5	74	2KJ3305	- ■ HG22 - ■ ■ C1	
305	172	4.80	11 100	3.8	74	2KJ3305	- ■ HG22 - ■ ■ B1	
356	147	4.11	10 700	4.1	74	2KJ3305	- ■ HG22 - ■ ■ A1	
FZ.69-LE132SF4E								
72	730	20.37	4 540	0.82	66	2KJ3304	- ■ HG22 - ■ ■ L1	
85	620	17.33	4 740	0.97	66	2KJ3304	- ■ HG22 - ■ ■ K1	
99	530	14.85	4 870	1.1	66	2KJ3304	- ■ HG22 - ■ ■ J1	
112	465	13.06	4 930	1.3	66	2KJ3304	- ■ HG22 - ■ ■ H1	
133	395	11.01	4 930	1.5	66	2KJ3304	- ■ HG22 - ■ ■ G1	
153	340	9.60	4 940	1.7	66	2KJ3304	- ■ HG22 - ■ ■ F1	
165	315	8.90	4 820	1.5	66	2KJ3304	- ■ HG22 - ■ ■ E1	
192	270	7.62	4 770	1.7	66	2KJ3304	- ■ HG22 - ■ ■ D1	
219	240	6.70	4 690	1.8	66	2KJ3304	- ■ HG22 - ■ ■ C1	
259	200	5.66	4 600	2.0	66	2KJ3304	- ■ HG22 - ■ ■ B1	
297	177	4.93	4 490	2.2	66	2KJ3304	- ■ HG22 - ■ ■ A1	
FZ.49-LE132SF4E								
89	590	16.47	2 660	0.81	54	2KJ3303	- ■ HG22 - ■ ■ K1	
104	505	14.11	2 890	0.95	54	2KJ3303	- ■ HG22 - ■ ■ J1	
118	445	12.40	3 020	1.1	54	2KJ3303	- ■ HG22 - ■ ■ H1	
140	375	10.46	3 150	1.3	54	2KJ3303	- ■ HG22 - ■ ■ G1	
161	325	9.12	3 220	1.5	54	2KJ3303	- ■ HG22 - ■ ■ F1	
174	300	8.40	3 020	1.5	54	2KJ3303	- ■ HG22 - ■ ■ E1	
203	255	7.20	3 090	1.7	54	2KJ3303	- ■ HG22 - ■ ■ D1	
231	225	6.33	3 100	1.9	54	2KJ3303	- ■ HG22 - ■ ■ C1	
274	191	5.34	3 090	2.1	54	2KJ3303	- ■ HG22 - ■ ■ B1	
315	167	4.65	3 060	2.2	54	2KJ3303	- ■ HG22 - ■ ■ A1	
7.5								
FD.189-LE132ZMS4P								
4.2	16 900	347.35	110 900	1.1	667	2KJ3412	- ■ HL23 - ■ ■ T1	
4.7	15 100	310.76	110 900	1.3	667	2KJ3412	- ■ HL23 - ■ ■ S1	
5.2	13 600	280.27	110 900	1.4	667	2KJ3412	- ■ HL23 - ■ ■ R1	
5.9	12 000	247.71	110 900	1.6	667	2KJ3412	- ■ HL23 - ■ ■ Q1	
6.5	11 000	226.42	110 900	1.7	667	2KJ3412	- ■ HL23 - ■ ■ P1	
7.2	9 920	203.69	110 900	1.9	667	2KJ3412	- ■ HL23 - ■ ■ N1	
8.1	8 860	182.03	110 900	2.1	667	2KJ3412	- ■ HL23 - ■ ■ M1	
FD.169-LE132ZMS4P								
4.3	16 700	343.01	73 500	0.81	455	2KJ3411	- ■ HL23 - ■ ■ U1	
4.8	14 800	304.94	73 500	0.92	455	2KJ3411	- ■ HL23 - ■ ■ T1	
5.4	13 300	273.80	73 500	1.0	455	2KJ3411	- ■ HL23 - ■ ■ S1	
5.9	12 000	247.84	73 500	1.1	455	2KJ3411	- ■ HL23 - ■ ■ R1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
7.5								
FD.169-LE132ZMS4P								
6.8	10 600	217.70	73 500	1.3	455	2KJ3411 - ■ HL23 - ■ ■ Q1		
7.5	9 610	197.27	73 500	1.4	455	2KJ3411 - ■ HL23 - ■ ■ P1		
8.4	8 560	175.69	73 500	1.6	455	2KJ3411 - ■ HL23 - ■ ■ N1		
9.3	7 680	157.76	73 500	1.8	455	2KJ3411 - ■ HL23 - ■ ■ M1		
10	6 850	140.77	73 500	2.0	455	2KJ3411 - ■ HL23 - ■ ■ L1		
12	6 110	125.49	73 500	2.2	455	2KJ3411 - ■ HL23 - ■ ■ K1		
FD.149-LE132ZMS4P								
7.3	9 860	202.50	65 000	0.81	308	2KJ3410 - ■ HL23 - ■ ■ Q1		
8.2	8 740	179.44	65 000	0.92	308	2KJ3410 - ■ HL23 - ■ ■ P1		
9.3	7 740	158.91	65 000	1.0	308	2KJ3410 - ■ HL23 - ■ ■ N1		
10	6 890	141.43	65 000	1.2	308	2KJ3410 - ■ HL23 - ■ ■ M1		
12	6 170	126.73	65 000	1.3	308	2KJ3410 - ■ HL23 - ■ ■ L1		
13	5 470	112.36	65 000	1.5	308	2KJ3410 - ■ HL23 - ■ ■ K1		
15	4 830	99.18	65 000	1.7	308	2KJ3410 - ■ HL23 - ■ ■ J1		
17	4 240	87.20	63 900	1.9	308	2KJ3410 - ■ HL23 - ■ ■ H1		
19	3 840	78.98	62 800	2.1	308	2KJ3410 - ■ HL23 - ■ ■ G1		
21	3 350	68.76	61 000	2.4	308	2KJ3410 - ■ HL23 - ■ ■ F1		
FD.129-LE132ZMS4P								
13	5 500	113.03	36 500	0.88	222	2KJ3408 - ■ HL23 - ■ ■ F1		
15	4 850	99.58	37 200	1.0	222	2KJ3408 - ■ HL23 - ■ ■ E1		
17	4 250	87.25	37 500	1.1	222	2KJ3408 - ■ HL23 - ■ ■ D1		
19	3 700	76.04	37 500	1.3	222	2KJ3408 - ■ HL23 - ■ ■ C1		
21	3 380	69.40	37 500	1.4	222	2KJ3408 - ■ HL23 - ■ ■ B1		
25	2 910	59.75	37 500	1.7	222	2KJ3408 - ■ HL23 - ■ ■ A1		
FZ.129-LE132ZMS4P								
21	3 370	69.20	37 500	1.4	217	2KJ3308 - ■ HL23 - ■ ■ A2		
25	2 880	59.22	37 500	1.7	217	2KJ3308 - ■ HL23 - ■ ■ X1		
26	2 710	55.74	37 500	1.8	217	2KJ3308 - ■ HL23 - ■ ■ W1		
28	2 540	52.25	37 500	1.9	217	2KJ3308 - ■ HL23 - ■ ■ V1		
32	2 250	46.32	37 500	2.1	217	2KJ3308 - ■ HL23 - ■ ■ U1		
36	2 000	41.14	37 500	2.4	217	2KJ3308 - ■ HL23 - ■ ■ T1		
40	1 800	37.12	37 500	2.7	217	2KJ3308 - ■ HL23 - ■ ■ S1		
FD.109-LE132ZMS4P								
19	3 680	75.59	25 000	0.84	168	2KJ3407 - ■ HL23 - ■ ■ C1		
23	3 140	64.62	25 000	0.98	168	2KJ3407 - ■ HL23 - ■ ■ B1		
27	2 690	55.31	25 000	1.2	168	2KJ3407 - ■ HL23 - ■ ■ A1		
FZ.109-LE132ZMS4P								
24	2 920	60.12	25 000	1.1	164	2KJ3307 - ■ HL23 - ■ ■ X1		
29	2 490	51.27	25 000	1.2	164	2KJ3307 - ■ HL23 - ■ ■ W1		
30	2 350	48.25	25 000	1.3	164	2KJ3307 - ■ HL23 - ■ ■ V1		
33	2 180	44.78	25 000	1.4	164	2KJ3307 - ■ HL23 - ■ ■ U1		
37	1 920	39.59	25 000	1.6	164	2KJ3307 - ■ HL23 - ■ ■ T1		
42	1 720	35.34	25 000	1.8	164	2KJ3307 - ■ HL23 - ■ ■ S1		
46	1 540	31.80	25 000	2.0	164	2KJ3307 - ■ HL23 - ■ ■ R1		
53	1 340	27.60	25 000	2.3	164	2KJ3307 - ■ HL23 - ■ ■ Q1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
7.5								
FZ.109-LE132ZMS4P								
	59	1 200	24.82	25 000	2.6	164	2KJ3307 - ■ HL23 - ■ ■ P1	
	68	1 050	21.70	25 000	2.9	164	2KJ3307 - ■ HL23 - ■ ■ N1	
FZ.89-LE132ZMS4P								
	35	2 060	42.41	17 400	0.9	126	2KJ3306 - ■ HL23 - ■ ■ V1	
	41	1 750	35.91	17 400	1.1	126	2KJ3306 - ■ HL23 - ■ ■ U1	
	43	1 640	33.80	17 400	1.1	126	2KJ3306 - ■ HL23 - ■ ■ T1	
	47	1 520	31.21	17 400	1.2	126	2KJ3306 - ■ HL23 - ■ ■ S1	
	53	1 350	27.77	17 400	1.4	126	2KJ3306 - ■ HL23 - ■ ■ R1	
	60	1 200	24.67	17 400	1.5	126	2KJ3306 - ■ HL23 - ■ ■ Q1	
	67	1 070	22.08	17 400	1.7	126	2KJ3306 - ■ HL23 - ■ ■ P1	
	78	920	18.88	17 400	2.0	126	2KJ3306 - ■ HL23 - ■ ■ N1	
	87	820	16.86	17 400	2.3	126	2KJ3306 - ■ HL23 - ■ ■ M1	
	99	725	14.90	17 400	2.5	126	2KJ3306 - ■ HL23 - ■ ■ L1	
	112	635	13.07	17 400	2.9	126	2KJ3306 - ■ HL23 - ■ ■ K1	
	129	550	11.38	17 400	3.3	126	2KJ3306 - ■ HL23 - ■ ■ J1	
	151	470	9.73	17 400	3.9	126	2KJ3306 - ■ HL23 - ■ ■ H1	
	193	370	7.60	17 200	3.0	126	2KJ3306 - ■ HL23 - ■ ■ F1	
	219	325	6.72	16 800	3.4	126	2KJ3306 - ■ HL23 - ■ ■ E1	
	249	285	5.90	16 200	3.9	126	2KJ3306 - ■ HL23 - ■ ■ D1	
	287	250	5.13	15 700	4.4	126	2KJ3306 - ■ HL23 - ■ ■ C1	
	335	210	4.39	15 100	5.0	126	2KJ3306 - ■ HL23 - ■ ■ B1	
	391	183	3.76	14 500	5.4	126	2KJ3306 - ■ HL23 - ■ ■ A1	
FZ.79-LE132ZMS4P								
	61	1 160	23.93	13 300	0.86	96	2KJ3305 - ■ HL23 - ■ ■ P1	
	70	1 010	20.90	13 400	0.98	96	2KJ3305 - ■ HL23 - ■ ■ N1	
	79	910	18.71	13 400	1.1	96	2KJ3305 - ■ HL23 - ■ ■ M1	
	90	795	16.36	13 200	1.3	96	2KJ3305 - ■ HL23 - ■ ■ L1	
	105	680	14.04	13 100	1.5	96	2KJ3305 - ■ HL23 - ■ ■ K1	
	118	605	12.41	12 800	1.7	96	2KJ3305 - ■ HL23 - ■ ■ J1	
	139	515	10.56	12 600	1.9	96	2KJ3305 - ■ HL23 - ■ ■ H1	
	162	440	9.05	12 300	2.3	96	2KJ3305 - ■ HL23 - ■ ■ G1	
	173	415	8.51	12 000	1.7	96	2KJ3305 - ■ HL23 - ■ ■ F1	
	198	360	7.44	11 700	2.0	96	2KJ3305 - ■ HL23 - ■ ■ E1	
	230	310	6.39	11 400	2.3	96	2KJ3305 - ■ HL23 - ■ ■ D1	
	261	275	5.64	11 100	2.5	96	2KJ3305 - ■ HL23 - ■ ■ C1	
	306	230	4.80	10 800	2.8	96	2KJ3305 - ■ HL23 - ■ ■ B1	
	358	200	4.11	10 400	3.0	96	2KJ3305 - ■ HL23 - ■ ■ A1	
FZ.69-LE132ZMS4P								
	99	720	14.85	3 680	0.83	88	2KJ3304 - ■ HL23 - ■ ■ J1	
	113	635	13.06	3 870	0.94	88	2KJ3304 - ■ HL23 - ■ ■ H1	
	134	535	11.01	4 060	1.1	88	2KJ3304 - ■ HL23 - ■ ■ G1	
	153	465	9.60	4 160	1.3	88	2KJ3304 - ■ HL23 - ■ ■ F1	
	165	430	8.90	4 060	1.1	88	2KJ3304 - ■ HL23 - ■ ■ E1	
	193	370	7.62	4 110	1.3	88	2KJ3304 - ■ HL23 - ■ ■ D1	
	219	325	6.70	4 130	1.3	88	2KJ3304 - ■ HL23 - ■ ■ C1	
	260	275	5.66	4 110	1.5	88	2KJ3304 - ■ HL23 - ■ ■ B1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
7.5								
FZ.69-LE132ZMS4P								
	298	240	4.93	4 070	1.6	88	2KJ3304 - ■ HL23 - ■ ■ A1	
FZ.49-LE132ZMS4P								
	141	510	10.46	2 260	0.94	84	2KJ3303 - ■ HL23 - ■ ■ G1	
	161	440	9.12	2 470	1.1	84	2KJ3303 - ■ HL23 - ■ ■ F1	
	175	405	8.40	2 260	1.1	84	2KJ3303 - ■ HL23 - ■ ■ E1	
	204	350	7.20	2 390	1.3	84	2KJ3303 - ■ HL23 - ■ ■ D1	
	232	305	6.33	2 510	1.4	84	2KJ3303 - ■ HL23 - ■ ■ C1	
	275	260	5.34	2 580	1.5	84	2KJ3303 - ■ HL23 - ■ ■ B1	
	316	225	4.65	2 630	1.7	84	2KJ3303 - ■ HL23 - ■ ■ A1	
9.2								
FD.189-LE160MPA4P								
	4.2	20 700	347.35	110 900	0.92	684	2KJ3412 - ■ JQ23 - ■ ■ T1	
	4.7	18 500	310.76	110 900	1.0	684	2KJ3412 - ■ JQ23 - ■ ■ S1	
	5.2	16 700	280.27	110 900	1.1	684	2KJ3412 - ■ JQ23 - ■ ■ R1	
	5.9	14 800	247.71	110 900	1.3	684	2KJ3412 - ■ JQ23 - ■ ■ Q1	
	6.5	13 500	226.42	110 900	1.4	684	2KJ3412 - ■ JQ23 - ■ ■ P1	
	7.2	12 100	203.69	110 900	1.6	684	2KJ3412 - ■ JQ23 - ■ ■ N1	
	8.1	10 800	182.03	110 900	1.7	684	2KJ3412 - ■ JQ23 - ■ ■ M1	
	8.9	9 830	164.61	110 900	1.9	684	2KJ3412 - ■ JQ23 - ■ ■ L1	
	10	8 680	145.28	110 900	2.2	684	2KJ3412 - ■ JQ23 - ■ ■ K1	
FD.169-LE160MPA4P								
	5.4	16 300	273.80	73 500	0.83	472	2KJ3411 - ■ JQ23 - ■ ■ S1	
	5.9	14 800	247.84	73 500	0.92	472	2KJ3411 - ■ JQ23 - ■ ■ R1	
	6.8	13 000	217.70	73 500	1.0	472	2KJ3411 - ■ JQ23 - ■ ■ Q1	
	7.5	11 700	197.27	73 500	1.2	472	2KJ3411 - ■ JQ23 - ■ ■ P1	
	8.4	10 500	175.69	73 500	1.3	472	2KJ3411 - ■ JQ23 - ■ ■ N1	
	9.3	9 420	157.76	73 500	1.4	472	2KJ3411 - ■ JQ23 - ■ ■ M1	
	10	8 410	140.77	73 500	1.6	472	2KJ3411 - ■ JQ23 - ■ ■ L1	
	12	7 500	125.49	73 500	1.8	472	2KJ3411 - ■ JQ23 - ■ ■ K1	
	13	6 650	111.30	73 500	2.0	472	2KJ3411 - ■ JQ23 - ■ ■ J1	
	14	6 100	102.18	73 500	2.2	472	2KJ3411 - ■ JQ23 - ■ ■ H1	
FD.149-LE160MPA4P								
	9.3	9 490	158.91	65 000	0.84	325	2KJ3410 - ■ JQ23 - ■ ■ N1	
	10	8 450	141.43	65 000	0.95	325	2KJ3410 - ■ JQ23 - ■ ■ M1	
	12	7 570	126.73	64 500	1.1	325	2KJ3410 - ■ JQ23 - ■ ■ L1	
	13	6 710	112.36	63 700	1.2	325	2KJ3410 - ■ JQ23 - ■ ■ K1	
	15	5 920	99.18	62 700	1.3	325	2KJ3410 - ■ JQ23 - ■ ■ J1	
	17	5 210	87.20	61 500	1.5	325	2KJ3410 - ■ JQ23 - ■ ■ H1	
	19	4 720	78.98	60 600	1.7	325	2KJ3410 - ■ JQ23 - ■ ■ G1	
	21	4 110	68.76	59 100	1.9	325	2KJ3410 - ■ JQ23 - ■ ■ F1	
	26	3 360	56.37	57 000	2.4	325	2KJ3410 - ■ JQ23 - ■ ■ E1	
FD.129-LE160MPA4P								
	15	5 950	99.58	36 100	0.81	239	2KJ3408 - ■ JQ23 - ■ ■ E1	
	17	5 210	87.25	36 800	0.93	239	2KJ3408 - ■ JQ23 - ■ ■ D1	
	19	4 540	76.04	37 500	1.1	239	2KJ3408 - ■ JQ23 - ■ ■ C1	
	21	4 140	69.40	37 500	1.2	239	2KJ3408 - ■ JQ23 - ■ ■ B1	
	25	3 570	59.75	37 500	1.4	239	2KJ3408 - ■ JQ23 - ■ ■ A1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
9.2								
FZ.129-LE160MPA4P								
21	4 130	69.20	37 500	1.2	234	2KJ3308	- ■ JQ23 - ■ ■ A2	
25	3 540	59.22	37 500	1.4	234	2KJ3308	- ■ JQ23 - ■ ■ X1	
26	3 330	55.74	37 500	1.5	234	2KJ3308	- ■ JQ23 - ■ ■ W1	
28	3 120	52.25	37 500	1.6	234	2KJ3308	- ■ JQ23 - ■ ■ V1	
32	2 760	46.32	37 500	1.8	234	2KJ3308	- ■ JQ23 - ■ ■ U1	
36	2 450	41.14	37 500	2.0	234	2KJ3308	- ■ JQ23 - ■ ■ T1	
40	2 210	37.12	37 500	2.2	234	2KJ3308	- ■ JQ23 - ■ ■ S1	
45	1 960	32.90	37 500	2.5	234	2KJ3308	- ■ JQ23 - ■ ■ R1	
50	1 740	29.13	37 100	2.8	234	2KJ3308	- ■ JQ23 - ■ ■ Q1	
FD.109-LE160MPA4P								
23	3 860	64.62	25 000	0.8	185	2KJ3407	- ■ JQ23 - ■ ■ B1	
27	3 300	55.31	25 000	0.94	185	2KJ3407	- ■ JQ23 - ■ ■ A1	
FZ.109-LE160MPA4P								
24	3 590	60.12	25 000	0.86	182	2KJ3307	- ■ JQ23 - ■ ■ X1	
29	3 060	51.27	25 000	1.0	182	2KJ3307	- ■ JQ23 - ■ ■ W1	
30	2 880	48.25	25 000	1.1	182	2KJ3307	- ■ JQ23 - ■ ■ V1	
33	2 670	44.78	25 000	1.2	182	2KJ3307	- ■ JQ23 - ■ ■ U1	
37	2 360	39.59	25 000	1.3	182	2KJ3307	- ■ JQ23 - ■ ■ T1	
42	2 110	35.34	25 000	1.5	182	2KJ3307	- ■ JQ23 - ■ ■ S1	
46	1 900	31.80	25 000	1.6	182	2KJ3307	- ■ JQ23 - ■ ■ R1	
53	1 650	27.60	25 000	1.9	182	2KJ3307	- ■ JQ23 - ■ ■ Q1	
59	1 480	24.82	25 000	2.1	182	2KJ3307	- ■ JQ23 - ■ ■ P1	
68	1 290	21.70	25 000	2.4	182	2KJ3307	- ■ JQ23 - ■ ■ N1	
76	1 150	19.36	25 000	2.7	182	2KJ3307	- ■ JQ23 - ■ ■ M1	
86	1 020	17.06	24 600	3	182	2KJ3307	- ■ JQ23 - ■ ■ L1	
98	890	14.95	23 900	3.5	182	2KJ3307	- ■ JQ23 - ■ ■ K1	
163	535	9.02	21 200	3.9	182	2KJ3307	- ■ JQ23 - ■ ■ F1	
185	475	7.94	20 600	4.2	182	2KJ3307	- ■ JQ23 - ■ ■ E1	
FZ.89-LE160MPA4P								
41	2 140	35.91	17 400	0.86	145	2KJ3306	- ■ JQ23 - ■ ■ U1	
43	2 020	33.80	17 400	0.92	145	2KJ3306	- ■ JQ23 - ■ ■ T1	
47	1 860	31.21	17 400	0.99	145	2KJ3306	- ■ JQ23 - ■ ■ S1	
53	1 660	27.77	17 400	1.1	145	2KJ3306	- ■ JQ23 - ■ ■ R1	
60	1 470	24.67	17 400	1.3	145	2KJ3306	- ■ JQ23 - ■ ■ Q1	
67	1 320	22.08	17 400	1.4	145	2KJ3306	- ■ JQ23 - ■ ■ P1	
78	1 120	18.88	17 400	1.6	145	2KJ3306	- ■ JQ23 - ■ ■ N1	
87	1 000	16.86	17 400	1.8	145	2KJ3306	- ■ JQ23 - ■ ■ M1	
99	890	14.90	17 400	2.1	145	2KJ3306	- ■ JQ23 - ■ ■ L1	
112	780	13.07	17 400	2.4	145	2KJ3306	- ■ JQ23 - ■ ■ K1	
129	680	11.38	17 400	2.7	145	2KJ3306	- ■ JQ23 - ■ ■ J1	
151	580	9.73	17 400	3.2	145	2KJ3306	- ■ JQ23 - ■ ■ H1	
176	495	8.33	17 300	3.5	145	2KJ3306	- ■ JQ23 - ■ ■ G1	
193	450	7.60	16 900	2.4	145	2KJ3306	- ■ JQ23 - ■ ■ F1	
219	400	6.72	16 400	2.8	145	2KJ3306	- ■ JQ23 - ■ ■ E1	
249	350	5.90	15 900	3.1	145	2KJ3306	- ■ JQ23 - ■ ■ D1	
287	305	5.13	15 400	3.6	145	2KJ3306	- ■ JQ23 - ■ ■ C1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
9.2								
FZ.89-LE160MPA4P								
	335	260	4.39	14 900	4.0	145	2KJ3306 - ■ JQ23 - ■ ■ B1	
	391	225	3.76	14 300	4.4	145	2KJ3306 - ■ JQ23 - ■ ■ A1	
FZ.79-LE160MPA4P								
	70	1 240	20.90	12 200	0.80	114	2KJ3305 - ■ JQ23 - ■ ■ N1	
	79	1 110	18.71	12 300	0.89	114	2KJ3305 - ■ JQ23 - ■ ■ M1	
	90	975	16.36	12 300	1.0	114	2KJ3305 - ■ JQ23 - ■ ■ L1	
	105	835	14.04	12 200	1.2	114	2KJ3305 - ■ JQ23 - ■ ■ K1	
	118	740	12.41	12 100	1.3	114	2KJ3305 - ■ JQ23 - ■ ■ J1	
	139	630	10.56	12 000	1.6	114	2KJ3305 - ■ JQ23 - ■ ■ H1	
	162	540	9.05	11 700	1.8	114	2KJ3305 - ■ JQ23 - ■ ■ G1	
	173	505	8.51	11 500	1.4	114	2KJ3305 - ■ JQ23 - ■ ■ F1	
	198	445	7.44	11 300	1.6	114	2KJ3305 - ■ JQ23 - ■ ■ E1	
	230	380	6.39	11 000	1.9	114	2KJ3305 - ■ JQ23 - ■ ■ D1	
	261	335	5.64	10 800	2.1	114	2KJ3305 - ■ JQ23 - ■ ■ C1	
	306	285	4.80	10 400	2.3	114	2KJ3305 - ■ JQ23 - ■ ■ B1	
	358	245	4.11	10 100	2.5	114	2KJ3305 - ■ JQ23 - ■ ■ A1	
11								
FD.189-LE160MPB4P								
	4.7	22 200	310.76	110 700	0.86	676	2KJ3412 - ■ JR23 - ■ ■ S1	
	5.2	20 000	280.27	110 900	0.95	676	2KJ3412 - ■ JR23 - ■ ■ R1	
	5.9	17 700	247.71	110 900	1.1	676	2KJ3412 - ■ JR23 - ■ ■ Q1	
	6.5	16 100	226.42	110 900	1.2	676	2KJ3412 - ■ JR23 - ■ ■ P1	
	7.2	14 500	203.69	110 900	1.3	676	2KJ3412 - ■ JR23 - ■ ■ N1	
	8.1	13 000	182.03	110 900	1.5	676	2KJ3412 - ■ JR23 - ■ ■ M1	
	8.9	11 700	164.61	110 900	1.6	676	2KJ3412 - ■ JR23 - ■ ■ L1	
	10	10 300	145.28	110 900	1.8	676	2KJ3412 - ■ JR23 - ■ ■ K1	
	11	9 250	129.45	110 900	2.1	676	2KJ3412 - ■ JR23 - ■ ■ J1	
FD.169-LE160MPB4P								
	6.8	15 500	217.70	73 500	0.87	464	2KJ3411 - ■ JR23 - ■ ■ Q1	
	7.5	14 000	197.27	73 500	0.96	464	2KJ3411 - ■ JR23 - ■ ■ P1	
	8.4	12 500	175.69	73 500	1.1	464	2KJ3411 - ■ JR23 - ■ ■ N1	
	9.3	11 200	157.76	73 500	1.2	464	2KJ3411 - ■ JR23 - ■ ■ M1	
	10	10 000	140.77	73 500	1.4	464	2KJ3411 - ■ JR23 - ■ ■ L1	
	12	8 960	125.49	73 500	1.5	464	2KJ3411 - ■ JR23 - ■ ■ K1	
	13	7 950	111.30	73 500	1.7	464	2KJ3411 - ■ JR23 - ■ ■ J1	
	14	7 300	102.18	73 500	1.9	464	2KJ3411 - ■ JR23 - ■ ■ H1	
	16	6 430	90.03	73 500	2.1	464	2KJ3411 - ■ JR23 - ■ ■ G1	
FD.149-LE160MPB4P								
	12	9 050	126.73	60 800	0.88	317	2KJ3410 - ■ JR23 - ■ ■ L1	
	13	8 030	112.36	60 300	1.0	317	2KJ3410 - ■ JR23 - ■ ■ K1	
	15	7 080	99.18	59 800	1.1	317	2KJ3410 - ■ JR23 - ■ ■ J1	
	17	6 230	87.20	59 000	1.3	317	2KJ3410 - ■ JR23 - ■ ■ H1	
	19	5 640	78.98	58 300	1.4	317	2KJ3410 - ■ JR23 - ■ ■ G1	
	21	4 910	68.76	57 100	1.6	317	2KJ3410 - ■ JR23 - ■ ■ F1	
	26	4 020	56.37	55 300	2.0	317	2KJ3410 - ■ JR23 - ■ ■ E1	
	29	3 570	50.01	54 200	2.2	317	2KJ3410 - ■ JR23 - ■ ■ D1	
	32	3 230	45.30	53 200	2.5	317	2KJ3410 - ■ JR23 - ■ ■ C1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
11								
FZ.149-LE160MPB4P								
	30	3 460	48.48	53 800	2.3	311	2KJ3310 - ■ JR23 - ■ ■ T1	
	33	3 130	43.89	52 800	2.6	311	2KJ3310 - ■ JR23 - ■ ■ S1	
FD.129-LE160MPB4P								
	19	5 430	76.04	36 600	0.89	231	2KJ3408 - ■ JR23 - ■ ■ C1	
	21	4 960	69.40	37 000	0.98	231	2KJ3408 - ■ JR23 - ■ ■ B1	
	25	4 270	59.75	37 500	1.1	231	2KJ3408 - ■ JR23 - ■ ■ A1	
FZ.129-LE160MPB4P								
	21	4 940	69.20	37 100	0.98	226	2KJ3308 - ■ JR23 - ■ ■ A2	
	25	4 230	59.22	37 500	1.1	226	2KJ3308 - ■ JR23 - ■ ■ X1	
	26	3 980	55.74	37 500	1.2	226	2KJ3308 - ■ JR23 - ■ ■ W1	
	28	3 730	52.25	37 500	1.3	226	2KJ3308 - ■ JR23 - ■ ■ V1	
	32	3 310	46.32	37 500	1.5	226	2KJ3308 - ■ JR23 - ■ ■ U1	
	36	2 940	41.14	37 500	1.6	226	2KJ3308 - ■ JR23 - ■ ■ T1	
	40	2 650	37.12	37 500	1.8	226	2KJ3308 - ■ JR23 - ■ ■ S1	
	45	2 350	32.90	36 900	2.1	226	2KJ3308 - ■ JR23 - ■ ■ R1	
	50	2 080	29.13	36 100	2.3	226	2KJ3308 - ■ JR23 - ■ ■ Q1	
	57	1 850	25.93	35 300	2.6	226	2KJ3308 - ■ JR23 - ■ ■ P1	
	63	1 660	23.23	34 500	2.9	226	2KJ3308 - ■ JR23 - ■ ■ N1	
FZ.109-LE160MPB4P								
	29	3 660	51.27	25 000	0.85	174	2KJ3307 - ■ JR23 - ■ ■ W1	
	30	3 440	48.25	25 000	0.9	174	2KJ3307 - ■ JR23 - ■ ■ V1	
	33	3 200	44.78	25 000	0.97	174	2KJ3307 - ■ JR23 - ■ ■ U1	
	37	2 820	39.59	25 000	1.1	174	2KJ3307 - ■ JR23 - ■ ■ T1	
	42	2 520	35.34	25 000	1.2	174	2KJ3307 - ■ JR23 - ■ ■ S1	
	46	2 270	31.80	25 000	1.4	174	2KJ3307 - ■ JR23 - ■ ■ R1	
	53	1 970	27.60	25 000	1.6	174	2KJ3307 - ■ JR23 - ■ ■ Q1	
	59	1 770	24.82	25 000	1.7	174	2KJ3307 - ■ JR23 - ■ ■ P1	
	68	1 550	21.70	24 900	2.0	174	2KJ3307 - ■ JR23 - ■ ■ N1	
	76	1 380	19.36	24 500	2.2	174	2KJ3307 - ■ JR23 - ■ ■ M1	
	86	1 210	17.06	23 900	2.5	174	2KJ3307 - ■ JR23 - ■ ■ L1	
	98	1 060	14.95	23 300	2.9	174	2KJ3307 - ■ JR23 - ■ ■ K1	
	113	930	13.03	22 700	3.3	174	2KJ3307 - ■ JR23 - ■ ■ J1	
	124	850	11.89	22 200	3.6	174	2KJ3307 - ■ JR23 - ■ ■ H1	
	144	730	10.23	21 500	3.9	174	2KJ3307 - ■ JR23 - ■ ■ G1	
	163	645	9.02	20 900	3.2	174	2KJ3307 - ■ JR23 - ■ ■ F1	
	185	565	7.94	20 300	3.5	174	2KJ3307 - ■ JR23 - ■ ■ E1	
	211	495	6.96	19 600	3.8	174	2KJ3307 - ■ JR23 - ■ ■ D1	
	242	430	6.07	19 000	4.1	174	2KJ3307 - ■ JR23 - ■ ■ C1	
	265	395	5.54	18 600	4.4	174	2KJ3307 - ■ JR23 - ■ ■ B1	
	308	340	4.77	17 900	4.8	174	2KJ3307 - ■ JR23 - ■ ■ A1	
FZ.89-LE160MPB4P								
	47	2 230	31.21	17 400	0.83	137	2KJ3306 - ■ JR23 - ■ ■ S1	
	53	1 980	27.77	17 400	0.93	137	2KJ3306 - ■ JR23 - ■ ■ R1	
	60	1 760	24.67	17 400	1.0	137	2KJ3306 - ■ JR23 - ■ ■ Q1	
	67	1 570	22.08	17 400	1.2	137	2KJ3306 - ■ JR23 - ■ ■ P1	
	78	1 340	18.88	17 400	1.4	137	2KJ3306 - ■ JR23 - ■ ■ N1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
11								
FZ.89-LE160MPB4P								
	87	1 200	16.86	17 400	1.5	137	2KJ3306 - ■ JR23 - ■ ■ M1	
	99	1 060	14.90	17 400	1.7	137	2KJ3306 - ■ JR23 - ■ ■ L1	
	112	930	13.07	17 400	2.0	137	2KJ3306 - ■ JR23 - ■ ■ K1	
	129	810	11.38	17 400	2.3	137	2KJ3306 - ■ JR23 - ■ ■ J1	
	151	695	9.73	17 400	2.7	137	2KJ3306 - ■ JR23 - ■ ■ H1	
	176	595	8.33	16 900	2.9	137	2KJ3306 - ■ JR23 - ■ ■ G1	
	193	540	7.60	16 500	2.0	137	2KJ3306 - ■ JR23 - ■ ■ F1	
	219	480	6.72	16 100	2.3	137	2KJ3306 - ■ JR23 - ■ ■ E1	
	249	420	5.90	15 600	2.6	137	2KJ3306 - ■ JR23 - ■ ■ D1	
	287	365	5.13	15 200	3.0	137	2KJ3306 - ■ JR23 - ■ ■ C1	
	335	310	4.39	14 600	3.4	137	2KJ3306 - ■ JR23 - ■ ■ B1	
	391	265	3.76	14 100	3.7	137	2KJ3306 - ■ JR23 - ■ ■ A1	
FZ.79-LE160MPB4P								
	90	1 160	16.36	11 300	0.86	106	2KJ3305 - ■ JR23 - ■ ■ L1	
	105	1 000	14.04	11 400	1.0	106	2KJ3305 - ■ JR23 - ■ ■ K1	
	118	885	12.41	11 400	1.1	106	2KJ3305 - ■ JR23 - ■ ■ J1	
	139	755	10.56	11 300	1.3	106	2KJ3305 - ■ JR23 - ■ ■ H1	
	162	645	9.05	11 200	1.5	106	2KJ3305 - ■ JR23 - ■ ■ G1	
	173	605	8.51	10 900	1.2	106	2KJ3305 - ■ JR23 - ■ ■ F1	
	198	530	7.44	10 800	1.4	106	2KJ3305 - ■ JR23 - ■ ■ E1	
	230	455	6.39	10 600	1.6	106	2KJ3305 - ■ JR23 - ■ ■ D1	
	261	400	5.64	10 400	1.7	106	2KJ3305 - ■ JR23 - ■ ■ C1	
	306	340	4.80	10 100	1.9	106	2KJ3305 - ■ JR23 - ■ ■ B1	
	358	290	4.11	9 920	2.1	106	2KJ3305 - ■ JR23 - ■ ■ A1	
15								
FD.189-LE160ZLL4P								
	6.5	21 900	226.42	110 900	0.86	701	2KJ3412 - ■ JU23 - ■ ■ P1	
	7.2	19 700	203.69	110 900	0.96	701	2KJ3412 - ■ JU23 - ■ ■ N1	
	8.1	17 600	182.03	110 900	1.1	701	2KJ3412 - ■ JU23 - ■ ■ M1	
	9	15 900	164.61	110 900	1.2	701	2KJ3412 - ■ JU23 - ■ ■ L1	
	10	14 100	145.28	110 900	1.3	701	2KJ3412 - ■ JU23 - ■ ■ K1	
	11	12 500	129.45	110 900	1.5	701	2KJ3412 - ■ JU23 - ■ ■ J1	
	13	11 300	117.27	110 900	1.7	701	2KJ3412 - ■ JU23 - ■ ■ H1	
	14	10 200	105.48	110 900	1.9	701	2KJ3412 - ■ JU23 - ■ ■ G1	
	17	8 510	87.65	110 900	2.2	701	2KJ3412 - ■ JU23 - ■ ■ F1	
FD.169-LE160ZLL4P								
	8.4	17 000	175.69	73 500	0.80	489	2KJ3411 - ■ JU23 - ■ ■ N1	
	9.3	15 300	157.76	73 500	0.89	489	2KJ3411 - ■ JU23 - ■ ■ M1	
	10	13 600	140.77	73 500	0.99	489	2KJ3411 - ■ JU23 - ■ ■ L1	
	12	12 100	125.49	73 500	1.1	489	2KJ3411 - ■ JU23 - ■ ■ K1	
	13	10 800	111.30	73 500	1.3	489	2KJ3411 - ■ JU23 - ■ ■ J1	
	14	9 920	102.18	73 500	1.4	489	2KJ3411 - ■ JU23 - ■ ■ H1	
	16	8 740	90.03	73 500	1.6	489	2KJ3411 - ■ JU23 - ■ ■ G1	
	20	7 170	73.85	73 500	1.9	489	2KJ3411 - ■ JU23 - ■ ■ F1	
	23	6 280	64.75	73 500	2.2	489	2KJ3411 - ■ JU23 - ■ ■ E1	
FD.149-LE160ZLL4P								
	15	9 630	99.18	53 300	0.83	342	2KJ3410 - ■ JU23 - ■ ■ J1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
15								
FD.149-LE160ZLL4P								
	17	8 460	87.20	53 300	0.94	342	2KJ3410 - ■ JU23 - ■ ■ H1	
	19	7 670	78.98	53 100	1.0	342	2KJ3410 - ■ JU23 - ■ ■ G1	
	21	6 670	68.76	52 700	1.2	342	2KJ3410 - ■ JU23 - ■ ■ F1	
	26	5 470	56.37	51 600	1.5	342	2KJ3410 - ■ JU23 - ■ ■ E1	
	29	4 850	50.01	50 900	1.6	342	2KJ3410 - ■ JU23 - ■ ■ D1	
	33	4 390	45.30	50 200	1.8	342	2KJ3410 - ■ JU23 - ■ ■ C1	
	37	3 820	39.43	49 100	2.1	342	2KJ3410 - ■ JU23 - ■ ■ B1	
	46	3 140	32.33	47 400	2.4	342	2KJ3410 - ■ JU23 - ■ ■ A1	
FZ.149-LE160ZLL4P								
	30	4 700	48.48	50 700	1.7	336	2KJ3310 - ■ JU23 - ■ ■ T1	
	34	4 260	43.89	49 900	1.9	336	2KJ3310 - ■ JU23 - ■ ■ S1	
	38	3 740	38.55	48 900	2.1	336	2KJ3310 - ■ JU23 - ■ ■ R1	
	42	3 390	34.93	48 100	2.4	336	2KJ3310 - ■ JU23 - ■ ■ Q1	
	47	3 020	31.11	47 100	2.6	336	2KJ3310 - ■ JU23 - ■ ■ P1	
	53	2 710	27.94	46 100	2.9	336	2KJ3310 - ■ JU23 - ■ ■ N1	
FD.129-LE160ZLL4P								
	25	5 800	59.75	35 800	0.84	256	2KJ3408 - ■ JU23 - ■ ■ A1	
FZ.129-LE160ZLL4P								
	25	5 750	59.22	35 800	0.84	251	2KJ3308 - ■ JU23 - ■ ■ X1	
	26	5 410	55.74	35 800	0.9	251	2KJ3308 - ■ JU23 - ■ ■ W1	
	28	5 070	52.25	35 800	0.96	251	2KJ3308 - ■ JU23 - ■ ■ V1	
	32	4 490	46.32	35 600	1.1	251	2KJ3308 - ■ JU23 - ■ ■ U1	
	36	3 990	41.14	35 300	1.2	251	2KJ3308 - ■ JU23 - ■ ■ T1	
	40	3 600	37.12	35 000	1.3	251	2KJ3308 - ■ JU23 - ■ ■ S1	
	45	3 190	32.90	34 600	1.5	251	2KJ3308 - ■ JU23 - ■ ■ R1	
	51	2 820	29.13	34 000	1.7	251	2KJ3308 - ■ JU23 - ■ ■ Q1	
	57	2 510	25.93	33 400	1.9	251	2KJ3308 - ■ JU23 - ■ ■ P1	
	63	2 250	23.23	32 900	2.1	251	2KJ3308 - ■ JU23 - ■ ■ N1	
	72	2 000	20.60	32 200	2.4	251	2KJ3308 - ■ JU23 - ■ ■ M1	
	81	1 760	18.18	31 500	2.7	251	2KJ3308 - ■ JU23 - ■ ■ L1	
	92	1 550	15.99	30 700	3.1	251	2KJ3308 - ■ JU23 - ■ ■ K1	
	102	1 400	14.48	30 000	3.3	251	2KJ3308 - ■ JU23 - ■ ■ J1	
	117	1 220	12.61	29 200	3.7	251	2KJ3308 - ■ JU23 - ■ ■ H1	
	151	950	9.80	27 300	3.8	251	2KJ3308 - ■ JU23 - ■ ■ F1	
FZ.109-LE160ZLL4P								
	37	3 840	39.59	23 300	0.81	199	2KJ3307 - ■ JU23 - ■ ■ T1	
	42	3 430	35.34	23 400	0.9	199	2KJ3307 - ■ JU23 - ■ ■ S1	
	46	3 080	31.80	23 500	1.0	199	2KJ3307 - ■ JU23 - ■ ■ R1	
	53	2 680	27.60	23 400	1.2	199	2KJ3307 - ■ JU23 - ■ ■ Q1	
	59	2 410	24.82	23 300	1.3	199	2KJ3307 - ■ JU23 - ■ ■ P1	
	68	2 100	21.70	23 100	1.5	199	2KJ3307 - ■ JU23 - ■ ■ N1	
	76	1 880	19.36	22 800	1.6	199	2KJ3307 - ■ JU23 - ■ ■ M1	
	86	1 650	17.06	22 500	1.9	199	2KJ3307 - ■ JU23 - ■ ■ L1	
	99	1 450	14.95	22 000	2.1	199	2KJ3307 - ■ JU23 - ■ ■ K1	
	113	1 260	13.03	21 600	2.4	199	2KJ3307 - ■ JU23 - ■ ■ J1	
	124	1 150	11.89	21 200	2.6	199	2KJ3307 - ■ JU23 - ■ ■ H1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
15	FZ.109-LE160ZLL4P							
	144	990	10.23	20 700	2.9	199	2KJ3307 - ■ JU23 - ■ ■ G1	
	164	875	9.02	20 100	2.4	199	2KJ3307 - ■ JU23 - ■ ■ F1	
	186	770	7.94	19 600	2.6	199	2KJ3307 - ■ JU23 - ■ ■ E1	
	212	675	6.96	19 000	2.8	199	2KJ3307 - ■ JU23 - ■ ■ D1	
	243	590	6.07	18 400	3.1	199	2KJ3307 - ■ JU23 - ■ ■ C1	
	266	535	5.54	18 100	3.2	199	2KJ3307 - ■ JU23 - ■ ■ B1	
	309	460	4.77	17 500	3.5	199	2KJ3307 - ■ JU23 - ■ ■ A1	
	FZ.89-LE160ZLL4P							
	67	2 140	22.08	17 100	0.86	162	2KJ3306 - ■ JU23 - ■ ■ P1	
	78	1 830	18.88	17 200	1.0	162	2KJ3306 - ■ JU23 - ■ ■ N1	
	87	1 630	16.86	17 200	1.1	162	2KJ3306 - ■ JU23 - ■ ■ M1	
	99	1 440	14.90	17 100	1.3	162	2KJ3306 - ■ JU23 - ■ ■ L1	
	113	1 260	13.07	17 000	1.5	162	2KJ3306 - ■ JU23 - ■ ■ K1	
	130	1 100	11.38	16 700	1.7	162	2KJ3306 - ■ JU23 - ■ ■ J1	
	152	945	9.73	16 400	2.0	162	2KJ3306 - ■ JU23 - ■ ■ H1	
	177	805	8.33	16 000	2.2	162	2KJ3306 - ■ JU23 - ■ ■ G1	
	194	735	7.60	15 600	1.5	162	2KJ3306 - ■ JU23 - ■ ■ F1	
	219	650	6.72	15 300	1.7	162	2KJ3306 - ■ JU23 - ■ ■ E1	
	250	570	5.90	15 000	1.9	162	2KJ3306 - ■ JU23 - ■ ■ D1	
	288	495	5.13	14 600	2.2	162	2KJ3306 - ■ JU23 - ■ ■ C1	
	336	425	4.39	14 100	2.5	162	2KJ3306 - ■ JU23 - ■ ■ B1	
	392	365	3.76	13 600	2.7	162	2KJ3306 - ■ JU23 - ■ ■ A1	
	FZ.79-LE160ZLL4P							
	119	1 200	12.41	9 750	0.83	131	2KJ3305 - ■ JU23 - ■ ■ J1	
	140	1 020	10.56	9 930	0.98	131	2KJ3305 - ■ JU23 - ■ ■ H1	
	163	875	9.05	10 000	1.1	131	2KJ3305 - ■ JU23 - ■ ■ G1	
	173	825	8.51	9 720	0.87	131	2KJ3305 - ■ JU23 - ■ ■ F1	
	198	720	7.44	9 740	1.0	131	2KJ3305 - ■ JU23 - ■ ■ E1	
	231	620	6.39	9 680	1.2	131	2KJ3305 - ■ JU23 - ■ ■ D1	
262	545	5.64	9 630	1.3	131	2KJ3305 - ■ JU23 - ■ ■ C1		
307	465	4.80	9 470	1.4	131	2KJ3305 - ■ JU23 - ■ ■ B1		
359	395	4.11	9 320	1.5	131	2KJ3305 - ■ JU23 - ■ ■ A1		
18.5	FD.189-LES180MQ4P							
	8	21 900	182.03	110 900	0.87	750	2KJ3412 - ■ KL33 - ■ ■ M1	
	8.9	19 800	164.61	110 900	0.96	750	2KJ3412 - ■ KL33 - ■ ■ L1	
	10	17 500	145.28	110 900	1.1	750	2KJ3412 - ■ KL33 - ■ ■ K1	
	11	15 600	129.45	110 900	1.2	750	2KJ3412 - ■ KL33 - ■ ■ J1	
	12	14 100	117.27	110 900	1.3	750	2KJ3412 - ■ KL33 - ■ ■ H1	
	14	12 700	105.48	110 900	1.5	750	2KJ3412 - ■ KL33 - ■ ■ G1	
	17	10 500	87.65	110 900	1.8	750	2KJ3412 - ■ KL33 - ■ ■ F1	
	19	9 390	77.92	110 900	2.0	750	2KJ3412 - ■ KL33 - ■ ■ E1	
	FD.169-LES180MQ4P							
	10	16 900	140.77	73 500	0.8	538	2KJ3411 - ■ KL33 - ■ ■ L1	
	12	15 100	125.49	73 500	0.9	538	2KJ3411 - ■ KL33 - ■ ■ K1	
	13	13 400	111.30	73 500	1.0	538	2KJ3411 - ■ KL33 - ■ ■ J1	
	14	12 300	102.18	73 500	1.1	538	2KJ3411 - ■ KL33 - ■ ■ H1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
18.5								
FD.169-LES180MQ4P								
	16	10 800	90.03	73 500	1.3	538	2KJ3411 - ■ KL33 - ■ ■ G1	
	20	8 900	73.85	73 500	1.5	538	2KJ3411 - ■ KL33 - ■ ■ F1	
	23	7 800	64.75	73 500	1.7	538	2KJ3411 - ■ KL33 - ■ ■ E1	
	29	6 100	50.63	73 500	2.2	538	2KJ3411 - ■ KL33 - ■ ■ D1	
	31	5 610	46.55	73 500	2.4	538	2KJ3411 - ■ KL33 - ■ ■ C1	
FD.149-LES180MQ4P								
	19	9 520	78.98	48 600	0.84	397	2KJ3410 - ■ KL33 - ■ ■ G1	
	21	8 290	68.76	48 700	0.96	397	2KJ3410 - ■ KL33 - ■ ■ F1	
	26	6 790	56.37	48 500	1.2	397	2KJ3410 - ■ KL33 - ■ ■ E1	
	29	6 030	50.01	48 100	1.3	397	2KJ3410 - ■ KL33 - ■ ■ D1	
	32	5 460	45.30	47 600	1.5	397	2KJ3410 - ■ KL33 - ■ ■ C1	
	37	4 750	39.43	46 900	1.7	397	2KJ3410 - ■ KL33 - ■ ■ B1	
	45	3 890	32.33	45 700	1.9	397	2KJ3410 - ■ KL33 - ■ ■ A1	
FZ.149-LES180MQ4P								
	42	4 210	34.93	46 200	1.9	416	2KJ3310 - ■ KL33 - ■ ■ Q1	
	47	3 750	31.11	45 400	2.1	416	2KJ3310 - ■ KL33 - ■ ■ P1	
	52	3 360	27.94	44 600	2.4	416	2KJ3310 - ■ KL33 - ■ ■ N1	
	59	3 000	24.93	43 700	2.7	416	2KJ3310 - ■ KL33 - ■ ■ M1	
	66	2 680	22.22	42 800	3.0	416	2KJ3310 - ■ KL33 - ■ ■ L1	
FZ.129-LES180MQ4P								
	50	3 510	29.13	32 200	1.4	328	2KJ3308 - ■ KL33 - ■ ■ Q1	
	56	3 120	25.93	31 800	1.6	328	2KJ3308 - ■ KL33 - ■ ■ P1	
	63	2 800	23.23	31 400	1.7	328	2KJ3308 - ■ KL33 - ■ ■ N1	
	71	2 480	20.60	30 900	2.0	328	2KJ3308 - ■ KL33 - ■ ■ M1	
	81	2 190	18.18	30 300	2.2	328	2KJ3308 - ■ KL33 - ■ ■ L1	
	92	1 920	15.99	29 700	2.5	328	2KJ3308 - ■ KL33 - ■ ■ K1	
	101	1 740	14.48	29 200	2.7	328	2KJ3308 - ■ KL33 - ■ ■ J1	
	116	1 520	12.61	28 400	3.0	328	2KJ3308 - ■ KL33 - ■ ■ H1	
	142	1 240	10.34	27 300	3.5	328	2KJ3308 - ■ KL33 - ■ ■ G1	
	149	1 180	9.80	26 700	3.1	328	2KJ3308 - ■ KL33 - ■ ■ F1	
	169	1 040	8.65	26 000	3.5	328	2KJ3308 - ■ KL33 - ■ ■ E1	
	193	915	7.60	25 300	3.9	328	2KJ3308 - ■ KL33 - ■ ■ D1	
	213	830	6.89	24 700	4.4	328	2KJ3308 - ■ KL33 - ■ ■ C1	
FZ.109-LES180MQ4P								
	59	2 990	24.82	21 500	1.0	277	2KJ3307 - ■ KL33 - ■ ■ P1	
	68	2 610	21.70	21 500	1.2	277	2KJ3307 - ■ KL33 - ■ ■ N1	
	76	2 330	19.36	21 400	1.3	277	2KJ3307 - ■ KL33 - ■ ■ M1	
	86	2 050	17.06	21 200	1.5	277	2KJ3307 - ■ KL33 - ■ ■ L1	
	98	1 800	14.95	20 900	1.7	277	2KJ3307 - ■ KL33 - ■ ■ K1	
	112	1 570	13.03	20 600	2.0	277	2KJ3307 - ■ KL33 - ■ ■ J1	
	123	1 430	11.89	20 400	2.1	277	2KJ3307 - ■ KL33 - ■ ■ H1	
	143	1 230	10.23	19 900	2.3	277	2KJ3307 - ■ KL33 - ■ ■ G1	
	162	1 080	9.02	19 400	1.9	277	2KJ3307 - ■ KL33 - ■ ■ F1	
	185	955	7.94	19 000	2.1	277	2KJ3307 - ■ KL33 - ■ ■ E1	
	210	835	6.96	18 500	2.3	277	2KJ3307 - ■ KL33 - ■ ■ D1	
	241	730	6.07	18 000	2.5	277	2KJ3307 - ■ KL33 - ■ ■ C1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
18.5	FZ.109-LES180MQ4P							
	264	665	5.54	17 700	2.6	277	2KJ3307 - ■ KL33 - ■ ■ B1	
	307	575	4.77	17 100	2.8	277	2KJ3307 - ■ KL33 - ■ ■ A1	
	FZ.89-LES180MQ4P							
	87	2 030	16.86	15 600	0.91	238	2KJ3306 - ■ KL33 - ■ ■ M1	
	98	1 790	14.90	15 700	1.0	238	2KJ3306 - ■ KL33 - ■ ■ L1	
	112	1 570	13.07	15 700	1.2	238	2KJ3306 - ■ KL33 - ■ ■ K1	
	129	1 370	11.38	15 600	1.3	238	2KJ3306 - ■ KL33 - ■ ■ J1	
	151	1 170	9.73	15 500	1.6	238	2KJ3306 - ■ KL33 - ■ ■ H1	
	176	1 000	8.33	15 300	1.7	238	2KJ3306 - ■ KL33 - ■ ■ G1	
	193	915	7.60	14 900	1.2	238	2KJ3306 - ■ KL33 - ■ ■ F1	
	218	810	6.72	14 600	1.4	238	2KJ3306 - ■ KL33 - ■ ■ E1	
	248	710	5.90	14 400	1.6	238	2KJ3306 - ■ KL33 - ■ ■ D1	
	286	615	5.13	14 100	1.8	238	2KJ3306 - ■ KL33 - ■ ■ C1	
	334	525	4.39	13 700	2.0	238	2KJ3306 - ■ KL33 - ■ ■ B1	
390	450	3.76	13 300	2.2	238	2KJ3306 - ■ KL33 - ■ ■ A1		
22	FD.189-LES180ZLN4P							
	8.9	23 600	164.61	109 900	0.80	755	2KJ3412 - ■ KN33 - ■ ■ L1	
	10	20 800	145.28	110 900	0.91	755	2KJ3412 - ■ KN33 - ■ ■ K1	
	11	18 500	129.45	110 900	1.0	755	2KJ3412 - ■ KN33 - ■ ■ J1	
	12	16 800	117.27	110 900	1.1	755	2KJ3412 - ■ KN33 - ■ ■ H1	
	14	15 100	105.48	110 900	1.3	755	2KJ3412 - ■ KN33 - ■ ■ G1	
	17	12 500	87.65	110 900	1.5	755	2KJ3412 - ■ KN33 - ■ ■ F1	
	19	11 100	77.92	110 900	1.7	755	2KJ3412 - ■ KN33 - ■ ■ E1	
	24	8 900	62.11	110 900	2.1	755	2KJ3412 - ■ KN33 - ■ ■ D1	
	FD.169-LES180ZLN4P							
	13	15 900	111.30	73 500	0.85	543	2KJ3411 - ■ KN33 - ■ ■ J1	
	14	14 600	102.18	73 500	0.93	543	2KJ3411 - ■ KN33 - ■ ■ H1	
	16	12 900	90.03	73 500	1.1	543	2KJ3411 - ■ KN33 - ■ ■ G1	
	20	10 500	73.85	73 500	1.3	543	2KJ3411 - ■ KN33 - ■ ■ F1	
	23	9 280	64.75	73 500	1.5	543	2KJ3411 - ■ KN33 - ■ ■ E1	
	29	7 260	50.63	73 500	1.9	543	2KJ3411 - ■ KN33 - ■ ■ D1	
	31	6 670	46.55	72 700	2.0	543	2KJ3411 - ■ KN33 - ■ ■ C1	
	36	5 850	40.82	71 000	2.3	543	2KJ3411 - ■ KN33 - ■ ■ B1	
	FZ.169-LES180ZLN4P							
	40	5 290	36.94	69 800	2.6	555	2KJ3311 - ■ KN33 - ■ ■ Q1	
	FD.149-LES180ZLN4P							
	21	9 860	68.76	44 800	0.81	402	2KJ3410 - ■ KN33 - ■ ■ F1	
	26	8 080	56.37	45 200	0.99	402	2KJ3410 - ■ KN33 - ■ ■ E1	
	29	7 170	50.01	45 200	1.1	402	2KJ3410 - ■ KN33 - ■ ■ D1	
	32	6 490	45.30	45 100	1.2	402	2KJ3410 - ■ KN33 - ■ ■ C1	
	37	5 650	39.43	44 700	1.4	402	2KJ3410 - ■ KN33 - ■ ■ B1	
	45	4 630	32.33	43 800	1.6	402	2KJ3410 - ■ KN33 - ■ ■ A1	
	FZ.149-LES180ZLN4P							
	47	4 460	31.11	43 600	1.8	421	2KJ3310 - ■ KN33 - ■ ■ P1	
	52	4 000	27.94	43 000	2.0	421	2KJ3310 - ■ KN33 - ■ ■ N1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
22								
FZ.149-LES180ZLN4P								
	59	3 570	24.93	42 300	2.2	421	2KJ3310 - ■ KN33 - ■ ■ M1	
	66	3 180	22.22	41 500	2.5	421	2KJ3310 - ■ KN33 - ■ ■ L1	
	74	2 820	19.71	40 700	2.8	421	2KJ3310 - ■ KN33 - ■ ■ K1	
	81	2 590	18.10	40 100	3.1	421	2KJ3310 - ■ KN33 - ■ ■ J1	
FZ.129-LES180ZLN4P								
	56	3 710	25.93	30 200	1.3	333	2KJ3308 - ■ KN33 - ■ ■ P1	
	63	3 330	23.23	29 900	1.5	333	2KJ3308 - ■ KN33 - ■ ■ N1	
	71	2 950	20.60	29 600	1.6	333	2KJ3308 - ■ KN33 - ■ ■ M1	
	81	2 600	18.18	29 200	1.9	333	2KJ3308 - ■ KN33 - ■ ■ L1	
	92	2 290	15.99	28 700	2.1	333	2KJ3308 - ■ KN33 - ■ ■ K1	
	101	2 070	14.48	28 300	2.3	333	2KJ3308 - ■ KN33 - ■ ■ J1	
	116	1 800	12.61	27 600	2.5	333	2KJ3308 - ■ KN33 - ■ ■ H1	
	142	1 480	10.34	26 600	2.9	333	2KJ3308 - ■ KN33 - ■ ■ G1	
	149	1 400	9.80	26 000	2.6	333	2KJ3308 - ■ KN33 - ■ ■ F1	
	169	1 240	8.65	25 400	2.9	333	2KJ3308 - ■ KN33 - ■ ■ E1	
	193	1 090	7.60	24 700	3.3	333	2KJ3308 - ■ KN33 - ■ ■ D1	
	213	985	6.89	24 200	3.7	333	2KJ3308 - ■ KN33 - ■ ■ C1	
	244	860	6.00	23 500	4.2	333	2KJ3308 - ■ KN33 - ■ ■ B1	
	298	705	4.92	22 500	4.3	333	2KJ3308 - ■ KN33 - ■ ■ A1	
FZ.109-LES180ZLN4P								
	68	3 110	21.70	19 800	1.0	282	2KJ3307 - ■ KN33 - ■ ■ N1	
	76	2 770	19.36	19 900	1.1	282	2KJ3307 - ■ KN33 - ■ ■ M1	
	86	2 440	17.06	19 900	1.3	282	2KJ3307 - ■ KN33 - ■ ■ L1	
	98	2 140	14.95	19 800	1.4	282	2KJ3307 - ■ KN33 - ■ ■ K1	
	112	1 860	13.03	19 700	1.7	282	2KJ3307 - ■ KN33 - ■ ■ J1	
	123	1 700	11.89	19 500	1.8	282	2KJ3307 - ■ KN33 - ■ ■ H1	
	143	1 460	10.23	19 200	2.0	282	2KJ3307 - ■ KN33 - ■ ■ G1	
	162	1 290	9.02	18 700	1.6	282	2KJ3307 - ■ KN33 - ■ ■ F1	
	185	1 130	7.94	18 400	1.8	282	2KJ3307 - ■ KN33 - ■ ■ E1	
	210	995	6.96	18 000	1.9	282	2KJ3307 - ■ KN33 - ■ ■ D1	
	241	870	6.07	17 500	2.1	282	2KJ3307 - ■ KN33 - ■ ■ C1	
	264	795	5.54	17 200	2.2	282	2KJ3307 - ■ KN33 - ■ ■ B1	
	307	680	4.77	16 800	2.4	282	2KJ3307 - ■ KN33 - ■ ■ A1	
FZ.89-LES180ZLN4P								
	98	2 130	14.90	14 300	0.87	243	2KJ3306 - ■ KN33 - ■ ■ L1	
	112	1 870	13.07	14 500	0.99	243	2KJ3306 - ■ KN33 - ■ ■ K1	
	129	1 630	11.38	14 600	1.1	243	2KJ3306 - ■ KN33 - ■ ■ J1	
	151	1 390	9.73	14 600	1.3	243	2KJ3306 - ■ KN33 - ■ ■ H1	
	176	1 190	8.33	14 500	1.5	243	2KJ3306 - ■ KN33 - ■ ■ G1	
	218	960	6.72	14 000	1.2	243	2KJ3306 - ■ KN33 - ■ ■ E1	
	248	845	5.90	13 800	1.3	243	2KJ3306 - ■ KN33 - ■ ■ D1	
	286	735	5.13	13 500	1.5	243	2KJ3306 - ■ KN33 - ■ ■ C1	
	334	630	4.39	13 200	1.7	243	2KJ3306 - ■ KN33 - ■ ■ B1	
	390	535	3.76	12 900	1.8	243	2KJ3306 - ■ KN33 - ■ ■ A1	

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
30								
FD.189-LES200ZLU4P								
	13	22 800	117.27	110 400	0.83	825	2KJ3412 - ■ LN33 - ■ ■ H1	
	14	20 500	105.48	110 900	0.92	825	2KJ3412 - ■ LN33 - ■ ■ G1	
	17	17 000	87.65	110 900	1.1	825	2KJ3412 - ■ LN33 - ■ ■ F1	
	19	15 100	77.92	110 200	1.3	825	2KJ3412 - ■ LN33 - ■ ■ E1	
	24	12 100	62.11	106 800	1.6	825	2KJ3412 - ■ LN33 - ■ ■ D1	
	30	9 630	49.43	102 900	2.0	825	2KJ3412 - ■ LN33 - ■ ■ C1	
	36	7 910	40.61	99 200	2.4	825	2KJ3412 - ■ LN33 - ■ ■ B1	
FZ.189-LES200ZLU4P								
	39	7 390	37.93	97 900	2.6	830	2KJ3312 - ■ LN33 - ■ ■ L1	
FD.169-LES200ZLU4P								
	20	14 300	73.85	69 500	0.94	613	2KJ3411 - ■ LN33 - ■ ■ F1	
	23	12 600	64.75	69 200	1.1	613	2KJ3411 - ■ LN33 - ■ ■ E1	
	29	9 860	50.63	68 100	1.4	613	2KJ3411 - ■ LN33 - ■ ■ D1	
	32	9 070	46.55	67 600	1.5	613	2KJ3411 - ■ LN33 - ■ ■ C1	
	36	7 950	40.82	66 600	1.7	613	2KJ3411 - ■ LN33 - ■ ■ B1	
	46	6 220	31.92	64 300	2.2	613	2KJ3411 - ■ LN33 - ■ ■ A1	
FZ.169-LES200ZLU4P								
	45	6 430	33.02	64 600	2.1	631	2KJ3311 - ■ LN33 - ■ ■ P1	
	49	5 820	29.86	63 600	2.3	631	2KJ3311 - ■ LN33 - ■ ■ N1	
	56	5 130	26.35	62 200	2.6	631	2KJ3311 - ■ LN33 - ■ ■ M1	
	63	4 570	23.48	60 900	3.0	631	2KJ3311 - ■ LN33 - ■ ■ L1	
FD.149-LES200ZLU4P								
	29	9 740	50.01	38 700	0.82	472	2KJ3410 - ■ LN33 - ■ ■ D1	
	32	8 820	45.30	39 200	0.91	472	2KJ3410 - ■ LN33 - ■ ■ C1	
	37	7 680	39.43	39 500	1.0	472	2KJ3410 - ■ LN33 - ■ ■ B1	
	45	6 300	32.33	39 600	1.2	472	2KJ3410 - ■ LN33 - ■ ■ A1	
FZ.149-LES200ZLU4P								
	53	5 440	27.94	39 400	1.5	495	2KJ3310 - ■ LN33 - ■ ■ N1	
	59	4 850	24.93	39 000	1.6	495	2KJ3310 - ■ LN33 - ■ ■ M1	
	66	4 330	22.22	38 600	1.8	495	2KJ3310 - ■ LN33 - ■ ■ L1	
	75	3 840	19.71	38 100	2.1	495	2KJ3310 - ■ LN33 - ■ ■ K1	
	81	3 520	18.10	37 700	2.3	495	2KJ3310 - ■ LN33 - ■ ■ J1	
	92	3 100	15.94	37 000	2.6	495	2KJ3310 - ■ LN33 - ■ ■ H1	
	112	2 540	13.08	35 800	3.0	495	2KJ3310 - ■ LN33 - ■ ■ G1	
	128	2 230	11.47	35 000	3.3	495	2KJ3310 - ■ LN33 - ■ ■ F1	
	164	1 740	8.97	33 300	3.9	495	2KJ3310 - ■ LN33 - ■ ■ E1	
	182	1 570	8.09	32 300	3.6	495	2KJ3310 - ■ LN33 - ■ ■ D1	
	221	1 290	6.64	31 000	4.4	495	2KJ3310 - ■ LN33 - ■ ■ C1	
FZ.129-LES200ZLU4P								
	63	4 520	23.23	26 600	1.1	408	2KJ3308 - ■ LN33 - ■ ■ N1	
	71	4 010	20.60	26 600	1.2	408	2KJ3308 - ■ LN33 - ■ ■ M1	
	81	3 540	18.18	26 500	1.4	408	2KJ3308 - ■ LN33 - ■ ■ L1	
	92	3 110	15.99	26 300	1.5	408	2KJ3308 - ■ LN33 - ■ ■ K1	
	102	2 820	14.48	26 100	1.7	408	2KJ3308 - ■ LN33 - ■ ■ J1	
	117	2 450	12.61	25 800	1.8	408	2KJ3308 - ■ LN33 - ■ ■ H1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
30								
FZ.129-LES200ZLU4P								
	142	2 010	10.34	25 100	2.1	408	2KJ3308 - ■ LN33 - ■ ■ G1	
	150	1 910	9.80	24 400	1.9	408	2KJ3308 - ■ LN33 - ■ ■ F1	
	170	1 680	8.65	24 000	2.2	408	2KJ3308 - ■ LN33 - ■ ■ E1	
	193	1 480	7.60	23 500	2.4	408	2KJ3308 - ■ LN33 - ■ ■ D1	
	213	1 340	6.89	23 100	2.7	408	2KJ3308 - ■ LN33 - ■ ■ C1	
	245	1 160	6.00	22 600	3.1	408	2KJ3308 - ■ LN33 - ■ ■ B1	
	299	955	4.92	21 700	3.2	408	2KJ3308 - ■ LN33 - ■ ■ A1	
FZ.109-LES200ZLU4P								
	76	3 770	19.36	16 600	0.82	357	2KJ3307 - ■ LN33 - ■ ■ M1	
	86	3 320	17.06	17 000	0.93	357	2KJ3307 - ■ LN33 - ■ ■ L1	
	98	2 910	14.95	17 300	1.1	357	2KJ3307 - ■ LN33 - ■ ■ K1	
	113	2 540	13.03	17 400	1.2	357	2KJ3307 - ■ LN33 - ■ ■ J1	
	124	2 310	11.89	17 500	1.3	357	2KJ3307 - ■ LN33 - ■ ■ H1	
	144	1 990	10.23	17 400	1.4	357	2KJ3307 - ■ LN33 - ■ ■ G1	
	163	1 750	9.02	17 200	1.2	357	2KJ3307 - ■ LN33 - ■ ■ F1	
	185	1 540	7.94	17 000	1.3	357	2KJ3307 - ■ LN33 - ■ ■ E1	
	211	1 350	6.96	16 800	1.4	357	2KJ3307 - ■ LN33 - ■ ■ D1	
	242	1 180	6.07	16 500	1.5	357	2KJ3307 - ■ LN33 - ■ ■ C1	
	265	1 080	5.54	16 300	1.6	357	2KJ3307 - ■ LN33 - ■ ■ B1	
	308	930	4.77	15 900	1.7	357	2KJ3307 - ■ LN33 - ■ ■ A1	
37								
FD.189-LES225SD4P								
	17	21 000	87.65	103 900	0.9	1 441	2KJ3412 - ■ MF33 - ■ ■ F1	
	19	18 700	77.92	103 300	1.0	1 441	2KJ3412 - ■ MF33 - ■ ■ E1	
	24	14 900	62.11	101 400	1.3	1 441	2KJ3412 - ■ MF33 - ■ ■ D1	
	30	11 800	49.43	98 800	1.6	1 441	2KJ3412 - ■ MF33 - ■ ■ C1	
	36	9 760	40.61	95 700	1.9	1 441	2KJ3412 - ■ MF33 - ■ ■ B1	
	45	7 760	32.32	91 900	2.4	1 441	2KJ3412 - ■ MF33 - ■ ■ A1	
FZ.189-LES225SD4P								
	39	9 110	37.93	94 600	2.1	1 413	2KJ3312 - ■ MF33 - ■ ■ L1	
	43	8 180	34.03	92 800	2.3	1 413	2KJ3312 - ■ MF33 - ■ ■ K1	
	48	7 310	30.41	90 900	2.6	1 413	2KJ3312 - ■ MF33 - ■ ■ J1	
	54	6 530	27.17	88 900	2.9	1 413	2KJ3312 - ■ MF33 - ■ ■ H1	
FD.169-LES225SD4P								
	23	15 500	64.75	63 100	0.87	1 229	2KJ3411 - ■ MF33 - ■ ■ E1	
	29	12 100	50.63	63 400	1.1	1 229	2KJ3411 - ■ MF33 - ■ ■ D1	
	32	11 100	46.55	63 300	1.2	1 229	2KJ3411 - ■ MF33 - ■ ■ C1	
	36	9 810	40.82	62 700	1.4	1 229	2KJ3411 - ■ MF33 - ■ ■ B1	
	46	7 670	31.92	61 200	1.8	1 229	2KJ3411 - ■ MF33 - ■ ■ A1	
FZ.169-LES225SD4P								
	45	7 930	33.02	61 500	1.7	1 214	2KJ3311 - ■ MF33 - ■ ■ P1	
	49	7 170	29.86	60 700	1.9	1 214	2KJ3311 - ■ MF33 - ■ ■ N1	
	56	6 330	26.35	59 700	2.1	1 214	2KJ3311 - ■ MF33 - ■ ■ M1	
	63	5 640	23.48	58 700	2.4	1 214	2KJ3311 - ■ MF33 - ■ ■ L1	
	69	5 110	21.27	57 700	2.7	1 214	2KJ3311 - ■ MF33 - ■ ■ K1	
	77	4 590	19.13	56 700	3.0	1 214	2KJ3311 - ■ MF33 - ■ ■ J1	
	182	1 940	8.07	46 300	4.3	1 214	2KJ3311 - ■ MF33 - ■ ■ D1	

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
37	FD.149-LES225SD4P							
	37	9 470	39.43	35 000	0.84	1 085	2KJ3410 - ■ MF33 - ■ ■ B1	
	45	7 770	32.33	35 900	0.97	1 085	2KJ3410 - ■ MF33 - ■ ■ A1	
	FZ.149-LES225SD4P							
	53	6 710	27.94	36 200	1.2	1 080	2KJ3310 - ■ MF33 - ■ ■ N1	
	59	5 990	24.93	36 200	1.3	1 080	2KJ3310 - ■ MF33 - ■ ■ M1	
	66	5 340	22.22	36 100	1.5	1 080	2KJ3310 - ■ MF33 - ■ ■ L1	
	75	4 730	19.71	35 900	1.7	1 080	2KJ3310 - ■ MF33 - ■ ■ K1	
	81	4 350	18.10	35 600	1.8	1 080	2KJ3310 - ■ MF33 - ■ ■ J1	
	92	3 830	15.94	35 200	2.1	1 080	2KJ3310 - ■ MF33 - ■ ■ H1	
	112	3 140	13.08	34 300	2.4	1 080	2KJ3310 - ■ MF33 - ■ ■ G1	
	128	2 750	11.47	33 700	2.7	1 080	2KJ3310 - ■ MF33 - ■ ■ F1	
	164	2 150	8.97	32 300	3.1	1 080	2KJ3310 - ■ MF33 - ■ ■ E1	
	182	1 940	8.09	31 300	2.9	1 080	2KJ3310 - ■ MF33 - ■ ■ D1	
	221	1 590	6.64	30 200	3.6	1 080	2KJ3310 - ■ MF33 - ■ ■ C1	
	253	1 390	5.82	29 400	4.1	1 080	2KJ3310 - ■ MF33 - ■ ■ B1	
	FZ.129-LES225SD4P							
	63	5 580	23.23	23 600	0.87	991	2KJ3308 - ■ MF33 - ■ ■ N1	
	71	4 950	20.60	24 000	0.98	991	2KJ3308 - ■ MF33 - ■ ■ M1	
	81	4 370	18.18	24 200	1.1	991	2KJ3308 - ■ MF33 - ■ ■ L1	
92	3 840	15.99	24 300	1.2	991	2KJ3308 - ■ MF33 - ■ ■ K1		
102	3 480	14.48	24 300	1.3	991	2KJ3308 - ■ MF33 - ■ ■ J1		
117	3 030	12.61	24 200	1.5	991	2KJ3308 - ■ MF33 - ■ ■ H1		
142	2 480	10.34	23 800	1.7	991	2KJ3308 - ■ MF33 - ■ ■ G1		
150	2 350	9.80	23 100	1.5	991	2KJ3308 - ■ MF33 - ■ ■ F1		
170	2 070	8.65	22 800	1.8	991	2KJ3308 - ■ MF33 - ■ ■ E1		
193	1 820	7.60	22 500	2.0	991	2KJ3308 - ■ MF33 - ■ ■ D1		
213	1 650	6.89	22 200	2.2	991	2KJ3308 - ■ MF33 - ■ ■ C1		
245	1 440	6.00	21 700	2.5	991	2KJ3308 - ■ MF33 - ■ ■ B1		
299	1 180	4.92	21 000	2.6	991	2KJ3308 - ■ MF33 - ■ ■ A1		
FZ.109-LES225SD4P								
98	3 590	14.95	15 000	0.86	939	2KJ3307 - ■ MF33 - ■ ■ K1		
113	3 130	13.03	15 500	0.99	939	2KJ3307 - ■ MF33 - ■ ■ J1		
124	2 850	11.89	15 700	1.1	939	2KJ3307 - ■ MF33 - ■ ■ H1		
144	2 450	10.23	15 900	1.2	939	2KJ3307 - ■ MF33 - ■ ■ G1		
163	2 160	9.02	15 800	0.96	939	2KJ3307 - ■ MF33 - ■ ■ F1		
185	1 900	7.94	15 800	1.0	939	2KJ3307 - ■ MF33 - ■ ■ E1		
211	1 670	6.96	15 700	1.1	939	2KJ3307 - ■ MF33 - ■ ■ D1		
242	1 450	6.07	15 600	1.2	939	2KJ3307 - ■ MF33 - ■ ■ C1		
265	1 330	5.54	15 400	1.3	939	2KJ3307 - ■ MF33 - ■ ■ B1		
308	1 140	4.77	15 200	1.4	939	2KJ3307 - ■ MF33 - ■ ■ A1		
45	FD.189-LES225YMF4P							
	19	22 700	77.92	95 700	0.83	946	2KJ3412 - ■ MT33 - ■ ■ E1	
	24	18 100	62.11	95 300	1.0	946	2KJ3412 - ■ MT33 - ■ ■ D1	
	30	14 400	49.43	93 800	1.3	946	2KJ3412 - ■ MT33 - ■ ■ C1	
	36	11 800	40.61	91 800	1.6	946	2KJ3412 - ■ MT33 - ■ ■ B1	
	45	9 440	32.32	88 700	2.0	946	2KJ3412 - ■ MT33 - ■ ■ A1	

Article No. supplement

Shaft design

1, 5 or 9

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Frequency and voltage

2 or 9

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Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
45	FZ.189-LES225YMF4P							
	43	9 940	34.03	89 400	1.9	918	2KJ3312 - ■ MT33 - ■ ■ K1	
	48	8 890	30.41	87 800	2.1	918	2KJ3312 - ■ MT33 - ■ ■ J1	
	54	7 940	27.17	86 200	2.4	918	2KJ3312 - ■ MT33 - ■ ■ H1	
	59	7 260	24.85	84 800	2.6	918	2KJ3312 - ■ MT33 - ■ ■ G1	
	67	6 450	22.09	82 900	2.9	918	2KJ3312 - ■ MT33 - ■ ■ F1	
	FD.169-LES225YMF4P							
	29	14 800	50.63	57 800	0.92	734	2KJ3411 - ■ MT33 - ■ ■ D1	
	32	13 600	46.55	58 100	1.0	734	2KJ3411 - ■ MT33 - ■ ■ C1	
	36	11 900	40.82	58 300	1.1	734	2KJ3411 - ■ MT33 - ■ ■ B1	
	46	9 330	31.92	57 700	1.5	734	2KJ3411 - ■ MT33 - ■ ■ A1	
	FZ.169-LES225YMF4P							
	49	8 720	29.86	57 500	1.6	719	2KJ3311 - ■ MT33 - ■ ■ N1	
	56	7 700	26.35	56 800	1.8	719	2KJ3311 - ■ MT33 - ■ ■ M1	
	63	6 860	23.48	56 100	2.0	719	2KJ3311 - ■ MT33 - ■ ■ L1	
69	6 210	21.27	55 400	2.2	719	2KJ3311 - ■ MT33 - ■ ■ K1		
77	5 590	19.13	54 600	2.4	719	2KJ3311 - ■ MT33 - ■ ■ J1		
92	4 640	15.90	53 000	2.9	719	2KJ3311 - ■ MT33 - ■ ■ H1		
104	4 130	14.13	51 900	3.1	719	2KJ3311 - ■ MT33 - ■ ■ G1		
131	3 290	11.26	49 600	3.6	719	2KJ3311 - ■ MT33 - ■ ■ F1		
164	2 620	8.97	47 300	4.0	719	2KJ3311 - ■ MT33 - ■ ■ E1		
182	2 350	8.07	45 200	3.5	719	2KJ3311 - ■ MT33 - ■ ■ D1		
205	2 090	7.18	44 100	4.0	719	2KJ3311 - ■ MT33 - ■ ■ C1		
FZ.149-LES225YMF4P								
59	7 280	24.93	33 000	1.1	585	2KJ3310 - ■ MT33 - ■ ■ M1		
66	6 490	22.22	33 200	1.2	585	2KJ3310 - ■ MT33 - ■ ■ L1		
75	5 760	19.71	33 300	1.4	585	2KJ3310 - ■ MT33 - ■ ■ K1		
81	5 290	18.10	33 300	1.5	585	2KJ3310 - ■ MT33 - ■ ■ J1		
92	4 660	15.94	33 100	1.7	585	2KJ3310 - ■ MT33 - ■ ■ H1		
112	3 820	13.08	32 600	2.0	585	2KJ3310 - ■ MT33 - ■ ■ G1		
128	3 350	11.47	32 200	2.2	585	2KJ3310 - ■ MT33 - ■ ■ F1		
164	2 620	8.97	31 100	2.6	585	2KJ3310 - ■ MT33 - ■ ■ E1		
182	2 360	8.09	30 200	2.4	585	2KJ3310 - ■ MT33 - ■ ■ D1		
221	1 940	6.64	29 200	2.9	585	2KJ3310 - ■ MT33 - ■ ■ C1		
253	1 700	5.82	28 500	3.3	585	2KJ3310 - ■ MT33 - ■ ■ B1		
323	1 330	4.55	27 200	4.2	585	2KJ3310 - ■ MT33 - ■ ■ A1		
FZ.129-LES225YMF4P								
71	6 020	20.60	21 000	0.81	496	2KJ3308 - ■ MT33 - ■ ■ M1		
81	5 310	18.18	21 600	0.91	496	2KJ3308 - ■ MT33 - ■ ■ L1		
92	4 670	15.99	22 000	1.0	496	2KJ3308 - ■ MT33 - ■ ■ K1		
102	4 230	14.48	22 200	1.1	496	2KJ3308 - ■ MT33 - ■ ■ J1		
117	3 680	12.61	22 300	1.2	496	2KJ3308 - ■ MT33 - ■ ■ H1		
142	3 020	10.34	22 300	1.4	496	2KJ3308 - ■ MT33 - ■ ■ G1		
150	2 860	9.80	21 500	1.3	496	2KJ3308 - ■ MT33 - ■ ■ F1		
170	2 520	8.65	21 500	1.4	496	2KJ3308 - ■ MT33 - ■ ■ E1		
193	2 220	7.60	21 300	1.6	496	2KJ3308 - ■ MT33 - ■ ■ D1		
213	2 010	6.89	21 100	1.8	496	2KJ3308 - ■ MT33 - ■ ■ C1		

Article No. supplement

Shaft design

1, 5 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
45	FZ.129-LES225YMF4P							
	245	1 750	6.00	20 800	2.1	496	2KJ3308 - ■ MT33 - ■ ■ B1	
	299	1 430	4.92	20 200	2.1	496	2KJ3308 - ■ MT33 - ■ ■ A1	
	FZ.109-LES225YMF4P							
	113	3 800	13.03	13 300	0.81	444	2KJ3307 - ■ MT33 - ■ ■ J1	
	124	3 470	11.89	13 700	0.88	444	2KJ3307 - ■ MT33 - ■ ■ H1	
	144	2 990	10.23	14 100	0.96	444	2KJ3307 - ■ MT33 - ■ ■ G1	
	185	2 320	7.94	14 400	0.86	444	2KJ3307 - ■ MT33 - ■ ■ E1	
	211	2 030	6.96	14 500	0.93	444	2KJ3307 - ■ MT33 - ■ ■ D1	
	242	1 770	6.07	14 500	1.0	444	2KJ3307 - ■ MT33 - ■ ■ C1	
265	1 620	5.54	14 400	1.1	444	2KJ3307 - ■ MT33 - ■ ■ B1		
308	1 390	4.77	14 300	1.2	444	2KJ3307 - ■ MT33 - ■ ■ A1		
55	FD.189-LES250MD4P							
	24	22 100	62.11	87 700	0.86	1 049	2KJ3412 - ■ NM33 - ■ ■ D1	
	30	17 600	49.43	87 700	1.1	1 049	2KJ3412 - ■ NM33 - ■ ■ C1	
	36	14 500	40.61	86 700	1.3	1 049	2KJ3412 - ■ NM33 - ■ ■ B1	
	45	11 500	32.32	84 800	1.6	1 049	2KJ3412 - ■ NM33 - ■ ■ A1	
	FZ.189-LES250MD4P							
	54	9 700	27.17	82 800	2.0	1 021	2KJ3312 - ■ NM33 - ■ ■ H1	
	59	8 870	24.85	81 700	2.1	1 021	2KJ3312 - ■ NM33 - ■ ■ G1	
	67	7 890	22.09	80 200	2.4	1 021	2KJ3312 - ■ NM33 - ■ ■ F1	
	78	6 700	18.75	77 900	2.8	1 021	2KJ3312 - ■ NM33 - ■ ■ E1	
	91	5 790	16.21	75 700	3.3	1 021	2KJ3312 - ■ NM33 - ■ ■ D1	
	FD.169-LES250MD4P							
	32	16 600	46.55	51 800	0.82	838	2KJ3411 - ■ NM33 - ■ ■ C1	
	36	14 500	40.82	52 800	0.93	838	2KJ3411 - ■ NM33 - ■ ■ B1	
	46	11 400	31.92	53 400	1.2	838	2KJ3411 - ■ NM33 - ■ ■ A1	
	FZ.169-LES250MD4P							
	63	8 390	23.48	52 900	1.6	822	2KJ3311 - ■ NM33 - ■ ■ L1	
	69	7 600	21.27	52 500	1.8	822	2KJ3311 - ■ NM33 - ■ ■ K1	
	77	6 830	19.13	52 000	2.0	822	2KJ3311 - ■ NM33 - ■ ■ J1	
	92	5 680	15.90	50 800	2.4	822	2KJ3311 - ■ NM33 - ■ ■ H1	
	104	5 040	14.13	50 000	2.6	822	2KJ3311 - ■ NM33 - ■ ■ G1	
	131	4 020	11.26	48 100	2.9	822	2KJ3311 - ■ NM33 - ■ ■ F1	
	164	3 200	8.97	46 100	3.2	822	2KJ3311 - ■ NM33 - ■ ■ E1	
	182	2 880	8.07	43 900	2.9	822	2KJ3311 - ■ NM33 - ■ ■ D1	
	205	2 560	7.18	42 900	3.2	822	2KJ3311 - ■ NM33 - ■ ■ C1	
	257	2 040	5.72	41 000	4.0	822	2KJ3311 - ■ NM33 - ■ ■ B1	
	323	1 620	4.55	39 000	4.5	822	2KJ3311 - ■ NM33 - ■ ■ A1	
	FZ.149-LES250MD4P							
	75	7 040	19.71	30 100	1.1	687	2KJ3310 - ■ NM33 - ■ ■ K1	
	81	6 460	18.10	30 300	1.2	687	2KJ3310 - ■ NM33 - ■ ■ J1	
92	5 690	15.94	30 500	1.4	687	2KJ3310 - ■ NM33 - ■ ■ H1		
112	4 670	13.08	30 500	1.6	687	2KJ3310 - ■ NM33 - ■ ■ G1		
128	4 090	11.47	30 300	1.8	687	2KJ3310 - ■ NM33 - ■ ■ F1		
164	3 200	8.97	29 600	2.1	687	2KJ3310 - ■ NM33 - ■ ■ E1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Parallel shaft geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
55	FZ.149-LES250MD4P							
	182	2 890	8.09	28 800	2.0	687	2KJ3310 - ■ NM33 - ■ ■ D1	
	221	2 370	6.64	28 100	2.4	687	2KJ3310 - ■ NM33 - ■ ■ C1	
	253	2 080	5.82	27 500	2.7	687	2KJ3310 - ■ NM33 - ■ ■ B1	
	323	1 620	4.55	26 400	3.5	687	2KJ3310 - ■ NM33 - ■ ■ A1	
	FZ.129-LES250MD4P							
	92	5 710	15.99	19 100	0.84	598	2KJ3308 - ■ NM33 - ■ ■ K1	
	102	5 170	14.48	19 600	0.91	598	2KJ3308 - ■ NM33 - ■ ■ J1	
	117	4 500	12.61	20 100	1.0	598	2KJ3308 - ■ NM33 - ■ ■ H1	
	142	3 690	10.34	20 400	1.2	598	2KJ3308 - ■ NM33 - ■ ■ G1	
193	2 710	7.60	19 800	1.3	598	2KJ3308 - ■ NM33 - ■ ■ D1		
213	2 460	6.89	19 700	1.5	598	2KJ3308 - ■ NM33 - ■ ■ C1		
245	2 140	6.00	19 600	1.7	598	2KJ3308 - ■ NM33 - ■ ■ B1		
299	1 750	4.92	19 300	1.7	598	2KJ3308 - ■ NM33 - ■ ■ A1		

Article No. supplement

Shaft design	1, 5 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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 → Page 11/2
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SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
FD.29																		
298.58	4.9	150	5 220	15	0.02	94054/315	✓	✓									2KJ3401 - ■■■■■■ - ■■ Q1	
264.39	5.5	150	5 220	15	0.03	92537/350	✓	✓	✓								2KJ3401 - ■■■■■■ - ■■ P1	
229.72	6.3	150	5 220	15	0.04	80401/350	✓	✓	✓								2KJ3401 - ■■■■■■ - ■■ N1	
208.83	6.9	150	5 220	15	0.05	80401/385	✓	✓	✓	✓							2KJ3401 - ■■■■■■ - ■■ M1	
177.71	8.2	150	5 220	15	0.06	62197/350	✓	✓	✓	✓							2KJ3401 - ■■■■■■ - ■■ L1	
161.55	9	150	5 220	15	0.08	62197/385	✓	✓	✓	✓							2KJ3401 - ■■■■■■ - ■■ K1	
140.86	10	150	5 220	16	0.09	19721/140	✓	✓	✓	✓	✓						2KJ3401 - ■■■■■■ - ■■ J1	
126.09	11	150	5 220	16	0.12	48544/385	✓	✓	✓	✓	✓						2KJ3401 - ■■■■■■ - ■■ H1	
111.97	13	150	5 220	16	0.14	47027/420	✓	✓	✓	✓	✓						2KJ3401 - ■■■■■■ - ■■ G1	
103.36	14	150	5 220	16	0.17	47027/455	✓	✓	✓	✓	✓						2KJ3401 - ■■■■■■ - ■■ F1	
89.78	16	150	5 220	16	0.19	43993/490	✓	✓	✓	✓	✓						2KJ3401 - ■■■■■■ - ■■ E1	
78.02	19	150	5 220	16	0.19	13653/175	✓	✓	✓	✓	✓						2KJ3401 - ■■■■■■ - ■■ D1	
70.43	21	150	5 220	16	0.25	19721/280	✓	✓	✓	✓	✓						2KJ3401 - ■■■■■■ - ■■ C1	
66.29	22	150	5 220	16	0.29	39442/595	✓	✓	✓	✓	✓						2KJ3401 - ■■■■■■ - ■■ B1	
57.79	25	150	5 220	16	0.33	6068/105	✓	✓	✓	✓	✓						2KJ3401 - ■■■■■■ - ■■ A1	
FZ.29																		
56.73	26	150	5 220	15	0.04	851/15	✓	✓									2KJ3301 - ■■■■■■ - ■■ C2	
50.32	29	150	5 220	15	0.05	1258/25	✓	✓	✓								2KJ3301 - ■■■■■■ - ■■ B2	
43.66	33	150	5 220	15	0.06	2183/50	✓	✓	✓								2KJ3301 - ■■■■■■ - ■■ A2	
39.69	37	150	5 220	15	0.08	2183/55	✓	✓	✓	✓							2KJ3301 - ■■■■■■ - ■■ X1	
34.04	43	150	4 920	16	0.10	851/25	✓	✓	✓	✓							2KJ3301 - ■■■■■■ - ■■ W1	
30.95	47	150	4 730	16	0.12	1702/55	✓	✓	✓	✓							2KJ3301 - ■■■■■■ - ■■ V1	
27.13	53	150	4 470	16	0.14	407/15	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ U1	
24.22	60	150	4 260	16	0.17	1332/55	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ T1	
21.58	67	150	4 050	16	0.20	259/12	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ S1	
19.92	73	150	3 910	16	0.24	259/13	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ R1	
17.44	83	150	3 690	16	0.28	1221/70	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ Q1	
15.29	95	150	3 480	16	0.30	1147/75	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ P1	
13.88	104	150	3 320	16	0.38	111/8	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ N1	
13.06	111	150	3 230	16	0.44	222/17	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ M1	
11.51	126	143	3 110	16	0.50	518/45	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ L1	
9.99	145	136	2 970	16	0.67	999/100	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ K1	
9.69	150	143	2 670	23	0.26	2664/275	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ J1	
8.63	168	130	2 640	24	0.32	259/30	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ H1	
7.97	182	120	2 630	24	0.38	518/65	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ G1	
6.98	208	123	2 440	24	0.46	1221/175	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ F1	
6.12	237	114	2 370	25	0.53	2294/375	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ E1	
5.55	261	108	2 320	25	0.66	111/20	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ D1	
5.22	278	106	2 300	25	0.76	444/85	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ C1	
4.60	315	97	2 280	24	0.92	1036/225	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ B1	
4.00	362	91	2 250	25	1.21	999/250	✓	✓	✓	✓	✓						2KJ3301 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.39																	
274.26	5.3	290	5 820	9	0.04	32637/119	✓	✓								2KJ3402 - ■■■■■ - ■■ R1	
243.26	6	290	5 820	9	0.05	8514/35	✓	✓	✓							2KJ3402 - ■■■■■ - ■■ Q1	
211.06	6.9	290	5 820	9	0.06	251163/1190	✓	✓	✓							2KJ3402 - ■■■■■ - ■■ P1	
191.87	7.6	290	5 820	9	0.07	22833/119	✓	✓	✓	✓						2KJ3402 - ■■■■■ - ■■ N1	
164.56	8.8	290	5 820	9	0.09	97911/595	✓	✓	✓	✓						2KJ3402 - ■■■■■ - ■■ M1	
149.60	9.7	290	5 820	9	0.11	17802/119	✓	✓	✓	✓						2KJ3402 - ■■■■■ - ■■ L1	
131.17	11	290	5 820	9	0.12	15609/119	✓	✓	✓	✓	✓					2KJ3402 - ■■■■■ - ■■ K1	
117.08	12	290	5 820	9	0.15	13932/119	✓	✓	✓	✓	✓	✓				2KJ3402 - ■■■■■ - ■■ J1	
104.34	14	290	5 820	9	0.18	7095/68	✓	✓	✓	✓	✓	✓				2KJ3402 - ■■■■■ - ■■ H1	
96.31	15	290	5 820	9	0.21	21285/221	✓	✓	✓	✓	✓	✓				2KJ3402 - ■■■■■ - ■■ G1	
84.32	17	290	5 820	9	0.25	140481/1666	✓	✓	✓	✓	✓	✓				2KJ3402 - ■■■■■ - ■■ F1	
73.93	20	290	5 820	9	0.24	43989/595	✓	✓	✓	✓	✓	✓				2KJ3402 - ■■■■■ - ■■ E1	
67.07	22	290	5 820	9	0.34	63855/952	✓	✓	✓	✓	✓	✓				2KJ3402 - ■■■■■ - ■■ D1	
63.13	23	290	5 820	9	0.40	127710/2023	✓	✓	✓	✓	✓	✓				2KJ3402 - ■■■■■ - ■■ C1	
55.65	26	290	5 820	9	0.44	946/17	✓	✓	✓	✓	✓	✓				2KJ3402 - ■■■■■ - ■■ B1	
48.29	30	290	5 820	9	0.59	114939/2380	✓	✓	✓	✓	✓	✓				2KJ3402 - ■■■■■ - ■■ A1	
FZ.39																	
65.21	22	290	5 820	9	0.06	913/14	✓	✓								2KJ3302 - ■■■■■ - ■■ B2	
57.99	25	230	6 040	9	0.08	4059/70	✓	✓	✓							2KJ3302 - ■■■■■ - ■■ A2	
50.91	28	240	6 000	9	0.09	1782/35	✓	✓	✓							2KJ3302 - ■■■■■ - ■■ X1	
46.29	31	255	5 950	9	0.11	324/7	✓	✓	✓	✓						2KJ3302 - ■■■■■ - ■■ W1	
39.60	37	290	5 820	9	0.13	198/5	✓	✓	✓	✓						2KJ3302 - ■■■■■ - ■■ V1	
36.00	40	255	5 950	9	0.16	36/1	✓	✓	✓	✓						2KJ3302 - ■■■■■ - ■■ U1	
31.82	46	285	5 490	9	0.19	891/28	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ T1	
28.93	50	275	5 330	9	0.26	405/14	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ S1	
25.34	57	265	5 080	9	0.30	1419/56	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ R1	
23.39	62	260	4 930	9	0.36	4257/182	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ Q1	
20.71	70	250	4 740	9	0.42	4059/196	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ P1	
17.24	84	235	4 460	9	0.57	3861/224	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ N1	
16.22	89	230	4 370	9	0.66	3861/238	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ M1	
14.54	100	220	4 220	10	0.74	407/28	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ L1	
12.38	117	210	3 990	10	0.97	99/8	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ K1	
10.61	137	199	3 800	10	1.28	297/28			✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ J1	
9.13	159	189	3 610	10	1.65	1023/112			✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ H1	
8.10	179	167	3 430	14	0.70	3403/420	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ G1	
6.74	215	152	3 270	14	0.96	1079/160	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ F1	
6.35	228	149	3 210	14	1.11	1079/170	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ E1	
5.69	255	140	3 120	15	1.29	3071/540	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ D1	
4.84	300	128	3 000	15	1.73	581/120	✓	✓	✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ C1	
4.15	349	118	2 950	16	2.30	83/20			✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ B1	
3.57	406	108	2 890	17	3.00	2573/720			✓	✓	✓	✓				2KJ3302 - ■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.49																	
330.98	4.4	480	7 960	8	0.06	26809/81	✓	✓								2KJ3403 - ■■■■■ - ■■ S1	
294.29	4.9	480	7 960	8	0.07	13243/45	✓	✓	✓							2KJ3403 - ■■■■■ - ■■ R1	
258.40	5.6	480	7 960	8	0.08	1292/5	✓	✓	✓							2KJ3403 - ■■■■■ - ■■ Q1	
234.91	6.2	480	7 960	8	0.10	2584/11	✓	✓	✓	✓						2KJ3403 - ■■■■■ - ■■ P1	
200.98	7.2	480	7 960	8	0.12	9044/45	✓	✓	✓	✓						2KJ3403 - ■■■■■ - ■■ N1	
182.71	7.9	480	7 960	8	0.14	18088/99	✓	✓	✓	✓						2KJ3403 - ■■■■■ - ■■ M1	
161.50	9	480	7 960	8	0.17	323/2	✓	✓	✓	✓	✓					2KJ3403 - ■■■■■ - ■■ L1	
146.82	9.9	480	7 960	8	0.22	1615/11	✓	✓	✓	✓	✓	✓				2KJ3403 - ■■■■■ - ■■ K1	
128.60	11	480	7 960	8	0.26	13889/108	✓	✓	✓	✓	✓	✓				2KJ3403 - ■■■■■ - ■■ J1	
118.71	12	480	7 960	8	0.31	13889/117	✓	✓	✓	✓	✓	✓				2KJ3403 - ■■■■■ - ■■ H1	
105.10	14	480	7 960	8	0.37	13243/126	✓	✓	✓	✓	✓	✓	✓			2KJ3403 - ■■■■■ - ■■ G1	
87.48	17	480	7 960	8	0.50	4199/48	✓	✓	✓	✓	✓	✓	✓			2KJ3403 - ■■■■■ - ■■ F1	
82.33	18	480	7 960	8	0.59	247/3	✓	✓	✓	✓	✓	✓	✓			2KJ3403 - ■■■■■ - ■■ E1	
73.77	20	480	7 640	8	0.66	11951/162	✓	✓	✓	✓	✓	✓	✓			2KJ3403 - ■■■■■ - ■■ D1	
62.81	23	480	7 080	8	0.86	2261/36	✓	✓	✓	✓	✓	✓	✓			2KJ3403 - ■■■■■ - ■■ C1	
53.83	27	480	6 570	8	1.13	323/6			✓	✓	✓	✓	✓			2KJ3403 - ■■■■■ - ■■ B1	
46.36	31	480	6 090	8	1.46	10013/216			✓	✓	✓	✓	✓			2KJ3403 - ■■■■■ - ■■ A1	
FZ.49																	
61.43	24	480	7 000	8	0.18	1843/30	✓	✓	✓							2KJ3303 - ■■■■■ - ■■ X1	
55.85	26	480	6 690	8	0.22	1843/33	✓	✓	✓	✓						2KJ3303 - ■■■■■ - ■■ W1	
47.50	31	480	6 170	8	0.27	95/2	✓	✓	✓	✓						2KJ3303 - ■■■■■ - ■■ V1	
43.18	34	480	5 880	8	0.33	475/11	✓	✓	✓	✓						2KJ3303 - ■■■■■ - ■■ U1	
38.53	38	480	5 540	8	0.39	1387/36	✓	✓	✓	✓	✓					2KJ3303 - ■■■■■ - ■■ T1	
34.55	42	480	5 230	8	0.47	380/11	✓	✓	✓	✓	✓	✓				2KJ3303 - ■■■■■ - ■■ S1	
31.14	47	480	4 950	8	0.55	1121/36	✓	✓	✓	✓	✓	✓				2KJ3303 - ■■■■■ - ■■ R1	
28.74	50	480	4 730	8	0.65	1121/39	✓	✓	✓	✓	✓	✓				2KJ3303 - ■■■■■ - ■■ Q1	
26.24	55	480	4 500	8	0.77	551/21	✓	✓	✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ P1	
21.77	67	480	4 040	8	0.99	1045/48	✓	✓	✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ N1	
20.49	71	480	3 890	8	1.15	1045/51	✓	✓	✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ M1	
19.35	75	480	3 760	8	1.30	1045/54	✓	✓	✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ L1	
16.47	88	480	3 400	8	1.61	247/15	✓	✓	✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ K1	
14.11	103	480	3 070	8	1.99	931/66			✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ J1	
12.40	117	480	3 010	8	2.50	893/72			✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ H1	
10.46	139	480	3 140	9	3.10	722/69			✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ G1	
9.12	159	480	3 210	9	4.20	228/25			✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ F1	
8.40	173	450	3 010	11	2.20	42/5	✓	✓	✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ E1	
7.20	201	450	3 070	12	2.80	1029/143			✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ D1	
6.33	229	430	3 090	12	3.50	329/52			✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ C1	
5.34	272	400	3 080	12	4.60	1596/299			✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ B1	
4.65	312	375	3 060	14	6.10	1512/325			✓	✓	✓	✓	✓			2KJ3303 - ■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.69																	
348.40	4.2	600	10 800	8	0.06	28220/81	✓	✓									2KJ3404 - ■■■■■■ - ■■ S1
309.78	4.7	600	10 800	8	0.07	2788/9	✓	✓	✓								2KJ3404 - ■■■■■■ - ■■ R1
272.00	5.3	600	10 800	8	0.08	272/1	✓	✓	✓								2KJ3404 - ■■■■■■ - ■■ Q1
247.27	5.9	600	10 800	8	0.10	2720/11	✓	✓	✓	✓							2KJ3404 - ■■■■■■ - ■■ P1
211.56	6.9	600	10 800	8	0.12	1904/9	✓	✓	✓	✓							2KJ3404 - ■■■■■■ - ■■ N1
192.32	7.5	600	10 800	8	0.14	19040/99	✓	✓	✓	✓							2KJ3404 - ■■■■■■ - ■■ M1
170.00	8.5	600	10 800	8	0.17	170/1	✓	✓	✓	✓	✓						2KJ3404 - ■■■■■■ - ■■ L1
154.55	9.4	600	10 800	8	0.22	1700/11	✓	✓	✓	✓	✓	✓					2KJ3404 - ■■■■■■ - ■■ K1
135.37	11	600	10 800	8	0.26	3655/27	✓	✓	✓	✓	✓	✓					2KJ3404 - ■■■■■■ - ■■ J1
124.96	12	600	10 800	8	0.31	14620/117	✓	✓	✓	✓	✓	✓					2KJ3404 - ■■■■■■ - ■■ H1
110.63	13	600	10 800	8	0.38	6970/63	✓	✓	✓	✓	✓	✓	✓				2KJ3404 - ■■■■■■ - ■■ G1
92.08	16	600	10 800	8	0.51	1105/12	✓	✓	✓	✓	✓	✓	✓				2KJ3404 - ■■■■■■ - ■■ F1
86.67	17	600	10 800	8	0.60	260/3	✓	✓	✓	✓	✓	✓	✓				2KJ3404 - ■■■■■■ - ■■ E1
77.65	19	600	10 400	8	0.66	6290/81	✓	✓	✓	✓	✓	✓	✓				2KJ3404 - ■■■■■■ - ■■ D1
66.11	22	600	9 740	8	0.87	595/9	✓	✓	✓	✓	✓	✓	✓				2KJ3404 - ■■■■■■ - ■■ C1
56.67	26	600	9 060	8	1.15	170/3			✓	✓	✓	✓	✓				2KJ3404 - ■■■■■■ - ■■ B1
48.80	30	600	8 440	8	1.47	2635/54			✓	✓	✓	✓	✓				2KJ3404 - ■■■■■■ - ■■ A1
FZ.69																	
64.67	22	600	9 640	7	0.19	194/3	✓	✓	✓								2KJ3304 - ■■■■■■ - ■■ X1
58.79	25	600	9 220	7	0.23	1940/33	✓	✓	✓	✓							2KJ3304 - ■■■■■■ - ■■ W1
50.00	29	600	8 540	7	0.29	50/1	✓	✓	✓	✓							2KJ3304 - ■■■■■■ - ■■ V1
45.45	32	600	8 160	7	0.35	500/11	✓	✓	✓	✓							2KJ3304 - ■■■■■■ - ■■ U1
40.56	36	600	7 720	7	0.41	365/9	✓	✓	✓	✓	✓						2KJ3304 - ■■■■■■ - ■■ T1
36.36	40	600	7 310	7	0.49	400/11	✓	✓	✓	✓	✓	✓					2KJ3304 - ■■■■■■ - ■■ S1
32.78	44	600	6 930	7	0.58	295/9	✓	✓	✓	✓	✓	✓					2KJ3304 - ■■■■■■ - ■■ R1
30.26	48	600	6 650	7	0.69	1180/39	✓	✓	✓	✓	✓	✓					2KJ3304 - ■■■■■■ - ■■ Q1
27.62	52	600	6 340	7	0.83	580/21	✓	✓	✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ P1
22.92	63	600	5 740	8	1.07	275/12	✓	✓	✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ N1
21.57	67	600	5 550	8	1.23	1100/51	✓	✓	✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ M1
20.37	71	600	5 370	8	1.39	550/27	✓	✓	✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ L1
17.33	84	600	4 900	8	1.74	52/3	✓	✓	✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ K1
14.85	98	600	4 460	8	2.20	490/33			✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ J1
13.06	111	600	4 120	8	2.70	235/18			✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ H1
11.01	132	600	4 030	8	3.50	760/69			✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ G1
9.60	151	600	4 130	9	4.60	48/5			✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ F1
8.90	163	475	4 030	11	2.40	89/10	✓	✓	✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ E1
7.62	190	465	4 100	11	3.10	4361/572			✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ D1
6.70	216	440	4 120	11	3.90	4183/624			✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ C1
5.66	256	410	4 110	12	5.10	1691/299			✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ B1
4.93	294	385	4 070	13	6.80	1602/325			✓	✓	✓	✓	✓				2KJ3304 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.79																	
357.00	4.1	1 000	13 600	7	0.17	57133/160	✓	✓								2KJ3405 - ■■■■■ - ■■ S1	
324.62	4.5	1 000	13 600	7	0.20	57133/176	✓	✓	✓							2KJ3405 - ■■■■■ - ■■ R1	
276.09	5.3	1 000	13 600	7	0.25	8835/32	✓	✓	✓							2KJ3405 - ■■■■■ - ■■ Q1	
250.99	5.8	1 000	13 600	7	0.30	44175/176	✓	✓	✓							2KJ3405 - ■■■■■ - ■■ P1	
223.94	6.5	1 000	13 600	7	0.35	42997/192	✓	✓	✓	✓	✓					2KJ3405 - ■■■■■ - ■■ N1	
200.80	7.2	1 000	13 600	7	0.42	8835/44	✓	✓	✓	✓	✓					2KJ3405 - ■■■■■ - ■■ M1	
180.99	8	1 000	13 600	7	0.49	34751/192	✓	✓	✓	✓	✓					2KJ3405 - ■■■■■ - ■■ L1	
167.07	8.7	1 000	13 600	7	0.58	34751/208	✓	✓	✓	✓	✓					2KJ3405 - ■■■■■ - ■■ K1	
152.51	9.5	1 000	13 600	7	0.69	17081/112	✓	✓	✓	✓	✓	✓	✓			2KJ3405 - ■■■■■ - ■■ J1	
126.54	11	1 000	13 600	7	0.87	32395/256	✓	✓	✓	✓	✓	✓	✓			2KJ3405 - ■■■■■ - ■■ H1	
119.10	12	1 000	13 600	7	1.01	32395/272	✓	✓	✓	✓	✓	✓	✓			2KJ3405 - ■■■■■ - ■■ G1	
112.48	13	1 000	13 600	7	1.15	32395/288	✓	✓	✓	✓	✓	✓	✓			2KJ3405 - ■■■■■ - ■■ F1	
95.71	15	1 000	13 600	7	1.39	7657/80	✓	✓	✓	✓	✓	✓	✓			2KJ3405 - ■■■■■ - ■■ E1	
81.99	18	1 000	13 600	7	1.70	28861/352		✓	✓	✓	✓	✓	✓			2KJ3405 - ■■■■■ - ■■ D1	
72.09	20	1 000	13 600	7	2.10	27683/384		✓	✓	✓	✓	✓	✓			2KJ3405 - ■■■■■ - ■■ C1	
60.82	24	1 000	13 600	7	2.60	11191/184		✓	✓	✓	✓	✓	✓			2KJ3405 - ■■■■■ - ■■ B1	
53.01	27	1 000	13 600	7	3.50	5301/100		✓	✓	✓	✓	✓	✓			2KJ3405 - ■■■■■ - ■■ A1	
FZ.79																	
53.55	27	1 000	13 600	7	0.56	589/11	✓	✓	✓							2KJ3305 - ■■■■■ - ■■ X1	
48.03	30	1 000	13 600	7	0.77	1729/36	✓	✓	✓	✓	✓					2KJ3305 - ■■■■■ - ■■ W1	
43.18	34	1 000	13 600	7	0.87	475/11	✓	✓	✓	✓	✓					2KJ3305 - ■■■■■ - ■■ V1	
39.06	37	1 000	13 600	7	0.97	703/18	✓	✓	✓	✓	✓					2KJ3305 - ■■■■■ - ■■ U1	
36.05	40	1 000	13 600	7	1.15	1406/39	✓	✓	✓	✓	✓					2KJ3305 - ■■■■■ - ■■ T1	
33.02	44	1 000	13 600	7	1.49	1387/42	✓	✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ S1	
27.71	52	1 000	13 600	7	1.62	665/24	✓	✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ R1	
26.08	56	1 000	13 600	7	1.85	1330/51	✓	✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ Q1	
23.93	61	1 000	13 600	7	2.00	646/27	✓	✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ P1	
20.90	69	1 000	13 600	7	2.90	209/10	✓	✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ N1	
18.71	77	1 000	13 000	7	3.60	1235/66		✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ M1	
16.36	89	1 000	12 200	7	4.20	589/36		✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ L1	
14.04	103	1 000	11 400	7	4.70	323/23		✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ K1	
12.41	117	1 000	10 800	7	6.00	931/75		✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ J1	
10.56	137	1 000	10 100	8	7.80	95/9				✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ H1	
9.05	160	1 000	9 980	8	10.00	190/21				✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ G1	
8.51	170	720	10 300	10	4.60	468/55		✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ F1	
7.44	195	725	9 780	11	5.50	186/25		✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ E1	
6.39	227	720	9 690	11	6.50	3672/575		✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ D1	
5.64	257	700	9 620	12	8.30	3528/625		✓	✓	✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ C1	
4.80	302	650	9 480	12	11.00	24/5				✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ B1	
4.11	353	605	9 310	13	15.00	144/35				✓	✓	✓	✓			2KJ3305 - ■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.89																	
335.30	4.3	1 850	17 400	7	0.42	370512/1105	✓	✓								2KJ3406 - ■■■■■ - ■■ S1	
304.82	4.8	1 850	17 400	7	0.51	741024/2431	✓	✓								2KJ3406 - ■■■■■ - ■■ R1	
273.41	5.3	1 850	17 400	7	0.71	4648/17	✓	✓	✓	✓						2KJ3406 - ■■■■■ - ■■ Q1	
245.82	5.9	1 850	17 400	7	0.79	597600/2431	✓	✓	✓	✓						2KJ3406 - ■■■■■ - ■■ P1	
222.33	6.5	1 850	17 400	7	0.88	49136/221	✓	✓	✓	✓						2KJ3406 - ■■■■■ - ■■ N1	
205.23	7.1	1 850	17 400	7	1.03	589632/2873	✓	✓	✓	✓						2KJ3406 - ■■■■■ - ■■ M1	
188.00	7.7	1 850	17 400	7	1.35	290832/1547	✓	✓	✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ L1	
157.74	9.2	1 850	17 400	7	1.43	34860/221	✓	✓	✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ K1	
148.46	9.8	1 850	17 400	7	1.64	557760/3757	✓	✓	✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ J1	
136.21	11	1 850	17 400	7	1.79	5312/39	✓	✓	✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ H1	
118.98	12	1 850	17 400	7	2.60	131472/1105	✓	✓	✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ G1	
106.52	14	1 850	17 400	7	3.10	19920/187	✓	✓	✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ F1	
93.14	16	1 850	17 400	7	3.70	20584/221	✓	✓	✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ E1	
79.95	18	1 850	17 400	7	4.00	23904/299	✓	✓	✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ D1	
70.67	21	1 850	17 400	7	5.10	390432/5525	✓	✓	✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ C1	
60.09	24	1 850	17 400	7	6.50	13280/221			✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ B1	
51.51	28	1 850	17 400	7	8.50	79680/1547			✓	✓	✓	✓				2KJ3406 - ■■■■■ - ■■ A1	
FZ.89																	
61.72	23	1 850	17 400	6	1.38	2407/39	✓	✓	✓	✓						2KJ3306 - ■■■■■ - ■■ B2	
55.72	26	1 850	17 400	6	1.51	7968/143	✓	✓	✓	✓						2KJ3306 - ■■■■■ - ■■ A2	
50.54	29	1 850	17 400	6	1.77	7885/156	✓	✓	✓	✓						2KJ3306 - ■■■■■ - ■■ X1	
46.66	31	1 850	17 400	6	2.10	7885/169	✓	✓	✓	✓						2KJ3306 - ■■■■■ - ■■ W1	
42.41	34	1 850	17 400	6	2.40	7719/182	✓	✓	✓	✓	✓	✓				2KJ3306 - ■■■■■ - ■■ V1	
35.91	40	1 850	17 400	7	2.90	3735/104	✓	✓	✓	✓	✓	✓				2KJ3306 - ■■■■■ - ■■ U1	
33.80	43	1 850	17 400	7	3.00	7470/221	✓	✓	✓	✓	✓	✓				2KJ3306 - ■■■■■ - ■■ T1	
31.21	46	1 850	17 400	7	4.50	3652/117	✓	✓	✓	✓	✓	✓				2KJ3306 - ■■■■■ - ■■ S1	
27.77	52	1 850	17 400	7	5.50	7221/260	✓	✓	✓	✓	✓	✓				2KJ3306 - ■■■■■ - ■■ R1	
24.67	59	1 850	17 400	7	6.70	7055/286	✓	✓	✓	✓	✓	✓				2KJ3306 - ■■■■■ - ■■ Q1	
22.08	66	1 850	17 400	7	6.70	6889/312	✓	✓	✓	✓	✓	✓				2KJ3306 - ■■■■■ - ■■ P1	
18.88	77	1 850	17 200	7	7.90	5644/299	✓	✓	✓	✓	✓	✓				2KJ3306 - ■■■■■ - ■■ N1	
16.86	86	1 850	16 400	7	10.00	5478/325	✓	✓	✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ M1	
14.90	97	1 850	15 500	7	12.00	581/39			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ L1	
13.07	111	1 850	14 600	7	16.00	3569/273			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ K1	
11.38	127	1 850	14 600	7	20.00	3403/299			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ J1	
9.73	149	1 850	14 600	7	26.00	2656/273			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ H1	
8.33	174	1 740	14 500	7	33.00	2490/299			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ G1	
7.60	191	1 100	14 100	11	14.00	4752/625	✓	✓	✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ F1	
6.72	216	1 110	14 000	12	17.00	168/25			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ E1	
5.90	246	1 110	13 800	11	23.00	1032/175			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ D1	
5.13	283	1 110	13 600	11	28.00	2952/575			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ C1	
4.39	330	1 060	13 300	12	39.00	768/175			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ B1	
3.76	386	985	12 900	12	50.00	432/115			✓	✓	✓	✓	✓			2KJ3306 - ■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.109																	
410.00	3.5	3 100	25 000	-	1.27	332021/810			✓	✓	✓						2KJ3407 - ■■■■■■ - ■■ T1
370.00	3.9	3 100	25 000	-	1.37	183184/495			✓	✓	✓						2KJ3407 - ■■■■■■ - ■■ S1
335.70	4.3	3 100	25 000	-	1.61	217531/648			✓	✓	✓						2KJ3407 - ■■■■■■ - ■■ R1
309.87	4.7	3 100	25 000	-	1.89	217531/702			✓	✓	✓						2KJ3407 - ■■■■■■ - ■■ Q1
281.68	5.1	3 100	25 000	-	2.20	354919/1260			✓	✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ P1
238.52	6.1	3 100	25 000	-	2.60	11449/48			✓	✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ N1
224.49	6.5	3 100	25 000	-	2.60	11449/51			✓	✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ M1
207.31	7	3 100	25 000	-	4.00	251878/1215			✓	✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ L1
184.46	7.9	3 100	25 000	-	5.00	332021/1800			✓	✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ K1
163.83	8.9	3 100	25 000	-	5.90	194633/1188			✓	✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ J1
146.65	9.9	3 100	25 000	-	5.90	950267/6480			✓	✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ H1
125.37	12	3 100	25 000	-	6.70	389266/3105			✓	✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ G1
111.95	13	3 100	25 000	-	8.60	125939/1125			✓	✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ F1
98.94	15	3 100	25 000	-	9.60	80143/810				✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ E1
86.83	17	3 100	25 000	-	14.00	492307/5670				✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ D1
75.59	19	3 100	25 000	-	16.00	469409/6210				✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ C1
64.62	22	3 100	25 000	-	21.00	183184/2835				✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ B1
55.31	26	3 100	25 000	-	25.00	11449/207				✓	✓	✓	✓				2KJ3407 - ■■■■■■ - ■■ A1
FZ.109																	
70.74	20	3 100	25 000	-	3.60	12733/180			✓	✓	✓						2KJ3307 - ■■■■■■ - ■■ B2
65.30	22	3 100	25 000	-	4.30	12733/195			✓	✓	✓						2KJ3307 - ■■■■■■ - ■■ A2
60.12	24	3 100	25 000	-	4.90	6313/105			✓	✓	✓	✓	✓				2KJ3307 - ■■■■■■ - ■■ X1
51.27	28	3 100	25 000	-	6.30	2461/48			✓	✓	✓	✓	✓				2KJ3307 - ■■■■■■ - ■■ W1
48.25	30	3 100	25 000	-	7.10	2461/51			✓	✓	✓	✓	✓				2KJ3307 - ■■■■■■ - ■■ V1
44.78	32	3 100	25 000	-	7.80	12091/270			✓	✓	✓	✓	✓				2KJ3307 - ■■■■■■ - ■■ U1
39.59	37	3 100	25 000	-	9.50	3959/100			✓	✓	✓	✓	✓				2KJ3307 - ■■■■■■ - ■■ T1
35.34	41	3 100	24 700	-	11.00	11663/330			✓	✓	✓	✓	✓				2KJ3307 - ■■■■■■ - ■■ S1
31.80	46	3 100	23 600	-	13.00	11449/360			✓	✓	✓	✓	✓				2KJ3307 - ■■■■■■ - ■■ R1
27.60	53	3 100	22 200	-	16.00	9523/345			✓	✓	✓	✓	✓				2KJ3307 - ■■■■■■ - ■■ Q1
24.82	58	3 100	21 200	-	19.00	3103/125			✓	✓	✓	✓	✓	✓			2KJ3307 - ■■■■■■ - ■■ P1
21.70	67	3 100	20 000	-	23.00	7811/360				✓	✓	✓	✓	✓	✓		2KJ3307 - ■■■■■■ - ■■ N1
19.36	75	3 100	18 900	-	27.00	2033/105				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ M1
17.06	85	3 100	17 900	-	33.00	1177/69				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ L1
14.95	97	3 100	16 800	-	40.00	4708/315				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ K1
13.03	111	3 100	15 700	-	48.00	1498/115				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ J1
11.89	122	3 060	15 600	-	56.00	107/9				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ H1
10.23	142	2 880	15 900	-	70.00	1177/115					✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ G1
9.02	161	2 090	16 100	-	36.00	1767/196				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ F1
7.94	183	2 000	15 800	-	44.00	5115/644				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ E1
6.96	208	1 900	15 700	-	54.00	341/49				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ D1
6.07	239	1 800	15 600	-	68.00	279/46				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ C1
5.54	262	1 730	15 400	-	79.00	155/28				✓	✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ B1
4.77	304	1 620	15 200	-	102.00	3069/644					✓	✓	✓	✓	✓	✓	2KJ3307 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques**Selection and ordering data**

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.129																	
413.00	3.5	4 850	37 200	-	3.30	9911/24			✓	✓	✓						2KJ3408 - ■■■■■ - ■■ T1
381.00	3.8	4 850	37 200	-	3.90	9911/26			✓	✓	✓						2KJ3408 - ■■■■■ - ■■ S1
351.00	4.1	4 850	37 200	-	4.50	34397/98			✓	✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ R1
299.31	4.8	4 850	37 200	-	5.60	67045/224			✓	✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ Q1
281.70	5.1	4 850	37 200	-	6.40	67045/238			✓	✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ P1
261.42	5.5	4 850	37 200	-	6.90	65879/252			✓	✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ N1
231.12	6.3	4 850	37 200	-	8.40	64713/280			✓	✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ M1
206.32	7	4 850	37 200	-	10.00	5777/28			✓	✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ L1
185.66	7.8	4 850	37 200	-	12.00	62381/336			✓	✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ K1
161.14	9	4 850	37 200	-	14.00	51887/322			✓	✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ J1
144.92	10	4 850	37 200	-	16.00	50721/350			✓	✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ H1
126.66	11	4 850	37 200	-	19.00	42559/336				✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ G1
113.03	13	4 850	37 200	-	23.00	11077/98				✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ F1
99.58	15	4 850	37 200	-	27.00	32065/322				✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ E1
87.25	17	4 850	37 200	-	32.00	12826/147				✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ D1
76.04	19	4 850	37 200	-	37.00	1749/23				✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ C1
69.40	21	4 850	37 200	-	44.00	2915/42				✓	✓	✓	✓				2KJ3408 - ■■■■■ - ■■ B1
59.75	24	4 850	37 200	-	53.00	19239/322						✓	✓				2KJ3408 - ■■■■■ - ■■ A1
FZ.129																	
69.20	21	4 850	37 200	-	7.70	13563/196			✓	✓	✓	✓	✓				2KJ3308 - ■■■■■ - ■■ A2
59.22	24	4 850	37 200	-	9.70	6633/112			✓	✓	✓	✓	✓				2KJ3308 - ■■■■■ - ■■ X1
55.74	26	4 850	37 200	-	11.00	6633/119			✓	✓	✓	✓	✓				2KJ3308 - ■■■■■ - ■■ W1
52.25	28	4 850	36 700	-	12.00	209/4			✓	✓	✓	✓	✓				2KJ3308 - ■■■■■ - ■■ V1
46.32	31	4 850	34 900	-	15.00	12969/280			✓	✓	✓	✓	✓				2KJ3308 - ■■■■■ - ■■ U1
41.14	35	4 850	33 200	-	18.00	288/7			✓	✓	✓	✓	✓				2KJ3308 - ■■■■■ - ■■ T1
37.12	39	4 850	31 800	-	21.00	297/8			✓	✓	✓	✓	✓				2KJ3308 - ■■■■■ - ■■ S1
32.90	44	4 850	30 100	-	26.00	10593/322			✓	✓	✓	✓	✓				2KJ3308 - ■■■■■ - ■■ R1
29.13	50	4 850	28 600	-	29.00	10197/350			✓	✓	✓	✓	✓	✓			2KJ3308 - ■■■■■ - ■■ Q1
25.93	56	4 850	27 100	-	35.00	363/14				✓	✓	✓	✓	✓	✓		2KJ3308 - ■■■■■ - ■■ P1
23.23	62	4 850	25 800	-	41.00	2277/98				✓	✓	✓	✓	✓	✓		2KJ3308 - ■■■■■ - ■■ N1
20.60	70	4 850	24 400	-	49.00	6633/322				✓	✓	✓	✓	✓	✓		2KJ3308 - ■■■■■ - ■■ M1
18.18	80	4 850	23 000	-	60.00	891/49				✓	✓	✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ L1
15.99	91	4 800	21 800	-	73.00	2574/161				✓	✓	✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ K1
14.48	100	4 690	21 100	-	83.00	1419/98				✓	✓	✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ J1
12.61	115	4 530	20 100	-	101.00	4059/322					✓	✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ H1
10.34	140	4 320	20 400	-	135.00	1881/182						✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ G1
9.80	148	3 630	19 600	-	64.00	2479/253				✓	✓	✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ F1
8.65	168	3 640	19 700	-	79.00	666/77				✓	✓	✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ E1
7.60	191	3 620	19 800	-	97.00	1924/253				✓	✓	✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ D1
6.89	210	3 630	19 700	-	112.00	1591/231				✓	✓	✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ C1
6.00	242	3 640	19 600	-	140.00	1517/253					✓	✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ B1
4.92	295	3 030	19 300	-	192.00	703/143						✓	✓	✓	✓	✓	2KJ3308 - ■■■■■ - ■■ A1

1) Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.149																	
377.00	3.8	8 000	65 000	-	7.10	18495/49				✓	✓	✓	✓			2KJ3410 - ■■■■■■ - ■■ W1	
323.04	4.5	8 000	65 000	-	9.00	9045/28				✓	✓	✓	✓			2KJ3410 - ■■■■■■ - ■■ V1	
304.03	4.8	8 000	65 000	-	10.00	36180/119				✓	✓	✓	✓			2KJ3410 - ■■■■■■ - ■■ U1	
285.00	5.1	8 000	65 000	-	11.00	285/1				✓	✓	✓	✓			2KJ3410 - ■■■■■■ - ■■ T1	
252.64	5.7	8 000	65 000	-	14.00	3537/14				✓	✓	✓	✓			2KJ3410 - ■■■■■■ - ■■ S1	
224.42	6.5	8 000	65 000	-	16.00	17280/77				✓	✓	✓	✓			2KJ3410 - ■■■■■■ - ■■ R1	
202.50	7.2	8 000	65 000	-	19.00	405/2				✓	✓	✓	✓			2KJ3410 - ■■■■■■ - ■■ Q1	
179.44	8.1	8 000	65 000	-	23.00	28890/161				✓	✓	✓	✓			2KJ3410 - ■■■■■■ - ■■ P1	
158.91	9.1	8 000	65 000	-	26.00	5562/35				✓	✓	✓	✓	✓		2KJ3410 - ■■■■■■ - ■■ N1	
141.43	10	8 000	65 000	-	31.00	990/7				✓	✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ M1	
126.73	11	8 000	63 700	-	37.00	6210/49				✓	✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ L1	
112.36	13	8 000	60 800	-	43.00	18090/161				✓	✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ K1	
99.18	15	8 000	57 800	-	53.00	4860/49				✓	✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ J1	
87.20	17	8 000	54 800	-	63.00	14040/161				✓	✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ H1	
78.98	18	8 000	52 600	-	71.00	3870/49				✓	✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ G1	
68.76	21	8 000	49 700	-	85.00	11070/161					✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ F1	
56.37	26	8 000	45 600	-	111.00	5130/91					✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ E1	
50.01	29	8 000	43 300	-	73.00	37960/759				✓	✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ D1	
45.30	32	8 000	41 500	-	83.00	31390/693				✓	✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ C1	
39.43	37	7 970	39 000	-	102.00	29930/759					✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ B1	
32.33	45	7 510	36 800	-	135.00	13870/429					✓	✓	✓	✓	✓	2KJ3410 - ■■■■■■ - ■■ A1	
FZ.149																	
48.48	30	8 000	42 700	-	31.00	1600/33				✓	✓	✓	✓			2KJ3310 - ■■■■■■ - ■■ T1	
43.89	33	8 000	40 900	-	36.00	395/9				✓	✓	✓	✓			2KJ3310 - ■■■■■■ - ■■ S1	
38.55	38	8 000	38 600	-	44.00	2660/69				✓	✓	✓	✓			2KJ3310 - ■■■■■■ - ■■ R1	
34.93	42	8 000	36 900	-	51.00	524/15				✓	✓	✓	✓	✓		2KJ3310 - ■■■■■■ - ■■ Q1	
31.11	47	8 000	34 900	-	60.00	280/9				✓	✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ P1	
27.94	52	8 000	33 200	-	72.00	1760/63				✓	✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ N1	
24.93	58	8 000	31 400	-	84.00	1720/69				✓	✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ M1	
22.22	65	8 000	29 600	-	98.00	200/9				✓	✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ L1	
19.71	74	8 000	27 900	-	117.00	1360/69				✓	✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ K1	
18.10	80	8 000	26 700	-	132.00	380/21				✓	✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ J1	
15.94	91	8 000	24 900	-	156.00	1100/69					✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ H1	
13.08	111	7 620	23 300	-	212.00	170/13					✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ G1	
11.47	126	7 320	23 700	-	241.00	172/15					✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ F1	
8.97	162	6 770	24 500	-	379.00	260/29					✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ E1	
8.09	179	5 690	23 900	-	200.00	2420/299					✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ D1	
6.64	218	5 690	24 000	-	277.00	1122/169					✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ C1	
5.82	249	5 680	24 000	-	325.00	1892/325					✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ B1	
4.55	319	5 650	23 600	-	517.00	132/29					✓	✓	✓	✓	✓	2KJ3310 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.169																	
368.00	3.9	13 600	73 500	-	18.00	106240/289					✓	✓	✓				2KJ3411 - ■■■■■■ - ■■ V1
343.01	4.2	13 600	73 500	-	19.00	52480/153					✓	✓	✓				2KJ3411 - ■■■■■■ - ■■ U1
304.94	4.8	13 600	73 500	-	24.00	5184/17					✓	✓	✓				2KJ3411 - ■■■■■■ - ■■ T1
273.80	5.3	13 600	73 500	-	28.00	51200/187					✓	✓	✓				2KJ3411 - ■■■■■■ - ■■ S1
247.84	5.9	13 600	73 500	-	33.00	12640/51					✓	✓	✓				2KJ3411 - ■■■■■■ - ■■ R1
217.70	6.7	13 600	73 500	-	40.00	85120/391					✓	✓	✓				2KJ3411 - ■■■■■■ - ■■ Q1
197.27	7.4	13 600	73 500	-	46.00	16768/85					✓	✓	✓	✓			2KJ3411 - ■■■■■■ - ■■ P1
175.69	8.3	13 600	73 500	-	54.00	8960/51					✓	✓	✓	✓	✓		2KJ3411 - ■■■■■■ - ■■ N1
157.76	9.2	13 600	73 500	-	64.00	56320/357					✓	✓	✓	✓	✓		2KJ3411 - ■■■■■■ - ■■ M1
140.77	10	13 600	73 500	-	74.00	55040/391					✓	✓	✓	✓	✓		2KJ3411 - ■■■■■■ - ■■ L1
125.49	12	13 600	73 500	-	86.00	6400/51					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ K1
111.30	13	13 600	73 500	-	101.00	2560/23					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ J1
102.18	14	13 600	73 500	-	113.00	12160/119					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ H1
90.03	16	13 600	73 500	-	132.00	35200/391					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ G1
73.85	20	13 600	71 300	-	176.00	960/13					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ F1
64.75	22	13 600	67 500	-	194.00	5504/85					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ E1
50.63	29	13 600	60 700	-	302.00	24960/493					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ D1
46.55	31	13 600	58 400	-	201.00	3026/65					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ C1
40.82	36	13 600	55 100	-	226.00	15308/375					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ B1
31.92	45	13 600	53 400	-	355.00	4628/145					✓	✓	✓	✓	✓	✓	2KJ3411 - ■■■■■■ - ■■ A1
FZ.169																	
44.93	32	12 400	60 000	-	68.00	3100/69					✓	✓	✓				2KJ3311 - ■■■■■■ - ■■ S1
41.07	35	13 600	55 200	-	80.00	616/15					✓	✓	✓	✓			2KJ3311 - ■■■■■■ - ■■ R1
36.94	39	13 600	52 600	-	95.00	665/18					✓	✓	✓	✓	✓		2KJ3311 - ■■■■■■ - ■■ Q1
33.02	44	13 600	49 900	-	111.00	2080/63					✓	✓	✓	✓	✓		2KJ3311 - ■■■■■■ - ■■ P1
29.86	49	13 600	47 600	-	133.00	2060/69					✓	✓	✓	✓	✓		2KJ3311 - ■■■■■■ - ■■ N1
26.35	55	13 600	44 800	-	157.00	1660/63					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ M1
23.48	62	13 600	42 300	-	186.00	540/23					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ L1
21.27	68	13 600	42 300	-	206.00	1340/63					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ K1
19.13	76	13 600	42 800	-	249.00	440/23					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ J1
15.90	91	13 500	43 200	-	314.00	620/39					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ H1
14.13	103	12 900	43 200	-	386.00	212/15					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ G1
11.26	129	11 700	42 800	-	534.00	980/87					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ F1
8.97	162	10 400	41 900	-	710.00	260/29						✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ E1
8.07	180	8 350	39 300	-	396.00	1364/169					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ D1
7.18	202	8 310	38 900	-	489.00	2332/325					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ C1
5.72	253	8 210	37 800	-	697.00	2156/377					✓	✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ B1
4.55	319	7 300	36 500	-	967.00	132/29						✓	✓	✓	✓	✓	2KJ3311 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Parallel shaft geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
FD.189																	
347.35	4.2	19 000	110 900	-	36.00	590499/1700					✓	✓	✓				2KJ3412 - ■■■■■■ - ■■ T1
310.76	4.7	19 000	110 900	-	43.00	290563/935					✓	✓	✓				2KJ3412 - ■■■■■■ - ■■ S1
280.27	5.2	19 000	110 900	-	49.00	571753/2040					✓	✓	✓				2KJ3412 - ■■■■■■ - ■■ R1
247.71	5.9	19 000	110 900	-	61.00	290563/1173					✓	✓	✓				2KJ3412 - ■■■■■■ - ■■ Q1
226.42	6.4	19 000	110 900	-	71.00	1443442/6375					✓	✓	✓	✓			2KJ3412 - ■■■■■■ - ■■ P1
203.69	7.1	19 000	110 900	-	84.00	1246609/6120					✓	✓	✓	✓	✓		2KJ3412 - ■■■■■■ - ■■ N1
182.03	8	19 000	110 900	-	98.00	139256/765					✓	✓	✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ M1
164.61	8.8	19 000	110 900	-	117.00	965419/5865					✓	✓	✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ L1
145.28	10	19 000	110 900	-	136.00	111137/765					✓	✓	✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ K1
129.45	11	19 000	110 900	-	160.00	253071/1955					✓	✓	✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ J1
117.27	12	19 000	110 900	-	177.00	89713/765					✓	✓	✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ H1
105.48	14	19 000	110 900	-	214.00	206206/1955						✓	✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ G1
87.65	17	19 000	108 400	-	263.00	22351/255						✓	✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ F1
77.92	19	19 000	103 300	-	323.00	496769/6375						✓	✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ E1
62.11	23	19 000	94 100	-	437.00	459277/7395						✓	✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ D1
49.43	29	19 000	85 500	-	557.00	121849/2465							✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ C1
40.61	36	19 000	78 500	-	478.00	35329/870							✓	✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ B1
32.32	45	19 000	70 900	-	621.00	9373/290								✓	✓	✓	2KJ3412 - ■■■■■■ - ■■ A1
FZ.189																	
37.93	38	19 000	76 200	-	143.00	11948/315						✓	✓	✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ L1
34.03	43	19 000	72 600	-	169.00	3914/115						✓	✓	✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ K1
30.41	48	19 000	69 000	-	202.00	3193/105						✓	✓	✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ J1
27.17	53	19 000	65 500	-	241.00	9373/345						✓	✓	✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ H1
24.85	58	19 000	62 800	-	269.00	7828/315						✓	✓	✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ G1
22.09	66	19 000	59 400	-	319.00	7622/345							✓	✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ F1
18.75	77	19 000	54 800	-	406.00	7313/390							✓	✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ E1
16.21	89	19 000	50 900	-	489.00	6077/375							✓	✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ D1
13.26	109	17 600	48 700	-	677.00	5768/435							✓	✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ C1
10.89	133	16 300	50 000	-	906.00	4738/435								✓	✓	✓	2KJ3312 - ■■■■■■ - ■■ B1
8.47	171	14 700	50 400	-	1 333.00	3811/450										✓	2KJ3312 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

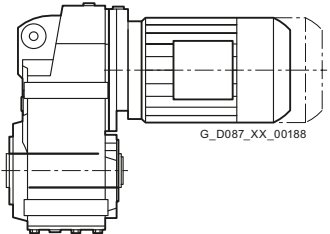
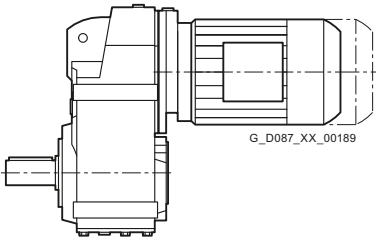
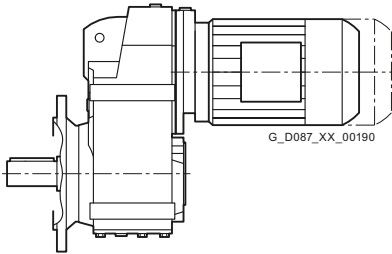
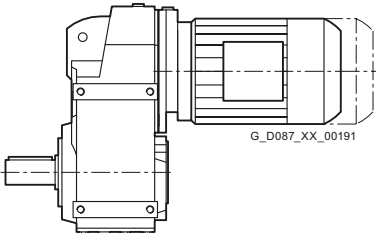
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

Dimensional drawing overview

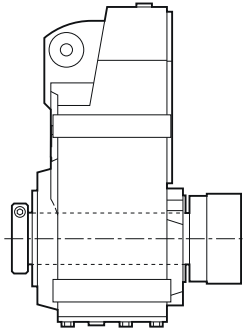
Information about dimensional drawings can be found in chapter [Introduction on page 1/20](#).

Representation	Gearbox type	Dimensional drawing on page
Shaft-mounted design		
	FDAD./FZAD.29	4/68
	FDAD./FZAD.39	4/72
	FDAD./FZAD.49	4/76
	FDAD./FZAD.69	4/80
	FDAD./FZAD.79	4/84
	FDAD./FZAD.89	4/88
	FDAD./FZAD.109	4/92
	FDAD./FZAD.129	4/96
	FDAD./FZAD.149	4/100
	FDAD./FZAD.169	4/104
	FDAD./FZAD.189	4/108
	Housing flange design	
	FD.Z./FZ.Z.29	4/69
	FD.Z./FZ.Z.39	4/73
	FD.Z./FZ.Z.49	4/77
	FD.Z./FZ.Z.69	4/81
	FD.Z./FZ.Z.79	4/85
	FD.Z./FZ.Z.89	4/89
	FD.Z./FZ.Z.109	4/93
	FD.Z./FZ.Z.129	4/97
	FD.Z./FZ.Z.149	4/101
	FD.Z./FZ.Z.169	4/105
FD.Z./FZ.Z.189	4/109	
Flange-mounted design		
	FD.F./FZ.F.29	4/70
	FD.F./FZ.F.39	4/74
	FD.F./FZ.F.49	4/78
	FD.F./FZ.F.69	4/82
	FD.F./FZ.F.79	4/86
	FD.F./FZ.F.89	4/90
	FD.F./FZ.F.109	4/94
	FD.F./FZ.F.129	4/98
	FD.F./FZ.F.149	4/102
	FD.F./FZ.F.169	4/106
FD.F./FZ.F.189	4/110	
Foot-mounted design		
	FD../FZ..29	4/71
	FD../FZ..39	4/75
	FD../FZ..49	4/79
	FD../FZ..69	4/83
	FD../FZ..79	4/87
	FD../FZ..89	4/91
	FD../FZ..109	4/95
	FD../FZ..129	4/99
	FD../FZ..149	4/103
	FD../FZ..169	4/107
	FD../FZ..189	4/111

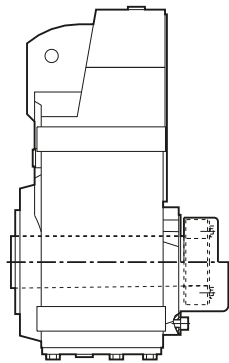
Dimensional drawing overview (continued)

Representation	Gearbox type	Dimensional drawing on page
Additional versions and options		

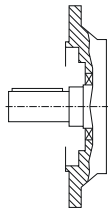
SIMOLOC assembly system 4/112



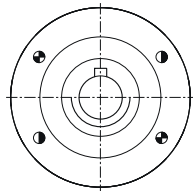
Protection cover for hollow shaft 4/114



Inner contour of the flange design 4/115



Pin holes 4/117



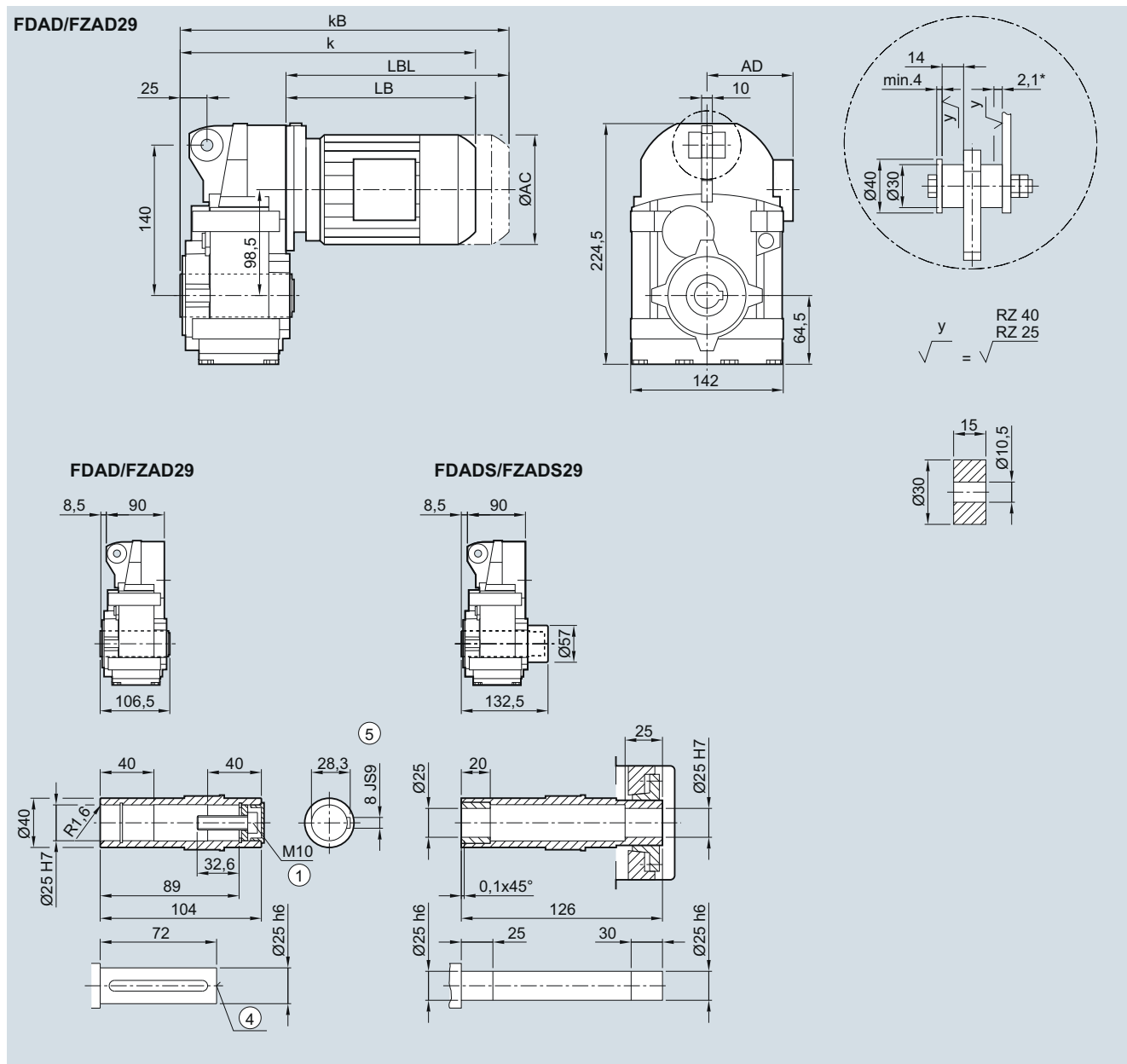
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FDAD./FZAD.29 gearbox in a shaft-mounted design

FAD030, FADS030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L ²⁾	90ZL ²⁾	100L ²⁾	100ZL ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	292.5	324.5	388.5	423.5	450.0	490.0	506.5	541.5
kB	337.0	379.5	448.5	483.5	520.0	560.0	585.0	620.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4017

② DIN 332

③ Feather key/keyway DIN 6885

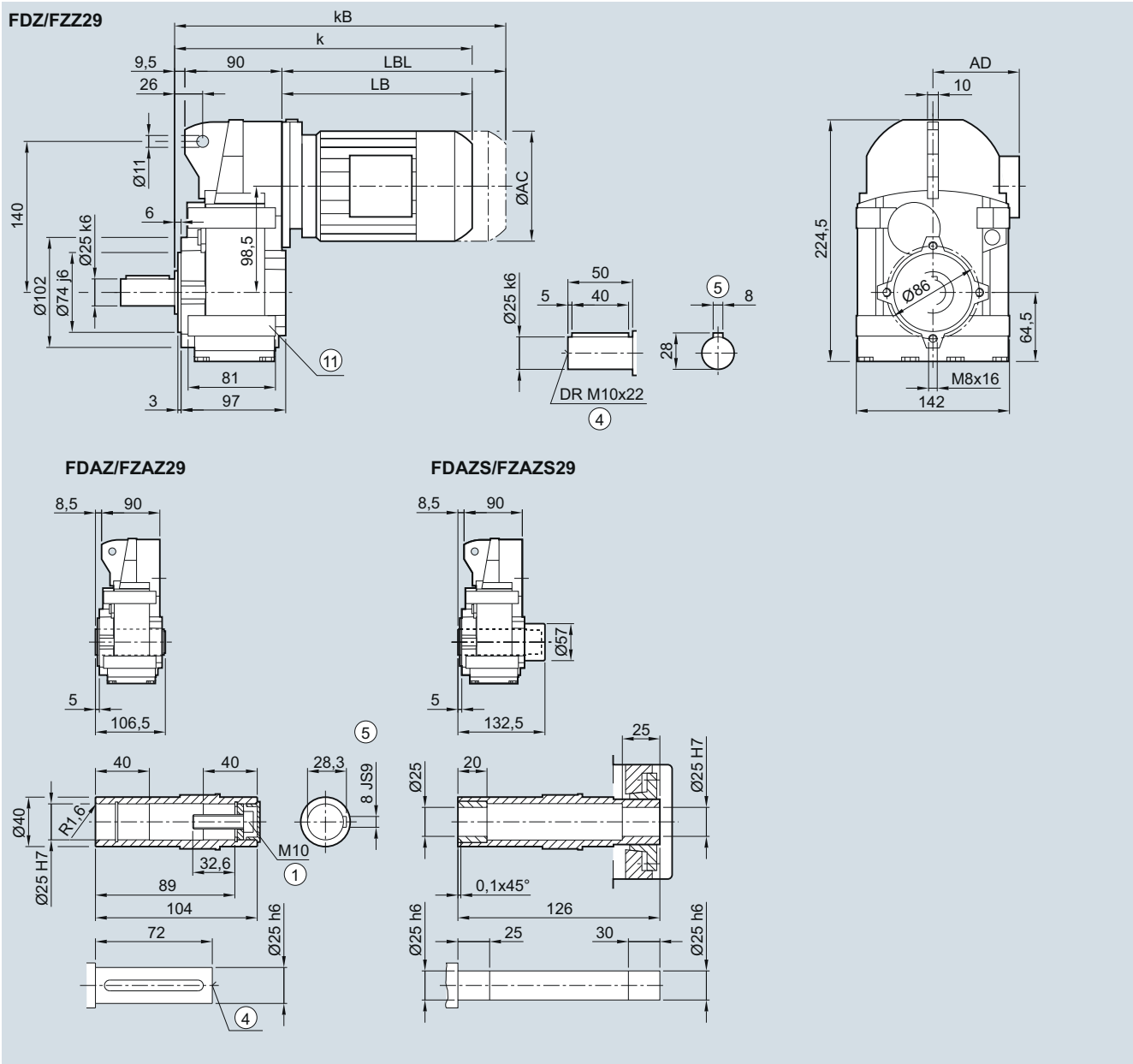
* Spring compression at max. torque

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

²⁾ FDADS/FZADS not possible

FD.Z/FZ.Z.29 gearbox in a housing flange design

FZ030, FAZ030, FAZS030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L ²⁾	90ZL ²⁾	100L ²⁾	100ZL ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	293.5	325.5	389.5	424.5	451.0	491.0	507.5	542.5
kB	338.0	380.5	449.5	484.5	521.0	561.0	586.0	621.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4017

② DIN 332

⑤ Feather key/keyway DIN 6885

⑩ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

²⁾ FDADS/FZADS not possible

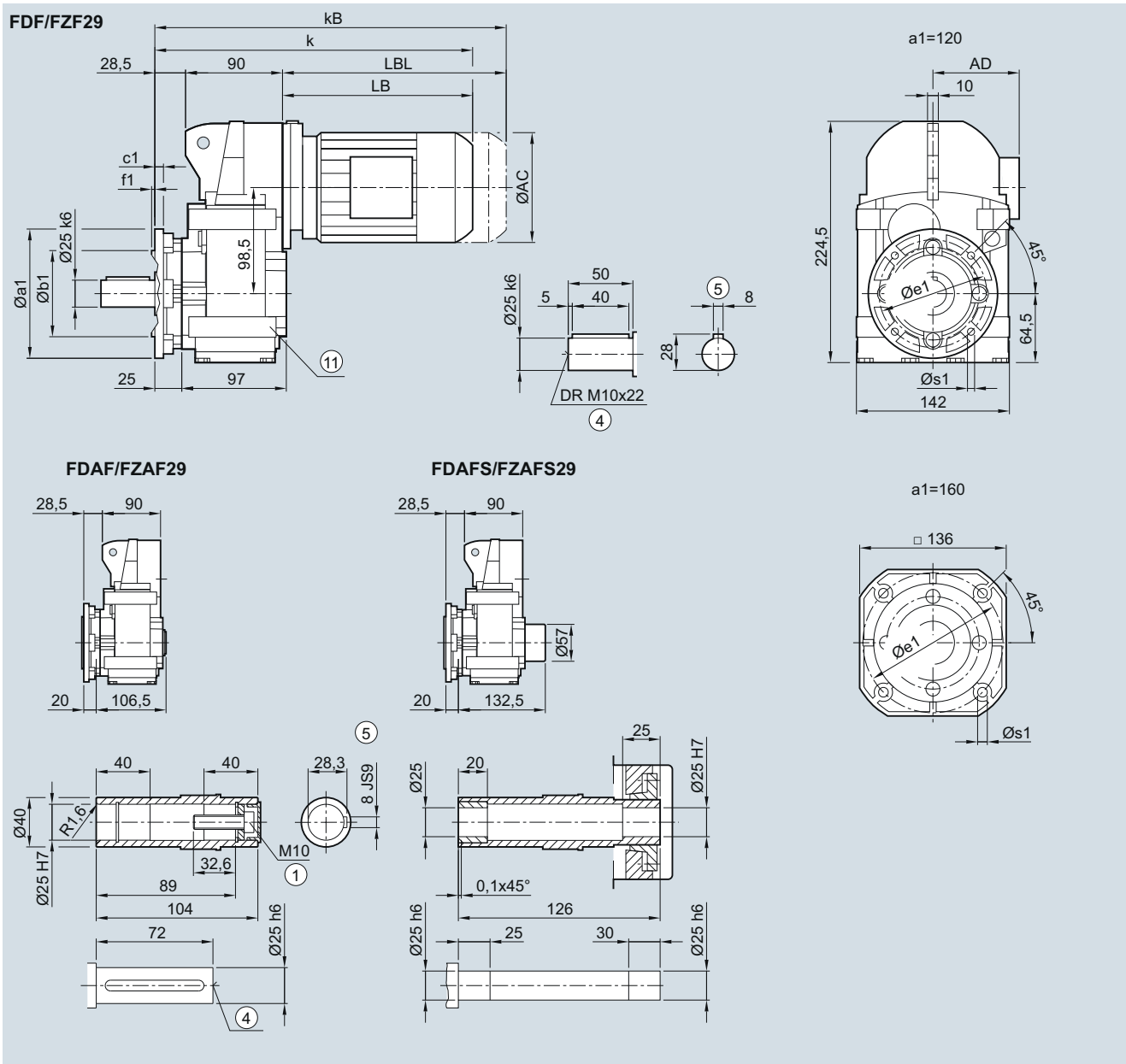
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F./FZ.F.29 gearbox in a flange-mounted design

FF030, FAF030, FAFS030



Flange	a1	b1	c1	f1	e1	s1
	120	80	8	3.0	100	6.6
	160	110	9	3.5	130	9.0

Motor	LA 63M	71M	LE 80M	80ZM	90S/L ²⁾	90ZL ²⁾	100L ²⁾	100ZL ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	312.5	344.5	408.5	443.5	470.0	510.0	526.5	561.5
kB	357.0	399.5	468.5	503.5	540.0	580.0	605.0	640.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4017

④ DIN 332

⑤ Feather key/keyway DIN 6885

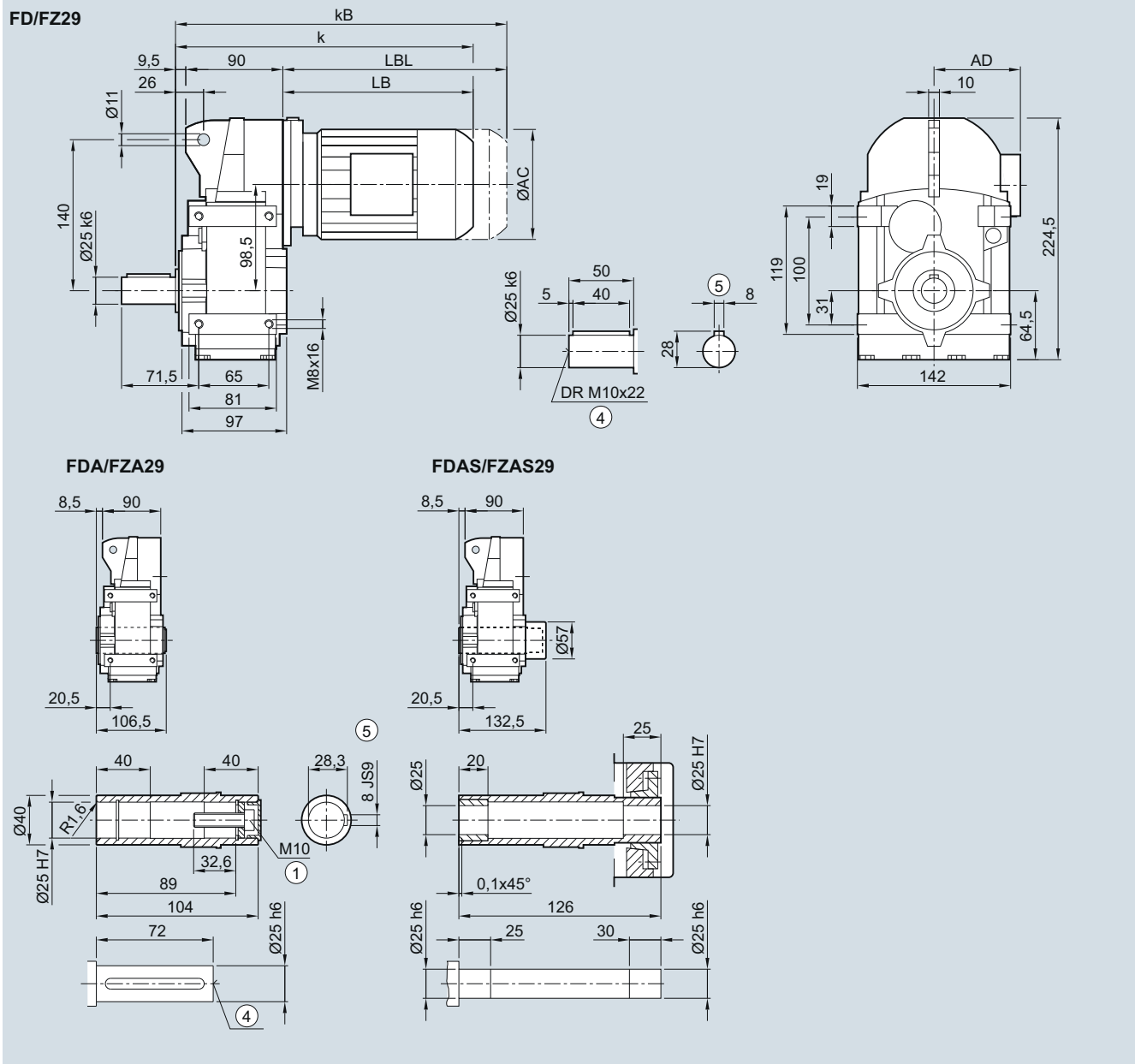
⑩ For inner contour, see page 4/115

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42. ²⁾ FDADS/FZADS not possible

⑪ Use bores only for foot-mounted design

FD../FZ..29 gearbox in a foot-mounted design

F030, FA030, FAS030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L ²⁾	90ZL ²⁾	100L ²⁾	100ZL ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	293.5	325.5	389.5	424.5	451.0	491.0	507.5	542.5
kB	338.0	380.5	449.5	484.5	521.0	561.0	586.0	621.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4017

④ DIN 332

⑤ Feather key/keyway DIN 6885

⑩ Use bores only for housing flange design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDADS/FZADS not possible

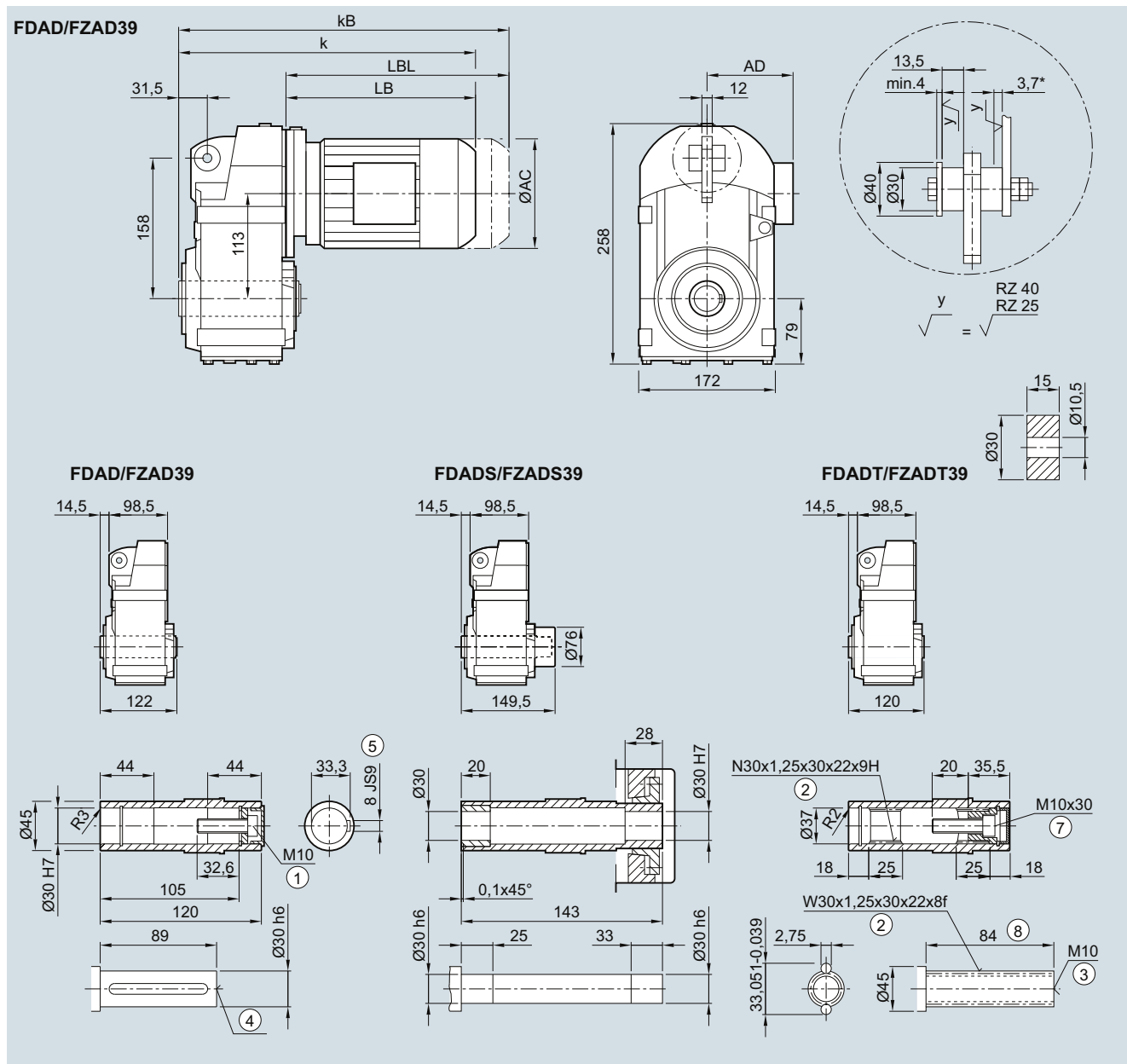
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FDAD/FZAD.39 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030

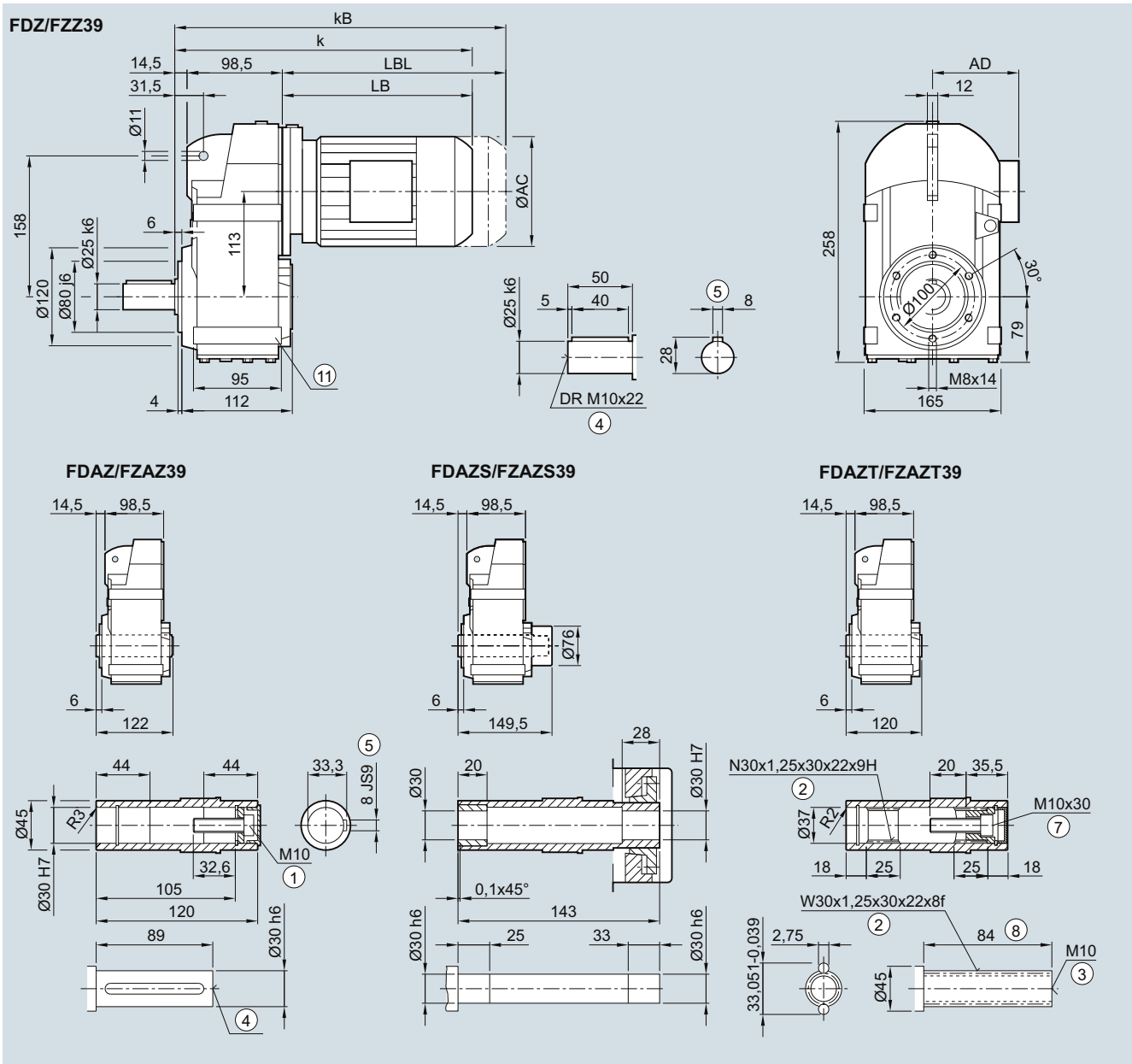


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L ²⁾	100ZL ²⁾	112M ²⁾	112ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	307.0	339.0	403.0	438.0	464.5	504.5	521.0	556.0	531.0	556.0
kB	351.5	394.0	463.0	498.0	534.5	574.5	599.5	634.5	604.0	629.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42. ²⁾ FDADS/FZADS not possible

* Spring compression at max. torque

FD.Z/FZ.Z.39 gearbox in a housing flange design
FZ030, FAZ030, FAZS030, FAZT030


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L ²⁾	100ZL ²⁾	112M ²⁾	112ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	307.0	339.0	403.0	438.0	464.5	504.5	521.0	556.0	531.0	556.0
kB	351.5	394.0	463.0	498.0	534.5	574.5	599.5	634.5	604.0	629.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDADS/FZADS not possible

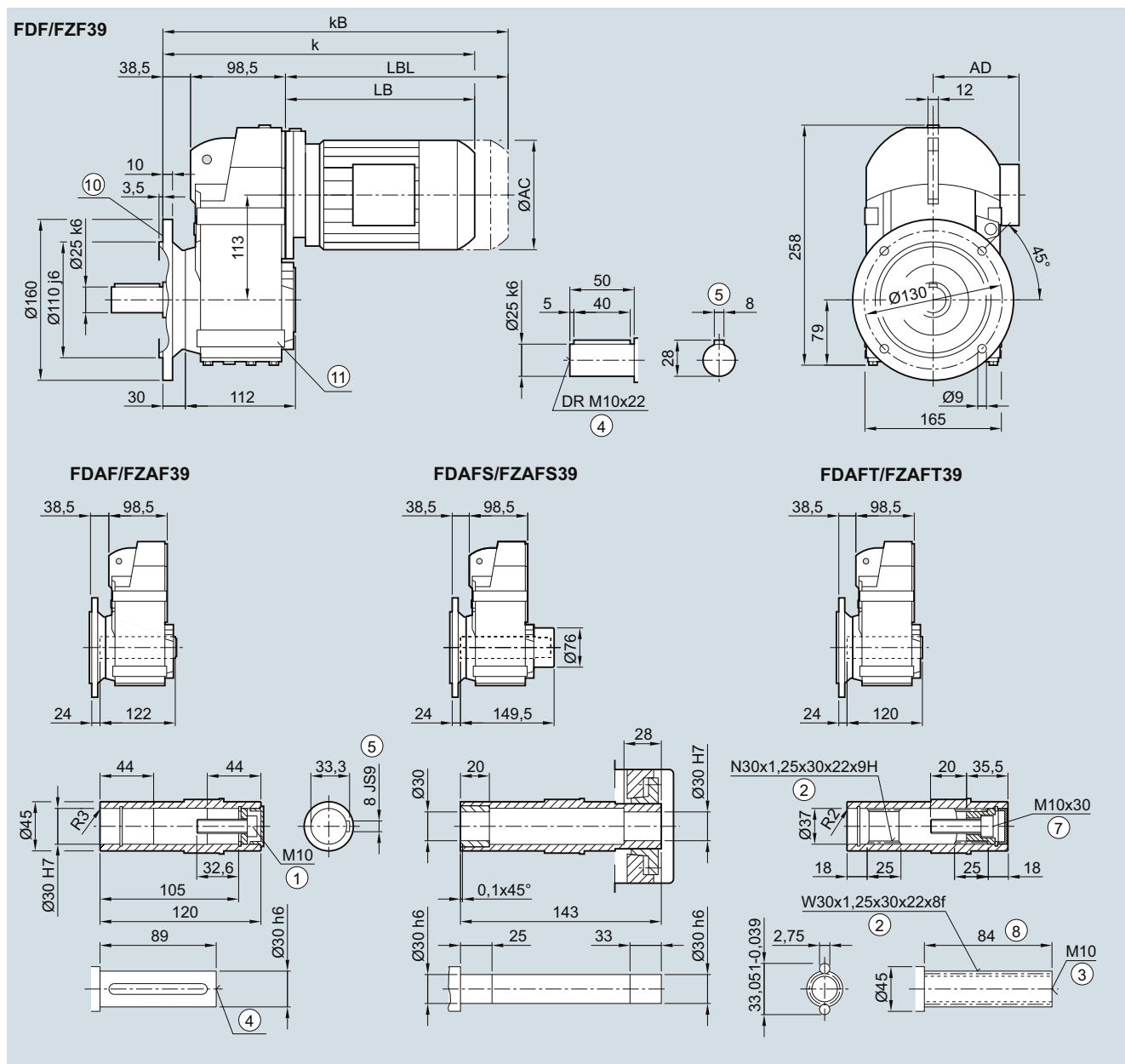
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F./FZ.F.39 in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030

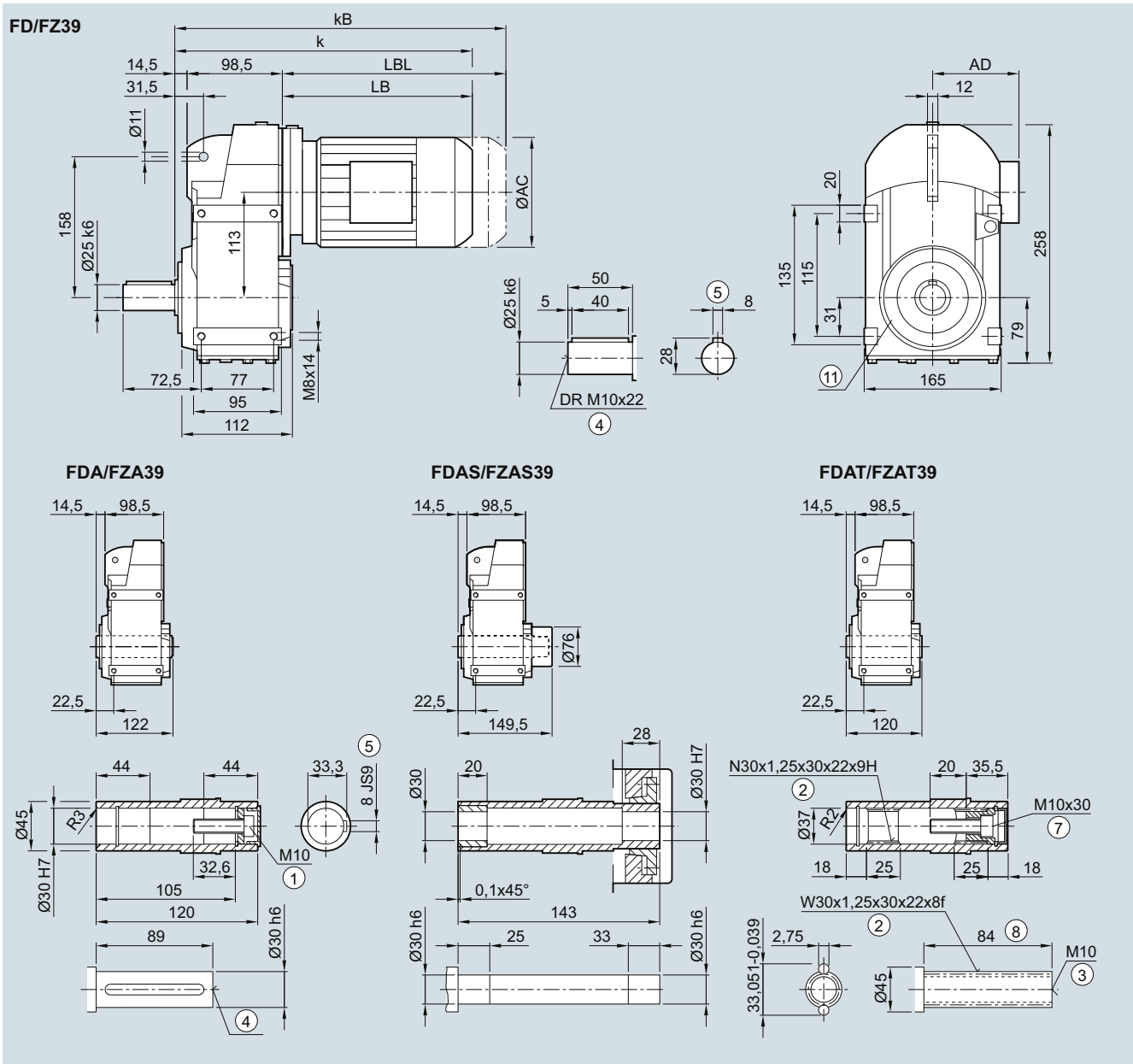


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L ²⁾	100ZL ²⁾	112M ²⁾	112ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	331.0	363.0	427.0	462.0	488.5	528.5	545.0	580.0	555.0	580.0
kB	375.5	418.0	487.0	522.0	558.5	598.5	623.5	658.5	628.0	653.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder + 1 mm

Ⓜ For inner contour, see page 4/115 Ⓜ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42. 2) FADAFS/FZAFS not possible

FD../FZ..39 gearbox in a foot-mounted design
F030, FA030, FAS030, FAT030


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L ²⁾	100ZL ²⁾	112M ²⁾	112ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	307.0	339.0	403.0	438.0	464.5	504.5	521.0	556.0	531.0	556.0
kB	351.5	394.0	463.0	498.0	534.5	574.5	599.5	634.5	604.0	629.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for housing flange design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAS/FZAS not possible

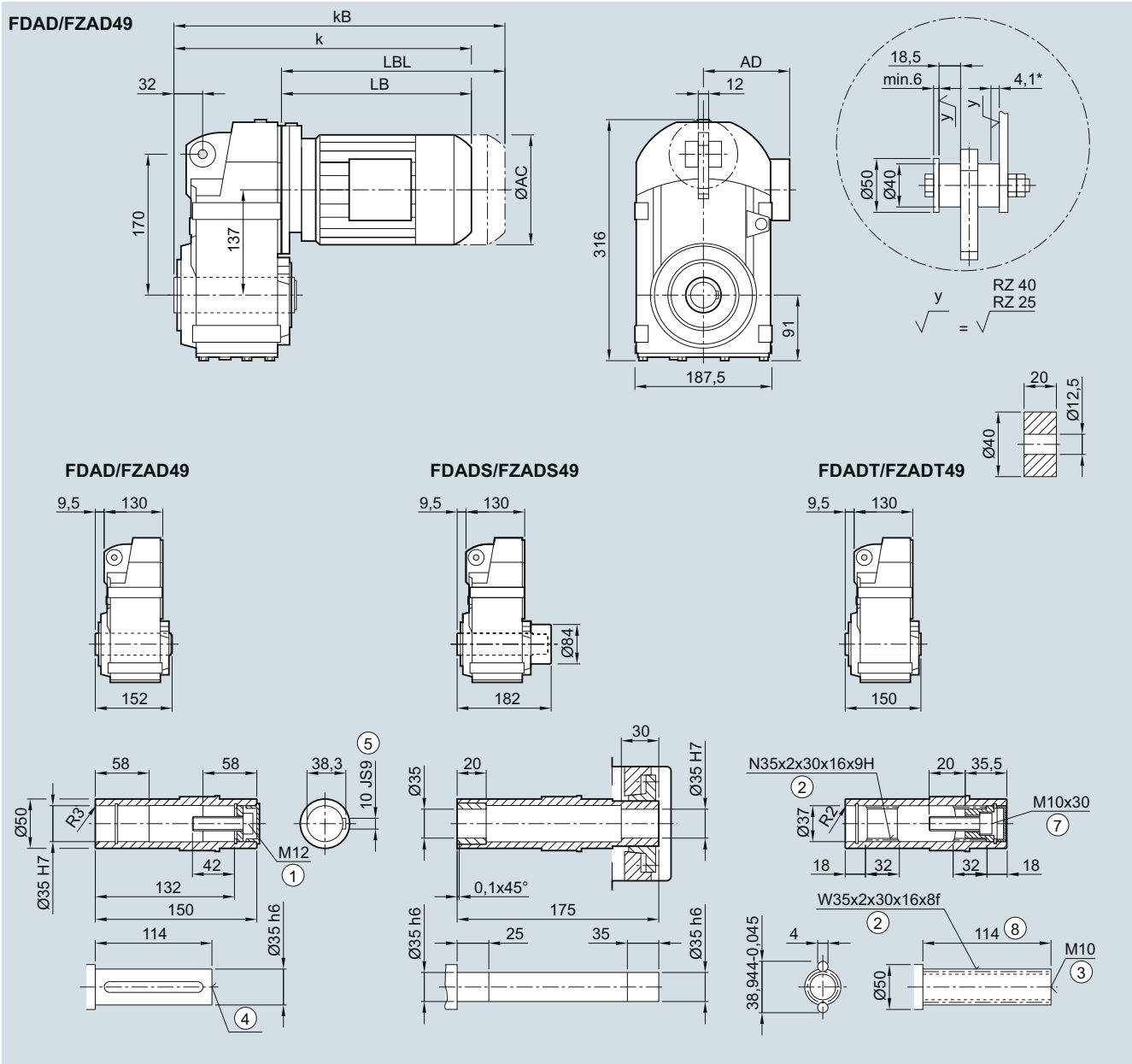
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

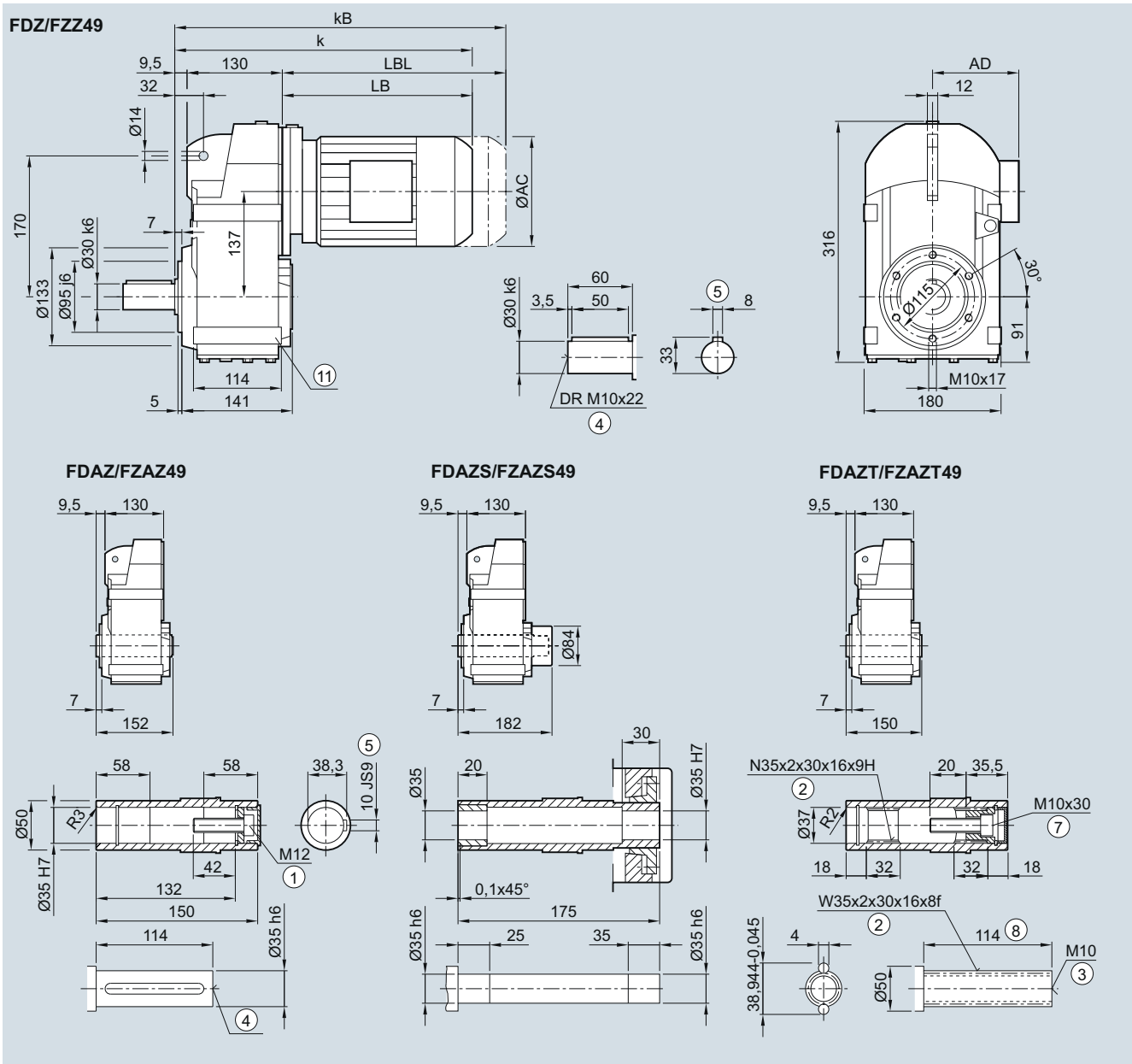
FDAD/FZAD.49 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M ²⁾	112ZM ²⁾	132S/M ²⁾	132ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	324.0	356.0	420.0	455.0	481.5	521.5	538.0	573.0	548.0	582.5	601.0	651.0
kB	368.5	411.0	480.0	515.0	551.5	591.5	616.5	651.5	621.0	655.5	705.5	755.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑥ ISO 4762 ⑦ Without locating shoulder +1 mm
 1) AD depends on the motor options, for other dimensions, see page 8/42. 2) FDADS/FZADS not possible * Spring compression at max. torque

FD.Z/FZ.Z.49 gearbox in a housing flange design
FZ030, FAZ030, FAZS030, FAZT030


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M ²⁾	112ZM ²⁾	132S/M ²⁾	132ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	324.0	356.0	420.0	455.0	481.5	521.5	538.0	573.0	548.0	582.5	601.0	651.0
kB	368.5	411.0	480.0	515.0	551.5	591.5	616.5	651.5	621.0	655.5	705.5	755.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAZS/FZAZS not possible

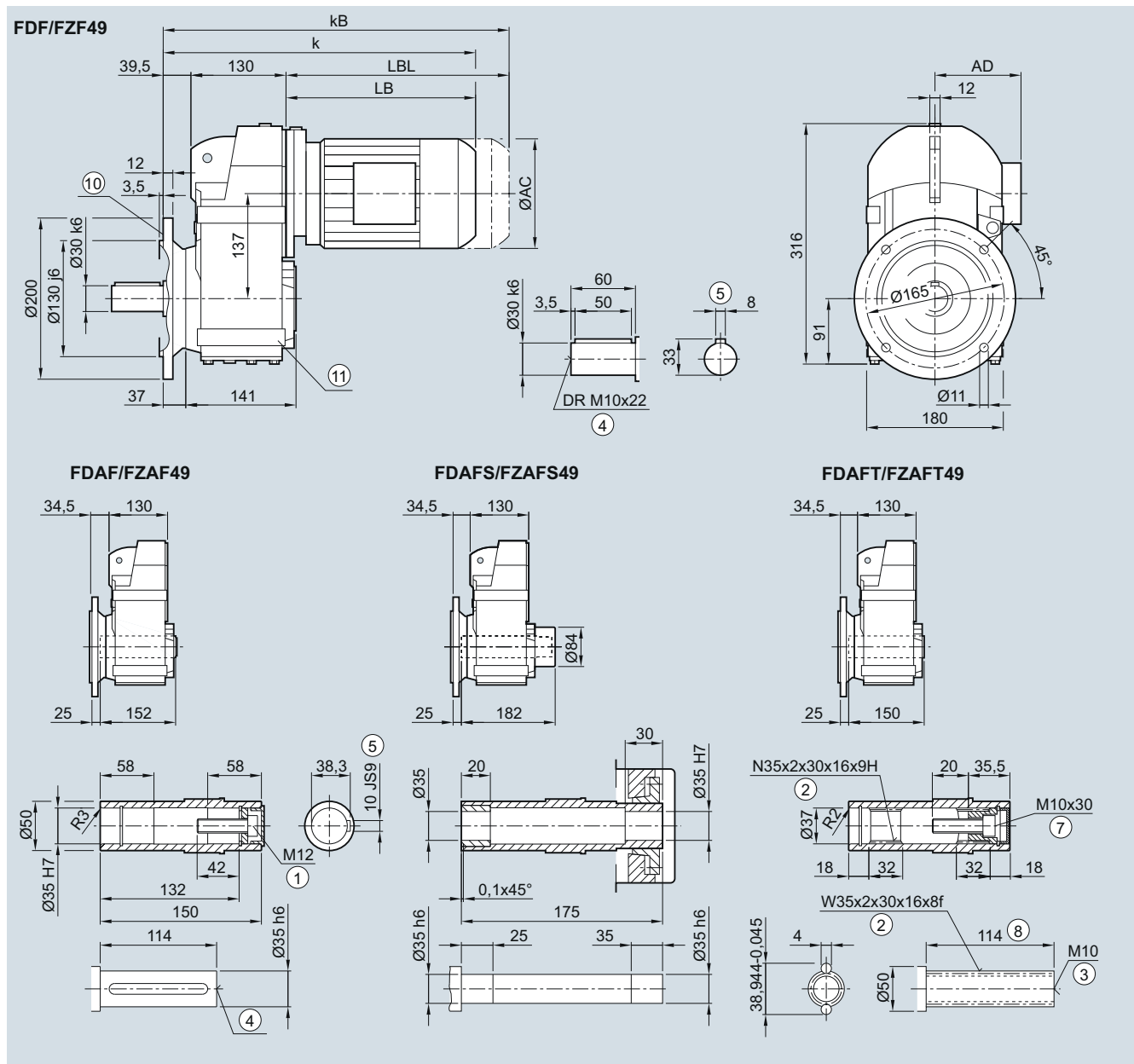
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F/FZ.F49 gearbox in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M ²⁾	112ZM ²⁾	132S/M ²⁾	132ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	354.0	386.0	450.0	485.0	511.5	551.5	568.0	603.0	578.0	612.5	631.0	681.0
kB	398.5	441.0	510.0	545.0	581.5	621.5	646.5	681.5	651.0	685.5	735.5	785.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

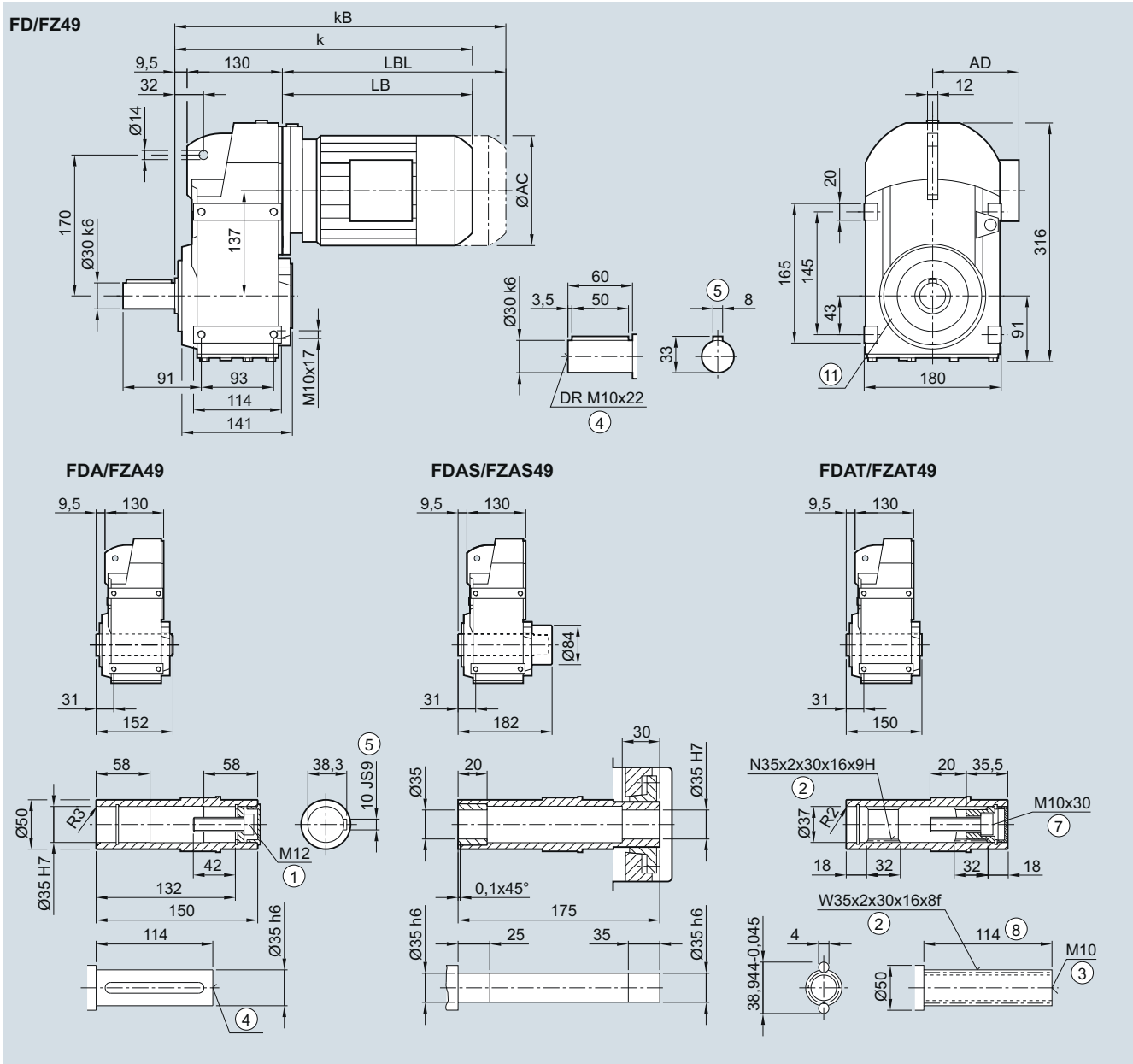
① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ For inner contour, see page 4/115 ⑪ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42. 2) FDAFS/FZAFS not possible

FD../FZ..49 gearbox in a foot-mounted design

F030, FA030, FAS030, FAT030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M ²⁾	112ZM ²⁾	132S/M ²⁾	132ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	324.0	356.0	420.0	455.0	481.5	521.5	538.0	573.0	548.0	582.5	601.0	651.0
kB	368.5	411.0	480.0	515.0	551.5	591.5	616.5	651.5	621.0	655.5	705.5	755.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for housing flange design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAS/FZAS not possible

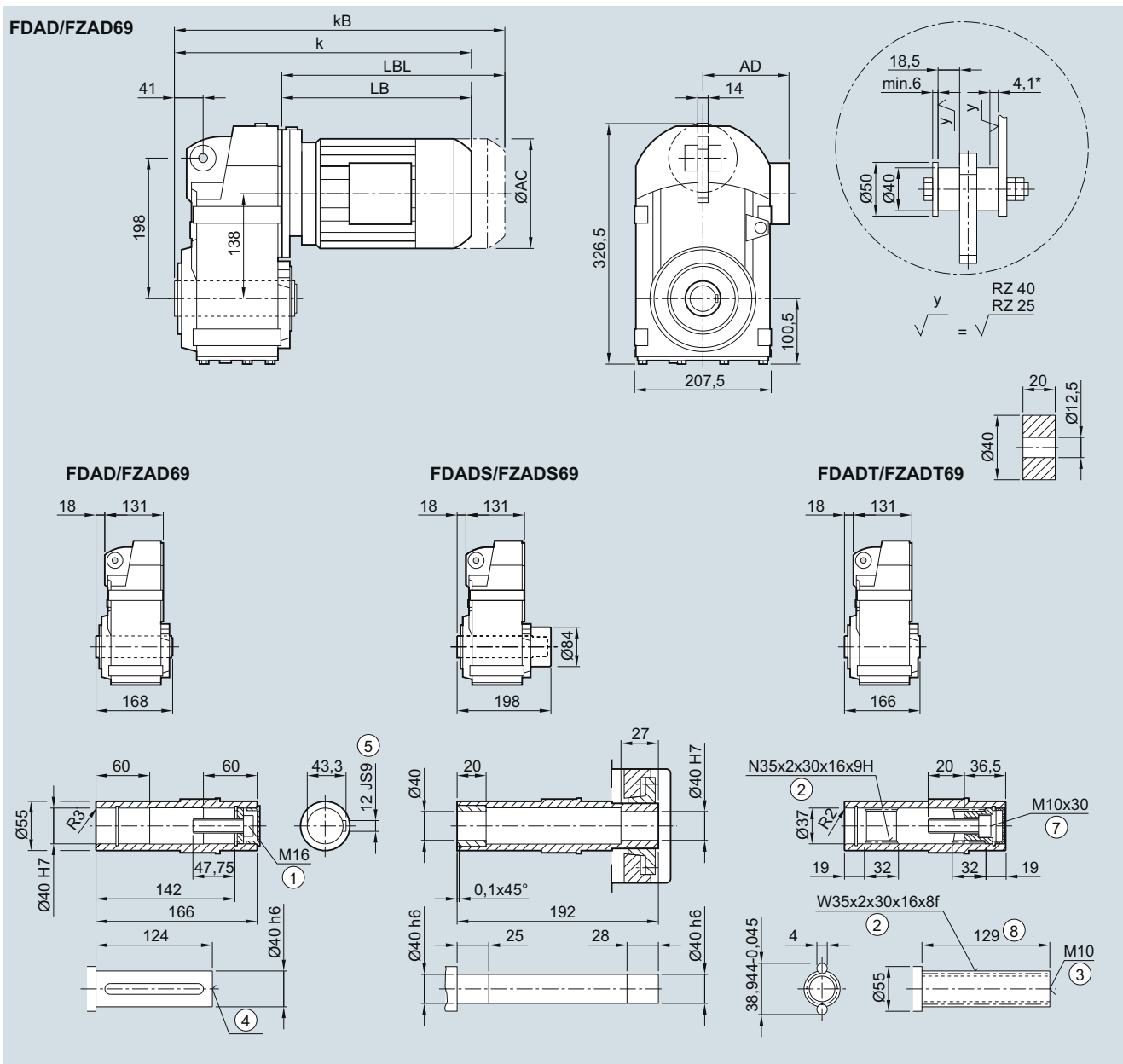
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FDAD./FZAD.69 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030

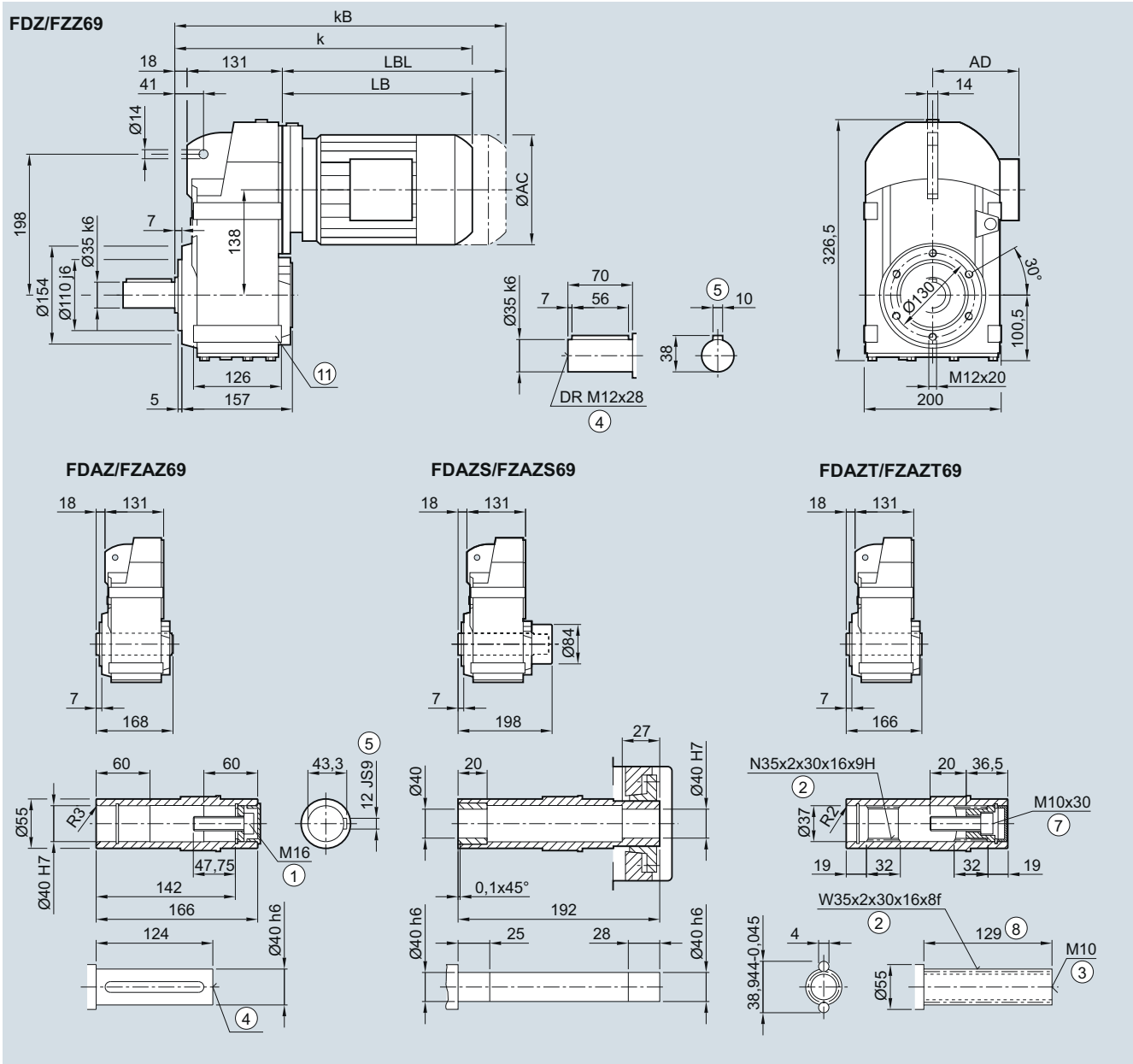


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M ²⁾	112ZM ²⁾	132S/M ²⁾	132ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	333.5	365.5	429.5	464.5	491.0	531.0	547.5	582.5	557.5	592.0	610.5	660.5
kB	378.0	420.5	489.5	524.5	561.0	601.0	626.0	661.0	630.5	665.0	715.0	765.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑥ ISO 4762 ⑦ Without locating shoulder +1 mm
¹⁾ AD depends on the motor options, for other dimensions, see page 8/42. ²⁾ FDADS/FZADS not possible * Spring compression at max. torque

FD.Z/FZ.Z.69 gearbox in a housing flange design

FZ030, FAZ030, FAZS030, FAZT030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M ²⁾	112ZM ²⁾	132S/M ²⁾	132ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	333.5	365.5	429.5	464.5	491.0	531.0	547.5	582.5	557.5	592.0	610.5	660.5
kB	378.0	420.5	489.5	524.5	561.0	601.0	626.0	661.0	630.5	665.0	715.0	765.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAZS/FZAZS not possible

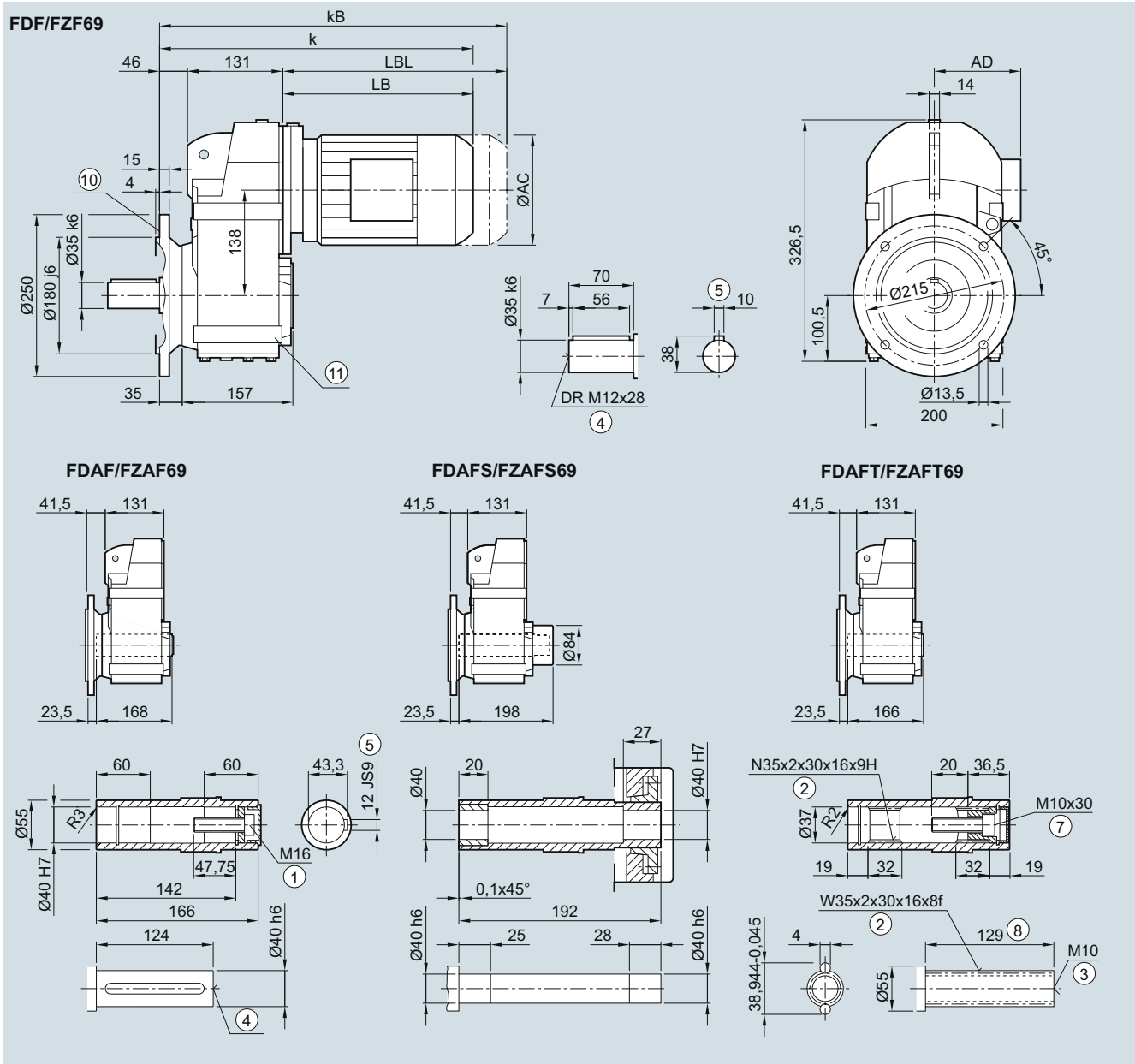
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F./FZ.F.69 gearbox in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030

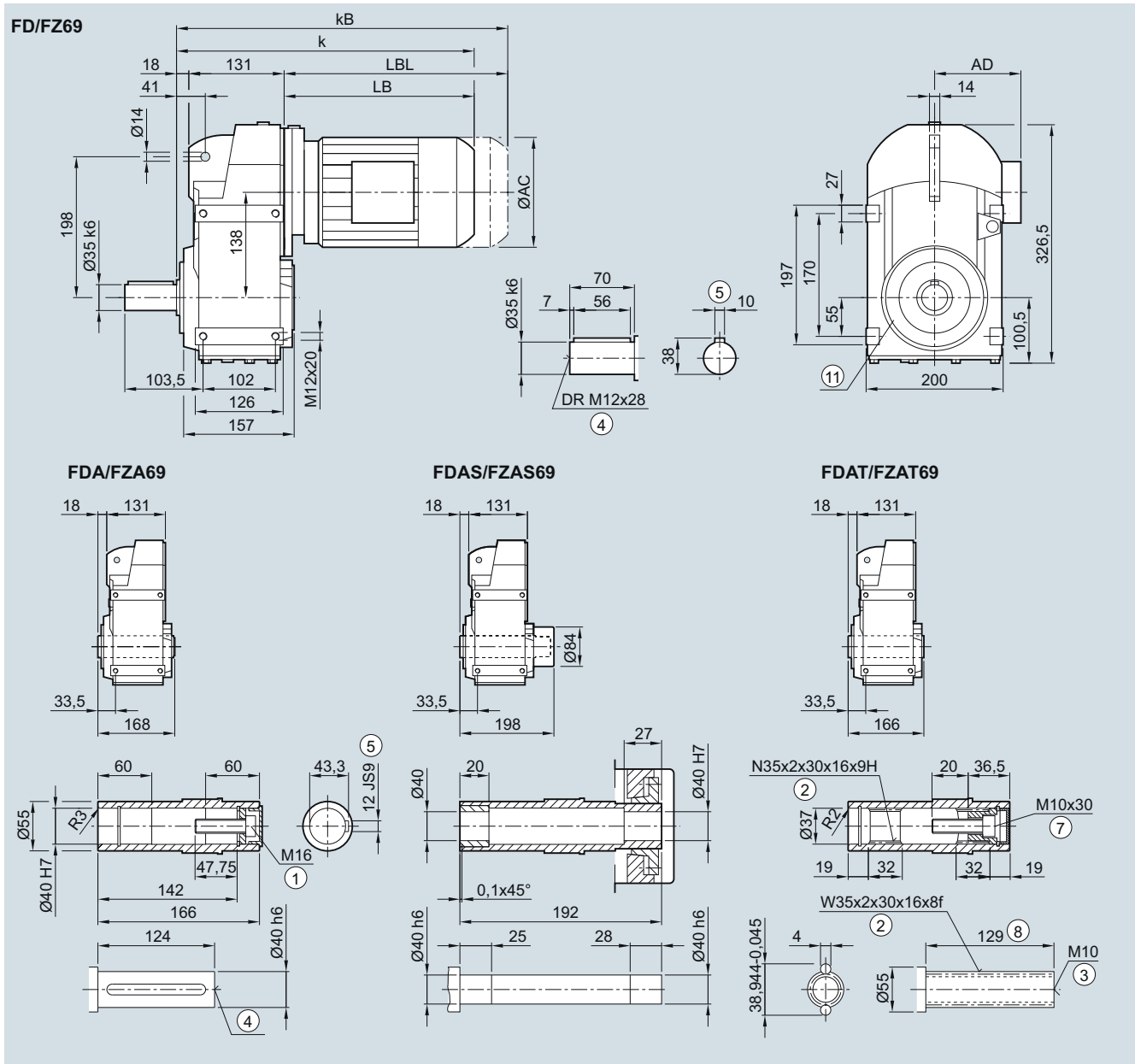


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M ²⁾	112ZM ²⁾	132S/M ²⁾	132ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	361.5	393.5	457.5	492.5	519.0	559.0	575.5	610.5	585.5	620.0	638.5	688.5
kB	406.0	448.5	517.5	552.5	589.0	629.0	654.0	689.0	658.5	693.0	743.0	793.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

Ⓢ For inner contour, see page 4/115 Ⓣ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42. ²⁾ FDAFS/FZAFS not possible

FD../FZ..69 gearbox in a foot-mounted design
F030, FA030, FAS030, FAT030


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M ²⁾	112ZM ²⁾	132S/M ²⁾	132ZM ²⁾
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	333.5	365.5	429.5	464.5	491.0	531.0	547.5	582.5	557.5	592.0	610.5	660.5
kB	378.0	420.5	489.5	524.5	561.0	601.0	626.0	661.0	630.5	665.0	715.0	765.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for housing flange design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAS/FZAS not possible

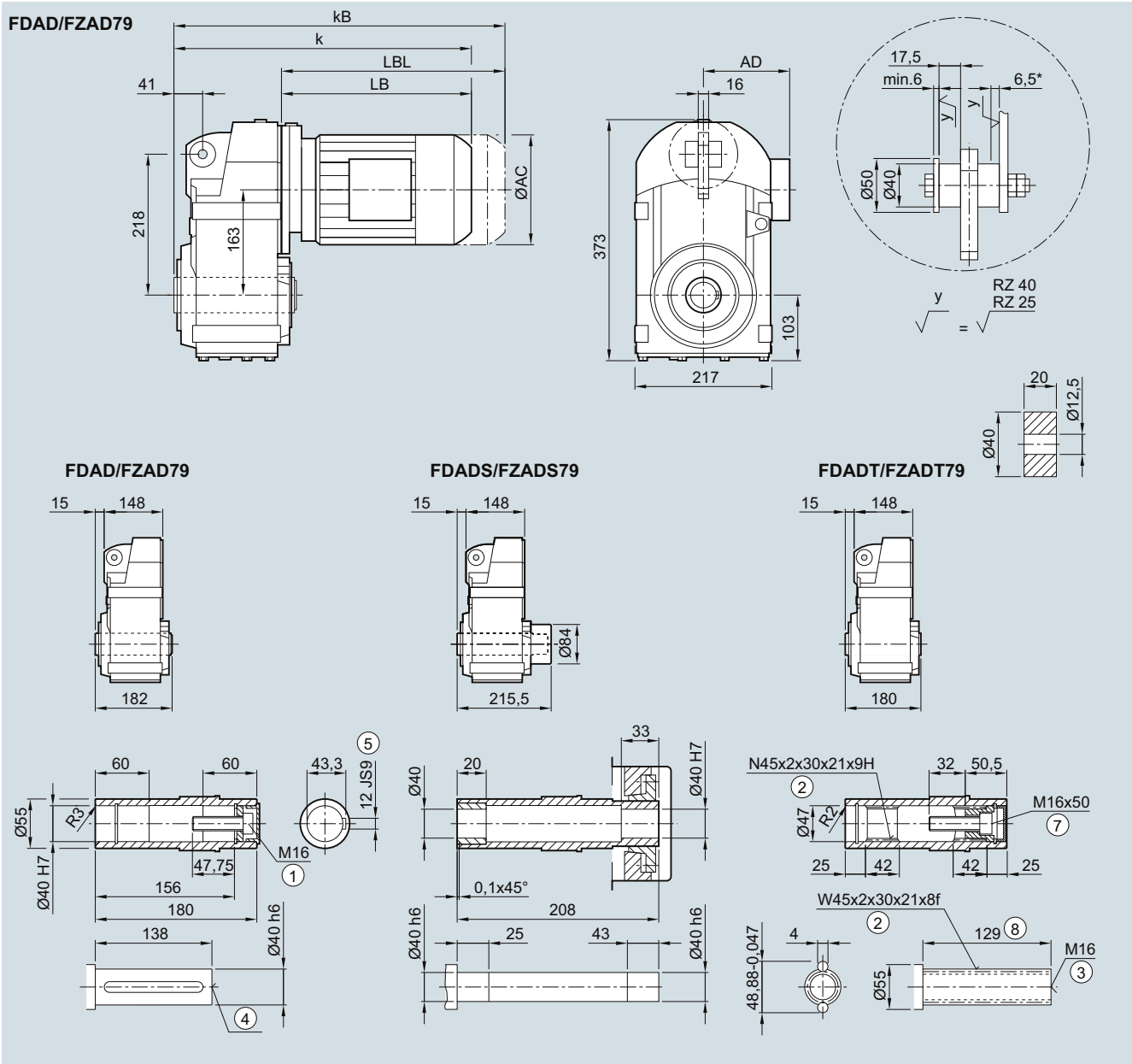
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

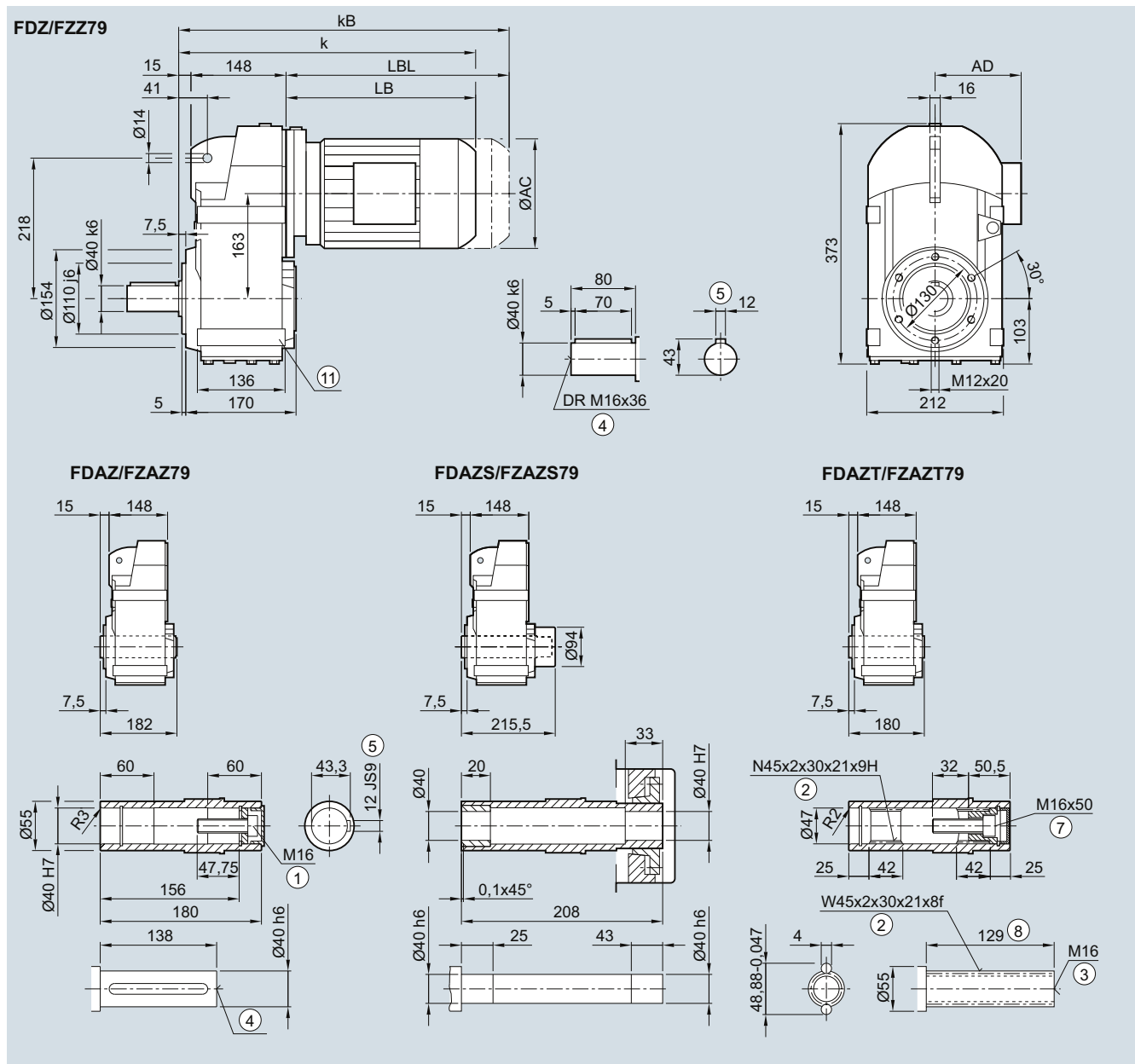
FDAD/FZAD.79 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030



Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L ²⁾	160ZL ²⁾
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	377.5	437.5	472.5	499.0	539.0	555.5	590.5	565.5	590.5	618.5	668.5	700.5	760.5
kB	432.5	497.5	532.5	569.0	609.0	634.0	669.0	638.5	663.5	723.0	773.0	816.5	876.5
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
¹⁾ AD depends on the motor options, for other dimensions, see page 8/42. ²⁾ FDAS/FZAS not possible * Spring compression at max. torque

FD.Z/FZ.Z.79 gearbox in a housing flange design
FZ030, FAZ030, FAZS030, FAZT030


Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L ²⁾	160ZL ²⁾
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	377.5	437.5	472.5	499.0	539.0	555.5	590.5	565.5	590.5	618.5	668.5	700.5	760.5
kB	432.5	497.5	532.5	569.0	609.0	634.0	669.0	638.5	663.5	723.0	773.0	816.5	876.5
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAZS/FZAZS not possible

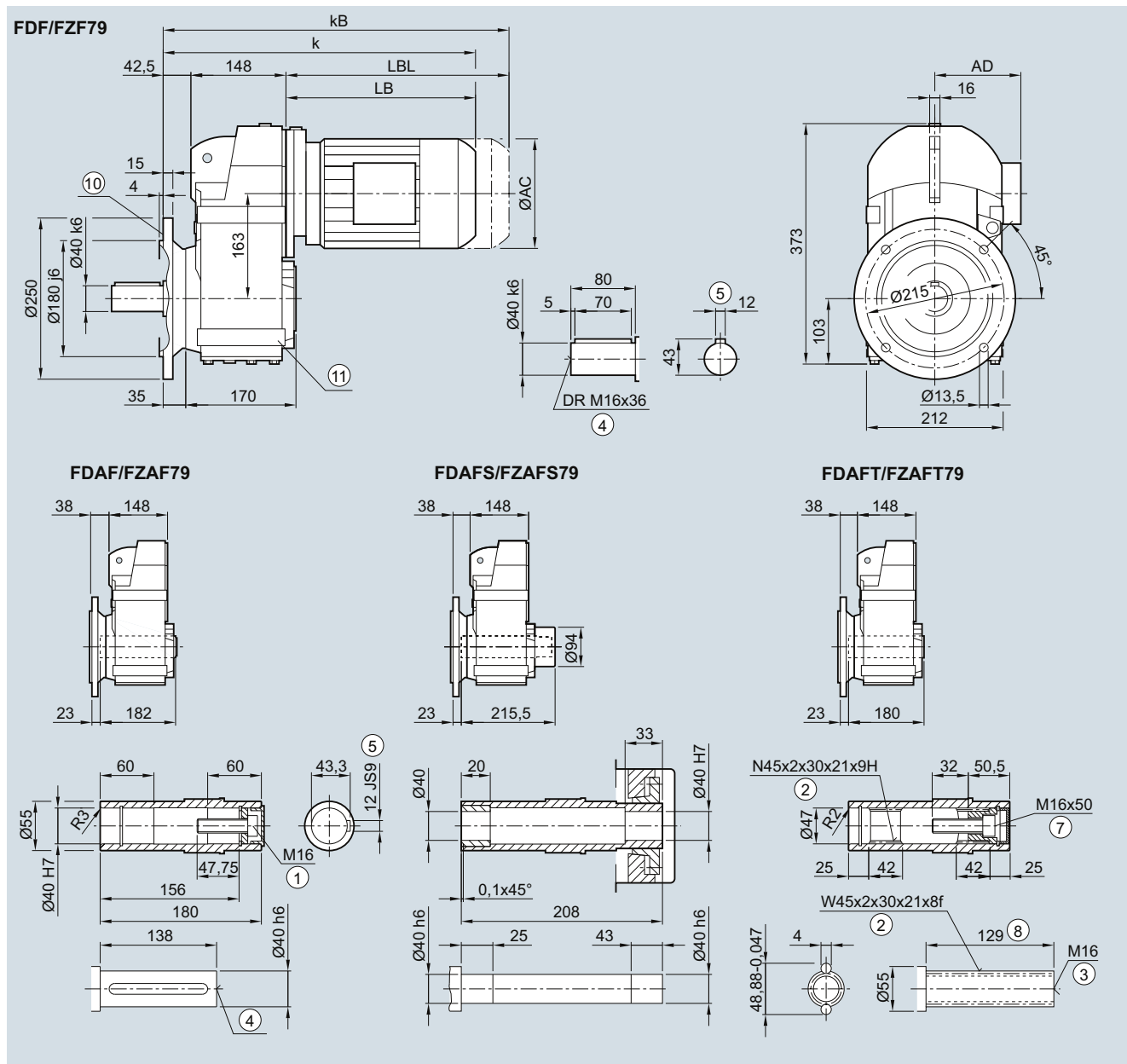
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F/FZ.F79 gearbox in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030

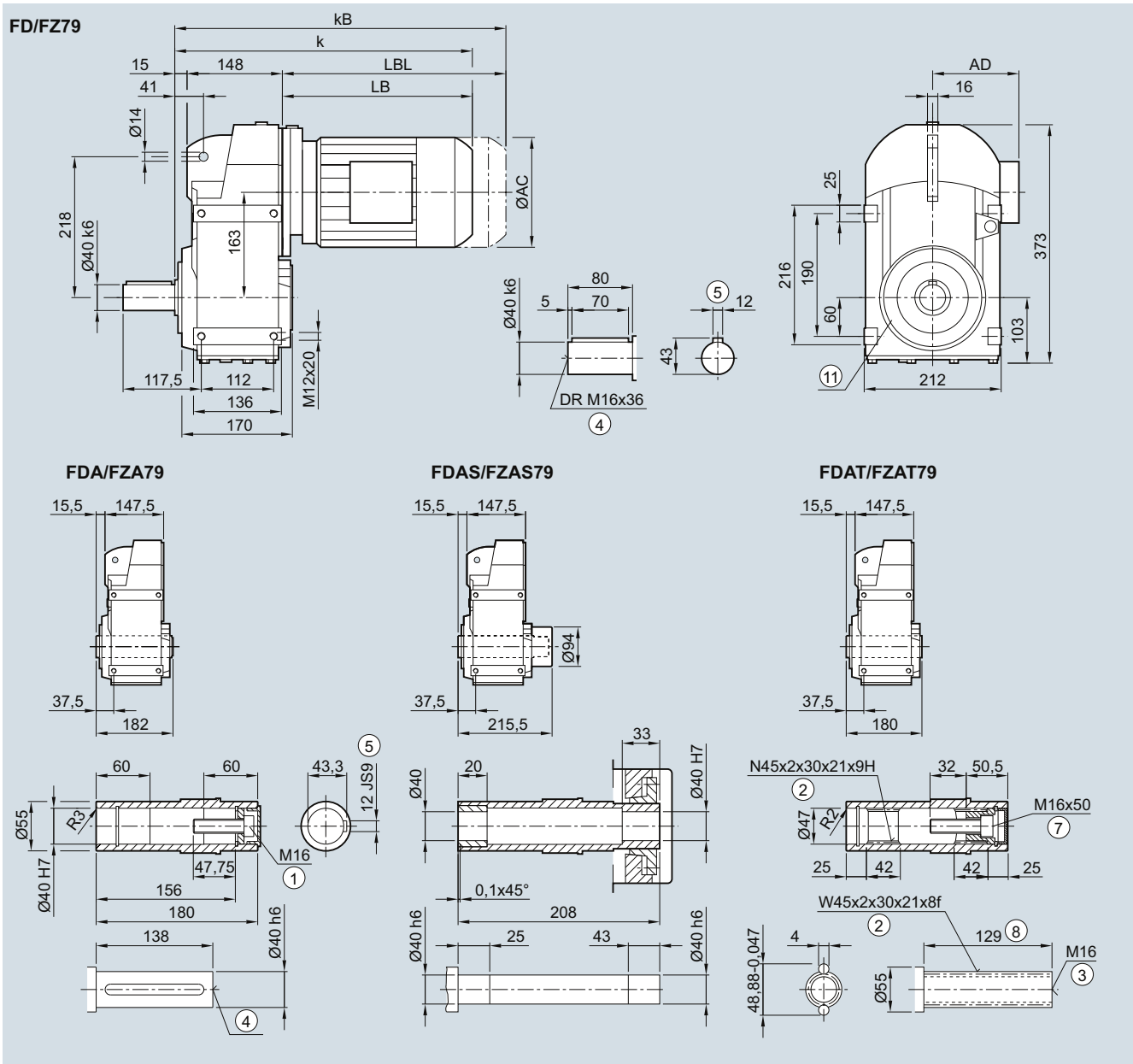


Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L ²⁾	160ZL ²⁾
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	405.5	465.5	500.5	527.0	567.0	583.5	618.5	593.5	618.5	646.5	696.5	728.5	788.5
kB	460.5	525.5	560.5	597.0	637.0	662.0	697.0	666.5	691.5	751.0	801.0	844.5	904.5
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ For inner contour, see page 4/115 ⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42. ²⁾ FDAFS/FZAFS not possible

FD../FZ..79 gearbox in a foot-mounted design
F030, FA030, FAS030, FAT030


Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L ²⁾	160ZL ²⁾
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	377.5	437.5	472.5	499.0	539.0	555.5	590.5	565.5	590.5	618.5	668.5	700.5	760.5
k _B	432.5	497.5	532.5	569.0	609.0	634.0	669.0	638.5	663.5	723.0	773.0	816.5	876.5
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑩ Use bores only for housing flange design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAS/FZAS not possible

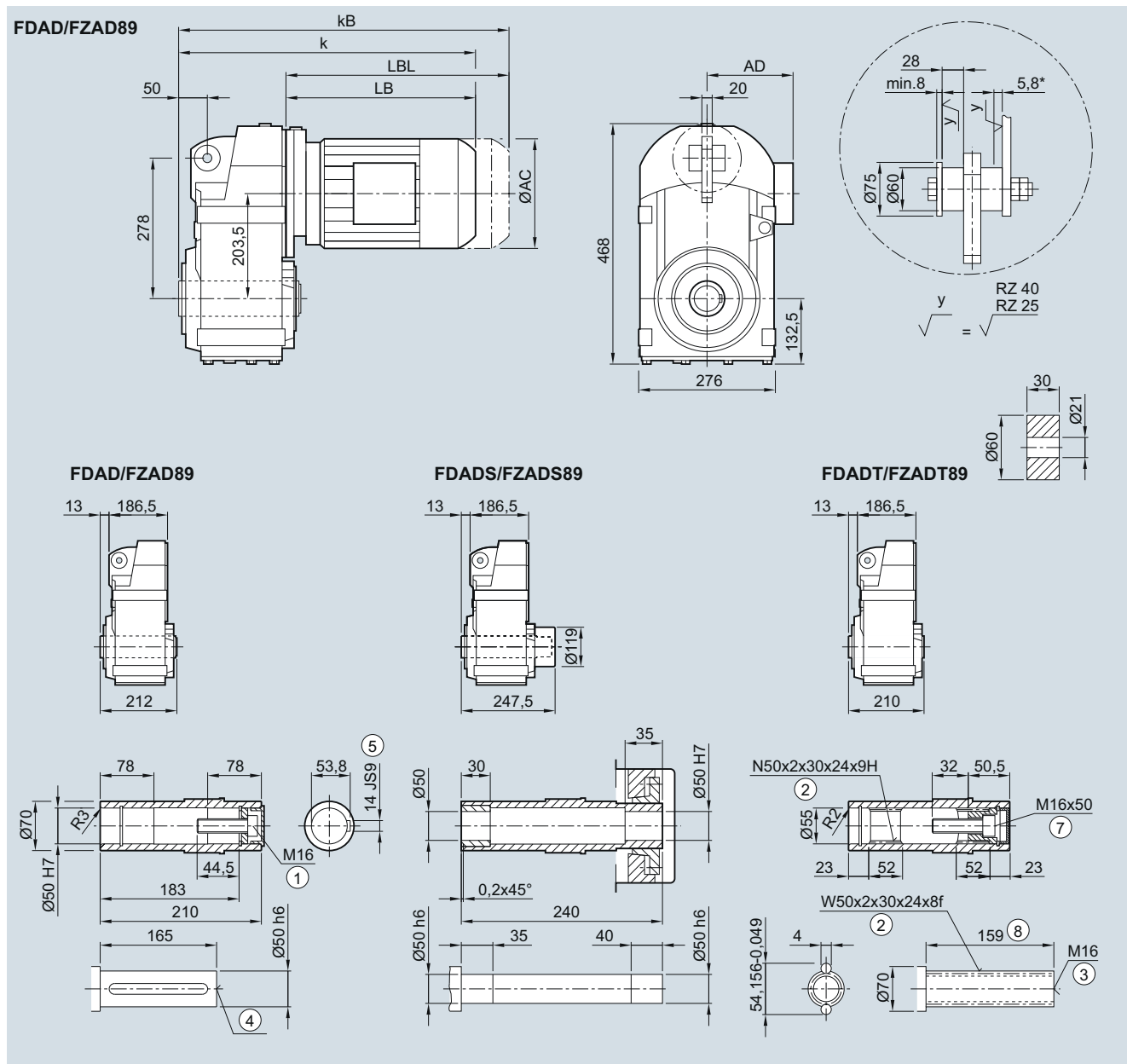
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FDAD./FZAD.89 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030

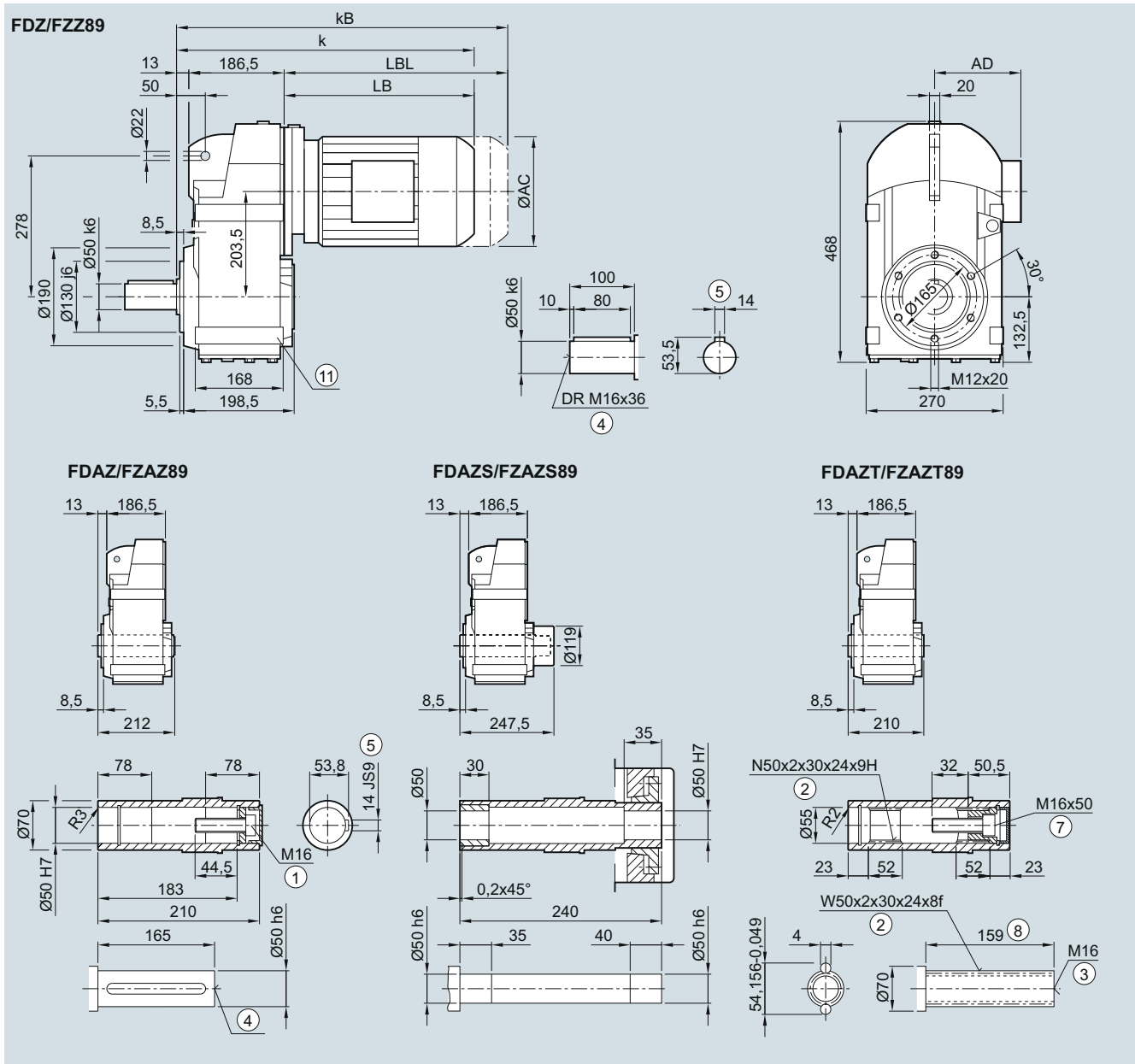


Motor	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L ⁽²⁾	180ZL ⁽²⁾
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	461.0	496.0	522.5	562.5	575.0	610.0	585.0	610.0	638.0	688.0	720.0	780.0	793.0	823.0
kB	521.0	556.0	592.5	632.5	653.5	688.5	658.0	683.0	742.5	792.5	836.0	896.0	922.0	952.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑥ ISO 4762 ⑦ Without locating shoulder +1 mm
¹⁾ AD depends on the motor options, for other dimensions, see page 8/42. ²⁾ FDAS/FZAS not possible * Spring compression at max. torque

FD.Z./FZ.Z.89 gearbox in a housing flange design

FZ030, FAZ030, FAZS030, FAZT030



Motor	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L ²⁾	180ZL ²⁾
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	461.0	496.0	522.5	562.5	575.0	610.0	585.0	610.0	638.0	688.0	720.0	780.0	793.0	823.0
kB	521.0	556.0	592.5	632.5	653.5	688.5	658.0	683.0	742.5	792.5	836.0	896.0	922.0	952.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAS/FZAS not possible

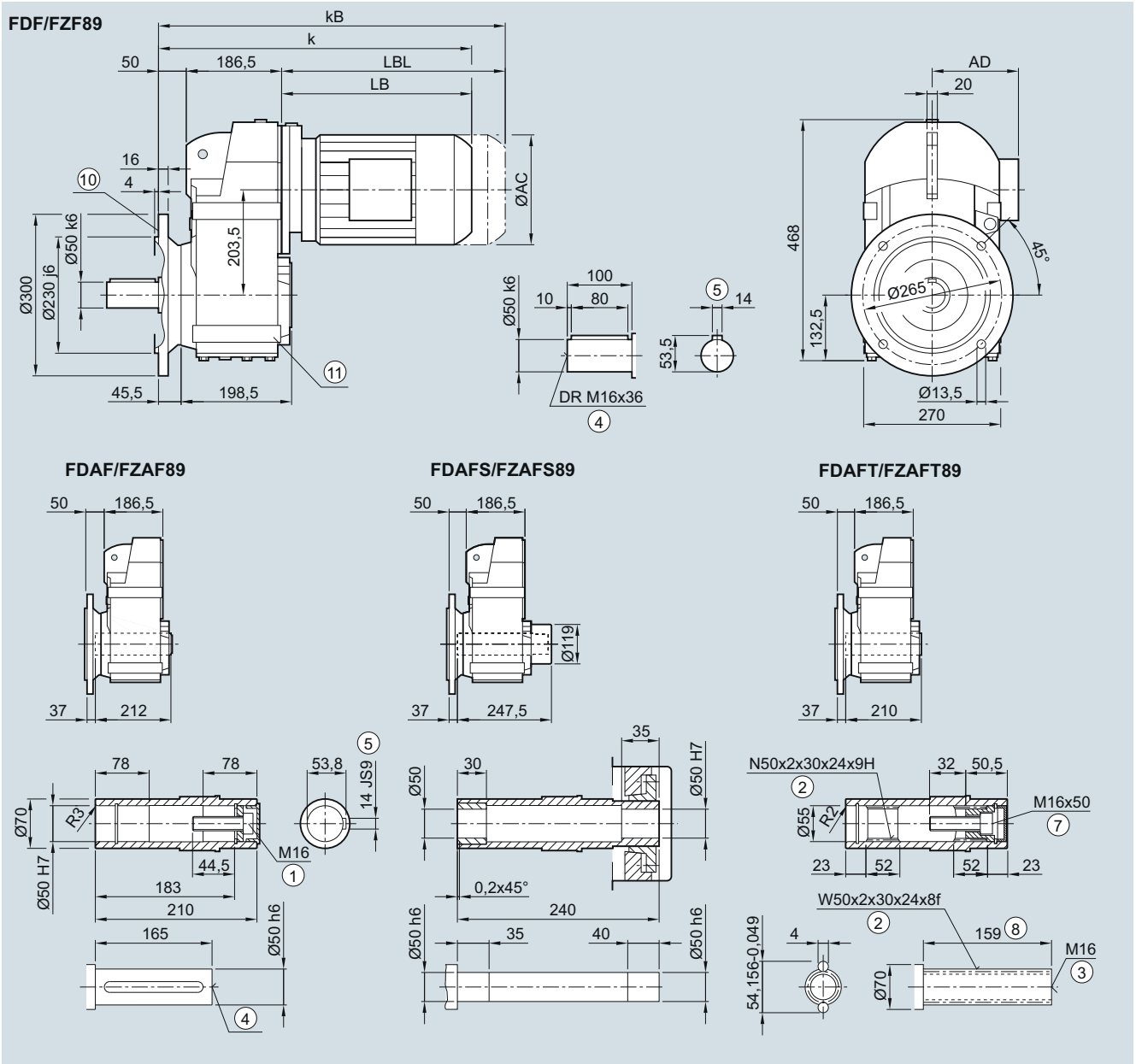
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F./FZ.F.89 gearbox in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030



Motor	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L ⁽²⁾	180ZL ⁽²⁾
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	498.0	533.0	559.5	599.5	612.0	647.0	622.0	647.0	675.0	725.0	757.0	817.0	830.0	860.0
kB	558.0	593.0	629.5	669.5	690.5	725.5	695.0	720.0	779.5	829.5	873.0	933.0	959.0	989.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

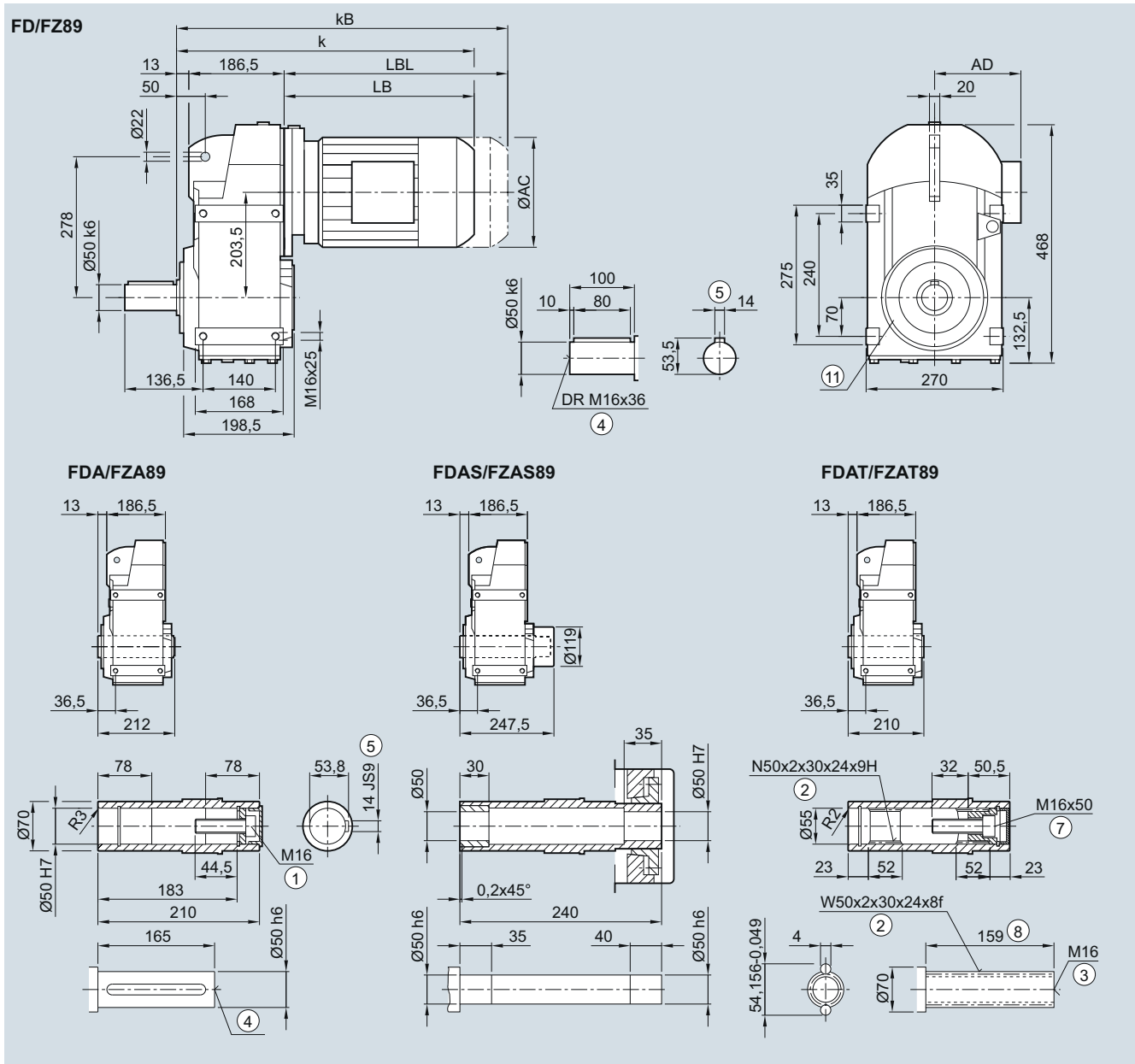
① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ For inner contour, see page 4/115 ⑪ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42. 2) FDAFS/FZAFS not possible

FD../FZ..89 gearbox in a foot-mounted design

F030, FA030, FAS030, FAT030



Motor	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L ²⁾	180ZL ²⁾
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	461.0	496.0	522.5	562.5	575.0	610.0	585.0	610.0	638.0	688.0	720.0	780.0	793.0	823.0
kB	521.0	556.0	592.5	632.5	653.5	688.5	658.0	683.0	742.5	792.5	836.0	896.0	922.0	952.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for housing flange design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

²⁾ FDAS/FZAS not possible

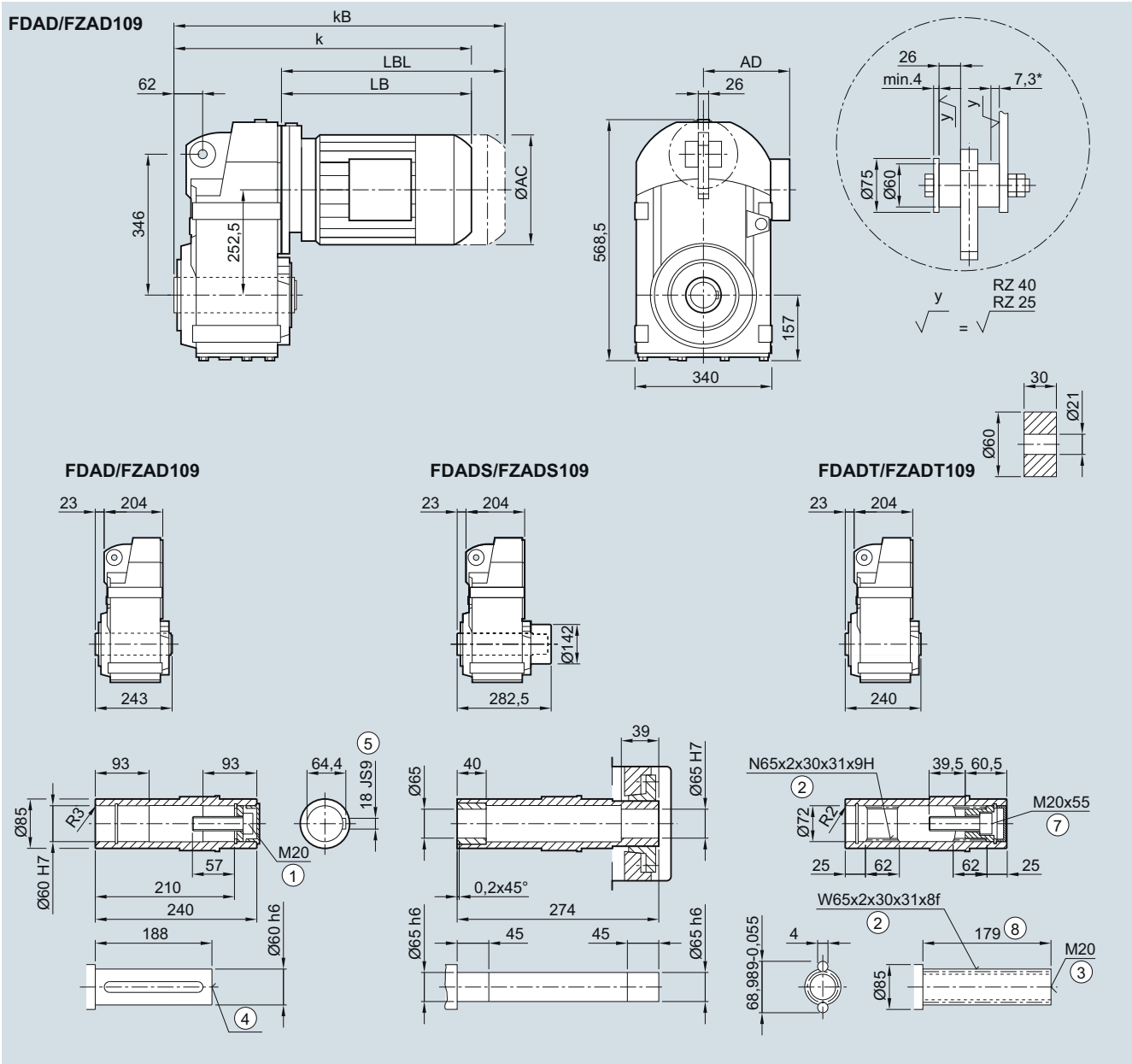
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FDAD./FZAD.109 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030



Motor	LE						LES						2)			
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	543.0	583.0	593.5	628.5	603.5	628.5	656.5	706.5	738.5	798.5	811.5	841.5	879.5	904.5	925.0	985.0
kB	613.0	653.0	672.0	707.0	676.5	701.5	761.0	811.0	854.5	914.5	940.5	970.5	1 026.5	1 051.5	1 153.0	1 213.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

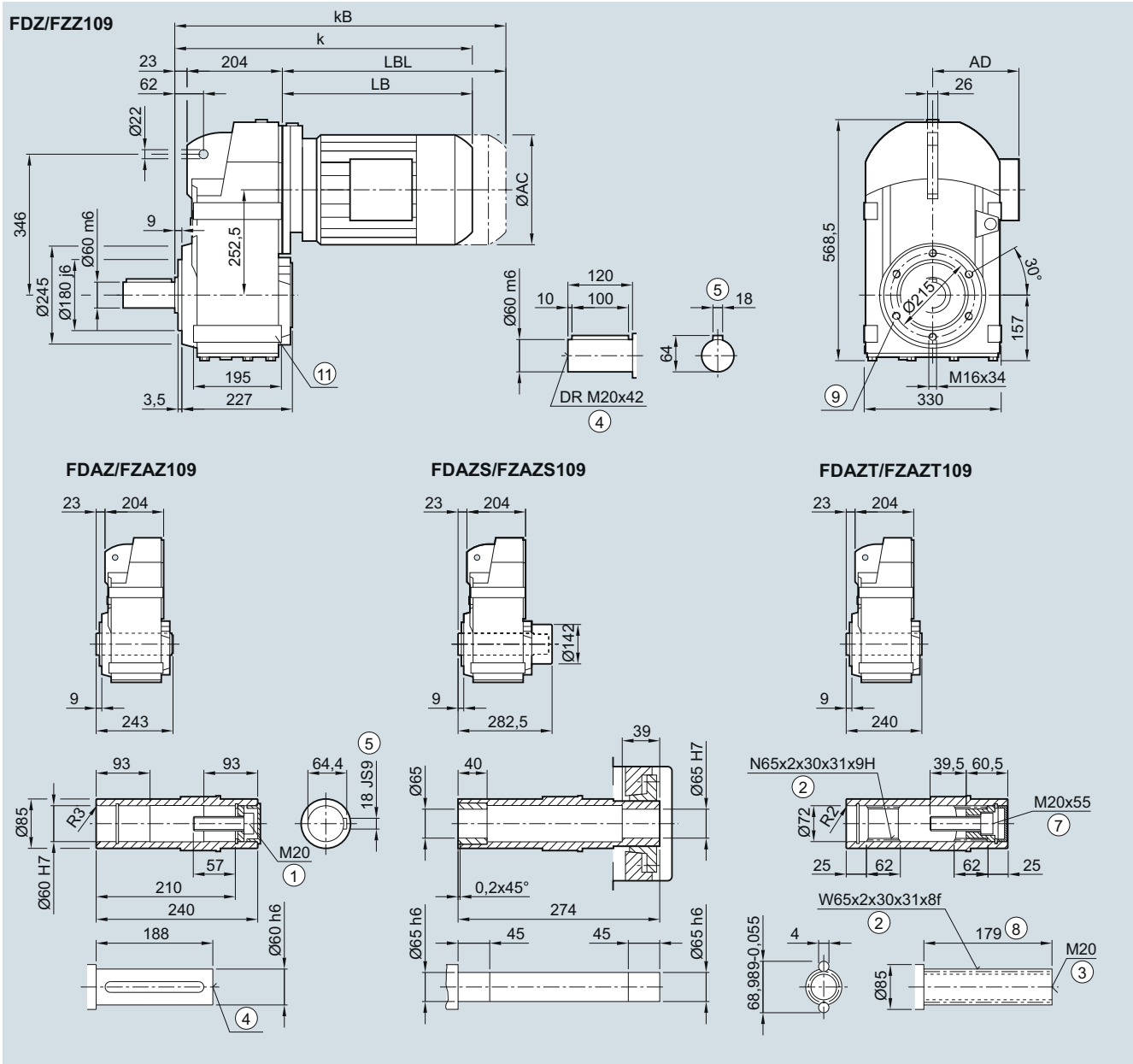
¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

* Spring compression at max. torque

²⁾ FDAS/FZAS not possible

FD.Z/FZ.Z.109 gearbox in a housing flange design

FZ030, FAZ030, FAZS030, FAZT030



Motor	LE	LE	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	
k	543.0	583.0	593.5	628.5	603.5	628.5	656.5	706.5	738.5	798.5	811.5	841.5	879.5	904.5	925.0	985.0	
kB	613.0	653.0	672.0	707.0	676.5	701.5	761.0	811.0	854.5	914.5	940.5	970.5	1 026.5	1 051.5	1 153.0	1 213.0	
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0	
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0	

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑩ Use bores only for foot-mounted design
 ⑨ For pin holes, see page 4/117 1) AD depends on the motor options, for other dimensions, see page 8/42. 2) FDAS/FZAS not possible

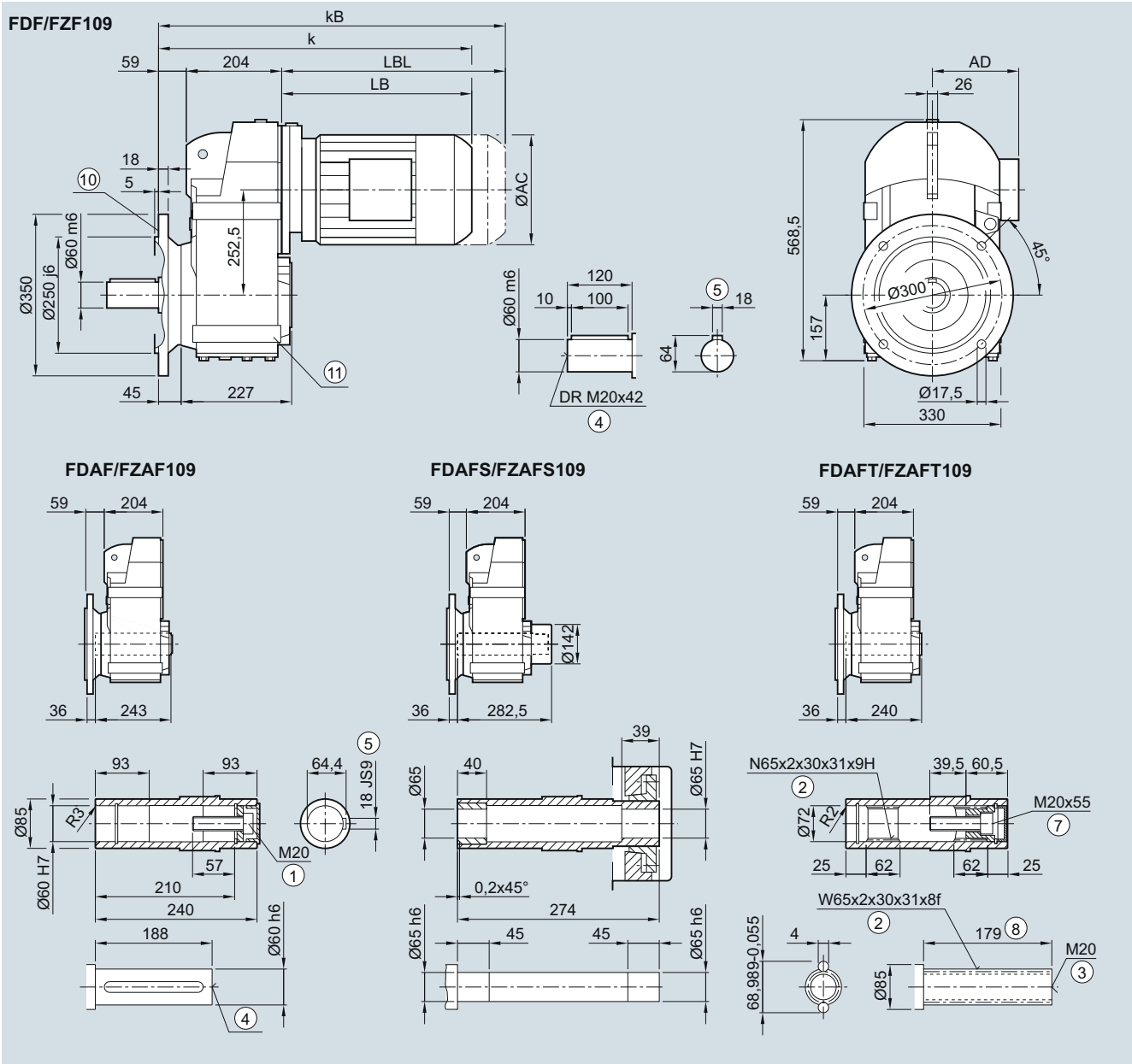
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F/FZ.F109 gearbox in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030



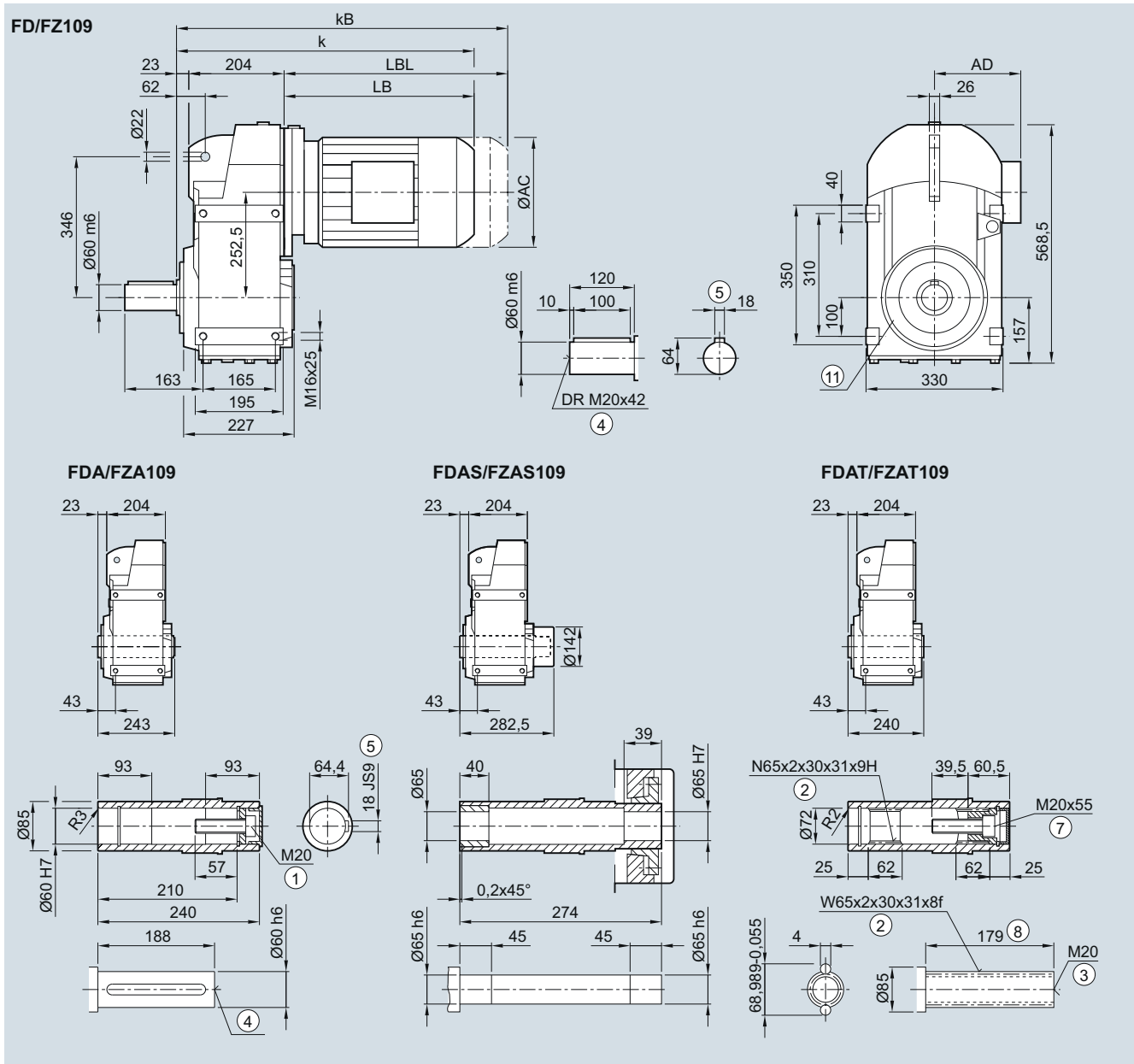
Motor	LE										LES					
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M ²⁾	225YM ²⁾
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	579.0	619.0	629.5	664.5	639.5	664.5	692.5	742.5	774.5	834.5	847.5	877.5	915.5	940.5	961.0	1 021.0
kB	649.0	689.0	708.0	743.0	712.5	737.5	797.0	847.0	890.5	950.5	976.5	1 006.5	1 062.5	1 087.5	1 189.0	1 249.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ For inner contour, see page 4/115 ⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

²⁾ FDAS/FZAS not possible

FD./FZ.109 gearbox in a foot-mounted design
F030, FA030, FAS030, FAT030


Motor	LE										LES					
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	543.0	583.0	593.5	628.5	603.5	628.5	656.5	706.5	738.5	798.5	811.5	841.5	879.5	904.5	925.0	985.0
kB	613.0	653.0	672.0	707.0	676.5	701.5	761.0	811.0	854.5	914.5	940.5	970.5	1 026.5	1 051.5	1 153.0	1 213.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.0	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for housing flange design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAS/FZAS not possible

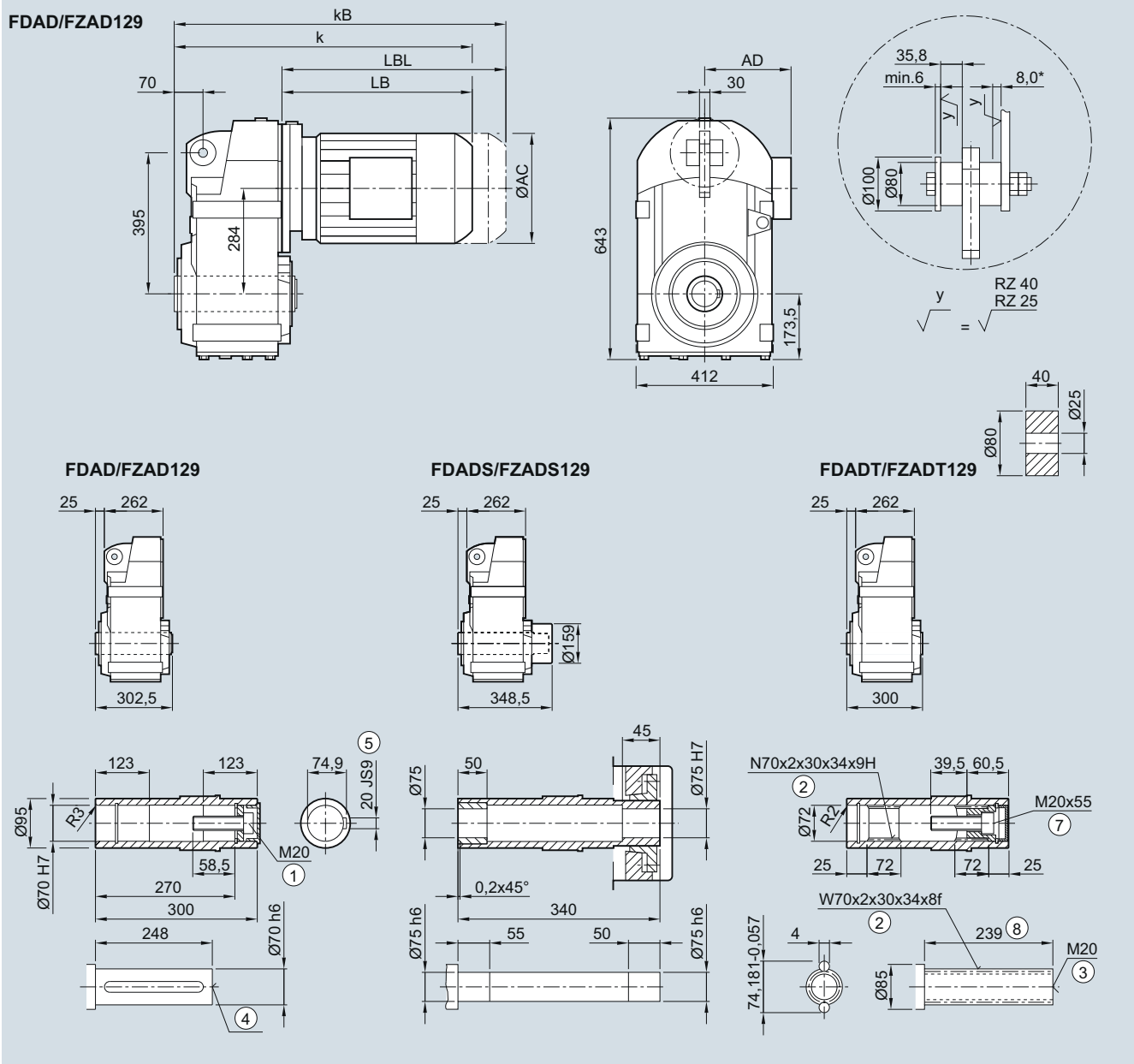
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FDAD./FZAD.129 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030



Motor	LE										LES								2)
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M		
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0		
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5		
k	596.0	636.0	644.5	679.5	654.5	679.5	705.5	755.5	787.5	847.5	860.5	890.5	928.5	953.5	980.0	1 040.0	1 085.5		
kB	666.0	706.0	723.0	758.0	727.5	752.5	810.0	860.0	903.5	963.5	989.5	1 019.5	1 075.5	1 100.5	1 208.0	1 268.0	1 310.5		
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5		
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5		

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

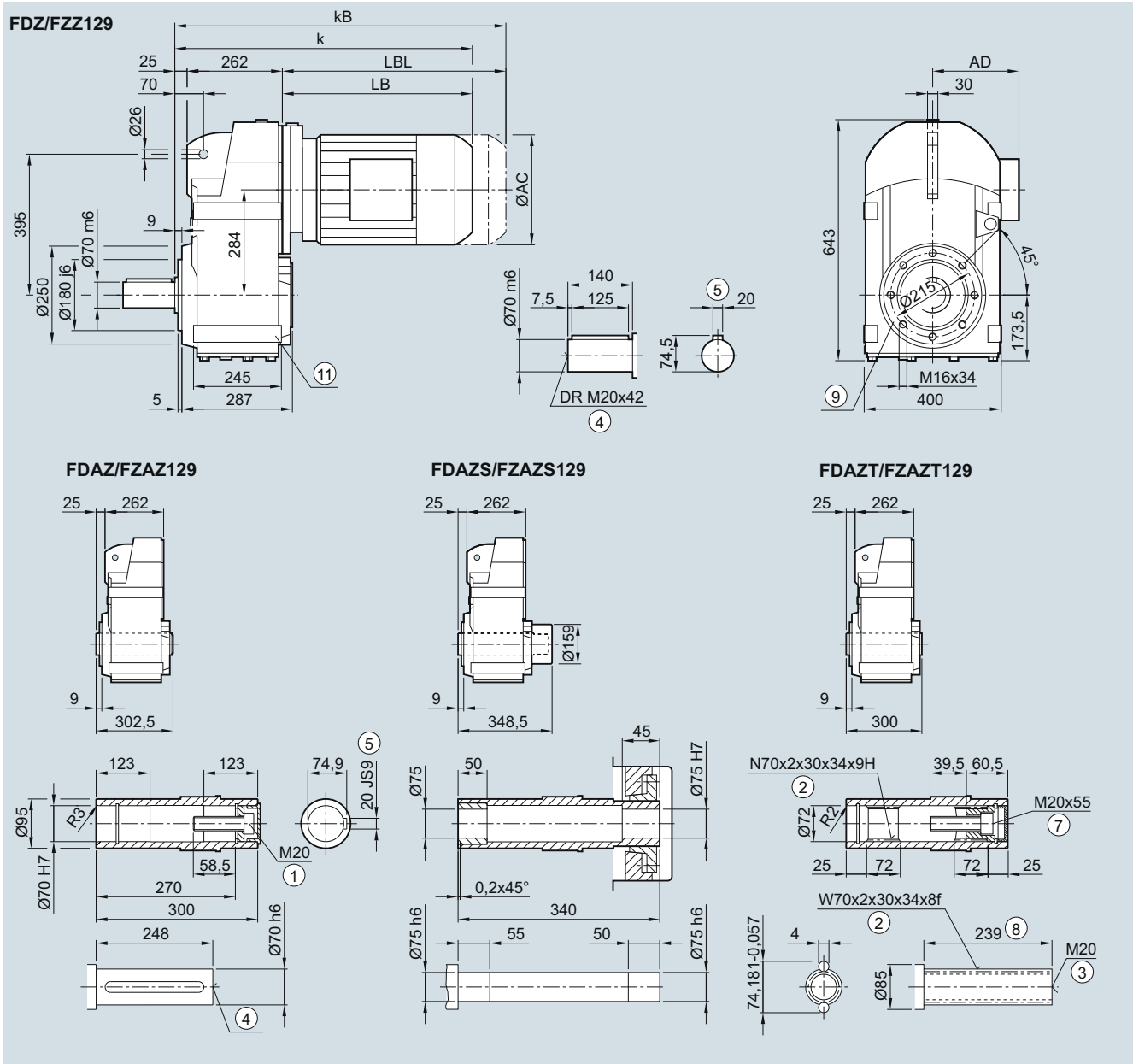
¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

* Spring compression at max. torque

²⁾ FDAS/FZAS not possible

FD.Z/FZ.Z.129 gearbox in a housing flange design

FZ030, FAZ030, FAZS030, FAZT030



Motor	LE										LES						
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M ²⁾
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	596.0	636.0	644.5	679.5	654.5	679.5	705.5	755.5	787.5	847.5	860.5	890.5	928.5	953.5	980.0	1 040.0	1 085.5
kB	666.0	706.0	723.0	758.0	727.5	752.5	810.0	860.0	903.5	963.5	989.5	1 019.5	1 075.5	1 100.5	1 208.0	1 268.0	1 310.5
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑥ ISO 4762 ⑦ Without locating shoulder +1 mm
 ⑧ For pin holes, see page 4/117 ⑨ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

²⁾ FDAS/FZAS not possible

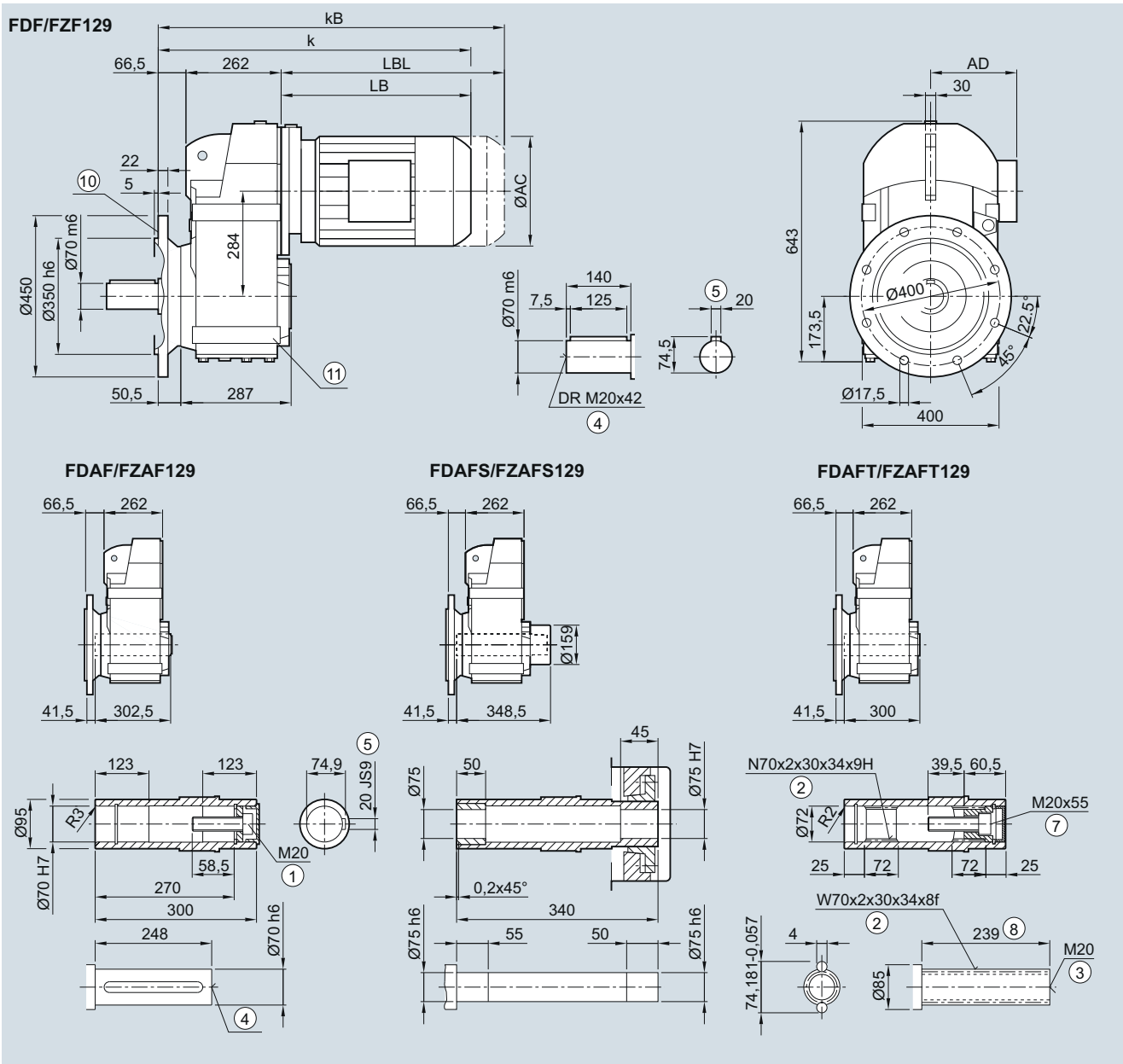
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F./FZ.F.129 gearbox in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030



Motor	LE										LES							
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M ²⁾	
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0	
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5	
k	637.5	677.5	686.0	721.0	696.0	721.0	747.0	797.0	829.0	889.0	902.0	932.0	970.0	995.0	1 021.5	1 081.5	1 127.0	
kB	707.5	747.5	764.5	799.5	769.0	794.0	851.5	901.5	945.0	1 005.0	1 031.0	1 061.0	1 117.0	1 142.0	1 249.5	1 309.5	1 352.0	
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5	
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5	

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

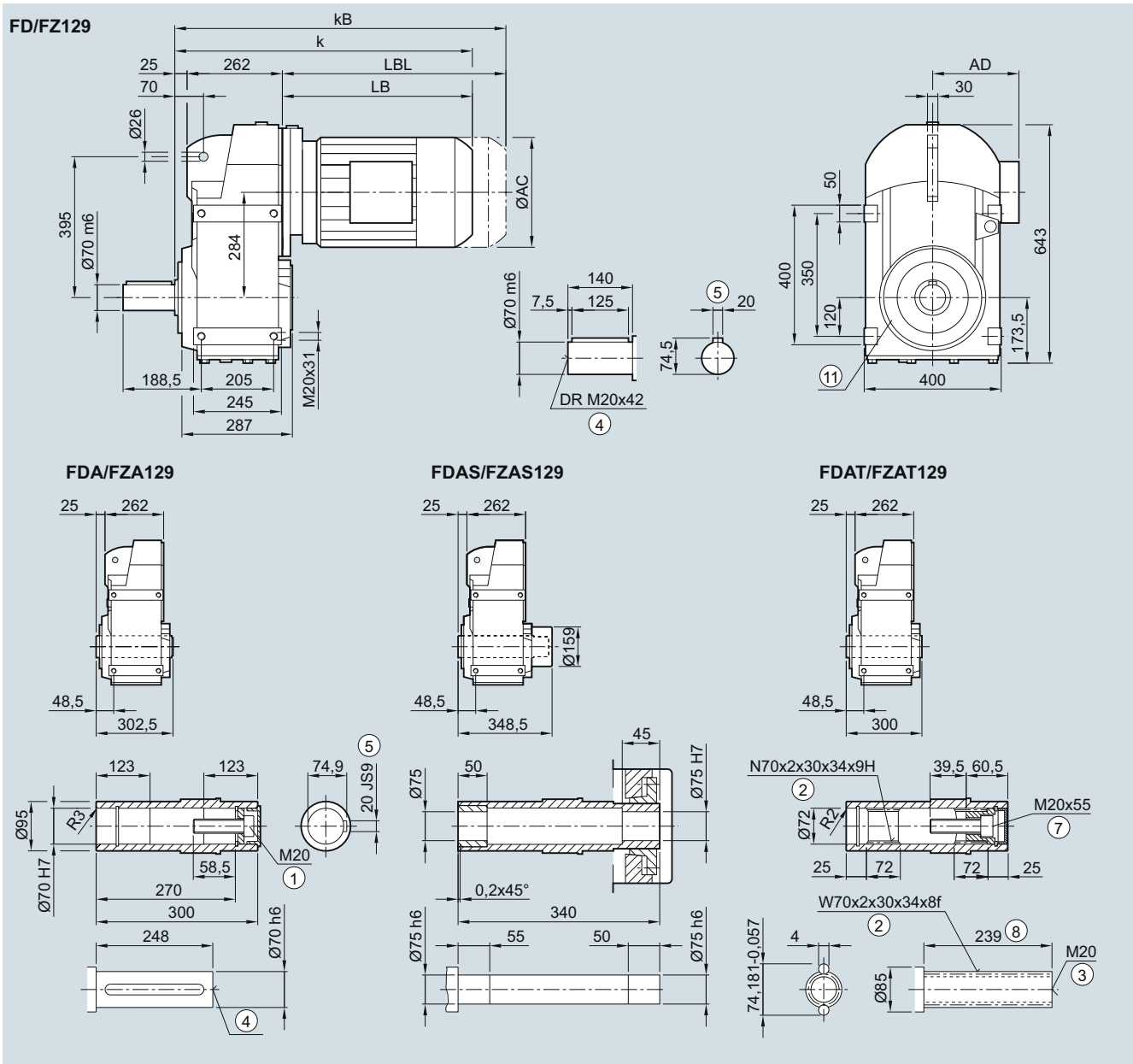
⑩ For inner contour, see page 4/115 ⑪ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42.

2) FDAS/FZAS not possible

FD../FZ..129 gearbox in a foot-mounted design

F030, FA030, FAS030, FAT030



Motor	LE										LES							
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M ²⁾	
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0	
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5	
k	596.0	636.0	644.5	679.5	654.5	679.5	705.5	755.5	787.5	847.5	860.5	890.5	928.5	953.5	980.0	1 040.0	1 085.5	
kB	666.0	706.0	723.0	758.0	727.5	752.5	810.0	860.0	903.5	963.5	989.5	1 019.5	1 075.5	1 100.5	1 208.0	1 268.0	1 310.5	
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5	
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5	

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Use bores only for housing flange design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

²⁾ FDAS/FZAS not possible

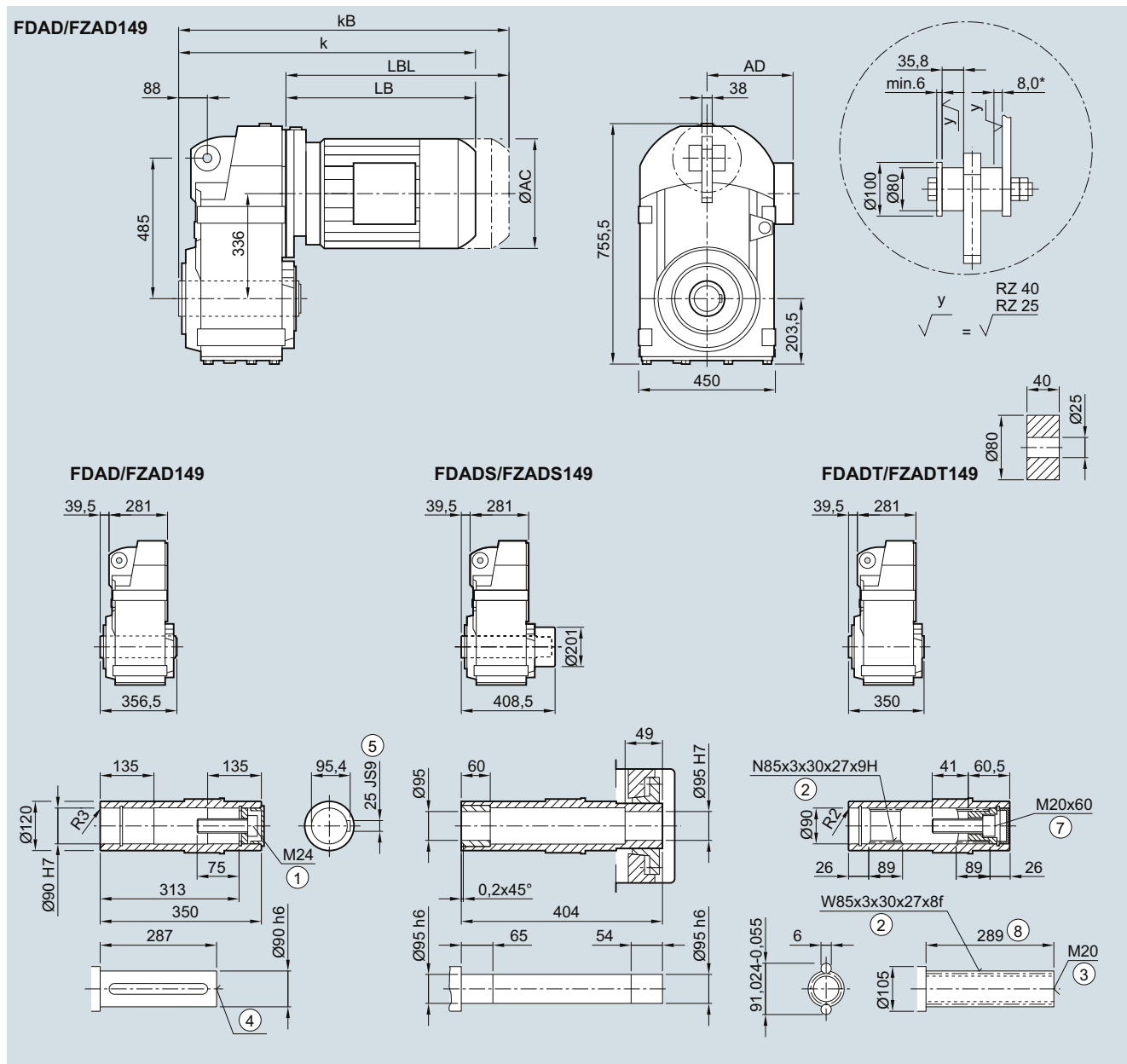
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

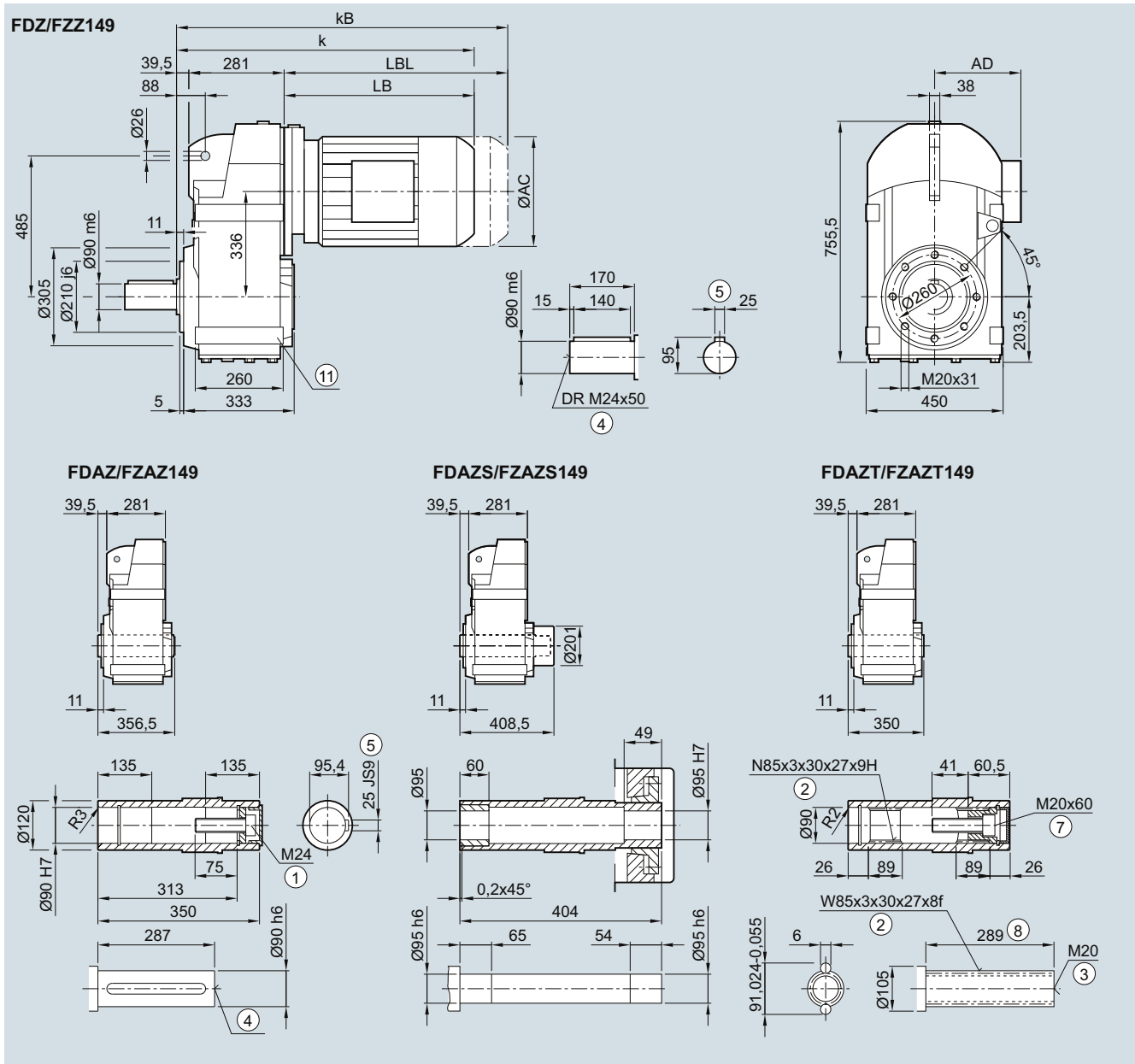
FDAD./FZAD.149 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030



Motor	LE					LES									
	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	676.5	711.5	686.5	711.5	732.5	782.5	814.5	874.5	887.5	917.5	955.5	980.5	1 000.5	1 060.5	1 112.0
kB	755.0	790.0	759.5	784.5	837.0	887.0	930.5	990.5	1 016.5	1 046.5	1 102.5	1 127.5	1 229.0	1 289.0	1 337.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 1) AD depends on the motor options, for other dimensions, see page 8/42. * Spring compression at max. torque

FD.Z./FZ.Z.149 gearbox in a housing flange design
FZ030, FAZ030, FAZS030, FAZT030


Motor	LE								LES						
	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	676.5	711.5	686.5	711.5	732.5	782.5	814.5	874.5	887.5	917.5	955.5	980.5	1 000.5	1 060.5	1 112.0
kB	755.0	790.0	759.5	784.5	837.0	887.0	930.5	990.5	1 016.5	1 046.5	1 102.5	1 127.5	1 229.0	1 289.0	1 337.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design ⑩ AD depends on the motor options, for other dimensions, see page 8/42.

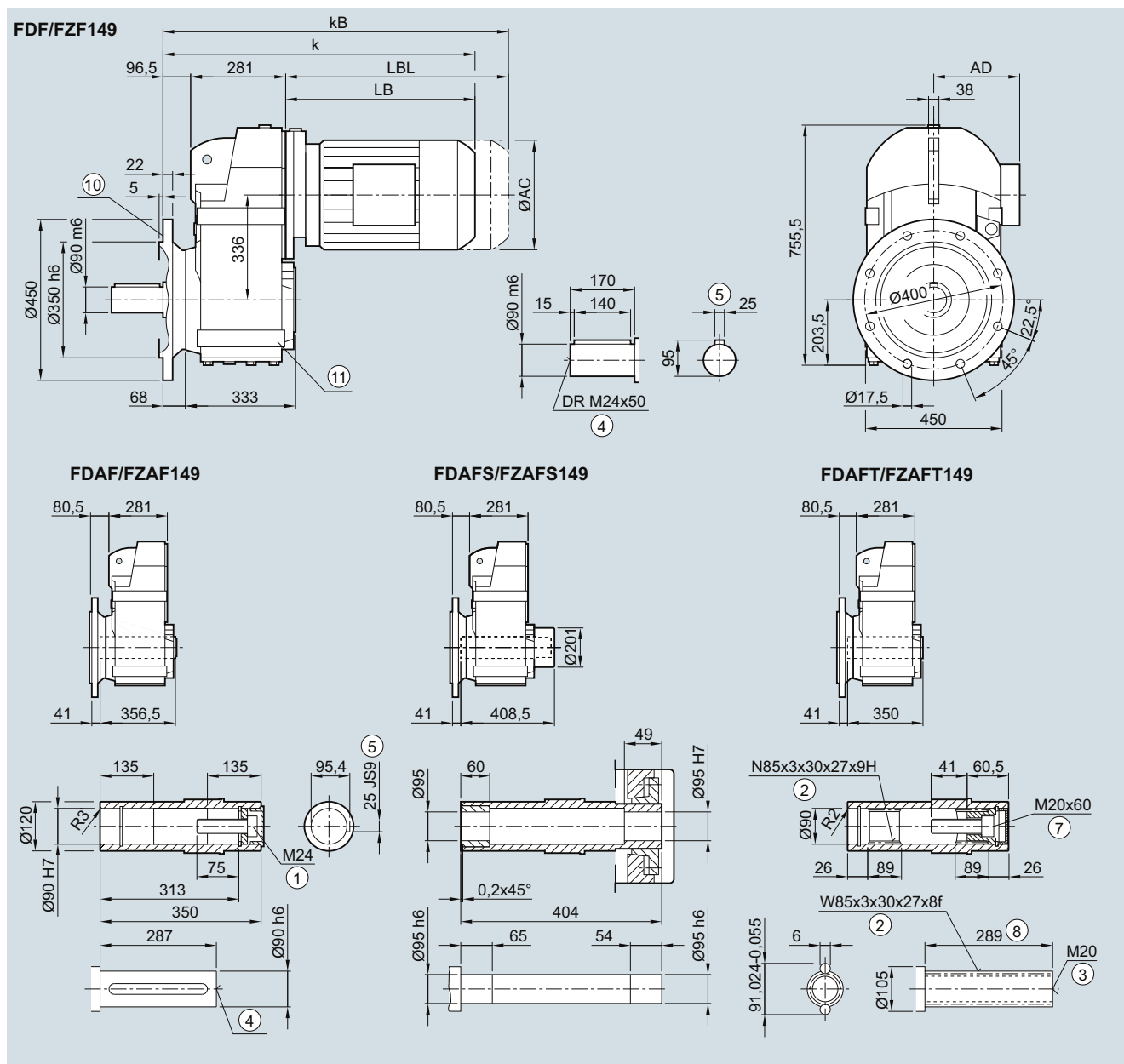
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F./FZ.F.149 gearbox in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030



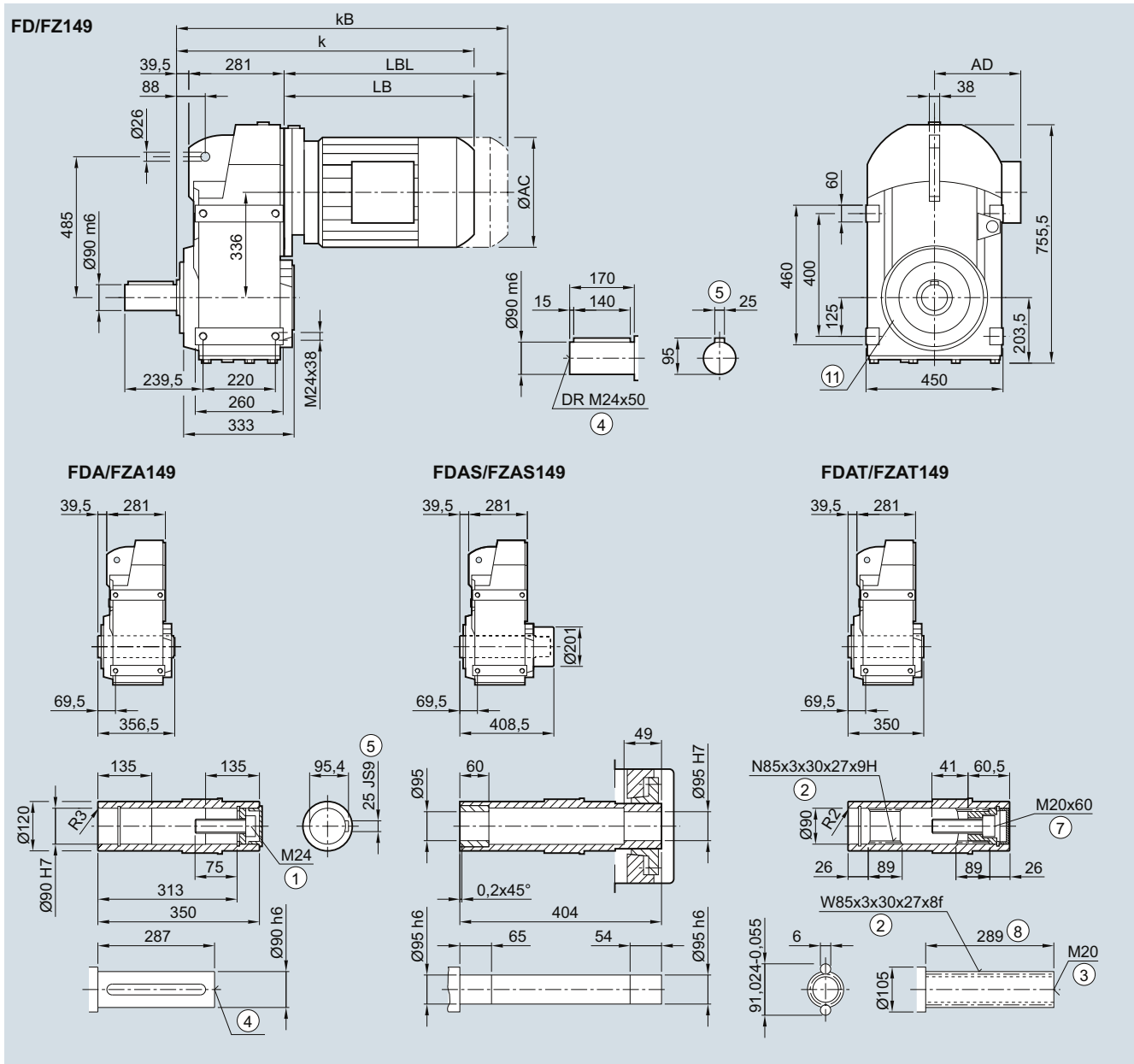
Motor	LE					LES					LES				
	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	734.0	769.0	744.0	769.0	790.0	840.0	872.0	932.0	945.0	975.0	1 013.0	1 038.0	1 058,5	1 118,5	1 170.0
kB	812.5	847.5	817.0	842.0	894.5	944.5	988.0	1 048.0	1 074.0	1 104.0	1 160.0	1 185.0	1 286.5	1 346.5	1 395.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ For inner contour, see page 4/115

⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

FD../FZ..149 gearbox in a foot-mounted design
F030, FA030, FAS030, FAT030


Motor	LE					LES									
	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	676.5	711.5	686.5	711.5	732.5	782.5	814.5	874.5	887.5	917.5	955.5	980.5	1 000.5	1 060.5	1 112.0
kB	755.0	790.0	759.5	784.5	837.0	887.0	930.5	990.5	1 016.5	1 046.5	1 102.5	1 127.5	1 229.0	1 289.0	1 337.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for housing flange design 1) AD depends on the motor options, for other dimensions, see page 8/42.

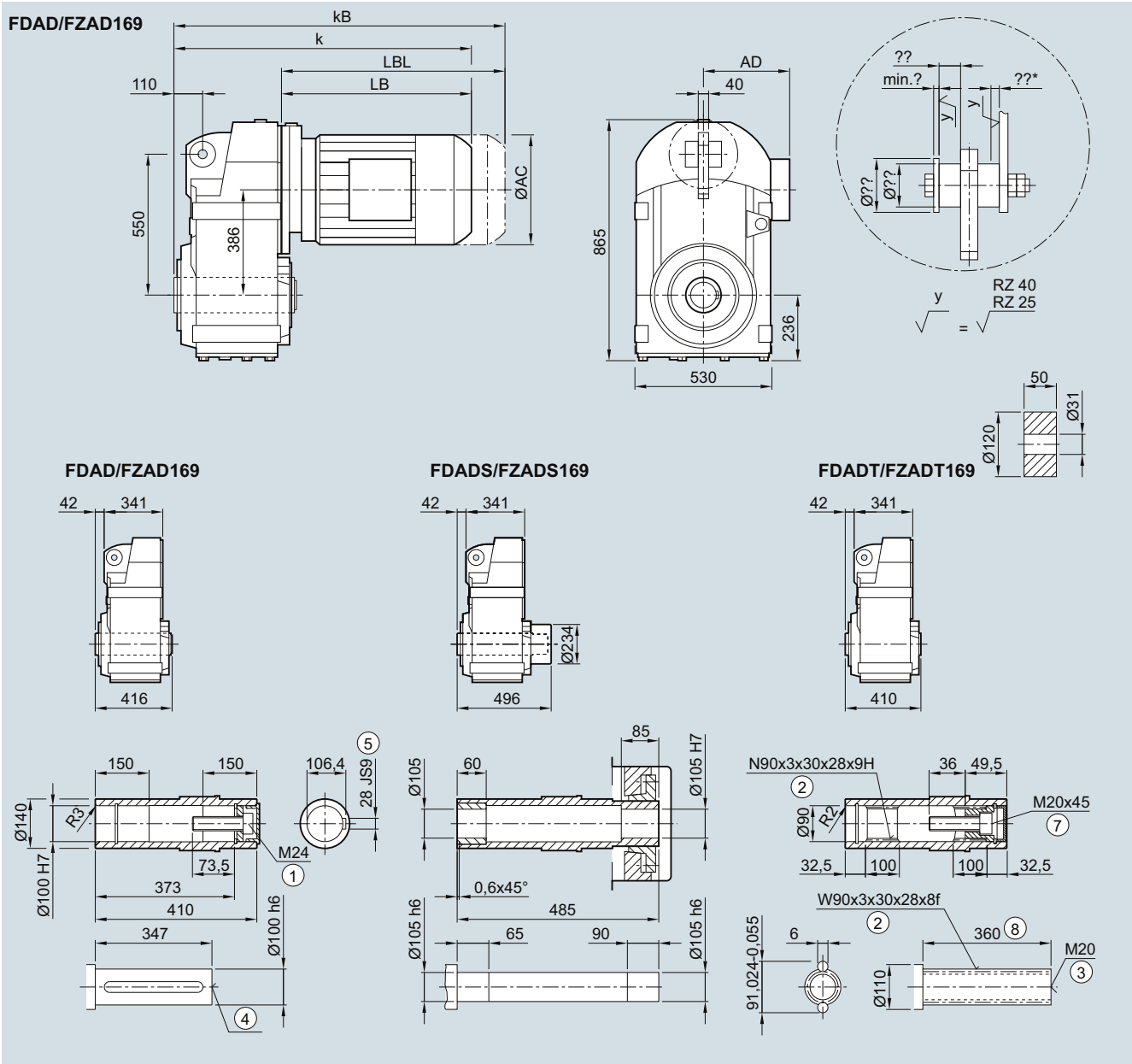
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FDAD./FZAD.169 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030

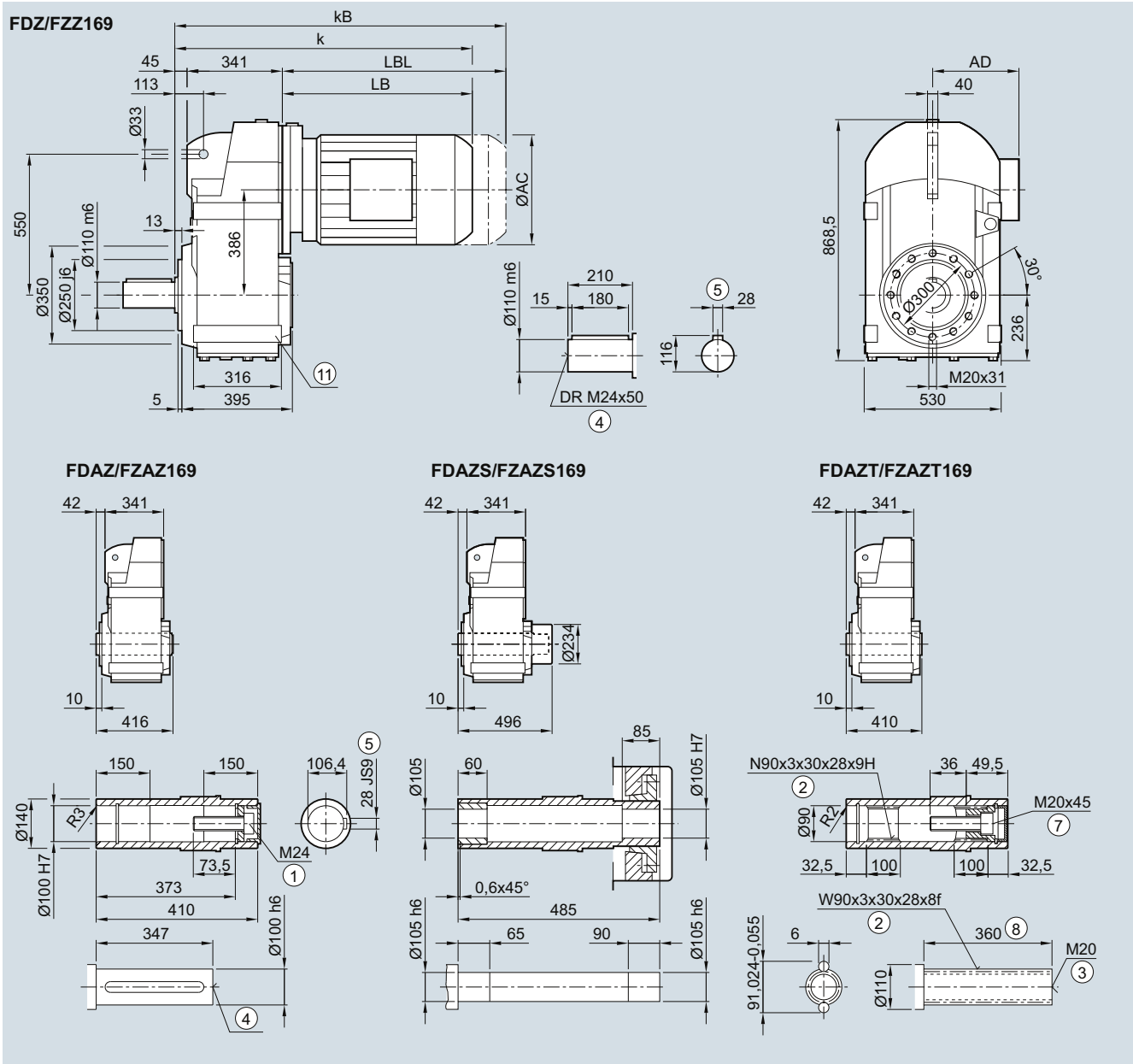


Motor	LE				LES								
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.0
k	739.5	764.5	785.0	835.0	867.0	927.0	939.5	969.5	1 007.5	1 032.5	1 052.5	1 112.0	1 159.5
kB	812.5	837.5	889.5	939.5	983.0	1 043.0	1 068.5	1 098.5	1 154.5	1 179.5	1 280.0	1 340.0	1 384.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.0	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
¹⁾ AD depends on the motor options, for other dimensions, see page 8/42. * Spring compression at max. torque

FD.Z./FZ.Z.169 gearbox in a housing flange design

FZ030, FAZ030, FAZS030, FAZT030



Motor	LE				LES								
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.0
k	739.5	764.5	785.0	835.0	867.0	927.0	939.5	969.5	1 007.5	1 032.5	1 052.5	1 112.0	1 159.5
kB	812.5	837.5	889.5	939.5	983.0	1 043.0	1 068.5	1 098.5	1 154.5	1 179.5	1 280.0	1 340.0	1 384.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.0	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions, see page 8/42

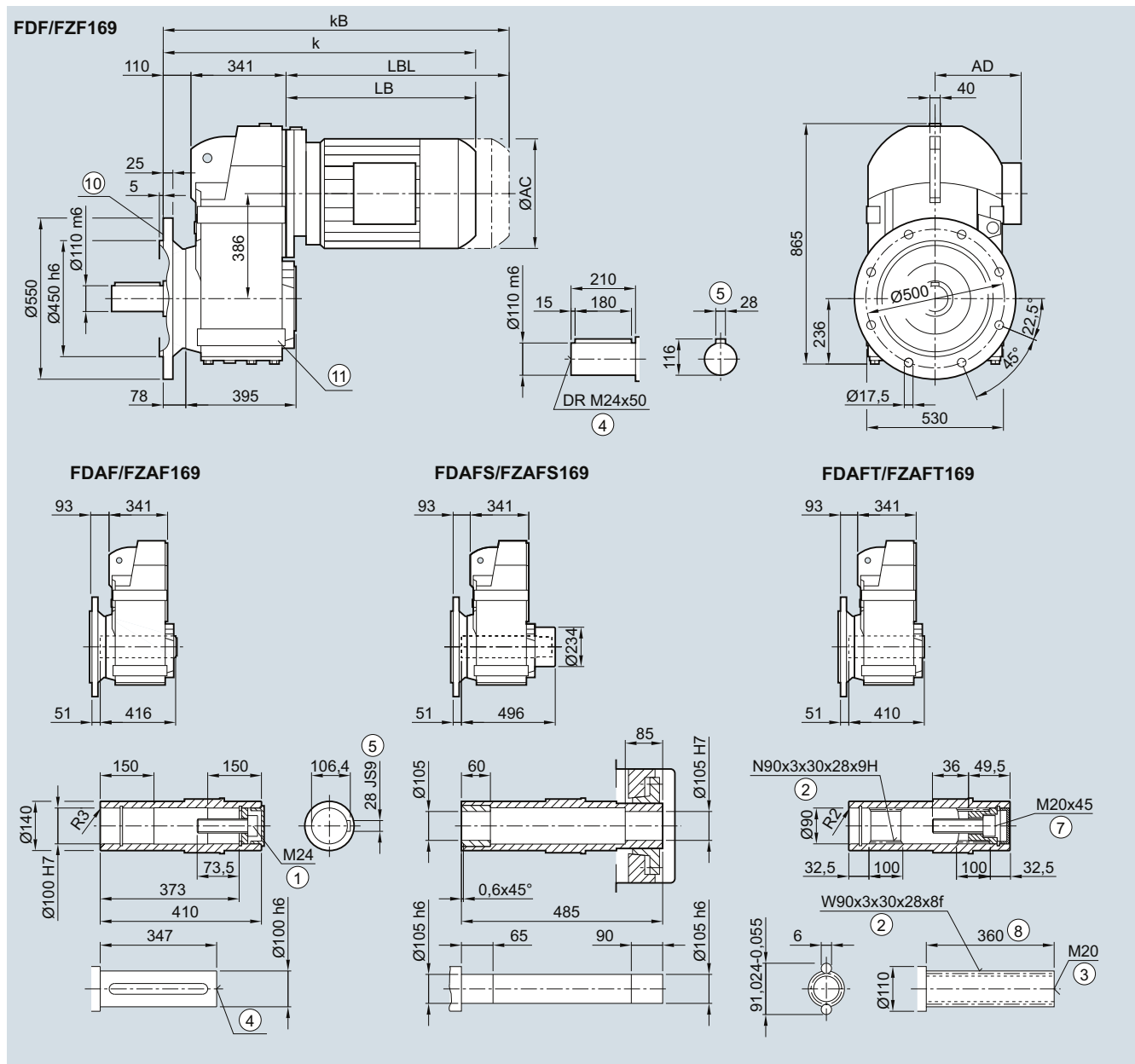
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F./FZ.F.169 gearbox in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030



Motor	LE 112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	804.5	829.5	850.0	900.0	932.0	992.0	1 004.5	1 034.5	1 072.5	1 097.5	1 117.0	1 177.0	1 224.5
kB	877.5	902.5	954.5	1 004.5	1 048.0	1 108.0	1 133.5	1 163.5	1 219.5	1 244.5	1 345.0	1 405.0	1 449.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

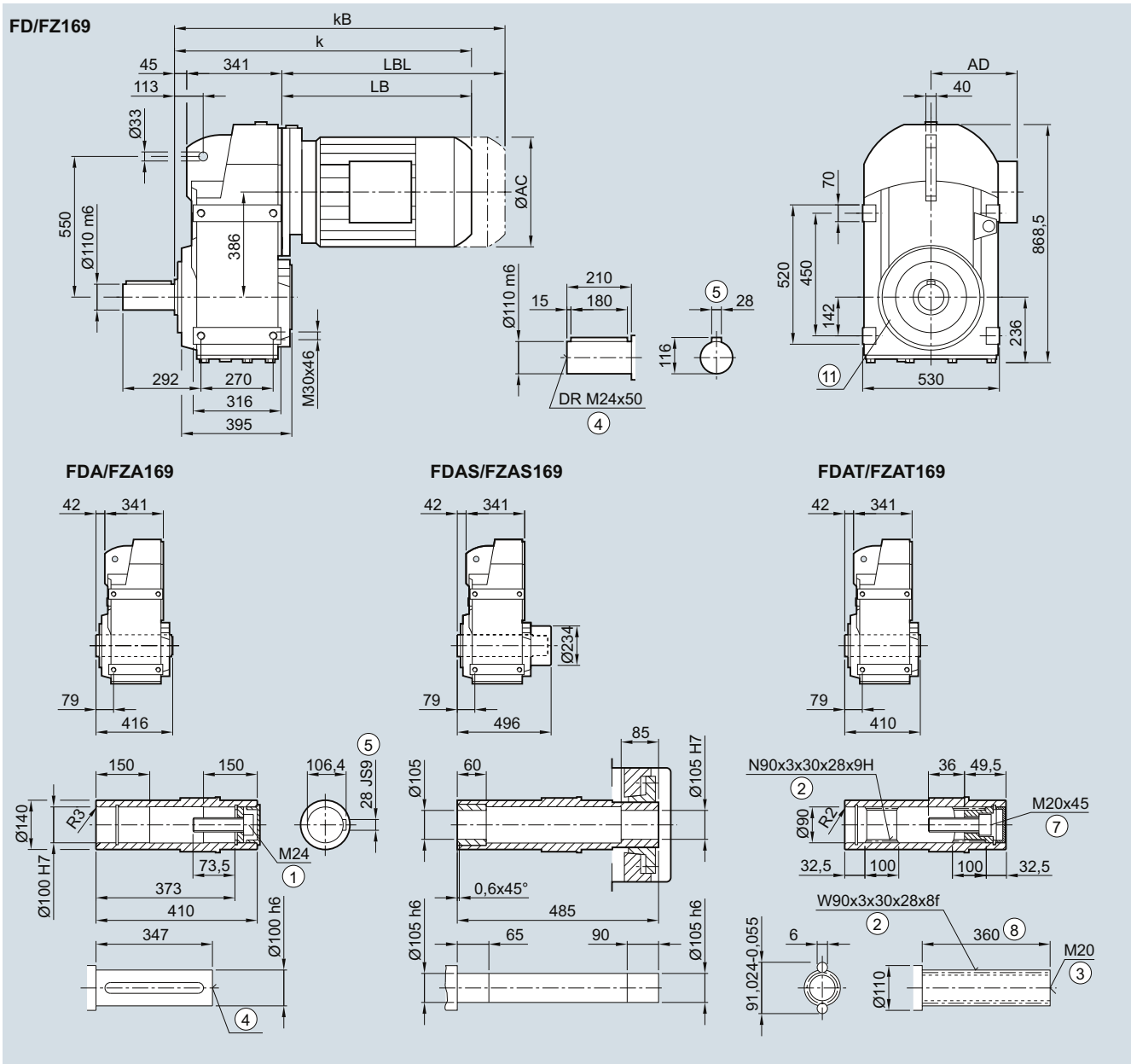
⑩ For inner contour, see page 4/115.

⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

FD../FZ..169 gearbox in a foot-mounted design

F030, FA030, FAS030, FAT030



Motor	LE				LES								
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.0
k	739.5	764.5	785.0	835.0	867.0	927.0	939.5	969.5	1 007.5	1 032.5	1 052.5	1 112.0	1 159.5
kB	812.5	837.5	889.5	939.5	983.0	1 043.0	1 068.5	1 098.5	1 154.5	1 179.5	1 280.0	1 340.0	1 384.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.0	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑩ Use bores only for housing flange design
 1) AD depends on the motor options, for other dimensions, see page 8/42.

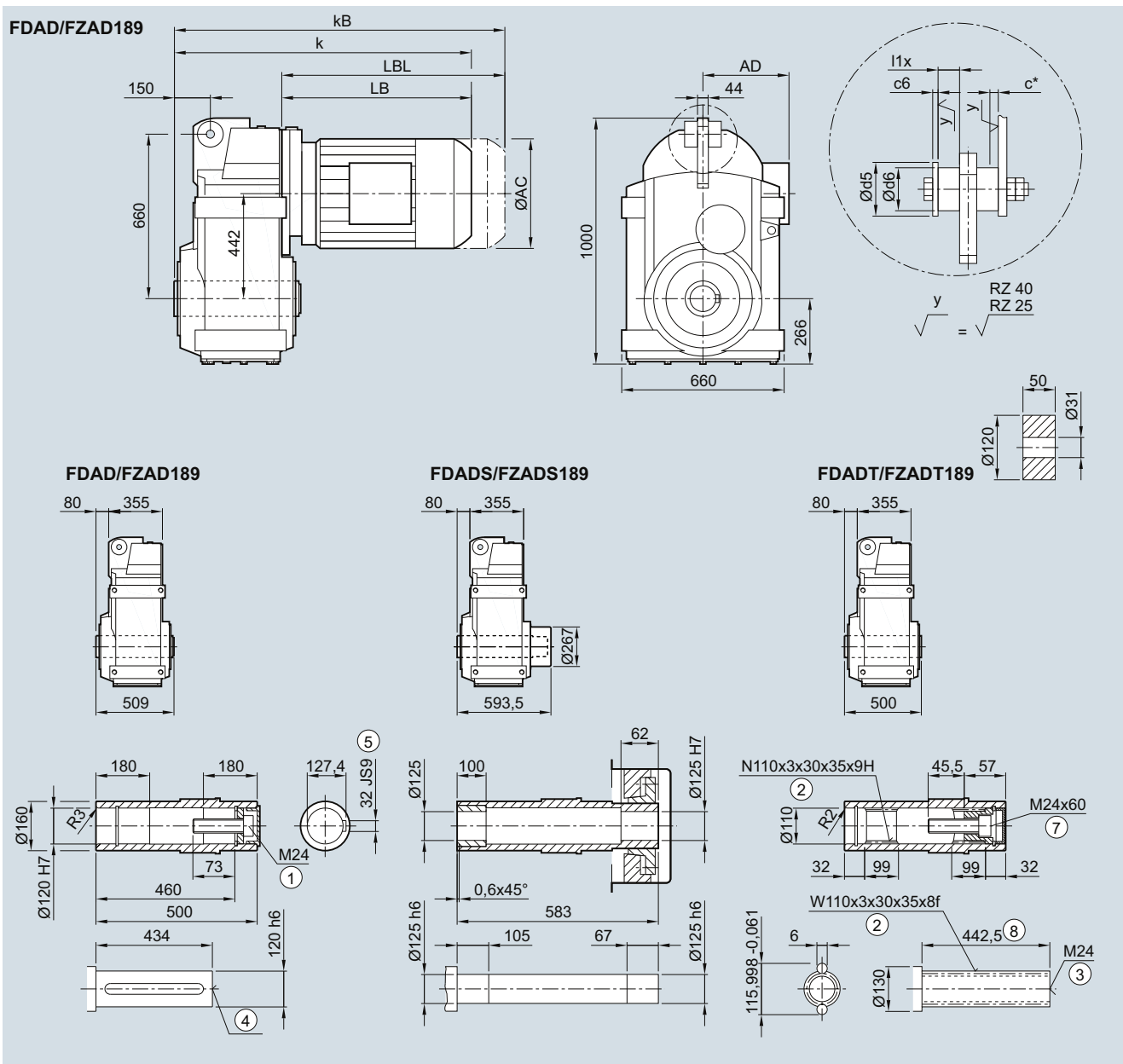
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FDAD./FZAD.189 gearbox in a shaft-mounted design

FAD030, FADS030, FADT030



Motor	LE 112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	788.5	813.5	834.0	884.0	916.0	976.0	988.5	1 018.5	1 056.5	1 081.5	1 101.0	1 161.0	1 208.5
kB	861.5	886.5	938.5	988.5	1 032.0	1 092.0	1 117.5	1 147.5	1 203.5	1 228.5	1 329.0	1 389.0	1 433.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

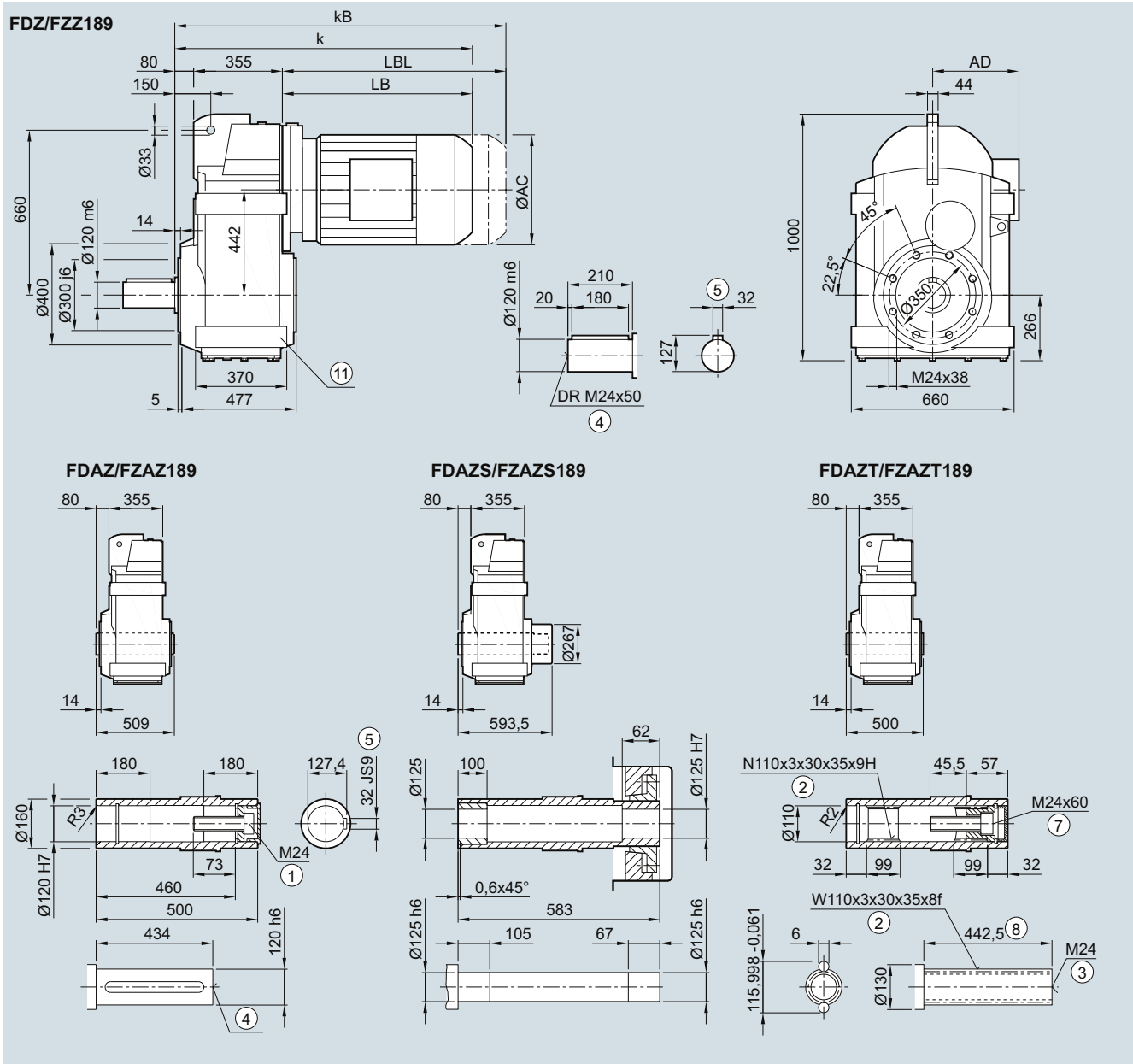
⑩ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions, see page 8/42.

* Spring compression at max. torque

FD.Z./FZ.Z.189 gearbox in a housing flange design

FZ030, FAZ030, FAZS030, FAZT030



Motor	LE				LES								
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	788.5	813.5	834.0	884.0	916.0	976.0	988.5	1 018.5	1 056.5	1 081.5	1 101.0	1 161.0	1 208.5
kB	861.5	886.5	938.5	988.5	1 032.0	1 092.0	1 117.5	1 147.5	1 203.5	1 228.5	1 329.0	1 389.0	1 433.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions, see page 8/42.

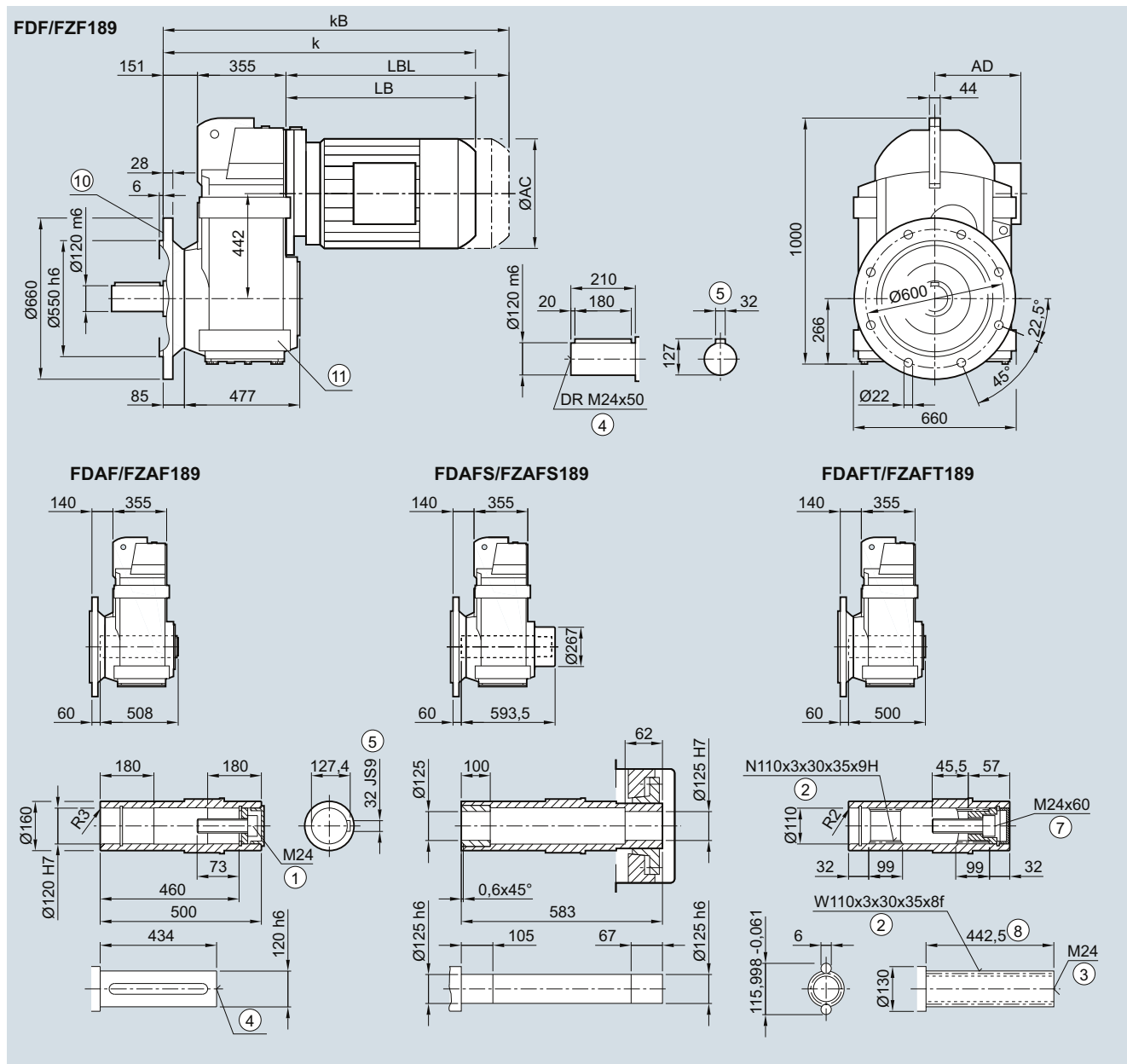
SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions

FD.F./FZ.F.189 gearbox in a flange-mounted design

FF030, FAF030, FAFS030, FAFT030



Motor	LE 112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	859.5	884.5	905.0	955.0	987.0	1 047.0	1 059.5	1 089.5	1 127.5	1 152.5	1 172.0	1 232.0	1 279.5
kB	932.5	957.5	1 009.5	1 059.5	1 103.0	1 163.0	1 188.5	1 218.5	1 274.5	1 299.5	1 400.0	1 460.0	1 504.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

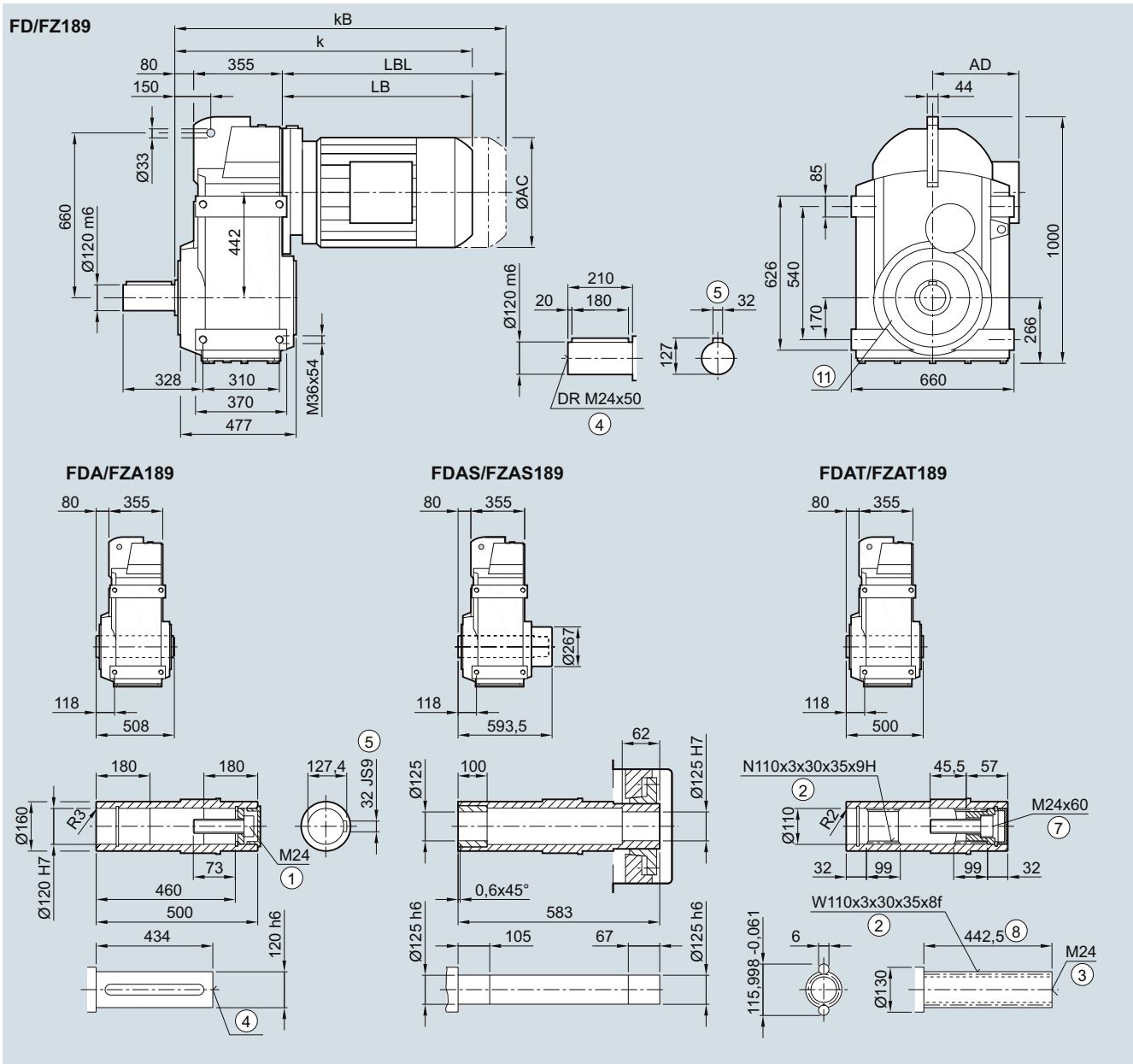
⑩ For inner contour, see page 4/115

⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

FD../FZ..189 gearbox in a foot-mounted design

F030, FA030, FAS030, FAT030

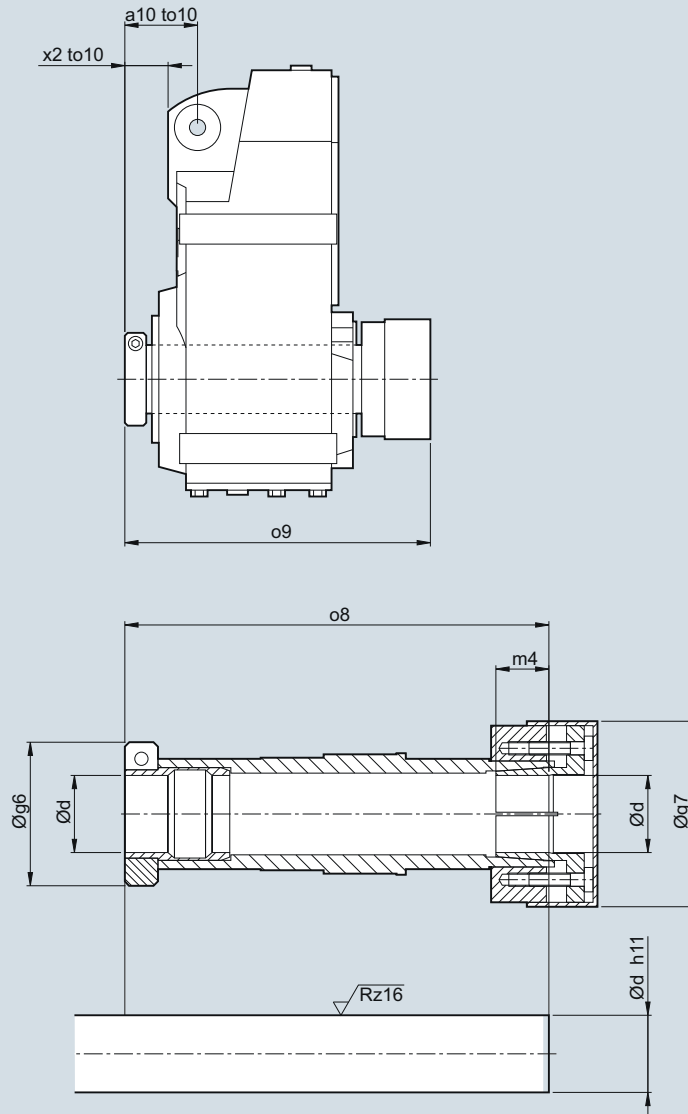


Motor	LE				LES								
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	788.5	813.5	834.0	884.0	916.0	976.0	988.5	1 018.5	1 056.5	1 081.5	1 101.0	1 161.0	1 208.5
kB	861.5	886.5	938.5	988.5	1 032.0	1 092.0	1 117.5	1 147.5	1 203.5	1 228.5	1 329.0	1 389.0	1 433.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for housing flange design 1) AD depends on the motor options, for other dimensions, see page 8/42.

SIMOGEAR Geared Motors

Parallel shaft geared motors

Dimensions**SIMOLOC assembly system****FDADR/FZADR**

Note mounting tolerance to10 when positioning the torque arm.

SIMOLOC assembly system (continued)

d	g6	g7	m4	o8	o9	a10	to10	x2
FDADR/FZADR29								
25	58.5	56	18.5	140.5	161	40.0	+2.1	23.5
20							+0.6	
1"								
0.75"								
FDADR/FZADR39								
30	62.0	76	22	160.5	181	46.5	+2.2	29.5
25							+0.7	
1.25"								
1.1875"								
1"								
FDADR/FZADR49								
35	65.0	84	24	192.0	214	47.0	+2.6	24.5
30							+0.8	
1.375"								
1.4375"								
1.25"								
1.1875"								
FDADR/FZADR.69								
40	79.5	94	30	217.5	240	59.5	+2.5	37.0
35							+0.7	
1.5"								
1.625"								
1.4375"								
1.375"								
FDADR/FZADR79								
40	79.5	94	30	232.0	259	60.0	+3.2	34.0
35							+1.4	
1.5"								
1.625"								
1.4375"								
1.375"								
FDADR/FZADR89								
50	89.0	114	32	264.0	295	69.0	+3.4	32.0
40							+1.5	
2"								
1.9375"								
1.75"								
1.625"								

SIMOGEAR Geared Motors

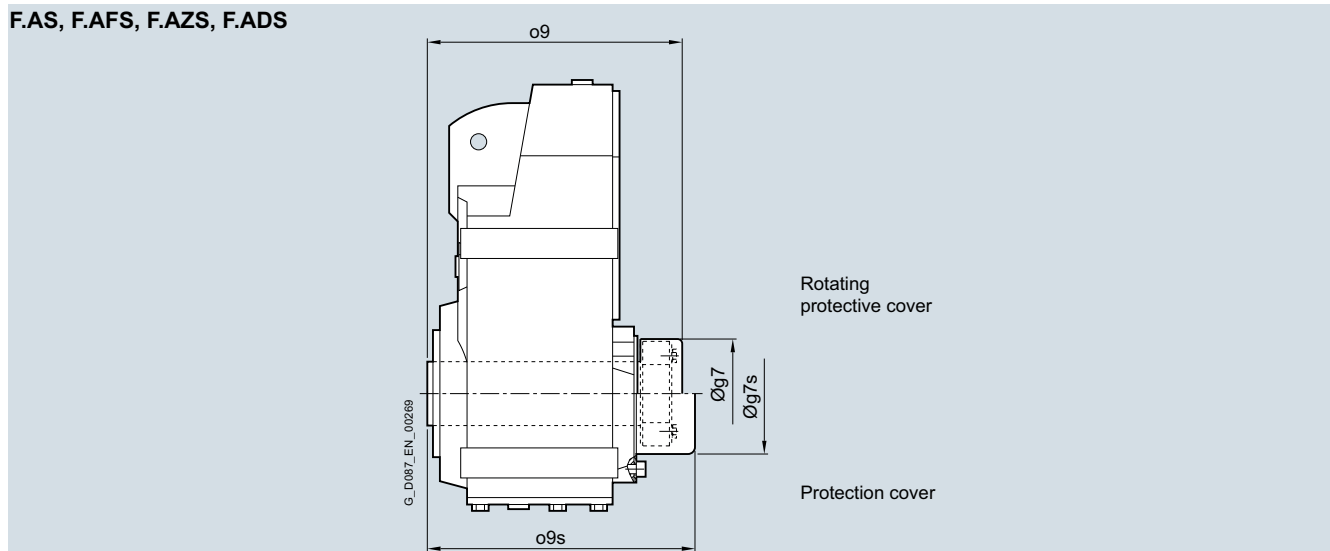
Parallel shaft geared motors

Dimensions

Protection cover for hollow shaft

Protection cover for hollow shaft and hollow shaft with shrink disk

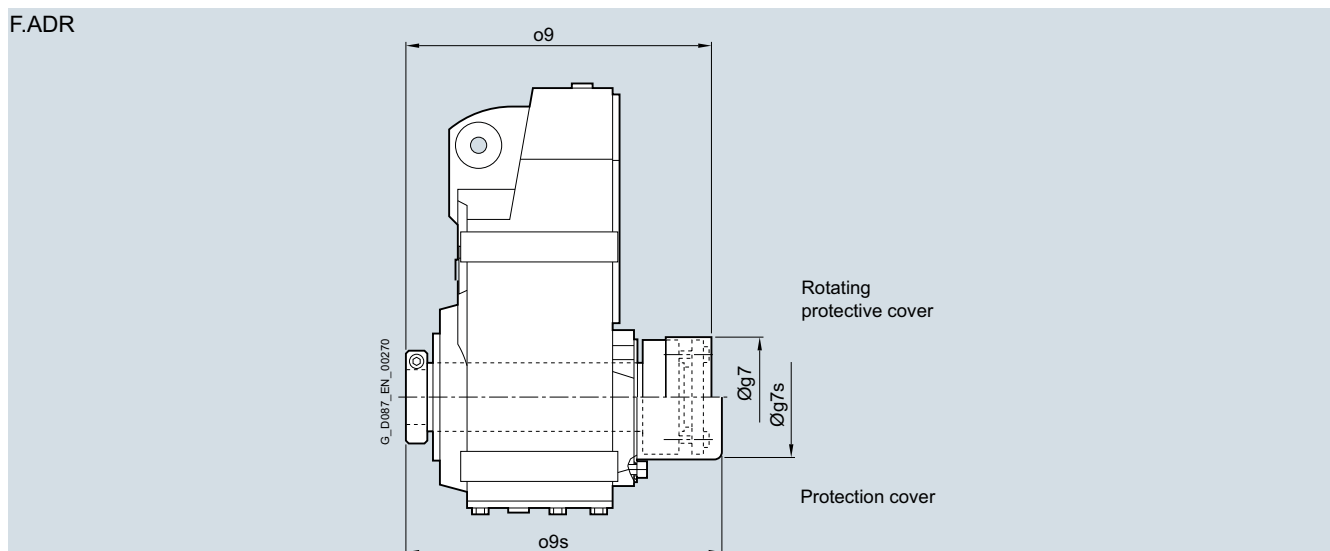
F.A.S, F.AFS, F.AZS, F.ADS



Gearbox type	F.A..29	F.A..39	F.A..49	F.A..69	F.A..79	F.A..89	F.A..109	F.A..129	F.A..149	F.A..169	F.A..189
Rotating protective cover with shrink disk version											
max. motor size that can be mounted	80	90	100	100	132	160	200	225	250	250	250
g7	57.0	76.0	84.0	84.0	94.0	119.0	142.0	159.0	201.0	234.0	267.0
o9	132.5	149.5	182.0	198.0	215.5	247.5	282.5	348.5	408.5	496.0	593.5
Protection cover											
max. motor size that can be mounted	71	80	100	100	112	132	200	225	250	250	250
g7s	58.0	86.0	86.0	99.0	99.0	137.0	186.8	186.8	217.8	257.5	309.5
o9s	135.5	170.0	198.0	210.0	223.5	284.5	308.5	375.0	425.0	520.0	621.5

Protection cover for hollow shaft with SIMOLOC assembly system

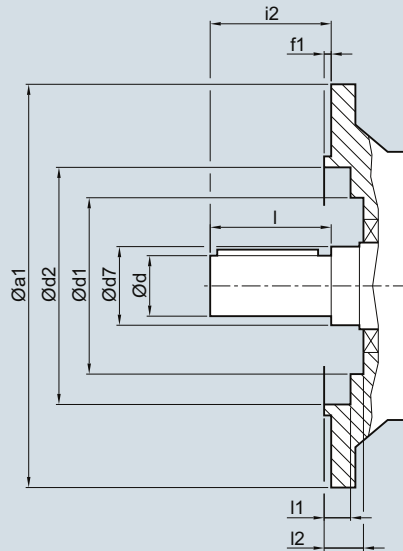
F.ADR



Gearbox type	F.ADR29	F.ADR39	F.ADR49	F.ADR69	F.ADR79	F.ADR89
Rotating protective cover						
max. motor size that can be mounted	80	90	100	100	132	160
g7	56	76	84	94	94	114
o9	161	181	214	240	259	295
Protection cover						
max. motor size that can be mounted	71	80	100	100	112	132
g7s	58	82.5	86	99	99	137
o9s	164	184.0	217	243	262	298

Inner contour of the flange design

Notes regarding the design of the customer's interface.

FDF/FZF


Gearbox type	a1	d	d7	d1	d2	f1	i2	l	l1	l2
FDF/FZF29	120	25	40	-	70	3.0	40	40	24.0	-
	160	25	40	70	101	3.5	40	40	8.5	24.5
FDF/FZF39	160	25	30	-	100	3.5	50	50	5.0	-
FDF/FZF49	200	30	35	-	118	3.5	60	60	5.5	-
FDF/FZF69	250	35	45	-	165	4.0	70	70	6.5	-
FDF/FZF79	250	40	55	-	165	4.0	80	80	6.5	-
FDF/FZF89	300	50	55	-	165	4.0	100	100	8.0	-
FDF/FZF109	350	60	65	-	235	5.0	120	120	9.0	-
FDF/FZF129	450	70	75	-	336	5.0	140	140	9.0	-
FDF/FZF149	450	90	100	-	336	5.0	170	170	10.0	-
FDF/FZF169	550	110	120	-	427	5.0	210	210	10.0	-
FDF/FZF189	660	120	160	-	517	6.0	210	210	11.0	-

SIMOGEAR Geared Motors

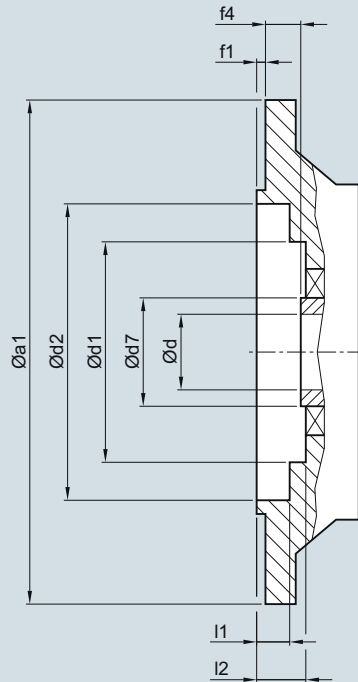
Parallel shaft geared motors

Dimensions

Inner contour of the flange design (continued)

Notes regarding the design of the customer's interface, e.g. plug-in shaft for hollow shaft design

FDAF/FZAF.



4

Gearbox type	a1	d	d7	d1	d2	f1	f4	l1	l2
FDAF./FZAF.29	120	25	40	-	70	3.0	20.0	24.0	-
	160	25	40	70	101	3.5	20.0	8.5	24.5
FDAF./FZAF.39	160	30	45	80	102	3.5	24.0	2.0	29.5
FDAF./FZAF.49	200	35	50	90	120	3.5	25.0	4.0	30.5
FDAF./FZAF.69	250	40	55	104	165	4.0	23.5	2.0	29.5
FDAF./FZAF.79	250	40	55	104	165	4.0	23.0	2.0	29.5
FDAF./FZAF.89	300	50	70	135	215	4.0	37.0	2.0	44.5
FDAF./FZAF.109	350	60	85	184	210	5.0	36.0	13.0	45.0
FDAF./FZAF.129	450	70	95	184	336	5.0	41.5	16.5	48.5
FDAF./FZAF.149	450	90	120	214	330	5.0	41.0	10.5	50.0
FDAF./FZAF.169	550	100	140	254	426	5.0	56.0	14.5	56.0
FDAF./FZAF.189	660	120	160	306	518	6.0	66.0	6.0	62.0

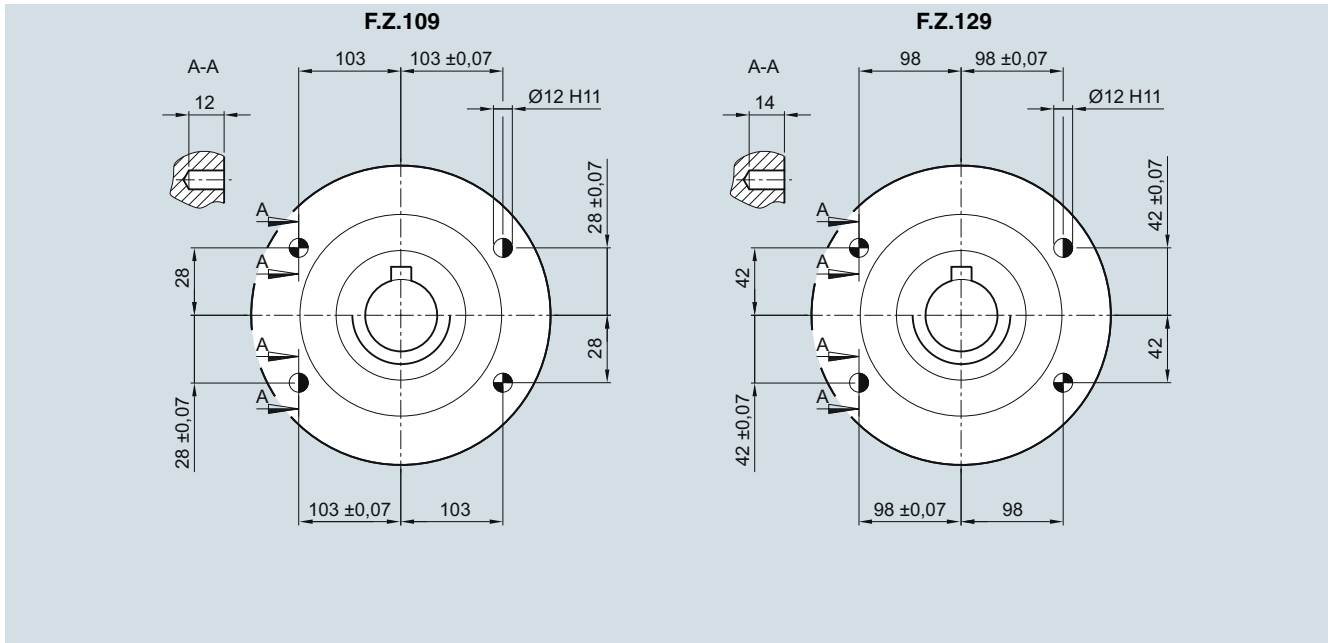
Pin holes

In the case of gearboxes F.Z.109 and F.Z.129, the customer's interface can be pinned on the housing flange (C type).

The output flanges have been designed to ensure the reliable transmission of the permissible torques and radial forces by the bolt connections.

If additional fastening is required, in the case of high shock loads, for example, the existing drilled pin holes can be used.

The gearboxes can also be drilled and pinned together with the machine. The listed dimensions must be complied with.



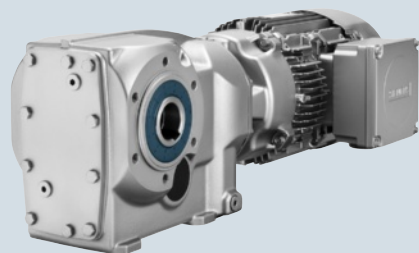
- Spring pins, heavy-duty design, to DIN 1481: Use pin holes provided in the housing flange.
- Grooved cylindrical pins with chamfer to EN 28740/ISO 8740: Drill connecting component together with housing.

SIMOGEAR Geared Motors

Notes

4

Bevel geared motors

**5/2 Orientation****5/3 Geared motors up to 55 kW**

5/3 Selection and ordering data

5/50 Transmission ratios and torques

5/50 Selection and ordering data

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5/64 Dimensional drawing overview

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Dimensions

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 5/93 KAD.69
 5/94 K..79
 5/95 K.F.79
 5/96 K.Z.79
 5/97 KAD.79
 5/98 K..89
 5/99 K.F.89
 5/100 K.Z.89
 5/101 KAD.89
 5/102 K..109
 5/103 K.F.109
 5/104 K.Z.109
 5/105 KAD.109
 5/106 K..129
 5/107 K.F.129
 5/108 K.Z.129
 5/109 KAD.129
 5/110 K..149
 5/111 K.F.149
 5/112 K.Z.149
 5/113 KAD.149
 5/114 K..169
 5/115 K.F.169
 5/116 K.Z.169
 5/117 KAD.169
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 5/125 Inner contour of the flange design
 5/127 Pin holes

SIMOGEAR Geared Motors

Bevel geared motors

Orientation

SIMOGEAR bevel geared motor B

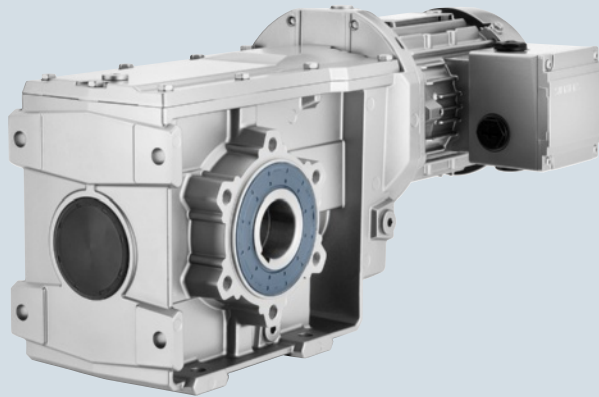


Fig. 5/1 Bevel geared motor B

SIMOGEAR bevel geared motor K

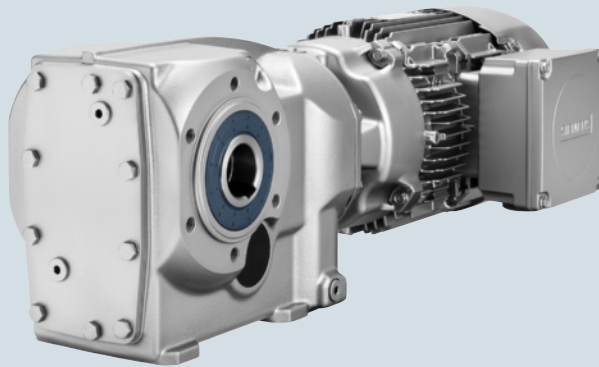


Fig. 5/2 Bevel geared motor K

SIMOGEAR bevel geared motors are available in the following versions for mounting in any position:

- 2 or 3 stages B/K
- Shaft-mounted design with torque arm BAD/KAD
- Flange-mounted design BF/KF
- Design with integrated housing flange BZ/KZ
- Foot-mounted design B/K
- Hollow-shaft design with feather key BA/KA
- Hollow-shaft design with splined shaft KAT
- Hollow-shaft design with shrink disk BAS/KAS
- Hollow-shaft design with SIMOLOC assembly system BADR/KADR
- Solid shaft design with feather key (at one end or both ends) B/K

For 2-stage bevel gearboxes B, the torque arm is supplied loose to enable it to be mounted as required on site. The position of the torque arm can be freely selected.

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.09	K.49-LA71MH8							
	3.1	270	200.25	8 640	1.5	25	2KJ3505 - ■ CE11 - ■ ■ J2	P02
	3.5	240	178.06	8 730	1.7	25	2KJ3505 - ■ CE11 - ■ ■ H2	P02
	4.0	210	156.34	8 820	2.0	25	2KJ3505 - ■ CE11 - ■ ■ G2	P02
	K.39-LA71MH8							
	4.0	215	157.32	6 100	1.0	17	2KJ3504 - ■ CE11 - ■ ■ J2	P02
	4.5	190	139.54	6 190	1.2	17	2KJ3504 - ■ CE11 - ■ ■ H2	P02
	5.2	165	121.07	6 280	1.3	17	2KJ3504 - ■ CE11 - ■ ■ G2	P02
	K.39-LA63MF6							
	5.4	159	157.32	6 300	1.4	15	2KJ3504 - ■ BD11 - ■ ■ J2	P01
	6.1	141	139.54	6 370	1.6	15	2KJ3504 - ■ BD11 - ■ ■ H2	P01
	7.0	122	121.07	6 440	1.8	15	2KJ3504 - ■ BD11 - ■ ■ G2	P01
	7.7	111	110.06	6 480	2.0	15	2KJ3504 - ■ BD11 - ■ ■ F2	P01
	B.29-LA71MH8							
	13	64	46.85	4 200	1.7	12	2KJ3501 - ■ CE11 - ■ ■ B2	P02
	15	57	41.56	4 200	1.9	12	2KJ3501 - ■ CE11 - ■ ■ A2	P02
	17	49	36.06	4 200	2.2	12	2KJ3501 - ■ CE11 - ■ ■ X1	P02
	B.29-LA63MF6							
	18	47	46.85	4 200	2.3	9	2KJ3501 - ■ BD11 - ■ ■ B2	P01
	20	42	41.56	4 200	2.6	9	2KJ3501 - ■ BD11 - ■ ■ A2	P01
	24	36	36.06	4 200	3.0	9	2KJ3501 - ■ BD11 - ■ ■ X1	P01
	26	33	32.78	4 200	3.3	9	2KJ3501 - ■ BD11 - ■ ■ W1	P01
	B.29-LA63MD4							
	30	29	46.85	4 200	3.8	9	2KJ3501 - ■ BB11 - ■ ■ B2	
	34	26	41.56	4 200	4.3	9	2KJ3501 - ■ BB11 - ■ ■ A2	
	39	22	36.06	4 200	5.0	9	2KJ3501 - ■ BB11 - ■ ■ X1	
	43	20	32.78	4 200	5.5	9	2KJ3501 - ■ BB11 - ■ ■ W1	
50	17	28.11	4 200	6.4	9	2KJ3501 - ■ BB11 - ■ ■ V1		
55	16	25.56	4 200	7.0	9	2KJ3501 - ■ BB11 - ■ ■ U1		
62	14	22.41	4 200	8.0	9	2KJ3501 - ■ BB11 - ■ ■ T1		
70	12	20.00	4 200	9.0	9	2KJ3501 - ■ BB11 - ■ ■ S1		
79	11	17.82	4 200	10	9	2KJ3501 - ■ BB11 - ■ ■ R1		
85	10	16.45	4 200	11	9	2KJ3501 - ■ BB11 - ■ ■ Q1		
97	8.8	14.40	4 200	12	9	2KJ3501 - ■ BB11 - ■ ■ P1		
111	7.8	12.63	4 200	14	9	2KJ3501 - ■ BB11 - ■ ■ N1		
B.19-LA71MH8								
15	57	42.10	1 910	0.87	10	2KJ3500 - ■ CE11 - ■ ■ A2	P02	
17	51	37.28	1 910	0.98	10	2KJ3500 - ■ CE11 - ■ ■ X1	P02	
19	44	32.39	1 910	1.1	10	2KJ3500 - ■ CE11 - ■ ■ W1	P02	
B.19-LA63MF6								
20	43	42.10	1 910	1.2	8	2KJ3500 - ■ BD11 - ■ ■ A2	P01	
23	38	37.28	1 910	1.3	8	2KJ3500 - ■ BD11 - ■ ■ X1	P01	
26	33	32.39	1 910	1.5	8	2KJ3500 - ■ BD11 - ■ ■ W1	P01	
29	30	29.44	1 910	1.7	8	2KJ3500 - ■ BD11 - ■ ■ V1	P01	
B.19-LA63MD4								
33	26	42.10	1 910	1.9	8	2KJ3500 - ■ BB11 - ■ ■ A2		

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.09								
B.19-LA63MD4								
	38	23	37.28	1 910	2.2	8	2KJ3500 - ■ BB11 - ■ ■ X1	
	43	20	32.39	1 910	2.5	8	2KJ3500 - ■ BB11 - ■ ■ W1	
	48	18	29.44	1 910	2.8	8	2KJ3500 - ■ BB11 - ■ ■ V1	
	56	15	25.06	1 910	3.2	8	2KJ3500 - ■ BB11 - ■ ■ U1	
	61	14	22.78	1 910	3.6	8	2KJ3500 - ■ BB11 - ■ ■ T1	
	70	12	19.86	1 910	4.1	8	2KJ3500 - ■ BB11 - ■ ■ S1	
	79	11	17.78	1 910	4.6	8	2KJ3500 - ■ BB11 - ■ ■ R1	
	89	9.7	15.79	1 910	5.2	8	2KJ3500 - ■ BB11 - ■ ■ Q1	
	96	8.9	14.57	1 910	5.6	8	2KJ3500 - ■ BB11 - ■ ■ P1	
	111	7.8	12.66	1 910	6.4	8	2KJ3500 - ■ BB11 - ■ ■ N1	
	127	6.8	11.00	1 910	7.4	8	2KJ3500 - ■ BB11 - ■ ■ M1	
	141	6.1	9.93	1 910	8.2	8	2KJ3500 - ■ BB11 - ■ ■ L1	
	150	5.7	9.35	1 910	8.7	8	2KJ3500 - ■ BB11 - ■ ■ K1	
	172	5	8.15	1 910	9.4	8	2KJ3500 - ■ BB11 - ■ ■ J1	
	178	4.8	7.87	1 910	7.9	8	2KJ3500 - ■ BB11 - ■ ■ H1	
	200	4.3	6.99	1 910	8.9	8	2KJ3500 - ■ BB11 - ■ ■ G1	
	217	4	6.45	1 910	9.8	8	2KJ3500 - ■ BB11 - ■ ■ F1	
	250	3.4	5.61	1 910	11	8	2KJ3500 - ■ BB11 - ■ ■ E1	
	287	3	4.87	1 910	12	8	2KJ3500 - ■ BB11 - ■ ■ D1	
	318	2.7	4.40	1 910	13	8	2KJ3500 - ■ BB11 - ■ ■ C1	
	338	2.5	4.14	1 910	13	8	2KJ3500 - ■ BB11 - ■ ■ B1	
	388	2.2	3.61	1 910	14	8	2KJ3500 - ■ BB11 - ■ ■ A1	
0.12								
K.79-LA71MJ8								
	2.6	430	244.25	14 400	1.9	36	2KJ3508 - ■ CF11 - ■ ■ J2	P02
K.69-LA71MJ8								
	3.3	345	196.59	11 400	1.7	31	2KJ3507 - ■ CF11 - ■ ■ H2	P02
	3.6	315	178.72	11 500	1.9	31	2KJ3507 - ■ CF11 - ■ ■ G2	P02
K.49-LA71MJ8								
	3.2	355	200.25	8 330	1.2	24	2KJ3505 - ■ CF11 - ■ ■ J2	P02
	3.6	315	178.06	8 510	1.3	24	2KJ3505 - ■ CF11 - ■ ■ H2	P02
K.49-LA63MG6								
	5.0	225	200.25	8 770	1.8	22	2KJ3505 - ■ BE11 - ■ ■ J2	P01
	5.6	200	178.06	8 850	2.1	22	2KJ3505 - ■ BE11 - ■ ■ H2	P01
K.39-LA71MJ8								
	4.6	245	139.54	5 980	0.89	17	2KJ3504 - ■ CF11 - ■ ■ H2	P02
K.39-LA63MG6								
	6.4	180	157.32	6 230	1.2	15	2KJ3504 - ■ BE11 - ■ ■ J2	P01
	7.2	160	139.54	6 300	1.4	15	2KJ3504 - ■ BE11 - ■ ■ H2	P01
	8.3	139	121.07	6 380	1.6	15	2KJ3504 - ■ BE11 - ■ ■ G2	P01
K.39-LA63ME4								
	8.6	134	157.32	6 400	1.6	15	2KJ3504 - ■ BC11 - ■ ■ J2	
	9.7	118	139.54	6 460	1.9	15	2KJ3504 - ■ BC11 - ■ ■ H2	
	11	103	121.07	6 510	2.1	15	2KJ3504 - ■ BC11 - ■ ■ G2	
B.29-LA71MJ8								
	14	83	46.85	4 200	1.3	11	2KJ3501 - ■ CF11 - ■ ■ B2	P02

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.12								
B.29-LA71MJ8								
16	74	41.56	41.56	4 200	1.5	11	2KJ3501 - ■ CF11 - ■ ■ A2	P02
B.29-LA63MG6								
21	54	46.85	46.85	4 200	2.0	9	2KJ3501 - ■ BE11 - ■ ■ B2	P01
24	48	41.56	41.56	4 200	2.3	9	2KJ3501 - ■ BE11 - ■ ■ A2	P01
28	41	36.06	36.06	4 200	2.7	9	2KJ3501 - ■ BE11 - ■ ■ X1	P01
B.29-LA63ME4								
29	40	46.85	46.85	4 200	2.8	9	2KJ3501 - ■ BC11 - ■ ■ B2	
32	35	41.56	41.56	4 200	3.1	9	2KJ3501 - ■ BC11 - ■ ■ A2	
37	31	36.06	36.06	4 200	3.6	9	2KJ3501 - ■ BC11 - ■ ■ X1	
41	28	32.78	32.78	4 200	4.0	9	2KJ3501 - ■ BC11 - ■ ■ W1	
48	24	28.11	28.11	4 200	4.6	9	2KJ3501 - ■ BC11 - ■ ■ V1	
53	22	25.56	25.56	4 200	5.1	9	2KJ3501 - ■ BC11 - ■ ■ U1	
60	19	22.41	22.41	4 200	5.8	9	2KJ3501 - ■ BC11 - ■ ■ T1	
68	17	20.00	20.00	4 200	6.5	9	2KJ3501 - ■ BC11 - ■ ■ S1	
76	15	17.82	17.82	4 200	7.3	9	2KJ3501 - ■ BC11 - ■ ■ R1	
82	14	16.45	16.45	4 200	7.9	9	2KJ3501 - ■ BC11 - ■ ■ Q1	
94	12	14.40	14.40	4 200	9.0	9	2KJ3501 - ■ BC11 - ■ ■ P1	
107	11	12.63	12.63	4 200	10	9	2KJ3501 - ■ BC11 - ■ ■ N1	
118	9.7	11.46	11.46	4 200	11	9	2KJ3501 - ■ BC11 - ■ ■ M1	
125	9.2	10.78	10.78	4 200	12	9	2KJ3501 - ■ BC11 - ■ ■ L1	
142	8.1	9.51	9.51	4 200	14	9	2KJ3501 - ■ BC11 - ■ ■ K1	
172	6.7	7.84	7.84	4 150	11	9	2KJ3501 - ■ BC11 - ■ ■ H1	
183	6.3	7.38	7.38	4 070	12	9	2KJ3501 - ■ BC11 - ■ ■ G1	
207	5.5	6.51	6.51	3 900	14	9	2KJ3501 - ■ BC11 - ■ ■ F1	
B.19-LA63MG6								
24	48	42.10	42.10	1 910	1.0	8	2KJ3500 - ■ BE11 - ■ ■ A2	P01
27	43	37.28	37.28	1 910	1.2	8	2KJ3500 - ■ BE11 - ■ ■ X1	P01
31	37	32.39	32.39	1 910	1.3	8	2KJ3500 - ■ BE11 - ■ ■ W1	P01
B.19-LA63ME4								
32	36	42.10	42.10	1 910	1.4	8	2KJ3500 - ■ BC11 - ■ ■ A2	
36	32	37.28	37.28	1 910	1.6	8	2KJ3500 - ■ BC11 - ■ ■ X1	
42	28	32.39	32.39	1 910	1.8	8	2KJ3500 - ■ BC11 - ■ ■ W1	
46	25	29.44	29.44	1 910	2.0	8	2KJ3500 - ■ BC11 - ■ ■ V1	
54	21	25.06	25.06	1 910	2.4	8	2KJ3500 - ■ BC11 - ■ ■ U1	
59	19	22.78	22.78	1 910	2.6	8	2KJ3500 - ■ BC11 - ■ ■ T1	
68	17	19.86	19.86	1 910	3.0	8	2KJ3500 - ■ BC11 - ■ ■ S1	
76	15	17.78	17.78	1 910	3.3	8	2KJ3500 - ■ BC11 - ■ ■ R1	
85	13	15.79	15.79	1 910	3.7	8	2KJ3500 - ■ BC11 - ■ ■ Q1	
93	12	14.57	14.57	1 910	4.0	8	2KJ3500 - ■ BC11 - ■ ■ P1	
107	11	12.66	12.66	1 910	4.7	8	2KJ3500 - ■ BC11 - ■ ■ N1	
123	9.3	11.00	11.00	1 910	5.4	8	2KJ3500 - ■ BC11 - ■ ■ M1	
136	8.4	9.93	9.93	1 910	5.9	8	2KJ3500 - ■ BC11 - ■ ■ L1	
144	7.9	9.35	9.35	1 910	6.3	8	2KJ3500 - ■ BC11 - ■ ■ K1	
166	6.9	8.15	8.15	1 910	6.8	8	2KJ3500 - ■ BC11 - ■ ■ J1	
172	6.7	7.87	7.87	1 910	5.7	8	2KJ3500 - ■ BC11 - ■ ■ H1	
193	5.9	6.99	6.99	1 910	6.4	8	2KJ3500 - ■ BC11 - ■ ■ G1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.12								
B.19-LA63ME4								
209		5.5	6.45	1 910	7.1	8	2KJ3500 - ■ BC11 - ■ ■ F1	
241		4.8	5.61	1 910	7.8	8	2KJ3500 - ■ BC11 - ■ ■ E1	
277		4.1	4.87	1 910	8.5	8	2KJ3500 - ■ BC11 - ■ ■ D1	
307		3.7	4.40	1 910	9.1	8	2KJ3500 - ■ BC11 - ■ ■ C1	
326		3.5	4.14	1 910	9.4	8	2KJ3500 - ■ BC11 - ■ ■ B1	
374		3.1	3.61	1 910	10	8	2KJ3500 - ■ BC11 - ■ ■ A1	
0.18								
K.79-LA71MG6								
3.5		490	244.25	14 400	1.7	35	2KJ3508 - ■ CD11 - ■ ■ J2	P01
3.8		445	222.05	14 400	1.8	35	2KJ3508 - ■ CD11 - ■ ■ H2	P01
K.69-LA71MG6								
4.3		395	196.59	11 300	1.5	30	2KJ3507 - ■ CD11 - ■ ■ H2	P01
4.8		360	178.72	11 400	1.7	30	2KJ3507 - ■ CD11 - ■ ■ G2	P01
5.6		305	152.00	11 500	2.0	30	2KJ3507 - ■ CD11 - ■ ■ F2	P01
6.2		275	138.18	11 600	2.1	30	2KJ3507 - ■ CD11 - ■ ■ E2	P01
K.49-LA71MG6								
4.2		405	200.25	7 940	1.0	23	2KJ3505 - ■ CD11 - ■ ■ J2	P01
4.8		360	178.06	8 290	1.2	23	2KJ3505 - ■ CD11 - ■ ■ H2	P01
5.4		315	156.34	8 510	1.3	23	2KJ3505 - ■ CD11 - ■ ■ G2	P01
6.0		285	142.13	8 600	1.5	23	2KJ3505 - ■ CD11 - ■ ■ F2	P01
K.49-LA63M4								
6.7		255	200.25	8 690	1.6	22	2KJ3505 - ■ BD11 - ■ ■ J2	
7.6		225	178.06	8 770	1.9	22	2KJ3505 - ■ BD11 - ■ ■ H2	
8.6		199	156.34	8 850	2.1	22	2KJ3505 - ■ BD11 - ■ ■ G2	
K.39-LA71MG6								
7.0		245	121.07	5 980	0.9	16	2KJ3504 - ■ CD11 - ■ ■ G2	P01
7.7		220	110.06	6 080	0.99	16	2KJ3504 - ■ CD11 - ■ ■ F2	P01
K.39-LA63M4								
8.6		200	157.32	6 150	1.1	15	2KJ3504 - ■ BD11 - ■ ■ J2	
9.7		178	139.54	6 230	1.2	15	2KJ3504 - ■ BD11 - ■ ■ H2	
11		154	121.07	6 320	1.4	15	2KJ3504 - ■ BD11 - ■ ■ G2	
12		140	110.06	6 370	1.6	15	2KJ3504 - ■ BD11 - ■ ■ F2	
14		120	94.39	6 450	1.8	15	2KJ3504 - ■ BD11 - ■ ■ E2	
16		109	85.81	6 490	2.0	15	2KJ3504 - ■ BD11 - ■ ■ D2	
18		96	75.24	6 530	2.3	15	2KJ3504 - ■ BD11 - ■ ■ C2	
B.39-LA71MG6								
15		114	56.36	6 980	2.2	15	2KJ3502 - ■ CD11 - ■ ■ A2	P01
17		101	50.11	6 980	2.1	15	2KJ3502 - ■ CD11 - ■ ■ X1	P01
B.29-LA71MG6								
18		95	46.85	4 200	1.2	10	2KJ3501 - ■ CD11 - ■ ■ B2	P01
20		84	41.56	4 200	1.3	10	2KJ3501 - ■ CD11 - ■ ■ A2	P01
24		73	36.06	4 200	1.5	10	2KJ3501 - ■ CD11 - ■ ■ X1	P01
26		66	32.78	4 200	1.7	10	2KJ3501 - ■ CD11 - ■ ■ W1	P01
B.29-LA63MF4								
29		60	46.85	4 200	1.8	9	2KJ3501 - ■ BD11 - ■ ■ B2	
32		53	41.56	4 200	2.1	9	2KJ3501 - ■ BD11 - ■ ■ A2	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.18								
B.29-LA63MF4								
	37	46	36.06	4 200	2.4	9	2KJ3501 - ■ BD11 - ■ ■ X1	
	41	42	32.78	4 200	2.6	9	2KJ3501 - ■ BD11 - ■ ■ W1	
	48	36	28.11	4 200	3.1	9	2KJ3501 - ■ BD11 - ■ ■ V1	
	53	32	25.56	4 200	3.4	9	2KJ3501 - ■ BD11 - ■ ■ U1	
	60	28	22.41	4 200	3.9	9	2KJ3501 - ■ BD11 - ■ ■ T1	
	68	26	20.00	4 200	4.3	9	2KJ3501 - ■ BD11 - ■ ■ S1	
	76	23	17.82	4 200	4.8	9	2KJ3501 - ■ BD11 - ■ ■ R1	
	82	21	16.45	4 200	5.3	9	2KJ3501 - ■ BD11 - ■ ■ Q1	
	94	18	14.40	4 200	6.0	9	2KJ3501 - ■ BD11 - ■ ■ P1	
	107	16	12.63	4 200	6.8	9	2KJ3501 - ■ BD11 - ■ ■ N1	
	118	15	11.46	4 200	7.5	9	2KJ3501 - ■ BD11 - ■ ■ M1	
	125	14	10.78	4 200	8.0	9	2KJ3501 - ■ BD11 - ■ ■ L1	
	142	12	9.51	4 200	9.1	9	2KJ3501 - ■ BD11 - ■ ■ K1	
	164	10	8.25	4 200	10	9	2KJ3501 - ■ BD11 - ■ ■ J1	
	172	10	7.84	4 110	7.5	9	2KJ3501 - ■ BD11 - ■ ■ H1	
	183	9.4	7.38	4 040	8.0	9	2KJ3501 - ■ BD11 - ■ ■ G1	
	207	8.3	6.51	3 880	9.0	9	2KJ3501 - ■ BD11 - ■ ■ F1	
	239	7.2	5.65	3 700	10	9	2KJ3501 - ■ BD11 - ■ ■ E1	
	266	6.5	5.07	3 590	12	9	2KJ3501 - ■ BD11 - ■ ■ D1	
	282	6.1	4.78	3 520	12	9	2KJ3501 - ■ BD11 - ■ ■ C1	
	321	5.4	4.21	3 380	14	9	2KJ3501 - ■ BD11 - ■ ■ B1	
B.19-LA71MG6								
	29	60	29.44	1 910	0.84	9	2KJ3500 - ■ CD11 - ■ ■ V1	P01
B.19-LA63MF4								
	32	54	42.10	1 910	0.93	8	2KJ3500 - ■ BD11 - ■ ■ A2	
	36	48	37.28	1 910	1.1	8	2KJ3500 - ■ BD11 - ■ ■ X1	
	42	41	32.39	1 910	1.2	8	2KJ3500 - ■ BD11 - ■ ■ W1	
	46	38	29.44	1 910	1.3	8	2KJ3500 - ■ BD11 - ■ ■ V1	
	54	32	25.06	1 910	1.6	8	2KJ3500 - ■ BD11 - ■ ■ U1	
	59	29	22.78	1 910	1.7	8	2KJ3500 - ■ BD11 - ■ ■ T1	
	68	25	19.86	1 910	2.0	8	2KJ3500 - ■ BD11 - ■ ■ S1	
	76	23	17.78	1 910	2.2	8	2KJ3500 - ■ BD11 - ■ ■ R1	
	85	20	15.79	1 910	2.5	8	2KJ3500 - ■ BD11 - ■ ■ Q1	
	93	19	14.57	1 910	2.7	8	2KJ3500 - ■ BD11 - ■ ■ P1	
	107	16	12.66	1 910	3.1	8	2KJ3500 - ■ BD11 - ■ ■ N1	
	123	14	11.00	1 910	3.6	8	2KJ3500 - ■ BD11 - ■ ■ M1	
	136	13	9.93	1 910	4.0	8	2KJ3500 - ■ BD11 - ■ ■ L1	
	144	12	9.35	1 910	4.2	8	2KJ3500 - ■ BD11 - ■ ■ K1	
	166	10	8.15	1 910	4.5	8	2KJ3500 - ■ BD11 - ■ ■ J1	
	172	10	7.87	1 910	3.8	8	2KJ3500 - ■ BD11 - ■ ■ H1	
	193	8.9	6.99	1 910	4.3	8	2KJ3500 - ■ BD11 - ■ ■ G1	
	209	8.2	6.45	1 910	4.7	8	2KJ3500 - ■ BD11 - ■ ■ F1	
	241	7.1	5.61	1 910	5.2	8	2KJ3500 - ■ BD11 - ■ ■ E1	
	277	6.2	4.87	1 910	5.6	8	2KJ3500 - ■ BD11 - ■ ■ D1	
	307	5.6	4.40	1 910	6.1	8	2KJ3500 - ■ BD11 - ■ ■ C1	
	326	5.3	4.14	1 910	6.3	8	2KJ3500 - ■ BD11 - ■ ■ B1	
	374	4.6	3.61	1 910	6.7	8	2KJ3500 - ■ BD11 - ■ ■ A1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25								
K.79-LA71MH6								
3.5	675	244.25	14 200	1.2	37	2KJ3508	- ■ CE11 - ■ ■ J2	P01
3.9	615	222.05	14 300	1.3	37	2KJ3508	- ■ CE11 - ■ ■ H2	P01
4.6	520	188.85	14 400	1.6	37	2KJ3508	- ■ CE11 - ■ ■ G2	P01
5.0	475	171.69	14 400	1.7	37	2KJ3508	- ■ CE11 - ■ ■ F2	P01
K.79-LA71MG4								
5.5	430	244.25	14 400	1.9	35	2KJ3508	- ■ CD11 - ■ ■ J2	
6.1	390	222.05	14 400	2.1	35	2KJ3508	- ■ CD11 - ■ ■ H2	
K.69-LA71MH6								
4.4	545	196.59	10 900	1.1	32	2KJ3507	- ■ CE11 - ■ ■ H2	P01
4.8	495	178.72	11 100	1.2	32	2KJ3507	- ■ CE11 - ■ ■ G2	P01
5.7	420	152.00	11 200	1.4	32	2KJ3507	- ■ CE11 - ■ ■ F2	P01
6.2	380	138.18	11 300	1.6	32	2KJ3507	- ■ CE11 - ■ ■ E2	P01
K.69-LA71MG4								
6.9	345	196.59	11 400	1.7	30	2KJ3507	- ■ CD11 - ■ ■ H2	
7.6	315	178.72	11 500	1.9	30	2KJ3507	- ■ CD11 - ■ ■ G2	
K.49-LA71MH6								
4.8	490	178.06	7 270	0.85	25	2KJ3505	- ■ CE11 - ■ ■ H2	P01
5.5	430	156.34	7 740	0.97	25	2KJ3505	- ■ CE11 - ■ ■ G2	P01
6.1	395	142.13	8 020	1.1	25	2KJ3505	- ■ CE11 - ■ ■ F2	P01
K.49-LA71MG4								
6.7	350	200.25	8 370	1.2	23	2KJ3505	- ■ CD11 - ■ ■ J2	
7.6	315	178.06	8 510	1.3	23	2KJ3505	- ■ CD11 - ■ ■ H2	
8.6	275	156.34	8 630	1.5	23	2KJ3505	- ■ CD11 - ■ ■ G2	
9.5	250	142.13	8 700	1.7	23	2KJ3505	- ■ CD11 - ■ ■ F2	
11	215	121.60	8 800	2.0	23	2KJ3505	- ■ CD11 - ■ ■ E2	
12	196	110.55	8 860	2.1	23	2KJ3505	- ■ CD11 - ■ ■ D2	
K.39-LA71MG4								
9.7	245	139.54	5 980	0.89	16	2KJ3504	- ■ CD11 - ■ ■ H2	
11	210	121.07	6 110	1.0	16	2KJ3504	- ■ CD11 - ■ ■ G2	
12	195	110.06	6 170	1.1	16	2KJ3504	- ■ CD11 - ■ ■ F2	
14	167	94.39	6 270	1.3	16	2KJ3504	- ■ CD11 - ■ ■ E2	
16	152	85.81	6 330	1.4	16	2KJ3504	- ■ CD11 - ■ ■ D2	
18	133	75.24	6 400	1.7	16	2KJ3504	- ■ CD11 - ■ ■ C2	
20	119	67.16	6 450	1.9	16	2KJ3504	- ■ CD11 - ■ ■ B2	
23	106	59.85	6 500	2.1	16	2KJ3504	- ■ CD11 - ■ ■ A2	
24	98	55.25	6 530	2.3	16	2KJ3504	- ■ CD11 - ■ ■ X1	
B.39-LA71MH6								
15	156	56.36	6 980	1.6	17	2KJ3502	- ■ CE11 - ■ ■ A2	P01
17	139	50.11	6 980	1.5	17	2KJ3502	- ■ CE11 - ■ ■ X1	P01
20	122	44.00	6 980	2.0	17	2KJ3502	- ■ CE11 - ■ ■ W1	P01
22	111	40.00	6 980	2.1	17	2KJ3502	- ■ CE11 - ■ ■ V1	P01
B.39-LA71MG4								
27	89	50.11	6 980	2.4	15	2KJ3502	- ■ CD11 - ■ ■ X1	
B.29-LA71MH6								
18	130	46.85	4 030	0.85	12	2KJ3501	- ■ CE11 - ■ ■ B2	P01

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25								
B.29-LA71MH6								
	21	115	41.56	4 110	0.95	12	2KJ3501 - ■ CE11 - ■ ■ A2	P01
	24	100	36.06	4 190	1.1	12	2KJ3501 - ■ CE11 - ■ ■ X1	P01
	26	91	32.78	4 200	1.2	12	2KJ3501 - ■ CE11 - ■ ■ W1	P01
B.29-LA71MG4								
	29	83	46.85	4 200	1.3	10	2KJ3501 - ■ CD11 - ■ ■ B2	
	32	74	41.56	4 200	1.5	10	2KJ3501 - ■ CD11 - ■ ■ A2	
	37	64	36.06	4 200	1.7	10	2KJ3501 - ■ CD11 - ■ ■ X1	
	41	58	32.78	4 200	1.9	10	2KJ3501 - ■ CD11 - ■ ■ W1	
	48	50	28.11	4 200	2.2	10	2KJ3501 - ■ CD11 - ■ ■ V1	
	53	45	25.56	4 200	2.4	10	2KJ3501 - ■ CD11 - ■ ■ U1	
	60	40	22.41	4 200	2.8	10	2KJ3501 - ■ CD11 - ■ ■ T1	
	68	35	20.00	4 200	3.1	10	2KJ3501 - ■ CD11 - ■ ■ S1	
	76	32	17.82	4 200	3.5	10	2KJ3501 - ■ CD11 - ■ ■ R1	
	82	29	16.45	4 200	3.8	10	2KJ3501 - ■ CD11 - ■ ■ Q1	
	94	26	14.40	4 200	4.3	10	2KJ3501 - ■ CD11 - ■ ■ P1	
	107	22	12.63	4 200	4.9	10	2KJ3501 - ■ CD11 - ■ ■ N1	
	118	20	11.46	4 200	5.4	10	2KJ3501 - ■ CD11 - ■ ■ M1	
	125	19	10.78	4 200	5.8	10	2KJ3501 - ■ CD11 - ■ ■ L1	
	142	17	9.51	4 200	6.5	10	2KJ3501 - ■ CD11 - ■ ■ K1	
	164	15	8.25	4 150	7.5	10	2KJ3501 - ■ CD11 - ■ ■ J1	
	172	14	7.84	4 070	5.4	10	2KJ3501 - ■ CD11 - ■ ■ H1	
	183	13	7.38	4 000	5.7	10	2KJ3501 - ■ CD11 - ■ ■ G1	
	207	12	6.51	3 840	6.5	10	2KJ3501 - ■ CD11 - ■ ■ F1	
	239	10	5.65	3 680	7.5	10	2KJ3501 - ■ CD11 - ■ ■ E1	
	266	9	5.07	3 570	8.3	10	2KJ3501 - ■ CD11 - ■ ■ D1	
	282	8.5	4.78	3 500	8.8	10	2KJ3501 - ■ CD11 - ■ ■ C1	
	321	7.4	4.21	3 360	9.9	10	2KJ3501 - ■ CD11 - ■ ■ B1	
	370	6.5	3.65	3 210	11	10	2KJ3501 - ■ CD11 - ■ ■ A1	
B.19-LA71MG4								
	42	57	32.39	1 910	0.87	9	2KJ3500 - ■ CD11 - ■ ■ W1	
	46	52	29.44	1 910	0.96	9	2KJ3500 - ■ CD11 - ■ ■ V1	
	54	44	25.06	1 910	1.1	9	2KJ3500 - ■ CD11 - ■ ■ U1	
	59	40	22.78	1 910	1.2	9	2KJ3500 - ■ CD11 - ■ ■ T1	
	68	35	19.86	1 910	1.4	9	2KJ3500 - ■ CD11 - ■ ■ S1	
	76	31	17.78	1 910	1.6	9	2KJ3500 - ■ CD11 - ■ ■ R1	
	85	28	15.79	1 910	1.8	9	2KJ3500 - ■ CD11 - ■ ■ Q1	
	93	26	14.57	1 910	1.9	9	2KJ3500 - ■ CD11 - ■ ■ P1	
	107	22	12.66	1 910	2.2	9	2KJ3500 - ■ CD11 - ■ ■ N1	
	123	20	11.00	1 910	2.6	9	2KJ3500 - ■ CD11 - ■ ■ M1	
	136	18	9.93	1 910	2.8	9	2KJ3500 - ■ CD11 - ■ ■ L1	
	144	16	9.35	1 910	3.0	9	2KJ3500 - ■ CD11 - ■ ■ K1	
	166	14	8.15	1 910	3.3	9	2KJ3500 - ■ CD11 - ■ ■ J1	
	172	14	7.87	1 910	2.7	9	2KJ3500 - ■ CD11 - ■ ■ H1	
	193	12	6.99	1 910	3.1	9	2KJ3500 - ■ CD11 - ■ ■ G1	
	209	11	6.45	1 910	3.4	9	2KJ3500 - ■ CD11 - ■ ■ F1	
	241	9.9	5.61	1 910	3.7	9	2KJ3500 - ■ CD11 - ■ ■ E1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25	B.19-LA71MG4							
	277	8.6	4.87	1 910	4.1	9	2KJ3500 - ■ CD11 - ■ ■ D1	
	307	7.8	4.40	1 910	4.4	9	2KJ3500 - ■ CD11 - ■ ■ C1	
	326	7.3	4.14	1 910	4.5	9	2KJ3500 - ■ CD11 - ■ ■ B1	
	374	6.4	3.61	1 910	4.9	9	2KJ3500 - ■ CD11 - ■ ■ A1	
0.37	K.79-LA71MH4							
	5.6	630	244.25	14 300	1.3	37	2KJ3508 - ■ CE11 - ■ ■ J2	
	6.2	570	222.05	14 400	1.4	37	2KJ3508 - ■ CE11 - ■ ■ H2	
	7.3	485	188.85	14 400	1.7	37	2KJ3508 - ■ CE11 - ■ ■ G2	
	8.0	440	171.69	14 400	1.9	37	2KJ3508 - ■ CE11 - ■ ■ F2	
	8.9	395	153.18	14 400	2.1	37	2KJ3508 - ■ CE11 - ■ ■ E2	
	K.69-LA71MH4							
	7.0	505	196.59	11 000	1.2	32	2KJ3507 - ■ CE11 - ■ ■ H2	
	7.7	460	178.72	11 100	1.3	32	2KJ3507 - ■ CE11 - ■ ■ G2	
	9.0	390	152.00	11 300	1.5	32	2KJ3507 - ■ CE11 - ■ ■ F2	
	9.9	355	138.18	11 400	1.7	32	2KJ3507 - ■ CE11 - ■ ■ E2	
	11	315	123.29	11 500	1.9	32	2KJ3507 - ■ CE11 - ■ ■ D2	
	12	285	110.55	11 600	2.1	32	2KJ3507 - ■ CE11 - ■ ■ C2	
	K.49-LA71MH4							
	6.8	515	200.25	7 080	0.81	25	2KJ3505 - ■ CE11 - ■ ■ J2	
	7.7	455	178.06	7 550	0.91	25	2KJ3505 - ■ CE11 - ■ ■ H2	
	8.8	400	156.34	7 980	1.0	25	2KJ3505 - ■ CE11 - ■ ■ G2	
	9.6	365	142.13	8 250	1.1	25	2KJ3505 - ■ CE11 - ■ ■ F2	
	11	310	121.60	8 530	1.3	25	2KJ3505 - ■ CE11 - ■ ■ E2	
	12	285	110.55	8 600	1.5	25	2KJ3505 - ■ CE11 - ■ ■ D2	
	14	250	97.71	8 700	1.7	25	2KJ3505 - ■ CE11 - ■ ■ C2	
	15	225	88.83	8 770	1.8	25	2KJ3505 - ■ CE11 - ■ ■ B2	
	18	200	77.81	8 820	2.1	25	2KJ3505 - ■ CE11 - ■ ■ A2	
	19	185	71.82	8 670	2.3	25	2KJ3505 - ■ CE11 - ■ ■ X1	
	K.39-LA71MH4							
15	240	94.39	6 000	0.9	17	2KJ3504 - ■ CE11 - ■ ■ E2		
16	220	85.81	6 080	0.99	17	2KJ3504 - ■ CE11 - ■ ■ D2		
18	194	75.24	6 170	1.1	17	2KJ3504 - ■ CE11 - ■ ■ C2		
20	173	67.16	6 250	1.3	17	2KJ3504 - ■ CE11 - ■ ■ B2		
23	154	59.85	6 320	1.4	17	2KJ3504 - ■ CE11 - ■ ■ A2		
25	143	55.25	6 360	1.5	17	2KJ3504 - ■ CE11 - ■ ■ X1		
28	125	48.37	6 430	1.8	17	2KJ3504 - ■ CE11 - ■ ■ W1		
32	109	42.41	6 490	2.0	17	2KJ3504 - ■ CE11 - ■ ■ V1		
36	99	38.47	6 530	2.2	17	2KJ3504 - ■ CE11 - ■ ■ U1		
38	93	36.21	6 530	2.4	17	2KJ3504 - ■ CE11 - ■ ■ T1		
43	82	31.92	6 470	2.7	17	2KJ3504 - ■ CE11 - ■ ■ S1		
B.39-LA71MH4								
24	145	56.36	6 980	1.7	17	2KJ3502 - ■ CE11 - ■ ■ A2		
27	129	50.11	6 980	1.6	17	2KJ3502 - ■ CE11 - ■ ■ X1		
31	113	44.00	6 980	2.2	17	2KJ3502 - ■ CE11 - ■ ■ W1		
34	103	40.00	6 980	2.2	17	2KJ3502 - ■ CE11 - ■ ■ V1		

Article No. supplement

Shaft design **1, 5, 6, 7 or 9**

Frequency and voltage **2 or 9**

Gearbox mounting type **A, D, F or H**

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.37	B.29-LA71MH4							
	29	121	46.85	4 080	0.91	12	2KJ3501 - ■ CE11 - ■ ■ B2	
	33	107	41.56	4 150	1.0	12	2KJ3501 - ■ CE11 - ■ ■ A2	
	38	93	36.06	4 200	1.2	12	2KJ3501 - ■ CE11 - ■ ■ X1	
	42	84	32.78	4 200	1.3	12	2KJ3501 - ■ CE11 - ■ ■ W1	
	49	72	28.11	4 200	1.5	12	2KJ3501 - ■ CE11 - ■ ■ V1	
	54	66	25.56	4 200	1.7	12	2KJ3501 - ■ CE11 - ■ ■ U1	
	61	58	22.41	4 200	1.9	12	2KJ3501 - ■ CE11 - ■ ■ T1	
	68	52	20.00	4 200	2.1	12	2KJ3501 - ■ CE11 - ■ ■ S1	
	77	46	17.82	4 200	2.4	12	2KJ3501 - ■ CE11 - ■ ■ R1	
	83	42	16.45	4 200	2.6	12	2KJ3501 - ■ CE11 - ■ ■ Q1	
	95	37	14.40	4 200	3.0	12	2KJ3501 - ■ CE11 - ■ ■ P1	
	108	33	12.63	4 200	3.4	12	2KJ3501 - ■ CE11 - ■ ■ N1	
	120	30	11.46	4 200	3.7	12	2KJ3501 - ■ CE11 - ■ ■ M1	
	127	28	10.78	4 200	4.0	12	2KJ3501 - ■ CE11 - ■ ■ L1	
	144	24	9.51	4 200	4.5	12	2KJ3501 - ■ CE11 - ■ ■ K1	
	166	21	8.25	4 070	5.2	12	2KJ3501 - ■ CE11 - ■ ■ J1	
	175	20	7.84	3 990	3.7	12	2KJ3501 - ■ CE11 - ■ ■ H1	
	186	19	7.38	3 920	3.9	12	2KJ3501 - ■ CE11 - ■ ■ G1	
	210	17	6.51	3 770	4.5	12	2KJ3501 - ■ CE11 - ■ ■ F1	
	242	15	5.65	3 610	5.1	12	2KJ3501 - ■ CE11 - ■ ■ E1	
	270	13	5.07	3 510	5.7	12	2KJ3501 - ■ CE11 - ■ ■ D1	
	287	12	4.78	3 450	6.0	12	2KJ3501 - ■ CE11 - ■ ■ C1	
	325	11	4.21	3 310	6.8	12	2KJ3501 - ■ CE11 - ■ ■ B1	
	375	9.4	3.65	3 170	7.8	12	2KJ3501 - ■ CE11 - ■ ■ A1	
	B.19-LA71MH4							
	60	59	22.78	1 910	0.85	10	2KJ3500 - ■ CE11 - ■ ■ T1	
	69	51	19.86	1 910	0.98	10	2KJ3500 - ■ CE11 - ■ ■ S1	
	77	46	17.78	1 910	1.1	10	2KJ3500 - ■ CE11 - ■ ■ R1	
	87	41	15.79	1 910	1.2	10	2KJ3500 - ■ CE11 - ■ ■ Q1	
	94	38	14.57	1 910	1.3	10	2KJ3500 - ■ CE11 - ■ ■ P1	
	108	33	12.66	1 910	1.5	10	2KJ3500 - ■ CE11 - ■ ■ N1	
	125	28	11.00	1 910	1.8	10	2KJ3500 - ■ CE11 - ■ ■ M1	
	138	26	9.93	1 910	2.0	10	2KJ3500 - ■ CE11 - ■ ■ L1	
	147	24	9.35	1 910	2.1	10	2KJ3500 - ■ CE11 - ■ ■ K1	
	168	21	8.15	1 910	2.2	10	2KJ3500 - ■ CE11 - ■ ■ J1	
	174	20	7.87	1 910	1.9	10	2KJ3500 - ■ CE11 - ■ ■ H1	
	196	18	6.99	1 910	2.1	10	2KJ3500 - ■ CE11 - ■ ■ G1	
	212	17	6.45	1 910	2.3	10	2KJ3500 - ■ CE11 - ■ ■ F1	
	244	14	5.61	1 910	2.6	10	2KJ3500 - ■ CE11 - ■ ■ E1	
	281	13	4.87	1 910	2.8	10	2KJ3500 - ■ CE11 - ■ ■ D1	
	311	11	4.40	1 910	3.0	10	2KJ3500 - ■ CE11 - ■ ■ C1	
	331	11	4.14	1 910	3.1	10	2KJ3500 - ■ CE11 - ■ ■ B1	
	380	9.3	3.61	1 910	3.3	10	2KJ3500 - ■ CE11 - ■ ■ A1	
0.55	K.89-LE80MB4							
	6.2	845	231.80	18 100	1.9	60	2KJ3510 - ■ DB21 - ■ ■ K2	
	6.8	765	210.72	18 100	2.1	60	2KJ3510 - ■ DB21 - ■ ■ J2	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.55								
K.79-LE80MB4								
5.9	890	244.25	13 800	0.92	39	2KJ3508	- ■ DB21 - ■ ■ J2	
6.5	810	222.05	13 900	1.0	39	2KJ3508	- ■ DB21 - ■ ■ H2	
7.6	685	188.85	14 200	1.2	39	2KJ3508	- ■ DB21 - ■ ■ G2	
8.4	625	171.69	14 300	1.3	39	2KJ3508	- ■ DB21 - ■ ■ F2	
9.4	555	153.18	14 400	1.5	39	2KJ3508	- ■ DB21 - ■ ■ E2	
10	500	137.35	14 400	1.6	39	2KJ3508	- ■ DB21 - ■ ■ D2	
12	450	123.80	14 400	1.8	39	2KJ3508	- ■ DB21 - ■ ■ C2	
13	415	114.28	14 400	2.0	39	2KJ3508	- ■ DB21 - ■ ■ B2	
14	380	104.32	14 400	2.2	39	2KJ3508	- ■ DB21 - ■ ■ A2	
K.69-LE80MB4								
7.3	715	196.59	10 100	0.84	34	2KJ3507	- ■ DB21 - ■ ■ H2	
8.1	650	178.72	10 500	0.92	34	2KJ3507	- ■ DB21 - ■ ■ G2	
9.5	550	152.00	10 900	1.1	34	2KJ3507	- ■ DB21 - ■ ■ F2	
10	500	138.18	11 000	1.2	34	2KJ3507	- ■ DB21 - ■ ■ E2	
12	450	123.29	11 200	1.3	34	2KJ3507	- ■ DB21 - ■ ■ D2	
13	400	110.55	11 300	1.5	34	2KJ3507	- ■ DB21 - ■ ■ C2	
14	360	99.64	11 400	1.7	34	2KJ3507	- ■ DB21 - ■ ■ B2	
16	335	91.98	11 400	1.8	34	2KJ3507	- ■ DB21 - ■ ■ A2	
17	305	83.96	11 500	2.0	34	2KJ3507	- ■ DB21 - ■ ■ X1	
21	250	69.67	11 600	2.4	34	2KJ3507	- ■ DB21 - ■ ■ W1	
K.49-LE80MB4								
10	515	142.13	7 080	0.81	27	2KJ3505	- ■ DB21 - ■ ■ F2	
12	440	121.60	7 670	0.95	27	2KJ3505	- ■ DB21 - ■ ■ E2	
13	400	110.55	7 980	1.0	27	2KJ3505	- ■ DB21 - ■ ■ D2	
15	355	97.71	8 250	1.2	27	2KJ3505	- ■ DB21 - ■ ■ C2	
16	320	88.83	8 180	1.3	27	2KJ3505	- ■ DB21 - ■ ■ B2	
19	280	77.81	8 030	1.5	27	2KJ3505	- ■ DB21 - ■ ■ A2	
20	260	71.82	7 910	1.6	27	2KJ3505	- ■ DB21 - ■ ■ X1	
23	230	63.59	7 750	1.8	27	2KJ3505	- ■ DB21 - ■ ■ W1	
27	193	52.93	7 470	2.2	27	2KJ3505	- ■ DB21 - ■ ■ V1	
29	182	49.82	7 380	2.3	27	2KJ3505	- ■ DB21 - ■ ■ U1	
B.49-LE80MB4								
24	215	59.28	11 100	2.1	25	2KJ3503	- ■ DB21 - ■ ■ C2	
27	197	53.89	10 800	2.3	25	2KJ3503	- ■ DB21 - ■ ■ B2	
K.39-LE80MB4								
19	270	75.24	5 890	0.8	20	2KJ3504	- ■ DB21 - ■ ■ C2	
21	245	67.16	5 980	0.9	20	2KJ3504	- ■ DB21 - ■ ■ B2	
24	215	59.85	6 100	1.0	20	2KJ3504	- ■ DB21 - ■ ■ A2	
26	200	55.25	6 150	1.1	20	2KJ3504	- ■ DB21 - ■ ■ X1	
30	176	48.37	6 240	1.2	20	2KJ3504	- ■ DB21 - ■ ■ W1	
34	155	42.41	6 320	1.4	20	2KJ3504	- ■ DB21 - ■ ■ V1	
37	140	38.47	6 280	1.6	20	2KJ3504	- ■ DB21 - ■ ■ U1	
40	132	36.21	6 210	1.7	20	2KJ3504	- ■ DB21 - ■ ■ T1	
45	116	31.92	6 050	1.9	20	2KJ3504	- ■ DB21 - ■ ■ S1	
52	101	27.70	5 850	2.2	20	2KJ3504	- ■ DB21 - ■ ■ R1	
54	98	26.89	5 810	2.2	20	2KJ3504	- ■ DB21 - ■ ■ Q1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.55	K.39-LE80MB4							
	60	87	23.97	5 660	2.5	20	2KJ3504 - ■ DB21 - ■ ■ P1	
	65	81	22.12	5 550	2.7	20	2KJ3504 - ■ DB21 - ■ ■ N1	
	74	71	19.37	5 360	3.1	20	2KJ3504 - ■ DB21 - ■ ■ M1	
	B.39-LE80MB4							
	29	183	50.11	6 980	1.1	19	2KJ3502 - ■ DB21 - ■ ■ X1	
	33	160	44.00	6 980	1.6	19	2KJ3502 - ■ DB21 - ■ ■ W1	
	36	146	40.00	6 980	1.6	19	2KJ3502 - ■ DB21 - ■ ■ V1	
	42	125	34.22	6 980	2.0	19	2KJ3502 - ■ DB21 - ■ ■ U1	
	46	113	31.11	6 980	2.2	19	2KJ3502 - ■ DB21 - ■ ■ T1	
	52	100	27.50	6 980	2.5	19	2KJ3502 - ■ DB21 - ■ ■ S1	
	58	91	25.00	6 980	2.7	19	2KJ3502 - ■ DB21 - ■ ■ R1	
	66	80	21.90	6 980	3.1	19	2KJ3502 - ■ DB21 - ■ ■ Q1	
	B.29-LE80MB4							
	40	132	36.06	4 020	0.84	14	2KJ3501 - ■ DB21 - ■ ■ X1	
	44	120	32.78	4 080	0.92	14	2KJ3501 - ■ DB21 - ■ ■ W1	
	51	103	28.11	4 170	1.1	14	2KJ3501 - ■ DB21 - ■ ■ V1	
	56	93	25.56	4 200	1.2	14	2KJ3501 - ■ DB21 - ■ ■ U1	
	64	82	22.41	4 200	1.3	14	2KJ3501 - ■ DB21 - ■ ■ T1	
	72	73	20.00	4 200	1.5	14	2KJ3501 - ■ DB21 - ■ ■ S1	
	81	65	17.82	4 200	1.7	14	2KJ3501 - ■ DB21 - ■ ■ R1	
	88	60	16.45	4 200	1.8	14	2KJ3501 - ■ DB21 - ■ ■ Q1	
	100	52	14.40	4 200	2.1	14	2KJ3501 - ■ DB21 - ■ ■ P1	
	114	46	12.63	4 200	2.4	14	2KJ3501 - ■ DB21 - ■ ■ N1	
	126	42	11.46	4 200	2.6	14	2KJ3501 - ■ DB21 - ■ ■ M1	
	134	39	10.78	4 200	2.8	14	2KJ3501 - ■ DB21 - ■ ■ L1	
	151	35	9.51	4 070	3.2	14	2KJ3501 - ■ DB21 - ■ ■ K1	
	175	30	8.25	3 920	3.7	14	2KJ3501 - ■ DB21 - ■ ■ J1	
	184	29	7.84	3 830	2.6	14	2KJ3501 - ■ DB21 - ■ ■ H1	
	195	27	7.38	3 770	2.8	14	2KJ3501 - ■ DB21 - ■ ■ G1	
	221	24	6.51	3 630	3.2	14	2KJ3501 - ■ DB21 - ■ ■ F1	
	255	21	5.65	3 480	3.6	14	2KJ3501 - ■ DB21 - ■ ■ E1	
	284	18	5.07	3 410	4.0	14	2KJ3501 - ■ DB21 - ■ ■ D1	
	301	17	4.78	3 340	4.2	14	2KJ3501 - ■ DB21 - ■ ■ C1	
	342	15	4.21	3 220	4.8	14	2KJ3501 - ■ DB21 - ■ ■ B1	
	B.19-LE80MB4							
	91	58	15.79	1 910	0.87	12	2KJ3500 - ■ DB21 - ■ ■ Q1	
	99	53	14.57	1 910	0.94	12	2KJ3500 - ■ DB21 - ■ ■ P1	
	114	46	12.66	1 910	1.1	12	2KJ3500 - ■ DB21 - ■ ■ N1	
	131	40	11.00	1 910	1.2	12	2KJ3500 - ■ DB21 - ■ ■ M1	
	145	36	9.93	1 910	1.4	12	2KJ3500 - ■ DB21 - ■ ■ L1	
	154	34	9.35	1 910	1.5	12	2KJ3500 - ■ DB21 - ■ ■ K1	
	177	30	8.15	1 910	1.6	12	2KJ3500 - ■ DB21 - ■ ■ J1	
	183	29	7.87	1 910	1.3	12	2KJ3500 - ■ DB21 - ■ ■ H1	
	206	26	6.99	1 910	1.5	12	2KJ3500 - ■ DB21 - ■ ■ G1	
	223	24	6.45	1 910	1.7	12	2KJ3500 - ■ DB21 - ■ ■ F1	
	257	20	5.61	1 910	1.8	12	2KJ3500 - ■ DB21 - ■ ■ E1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.55	B.19-LE80MB4							
	296	18	4.87	1 910	2.0	12	2KJ3500 - ■ DB21 - ■ ■ D1	
	327	16	4.40	1 910	2.1	12	2KJ3500 - ■ DB21 - ■ ■ C1	
	348	15	4.14	1 910	2.2	12	2KJ3500 - ■ DB21 - ■ ■ B1	
	399	13	3.61	1 910	2.4	12	2KJ3500 - ■ DB21 - ■ ■ A1	
0.75	K.129-LE100LA8							
	3.1	2310	228.30	39 600	1.9	158	2KJ3512 - ■ FB21 - ■ ■ J2	P02
	K.109-LE100LA8							
	3.3	2200	216.65	24 500	1.3	107	2KJ3511 - ■ FB21 - ■ ■ H2	P02
	3.6	1980	195.60	24 500	1.5	107	2KJ3511 - ■ FB21 - ■ ■ G2	P02
	4.0	1800	177.43	24 500	1.6	107	2KJ3511 - ■ FB21 - ■ ■ F2	P02
	K.109-LE90SH6E							
	4.3	1670	216.65	24 500	1.7	102	2KJ3511 - ■ EC22 - ■ ■ H2	P01
	4.7	1510	195.60	24 500	1.9	102	2KJ3511 - ■ EC22 - ■ ■ G2	P01
	5.2	1370	177.43	24 500	2.1	102	2KJ3511 - ■ EC22 - ■ ■ F2	P01
	K.89-LE100LA8							
	3.7	1920	189.01	18 100	0.83	72	2KJ3510 - ■ FB21 - ■ ■ H2	P02
	K.89-LE90SH6E							
	4.0	1790	231.80	18 100	0.89	65	2KJ3510 - ■ EC22 - ■ ■ K2	P01
	4.4	1630	210.72	18 100	0.98	65	2KJ3510 - ■ EC22 - ■ ■ J2	P01
	4.9	1460	189.01	18 100	1.1	65	2KJ3510 - ■ EC22 - ■ ■ H2	P01
	5.4	1310	169.94	18 100	1.2	65	2KJ3510 - ■ EC22 - ■ ■ G2	P01
	K.89-LE80MH4E							
	6.2	1150	231.80	18 100	1.4	62	2KJ3510 - ■ DE22 - ■ ■ K2	
	6.8	1040	210.72	18 100	1.5	62	2KJ3510 - ■ DE22 - ■ ■ J2	
	7.6	940	189.01	18 100	1.7	62	2KJ3510 - ■ DE22 - ■ ■ H2	
	8.5	845	169.94	18 100	1.9	62	2KJ3510 - ■ DE22 - ■ ■ G2	
	9.4	760	153.70	18 100	2.1	62	2KJ3510 - ■ DE22 - ■ ■ F2	
	K.79-LE80MH4E							
	7.6	935	188.85	13 700	0.87	41	2KJ3508 - ■ DE22 - ■ ■ G2	
	8.4	850	171.69	13 900	0.96	41	2KJ3508 - ■ DE22 - ■ ■ F2	
	9.4	760	153.18	14 000	1.1	41	2KJ3508 - ■ DE22 - ■ ■ E2	
	10	680	137.35	14 200	1.2	41	2KJ3508 - ■ DE22 - ■ ■ D2	
12	615	123.80	14 300	1.3	41	2KJ3508 - ■ DE22 - ■ ■ C2		
13	565	114.28	14 400	1.4	41	2KJ3508 - ■ DE22 - ■ ■ B2		
14	515	104.32	14 400	1.6	41	2KJ3508 - ■ DE22 - ■ ■ A2		
17	430	86.56	14 400	1.9	41	2KJ3508 - ■ DE22 - ■ ■ X1		
18	405	81.47	14 400	2.0	41	2KJ3508 - ■ DE22 - ■ ■ W1		
19	380	76.94	14 400	2.1	41	2KJ3508 - ■ DE22 - ■ ■ V1		
K.69-LE80MH4E								
10	685	138.18	10 300	0.87	36	2KJ3507 - ■ DE22 - ■ ■ E2		
12	610	123.29	10 800	0.98	36	2KJ3507 - ■ DE22 - ■ ■ D2		
13	550	110.55	10 900	1.1	36	2KJ3507 - ■ DE22 - ■ ■ C2		
14	495	99.64	11 100	1.2	36	2KJ3507 - ■ DE22 - ■ ■ B2		
16	455	91.98	11 200	1.3	36	2KJ3507 - ■ DE22 - ■ ■ A2		
17	415	83.96	11 200	1.4	36	2KJ3507 - ■ DE22 - ■ ■ X1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75								
K.69-LE80MH4E								
	21	345	69.67	11 100	1.7	36	2KJ3507 - ■ DE22 - ■ ■ W1	
	22	325	65.57	11 000	1.8	36	2KJ3507 - ■ DE22 - ■ ■ V1	
	23	305	61.93	10 900	1.9	36	2KJ3507 - ■ DE22 - ■ ■ U1	
	27	260	52.69	10 500	2.3	36	2KJ3507 - ■ DE22 - ■ ■ T1	
K.49-LE80MH4E								
	15	485	97.71	7 240	0.86	29	2KJ3505 - ■ DE22 - ■ ■ C2	
	16	440	88.83	7 240	0.95	29	2KJ3505 - ■ DE22 - ■ ■ B2	
	19	385	77.81	7 210	1.1	29	2KJ3505 - ■ DE22 - ■ ■ A2	
	20	355	71.82	7 170	1.2	29	2KJ3505 - ■ DE22 - ■ ■ X1	
	23	315	63.59	7 090	1.3	29	2KJ3505 - ■ DE22 - ■ ■ W1	
	27	260	52.93	6 950	1.6	29	2KJ3505 - ■ DE22 - ■ ■ V1	
	29	245	49.82	6 890	1.7	29	2KJ3505 - ■ DE22 - ■ ■ U1	
	32	220	44.63	6 770	1.9	29	2KJ3505 - ■ DE22 - ■ ■ T1	
	38	189	38.00	6 570	2.2	29	2KJ3505 - ■ DE22 - ■ ■ S1	
	44	162	32.57	6 370	2.6	29	2KJ3505 - ■ DE22 - ■ ■ R1	
B.49-LE90SH6E								
	16	455	59.28	11 200	0.98	29	2KJ3503 - ■ EC22 - ■ ■ C2	P01
	17	415	53.89	11 200	1.1	29	2KJ3503 - ■ EC22 - ■ ■ B2	P01
	20	355	45.83	10 900	1.3	29	2KJ3503 - ■ EC22 - ■ ■ A2	P01
	22	320	41.67	10 700	1.4	29	2KJ3503 - ■ EC22 - ■ ■ X1	P01
B.49-LE80MH4E								
	24	295	59.28	10 500	1.5	27	2KJ3503 - ■ DE22 - ■ ■ C2	
	27	265	53.89	10 300	1.7	27	2KJ3503 - ■ DE22 - ■ ■ B2	
	31	225	45.83	10 000	2.0	27	2KJ3503 - ■ DE22 - ■ ■ A2	
	35	205	41.67	9 780	2.2	27	2KJ3503 - ■ DE22 - ■ ■ X1	
	39	185	37.18	9 500	2.4	27	2KJ3503 - ■ DE22 - ■ ■ W1	
	43	166	33.33	9 240	2.7	27	2KJ3503 - ■ DE22 - ■ ■ V1	
K.39-LE80MH4E								
	26	275	55.25	5 870	0.8	22	2KJ3504 - ■ DE22 - ■ ■ X1	
	30	240	48.37	5 980	0.91	22	2KJ3504 - ■ DE22 - ■ ■ W1	
	34	210	42.41	5 900	1.0	22	2KJ3504 - ■ DE22 - ■ ■ V1	
	37	191	38.47	5 820	1.1	22	2KJ3504 - ■ DE22 - ■ ■ U1	
	40	180	36.21	5 770	1.2	22	2KJ3504 - ■ DE22 - ■ ■ T1	
	45	159	31.92	5 660	1.4	22	2KJ3504 - ■ DE22 - ■ ■ S1	
	52	138	27.70	5 520	1.6	22	2KJ3504 - ■ DE22 - ■ ■ R1	
	54	134	26.89	5 490	1.6	22	2KJ3504 - ■ DE22 - ■ ■ Q1	
	60	119	23.97	5 370	1.8	22	2KJ3504 - ■ DE22 - ■ ■ P1	
	65	110	22.12	5 280	2.0	22	2KJ3504 - ■ DE22 - ■ ■ N1	
	74	96	19.37	5 140	2.3	22	2KJ3504 - ■ DE22 - ■ ■ M1	
	85	84	16.98	4 990	2.6	22	2KJ3504 - ■ DE22 - ■ ■ L1	
	93	77	15.41	4 870	2.9	22	2KJ3504 - ■ DE22 - ■ ■ K1	
	99	72	14.50	4 800	3.1	22	2KJ3504 - ■ DE22 - ■ ■ J1	
	113	64	12.78	4 650	3.5	22	2KJ3504 - ■ DE22 - ■ ■ H1	
	143	50	10.04	4 300	3.7	22	2KJ3504 - ■ DE22 - ■ ■ F1	
B.39-LE80MH4E								
	29	245	50.11	6 980	0.84	21	2KJ3502 - ■ DE22 - ■ ■ X1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75								
B.39-LE80MH4E								
	33	215	44.00	6 980	1.1	21	2KJ3502 - ■ DE22 - ■ ■ W1	
	36	199	40.00	6 980	1.2	21	2KJ3502 - ■ DE22 - ■ ■ V1	
	42	170	34.22	6 980	1.5	21	2KJ3502 - ■ DE22 - ■ ■ U1	
	46	155	31.11	6 980	1.6	21	2KJ3502 - ■ DE22 - ■ ■ T1	
	52	137	27.50	6 980	1.8	21	2KJ3502 - ■ DE22 - ■ ■ S1	
	58	124	25.00	6 980	2.0	21	2KJ3502 - ■ DE22 - ■ ■ R1	
	66	109	21.90	6 980	2.3	21	2KJ3502 - ■ DE22 - ■ ■ Q1	
	71	101	20.21	6 980	2.5	21	2KJ3502 - ■ DE22 - ■ ■ P1	
	80	89	17.90	6 980	2.8	21	2KJ3502 - ■ DE22 - ■ ■ N1	
	97	74	14.90	6 980	3.4	21	2KJ3502 - ■ DE22 - ■ ■ M1	
B.29-LE80MH4E								
	56	127	25.56	4 050	0.87	16	2KJ3501 - ■ DE22 - ■ ■ U1	
	64	111	22.41	4 130	0.99	16	2KJ3501 - ■ DE22 - ■ ■ T1	
	72	100	20.00	4 190	1.1	16	2KJ3501 - ■ DE22 - ■ ■ S1	
	81	89	17.82	4 200	1.2	16	2KJ3501 - ■ DE22 - ■ ■ R1	
	88	82	16.45	4 200	1.3	16	2KJ3501 - ■ DE22 - ■ ■ Q1	
	100	72	14.40	4 200	1.5	16	2KJ3501 - ■ DE22 - ■ ■ P1	
	114	63	12.63	4 200	1.8	16	2KJ3501 - ■ DE22 - ■ ■ N1	
	126	57	11.46	4 150	1.9	16	2KJ3501 - ■ DE22 - ■ ■ M1	
	134	54	10.78	4 090	2.1	16	2KJ3501 - ■ DE22 - ■ ■ L1	
	151	47	9.51	3 960	2.3	16	2KJ3501 - ■ DE22 - ■ ■ K1	
	175	41	8.25	3 820	2.7	16	2KJ3501 - ■ DE22 - ■ ■ J1	
	184	39	7.84	3 730	1.9	16	2KJ3501 - ■ DE22 - ■ ■ H1	
	195	37	7.38	3 660	2.0	16	2KJ3501 - ■ DE22 - ■ ■ G1	
	221	32	6.51	3 550	2.3	16	2KJ3501 - ■ DE22 - ■ ■ F1	
	255	28	5.65	3 410	2.7	16	2KJ3501 - ■ DE22 - ■ ■ E1	
	284	25	5.07	3 350	2.9	16	2KJ3501 - ■ DE22 - ■ ■ D1	
	301	24	4.78	3 280	3.1	16	2KJ3501 - ■ DE22 - ■ ■ C1	
	342	21	4.21	3 170	3.5	16	2KJ3501 - ■ DE22 - ■ ■ B1	
	395	18	3.65	3 040	4.0	16	2KJ3501 - ■ DE22 - ■ ■ A1	
B.19-LE80MH4E								
	131	55	11.00	1 910	0.91	14	2KJ3500 - ■ DE22 - ■ ■ M1	
	145	49	9.93	1 910	1.0	14	2KJ3500 - ■ DE22 - ■ ■ L1	
	154	46	9.35	1 910	1.1	14	2KJ3500 - ■ DE22 - ■ ■ K1	
	177	40	8.15	1 910	1.2	14	2KJ3500 - ■ DE22 - ■ ■ J1	
	183	39	7.87	1 910	0.97	14	2KJ3500 - ■ DE22 - ■ ■ H1	
	206	35	6.99	1 910	1.1	14	2KJ3500 - ■ DE22 - ■ ■ G1	
	223	32	6.45	1 910	1.2	14	2KJ3500 - ■ DE22 - ■ ■ F1	
	257	28	5.61	1 910	1.3	14	2KJ3500 - ■ DE22 - ■ ■ E1	
	296	24	4.87	1 910	1.4	14	2KJ3500 - ■ DE22 - ■ ■ D1	
	327	22	4.40	1 910	1.6	14	2KJ3500 - ■ DE22 - ■ ■ C1	
	348	21	4.14	1 910	1.6	14	2KJ3500 - ■ DE22 - ■ ■ B1	
	399	18	3.61	1 910	1.7	14	2KJ3500 - ■ DE22 - ■ ■ A1	
1.1								
K.129-LE100LK8								
	3.1	3 400	228.30	38 600	1.3	163	2KJ3512 - ■ FP21 - ■ ■ J2	P02
	3.3	3 140	210.74	38 800	1.4	163	2KJ3512 - ■ FP21 - ■ ■ H2	P02

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1								
K.129-LE100LK8								
3.6	2890	194.04	39 100	1.5	163	2KJ3512	- ■ FP21 - ■ ■ G2	P02
K.129-LE90LLB6E								
4.1	2560	228.30	39 400	1.7	155	2KJ3512	- ■ EP22 - ■ ■ J2	P01
4.4	2360	210.74	39 600	1.9	155	2KJ3512	- ■ EP22 - ■ ■ H2	P01
4.8	2180	194.04	39 800	2.0	155	2KJ3512	- ■ EP22 - ■ ■ G2	P01
K.109-LE100LK8								
3.3	3220	216.65	24 500	0.9	112	2KJ3511	- ■ FP21 - ■ ■ H2	P02
3.6	2910	195.60	24 500	0.99	112	2KJ3511	- ■ FP21 - ■ ■ G2	P02
4.0	2640	177.43	24 500	1.1	112	2KJ3511	- ■ FP21 - ■ ■ F2	P02
K.109-LE90LLB6E								
4.3	2430	216.65	24 500	1.2	105	2KJ3511	- ■ EP22 - ■ ■ H2	P01
4.8	2190	195.60	24 500	1.3	105	2KJ3511	- ■ EP22 - ■ ■ G2	P01
5.3	1990	177.43	24 500	1.5	105	2KJ3511	- ■ EP22 - ■ ■ F2	P01
5.7	1840	163.78	24 500	1.6	105	2KJ3511	- ■ EP22 - ■ ■ E2	P01
6.3	1670	148.88	24 500	1.7	105	2KJ3511	- ■ EP22 - ■ ■ D2	P01
K.109-LE90SG4E								
6.6	1590	216.65	24 500	1.8	101	2KJ3511	- ■ EK22 - ■ ■ H2	
7.3	1440	195.60	24 500	2.0	101	2KJ3511	- ■ EK22 - ■ ■ G2	
K.89-LE90LLB6E								
5.5	1900	169.94	18 100	0.84	68	2KJ3510	- ■ EP22 - ■ ■ G2	
K.89-LE90SG4E								
6.1	1700	231.80	18 100	0.94	64	2KJ3510	- ■ EK22 - ■ ■ K2	
6.8	1550	210.72	18 100	1.0	64	2KJ3510	- ■ EK22 - ■ ■ J2	
7.5	1390	189.01	18 100	1.1	64	2KJ3510	- ■ EK22 - ■ ■ H2	
8.4	1250	169.94	18 100	1.3	64	2KJ3510	- ■ EK22 - ■ ■ G2	
9.3	1130	153.70	18 100	1.4	64	2KJ3510	- ■ EK22 - ■ ■ F2	
10	1040	141.88	18 100	1.5	64	2KJ3510	- ■ EK22 - ■ ■ E2	
11	955	129.96	18 100	1.7	64	2KJ3510	- ■ EK22 - ■ ■ D2	
13	800	109.04	18 100	2.0	64	2KJ3510	- ■ EK22 - ■ ■ C2	
14	755	102.63	18 100	2.1	64	2KJ3510	- ■ EK22 - ■ ■ B2	
K.79-LE90SG4E								
10	1010	137.35	13 600	0.81	42	2KJ3508	- ■ EK22 - ■ ■ D2	
12	840	114.28	13 900	0.97	42	2KJ3508	- ■ EK22 - ■ ■ B2	
12	910	123.80	13 700	0.90	42	2KJ3508	- ■ EK22 - ■ ■ C2	
14	765	104.32	14 000	1.1	42	2KJ3508	- ■ EK22 - ■ ■ A2	
16	635	86.56	14 300	1.3	42	2KJ3508	- ■ EK22 - ■ ■ X1	
17	600	81.47	14 400	1.4	42	2KJ3508	- ■ EK22 - ■ ■ W1	
19	565	76.94	14 400	1.4	42	2KJ3508	- ■ EK22 - ■ ■ V1	
22	480	65.47	14 400	1.7	42	2KJ3508	- ■ EK22 - ■ ■ U1	
25	410	56.08	14 400	2.0	42	2KJ3508	- ■ EK22 - ■ ■ T1	
29	360	49.31	14 400	2.3	42	2KJ3508	- ■ EK22 - ■ ■ S1	
34	305	41.60	14 400	2.6	42	2KJ3508	- ■ EK22 - ■ ■ R1	
K.69-LE90SG4E								
14	735	99.64	9 990	0.82	37	2KJ3507	- ■ EK22 - ■ ■ B2	
15	675	91.98	10 100	0.88	37	2KJ3507	- ■ EK22 - ■ ■ A2	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1								
K.69-LE90SG4E								
17	615	83.96	10 100	0.97	37	2KJ3507	- ■ EK22 - ■ ■ X1	
20	510	69.67	10 000	1.2	37	2KJ3507	- ■ EK22 - ■ ■ W1	
22	480	65.57	9 960	1.2	37	2KJ3507	- ■ EK22 - ■ ■ V1	
23	455	61.93	9 890	1.3	37	2KJ3507	- ■ EK22 - ■ ■ U1	
27	385	52.69	9 700	1.5	37	2KJ3507	- ■ EK22 - ■ ■ T1	
32	330	45.14	9 470	1.8	37	2KJ3507	- ■ EK22 - ■ ■ S1	
36	290	39.69	9 260	2.1	37	2KJ3507	- ■ EK22 - ■ ■ R1	
43	245	33.48	8 950	2.3	37	2KJ3507	- ■ EK22 - ■ ■ Q1	
49	215	29.18	8 690	2.6	37	2KJ3507	- ■ EK22 - ■ ■ P1	
K.49-LE90SG4E								
22	465	63.59	5 960	0.9	30	2KJ3505	- ■ EK22 - ■ ■ W1	
27	390	52.93	5 970	1.1	30	2KJ3505	- ■ EK22 - ■ ■ V1	
29	365	49.82	5 980	1.1	30	2KJ3505	- ■ EK22 - ■ ■ U1	
32	325	44.63	5 980	1.3	30	2KJ3505	- ■ EK22 - ■ ■ T1	
38	280	38.00	5 890	1.5	30	2KJ3505	- ■ EK22 - ■ ■ S1	
44	240	32.57	5 790	1.7	30	2KJ3505	- ■ EK22 - ■ ■ R1	
51	205	28.05	5 690	2.0	30	2KJ3505	- ■ EK22 - ■ ■ Q1	
54	194	26.30	5 620	2.2	30	2KJ3505	- ■ EK22 - ■ ■ P1	
61	172	23.28	5 510	2.4	30	2KJ3505	- ■ EK22 - ■ ■ N1	
74	143	19.38	5 330	2.9	30	2KJ3505	- ■ EK22 - ■ ■ M1	
78	134	18.24	5 270	3.1	30	2KJ3505	- ■ EK22 - ■ ■ L1	
146	72	9.75	4 530	3.8	30	2KJ3505	- ■ EK22 - ■ ■ F1	
155	68	9.18	4 460	4.0	30	2KJ3505	- ■ EK22 - ■ ■ E1	
173	61	8.22	4 330	4.2	30	2KJ3505	- ■ EK22 - ■ ■ D1	
B.49-LE90LLB6E								
20	515	45.83	9 860	0.87	32	2KJ3503	- ■ EP22 - ■ ■ A2	P01
22	465	41.67	9 780	0.96	32	2KJ3503	- ■ EP22 - ■ ■ X1	P01
B.49-LE90SG4E								
24	435	59.28	9 680	1.0	28	2KJ3503	- ■ EK22 - ■ ■ C2	
26	395	53.89	9 560	1.1	28	2KJ3503	- ■ EK22 - ■ ■ B2	
31	335	45.83	9 320	1.3	28	2KJ3503	- ■ EK22 - ■ ■ A2	
34	305	41.67	9 150	1.5	28	2KJ3503	- ■ EK22 - ■ ■ X1	
38	270	37.18	8 970	1.6	28	2KJ3503	- ■ EK22 - ■ ■ W1	
43	245	33.33	8 750	1.8	28	2KJ3503	- ■ EK22 - ■ ■ V1	
47	220	30.05	8 560	2.0	28	2KJ3503	- ■ EK22 - ■ ■ U1	
51	200	27.74	8 430	2.2	28	2KJ3503	- ■ EK22 - ■ ■ T1	
56	187	25.32	8 230	2.4	28	2KJ3503	- ■ EK22 - ■ ■ S1	
68	155	21.01	7 870	2.9	28	2KJ3503	- ■ EK22 - ■ ■ R1	
72	146	19.77	7 750	3.1	28	2KJ3503	- ■ EK22 - ■ ■ Q1	
K.39-LE90SG4E								
39	265	36.21	5 030	0.82	24	2KJ3504	- ■ EK22 - ■ ■ T1	
45	235	31.92	4 990	0.93	24	2KJ3504	- ■ EK22 - ■ ■ S1	
51	200	27.70	4 980	1.1	24	2KJ3504	- ■ EK22 - ■ ■ R1	
53	198	26.89	4 930	1.1	24	2KJ3504	- ■ EK22 - ■ ■ Q1	
59	177	23.97	4 870	1.2	24	2KJ3504	- ■ EK22 - ■ ■ P1	
64	163	22.12	4 820	1.3	24	2KJ3504	- ■ EK22 - ■ ■ N1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1								
K.39-LE90SG4E								
74	143	19.37	4 730	1.5	24	2KJ3504 - ■ EK22 - ■ ■ M1		
84	125	16.98	4 640	1.8	24	2KJ3504 - ■ EK22 - ■ ■ L1		
92	114	15.41	4 550	1.9	24	2KJ3504 - ■ EK22 - ■ ■ K1		
98	107	14.50	4 500	2.1	24	2KJ3504 - ■ EK22 - ■ ■ J1		
112	94	12.78	4 400	2.3	24	2KJ3504 - ■ EK22 - ■ ■ H1		
128	82	11.09	4 260	2.7	24	2KJ3504 - ■ EK22 - ■ ■ G1		
142	74	10.04	4 070	2.5	24	2KJ3504 - ■ EK22 - ■ ■ F1		
162	65	8.81	3 950	2.8	24	2KJ3504 - ■ EK22 - ■ ■ E1		
178	59	7.99	3 870	3.0	24	2KJ3504 - ■ EK22 - ■ ■ D1		
189	55	7.52	3 820	3.1	24	2KJ3504 - ■ EK22 - ■ ■ C1		
215	49	6.63	3 700	3.3	24	2KJ3504 - ■ EK22 - ■ ■ B1		
248	42	5.75	3 580	3.5	24	2KJ3504 - ■ EK22 - ■ ■ A1		
B.39-LE90SG4E								
42	250	34.22	6 980	0.99	23	2KJ3502 - ■ EK22 - ■ ■ U1		
46	225	31.11	6 980	1.1	23	2KJ3502 - ■ EK22 - ■ ■ T1		
52	200	27.50	6 980	1.2	23	2KJ3502 - ■ EK22 - ■ ■ S1		
57	184	25.00	6 980	1.4	23	2KJ3502 - ■ EK22 - ■ ■ R1		
65	161	21.90	6 980	1.5	23	2KJ3502 - ■ EK22 - ■ ■ Q1		
71	149	20.21	6 980	1.7	23	2KJ3502 - ■ EK22 - ■ ■ P1		
80	132	17.90	6 980	1.9	23	2KJ3502 - ■ EK22 - ■ ■ N1		
96	110	14.90	6 800	2.3	23	2KJ3502 - ■ EK22 - ■ ■ M1		
102	103	14.02	6 710	2.4	23	2KJ3502 - ■ EK22 - ■ ■ L1		
113	93	12.56	6 510	2.7	23	2KJ3502 - ■ EK22 - ■ ■ K1		
133	79	10.69	6 240	3.0	23	2KJ3502 - ■ EK22 - ■ ■ J1		
155	68	9.17	5 980	3.4	23	2KJ3502 - ■ EK22 - ■ ■ H1		
181	58	7.89	5 740	3.8	23	2KJ3502 - ■ EK22 - ■ ■ G1		
216	49	6.60	5 490	4.1	23	2KJ3502 - ■ EK22 - ■ ■ F1		
229	46	6.21	5 400	4.4	23	2KJ3502 - ■ EK22 - ■ ■ E1		
B.29-LE90SG4E								
80	131	17.82	4 030	0.84	18	2KJ3501 - ■ EK22 - ■ ■ R1		
87	121	16.45	4 080	0.91	18	2KJ3501 - ■ EK22 - ■ ■ Q1		
99	106	14.40	4 090	1.0	18	2KJ3501 - ■ EK22 - ■ ■ P1		
113	93	12.63	3 990	1.2	18	2KJ3501 - ■ EK22 - ■ ■ N1		
124	84	11.46	3 920	1.3	18	2KJ3501 - ■ EK22 - ■ ■ M1		
132	80	10.78	3 860	1.4	18	2KJ3501 - ■ EK22 - ■ ■ L1		
150	70	9.51	3 760	1.6	18	2KJ3501 - ■ EK22 - ■ ■ K1		
173	61	8.25	3 640	1.8	18	2KJ3501 - ■ EK22 - ■ ■ J1		
182	58	7.84	3 550	1.3	18	2KJ3501 - ■ EK22 - ■ ■ H1		
193	54	7.38	3 500	1.4	18	2KJ3501 - ■ EK22 - ■ ■ G1		
219	48	6.51	3 400	1.6	18	2KJ3501 - ■ EK22 - ■ ■ F1		
252	42	5.65	3 280	1.8	18	2KJ3501 - ■ EK22 - ■ ■ E1		
281	37	5.07	3 250	2.0	18	2KJ3501 - ■ EK22 - ■ ■ D1		
298	35	4.78	3 200	2.1	18	2KJ3501 - ■ EK22 - ■ ■ C1		
338	31	4.21	3 090	2.4	18	2KJ3501 - ■ EK22 - ■ ■ B1		
390	27	3.65	2 970	2.7	18	2KJ3501 - ■ EK22 - ■ ■ A1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5	K.149-LE112MG8							
	3.0	4850	237.03	65 000	1.6	254	2KJ3513 - ■ GJ21 - ■ ■ J2	P02
	3.5	4 150	202.86	65 000	1.9	254	2KJ3513 - ■ GJ21 - ■ ■ H2	P02
	3.7	3900	190.92	65 000	2.0	254	2KJ3513 - ■ GJ21 - ■ ■ G2	P02
	K.129-LE112MG8							
	3.1	4670	228.30	37 300	0.94	170	2KJ3512 - ■ GJ21 - ■ ■ J2	P02
	3.3	4310	210.74	37 700	1.0	170	2KJ3512 - ■ GJ21 - ■ ■ H2	P02
	3.6	3970	194.04	38 000	1.1	170	2KJ3512 - ■ GJ21 - ■ ■ G2	P02
	K.129-LE100LLB6E							
	4.2	3370	228.30	38 600	1.3	166	2KJ3512 - ■ FP22 - ■ ■ J2	P01
	4.6	3 110	210.74	38 900	1.4	166	2KJ3512 - ■ FP22 - ■ ■ H2	P01
	5.0	2860	194.04	39 100	1.5	166	2KJ3512 - ■ FP22 - ■ ■ G2	P01
	5.9	2440	165.47	39 500	1.8	166	2KJ3512 - ■ FP22 - ■ ■ F2	P01
	K.129-LE90LH4E							
	6.3	2270	228.30	39 700	1.9	154	2KJ3512 - ■ EM22 - ■ ■ J2	
	6.8	2 100	210.74	39 800	2.1	154	2KJ3512 - ■ EM22 - ■ ■ H2	
	K.109-LE112MG8							
	3.9	3630	177.43	24 500	0.80	120	2KJ3511 - ■ GJ21 - ■ ■ F2	P02
	K.109-LE100LLB6E							
	4.5	3 190	216.65	24 500	0.91	115	2KJ3511 - ■ FP22 - ■ ■ H2	P01
	5.0	2880	195.60	24 500	1.0	115	2KJ3511 - ■ FP22 - ■ ■ G2	P01
5.5	2620	177.43	24 500	1.1	115	2KJ3511 - ■ FP22 - ■ ■ F2	P01	
5.9	2410	163.78	24 500	1.2	115	2KJ3511 - ■ FP22 - ■ ■ E2	P01	
K.109-LE90LH4E								
6.6	2 160	216.65	24 500	1.3	104	2KJ3511 - ■ EM22 - ■ ■ H2		
7.3	1950	195.60	24 500	1.5	104	2KJ3511 - ■ EM22 - ■ ■ G2		
8.1	1 770	177.43	24 500	1.6	104	2KJ3511 - ■ EM22 - ■ ■ F2		
8.8	1 630	163.78	24 500	1.8	104	2KJ3511 - ■ EM22 - ■ ■ E2		
9.6	1 480	148.88	24 500	2.0	104	2KJ3511 - ■ EM22 - ■ ■ D2		
K.89-LE90LH4E								
7.6	1 880	189.01	18 100	0.85	67	2KJ3510 - ■ EM22 - ■ ■ H2		
8.4	1 690	169.94	18 100	0.94	67	2KJ3510 - ■ EM22 - ■ ■ G2		
9.3	1 530	153.70	18 100	1.0	67	2KJ3510 - ■ EM22 - ■ ■ F2		
10	1 410	141.88	18 100	1.1	67	2KJ3510 - ■ EM22 - ■ ■ E2		
11	1 290	129.96	18 100	1.2	67	2KJ3510 - ■ EM22 - ■ ■ D2		
13	1 080	109.04	18 100	1.5	67	2KJ3510 - ■ EM22 - ■ ■ C2		
14	1 020	102.63	18 100	1.6	67	2KJ3510 - ■ EM22 - ■ ■ B2		
15	940	94.16	18 100	1.7	67	2KJ3510 - ■ EM22 - ■ ■ A2		
17	820	82.25	18 100	1.9	67	2KJ3510 - ■ EM22 - ■ ■ X1		
19	735	73.64	18 100	2.2	67	2KJ3510 - ■ EM22 - ■ ■ W1		
K.79-LE90LH4E								
17	860	86.56	13 800	0.95	45	2KJ3508 - ■ EM22 - ■ ■ X1		
18	810	81.47	13 900	1.0	45	2KJ3508 - ■ EM22 - ■ ■ W1		
19	765	76.94	14 000	1.1	45	2KJ3508 - ■ EM22 - ■ ■ V1		
22	650	65.47	14 300	1.3	45	2KJ3508 - ■ EM22 - ■ ■ U1		
26	560	56.08	14 400	1.5	45	2KJ3508 - ■ EM22 - ■ ■ T1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5	K.79-LE90LH4E							
	29	490	49.31	14 400	1.7	45	2KJ3508 - ■ EM22 - ■ ■ S1	
	34	415	41.60	14 400	1.9	45	2KJ3508 - ■ EM22 - ■ ■ R1	
	40	360	36.26	14 400	2.1	45	2KJ3508 - ■ EM22 - ■ ■ Q1	
	44	325	32.78	14 400	2.5	45	2KJ3508 - ■ EM22 - ■ ■ P1	
	53	270	27.20	14 400	2.9	45	2KJ3508 - ■ EM22 - ■ ■ N1	
	K.69-LE90LH4E							
	21	695	69.67	8 670	0.86	40	2KJ3507 - ■ EM22 - ■ ■ W1	
	22	655	65.57	8 690	0.92	40	2KJ3507 - ■ EM22 - ■ ■ V1	
	23	615	61.93	8 720	0.97	40	2KJ3507 - ■ EM22 - ■ ■ U1	
	27	525	52.69	8 670	1.1	40	2KJ3507 - ■ EM22 - ■ ■ T1	
	32	450	45.14	8 580	1.3	40	2KJ3507 - ■ EM22 - ■ ■ S1	
	36	395	39.69	8 480	1.5	40	2KJ3507 - ■ EM22 - ■ ■ R1	
	43	330	33.48	8 320	1.7	40	2KJ3507 - ■ EM22 - ■ ■ Q1	
	49	290	29.18	8 130	1.9	40	2KJ3507 - ■ EM22 - ■ ■ P1	
55	260	26.05	7 960	2.3	40	2KJ3507 - ■ EM22 - ■ ■ N1		
59	245	24.52	7 870	2.4	40	2KJ3507 - ■ EM22 - ■ ■ M1		
62	230	23.15	7 800	2.5	40	2KJ3507 - ■ EM22 - ■ ■ L1		
73	197	19.70	7 540	2.8	40	2KJ3507 - ■ EM22 - ■ ■ K1		
85	169	16.88	7 290	3.1	40	2KJ3507 - ■ EM22 - ■ ■ J1		
97	148	14.84	7 080	3.5	40	2KJ3507 - ■ EM22 - ■ ■ H1		
154	93	9.34	6 140	4.0	40	2KJ3507 - ■ EM22 - ■ ■ E1		
K.49-LE90LH4E								
29	495	49.82	4 950	0.84	33	2KJ3505 - ■ EM22 - ■ ■ U1		
32	445	44.63	5 020	0.94	33	2KJ3505 - ■ EM22 - ■ ■ T1		
38	375	38.00	5 130	1.1	33	2KJ3505 - ■ EM22 - ■ ■ S1		
44	325	32.57	5 110	1.3	33	2KJ3505 - ■ EM22 - ■ ■ R1		
51	280	28.05	5 090	1.5	33	2KJ3505 - ■ EM22 - ■ ■ Q1		
55	260	26.30	5 090	1.6	33	2KJ3505 - ■ EM22 - ■ ■ P1		
62	230	23.28	5 040	1.8	33	2KJ3505 - ■ EM22 - ■ ■ N1		
74	193	19.38	4 930	2.2	33	2KJ3505 - ■ EM22 - ■ ■ M1		
79	182	18.24	4 880	2.3	33	2KJ3505 - ■ EM22 - ■ ■ L1		
88	163	16.34	4 800	2.6	33	2KJ3505 - ■ EM22 - ■ ■ K1		
103	139	13.91	4 670	3.0	33	2KJ3505 - ■ EM22 - ■ ■ J1		
120	119	11.93	4 540	3.5	33	2KJ3505 - ■ EM22 - ■ ■ H1		
147	97	9.75	4 310	2.8	33	2KJ3505 - ■ EM22 - ■ ■ F1		
156	92	9.18	4 240	2.9	33	2KJ3505 - ■ EM22 - ■ ■ E1		
175	82	8.22	4 150	3.1	33	2KJ3505 - ■ EM22 - ■ ■ D1		
205	70	7.00	3 990	3.4	33	2KJ3505 - ■ EM22 - ■ ■ C1		
239	60	6.00	3 850	3.8	33	2KJ3505 - ■ EM22 - ■ ■ B1		
278	52	5.17	3 700	4.1	33	2KJ3505 - ■ EM22 - ■ ■ A1		
B.49-LE90LH4E								
27	535	53.89	8 600	0.84	31	2KJ3503 - ■ EM22 - ■ ■ B2		
31	455	45.83	8 490	0.98	31	2KJ3503 - ■ EM22 - ■ ■ A2		
34	415	41.67	8 400	1.1	31	2KJ3503 - ■ EM22 - ■ ■ X1		
39	370	37.18	8 280	1.2	31	2KJ3503 - ■ EM22 - ■ ■ W1		
43	330	33.33	8 160	1.4	31	2KJ3503 - ■ EM22 - ■ ■ V1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5								
B.49-LE90LH4E								
48	300	30.05	8 010	1.5	31	2KJ3503	- ■ EM22 - ■ ■ U1	
52	275	27.74	7 910	1.6	31	2KJ3503	- ■ EM22 - ■ ■ T1	
57	250	25.32	7 790	1.8	31	2KJ3503	- ■ EM22 - ■ ■ S1	
68	210	21.01	7 480	2.1	31	2KJ3503	- ■ EM22 - ■ ■ R1	
73	197	19.77	7 390	2.3	31	2KJ3503	- ■ EM22 - ■ ■ Q1	
77	186	18.67	7 300	2.4	31	2KJ3503	- ■ EM22 - ■ ■ P1	
90	159	15.89	7 030	2.8	31	2KJ3503	- ■ EM22 - ■ ■ N1	
105	136	13.61	6 780	3.3	31	2KJ3503	- ■ EM22 - ■ ■ M1	
173	83	8.29	6 020	4.0	31	2KJ3503	- ■ EM22 - ■ ■ H1	
184	78	7.80	5 920	4.2	31	2KJ3503	- ■ EM22 - ■ ■ G1	
K.39-LE90LH4E								
52	275	27.70	4 280	0.8	27	2KJ3504	- ■ EM22 - ■ ■ R1	
53	265	26.89	4 310	0.82	27	2KJ3504	- ■ EM22 - ■ ■ Q1	
60	235	23.97	4 330	0.92	27	2KJ3504	- ■ EM22 - ■ ■ P1	
65	220	22.12	4 290	1.0	27	2KJ3504	- ■ EM22 - ■ ■ N1	
74	193	19.37	4 270	1.1	27	2KJ3504	- ■ EM22 - ■ ■ M1	
85	170	16.98	4 220	1.3	27	2KJ3504	- ■ EM22 - ■ ■ L1	
93	154	15.41	4 180	1.4	27	2KJ3504	- ■ EM22 - ■ ■ K1	
99	145	14.50	4 150	1.5	27	2KJ3504	- ■ EM22 - ■ ■ J1	
112	128	12.78	4 080	1.7	27	2KJ3504	- ■ EM22 - ■ ■ H1	
129	111	11.09	3 990	2.0	27	2KJ3504	- ■ EM22 - ■ ■ G1	
143	100	10.04	3 780	1.8	27	2KJ3504	- ■ EM22 - ■ ■ F1	
163	88	8.81	3 700	2.1	27	2KJ3504	- ■ EM22 - ■ ■ E1	
180	80	7.99	3 640	2.2	27	2KJ3504	- ■ EM22 - ■ ■ D1	
191	75	7.52	3 600	2.3	27	2KJ3504	- ■ EM22 - ■ ■ C1	
216	66	6.63	3 510	2.4	27	2KJ3504	- ■ EM22 - ■ ■ B1	
250	57	5.75	3 410	2.6	27	2KJ3504	- ■ EM22 - ■ ■ A1	
B.39-LE90LH4E								
46	310	31.11	6 980	0.81	26	2KJ3502	- ■ EM22 - ■ ■ T1	
52	275	27.50	6 980	0.91	26	2KJ3502	- ■ EM22 - ■ ■ S1	
57	250	25.00	6 980	1.0	26	2KJ3502	- ■ EM22 - ■ ■ R1	
66	215	21.90	6 980	1.1	26	2KJ3502	- ■ EM22 - ■ ■ Q1	
71	200	20.21	6 910	1.2	26	2KJ3502	- ■ EM22 - ■ ■ P1	
80	179	17.90	6 740	1.4	26	2KJ3502	- ■ EM22 - ■ ■ N1	
96	149	14.90	6 490	1.7	26	2KJ3502	- ■ EM22 - ■ ■ M1	
102	140	14.02	6 400	1.8	26	2KJ3502	- ■ EM22 - ■ ■ L1	
114	125	12.56	6 250	2.0	26	2KJ3502	- ■ EM22 - ■ ■ K1	
134	107	10.69	6 010	2.2	26	2KJ3502	- ■ EM22 - ■ ■ J1	
156	92	9.17	5 780	2.5	26	2KJ3502	- ■ EM22 - ■ ■ H1	
182	79	7.89	5 570	2.8	26	2KJ3502	- ■ EM22 - ■ ■ G1	
217	66	6.60	5 360	3.0	26	2KJ3502	- ■ EM22 - ■ ■ F1	
231	62	6.21	5 270	3.2	26	2KJ3502	- ■ EM22 - ■ ■ E1	
258	56	5.56	5 110	3.6	26	2KJ3502	- ■ EM22 - ■ ■ D1	
303	47	4.74	4 880	4.2	26	2KJ3502	- ■ EM22 - ■ ■ C1	
353	40	4.06	4 670	4.9	26	2KJ3502	- ■ EM22 - ■ ■ B1	
410	35	3.50	4 470	5.5	26	2KJ3502	- ■ EM22 - ■ ■ A1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5	B.29-LE90LH4E							
	114	126	12.63	3 670	0.87	21	2KJ3501 - ■ EM22 - ■ ■ N1	
	125	114	11.46	3 630	0.96	21	2KJ3501 - ■ EM22 - ■ ■ M1	
	133	108	10.78	3 590	1.0	21	2KJ3501 - ■ EM22 - ■ ■ L1	
	151	95	9.51	3 520	1.2	21	2KJ3501 - ■ EM22 - ■ ■ K1	
	174	82	8.25	3 440	1.3	21	2KJ3501 - ■ EM22 - ■ ■ J1	
	183	78	7.84	3 330	0.96	21	2KJ3501 - ■ EM22 - ■ ■ H1	
	194	74	7.38	3 290	1.0	21	2KJ3501 - ■ EM22 - ■ ■ G1	
	220	65	6.51	3 210	1.2	21	2KJ3501 - ■ EM22 - ■ ■ F1	
	254	56	5.65	3 130	1.3	21	2KJ3501 - ■ EM22 - ■ ■ E1	
	283	51	5.07	3 120	1.5	21	2KJ3501 - ■ EM22 - ■ ■ D1	
	300	48	4.78	3 070	1.6	21	2KJ3501 - ■ EM22 - ■ ■ C1	
	341	42	4.21	2 980	1.8	21	2KJ3501 - ■ EM22 - ■ ■ B1	
393	36	3.65	2 880	2.0	21	2KJ3501 - ■ EM22 - ■ ■ A1		
2.2	K.169-LE132SL8							
	3.2	6560	223.30	70 000	2.0	441	2KJ3514 - ■ HG21 - ■ ■ F2	P02
	K.149-LE132SL8							
	3.0	6960	237.03	65 000	1.1	271	2KJ3513 - ■ HG21 - ■ ■ J2	P02
	3.5	5960	202.86	65 000	1.3	271	2KJ3513 - ■ HG21 - ■ ■ H2	P02
	3.7	5610	190.92	65 000	1.4	271	2KJ3513 - ■ HG21 - ■ ■ G2	P02
	K.149-LE112ME6E							
	4.1	5160	237.03	65 000	1.6	249	2KJ3513 - ■ GH22 - ■ ■ J2	P01
	4.8	4410	202.86	65 000	1.8	249	2KJ3513 - ■ GH22 - ■ ■ H2	P01
	5.1	4150	190.92	65 000	1.9	249	2KJ3513 - ■ GH22 - ■ ■ G2	P01
	5.4	3890	178.97	65 000	2.1	249	2KJ3513 - ■ GH22 - ■ ■ F2	P01
	K.129-LE112ME6E							
	4.2	4970	228.30	37 000	0.89	165	2KJ3512 - ■ GH22 - ■ ■ J2	P01
	4.6	4580	210.74	37 400	0.96	165	2KJ3512 - ■ GH22 - ■ ■ H2	P01
	5.0	4220	194.04	37 800	1.0	165	2KJ3512 - ■ GH22 - ■ ■ G2	P01
	5.8	3600	165.47	38 400	1.2	165	2KJ3512 - ■ GH22 - ■ ■ F2	P01
	K.129-LE100LE4E							
	6.4	3290	228.30	38 700	1.3	161	2KJ3512 - ■ FL22 - ■ ■ J2	
	6.9	3040	210.74	38 900	1.4	161	2KJ3512 - ■ FL22 - ■ ■ H2	
	7.5	2800	194.04	39 200	1.6	161	2KJ3512 - ■ FL22 - ■ ■ G2	
	8.8	2380	165.47	39 600	1.8	161	2KJ3512 - ■ FL22 - ■ ■ F2	
	9.3	2240	155.74	39 700	2.0	161	2KJ3512 - ■ FL22 - ■ ■ E2	
	10	2080	144.53	39 900	2.1	161	2KJ3512 - ■ FL22 - ■ ■ D2	
	K.109-LE112ME6E							
	5.9	3560	163.78	24 500	0.81	115	2KJ3511 - ■ GH22 - ■ ■ E2	P01
	K.109-LE100LE4E							
	6.7	3120	216.65	24 500	0.93	110	2KJ3511 - ■ FL22 - ■ ■ H2	
	7.4	2820	195.60	24 500	1.0	110	2KJ3511 - ■ FL22 - ■ ■ G2	
	8.2	2560	177.43	24 500	1.1	110	2KJ3511 - ■ FL22 - ■ ■ F2	
	8.9	2360	163.78	24 500	1.2	110	2KJ3511 - ■ FL22 - ■ ■ E2	
	9.8	2150	148.88	24 500	1.3	110	2KJ3511 - ■ FL22 - ■ ■ D2	
	12	1710	118.65	24 500	1.7	110	2KJ3511 - ■ FL22 - ■ ■ B2	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
K.109-LE100LE4E								
	12	1820	126.07	24 500	1.6	110	2KJ3511 - ■ FL22 - ■ ■ C2	
	13	1580	109.57	24 500	1.8	110	2KJ3511 - ■ FL22 - ■ ■ A2	
	15	1400	97.49	24 500	2.1	110	2KJ3511 - ■ FL22 - ■ ■ X1	
	17	1250	86.59	24 500	2.3	110	2KJ3511 - ■ FL22 - ■ ■ W1	
K.89-LE100LE4E								
	11	1870	129.96	18 100	0.85	75	2KJ3510 - ■ FL22 - ■ ■ D2	
	13	1570	109.04	18 100	1.0	75	2KJ3510 - ■ FL22 - ■ ■ C2	
	14	1480	102.63	18 100	1.1	75	2KJ3510 - ■ FL22 - ■ ■ B2	
	15	1360	94.16	18 100	1.2	75	2KJ3510 - ■ FL22 - ■ ■ A2	
	18	1180	82.25	18 100	1.3	75	2KJ3510 - ■ FL22 - ■ ■ X1	
	20	1060	73.64	18 100	1.5	75	2KJ3510 - ■ FL22 - ■ ■ W1	
	23	930	64.39	18 100	1.7	75	2KJ3510 - ■ FL22 - ■ ■ V1	
	26	795	55.27	18 100	2.0	75	2KJ3510 - ■ FL22 - ■ ■ U1	
	30	705	48.85	18 100	2.3	75	2KJ3510 - ■ FL22 - ■ ■ T1	
	35	600	41.54	18 100	2.6	75	2KJ3510 - ■ FL22 - ■ ■ S1	
K.79-LE100LE4E								
	22	945	65.47	13 700	0.87	54	2KJ3508 - ■ FL22 - ■ ■ U1	
	26	810	56.08	13 900	1.0	54	2KJ3508 - ■ FL22 - ■ ■ T1	
	30	710	49.31	14 100	1.2	54	2KJ3508 - ■ FL22 - ■ ■ S1	
	35	600	41.60	14 400	1.3	54	2KJ3508 - ■ FL22 - ■ ■ R1	
	40	520	36.26	14 400	1.5	54	2KJ3508 - ■ FL22 - ■ ■ Q1	
	44	470	32.78	14 400	1.7	54	2KJ3508 - ■ FL22 - ■ ■ P1	
	53	390	27.20	14 400	2.0	54	2KJ3508 - ■ FL22 - ■ ■ N1	
	57	370	25.60	14 400	2.1	54	2KJ3508 - ■ FL22 - ■ ■ M1	
	60	345	24.17	14 400	2.2	54	2KJ3508 - ■ FL22 - ■ ■ L1	
	71	295	20.57	14 400	2.5	54	2KJ3508 - ■ FL22 - ■ ■ K1	
	83	250	17.62	14 400	2.8	54	2KJ3508 - ■ FL22 - ■ ■ J1	
	94	220	15.49	14 400	3.1	54	2KJ3508 - ■ FL22 - ■ ■ H1	
	111	189	13.07	14 400	3.5	54	2KJ3508 - ■ FL22 - ■ ■ G1	
	138	152	10.51	14 400	2.9	54	2KJ3508 - ■ FL22 - ■ ■ E1	
	161	130	9.01	13 800	3.5	54	2KJ3508 - ■ FL22 - ■ ■ D1	
	184	114	7.92	13 400	3.9	54	2KJ3508 - ■ FL22 - ■ ■ C1	
K.69-LE100LE4E								
	32	650	45.14	7 100	0.92	48	2KJ3507 - ■ FL22 - ■ ■ S1	
	37	570	39.69	7 180	1.0	48	2KJ3507 - ■ FL22 - ■ ■ R1	
	43	480	33.48	7 200	1.2	48	2KJ3507 - ■ FL22 - ■ ■ Q1	
	50	420	29.18	7 150	1.3	48	2KJ3507 - ■ FL22 - ■ ■ P1	
	56	375	26.05	7 100	1.6	48	2KJ3507 - ■ FL22 - ■ ■ N1	
	59	350	24.52	7 080	1.7	48	2KJ3507 - ■ FL22 - ■ ■ M1	
	63	330	23.15	7 040	1.8	48	2KJ3507 - ■ FL22 - ■ ■ L1	
	74	280	19.70	6 910	2.0	48	2KJ3507 - ■ FL22 - ■ ■ K1	
	86	240	16.88	6 740	2.2	48	2KJ3507 - ■ FL22 - ■ ■ J1	
	98	210	14.84	6 600	2.4	48	2KJ3507 - ■ FL22 - ■ ■ H1	
	116	181	12.52	6 360	2.7	48	2KJ3507 - ■ FL22 - ■ ■ G1	
	133	158	10.91	6 180	3.0	48	2KJ3507 - ■ FL22 - ■ ■ F1	
	156	135	9.34	5 730	2.7	48	2KJ3507 - ■ FL22 - ■ ■ E1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
K.69-LE100LE4E								
182	116	8.01	5 550	3.2	48	2KJ3507	- ■ FL22 - ■ ■ D1	
207	102	7.04	5 400	3.6	48	2KJ3507	- ■ FL22 - ■ ■ C1	
245	86	5.94	5 200	4.0	48	2KJ3507	- ■ FL22 - ■ ■ B1	
281	75	5.18	5 030	4.4	48	2KJ3507	- ■ FL22 - ■ ■ A1	
K.49-LE100LE4E								
45	470	32.57	3 950	0.89	42	2KJ3505	- ■ FL22 - ■ ■ R1	
52	405	28.05	4 080	1.0	42	2KJ3505	- ■ FL22 - ■ ■ Q1	
55	380	26.30	4 120	1.1	42	2KJ3505	- ■ FL22 - ■ ■ P1	
62	335	23.28	4 190	1.2	42	2KJ3505	- ■ FL22 - ■ ■ N1	
75	280	19.38	4 220	1.5	42	2KJ3505	- ■ FL22 - ■ ■ M1	
80	260	18.24	4 250	1.6	42	2KJ3505	- ■ FL22 - ■ ■ L1	
89	235	16.34	4 210	1.8	42	2KJ3505	- ■ FL22 - ■ ■ K1	
105	200	13.91	4 170	2.1	42	2KJ3505	- ■ FL22 - ■ ■ J1	
122	172	11.93	4 100	2.4	42	2KJ3505	- ■ FL22 - ■ ■ H1	
142	148	10.27	4 020	2.8	42	2KJ3505	- ■ FL22 - ■ ■ G1	
149	141	9.75	3 920	2.0	42	2KJ3505	- ■ FL22 - ■ ■ F1	
158	133	9.18	3 880	2.0	42	2KJ3505	- ■ FL22 - ■ ■ E1	
177	119	8.22	3 820	2.1	42	2KJ3505	- ■ FL22 - ■ ■ D1	
208	101	7.00	3 720	2.4	42	2KJ3505	- ■ FL22 - ■ ■ C1	
242	87	6.00	3 600	2.6	42	2KJ3505	- ■ FL22 - ■ ■ B1	
281	75	5.17	3 490	2.8	42	2KJ3505	- ■ FL22 - ■ ■ A1	
B.49-LE100LE4E								
39	535	37.18	7 130	0.84	39	2KJ3503	- ■ FL22 - ■ ■ W1	
44	480	33.33	7 120	0.94	39	2KJ3503	- ■ FL22 - ■ ■ V1	
48	430	30.05	7 100	1.0	39	2KJ3503	- ■ FL22 - ■ ■ U1	
52	400	27.74	7 030	1.1	39	2KJ3503	- ■ FL22 - ■ ■ T1	
57	365	25.32	6 980	1.2	39	2KJ3503	- ■ FL22 - ■ ■ S1	
69	300	21.01	6 840	1.5	39	2KJ3503	- ■ FL22 - ■ ■ R1	
74	285	19.77	6 770	1.6	39	2KJ3503	- ■ FL22 - ■ ■ Q1	
78	270	18.67	6 700	1.7	39	2KJ3503	- ■ FL22 - ■ ■ P1	
92	225	15.89	6 560	2.0	39	2KJ3503	- ■ FL22 - ■ ■ N1	
107	197	13.61	6 340	2.3	39	2KJ3503	- ■ FL22 - ■ ■ M1	
122	173	11.97	6 180	2.6	39	2KJ3503	- ■ FL22 - ■ ■ L1	
144	146	10.10	5 950	3.1	39	2KJ3503	- ■ FL22 - ■ ■ K1	
165	127	8.80	5 770	3.5	39	2KJ3503	- ■ FL22 - ■ ■ J1	
176	120	8.29	5 780	2.8	39	2KJ3503	- ■ FL22 - ■ ■ H1	
187	113	7.80	5 690	2.9	39	2KJ3503	- ■ FL22 - ■ ■ G1	
197	106	7.37	5 610	3.1	39	2KJ3503	- ■ FL22 - ■ ■ F1	
232	90	6.27	5 380	3.6	39	2KJ3503	- ■ FL22 - ■ ■ E1	
271	78	5.37	5 150	4.3	39	2KJ3503	- ■ FL22 - ■ ■ D1	
308	68	4.72	4 970	4.8	39	2KJ3503	- ■ FL22 - ■ ■ C1	
K.39-LE100LE4E								
86	245	16.98	3 510	0.90	32	2KJ3504	- ■ FL22 - ■ ■ L1	
94	220	15.41	3 550	0.99	32	2KJ3504	- ■ FL22 - ■ ■ K1	
100	205	14.50	3 580	1.1	32	2KJ3504	- ■ FL22 - ■ ■ J1	
114	185	12.78	3 540	1.2	32	2KJ3504	- ■ FL22 - ■ ■ H1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2								
K.39-LE100LE4E								
131	160	11.09	3 520	1.4	32	2KJ3504 - ■ FL22 - ■ ■ G1		
145	145	10.04	3 290	1.3	32	2KJ3504 - ■ FL22 - ■ ■ F1		
165	127	8.81	3 270	1.4	32	2KJ3504 - ■ FL22 - ■ ■ E1		
182	115	7.99	3 250	1.5	32	2KJ3504 - ■ FL22 - ■ ■ D1		
193	109	7.52	3 220	1.6	32	2KJ3504 - ■ FL22 - ■ ■ C1		
219	96	6.63	3 180	1.7	32	2KJ3504 - ■ FL22 - ■ ■ B1		
253	83	5.75	3 120	1.8	32	2KJ3504 - ■ FL22 - ■ ■ A1		
B.39-LE100LE4E								
72	290	20.21	6 180	0.86	32	2KJ3502 - ■ FL22 - ■ ■ P1		
81	255	17.90	6 110	0.97	32	2KJ3502 - ■ FL22 - ■ ■ N1		
98	215	14.90	5 940	1.2	32	2KJ3502 - ■ FL22 - ■ ■ M1		
104	200	14.02	5 900	1.2	32	2KJ3502 - ■ FL22 - ■ ■ L1		
116	181	12.56	5 780	1.4	32	2KJ3502 - ■ FL22 - ■ ■ K1		
136	154	10.69	5 620	1.6	32	2KJ3502 - ■ FL22 - ■ ■ J1		
159	132	9.17	5 450	1.7	32	2KJ3502 - ■ FL22 - ■ ■ H1		
184	114	7.89	5 270	1.9	32	2KJ3502 - ■ FL22 - ■ ■ G1		
220	95	6.60	5 130	2.1	32	2KJ3502 - ■ FL22 - ■ ■ F1		
234	90	6.21	5 050	2.2	32	2KJ3502 - ■ FL22 - ■ ■ E1		
262	80	5.56	4 920	2.5	32	2KJ3502 - ■ FL22 - ■ ■ D1		
307	68	4.74	4 710	2.9	32	2KJ3502 - ■ FL22 - ■ ■ C1		
358	59	4.06	4 520	3.4	32	2KJ3502 - ■ FL22 - ■ ■ B1		
416	50	3.50	4 340	3.8	32	2KJ3502 - ■ FL22 - ■ ■ A1		
B.29-LE100LE4E								
153	137	9.51	3 110	0.80	27	2KJ3501 - ■ FL22 - ■ ■ K1		
176	119	8.25	3 080	0.92	27	2KJ3501 - ■ FL22 - ■ ■ J1		
224	94	6.51	2 900	0.80	27	2KJ3501 - ■ FL22 - ■ ■ F1		
258	82	5.65	2 840	0.92	27	2KJ3501 - ■ FL22 - ■ ■ E1		
287	73	5.07	2 910	1.0	27	2KJ3501 - ■ FL22 - ■ ■ D1		
304	69	4.78	2 870	1.1	27	2KJ3501 - ■ FL22 - ■ ■ C1		
346	61	4.21	2 800	1.2	27	2KJ3501 - ■ FL22 - ■ ■ B1		
399	53	3.65	2 710	1.4	27	2KJ3501 - ■ FL22 - ■ ■ A1		
3								
K.169-LE132MJ8								
3.2	8940	223.30	70 000	1.5	451	2KJ3514 - ■ HK21 - ■ ■ F2 P02		
3.4	8340	208.35	70 000	1.6	451	2KJ3514 - ■ HK21 - ■ ■ E2 P02		
3.9	7 420	185.23	70 000	1.8	451	2KJ3514 - ■ HK21 - ■ ■ D2 P02		
K.169-LE132SC6E								
4.3	6590	223.30	70 000	2.0	427	2KJ3514 - ■ HF22 - ■ ■ F2 P01		
K.149-LE132MJ8								
3.0	9490	237.03	65 000	0.84	281	2KJ3513 - ■ HK21 - ■ ■ J2 P02		
3.5	8 120	202.86	65 000	0.98	281	2KJ3513 - ■ HK21 - ■ ■ H2 P02		
3.7	7 650	190.92	65 000	1.0	281	2KJ3513 - ■ HK21 - ■ ■ G2 P02		
K.149-LE132SC6E								
4.1	7 000	237.03	65 000	1.1	257	2KJ3513 - ■ HF22 - ■ ■ J2 P01		
4.8	5 990	202.86	65 000	1.3	257	2KJ3513 - ■ HF22 - ■ ■ H2 P01		
5.1	5 630	190.92	65 000	1.4	257	2KJ3513 - ■ HF22 - ■ ■ G2 P01		
5.4	5 280	178.97	65 000	1.5	257	2KJ3513 - ■ HF22 - ■ ■ F2 P01		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3								
K.149-LE100LK4E								
6.1	4660	237.03	65 000	1.7	248	248	2KJ3513 - ■ FM22 - ■ ■ J2	
7.2	3990	202.86	65 000	2.0	248	248	2KJ3513 - ■ FM22 - ■ ■ H2	
7.6	3750	190.92	65 000	2.1	248	248	2KJ3513 - ■ FM22 - ■ ■ G2	
K.129-LE132SC6E								
5.9	4880	165.47	37 100	0.90	174	174	2KJ3512 - ■ HF22 - ■ ■ F2 P01	
K.129-LE100LK4E								
6.4	4490	228.30	37 500	0.98	165	165	2KJ3512 - ■ FM22 - ■ ■ J2	
6.9	4150	210.74	37 800	1.1	165	165	2KJ3512 - ■ FM22 - ■ ■ H2	
7.5	3820	194.04	38 200	1.2	165	165	2KJ3512 - ■ FM22 - ■ ■ G2	
8.8	3250	165.47	38 700	1.4	165	165	2KJ3512 - ■ FM22 - ■ ■ F2	
9.3	3060	155.74	38 900	1.4	165	165	2KJ3512 - ■ FM22 - ■ ■ E2	
10	2840	144.53	39 100	1.5	165	165	2KJ3512 - ■ FM22 - ■ ■ D2	
11	2510	127.77	39 400	1.7	165	165	2KJ3512 - ■ FM22 - ■ ■ C2	
13	2240	114.06	39 700	2.0	165	165	2KJ3512 - ■ FM22 - ■ ■ B2	
14	2020	102.64	39 900	2.2	165	165	2KJ3512 - ■ FM22 - ■ ■ A2	
K.109-LE100LK4E								
8.2	3490	177.43	24 500	0.83	114	114	2KJ3511 - ■ FM22 - ■ ■ F2	
8.9	3220	163.78	24 500	0.90	114	114	2KJ3511 - ■ FM22 - ■ ■ E2	
9.8	2930	148.88	24 500	0.99	114	114	2KJ3511 - ■ FM22 - ■ ■ D2	
12	2330	118.65	24 500	1.2	114	114	2KJ3511 - ■ FM22 - ■ ■ B2	
12	2480	126.07	24 500	1.2	114	114	2KJ3511 - ■ FM22 - ■ ■ C2	
13	2150	109.57	24 500	1.3	114	114	2KJ3511 - ■ FM22 - ■ ■ A2	
15	1920	97.49	24 500	1.5	114	114	2KJ3511 - ■ FM22 - ■ ■ X1	
17	1700	86.59	24 500	1.7	114	114	2KJ3511 - ■ FM22 - ■ ■ W1	
19	1520	77.51	24 500	1.9	114	114	2KJ3511 - ■ FM22 - ■ ■ V1	
22	1300	66.26	24 500	2.2	114	114	2KJ3511 - ■ FM22 - ■ ■ U1	
K.89-LE100LK4E								
15	1850	94.16	18 100	0.86	79	79	2KJ3510 - ■ FM22 - ■ ■ A2	
18	1620	82.25	18 100	0.99	79	79	2KJ3510 - ■ FM22 - ■ ■ X1	
20	1450	73.64	18 100	1.1	79	79	2KJ3510 - ■ FM22 - ■ ■ W1	
23	1260	64.39	18 100	1.3	79	79	2KJ3510 - ■ FM22 - ■ ■ V1	
26	1080	55.27	18 100	1.5	79	79	2KJ3510 - ■ FM22 - ■ ■ U1	
30	960	48.85	18 100	1.7	79	79	2KJ3510 - ■ FM22 - ■ ■ T1	
35	815	41.54	18 100	1.9	79	79	2KJ3510 - ■ FM22 - ■ ■ S1	
37	770	39.29	18 100	2.1	79	79	2KJ3510 - ■ FM22 - ■ ■ R1	
44	645	32.96	18 100	2.5	79	79	2KJ3510 - ■ FM22 - ■ ■ Q1	
47	610	31.03	18 100	2.6	79	79	2KJ3510 - ■ FM22 - ■ ■ P1	
K.79-LE100LK4E								
30	970	49.31	13 600	0.84	58	58	2KJ3508 - ■ FM22 - ■ ■ S1	
35	815	41.60	13 900	0.98	58	58	2KJ3508 - ■ FM22 - ■ ■ R1	
40	710	36.26	14 100	1.1	58	58	2KJ3508 - ■ FM22 - ■ ■ Q1	
44	645	32.78	14 300	1.3	58	58	2KJ3508 - ■ FM22 - ■ ■ P1	
53	535	27.20	14 400	1.5	58	58	2KJ3508 - ■ FM22 - ■ ■ N1	
57	500	25.60	14 400	1.6	58	58	2KJ3508 - ■ FM22 - ■ ■ M1	
60	475	24.17	14 400	1.6	58	58	2KJ3508 - ■ FM22 - ■ ■ L1	
71	405	20.57	14 400	1.8	58	58	2KJ3508 - ■ FM22 - ■ ■ K1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3								
K.79-LE100LK4E								
	83	345	17.62	14 400	2.1	58	2KJ3508 - ■ FM22 - ■ ■ J1	
	94	305	15.49	14 400	2.3	58	2KJ3508 - ■ FM22 - ■ ■ H1	
	111	255	13.07	14 400	2.6	58	2KJ3508 - ■ FM22 - ■ ■ G1	
	128	220	11.39	14 400	2.9	58	2KJ3508 - ■ FM22 - ■ ■ F1	
	138	205	10.51	14 100	2.2	58	2KJ3508 - ■ FM22 - ■ ■ E1	
	161	177	9.01	13 500	2.5	58	2KJ3508 - ■ FM22 - ■ ■ D1	
	184	156	7.92	13 100	2.9	58	2KJ3508 - ■ FM22 - ■ ■ C1	
	218	132	6.68	12 600	3.5	58	2KJ3508 - ■ FM22 - ■ ■ B1	
	250	115	5.82	12 100	3.8	58	2KJ3508 - ■ FM22 - ■ ■ A1	
K.69-LE100LK4E								
	43	655	33.48	5 960	0.88	52	2KJ3507 - ■ FM22 - ■ ■ Q1	
	50	575	29.18	6 050	0.97	52	2KJ3507 - ■ FM22 - ■ ■ P1	
	56	510	26.05	6 140	1.2	52	2KJ3507 - ■ FM22 - ■ ■ N1	
	59	480	24.52	6 150	1.2	52	2KJ3507 - ■ FM22 - ■ ■ M1	
	63	455	23.15	6 150	1.3	52	2KJ3507 - ■ FM22 - ■ ■ L1	
	74	385	19.70	6 160	1.4	52	2KJ3507 - ■ FM22 - ■ ■ K1	
	86	330	16.88	6 100	1.6	52	2KJ3507 - ■ FM22 - ■ ■ J1	
	98	290	14.84	6 030	1.8	52	2KJ3507 - ■ FM22 - ■ ■ H1	
	116	245	12.52	5 910	2.0	52	2KJ3507 - ■ FM22 - ■ ■ G1	
	133	215	10.91	5 780	2.2	52	2KJ3507 - ■ FM22 - ■ ■ F1	
	156	184	9.34	5 300	2.0	52	2KJ3507 - ■ FM22 - ■ ■ E1	
	182	158	8.01	5 180	2.3	52	2KJ3507 - ■ FM22 - ■ ■ D1	
	207	139	7.04	5 070	2.6	52	2KJ3507 - ■ FM22 - ■ ■ C1	
	245	117	5.94	4 920	2.9	52	2KJ3507 - ■ FM22 - ■ ■ B1	
	281	102	5.18	4 790	3.2	52	2KJ3507 - ■ FM22 - ■ ■ A1	
K.49-LE100LK4E								
	55	515	26.30	3 070	0.81	46	2KJ3505 - ■ FM22 - ■ ■ P1	
	62	455	23.28	3 260	0.92	46	2KJ3505 - ■ FM22 - ■ ■ N1	
	75	380	19.38	3 440	1.1	46	2KJ3505 - ■ FM22 - ■ ■ M1	
	80	355	18.24	3 510	1.2	46	2KJ3505 - ■ FM22 - ■ ■ L1	
	89	320	16.34	3 550	1.3	46	2KJ3505 - ■ FM22 - ■ ■ K1	
	105	270	13.91	3 630	1.5	46	2KJ3505 - ■ FM22 - ■ ■ J1	
	122	235	11.93	3 610	1.8	46	2KJ3505 - ■ FM22 - ■ ■ H1	
	142	200	10.27	3 620	2.1	46	2KJ3505 - ■ FM22 - ■ ■ G1	
	149	192	9.75	3 490	1.4	46	2KJ3505 - ■ FM22 - ■ ■ F1	
	158	181	9.18	3 480	1.5	46	2KJ3505 - ■ FM22 - ■ ■ E1	
	177	162	8.22	3 460	1.6	46	2KJ3505 - ■ FM22 - ■ ■ D1	
	208	138	7.00	3 410	1.7	46	2KJ3505 - ■ FM22 - ■ ■ C1	
	242	118	6.00	3 350	1.9	46	2KJ3505 - ■ FM22 - ■ ■ B1	
	281	102	5.17	3 270	2.1	46	2KJ3505 - ■ FM22 - ■ ■ A1	
B.49-LE100LK4E								
	52	545	27.74	6 070	0.82	43	2KJ3503 - ■ FM22 - ■ ■ T1	
	57	495	25.32	6 110	0.90	43	2KJ3503 - ■ FM22 - ■ ■ S1	
	69	410	21.01	6 110	1.1	43	2KJ3503 - ■ FM22 - ■ ■ R1	
	74	385	19.77	6 100	1.2	43	2KJ3503 - ■ FM22 - ■ ■ Q1	
	78	365	18.67	6 070	1.2	43	2KJ3503 - ■ FM22 - ■ ■ P1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3								
B.49-LE100LK4E								
	92	310	15.89	5 990	1.4	43	2KJ3503 - ■ FM22 - ■ ■ N1	
	107	265	13.61	5 880	1.7	43	2KJ3503 - ■ FM22 - ■ ■ M1	
	122	235	11.97	5 760	1.9	43	2KJ3503 - ■ FM22 - ■ ■ L1	
	144	199	10.10	5 600	2.3	43	2KJ3503 - ■ FM22 - ■ ■ K1	
	165	173	8.80	5 460	2.6	43	2KJ3503 - ■ FM22 - ■ ■ J1	
	176	163	8.29	5 520	2.0	43	2KJ3503 - ■ FM22 - ■ ■ H1	
	187	154	7.80	5 450	2.1	43	2KJ3503 - ■ FM22 - ■ ■ G1	
	197	145	7.37	5 380	2.3	43	2KJ3503 - ■ FM22 - ■ ■ F1	
	232	123	6.27	5 180	2.7	43	2KJ3503 - ■ FM22 - ■ ■ E1	
	271	106	5.37	4 980	3.1	43	2KJ3503 - ■ FM22 - ■ ■ D1	
	308	93	4.72	4 820	3.6	43	2KJ3503 - ■ FM22 - ■ ■ C1	
	366	78	3.98	4 620	4.2	43	2KJ3503 - ■ FM22 - ■ ■ B1	
	419	68	3.47	4 450	4.8	43	2KJ3503 - ■ FM22 - ■ ■ A1	
K.39-LE100LK4E								
	114	250	12.78	2 950	0.87	36	2KJ3504 - ■ FM22 - ■ ■ H1	
	131	215	11.09	3 020	1.0	36	2KJ3504 - ■ FM22 - ■ ■ G1	
	145	198	10.04	2 730	0.93	36	2KJ3504 - ■ FM22 - ■ ■ F1	
	165	173	8.81	2 790	1.1	36	2KJ3504 - ■ FM22 - ■ ■ E1	
	182	157	7.99	2 810	1.1	36	2KJ3504 - ■ FM22 - ■ ■ D1	
	193	148	7.52	2 820	1.2	36	2KJ3504 - ■ FM22 - ■ ■ C1	
	219	131	6.63	2 810	1.2	36	2KJ3504 - ■ FM22 - ■ ■ B1	
	253	113	5.75	2 810	1.3	36	2KJ3504 - ■ FM22 - ■ ■ A1	
B.39-LE100LK4E								
	98	290	14.90	5 360	0.85	36	2KJ3502 - ■ FM22 - ■ ■ M1	
	104	275	14.02	5 330	0.91	36	2KJ3502 - ■ FM22 - ■ ■ L1	
	116	245	12.56	5 290	1.0	36	2KJ3502 - ■ FM22 - ■ ■ K1	
	136	210	10.69	5 180	1.1	36	2KJ3502 - ■ FM22 - ■ ■ J1	
	159	181	9.17	5 070	1.3	36	2KJ3502 - ■ FM22 - ■ ■ H1	
	184	155	7.89	4 950	1.4	36	2KJ3502 - ■ FM22 - ■ ■ G1	
	220	130	6.60	4 890	1.5	36	2KJ3502 - ■ FM22 - ■ ■ F1	
	234	122	6.21	4 830	1.6	36	2KJ3502 - ■ FM22 - ■ ■ E1	
	262	109	5.56	4 720	1.8	36	2KJ3502 - ■ FM22 - ■ ■ D1	
	307	93	4.74	4 540	2.1	36	2KJ3502 - ■ FM22 - ■ ■ C1	
	358	80	4.06	4 370	2.5	36	2KJ3502 - ■ FM22 - ■ ■ B1	
	416	69	3.50	4 210	2.8	36	2KJ3502 - ■ FM22 - ■ ■ A1	
B.29-LE100LK4E								
	346	83	4.21	2 600	0.89	31	2KJ3501 - ■ FM22 - ■ ■ B1	
	399	72	3.65	2 550	1.0	31	2KJ3501 - ■ FM22 - ■ ■ A1	
4								
K.189-LE160MD8								
	3.6	10500	199.51	104 000	1.8	700	2KJ3515 - ■ JF21 - ■ ■ W1	P02
K.169-LE160MD8								
	3.2	11800	223.30	70 000	1.1	469	2KJ3514 - ■ JF21 - ■ ■ F2	P02
	3.5	11000	208.35	70 000	1.2	469	2KJ3514 - ■ JF21 - ■ ■ E2	P02
	3.9	9820	185.23	70 000	1.3	469	2KJ3514 - ■ JF21 - ■ ■ D2	P02
K.169-LE132MB6E								
	4.3	8790	223.30	70 000	1.5	432	2KJ3514 - ■ HH22 - ■ ■ F2	P01

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4								
K.169-LE132MB6E								
4.7	8200	208.35	70 000	1.6	432	2KJ3514	- ■ HH22 - ■ ■ E2	P01
5.2	7290	185.23	70 000	1.8	432	2KJ3514	- ■ HH22 - ■ ■ D2	P01
5.8	6550	166.31	70 000	2.0	432	2KJ3514	- ■ HH22 - ■ ■ C2	P01
K.149-LE132MB6E								
4.1	9330	237.03	65 000	0.9	262	2KJ3513	- ■ HH22 - ■ ■ J2	P01
4.8	7980	202.86	65 000	1.0	262	2KJ3513	- ■ HH22 - ■ ■ H2	P01
5.1	7510	190.92	65 000	1.1	262	2KJ3513	- ■ HH22 - ■ ■ G2	P01
5.4	7040	178.97	65 000	1.1	262	2KJ3513	- ■ HH22 - ■ ■ F2	P01
K.149-LE112ME4E								
6.2	6200	237.03	65 000	1.3	249	2KJ3513	- ■ GH22 - ■ ■ J2	
7.2	5300	202.86	65 000	1.5	249	2KJ3513	- ■ GH22 - ■ ■ H2	
7.6	4990	190.92	65 000	1.6	249	2KJ3513	- ■ GH22 - ■ ■ G2	
8.2	4680	178.97	65 000	1.7	249	2KJ3513	- ■ GH22 - ■ ■ F2	
9.2	4150	158.65	65 000	1.9	249	2KJ3513	- ■ GH22 - ■ ■ E2	
10	3680	140.93	65 000	2.2	249	2KJ3513	- ■ GH22 - ■ ■ D2	
K.129-LE112ME4E								
6.9	5510	210.74	36 500	0.8	165	2KJ3512	- ■ GH22 - ■ ■ H2	
7.5	5070	194.04	36 900	0.87	165	2KJ3512	- ■ GH22 - ■ ■ G2	
8.8	4320	165.47	37 700	1.0	165	2KJ3512	- ■ GH22 - ■ ■ F2	
9.4	4070	155.74	37 900	1.1	165	2KJ3512	- ■ GH22 - ■ ■ E2	
10	3780	144.53	38 200	1.2	165	2KJ3512	- ■ GH22 - ■ ■ D2	
11	3340	127.77	38 600	1.3	165	2KJ3512	- ■ GH22 - ■ ■ C2	
13	2980	114.06	39 000	1.5	165	2KJ3512	- ■ GH22 - ■ ■ B2	
14	2680	102.64	39 300	1.6	165	2KJ3512	- ■ GH22 - ■ ■ A2	
16	2330	89.09	39 600	1.9	165	2KJ3512	- ■ GH22 - ■ ■ X1	
18	2090	80.12	39 900	2.1	165	2KJ3512	- ■ GH22 - ■ ■ W1	
21	1830	70.03	40 000	2.4	165	2KJ3512	- ■ GH22 - ■ ■ V1	
K.109-LE112ME4E								
12	3100	118.65	24 500	0.93	115	2KJ3511	- ■ GH22 - ■ ■ B2	
12	3290	126.07	24 500	0.88	115	2KJ3511	- ■ GH22 - ■ ■ C2	
13	2860	109.57	24 500	1.0	115	2KJ3511	- ■ GH22 - ■ ■ A2	
15	2550	97.49	24 500	1.1	115	2KJ3511	- ■ GH22 - ■ ■ X1	
17	2260	86.59	24 500	1.3	115	2KJ3511	- ■ GH22 - ■ ■ W1	
19	2020	77.51	24 500	1.4	115	2KJ3511	- ■ GH22 - ■ ■ V1	
22	1730	66.26	24 500	1.7	115	2KJ3511	- ■ GH22 - ■ ■ U1	
25	1540	59.17	24 500	1.9	115	2KJ3511	- ■ GH22 - ■ ■ T1	
28	1360	52.29	24 500	2.1	115	2KJ3511	- ■ GH22 - ■ ■ S1	
32	1200	45.89	24 500	2.4	115	2KJ3511	- ■ GH22 - ■ ■ R1	
K.89-LE112ME4E								
20	1920	73.64	18 100	0.83	79	2KJ3510	- ■ GH22 - ■ ■ W1	
23	1680	64.39	18 100	0.95	79	2KJ3510	- ■ GH22 - ■ ■ V1	
26	1440	55.27	18 100	1.1	79	2KJ3510	- ■ GH22 - ■ ■ U1	
30	1270	48.85	18 100	1.3	79	2KJ3510	- ■ GH22 - ■ ■ T1	
35	1080	41.54	18 100	1.4	79	2KJ3510	- ■ GH22 - ■ ■ S1	
37	1020	39.29	18 100	1.6	79	2KJ3510	- ■ GH22 - ■ ■ R1	
44	860	32.96	18 100	1.9	79	2KJ3510	- ■ GH22 - ■ ■ Q1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4								
K.89-LE112ME4E								
47	810	31.03	18 100	2.0	79	2KJ3510 - ■ GH22 - ■ ■ P1		
51	745	28.46	18 100	2.1	79	2KJ3510 - ■ GH22 - ■ ■ N1		
59	650	24.86	18 100	2.5	79	2KJ3510 - ■ GH22 - ■ ■ M1		
66	580	22.26	18 100	2.7	79	2KJ3510 - ■ GH22 - ■ ■ L1		
75	505	19.46	18 100	3.1	79	2KJ3510 - ■ GH22 - ■ ■ K1		
139	275	10.51	18 100	3.1	79	2KJ3510 - ■ GH22 - ■ ■ E1		
162	235	9.02	18 100	3.4	79	2KJ3510 - ■ GH22 - ■ ■ D1		
183	205	7.97	18 000	3.7	79	2KJ3510 - ■ GH22 - ■ ■ C1		
215	177	6.78	17 300	4.1	79	2KJ3510 - ■ GH22 - ■ ■ B1		
251	152	5.81	16 600	4.4	79	2KJ3510 - ■ GH22 - ■ ■ A1		
K.79-LE112ME4E								
40	945	36.26	13 700	0.81	59	2KJ3508 - ■ GH22 - ■ ■ Q1		
45	855	32.78	13 900	0.96	59	2KJ3508 - ■ GH22 - ■ ■ P1		
54	710	27.20	14 100	1.1	59	2KJ3508 - ■ GH22 - ■ ■ N1		
57	670	25.60	14 200	1.2	59	2KJ3508 - ■ GH22 - ■ ■ M1		
60	630	24.17	14 300	1.2	59	2KJ3508 - ■ GH22 - ■ ■ L1		
71	535	20.57	14 400	1.4	59	2KJ3508 - ■ GH22 - ■ ■ K1		
83	460	17.62	14 400	1.6	59	2KJ3508 - ■ GH22 - ■ ■ J1		
94	405	15.49	14 400	1.7	59	2KJ3508 - ■ GH22 - ■ ■ H1		
112	340	13.07	14 400	1.9	59	2KJ3508 - ■ GH22 - ■ ■ G1		
128	295	11.39	14 000	2.2	59	2KJ3508 - ■ GH22 - ■ ■ F1		
139	275	10.51	13 600	1.6	59	2KJ3508 - ■ GH22 - ■ ■ E1		
162	235	9.01	13 200	1.9	59	2KJ3508 - ■ GH22 - ■ ■ D1		
184	205	7.92	12 800	2.2	59	2KJ3508 - ■ GH22 - ■ ■ C1		
219	175	6.68	12 300	2.6	59	2KJ3508 - ■ GH22 - ■ ■ B1		
251	152	5.82	11 900	2.8	59	2KJ3508 - ■ GH22 - ■ ■ A1		
K.69-LE112ME4E								
56	680	26.05	4 910	0.88	53	2KJ3507 - ■ GH22 - ■ ■ N1		
60	640	24.52	5 000	0.93	53	2KJ3507 - ■ GH22 - ■ ■ M1		
63	605	23.15	5 070	0.97	53	2KJ3507 - ■ GH22 - ■ ■ L1		
74	515	19.70	5 220	1.1	53	2KJ3507 - ■ GH22 - ■ ■ K1		
86	440	16.88	5 310	1.2	53	2KJ3507 - ■ GH22 - ■ ■ J1		
98	385	14.84	5 350	1.3	53	2KJ3507 - ■ GH22 - ■ ■ H1		
117	325	12.52	5 330	1.5	53	2KJ3507 - ■ GH22 - ■ ■ G1		
134	285	10.91	5 270	1.6	53	2KJ3507 - ■ GH22 - ■ ■ F1		
156	240	9.34	4 790	1.5	53	2KJ3507 - ■ GH22 - ■ ■ E1		
182	210	8.01	4 710	1.7	53	2KJ3507 - ■ GH22 - ■ ■ D1		
207	184	7.04	4 660	2.0	53	2KJ3507 - ■ GH22 - ■ ■ C1		
246	155	5.94	4 570	2.2	53	2KJ3507 - ■ GH22 - ■ ■ B1		
282	136	5.18	4 480	2.4	53	2KJ3507 - ■ GH22 - ■ ■ A1		
K.49-LE112ME4E								
75	505	19.38	2 460	0.83	47	2KJ3505 - ■ GH22 - ■ ■ M1		
80	475	18.24	2 560	0.88	47	2KJ3505 - ■ GH22 - ■ ■ L1		
89	425	16.34	2 730	0.98	47	2KJ3505 - ■ GH22 - ■ ■ K1		
105	360	13.91	2 920	1.2	47	2KJ3505 - ■ GH22 - ■ ■ J1		
122	310	11.93	3 020	1.3	47	2KJ3505 - ■ GH22 - ■ ■ H1		

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4	K.49-LE112ME4E							
	142	265	10.27	3 110	1.5	47	2KJ3505 - ■ GH22 - ■ ■ G1	
	150	255	9.75	2 960	1.1	47	2KJ3505 - ■ GH22 - ■ ■ F1	
	159	240	9.18	2 980	1.1	47	2KJ3505 - ■ GH22 - ■ ■ E1	
	178	215	8.22	3 010	1.2	47	2KJ3505 - ■ GH22 - ■ ■ D1	
	209	183	7.00	3 030	1.3	47	2KJ3505 - ■ GH22 - ■ ■ C1	
	243	157	6.00	3 020	1.4	47	2KJ3505 - ■ GH22 - ■ ■ B1	
	282	135	5.17	2 990	1.6	47	2KJ3505 - ■ GH22 - ■ ■ A1	
	B.49-LE112ME4E							
	69	550	21.01	5 170	0.82	44	2KJ3503 - ■ GH22 - ■ ■ R1	
	74	515	19.77	5 230	0.87	44	2KJ3503 - ■ GH22 - ■ ■ Q1	
	78	485	18.67	5 260	0.92	44	2KJ3503 - ■ GH22 - ■ ■ P1	
	92	415	15.89	5 280	1.1	44	2KJ3503 - ■ GH22 - ■ ■ N1	
	107	355	13.61	5 280	1.3	44	2KJ3503 - ■ GH22 - ■ ■ M1	
	122	310	11.97	5 250	1.4	44	2KJ3503 - ■ GH22 - ■ ■ L1	
	145	260	10.10	5 180	1.7	44	2KJ3503 - ■ GH22 - ■ ■ K1	
	166	230	8.80	5 070	2.0	44	2KJ3503 - ■ GH22 - ■ ■ J1	
	176	215	8.29	5 210	1.5	44	2KJ3503 - ■ GH22 - ■ ■ H1	
	187	200	7.80	5 170	1.6	44	2KJ3503 - ■ GH22 - ■ ■ G1	
	198	193	7.37	5 090	1.7	44	2KJ3503 - ■ GH22 - ■ ■ F1	
	233	164	6.27	4 930	2	44	2KJ3503 - ■ GH22 - ■ ■ E1	
	272	141	5.37	4 770	2.3	44	2KJ3503 - ■ GH22 - ■ ■ D1	
	309	123	4.72	4 640	2.7	44	2KJ3503 - ■ GH22 - ■ ■ C1	
	367	104	3.98	4 460	3.2	44	2KJ3503 - ■ GH22 - ■ ■ B1	
	421	91	3.47	4 310	3.6	44	2KJ3503 - ■ GH22 - ■ ■ A1	
	K.39-LE112ME4E							
	183	205	7.99	2 300	0.84	40	2KJ3504 - ■ GH22 - ■ ■ D1	
	194	197	7.52	2 300	0.87	40	2KJ3504 - ■ GH22 - ■ ■ C1	
220	173	6.63	2 370	0.93	40	2KJ3504 - ■ GH22 - ■ ■ B1		
254	150	5.75	2 420	1.0	40	2KJ3504 - ■ GH22 - ■ ■ A1		
B.39-LE112ME4E								
137	280	10.69	4 640	0.86	39	2KJ3502 - ■ GH22 - ■ ■ J1		
159	240	9.17	4 600	0.96	39	2KJ3502 - ■ GH22 - ■ ■ H1		
185	205	7.89	4 560	1.1	39	2KJ3502 - ■ GH22 - ■ ■ G1		
221	173	6.60	4 580	1.2	39	2KJ3502 - ■ GH22 - ■ ■ F1		
235	162	6.21	4 550	1.2	39	2KJ3502 - ■ GH22 - ■ ■ E1		
263	145	5.56	4 460	1.4	39	2KJ3502 - ■ GH22 - ■ ■ D1		
308	124	4.74	4 320	1.6	39	2KJ3502 - ■ GH22 - ■ ■ C1		
360	106	4.06	4 180	1.9	39	2KJ3502 - ■ GH22 - ■ ■ B1		
417	92	3.50	4 040	2.1	39	2KJ3502 - ■ GH22 - ■ ■ A1		
5.5	K.189-LE160ML8							
	3.6	14500	199.51	104 000	1.3	710	2KJ3515 - ■ JH21 - ■ ■ W1	P02
	4.0	13000	178.49	104 000	1.5	710	2KJ3515 - ■ JH21 - ■ ■ V1	P02
	4.5	11700	160.98	104 000	1.7	710	2KJ3515 - ■ JH21 - ■ ■ U1	P02
	K.189-LE132MJ6E							
	4.9	10800	199.51	104 000	1.8	671	2KJ3515 - ■ HL22 - ■ ■ W1	P01
	5.4	9660	178.49	104 000	2.0	671	2KJ3515 - ■ HL22 - ■ ■ V1	P01

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
5.5	K.169-LE160ML8							
	3.2	16200	223.30	70 000	0.8	479	2KJ3514 - ■ JH21 - ■ ■ F2	P02
	3.5	15100	208.35	70 000	0.86	479	2KJ3514 - ■ JH21 - ■ ■ E2	P02
	3.9	13500	185.23	70 000	0.96	479	2KJ3514 - ■ JH21 - ■ ■ D2	P02
	K.169-LE132MJ6E							
	4.3	12000	223.30	70 000	1.1	441	2KJ3514 - ■ HL22 - ■ ■ F2	P01
	4.7	11200	208.35	70 000	1.2	441	2KJ3514 - ■ HL22 - ■ ■ E2	P01
	5.2	10000	185.23	70 000	1.3	441	2KJ3514 - ■ HL22 - ■ ■ D2	P01
	5.8	9000	166.31	70 000	1.4	441	2KJ3514 - ■ HL22 - ■ ■ C2	P01
	6.4	8150	150.55	70 000	1.6	441	2KJ3514 - ■ HL22 - ■ ■ B2	P01
	K.169-LE132SF4E							
	6.6	8000	223.30	70 000	1.6	431	2KJ3514 - ■ HG22 - ■ ■ F2	
	7.0	7470	208.35	70 000	1.7	431	2KJ3514 - ■ HG22 - ■ ■ E2	
	7.9	6640	185.23	70 000	2.0	431	2KJ3514 - ■ HG22 - ■ ■ D2	
	K.149-LE132MJ6E							
	5.4	9690	178.97	65 000	0.83	271	2KJ3513 - ■ HL22 - ■ ■ F2	P01
	K.149-LE132SF4E							
	6.2	8490	237.03	65 000	0.94	261	2KJ3513 - ■ HG22 - ■ ■ J2	
	7.2	7270	202.86	65 000	1.1	261	2KJ3513 - ■ HG22 - ■ ■ H2	
	7.7	6840	190.92	65 000	1.2	261	2KJ3513 - ■ HG22 - ■ ■ G2	
	8.2	6410	178.97	65 000	1.2	261	2KJ3513 - ■ HG22 - ■ ■ F2	
	9.2	5680	158.65	65 000	1.4	261	2KJ3513 - ■ HG22 - ■ ■ E2	
	10	5050	140.93	65 000	1.6	261	2KJ3513 - ■ HG22 - ■ ■ D2	
	12	4550	127.16	65 000	1.8	261	2KJ3513 - ■ HG22 - ■ ■ C2	
	13	4040	112.68	65 000	2.0	261	2KJ3513 - ■ HG22 - ■ ■ B2	
	15	3570	99.79	65 000	2.2	261	2KJ3513 - ■ HG22 - ■ ■ A2	
	K.129-LE132SF4E							
10	5180	144.53	36 800	0.85	178	2KJ3512 - ■ HG22 - ■ ■ D2		
11	4580	127.77	37 400	0.96	178	2KJ3512 - ■ HG22 - ■ ■ C2		
13	4080	114.06	37 900	1.1	178	2KJ3512 - ■ HG22 - ■ ■ B2		
14	3680	102.64	38 300	1.2	178	2KJ3512 - ■ HG22 - ■ ■ A2		
16	3190	89.09	38 800	1.4	178	2KJ3512 - ■ HG22 - ■ ■ X1		
18	2870	80.12	39 100	1.5	178	2KJ3512 - ■ HG22 - ■ ■ W1		
21	2510	70.03	39 400	1.8	178	2KJ3512 - ■ HG22 - ■ ■ V1		
23	2240	62.49	39 700	2.0	178	2KJ3512 - ■ HG22 - ■ ■ U1		
27	1970	55.05	40 000	2.2	178	2KJ3512 - ■ HG22 - ■ ■ T1		
30	1730	48.24	40 000	2.5	178	2KJ3512 - ■ HG22 - ■ ■ S1		
K.109-LE132SF4E								
15	3490	97.49	24 500	0.83	129	2KJ3511 - ■ HG22 - ■ ■ X1		
17	3100	86.59	24 500	0.93	129	2KJ3511 - ■ HG22 - ■ ■ W1		
19	2770	77.51	24 500	1.0	129	2KJ3511 - ■ HG22 - ■ ■ V1		
22	2370	66.26	24 500	1.2	129	2KJ3511 - ■ HG22 - ■ ■ U1		
25	2120	59.17	24 500	1.4	129	2KJ3511 - ■ HG22 - ■ ■ T1		
28	1870	52.29	24 500	1.5	129	2KJ3511 - ■ HG22 - ■ ■ S1		
32	1640	45.89	24 500	1.8	129	2KJ3511 - ■ HG22 - ■ ■ R1		
37	1430	39.95	24 500	2.0	129	2KJ3511 - ■ HG22 - ■ ■ Q1		
43	1220	34.15	24 500	2.2	129	2KJ3511 - ■ HG22 - ■ ■ P1		

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
5.5								
K.109-LE132SF4E								
	50	1040	29.23	24 500	2.5	129	2KJ3511 - ■ HG22 - ■ ■ N1	
	59	895	24.98	24 500	2.7	129	2KJ3511 - ■ HG22 - ■ ■ M1	
	66	800	22.31	24 500	3.0	129	2KJ3511 - ■ HG22 - ■ ■ L1	
	140	375	10.45	21 400	3.4	129	2KJ3511 - ■ HG22 - ■ ■ E1	
	160	325	9.17	20 700	3.9	129	2KJ3511 - ■ HG22 - ■ ■ D1	
K.89-LE132SF4E								
	27	1980	55.27	18 100	0.81	93	2KJ3510 - ■ HG22 - ■ ■ U1	
	30	1750	48.85	18 100	0.91	93	2KJ3510 - ■ HG22 - ■ ■ T1	
	35	1480	41.54	18 100	1.1	93	2KJ3510 - ■ HG22 - ■ ■ S1	
	37	1400	39.29	18 100	1.1	93	2KJ3510 - ■ HG22 - ■ ■ R1	
	44	1180	32.96	18 100	1.4	93	2KJ3510 - ■ HG22 - ■ ■ Q1	
	47	1110	31.03	18 100	1.4	93	2KJ3510 - ■ HG22 - ■ ■ P1	
	51	1020	28.46	18 100	1.6	93	2KJ3510 - ■ HG22 - ■ ■ N1	
	59	890	24.86	18 100	1.8	93	2KJ3510 - ■ HG22 - ■ ■ M1	
	66	795	22.26	18 100	2.0	93	2KJ3510 - ■ HG22 - ■ ■ L1	
	75	695	19.46	18 100	2.2	93	2KJ3510 - ■ HG22 - ■ ■ K1	
	88	595	16.71	18 100	2.5	93	2KJ3510 - ■ HG22 - ■ ■ J1	
	99	530	14.77	18 100	2.7	93	2KJ3510 - ■ HG22 - ■ ■ H1	
	117	450	12.56	18 100	3.0	93	2KJ3510 - ■ HG22 - ■ ■ G1	
	136	385	10.76	18 100	3.2	93	2KJ3510 - ■ HG22 - ■ ■ F1	
	139	375	10.51	18 100	2.2	93	2KJ3510 - ■ HG22 - ■ ■ E1	
	162	320	9.02	18 100	2.5	93	2KJ3510 - ■ HG22 - ■ ■ D1	
	184	285	7.97	17 500	2.7	93	2KJ3510 - ■ HG22 - ■ ■ C1	
	216	240	6.78	16 900	3.0	93	2KJ3510 - ■ HG22 - ■ ■ B1	
	252	205	5.81	16 300	3.2	93	2KJ3510 - ■ HG22 - ■ ■ A1	
K.79-LE132SF4E								
	54	975	27.20	13 600	0.82	72	2KJ3508 - ■ HG22 - ■ ■ N1	
	57	915	25.60	13 700	0.86	72	2KJ3508 - ■ HG22 - ■ ■ M1	
	61	865	24.17	13 800	0.89	72	2KJ3508 - ■ HG22 - ■ ■ L1	
	71	735	20.57	14 100	1.0	72	2KJ3508 - ■ HG22 - ■ ■ K1	
	83	630	17.62	14 300	1.1	72	2KJ3508 - ■ HG22 - ■ ■ J1	
	95	555	15.49	14 000	1.3	72	2KJ3508 - ■ HG22 - ■ ■ H1	
	112	465	13.07	13 700	1.4	72	2KJ3508 - ■ HG22 - ■ ■ G1	
	129	405	11.39	13 300	1.6	72	2KJ3508 - ■ HG22 - ■ ■ F1	
	139	375	10.51	13 000	1.2	72	2KJ3508 - ■ HG22 - ■ ■ E1	
	163	320	9.01	12 600	1.4	72	2KJ3508 - ■ HG22 - ■ ■ D1	
	185	280	7.92	12 300	1.6	72	2KJ3508 - ■ HG22 - ■ ■ C1	
	219	235	6.68	11 900	1.9	72	2KJ3508 - ■ HG22 - ■ ■ B1	
	252	205	5.82	11 500	2.1	72	2KJ3508 - ■ HG22 - ■ ■ A1	
K.69-LE132SF4E								
	87	605	16.88	4 120	0.88	66	2KJ3507 - ■ HG22 - ■ ■ J1	
	99	530	14.84	4 300	0.97	66	2KJ3507 - ■ HG22 - ■ ■ H1	
	117	445	12.52	4 460	1.1	66	2KJ3507 - ■ HG22 - ■ ■ G1	
	134	390	10.91	4 510	1.2	66	2KJ3507 - ■ HG22 - ■ ■ F1	
	157	335	9.34	3 930	1.1	66	2KJ3507 - ■ HG22 - ■ ■ E1	
	183	285	8.01	4 030	1.3	66	2KJ3507 - ■ HG22 - ■ ■ D1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
5.5	K.69-LE132SF4E								
	208	250	7.04	4 060	1.4	66	2KJ3507 - ■ HG22 - ■ ■ C1		
	247	210	5.94	4 080	1.6	66	2KJ3507 - ■ HG22 - ■ ■ B1		
	283	186	5.18	4 020	1.8	66	2KJ3507 - ■ HG22 - ■ ■ A1		
	K.49-LE132SF4E								
	105	495	13.91	1 860	0.84	60	2KJ3505 - ■ HG22 - ■ ■ J1		
	123	425	11.93	2 120	0.98	60	2KJ3505 - ■ HG22 - ■ ■ H1		
	143	365	10.27	2 320	1.1	60	2KJ3505 - ■ HG22 - ■ ■ G1		
	160	325	9.18	2 270	0.82	60	2KJ3505 - ■ HG22 - ■ ■ E1		
	178	295	8.22	2 340	0.87	60	2KJ3505 - ■ HG22 - ■ ■ D1		
	209	250	7.00	2 460	0.96	60	2KJ3505 - ■ HG22 - ■ ■ C1		
	244	215	6.00	2 530	1.0	60	2KJ3505 - ■ HG22 - ■ ■ B1		
	283	185	5.17	2 570	1.1	60	2KJ3505 - ■ HG22 - ■ ■ A1		
	B.49-LE132SF4E								
	108	485	13.61	4 400	0.92	57	2KJ3503 - ■ HG22 - ■ ■ M1		
	122	425	11.97	4 480	1.0	57	2KJ3503 - ■ HG22 - ■ ■ L1		
	145	360	10.10	4 510	1.2	57	2KJ3503 - ■ HG22 - ■ ■ K1		
	166	315	8.80	4 500	1.4	57	2KJ3503 - ■ HG22 - ■ ■ J1		
	177	295	8.29	4 730	1.1	57	2KJ3503 - ■ HG22 - ■ ■ H1		
	188	280	7.80	4 690	1.2	57	2KJ3503 - ■ HG22 - ■ ■ G1		
	199	260	7.37	4 690	1.2	57	2KJ3503 - ■ HG22 - ■ ■ F1		
	234	225	6.27	4 570	1.5	57	2KJ3503 - ■ HG22 - ■ ■ E1		
	273	193	5.37	4 460	1.7	57	2KJ3503 - ■ HG22 - ■ ■ D1		
	310	169	4.72	4 360	2.0	57	2KJ3503 - ■ HG22 - ■ ■ C1		
	368	143	3.98	4 220	2.3	57	2KJ3503 - ■ HG22 - ■ ■ B1		
	422	124	3.47	4 110	2.6	57	2KJ3503 - ■ HG22 - ■ ■ A1		
	7.5	K.189-LE160LN8							
		3.6	19900	199.51	104 000	0.96	733	2KJ3515 - ■ JL21 - ■ ■ W1	P02
		4.0	17800	178.49	104 000	1.1	733	2KJ3515 - ■ JL21 - ■ ■ V1	P02
		4.4	16100	160.98	104 000	1.2	733	2KJ3515 - ■ JL21 - ■ ■ U1	P02
K.189-LE132ZMS4P									
7.4		9720	199.51	104 000	2.0	683	2KJ3515 - ■ HL23 - ■ ■ W1		
K.169-LE132ZMS4P									
6.6		10800	223.30	70 000	1.2	453	2KJ3514 - ■ HL23 - ■ ■ F2		
7.1		10100	208.35	70 000	1.3	453	2KJ3514 - ■ HL23 - ■ ■ E2		
7.9		9020	185.23	70 000	1.4	453	2KJ3514 - ■ HL23 - ■ ■ D2		
8.8		8100	166.31	70 000	1.6	453	2KJ3514 - ■ HL23 - ■ ■ C2		
9.8		7330	150.55	70 000	1.8	453	2KJ3514 - ■ HL23 - ■ ■ B2		
11		6440	132.24	70 000	2.0	453	2KJ3514 - ■ HL23 - ■ ■ A2		
12		5830	119.83	70 000	2.2	453	2KJ3514 - ■ HL23 - ■ ■ X1		
K.149-LE132ZMS4P									
7.2		9880	202.86	65 000	0.81	283	2KJ3513 - ■ HL23 - ■ ■ H2		
7.7		9300	190.92	65 000	0.86	283	2KJ3513 - ■ HL23 - ■ ■ G2		
8.2		8720	178.97	65 000	0.92	283	2KJ3513 - ■ HL23 - ■ ■ F2		
9.3		7730	158.65	65 000	1.0	283	2KJ3513 - ■ HL23 - ■ ■ E2		
10		6860	140.93	65 000	1.2	283	2KJ3513 - ■ HL23 - ■ ■ D2		
12		6190	127.16	65 000	1.3	283	2KJ3513 - ■ HL23 - ■ ■ C2		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
7.5								
K.149-LE132ZMS4P								
	13	5490	112.68	65 000	1.5	283	2KJ3513 - ■ HL23 - ■ ■ B2	
	15	4860	99.79	64 000	1.6	283	2KJ3513 - ■ HL23 - ■ ■ A2	
	17	4320	88.81	62 900	1.8	283	2KJ3513 - ■ HL23 - ■ ■ X1	
	18	3870	79.59	61 700	2.1	283	2KJ3513 - ■ HL23 - ■ ■ W1	
	21	3430	70.56	60 400	2.3	283	2KJ3513 - ■ HL23 - ■ ■ V1	
K.129-LE132ZMS4P								
	14	5000	102.64	37 000	0.88	200	2KJ3512 - ■ HL23 - ■ ■ A2	
	17	4340	89.09	37 700	1.0	200	2KJ3512 - ■ HL23 - ■ ■ X1	
	18	3900	80.12	38 100	1.1	200	2KJ3512 - ■ HL23 - ■ ■ W1	
	21	3410	70.03	38 600	1.3	200	2KJ3512 - ■ HL23 - ■ ■ V1	
	24	3040	62.49	38 900	1.4	200	2KJ3512 - ■ HL23 - ■ ■ U1	
	27	2680	55.05	39 300	1.6	200	2KJ3512 - ■ HL23 - ■ ■ T1	
	30	2350	48.24	39 200	1.9	200	2KJ3512 - ■ HL23 - ■ ■ S1	
	35	2040	42.04	38 300	2.1	200	2KJ3512 - ■ HL23 - ■ ■ R1	
	38	1870	38.37	37 700	2.4	200	2KJ3512 - ■ HL23 - ■ ■ Q1	
	45	1600	33.03	36 700	2.7	200	2KJ3512 - ■ HL23 - ■ ■ P1	
K.109-LE132ZMS4P								
	22	3220	66.26	24 500	0.9	151	2KJ3511 - ■ HL23 - ■ ■ U1	
	25	2880	59.17	24 500	1.0	151	2KJ3511 - ■ HL23 - ■ ■ T1	
	28	2540	52.29	24 500	1.1	151	2KJ3511 - ■ HL23 - ■ ■ S1	
	32	2230	45.89	24 500	1.3	151	2KJ3511 - ■ HL23 - ■ ■ R1	
	37	1940	39.95	24 500	1.4	151	2KJ3511 - ■ HL23 - ■ ■ Q1	
	43	1660	34.15	24 500	1.6	151	2KJ3511 - ■ HL23 - ■ ■ P1	
	50	1420	29.23	24 500	1.8	151	2KJ3511 - ■ HL23 - ■ ■ N1	
	59	1210	24.98	24 500	2.0	151	2KJ3511 - ■ HL23 - ■ ■ M1	
	66	1080	22.31	24 500	2.2	151	2KJ3511 - ■ HL23 - ■ ■ L1	
	75	960	19.71	24 200	2.5	151	2KJ3511 - ■ HL23 - ■ ■ K1	
	85	840	17.30	23 600	2.8	151	2KJ3511 - ■ HL23 - ■ ■ J1	
	98	730	15.06	22 900	3.1	151	2KJ3511 - ■ HL23 - ■ ■ H1	
	114	625	12.87	22 100	3.5	151	2KJ3511 - ■ HL23 - ■ ■ G1	
	141	505	10.45	20 800	2.5	151	2KJ3511 - ■ HL23 - ■ ■ E1	
	160	445	9.17	20 200	2.8	151	2KJ3511 - ■ HL23 - ■ ■ D1	
	184	385	7.99	19 500	3.3	151	2KJ3511 - ■ HL23 - ■ ■ C1	
	215	330	6.83	18 800	3.9	151	2KJ3511 - ■ HL23 - ■ ■ B1	
	252	285	5.84	18 100	4.6	151	2KJ3511 - ■ HL23 - ■ ■ A1	
K.89-LE132ZMS4P								
	37	1910	39.29	18 100	0.84	115	2KJ3510 - ■ HL23 - ■ ■ R1	
	45	1600	32.96	18 100	1.0	115	2KJ3510 - ■ HL23 - ■ ■ Q1	
	47	1510	31.03	18 100	1.1	115	2KJ3510 - ■ HL23 - ■ ■ P1	
	52	1380	28.46	18 100	1.2	115	2KJ3510 - ■ HL23 - ■ ■ N1	
	59	1210	24.86	18 100	1.3	115	2KJ3510 - ■ HL23 - ■ ■ M1	
	66	1080	22.26	18 100	1.5	115	2KJ3510 - ■ HL23 - ■ ■ L1	
	76	945	19.46	18 100	1.6	115	2KJ3510 - ■ HL23 - ■ ■ K1	
	88	810	16.71	18 100	1.8	115	2KJ3510 - ■ HL23 - ■ ■ J1	
	100	720	14.77	18 100	2.0	115	2KJ3510 - ■ HL23 - ■ ■ H1	
	117	610	12.56	18 100	2.2	115	2KJ3510 - ■ HL23 - ■ ■ G1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
7.5	K.89-LE132ZMS4P							
	137	520	10.76	18 100	2.4	115	2KJ3510 - ■ HL23 - ■ ■ F1	
	140	510	10.51	17 900	1.7	115	2KJ3510 - ■ HL23 - ■ ■ E1	
	163	435	9.02	17 400	1.8	115	2KJ3510 - ■ HL23 - ■ ■ D1	
	184	385	7.97	16 900	2.0	115	2KJ3510 - ■ HL23 - ■ ■ C1	
	217	330	6.78	16 400	2.2	115	2KJ3510 - ■ HL23 - ■ ■ B1	
	253	280	5.81	15 800	2.4	115	2KJ3510 - ■ HL23 - ■ ■ A1	
	K.79-LE132ZMS4P							
	83	855	17.62	12 900	0.83	94	2KJ3508 - ■ HL23 - ■ ■ J1	
	95	755	15.49	12 800	0.92	94	2KJ3508 - ■ HL23 - ■ ■ H1	
	112	635	13.07	12 700	1.0	94	2KJ3508 - ■ HL23 - ■ ■ G1	
	129	555	11.39	12 500	1.2	94	2KJ3508 - ■ HL23 - ■ ■ F1	
	140	510	10.51	12 100	0.87	94	2KJ3508 - ■ HL23 - ■ ■ E1	
	163	435	9.01	11 900	1.0	94	2KJ3508 - ■ HL23 - ■ ■ D1	
	186	385	7.92	11 600	1.2	94	2KJ3508 - ■ HL23 - ■ ■ C1	
	220	325	6.68	11 300	1.4	94	2KJ3508 - ■ HL23 - ■ ■ B1	
	253	280	5.82	11 100	1.5	94	2KJ3508 - ■ HL23 - ■ ■ A1	
	K.69-LE132ZMS4P							
	117	610	12.52	3 280	0.8	88	2KJ3507 - ■ HL23 - ■ ■ G1	
	135	530	10.91	3 510	0.88	88	2KJ3507 - ■ HL23 - ■ ■ F1	
	157	455	9.34	2 850	0.81	88	2KJ3507 - ■ HL23 - ■ ■ E1	
	184	390	8.01	3 080	0.94	88	2KJ3507 - ■ HL23 - ■ ■ D1	
	209	340	7.04	3 250	1.1	88	2KJ3507 - ■ HL23 - ■ ■ C1	
	247	285	5.94	3 400	1.2	88	2KJ3507 - ■ HL23 - ■ ■ B1	
	284	250	5.18	3 440	1.3	88	2KJ3507 - ■ HL23 - ■ ■ A1	
	K.49-LE132ZMS4P							
	143	500	10.27	1 260	0.83	82	2KJ3505 - ■ HL23 - ■ ■ G1	
284	250	5.17	2 020	0.83	82	2KJ3505 - ■ HL23 - ■ ■ A1		
B.49-LE132ZMS4P								
146	490	10.10	3 640	0.91	79	2KJ3503 - ■ HL23 - ■ ■ K1		
167	425	8.80	3 760	1.0	79	2KJ3503 - ■ HL23 - ■ ■ J1		
177	400	8.29	4 100	0.82	79	2KJ3503 - ■ HL23 - ■ ■ H1		
188	380	7.80	4 090	0.87	79	2KJ3503 - ■ HL23 - ■ ■ G1		
199	355	7.37	4 120	0.92	79	2KJ3503 - ■ HL23 - ■ ■ F1		
234	305	6.27	4 090	1.1	79	2KJ3503 - ■ HL23 - ■ ■ E1		
274	260	5.37	4 060	1.3	79	2KJ3503 - ■ HL23 - ■ ■ D1		
311	230	4.72	4 000	1.4	79	2KJ3503 - ■ HL23 - ■ ■ C1		
369	194	3.98	3 920	1.7	79	2KJ3503 - ■ HL23 - ■ ■ B1		
424	169	3.47	3 840	1.9	79	2KJ3503 - ■ HL23 - ■ ■ A1		
9.2	K.189-LE160MPA4P							
	7.4	11900	199.51	104 000	1.6	700	2KJ3515 - ■ JQ23 - ■ ■ W1	
	8.2	10600	178.49	104 000	1.8	700	2KJ3515 - ■ JQ23 - ■ ■ V1	
	9.1	9620	160.98	104 000	2.0	700	2KJ3515 - ■ JQ23 - ■ ■ U1	
	K.169-LE160MPA4P							
	6.6	13300	223.30	70 000	0.97	469	2KJ3514 - ■ JQ23 - ■ ■ F2	
	7.1	12400	208.35	70 000	1.0	469	2KJ3514 - ■ JQ23 - ■ ■ E2	
	7.9	11000	185.23	70 000	1.2	469	2KJ3514 - ■ JQ23 - ■ ■ D2	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
9.2								
K.169-LE160MPA4P								
	8.8	9940	166.31	70 000	1.3	469	2KJ3514 - ■ JQ23 - ■ ■ C2	
	9.8	8990	150.55	70 000	1.4	469	2KJ3514 - ■ JQ23 - ■ ■ B2	
	11	7900	132.24	70 000	1.6	469	2KJ3514 - ■ JQ23 - ■ ■ A2	
	12	7160	119.83	70 000	1.8	469	2KJ3514 - ■ JQ23 - ■ ■ X1	
	14	6370	106.72	70 000	2.0	469	2KJ3514 - ■ JQ23 - ■ ■ W1	
K.149-LE160MPA4P								
	9.3	9480	158.65	62 700	0.84	301	2KJ3513 - ■ JQ23 - ■ ■ E2	
	10	8420	140.93	62 600	0.95	301	2KJ3513 - ■ JQ23 - ■ ■ D2	
	12	7600	127.16	62 200	1.1	301	2KJ3513 - ■ JQ23 - ■ ■ C2	
	13	6730	112.68	61 700	1.2	301	2KJ3513 - ■ JQ23 - ■ ■ B2	
	15	5960	99.79	61 000	1.3	301	2KJ3513 - ■ JQ23 - ■ ■ A2	
	17	5300	88.81	60 100	1.5	301	2KJ3513 - ■ JQ23 - ■ ■ X1	
	18	4750	79.59	59 200	1.7	301	2KJ3513 - ■ JQ23 - ■ ■ W1	
	21	4210	70.56	58 200	1.9	301	2KJ3513 - ■ JQ23 - ■ ■ V1	
	24	3720	62.28	57 000	2.1	301	2KJ3513 - ■ JQ23 - ■ ■ U1	
	27	3270	54.76	55 700	2.4	301	2KJ3513 - ■ JQ23 - ■ ■ T1	
K.129-LE160MPA4P								
	17	5320	89.09	36 700	0.83	218	2KJ3512 - ■ JQ23 - ■ ■ X1	
	18	4780	80.12	37 200	0.92	218	2KJ3512 - ■ JQ23 - ■ ■ W1	
	21	4180	70.03	37 800	1.1	218	2KJ3512 - ■ JQ23 - ■ ■ V1	
	24	3730	62.49	38 200	1.2	218	2KJ3512 - ■ JQ23 - ■ ■ U1	
	27	3290	55.05	37 900	1.3	218	2KJ3512 - ■ JQ23 - ■ ■ T1	
	30	2880	48.24	37 400	1.5	218	2KJ3512 - ■ JQ23 - ■ ■ S1	
	35	2510	42.04	36 700	1.8	218	2KJ3512 - ■ JQ23 - ■ ■ R1	
	38	2290	38.37	36 300	1.9	218	2KJ3512 - ■ JQ23 - ■ ■ Q1	
	45	1970	33.03	35 400	2.2	218	2KJ3512 - ■ JQ23 - ■ ■ P1	
	47	1880	31.55	35 200	2.3	218	2KJ3512 - ■ JQ23 - ■ ■ N1	
	53	1640	27.58	34 300	2.7	218	2KJ3512 - ■ JQ23 - ■ ■ M1	
	60	1470	24.61	33 600	3.0	218	2KJ3512 - ■ JQ23 - ■ ■ L1	
K.109-LE160MPA4P								
	25	3530	59.17	24 500	0.82	170	2KJ3511 - ■ JQ23 - ■ ■ T1	
	28	3120	52.29	24 500	0.93	170	2KJ3511 - ■ JQ23 - ■ ■ S1	
	32	2740	45.89	24 500	1.1	170	2KJ3511 - ■ JQ23 - ■ ■ R1	
	37	2380	39.95	24 500	1.2	170	2KJ3511 - ■ JQ23 - ■ ■ Q1	
	43	2040	34.15	24 500	1.3	170	2KJ3511 - ■ JQ23 - ■ ■ P1	
	50	1740	29.23	24 500	1.5	170	2KJ3511 - ■ JQ23 - ■ ■ N1	
	59	1490	24.98	24 200	1.6	170	2KJ3511 - ■ JQ23 - ■ ■ M1	
	66	1330	22.31	23 900	1.8	170	2KJ3511 - ■ JQ23 - ■ ■ L1	
	75	1170	19.71	23 400	2.0	170	2KJ3511 - ■ JQ23 - ■ ■ K1	
	85	1030	17.30	22 900	2.3	170	2KJ3511 - ■ JQ23 - ■ ■ J1	
	98	900	15.06	22 300	2.6	170	2KJ3511 - ■ JQ23 - ■ ■ H1	
	114	765	12.87	21 600	2.9	170	2KJ3511 - ■ JQ23 - ■ ■ G1	
	133	655	11.02	20 900	3.2	170	2KJ3511 - ■ JQ23 - ■ ■ F1	
	141	625	10.45	20 300	2.0	170	2KJ3511 - ■ JQ23 - ■ ■ E1	
	160	545	9.17	19 800	2.3	170	2KJ3511 - ■ JQ23 - ■ ■ D1	
	184	475	7.99	19 200	2.7	170	2KJ3511 - ■ JQ23 - ■ ■ C1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
9.2	K.109-LE160MPA4P							
	215	405	6.83	18 500	3.2	170	2KJ3511 - ■ JQ23 - ■ ■ B1	
	252	345	5.84	17 800	3.7	170	2KJ3511 - ■ JQ23 - ■ ■ A1	
	K.89-LE160MPA4P							
	45	1970	32.96	18 100	0.81	133	2KJ3510 - ■ JQ23 - ■ ■ Q1	
	47	1850	31.03	18 100	0.86	133	2KJ3510 - ■ JQ23 - ■ ■ P1	
	52	1700	28.46	18 100	0.94	133	2KJ3510 - ■ JQ23 - ■ ■ N1	
	59	1480	24.86	18 100	1.1	133	2KJ3510 - ■ JQ23 - ■ ■ M1	
	66	1330	22.26	18 100	1.2	133	2KJ3510 - ■ JQ23 - ■ ■ L1	
	76	1160	19.46	18 100	1.3	133	2KJ3510 - ■ JQ23 - ■ ■ K1	
	88	995	16.71	18 100	1.5	133	2KJ3510 - ■ JQ23 - ■ ■ J1	
	100	880	14.77	18 100	1.6	133	2KJ3510 - ■ JQ23 - ■ ■ H1	
	117	750	12.56	18 100	1.8	133	2KJ3510 - ■ JQ23 - ■ ■ G1	
	137	640	10.76	18 000	1.9	133	2KJ3510 - ■ JQ23 - ■ ■ F1	
	140	625	10.51	17 200	1.3	133	2KJ3510 - ■ JQ23 - ■ ■ E1	
163	535	9.02	16 800	1.5	133	2KJ3510 - ■ JQ23 - ■ ■ D1		
184	475	7.97	16 400	1.6	133	2KJ3510 - ■ JQ23 - ■ ■ C1		
217	405	6.78	15 900	1.8	133	2KJ3510 - ■ JQ23 - ■ ■ B1		
253	345	5.81	15 400	1.9	133	2KJ3510 - ■ JQ23 - ■ ■ A1		
11	K.189-LE160MPB4P							
	7.4	14200	199.51	104 000	1.3	692	2KJ3515 - ■ JR23 - ■ ■ W1	
	8.2	12700	178.49	104 000	1.5	692	2KJ3515 - ■ JR23 - ■ ■ V1	
	9.1	11500	160.98	104 000	1.7	692	2KJ3515 - ■ JR23 - ■ ■ U1	
	10	10100	142.28	104 000	1.9	692	2KJ3515 - ■ JR23 - ■ ■ T1	
	11	9290	130.05	104 000	2.1	692	2KJ3515 - ■ JR23 - ■ ■ S1	
	K.169-LE160MPB4P							
	6.6	15900	223.30	70 000	0.81	461	2KJ3514 - ■ JR23 - ■ ■ F2	
	7.1	14800	208.35	70 000	0.87	461	2KJ3514 - ■ JR23 - ■ ■ E2	
	7.9	13200	185.23	70 000	0.98	461	2KJ3514 - ■ JR23 - ■ ■ D2	
	8.8	11800	166.31	70 000	1.1	461	2KJ3514 - ■ JR23 - ■ ■ C2	
	9.8	10700	150.55	70 000	1.2	461	2KJ3514 - ■ JR23 - ■ ■ B2	
	11	9450	132.24	70 000	1.4	461	2KJ3514 - ■ JR23 - ■ ■ A2	
	12	8560	119.83	70 000	1.5	461	2KJ3514 - ■ JR23 - ■ ■ X1	
	14	7620	106.72	70 000	1.7	461	2KJ3514 - ■ JR23 - ■ ■ W1	
15	6840	95.83	70 000	1.9	461	2KJ3514 - ■ JR23 - ■ ■ V1		
17	6110	85.51	70 000	2.1	461	2KJ3514 - ■ JR23 - ■ ■ U1		
K.149-LE160MPB4P								
12	9080	127.16	58 100	0.88	293	2KJ3513 - ■ JR23 - ■ ■ C2		
13	8050	112.68	58 000	0.99	293	2KJ3513 - ■ JR23 - ■ ■ B2		
15	7130	99.79	57 700	1.1	293	2KJ3513 - ■ JR23 - ■ ■ A2		
17	6340	88.81	57 200	1.3	293	2KJ3513 - ■ JR23 - ■ ■ X1		
18	5680	79.59	56 700	1.4	293	2KJ3513 - ■ JR23 - ■ ■ W1		
21	5040	70.56	55 900	1.6	293	2KJ3513 - ■ JR23 - ■ ■ V1		
24	4450	62.28	54 900	1.8	293	2KJ3513 - ■ JR23 - ■ ■ U1		
27	3910	54.76	53 900	2.0	293	2KJ3513 - ■ JR23 - ■ ■ T1		
30	3540	49.60	53 000	2.3	293	2KJ3513 - ■ JR23 - ■ ■ S1		
34	3080	43.18	51 800	2.6	293	2KJ3513 - ■ JR23 - ■ ■ R1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
11								
K.129-LE160MPB4P								
21	5000	70.03	35 700	0.88	210	2KJ3512	- ■ JR23	- ■ ■ V1
24	4460	62.49	35 800	0.99	210	2KJ3512	- ■ JR23	- ■ ■ U1
27	3930	55.05	35 700	1.1	210	2KJ3512	- ■ JR23	- ■ ■ T1
30	3440	48.24	35 500	1.3	210	2KJ3512	- ■ JR23	- ■ ■ S1
35	3000	42.04	35 100	1.5	210	2KJ3512	- ■ JR23	- ■ ■ R1
38	2740	38.37	34 700	1.6	210	2KJ3512	- ■ JR23	- ■ ■ Q1
45	2360	33.03	34 100	1.9	210	2KJ3512	- ■ JR23	- ■ ■ P1
47	2250	31.55	33 900	2.0	210	2KJ3512	- ■ JR23	- ■ ■ N1
53	1970	27.58	33 200	2.2	210	2KJ3512	- ■ JR23	- ■ ■ M1
60	1750	24.61	32 600	2.5	210	2KJ3512	- ■ JR23	- ■ ■ L1
68	1540	21.68	31 900	2.8	210	2KJ3512	- ■ JR23	- ■ ■ K1
77	1350	19.00	31 100	3.0	210	2KJ3512	- ■ JR23	- ■ ■ J1
89	1180	16.56	30 200	3.4	210	2KJ3512	- ■ JR23	- ■ ■ H1
125	840	11.80	28 100	3.4	210	2KJ3512	- ■ JR23	- ■ ■ E1
142	735	10.34	27 200	3.9	210	2KJ3512	- ■ JR23	- ■ ■ D1
K.109-LE160MPB4P								
32	3270	45.89	23 500	0.88	162	2KJ3511	- ■ JR23	- ■ ■ R1
37	2850	39.95	23 600	0.99	162	2KJ3511	- ■ JR23	- ■ ■ Q1
43	2440	34.15	23 600	1.1	162	2KJ3511	- ■ JR23	- ■ ■ P1
50	2080	29.23	23 500	1.3	162	2KJ3511	- ■ JR23	- ■ ■ N1
59	1780	24.98	23 200	1.3	162	2KJ3511	- ■ JR23	- ■ ■ M1
66	1590	22.31	22 900	1.5	162	2KJ3511	- ■ JR23	- ■ ■ L1
75	1400	19.71	22 500	1.7	162	2KJ3511	- ■ JR23	- ■ ■ K1
85	1230	17.30	22 100	1.9	162	2KJ3511	- ■ JR23	- ■ ■ J1
98	1070	15.06	21 600	2.1	162	2KJ3511	- ■ JR23	- ■ ■ H1
114	920	12.87	21 000	2.4	162	2KJ3511	- ■ JR23	- ■ ■ G1
133	785	11.02	20 400	2.7	162	2KJ3511	- ■ JR23	- ■ ■ F1
141	745	10.45	19 800	1.7	162	2KJ3511	- ■ JR23	- ■ ■ E1
160	655	9.17	19 300	1.9	162	2KJ3511	- ■ JR23	- ■ ■ D1
184	570	7.99	18 800	2.2	162	2KJ3511	- ■ JR23	- ■ ■ C1
215	485	6.83	18 100	2.7	162	2KJ3511	- ■ JR23	- ■ ■ B1
252	415	5.84	17 500	3.1	162	2KJ3511	- ■ JR23	- ■ ■ A1
K.89-LE160MPB4P								
59	1770	24.86	18 100	0.90	125	2KJ3510	- ■ JR23	- ■ ■ M1
66	1590	22.26	18 100	1.0	125	2KJ3510	- ■ JR23	- ■ ■ L1
76	1390	19.46	18 100	1.1	125	2KJ3510	- ■ JR23	- ■ ■ K1
88	1190	16.71	18 100	1.2	125	2KJ3510	- ■ JR23	- ■ ■ J1
100	1050	14.77	18 100	1.3	125	2KJ3510	- ■ JR23	- ■ ■ H1
117	895	12.56	17 800	1.5	125	2KJ3510	- ■ JR23	- ■ ■ G1
137	765	10.76	17 400	1.6	125	2KJ3510	- ■ JR23	- ■ ■ F1
140	750	10.51	16 500	1.1	125	2KJ3510	- ■ JR23	- ■ ■ E1
163	645	9.02	16 200	1.2	125	2KJ3510	- ■ JR23	- ■ ■ D1
184	570	7.97	15 900	1.4	125	2KJ3510	- ■ JR23	- ■ ■ C1
217	485	6.78	15 500	1.5	125	2KJ3510	- ■ JR23	- ■ ■ B1
253	415	5.81	15 000	1.6	125	2KJ3510	- ■ JR23	- ■ ■ A1

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
15								
K.189-LE160ZLL4P								
7.4	19300	199.51	104 000	0.99	717	2KJ3515	- ■ JU23	- ■ ■ W1
8.3	17300	178.49	104 000	1.1	717	2KJ3515	- ■ JU23	- ■ ■ V1
9.2	15600	160.98	104 000	1.2	717	2KJ3515	- ■ JU23	- ■ ■ U1
10	13800	142.28	104 000	1.4	717	2KJ3515	- ■ JU23	- ■ ■ T1
11	12600	130.05	104 000	1.5	717	2KJ3515	- ■ JU23	- ■ ■ S1
13	11300	117.00	104 000	1.7	717	2KJ3515	- ■ JU23	- ■ ■ R1
14	10100	104.56	104 000	1.9	717	2KJ3515	- ■ JU23	- ■ ■ Q1
16	9180	94.55	104 000	2.1	717	2KJ3515	- ■ JU23	- ■ ■ P1
K.169-LE160ZLL4P								
8.9	16100	166.31	70 000	0.8	486	2KJ3514	- ■ JU23	- ■ ■ C2
9.8	14600	150.55	70 000	0.89	486	2KJ3514	- ■ JU23	- ■ ■ B2
11	12800	132.24	70 000	1.0	486	2KJ3514	- ■ JU23	- ■ ■ A2
12	11600	119.83	70 000	1.1	486	2KJ3514	- ■ JU23	- ■ ■ X1
14	10300	106.72	70 000	1.3	486	2KJ3514	- ■ JU23	- ■ ■ W1
15	9300	95.83	70 000	1.4	486	2KJ3514	- ■ JU23	- ■ ■ V1
17	8300	85.51	70 000	1.6	486	2KJ3514	- ■ JU23	- ■ ■ U1
19	7400	76.23	70 000	1.8	486	2KJ3514	- ■ JU23	- ■ ■ T1
22	6560	67.61	70 000	2.0	486	2KJ3514	- ■ JU23	- ■ ■ S1
24	6020	62.07	70 000	2.2	486	2KJ3514	- ■ JU23	- ■ ■ R1
27	5310	54.68	70 000	2.4	486	2KJ3514	- ■ JU23	- ■ ■ Q1
K.149-LE160ZLL4P								
15	9690	99.79	50 500	0.83	318	2KJ3513	- ■ JU23	- ■ ■ A2
17	8620	88.81	50 800	0.93	318	2KJ3513	- ■ JU23	- ■ ■ X1
19	7730	79.59	50 800	1.0	318	2KJ3513	- ■ JU23	- ■ ■ W1
21	6850	70.56	50 700	1.2	318	2KJ3513	- ■ JU23	- ■ ■ V1
24	6040	62.28	50 400	1.3	318	2KJ3513	- ■ JU23	- ■ ■ U1
27	5310	54.76	49 900	1.5	318	2KJ3513	- ■ JU23	- ■ ■ T1
30	4810	49.60	49 400	1.7	318	2KJ3513	- ■ JU23	- ■ ■ S1
34	4190	43.18	48 600	1.9	318	2KJ3513	- ■ JU23	- ■ ■ R1
42	3430	35.40	47 200	2.3	318	2KJ3513	- ■ JU23	- ■ ■ Q1
46	3140	32.33	46 500	2.5	318	2KJ3513	- ■ JU23	- ■ ■ P1
51	2780	28.66	45 500	2.7	318	2KJ3513	- ■ JU23	- ■ ■ N1
58	2450	25.30	44 500	3.0	318	2KJ3513	- ■ JU23	- ■ ■ M1
104	1370	14.15	39 100	3.0	318	2KJ3513	- ■ JU23	- ■ ■ G1
119	1200	12.44	38 000	3.3	318	2KJ3513	- ■ JU23	- ■ ■ F1
131	1090	11.26	37 100	3.6	318	2KJ3513	- ■ JU23	- ■ ■ E1
150	950	9.81	35 800	4.0	318	2KJ3513	- ■ JU23	- ■ ■ D1
K.129-LE160ZLL4P								
27	5340	55.05	30 800	0.82	235	2KJ3512	- ■ JU23	- ■ ■ T1
31	4680	48.24	31 200	0.94	235	2KJ3512	- ■ JU23	- ■ ■ S1
35	4080	42.04	31 300	1.1	235	2KJ3512	- ■ JU23	- ■ ■ R1
38	3720	38.37	31 300	1.2	235	2KJ3512	- ■ JU23	- ■ ■ Q1
45	3200	33.03	31 200	1.4	235	2KJ3512	- ■ JU23	- ■ ■ P1
47	3060	31.55	31 100	1.4	235	2KJ3512	- ■ JU23	- ■ ■ N1
53	2670	27.58	30 800	1.6	235	2KJ3512	- ■ JU23	- ■ ■ M1
60	2390	24.61	30 400	1.8	235	2KJ3512	- ■ JU23	- ■ ■ L1

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
15	K.129-LE160ZLL4P								
	68	2100	21.68	29 900	2.0	235	2KJ3512 - ■ JU23 - ■ ■ K1		
	78	1840	19.00	29 400	2.2	235	2KJ3512 - ■ JU23 - ■ ■ J1		
	89	1600	16.56	28 800	2.5	235	2KJ3512 - ■ JU23 - ■ ■ H1		
	98	1460	15.11	28 300	2.7	235	2KJ3512 - ■ JU23 - ■ ■ G1		
	113	1260	13.01	27 500	3.0	235	2KJ3512 - ■ JU23 - ■ ■ F1		
	125	1140	11.80	27 000	2.5	235	2KJ3512 - ■ JU23 - ■ ■ E1		
	143	1000	10.34	26 300	2.8	235	2KJ3512 - ■ JU23 - ■ ■ D1		
	164	875	9.01	25 500	3.2	235	2KJ3512 - ■ JU23 - ■ ■ C1		
	179	795	8.22	25 000	3.4	235	2KJ3512 - ■ JU23 - ■ ■ B1		
	208	685	7.08	24 200	3.7	235	2KJ3512 - ■ JU23 - ■ ■ A1		
	15	K.109-LE160ZLL4P							
		43	3310	34.15	20 300	0.82	187	2KJ3511 - ■ JU23 - ■ ■ P1	
		50	2830	29.23	20 600	0.92	187	2KJ3511 - ■ JU23 - ■ ■ N1	
		59	2420	24.98	20 700	0.98	187	2KJ3511 - ■ JU23 - ■ ■ M1	
		66	2160	22.31	20 700	1.1	187	2KJ3511 - ■ JU23 - ■ ■ L1	
		75	1910	19.71	20 600	1.2	187	2KJ3511 - ■ JU23 - ■ ■ K1	
		85	1680	17.30	20 400	1.4	187	2KJ3511 - ■ JU23 - ■ ■ J1	
		98	1460	15.06	20 100	1.6	187	2KJ3511 - ■ JU23 - ■ ■ H1	
115		1250	12.87	19 700	1.8	187	2KJ3511 - ■ JU23 - ■ ■ G1		
134		1070	11.02	19 300	2.0	187	2KJ3511 - ■ JU23 - ■ ■ F1		
141		1010	10.45	18 600	1.2	187	2KJ3511 - ■ JU23 - ■ ■ E1		
161		890	9.17	18 300	1.4	187	2KJ3511 - ■ JU23 - ■ ■ D1		
185		775	7.99	17 800	1.6	187	2KJ3511 - ■ JU23 - ■ ■ C1		
216		660	6.83	17 400	2.0	187	2KJ3511 - ■ JU23 - ■ ■ B1		
253		565	5.84	16 900	2.3	187	2KJ3511 - ■ JU23 - ■ ■ A1		
15		K.89-LE160ZLL4P							
	76	1890	19.46	16 300	0.83	150	2KJ3510 - ■ JU23 - ■ ■ K1		
	88	1620	16.71	16 400	0.91	150	2KJ3510 - ■ JU23 - ■ ■ J1		
	100	1430	14.77	16 400	0.99	150	2KJ3510 - ■ JU23 - ■ ■ H1		
	117	1220	12.56	16 300	1.1	150	2KJ3510 - ■ JU23 - ■ ■ G1		
	137	1040	10.76	16 100	1.2	150	2KJ3510 - ■ JU23 - ■ ■ F1		
	140	1020	10.51	15 000	0.83	150	2KJ3510 - ■ JU23 - ■ ■ E1		
	164	875	9.02	14 900	0.91	150	2KJ3510 - ■ JU23 - ■ ■ D1		
	185	770	7.97	14 700	0.99	150	2KJ3510 - ■ JU23 - ■ ■ C1		
	218	655	6.78	14 500	1.1	150	2KJ3510 - ■ JU23 - ■ ■ B1		
	254	560	5.81	14 200	1.2	150	2KJ3510 - ■ JU23 - ■ ■ A1		
	18.5	K.189-LES180MQ4P							
		11	15600	130.05	104 000	1.2	794	2KJ3515 - ■ KL33 - ■ ■ S1	
13		14100	117.00	104 000	1.4	794	2KJ3515 - ■ KL33 - ■ ■ R1		
14		12600	104.56	104 000	1.5	794	2KJ3515 - ■ KL33 - ■ ■ Q1		
15		11400	94.55	104 000	1.7	794	2KJ3515 - ■ KL33 - ■ ■ P1		
18		10000	83.44	104 000	1.9	794	2KJ3515 - ■ KL33 - ■ ■ N1		
20		8960	74.35	104 000	2.2	794	2KJ3515 - ■ KL33 - ■ ■ M1		
22		8120	67.36	104 000	2.4	794	2KJ3515 - ■ KL33 - ■ ■ L1		
18.5	K.169-LES180MQ4P								
12	14400	119.83	70 000	0.9	565	2KJ3514 - ■ KL33 - ■ ■ X1			

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
18.5	K.169-LES180MQ4P							
	14	12800	106.72	70 000	1.0	565	2KJ3514 - ■ KL33 - ■ ■ W1	
	15	11500	95.83	70 000	1.1	565	2KJ3514 - ■ KL33 - ■ ■ V1	
	17	10300	85.51	70 000	1.3	565	2KJ3514 - ■ KL33 - ■ ■ U1	
	19	9190	76.23	70 000	1.4	565	2KJ3514 - ■ KL33 - ■ ■ T1	
	22	8150	67.61	70 000	1.6	565	2KJ3514 - ■ KL33 - ■ ■ S1	
	24	7480	62.07	70 000	1.7	565	2KJ3514 - ■ KL33 - ■ ■ R1	
	27	6590	54.68	70 000	2.0	565	2KJ3514 - ■ KL33 - ■ ■ Q1	
33	5410	44.86	70 000	2.4	565	2KJ3514 - ■ KL33 - ■ ■ P1		
K.149-LES180MQ4P								
18	9590	79.59	45 800	0.83	394	2KJ3513 - ■ KL33 - ■ ■ W1		
21	8500	70.56	46 300	0.94	394	2KJ3513 - ■ KL33 - ■ ■ V1		
24	7510	62.28	46 500	1.1	394	2KJ3513 - ■ KL33 - ■ ■ U1		
27	6600	54.76	46 400	1.2	394	2KJ3513 - ■ KL33 - ■ ■ T1		
30	5980	49.60	46 300	1.3	394	2KJ3513 - ■ KL33 - ■ ■ S1		
34	5200	43.18	45 900	1.5	394	2KJ3513 - ■ KL33 - ■ ■ R1		
41	4260	35.40	45 000	1.8	394	2KJ3513 - ■ KL33 - ■ ■ Q1		
45	3890	32.33	44 500	2.0	394	2KJ3513 - ■ KL33 - ■ ■ P1		
51	3450	28.66	43 800	2.2	394	2KJ3513 - ■ KL33 - ■ ■ N1		
58	3050	25.30	42 900	2.4	394	2KJ3513 - ■ KL33 - ■ ■ M1		
66	2680	22.25	42 000	2.7	394	2KJ3513 - ■ KL33 - ■ ■ L1		
73	2430	20.15	41 300	2.9	394	2KJ3513 - ■ KL33 - ■ ■ K1		
84	2110	17.54	40 200	3.3	394	2KJ3513 - ■ KL33 - ■ ■ J1		
104	1700	14.15	38 200	2.4	394	2KJ3513 - ■ KL33 - ■ ■ G1		
118	1500	12.44	37 200	2.7	394	2KJ3513 - ■ KL33 - ■ ■ F1		
130	1350	11.26	36 400	2.9	394	2KJ3513 - ■ KL33 - ■ ■ E1		
149	1180	9.81	35 200	3.3	394	2KJ3513 - ■ KL33 - ■ ■ D1		
182	970	8.04	33 600	3.8	394	2KJ3513 - ■ KL33 - ■ ■ C1		
215	820	6.82	32 300	4.4	394	2KJ3513 - ■ KL33 - ■ ■ B1		
K.129-LES180MQ4P								
35	5070	42.04	28 000	0.87	312	2KJ3512 - ■ KL33 - ■ ■ R1		
38	4620	38.37	28 400	0.95	312	2KJ3512 - ■ KL33 - ■ ■ Q1		
44	3980	33.03	28 600	1.1	312	2KJ3512 - ■ KL33 - ■ ■ P1		
46	3800	31.55	28 600	1.2	312	2KJ3512 - ■ KL33 - ■ ■ N1		
53	3320	27.58	28 600	1.3	312	2KJ3512 - ■ KL33 - ■ ■ M1		
60	2960	24.61	28 500	1.5	312	2KJ3512 - ■ KL33 - ■ ■ L1		
68	2610	21.68	28 300	1.6	312	2KJ3512 - ■ KL33 - ■ ■ K1		
77	2290	19.00	27 900	1.8	312	2KJ3512 - ■ KL33 - ■ ■ J1		
88	1990	16.56	27 500	2.0	312	2KJ3512 - ■ KL33 - ■ ■ H1		
97	1820	15.11	27 100	2.2	312	2KJ3512 - ■ KL33 - ■ ■ G1		
113	1560	13.01	26 600	2.4	312	2KJ3512 - ■ KL33 - ■ ■ F1		
124	1420	11.80	26 100	2.0	312	2KJ3512 - ■ KL33 - ■ ■ E1		
142	1240	10.34	25 500	2.3	312	2KJ3512 - ■ KL33 - ■ ■ D1		
163	1080	9.01	24 900	2.5	312	2KJ3512 - ■ KL33 - ■ ■ C1		
178	990	8.22	24 400	2.7	312	2KJ3512 - ■ KL33 - ■ ■ B1		
207	850	7.08	23 700	3.0	312	2KJ3512 - ■ KL33 - ■ ■ A1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
18.5	K.109-LES180MQ4P							
	66	2690	22.31	18 700	0.9	263	2KJ3511 - ■ KL33 - ■ ■ L1	
	74	2370	19.71	18 900	1.0	263	2KJ3511 - ■ KL33 - ■ ■ K1	
	85	2080	17.30	18 900	1.2	263	2KJ3511 - ■ KL33 - ■ ■ J1	
	97	1810	15.06	18 900	1.3	263	2KJ3511 - ■ KL33 - ■ ■ H1	
	114	1550	12.87	18 600	1.4	263	2KJ3511 - ■ KL33 - ■ ■ G1	
	133	1320	11.02	18 400	1.6	263	2KJ3511 - ■ KL33 - ■ ■ F1	
	140	1260	10.45	17 600	1.0	263	2KJ3511 - ■ KL33 - ■ ■ E1	
	160	1100	9.17	17 400	1.1	263	2KJ3511 - ■ KL33 - ■ ■ D1	
	183	960	7.99	17 100	1.3	263	2KJ3511 - ■ KL33 - ■ ■ C1	
	214	820	6.83	16 700	1.6	263	2KJ3511 - ■ KL33 - ■ ■ B1	
251	700	5.84	16 300	1.8	263	2KJ3511 - ■ KL33 - ■ ■ A1		
22	K.189-LES180ZLN4P							
	13	16700	117.00	104 000	1.2	799	2KJ3515 - ■ KN33 - ■ ■ R1	
	14	14900	104.56	104 000	1.3	799	2KJ3515 - ■ KN33 - ■ ■ Q1	
	15	13500	94.55	104 000	1.4	799	2KJ3515 - ■ KN33 - ■ ■ P1	
	18	11900	83.44	104 000	1.6	799	2KJ3515 - ■ KN33 - ■ ■ N1	
	20	10600	74.35	104 000	1.8	799	2KJ3515 - ■ KN33 - ■ ■ M1	
	22	9660	67.36	104 000	2.0	799	2KJ3515 - ■ KN33 - ■ ■ L1	
	24	8680	60.58	104 000	2.2	799	2KJ3515 - ■ KN33 - ■ ■ K1	
	K.169-LES180ZLN4P							
	14	15300	106.72	70 000	0.85	570	2KJ3514 - ■ KN33 - ■ ■ W1	
	15	13700	95.83	70 000	0.95	570	2KJ3514 - ■ KN33 - ■ ■ V1	
	17	12200	85.51	70 000	1.1	570	2KJ3514 - ■ KN33 - ■ ■ U1	
	19	10900	76.23	70 000	1.2	570	2KJ3514 - ■ KN33 - ■ ■ T1	
	22	9690	67.61	70 000	1.3	570	2KJ3514 - ■ KN33 - ■ ■ S1	
	24	8900	62.07	70 000	1.5	570	2KJ3514 - ■ KN33 - ■ ■ R1	
	27	7840	54.68	70 000	1.7	570	2KJ3514 - ■ KN33 - ■ ■ Q1	
	33	6430	44.86	70 000	2.0	570	2KJ3514 - ■ KN33 - ■ ■ P1	
37	5640	39.33	69 200	2.3	570	2KJ3514 - ■ KN33 - ■ ■ N1		
K.149-LES180ZLN4P								
24	8930	62.28	42 500	0.90	399	2KJ3513 - ■ KN33 - ■ ■ U1		
27	7850	54.76	43 000	1.0	399	2KJ3513 - ■ KN33 - ■ ■ T1		
30	7110	49.60	43 100	1.1	399	2KJ3513 - ■ KN33 - ■ ■ S1		
34	6190	43.18	43 100	1.3	399	2KJ3513 - ■ KN33 - ■ ■ R1		
41	5070	35.40	42 800	1.5	399	2KJ3513 - ■ KN33 - ■ ■ Q1		
45	4630	32.33	42 500	1.7	399	2KJ3513 - ■ KN33 - ■ ■ P1		
51	4110	28.66	41 900	1.9	399	2KJ3513 - ■ KN33 - ■ ■ N1		
58	3620	25.30	41 300	2.0	399	2KJ3513 - ■ KN33 - ■ ■ M1		
66	3190	22.25	40 600	2.3	399	2KJ3513 - ■ KN33 - ■ ■ L1		
73	2890	20.15	40 000	2.4	399	2KJ3513 - ■ KN33 - ■ ■ K1		
84	2510	17.54	39 100	2.7	399	2KJ3513 - ■ KN33 - ■ ■ J1		
102	2060	14.38	37 700	3.2	399	2KJ3513 - ■ KN33 - ■ ■ H1		
104	2020	14.15	37 300	2.0	399	2KJ3513 - ■ KN33 - ■ ■ G1		
118	1780	12.44	36 300	2.3	399	2KJ3513 - ■ KN33 - ■ ■ F1		
130	1610	11.26	35 600	2.4	399	2KJ3513 - ■ KN33 - ■ ■ E1		
149	1400	9.81	34 600	2.7	399	2KJ3513 - ■ KN33 - ■ ■ D1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
22	K.149-LES180ZLN4P							
	182	1150	8.04	33 100	3.2	399	2KJ3513 - ■ KN33 - ■ ■ C1	
	215	975	6.82	31 800	3.7	399	2KJ3513 - ■ KN33 - ■ ■ B1	
	K.129-LES180ZLN4P							
	38	5500	38.37	25 300	0.80	317	2KJ3512 - ■ KN33 - ■ ■ Q1	
	44	4730	33.03	26 000	0.93	317	2KJ3512 - ■ KN33 - ■ ■ P1	
	53	3950	27.58	26 500	1.1	317	2KJ3512 - ■ KN33 - ■ ■ M1	
	60	3520	24.61	26 600	1.2	317	2KJ3512 - ■ KN33 - ■ ■ L1	
	68	3100	21.68	26 600	1.4	317	2KJ3512 - ■ KN33 - ■ ■ K1	
	77	2720	19.00	26 400	1.5	317	2KJ3512 - ■ KN33 - ■ ■ J1	
	88	2370	16.56	26 200	1.7	317	2KJ3512 - ■ KN33 - ■ ■ H1	
	97	2160	15.11	26 000	1.8	317	2KJ3512 - ■ KN33 - ■ ■ G1	
	113	1860	13.01	25 500	2.0	317	2KJ3512 - ■ KN33 - ■ ■ F1	
	124	1690	11.80	25 200	1.7	317	2KJ3512 - ■ KN33 - ■ ■ E1	
	142	1480	10.34	24 700	1.9	317	2KJ3512 - ■ KN33 - ■ ■ D1	
	163	1290	9.01	24 100	2.1	317	2KJ3512 - ■ KN33 - ■ ■ C1	
	178	1170	8.22	23 800	2.3	317	2KJ3512 - ■ KN33 - ■ ■ B1	
	207	1010	7.08	23 100	2.5	317	2KJ3512 - ■ KN33 - ■ ■ A1	
	K.109-LES180ZLN4P							
	74	2820	19.71	17 200	0.84	268	2KJ3511 - ■ KN33 - ■ ■ K1	
	85	2480	17.30	17 400	0.97	268	2KJ3511 - ■ KN33 - ■ ■ J1	
	97	2160	15.06	17 500	1.1	268	2KJ3511 - ■ KN33 - ■ ■ H1	
114	1840	12.87	17 600	1.2	268	2KJ3511 - ■ KN33 - ■ ■ G1		
133	1580	11.02	17 400	1.3	268	2KJ3511 - ■ KN33 - ■ ■ F1		
140	1490	10.45	16 600	0.84	268	2KJ3511 - ■ KN33 - ■ ■ E1		
160	1310	9.17	16 500	0.97	268	2KJ3511 - ■ KN33 - ■ ■ D1		
183	1140	7.99	16 300	1.1	268	2KJ3511 - ■ KN33 - ■ ■ C1		
214	980	6.83	16 000	1.3	268	2KJ3511 - ■ KN33 - ■ ■ B1		
251	835	5.84	15 700	1.6	268	2KJ3511 - ■ KN33 - ■ ■ A1		
30	K.189-LES200ZLU4P							
	14	20300	104.56	104 000	0.96	875	2KJ3515 - ■ LN33 - ■ ■ Q1	
	16	18400	94.55	104 000	1.1	875	2KJ3515 - ■ LN33 - ■ ■ P1	
	18	16200	83.44	104 000	1.2	875	2KJ3515 - ■ LN33 - ■ ■ N1	
	20	14400	74.35	104 000	1.3	875	2KJ3515 - ■ LN33 - ■ ■ M1	
	22	13100	67.36	104 000	1.5	875	2KJ3515 - ■ LN33 - ■ ■ L1	
	24	11800	60.58	104 000	1.7	875	2KJ3515 - ■ LN33 - ■ ■ K1	
	29	9810	50.34	104 000	2.0	875	2KJ3515 - ■ LN33 - ■ ■ J1	
	33	8720	44.76	104 000	2.2	875	2KJ3515 - ■ LN33 - ■ ■ H1	
	K.169-LES200ZLU4P							
	19	14800	76.23	65 900	0.88	645	2KJ3514 - ■ LN33 - ■ ■ T1	
	22	13100	67.61	66 300	0.99	645	2KJ3514 - ■ LN33 - ■ ■ S1	
	24	12000	62.07	66 400	1.1	645	2KJ3514 - ■ LN33 - ■ ■ R1	
	27	10600	54.68	66 200	1.2	645	2KJ3514 - ■ LN33 - ■ ■ Q1	
	33	8740	44.86	65 300	1.5	645	2KJ3514 - ■ LN33 - ■ ■ P1	
	37	7660	39.33	64 500	1.7	645	2KJ3514 - ■ LN33 - ■ ■ N1	
	48	5990	30.75	62 500	2.2	645	2KJ3514 - ■ LN33 - ■ ■ M1	
	50	5730	29.43	62 100	2.3	645	2KJ3514 - ■ LN33 - ■ ■ L1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
30	K.169-LES200ZLU4P							
	54	5260	27.02	61 300	2.5	645	2KJ3514 - ■ LN33 - ■ ■ K1	
	62	4630	23.80	60 000	2.8	645	2KJ3514 - ■ LN33 - ■ ■ J1	
	120	2370	12.20	51 100	2.8	645	2KJ3514 - ■ LN33 - ■ ■ E1	
	147	1950	10.01	49 000	3.3	645	2KJ3514 - ■ LN33 - ■ ■ D1	
	167	1710	8.78	47 600	3.7	645	2KJ3514 - ■ LN33 - ■ ■ C1	
	K.149-LES200ZLU4P							
	30	9660	49.60	35 900	0.83	474	2KJ3513 - ■ LN33 - ■ ■ S1	
	34	8410	43.18	36 900	0.95	474	2KJ3513 - ■ LN33 - ■ ■ R1	
	42	6890	35.40	37 600	1.1	474	2KJ3513 - ■ LN33 - ■ ■ Q1	
	45	6300	32.33	37 700	1.2	474	2KJ3513 - ■ LN33 - ■ ■ P1	
	51	5580	28.66	37 800	1.4	474	2KJ3513 - ■ LN33 - ■ ■ N1	
	58	4930	25.30	37 600	1.5	474	2KJ3513 - ■ LN33 - ■ ■ M1	
	66	4330	22.25	37 400	1.7	474	2KJ3513 - ■ LN33 - ■ ■ L1	
	73	3920	20.15	37 100	1.8	474	2KJ3513 - ■ LN33 - ■ ■ K1	
	84	3410	17.54	36 500	2.0	474	2KJ3513 - ■ LN33 - ■ ■ J1	
	102	2800	14.38	35 600	2.4	474	2KJ3513 - ■ LN33 - ■ ■ H1	
	104	2750	14.15	35 100	1.5	474	2KJ3513 - ■ LN33 - ■ ■ G1	
	118	2420	12.44	34 400	1.7	474	2KJ3513 - ■ LN33 - ■ ■ F1	
	131	2190	11.26	33 900	1.8	474	2KJ3513 - ■ LN33 - ■ ■ E1	
	150	1910	9.81	33 100	2.0	474	2KJ3513 - ■ LN33 - ■ ■ D1	
	183	1560	8.04	31 800	2.4	474	2KJ3513 - ■ LN33 - ■ ■ C1	
	216	1320	6.82	30 800	2.7	474	2KJ3513 - ■ LN33 - ■ ■ B1	
	K.129-LES200ZLU4P							
	60	4790	24.61	22 200	0.92	393	2KJ3512 - ■ LN33 - ■ ■ L1	
	68	4220	21.68	22 700	1.0	393	2KJ3512 - ■ LN33 - ■ ■ K1	
	77	3700	19.00	23 100	1.1	393	2KJ3512 - ■ LN33 - ■ ■ J1	
	89	3220	16.56	23 300	1.2	393	2KJ3512 - ■ LN33 - ■ ■ H1	
	97	2940	15.11	23 300	1.3	393	2KJ3512 - ■ LN33 - ■ ■ G1	
	113	2530	13.01	23 200	1.5	393	2KJ3512 - ■ LN33 - ■ ■ F1	
	125	2300	11.80	23 100	1.2	393	2KJ3512 - ■ LN33 - ■ ■ E1	
	142	2010	10.34	22 800	1.4	393	2KJ3512 - ■ LN33 - ■ ■ D1	
	163	1750	9.01	22 500	1.6	393	2KJ3512 - ■ LN33 - ■ ■ C1	
	179	1600	8.22	22 300	1.7	393	2KJ3512 - ■ LN33 - ■ ■ B1	
	208	1380	7.08	21 800	1.8	393	2KJ3512 - ■ LN33 - ■ ■ A1	
37	K.189-LES225SD4P							
	16	22700	94.55	104 000	0.86	1 457	2KJ3515 - ■ MF33 - ■ ■ P1	
	18	20000	83.44	104 000	0.97	1 457	2KJ3515 - ■ MF33 - ■ ■ N1	
	20	17800	74.35	104 000	1.1	1 457	2KJ3515 - ■ MF33 - ■ ■ M1	
	22	16100	67.36	104 000	1.2	1 457	2KJ3515 - ■ MF33 - ■ ■ L1	
	24	14500	60.58	104 000	1.3	1 457	2KJ3515 - ■ MF33 - ■ ■ K1	
	29	12100	50.34	104 000	1.6	1 457	2KJ3515 - ■ MF33 - ■ ■ J1	
	33	10700	44.76	104 000	1.8	1 457	2KJ3515 - ■ MF33 - ■ ■ H1	
	41	8570	35.67	104 000	2.3	1 457	2KJ3515 - ■ MF33 - ■ ■ G1	
	52	6820	28.39	104 000	2.9	1 457	2KJ3515 - ■ MF33 - ■ ■ F1	
	K.169-LES225SD4P							
	22	16200	67.61	59 100	0.8	1230	2KJ3514 - ■ MF33 - ■ ■ S1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
37	K.169-LES225SD4P							
	24	14900	62.07	59 700	0.87	1 230	2KJ3514 - ■ MF33 - ■ ■ R1	
	27	13100	54.68	60 400	0.99	1 230	2KJ3514 - ■ MF33 - ■ ■ Q1	
	33	10700	44.86	60 700	1.2	1 230	2KJ3514 - ■ MF33 - ■ ■ P1	
	37	9450	39.33	60 300	1.4	1 230	2KJ3514 - ■ MF33 - ■ ■ N1	
	48	7390	30.75	59 200	1.8	1 230	2KJ3514 - ■ MF33 - ■ ■ M1	
	50	7070	29.43	59 000	1.8	1 230	2KJ3514 - ■ MF33 - ■ ■ L1	
	54	6490	27.02	58 400	2.0	1 230	2KJ3514 - ■ MF33 - ■ ■ K1	
	62	5720	23.80	57 500	2.3	1 230	2KJ3514 - ■ MF33 - ■ ■ J1	
	75	4690	19.53	55 800	2.7	1 230	2KJ3514 - ■ MF33 - ■ ■ H1	
	86	4 110	17.12	54 500	3.0	1 230	2KJ3514 - ■ MF33 - ■ ■ G1	
	120	2930	12.20	49 500	2.3	1 230	2KJ3514 - ■ MF33 - ■ ■ E1	
	147	2400	10.01	47 700	2.7	1 230	2KJ3514 - ■ MF33 - ■ ■ D1	
	167	2 110	8.78	46 400	3.0	1 230	2KJ3514 - ■ MF33 - ■ ■ C1	
214	1640	6.86	44 000	3.7	1 230	2KJ3514 - ■ MF33 - ■ ■ B1		
	K.149-LES225SD4P							
	42	8500	35.40	33 100	0.92	1 058	2KJ3513 - ■ MF33 - ■ ■ Q1	
	45	7770	32.33	33 600	1.0	1 058	2KJ3513 - ■ MF33 - ■ ■ P1	
	51	6880	28.66	34 100	1.1	1 058	2KJ3513 - ■ MF33 - ■ ■ N1	
	58	6080	25.30	34 400	1.2	1 058	2KJ3513 - ■ MF33 - ■ ■ M1	
	66	5340	22.25	34 500	1.3	1 058	2KJ3513 - ■ MF33 - ■ ■ L1	
	73	4840	20.15	34 500	1.5	1 058	2KJ3513 - ■ MF33 - ■ ■ K1	
	84	4210	17.54	34 300	1.6	1 058	2KJ3513 - ■ MF33 - ■ ■ J1	
	102	3450	14.38	33 700	1.9	1 058	2KJ3513 - ■ MF33 - ■ ■ H1	
	104	3400	14.15	33 200	1.2	1 058	2KJ3513 - ■ MF33 - ■ ■ G1	
	118	2990	12.44	32 700	1.3	1 058	2KJ3513 - ■ MF33 - ■ ■ F1	
	131	2700	11.26	32 400	1.5	1 058	2KJ3513 - ■ MF33 - ■ ■ E1	
	150	2350	9.81	31 800	1.6	1 058	2KJ3513 - ■ MF33 - ■ ■ D1	
	183	1930	8.04	30 800	1.9	1 058	2KJ3513 - ■ MF33 - ■ ■ C1	
	216	1630	6.82	29 900	2.2	1 058	2KJ3513 - ■ MF33 - ■ ■ B1	
		K.129-LES225SD4P						
68		5210	21.68	19 300	0.82	975	2KJ3512 - ■ MF33 - ■ ■ K1	
77		4560	19.00	20 100	0.91	975	2KJ3512 - ■ MF33 - ■ ■ J1	
89		3980	16.56	20 700	1.0	975	2KJ3512 - ■ MF33 - ■ ■ H1	
97		3630	15.11	20 900	1.1	975	2KJ3512 - ■ MF33 - ■ ■ G1	
113		3120	13.01	21 200	1.2	975	2KJ3512 - ■ MF33 - ■ ■ F1	
125		2830	11.80	21 200	1.0	975	2KJ3512 - ■ MF33 - ■ ■ E1	
142		2480	10.34	21 200	1.1	975	2KJ3512 - ■ MF33 - ■ ■ D1	
163		2160	9.01	21 100	1.3	975	2KJ3512 - ■ MF33 - ■ ■ C1	
179		1970	8.22	21 000	1.4	975	2KJ3512 - ■ MF33 - ■ ■ B1	
208		1700	7.08	20 700	1.5	975	2KJ3512 - ■ MF33 - ■ ■ A1	
45	K.189-LES225YMF4P							
	18	24300	83.44	104 000	0.80	962	2KJ3515 - ■ MT33 - ■ ■ N1	
	20	21700	74.35	104 000	0.90	962	2KJ3515 - ■ MT33 - ■ ■ M1	
	22	19600	67.36	104 000	0.99	962	2KJ3515 - ■ MT33 - ■ ■ L1	
	24	17700	60.58	104 000	1.1	962	2KJ3515 - ■ MT33 - ■ ■ K1	
	29	14700	50.34	104 000	1.3	962	2KJ3515 - ■ MT33 - ■ ■ J1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Geared motors up to 55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
45	K.189-LES225YMF4P							
	33	13000	44.76	104 000	1.5	962	2KJ3515 - ■ MT33 - ■ ■ H1	
	41	10400	35.67	104 000	1.9	962	2KJ3515 - ■ MT33 - ■ ■ G1	
	52	8300	28.39	104 000	2.3	962	2KJ3515 - ■ MT33 - ■ ■ F1	
	58	7410	25.37	101 900	2.6	962	2KJ3515 - ■ MT33 - ■ ■ E1	
	K.169-LES225YMF4P							
	27	15900	54.68	53 800	0.81	735	2KJ3514 - ■ MT33 - ■ ■ Q1	
	33	13100	44.86	55 100	0.99	735	2KJ3514 - ■ MT33 - ■ ■ P1	
	37	11400	39.33	55 800	1.1	735	2KJ3514 - ■ MT33 - ■ ■ N1	
	48	8990	30.75	55 500	1.4	735	2KJ3514 - ■ MT33 - ■ ■ M1	
	50	8600	29.43	55 400	1.5	735	2KJ3514 - ■ MT33 - ■ ■ L1	
	54	7890	27.02	55 200	1.6	735	2KJ3514 - ■ MT33 - ■ ■ K1	
	62	6950	23.80	54 600	1.9	735	2KJ3514 - ■ MT33 - ■ ■ J1	
	75	5710	19.53	53 400	2.2	735	2KJ3514 - ■ MT33 - ■ ■ H1	
	86	5000	17.12	52 500	2.5	735	2KJ3514 - ■ MT33 - ■ ■ G1	
	110	3910	13.39	50 400	3.0	735	2KJ3514 - ■ MT33 - ■ ■ F1	
	120	3560	12.20	47 700	1.9	735	2KJ3514 - ■ MT33 - ■ ■ E1	
	147	2920	10.01	46 200	2.2	735	2KJ3514 - ■ MT33 - ■ ■ D1	
	167	2560	8.78	45 100	2.5	735	2KJ3514 - ■ MT33 - ■ ■ C1	
	214	2000	6.86	43 000	3.1	735	2KJ3514 - ■ MT33 - ■ ■ B1	
	K.149-LES225YMF4P							
	51	8370	28.66	30 000	0.91	563	2KJ3513 - ■ MT33 - ■ ■ N1	
	58	7390	25.30	30 800	1.0	563	2KJ3513 - ■ MT33 - ■ ■ M1	
	66	6500	22.25	31 300	1.1	563	2KJ3513 - ■ MT33 - ■ ■ L1	
	73	5890	20.15	31 600	1.2	563	2KJ3513 - ■ MT33 - ■ ■ K1	
	84	5120	17.54	31 700	1.3	563	2KJ3513 - ■ MT33 - ■ ■ J1	
	102	4200	14.38	31 700	1.6	563	2KJ3513 - ■ MT33 - ■ ■ H1	
	104	4130	14.15	31 000	1.0	563	2KJ3513 - ■ MT33 - ■ ■ G1	
	118	3630	12.44	30 900	1.1	563	2KJ3513 - ■ MT33 - ■ ■ F1	
	131	3290	11.26	30 600	1.2	563	2KJ3513 - ■ MT33 - ■ ■ E1	
	150	2860	9.81	30 300	1.3	563	2KJ3513 - ■ MT33 - ■ ■ D1	
	183	2350	8.04	29 500	1.6	563	2KJ3513 - ■ MT33 - ■ ■ C1	
	216	1990	6.82	28 800	1.8	563	2KJ3513 - ■ MT33 - ■ ■ B1	
	K.129-LES225YMF4P							
	89	4840	16.56	17 700	0.83	480	2KJ3512 - ■ MT33 - ■ ■ H1	
	97	4410	15.11	18 300	0.89	480	2KJ3512 - ■ MT33 - ■ ■ G1	
	113	3800	13.01	18 900	1.0	480	2KJ3512 - ■ MT33 - ■ ■ F1	
	125	3450	11.80	19 100	0.82	480	2KJ3512 - ■ MT33 - ■ ■ E1	
	142	3020	10.34	19 400	0.94	480	2KJ3512 - ■ MT33 - ■ ■ D1	
	163	2630	9.01	19 500	1.0	480	2KJ3512 - ■ MT33 - ■ ■ C1	
	179	2400	8.22	19 500	1.1	480	2KJ3512 - ■ MT33 - ■ ■ B1	
	208	2070	7.08	19 400	1.2	480	2KJ3512 - ■ MT33 - ■ ■ A1	
55	K.189-LES250MD4P							
	22	24000	67.36	104 000	0.81	1 066	2KJ3515 - ■ NM33 - ■ ■ L1	
	24	21600	60.58	104 000	0.9	1 066	2KJ3515 - ■ NM33 - ■ ■ K1	
	29	17900	50.34	104 000	1.1	1 066	2KJ3515 - ■ NM33 - ■ ■ J1	
	33	15900	44.76	104 000	1.2	1 066	2KJ3515 - ■ NM33 - ■ ■ H1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
55	K.189-LES250MD4P							
	41	12700	35.67	103 500	1.5	1 066	2KJ3515 - ■ NM33 - ■ ■ G1	
	52	10100	28.39	100 300	1.9	1 066	2KJ3515 - ■ NM33 - ■ ■ F1	
	58	9060	25.37	98 400	2.2	1 066	2KJ3515 - ■ NM33 - ■ ■ E1	
	70	7530	21.09	95 300	2.6	1 066	2KJ3515 - ■ NM33 - ■ ■ D1	
	78	6700	18.75	93 100	2.9	1 066	2KJ3515 - ■ NM33 - ■ ■ C1	
	K.169-LES250MD4P							
	33	16000	44.86	48 400	0.81	837	2KJ3514 - ■ NM33 - ■ ■ P1	
	37	14000	39.33	49 700	0.93	837	2KJ3514 - ■ NM33 - ■ ■ N1	
	48	10900	30.75	51 100	1.2	837	2KJ3514 - ■ NM33 - ■ ■ M1	
	50	10500	29.43	51 000	1.2	837	2KJ3514 - ■ NM33 - ■ ■ L1	
	54	9650	27.02	51 100	1.3	837	2KJ3514 - ■ NM33 - ■ ■ K1	
	62	8500	23.80	51 000	1.5	837	2KJ3514 - ■ NM33 - ■ ■ J1	
	75	6970	19.53	50 500	1.8	837	2KJ3514 - ■ NM33 - ■ ■ H1	
	86	6 110	17.12	49 900	2.0	837	2KJ3514 - ■ NM33 - ■ ■ G1	
110	4780	13.39	48 400	2.5	837	2KJ3514 - ■ NM33 - ■ ■ F1		
120	4350	12.20	45 400	1.6	837	2KJ3514 - ■ NM33 - ■ ■ E1		
147	3570	10.01	44 300	1.8	837	2KJ3514 - ■ NM33 - ■ ■ D1		
167	3 130	8.78	43 500	2.0	837	2KJ3514 - ■ NM33 - ■ ■ C1		
214	2 450	6.86	41 700	2.5	837	2KJ3514 - ■ NM33 - ■ ■ B1		
K.149-LES250MD4P								
66	7950	22.25	27 200	0.91	664	2KJ3513 - ■ NM33 - ■ ■ L1		
73	7200	20.15	27 900	0.98	664	2KJ3513 - ■ NM33 - ■ ■ K1		
84	6260	17.54	28 600	1.1	664	2KJ3513 - ■ NM33 - ■ ■ J1		
102	5 130	14.38	29 100	1.3	664	2KJ3513 - ■ NM33 - ■ ■ H1		
118	4 440	12.44	28 500	0.91	664	2KJ3513 - ■ NM33 - ■ ■ F1		
131	4020	11.26	28 500	0.98	664	2KJ3513 - ■ NM33 - ■ ■ E1		
150	3500	9.81	28 400	1.1	664	2KJ3513 - ■ NM33 - ■ ■ D1		
183	2870	8.04	28 000	1.3	664	2KJ3513 - ■ NM33 - ■ ■ C1		
216	2430	6.82	27 500	1.5	664	2KJ3513 - ■ NM33 - ■ ■ B1		

Article No. supplement

Shaft design 1, 5, 6, 7 or 9

Frequency and voltage 2 or 9

Gearbox mounting type A, D, F or H

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SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
B.19																	
42.10	34	50	3 880	16	0.02	3410/81	✓	✓									2KJ3500 - ■■■■■■ - ■■ A2
37.28	39	50	3 700	16	0.03	671/18	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ X1
32.39	45	50	3 510	16	0.04	583/18	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ W1
29.44	49	50	3 380	16	0.04	265/9	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ V1
25.06	58	50	3 170	16	0.06	451/18	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ U1
22.78	64	50	3 050	16	0.08	205/9	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ T1
19.86	73	50	2 890	17	0.09	715/36	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ S1
17.78	82	50	2 770	17	0.12	160/9	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ R1
15.79	92	50	2 640	17	0.14	1705/108	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ Q1
14.57	100	50	2 550	17	0.17	1705/117	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ P1
12.66	115	50	2 410	17	0.19	1595/126	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ N1
11.00	132	50	2 270	17	0.19	11/1	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ M1
9.93	146	50	2 190	17	0.25	715/72	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ L1
9.35	155	50	2 160	17	0.29	1430/153	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ K1
8.15	178	47	2 110	17	0.33	220/27	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ J1
7.87	184	38	2 160	25	0.14	1472/187	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ H1
6.99	207	38	2 100	26	0.17	713/102	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ G1
6.45	225	39	2 060	26	0.20	1426/221	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ F1
5.61	258	37	1 990	27	0.22	667/119	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ E1
4.87	298	35	1 930	26	0.24	414/85	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ D1
4.40	330	34	1 880	26	0.32	299/68	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ C1
4.14	350	33	1 850	26	0.37	1196/289	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ B1
3.61	402	31	1 780	27	0.43	184/51	✓	✓	✓								2KJ3500 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

Selection and ordering data (continued)

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ² -	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
B.29																	
46.85	31	110	4 130	13	0.04	1265/27	✓	✓									2KJ3501 - ■■■■■■ - ■■ B2
41.56	35	110	4 130	13	0.05	374/9	✓	✓	✓								2KJ3501 - ■■■■■■ - ■■ A2
36.06	40	110	4 130	13	0.06	649/18	✓	✓	✓								2KJ3501 - ■■■■■■ - ■■ X1
32.78	44	110	4 130	13	0.07	295/9	✓	✓	✓	✓							2KJ3501 - ■■■■■■ - ■■ W1
28.11	52	110	4 130	13	0.09	253/9	✓	✓	✓	✓							2KJ3501 - ■■■■■■ - ■■ V1
25.56	57	110	4 130	13	0.11	230/9	✓	✓	✓	✓							2KJ3501 - ■■■■■■ - ■■ U1
22.41	65	110	4 130	14	0.13	605/27	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ T1
20.00	72	110	4 130	14	0.16	20/1	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ S1
17.82	81	110	4 130	14	0.19	1925/108	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ R1
16.45	88	110	4 130	14	0.23	1925/117	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ Q1
14.40	101	110	4 020	14	0.28	605/42	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ P1
12.63	115	110	3 800	14	0.27	341/27	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ N1
11.46	127	110	3 650	15	0.38	275/24	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ M1
10.78	135	110	3 560	15	0.44	550/51	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ L1
9.51	152	110	3 370	14	0.50	770/81	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ K1
8.25	176	110	3 170	14	0.67	33/4	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ J1
7.84	185	75	3 350	20	0.41	345/44	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ H1
7.38	196	75	3 270	20	0.48	1380/187	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ G1
6.51	223	75	3 100	19	0.54	644/99	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ F1
5.65	257	75	2 920	20	0.73	621/110	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ E1
5.07	286	74	2 900	22	0.60	345/68	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ D1
4.78	303	74	2 830	22	0.70	1380/289	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ C1
4.21	344	74	2 690	22	0.82	644/153	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ B1
3.65	397	73	2 550	22	1.10	621/170	✓	✓	✓	✓	✓						2KJ3501 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ² -	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
B.39																	
56.36	26	250	6 980	10	0.06	4565/81	✓	✓									2KJ3502 - ■■■■■■ - ■■ A2
50.11	29	210	6 980	11	0.08	451/9	✓	✓	✓								2KJ3502 - ■■■■■■ - ■■ X1
44.00	33	250	6 980	11	0.09	44/1	✓	✓	✓								2KJ3502 - ■■■■■■ - ■■ W1
40.00	36	230	6 980	11	0.11	40/1	✓	✓	✓	✓							2KJ3502 - ■■■■■■ - ■■ V1
34.22	42	250	6 980	11	0.13	308/9	✓	✓	✓	✓							2KJ3502 - ■■■■■■ - ■■ U1
31.11	47	250	6 980	11	0.16	280/9	✓	✓	✓	✓							2KJ3502 - ■■■■■■ - ■■ T1
27.50	53	250	6 980	11	0.20	55/2	✓	✓	✓	✓	✓						2KJ3502 - ■■■■■■ - ■■ S1
25.00	58	250	6 980	11	0.26	25/1	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ R1
21.90	66	250	6 720	11	0.30	2365/108	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ Q1
20.21	72	250	6 490	11	0.36	2365/117	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ P1
17.90	81	250	6 160	11	0.43	2255/126	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ N1
14.90	97	250	5 680	11	0.58	715/48	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ M1
14.02	103	250	5 530	11	0.67	715/51	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ L1
12.56	115	250	5 260	12	0.75	2035/162	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ K1
10.69	136	240	4 960	12	0.98	385/36	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ J1
9.17	158	230	4 700	12	1.29	55/6			✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ H1
7.89	184	220	4 550	12	1.66	1705/216			✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ G1
6.60	220	200	4 590	18	0.94	897/136	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ F1
6.21	233	200	4 550	18	1.08	1794/289	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ E1
5.56	261	200	4 460	18	1.26	851/153	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ D1
4.74	306	200	4 330	19	1.69	161/34	✓	✓	✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ C1
4.06	357	200	4 190	20	2.30	69/17			✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ B1
3.50	414	192	4 050	20	3.00	713/204			✓	✓	✓	✓					2KJ3502 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

Selection and ordering data (continued)

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ² -	R _{ex}	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
B.49																		
59.28	24	450	9 510	9	0.19	1067/18	✓	✓	✓								2KJ3503 - ■■■■■■ - ■■ C2	
53.89	27	450	9 120	9	0.23	485/9	✓	✓	✓	✓							2KJ3503 - ■■■■■■ - ■■ B2	
45.83	32	450	8 480	9	0.28	275/6	✓	✓	✓	✓							2KJ3503 - ■■■■■■ - ■■ A2	
41.67	35	450	8 120	9	0.34	125/3	✓	✓	✓	✓							2KJ3503 - ■■■■■■ - ■■ X1	
37.18	39	450	7 710	9	0.40	4015/108	✓	✓	✓	✓	✓	✓					2KJ3503 - ■■■■■■ - ■■ W1	
33.33	44	450	7 330	9	0.48	100/3	✓	✓	✓	✓	✓	✓					2KJ3503 - ■■■■■■ - ■■ V1	
30.05	48	450	6 980	9	0.56	3245/108	✓	✓	✓	✓	✓	✓					2KJ3503 - ■■■■■■ - ■■ U1	
27.74	52	450	6 710	9	0.67	3245/117	✓	✓	✓	✓	✓	✓					2KJ3503 - ■■■■■■ - ■■ T1	
25.32	57	450	6 420	9	0.80	1595/63	✓	✓	✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ S1	
21.01	69	450	5 850	10	1.03	3025/144	✓	✓	✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ R1	
19.77	73	450	5 680	10	1.18	3025/153	✓	✓	✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ Q1	
18.67	78	450	5 510	10	1.34	3025/162	✓	✓	✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ P1	
15.89	91	450	5 070	10	1.66	143/9	✓	✓	✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ N1	
13.61	107	450	4 660	10	2.10	245/18			✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ M1	
11.97	121	450	4 340	10	2.50	2585/216			✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ L1	
10.10	144	450	3 940	10	3.30	2090/207			✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ K1	
8.80	165	450	3 630	11	4.40	44/5			✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ J1	
8.29	175	330	4 550	16	1.52	2255/272	✓	✓	✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ H1	
7.80	186	330	4 420	16	1.74	2255/289	✓	✓	✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ G1	
7.37	197	330	4 300	16	1.97	2255/306	✓	✓	✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ F1	
6.27	231	330	3 970	16	2.50	533/85	✓	✓	✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ E1	
5.37	270	330	3 700	17	3.30	2009/374			✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ D1	
4.72	307	330	3 690	17	4.10	1927/408			✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ C1	
3.98	364	330	3 660	17	5.40	1558/391			✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ B1	
3.47	418	325	3 610	9	7.20	1476/425			✓	✓	✓	✓	✓				2KJ3503 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
K.39																		
157.32	9.2	220	6 080	10	0.04	3933/25	✓	✓								2KJ3504 - ■■■■■ - ■■ J2		
139.54	10	220	6 080	10	0.05	17442/125	✓	✓	✓							2KJ3504 - ■■■■■ - ■■ H2		
121.07	12	220	6 080	10	0.06	30267/250	✓	✓	✓							2KJ3504 - ■■■■■ - ■■ G2		
110.06	13	220	6 080	10	0.07	30267/275	✓	✓	✓	✓						2KJ3504 - ■■■■■ - ■■ F2		
94.39	15	220	6 080	10	0.08	11799/125	✓	✓	✓	✓						2KJ3504 - ■■■■■ - ■■ E2		
85.81	17	220	6 080	10	0.11	23598/275	✓	✓	✓	✓						2KJ3504 - ■■■■■ - ■■ D2		
75.24	19	220	6 080	10	0.12	1881/25	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ C2		
67.16	22	220	6 080	10	0.15	18468/275	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ B2		
59.85	24	220	6 080	10	0.18	1197/20	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ A2		
55.25	26	220	6 080	10	0.22	3591/65	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ X1		
48.37	30	220	6 080	10	0.26	16929/350	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ W1		
42.41	34	220	5 790	10	0.24	5301/125	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ V1		
38.47	38	220	5 540	10	0.34	1539/40	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ U1		
36.21	40	220	5 390	10	0.40	3078/85	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ T1		
31.92	45	220	5 090	10	0.44	798/25	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ S1		
27.70	52	220	4 760	10	0.60	13851/500	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ R1		
26.89	54	220	4 690	12	0.26	6804/253	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ Q1		
23.97	60	220	4 440	12	0.32	2205/92	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ P1		
22.12	66	220	4 270	12	0.38	6615/299	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ N1		
19.37	75	220	4 000	12	0.47	891/46	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ M1		
16.98	85	220	3 740	12	0.51	1953/115	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ L1		
15.41	94	220	3 560	12	0.67	2835/184	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ K1		
14.50	100	220	3 450	12	0.78	5670/391	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ J1		
12.78	113	220	3 220	12	0.92	294/23	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ H1		
11.09	131	220	2 990	12	1.24	5103/460	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ G1		
10.04	144	184	2 890	19	0.55	231/23	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ F1		
8.81	165	183	2 790	19	0.62	3038/345	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ E1		
7.99	181	175	2 810	19	0.80	735/92	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ D1		
7.52	193	171	2 810	19	0.92	2940/391	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ C1		
6.63	219	161	2 820	19	1.11	1372/207	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ B1		
5.75	252	150	2 810	19	1.49	1323/230	✓	✓	✓	✓	✓					2KJ3504 - ■■■■■ - ■■ A1		

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
K.49																	
200.25	7.2	420	7 820	8	0.06	12616/63	✓	✓									2KJ3505 - ■■■■■■ - ■■ J2
178.06	8.1	420	7 820	8	0.07	6232/35	✓	✓	✓								2KJ3505 - ■■■■■■ - ■■ H2
156.34	9.3	420	7 820	8	0.08	5472/35	✓	✓	✓								2KJ3505 - ■■■■■■ - ■■ G2
142.13	10	420	7 820	8	0.10	10944/77	✓	✓	✓	✓							2KJ3505 - ■■■■■■ - ■■ F2
121.60	12	420	7 820	8	0.12	608/5	✓	✓	✓	✓							2KJ3505 - ■■■■■■ - ■■ E2
110.55	13	420	7 820	8	0.14	1216/11	✓	✓	✓	✓							2KJ3505 - ■■■■■■ - ■■ D2
97.71	15	420	7 720	8	0.17	684/7	✓	✓	✓	✓	✓						2KJ3505 - ■■■■■■ - ■■ C2
88.83	16	420	7 370	8	0.22	6840/77	✓	✓	✓	✓	✓	✓					2KJ3505 - ■■■■■■ - ■■ B2
77.81	19	420	6 910	8	0.25	1634/21	✓	✓	✓	✓	✓	✓					2KJ3505 - ■■■■■■ - ■■ A2
71.82	20	420	6 650	8	0.30	6536/91	✓	✓	✓	✓	✓	✓					2KJ3505 - ■■■■■■ - ■■ X1
63.59	23	420	6 250	8	0.37	3116/49	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ W1
52.93	27	420	5 680	8	0.50	741/14	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ V1
49.82	29	420	5 510	8	0.58	5928/119	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ U1
44.63	32	420	5 190	9	0.65	2812/63	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ T1
38.00	38	420	4 750	9	0.84	38/1	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ S1
32.57	45	420	4 350	9	1.11	228/7			✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ R1
28.05	52	420	3 970	9	1.43	589/21			✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ Q1
26.30	55	420	3 820	10	0.52	55040/2093	✓	✓	✓	✓	✓	✓					2KJ3505 - ■■■■■■ - ■■ P1
23.28	62	420	3 540	11	0.65	26240/1127	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ N1
19.38	75	420	3 130	11	0.90	3120/161	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ M1
18.24	79	420	3 010	11	1.03	49920/2737	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ L1
16.34	89	420	2 780	11	1.21	23680/1449	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ K1
13.91	104	420	2 880	11	1.62	320/23	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ J1
11.93	122	420	3 000	11	2.20	1920/161			✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ H1
10.27	141	415	3 080	11	2.90	4960/483			✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ G1
9.75	149	275	2 960	17	1.03	39/4	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ F1
9.18	158	270	2 980	17	1.19	156/17	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ E1
8.22	176	255	3 010	17	1.40	74/9	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ D1
7.00	207	240	3 030	18	1.88	7/1	✓	✓	✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ C1
6.00	242	225	3 020	18	2.50	6/1			✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ B1
5.17	280	210	2 990	19	3.30	31/6			✓	✓	✓	✓	✓				2KJ3505 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ² -	R _{ex}	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
K.69																		
196.59	7.4	600	10 800	9	0.17	14744/75	✓	✓	✓								2KJ3507 - ■■■■■■ - ■■ H2	
178.72	8.1	600	10 800	9	0.20	29488/165	✓	✓	✓	✓							2KJ3507 - ■■■■■■ - ■■ G2	
152.00	9.5	600	10 800	9	0.25	152/1	✓	✓	✓	✓							2KJ3507 - ■■■■■■ - ■■ F2	
138.18	10	600	10 800	9	0.30	1520/11	✓	✓	✓	✓							2KJ3507 - ■■■■■■ - ■■ E2	
123.29	12	600	10 800	9	0.35	5548/45	✓	✓	✓	✓	✓	✓					2KJ3507 - ■■■■■■ - ■■ D2	
110.55	13	600	10 800	9	0.42	1216/11	✓	✓	✓	✓	✓	✓					2KJ3507 - ■■■■■■ - ■■ C2	
99.64	15	600	10 800	9	0.49	4484/45	✓	✓	✓	✓	✓	✓					2KJ3507 - ■■■■■■ - ■■ B2	
91.98	16	600	10 600	9	0.58	17936/195	✓	✓	✓	✓	✓	✓					2KJ3507 - ■■■■■■ - ■■ A2	
83.96	17	600	10 100	9	0.69	8816/105	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ X1	
69.67	21	600	9 300	9	0.87	209/3	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ W1	
65.57	22	600	9 030	9	1.01	3344/51	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ V1	
61.93	23	600	8 780	9	1.15	1672/27	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ U1	
52.69	28	600	8 100	9	1.40	3952/75	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ T1	
45.14	32	600	7 470	9	1.70	7448/165			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ S1	
39.69	37	600	6 980	9	2.10	1786/45			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ R1	
33.48	43	580	6 500	9	2.60	11552/345			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ Q1	
29.18	50	555	6 200	9	3.50	3648/125			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ P1	
26.05	56	600	5 510	11	1.25	3751/144	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ N1	
24.52	59	595	5 350	11	1.44	3751/153	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ M1	
23.15	63	585	5 240	11	1.63	3751/162	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ L1	
19.70	74	555	4 960	11	2.10	4433/225	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ K1	
16.88	86	530	4 690	11	2.60	1519/90			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ J1	
14.84	98	515	4 440	11	3.30	16027/1080			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ H1	
12.52	116	490	4 170	11	4.30	12958/1035			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ G1	
10.91	133	470	3 970	12	5.70	1364/125			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ F1	
9.34	155	370	3 640	16	2.40	3224/345	✓	✓	✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ E1	
8.01	181	365	3 330	16	3.10	6076/759			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ D1	
7.04	206	365	3 210	16	3.90	1457/207			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ C1	
5.94	244	345	3 350	17	5.10	9424/1587			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ B1	
5.18	280	330	3 420	18	6.80	2976/575			✓	✓	✓	✓	✓				2KJ3507 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

Selection and ordering data (continued)

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
K.79																		
244.25	5.9	820	13 900	6	0.17	175861/720	✓	✓	✓							2KJ3508 - ■■■■■■ - ■■ J2		
222.05	6.5	820	13 900	6	0.20	175861/792	✓	✓	✓	✓						2KJ3508 - ■■■■■■ - ■■ H2		
188.85	7.7	820	13 900	6	0.25	9065/48	✓	✓	✓	✓						2KJ3508 - ■■■■■■ - ■■ G2		
171.69	8.4	820	13 900	6	0.31	45325/264	✓	✓	✓	✓						2KJ3508 - ■■■■■■ - ■■ F2		
153.18	9.5	820	13 900	6	0.35	132349/864	✓	✓	✓	✓	✓	✓				2KJ3508 - ■■■■■■ - ■■ E2		
137.35	11	820	13 900	6	0.42	9065/66	✓	✓	✓	✓	✓	✓				2KJ3508 - ■■■■■■ - ■■ D2		
123.80	12	820	13 900	6	0.50	106967/864	✓	✓	✓	✓	✓	✓				2KJ3508 - ■■■■■■ - ■■ C2		
114.28	13	820	13 900	6	0.59	106967/936	✓	✓	✓	✓	✓	✓				2KJ3508 - ■■■■■■ - ■■ B2		
104.32	14	820	13 900	6	0.70	7511/72	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ A2		
86.56	17	820	13 900	6	0.89	99715/1152	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ X1		
81.47	18	820	13 900	6	1.02	99715/1224	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ W1		
76.94	19	820	13 900	6	1.16	99715/1296	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ V1		
65.47	22	820	13 900	6	1.42	23569/360	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ U1		
56.08	26	820	13 900	6	1.73	88837/1584			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ T1		
49.31	29	820	13 900	6	2.10	85211/1728			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ S1		
41.60	35	800	14 000	6	2.70	34447/828			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ R1		
36.26	40	770	14 000	6	3.60	1813/50			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ Q1		
32.78	44	820	13 900	7	0.94	6293/192	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ P1		
27.20	53	800	14 000	7	1.23	83545/3072	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ N1		
25.60	57	785	14 000	7	1.41	83545/3264	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ M1		
24.17	60	770	14 000	7	1.60	83545/3456	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ L1		
20.57	70	740	14 100	7	2.00	19747/960	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ K1		
17.62	82	715	13 800	8	2.60	74431/4224			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ J1		
15.49	94	695	13 300	8	3.20	71393/4608			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ H1		
13.07	111	665	12 600	8	4.20	28861/2208			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ G1		
11.39	127	645	12 000	8	5.50	4557/400			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ F1		
10.51	138	445	12 600	10	2.30	1209/115	✓	✓	✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ E1		
9.01	161	450	11 900	11	3.00	4557/506			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ D1		
7.92	183	450	11 300	11	3.70	1457/184			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ C1		
6.68	217	455	10 900	11	4.90	3534/529			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ B1		
5.82	249	430	10 700	12	6.60	3348/575			✓	✓	✓	✓	✓			2KJ3508 - ■■■■■■ - ■■ A1		

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size											Article No.
							63	71	80	90	100	112	132	160	180	200	225		250
K.89																		
231.80	6.3	1 600	18 100	7	0.42	10199/44	✓	✓	✓							2KJ3510 - ■■■■■ - ■■ K2		
210.72	6.9	1 600	18 100	7	0.51	50995/242	✓	✓	✓							2KJ3510 - ■■■■■ - ■■ J2		
189.01	7.7	1 600	18 100	7	0.71	149695/792	✓	✓	✓	✓	✓					2KJ3510 - ■■■■■ - ■■ H2		
169.94	8.5	1 600	18 100	7	0.80	41125/242	✓	✓	✓	✓	✓					2KJ3510 - ■■■■■ - ■■ G2		
153.70	9.4	1 600	18 100	7	0.88	60865/396	✓	✓	✓	✓	✓					2KJ3510 - ■■■■■ - ■■ F2		
141.88	10	1 600	18 100	7	1.05	60865/429	✓	✓	✓	✓	✓					2KJ3510 - ■■■■■ - ■■ E2		
129.96	11	1 600	18 100	7	1.37	17155/132	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ D2		
109.04	13	1 600	18 100	7	1.45	57575/528	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ C2		
102.63	14	1 600	18 100	7	1.66	57575/561	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ B2		
94.16	15	1 600	18 100	7	1.81	27965/297	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ A2		
82.25	18	1 600	18 100	7	2.60	329/4	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ X1		
73.64	20	1 600	18 100	7	3.20	106925/1452		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ W1		
64.39	23	1 600	18 100	7	3.70	50995/792		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ V1		
55.27	26	1 600	18 100	7	4.10	27965/506		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ U1		
48.85	30	1 600	18 100	7	5.20	16121/330		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ T1		
41.54	35	1 570	18 100	7	6.60	8225/198				✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ S1		
39.29	37	1 600	18 100	9	1.86	11315/288	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ R1		
32.96	44	1 600	18 100	8	2.10	37975/1152	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ Q1		
31.03	47	1 600	18 100	8	2.40	37975/1224	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ P1		
28.46	51	1 600	18 100	8	2.70	18445/648	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ N1		
24.86	58	1 600	18 100	9	3.80	2387/96	✓	✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ M1		
22.26	65	1 600	18 100	9	4.70	70525/3168		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ L1		
19.46	75	1 560	17 900	9	5.70	33635/1728		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ K1		
16.71	87	1 480	17 200	9	6.80	18445/1104		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ J1		
14.77	98	1 420	16 600	9	8.60	10633/720		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ H1		
12.56	115	1 330	16 300	9	11.00	5425/432				✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ G1		
10.76	135	1 250	16 100	9	15.00	775/72				✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ F1		
10.51	138	845	16 100	13	6.40	6727/640		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ E1		
9.02	161	800	15 400	14	7.70	33201/3680		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ D1		
7.97	182	770	14 800	14	9.80	31899/4000		✓	✓	✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ C1		
6.78	214	720	14 500	14	13.00	217/32				✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ B1		
5.81	250	675	14 200	14	17.00	93/16				✓	✓	✓	✓			2KJ3510 - ■■■■■ - ■■ A1		

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
K.109																	
216.65	6.7	2 900	24 500	-	1.27	107242/495		✓	✓	✓	✓						2KJ3511 - ■■■■■■ - ■■ H2
195.60	7.4	2 900	24 500	-	1.37	118336/605		✓	✓	✓	✓						2KJ3511 - ■■■■■■ - ■■ G2
177.43	8.2	2 900	24 500	-	1.61	35131/198		✓	✓	✓	✓						2KJ3511 - ■■■■■■ - ■■ F2
163.78	8.9	2 900	24 500	-	1.9	70262/429		✓	✓	✓	✓						2KJ3511 - ■■■■■■ - ■■ E2
148.88	9.7	2 900	24 500	-	2.2	57319/385		✓	✓	✓	✓	✓	✓				2KJ3511 - ■■■■■■ - ■■ D2
126.07	12	2 900	24 500	-	2.6	5547/44		✓	✓	✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ C2
118.65	12	2 900	24 500	-	2.6	22188/187		✓	✓	✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ B2
109.57	13	2 900	24 500	-	4.1	14792/135		✓	✓	✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ A2
97.49	15	2 900	24 500	-	5.0	53621/550		✓	✓	✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ X1
86.59	17	2 900	24 500	-	6.0	31433/363		✓	✓	✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ W1
77.51	19	2 900	24 500	-	5.9	153467/1980		✓	✓	✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ V1
66.26	22	2 900	24 500	-	6.8	251464/3795		✓	✓	✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ U1
59.17	25	2 900	24 500	-	8.6	7396/125		✓	✓	✓	✓	✓	✓	✓	✓		2KJ3511 - ■■■■■■ - ■■ T1
52.29	28	2 900	24 500	-	9.7	25886/495				✓	✓	✓	✓	✓	✓		2KJ3511 - ■■■■■■ - ■■ S1
45.89	32	2 900	24 500	-	14	159014/3465				✓	✓	✓	✓	✓	✓		2KJ3511 - ■■■■■■ - ■■ R1
39.95	36	2 820	23 900	-	17	151618/3795				✓	✓	✓	✓	✓	✓		2KJ3511 - ■■■■■■ - ■■ Q1
34.15	42	2 710	22 700	-	21	118336/3465				✓	✓	✓	✓	✓	✓		2KJ3511 - ■■■■■■ - ■■ P1
29.23	50	2 620	21 600	-	27	7396/253				✓	✓	✓	✓	✓	✓		2KJ3511 - ■■■■■■ - ■■ N1
24.98	58	2 380	21 000	-	9.9	163744/6555		✓	✓	✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ M1
22.31	65	2 380	20 000	-	13	52976/2375		✓	✓	✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ L1
19.71	74	2 380	18 900	-	15	16856/855				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ K1
17.30	84	2 400	17 800	-	20	14792/855				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ J1
15.06	96	2 310	17 500	-	25	98728/6555				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ H1
12.87	113	2 200	17 500	-	33	11008/855				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ G1
11.02	132	2 100	17 400	-	43	4816/437				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ F1
10.45	139	1 260	17 700	-	17	784/75				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ E1
9.17	158	1 270	16 700	-	23	688/75				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ D1
7.99	181	1 280	16 300	-	29	4592/575				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ C1
6.83	212	1 300	16 100	-	38	512/75				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ B1
5.84	248	1 300	15 700	-	49	672/115				✓	✓	✓	✓	✓			2KJ3511 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ² -	R _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
K.129																	
228.30	6.4	4 400	37 600	-	3.3	30821/135			✓	✓	✓						2KJ3512 - ■■■■■■ - ■■ J2
210.74	6.9	4 400	37 600	-	3.9	123284/585			✓	✓	✓						2KJ3512 - ■■■■■■ - ■■ H2
194.04	7.5	4 400	37 600	-	4.5	8732/45			✓	✓	✓	✓	✓				2KJ3512 - ■■■■■■ - ■■ G2
165.47	8.8	4 400	37 600	-	5.6	5957/36			✓	✓	✓	✓	✓				2KJ3512 - ■■■■■■ - ■■ F2
155.74	9.3	4 400	37 600	-	6.4	23828/153			✓	✓	✓	✓	✓				2KJ3512 - ■■■■■■ - ■■ E2
144.53	10	4 400	37 600	-	7.0	58534/405			✓	✓	✓	✓	✓				2KJ3512 - ■■■■■■ - ■■ D2
127.77	11	4 400	37 600	-	8.4	9583/75			✓	✓	✓	✓	✓				2KJ3512 - ■■■■■■ - ■■ C2
114.06	13	4 400	37 600	-	10	56462/495			✓	✓	✓	✓	✓				2KJ3512 - ■■■■■■ - ■■ B2
102.64	14	4 400	37 600	-	12	27713/270			✓	✓	✓	✓	✓				2KJ3512 - ■■■■■■ - ■■ A2
89.09	16	4 400	37 600	-	14	92204/1035			✓	✓	✓	✓	✓				2KJ3512 - ■■■■■■ - ■■ X1
80.12	18	4 400	37 600	-	17	30044/375			✓	✓	✓	✓	✓	✓			2KJ3512 - ■■■■■■ - ■■ W1
70.03	21	4 400	37 600	-	19	18907/270				✓	✓	✓	✓	✓	✓		2KJ3512 - ■■■■■■ - ■■ V1
62.49	23	4 400	36 200	-	23	2812/45				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ U1
55.05	26	4 400	34 300	-	27	11396/207				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ T1
48.24	30	4 400	32 400	-	33	6512/135				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ S1
42.04	34	4 400	30 500	-	39	14504/345				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ R1
38.37	38	4 400	29 200	-	45	1036/27				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ Q1
33.03	44	4 400	27 300	-	55	11396/345					✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ P1
31.55	46	4 400	26 700	-	23	3944/125			✓	✓	✓	✓	✓	✓			2KJ3512 - ■■■■■■ - ■■ N1
27.58	53	4 400	25 100	-	27	1241/45				✓	✓	✓	✓	✓	✓		2KJ3512 - ■■■■■■ - ■■ M1
24.61	59	4 400	23 700	-	33	2584/105				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ L1
21.68	67	4 270	22 700	-	40	1496/69				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ K1
19.00	76	4 140	21 700	-	50	5984/315				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ J1
16.56	88	4 020	20 700	-	62	1904/115				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ H1
15.11	96	3 940	20 000	-	72	136/9				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ G1
13.01	111	3 810	19 000	-	91	1496/115					✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ F1
11.80	123	2 830	21 400	-	46	119680/10143				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ E1
10.34	140	2 850	20 100	-	57	95744/9261				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ D1
9.01	161	2 760	19 500	-	71	4352/483				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ C1
8.22	176	2 680	19 500	-	83	10880/1323				✓	✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ B1
7.08	205	2 530	19 500	-	107	23936/3381					✓	✓	✓	✓	✓	✓	2KJ3512 - ■■■■■■ - ■■ A1

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ² -	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
K.149																	
237.03	6.1	8 000	65 000	-	7.1	83433/352			✓	✓	✓	✓	✓			2KJ3513 - ■■■■■■ - ■■ J2	
202.86	7.1	8 000	65 000	-	9.0	285621/1408			✓	✓	✓	✓	✓			2KJ3513 - ■■■■■■ - ■■ H2	
190.92	7.6	8 000	65 000	-	10	285621/1496			✓	✓	✓	✓	✓			2KJ3513 - ■■■■■■ - ■■ G2	
178.97	8.1	8 000	65 000	-	11	188993/1056			✓	✓	✓	✓	✓			2KJ3513 - ■■■■■■ - ■■ F2	
158.65	9.1	8 000	65 000	-	14	558453/3520			✓	✓	✓	✓	✓			2KJ3513 - ■■■■■■ - ■■ E2	
140.93	10	8 000	64 100	-	16	17052/121			✓	✓	✓	✓	✓			2KJ3513 - ■■■■■■ - ■■ D2	
127.16	11	8 000	61 500	-	19	89523/704			✓	✓	✓	✓	✓			2KJ3513 - ■■■■■■ - ■■ C2	
112.68	13	8 000	58 500	-	23	456141/4048			✓	✓	✓	✓	✓			2KJ3513 - ■■■■■■ - ■■ B2	
99.79	15	8 000	55 600	-	26	439089/4400			✓	✓	✓	✓	✓	✓		2KJ3513 - ■■■■■■ - ■■ A2	
88.81	16	8 000	52 900	-	31	1421/16				✓	✓	✓	✓	✓		2KJ3513 - ■■■■■■ - ■■ X1	
79.59	18	8 000	50 500	-	37	14007/176				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ W1	
70.56	21	8 000	47 900	-	43	285621/4048				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ V1	
62.28	23	8 000	45 300	-	52	5481/88				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ U1	
54.76	26	8 000	42 700	-	63	55419/1012				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ T1	
49.60	29	8 000	40 800	-	70	8729/176				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ S1	
43.18	34	8 000	38 300	-	85	174783/4048					✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ R1	
35.40	41	7 850	35 200	-	110	80997/2288						✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ Q1	
32.33	45	7 760	33 900	-	49	12673/392				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ P1	
28.66	51	7 630	32 300	-	59	36917/1288				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ N1	
25.30	57	7 420	30 900	-	73	4959/196				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ M1	
22.25	65	7 210	29 500	-	89	7163/322				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ L1	
20.15	72	7 070	28 500	-	103	23693/1176				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ K1	
17.54	83	6 890	28 500	-	128	22591/1288					✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ J1	
14.38	101	6 660	29 000	-	174	10469/728						✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ H1	
14.15	102	4 140	31 200	-	79	17328/1225				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ G1	
12.44	117	4 030	29 800	-	97	150176/12075				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ F1	
11.26	129	3 950	28 900	-	113	124184/11025				✓	✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ E1	
9.81	148	3 850	28 400	-	141	118408/12075					✓	✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ D1	
8.04	180	3 720	28 000	-	194	54872/6825						✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ C1	
6.82	213	3 630	27 600	-	266	89528/13125						✓	✓	✓	✓	2KJ3513 - ■■■■■■ - ■■ B1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

i	n ₂ rpm	T _{2N} Nm	F _{R2} N	φ ¹⁾	J _G 10 ⁻⁴ kgm ²	R _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
K.169																	
223.30	6.5	13 000	70 000	-	18	273319/1224				✓	✓	✓	✓			2KJ3514 - ■■■■■■ - ■■ F2	
208.35	7	13 000	70 000	-	20	135013/648				✓	✓	✓	✓			2KJ3514 - ■■■■■■ - ■■ E2	
185.23	7.8	13 000	70 000	-	24	29637/160				✓	✓	✓	✓			2KJ3514 - ■■■■■■ - ■■ D2	
166.31	8.7	13 000	70 000	-	28	16465/99				✓	✓	✓	✓			2KJ3514 - ■■■■■■ - ■■ C2	
150.55	9.6	13 000	70 000	-	33	260147/1728				✓	✓	✓	✓			2KJ3514 - ■■■■■■ - ■■ B2	
132.24	11	13 000	70 000	-	40	437969/3312				✓	✓	✓	✓			2KJ3514 - ■■■■■■ - ■■ A2	
119.83	12	13 000	70 000	-	47	431383/3600				✓	✓	✓	✓	✓		2KJ3514 - ■■■■■■ - ■■ X1	
106.72	14	13 000	70 000	-	54	23051/216				✓	✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ W1	
95.83	15	13 000	70 000	-	65	36223/378				✓	✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ V1	
85.51	17	13 000	70 000	-	75	141599/1656				✓	✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ U1	
76.23	19	13 000	70 000	-	87	16465/216				✓	✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ T1	
67.61	21	13 000	67 000	-	103	55981/828				✓	✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ S1	
62.07	23	13 000	64 500	-	114	62567/1008				✓	✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ R1	
54.68	27	13 000	61 000	-	134	181115/3312					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ Q1	
44.86	32	13 000	55 700	-	180	55981/1248					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ P1	
39.33	37	13 000	52 400	-	198	141599/3600					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ N1	
30.75	47	13 000	46 500	-	309	42809/1392					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ M1	
29.43	49	13 000	45 500	-	133	25721/874				✓	✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ L1	
27.02	54	13 000	43 600	-	151	1513/56				✓	✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ K1	
23.80	61	13 000	40 800	-	181	83215/3496					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ J1	
19.53	74	12 700	40 000	-	249	77163/3952					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ H1	
17.12	85	12 400	40 800	-	288	65059/3800					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ G1	
13.39	108	11 900	41 300	-	457	59007/4408					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ F1	
12.20	119	6 760	38 800	-	202	143990/11799					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ E1	
10.01	145	6 530	37 800	-	280	22253/2223					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ D1	
8.78	165	6 360	37 800	-	328	112574/12825					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ C1	
6.86	211	6 130	37 300	-	523	34034/4959					✓	✓	✓	✓	✓	2KJ3514 - ■■■■■■ - ■■ B1	

¹⁾ Only in conjunction with reduced-backlash version

SIMOGEAR Geared Motors

Bevel geared motors

Transmission ratios and torques

Selection and ordering data (continued)

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	ϕ ¹⁾	<i>J</i> _G 10 ⁻⁴ kgm ² -	<i>R</i> _{ex}	Motor size										Article No.
							63	71	80	90	100	112	132	160	180	200		225	250
K.189																	
199.51	7.3	19 100	104 000	-	37	186543/935					✓	✓	✓			2KJ3515 - ■■■■■■ - ■■ W1	
178.49	8.1	19 500	104 000	-	43	367164/2057					✓	✓	✓			2KJ3515 - ■■■■■■ - ■■ V1	
160.98	9	19 500	104 000	-	50	60207/374					✓	✓	✓			2KJ3515 - ■■■■■■ - ■■ U1	
142.28	10	19 500	104 000	-	62	611940/4301					✓	✓	✓			2KJ3515 - ■■■■■■ - ■■ T1	
130.05	11	19 500	104 000	-	73	55272/425					✓	✓	✓	✓		2KJ3515 - ■■■■■■ - ■■ S1	
117.00	12	19 500	104 000	-	86	43757/374					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ R1	
104.56	14	19 500	104 000	-	100	19552/187					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ Q1	
94.55	15	19 500	104 000	-	119	406644/4301					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ P1	
83.44	17	19 500	104 000	-	140	15604/187					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ N1	
74.35	20	19 500	104 000	-	164	319788/4301					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ M1	
67.36	22	19 500	104 000	-	182	12596/187					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ L1	
60.58	24	19 500	104 000	-	220	23688/391					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ K1	
50.34	29	19 500	104 000	-	273	122388/2431					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ J1	
44.76	32	19 500	99 200	-	334	209244/4675					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ H1	
35.67	41	19 500	90 000	-	455	193452/5423					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ G1	
28.39	51	19 500	81 400	-	586	153972/5423						✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ F1	
25.37	57	19 500	77 300	-	335	11088/437					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ E1	
21.09	69	19 500	71 000	-	439	5208/247					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ D1	
18.75	77	19 500	67 100	-	545	8904/475					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ C1	
14.94	97	19 500	60 000	-	786	8232/551					✓	✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ B1	
11.89	122	19 500	61 300	-	1 109	6552/551						✓	✓	✓	✓	2KJ3515 - ■■■■■■ - ■■ A1	

¹⁾ Only in conjunction with reduced-backlash version

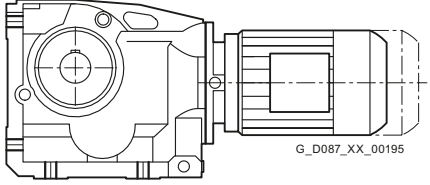
SIMOGEAR Geared Motors

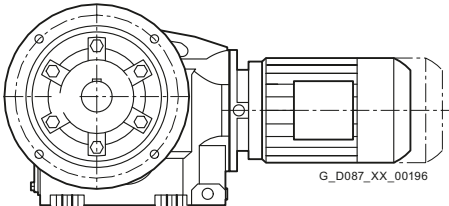
Bevel geared motors

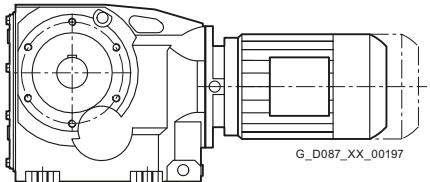
Dimensions

Dimensional drawing overview

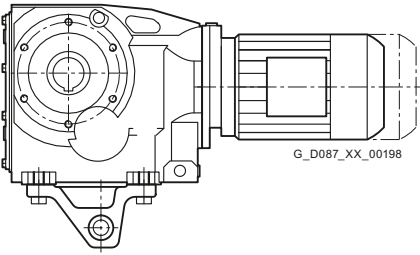
Information about dimensional drawings can be found in chapter [Introduction on page 1/20](#).

Representation	Gearbox type	Dimensional drawing on page
Foot-mounted design		
	B..19	5/66
	B..29	5/70
	B..39	5/74
	B..49	5/78
	K..39	5/82
	K..49	5/86
	K..69	5/90
	K..79	5/94
	K..89	5/98
	K..109	5/102
	K..129	5/106
	K..149	5/110
	K..169	5/114
	K..189	5/118

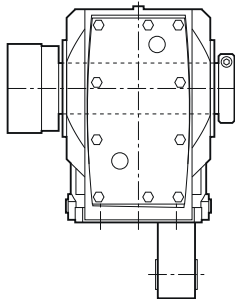
Flange-mounted design		
	B.F.19	5/67
	B.F.29	5/71
	B.F.39	5/75
	B.F.49	5/79
	K.F.39	5/83
	K.F.49	5/87
	K.F.69	5/91
	K.F.79	5/95
	K.F.89	5/99
	K.F.109	5/103
	K.F.129	5/107
	K.F.149	5/111
	K.F.169	5/115
	K.F.189	5/119

Housing flange design		
	B.Z.19	5/68
	B.Z.29	5/72
	B.Z.39	5/76
	B.Z.49	5/80
	K.Z.39	5/84
	K.Z.49	5/88
	K.Z.69	5/92
	K.Z.79	5/96
	K.Z.89	5/100
	K.Z.109	5/104
	K.Z.129	5/108
	K.Z.149	5/112
	K.Z.169	5/116
	K.Z.189	5/120

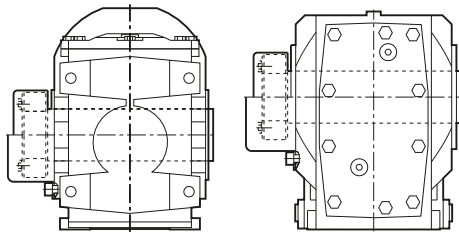
Dimensional drawing overview (continued)

Representation	Gearbox type	Dimensional drawing on page
Shaft-mounted design		
	BAD.19	5/69
	BAD.29	5/73
	BAD.39	5/77
	BAD.49	5/81
	KAD.39	5/85
	KAD.49	5/89
	KAD.69	5/93
	KAD.79	5/97
	KAD.89	5/101
	KAD.109	5/105
	KAD.129	5/109
	KAD.149	5/113
	KAD.169	5/117
	KAD.189	5/121

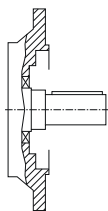
Additional versions and options



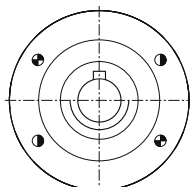
SIMOLOC assembly system 5/122



Protection cover for hollow shaft 5/124



Inner contour of the flange design 5/125



Pin holes 5/127

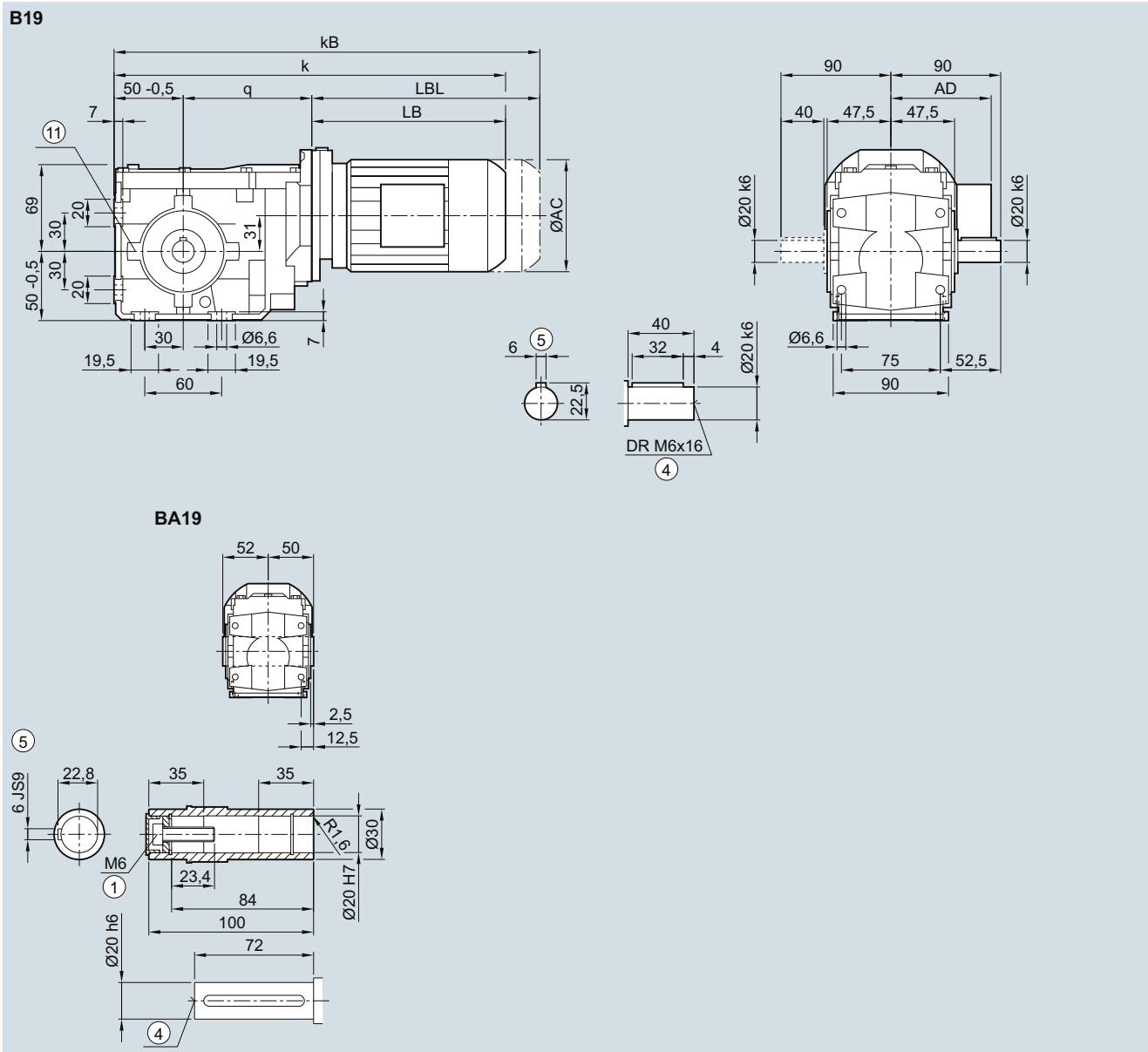
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

B..19 gearbox in a foot-mounted design

B030, BA030



Motor	LA 63M	71M	LE 80M	80ZM
q	133.0	141.0	149.5	149.5
AC	117.8	138.8	156.3	156.3
AD ¹⁾	124.0	134.4	149.2	149.2
k	343.5	375.5	439.5	474.5
kB	388.0	430.5	499.5	534.5
LB	160.5	184.5	240.0	275.0
LBL	205.0	239.5	300.0	335.0

① ISO 4014

④ DIN 332

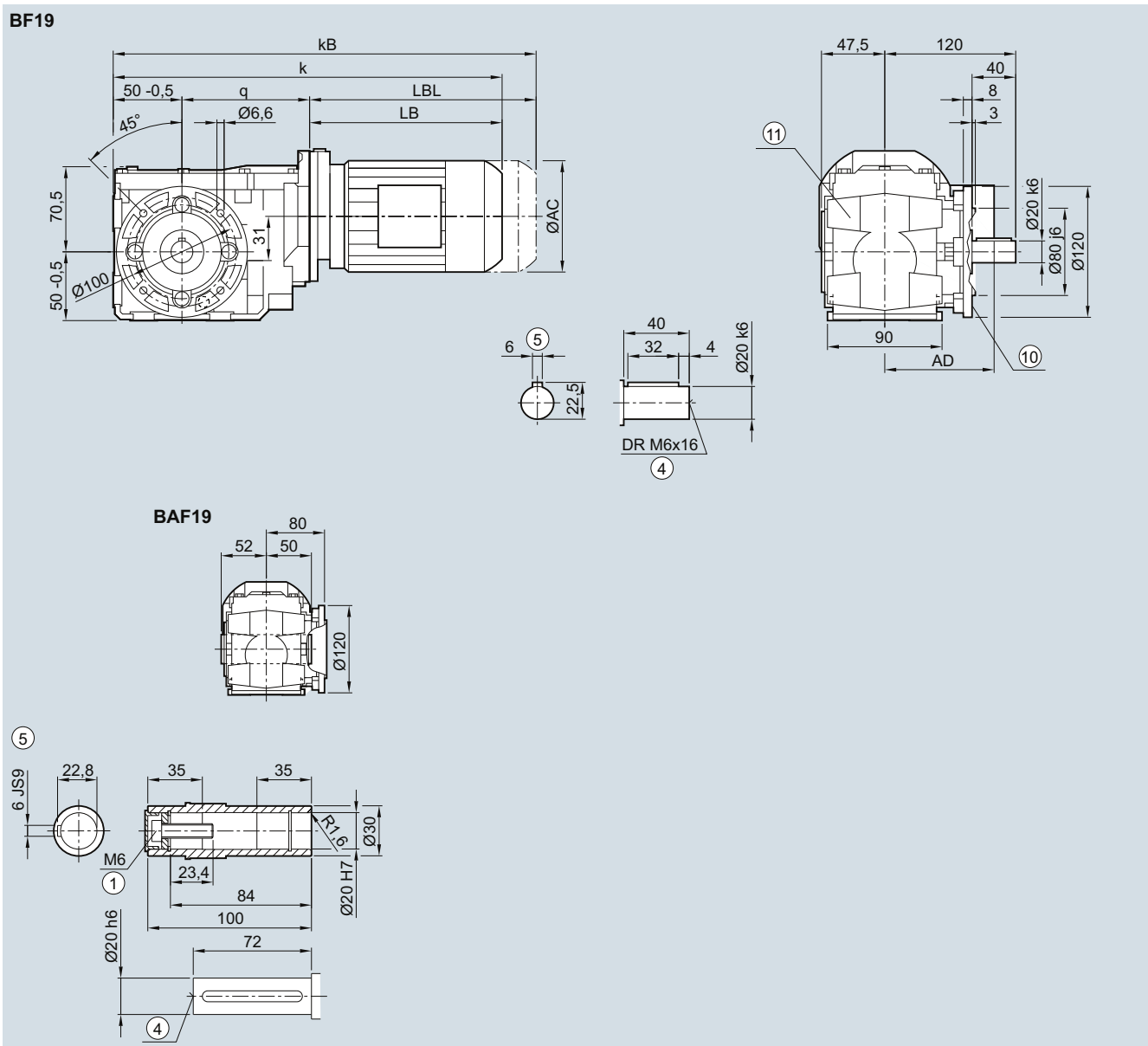
⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑩ Use bores only for housing flange design

B.F.19 gearbox in a flange-mounted design

BF030, BAF030



Motor	LA 63M	71M	LE 80M	80ZM
q	133.0	141.0	149.5	149.5
AC	117.8	138.8	156.3	156.3
AD ¹⁾	124.0	134.4	149.2	149.2
k	343.5	375.5	439.5	474.5
kB	388.0	430.5	499.5	534.5
LB	160.5	184.5	240.0	275.0
LBL	205.0	239.5	300.0	335.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 5/125

1) AD depends on the motor options, for other dimensions see page 8/42.

⑮

⑪ Use bores only for foot-mounted design

SIMOGEAR Geared Motors

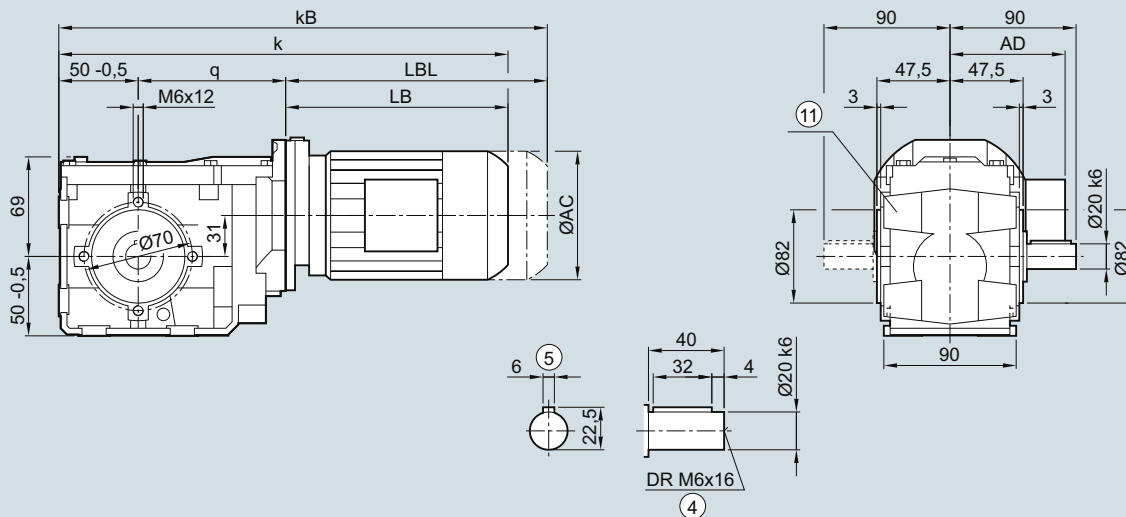
Bevel geared motors

Dimensions

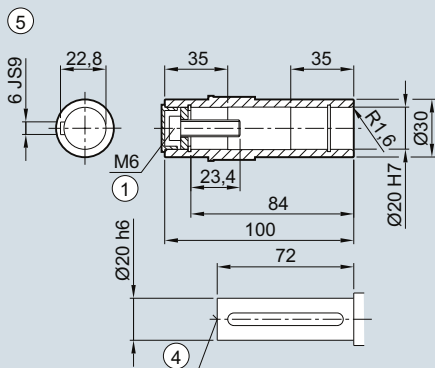
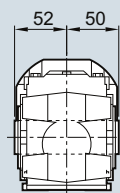
B.Z.19 in a housing flange design

BZ030, BAZ030

BZ19



BAZ19



Motor	LA 63M	71M	LE 80M	80ZM
q	133.0	141.0	149.5	149.5
AC	117.8	138.8	156.3	156.3
AD ¹⁾	124.0	134.4	149.2	149.2
k	343.5	375.5	439.5	474.5
kB	388.0	430.5	499.5	534.5
LB	160.5	184.5	240.0	275.0
LBL	205.0	239.5	300.0	335.0

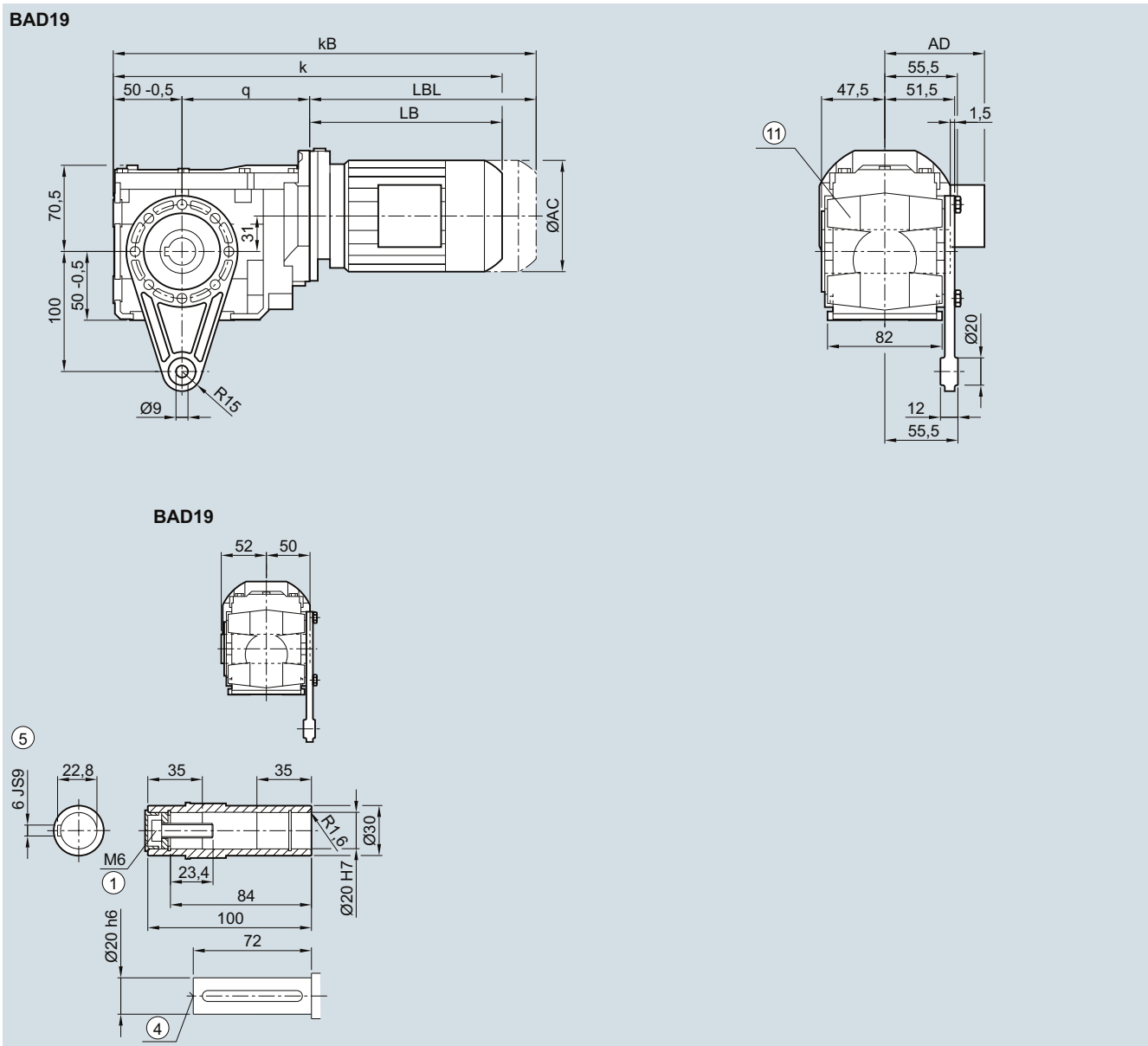
① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

Ⓜ Use bores only for foot-mounted design

BAD.19 gearbox in a shaft-mounted design
BAD030


Motor	LA 63M	71M	LE 80M	80ZM
q	133.0	141.0	149.5	149.5
AC	117.8	138.8	156.3	156.3
AD ¹⁾	124.0	134.4	149.2	149.2
k	343.5	375.5	439.5	474.5
kB	388.0	430.5	499.5	534.5
LB	160.5	184.5	240.0	275.0
LBL	205.0	239.5	300.0	335.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

⑪ Use bores only for foot-mounted design

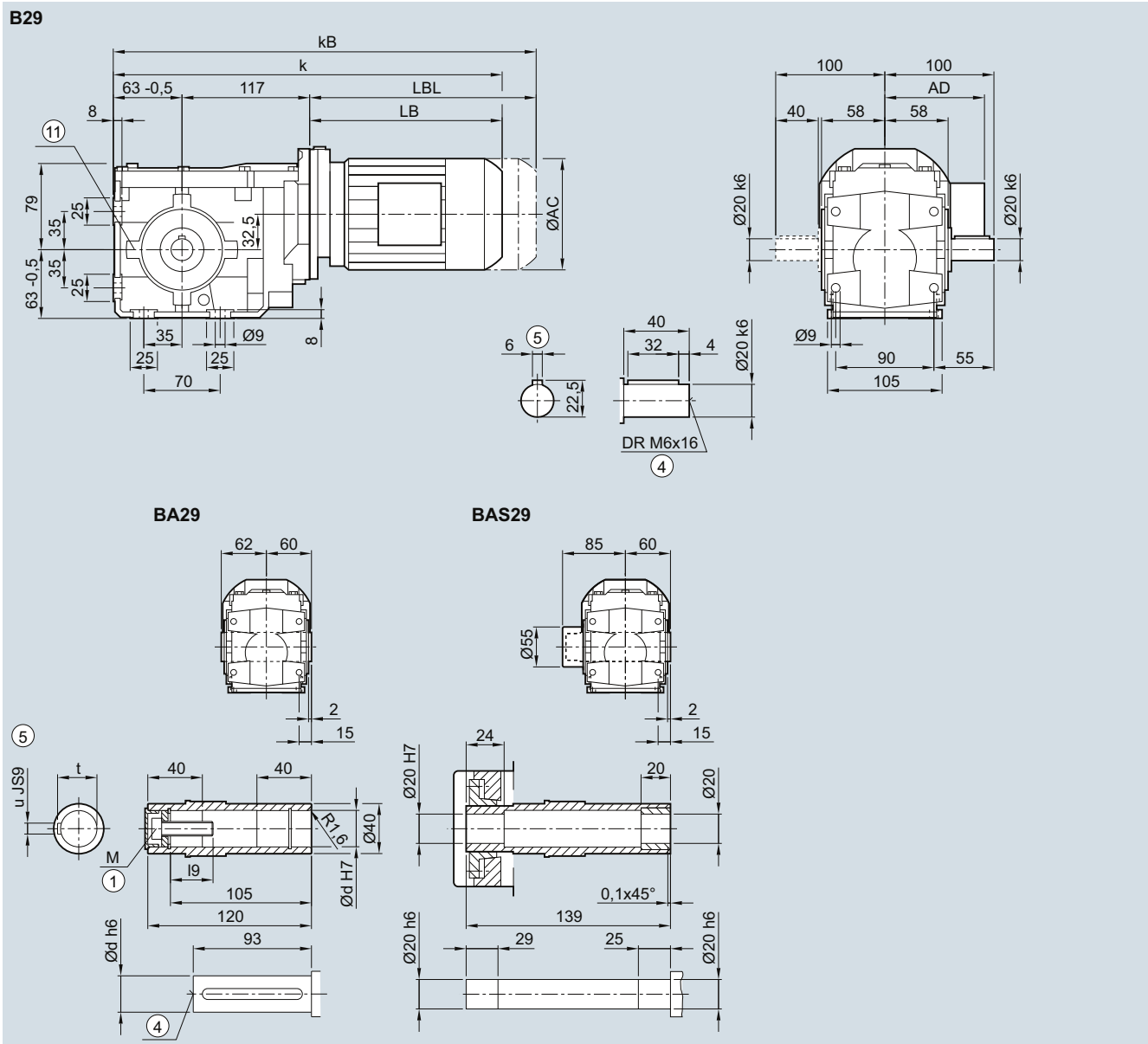
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

B..29 gearbox in a foot-mounted design

B030, BA030, BAS030



Shaft	d	l9	M	t	u
	20	23.4	M6	22.8	6
	25	27.6	M10	28.3	8

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5
k	374.0	406.0	470.0	505.0	531.5	571.5	588.0	623.0
kB	418.5	461.0	530.0	565.0	601.5	641.5	666.5	701.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4014

④ DIN 332

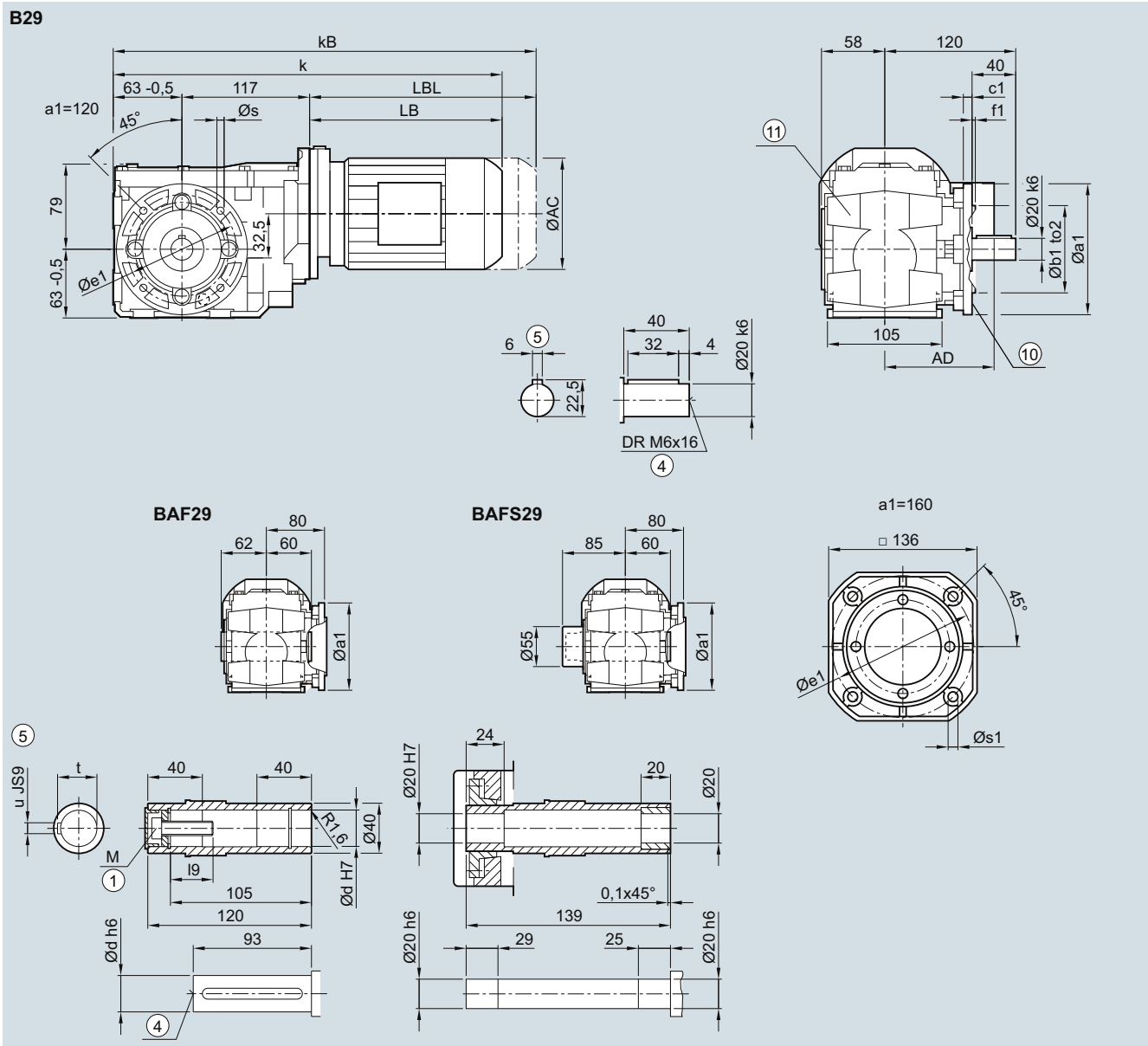
⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑥ Use bores only for housing flange design

B.F.29 gearbox in a flange-mounted design

BF030, BAF030, BAFS030



Flange	a1	b1	c1	f1	e1	s	to2	
	120	80	8	3.0	100	6.6	j6	
	160	110	9	3.5	130	9.0	j6	
Shaft	d	I9	M	t	u			
	20	23.4	M6	22.8	6			
	25	27.6	M10	28.3	8			
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5
k	374.0	406.0	470.0	505.0	531.5	571.5	588.0	623.0
kB	418.5	461.0	530.0	565.0	601.5	641.5	666.5	701.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

⑩ For inner contour, see page 5/125

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑪ Use bores only for foot-mounted design

SIMOGEAR Geared Motors

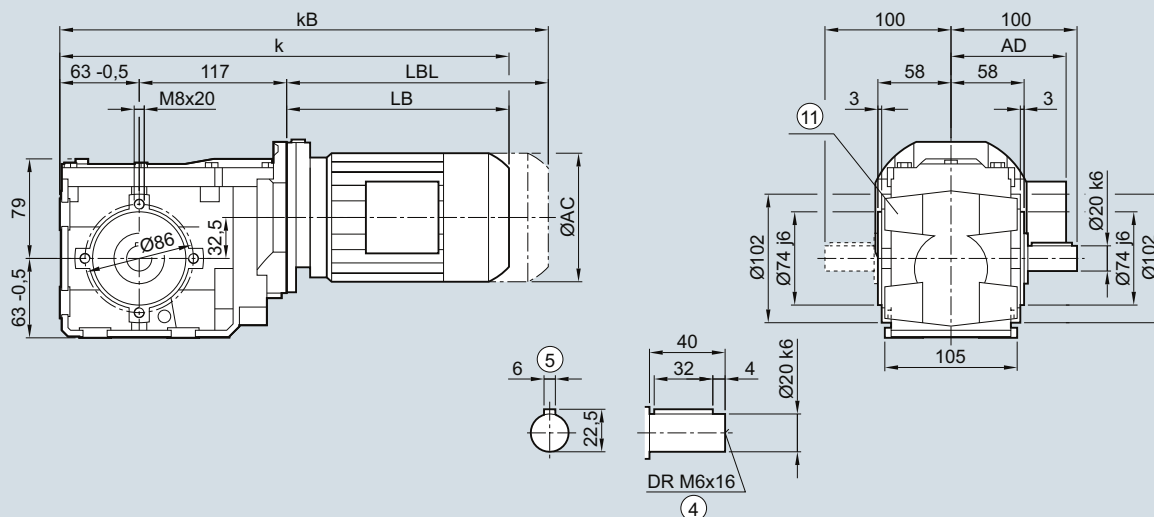
Bevel geared motors

Dimensions

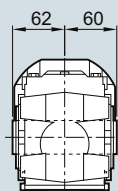
B.Z.29 gearbox in a housing flange design

BZ030, BAZ030, BAZS030

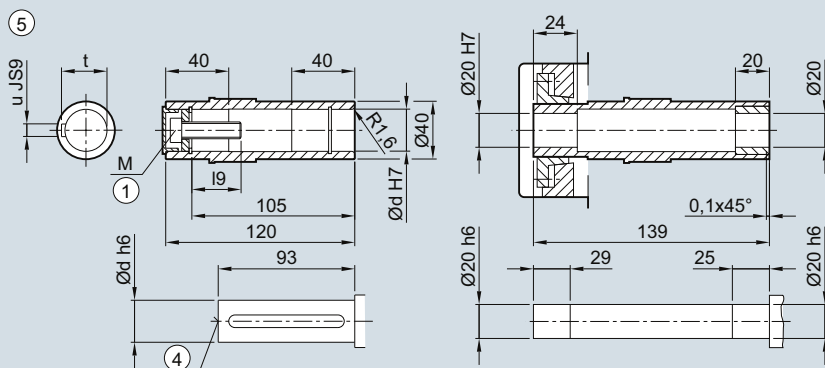
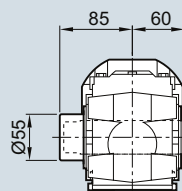
BZ29



BAZ29



BAZS29



Shaft	d	l9	M	t	u			
	20	23.4	M6	22.8	6			
	25	27.6	M10	28.3	8			
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5
k	374.0	406.0	470.0	505.0	531.5	571.5	588.0	623.0
kB	418.5	461.0	530.0	565.0	601.5	641.5	666.5	701.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4014

④ DIN 332

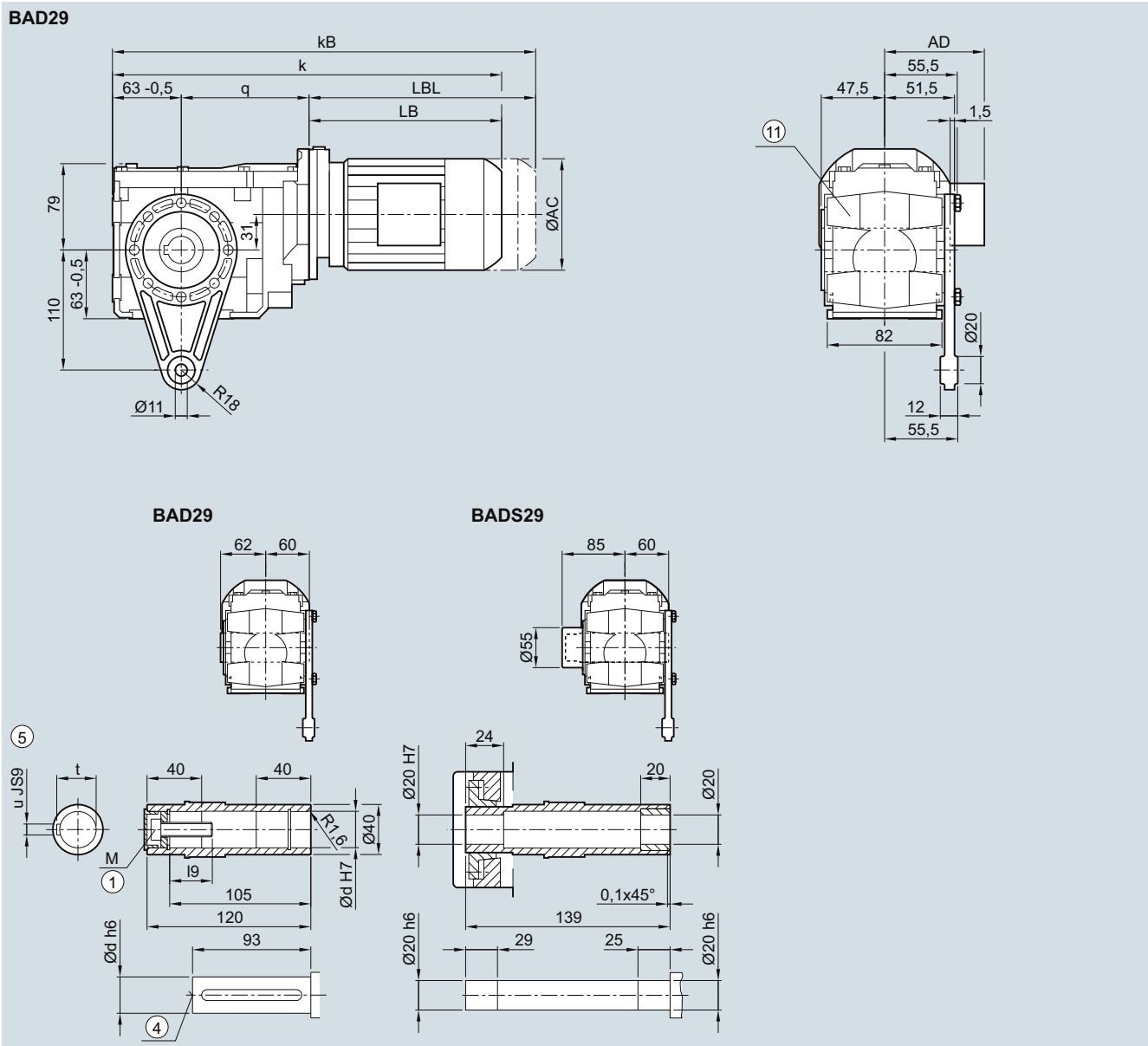
⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑩ Use bores only for four-mounted design

BAD.29 gearbox in a shaft-mounted design

BAD030, BADS030



Shaft	d	l9	M	t	u			
	20	23.4	M6	22.8	6			
	25	27.6	M10	28.3	8			
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5
k	374.0	406.0	470.0	505.0	531.5	571.5	588.0	623.0
kB	418.5	461.0	530.0	565.0	601.5	641.5	666.5	701.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑩ Use bores only for foot-mounted design

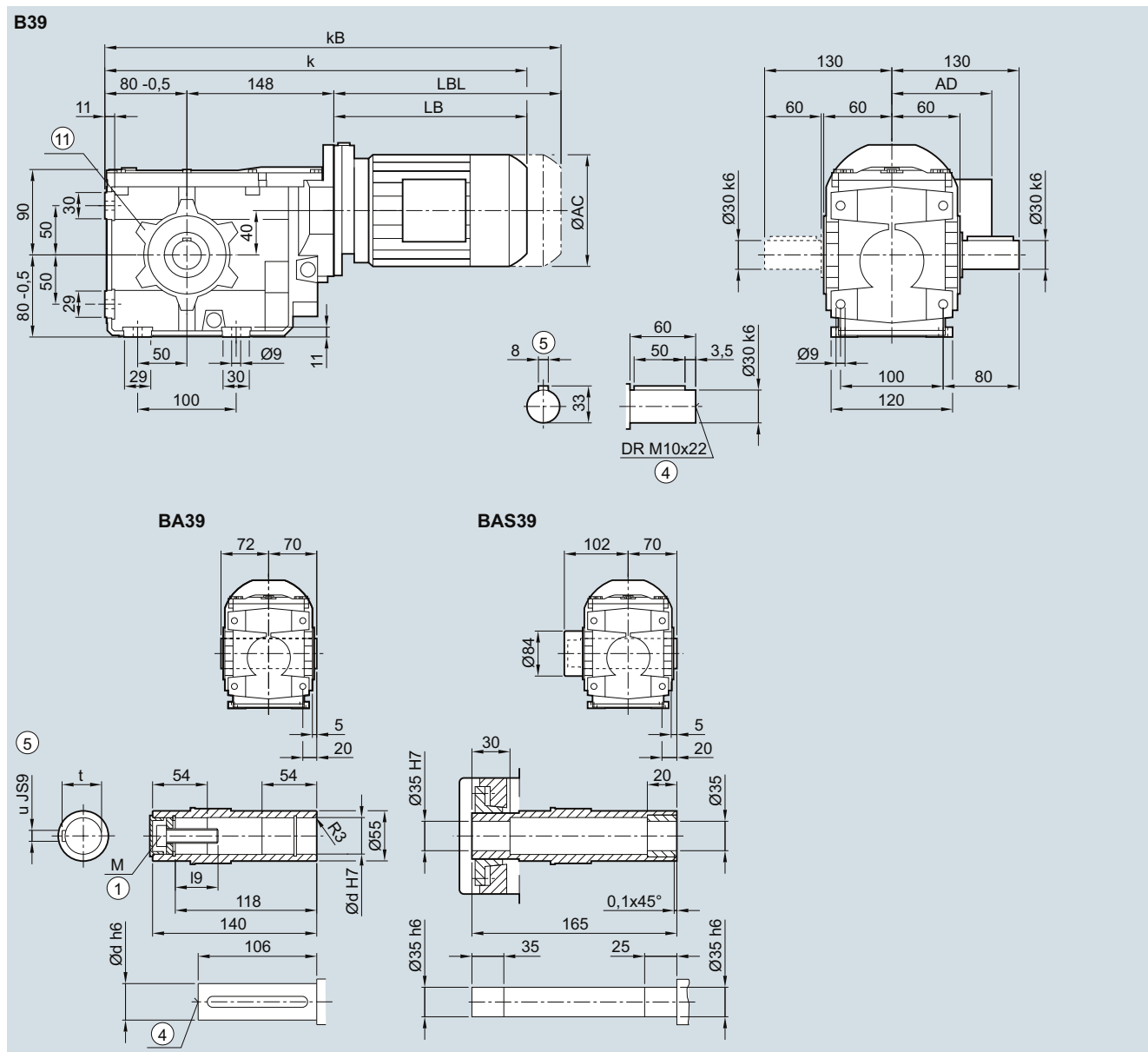
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

B..39 gearbox in a foot-mounted design

B030, BA030, BAS030



Shaft	d	l9	M	t	u
	30	32.6	M10	33.3	8
	35	37	M12	38.3	10
	40	47.75	M16	43.3	12

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	422.0	454.0	518.0	553.0	579.5	619.5	636.0	671.0	646.0	671.0
kB	466.5	509.0	578.0	613.0	649.5	689.5	714.5	749.5	719.0	744.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014

④ DIN 332

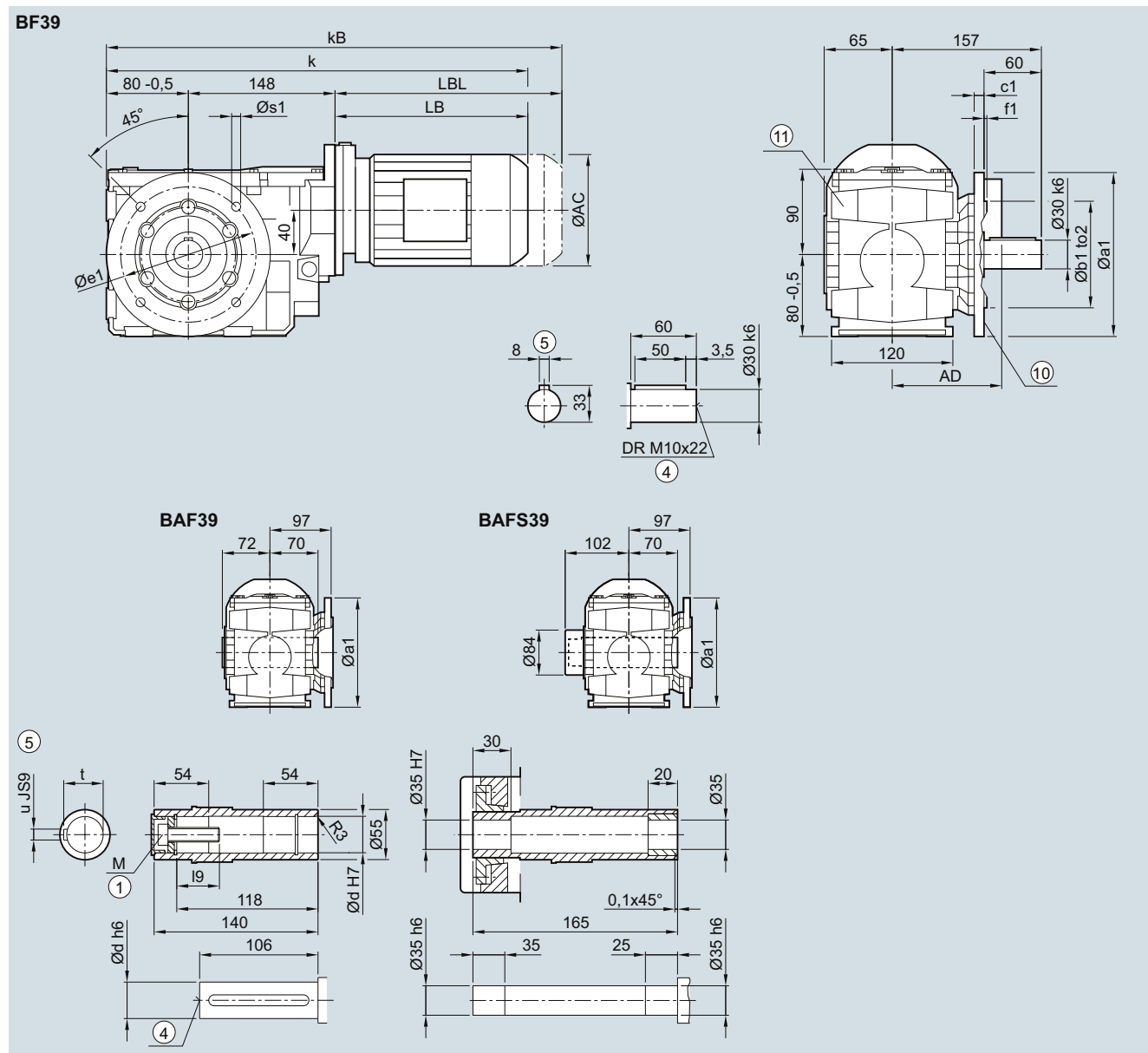
⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑥ Use bores only for housing flange design

B.F.39 gearbox in a flange-mounted design

BF030, BAF030, BAFS030



Flange	a1	b1	c1	f1	e1	s	to2
	160	110	10	3.5	130	9	j6
	200	130	12	3.5	165	11	j6

Shaft	d	l9	M	t	u
	30	32.6	M10	33.3	8
	35	37	M12	38.3	10
	40	47.75	M16	43.3	12

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	422.0	454.0	518.0	553.0	579.5	619.5	636.0	671.0	646.0	671.0
kB	466.5	509.0	578.0	613.0	649.5	689.5	714.5	749.5	719.0	744.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014 ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑩ For inner contour, see page 5/125
 1) AD depends on the motor options, for other dimensions see page 8/42. ⑪ Use bores only for foot-mounted design

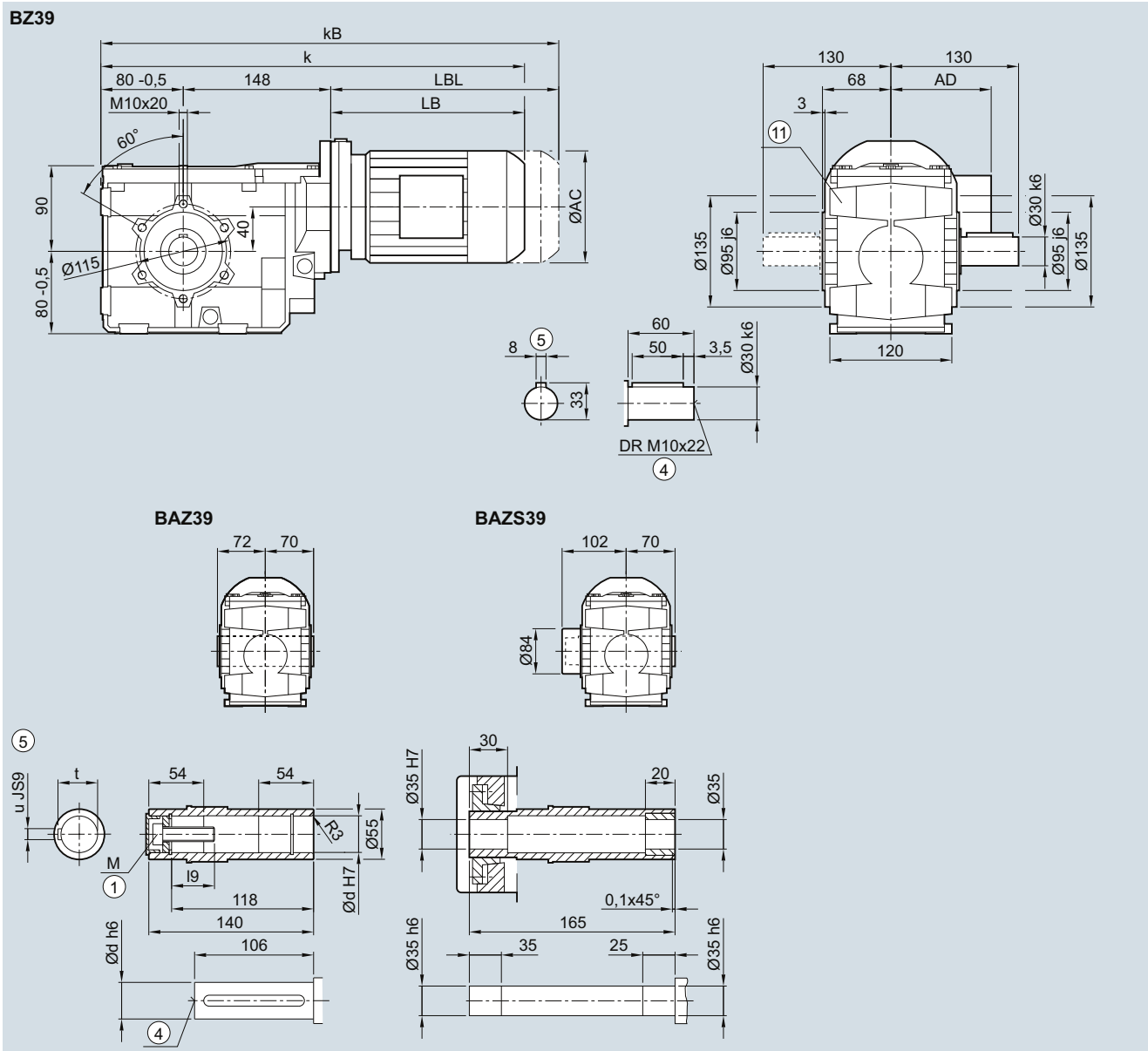
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

B.Z.39 in a housing flange design

BZ030, BAZ030, BAZS030



Shaft	d	l9	M	t	u
	30	32.6	M10	33.3	8
	35	37	M12	38.3	10
	40	47.75	M16	43.3	12

Motor	LA LA63M	LA71M	LE LE80M	LE80ZM	LE90S/L	LE90ZL	LE100L	LE100ZL	LE112M	LE112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	422.0	454.0	518.0	553.0	579.5	619.5	636.0	671.0	646.0	671.0
kB	466.5	509.0	578.0	613.0	649.5	689.5	714.5	749.5	719.0	744.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014

④ DIN 332

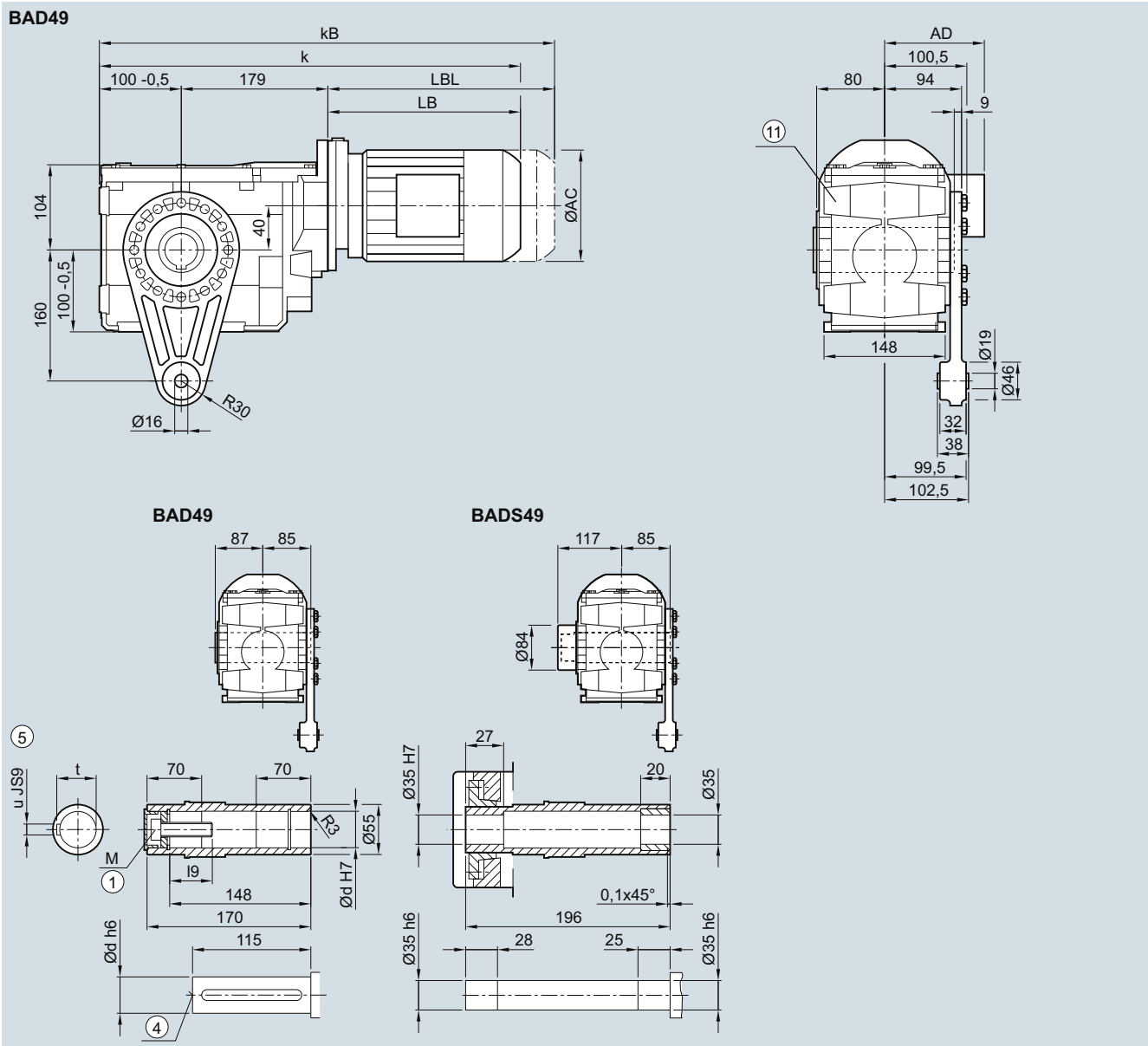
⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑩ Use bores only for foot-mounted design

BAD.39 gearbox in a shaft-mounted design

BAD030, BADS030



Shaft	d	l ₉	M	t	u
	30	32.6	M10	33.3	8
	35	37	M12	38.3	10
	40	47.75	M16	43.3	12

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	422.0	454.0	518.0	553.0	579.5	619.5	636.0	671.0	646.0	671.0
kB	466.5	509.0	578.0	613.0	649.5	689.5	714.5	749.5	719.0	744.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑪ Use bores only for foot-mounted design

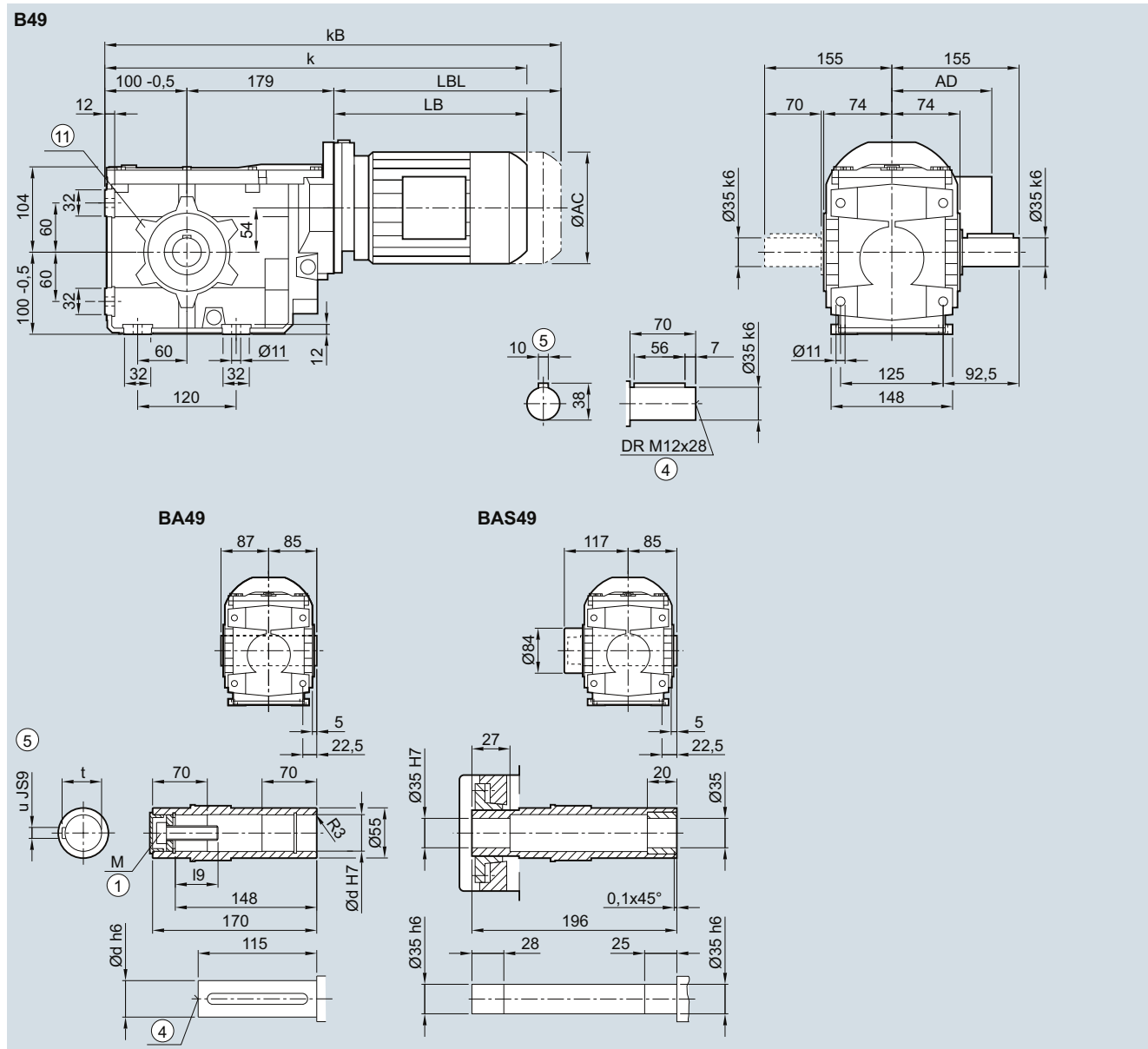
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

B..49 gearbox in a foot-mounted design

B030, BA030, BAS030



Shaft	d	I9	M	t	u
	35	57	M12	38.3	10
	40	67.75	M16	43.3	12

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	463.5	495.5	559.5	594.5	621.0	661.0	677.5	712.5	687.5	722.0	740.5	790.5
kB	508.0	550.5	619.5	654.5	691.0	731.0	756.0	791.0	760.5	795.0	845.0	895.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

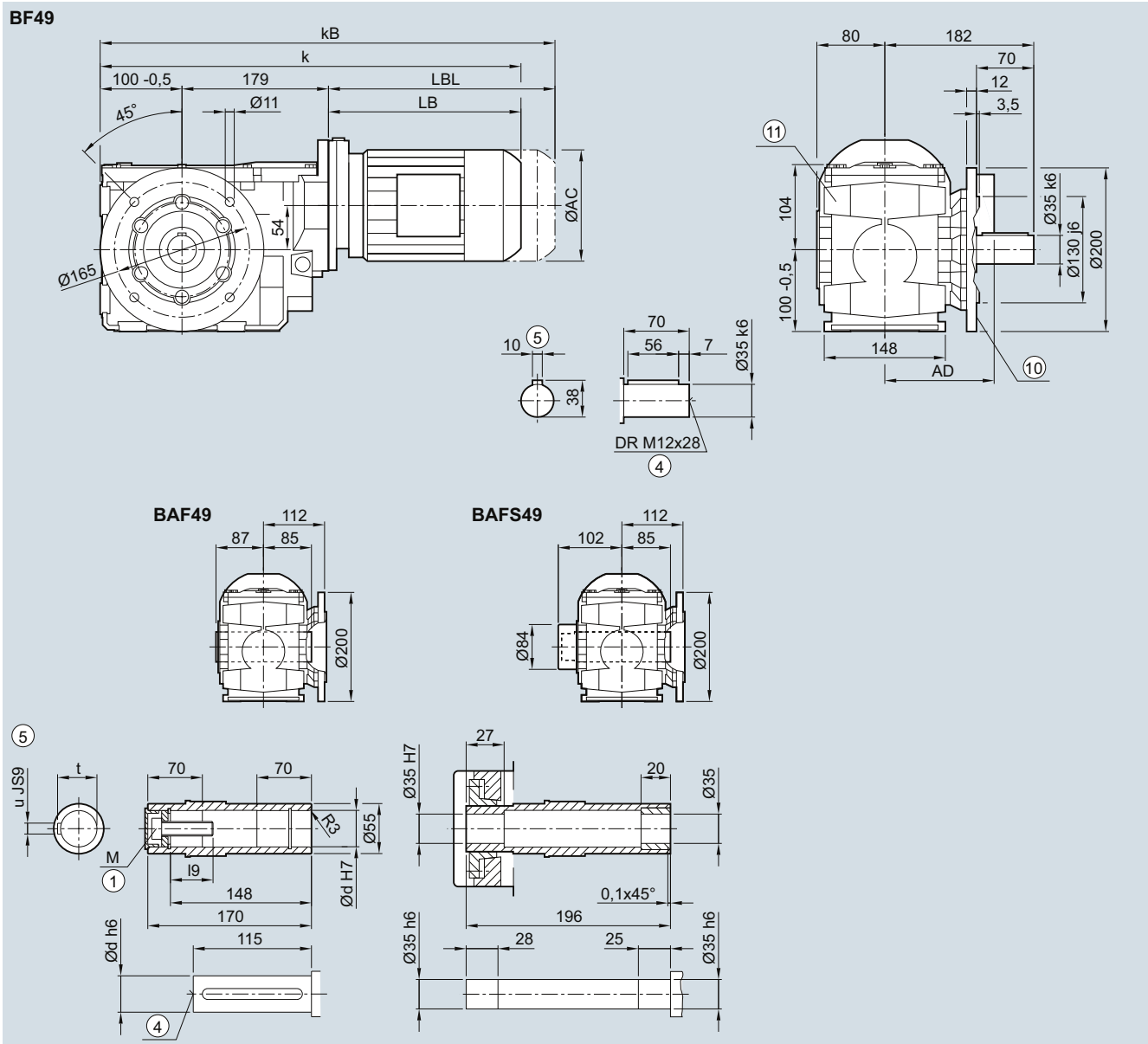
① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑥ Use bores only for housing flange design

B.F.49 gearbox in a flange-mounted design
BF030, BAF030, BAFS030


Shaft	d	I9	M	t	u
	35	57	M12	38.3	10
	40	67.75	M16	43.3	12

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	463.5	495.5	559.5	594.5	621.0	661.0	677.5	712.5	687.5	722.0	740.5	790.5
kB	508.0	550.5	619.5	654.5	691.0	731.0	756.0	791.0	760.5	795.0	845.0	895.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

⑩ Inner contour see page 5/112

⑪ Use bores only for housing flange design

1) AD depends on the motor options, for other dimensions see page 8/42.

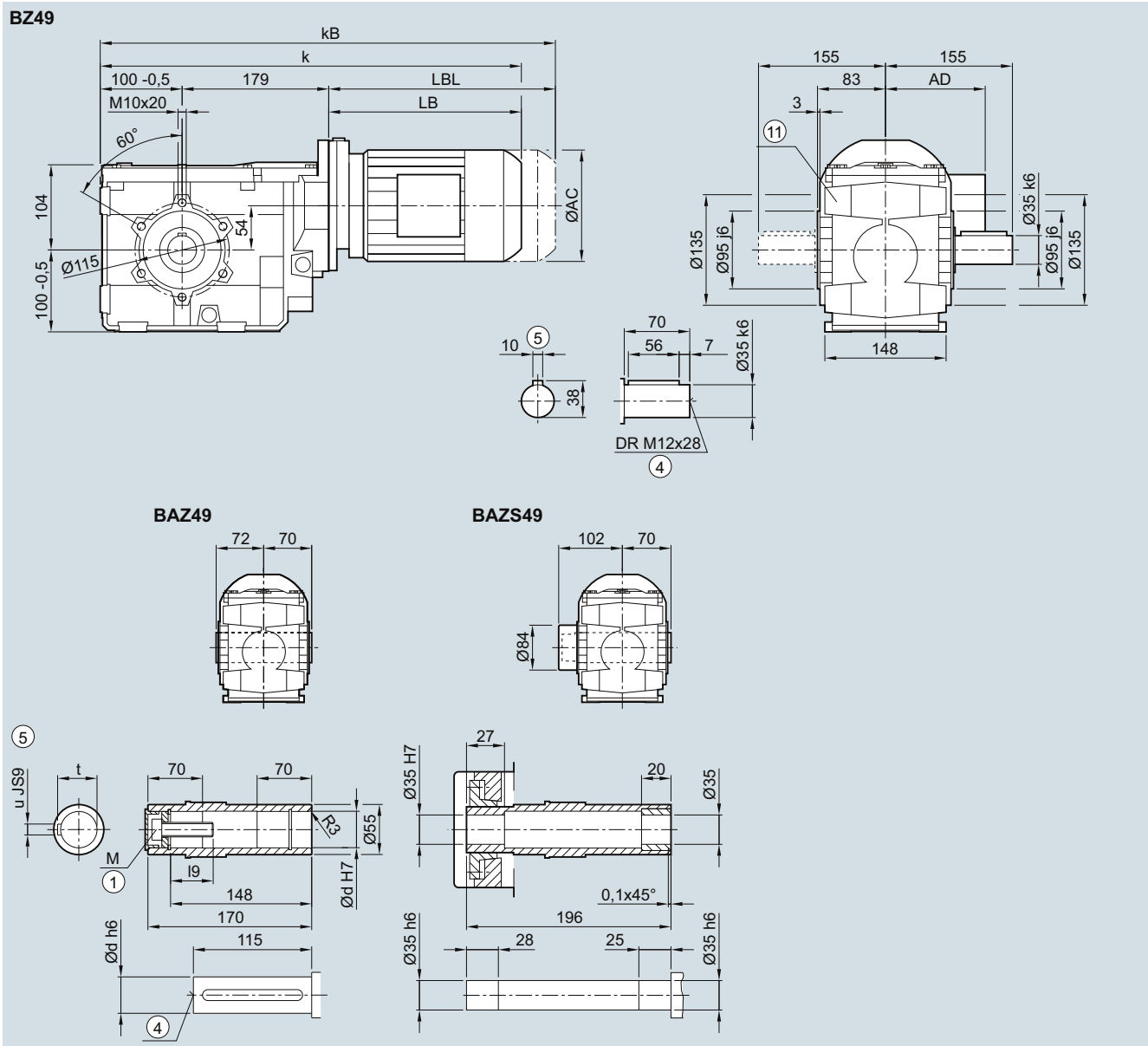
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

B.Z.49 in a housing flange design

BZ030, BAZ030, BAZS030



Shaft	d	I9	M	t	u
	35	57	M12	38.3	10
	40	67.75	M16	43.3	12

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	463.5	495.5	559.5	594.5	621.0	661.0	677.5	712.5	687.5	722.0	740.5	790.5
kB	508.0	550.5	619.5	654.5	691.0	731.0	756.0	791.0	760.5	795.0	845.0	895.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

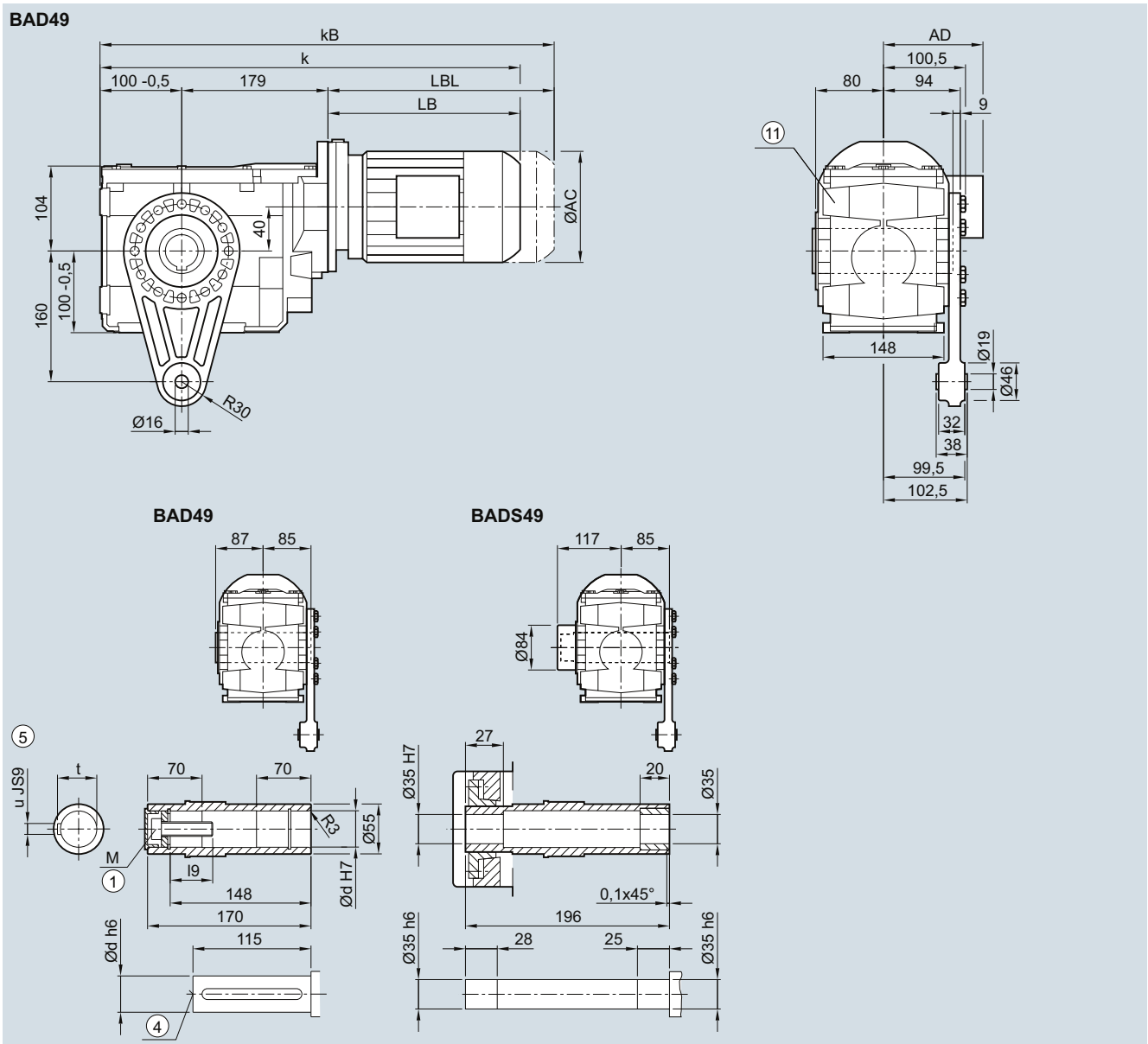
① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

⑩ Use bores only for foot-mounted design

BAD.49 gearbox in a shaft-mounted design
BAD030, BADS030


Shaft	d	I9	M	t	u
	35	57	M12	38.3	10
	40	67.75	M16	43.3	12

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	463.5	495.5	559.5	594.5	621.0	661.0	677.5	712.5	687.5	722.0	740.5	790.5
kB	508.0	550.5	619.5	654.5	691.0	731.0	756.0	791.0	760.5	795.0	845.0	895.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

⑪ Use bores only for foot-mounted design

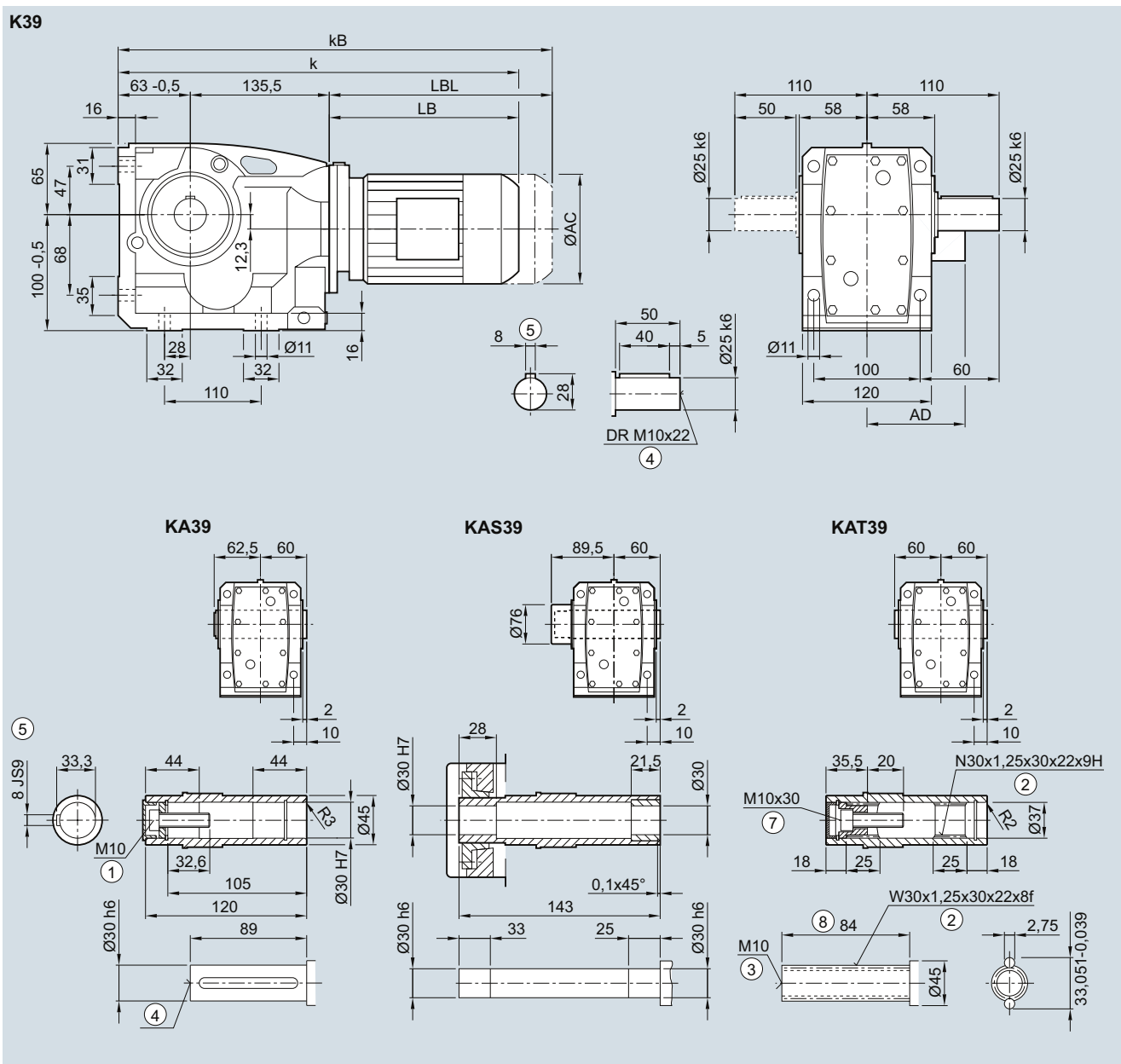
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K..39 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030

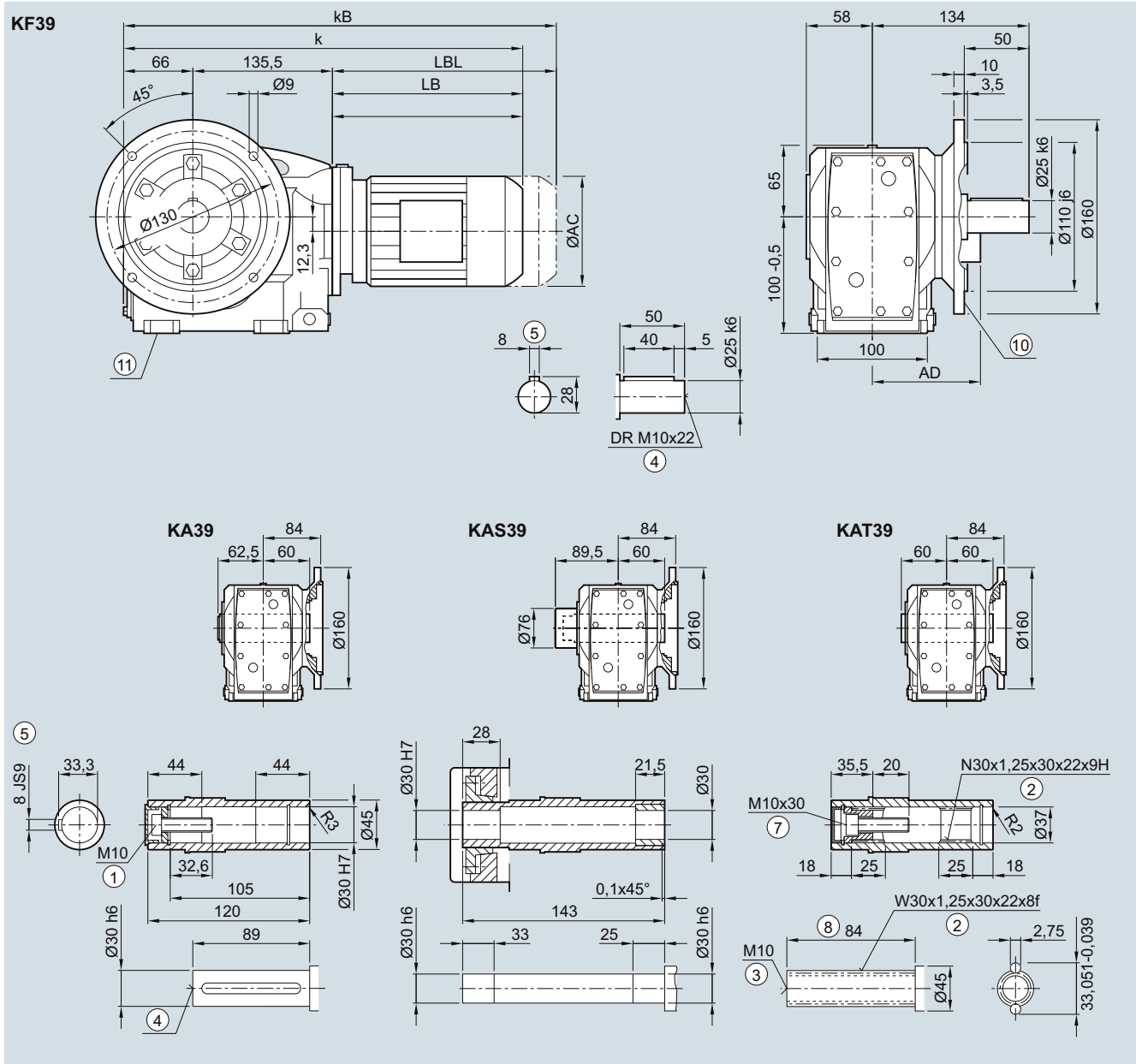


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	392.0	424.0	488.0	523.0	549.5	589.5	606.0	641.0	616.0	641.0
kB	436.5	479.0	548.0	583.0	619.5	659.5	684.5	719.5	689.0	714.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
¹⁾ AD depends on the motor options, for other dimensions see page 8/42

K.F.39 gearbox in a flange-mounted design

KF030, KAF030, KAFS030, KAFT030



5

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	395.0	427.0	491.0	526.0	552.5	592.5	609.0	644.0	619.0	644.0
kB	439.5	482.0	551.0	586.0	622.5	662.5	687.5	722.5	692.0	717.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑩ Inner contour see page 5/125 ⑪ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

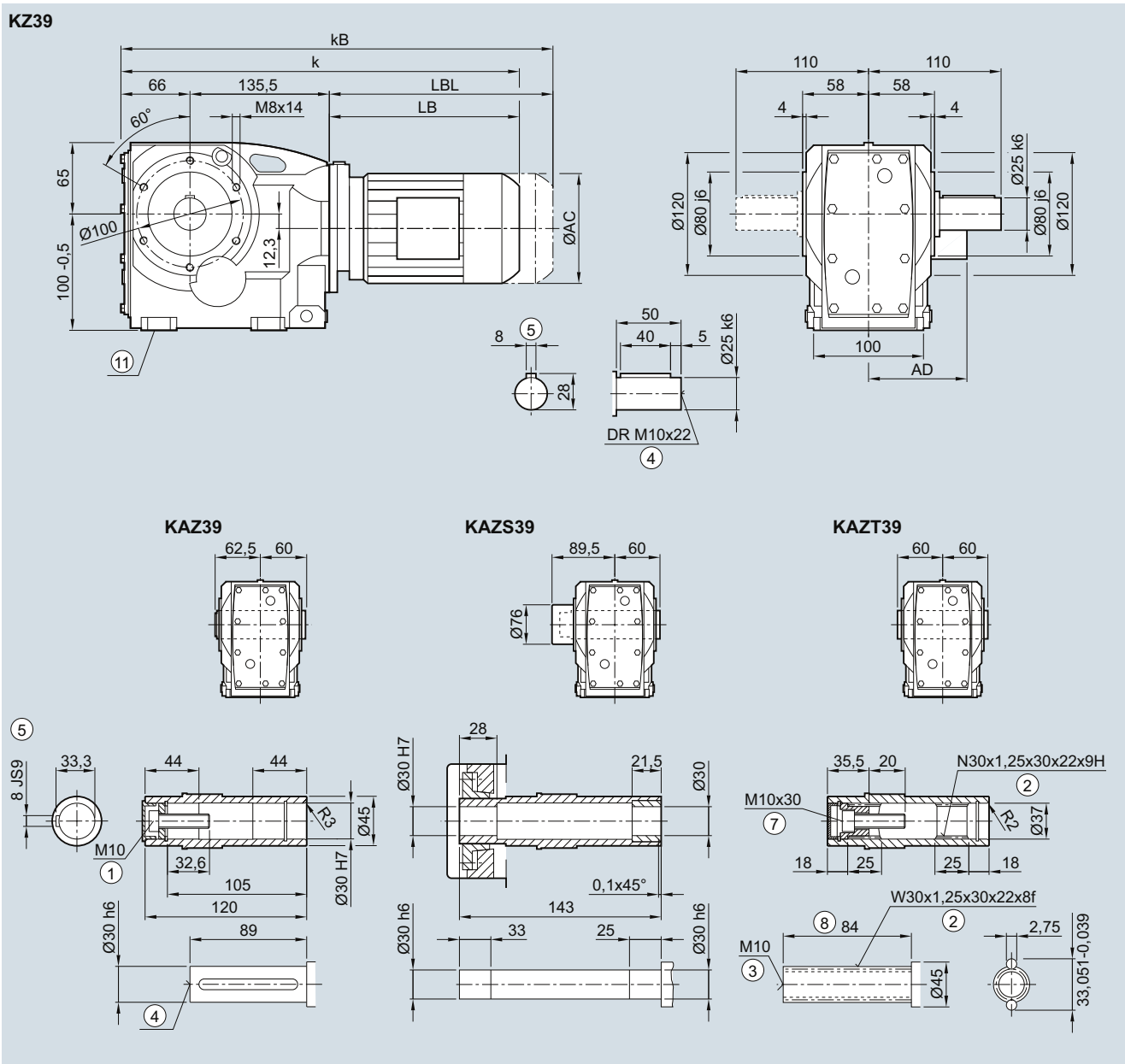
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

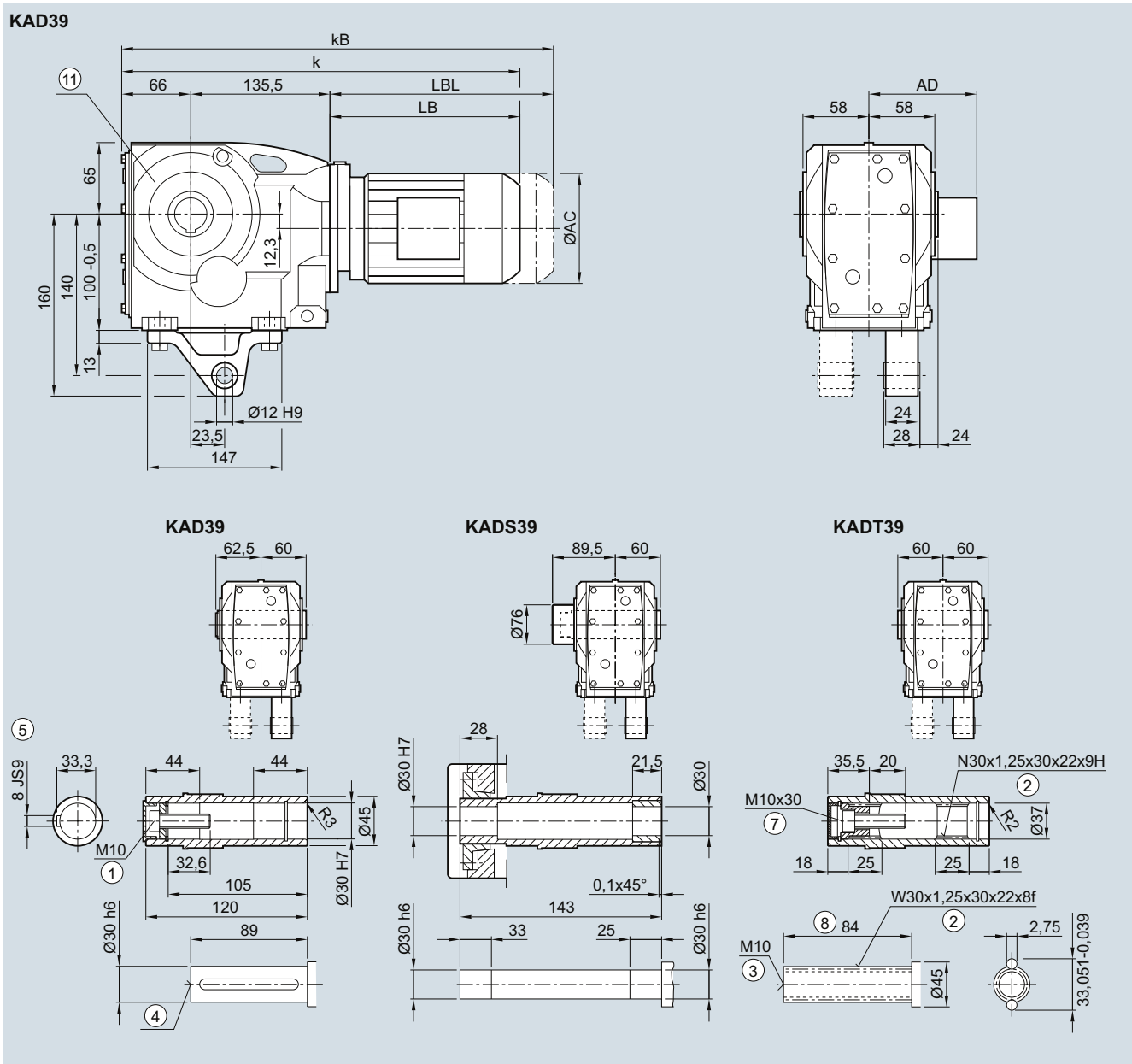
K.Z.39 gearbox in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	395.0	427.0	491.0	526.0	552.5	592.5	609.0	644.0	619.0	644.0
kB	439.5	482.0	551.0	586.0	622.5	662.5	687.5	722.5	692.0	717.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design ⑩ AD depends on the motor options, for other dimensions see page 8/42.

KAD.39 gearbox in a shaft-mounted design
KAD030, KADS030, KADT030


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	395.0	427.0	491.0	526.0	552.5	592.5	609.0	644.0	619.0	644.0
kB	439.5	482.0	551.0	586.0	622.5	662.5	687.5	722.5	692.0	717.0
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0	418.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5	491.0	516.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design 1) AD depends on the motor options, for other dimensions see page 8/42.

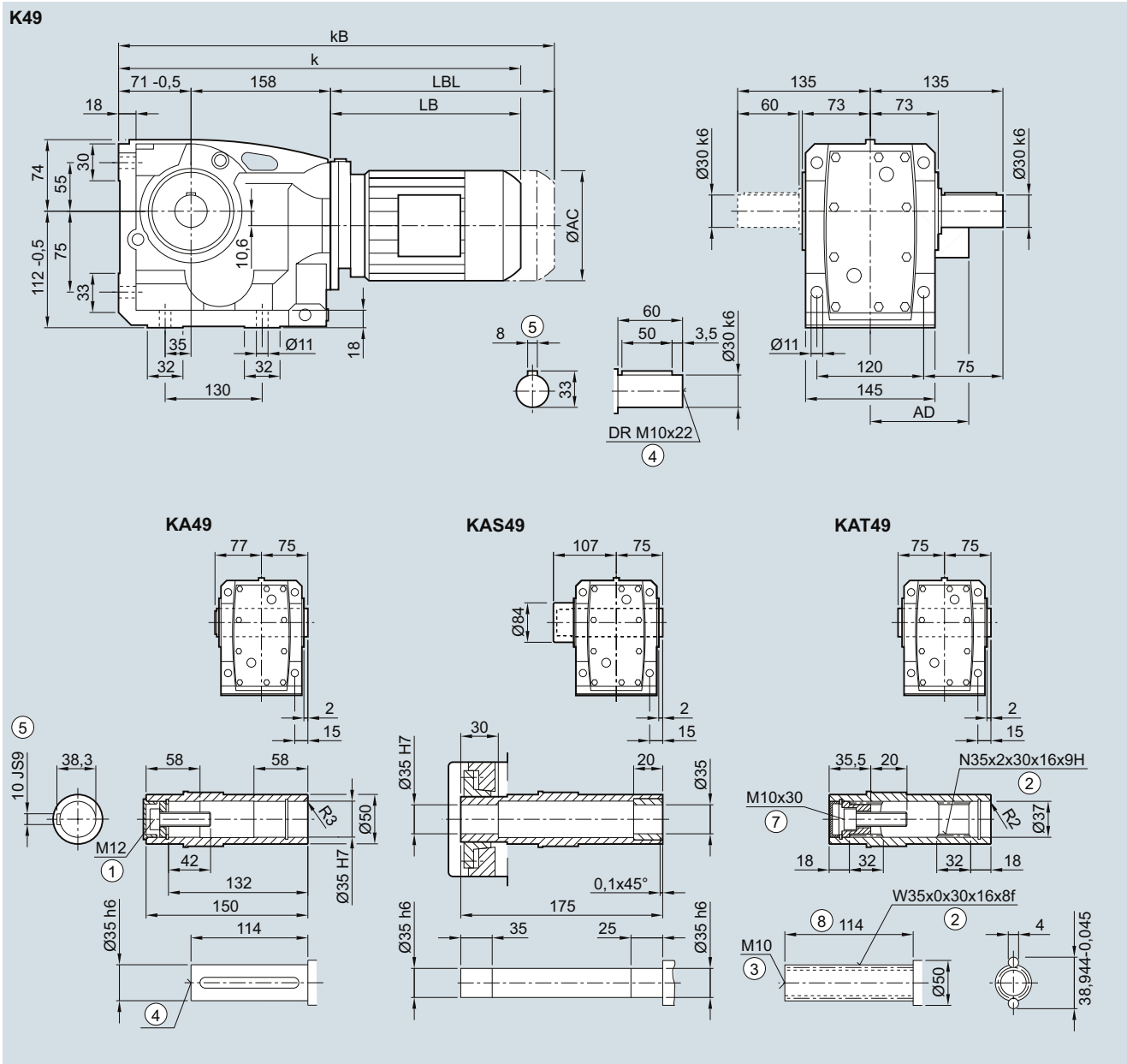
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K..49 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030



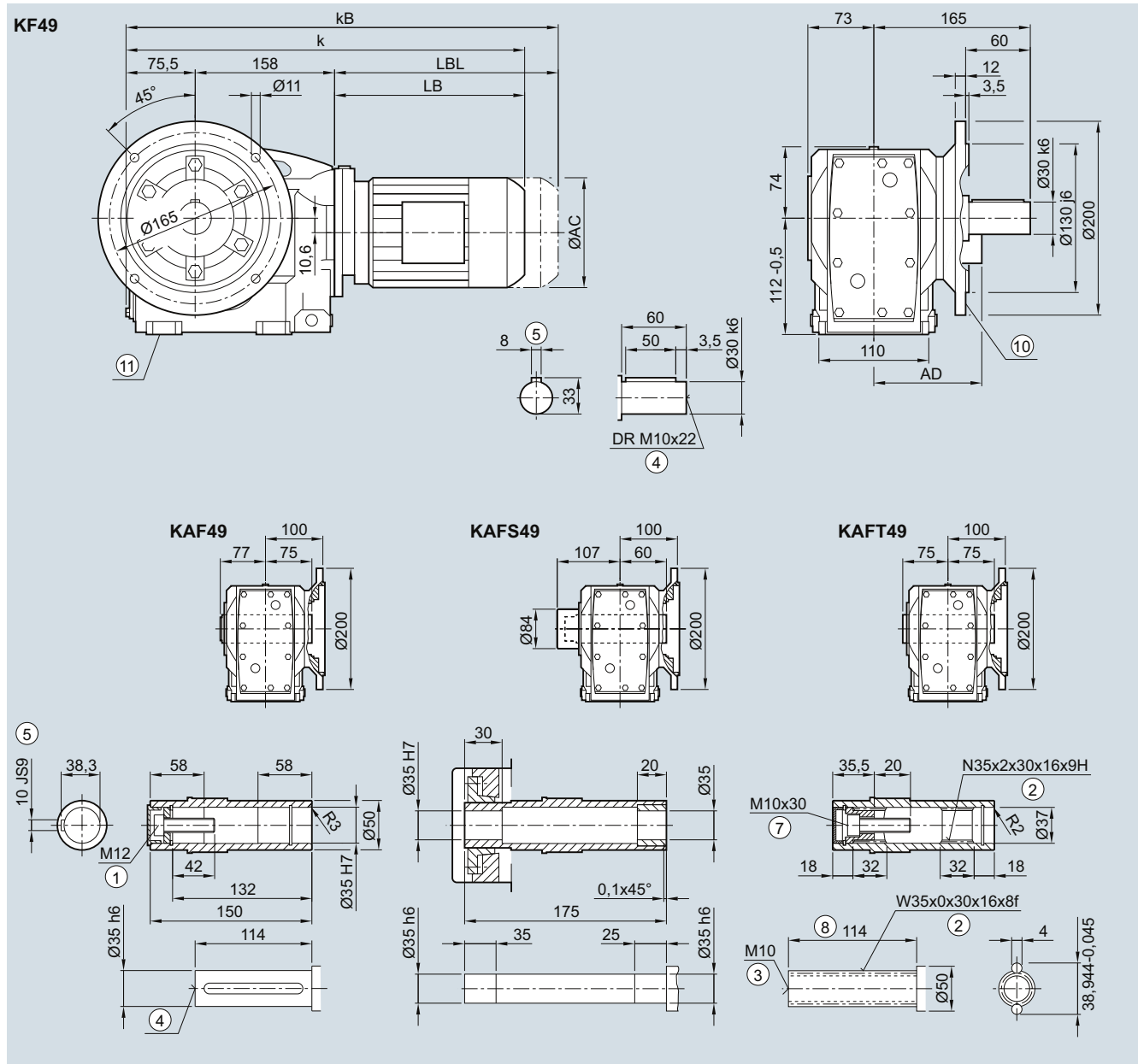
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	413.5	445.5	509.5	544.5	571.0	611.0	627.5	662.5	637.5	672.0	690.5	740.5
kB	458.0	500.5	569.5	604.5	641.0	681.0	706.0	741.0	710.5	745.0	795.0	845.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

K.F.49 gearbox in a flange-mounted design

KF030, KAF030, KAFS030, KAFT030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	418.0	450.0	514.0	549.0	575.5	615.5	632.0	667.0	642.0	676.5	695.0	745.0
kB	462.5	505.0	574.0	609.0	645.5	685.5	710.5	745.5	715.0	749.5	799.5	849.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑨ Inner contour see page 5/125

⑩ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

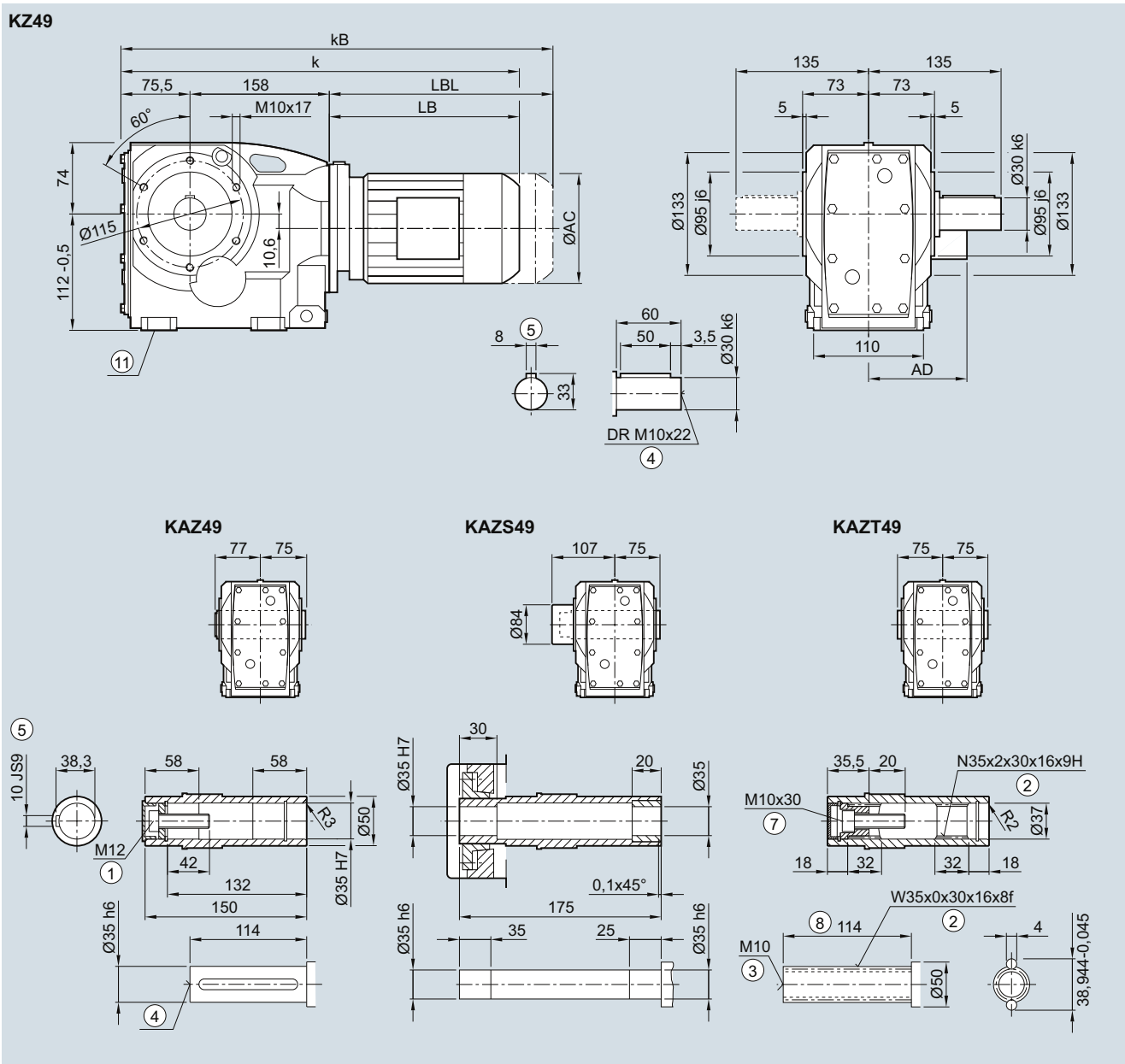
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K.Z.49 in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030



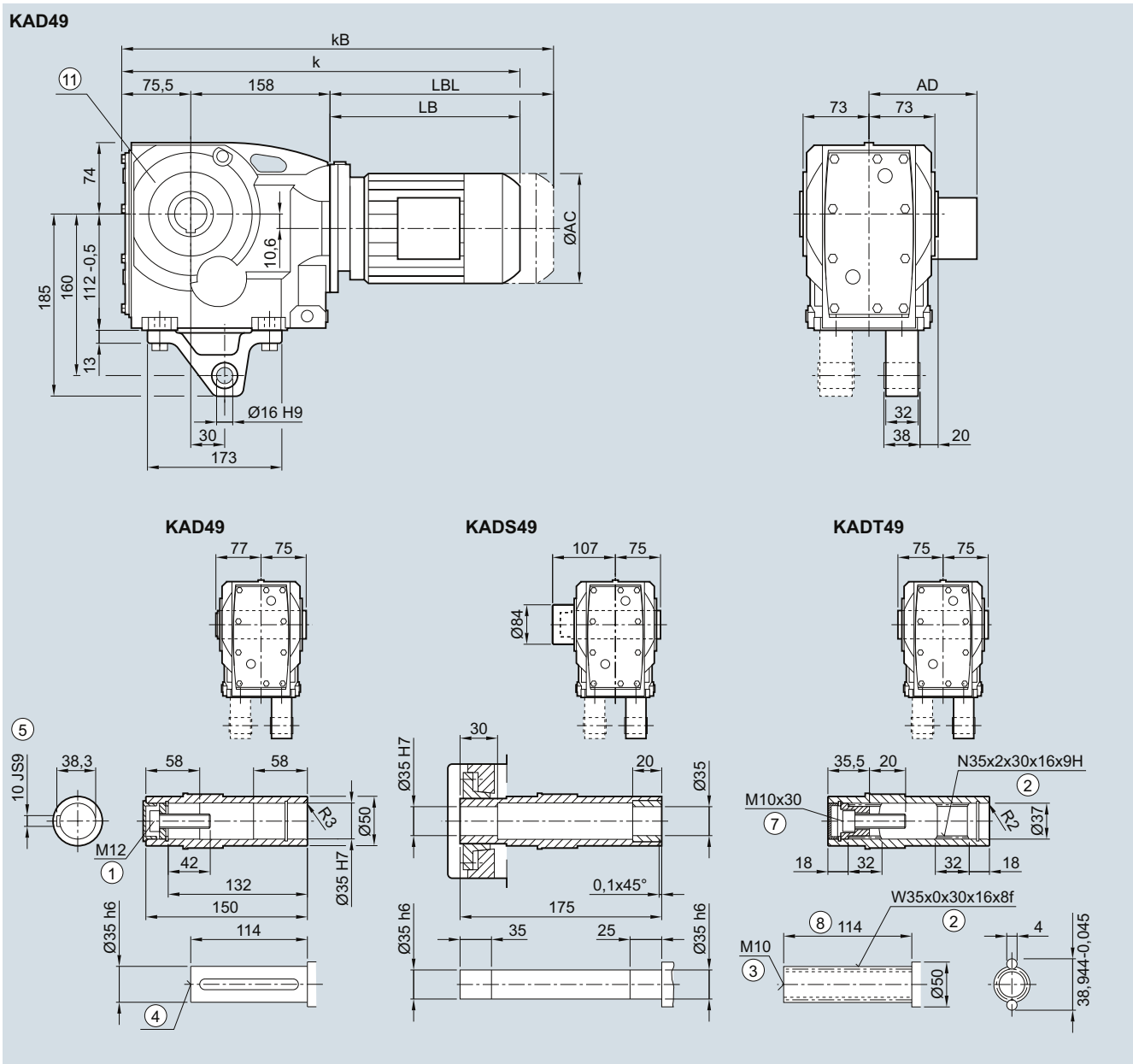
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	418.0	450.0	514.0	549.0	575.5	615.5	632.0	667.0	642.0	676.5	695.0	745.0
kB	462.5	505.0	574.0	609.0	645.5	685.5	710.5	745.5	715.0	749.5	799.5	849.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

5

KAD.49 gearbox in a shaft-mounted design

KAD030, KADS030, KADT030



5

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	418.0	450.0	514.0	549.0	575.5	615.5	632.0	667.0	642.0	676.5	695.0	745.0
kB	462.5	505.0	574.0	609.0	645.5	685.5	710.5	745.5	715.0	749.5	799.5	849.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for housing flange design
 1) AD depends on the motor options, for other dimensions see page 8/42.

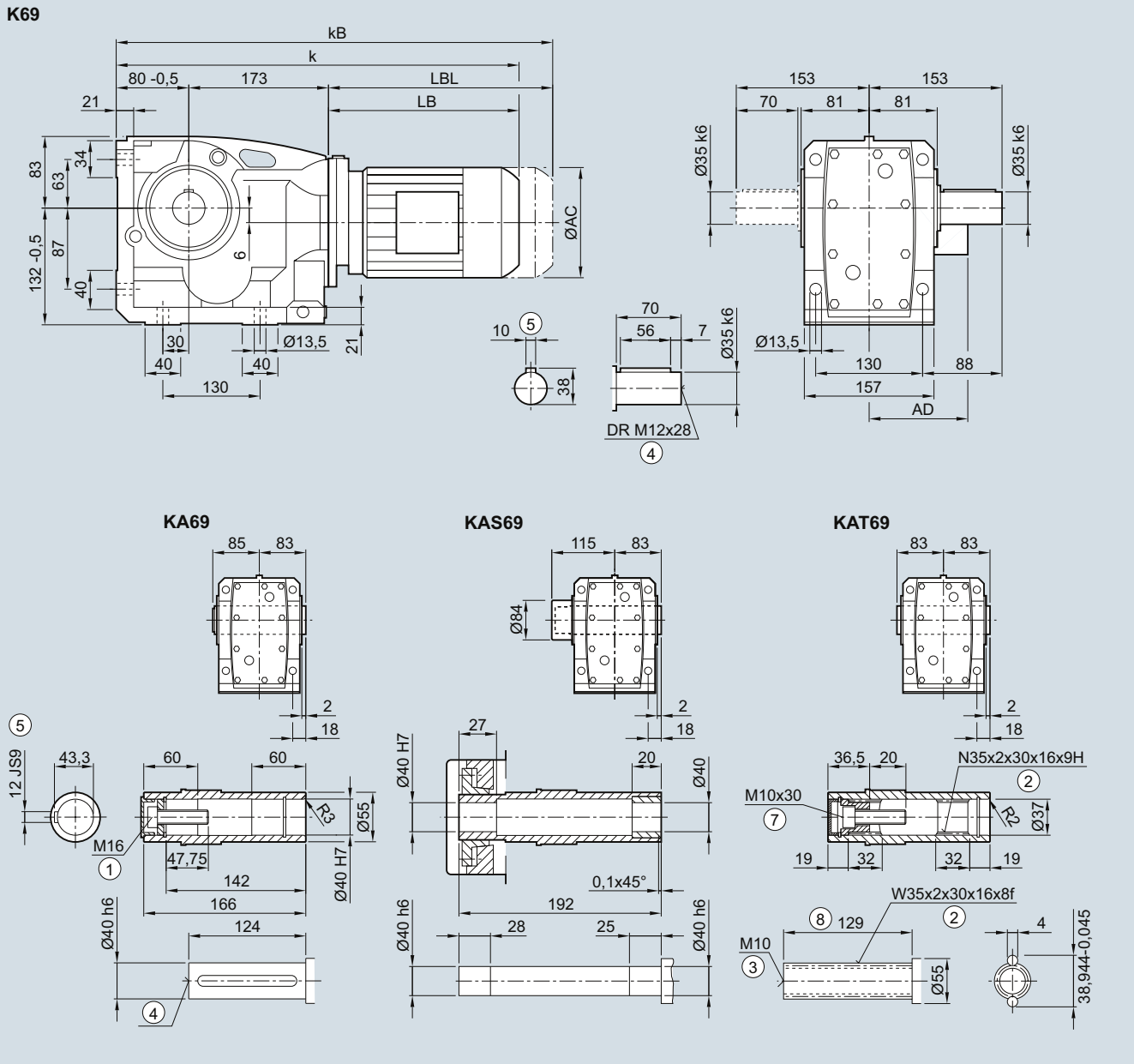
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K..69 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030

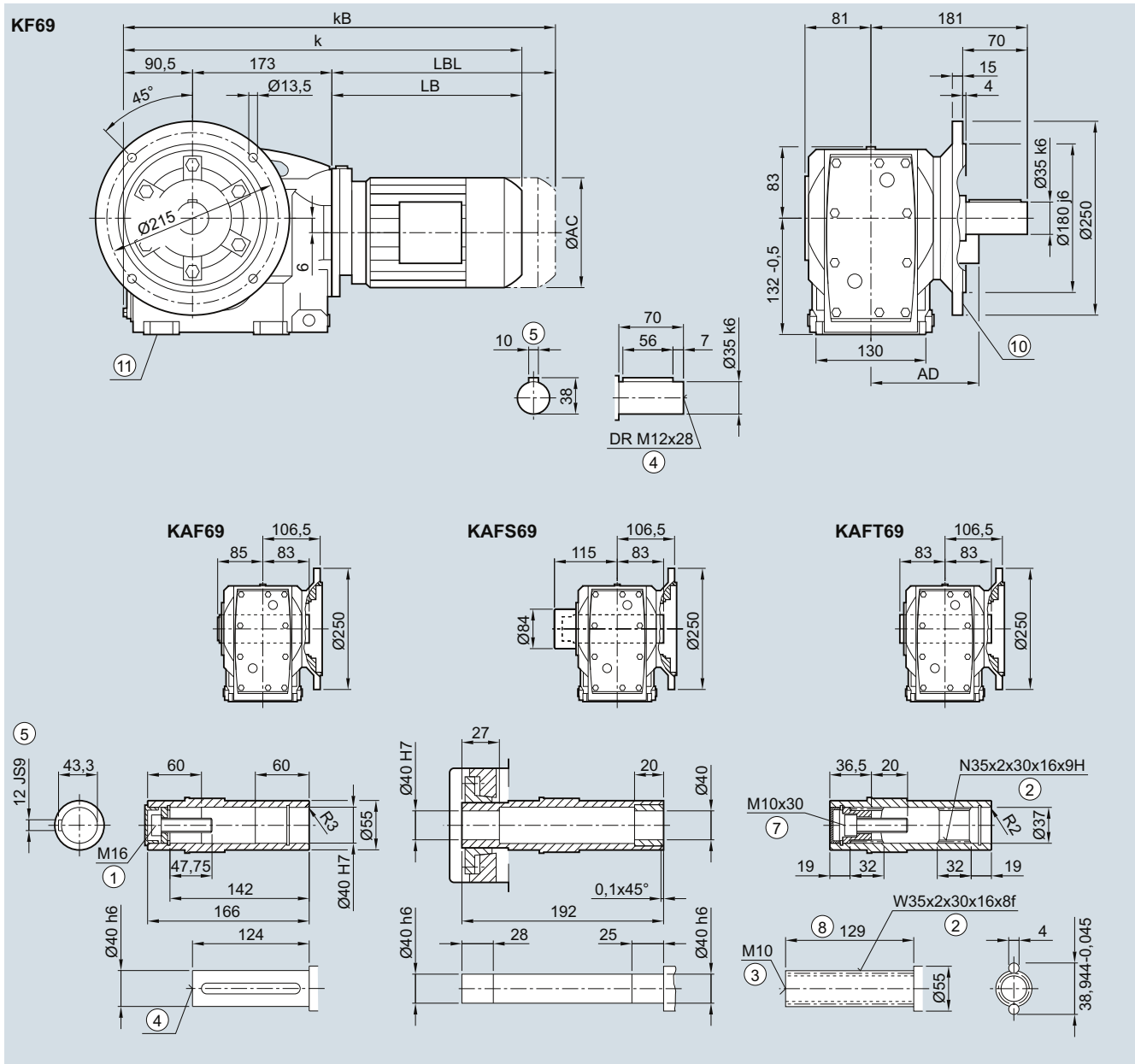


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	437.5	469.5	533.5	568.5	595.0	635.0	651.5	686.5	661.5	696.0	714.5	764.5
kB	482.0	524.5	593.5	628.5	665.0	705.0	730.0	765.0	734.5	769.0	819.0	869.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

K.F.69 gearbox in a flange-mounted design

KF030, KAF030, KAFS030, KAFT030



5

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	448.0	480.0	544.0	579.0	605.5	645.5	662.0	697.0	672.0	706.5	725.0	775.0
kB	492.5	535.0	604.0	639.0	675.5	715.5	740.5	775.5	745.0	779.5	829.5	879.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑩ Inner contour see page 5/125 ⑪ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

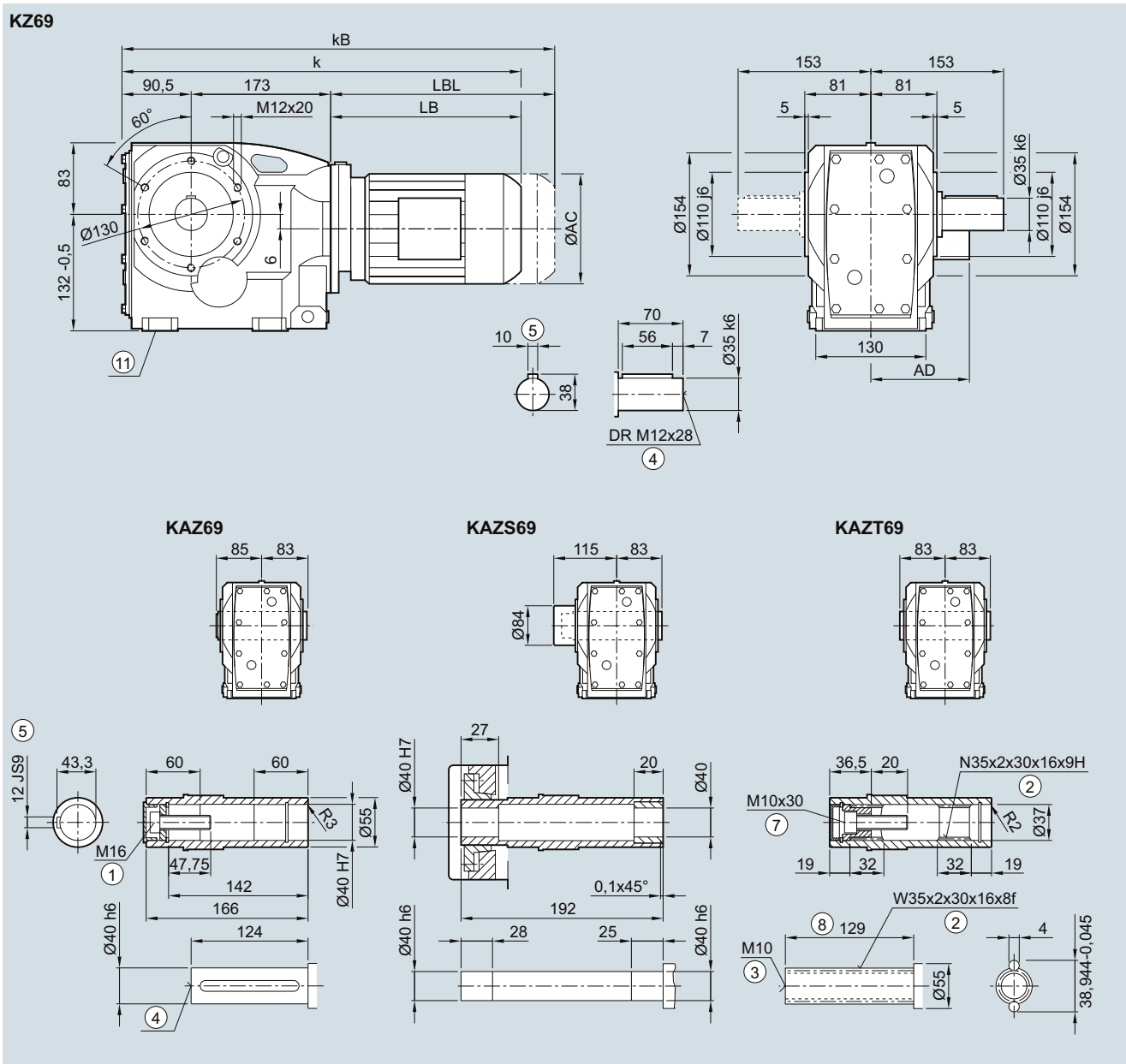
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

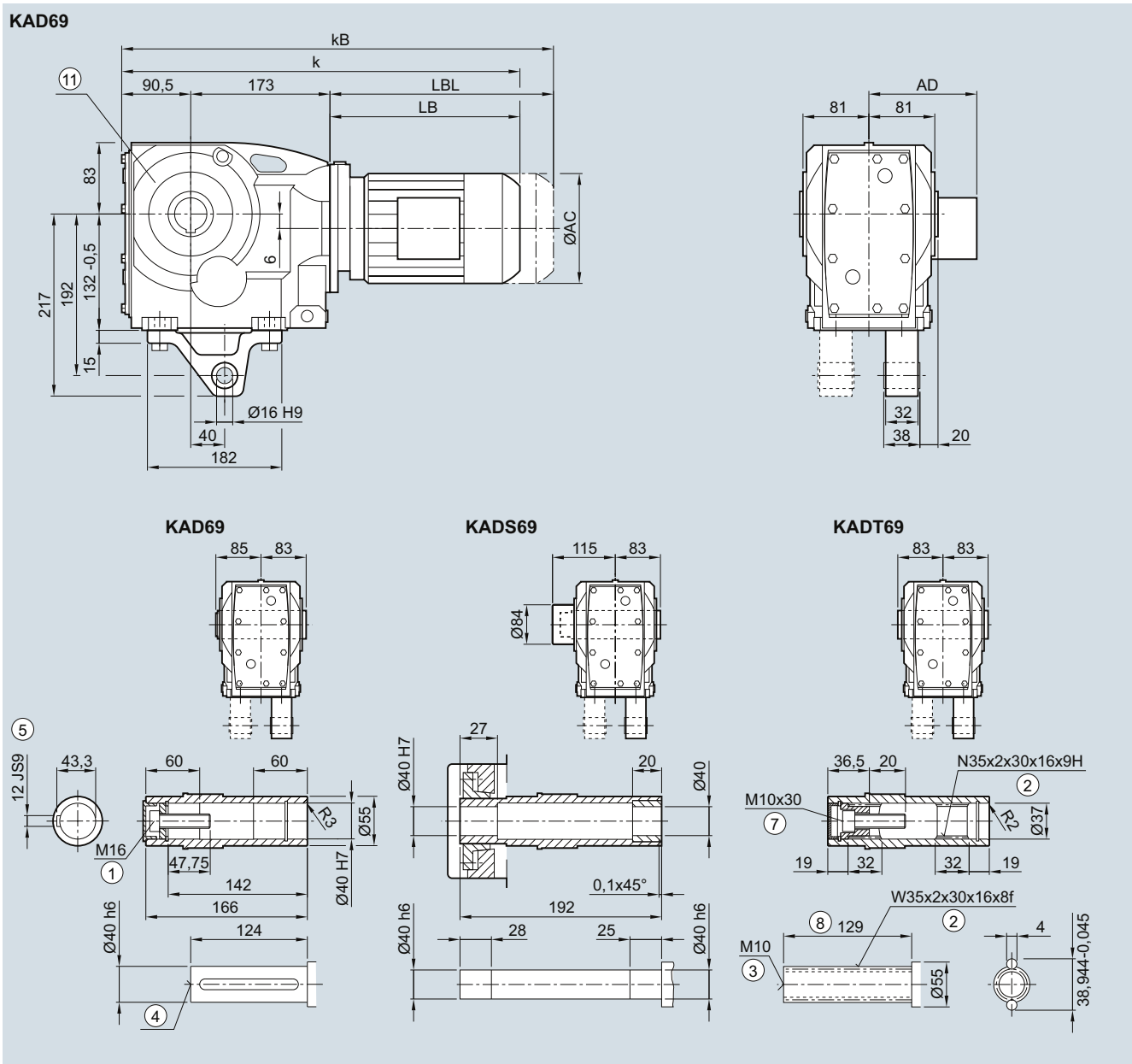
K.Z.69 gearbox in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	448.0	480.0	544.0	579.0	605.5	645.5	662.0	697.0	672.0	706.5	725.0	775.0
kB	492.5	535.0	604.0	639.0	675.5	715.5	740.5	775.5	745.0	779.5	829.5	879.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

KAD.69 gearbox in a shaft-mounted design
KAD030, KADS030, KADT030


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	448.0	480.0	544.0	579.0	605.5	645.5	662.0	697.0	672.0	706.5	725.0	775.0
kB	492.5	535.0	604.0	639.0	675.5	715.5	740.5	775.5	745.0	779.5	829.5	879.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for housing flange design
 1) AD depends on the motor options, for other dimensions see page 8/42.

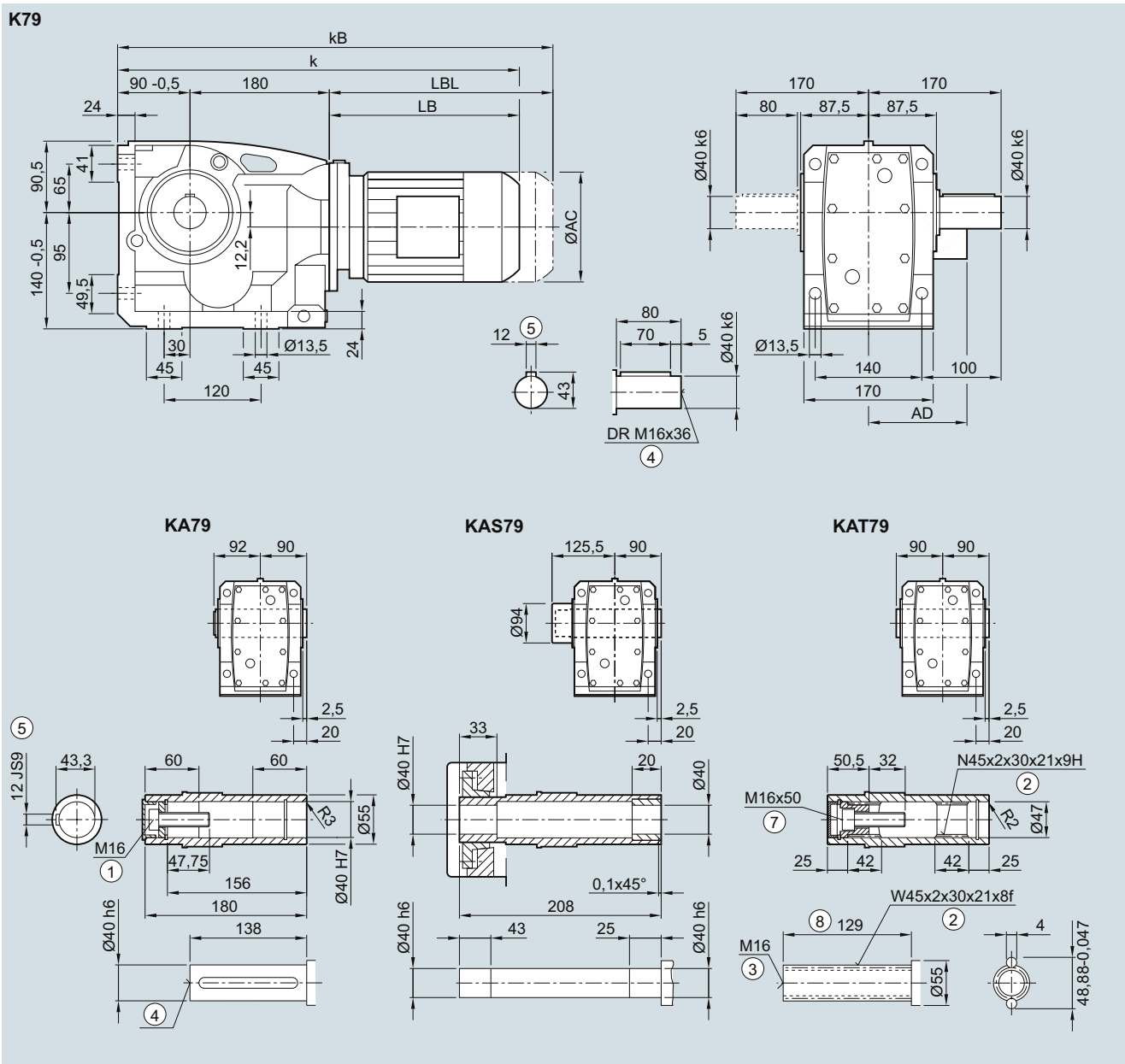
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

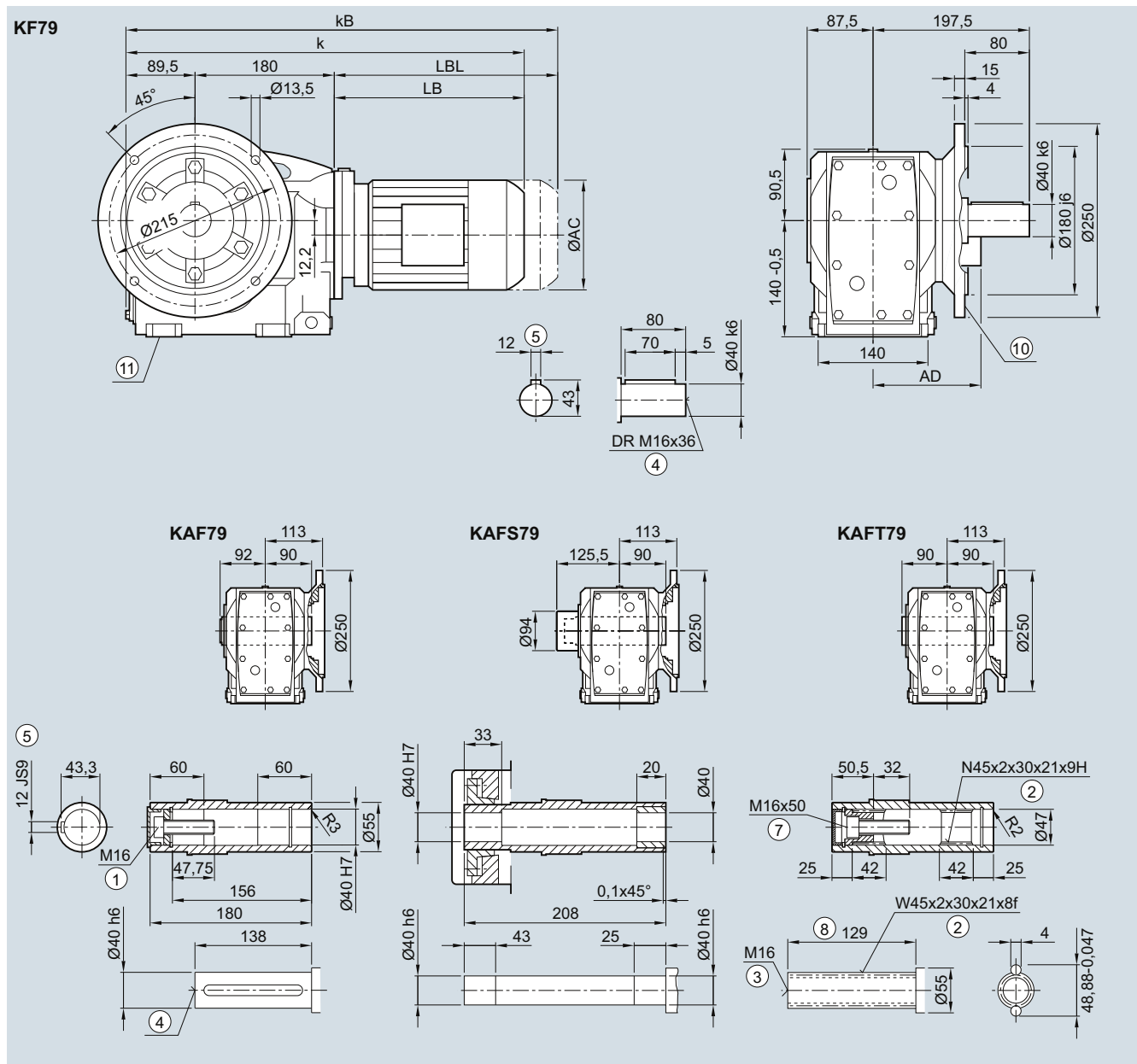
K..79 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	454.5	486.5	550.5	585.5	612.0	652.0	668.5	703.5	678.5	713.0	731.5	781.5
kB	499.0	541.5	610.5	645.5	682.0	722.0	747.0	782.0	751.5	786.0	836.0	886.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

K.F.79 gearbox in a flange-mounted design
KF030, KAF030, KAFS030, KAFT030


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	454.0	486.0	550.0	585.0	611.5	651.5	668.0	703.0	678.5	712.5	731.0	781.0
kB	498.5	541.0	610.0	645.0	681.5	721.5	746.5	781.5	751.0	785.5	835.5	885.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

 ⑩ Inner contour [see page 5/125](#)

⑪ Use bores only for foot-mounted design

 1) AD depends on the motor options, for other dimensions [see page 8/42](#).

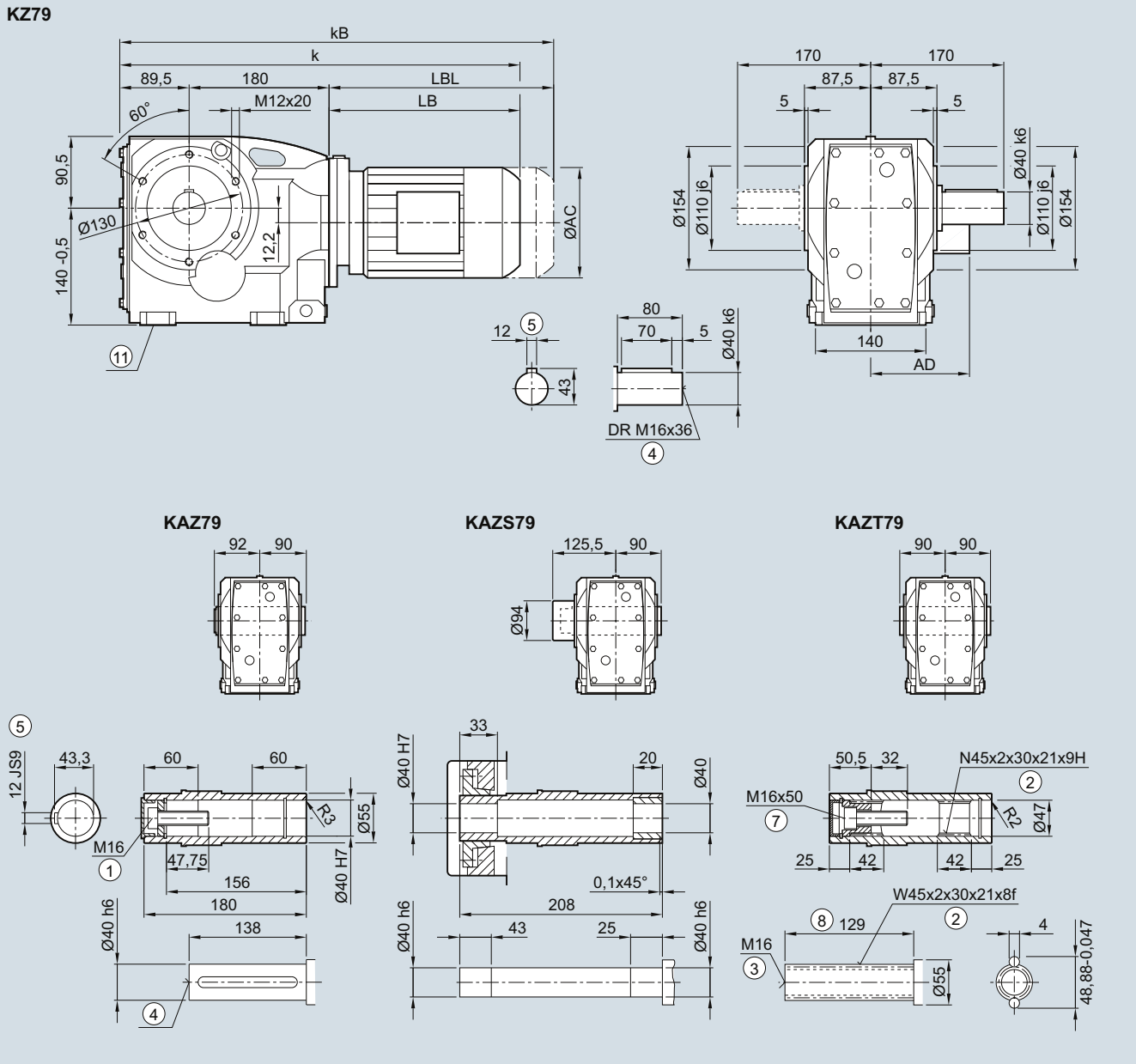
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K.Z.79 gearbox in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030

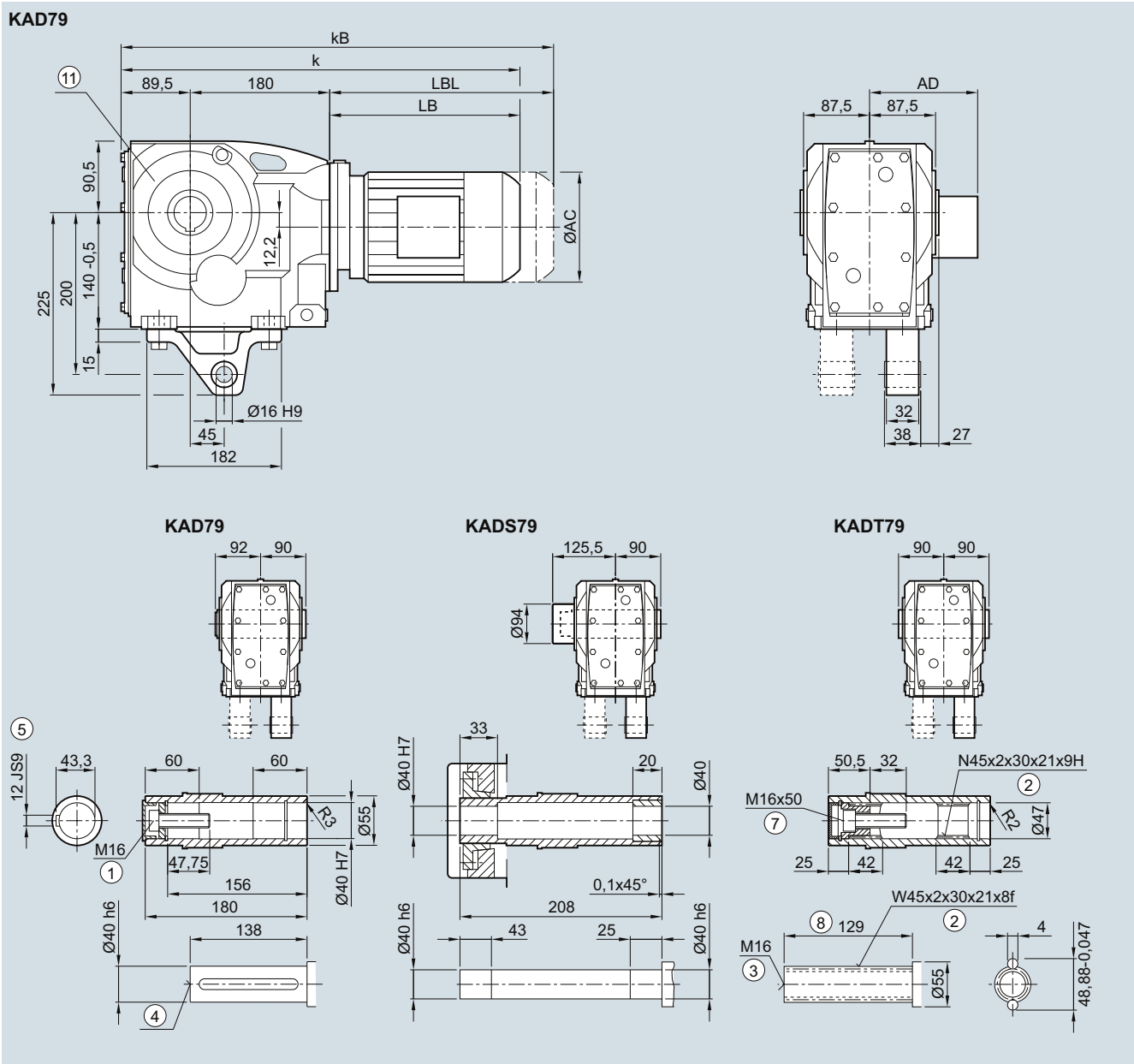


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	454.0	486.0	550.0	585.0	611.5	651.5	668.0	703.0	678.5	712.5	731.0	781.0
kB	498.5	541.0	610.0	645.0	681.5	721.5	746.5	781.5	751.0	785.5	835.5	885.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

KAD.79 gearbox in a shaft-mounted design

KAD030, KADS030, KADT030



Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	454.0	486.0	550.0	585.0	611.5	651.5	668.0	703.0	678.5	712.5	731.0	781.0
kB	498.5	541.0	610.0	645.0	681.5	721.5	746.5	781.5	751.0	785.5	835.5	885.5
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for housing flange design
 1) AD depends on the motor options, for other dimensions see page 8/42.

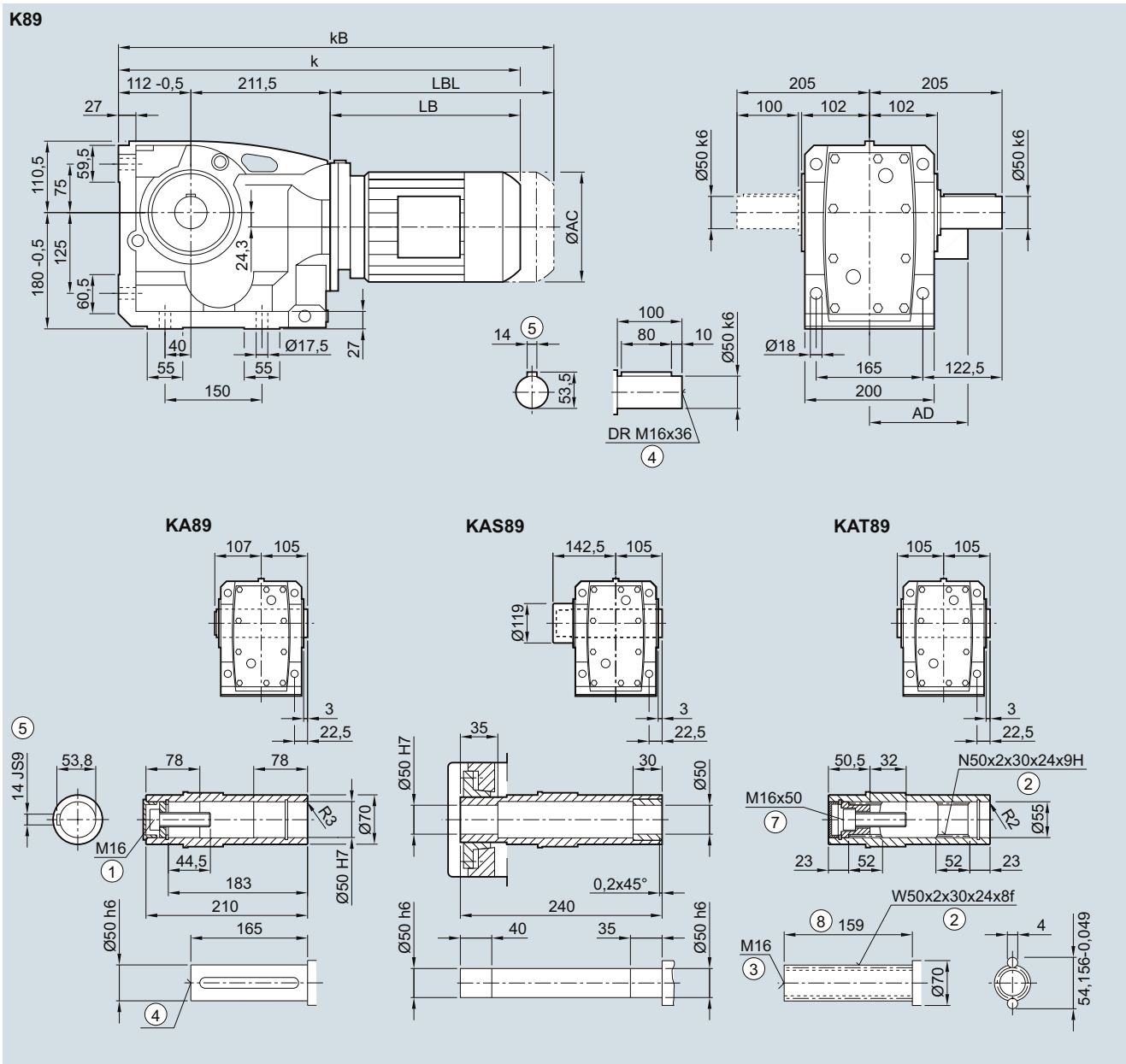
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K..89 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030



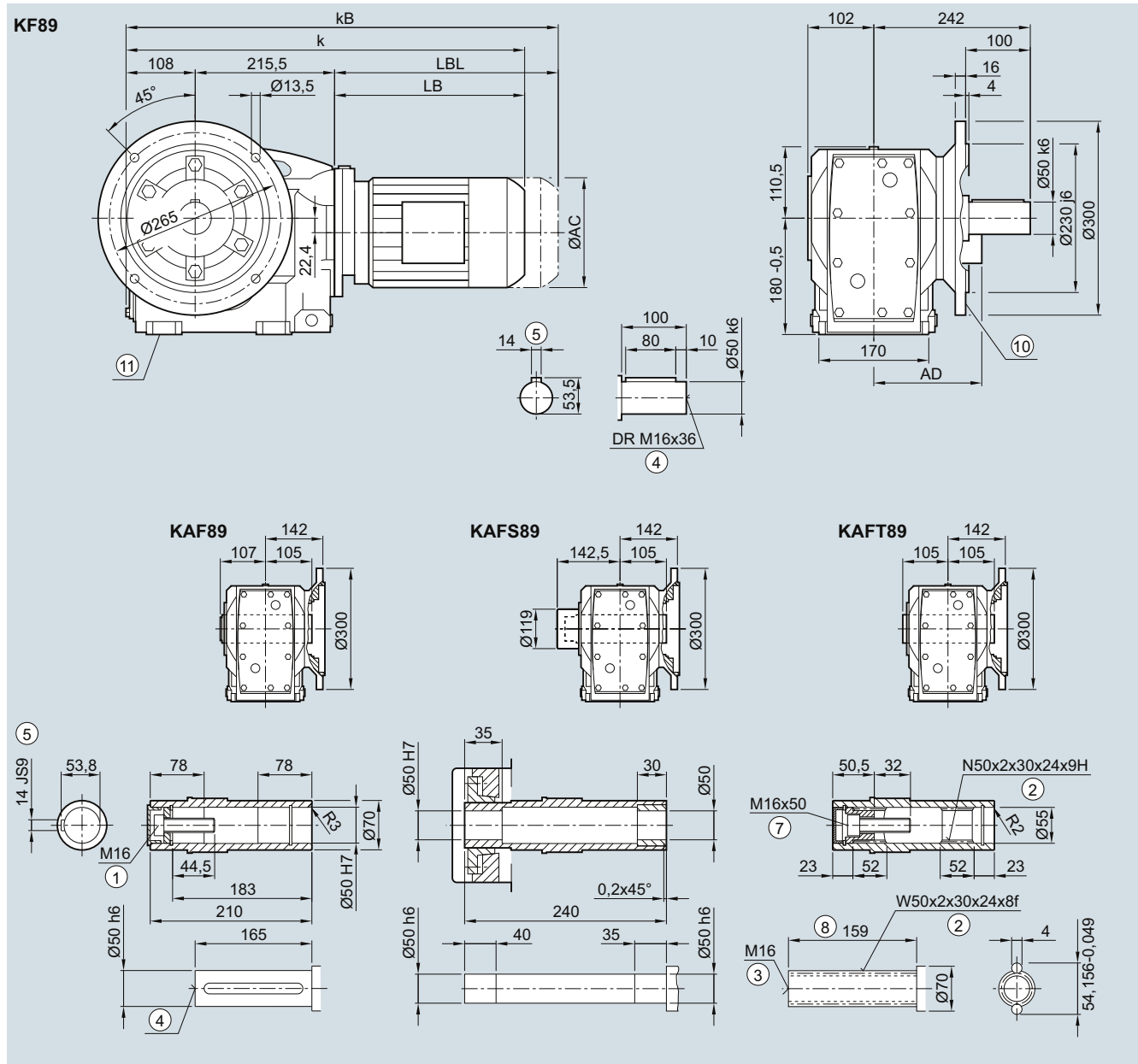
Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	538.0	598.0	633.0	659.5	699.5	716.0	751.0	726.0	751.0	779.0	829.0	861.0	921.0
kB	593.0	658.0	693.0	729.5	769.5	794.5	829.5	799.0	824.0	883.5	933.5	977.0	1 037.0
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑥ ISO 4762 ⑦ Without locating shoulder +1 mm

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

K.F.89 gearbox in a flange-mounted design

KF030, KAF030, KAFS030, KAFT030



Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	538.0	598.0	633.0	659.5	699.5	716.0	751.0	726.0	751.0	779.0	829.0	861.0	921.0
kB	593.0	658.0	693.0	729.5	769.5	794.5	829.5	799.0	824.0	883.5	933.5	977.0	1 037.0
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑨ Inner contour see page 5/125

⑩ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

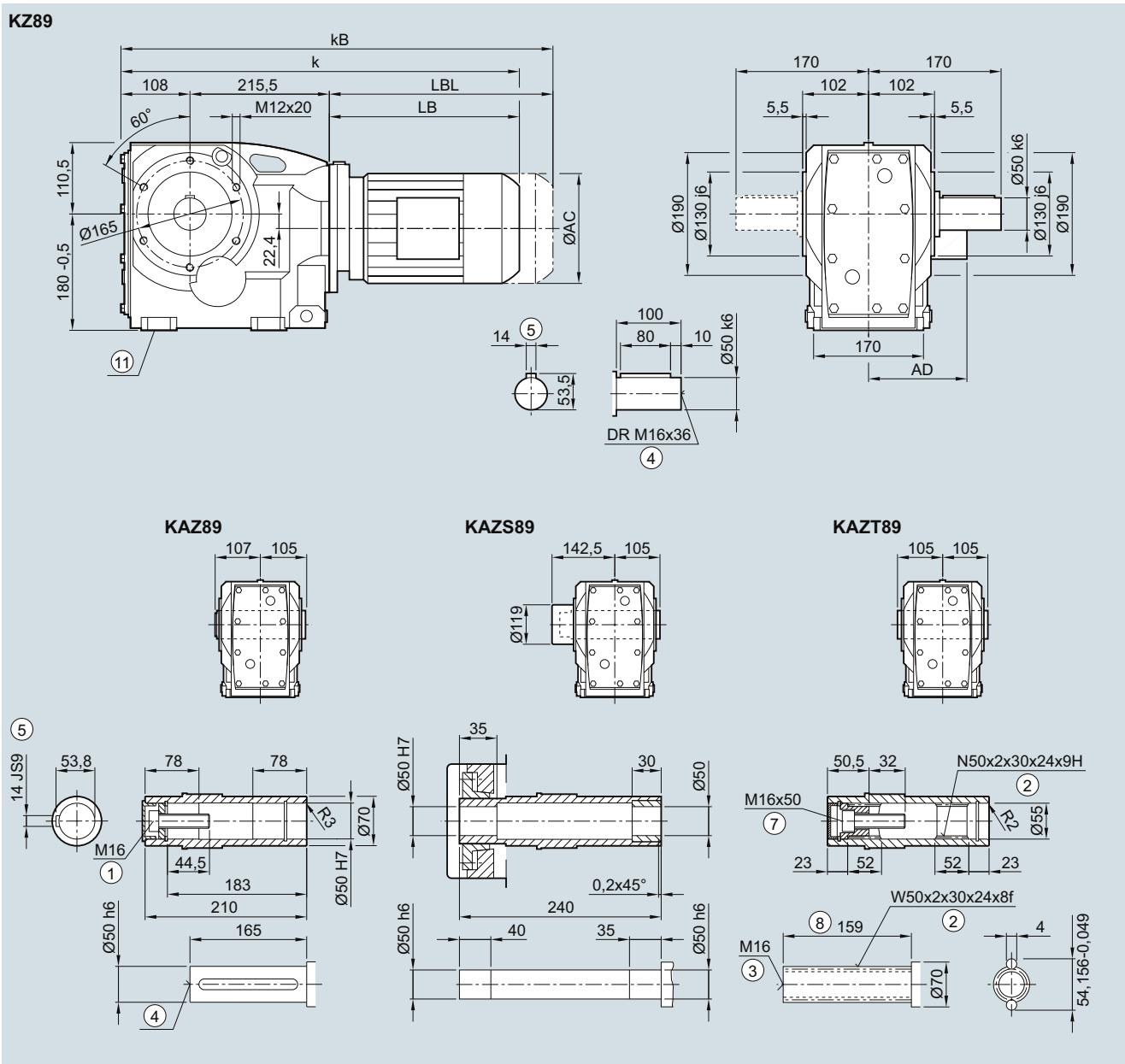
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K.Z.89 gearbox in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030



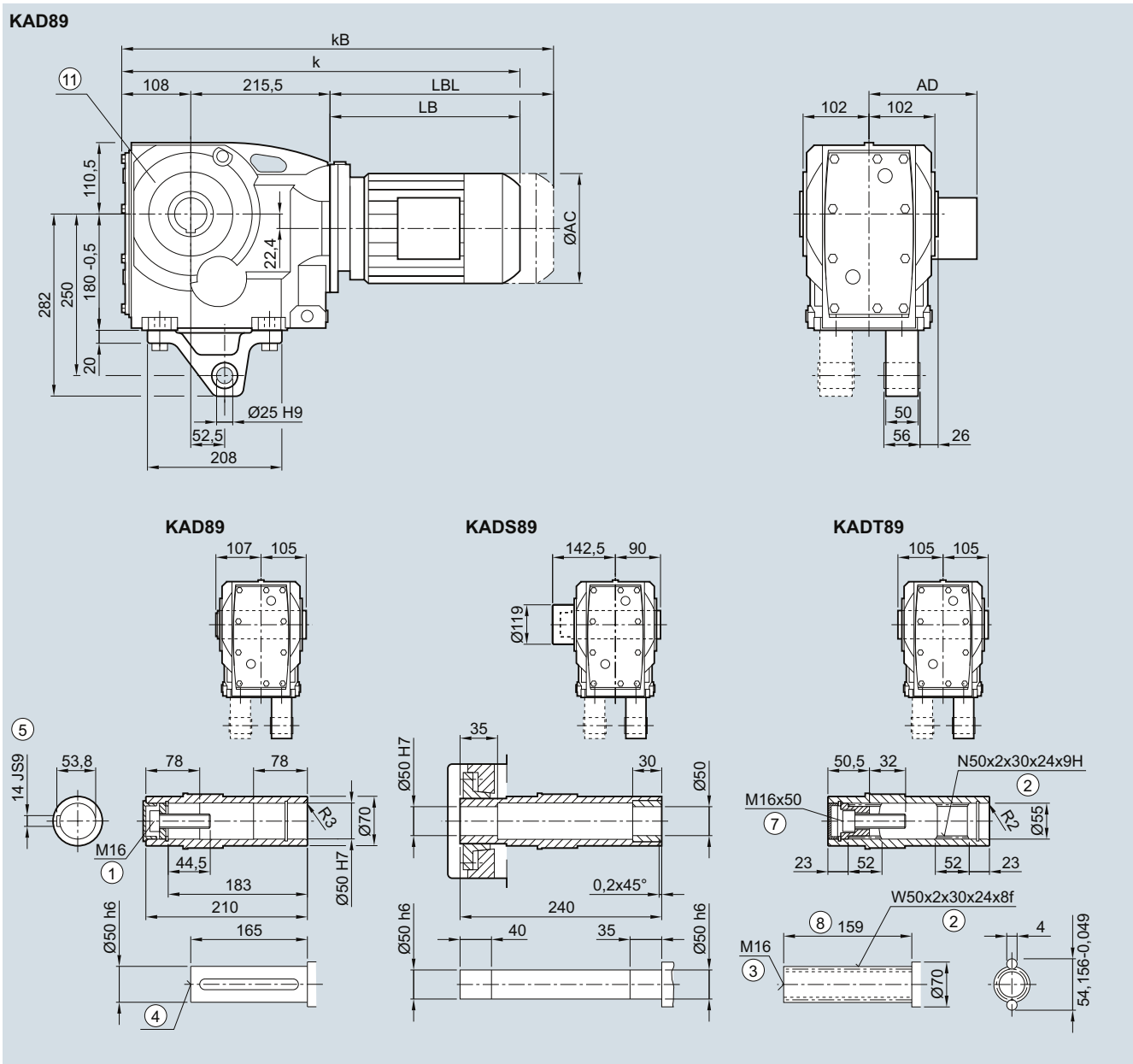
Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	538.0	598.0	633.0	659.5	699.5	716.0	751.0	726.0	751.0	779.0	829.0	861.0	921.0
kB	593.0	658.0	693.0	729.5	769.5	794.5	829.5	799.0	824.0	883.5	933.5	977.0	1 037.0
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

5

KAD.89 gearbox in a shaft-mounted design

KAD030, KADS030, KADT030



Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0
AD ¹⁾	134.4	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0
k	538.0	598.0	633.0	659.5	699.5	716.0	751.0	726.0	751.0	779.0	829.0	861.0	921.0
kB	593.0	658.0	693.0	729.5	769.5	794.5	829.5	799.0	824.0	883.5	933.5	977.0	1 037.0
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5	537.5	597.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0	653.5	713.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for housing flange design
 1) AD depends on the motor options, for other dimensions see page 8/42.

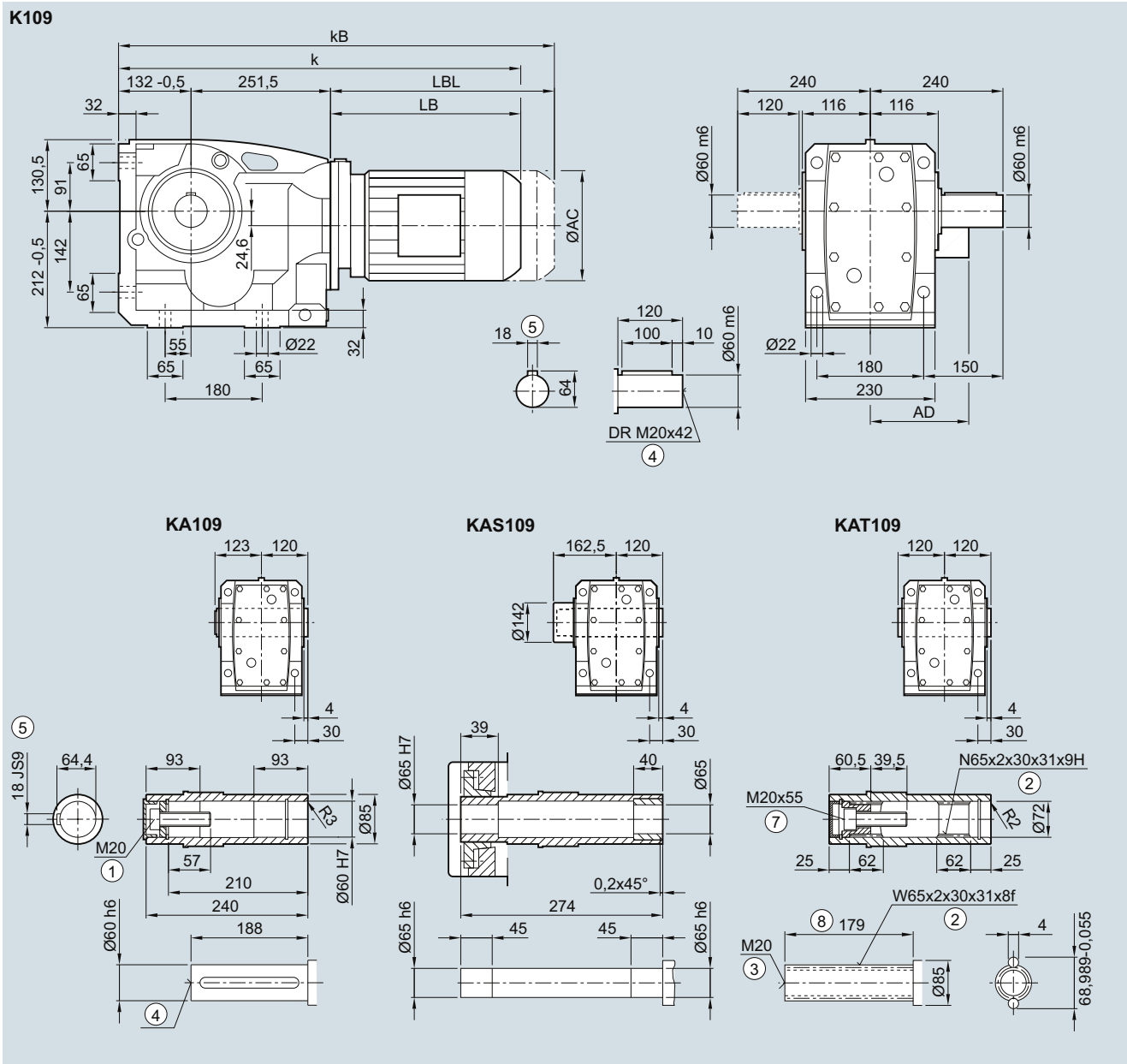
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K..109 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030



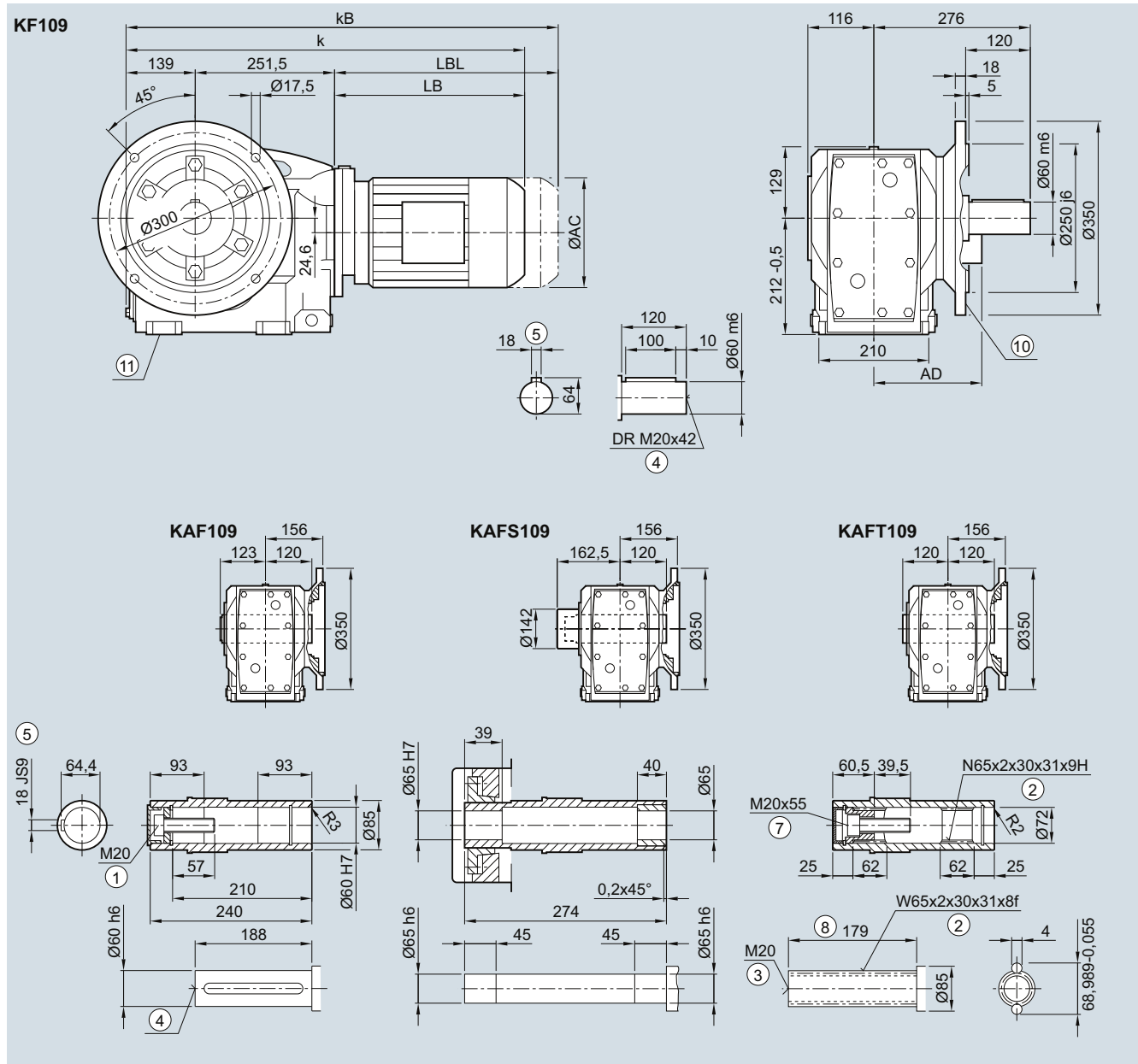
Motor	LES													
	80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	645.0	680.0	706.5	746.5	759.0	794.0	769.0	794.0	822.0	872.0	904.0	964.0	977.0	1 007.0
kB	705.0	740.0	776.5	816.5	837.5	872.5	842.0	867.0	926.5	976.5	1 020.0	1 080.0	1 106.0	1 136.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

K.F.109 gearbox in a flange-mounted design

KF030, KAF030, KAFS030, KAFT030



Motor	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	652.0	687.0	713.5	753.5	766.0	801.0	776.0	801.0	829.0	879.0	911.0	971.0	984.0	1 014.0
kB	712.0	747.0	783.5	823.5	844.5	879.5	849.0	874.0	933.5	983.5	1 027.0	1 087.0	1 113.0	1 143.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Inner contour see page 5/125 ⑩ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

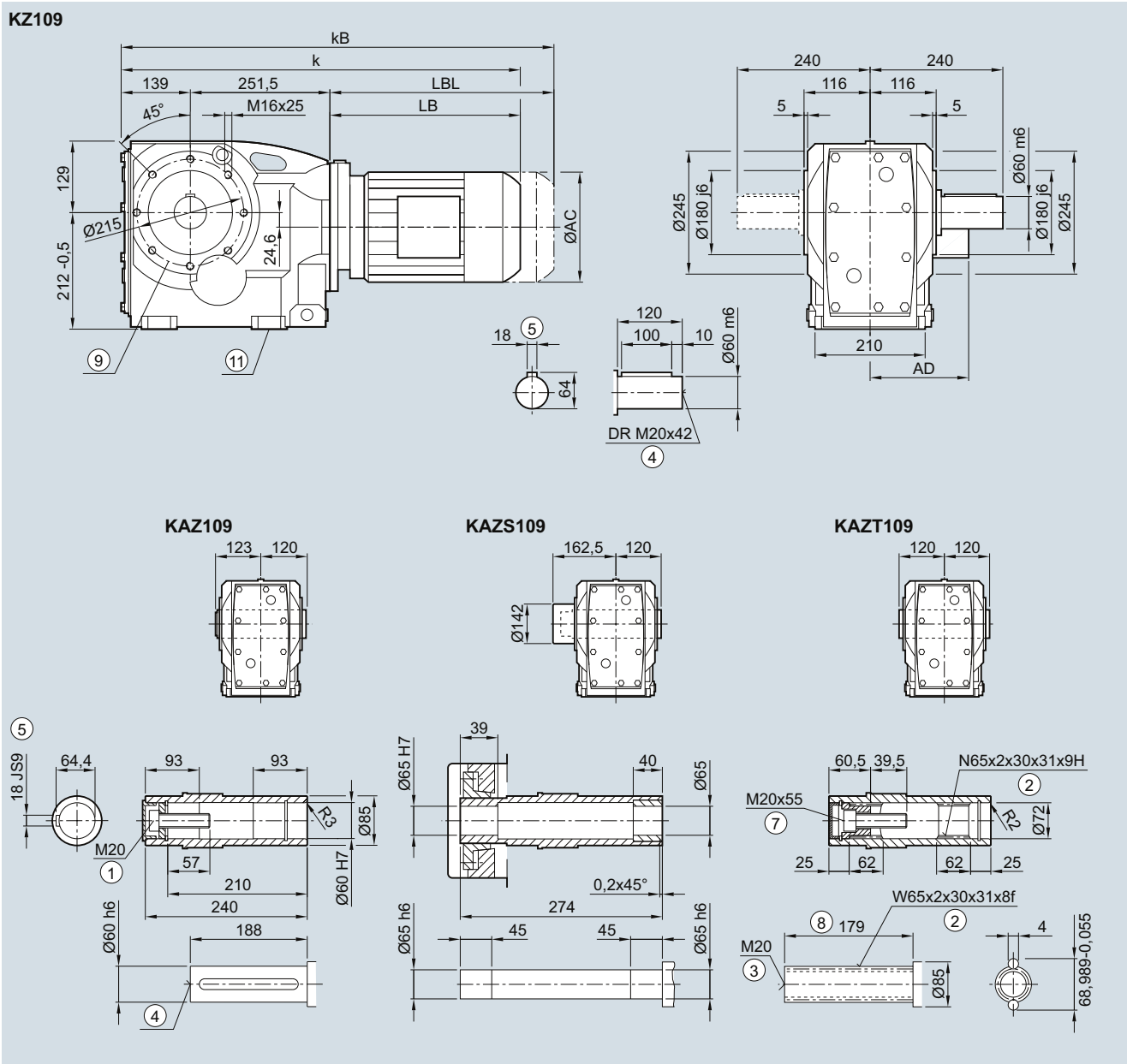
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K.Z.109 gearbox in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030



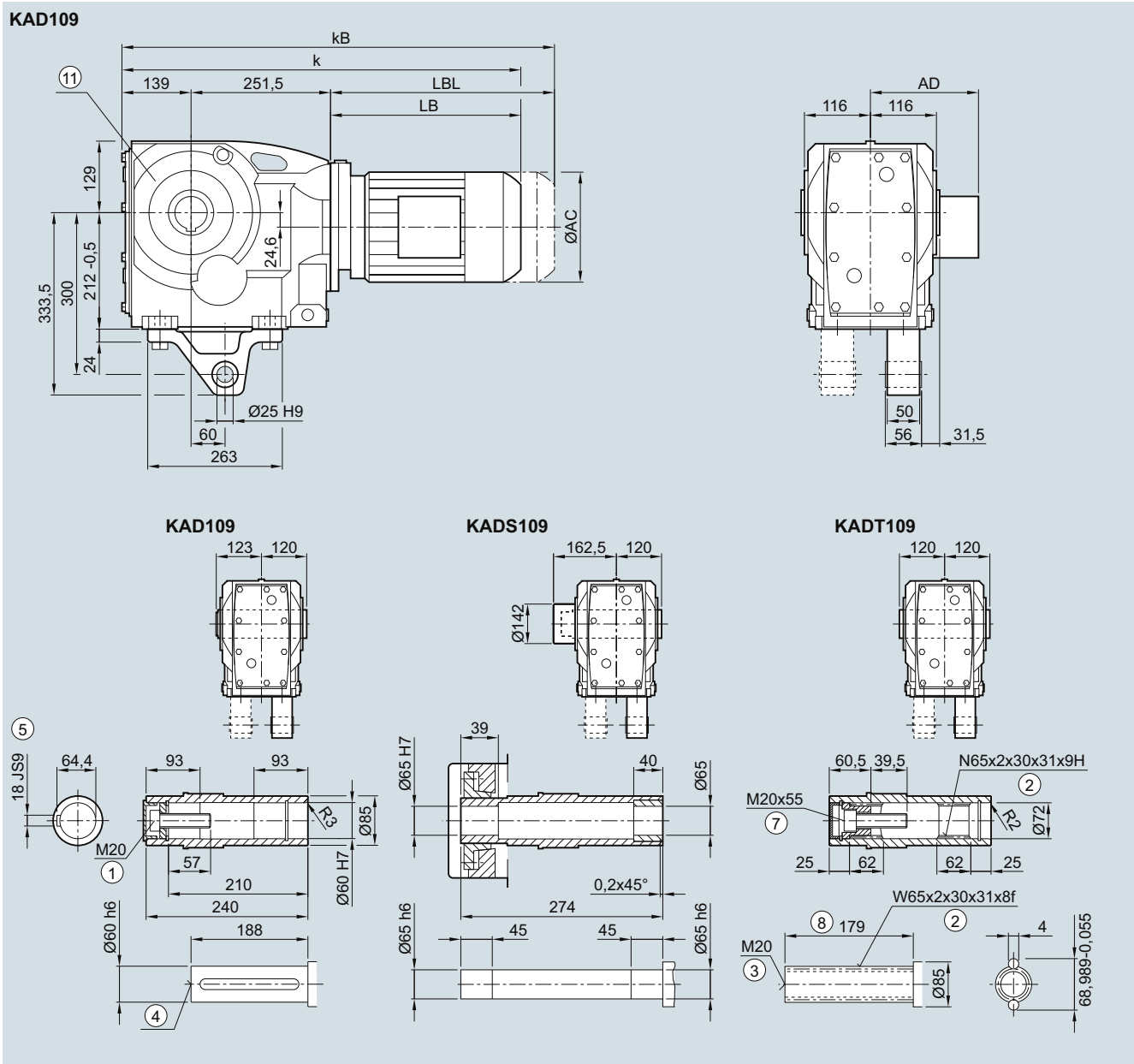
Motor	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	652.0	687.0	713.5	753.5	766.0	801.0	776.0	801.0	829.0	879.0	911.0	971.0	984.0	1 014.0
kB	712.0	747.0	783.5	823.5	844.5	879.5	849.0	874.0	933.5	983.5	1 027.0	1 087.0	1 113.0	1 143.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Pin holes see page 5/125

⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

KAD.109 gearbox in a shaft-mounted design
KAD030, KADS030, KADT030


Motor	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL
AC	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5
AD ¹⁾	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0
k	652.0	687.0	713.5	753.5	766.0	801.0	776.0	801.0	829.0	879.0	911.0	971.0	984.0	1 014.0
kB	712.0	747.0	783.5	823.5	844.5	879.5	849.0	874.0	933.5	983.5	1 027.0	1 087.0	1 113.0	1 143.0
LB	261.5	296.5	323.0	363.0	375.5	410.5	385.5	410.5	438.5	488.5	520.5	580.5	593.5	623.5
LBL	321.5	356.5	393.0	433.0	454.0	489.0	458.5	483.5	543.0	593.0	636.5	696.5	722.5	752.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for housing flange design
 1) AD depends on the motor options, for other dimensions see page 8/42.

SIMOGEAR Geared Motors

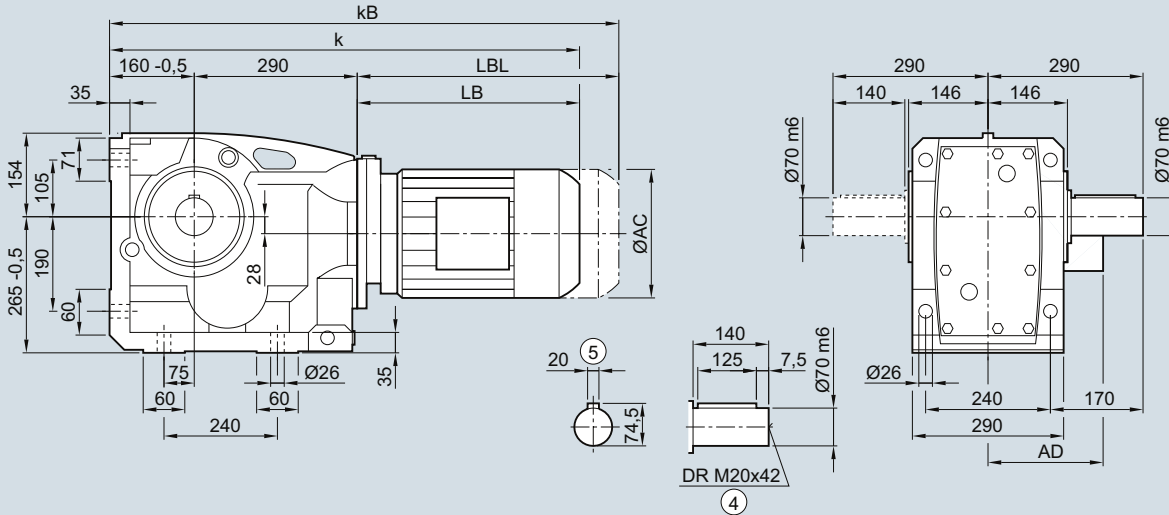
Bevel geared motors

Dimensions

K..129 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030

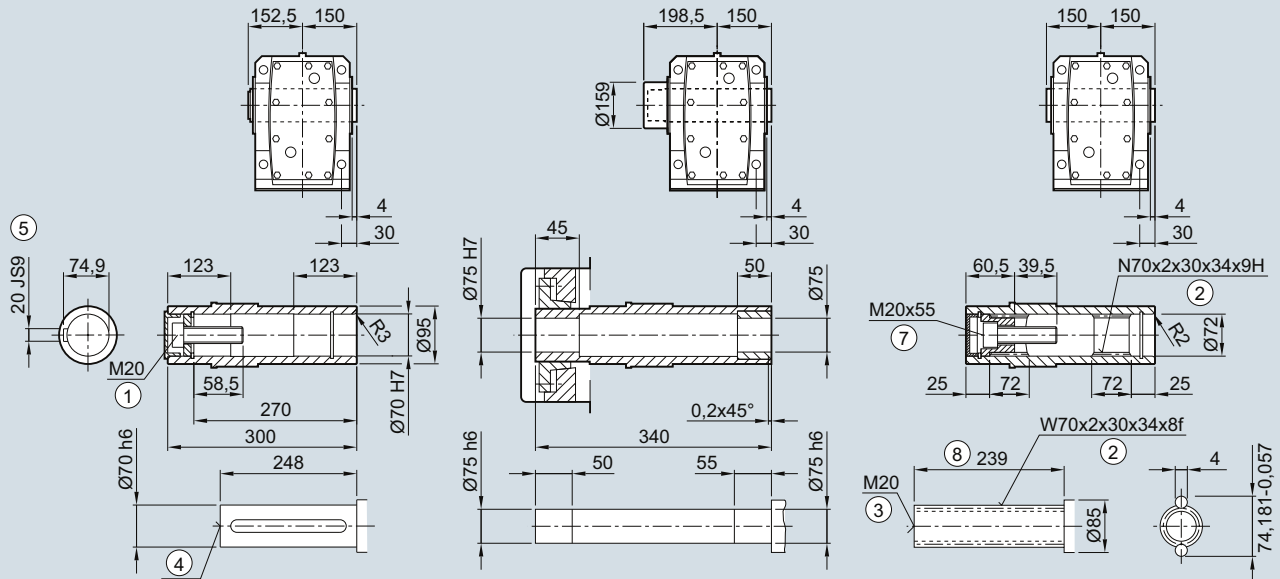
K129



KA129

KAS129

KAT129



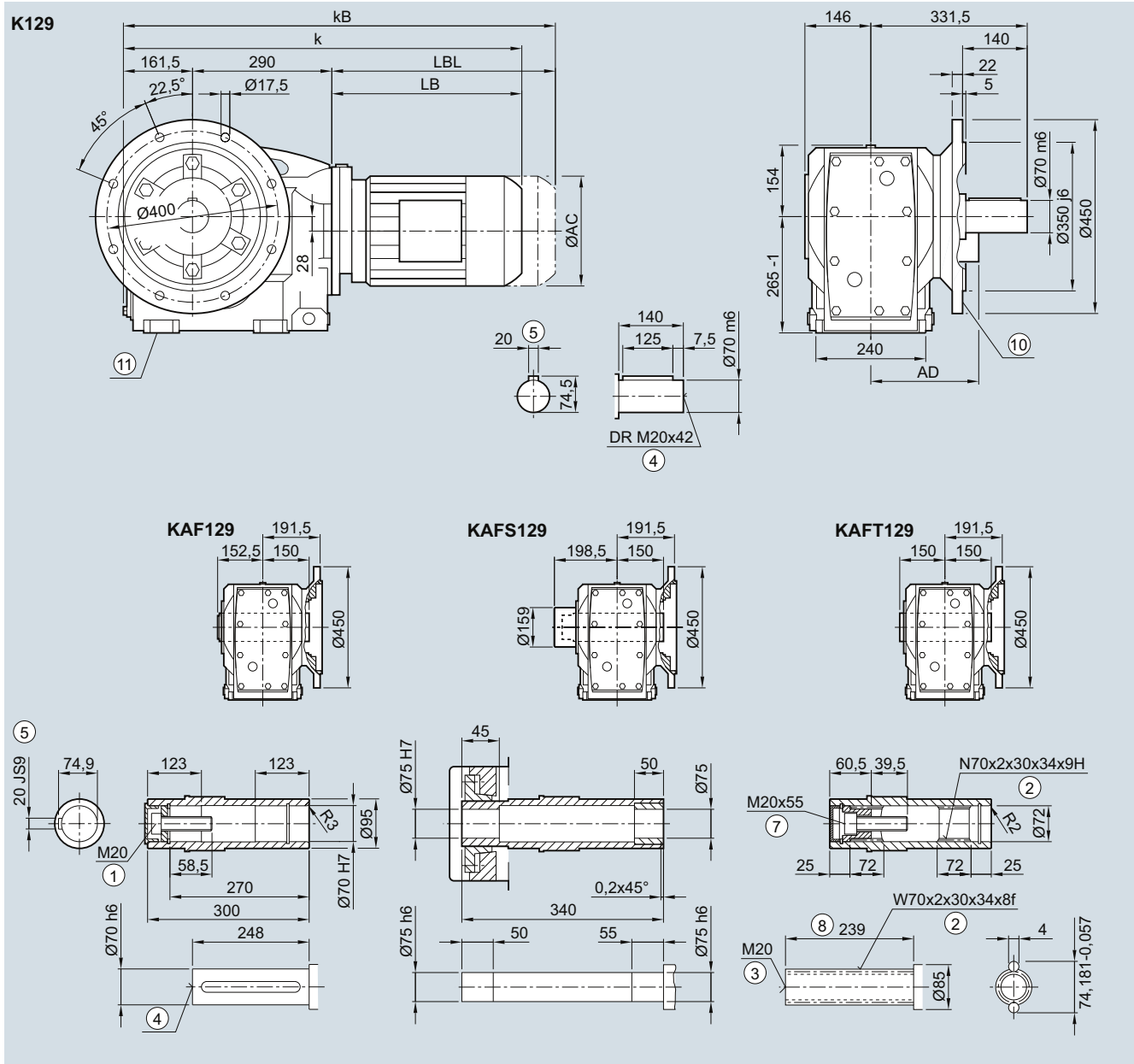
Motor	LE										LES					
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	766.0	806.0	816.5	851.5	826.5	851.5	879.5	929.5	961.5	1 021.5	1 034.5	1 064.5	1 102.5	1 127.5	1 148.0	1 208.0
kB	836.0	876.0	895.0	930.0	899.5	924.5	984.0	1 034.4	1 077.5	1 137.5	1 163.5	1 193.5	1 249.5	1 274.5	1 376.0	1 436.0
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.4	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926	986

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

K.F.129 gearbox in a flange-mounted design

KF030, KAF030, KAFS030, KAFT030



Motor	LE										LES					
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	767.5	807.5	818.0	853.0	828.0	853.0	881.0	931.0	963.0	1 023.0	1 036.0	1 066.0	1 104.0	1 129.0	1 149.5	1 209.5
kB	837.5	877.5	896.5	931.5	901.0	926.0	985.5	1 035.5	1 079.0	1 139.0	1 165.0	1 195.0	1 251.0	1 276.0	1 377.5	1 437.5
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.4	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Inner contour see page 5/125

⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

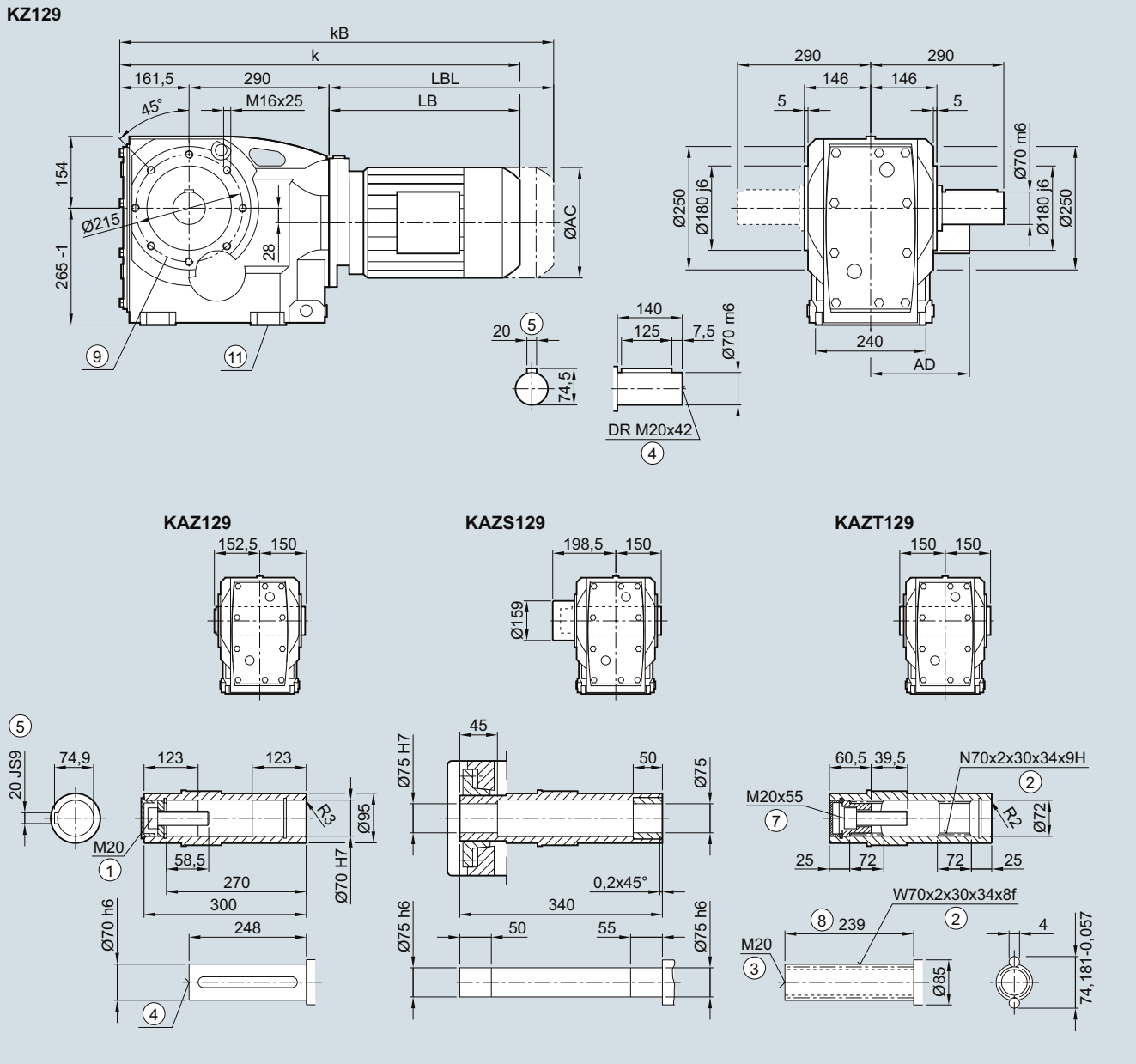
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K.Z.129 in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030



Motor	LE										LES					
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	767.5	807.5	818.0	853.0	828.0	853.0	881.0	931.0	963.0	1 023.0	1 036.0	1 066.0	1 104.0	1 129.0	1 149.5	1 209.5
kB	837.5	877.5	896.5	931.5	901.0	926.0	985.5	1 035.5	1 079.0	1 139.0	1 165.0	1 195.0	1 251.0	1 276.0	1 377.5	1 437.5
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.4	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

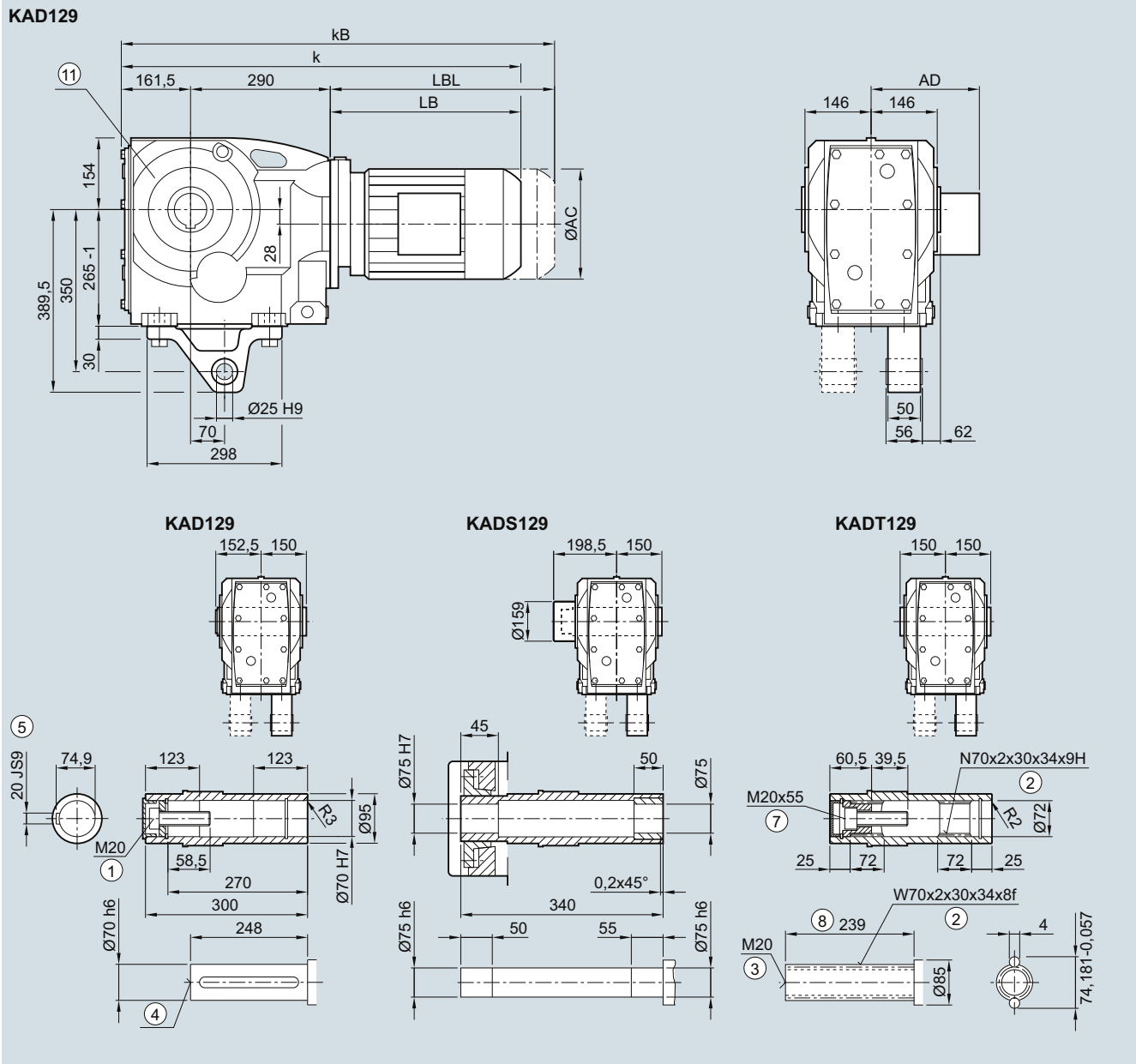
⑩ Pin holes see page 5/127

⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

KAD.129 gearbox in a shaft-mounted design

KAD030, KADS030, KADT030



Motor	LE										LES					
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0
k	767.5	807.5	818.0	853.0	828.0	853.0	881.0	931.0	963.0	1 023.0	1 036.0	1 066.0	1 104.0	1 129.0	1 149.5	1 209.5
kB	837.5	877.5	896.5	931.5	901.0	926.0	985.5	1 035.5	1 079.0	1 139.0	1 165.0	1 195.0	1 251.0	1 276.0	1 377.5	1 437.5
LB	316.0	356.0	366.5	401.5	376.5	401.5	429.5	479.5	511.5	571.5	584.5	614.5	652.5	677.5	698.0	758.0
LBL	386.0	426.0	445.0	480.0	449.5	474.5	534.4	584.0	627.5	687.5	713.5	743.5	799.5	824.5	926.0	986.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for housing flange design ⑩ AD depends on the motor options, for other dimensions see page 8/42.

SIMOGEAR Geared Motors

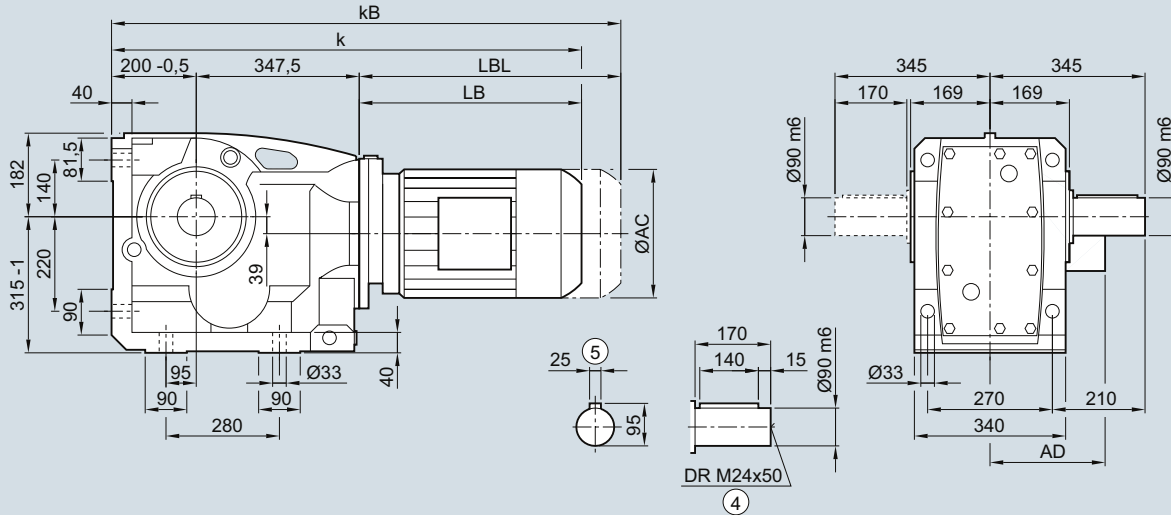
Bevel geared motors

Dimensions

K..149 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030

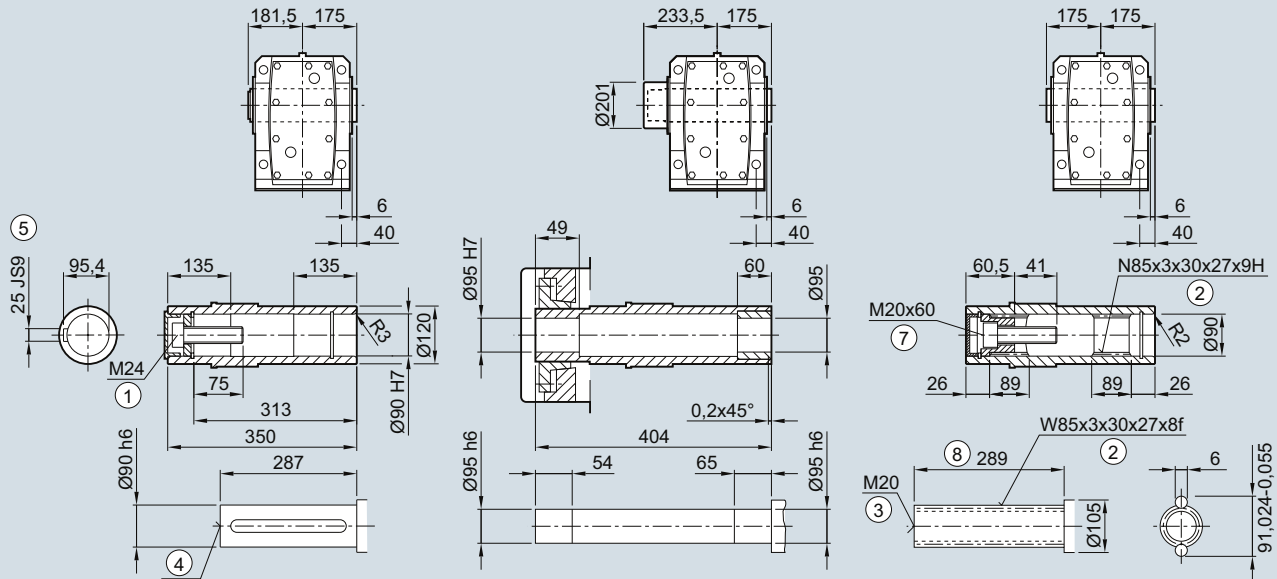
K149



KA149

KAS149

KAT149



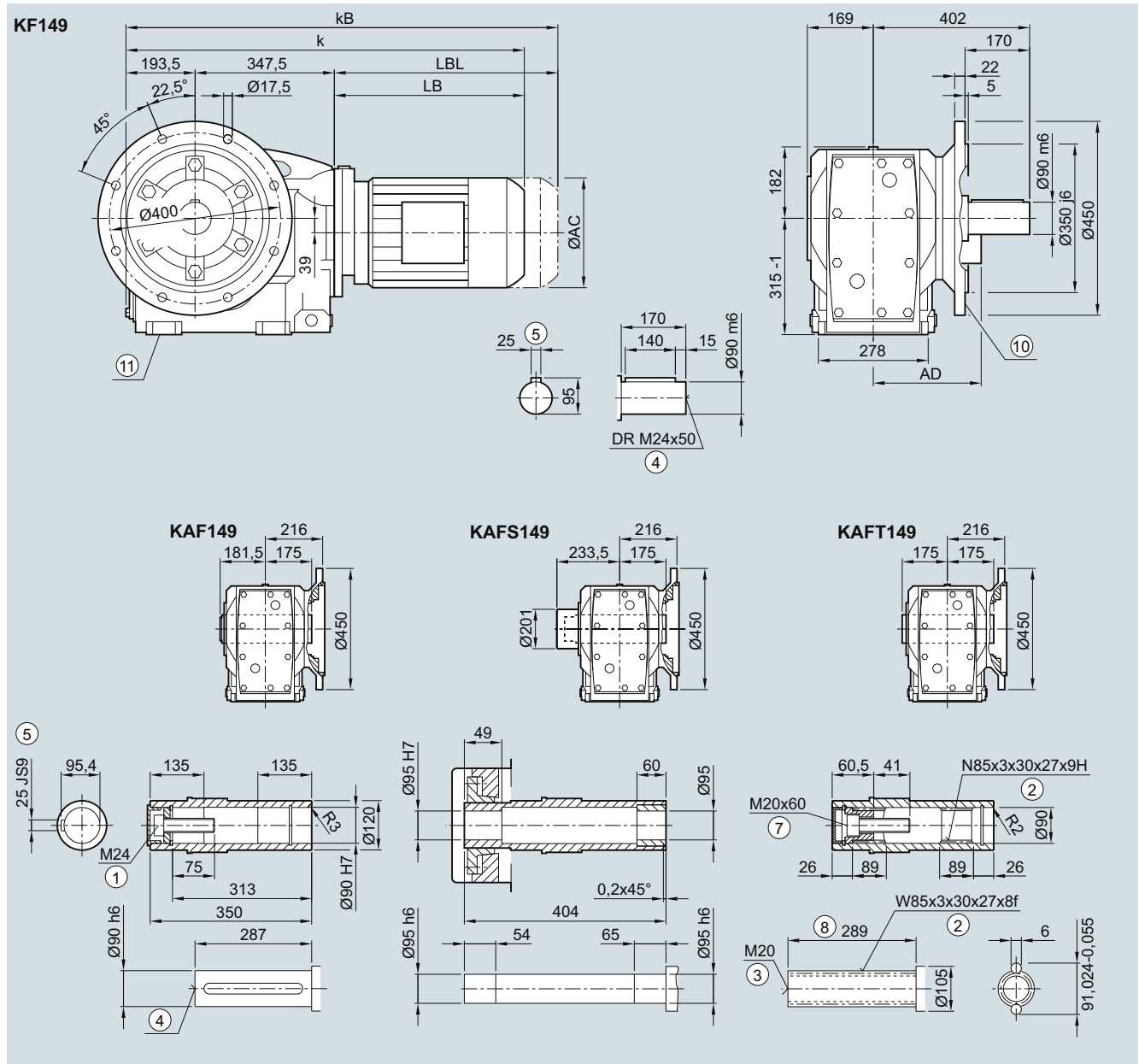
Motor	LE										LES							
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M	
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0	
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5	
k	856.5	896.5	905.0	940.0	915.0	940.0	966.0	1 016.0	1 048.0	1 108.0	1 121.0	1 151.0	1 189.0	1 214.0	1 240.5	1 300.5	1 346.0	
kB	926.5	966.5	983.5	1 018.5	988.0	1 013.0	1 070.5	1 120.5	1 164.0	1 224.0	1 250.0	1 280.0	1 336.0	1 361.0	1 468.5	1 528.5	1 571.0	
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5	
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5	

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

K.F.149 gearbox in a flange-mounted design

KF030, KAF030, KAFS030, KAFT030



Motor	LE										LES							
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225Y/M	250M	
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0	
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5	
k	850.0	890.0	898.5	933.5	908.5	933.5	959.5	1 009.5	1 041.5	1 101.5	1 114.5	1 144.5	1 182.5	1 207.5	1 234.4	1 294.0	1 339.5	
kB	920.0	960.0	977.0	1 012.0	981.5	1 006.5	1 064.0	1 114.0	1 157.5	1 217.5	1 243.5	1 273.5	1 329.5	1 354.5	1 462.0	1 522.0	1 564.5	
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5	
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5	

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Inner contour see page 5/125

⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

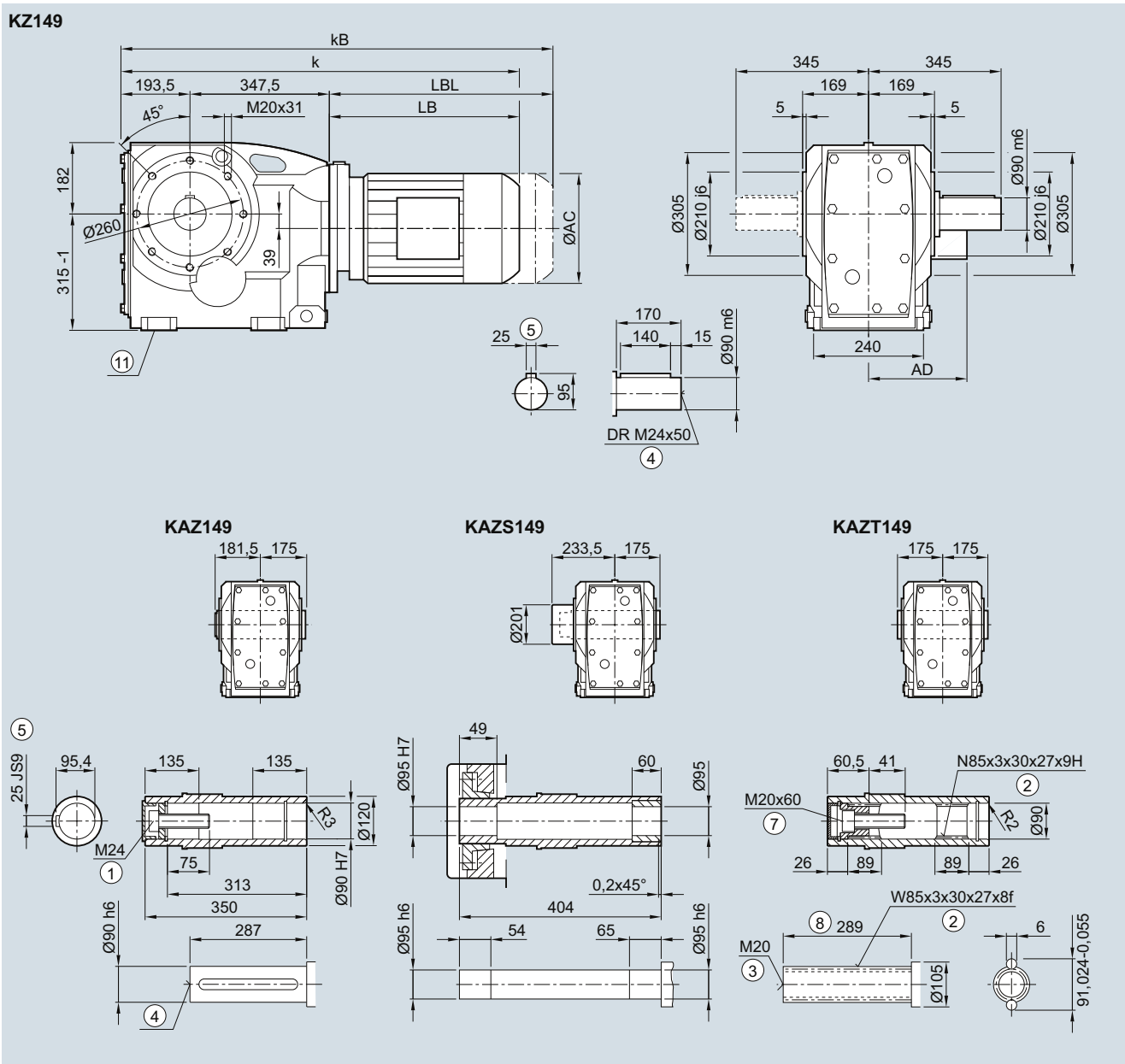
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K.Z.149 in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030

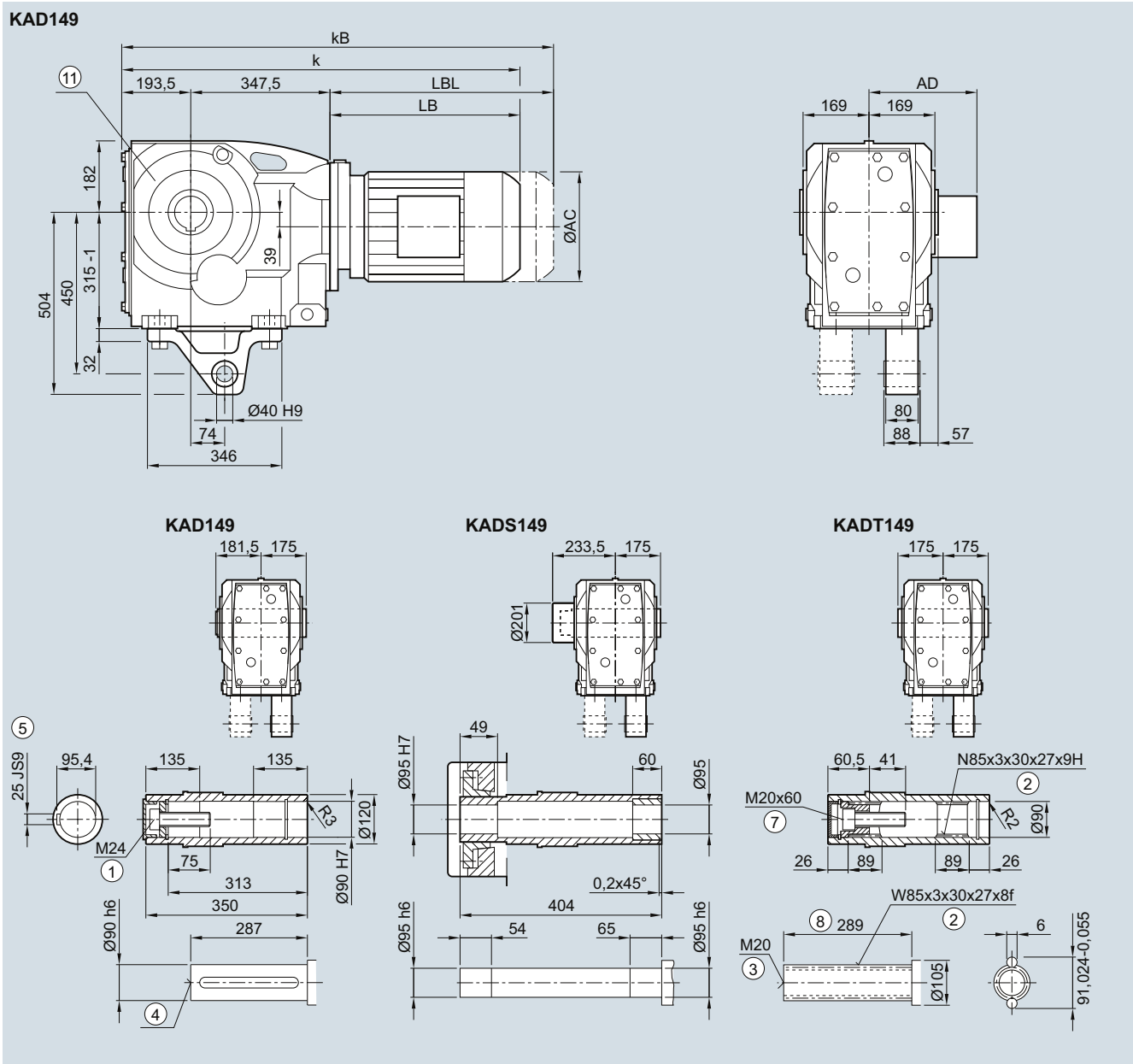


Motor	LE					LES												
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M	
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0	
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5	
k	850.0	890.0	898.5	933.5	908.5	933.5	959.5	1 009.5	1 041.5	1 101.5	1 114.5	1 144.5	1 182.5	1 207.5	1 234.4	1 294.0	1 339.5	
kB	920.0	960.0	977.0	1 012.0	981.5	1 006.5	1 064.0	1 114.0	1 157.5	1 217.5	1 243.5	1 273.5	1 329.5	1 354.5	1 462.0	1 522.0	1 564.5	
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5	
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5	

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design ⑩ AD depends on the motor options, for other dimensions see page 8/42.

KAD.149 gearbox in a shaft-mounted design

KAD030, KADS030, KADT030



Motor	LE										LES							
	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M	
AC	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0	
AD ¹⁾	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5	
k	850.0	890.0	898.5	933.5	908.5	933.5	959.5	1 009.5	1 041.5	1 101.5	1 114.5	1 144.5	1 182.5	1 207.5	1 234.4	1 294.0	1 339.5	
kB	920.0	960.0	977.0	1 012.0	981.5	1 006.5	1 064.0	1 114.0	1 157.5	1 217.5	1 243.5	1 273.5	1 329.5	1 354.5	1 462.0	1 522.0	1 564.5	
LB	309.0	349.0	357.5	392.5	367.5	392.5	418.5	468.5	500.5	560.5	573.5	603.5	641.5	666.5	693.0	753.0	798.5	
LBL	379.0	419.0	436.0	471.0	440.5	465.5	523.0	573.0	616.5	676.5	702.5	732.5	788.5	813.5	921.0	981.0	1 023.5	

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Pin holes see page 5/125

⑪ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions see page 8/42.

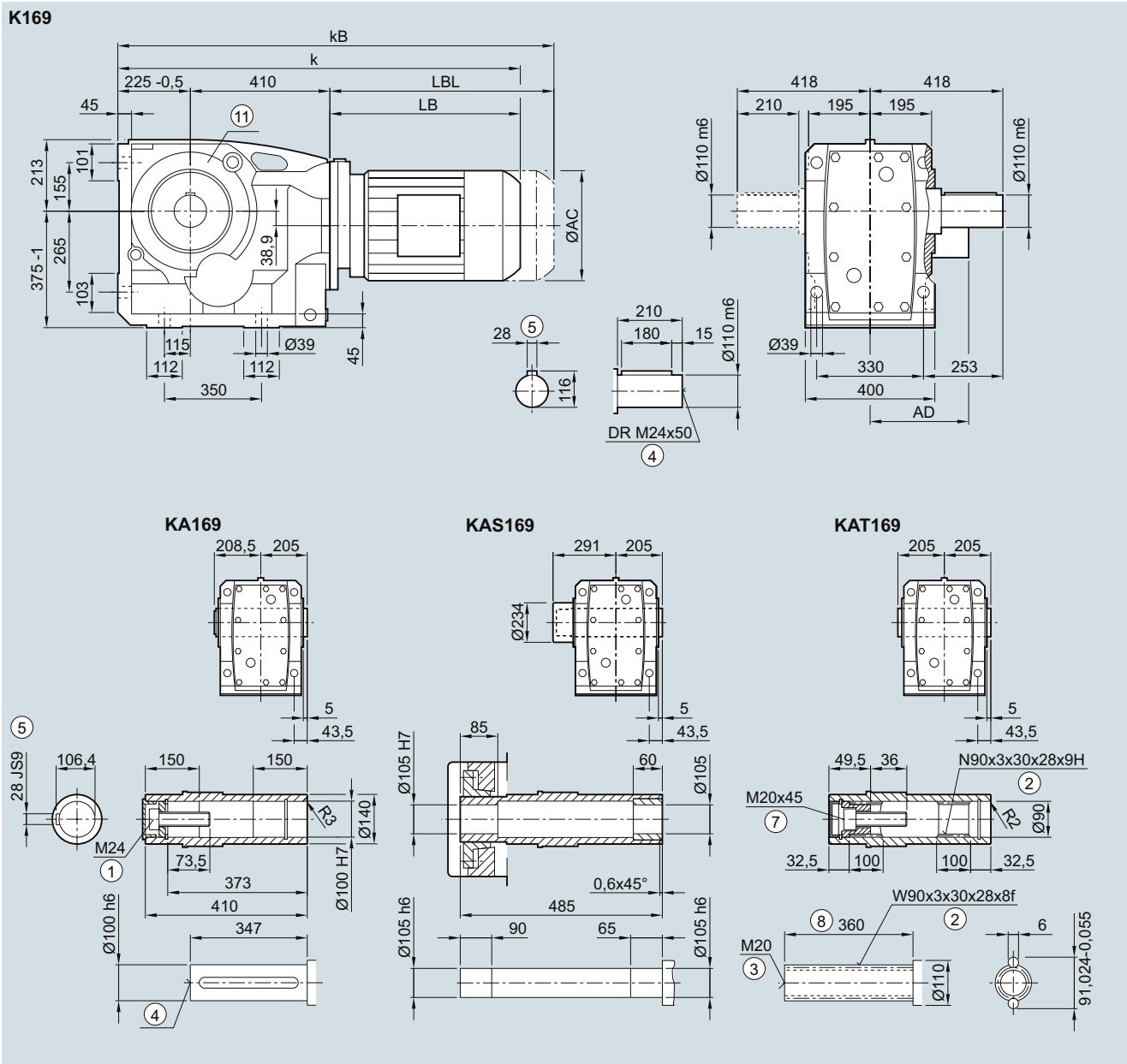
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K..169 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030

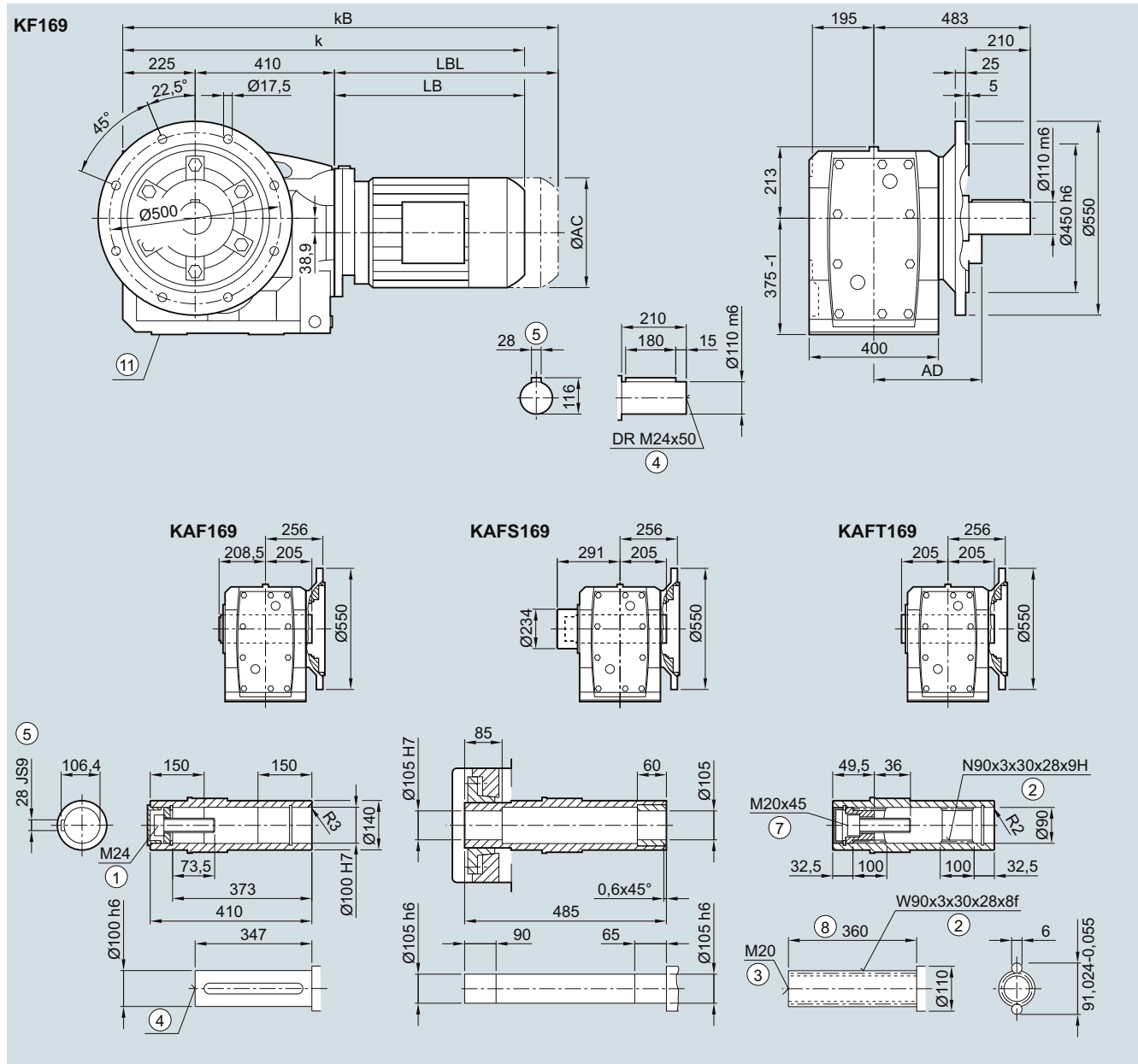


Motor	LE								LES						
	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	991.0	1 026.0	1 001.0	1 026.0	1 047.0	1 097.0	1 129.0	1 189.0	1 202.0	1 232.0	1 270.0	1 295.0	1 315.5	1 375.5	1 427.0
kB	1 069.5	1 104.5	1 074.0	1 099.0	1 151.5	1 201.5	1 245.0	1 305.0	1 331.0	1 361.0	1 417.0	1 442.0	1 543.5	1 603.5	1 652.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.5	740.5	792.0
LBL	434.5	469.5	439	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	1 017.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

K.F.169 gearbox in a flange-mounted design

KF030, KAF030, KAFS030, KAFT030



Motor	LE					LES					LE				
	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	991.0	1026.0	1001.0	1026.0	1047.0	1097.0	1129.0	1189.0	1202.0	1232.0	1 270.0	1 295.0	1 315.5	1 375.5	1 427.0
kB	1069.5	1104.5	1074.0	1099.0	1151.5	1201.5	1245.0	1305.0	1331.0	1361.0	1 417.0	1 442.0	1 543.5	1 603.5	1 652.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.55	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	10 17.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Inner contour see page 5/125

⑪ Use bores only for foot-mounted design

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

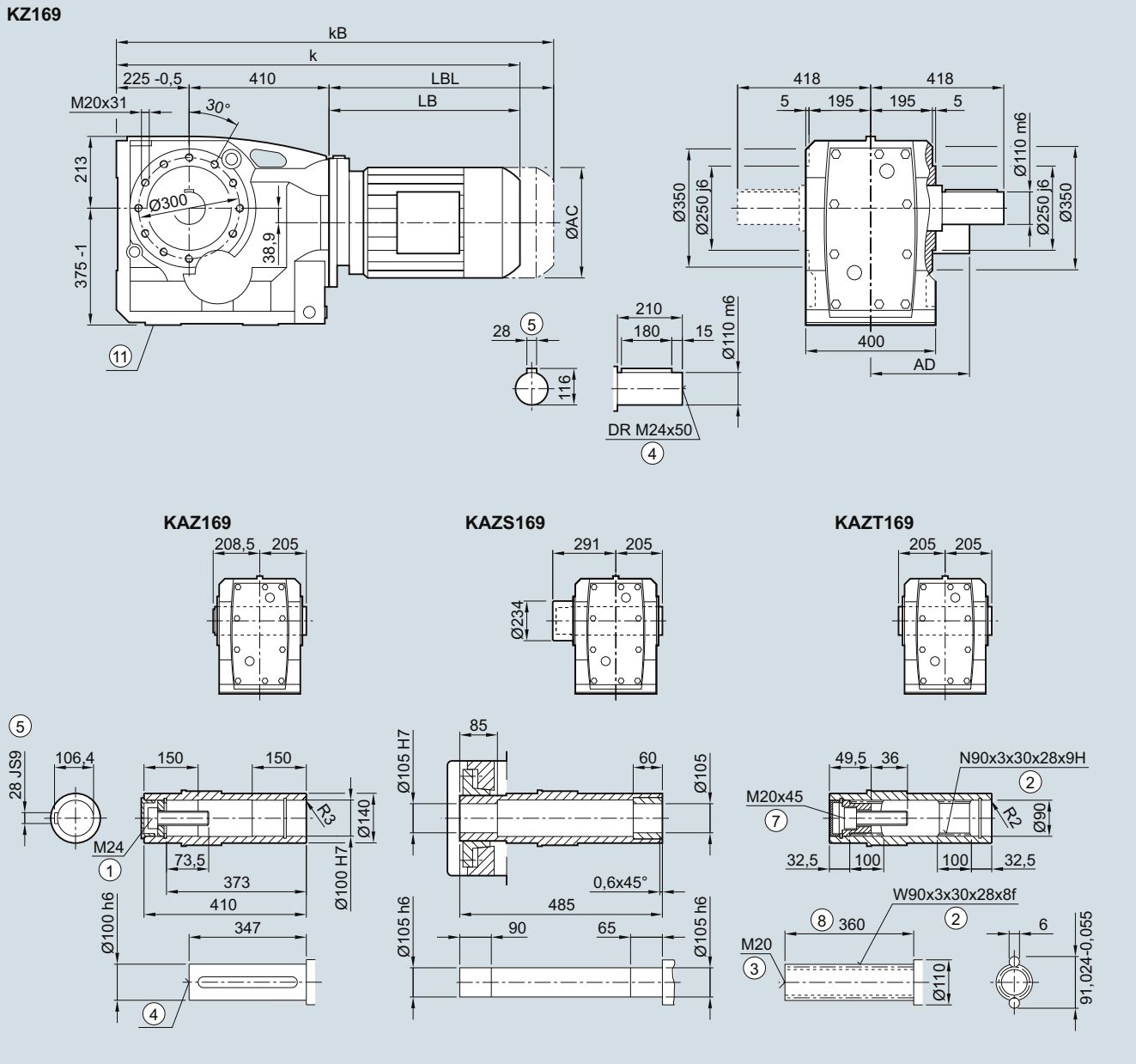
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K.Z.169 gearbox in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030

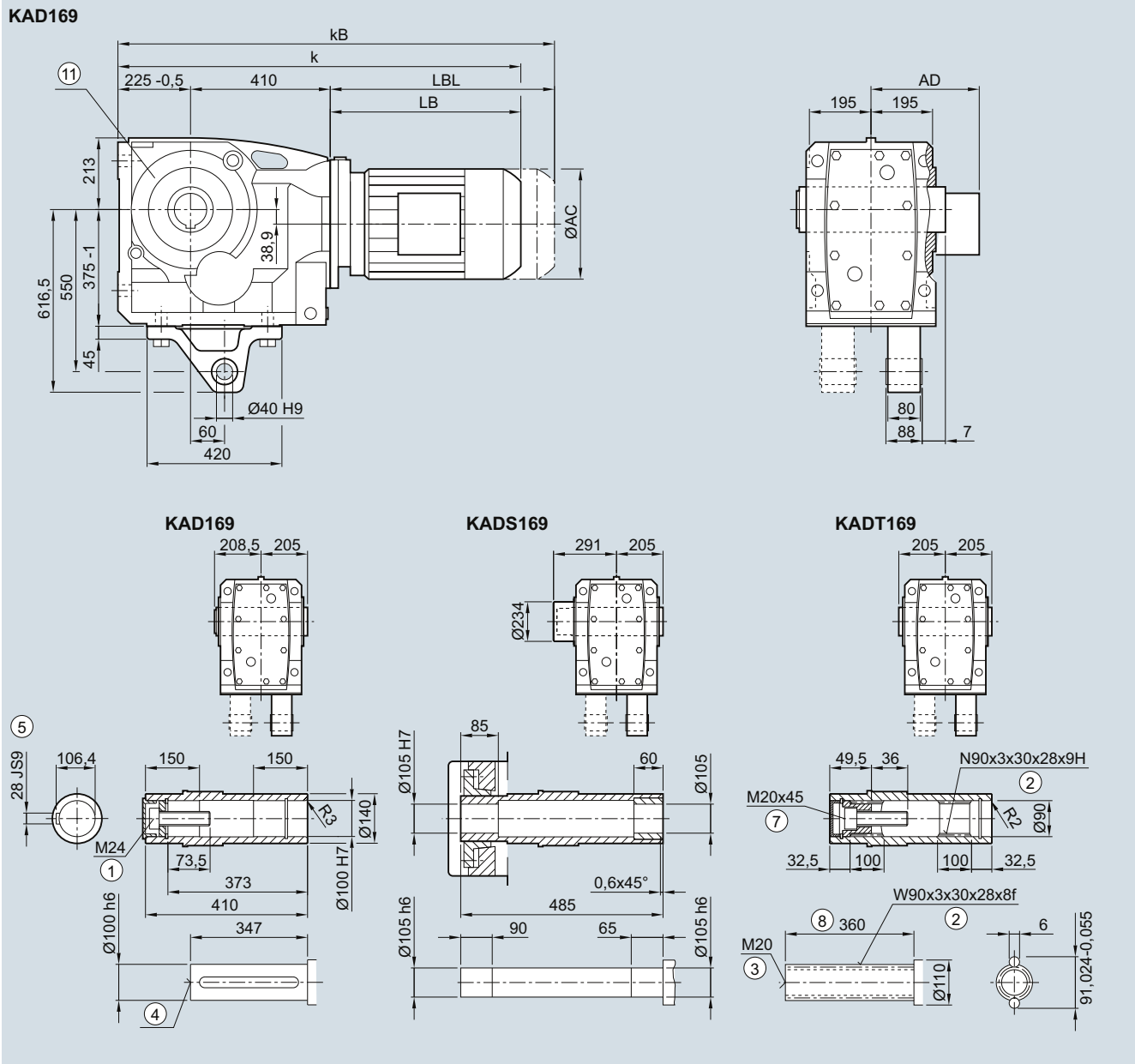


Motor	LE								LES						
	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	991.0	1026.0	1001.0	1026.0	1047.0	1097.0	1129.0	1189.0	1202.0	1232.0	1 270.0	1 295.0	1 315.5	1 375.5	1 427.0
kB	1069.5	1104.5	1074.0	1099.0	1151.5	1201.5	1245.0	1305.0	1331.0	1361.0	1 417.0	1 442.0	1 543.5	1 603.5	1 652.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.55	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	10 17.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design ⑩ AD depends on the motor options, for other dimensions see page 8/42.

KAD.169 gearbox in a shaft-mounted design

KAD030, KADS030, KADT030



Motor	LE					LES									
	100L	100ZL	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	198.0	198.0	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	170.5	170.5	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	991.0	1026.0	1001.0	1026.0	1047.0	1097.0	1129.0	1189.0	1202.0	1232.0	1 270.0	1 295.0	1 315.5	1 375.5	1 427.0
kB	1069.5	1104.5	1074.0	1099.0	1151.5	1201.5	1245.0	1305.0	1331.0	1361.0	1 417.0	1 442.0	1 543.5	1 603.5	1 652.0
LB	356.0	391.0	366.0	391.0	412.0	462.0	494.0	554.0	567.0	597.0	635.0	660.0	680.55	740.5	792.0
LBL	434.5	469.5	439.0	464.0	516.5	566.5	610.0	670.0	696.0	726.0	782.0	807.0	908.5	968.5	10 17.0

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

⑩ Pin holes see page 5/127

⑪ Use bores only for foot-mounted design

1) AD depends on the motor options, for other dimensions see page 8/42.

SIMOGEAR Geared Motors

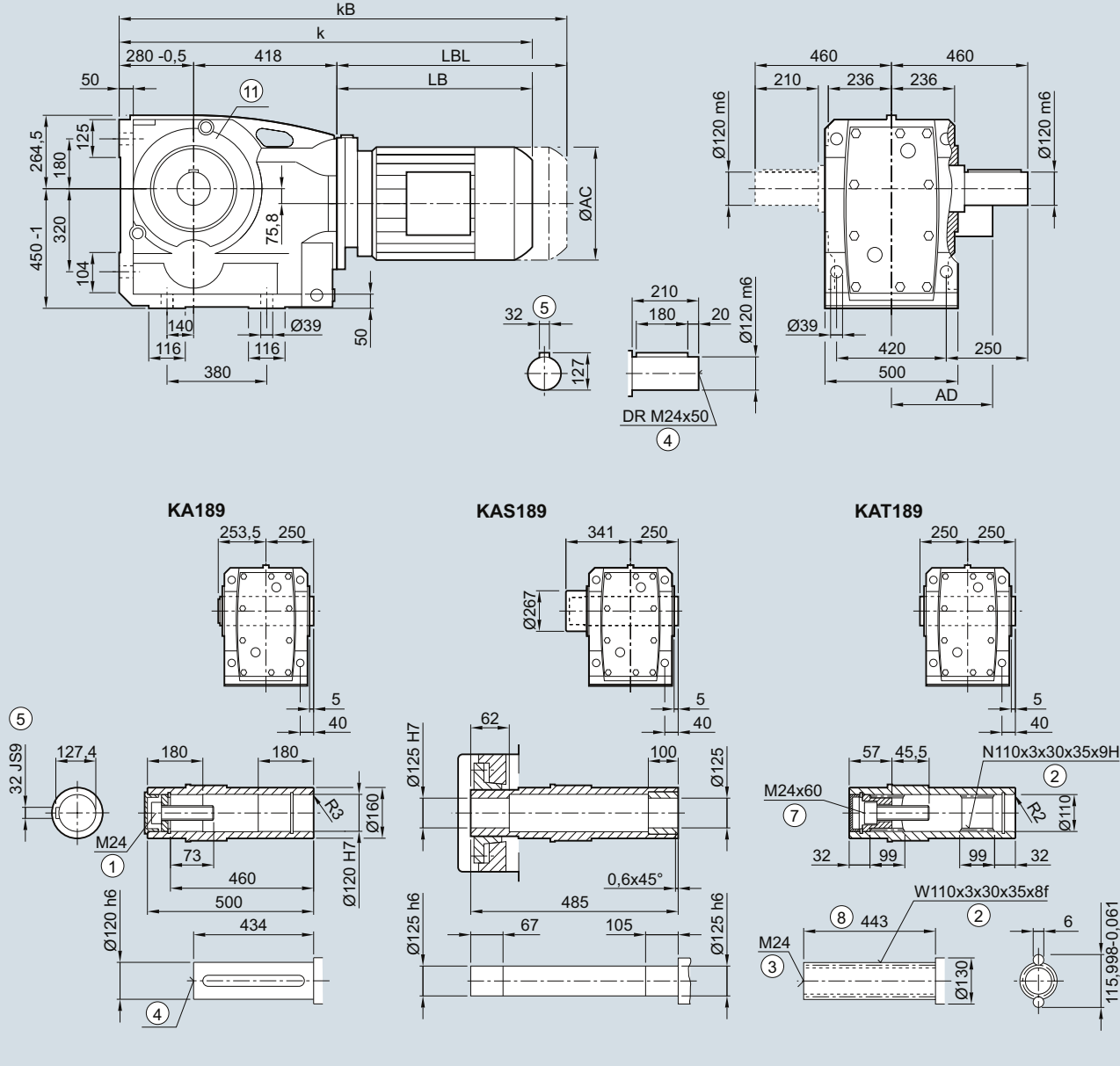
Bevel geared motors

Dimensions

K..189 gearbox in a foot-mounted design

K030, KA030, KAS030, KAT030

K189



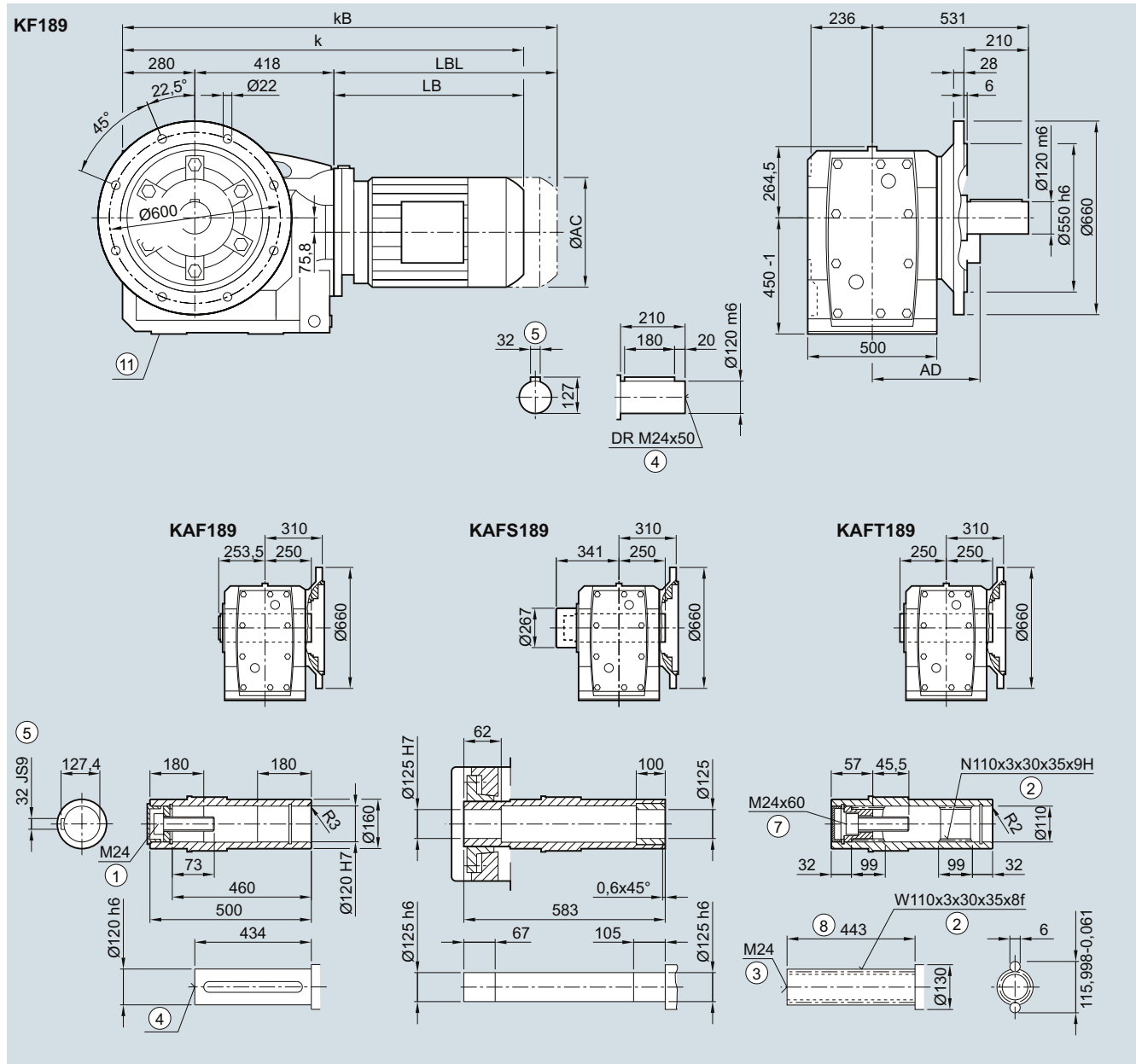
Motor	LE				LES									
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M	
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0	
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5	
k	1 051.5	1 076.5	1 097.0	1 147.0	1 179.0	1 239.0	1 251.5	1 281.5	1 319.5	1 344.5	1 364.0	1 424.0	1 471.5	
kB	1 124.5	1 149.5	1 201.5	1 251.5	1 295.0	1 355.0	1 380.5	1 410.5	1 466.5	1 491.5	1 592.0	1 652.0	1 696.5	
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5	
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5	

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

K.F.189 gearbox in a flange-mounted design

KF030, KAF030, KAFS030, KAFT030



Motor	LE				LES								
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	1 051.5	1 076.5	1 097.0	1 147.0	1 179.0	1 239.0	1 251.5	1 281.5	1 319.5	1 344.5	1 364.0	1 424.0	1 471.5
kB	1 124.5	1 149.5	1 201.5	1 251.5	1 295.0	1 355.0	1 380.5	1 410.5	1 466.5	1 491.5	1 592.0	1 652.0	1 696.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Inner contour see page 5/125 ⑩ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

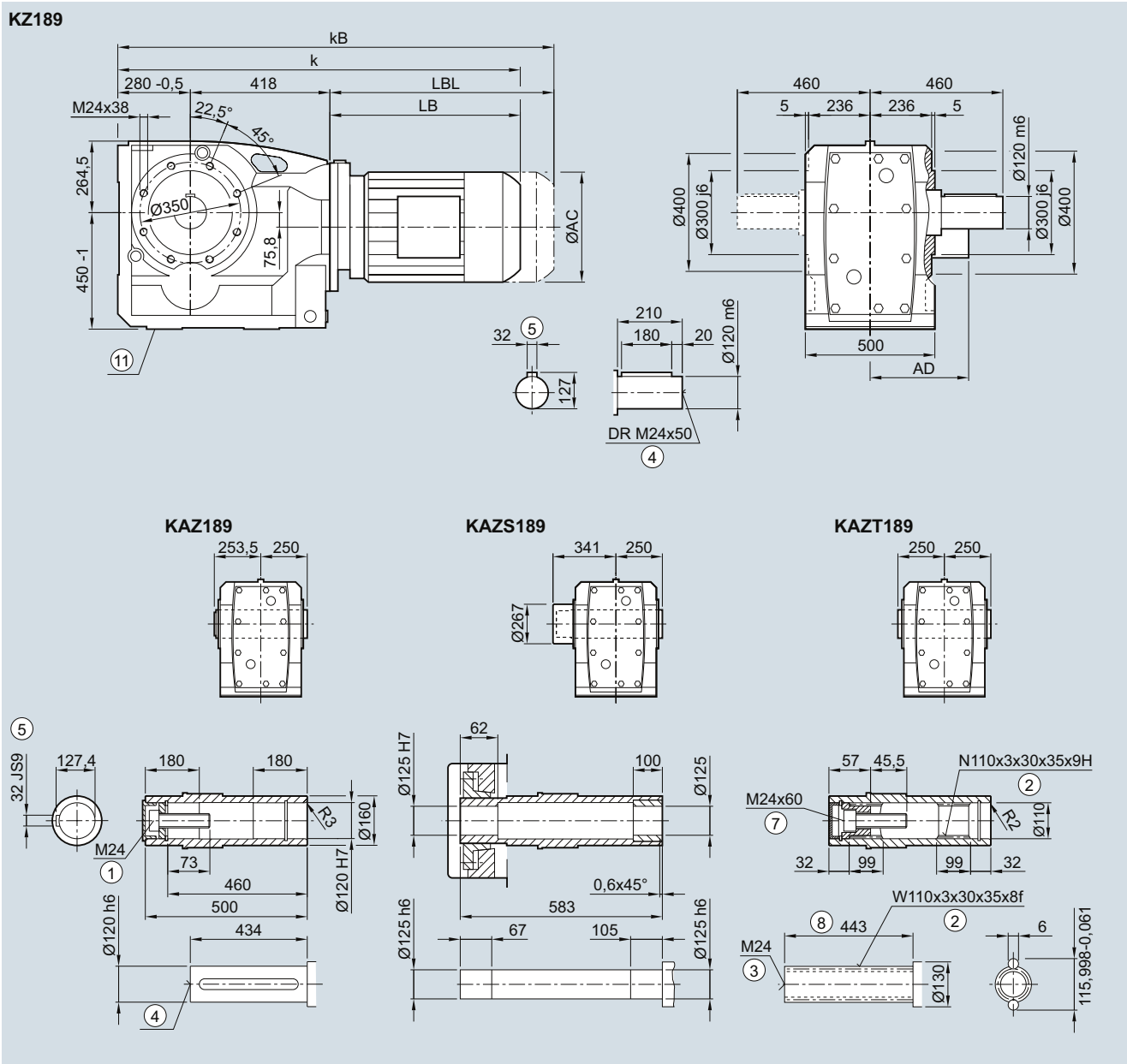
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

K.Z.189 gearbox in a housing flange design

KZ030, KAZ030, KAZS030, KAZT030



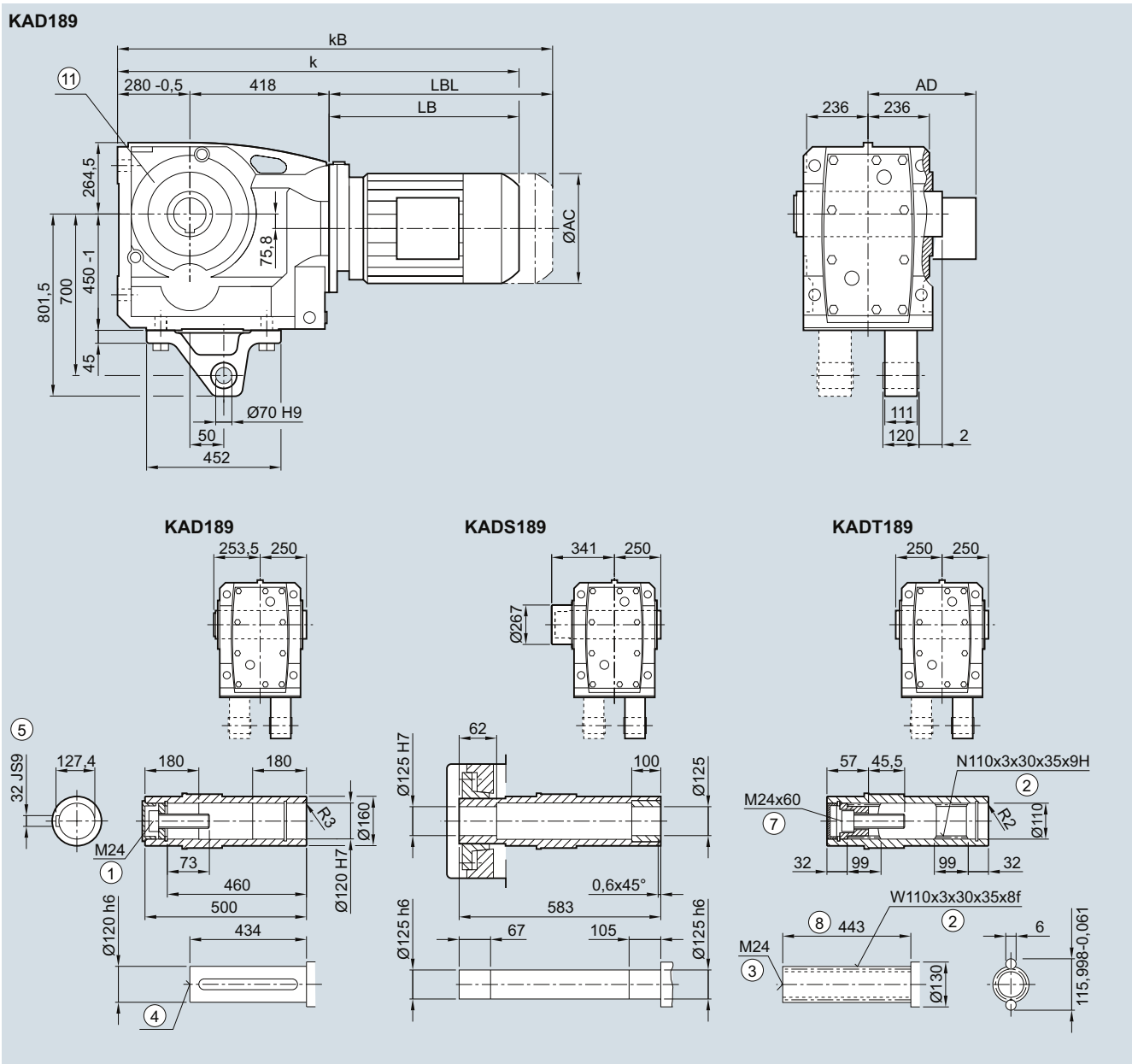
Motor	LE				LES								
	112M	112ZM	132S/M	132ZM	160M/L	160ZL	180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	1 051.5	1 076.5	1 097.0	1 147.0	1 179.0	1 239.0	1 251.5	1 281.5	1 319.5	1 344.5	1 364.0	1 424.0	1 471.5
kB	1 124.5	1 149.5	1 201.5	1 251.5	1 295.0	1 355.0	1 380.5	1 410.5	1 466.5	1 491.5	1 592.0	1 652.0	1 696.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑨ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

5

KAD.189 gearbox in a shaft-mounted design

KAD030, KADS030, KADT030

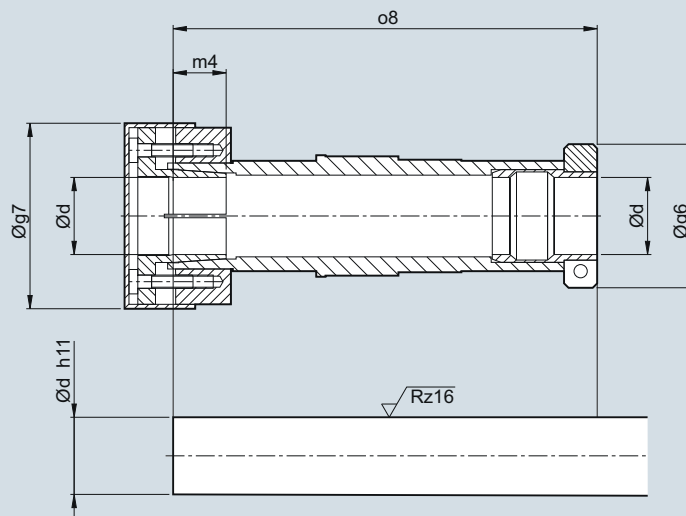
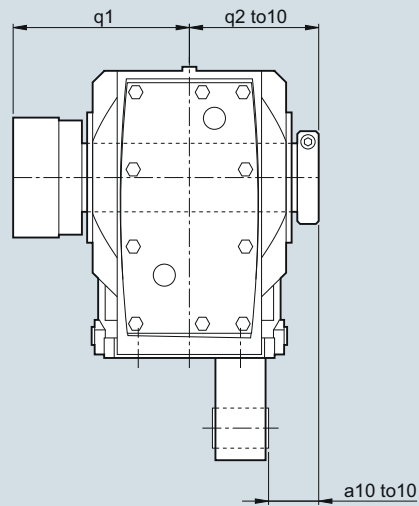
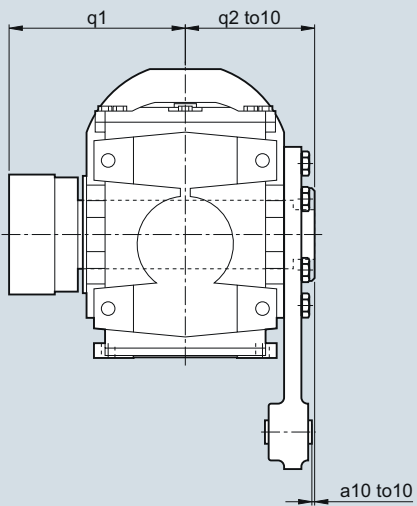


Motor	LE 112M	112ZM	132S/M	132ZM	160M/L	160ZL	LES 180M/L	180ZL	200L	200ZL	225S/M	225YM	250M
AC	222.0	222.0	264.0	264.0	318.0	318.0	352.5	352.5	392.5	392.5	439.0	439.0	487.0
AD ¹⁾	181.5	181.5	207.0	207.0	241.0	241.0	292.0	292.0	315.0	315.0	382.0	382.0	457.5
k	1 051.5	1 076.5	1 097.0	1 147.0	1 179.0	1 239.0	1 251.5	1 281.5	1 319.5	1 344.5	1 364.0	1 424.0	1 471.5
kB	1 124.5	1 149.5	1 201.5	1 251.5	1 295.0	1 355.0	1 380.5	1 410.5	1 466.5	1 491.5	1 592.0	1 652.0	1 696.5
LB	353.5	378.5	399.0	449.0	481.0	541.0	553.5	583.5	621.5	646.5	666.0	726.0	773.5
LBL	426.5	451.5	503.5	553.5	597.0	657.0	682.5	712.5	768.5	793.5	894.0	954.0	998.5

① ISO 4014 ② DIN 5480 ③ DIN 332-D ④ DIN 332 ⑤ Feather key/keyway DIN 6885 ⑦ ISO 4762 ⑧ Without locating shoulder +1 mm
 ⑩ Pin holes see page 5/127 ⑪ Use bores only for foot-mounted design
 1) AD depends on the motor options, for other dimensions see page 8/42.

SIMOGEAR Geared Motors

Bevel geared motors

Dimensions**SIMOLOC assembly system****BADR****KADR**

Note mounting tolerance to10 when positioning the torque arm.

SIMOLOC assembly system (continued)

d	g6	g7	m4	o8	q1	q2	a10	to10
BADR29								
20	58.5	56	18.5	151	102	75	11	+2.1
1"								+0.6
0.75"								
BADR39								
30	62.0	76	22	180.5	116	85	2.5	+2.2
25								+0.7
1.25"								
1.1875"								
1"								
BADR49								
35	65.0	84	24	210.0	134	100	-2.5	+2.6
30								+0.8
1.375"								
1.4375"								
1.25"								
1.1875"								
40	79.5	94	30	220	140	104	1.5	
1.625"								
KADR39								
30	62.0	76	22	160.5	106	75	39	+2.2
25								+0.7
1.25"								
1.1875"								
1"								
KADR49								
35	65.0	84	24	192.0	124	90	35	+2.6
30								+0.8
1.375"								
1.4375"								
1.25"								
1.1875"								
KADR69								
40	79.5	94	30	217.5	138	102	39	+2.5
35								+0.7
1.5"								
1.625"								
1.4375"								
1.375"								
KADR79								
40	79.5	94	30	232.0	150	109	46	+3.2
35								+1.4
1.5"								
1.625"								
1.4375"								
1.375"								
KADR89								
50	89.0	114	32	264.0	171	124	45	+3.4
40								+1.5
2"								
1.9375"								
1.75"								
1.625"								

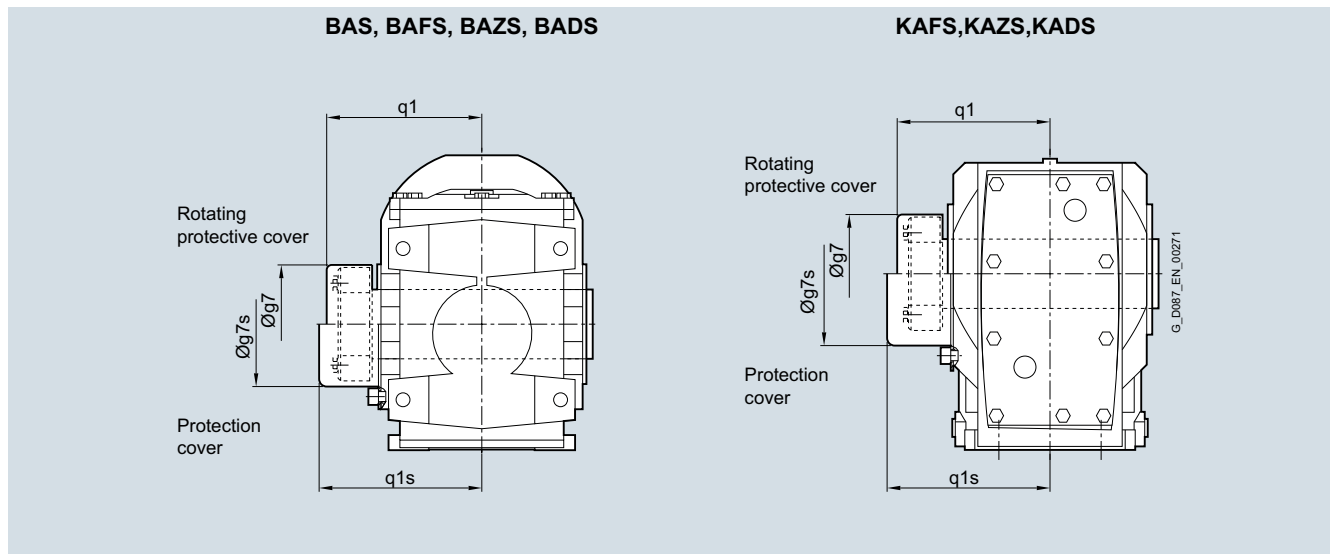
SIMOGEAR Geared Motors

Bevel geared motors

Dimensions

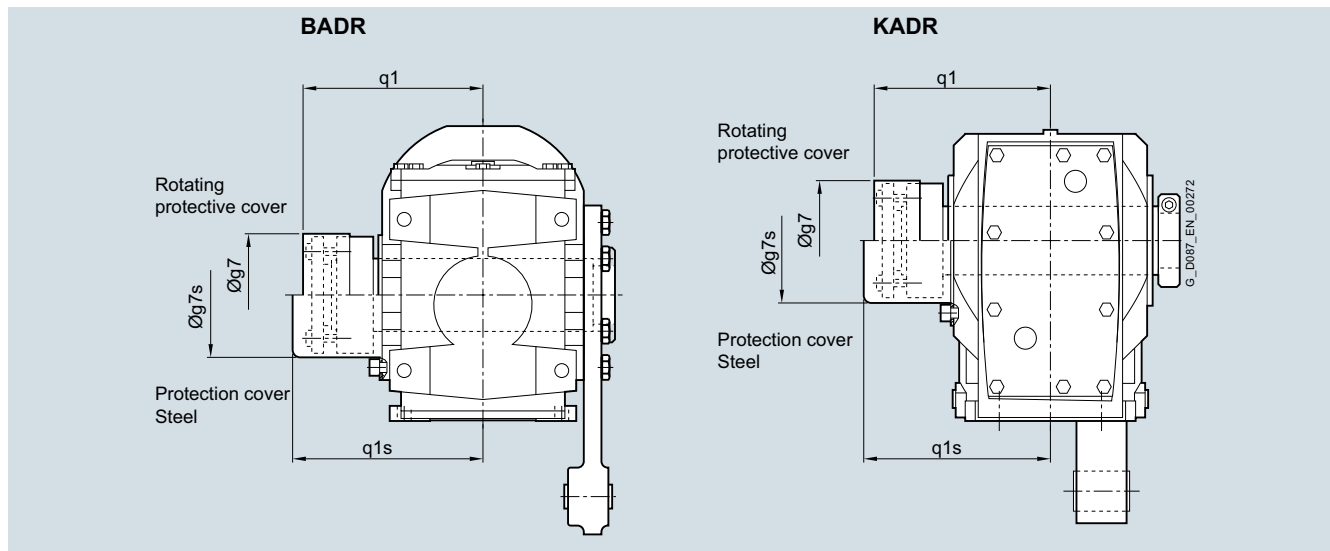
Protection cover for hollow shaft

Protection cover for hollow shaft and hollow shaft with shrink disk



Gearbox type	BA..29	BA..39	BA..49	KA..39	KA..49	KA..69	KA..79	KA..89	KA..109	KA..129	KA..149	KA..169	KA..189
Rotating protective cover with shrink disk version													
g7	55	84	84	76.0	84	84	94.0	119.0	142.0	159.0	201.0	234.4	267.0
q1	85	102	117	89.5	107	115	125.5	142.5	162.5	198.5	233.5	291.0	343.5
Protection cover													
g7s	58	86	86	82.5	86	99	99.0	137.0	186.8	186.8	217.0	257.5	309.5
q1s	91	119	134	109.0	122	126	132.5	176.5	195.0	225.0	250.0	313.0	371.5

Protection cover for hollow shaft with SIMOLOC assembly system

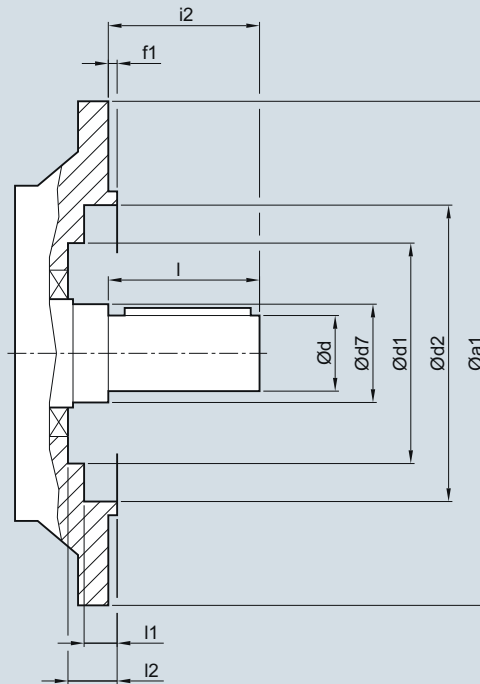


Gearbox type	BADR29	BADR39	BADR49	KADR39	KADR49	KADR69	KADR79	KADR89
Rotating protective cover								
g7	56	76	84 (94)	76	84	94	94	114
q1	102	116	134 (140)	106	124	138	150	171
Protection cover								
g7s	58	82.5	86 (99)	82.5	86	99	99	137
q1s	105	119.0	137 (143)	109	127	141	153	174

() Dimension in brackets for hollow shaft $d=40$ and $d=1.625^*$

Inner contour of the flange design

Notes regarding the design of the customer's interface.

BF, KF


Gearbox type	a1	d	d7	d1	d2	f1	i2	l	l1	l2
BF19	120	20	30	60	68	3.0	40	40	23.5	29.5
BF29	120	20	40	-	70	3.0	40	40	24.0	-
	160	20	40	70	101	3.5	40	40	8.5	24.5
BF39	160	30	55	93	100	3.5	60	60	11.0	31.5
	200	30	55	93	119	3.5	60	60	16.0	31.5
BF49	200	35	55	93	119	3.5	70	70	16.0	31.5
KF39	160	25	30	-	100	3.5	50	50	5.0	-
KF49	200	30	35	-	118	3.5	60	60	5.5	-
KF69	250	35	45	-	165	4.0	70	70	6.5	-
KF79	250	40	55	-	165	4.0	80	80	6.5	-
KF89	300	50	55	-	165	4.0	100	100	8.0	-
KF109	350	60	65	-	235	5.0	120	120	9.0	-
KF129	450	70	75	-	336	5.0	140	140	9.0	-
KF149	450	90	100	-	336	5.0	170	170	10.0	-
KF169	550	110	120	-	427	5.0	210	210	10.0	-
KF189	660	120	160	-	517	6.0	210	210	11.0	-

SIMOGEAR Geared Motors

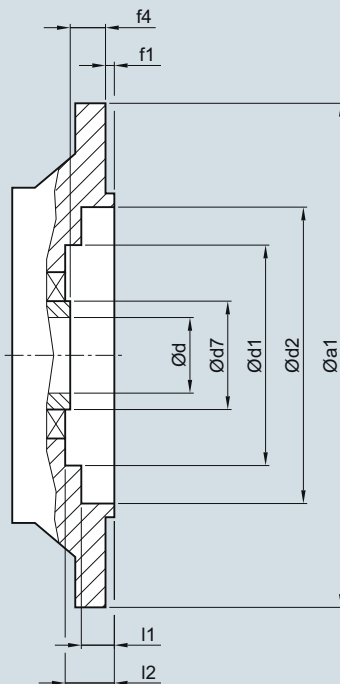
Bevel geared motors

Dimensions

Inner contour of the flange design (continued)

Notes regarding the design of the customer's interface, e.g. plug-in shaft for hollow shaft design

BAF., KAF.



Gearbox type	a1	d	d7	d1	d2	f1	f4	l1	l2
BAF.19	120	20	30	60	68	3.0	30.0	23.5	29.5
BAF.29	120	20/	40	-	70	3.0	20.0	24.0	-
		25							
BAF.39	160	20/	40	70	101	3.5	20.0	8.5	24.5
		25							
BAF.39	160	30	55	93	100	3.5	27.0	11.0	31.5
		35							
		40							
BAF.39	200	30	55	93	119	3.5	27.0	16.0	31.5
		35							
		40							
BAF.49	200	35/	55	93	119	3.5	27.0	16.0	31.5
		40							
KAF.39	160	30	45	80	102	3.5	24.0	2.0	29.5
KAF.49	200	35	50	90	120	3.5	25.0	4.0	30.5
KAF.69	250	40	55	104	165	4.0	23.5	2.0	29.5
KAF.79	250	40	55	104	165	4.0	23.0	2.0	29.5
KAF.89	300	50	70	135	215	4.0	37.0	2.0	44.5
KAF.109	350	60	85	184	210	5.0	36.0	13.0	45.0
KAF.129	450	70	95	184	336	5.0	41.5	16.5	48.5
KAF.149	450	90	120	214	219	5.0	41.0	40.0	50.0
KAF.169	550	100	140	254	426	5.0	56.0	14.5	56.0
KAF.189	660	120	160	306	518	6.0	66.0	6.0	62.0

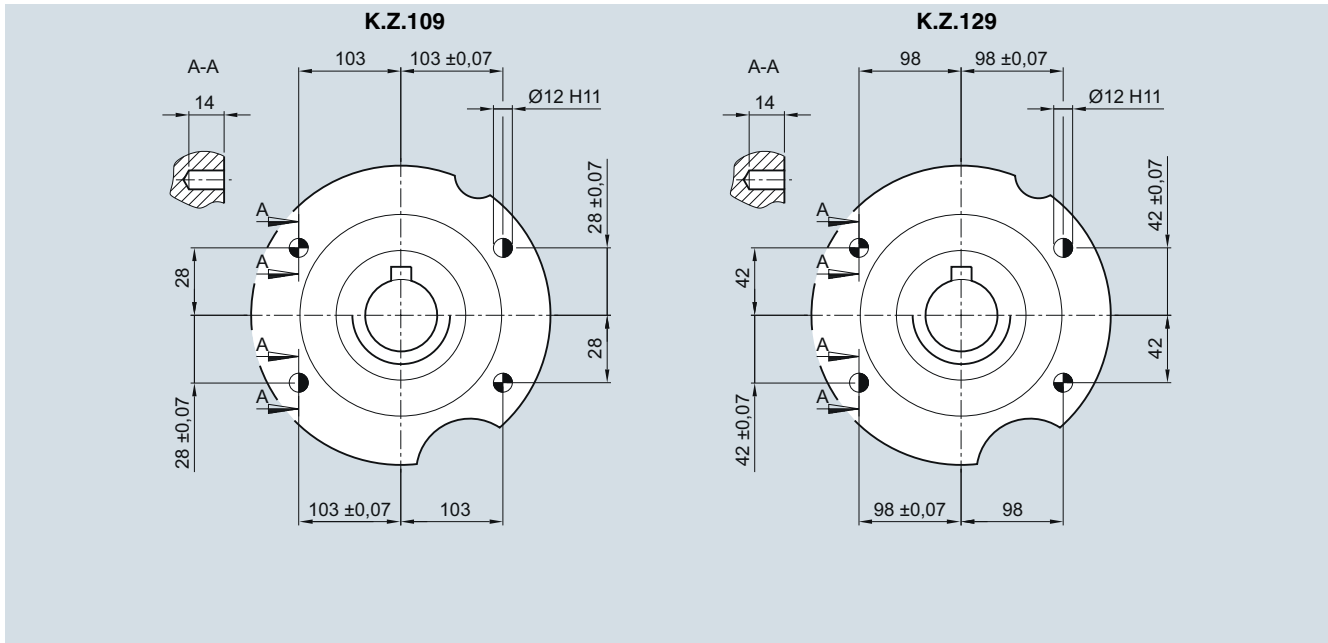
Pin holes

In the case of gearboxes K.Z.109 and K.Z.129, the customer's interface can be pinned on the housing flange (C type).

The output flanges have been designed to ensure the reliable transmission of the permissible torques and radial forces by the bolt connections.

If additional fastening is required, in the case of high shock loads, for example, the existing drilled pin holes can be used.

The gearboxes can also be drilled and pinned together with the machine. The listed dimensions must be complied with.



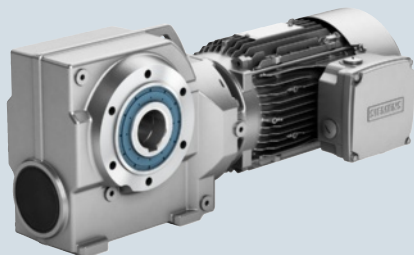
- Spring pins, heavy-duty design, to DIN 1481: Use pin holes provided in the housing flange.
- Grooved cylindrical pins with chamfer to EN 28740/ISO 8740: Drill connecting component together with housing.

SIMOGEAR Geared Motors

Notes

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Helical worm geared motors



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Orientation

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Geared motors up to 7.5 kW

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Selection and ordering data

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Transmission ratios and torques

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Selection and ordering data

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Efficiencies

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Selection and ordering data

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Dimensions

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Dimensional drawing overview

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C..29

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C.F.29

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C.Z.29

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CAD.29

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C..39

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C.F.39

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C.Z.39

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CAD.39

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C..49

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C.F.49

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C.Z.49

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CAD.49

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C..69

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C.F.69

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C.Z.69

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CAD.69

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C..89

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C.F.89

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C.Z.89

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CAD.89

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SIMOLOC assembly system

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Protection cover for hollow shaft

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Inner contour of the flange surface

SIMOGEAR Geared Motors

Helical worm geared motors

Orientation

SIMOGEAR helical worm geared motors C

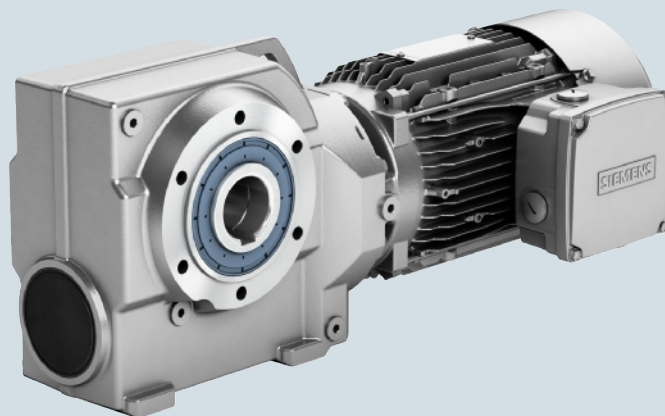


Fig. 6/1 Helical worm geared motor C

SIMOGEAR helical worm geared motors are available in the following versions for mounting in any position:

- 2 stages
- Shaft-mounted design with torque arm CAD
- Flange-mounted design CF
- Design with integrated housing flange CZ
- Foot-mounted design C
- Hollow-shaft design with feather key CA
- Hollow-shaft design with splined shaft CAT
- Hollow-shaft design with shrink disk CAS
- Hollow-shaft design with SIMOLOC assembly system CADR
- Solid shaft design
with or without feather key (at one end or both ends) C

For helical worm gearboxes, the torque arm is supplied loose to enable it to be mounted as required on site. The position of the torque arm can be freely selected.

SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.09	C.49-LA71MH8							
	2.1	230	299.0	8 730	1.5	22	2KJ3603 - ■ CE11 - ■ ■ N2	P02
	2.4	210	265.2	8 730	1.6	22	2KJ3603 - ■ CE11 - ■ ■ M2	P02
	2.7	188	230.1	8 730	1.8	22	2KJ3603 - ■ CE11 - ■ ■ L2	P02
	C.49-LA63MF6							
	2.8	183	299.0	8 730	1.9	20	2KJ3603 - ■ BD11 - ■ ■ N2	P01
	C.39-LA71MH8							
	2.1	220	299.0	6 080	0.84	16	2KJ3602 - ■ CE11 - ■ ■ N2	P02
	2.4	200	265.2	6 150	0.93	16	2KJ3602 - ■ CE11 - ■ ■ M2	P02
	2.7	179	230.1	6 230	1.0	16	2KJ3602 - ■ CE11 - ■ ■ L2	P02
	C.39-LA63MF6							
	2.8	174	299.0	6 250	1.1	14	2KJ3602 - ■ BD11 - ■ ■ N2	P01
	3.2	158	265.2	6 310	1.2	14	2KJ3602 - ■ BD11 - ■ ■ M2	P01
	3.7	142	230.1	6 370	1.3	14	2KJ3602 - ■ BD11 - ■ ■ L2	P01
	4.1	131	209.18	6 410	1.5	14	2KJ3602 - ■ BD11 - ■ ■ K2	P01
	C.39-LA63MD4							
	4.7	118	299.0	6 460	1.6	14	2KJ3602 - ■ BB11 - ■ ■ N2	
	5.3	107	265.2	6 500	1.8	14	2KJ3602 - ■ BB11 - ■ ■ M2	
	6.1	95	230.1	6 540	2.0	14	2KJ3602 - ■ BB11 - ■ ■ L2	
	C.29-LA63MF6							
	4.1	130	209.18	4 030	0.82	9	2KJ3601 - ■ BD11 - ■ ■ K2	P01
	4.7	115	179.4	4 100	0.93	9	2KJ3601 - ■ BD11 - ■ ■ J2	P01
	C.29-LA63MD4							
	5.3	106	265.2	4 150	1.0	8	2KJ3601 - ■ BB11 - ■ ■ M2	
	6.1	94	230.1	4 210	1.1	8	2KJ3601 - ■ BB11 - ■ ■ L2	
	6.7	87	209.18	4 240	1.2	8	2KJ3601 - ■ BB11 - ■ ■ K2	
	7.8	77	179.4	4 290	1.4	8	2KJ3601 - ■ BB11 - ■ ■ J2	
	8.6	71	163.09	4 330	1.5	8	2KJ3601 - ■ BB11 - ■ ■ H2	
	9.8	63	143.0	4 370	1.7	8	2KJ3601 - ■ BB11 - ■ ■ G2	
	11	57	127.64	4 400	1.9	8	2KJ3601 - ■ BB11 - ■ ■ F2	
	12	52	113.75	4 420	2.1	8	2KJ3601 - ■ BB11 - ■ ■ E2	
	13	48	105.0	4 440	2.3	8	2KJ3601 - ■ BB11 - ■ ■ D2	
	15	42	91.93	4 470	2.6	8	2KJ3601 - ■ BB11 - ■ ■ C2	
	17	37	80.6	4 500	3.0	8	2KJ3601 - ■ BB11 - ■ ■ B2	
	19	34	73.12	4 500	3.2	8	2KJ3601 - ■ BB11 - ■ ■ A2	
	20	32	68.82	4 500	3.4	8	2KJ3601 - ■ BB11 - ■ ■ X1	
	23	28	60.67	4 500	3.9	8	2KJ3601 - ■ BB11 - ■ ■ W1	
	27	24	52.65	4 500	4.5	8	2KJ3601 - ■ BB11 - ■ ■ V1	
	28	27	49.87	4 500	3.8	8	2KJ3601 - ■ BB11 - ■ ■ U1	
	32	23	43.27	4 500	4.4	8	2KJ3601 - ■ BB11 - ■ ■ T1	
	36	21	39.33	4 500	4.8	8	2KJ3601 - ■ BB11 - ■ ■ S1	
	43	18	32.64	4 500	5.0	8	2KJ3601 - ■ BB11 - ■ ■ Q1	
0.12	C.69-LA71MJ8							
	1.8	375	360.0	11 300	1.8	30	2KJ3604 - ■ CF11 - ■ ■ M2	P02
	2.0	340	319.8	11 400	1.9	30	2KJ3604 - ■ CF11 - ■ ■ L2	P02
	C.49-LA71MJ8							
	2.2	300	299.0	8 560	1.1	22	2KJ3603 - ■ CF11 - ■ ■ N2	P02

Article No. supplement

Shaft design **1, 5, 6, 7 or 9**Frequency and voltage **2 or 9**Gearbox mounting type **A, D, F or H**

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.12	C.49-LA71MJ8							
	2.4	275	265.2	8 630	1.2	22	2KJ3603 - ■ CF11 - ■ ■ M2	P02
	C.49-LA63MG6							
	3.3	215	299.0	8 730	1.6	20	2KJ3603 - ■ BE11 - ■ ■ N2	P01
	3.8	196	265.2	8 730	1.8	20	2KJ3603 - ■ BE11 - ■ ■ M2	P01
	4.3	175	230.1	8 730	2.0	20	2KJ3603 - ■ BE11 - ■ ■ L2	P01
	C.39-LA63MG6							
	3.3	205	299.0	6 130	0.93	14	2KJ3602 - ■ BE11 - ■ ■ N2	P01
	3.8	186	265.2	6 200	1.0	14	2KJ3602 - ■ BE11 - ■ ■ M2	P01
	4.3	167	230.1	6 270	1.1	14	2KJ3602 - ■ BE11 - ■ ■ L2	P01
	C.39-LA63ME4							
	4.5	162	299.0	6 290	1.2	14	2KJ3602 - ■ BC11 - ■ ■ N2	
	5.1	147	265.2	6 350	1.3	14	2KJ3602 - ■ BC11 - ■ ■ M2	
	5.9	131	230.1	6 410	1.5	14	2KJ3602 - ■ BC11 - ■ ■ L2	
	6.5	121	209.18	6 450	1.6	14	2KJ3602 - ■ BC11 - ■ ■ K2	
	7.5	106	179.4	6 500	1.8	14	2KJ3602 - ■ BC11 - ■ ■ J2	
	8.3	97	163.09	6 530	2.0	14	2KJ3602 - ■ BC11 - ■ ■ H2	
	C.29-LA63ME4							
	5.9	129	230.1	4 030	0.83	8	2KJ3601 - ■ BC11 - ■ ■ L2	
	6.5	120	209.18	4 080	0.91	8	2KJ3601 - ■ BC11 - ■ ■ K2	
	7.5	106	179.4	4 150	1.0	8	2KJ3601 - ■ BC11 - ■ ■ J2	
	8.3	98	163.09	4 190	1.1	8	2KJ3601 - ■ BC11 - ■ ■ H2	
	9.4	87	143.0	4 240	1.3	8	2KJ3601 - ■ BC11 - ■ ■ G2	
	11	79	127.64	4 280	1.4	8	2KJ3601 - ■ BC11 - ■ ■ F2	
	12	71	113.75	4 330	1.5	8	2KJ3601 - ■ BC11 - ■ ■ E2	
	13	66	105.0	4 350	1.7	8	2KJ3601 - ■ BC11 - ■ ■ D2	
	15	58	91.93	4 390	1.9	8	2KJ3601 - ■ BC11 - ■ ■ C2	
	17	51	80.6	4 430	2.1	8	2KJ3601 - ■ BC11 - ■ ■ B2	
	18	47	73.12	4 450	2.4	8	2KJ3601 - ■ BC11 - ■ ■ A2	
	20	44	68.82	4 460	2.5	8	2KJ3601 - ■ BC11 - ■ ■ X1	
	22	39	60.67	4 490	2.8	8	2KJ3601 - ■ BC11 - ■ ■ W1	
	26	34	52.65	4 500	3.3	8	2KJ3601 - ■ BC11 - ■ ■ V1	
27	37	49.87	4 500	2.8	8	2KJ3601 - ■ BC11 - ■ ■ U1		
31	32	43.27	4 500	3.2	8	2KJ3601 - ■ BC11 - ■ ■ T1		
34	30	39.33	4 500	3.5	8	2KJ3601 - ■ BC11 - ■ ■ S1		
40	26	33.73	4 500	4.0	8	2KJ3601 - ■ BC11 - ■ ■ R1		
41	25	32.64	4 500	3.6	8	2KJ3601 - ■ BC11 - ■ ■ Q1		
48	22	28.32	4 500	4.2	8	2KJ3601 - ■ BC11 - ■ ■ P1		
52	20	25.75	4 500	4.6	8	2KJ3601 - ■ BC11 - ■ ■ N1		
0.18	C.69-LA71MG6							
	2.4	450	360.0	11 100	1.5	30	2KJ3604 - ■ CD11 - ■ ■ M2	P01
	2.7	410	319.8	11 200	1.6	30	2KJ3604 - ■ CD11 - ■ ■ L2	P01
	3	370	280.8	11 300	1.8	30	2KJ3604 - ■ CD11 - ■ ■ K2	P01
	3.3	345	255.27	11 400	2.0	30	2KJ3604 - ■ CD11 - ■ ■ J2	P01
	C.49-LA71MG6							
	2.8	365	299.0	8 370	0.94	21	2KJ3603 - ■ CD11 - ■ ■ N2	P01
	3.2	330	265.2	8 470	1.0	21	2KJ3603 - ■ CD11 - ■ ■ M2	P01
	3.7	295	230.1	8 570	1.2	21	2KJ3603 - ■ CD11 - ■ ■ L2	P01

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
0.18	C.49-LA71MG6								
	4.1	275	209.18	8 630	1.3	21	2KJ3603 - ■ CD11 - ■ ■ K2	P01	
	C.49-LA63MF4								
	4.5	255	299.0	8 690	1.4	20	2KJ3603 - ■ BD11 - ■ ■ N2		
	5.1	230	265.2	8 730	1.5	20	2KJ3603 - ■ BD11 - ■ ■ M2		
	5.9	200	230.1	8 730	1.7	20	2KJ3603 - ■ BD11 - ■ ■ L2		
	6.5	188	209.18	8 730	1.9	20	2KJ3603 - ■ BD11 - ■ ■ K2		
	C.39-LA63MF4								
	5.1	220	265.20	6 080	0.87	14	2KJ3602 - ■ BD11 - ■ ■ M2		
	5.9	197	230.10	6 160	0.98	14	2KJ3602 - ■ BD11 - ■ ■ L2		
	6.5	181	209.18	6 220	1.1	14	2KJ3602 - ■ BD11 - ■ ■ K2		
	7.5	159	179.40	6 300	1.2	14	2KJ3602 - ■ BD11 - ■ ■ J2		
	8.3	146	163.09	6 350	1.3	14	2KJ3602 - ■ BD11 - ■ ■ H2		
	9.4	129	143.00	6 420	1.5	14	2KJ3602 - ■ BD11 - ■ ■ G2		
	11	117	127.64	6 460	1.7	14	2KJ3602 - ■ BD11 - ■ ■ F2		
	12	104	113.75	6 510	1.9	14	2KJ3602 - ■ BD11 - ■ ■ E2		
	13	97	105.00	6 530	2.0	14	2KJ3602 - ■ BD11 - ■ ■ D2		
	C.29-LA63MF4								
	9.4	131	143.00	4 020	0.84	9	2KJ3601 - ■ BD11 - ■ ■ G2		
	11	118	127.64	4 090	0.93	9	2KJ3601 - ■ BD11 - ■ ■ F2		
	12	107	113.75	4 140	1.0	9	2KJ3601 - ■ BD11 - ■ ■ E2		
	13	99	105.00	4 180	1.1	9	2KJ3601 - ■ BD11 - ■ ■ D2		
	15	88	91.93	4 240	1.3	9	2KJ3601 - ■ BD11 - ■ ■ C2		
	17	77	80.6	4 290	1.4	9	2KJ3601 - ■ BD11 - ■ ■ B2		
	18	70	73.12	4 330	1.6	9	2KJ3601 - ■ BD11 - ■ ■ A2		
	20	66	68.82	4 350	1.7	9	2KJ3601 - ■ BD11 - ■ ■ X1		
	22	58	60.67	4 390	1.9	9	2KJ3601 - ■ BD11 - ■ ■ W1		
	26	51	52.65	4 430	2.2	9	2KJ3601 - ■ BD11 - ■ ■ V1		
	27	55	49.87	4 410	1.8	9	2KJ3601 - ■ BD11 - ■ ■ U1		
	31	48	43.27	4 440	2.1	9	2KJ3601 - ■ BD11 - ■ ■ T1		
	34	44	39.33	4 460	2.3	9	2KJ3601 - ■ BD11 - ■ ■ S1		
	40	38	33.73	4 490	2.7	9	2KJ3601 - ■ BD11 - ■ ■ R1		
	41	37	32.64	4 500	2.4	9	2KJ3601 - ■ BD11 - ■ ■ Q1		
	48	32	28.32	4 500	2.8	9	2KJ3601 - ■ BD11 - ■ ■ P1		
	52	30	25.75	4 500	3.0	9	2KJ3601 - ■ BD11 - ■ ■ N1		
	61	26	22.08	4 500	3.6	9	2KJ3601 - ■ BD11 - ■ ■ M1		
	67	23	20.07	4 500	3.9	9	2KJ3601 - ■ BD11 - ■ ■ L1		
	77	20	17.60	4 500	4.5	9	2KJ3601 - ■ BD11 - ■ ■ K1		
	86	18	15.71	4 500	5.0	9	2KJ3601 - ■ BD11 - ■ ■ J1		
	0.25	C.69-LA71MH6							
		2.4	625	360.0	10 700	1.1	31	2KJ3604 - ■ CE11 - ■ ■ M2	P01
		2.7	565	319.8	10 900	1.2	31	2KJ3604 - ■ CE11 - ■ ■ L2	P01
		3.1	510	280.8	11 000	1.3	31	2KJ3604 - ■ CE11 - ■ ■ K2	P01
		3.4	470	255.27	11 100	1.4	31	2KJ3604 - ■ CE11 - ■ ■ J2	P01
		C.69-LA71MG4							
		3.8	435	360.0	11 200	1.5	30	2KJ3604 - ■ CD11 - ■ ■ M2	
	4.2	390	319.8	11 300	1.7	30	2KJ3604 - ■ CD11 - ■ ■ L2		

Article No. supplement

Shaft design **1, 5, 6, 7 or 9**Frequency and voltage **2 or 9**Gearbox mounting type **A, D, F or H**

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25	C.69-LA71MG4							
	4.8	350	280.8	11 400	1.9	30	2KJ3604 - ■ CD11 - ■ ■ K2	
	5.3	320	255.27	11 400	2.1	30	2KJ3604 - ■ CD11 - ■ ■ J2	
	C.49-LA71MH6							
	3.7	410	230.1	8 240	0.85	22	2KJ3603 - ■ CE11 - ■ ■ L2	P01
	4.1	380	209.18	8 330	0.92	22	2KJ3603 - ■ CE11 - ■ ■ K2	P01
	C.49-LA71MG4							
	4.5	350	299.0	8 410	0.99	21	2KJ3603 - ■ CD11 - ■ ■ N2	
	5.1	320	265.2	8 500	1.1	21	2KJ3603 - ■ CD11 - ■ ■ M2	
	5.9	280	230.1	8 610	1.2	21	2KJ3603 - ■ CD11 - ■ ■ L2	
	6.5	260	209.18	8 670	1.4	21	2KJ3603 - ■ CD11 - ■ ■ K2	
	7.5	225	179.4	8 730	1.6	21	2KJ3603 - ■ CD11 - ■ ■ J2	
	8.3	205	163.09	8 730	1.7	21	2KJ3603 - ■ CD11 - ■ ■ H2	
	9.4	185	143.0	8 730	1.9	21	2KJ3603 - ■ CD11 - ■ ■ G2	
	11	165	127.64	8 650	2.1	21	2KJ3603 - ■ CD11 - ■ ■ F2	
	C.39-LA71MG4							
	7.5	220	179.4	6 080	0.88	15	2KJ3602 - ■ CD11 - ■ ■ J2	
	8.3	200	163.09	6 150	0.95	15	2KJ3602 - ■ CD11 - ■ ■ H2	
	9.4	180	143.0	6 230	1.1	15	2KJ3602 - ■ CD11 - ■ ■ G2	
	11	162	127.64	6 290	1.2	15	2KJ3602 - ■ CD11 - ■ ■ F2	
	12	145	113.75	6 360	1.3	15	2KJ3602 - ■ CD11 - ■ ■ E2	
	13	134	105.0	6 400	1.4	15	2KJ3602 - ■ CD11 - ■ ■ D2	
	15	118	91.93	6 460	1.6	15	2KJ3602 - ■ CD11 - ■ ■ C2	
	17	103	80.6	6 510	1.9	15	2KJ3602 - ■ CD11 - ■ ■ B2	
	18	94	73.12	6 550	2.1	15	2KJ3602 - ■ CD11 - ■ ■ A2	
	20	89	68.82	6 560	2.2	15	2KJ3602 - ■ CD11 - ■ ■ X1	
	22	78	60.67	6 610	2.4	15	2KJ3602 - ■ CD11 - ■ ■ W1	
	27	78	49.87	6 610	2.5	15	2KJ3602 - ■ CD11 - ■ ■ U1	
	C.29-LA71MG4							
	13	138	105.0	3 990	0.8	10	2KJ3601 - ■ CD11 - ■ ■ D2	
	15	122	91.93	4 070	0.9	10	2KJ3601 - ■ CD11 - ■ ■ C2	
	17	107	80.6	4 140	1.0	10	2KJ3601 - ■ CD11 - ■ ■ B2	
	18	98	73.12	4 190	1.1	10	2KJ3601 - ■ CD11 - ■ ■ A2	
	20	92	68.82	4 220	1.2	10	2KJ3601 - ■ CD11 - ■ ■ X1	
	22	81	60.67	4 270	1.4	10	2KJ3601 - ■ CD11 - ■ ■ W1	
	26	70	52.65	4 330	1.6	10	2KJ3601 - ■ CD11 - ■ ■ V1	
	27	77	49.87	4 290	1.3	10	2KJ3601 - ■ CD11 - ■ ■ U1	
	31	67	43.27	4 350	1.5	10	2KJ3601 - ■ CD11 - ■ ■ T1	
	34	62	39.33	4 370	1.7	10	2KJ3601 - ■ CD11 - ■ ■ S1	
	40	53	33.73	4 420	1.9	10	2KJ3601 - ■ CD11 - ■ ■ R1	
	41	52	32.64	4 420	1.7	10	2KJ3601 - ■ CD11 - ■ ■ Q1	
	48	45	28.32	4 460	2.0	10	2KJ3601 - ■ CD11 - ■ ■ P1	
	52	41	25.75	4 480	2.2	10	2KJ3601 - ■ CD11 - ■ ■ N1	
	61	36	22.08	4 500	2.6	10	2KJ3601 - ■ CD11 - ■ ■ M1	
	67	32	20.07	4 500	2.8	10	2KJ3601 - ■ CD11 - ■ ■ L1	
	77	28	17.6	4 500	3.2	10	2KJ3601 - ■ CD11 - ■ ■ K1	
	86	25	15.71	4 500	3.6	10	2KJ3601 - ■ CD11 - ■ ■ J1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25	C.29-LA71MG4							
	96	23	14.00	4 500	4.1	10	2KJ3601 - ■ CD11 - ■ ■ H1	
	104	21	12.92	4 500	4.4	10	2KJ3601 - ■ CD11 - ■ ■ G1	
0.37	C.69-LA71MH4							
	3.8	635	360.0	10 700	1.1	31	2KJ3604 - ■ CE11 - ■ ■ M2	
	4.3	575	319.8	10 800	1.2	31	2KJ3604 - ■ CE11 - ■ ■ L2	
	4.9	510	280.8	11 000	1.3	31	2KJ3604 - ■ CE11 - ■ ■ K2	
	5.4	470	255.27	11 100	1.4	31	2KJ3604 - ■ CE11 - ■ ■ J2	
	6.3	410	218.4	11 200	1.6	31	2KJ3604 - ■ CE11 - ■ ■ H2	
	6.9	375	198.55	11 300	1.8	31	2KJ3604 - ■ CE11 - ■ ■ G2	
	7.8	330	175.5	11 400	2.0	31	2KJ3604 - ■ CE11 - ■ ■ F2	
	8.6	300	159.55	11 500	2.1	31	2KJ3604 - ■ CE11 - ■ ■ E2	
	C.49-LA71MH4							
	6	415	230.1	8 220	0.84	22	2KJ3603 - ■ CE11 - ■ ■ L2	
	6.5	380	209.18	8 330	0.93	22	2KJ3603 - ■ CE11 - ■ ■ K2	
	7.6	330	179.4	8 470	1.1	22	2KJ3603 - ■ CE11 - ■ ■ J2	
	8.4	305	163.09	8 480	1.2	22	2KJ3603 - ■ CE11 - ■ ■ H2	
	9.6	265	143.0	8 300	1.3	22	2KJ3603 - ■ CE11 - ■ ■ G2	
	11	240	127.64	8 090	1.5	22	2KJ3603 - ■ CE11 - ■ ■ F2	
	12	215	113.75	7 900	1.6	22	2KJ3603 - ■ CE11 - ■ ■ E2	
	13	199	105.0	7 760	1.8	22	2KJ3603 - ■ CE11 - ■ ■ D2	
	15	175	91.93	7 530	2.0	22	2KJ3603 - ■ CE11 - ■ ■ C2	
	17	154	80.6	7 290	2.2	22	2KJ3603 - ■ CE11 - ■ ■ B2	
	19	139	73.12	7 130	2.3	22	2KJ3603 - ■ CE11 - ■ ■ A2	
	C.39-LA71MH4							
	11	235	127.64	6 020	0.82	16	2KJ3602 - ■ CE11 - ■ ■ F2	
12	210	113.75	6 110	0.92	16	2KJ3602 - ■ CE11 - ■ ■ E2		
13	196	105.0	6 170	0.99	16	2KJ3602 - ■ CE11 - ■ ■ D2		
15	172	91.93	6 260	1.1	16	2KJ3602 - ■ CE11 - ■ ■ C2		
17	151	80.6	6 330	1.3	16	2KJ3602 - ■ CE11 - ■ ■ B2		
19	137	73.12	6 390	1.4	16	2KJ3602 - ■ CE11 - ■ ■ A2		
20	129	68.82	6 420	1.5	16	2KJ3602 - ■ CE11 - ■ ■ X1		
23	114	60.67	6 470	1.6	16	2KJ3602 - ■ CE11 - ■ ■ W1		
26	99	52.65	6 530	1.8	16	2KJ3602 - ■ CE11 - ■ ■ V1		
27	114	49.87	6 470	1.7	16	2KJ3602 - ■ CE11 - ■ ■ U1		
32	99	43.27	6 530	2.0	16	2KJ3602 - ■ CE11 - ■ ■ T1		
35	90	39.33	6 560	2.2	16	2KJ3602 - ■ CE11 - ■ ■ S1		
41	77	33.73	6 610	2.6	16	2KJ3602 - ■ CE11 - ■ ■ R1		
C.29-LA71MH4								
20	134	68.82	4 010	0.82	11	2KJ3601 - ■ CE11 - ■ ■ X1		
23	118	60.67	4 090	0.93	11	2KJ3601 - ■ CE11 - ■ ■ W1		
26	103	52.65	4 160	1.1	11	2KJ3601 - ■ CE11 - ■ ■ V1		
27	112	49.87	4 120	0.91	11	2KJ3601 - ■ CE11 - ■ ■ U1		
32	98	43.27	4 190	1.0	11	2KJ3601 - ■ CE11 - ■ ■ T1		
35	90	39.33	4 230	1.1	11	2KJ3601 - ■ CE11 - ■ ■ S1		
41	78	33.73	4 290	1.3	11	2KJ3601 - ■ CE11 - ■ ■ R1		
42	76	32.64	4 300	1.2	11	2KJ3601 - ■ CE11 - ■ ■ Q1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.37	C.29-LA71MH4							
	48	66	28.32	4 350	1.4	11	2KJ3601 - ■ CE11 - ■ ■ P1	
	53	60	25.75	4 380	1.5	11	2KJ3601 - ■ CE11 - ■ ■ N1	
	62	52	22.08	4 420	1.8	11	2KJ3601 - ■ CE11 - ■ ■ M1	
	68	47	20.07	4 450	1.9	11	2KJ3601 - ■ CE11 - ■ ■ L1	
	78	42	17.6	4 470	2.2	11	2KJ3601 - ■ CE11 - ■ ■ K1	
	87	37	15.71	4 500	2.5	11	2KJ3601 - ■ CE11 - ■ ■ J1	
	98	33	14.0	4 500	2.8	11	2KJ3601 - ■ CE11 - ■ ■ H1	
	106	30	12.92	4 450	3.0	11	2KJ3601 - ■ CE11 - ■ ■ G1	
	121	27	11.31	4 280	3.5	11	2KJ3601 - ■ CE11 - ■ ■ F1	
	138	23	9.92	4 140	4.0	11	2KJ3601 - ■ CE11 - ■ ■ E1	
	152	21	9.0	4 020	4.4	11	2KJ3601 - ■ CE11 - ■ ■ D1	
	162	20	8.47	3 950	4.6	11	2KJ3601 - ■ CE11 - ■ ■ C1	
183	18	7.47	3 800	4.9	11	2KJ3601 - ■ CE11 - ■ ■ B1		
0.55	C.89-LE80MB4							
	4	950	363.0	16 300	1.5	53	2KJ3605 - ■ DB21 - ■ ■ N2	
	4.4	870	329.73	16 300	1.7	53	2KJ3605 - ■ DB21 - ■ ■ M2	
	4.9	780	295.75	16 300	1.8	53	2KJ3605 - ■ DB21 - ■ ■ L2	
	5.4	705	265.91	16 300	2.0	53	2KJ3605 - ■ DB21 - ■ ■ K2	
	C.69-LE80MB4							
	4.5	815	319.8	10 300	0.82	34	2KJ3604 - ■ DB21 - ■ ■ L2	
	5.1	725	280.8	10 500	0.93	34	2KJ3604 - ■ DB21 - ■ ■ K2	
	5.6	665	255.27	10 600	1.0	34	2KJ3604 - ■ DB21 - ■ ■ J2	
	6.6	580	218.4	10 800	1.2	34	2KJ3604 - ■ DB21 - ■ ■ H2	
	7.3	530	198.55	11 000	1.3	34	2KJ3604 - ■ DB21 - ■ ■ G2	
	8.2	470	175.5	11 100	1.4	34	2KJ3604 - ■ DB21 - ■ ■ F2	
	9	430	159.55	11 200	1.5	34	2KJ3604 - ■ DB21 - ■ ■ E2	
10	375	139.75	11 300	1.6	34	2KJ3604 - ■ DB21 - ■ ■ D2		
11	345	129.0	11 400	1.6	34	2KJ3604 - ■ DB21 - ■ ■ C2		
13	305	114.21	11 200	1.7	34	2KJ3604 - ■ DB21 - ■ ■ B2		
14	320	102.5	10 500	2.1	34	2KJ3604 - ■ DB21 - ■ ■ A2		
C.49-LE80MB4								
8.8	430	163.09	7 460	0.82	25	2KJ3603 - ■ DB21 - ■ ■ H2		
10	380	143.0	7 360	0.93	25	2KJ3603 - ■ DB21 - ■ ■ G2		
11	340	127.64	7 260	1.0	25	2KJ3603 - ■ DB21 - ■ ■ F2		
13	305	113.75	7 130	1.2	25	2KJ3603 - ■ DB21 - ■ ■ E2		
14	280	105.0	7 060	1.3	25	2KJ3603 - ■ DB21 - ■ ■ D2		
16	245	91.93	6 910	1.4	25	2KJ3603 - ■ DB21 - ■ ■ C2		
18	215	80.6	6 740	1.5	25	2KJ3603 - ■ DB21 - ■ ■ B2		
20	197	73.12	6 600	1.6	25	2KJ3603 - ■ DB21 - ■ ■ A2		
21	185	68.82	6 530	1.6	25	2KJ3603 - ■ DB21 - ■ ■ X1		
24	163	60.67	6 350	1.7	25	2KJ3603 - ■ DB21 - ■ ■ W1		
27	142	52.65	6 150	1.9	25	2KJ3603 - ■ DB21 - ■ ■ V1		
29	162	49.87	5 620	2.0	25	2KJ3603 - ■ DB21 - ■ ■ U1		
33	141	43.27	5 470	2.5	25	2KJ3603 - ■ DB21 - ■ ■ T1		
C.39-LE80MB4								
16	240	91.93	6 000	0.8	19	2KJ3602 - ■ DB21 - ■ ■ C2		

Article No. supplement

Shaft design **1, 5, 6, 7 or 9**

Frequency and voltage **2 or 9**

Gearbox mounting type **A, D, F or H**

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.55	C.39-LE80MB4							
	18	210	80.60	6 110	0.91	19	2KJ3602 - ■ DB21 - ■ ■ B2	
	20	194	73.12	6 170	1.0	19	2KJ3602 - ■ DB21 - ■ ■ A2	
	21	183	68.82	6 210	1.1	19	2KJ3602 - ■ DB21 - ■ ■ X1	
	24	161	60.67	6 300	1.1	19	2KJ3602 - ■ DB21 - ■ ■ W1	
	27	140	52.65	6 370	1.2	19	2KJ3602 - ■ DB21 - ■ ■ V1	
	29	162	49.87	6 290	1.2	19	2KJ3602 - ■ DB21 - ■ ■ U1	
	33	140	43.27	6 370	1.4	19	2KJ3602 - ■ DB21 - ■ ■ T1	
	37	127	39.33	6 420	1.6	19	2KJ3602 - ■ DB21 - ■ ■ S1	
	43	109	33.73	6 490	1.8	19	2KJ3602 - ■ DB21 - ■ ■ R1	
	44	108	32.64	6 490	2.0	19	2KJ3602 - ■ DB21 - ■ ■ Q1	
	51	94	28.32	6 290	2.5	19	2KJ3602 - ■ DB21 - ■ ■ P1	
	56	86	25.75	6 150	2.7	19	2KJ3602 - ■ DB21 - ■ ■ N1	
	C.29-LE80MB4							
	37	127	39.33	4 040	0.81	13	2KJ3601 - ■ DB21 - ■ ■ S1	
	43	110	33.73	4 130	0.95	13	2KJ3601 - ■ DB21 - ■ ■ R1	
	44	107	32.64	4 140	0.84	13	2KJ3601 - ■ DB21 - ■ ■ Q1	
51	93	28.32	4 210	0.96	13	2KJ3601 - ■ DB21 - ■ ■ P1		
56	85	25.75	4 250	1.1	13	2KJ3601 - ■ DB21 - ■ ■ N1		
65	73	22.08	4 310	1.2	13	2KJ3601 - ■ DB21 - ■ ■ M1		
72	67	20.07	4 350	1.4	13	2KJ3601 - ■ DB21 - ■ ■ L1		
82	59	17.60	4 390	1.6	13	2KJ3601 - ■ DB21 - ■ ■ K1		
92	52	15.71	4 370	1.8	13	2KJ3601 - ■ DB21 - ■ ■ J1		
103	47	14.00	4 250	2.0	13	2KJ3601 - ■ DB21 - ■ ■ H1		
111	43	12.92	4 180	2.2	13	2KJ3601 - ■ DB21 - ■ ■ G1		
127	38	11.31	4 040	2.5	13	2KJ3601 - ■ DB21 - ■ ■ F1		
145	33	9.92	3 920	2.8	13	2KJ3601 - ■ DB21 - ■ ■ E1		
160	30	9.00	3 820	3.0	13	2KJ3601 - ■ DB21 - ■ ■ D1		
170	28	8.47	3 770	3.2	13	2KJ3601 - ■ DB21 - ■ ■ C1		
193	25	7.47	3 640	3.4	13	2KJ3601 - ■ DB21 - ■ ■ B1		
222	22	6.48	3 490	3.8	13	2KJ3601 - ■ DB21 - ■ ■ A1		
0.75	C.89-LE90SH6E							
	2.8	1760	329.73	15 700	0.82	59	2KJ3605 - ■ EC22 - ■ ■ M2 P01	
	3.1	1600	295.75	16 000	0.9	59	2KJ3605 - ■ EC22 - ■ ■ L2 P01	
	3.5	1460	265.91	16 200	0.99	59	2KJ3605 - ■ EC22 - ■ ■ K2 P01	
	3.8	1330	240.5	16 300	1.1	59	2KJ3605 - ■ EC22 - ■ ■ J2 P01	
	C.89-LE80MH4E							
	4	1290	363.0	16 300	1.1	55	2KJ3605 - ■ DE22 - ■ ■ N2	
	4.4	1180	329.73	16 300	1.2	55	2KJ3605 - ■ DE22 - ■ ■ M2	
	4.9	1060	295.75	16 300	1.4	55	2KJ3605 - ■ DE22 - ■ ■ L2	
	5.4	965	265.91	16 300	1.5	55	2KJ3605 - ■ DE22 - ■ ■ K2	
	6	875	240.5	16 300	1.7	55	2KJ3605 - ■ DE22 - ■ ■ J2	
	6.5	810	222.0	16 300	1.8	55	2KJ3605 - ■ DE22 - ■ ■ H2	
	7.1	740	203.36	16 300	1.9	55	2KJ3605 - ■ DE22 - ■ ■ G2	
	C.69-LE80MH4E							
	6.6	790	218.4	10 300	0.85	36	2KJ3604 - ■ DE22 - ■ ■ H2	
	7.3	725	198.55	10 500	0.93	36	2KJ3604 - ■ DE22 - ■ ■ G2	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75	C.69-LE80MH4E							
	8.2	640	175.5	10 700	1.0	36	2KJ3604 - ■ DE22 - ■ ■ F2	
	9	585	159.55	10 800	1.1	36	2KJ3604 - ■ DE22 - ■ ■ E2	
	10	515	139.75	11 000	1.1	36	2KJ3604 - ■ DE22 - ■ ■ D2	
	11	475	129.0	10 900	1.2	36	2KJ3604 - ■ DE22 - ■ ■ C2	
	13	420	114.21	10 600	1.3	36	2KJ3604 - ■ DE22 - ■ ■ B2	
	14	440	102.5	9 790	1.5	36	2KJ3604 - ■ DE22 - ■ ■ A2	
	16	385	90.0	9 590	1.7	36	2KJ3604 - ■ DE22 - ■ ■ X1	
	18	350	81.82	9 430	1.9	36	2KJ3604 - ■ DE22 - ■ ■ W1	
	21	300	70.0	9 150	2.2	36	2KJ3604 - ■ DE22 - ■ ■ V1	
	23	275	63.64	8 960	2.3	36	2KJ3604 - ■ DE22 - ■ ■ U1	
	C.49-LE80MH4E							
	13	415	113.75	6 390	0.85	27	2KJ3603 - ■ DE22 - ■ ■ E2	
	14	385	105.0	6 350	0.92	27	2KJ3603 - ■ DE22 - ■ ■ D2	
	16	335	91.93	6 300	1.0	27	2KJ3603 - ■ DE22 - ■ ■ C2	
	18	295	80.6	6 200	1.1	27	2KJ3603 - ■ DE22 - ■ ■ B2	
	20	265	73.12	6 140	1.2	27	2KJ3603 - ■ DE22 - ■ ■ A2	
	21	250	68.82	6 090	1.2	27	2KJ3603 - ■ DE22 - ■ ■ X1	
	24	220	60.67	5 970	1.3	27	2KJ3603 - ■ DE22 - ■ ■ W1	
	27	193	52.65	5 810	1.4	27	2KJ3603 - ■ DE22 - ■ ■ V1	
	29	220	49.87	5 130	1.4	27	2KJ3603 - ■ DE22 - ■ ■ U1	
	33	192	43.27	5 040	1.8	27	2KJ3603 - ■ DE22 - ■ ■ T1	
	37	175	39.33	4 980	2.3	27	2KJ3603 - ■ DE22 - ■ ■ S1	
43	150	33.73	4 870	2.5	27	2KJ3603 - ■ DE22 - ■ ■ R1		
47	136	30.67	4 790	2.8	27	2KJ3603 - ■ DE22 - ■ ■ Q1		
C.39-LE80MH4E								
24	220	60.67	6 080	0.83	21	2KJ3602 - ■ DE22 - ■ ■ W1		
27	190	52.65	6 190	0.9	21	2KJ3602 - ■ DE22 - ■ ■ V1		
29	220	49.87	6 080	0.9	21	2KJ3602 - ■ DE22 - ■ ■ U1		
33	191	43.27	6 180	1.0	21	2KJ3602 - ■ DE22 - ■ ■ T1		
37	174	39.33	6 250	1.2	21	2KJ3602 - ■ DE22 - ■ ■ S1		
43	149	33.73	6 280	1.3	21	2KJ3602 - ■ DE22 - ■ ■ R1		
44	148	32.64	6 050	1.5	21	2KJ3602 - ■ DE22 - ■ ■ Q1		
51	129	28.32	5 900	1.8	21	2KJ3602 - ■ DE22 - ■ ■ P1		
56	117	25.75	5 810	2.0	21	2KJ3602 - ■ DE22 - ■ ■ N1		
65	100	22.08	5 640	2.3	21	2KJ3602 - ■ DE22 - ■ ■ M1		
72	91	20.07	5 530	2.6	21	2KJ3602 - ■ DE22 - ■ ■ L1		
82	80	17.60	5 370	2.8	21	2KJ3602 - ■ DE22 - ■ ■ K1		
92	72	15.71	5 230	3.0	21	2KJ3602 - ■ DE22 - ■ ■ J1		
103	64	14.00	5 090	3.2	21	2KJ3602 - ■ DE22 - ■ ■ H1		
111	59	12.92	4 990	3.4	21	2KJ3602 - ■ DE22 - ■ ■ G1		
127	52	11.31	4 830	3.7	21	2KJ3602 - ■ DE22 - ■ ■ F1		
145	45	9.92	4 670	4.0	21	2KJ3602 - ■ DE22 - ■ ■ E1		
C.29-LE80MH4E								
65	100	22.08	4 180	0.91	15	2KJ3601 - ■ DE22 - ■ ■ M1		
72	91	20.07	4 220	1.0	15	2KJ3601 - ■ DE22 - ■ ■ L1		
82	80	17.60	4 160	1.1	15	2KJ3601 - ■ DE22 - ■ ■ K1		

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.75	C.29-LE80MH4E							
	92	72	15.71	4 080	1.3	15	2KJ3601 - ■ DE22 - ■ ■ J1	
	103	64	14.00	4 000	1.5	15	2KJ3601 - ■ DE22 - ■ ■ H1	
	111	59	12.92	3 950	1.6	15	2KJ3601 - ■ DE22 - ■ ■ G1	
	127	52	11.31	3 840	1.8	15	2KJ3601 - ■ DE22 - ■ ■ F1	
	145	45	9.92	3 740	2.1	15	2KJ3601 - ■ DE22 - ■ ■ E1	
	160	41	9.00	3 660	2.2	15	2KJ3601 - ■ DE22 - ■ ■ D1	
	170	39	8.47	3 610	2.3	15	2KJ3601 - ■ DE22 - ■ ■ C1	
	193	34	7.47	3 510	2.5	15	2KJ3601 - ■ DE22 - ■ ■ B1	
	222	30	6.48	3 380	2.8	15	2KJ3601 - ■ DE22 - ■ ■ A1	
1.1	C.89-LE90SG4E							
	4.3	1750	329.73	15 700	0.82	58	2KJ3605 - ■ EK22 - ■ ■ M2	
	4.8	1580	295.75	16 000	0.92	58	2KJ3605 - ■ EK22 - ■ ■ L2	
	5.4	1430	265.91	16 300	1.0	58	2KJ3605 - ■ EK22 - ■ ■ K2	
	5.9	1300	240.50	16 300	1.1	58	2KJ3605 - ■ EK22 - ■ ■ J2	
	6.4	1200	222.00	16 300	1.2	58	2KJ3605 - ■ EK22 - ■ ■ H2	
	7	1100	203.36	16 300	1.3	58	2KJ3605 - ■ EK22 - ■ ■ G2	
	8.4	925	170.62	16 300	1.5	58	2KJ3605 - ■ EK22 - ■ ■ F2	
	8.9	870	160.59	16 300	1.5	58	2KJ3605 - ■ EK22 - ■ ■ E2	
	9.7	800	147.33	16 300	1.6	58	2KJ3605 - ■ EK22 - ■ ■ D2	
	11	695	128.70	16 300	1.7	58	2KJ3605 - ■ EK22 - ■ ■ C2	
	12	625	115.23	16 300	1.8	58	2KJ3605 - ■ EK22 - ■ ■ B2	
	14	545	100.75	16 300	1.9	58	2KJ3605 - ■ EK22 - ■ ■ A2	
	16	465	86.48	16 300	2.1	58	2KJ3605 - ■ EK22 - ■ ■ X1	
	19	410	76.44	16 300	2.3	58	2KJ3605 - ■ EK22 - ■ ■ W1	
	C.69-LE90SG4E							
	11	705	129.00	9 720	0.81	36	2KJ3604 - ■ EK22 - ■ ■ C2	
	12	620	114.21	9 630	0.86	36	2KJ3604 - ■ EK22 - ■ ■ B2	
	14	650	102.50	8 560	1.0	36	2KJ3604 - ■ EK22 - ■ ■ A2	
	16	570	90.00	8 510	1.2	36	2KJ3604 - ■ EK22 - ■ ■ X1	
17	520	81.82	8 440	1.3	36	2KJ3604 - ■ EK22 - ■ ■ W1		
20	445	70.00	8 310	1.5	36	2KJ3604 - ■ EK22 - ■ ■ V1		
22	405	63.64	8 210	1.6	36	2KJ3604 - ■ EK22 - ■ ■ U1		
25	360	56.25	8 050	1.7	36	2KJ3604 - ■ EK22 - ■ ■ T1		
28	325	51.14	7 940	1.8	36	2KJ3604 - ■ EK22 - ■ ■ S1		
32	285	44.79	7 750	1.9	36	2KJ3604 - ■ EK22 - ■ ■ R1		
34	265	41.35	7 630	2.0	36	2KJ3604 - ■ EK22 - ■ ■ Q1		
39	235	36.61	7 440	2.1	36	2KJ3604 - ■ EK22 - ■ ■ P1		
48	200	30.00	6 950	2.7	36	2KJ3604 - ■ EK22 - ■ ■ N1		
90	107	15.88	5 900	3.4	36	2KJ3604 - ■ EK22 - ■ ■ H1		
C.49-LE90SG4E								
21	370	68.82	5 300	0.81	27	2KJ3603 - ■ EK22 - ■ ■ X1		
23	330	60.67	5 250	0.86	27	2KJ3603 - ■ EK22 - ■ ■ W1		
27	285	52.65	5 210	0.94	27	2KJ3603 - ■ EK22 - ■ ■ V1		
29	325	49.87	4 270	0.98	27	2KJ3603 - ■ EK22 - ■ ■ U1		
33	285	43.27	4 280	1.2	27	2KJ3603 - ■ EK22 - ■ ■ T1		
36	255	39.33	4 320	1.5	27	2KJ3603 - ■ EK22 - ■ ■ S1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.1	C.49-LE90SG4E							
	42	220	33.73	4 300	1.7	27	2KJ3603 - ■ EK22 - ■ ■ R1	
	46	200	30.67	4 270	1.9	27	2KJ3603 - ■ EK22 - ■ ■ Q1	
	53	178	26.89	4 200	2.1	27	2KJ3603 - ■ EK22 - ■ ■ P1	
	59	158	24.00	4 160	2.2	27	2KJ3603 - ■ EK22 - ■ ■ N1	
	67	141	21.39	4 100	2.3	27	2KJ3603 - ■ EK22 - ■ ■ M1	
	72	130	19.74	4 050	2.5	27	2KJ3603 - ■ EK22 - ■ ■ L1	
	82	114	17.29	3 960	2.7	27	2KJ3603 - ■ EK22 - ■ ■ K1	
	94	100	15.16	3 870	2.9	27	2KJ3603 - ■ EK22 - ■ ■ J1	
	104	91	13.75	3 790	3.0	27	2KJ3603 - ■ EK22 - ■ ■ H1	
	110	85	12.94	3 750	3.2	27	2KJ3603 - ■ EK22 - ■ ■ G1	
	125	75	11.41	3 650	3.5	27	2KJ3603 - ■ EK22 - ■ ■ F1	
	144	65	9.9	3 540	3.8	27	2KJ3603 - ■ EK22 - ■ ■ E1	
	C.39-LE90SG4E							
	42	220	33.73	5 590	0.91	23	2KJ3602 - ■ EK22 - ■ ■ R1	
	44	215	32.64	5 320	0.98	23	2KJ3602 - ■ EK22 - ■ ■ Q1	
	50	191	28.32	5 230	1.2	23	2KJ3602 - ■ EK22 - ■ ■ P1	
	55	173	25.75	5 200	1.4	23	2KJ3602 - ■ EK22 - ■ ■ N1	
	65	149	22.08	5 120	1.6	23	2KJ3602 - ■ EK22 - ■ ■ M1	
	71	135	20.07	5 060	1.7	23	2KJ3602 - ■ EK22 - ■ ■ L1	
	81	119	17.6	4 960	1.9	23	2KJ3602 - ■ EK22 - ■ ■ K1	
	91	106	15.71	4 870	2.0	23	2KJ3602 - ■ EK22 - ■ ■ J1	
	102	94	14.0	4 770	2.2	23	2KJ3602 - ■ EK22 - ■ ■ H1	
	110	87	12.92	4 700	2.3	23	2KJ3602 - ■ EK22 - ■ ■ G1	
	126	76	11.31	4 580	2.5	23	2KJ3602 - ■ EK22 - ■ ■ F1	
	144	67	9.92	4 440	2.7	23	2KJ3602 - ■ EK22 - ■ ■ E1	
	158	61	9.0	4 350	2.9	23	2KJ3602 - ■ EK22 - ■ ■ D1	
	168	57	8.47	4 290	3.0	23	2KJ3602 - ■ EK22 - ■ ■ C1	
	191	50	7.47	4 170	3.3	23	2KJ3602 - ■ EK22 - ■ ■ B1	
	220	44	6.48	4 010	3.5	23	2KJ3602 - ■ EK22 - ■ ■ A1	
	C.29-LE90SG4E							
	91	106	15.71	3 610	0.87	17	2KJ3601 - ■ EK22 - ■ ■ J1	
	102	95	14.0	3 570	0.98	17	2KJ3601 - ■ EK22 - ■ ■ H1	
	110	87	12.92	3 560	1.1	17	2KJ3601 - ■ EK22 - ■ ■ G1	
	126	76	11.31	3 510	1.2	17	2KJ3601 - ■ EK22 - ■ ■ F1	
	144	67	9.92	3 440	1.4	17	2KJ3601 - ■ EK22 - ■ ■ E1	
	158	61	9.0	3 390	1.5	17	2KJ3601 - ■ EK22 - ■ ■ D1	
	168	57	8.47	3 360	1.6	17	2KJ3601 - ■ EK22 - ■ ■ C1	
	191	50	7.47	3 290	1.7	17	2KJ3601 - ■ EK22 - ■ ■ B1	
	220	44	6.48	3 190	1.9	17	2KJ3601 - ■ EK22 - ■ ■ A1	
1.5	C.89-LE90LH4E							
	6	1760	240.5	15 700	0.82	61	2KJ3605 - ■ EM22 - ■ ■ J2	
	6.5	1620	222.0	16 000	0.89	61	2KJ3605 - ■ EM22 - ■ ■ H2	
	7.1	1490	203.36	16 200	0.97	61	2KJ3605 - ■ EM22 - ■ ■ G2	
	8.4	1250	170.62	16 300	1.1	61	2KJ3605 - ■ EM22 - ■ ■ F2	
	8.9	1180	160.59	16 300	1.1	61	2KJ3605 - ■ EM22 - ■ ■ E2	
	9.7	1080	147.33	16 300	1.2	61	2KJ3605 - ■ EM22 - ■ ■ D2	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
1.5	C.89-LE90LH4E							
	11	945	128.7	16 300	1.3	61	2KJ3605 - ■ EM22 - ■ ■ C2	
	12	845	115.23	16 300	1.3	61	2KJ3605 - ■ EM22 - ■ ■ B2	
	14	740	100.75	16 300	1.4	61	2KJ3605 - ■ EM22 - ■ ■ A2	
	17	630	86.48	16 300	1.6	61	2KJ3605 - ■ EM22 - ■ ■ X1	
	19	560	76.44	15 800	1.7	61	2KJ3605 - ■ EM22 - ■ ■ W1	
	C.69-LE90LH4E							
	16	775	90.0	7 250	0.87	39	2KJ3604 - ■ EM22 - ■ ■ X1	
	18	705	81.82	7 300	0.95	39	2KJ3604 - ■ EM22 - ■ ■ W1	
	20	605	70.0	7 320	1.1	39	2KJ3604 - ■ EM22 - ■ ■ V1	
	23	550	63.64	7 300	1.2	39	2KJ3604 - ■ EM22 - ■ ■ U1	
	26	490	56.25	7 240	1.3	39	2KJ3604 - ■ EM22 - ■ ■ T1	
	28	445	51.14	7 190	1.3	39	2KJ3604 - ■ EM22 - ■ ■ S1	
	32	390	44.79	7 100	1.4	39	2KJ3604 - ■ EM22 - ■ ■ R1	
	35	360	41.35	7 030	1.5	39	2KJ3604 - ■ EM22 - ■ ■ Q1	
	39	315	36.61	6 940	1.6	39	2KJ3604 - ■ EM22 - ■ ■ P1	
	48	270	30.0	6 460	2.0	39	2KJ3604 - ■ EM22 - ■ ■ N1	
	55	235	26.28	6 330	2.2	39	2KJ3604 - ■ EM22 - ■ ■ M1	
	59	215	24.26	6 260	2.3	39	2KJ3604 - ■ EM22 - ■ ■ L1	
67	194	21.48	6 100	2.4	39	2KJ3604 - ■ EM22 - ■ ■ K1		
80	161	17.88	5 880	2.8	39	2KJ3604 - ■ EM22 - ■ ■ J1		
90	145	15.88	5 600	2.5	39	2KJ3604 - ■ EM22 - ■ ■ H1		
102	129	14.06	5 460	2.8	39	2KJ3604 - ■ EM22 - ■ ■ G1		
123	107	11.7	5 240	3.4	39	2KJ3604 - ■ EM22 - ■ ■ F1		
130	101	11.01	5 160	3.6	39	2KJ3604 - ■ EM22 - ■ ■ E1		
145	90	9.87	5 030	4.0	39	2KJ3604 - ■ EM22 - ■ ■ D1		
C.49-LE90LH4E								
33	385	43.27	3 420	0.91	30	2KJ3603 - ■ EM22 - ■ ■ T1		
36	350	39.33	3 510	1.1	30	2KJ3603 - ■ EM22 - ■ ■ S1		
43	300	33.73	3 610	1.2	30	2KJ3603 - ■ EM22 - ■ ■ R1		
47	270	30.67	3 670	1.4	30	2KJ3603 - ■ EM22 - ■ ■ Q1		
53	240	26.89	3 670	1.5	30	2KJ3603 - ■ EM22 - ■ ■ P1		
60	210	24.0	3 710	1.6	30	2KJ3603 - ■ EM22 - ■ ■ N1		
67	191	21.39	3 660	1.7	30	2KJ3603 - ■ EM22 - ■ ■ M1		
73	176	19.74	3 650	1.8	30	2KJ3603 - ■ EM22 - ■ ■ L1		
83	155	17.29	3 600	1.9	30	2KJ3603 - ■ EM22 - ■ ■ K1		
95	135	15.16	3 560	2.1	30	2KJ3603 - ■ EM22 - ■ ■ J1		
104	123	13.75	3 510	2.2	30	2KJ3603 - ■ EM22 - ■ ■ H1		
111	116	12.94	3 480	2.3	30	2KJ3603 - ■ EM22 - ■ ■ G1		
126	102	11.41	3 410	2.5	30	2KJ3603 - ■ EM22 - ■ ■ F1		
145	88	9.9	3 330	2.8	30	2KJ3603 - ■ EM22 - ■ ■ E1		
159	82	9.0	3 190	3.1	30	2KJ3603 - ■ EM22 - ■ ■ D1		
169	77	8.47	3 160	3.3	30	2KJ3603 - ■ EM22 - ■ ■ C1		
192	68	7.47	3 080	3.6	30	2KJ3603 - ■ EM22 - ■ ■ B1		
221	59	6.48	2 990	3.9	30	2KJ3603 - ■ EM22 - ■ ■ A1		
C.39-LE90LH4E								
51	255	28.32	4 500	0.91	26	2KJ3602 - ■ EM22 - ■ ■ P1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
1.5	C.39-LE90LH4E								
	56	235	25.75	4 490	1.0	26	2KJ3602 - ■ EM22 - ■ ■ N1		
	65	200	22.08	4 530	1.2	26	2KJ3602 - ■ EM22 - ■ ■ M1		
	71	183	20.07	4 510	1.3	26	2KJ3602 - ■ EM22 - ■ ■ L1		
	82	161	17.6	4 470	1.4	26	2KJ3602 - ■ EM22 - ■ ■ K1		
	91	143	15.71	4 440	1.5	26	2KJ3602 - ■ EM22 - ■ ■ J1		
	102	128	14.0	4 380	1.6	26	2KJ3602 - ■ EM22 - ■ ■ H1		
	111	118	12.92	4 340	1.7	26	2KJ3602 - ■ EM22 - ■ ■ G1		
	127	103	11.31	4 260	1.8	26	2KJ3602 - ■ EM22 - ■ ■ F1		
	145	91	9.92	4 160	2.0	26	2KJ3602 - ■ EM22 - ■ ■ E1		
	159	82	9.0	4 100	2.1	26	2KJ3602 - ■ EM22 - ■ ■ D1		
	169	77	8.47	4 050	2.2	26	2KJ3602 - ■ EM22 - ■ ■ C1		
	192	68	7.47	3 950	2.4	26	2KJ3602 - ■ EM22 - ■ ■ B1		
	221	59	6.48	3 840	2.6	26	2KJ3602 - ■ EM22 - ■ ■ A1		
	1.5	C.29-LE90LH4E							
		127	104	11.31	3 090	0.91	20	2KJ3601 - ■ EM22 - ■ ■ F1	
		145	91	9.92	3 080	1.0	20	2KJ3601 - ■ EM22 - ■ ■ E1	
		159	82	9.0	3 070	1.1	20	2KJ3601 - ■ EM22 - ■ ■ D1	
		169	78	8.47	3 050	1.2	20	2KJ3601 - ■ EM22 - ■ ■ C1	
		192	68	7.47	3 020	1.3	20	2KJ3601 - ■ EM22 - ■ ■ B1	
		221	59	6.48	2 960	1.4	20	2KJ3601 - ■ EM22 - ■ ■ A1	
	2.2	C.89-LE100LE4E							
9.9		1560	147.33	15 800	0.82	68	2KJ3605 - ■ FL22 - ■ ■ D2		
11		1360	128.7	15 700	0.87	68	2KJ3605 - ■ FL22 - ■ ■ C2		
13		1220	115.23	15 500	0.91	68	2KJ3605 - ■ FL22 - ■ ■ B2		
14		1070	100.75	15 200	0.98	68	2KJ3605 - ■ FL22 - ■ ■ A2		
17		915	86.48	14 900	1.1	68	2KJ3605 - ■ FL22 - ■ ■ X1		
19		810	76.44	14 600	1.1	68	2KJ3605 - ■ FL22 - ■ ■ W1		
22		685	65.0	14 200	1.2	68	2KJ3605 - ■ FL22 - ■ ■ V1		
26		725	55.61	12 500	2.0	68	2KJ3605 - ■ FL22 - ■ ■ U1		
29		650	50.0	12 300	2.2	68	2KJ3605 - ■ FL22 - ■ ■ T1		
32		590	45.22	12 100	2.3	68	2KJ3605 - ■ FL22 - ■ ■ S1		
35		545	41.74	11 900	2.5	68	2KJ3605 - ■ FL22 - ■ ■ R1		
38		500	38.24	11 700	2.6	68	2KJ3605 - ■ FL22 - ■ ■ Q1		
2.2		C.69-LE100LE4E							
		26	705	56.25	5 890	0.86	48	2KJ3604 - ■ FL22 - ■ ■ T1	
		28	640	51.14	5 970	0.89	48	2KJ3604 - ■ FL22 - ■ ■ S1	
		32	565	44.79	6 000	0.97	48	2KJ3604 - ■ FL22 - ■ ■ R1	
		35	520	41.35	6 020	1.0	48	2KJ3604 - ■ FL22 - ■ ■ Q1	
		40	460	36.61	6 020	1.1	48	2KJ3604 - ■ FL22 - ■ ■ P1	
		48	390	30.0	5 610	1.4	48	2KJ3604 - ■ FL22 - ■ ■ N1	
	55	340	26.28	5 590	1.5	48	2KJ3604 - ■ FL22 - ■ ■ M1		
	60	315	24.26	5 550	1.6	48	2KJ3604 - ■ FL22 - ■ ■ L1		
	68	280	21.48	5 480	1.7	48	2KJ3604 - ■ FL22 - ■ ■ K1		
	81	230	17.88	5 380	1.9	48	2KJ3604 - ■ FL22 - ■ ■ J1		
	92	210	15.88	5 090	1.7	48	2KJ3604 - ■ FL22 - ■ ■ H1		
	103	187	14.06	4 990	1.9	48	2KJ3604 - ■ FL22 - ■ ■ G1		

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
2.2	C.69-LE100LE4E							
	124	155	11.7	4 850	2.3	48	2KJ3604 - ■ FL22 - ■ ■ F1	
	132	146	11.01	4 800	2.5	48	2KJ3604 - ■ FL22 - ■ ■ E1	
	147	131	9.87	4 700	2.8	48	2KJ3604 - ■ FL22 - ■ ■ D1	
	173	111	8.4	4 550	3.2	48	2KJ3604 - ■ FL22 - ■ ■ C1	
	202	95	7.2	4 400	3.8	48	2KJ3604 - ■ FL22 - ■ ■ B1	
	235	82	6.2	4 250	4.3	48	2KJ3604 - ■ FL22 - ■ ■ A1	
	C.49-LE100LE4E							
	54	345	26.89	2 750	1.0	39	2KJ3603 - ■ FL22 - ■ ■ P1	
	61	310	24.0	2 840	1.1	39	2KJ3603 - ■ FL22 - ■ ■ N1	
	68	275	21.39	2 930	1.2	39	2KJ3603 - ■ FL22 - ■ ■ M1	
	74	255	19.74	2 960	1.2	39	2KJ3603 - ■ FL22 - ■ ■ L1	
	84	220	17.29	3 030	1.3	39	2KJ3603 - ■ FL22 - ■ ■ K1	
	96	196	15.16	3 020	1.5	39	2KJ3603 - ■ FL22 - ■ ■ J1	
	106	178	13.75	3 030	1.5	39	2KJ3603 - ■ FL22 - ■ ■ H1	
	112	167	12.94	3 030	1.6	39	2KJ3603 - ■ FL22 - ■ ■ G1	
	128	147	11.41	3 010	1.7	39	2KJ3603 - ■ FL22 - ■ ■ F1	
	147	128	9.9	2 980	1.9	39	2KJ3603 - ■ FL22 - ■ ■ E1	
	162	119	9.0	2 830	2.1	39	2KJ3603 - ■ FL22 - ■ ■ D1	
	172	112	8.47	2 810	2.3	39	2KJ3603 - ■ FL22 - ■ ■ C1	
	195	99	7.47	2 770	2.4	39	2KJ3603 - ■ FL22 - ■ ■ B1	
225	86	6.48	2 720	2.7	39	2KJ3603 - ■ FL22 - ■ ■ A1		
C.39-LE100LE4E								
83	230	17.6	3 670	0.97	31	2KJ3602 - ■ FL22 - ■ ■ K1		
93	205	15.71	3 720	1.0	31	2KJ3602 - ■ FL22 - ■ ■ J1		
104	185	14.0	3 720	1.1	31	2KJ3602 - ■ FL22 - ■ ■ H1		
113	171	12.92	3 720	1.2	31	2KJ3602 - ■ FL22 - ■ ■ G1		
129	149	11.31	3 720	1.3	31	2KJ3602 - ■ FL22 - ■ ■ F1		
147	131	9.92	3 690	1.4	31	2KJ3602 - ■ FL22 - ■ ■ E1		
162	119	9.0	3 660	1.5	31	2KJ3602 - ■ FL22 - ■ ■ D1		
172	112	8.47	3 640	1.5	31	2KJ3602 - ■ FL22 - ■ ■ C1		
195	99	7.47	3 580	1.6	31	2KJ3602 - ■ FL22 - ■ ■ B1		
225	86	6.48	3 510	1.8	31	2KJ3602 - ■ FL22 - ■ ■ A1		
3	C.89-LE100LK4E							
	19	1100	76.44	13 300	0.84	72	2KJ3605 - ■ FM22 - ■ ■ W1	
	22	935	65.0	13 100	0.92	72	2KJ3605 - ■ FM22 - ■ ■ V1	
	26	990	55.61	11 100	1.5	72	2KJ3605 - ■ FM22 - ■ ■ U1	
	29	890	50.0	11 000	1.6	72	2KJ3605 - ■ FM22 - ■ ■ T1	
	32	805	45.22	10 900	1.7	72	2KJ3605 - ■ FM22 - ■ ■ S1	
	35	745	41.74	10 900	1.8	72	2KJ3605 - ■ FM22 - ■ ■ R1	
	38	680	38.24	10 800	1.9	72	2KJ3605 - ■ FM22 - ■ ■ Q1	
	45	570	32.08	10 500	2.1	72	2KJ3605 - ■ FM22 - ■ ■ P1	
	48	535	30.2	10 500	2.2	72	2KJ3605 - ■ FM22 - ■ ■ N1	
	53	490	27.7	10 300	2.3	72	2KJ3605 - ■ FM22 - ■ ■ M1	
	58	455	25.03	9 850	2.4	72	2KJ3605 - ■ FM22 - ■ ■ L1	
	69	380	21.0	9 580	2.8	72	2KJ3605 - ■ FM22 - ■ ■ K1	
	74	360	19.76	9 460	3.1	72	2KJ3605 - ■ FM22 - ■ ■ J1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
3	C.69-LE100LK4E							
	48	530	30.0	4 670	1.0	52	2KJ3604 - ■ FM22 - ■ ■ N1	
	55	465	26.28	4 750	1.1	52	2KJ3604 - ■ FM22 - ■ ■ M1	
	60	430	24.26	4 780	1.1	52	2KJ3604 - ■ FM22 - ■ ■ L1	
	68	380	21.48	4 810	1.2	52	2KJ3604 - ■ FM22 - ■ ■ K1	
	81	315	17.88	4 810	1.4	52	2KJ3604 - ■ FM22 - ■ ■ J1	
	92	285	15.88	4 520	1.3	52	2KJ3604 - ■ FM22 - ■ ■ H1	
	103	250	14.06	4 520	1.4	52	2KJ3604 - ■ FM22 - ■ ■ G1	
	124	210	11.7	4 440	1.7	52	2KJ3604 - ■ FM22 - ■ ■ F1	
	132	199	11.01	4 400	1.8	52	2KJ3604 - ■ FM22 - ■ ■ E1	
	147	178	9.87	4 350	2.0	52	2KJ3604 - ■ FM22 - ■ ■ D1	
	173	152	8.4	4 250	2.4	52	2KJ3604 - ■ FM22 - ■ ■ C1	
	202	130	7.2	4 140	2.8	52	2KJ3604 - ■ FM22 - ■ ■ B1	
	235	112	6.2	4 030	3.2	52	2KJ3604 - ■ FM22 - ■ ■ A1	
	C.49-LE100LK4E							
	61	420	24.0	1 930	0.82	43	2KJ3603 - ■ FM22 - ■ ■ N1	
	68	375	21.39	2 080	0.88	43	2KJ3603 - ■ FM22 - ■ ■ M1	
	74	345	19.74	2 200	0.91	43	2KJ3603 - ■ FM22 - ■ ■ L1	
	84	305	17.29	2 310	0.98	43	2KJ3603 - ■ FM22 - ■ ■ K1	
	96	265	15.16	2 440	1.1	43	2KJ3603 - ■ FM22 - ■ ■ J1	
	106	240	13.75	2 500	1.1	43	2KJ3603 - ■ FM22 - ■ ■ H1	
	112	225	12.94	2 540	1.2	43	2KJ3603 - ■ FM22 - ■ ■ G1	
	128	200	11.41	2 570	1.3	43	2KJ3603 - ■ FM22 - ■ ■ F1	
	147	174	9.9	2 590	1.4	43	2KJ3603 - ■ FM22 - ■ ■ E1	
	162	162	9.0	2 430	1.6	43	2KJ3603 - ■ FM22 - ■ ■ D1	
	172	153	8.47	2 430	1.7	43	2KJ3603 - ■ FM22 - ■ ■ C1	
	195	135	7.47	2 440	1.8	43	2KJ3603 - ■ FM22 - ■ ■ B1	
	225	117	6.48	2 440	2.0	43	2KJ3603 - ■ FM22 - ■ ■ A1	
	C.39-LE100LK4E							
	104	250	14.0	2 990	0.81	35	2KJ3602 - ■ FM22 - ■ ■ H1	
	113	230	12.92	3 060	0.85	35	2KJ3602 - ■ FM22 - ■ ■ G1	
	129	200	11.31	3 150	0.93	35	2KJ3602 - ■ FM22 - ■ ■ F1	
	147	179	9.92	3 150	1.0	35	2KJ3602 - ■ FM22 - ■ ■ E1	
	162	162	9.0	3 180	1.1	35	2KJ3602 - ■ FM22 - ■ ■ D1	
	172	153	8.47	3 180	1.1	35	2KJ3602 - ■ FM22 - ■ ■ C1	
195	134	7.47	3 190	1.2	35	2KJ3602 - ■ FM22 - ■ ■ B1		
225	117	6.48	3 170	1.3	35	2KJ3602 - ■ FM22 - ■ ■ A1		
4	C.89-LE112ME4E							
	26	1310	55.61	9 370	1.1	72	2KJ3605 - ■ GH22 - ■ ■ U1	
	29	1180	50.0	9 500	1.2	72	2KJ3605 - ■ GH22 - ■ ■ T1	
	32	1070	45.22	9 560	1.3	72	2KJ3605 - ■ GH22 - ■ ■ S1	
	35	990	41.74	9 590	1.4	72	2KJ3605 - ■ GH22 - ■ ■ R1	
	38	905	38.24	9 610	1.4	72	2KJ3605 - ■ GH22 - ■ ■ Q1	
	46	760	32.08	9 560	1.6	72	2KJ3605 - ■ GH22 - ■ ■ P1	
	48	715	30.2	9 530	1.7	72	2KJ3605 - ■ GH22 - ■ ■ N1	
	53	655	27.7	9 470	1.7	72	2KJ3605 - ■ GH22 - ■ ■ M1	
	58	605	25.03	8 940	1.8	72	2KJ3605 - ■ GH22 - ■ ■ L1	

Article No. supplement

Shaft design

1, 5, 6, 7 or 9

Frequency and voltage

2 or 9

Gearbox mounting type

A, D, F or H

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Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
4	C.89-LE112ME4E							
	70	510	21.0	8 790	2.1	72	2KJ3605 - ■ GH22 - ■ ■ K1	
	74	480	19.76	8 730	2.3	72	2KJ3605 - ■ GH22 - ■ ■ J1	
	81	440	18.13	8 640	2.5	72	2KJ3605 - ■ GH22 - ■ ■ H1	
	92	385	15.84	8 470	2.9	72	2KJ3605 - ■ GH22 - ■ ■ G1	
	103	340	14.18	8 350	3.1	72	2KJ3605 - ■ GH22 - ■ ■ F1	
	118	300	12.4	8 130	3.4	72	2KJ3605 - ■ GH22 - ■ ■ E1	
	137	255	10.64	7 910	3.7	72	2KJ3605 - ■ GH22 - ■ ■ D1	
	155	225	9.41	7 710	4.0	72	2KJ3605 - ■ GH22 - ■ ■ C1	
	182	194	8.0	7 420	4.3	72	2KJ3605 - ■ GH22 - ■ ■ B1	
213	167	6.86	7 150	4.3	72	2KJ3605 - ■ GH22 - ■ ■ A1		
	C.69-LE112ME4E							
	56	620	26.28	3 700	0.83	53	2KJ3604 - ■ GH22 - ■ ■ M1	
	60	570	24.26	3 830	0.86	53	2KJ3604 - ■ GH22 - ■ ■ L1	
	68	505	21.48	3 960	0.93	53	2KJ3604 - ■ GH22 - ■ ■ K1	
	82	420	17.88	4 100	1.0	53	2KJ3604 - ■ GH22 - ■ ■ J1	
	92	380	15.88	3 800	0.94	53	2KJ3604 - ■ GH22 - ■ ■ H1	
	104	335	14.06	3 880	1.1	53	2KJ3604 - ■ GH22 - ■ ■ G1	
	125	280	11.7	3 910	1.3	53	2KJ3604 - ■ GH22 - ■ ■ F1	
	133	260	11.01	3 940	1.4	53	2KJ3604 - ■ GH22 - ■ ■ E1	
	148	235	9.87	3 910	1.5	53	2KJ3604 - ■ GH22 - ■ ■ D1	
	174	200	8.4	3 880	1.8	53	2KJ3604 - ■ GH22 - ■ ■ C1	
	203	173	7.2	3 810	2.1	53	2KJ3604 - ■ GH22 - ■ ■ B1	
	235	149	6.2	3 740	2.3	53	2KJ3604 - ■ GH22 - ■ ■ A1	
		C.49-LE112ME4E						
96		355	15.16	1 600	0.80	44	2KJ3603 - ■ GH22 - ■ ■ J1	
106		320	13.75	1 820	0.85	44	2KJ3603 - ■ GH22 - ■ ■ H1	
113		300	12.94	1 900	0.89	44	2KJ3603 - ■ GH22 - ■ ■ G1	
128		265	11.41	2 010	0.95	44	2KJ3603 - ■ GH22 - ■ ■ F1	
147		230	9.9	2 110	1.0	44	2KJ3603 - ■ GH22 - ■ ■ E1	
162		215	9.0	1 580	1.2	44	2KJ3603 - ■ GH22 - ■ ■ D1	
172		200	8.47	1 760	1.3	44	2KJ3603 - ■ GH22 - ■ ■ C1	
195		179	7.47	1 940	1.3	44	2KJ3603 - ■ GH22 - ■ ■ B1	
225		155	6.48	2 080	1.5	44	2KJ3603 - ■ GH22 - ■ ■ A1	
		C.39-LE112ME4E						
	162	215	9.0	2 580	0.81	39	2KJ3602 - ■ GH22 - ■ ■ D1	
	172	200	8.47	2 650	0.83	39	2KJ3602 - ■ GH22 - ■ ■ C1	
	195	179	7.47	2 680	0.91	39	2KJ3602 - ■ GH22 - ■ ■ B1	
225	155	6.48	2 740	0.99	39	2KJ3602 - ■ GH22 - ■ ■ A1		
5.5	C.89-LE132SF4E							
	38	1240	38.24	7 810	1.0	86	2KJ3605 - ■ HG22 - ■ ■ Q1	
	46	1040	32.08	8 050	1.2	86	2KJ3605 - ■ HG22 - ■ ■ P1	
	49	980	30.2	8 100	1.2	86	2KJ3605 - ■ HG22 - ■ ■ N1	
	53	895	27.7	8 180	1.3	86	2KJ3605 - ■ HG22 - ■ ■ M1	
	59	830	25.03	7 590	1.3	86	2KJ3605 - ■ HG22 - ■ ■ L1	
	70	695	21.0	7 680	1.5	86	2KJ3605 - ■ HG22 - ■ ■ K1	
	74	655	19.76	7 680	1.7	86	2KJ3605 - ■ HG22 - ■ ■ J1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Helical worm geared motors

Geared motors up to 7.5 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	F_{R2} N	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
5.5	C.89-LE132SF4E								
	81	600	18.13	7 680	1.8	86	2KJ3605 - ■ HG22 - ■ ■ H1		
	92	525	15.84	7 630	2.1	86	2KJ3605 - ■ HG22 - ■ ■ G1		
	103	470	14.18	7 570	2.2	86	2KJ3605 - ■ HG22 - ■ ■ F1		
	118	410	12.4	7 470	2.4	86	2KJ3605 - ■ HG22 - ■ ■ E1		
	138	350	10.64	7 330	2.7	86	2KJ3605 - ■ HG22 - ■ ■ D1		
	156	310	9.41	7 190	2.9	86	2KJ3605 - ■ HG22 - ■ ■ C1		
	183	265	8.0	6 980	3.1	86	2KJ3605 - ■ HG22 - ■ ■ B1		
	214	225	6.86	6 790	3.1	86	2KJ3605 - ■ HG22 - ■ ■ A1		
	C.69-LE132SF4E								
	125	385	11.7	2 950	0.94	66	2KJ3604 - ■ HG22 - ■ ■ F1		
	133	360	11.01	3 170	0.99	66	2KJ3604 - ■ HG22 - ■ ■ E1		
	148	325	9.87	3 230	1.1	66	2KJ3604 - ■ HG22 - ■ ■ D1		
	174	275	8.4	3 310	1.3	66	2KJ3604 - ■ HG22 - ■ ■ C1		
	203	235	7.2	3 340	1.5	66	2KJ3604 - ■ HG22 - ■ ■ B1		
	236	200	6.2	3 360	1.7	66	2KJ3604 - ■ HG22 - ■ ■ A1		
	7.5	C.89-LE132ZMS4P							
		46	1410	32.08	6 070	0.86	108	2KJ3605 - ■ HL23 - ■ ■ P1	
		49	1330	30.2	6 220	0.89	108	2KJ3605 - ■ HL23 - ■ ■ N1	
53		1220	27.7	6 430	0.92	108	2KJ3605 - ■ HL23 - ■ ■ M1		
59		1130	25.03	4 900	0.96	108	2KJ3605 - ■ HL23 - ■ ■ L1		
70		950	21.0	6 040	1.1	108	2KJ3605 - ■ HL23 - ■ ■ K1		
74		890	19.76	6 270	1.3	108	2KJ3605 - ■ HL23 - ■ ■ J1		
81		820	18.13	6 360	1.4	108	2KJ3605 - ■ HL23 - ■ ■ H1		
93		715	15.84	6 490	1.5	108	2KJ3605 - ■ HL23 - ■ ■ G1		
104		640	14.18	6 540	1.7	108	2KJ3605 - ■ HL23 - ■ ■ F1		
119		560	12.4	6 570	1.8	108	2KJ3605 - ■ HL23 - ■ ■ E1		
138		480	10.64	6 550	2.0	108	2KJ3605 - ■ HL23 - ■ ■ D1		
156		425	9.41	6 500	2.2	108	2KJ3605 - ■ HL23 - ■ ■ C1		
184		360	8.0	6 410	2.3	108	2KJ3605 - ■ HL23 - ■ ■ B1		
214		310	6.86	6 280	2.3	108	2KJ3605 - ■ HL23 - ■ ■ A1		
C.69-LE132ZMS4P									
149		440	9.87	1 400	0.82	88	2KJ3604 - ■ HL23 - ■ ■ D1		
175		375	8.4	1 990	0.96	88	2KJ3604 - ■ HL23 - ■ ■ C1		
204		320	7.2	2 470	1.1	88	2KJ3604 - ■ HL23 - ■ ■ B1		
237		275	6.2	2 790	1.3	88	2KJ3604 - ■ HL23 - ■ ■ A1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Helical worm geared motors

Transmission ratios and torques

Selection and ordering data

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex} -	Motor size							Article No.
						63	71	80	90	100	112	132	
C.29													
265.20	5.5	108	4 140	0.05	1326/5	✓	✓	✓					2KJ3601 - ■■■■■■ - ■■ M2
230.10	6.3	108	4 140	0.05	2301/10	✓	✓	✓					2KJ3601 - ■■■■■■ - ■■ L2
209.18	6.9	109	4 130	0.07	2301/11	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ K2
179.40	8.1	110	4 130	0.08	897/5	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ J2
163.09	8.9	110	4 130	0.10	1794/11	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ H2
143.00	10	110	4 130	0.11	143/1	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ G2
127.64	11	110	4 130	0.14	1404/11	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ F2
113.75	13	110	4 130	0.16	455/4	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ E2
105.00	14	110	4 130	0.20	105/1	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ D2
91.93	16	110	4 130	0.22	1287/14	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ C2
80.60	18	110	4 130	0.22	403/5	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ B2
73.12	20	110	4 130	0.28	585/8	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ A2
68.82	21	110	4 130	0.33	1170/17	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ X1
60.67	24	110	4 130	0.36	182/3	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ W1
52.65	28	110	4 130	0.48	1053/20	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ V1
49.87	29	102	4 170	0.05	748/15	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ U1
43.27	34	103	4 160	0.06	649/15	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ T1
39.33	37	103	4 160	0.07	118/3	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ S1
33.73	43	104	4 160	0.09	506/15	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ R1
32.64	44	90	4 230	0.05	816/25	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ Q1
28.32	51	90	4 230	0.06	708/25	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ P1
25.75	56	91	4 220	0.07	1416/55	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ N1
22.08	66	91	4 220	0.09	552/25	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ M1
20.07	72	92	4 220	0.11	1104/55	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ L1
17.60	82	92	3 980	0.13	88/5	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ K1
15.71	92	92	3 780	0.15	864/55	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ J1
14.00	104	93	3 570	0.18	14/1	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ H1
12.92	112	93	3 440	0.22	168/13	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ G1
11.31	128	94	3 220	0.25	396/35	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ F1
9.92	146	94	3 020	0.26	248/25	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ E1
9.00	161	91	2 960	0.33	9/1	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ D1
8.47	171	90	2 950	0.38	144/17	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ C1
7.47	194	86	2 920	0.43	112/15	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ B1
6.48	224	82	2 880	0.57	162/25	✓	✓	✓	✓				2KJ3601 - ■■■■■■ - ■■ A1

SIMOGEAR Geared Motors

Helical worm geared motors

Transmission ratios and torques

Selection and ordering data (continued)

<i>i</i>	n_2 rpm	T_{2N} Nm	F_{R2} N	J_G 10^{-4} kgm ²	R_{ex} -	Motor size							Article No.
						63	71	80	90	100	112	132	
C.39													
299.00	4.8	192	6 180	0.04	299/1	✓	✓						2KJ3602 - ■■■■■■ - ■■ N2
265.20	5.5	192	6 180	0.05	1326/5	✓	✓	✓					2KJ3602 - ■■■■■■ - ■■ M2
230.10	6.3	193	6 180	0.06	2301/10	✓	✓	✓					2KJ3602 - ■■■■■■ - ■■ L2
209.18	6.9	193	6 180	0.07	2301/11	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ K2
179.40	8.1	193	6 180	0.09	897/5	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ J2
163.09	8.9	193	6 180	0.11	1794/11	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ H2
143.00	10	194	6 170	0.13	143/1	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ G2
127.64	11	194	6 170	0.16	1404/11	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ F2
113.75	13	194	6 170	0.19	455/4	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ E2
105.00	14	194	6 170	0.23	105/1	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ D2
91.93	16	194	6 170	0.27	1287/14	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ C2
80.60	18	194	6 170	0.26	403/5	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ B2
73.12	20	194	6 170	0.36	585/8	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ A2
68.82	21	194	6 170	0.43	1170/17	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ X1
60.67	24	183	6 210	0.47	182/3	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ W1
52.65	28	170	6 260	0.64	1053/20	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ V1
49.87	29	198	6 160	0.06	748/15	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ U1
43.27	34	199	6 150	0.07	649/15	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ T1
39.33	37	200	6 150	0.08	118/3	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ S1
33.73	43	200	5 750	0.11	506/15	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ R1
32.64	44	215	5 280	0.07	816/25	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ Q1
28.32	51	235	4 700	0.08	708/25	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ P1
25.75	56	235	4 470	0.1	1416/55	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ N1
22.08	66	235	4 110	0.13	552/25	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ M1
20.07	72	235	3 900	0.16	1104/55	✓	✓	✓	✓				2KJ3602 - ■■■■■■ - ■■ L1
17.60	82	225	3 730	0.19	88/5	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ K1
15.71	92	215	3 610	0.23	864/55	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ J1
14.00	104	205	3 500	0.28	14/1	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ H1
12.92	112	199	3 410	0.34	168/13	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ G1
11.31	128	189	3 280	0.41	396/35	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ F1
9.92	146	181	3 140	0.44	248/25	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ E1
9.00	161	174	3 050	0.59	9/1	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ D1
8.47	171	170	3 030	0.68	144/17	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ C1
7.47	194	163	3 050	0.81	112/15	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ B1
6.48	224	154	3 050	1.08	162/25	✓	✓	✓	✓	✓			2KJ3602 - ■■■■■■ - ■■ A1

SIMOGEAR Geared Motors

Helical worm geared motors

Transmission ratios and torques

Selection and ordering data (continued)

<i>i</i>	n_2 rpm	T_{2N} Nm	F_{R2} N	J_G 10^{-4} kgm ²	R_{ex} -	Motor size							Article No.
						63	71	80	90	100	112	132	
C.49													
299.00	4.8	350	8 410	0.04	299/1	✓	✓						2KJ3603 - ■■■■■■ - ■■ N2
265.20	5.5	350	8 410	0.05	1326/5	✓	✓	✓					2KJ3603 - ■■■■■■ - ■■ M2
230.10	6.3	355	8 400	0.07	2301/10	✓	✓	✓					2KJ3603 - ■■■■■■ - ■■ L2
209.18	6.9	355	8 400	0.08	2301/11	✓	✓	✓	✓				2KJ3603 - ■■■■■■ - ■■ K2
179.40	8.1	355	8 280	0.10	897/5	✓	✓	✓	✓				2KJ3603 - ■■■■■■ - ■■ J2
163.09	8.9	355	7 950	0.13	1794/11	✓	✓	✓	✓				2KJ3603 - ■■■■■■ - ■■ H2
143.00	10	355	7 500	0.15	143/1	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ G2
127.64	11	355	7 130	0.18	1404/11	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ F2
113.75	13	355	6 770	0.22	455/4	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ E2
105.00	14	355	6 530	0.26	105/1	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ D2
91.93	16	350	6 180	0.32	1287/14	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ C2
80.60	18	330	5 950	0.32	403/5	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ B2
73.12	20	315	5 790	0.44	585/8	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ A2
68.82	21	305	5 700	0.51	1170/17	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ X1
60.67	24	285	5 510	0.58	182/3	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ W1
52.65	28	265	5 300	0.78	1053/20	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ V1
49.87	29	320	4 270	0.08	748/15	✓	✓	✓	✓				2KJ3603 - ■■■■■■ - ■■ U1
43.27	34	350	3 690	0.10	649/15	✓	✓	✓	✓				2KJ3603 - ■■■■■■ - ■■ T1
39.33	37	400	3 060	0.12	118/3	✓	✓	✓	✓				2KJ3603 - ■■■■■■ - ■■ S1
33.73	43	375	2 950	0.15	506/15	✓	✓	✓	✓				2KJ3603 - ■■■■■■ - ■■ R1
30.67	47	385	2 680	0.19	92/3	✓	✓	✓	✓				2KJ3603 - ■■■■■■ - ■■ Q1
26.89	54	360	2 630	0.23	242/9	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ P1
24.00	60	345	2 550	0.28	24/1	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ N1
21.39	68	330	2 470	0.34	385/18	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ M1
19.74	73	315	2 460	0.41	770/39	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ L1
17.29	84	300	2 360	0.51	121/7	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ K1
15.16	96	285	2 280	0.56	682/45	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ J1
13.75	105	275	2 210	0.73	55/4	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ H1
12.94	112	270	2 170	0.85	220/17	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ G1
11.41	127	255	2 110	1.02	308/27	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ F1
9.90	146	245	2 000	1.36	99/10	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ E1
9.00	161	255	1 120	1.03	9/1	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ D1
8.47	171	255	1 280	1.18	144/17	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ C1
7.47	194	240	1 570	1.45	112/15	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ B1
6.48	224	230	1 840	1.93	162/25	✓	✓	✓	✓	✓	✓		2KJ3603 - ■■■■■■ - ■■ A1

SIMOGEAR Geared Motors

Helical worm geared motors

Transmission ratios and torques

Selection and ordering data (continued)

<i>i</i>	n_2 rpm	T_{2N} Nm	F_{R2} N	J_G 10^{-4} kgm ²	R_{ex} -	Motor size							Article No.
						63	71	80	90	100	112	132	
C.69													
360.00	4.0	675	10 600	0.07	1079/3	✓	✓						2KJ3604 - ■■■■■■ - ■■ M2
319.80	4.5	675	10 600	0.09	1599/5	✓	✓	✓					2KJ3604 - ■■■■■■ - ■■ L2
280.80	5.2	675	10 600	0.11	1404/5	✓	✓	✓					2KJ3604 - ■■■■■■ - ■■ K2
255.27	5.7	675	10 600	0.13	2808/11	✓	✓	✓	✓				2KJ3604 - ■■■■■■ - ■■ J2
218.40	6.6	675	10 600	0.16	1092/5	✓	✓	✓	✓				2KJ3604 - ■■■■■■ - ■■ H2
198.55	7.3	675	10 600	0.19	2184/11	✓	✓	✓	✓				2KJ3604 - ■■■■■■ - ■■ G2
175.50	8.3	665	10 600	0.23	351/2	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ F2
159.55	9.1	640	10 700	0.30	1755/11	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ E2
139.75	10	590	10 600	0.35	559/4	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ D2
129.00	11	565	10 300	0.42	129/1	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ C2
114.21	13	535	10 000	0.50	1599/14	✓	✓	✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ B2
102.50	14	675	8 340	0.10	205/2	✓	✓	✓	✓				2KJ3604 - ■■■■■■ - ■■ A2
90.00	16	675	7 810	0.12	90/1	✓	✓	✓	✓				2KJ3604 - ■■■■■■ - ■■ X1
81.82	18	675	7 440	0.15	900/11	✓	✓	✓	✓				2KJ3604 - ■■■■■■ - ■■ W1
70.00	21	660	6 940	0.18	70/1	✓	✓	✓	✓				2KJ3604 - ■■■■■■ - ■■ V1
63.64	23	640	6 720	0.22	700/11	✓	✓	✓	✓				2KJ3604 - ■■■■■■ - ■■ U1
56.25	26	610	6 480	0.27	225/4	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ T1
51.14	28	580	6 340	0.34	1125/22	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ S1
44.79	32	545	6 130	0.41	1075/24	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ R1
41.35	35	525	6 000	0.49	1075/26	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ Q1
36.61	40	500	5 790	0.60	1025/28	✓	✓	✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ P1
30.00	48	545	4 580	0.46	30/1	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ N1
26.28	55	515	4 420	0.56	473/18	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ M1
24.26	60	500	4 320	0.67	946/39	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ L1
21.48	68	475	4 180	0.82	451/21	✓	✓	✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ K1
17.88	81	440	3 980	1.14	143/8	✓	✓	✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ J1
15.88	91	360	3 970	0.88	1032/65	✓	✓	✓	✓	✓	✓		2KJ3604 - ■■■■■■ - ■■ H1
14.06	103	355	3 740	1.09	492/35	✓	✓	✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ G1
11.70	124	360	3 320	1.54	117/10	✓	✓	✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ F1
11.01	132	360	3 200	1.76	936/85	✓	✓	✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ E1
9.87	147	360	2 870	2.10	148/15	✓	✓	✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ D1
8.40	173	360	3 110	2.90	42/5	✓	✓	✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ C1
7.20	201	360	3 170	3.80	36/5			✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ B1
6.20	234	355	3 190	5.10	31/5			✓	✓	✓	✓	✓	2KJ3604 - ■■■■■■ - ■■ A1

SIMOGEAR Geared Motors

Helical worm geared motors

Transmission ratios and torques

Selection and ordering data (continued)

<i>i</i>	<i>n</i> ₂ rpm	<i>T</i> _{2N} Nm	<i>F</i> _{R2} N	<i>J</i> _G 10 ⁻⁴ kgm ²	<i>R</i> _{ex} -	Motor size							Article No.
						63	71	80	90	100	112	132	
C.89													
363.00	4	1 450	16 200	0.47	3627/10	✓	✓	✓				2KJ3606 - ■■■■■■ - ■■ N2	
329.73	4.4	1 450	16 200	0.57	3627/11	✓	✓	✓				2KJ3606 - ■■■■■■ - ■■ M2	
295.75	4.9	1 450	16 200	0.78	1183/4	✓	✓	✓	✓	✓		2KJ3606 - ■■■■■■ - ■■ L2	
265.91	5.5	1 450	16 200	0.89	2925/11	✓	✓	✓	✓	✓		2KJ3606 - ■■■■■■ - ■■ K2	
240.50	6	1 450	16 200	1.00	481/2	✓	✓	✓	✓	✓		2KJ3606 - ■■■■■■ - ■■ J2	
222.00	6.5	1 450	16 200	1.18	222/1	✓	✓	✓	✓	✓		2KJ3606 - ■■■■■■ - ■■ H2	
203.36	7.1	1 450	16 200	1.52	2847/14	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ G2	
170.62	8.5	1 360	16 300	1.67	1365/8	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ F2	
160.59	9	1 330	16 300	1.91	2730/17	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ E2	
147.33	9.8	1 280	16 300	2.10	442/3	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ D2	
128.70	11	1 190	16 300	3.00	1287/10	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ C2	
115.23	13	1 120	16 000	3.70	2535/22		✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ B2	
100.75	14	1 050	15 300	4.40	403/4		✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ A2	
86.48	17	985	14 600	4.90	1989/23		✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ X1	
76.44	19	930	14 100	6.30	1911/25		✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ W1	
65.00	22	865	13 400	8.10	65/1				✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ V1	
55.61	26	1 450	8 660	0.89	1001/18	✓	✓	✓	✓	✓		2KJ3606 - ■■■■■■ - ■■ U1	
50.00	29	1 430	8 200	1.02	50/1	✓	✓	✓	✓	✓		2KJ3606 - ■■■■■■ - ■■ T1	
45.22	32	1 380	7 940	1.15	407/9	✓	✓	✓	✓	✓		2KJ3606 - ■■■■■■ - ■■ S1	
41.74	35	1 340	7 750	1.35	1628/39	✓	✓	✓	✓	✓		2KJ3606 - ■■■■■■ - ■■ R1	
38.24	38	1 300	7 540	1.72	803/21	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ Q1	
32.08	45	1 220	7 140	1.97	385/12	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ P1	
30.20	48	1 200	6 970	2.20	1540/51	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ N1	
27.70	52	1 140	6 920	2.50	748/27	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ M1	
25.03	58	1 090	5 540	2.10	876/35	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ L1	
21.00	69	1 070	4 530	2.40	21/1	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ K1	
19.76	73	1 120	3 440	2.80	336/17	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ J1	
18.13	80	1 110	3 130	3.20	272/15	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ H1	
15.84	92	1 110	4 110	4.40	396/25	✓	✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ G1	
14.18	102	1 070	4 780	5.40	156/11		✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ F1	
12.40	117	1 010	5 460	6.60	62/5		✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ E1	
10.64	136	960	5 610	8.00	1224/115		✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ D1	
9.41	154	915	5 680	10.00	1176/125		✓	✓	✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ C1	
8.00	181	840	5 710	14.00	8/1				✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ B1	
6.86	211	720	5 690	18.00	48/7				✓	✓	✓	2KJ3606 - ■■■■■■ - ■■ A1	

SIMOGEAR Geared Motors

Helical worm geared motors

Efficiencies

Selection and ordering data

i	$n_{\text{mot}} = 2\,800 \text{ rpm}$				$n_{\text{mot}} = 1\,400 \text{ rpm}$				$n_{\text{mot}} = 900 \text{ rpm}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
C.29													
265.20	10.6	110	0.17	73	5.3	108	0.09	65	3.4	106	0.06	59	2KJ3601 - ■■■■■■ - ■■ M2
230.10	12.2	110	0.19	74	6.1	108	0.10	67	3.9	106	0.07	61	2KJ3601 - ■■■■■■ - ■■ L2
209.18	13.4	110	0.21	75	6.7	109	0.11	68	4.3	107	0.08	62	2KJ3601 - ■■■■■■ - ■■ K2
179.40	15.6	110	0.24	76	7.8	109	0.13	70	5.0	107	0.09	64	2KJ3601 - ■■■■■■ - ■■ J2
163.09	17.2	110	0.26	76	8.6	110	0.14	71	5.5	108	0.10	65	2KJ3601 - ■■■■■■ - ■■ H2
143.00	19.6	110	0.30	76	9.8	110	0.16	72	6.3	108	0.11	67	2KJ3601 - ■■■■■■ - ■■ G2
127.64	22	110	0.33	76	11.0	110	0.17	73	7.1	109	0.12	68	2KJ3601 - ■■■■■■ - ■■ F2
113.75	25	110	0.38	76	12.3	110	0.19	74	7.9	109	0.13	70	2KJ3601 - ■■■■■■ - ■■ E2
105.00	27	110	0.41	76	13.3	110	0.21	74	8.6	110	0.14	70	2KJ3601 - ■■■■■■ - ■■ D2
91.93	30	110	0.46	76	15.2	110	0.23	75	9.8	110	0.16	72	2KJ3601 - ■■■■■■ - ■■ C2
80.60	35	105	0.51	76	17.4	110	0.27	75	11.2	110	0.18	73	2KJ3601 - ■■■■■■ - ■■ B2
73.12	38	101	0.53	76	19.1	110	0.29	75	12.3	110	0.19	74	2KJ3601 - ■■■■■■ - ■■ A2
68.82	41	99	0.56	76	20	110	0.31	75	13.1	110	0.21	74	2KJ3601 - ■■■■■■ - ■■ X1
60.67	46	95	0.61	75	23	110	0.35	76	14.8	110	0.23	74	2KJ3601 - ■■■■■■ - ■■ W1
52.65	53	90	0.67	75	27	110	0.41	76	17.1	110	0.26	75	2KJ3601 - ■■■■■■ - ■■ V1
49.87	56	105	0.69	90	28	102	0.34	87	18	100	0.22	84	2KJ3601 - ■■■■■■ - ■■ U1
43.27	65	106	0.80	90	32	103	0.39	88	21	101	0.26	86	2KJ3601 - ■■■■■■ - ■■ T1
39.33	71	106	0.88	90	36	103	0.44	89	23	101	0.28	86	2KJ3601 - ■■■■■■ - ■■ S1
33.73	83	107	1.00	90	42	104	0.51	89	27	102	0.33	87	2KJ3601 - ■■■■■■ - ■■ R1
32.64	86	92	0.91	92	43	90	0.45	90	28	88	0.30	87	2KJ3601 - ■■■■■■ - ■■ Q1
28.32	99	93	1.10	92	49	90	0.51	90	32	89	0.34	88	2KJ3601 - ■■■■■■ - ■■ P1
25.75	109	93	1.20	92	54	90	0.57	91	35	89	0.37	89	2KJ3601 - ■■■■■■ - ■■ N1
22.08	127	94	1.40	92	63	91	0.66	91	41	89	0.43	89	2KJ3601 - ■■■■■■ - ■■ M1
20.07	140	94	1.50	92	70	91	0.74	91	45	90	0.47	90	2KJ3601 - ■■■■■■ - ■■ L1
17.60	159	93	1.7*	92	80	92	0.85	92	51	90	0.54	90	2KJ3601 - ■■■■■■ - ■■ K1
15.71	178	89	1.8*	92	89	92	0.95	92	57	91	0.60	91	2KJ3601 - ■■■■■■ - ■■ J1
14.00	200	86	2.0*	92	100	93	1.10	92	64	91	0.67	91	2KJ3601 - ■■■■■■ - ■■ H1
12.92	217	83	2.1*	92	108	93	1.20	92	70	91	0.74	91	2KJ3601 - ■■■■■■ - ■■ G1
11.31	248	79	2.3*	92	124	94	1.30	92	80	92	0.85	91	2KJ3601 - ■■■■■■ - ■■ F1
9.92	282	74	2.4*	91	141	94	1.50	92	91	92	0.97	91	2KJ3601 - ■■■■■■ - ■■ E1
9.00	311	71	2.6*	92	156	90	1.6*	92	100	93	1.10	92	2KJ3601 - ■■■■■■ - ■■ D1
8.47	331	70	2.7*	91	165	88	1.7*	92	106	93	1.10	92	2KJ3601 - ■■■■■■ - ■■ C1
7.47	375	66	2.8*	91	187	83	1.8*	92	120	93	1.30	92	2KJ3601 - ■■■■■■ - ■■ B1
6.48	432	62	3.1*	91	216	78	1.9*	92	139	91	1.40	92	2KJ3601 - ■■■■■■ - ■■ A1

* $P_{\text{mot max}} = 1.5 \text{ kW}$

Selection and ordering data (continued)

i	$n_{\text{mot}} = 700 \text{ rpm}$				$n_{\text{mot}} = 500 \text{ rpm}$				$n_{\text{mot}} = 100 \text{ rpm}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
C.29													
265.20	2.6	104	<0.06	57	1.9	103	<0.06	54	0.38	95	<0.06	47	2KJ3601 - ■■■■■■ - ■■ M2
230.10	3	105	0.06	58	2.2	104	<0.06	55	0.43	96	<0.06	48	2KJ3601 - ■■■■■■ - ■■ L2
209.18	3.3	105	0.06	59	2.4	104	<0.06	56	0.48	97	<0.06	48	2KJ3601 - ■■■■■■ - ■■ K2
179.40	3.9	106	0.07	61	2.8	105	<0.06	57	0.56	97	<0.06	48	2KJ3601 - ■■■■■■ - ■■ J2
163.09	4.3	107	0.08	62	3.1	105	0.06	58	0.61	98	<0.06	48	2KJ3601 - ■■■■■■ - ■■ H2
143.00	4.9	107	0.09	64	3.5	106	0.07	59	0.70	98	<0.06	48	2KJ3601 - ■■■■■■ - ■■ G2
127.64	5.5	108	0.10	65	3.9	106	0.07	61	0.78	99	<0.06	49	2KJ3601 - ■■■■■■ - ■■ F2
113.75	6.2	108	0.11	66	4.4	107	0.08	62	0.88	99	<0.06	49	2KJ3601 - ■■■■■■ - ■■ E2
105.00	6.7	109	0.11	67	4.8	107	0.09	63	0.95	100	<0.06	49	2KJ3601 - ■■■■■■ - ■■ D2
91.93	7.6	109	0.13	69	5.4	108	0.09	65	1.1	100	<0.06	50	2KJ3601 - ■■■■■■ - ■■ C2
80.60	8.7	110	0.14	70	6.2	108	0.11	66	1.2	101	<0.06	50	2KJ3601 - ■■■■■■ - ■■ B2
73.12	9.6	110	0.16	71	6.8	109	0.12	67	1.4	101	<0.06	51	2KJ3601 - ■■■■■■ - ■■ A2
68.82	10.2	110	0.16	72	7.3	109	0.12	68	1.5	102	<0.06	51	2KJ3601 - ■■■■■■ - ■■ X1
60.67	11.5	110	0.18	73	8.2	110	0.14	70	1.6	102	<0.06	52	2KJ3601 - ■■■■■■ - ■■ W1
52.65	13.3	110	0.21	74	9.5	110	0.15	71	1.9	103	<0.06	53	2KJ3601 - ■■■■■■ - ■■ V1
49.87	14.0	99	0.18	83	10.0	98	0.13	80	2.0	91	<0.06	73	2KJ3601 - ■■■■■■ - ■■ U1
43.27	16.2	100	0.20	84	11.6	98	0.15	81	2.3	91	<0.06	74	2KJ3601 - ■■■■■■ - ■■ T1
39.33	17.8	100	0.22	84	12.7	99	0.16	82	2.5	92	<0.06	74	2KJ3601 - ■■■■■■ - ■■ S1
33.73	21	101	0.26	85	14.8	99	0.19	83	3.0	92	<0.06	74	2KJ3601 - ■■■■■■ - ■■ R1
32.64	21	87	0.22	86	15.3	86	0.17	84	3.1	80	<0.06	77	2KJ3601 - ■■■■■■ - ■■ Q1
28.32	25	88	0.27	87	17.7	86	0.19	84	3.5	80	<0.06	78	2KJ3601 - ■■■■■■ - ■■ P1
25.75	27	88	0.29	87	19.4	87	0.21	85	3.9	81	<0.06	78	2KJ3601 - ■■■■■■ - ■■ N1
22.08	32	89	0.34	88	23	87	0.25	86	4.5	81	<0.06	78	2KJ3601 - ■■■■■■ - ■■ M1
20.07	35	89	0.37	89	25	88	0.27	87	5.0	82	<0.06	79	2KJ3601 - ■■■■■■ - ■■ L1
17.60	40	89	0.42	89	28	88	0.30	87	5.7	82	0.06	79	2KJ3601 - ■■■■■■ - ■■ K1
15.71	45	90	0.47	90	32	89	0.34	88	6.4	83	0.07	79	2KJ3601 - ■■■■■■ - ■■ J1
14.00	50	90	0.53	90	36	89	0.38	89	7.1	83	0.08	80	2KJ3601 - ■■■■■■ - ■■ H1
12.92	54	90	0.57	90	39	89	0.41	89	7.7	83	0.08	80	2KJ3601 - ■■■■■■ - ■■ G1
11.31	62	91	0.65	91	44	90	0.46	90	8.8	84	0.10	81	2KJ3601 - ■■■■■■ - ■■ F1
9.92	71	91	0.75	91	50	90	0.53	90	10.1	84	0.11	81	2KJ3601 - ■■■■■■ - ■■ E1
9.00	78	92	0.82	91	56	91	0.59	91	11.1	85	0.12	82	2KJ3601 - ■■■■■■ - ■■ D1
8.47	83	92	0.88	91	59	91	0.62	91	11.8	85	0.13	82	2KJ3601 - ■■■■■■ - ■■ C1
7.47	94	93	1.00	92	67	91	0.71	91	13.4	85	0.15	83	2KJ3601 - ■■■■■■ - ■■ B1
6.48	108	93	1.20	92	77	92	0.81	91	15.4	86	0.17	84	2KJ3601 - ■■■■■■ - ■■ A1

SIMOGEAR Geared Motors

Helical worm geared motors

Efficiencies

Selection and ordering data (continued)

i	$n_{\text{mot}} = 2\,800\text{ rpm}$				$n_{\text{mot}} = 1\,400\text{ rpm}$				$n_{\text{mot}} = 900\text{ rpm}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
C.39													
299.00	9.4	194	0.27	71	4.7	192	0.15	64	3.0	189	0.10	58	2KJ3602 - ■■■■■■ - ■■ N2
265.20	10.6	194	0.30	72	5.3	192	0.16	66	3.4	190	0.11	60	2KJ3602 - ■■■■■■ - ■■ M2
230.10	12.2	194	0.34	73	6.1	193	0.18	68	3.9	191	0.13	62	2KJ3602 - ■■■■■■ - ■■ L2
209.18	13.4	194	0.38	73	6.7	193	0.20	68	4.3	191	0.14	63	2KJ3602 - ■■■■■■ - ■■ K2
179.40	15.6	194	0.44	73	7.8	193	0.23	70	5.0	192	0.16	65	2KJ3602 - ■■■■■■ - ■■ J2
163.09	17.2	194	0.48	73	8.6	193	0.25	71	5.5	192	0.17	66	2KJ3602 - ■■■■■■ - ■■ H2
143.00	19.6	194	0.55	73	9.8	194	0.28	71	6.3	193	0.19	68	2KJ3602 - ■■■■■■ - ■■ G2
127.64	22	194	0.61	73	11	194	0.31	72	7.1	193	0.21	69	2KJ3602 - ■■■■■■ - ■■ F2
113.75	25	181	0.66	73	12.3	194	0.35	72	7.9	193	0.23	70	2KJ3602 - ■■■■■■ - ■■ E2
105.00	27	175	0.68	73	13.3	194	0.37	72	8.6	193	0.25	70	2KJ3602 - ■■■■■■ - ■■ D2
91.93	30	165	0.72	72	15.2	194	0.43	72	9.8	194	0.28	71	2KJ3602 - ■■■■■■ - ■■ C2
80.60	35	157	0.80	72	17.4	194	0.49	73	11.2	194	0.32	72	2KJ3602 - ■■■■■■ - ■■ B2
73.12	38	150	0.84	72	19.1	189	0.52	73	12.3	194	0.35	72	2KJ3602 - ■■■■■■ - ■■ A2
68.82	41	147	0.88	72	20	185	0.53	73	13.1	194	0.37	72	2KJ3602 - ■■■■■■ - ■■ X1
60.67	46	139	0.94	72	23	175	0.58	73	14.8	194	0.41	73	2KJ3602 - ■■■■■■ - ■■ W1
52.65	53	131	1.00	72	27	166	0.65	73	17.1	192	0.47	73	2KJ3602 - ■■■■■■ - ■■ V1
49.87	56	195	1.30	89	28	198	0.66	89	18	194	0.41	89	2KJ3602 - ■■■■■■ - ■■ U1
43.27	65	196	1.50	89	32	199	0.75	89	21	196	0.49	89	2KJ3602 - ■■■■■■ - ■■ T1
39.33	71	196	1.60	89	36	200	0.85	89	23	196	0.53	89	2KJ3602 - ■■■■■■ - ■■ S1
33.73	83	196	1.90	89	42	200	1.00	89	27	197	0.63	89	2KJ3602 - ■■■■■■ - ■■ R1
32.64	86	200	2.00	91	43	210	1.00	91	28	205	0.68	90	2KJ3602 - ■■■■■■ - ■■ Q1
28.32	99	200	2.30	91	49	225	1.30	91	32	225	0.84	90	2KJ3602 - ■■■■■■ - ■■ P1
25.75	109	200	2.50	91	54	235	1.50	91	35	230	0.95	90	2KJ3602 - ■■■■■■ - ■■ N1
22.08	127	198	2.90	91	63	235	1.70	91	41	230	1.10	91	2KJ3602 - ■■■■■■ - ■■ M1
20.07	140	188	3.00	91	70	235	1.90	91	45	235	1.20	91	2KJ3602 - ■■■■■■ - ■■ L1
17.60	159	180	3.3*	91	80	225	2.10	92	51	235	1.40	91	2KJ3602 - ■■■■■■ - ■■ K1
15.71	178	172	3.5*	91	89	215	2.20	91	57	235	1.60	91	2KJ3602 - ■■■■■■ - ■■ J1
14.00	200	164	3.8*	91	100	205	2.40	91	64	235	1.70	92	2KJ3602 - ■■■■■■ - ■■ H1
12.92	217	159	4.0*	91	108	200	2.50	92	70	230	1.90	92	2KJ3602 - ■■■■■■ - ■■ G1
11.31	248	152	4.3*	91	124	192	2.70	91	80	220	2.00	92	2KJ3602 - ■■■■■■ - ■■ F1
9.92	282	145	4.7*	91	141	183	3.00	91	91	210	2.20	92	2KJ3602 - ■■■■■■ - ■■ E1
9.00	311	137	4.9*	91	156	177	3.2*	91	100	205	2.30	92	2KJ3602 - ■■■■■■ - ■■ D1
8.47	331	129	4.9*	91	165	173	3.3*	91	106	200	2.40	92	2KJ3602 - ■■■■■■ - ■■ C1
7.47	375	114	4.9*	91	187	166	3.6*	91	120	192	2.60	92	2KJ3602 - ■■■■■■ - ■■ B1
6.48	432	99	4.9*	91	216	157	3.9*	91	139	182	2.90	92	2KJ3602 - ■■■■■■ - ■■ A1

* $P_{\text{mot max}} = 3\text{ kW}$

Selection and ordering data (continued)

i	$n_{\text{mot}} = 700 \text{ rpm}$				$n_{\text{mot}} = 500 \text{ rpm}$				$n_{\text{mot}} = 100 \text{ rpm}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
C.39													
299.00	2.3	187	0.08	55	1.7	184	0.06	52	0.33	170	<0.06	44	2KJ3602 - ■■■■■■ - ■■ N2
265.20	2.6	188	0.09	57	1.9	185	0.07	53	0.38	167	<0.06	44	2KJ3602 - ■■■■■■ - ■■ M2
230.10	3.0	189	0.10	58	2.2	186	0.08	54	0.43	164	<0.06	44	2KJ3602 - ■■■■■■ - ■■ L2
209.18	3.3	190	0.11	59	2.4	187	0.09	55	0.48	162	<0.06	44	2KJ3602 - ■■■■■■ - ■■ K2
179.40	3.9	191	0.13	62	2.8	188	0.10	57	0.56	160	<0.06	45	2KJ3602 - ■■■■■■ - ■■ J2
163.09	4.3	191	0.14	63	3.1	189	0.11	58	0.61	160	<0.06	45	2KJ3602 - ■■■■■■ - ■■ H2
143.00	4.9	192	0.15	64	3.5	190	0.12	60	0.70	160	<0.06	46	2KJ3602 - ■■■■■■ - ■■ G2
127.64	5.5	192	0.17	66	3.9	191	0.13	61	0.78	161	<0.06	46	2KJ3602 - ■■■■■■ - ■■ F2
113.75	6.2	193	0.19	67	4.4	191	0.14	63	0.88	162	<0.06	47	2KJ3602 - ■■■■■■ - ■■ E2
105.00	6.7	193	0.20	68	4.8	192	0.15	64	0.95	163	<0.06	47	2KJ3602 - ■■■■■■ - ■■ D2
91.93	7.6	193	0.22	69	5.4	192	0.17	66	1.1	166	<0.06	48	2KJ3602 - ■■■■■■ - ■■ C2
80.60	8.7	193	0.25	70	6.2	193	0.19	67	1.2	168	<0.06	49	2KJ3602 - ■■■■■■ - ■■ B2
73.12	9.6	194	0.28	71	6.8	193	0.20	68	1.4	170	<0.06	49	2KJ3602 - ■■■■■■ - ■■ A2
68.82	10.2	194	0.29	71	7.3	193	0.21	69	1.5	172	<0.06	50	2KJ3602 - ■■■■■■ - ■■ X1
60.67	11.5	194	0.32	72	8.2	193	0.24	70	1.6	176	0.06	51	2KJ3602 - ■■■■■■ - ■■ W1
52.65	13.3	194	0.37	73	9.5	194	0.27	71	1.9	180	0.07	53	2KJ3602 - ■■■■■■ - ■■ V1
49.87	14.0	192	0.32	88	10.0	190	0.23	86	2.0	177	0.06	66	2KJ3602 - ■■■■■■ - ■■ U1
43.27	16.2	194	0.37	88	11.6	191	0.27	87	2.3	178	0.06	67	2KJ3602 - ■■■■■■ - ■■ T1
39.33	17.8	194	0.41	88	12.7	192	0.29	88	2.5	179	0.07	68	2KJ3602 - ■■■■■■ - ■■ S1
33.73	21	196	0.49	89	14.8	193	0.34	88	3.0	180	0.08	71	2KJ3602 - ■■■■■■ - ■■ R1
32.64	21	200	0.51	88	15.3	197	0.37	86	3.1	174	0.08	76	2KJ3602 - ■■■■■■ - ■■ Q1
28.32	25	220	0.66	89	17.7	215	0.47	87	3.5	192	0.09	76	2KJ3602 - ■■■■■■ - ■■ P1
25.75	27	230	0.73	89	19.4	225	0.53	87	3.9	210	0.11	77	2KJ3602 - ■■■■■■ - ■■ N1
22.08	32	230	0.86	90	23	225	0.62	88	4.5	210	0.13	77	2KJ3602 - ■■■■■■ - ■■ M1
20.07	35	230	0.94	90	25	230	0.68	89	5.0	215	0.15	78	2KJ3602 - ■■■■■■ - ■■ L1
17.60	40	230	1.10	91	28	230	0.76	90	5.7	215	0.16	79	2KJ3602 - ■■■■■■ - ■■ K1
15.71	45	235	1.20	91	32	230	0.86	90	6.4	215	0.18	79	2KJ3602 - ■■■■■■ - ■■ J1
14.00	50	235	1.40	91	36	230	0.97	91	7.1	215	0.20	80	2KJ3602 - ■■■■■■ - ■■ H1
12.92	54	235	1.50	92	39	230	1.10	91	7.7	215	0.22	81	2KJ3602 - ■■■■■■ - ■■ G1
11.31	62	235	1.70	92	44	235	1.20	91	8.8	220	0.25	82	2KJ3602 - ■■■■■■ - ■■ F1
9.92	71	230	1.90	92	50	235	1.40	91	10.1	220	0.28	83	2KJ3602 - ■■■■■■ - ■■ E1
9.00	78	220	2.00	92	56	235	1.50	92	11.1	220	0.31	83	2KJ3602 - ■■■■■■ - ■■ D1
8.47	83	215	2.10	92	59	235	1.60	92	11.8	220	0.33	84	2KJ3602 - ■■■■■■ - ■■ C1
7.47	94	205	2.30	92	67	230	1.80	92	13.4	220	0.37	85	2KJ3602 - ■■■■■■ - ■■ B1
6.48	108	198	2.50	92	77	220	2.00	92	15.4	225	0.42	86	2KJ3602 - ■■■■■■ - ■■ A1

SIMOGEAR Geared Motors

Helical worm geared motors

Efficiencies

Selection and ordering data (continued)

i	$n_{\text{mot}} = 2\,800 \text{ rpm}$				$n_{\text{mot}} = 1\,400 \text{ rpm}$				$n_{\text{mot}} = 900 \text{ rpm}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
C.49													
299.00	9.4	355	0.48	73	4.7	350	0.26	67	3.0	345	0.18	61	2KJ3603 - ■■■■■■ - ■■ N2
265.20	10.6	355	0.54	74	5.3	350	0.29	69	3.4	350	0.20	63	2KJ3603 - ■■■■■■ - ■■ M2
230.10	12.2	355	0.62	74	6.1	350	0.32	70	3.9	350	0.22	65	2KJ3603 - ■■■■■■ - ■■ L2
209.18	13.4	355	0.68	74	6.7	355	0.35	71	4.3	350	0.24	66	2KJ3603 - ■■■■■■ - ■■ K2
179.40	15.6	355	0.79	74	7.8	355	0.40	72	5.0	350	0.27	68	2KJ3603 - ■■■■■■ - ■■ J2
163.09	17.2	340	0.84	74	8.6	355	0.44	73	5.5	350	0.30	69	2KJ3603 - ■■■■■■ - ■■ H2
143.00	19.6	315	0.89	74	9.8	355	0.50	73	6.3	355	0.33	70	2KJ3603 - ■■■■■■ - ■■ G2
127.64	22	300	0.95	73	11.0	355	0.56	73	7.1	355	0.37	71	2KJ3603 - ■■■■■■ - ■■ F2
113.75	25	285	1.00	73	12.3	355	0.62	74	7.9	355	0.41	72	2KJ3603 - ■■■■■■ - ■■ E2
105.00	27	275	1.10	73	13.3	350	0.66	74	8.6	355	0.44	72	2KJ3603 - ■■■■■■ - ■■ D2
91.93	30	260	1.10	73	15.2	330	0.72	74	9.8	355	0.50	73	2KJ3603 - ■■■■■■ - ■■ C2
80.60	35	250	1.30	73	17.4	315	0.78	74	11.2	355	0.57	74	2KJ3603 - ■■■■■■ - ■■ B2
73.12	38	240	1.30	73	19.1	300	0.82	74	12.3	345	0.61	74	2KJ3603 - ■■■■■■ - ■■ A2
68.82	41	230	1.40	73	20	295	0.84	74	13.1	340	0.63	74	2KJ3603 - ■■■■■■ - ■■ X1
60.67	46	220	1.50	73	23	280	0.92	74	14.8	320	0.68	74	2KJ3603 - ■■■■■■ - ■■ W1
52.65	53	210	1.60	73	27	265	1.00	74	17.1	305	0.74	74	2KJ3603 - ■■■■■■ - ■■ V1
49.87	56	310	2.10	90	28	310	1.00	89	18	305	0.66	87	2KJ3603 - ■■■■■■ - ■■ U1
43.27	65	340	2.60	90	32	340	1.30	89	21	335	0.85	88	2KJ3603 - ■■■■■■ - ■■ T1
39.33	71	335	2.80	89	36	395	1.70	89	23	395	1.10	88	2KJ3603 - ■■■■■■ - ■■ S1
33.73	83	315	3.10	89	42	365	1.80	90	27	365	1.20	89	2KJ3603 - ■■■■■■ - ■■ R1
30.67	91	300	3.20	89	46	380	2.10	89	29	400	1.40	89	2KJ3603 - ■■■■■■ - ■■ Q1
26.89	104	285	3.50	89	52	360	2.20	90	33	400	1.50	89	2KJ3603 - ■■■■■■ - ■■ P1
24.00	117	275	3.80	89	58	345	2.40	90	38	400	1.80	90	2KJ3603 - ■■■■■■ - ■■ N1
21.39	131	260	4.1*	89	65	330	2.50	90	42	385	1.90	90	2KJ3603 - ■■■■■■ - ■■ M1
19.74	142	255	4.3*	89	71	320	2.70	90	46	370	2.00	90	2KJ3603 - ■■■■■■ - ■■ L1
17.29	162	240	4.6*	89	81	305	2.90	90	52	355	2.20	90	2KJ3603 - ■■■■■■ - ■■ K1
15.16	185	230	5.1*	89	92	290	3.20	90	59	335	2.30	90	2KJ3603 - ■■■■■■ - ■■ J1
13.75	204	220	5.4*	89	102	280	3.40	90	65	325	2.50	90	2KJ3603 - ■■■■■■ - ■■ H1
12.94	216	210	5.3*	89	108	275	3.50	90	70	315	2.60	90	2KJ3603 - ■■■■■■ - ■■ G1
11.41	245	185	5.4*	89	123	260	3.80	90	79	305	2.80	90	2KJ3603 - ■■■■■■ - ■■ F1
9.90	283	161	5.4*	89	141	250	4.1*	89	91	290	3.10	90	2KJ3603 - ■■■■■■ - ■■ E1
9.00	311	185	6.6*	91	156	260	4.6*	92	100	260	3.00	92	2KJ3603 - ■■■■■■ - ■■ D1
8.47	331	174	6.6*	91	165	260	4.9*	92	106	260	3.20	92	2KJ3603 - ■■■■■■ - ■■ C1
7.47	375	153	6.6*	91	187	250	5.3*	92	120	260	3.60	92	2KJ3603 - ■■■■■■ - ■■ B1
6.48	432	133	6.6*	91	216	235	5.8*	92	139	260	4.1*	92	2KJ3603 - ■■■■■■ - ■■ A1

* $P_{\text{mot max}} = 4 \text{ kW}$

Selection and ordering data (continued)

i	$n_{\text{mot}} = 700 \text{ rpm}$				$n_{\text{mot}} = 500 \text{ rpm}$				$n_{\text{mot}} = 100 \text{ rpm}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
C.49													
299.00	2.3	340	0.14	58	1.7	315	0.10	54	0.33	260	<0.06	45	2KJ3603 - ■■■■■■ - ■■ N2
265.20	2.6	340	0.16	60	1.9	315	0.11	55	0.38	255	<0.06	45	2KJ3603 - ■■■■■■ - ■■ M2
230.10	3.0	345	0.18	61	2.2	320	0.13	57	0.43	255	<0.06	45	2KJ3603 - ■■■■■■ - ■■ L2
209.18	3.3	345	0.19	63	2.4	320	0.14	58	0.48	255	<0.06	45	2KJ3603 - ■■■■■■ - ■■ K2
179.40	3.9	350	0.22	65	2.8	330	0.16	60	0.56	255	<0.06	46	2KJ3603 - ■■■■■■ - ■■ J2
163.09	4.3	350	0.24	66	3.1	330	0.18	61	0.61	255	<0.06	46	2KJ3603 - ■■■■■■ - ■■ H2
143.00	4.9	350	0.27	68	3.5	340	0.20	63	0.70	255	<0.06	47	2KJ3603 - ■■■■■■ - ■■ G2
127.64	5.5	350	0.30	69	3.9	350	0.22	65	0.78	260	<0.06	47	2KJ3603 - ■■■■■■ - ■■ F2
113.75	6.2	355	0.33	70	4.4	350	0.25	66	0.88	260	<0.06	48	2KJ3603 - ■■■■■■ - ■■ E2
105.00	6.7	355	0.35	71	4.8	350	0.26	67	0.95	265	<0.06	49	2KJ3603 - ■■■■■■ - ■■ D2
91.93	7.6	355	0.39	72	5.4	350	0.29	69	1.1	270	0.06	50	2KJ3603 - ■■■■■■ - ■■ C2
80.60	8.7	355	0.45	73	6.2	355	0.33	70	1.2	275	0.07	51	2KJ3603 - ■■■■■■ - ■■ B2
73.12	9.6	355	0.49	73	6.8	355	0.36	71	1.4	280	0.08	52	2KJ3603 - ■■■■■■ - ■■ A2
68.82	10.2	355	0.52	73	7.3	355	0.38	72	1.5	280	0.08	52	2KJ3603 - ■■■■■■ - ■■ X1
60.67	11.5	350	0.57	74	8.2	355	0.42	73	1.6	285	0.09	54	2KJ3603 - ■■■■■■ - ■■ W1
52.65	13.3	330	0.63	74	9.5	355	0.48	73	1.9	295	0.11	55	2KJ3603 - ■■■■■■ - ■■ V1
49.87	14.0	295	0.51	86	10.0	285	0.37	83	2.0	245	0.07	71	2KJ3603 - ■■■■■■ - ■■ U1
43.27	16.2	330	0.65	87	11.6	320	0.47	84	2.3	275	0.09	71	2KJ3603 - ■■■■■■ - ■■ T1
39.33	17.8	390	0.83	87	12.7	375	0.60	85	2.5	320	0.12	72	2KJ3603 - ■■■■■■ - ■■ S1
33.73	21	360	0.91	88	14.8	355	0.64	86	3.0	300	0.13	73	2KJ3603 - ■■■■■■ - ■■ R1
30.67	23	395	1.10	88	16.3	385	0.77	87	3.3	330	0.16	73	2KJ3603 - ■■■■■■ - ■■ Q1
26.89	26	395	1.20	89	18.6	390	0.87	88	3.7	330	0.17	74	2KJ3603 - ■■■■■■ - ■■ P1
24.00	29	395	1.40	89	21	390	0.99	88	4.2	335	0.20	75	2KJ3603 - ■■■■■■ - ■■ N1
21.39	33	395	1.50	89	23	395	1.10	89	4.7	340	0.22	76	2KJ3603 - ■■■■■■ - ■■ M1
19.74	35	400	1.60	90	25	395	1.20	89	5.1	340	0.24	77	2KJ3603 - ■■■■■■ - ■■ L1
17.29	40	385	1.80	90	29	395	1.30	89	5.8	345	0.27	78	2KJ3603 - ■■■■■■ - ■■ K1
15.16	46	365	2.00	90	33	390	1.50	90	6.6	345	0.30	79	2KJ3603 - ■■■■■■ - ■■ J1
13.75	51	355	2.10	90	36	390	1.60	90	7.3	345	0.33	80	2KJ3603 - ■■■■■■ - ■■ H1
12.94	54	345	2.20	90	39	385	1.80	90	7.7	350	0.35	80	2KJ3603 - ■■■■■■ - ■■ G1
11.41	61	330	2.40	90	44	370	1.90	90	8.8	355	0.40	82	2KJ3603 - ■■■■■■ - ■■ F1
9.90	71	315	2.60	90	51	350	2.10	90	10.1	360	0.46	83	2KJ3603 - ■■■■■■ - ■■ E1
9.00	78	260	2.30	92	56	255	1.70	91	11.1	235	0.33	84	2KJ3603 - ■■■■■■ - ■■ D1
8.47	83	260	2.50	92	59	260	1.80	91	11.8	240	0.35	84	2KJ3603 - ■■■■■■ - ■■ C1
7.47	94	260	2.80	92	67	260	2.00	92	13.4	240	0.40	85	2KJ3603 - ■■■■■■ - ■■ B1
6.48	108	260	3.20	92	77	260	2.30	92	15.4	245	0.46	87	2KJ3603 - ■■■■■■ - ■■ A1

SIMOGEAR Geared Motors

Helical worm geared motors

Efficiencies

Selection and ordering data (continued)

i	$n_{\text{mot}} = 2\,800 \text{ rpm}$				$n_{\text{mot}} = 1\,400 \text{ rpm}$				$n_{\text{mot}} = 900 \text{ rpm}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
C.69													
360.00	7.8	575	0.65	73	3.9	680	0.40	69	2.5	645	0.27	63	2KJ3604 - ■■■■■■ - ■■ M2
319.80	8.8	570	0.72	73	4.4	680	0.45	70	2.8	655	0.30	65	2KJ3604 - ■■■■■■ - ■■ L2
280.80	10.0	560	0.81	73	5.0	680	0.50	71	3.2	660	0.33	66	2KJ3604 - ■■■■■■ - ■■ K2
255.27	11.0	555	0.88	73	5.5	680	0.55	72	3.5	665	0.36	67	2KJ3604 - ■■■■■■ - ■■ J2
218.40	12.8	530	0.97	74	6.4	655	0.60	73	4.1	675	0.42	70	2KJ3604 - ■■■■■■ - ■■ H2
198.55	14.1	510	1.00	73	7.1	635	0.65	73	4.5	680	0.46	70	2KJ3604 - ■■■■■■ - ■■ G2
175.50	16.0	485	1.10	73	8.0	610	0.70	74	5.1	685	0.51	72	2KJ3604 - ■■■■■■ - ■■ F2
159.55	17.5	470	1.20	73	8.8	590	0.74	74	5.6	670	0.54	72	2KJ3604 - ■■■■■■ - ■■ E2
139.75	20	440	1.30	73	10.0	550	0.79	74	6.4	630	0.58	73	2KJ3604 - ■■■■■■ - ■■ D2
129.00	22	425	1.30	74	10.9	535	0.83	74	7.0	610	0.61	73	2KJ3604 - ■■■■■■ - ■■ C2
114.21	25	405	1.40	73	12.3	510	0.89	74	7.9	585	0.66	74	2KJ3604 - ■■■■■■ - ■■ B2
102.50	27	555	1.80	87	13.7	645	1.10	86	8.8	625	0.69	84	2KJ3604 - ■■■■■■ - ■■ A2
90.00	31	555	2.10	87	15.6	665	1.30	86	10.0	650	0.81	84	2KJ3604 - ■■■■■■ - ■■ X1
81.82	34	545	2.20	87	17.1	680	1.40	87	11.0	775	1.10	85	2KJ3604 - ■■■■■■ - ■■ W1
70.00	40	515	2.50	87	20	650	1.60	87	12.9	680	1.10	86	2KJ3604 - ■■■■■■ - ■■ V1
63.64	44	500	2.70	87	22	630	1.70	87	14.1	720	1.20	86	2KJ3604 - ■■■■■■ - ■■ U1
56.25	50	480	2.90	87	25	605	1.80	87	16.0	695	1.30	87	2KJ3604 - ■■■■■■ - ■■ T1
51.14	55	455	3.00	87	27	575	1.90	87	17.6	660	1.40	87	2KJ3604 - ■■■■■■ - ■■ S1
44.79	63	430	3.30	87	31	545	2.00	87	20	630	1.50	87	2KJ3604 - ■■■■■■ - ■■ R1
41.35	68	420	3.40	87	34	525	2.20	87	22	610	1.60	87	2KJ3604 - ■■■■■■ - ■■ Q1
36.61	76	400	3.70	87	38	505	2.30	87	25	580	1.80	87	2KJ3604 - ■■■■■■ - ■■ P1
30.00	93	435	4.70	90	47	545	3.00	90	30	560	2.00	90	2KJ3604 - ■■■■■■ - ■■ N1
26.28	107	410	5.10	90	53	520	3.20	90	34	550	2.20	90	2KJ3604 - ■■■■■■ - ■■ M1
24.26	115	400	5.30	90	58	500	3.40	90	37	545	2.30	91	2KJ3604 - ■■■■■■ - ■■ L1
21.48	130	380	5.8*	90	65	480	3.60	90	42	540	2.60	91	2KJ3604 - ■■■■■■ - ■■ K1
17.88	157	355	6.5*	90	78	450	4.10	90	50	520	3.00	91	2KJ3604 - ■■■■■■ - ■■ J1
15.88	176	365	7.3*	92	88	365	3.70	92	57	365	2.40	92	2KJ3604 - ■■■■■■ - ■■ H1
14.06	199	360	8.2*	92	100	360	4.10	92	64	360	2.60	92	2KJ3604 - ■■■■■■ - ■■ G1
11.70	239	345	9.5*	92	120	365	5.00	92	77	365	3.20	92	2KJ3604 - ■■■■■■ - ■■ F1
11.01	254	325	9.5*	92	127	365	5.40	92	82	365	3.50	92	2KJ3604 - ■■■■■■ - ■■ E1
9.87	284	290	9.5*	92	142	365	6.0*	92	91	365	3.80	92	2KJ3604 - ■■■■■■ - ■■ D1
8.40	333	250	9.6*	91	167	370	7.1*	92	107	370	4.50	92	2KJ3604 - ■■■■■■ - ■■ C1
7.20	389	210	9.6*	91	194	365	8.2*	92	125	365	5.30	92	2KJ3604 - ■■■■■■ - ■■ B1
6.20	452	184	9.6*	91	226	365	9.4*	92	145	365	6.1*	92	2KJ3604 - ■■■■■■ - ■■ A1

* $P_{\text{mot max}} = 5.5 \text{ kW}$

Selection and ordering data (continued)

<i>i</i>	$n_{\text{mot}} = 700 \text{ rpm}$				$n_{\text{mot}} = 500 \text{ rpm}$				$n_{\text{mot}} = 100 \text{ rpm}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
C.69													
360.00	1.9	610	0.20	60	1.4	570	0.15	55	0.28	460	<0.06	45	2KJ3604 - ■■■■■■ - ■■ M2
319.80	2.2	620	0.23	61	1.6	575	0.17	57	0.31	460	<0.06	45	2KJ3604 - ■■■■■■ - ■■ L2
280.80	2.5	625	0.26	63	1.8	580	0.19	58	0.36	455	<0.06	45	2KJ3604 - ■■■■■■ - ■■ K2
255.27	2.7	635	0.28	64	2.0	590	0.21	59	0.39	455	<0.06	45	2KJ3604 - ■■■■■■ - ■■ J2
218.40	3.2	645	0.33	66	2.3	605	0.24	62	0.46	460	<0.06	46	2KJ3604 - ■■■■■■ - ■■ H2
198.55	3.5	650	0.35	68	2.5	610	0.25	63	0.50	455	<0.06	47	2KJ3604 - ■■■■■■ - ■■ G2
175.50	4.0	665	0.40	69	2.8	625	0.28	65	0.57	460	0.06	48	2KJ3604 - ■■■■■■ - ■■ F2
159.55	4.4	670	0.44	70	3.1	635	0.31	66	0.63	465	0.06	48	2KJ3604 - ■■■■■■ - ■■ E2
139.75	5.0	670	0.49	72	3.6	650	0.36	68	0.72	475	0.07	49	2KJ3604 - ■■■■■■ - ■■ D2
129.00	5.4	655	0.51	72	3.9	660	0.39	69	0.78	480	0.08	50	2KJ3604 - ■■■■■■ - ■■ C2
114.21	6.1	630	0.55	73	4.4	670	0.44	71	0.88	490	0.09	51	2KJ3604 - ■■■■■■ - ■■ B2
102.50	6.8	610	0.54	81	4.9	585	0.39	78	0.98	500	0.08	67	2KJ3604 - ■■■■■■ - ■■ A2
90.00	7.8	635	0.63	82	5.6	610	0.45	79	1.1	515	0.09	67	2KJ3604 - ■■■■■■ - ■■ X1
81.82	8.6	800	0.87	84	6.1	775	0.62	80	1.2	650	0.12	68	2KJ3604 - ■■■■■■ - ■■ W1
70.00	10.0	665	0.83	84	7.1	645	0.59	82	1.4	540	0.12	68	2KJ3604 - ■■■■■■ - ■■ V1
63.64	11.0	775	1.00	85	7.9	830	0.83	83	1.6	695	0.17	69	2KJ3604 - ■■■■■■ - ■■ U1
56.25	12.4	750	1.10	86	8.9	810	0.90	84	1.8	675	0.18	70	2KJ3604 - ■■■■■■ - ■■ T1
51.14	13.7	715	1.20	86	9.8	785	0.95	85	2.0	750	0.22	71	2KJ3604 - ■■■■■■ - ■■ S1
44.79	15.6	680	1.30	87	11.2	750	1.00	86	2.2	760	0.24	72	2KJ3604 - ■■■■■■ - ■■ R1
41.35	16.9	660	1.30	87	12.1	730	1.10	86	2.4	765	0.27	72	2KJ3604 - ■■■■■■ - ■■ Q1
36.61	19.1	630	1.50	87	13.7	700	1.20	87	2.7	770	0.30	73	2KJ3604 - ■■■■■■ - ■■ P1
30.00	23	560	1.50	90	16.7	555	1.10	89	3.3	480	0.22	77	2KJ3604 - ■■■■■■ - ■■ N1
26.28	27	550	1.70	90	19	545	1.20	90	3.8	480	0.24	78	2KJ3604 - ■■■■■■ - ■■ M1
24.26	29	545	1.80	90	21	540	1.30	90	4.1	475	0.26	79	2KJ3604 - ■■■■■■ - ■■ L1
21.48	33	540	2.10	91	23	540	1.40	90	4.7	475	0.30	80	2KJ3604 - ■■■■■■ - ■■ K1
17.88	39	545	2.50	91	28	545	1.80	91	5.6	490	0.35	82	2KJ3604 - ■■■■■■ - ■■ J1
15.88	44	365	1.80	92	31	360	1.30	91	6.3	330	0.26	83	2KJ3604 - ■■■■■■ - ■■ H1
14.06	50	360	2.10	92	36	355	1.50	92	7.1	330	0.29	84	2KJ3604 - ■■■■■■ - ■■ G1
11.70	60	365	2.50	92	43	365	1.80	92	8.5	340	0.36	85	2KJ3604 - ■■■■■■ - ■■ F1
11.01	64	365	2.70	92	45	365	1.90	92	9.1	340	0.38	86	2KJ3604 - ■■■■■■ - ■■ E1
9.87	71	365	3.00	92	51	365	2.10	92	10.1	345	0.43	86	2KJ3604 - ■■■■■■ - ■■ D1
8.40	83	370	3.50	92	60	370	2.50	92	11.9	350	0.50	87	2KJ3604 - ■■■■■■ - ■■ C1
7.20	97	365	4.10	92	69	365	2.90	92	13.9	350	0.59	88	2KJ3604 - ■■■■■■ - ■■ B1
6.20	113	365	4.70	92	81	365	3.40	92	16.1	355	0.67	89	2KJ3604 - ■■■■■■ - ■■ A1

SIMOGEAR Geared Motors

Helical worm geared motors

Efficiencies

Selection and ordering data (continued)

i	$n_{\text{mot}} = 2\,800 \text{ rpm}$				$n_{\text{mot}} = 1\,400 \text{ rpm}$				$n_{\text{mot}} = 900 \text{ rpm}$				Article No.
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	
C.89													
363.00	7.7	1 180	1.30	73	3.9	1 460	0.83	72	2.5	1 430	0.55	68	2KJ3606 - ■■■■■■ - ■■ N2
329.73	8.5	1 180	1.40	73	4.2	1 460	0.89	72	2.7	1 440	0.59	69	2KJ3606 - ■■■■■■ - ■■ M2
295.75	9.5	1 170	1.60	73	4.7	1 460	0.99	73	3.0	1 460	0.66	70	2KJ3606 - ■■■■■■ - ■■ L2
265.91	10.5	1 170	1.80	73	5.3	1 460	1.10	73	3.4	1 470	0.74	71	2KJ3606 - ■■■■■■ - ■■ K2
240.50	11.6	1 160	1.90	73	5.8	1 450	1.20	73	3.7	1 480	0.80	72	2KJ3606 - ■■■■■■ - ■■ J2
222.00	12.6	1 120	2.00	73	6.3	1 410	1.30	73	4.1	1 490	0.89	72	2KJ3606 - ■■■■■■ - ■■ H2
203.36	13.8	1 090	2.20	73	6.9	1 370	1.40	73	4.4	1 500	0.95	73	2KJ3606 - ■■■■■■ - ■■ G2
170.62	16.4	1 030	2.40	73	8.2	1 300	1.50	73	5.3	1 490	1.10	73	2KJ3606 - ■■■■■■ - ■■ F2
160.59	17.4	1 010	2.50	73	8.7	1 270	1.60	73	5.6	1 460	1.20	74	2KJ3606 - ■■■■■■ - ■■ E2
147.33	19	980	2.70	73	9.5	1 230	1.70	74	6.1	1 430	1.20	74	2KJ3606 - ■■■■■■ - ■■ D2
128.70	22	915	2.90	73	10.9	1 150	1.80	73	7.0	1 340	1.30	74	2KJ3606 - ■■■■■■ - ■■ C2
115.23	24	875	3.00	73	12.1	1 100	1.90	74	7.8	1 280	1.40	74	2KJ3606 - ■■■■■■ - ■■ B2
100.75	28	830	3.30	73	13.9	1 040	2.10	74	8.9	1 210	1.50	74	2KJ3606 - ■■■■■■ - ■■ A2
86.48	32	780	3.60	73	16.2	980	2.30	73	10.4	1 140	1.70	74	2KJ3606 - ■■■■■■ - ■■ X1
76.44	37	740	4.00	73	18.3	935	2.40	73	11.8	1 080	1.80	74	2KJ3606 - ■■■■■■ - ■■ W1
65.00	43	695	4.30	73	22	875	2.80	73	13.8	1 010	2.00	74	2KJ3606 - ■■■■■■ - ■■ V1
55.61	50	1 150	6.70	90	25	1 450	4.20	91	16.2	1 550	2.90	90	2KJ3606 - ■■■■■■ - ■■ U1
50.00	56	1 130	7.40	90	28	1 430	4.60	90	18.0	1 560	3.30	90	2KJ3606 - ■■■■■■ - ■■ T1
45.22	62	1 100	7.90	90	31	1 380	5.00	91	19.9	1 560	3.60	90	2KJ3606 - ■■■■■■ - ■■ S1
41.74	67	1 070	8.30	90	34	1 350	5.30	91	22	1 560	4.00	91	2KJ3606 - ■■■■■■ - ■■ R1
38.24	73	1 040	8.80	90	37	1 310	5.60	91	24	1 520	4.20	91	2KJ3606 - ■■■■■■ - ■■ Q1
32.08	87	985	10*	90	44	1 240	6.30	91	28	1 440	4.70	91	2KJ3606 - ■■■■■■ - ■■ P1
30.20	93	950	10.3*	90	46	1 200	6.40	91	30	1 390	4.80	91	2KJ3606 - ■■■■■■ - ■■ N1
27.70	101	920	10.8*	90	51	1 160	6.90	91	32	1 340	5.00	91	2KJ3606 - ■■■■■■ - ■■ M1
25.03	112	1 080	13.7*	93	56	1 090	6.90	93	36	1 090	4.50	93	2KJ3606 - ■■■■■■ - ■■ L1
21.00	133	1 000	15.1*	93	67	1 080	8.20	93	43	1 070	5.20	93	2KJ3606 - ■■■■■■ - ■■ K1
19.76	142	980	15.8*	93	71	1 120	9.00	93	46	1 120	5.80	93	2KJ3606 - ■■■■■■ - ■■ J1
18.13	154	950	16.6*	93	77	1 120	9.7*	93	50	1 120	6.30	93	2KJ3606 - ■■■■■■ - ■■ H1
15.84	177	865	17.3*	93	88	1 140	11.3*	93	57	1 140	7.30	93	2KJ3606 - ■■■■■■ - ■■ G1
14.18	197	770	17.3*	92	99	1 090	12.2*	93	63	1 150	8.20	93	2KJ3606 - ■■■■■■ - ■■ F1
12.40	226	675	17.3*	93	113	1 040	13.3*	93	73	1 140	9.5*	93	2KJ3606 - ■■■■■■ - ■■ E1
10.64	263	580	17.3*	92	132	985	14.7*	93	85	1 140	10.9*	93	2KJ3606 - ■■■■■■ - ■■ D1
9.41	298	510	17.4*	92	149	940	15.9*	93	96	1 090	11.8*	93	2KJ3606 - ■■■■■■ - ■■ C1
8.00	350	435	17.4*	92	175	870	17.3*	93	112	1 030	13.1*	93	2KJ3606 - ■■■■■■ - ■■ B1
6.86	408	370	17.4*	92	204	745	17.3*	93	131	980	14.5*	93	2KJ3606 - ■■■■■■ - ■■ A1

* $P_{\text{mot max}} = 9.2 \text{ kW}$

Selection and ordering data (continued)

<i>i</i>	$n_{\text{mot}} = 700 \text{ rpm}$				$n_{\text{mot}} = 500 \text{ rpm}$				$n_{\text{mot}} = 100 \text{ rpm}$				Article No.	
	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %	n_2 rpm	T_{2N} Nm	P_{mot} kW	η %		
C.89														
363.00	1.9	1 360	0.42	64	1.4	1 260	0.31	60	0.28	955	0.06	45	2KJ3606 - ■■■■■■ - ■■ N2	
329.73	2.1	1 380	0.46	66	1.5	1 280	0.33	61	0.30	960	0.07	45	2KJ3606 - ■■■■■■ - ■■ M2	
295.75	2.4	1 400	0.53	67	1.7	1 310	0.37	62	0.34	965	0.08	45	2KJ3606 - ■■■■■■ - ■■ L2	
265.91	2.6	1 420	0.57	68	1.9	1 330	0.42	64	0.38	975	0.08	46	2KJ3606 - ■■■■■■ - ■■ K2	
240.50	2.9	1 440	0.63	70	2.1	1 360	0.46	66	0.42	985	0.09	47	2KJ3606 - ■■■■■■ - ■■ J2	
222.00	3.2	1 450	0.69	70	2.3	1 380	0.50	67	0.45	995	0.10	47	2KJ3606 - ■■■■■■ - ■■ H2	
203.36	3.4	1 470	0.74	71	2.5	1 400	0.54	68	0.49	1 000	0.11	48	2KJ3606 - ■■■■■■ - ■■ G2	
170.62	4.1	1 490	0.89	72	2.9	1 440	0.63	70	0.59	1 030	0.13	50	2KJ3606 - ■■■■■■ - ■■ F2	
160.59	4.4	1 490	0.95	73	3.1	1 450	0.67	71	0.62	1 040	0.14	50	2KJ3606 - ■■■■■■ - ■■ E2	
147.33	4.8	1 500	1.00	73	3.4	1 460	0.73	71	0.68	1 060	0.15	51	2KJ3606 - ■■■■■■ - ■■ D2	
128.70	5.4	1 450	1.10	74	3.9	1 480	0.84	72	0.78	1 090	0.17	53	2KJ3606 - ■■■■■■ - ■■ C2	
115.23	6.1	1 390	1.20	74	4.3	1 490	0.92	73	0.87	1 110	0.19	54	2KJ3606 - ■■■■■■ - ■■ B2	
100.75	6.9	1 310	1.30	74	5.0	1 460	1.00	74	0.99	1 150	0.21	56	2KJ3606 - ■■■■■■ - ■■ A2	
86.48	8.1	1 230	1.40	74	5.8	1 380	1.10	74	1.2	1 190	0.26	58	2KJ3606 - ■■■■■■ - ■■ X1	
76.44	9.2	1 170	1.50	74	6.5	1 310	1.20	74	1.3	1 220	0.28	60	2KJ3606 - ■■■■■■ - ■■ W1	
65.00	10.8	1 100	1.70	74	7.7	1 230	1.30	74	1.5	1 270	0.32	62	2KJ3606 - ■■■■■■ - ■■ V1	
55.61	12.6	1 540	2.30	90	9.0	1 510	1.60	88	1.8	1 290	0.33	75	2KJ3606 - ■■■■■■ - ■■ U1	
50.00	14.0	1 540	2.50	90	10.0	1 530	1.80	88	2.0	1 430	0.40	75	2KJ3606 - ■■■■■■ - ■■ T1	
45.22	15.5	1 550	2.80	90	11.1	1 530	2.00	89	2.2	1 430	0.43	76	2KJ3606 - ■■■■■■ - ■■ S1	
41.74	16.8	1 550	3.00	90	12.0	1 540	2.20	89	2.4	1 450	0.48	77	2KJ3606 - ■■■■■■ - ■■ R1	
38.24	18.3	1 560	3.30	90	13.1	1 540	2.40	90	2.6	1 450	0.51	77	2KJ3606 - ■■■■■■ - ■■ Q1	
32.08	22	1 560	4.00	91	15.6	1 550	2.80	90	3.1	1 390	0.57	79	2KJ3606 - ■■■■■■ - ■■ P1	
30.20	23	1 510	4.00	91	16.6	1 550	3.00	90	3.3	1 460	0.64	79	2KJ3606 - ■■■■■■ - ■■ N1	
27.70	25	1 460	4.20	91	18.1	1 560	3.30	91	3.6	1 470	0.69	80	2KJ3606 - ■■■■■■ - ■■ M1	
25.03	28	1 090	3.50	93	20	1 080	2.50	92	4.0	990	0.50	84	2KJ3606 - ■■■■■■ - ■■ L1	
21.00	33	1 070	4.00	93	24	1 070	2.90	92	4.8	985	0.59	85	2KJ3606 - ■■■■■■ - ■■ K1	
19.76	35	1 120	4.50	93	25	1 120	3.20	92	5.1	1 030	0.65	85	2KJ3606 - ■■■■■■ - ■■ J1	
18.13	39	1 110	4.90	93	28	1 110	3.50	92	5.5	1 030	0.70	85	2KJ3606 - ■■■■■■ - ■■ H1	
15.84	44	1 140	5.70	93	32	1 130	4.10	93	6.3	1 050	0.81	86	2KJ3606 - ■■■■■■ - ■■ G1	
14.18	49	1 150	6.40	93	35	1 140	4.50	93	7.1	1 070	0.92	87	2KJ3606 - ■■■■■■ - ■■ F1	
12.40	56	1 140	7.30	93	40	1 140	5.20	93	8.1	1 080	1.00	88	2KJ3606 - ■■■■■■ - ■■ E1	
10.64	66	1 150	8.50	93	47	1 140	6.10	93	9.4	1 090	1.20	88	2KJ3606 - ■■■■■■ - ■■ D1	
9.41	74	1 120	9.4*	93	53	1 120	6.70	93	10.6	1 070	1.30	89	2KJ3606 - ■■■■■■ - ■■ C1	
8.00	88	1 120	11.2*	93	62	1 130	7.90	93	12.5	1 090	1.60	90	2KJ3606 - ■■■■■■ - ■■ B1	
6.86	102	1 060	12.3*	93	73	1 110	9.20	93	14.6	1 090	1.80	91	2KJ3606 - ■■■■■■ - ■■ A1	

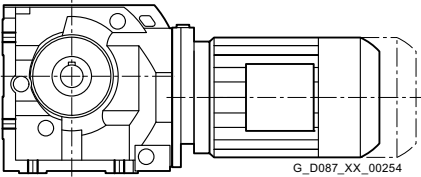
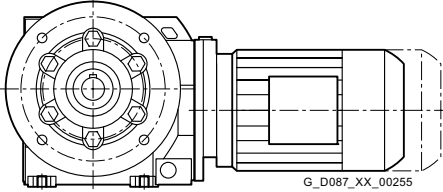
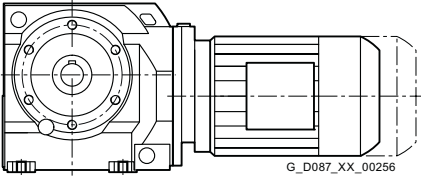
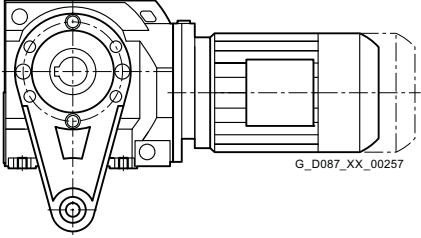
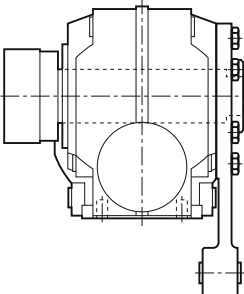
SIMOGEAR Geared Motors

Helical worm geared motors

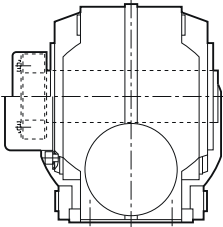
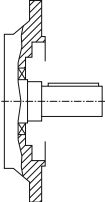
Dimensions

Dimensional drawing overview

Information about dimensional drawings can be found in chapter [Introduction on page 1/20](#).

Design	Size	Dimensional drawing on page
Foot-mounted design		
	C..29	6/36
	C..39	6/40
	C..49	6/44
	C..69	6/48
	C..89	6/52
Flange-mounted design		
	C.F.29	6/37
	C.F.39	6/41
	C.F.49	6/45
	C.F.69	6/49
	C.F.89	6/53
Housing flange design		
	C.Z.29	6/38
	C.Z.39	6/42
	C.Z.49	6/46
	C.Z.69	6/50
	C.Z.89	6/54
Shaft-mounted design		
	CAD.29	6/39
	CAD.39	6/43
	CAD.49	6/47
	CAD.69	6/51
	CAD.89	6/55
Additional versions and options		
	SIMOLOC assembly system	6/56

Dimensional drawing overview (continued)

Design	Size	Dimensional drawing on page
Additional versions and options		
	Protection cover for hollow shaft	6/58
	Inner contour of the flange design	6/59

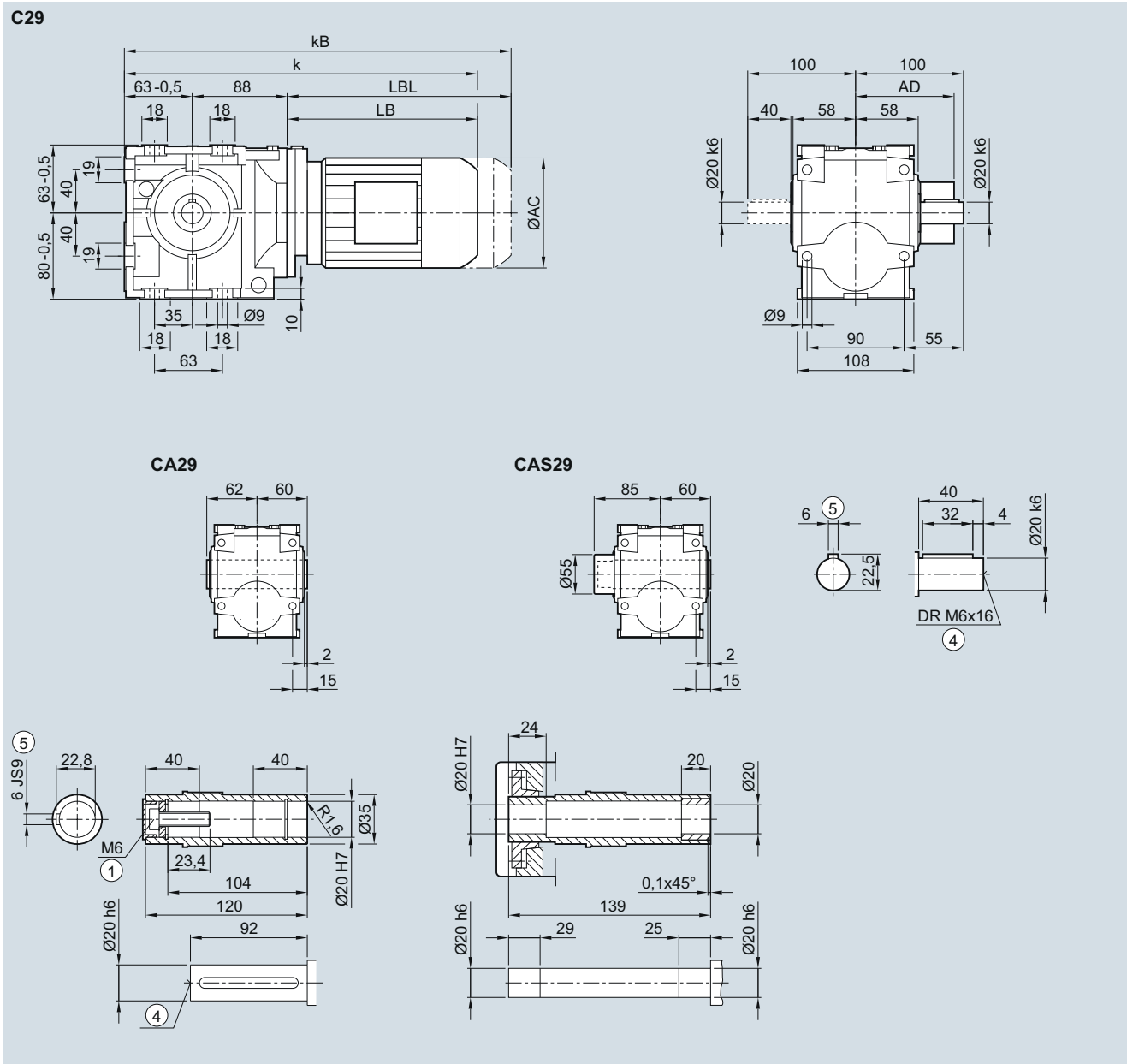
SIMOGEAR Geared Motors

Helical worm geared motors

Dimensions

C..29 gearbox in a foot-mounted design

C030, CA030, CAS030



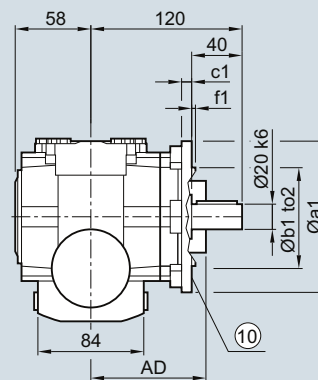
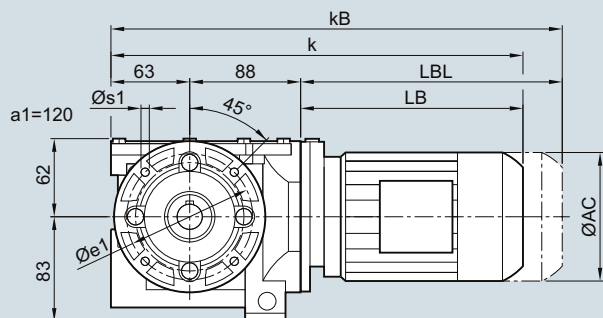
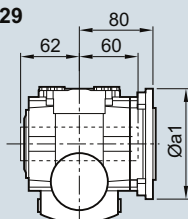
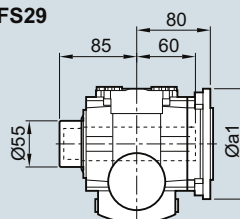
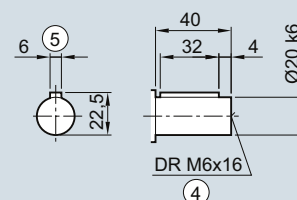
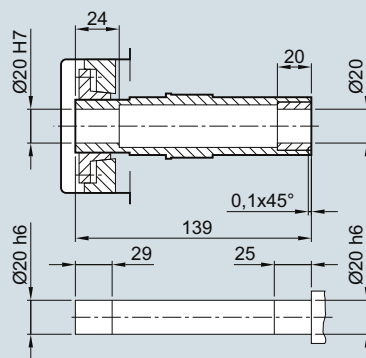
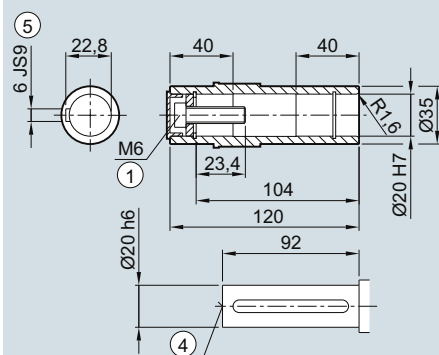
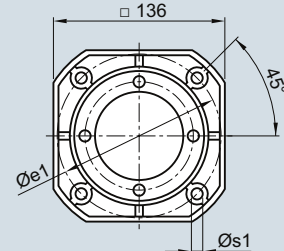
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2
k	345.0	377.0	441.0	476.0	502.5	542.5
kB	389.5	432.0	501.0	536.0	572.5	612.5
LB	194.0	226.0	290.0	325.0	351.5	391.5
LBL	238.5	281.0	350.0	385.0	421.5	461.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

CF.29 gearbox in a flange-mounted design
CF030, CAF030, CAFS030
CF29

CAF29

CAFS29

a1=160


Flange	a1	b1	c1	f1	e1	s	to2
	120	80	8	3.0	100	6.6	j6
	160	110	9	3.5	130	9.0	j6
Motor	LA	71M	LE	80ZM	90S/L	90ZL	
	63M		80M				
AC	117.8	138.8	156.3	156.3	173.8	173.8	
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	
k	345.0	377.0	441.0	476.0	502.5	542.5	
kB	389.5	432.0	501.0	536.0	572.5	612.5	
LB	194.0	226.0	290.0	325.0	351.5	391.5	
LBL	238.5	281.0	350.0	385.0	421.5	461.5	

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

⑩ For inner contour, see page 6/59

SIMOGEAR Geared Motors

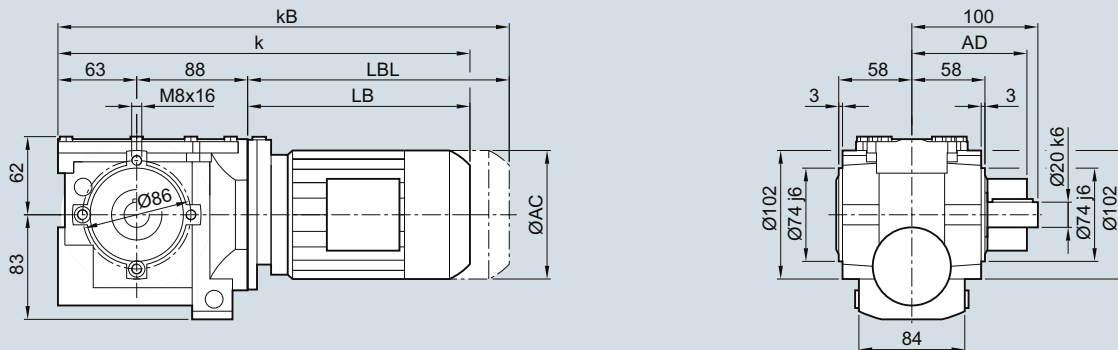
Helical worm geared motors

Dimensions

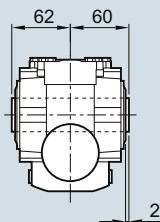
C.Z.29 gearbox in a housing flange design

CZ030, CAZ030, CAZS030

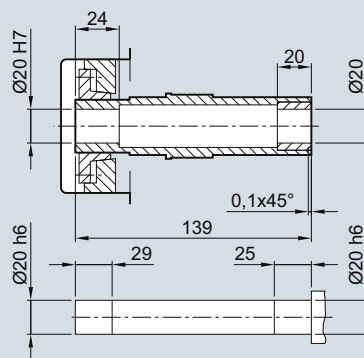
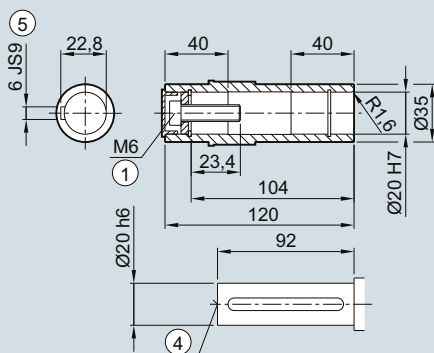
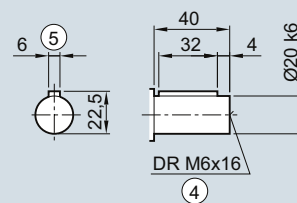
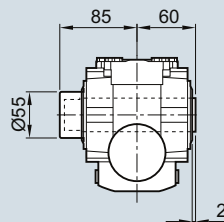
CZ29



CAZ29



CAZS29



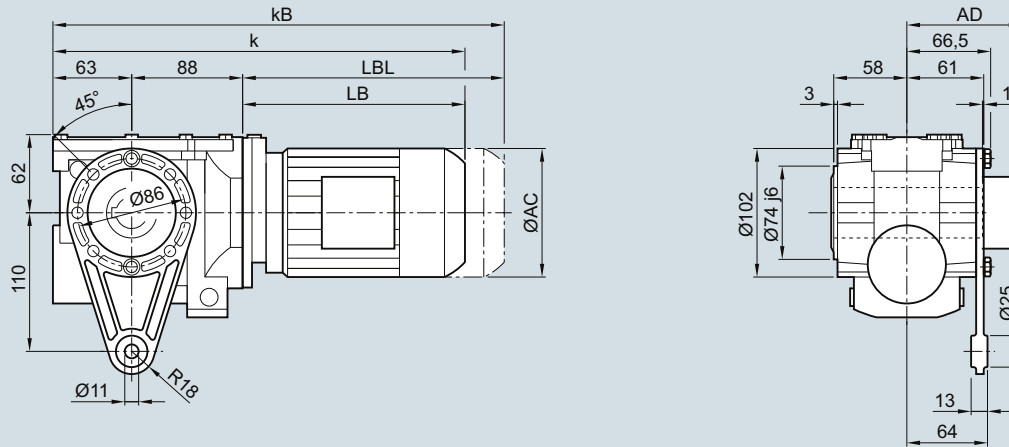
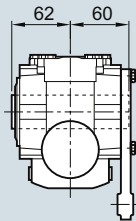
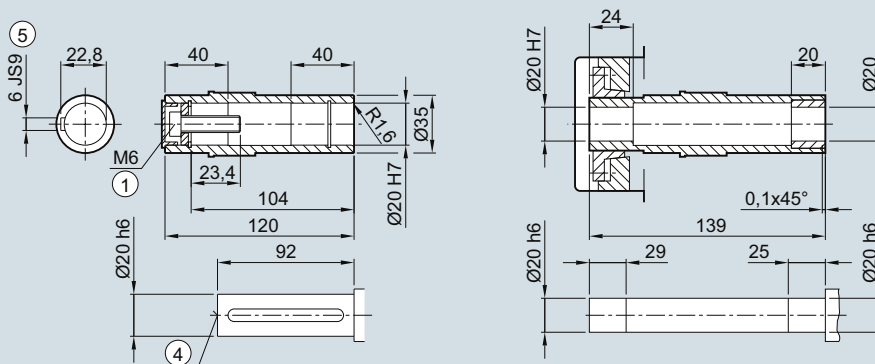
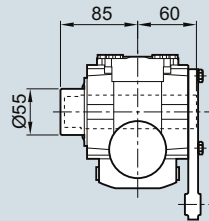
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2
k	345.0	377.0	441.0	476.0	502.5	542.5
kB	389.5	432.0	501.0	536.0	572.5	612.5
LB	194.0	226.0	290.0	325.0	351.5	391.5
LBL	238.5	281.0	350.0	385.0	421.5	461.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

CAD.29 gearbox in a shaft-mounted design
CAD030, CADS030
CAD29

CAD29

CADS29


Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2
k	345.0	377.0	441.0	476.0	502.5	542.5
kB	389.5	432.0	501.0	536.0	572.5	612.5
LB	194.0	226.0	290.0	325.0	351.5	391.5
LBL	238.5	281.0	350.0	385.0	421.5	461.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

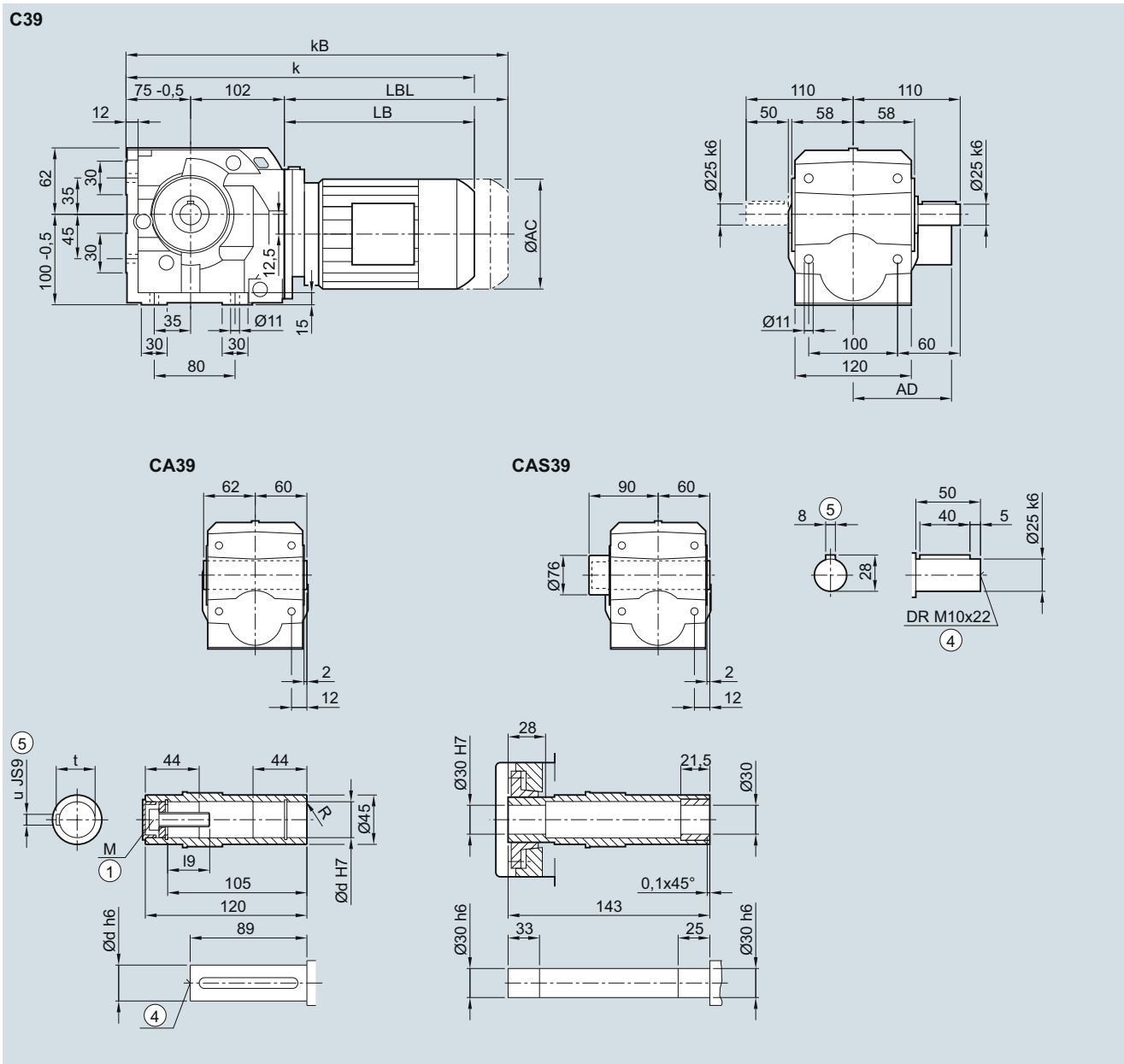
SIMOGEAR Geared Motors

Helical worm geared motors

Dimensions

C..39 gearbox in a foot-mounted design

C030, CA030, CAS030



Shaft	d	I9	M	R	t	u
	25	32.6	M10	1.6	28.3	8
	30	32.6	M10	3.0	33.3	8

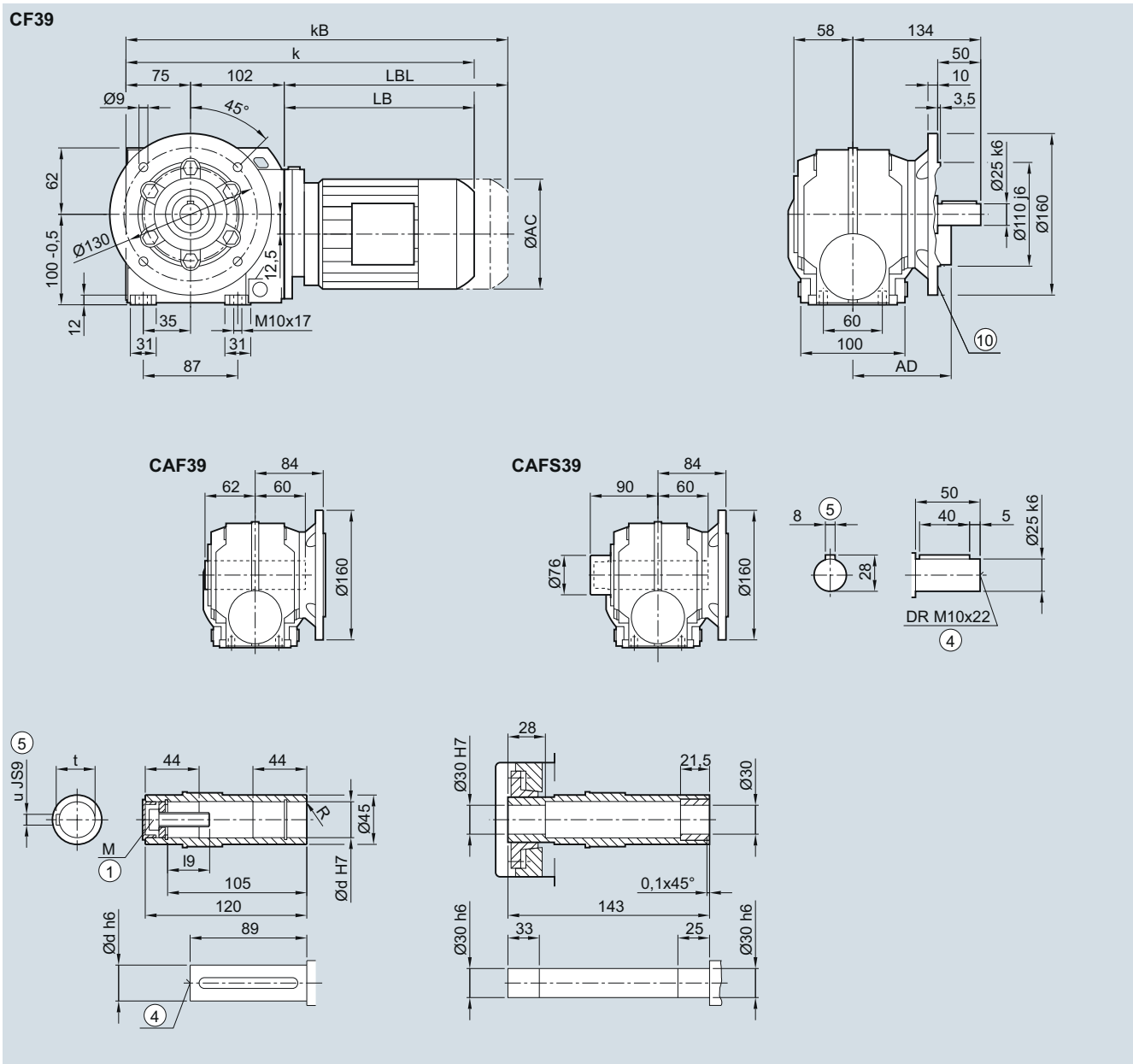
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	371.0	403.0	467.0	502.0	528.5	568.5	585.0	620.0
kB	415.5	458.0	527.0	562.0	598.5	638.5	663.5	698.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

CF.39 gearbox in a flange-mounted design
CF030, CAF030, CAFS030


Shaft	d	I9	M	R	t	u
	25	32.6	M10	1.6	28.3	8
	30	32.6	M10	3.0	33.3	8

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	371.0	403.0	467.0	502.0	528.5	568.5	585.0	620.0
k _B	415.5	458.0	527.0	562.0	598.5	638.5	663.5	698.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

⑩ For inner contour, see page 6/59

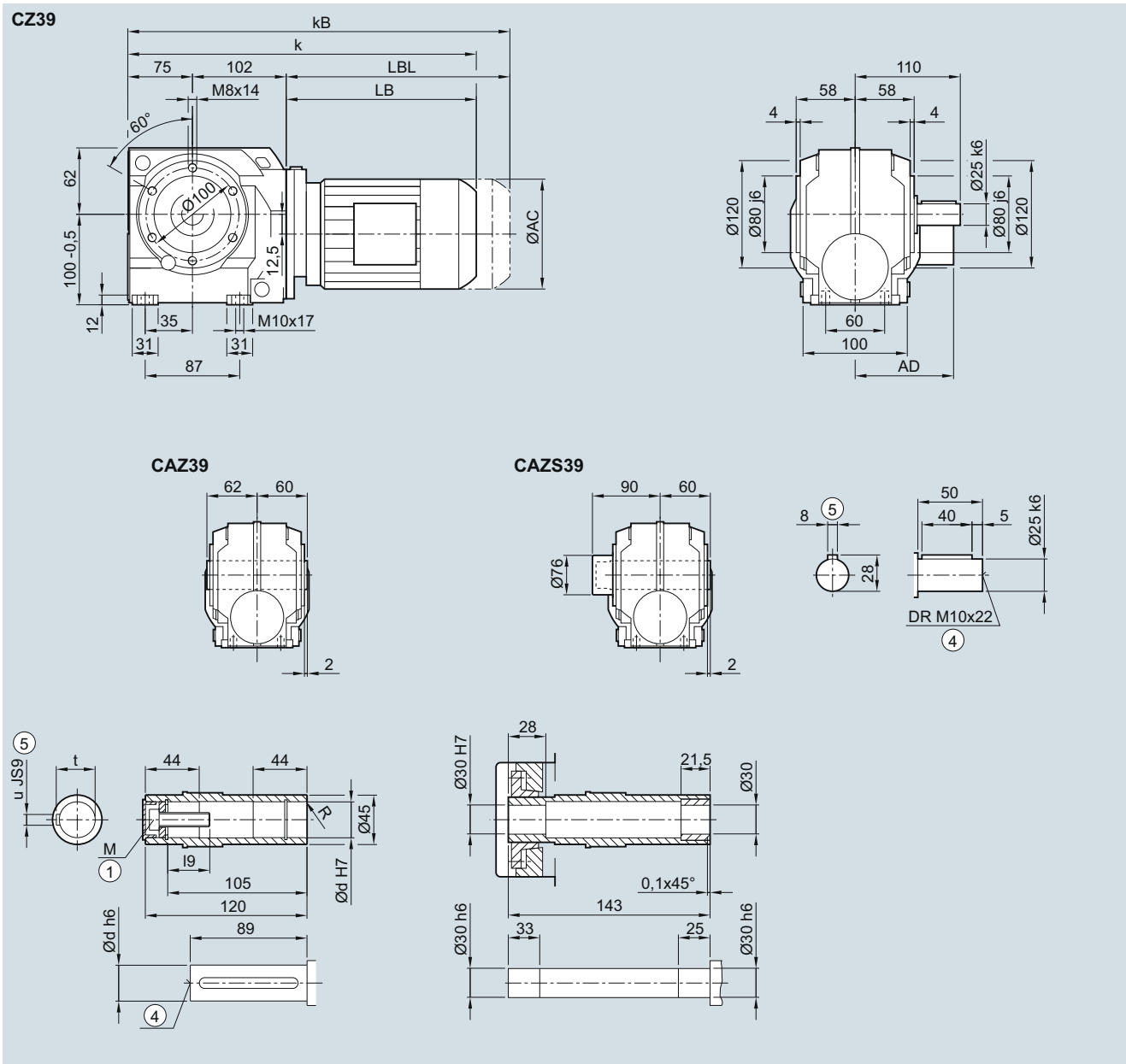
SIMOGEAR Geared Motors

Helical worm geared motors

Dimensions

C.Z.39 gearbox in a housing flange design

CZ030, CAZ030, CAZS030



Shaft	d	I9	M	R	t	u
	25	32.6	M10	1.6	28.3	8
	30	32.6	M10	3.0	33.3	8

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	371.0	403.0	467.0	502.0	528.5	568.5	585.0	620.0
kB	415.5	458.0	527.0	562.0	598.5	638.5	663.5	698.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4014

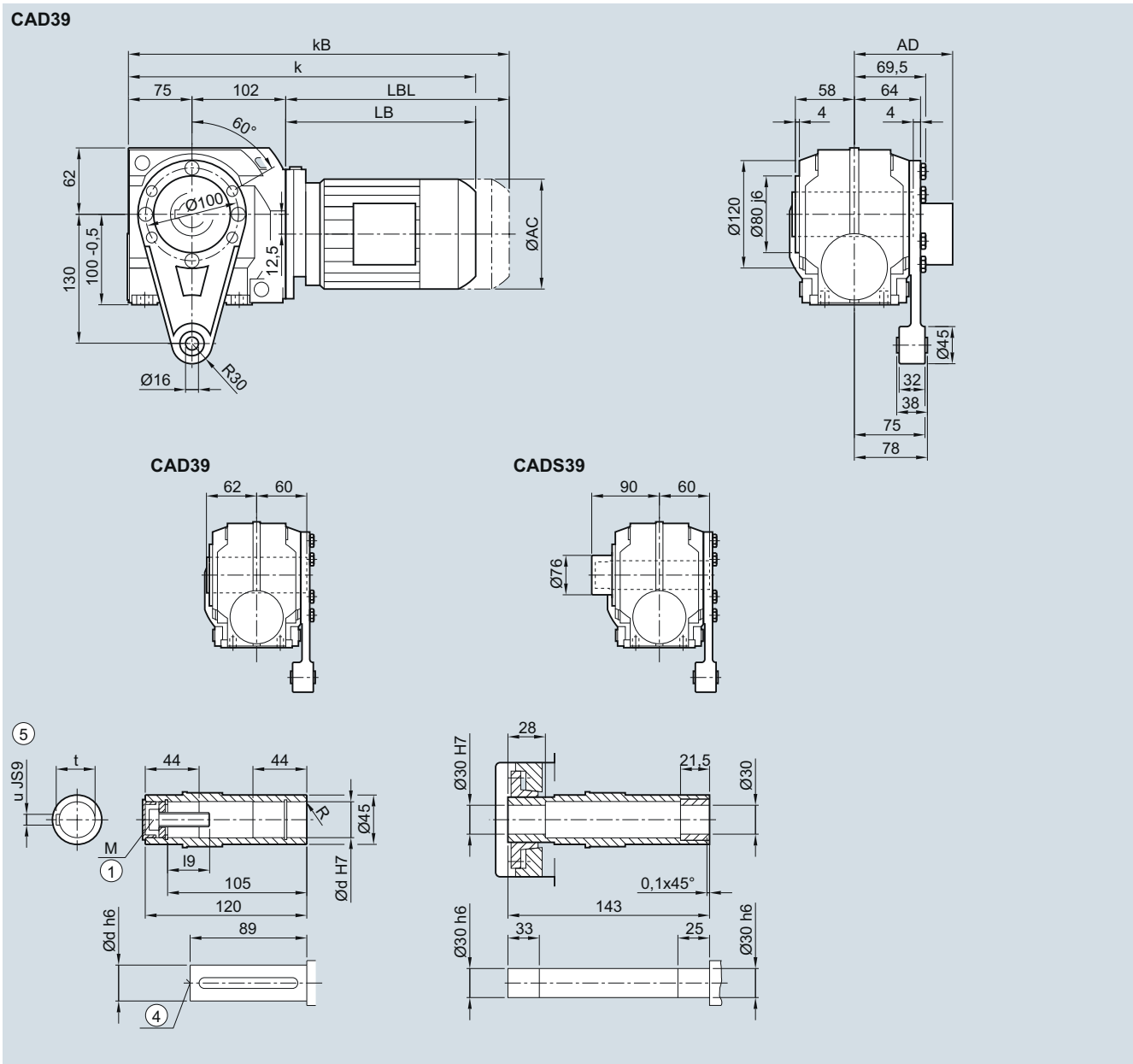
④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

CAD.39 gearbox in a shaft-mounted design

CAD030, CADS030



Shaft	d	I9	M	R	t	u		
	25	32.6	M10	1.6	28.3	8		
	30	32.6	M10	3.0	33.3	8		
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5
k	371.0	403.0	467.0	502.0	528.5	568.5	585.0	620.0
kB	415.5	458.0	527.0	562.0	598.5	638.5	663.5	698.5
LB	194.0	226.0	290.0	325.0	351.5	391.5	408.0	443.0
LBL	238.5	281.0	350.0	385.0	421.5	461.5	486.5	521.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

SIMOGEAR Geared Motors

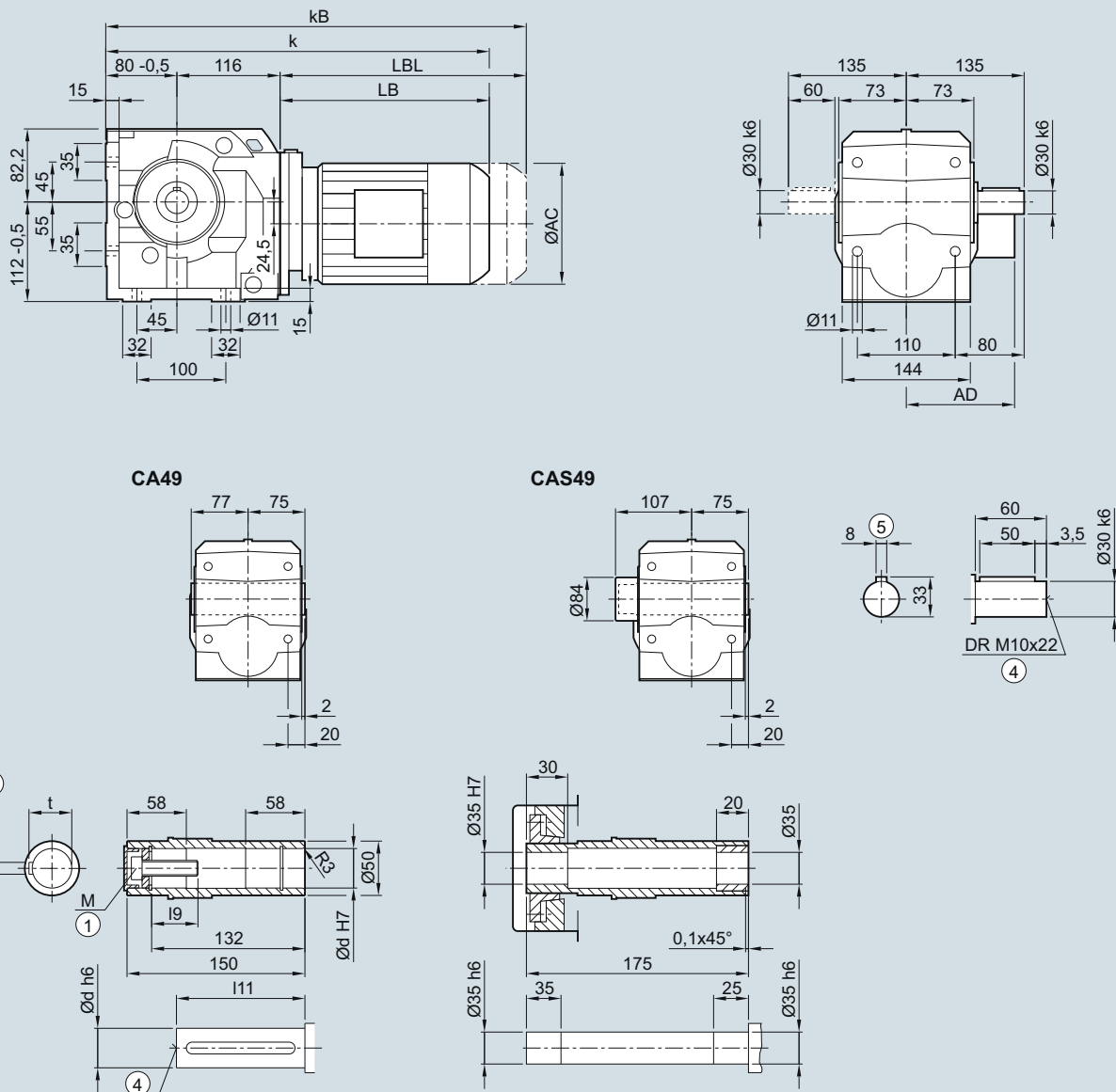
Helical worm geared motors

Dimensions

C..49 gearbox in a foot-mounted design

C030, CA030, CAS030

C49



Shaft	d	I9	I11	M	t	u
	30	32.6	114	M10	33.3	8
	35	42	116	M12	38.3	10

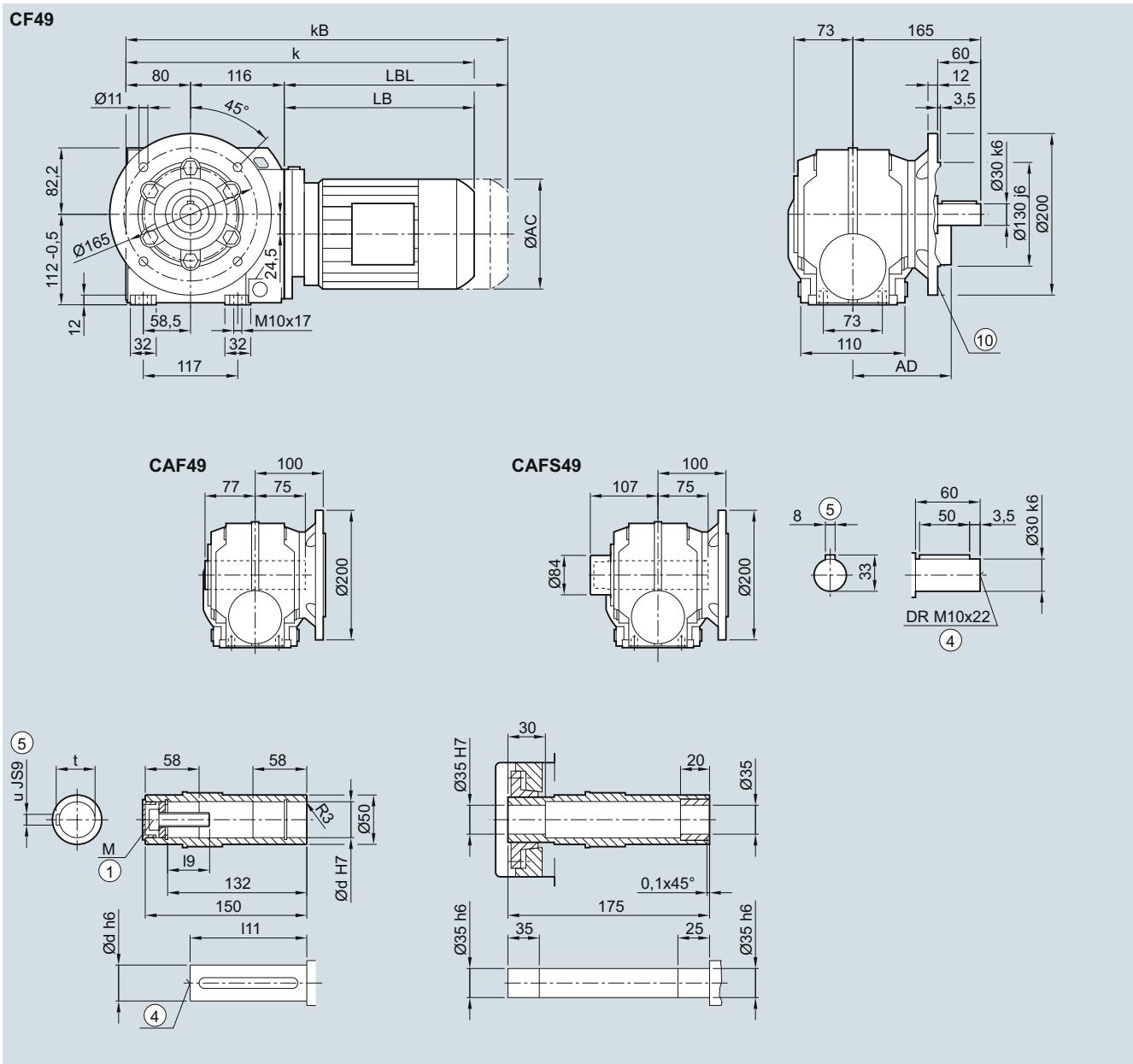
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	380.5	412.5	476.5	511.5	538.0	578.0	594.5	629.5	604.5	639.0
kB	425.0	467.5	536.5	571.5	608.0	648.0	673.0	708.0	677.5	712.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

C.F.49 gearbox in a flange-mounted design
CF030, CAF030, CAFS030


Shaft	d	I9	I11	M	t	u
	30	32.6	114	M10	33.3	8
	35	42	116	M12	38.3	10

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	380.5	412.5	476.5	511.5	538.0	578.0	594.5	629.5	604.5	639.0
kB	425.0	467.5	536.5	571.5	608.0	648.0	673.0	708.0	677.5	712.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

⑩ For inner contour, see page 6/59

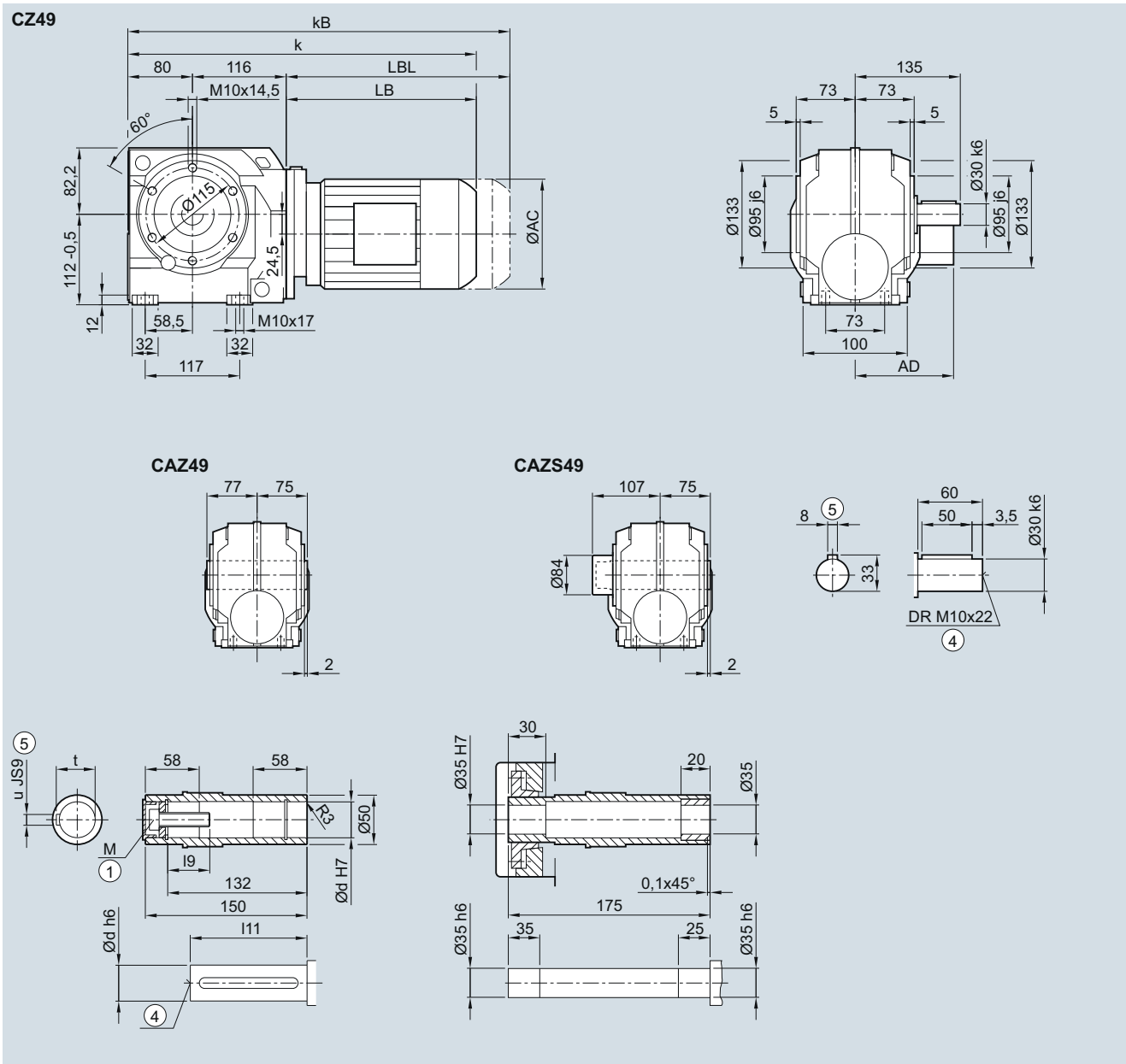
SIMOGEAR Geared Motors

Helical worm geared motors

Dimensions

C.Z.49 gearbox in a housing flange design

CZ030, CAZ030, CAZS030



Shaft	d	I9	I11	M	t	u
	30	32.6	114	M10	33.3	8
	35	42	116	M12	38.3	10

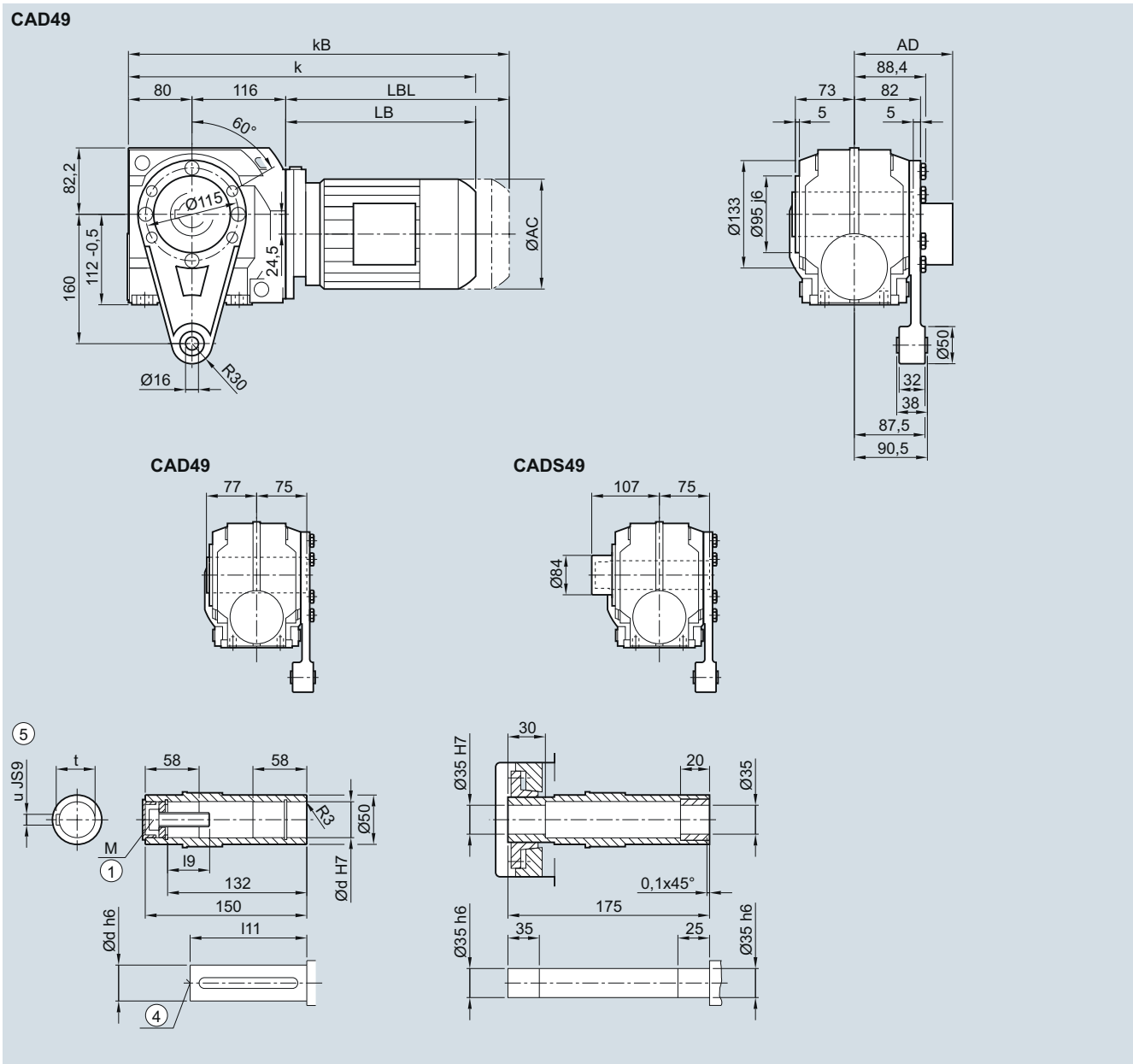
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	380.5	412.5	476.5	511.5	538.0	578.0	594.5	629.5	604.5	639.0
kB	425.0	467.5	536.5	571.5	608.0	648.0	673.0	708.0	677.5	712.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

CAD.49 gearbox in a shaft-mounted design
CAD030, CADS030


Shaft	d	I9	I11	M	t	u
	30	32.6	114	M10	33.3	8
	35	42	116	M12	38.3	10

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5
k	380.5	412.5	476.5	511.5	538.0	578.0	594.5	629.5	604.5	639.0
kB	425.0	467.5	536.5	571.5	608.0	648.0	673.0	708.0	677.5	712.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

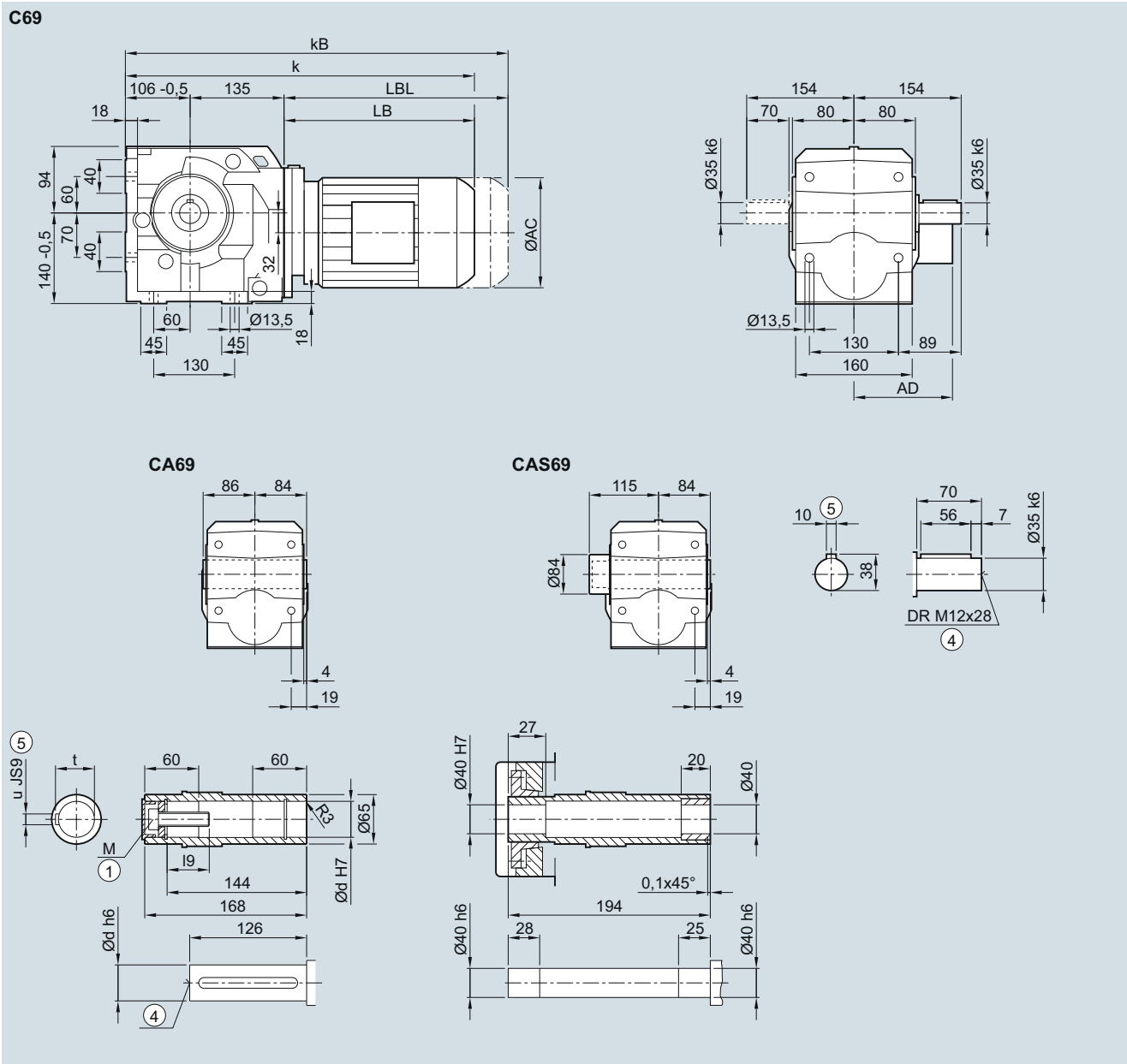
SIMOGEAR Geared Motors

Helical worm geared motors

Dimensions

C..69 gearbox in a foot-mounted design

C030, CA030, CAS030



Shaft	d	l9	M	t	u
	40	47.75	M16	43.3	12
	45	48.75	M16	48.8	14

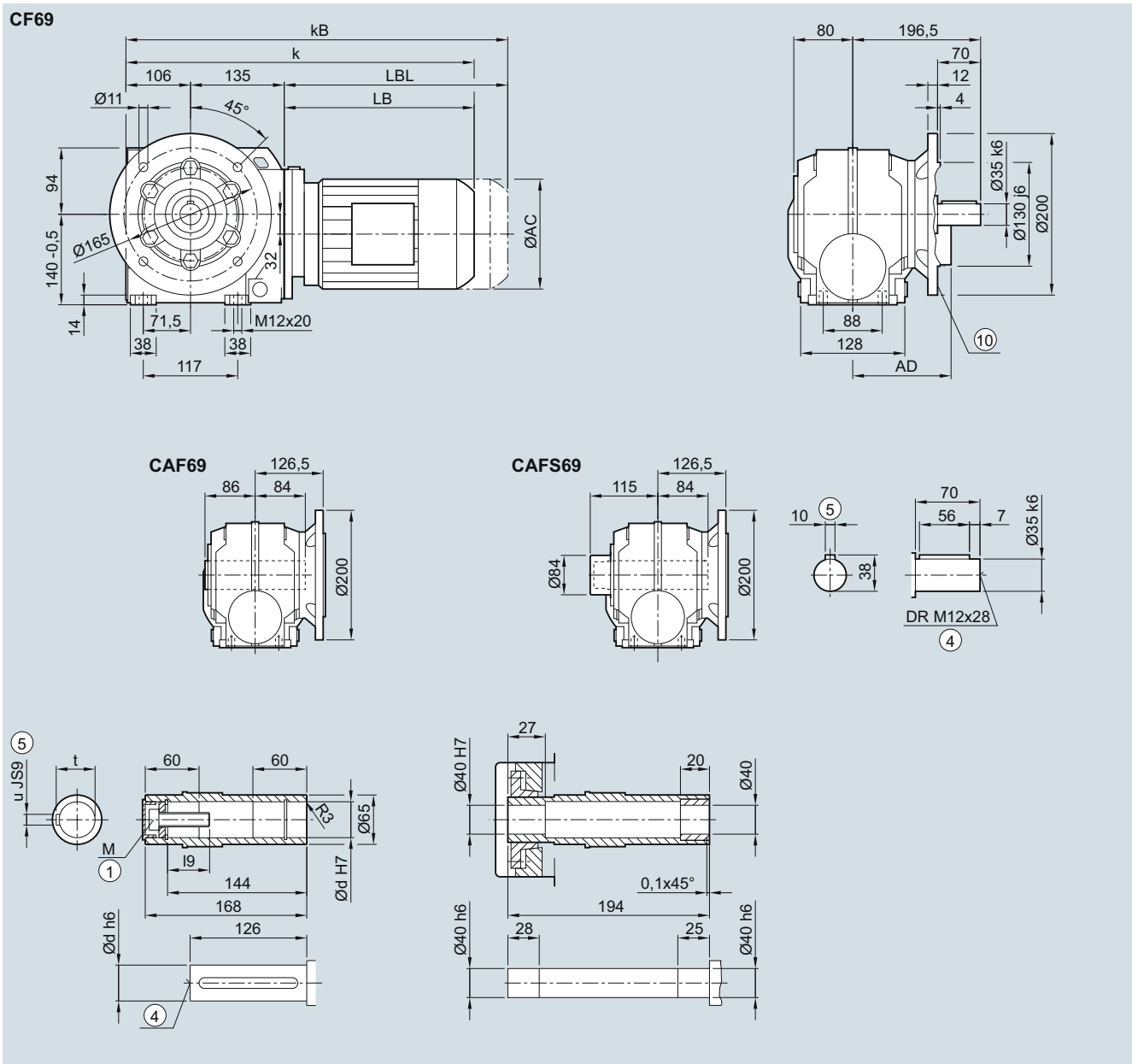
Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	425.5	457.5	521.5	556.5	583.0	623.0	639.5	674.5	649.5	684.0	702.5	752.5
kB	470.0	512.5	581.5	616.5	653.0	693.0	718.0	753.0	722.5	757.0	807.0	857.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

CF.69 gearbox in a flange-mounted design
CF030, CAF030, CAFS030


Shaft	d	l ₉	M	t	u
	40	47.75	M16	43.3	12
	45	48.75	M16	48.8	14

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	425.5	457.5	521.5	556.5	583.0	623.0	639.5	674.5	649.5	684.0	702.5	752.5
kB	470.0	512.5	581.5	616.5	653.0	693.0	718.0	753.0	722.5	757.0	807.0	857.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

⑩ For inner contour, see page 6/59

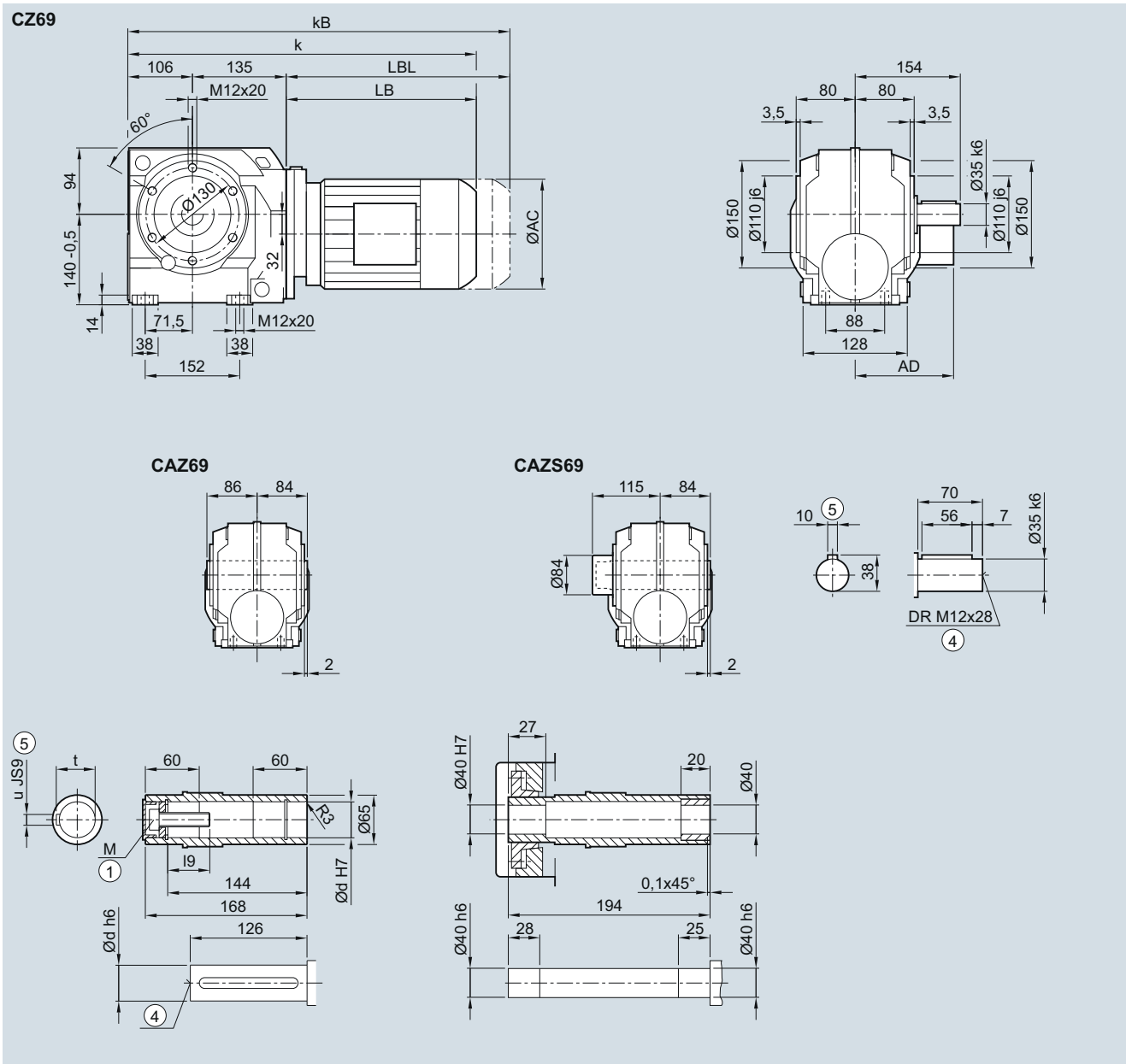
SIMOGEAR Geared Motors

Helical worm geared motors

Dimensions

C.Z.69 gearbox in a housing flange design

CZ030, CAZ030, CAZS030



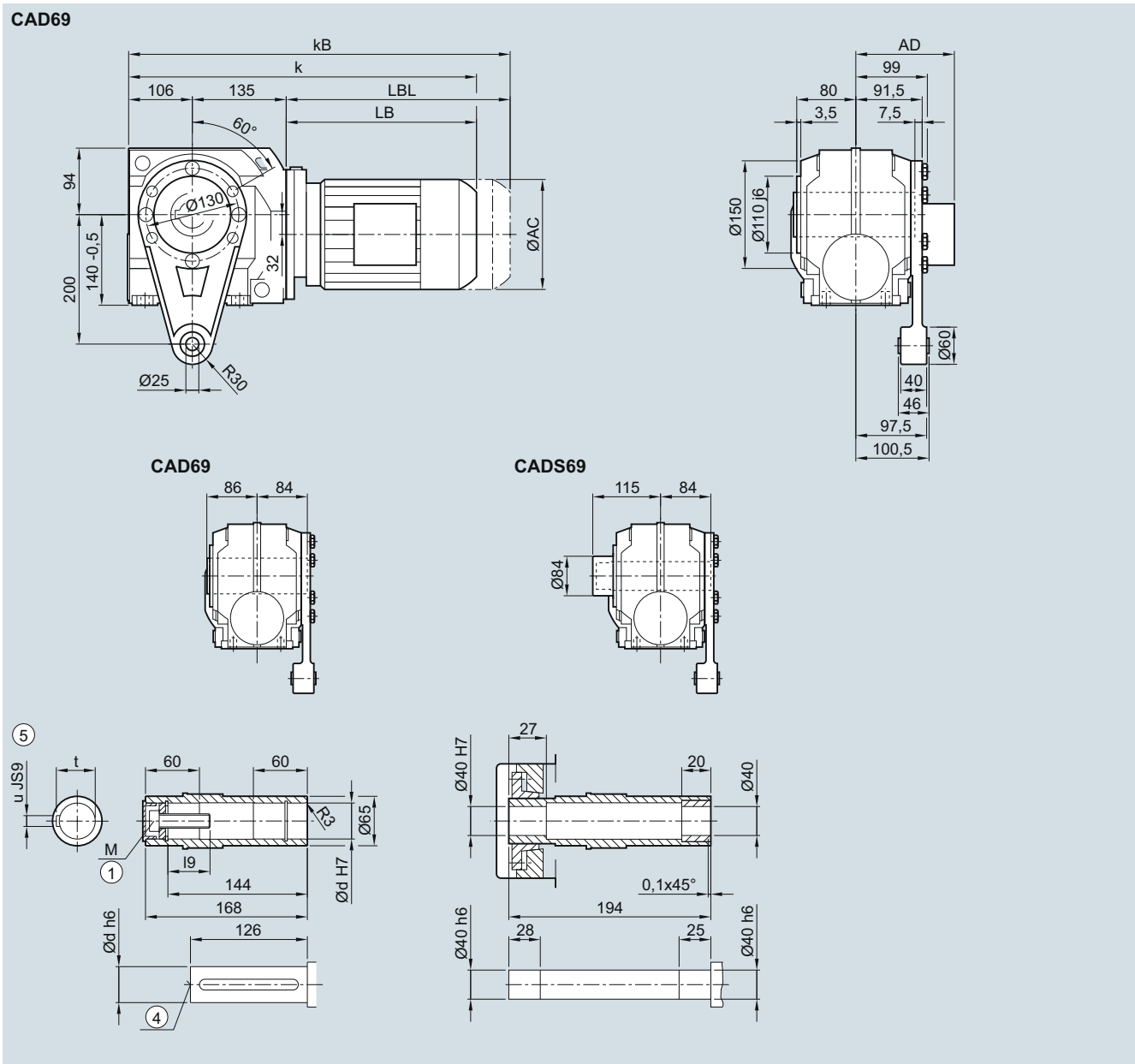
Shaft	d	l9	M	t	u							
	40	47.75	M16	43.3	12							
	45	48.75	M16	48.8	14							
Motor	LA63M	LA71M	LE80M	LE80ZM	LE90S/L	LE90ZL	LE100L	LE100ZL	LE112M	LE112ZM	LE132S/M	LE132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	425.5	457.5	521.5	556.5	583.0	623.0	639.5	674.5	649.5	684.0	702.5	752.5
kB	470.0	512.5	581.5	616.5	653.0	693.0	718.0	753.0	722.5	757.0	807.0	857.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443.0	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516.0	566.0	616.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

CAD.69 gearbox in a shaft-mounted design
CAD030, CADS030


Shaft	d	l ₉	M	t	u
	40	47.75	M16	43.3	12
	45	48.75	M16	48.8	14

Motor	LA 63M	71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	117.8	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	124.0	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	425.5	457.5	521.5	556.5	583.0	623.0	639.5	674.5	649.5	684	702.5	752.5
k _B	470.0	512.5	581.5	616.5	653.0	693.0	718.0	753.0	722.5	757	807.0	857.0
LB	184.5	216.5	280.5	315.5	342.0	382.0	398.5	433.5	408.5	443	461.5	511.5
LBL	229.0	271.5	340.5	375.5	412.0	452.0	477.0	512.0	481.5	516	566.0	616.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

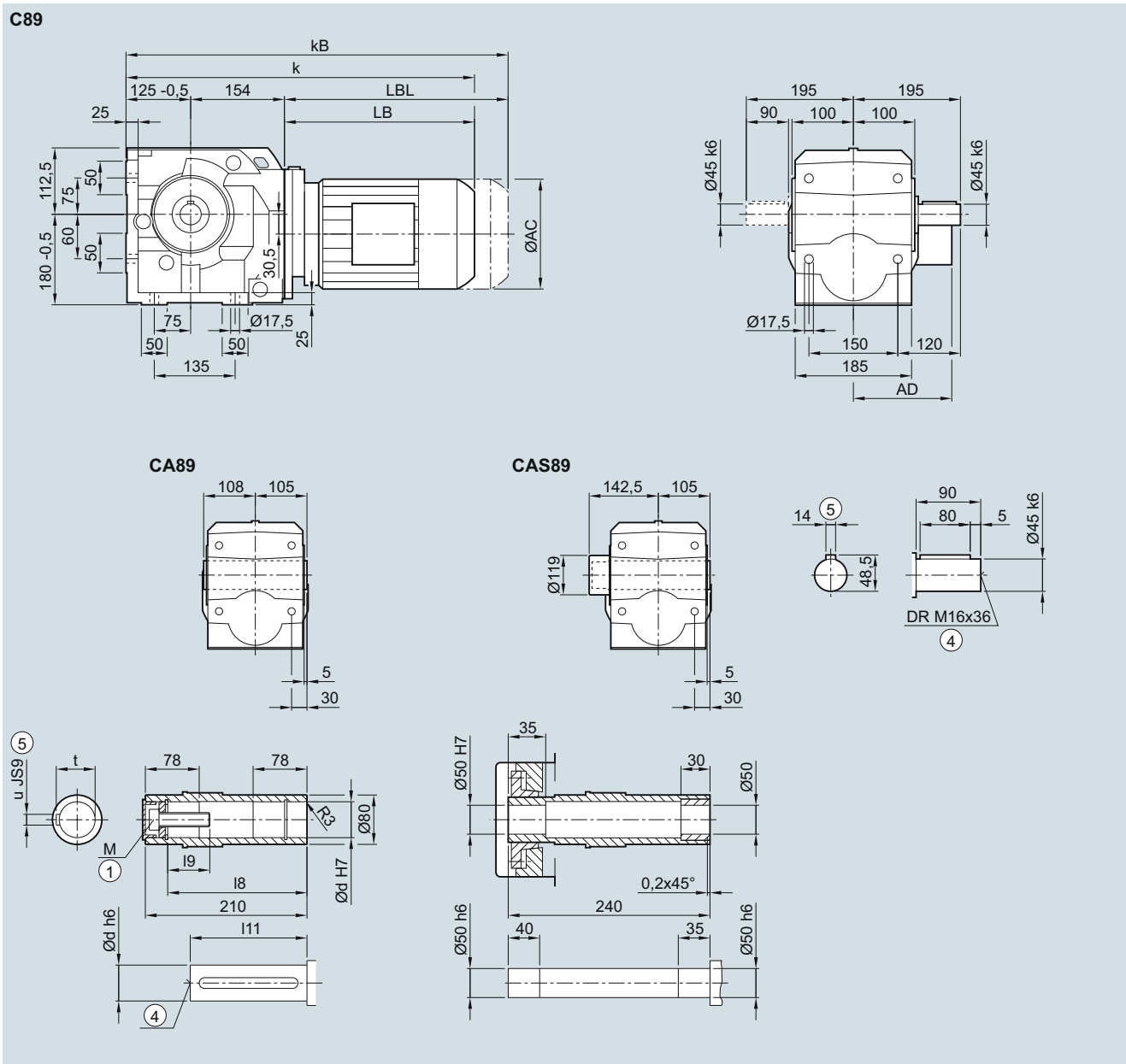
SIMOGEAR Geared Motors

Helical worm geared motors

Dimensions

C..89 gearbox in a foot-mounted design

C030, CA030, CAS030



Shaft	d	l8	l9	l11	M	t	u
	50	183	44.5	165	M16	53.8	14
	60	180	57	158	M20	64.4	18

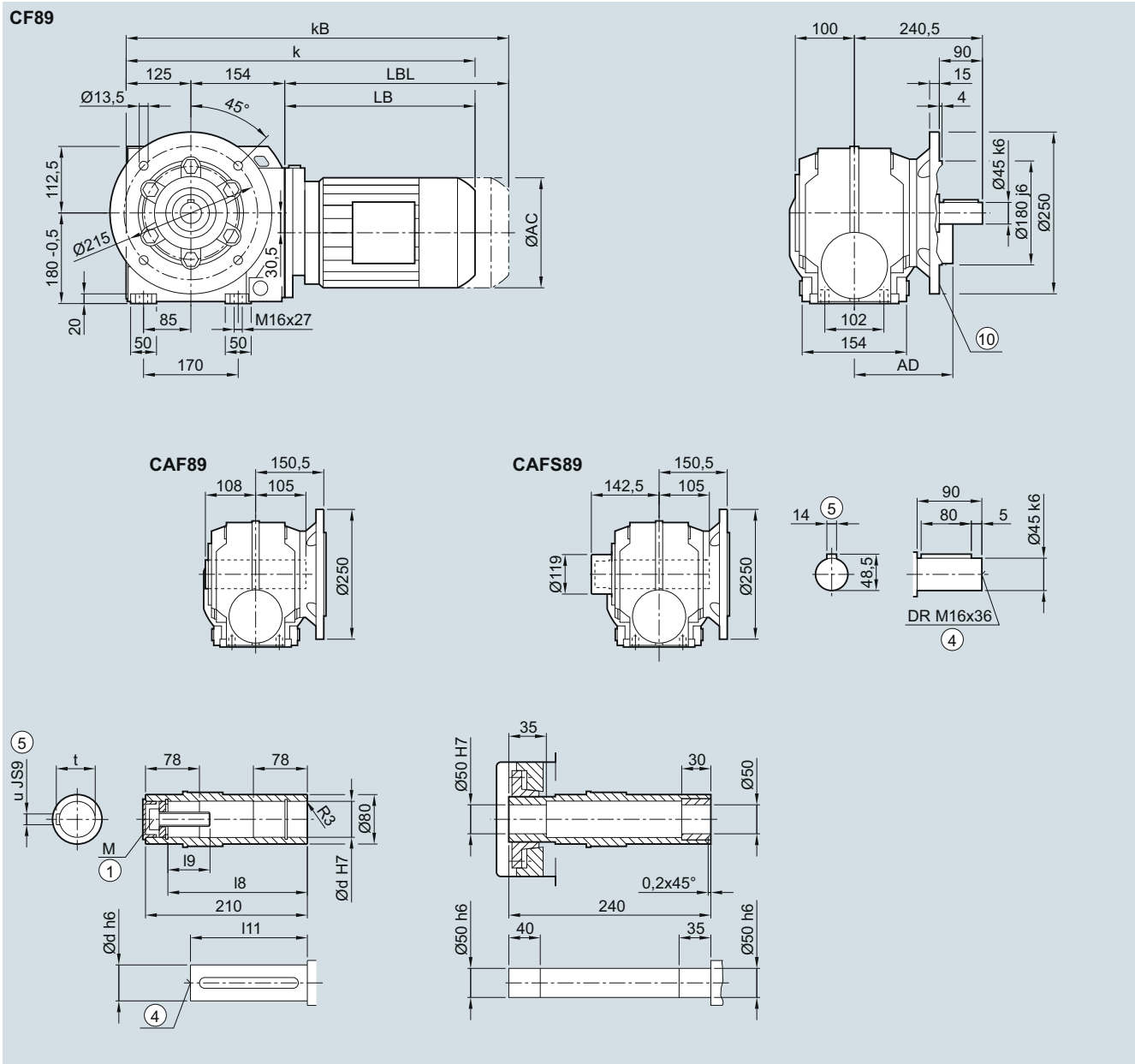
Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	493.5	553.5	588.5	615.0	655.0	671.5	706.5	681.5	706.5	734.5	784.5
kB	548.5	613.5	648.5	685.0	725.0	750.0	785.0	754.5	779.5	839.0	889.0
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

C.F.89 gearbox in a flange-mounted design
CF030, CAF030, CAFS030


Shaft	d	l8	l9	l11	M	t	u
	50	183	44.5	165	M16	53.8	14
	60	180	57	158	M20	64.4	18

Motor	LA 71M	LAE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	493.5	553.5	588.5	615.0	655.0	671.5	706.5	681.5	706.5	734.5	784.5
kB	548.5	613.5	648.5	685.0	725.0	750.0	785.0	754.5	779.5	839.0	889.0
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions see page 8/42.

⑩ For inner contour, see page 6/59

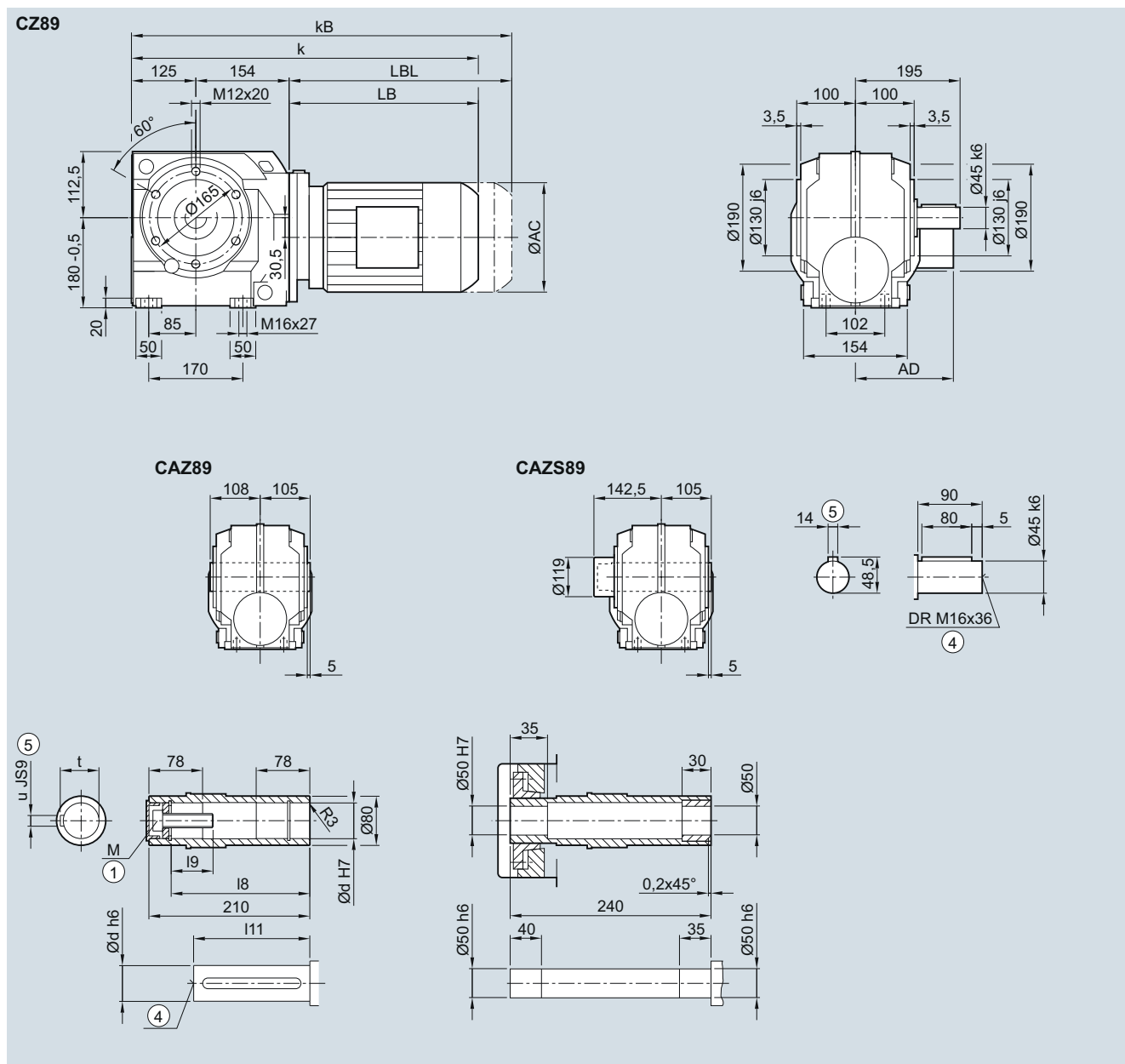
SIMOGEAR Geared Motors

Helical worm geared motors

Dimensions

C.Z.89 gearbox in a housing flange design

CZ030, CAZ030, CAZS030



Shaft	d	l8	l9	l11	M	t	u
	50	183	44.5	165	M16	53.8	14
	60	180	57	158	M20	64.4	18

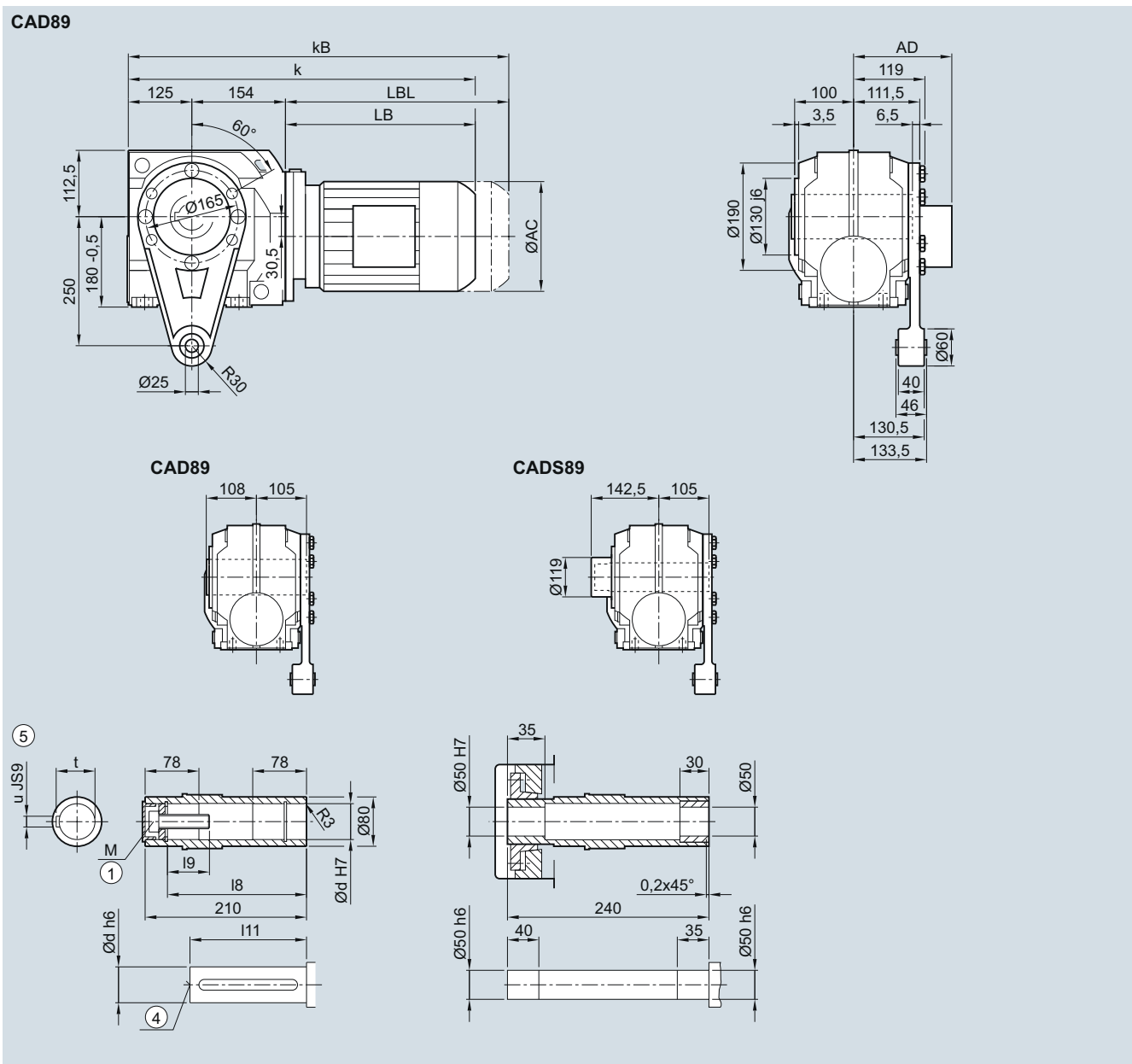
Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	493.5	553.5	588.5	615.0	655.0	671.5	706.5	681.5	706.5	734.5	784.5
k _B	548.5	613.5	648.5	685.0	725.0	750.0	785.0	754.5	779.5	839.0	889.0
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions see page 8/42.

CAD.89 gearbox in a shaft-mounted design
CAD030, CADS030


Shaft	d	l8	l9	l11	M	t	u				
	50	183	44.5	165	M16	53.8	14				
	60	180	57	158	M20	64.4	18				
Motor	LA 71M	LE 80M	80ZM	90S/L	90ZL	100L	100ZL	112M	112ZM	132S/M	132ZM
AC	138.8	156.3	156.3	173.8	173.8	198.0	198.0	222.0	222.0	264.0	264.0
AD ¹⁾	134.0	149.2	149.2	154.2	154.2	170.5	170.5	181.5	181.5	207.0	207.0
k	493.5	553.5	588.5	615.0	655.0	671.5	706.5	681.5	706.5	734.5	784.5
kB	548.5	613.5	648.5	685.0	725.0	750.0	785.0	754.5	779.5	839.0	889.0
LB	214.5	274.5	309.5	336.0	376.0	392.5	427.5	402.5	427.5	455.5	505.5
LBL	269.5	334.5	369.5	406.0	446.0	471.0	506.0	475.5	500.5	560.0	610.0

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

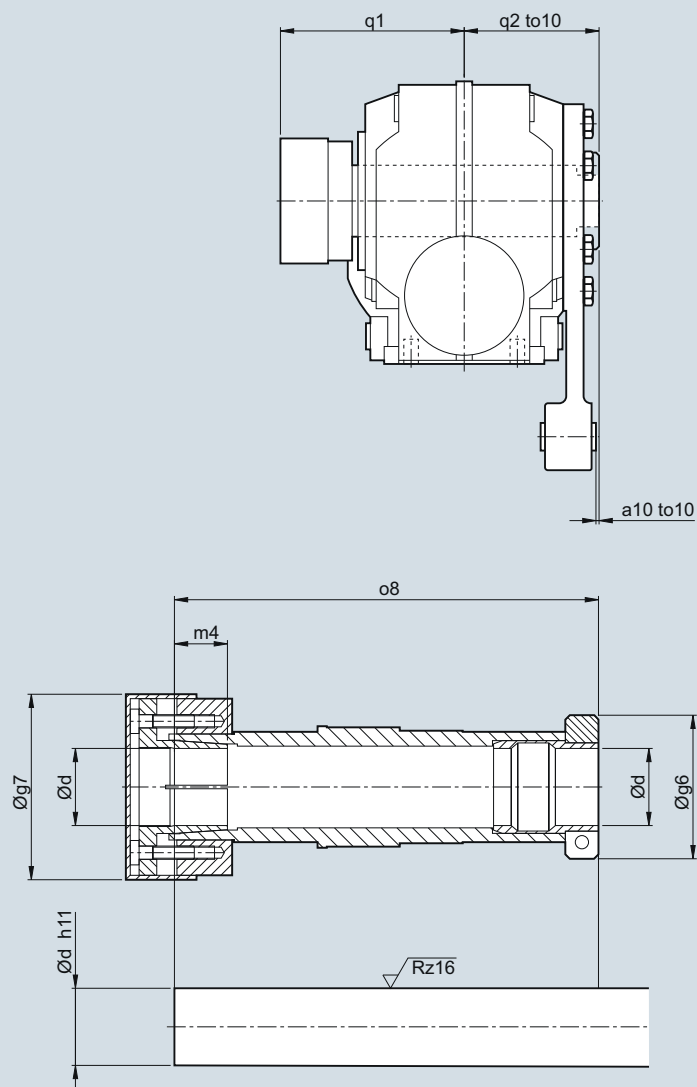
1) AD depends on the motor options, for other dimensions see page 8/42.

SIMOGEAR Geared Motors

Helical worm geared motors

Dimensions**SIMOLOC assembly system**

CADR



Note mounting tolerance to10 when positioning the torque arm.

SIMOLOC assembly system (continued)

d	g6	g7	m4	o8	q1	q2	a10	to10
CADR.29								
20	58.5	56	18.5	151.0	102	75	11	+2.1
1"								+0.6
0.75"								
CADR39								
30	62.0	76	22	160.5	106	75	39	+2.2
25								+0.7
1.25"								
1.1875"								
1"								
CADR49								
35	65.0	84	24	192.0	124	90	35	+2.6
30								+0.8
1.4375"								
1.375"								
1.25"								
1.1875"								
CADR69								
40	79.5	94	30	217.5	138	102	39	+2.5
35								+0.7
1.5"								
1.4375"								
1.375"								
1.625"								
CADR89								
50	89.0	114	32	264.0	171	124	45	+3.4
40								+1.5
2"								
1.9375"								
1.75"								
1.625"								

SIMOGEAR Geared Motors

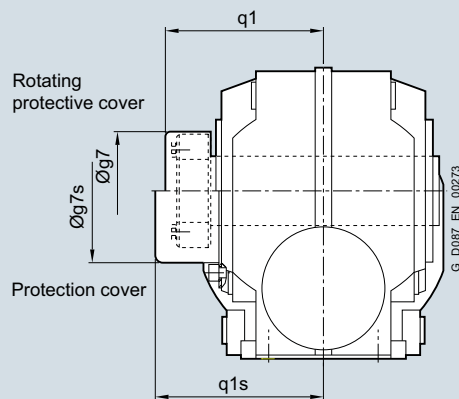
Helical worm geared motors

Dimensions

Protection cover for hollow shaft

Protection cover for hollow shaft and hollow shaft with shrink disk

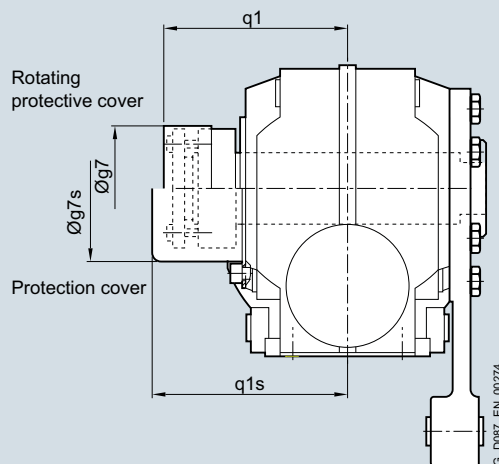
CAS, CAFS, CAZS, CADS



Gearbox type	CA..29	CA..39	CA..49	C..69	C..89
Rotating protective cover with shrink disk version					
g7	55	76.0	84	84	94.0
q1	85	89.5	107	115	125.5
Protection cover					
g7s	58	82.5	86	99	99.0
q1s	91	109.0	122	126	132.5

Protection cover for hollow shaft with SIMOLOC assembly system

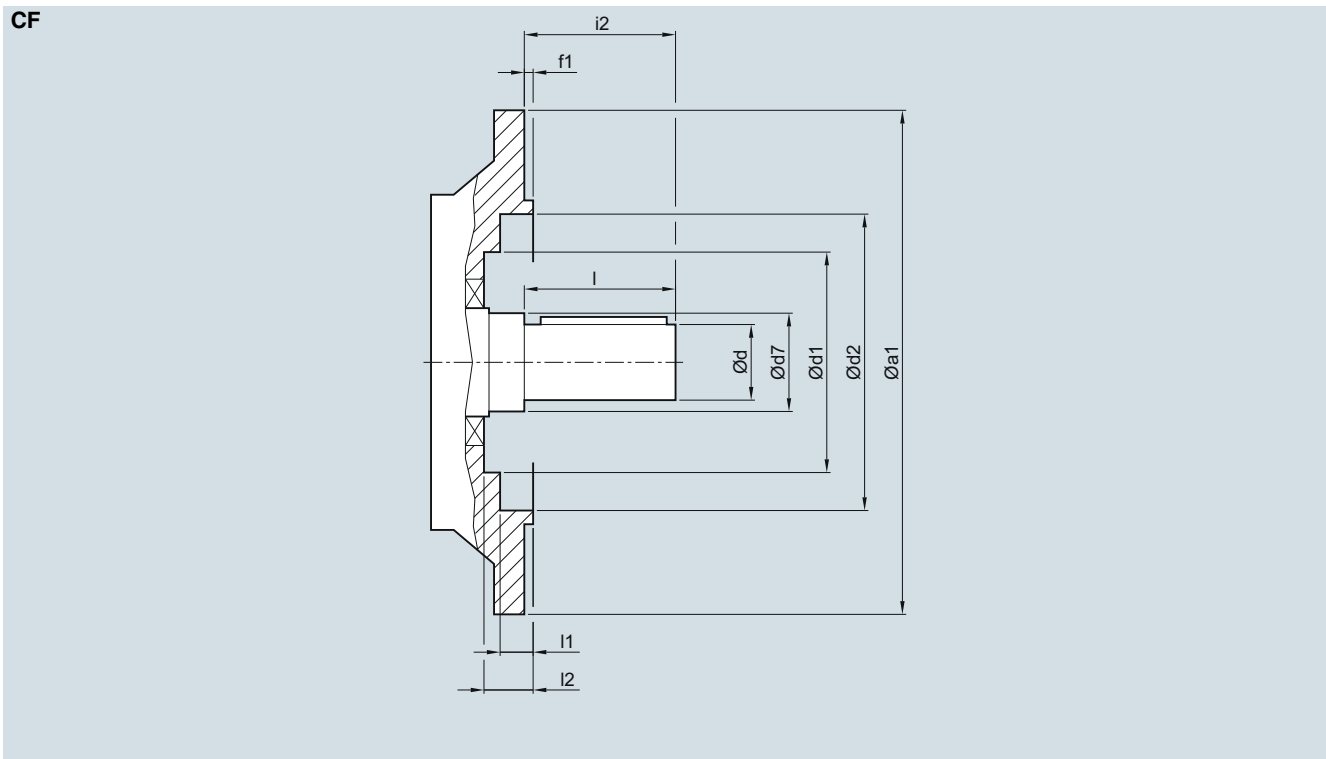
CADR



Gearbox type	CADR29	CADR39	CADR49	CADR69	CADR89
Rotating protective cover					
g7	56.0	76.0	84	94	114
q1	101.5	106.0	124	144	171
Protection cover					
g7s	58.0	82.5	86	99	137
q1s	104.5	109.0	127	147	174

Inner contour of the flange design

Notes regarding the design of the customer's interface



Gearbox type	a1	d	d7	d1	d2	f1	i2	l	l1	l2
CF29	120	20	40	-	70	3.0	40	40	24.0	-
	160			70	101	3.5			8.5	24.5
CF39	160	25	30	-	100	3.5	50	50	5.0	-
CF49	200	30	35	-	118	3.5	60	60	5.5	-
CF.69	200	35	45	105	120	4.0	70	70	4.5	48.0
CF.89	250	45	70	134	165	4.0	90	90	6.5	53.0

SIMOGEAR Geared Motors

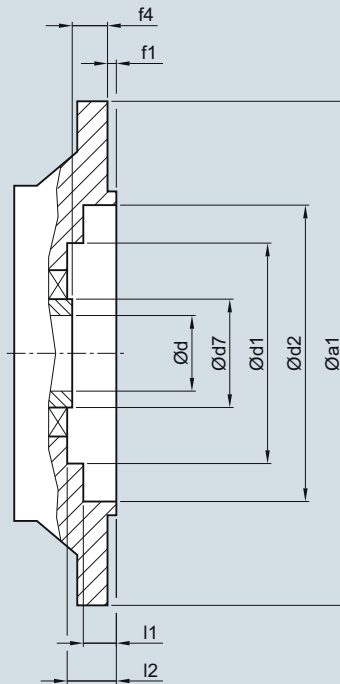
Helical worm geared motors

Dimensions

Inner contour of the flange design (continued)

Notes regarding the design of the customer's interface, e.g. plug-in shaft for hollow shaft design

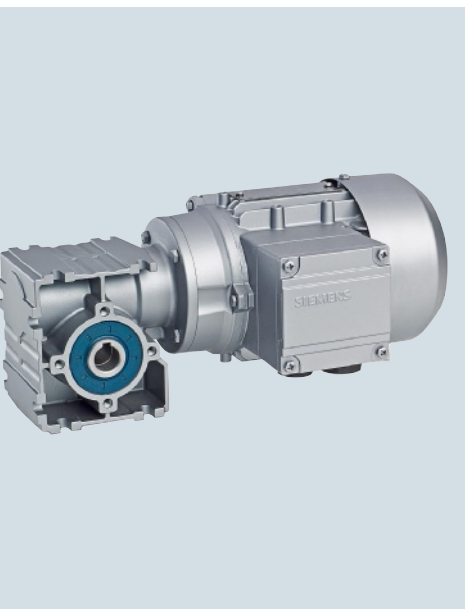
CAF.



6

Gearbox type	a1	d	d7	d1	d2	f1	f4	l1	l2
CAF.29	120	20	35	-	70	3.0	23.0	24.0	-
	160			70	101	3.5		8.5	24.5
CAF.39	160	25/30	45	80	102	3.5	24.0	2.0	29.5
CAF.49	200	30/35	50	90	120	3.5	25.0	4.0	30.5
CAF.69	200	40/45	65	105	120	4.0	42.0	4.5	48.0
CAF.89	250	50/60	80	134	147	4	45.5	14.0	53.0

Worm geared motors



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7/9	General technical specifications
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7/12	S.Z09
7/13	SAD09
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7/16	S.Z19
7/17	SAD19
7/18	S.29
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7/20	S.Z29
7/21	SAD29
7/22	Protection cover for hollow shaft

SIMOGEAR Geared Motors

Worm geared motors

Orientation

SIMOGEAR worm geared motors S

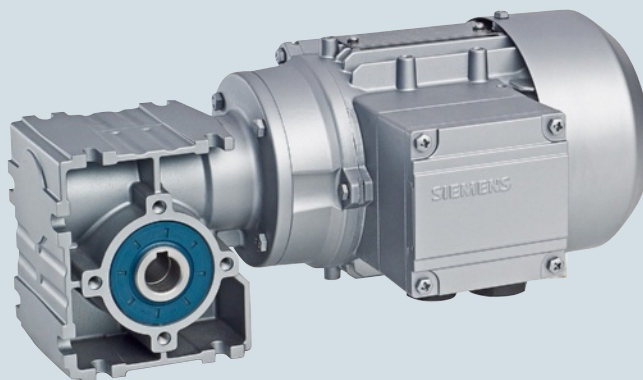


Fig. 7/1 Worm geared motor S

SIMOGEAR helical worm geared motors are available in the following versions for mounting in any position:

- 1 stage
- Shaft-mounted design with torque arm SAD
- Flange-mounted design SF
- Design with integrated housing flange SZ
- Foot-mounted design S
- Solid shaft design with feather key (at one end or both ends) S
- Hollow-shaft design with feather key SA
- Hollow-shaft design with plug-in shaft SE

For helical worm gearboxes, the torque arm is supplied loose to enable it to be mounted as required on site. The position of the torque arm can be freely selected.

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles	
0.09	S.29-LAI63MF6							
	8.5	46.2	100	1.6	8	2KJ3732 - ■ BD11 - ■ A1	P01	
	10.6	41.0	80	2.1	8	2KJ3732 - ■ BD11 - ■ B1	P01	
	14.2	34.5	60	2.8	8	2KJ3732 - ■ BD11 - ■ C1	P01	
	S.19-LAI63MF6							
	10.6	39.6	80	0.9	6	2KJ3731 - ■ BD11 - ■ B1	P01	
	14.2	33.8	60	1.4	6	2KJ3731 - ■ BD11 - ■ C1	P01	
	17	30.0	50	1.7	6	2KJ3731 - ■ BD11 - ■ D1	P01	
	S.09-LAI63MF6							
	14.2	29.9	60	0.8	5	2KJ3730 - ■ BD11 - ■ C1	P01	
	17.0	26.8	50	1	5	2KJ3730 - ■ BD11 - ■ D1	P01	
	21.2	23.5	40	1.3	5	2KJ3730 - ■ BD11 - ■ E1	P01	
	0.12	S.29-LAI63ME4						
		13.5	40.3	100	1.7	8	2KJ3732 - ■ BC11 - ■ A1	
		16.9	35.7	80	2.3	8	2KJ3732 - ■ BC11 - ■ B1	
22.5		29.9	60	2.7	8	2KJ3732 - ■ BC11 - ■ C1		
27		26.5	50	3	8	2KJ3732 - ■ BC11 - ■ D1		
33.8		22.9	40	3.4	8	2KJ3732 - ■ BC11 - ■ E1		
45		18.5	30	4.1	8	2KJ3732 - ■ BC11 - ■ F1		
S.19-LAI63ME4								
16.9		34.8	80	1	6	2KJ3731 - ■ BC11 - ■ B1		
22.5		29.5	60	1.5	6	2KJ3731 - ■ BC11 - ■ C1		
27		26.2	50	1.7	6	2KJ3731 - ■ BC11 - ■ D1		
33.8		22.6	40	2	6	2KJ3731 - ■ BC11 - ■ E1		
45		18.2	30	2.4	6	2KJ3731 - ■ BC11 - ■ F1		
54		15.9	25	2.5	6	2KJ3731 - ■ BC11 - ■ G1		
67.5		13.5	20	3.2	6	2KJ3731 - ■ BC11 - ■ H1		
90		10.6	15	4.1	6	2KJ3731 - ■ BC11 - ■ J1		
135		7.4	10	5.7	6	2KJ3731 - ■ BC11 - ■ K1		
193		5.4	7	7.6	6	2KJ3731 - ■ BC11 - ■ L1		
270		3.9	5	10	6	2KJ3731 - ■ BC11 - ■ M1		
S.09-LAI63ME4								
22.5		26.4	60	0.88	5	2KJ3730 - ■ BC11 - ■ C1		
27.0		23.5	50	1.1	5	2KJ3730 - ■ BC11 - ■ D1		
33.8		20.5	40	1.4	5	2KJ3730 - ■ BC11 - ■ E1		
45.0		16.9	30	1.7	5	2KJ3730 - ■ BC11 - ■ F1		
54.0		14.8	25	1.9	5	2KJ3730 - ■ BC11 - ■ G1		
67.5		12.7	20	2.2	5	2KJ3730 - ■ BC11 - ■ H1		
90		10.1	15	2.7	5	2KJ3730 - ■ BC11 - ■ J1		
135		7.2	10	3.9	5	2KJ3730 - ■ BC11 - ■ K1		
193		5.2	7	5.3	5	2KJ3730 - ■ BC11 - ■ L1		
270		3.8	5	6.7	5	2KJ3730 - ■ BC11 - ■ M1		
0.18		S.29-LAI71MG6						
		10.6	82	80	1.1	10	2KJ3732 - ■ CD11 - ■ B1	P01
		14.2	69.1	60	1.4	10	2KJ3732 - ■ CD11 - ■ C1	P01
	17	61.5	50	1.5	10	2KJ3732 - ■ CD11 - ■ D1	P01	
	21.2	53.2	40	1.8	10	2KJ3732 - ■ CD11 - ■ E1	P01	
	28.3	43.3	30	2.1	10	2KJ3732 - ■ CD11 - ■ F1	P01	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Worm geared motors

Geared motors up to 0.55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.18							
S.29-LAI63MF4							
13.5	60.4	100	1.2	8	2KJ3732 - ■ BD11 - ■ ■ A1		
16.9	53.5	80	1.5	8	2KJ3732 - ■ BD11 - ■ ■ B1		
22.5	44.8	60	1.8	8	2KJ3732 - ■ BD11 - ■ ■ C1		
27	39.8	50	2	8	2KJ3732 - ■ BD11 - ■ ■ D1		
33.8	34.3	40	2.3	8	2KJ3732 - ■ BD11 - ■ ■ E1		
45	27.7	30	2.8	8	2KJ3732 - ■ BD11 - ■ ■ F1		
54	24	25	3.1	8	2KJ3732 - ■ BD11 - ■ ■ G1		
67.5	20.4	20	3.7	8	2KJ3732 - ■ BD11 - ■ ■ H1		
S.29-LAI63ME2							
282	5.4	10	9.9	8	2KJ3732 - ■ BC11 - ■ ■ K1	P00	
403	3.9	7	13.4	8	2KJ3732 - ■ BC11 - ■ ■ L1	P00	
564	2.8	5	18.1	8	2KJ3732 - ■ BC11 - ■ ■ M1	P00	
S.19-LAI71MG6							
17	60.1	50	0.86	8	2KJ3731 - ■ CD11 - ■ ■ D1	P01	
21.2	52.4	40	1	8	2KJ3731 - ■ CD11 - ■ ■ E1	P01	
S.19-LAI63MF4							
22.5	44.3	60	1	6	2KJ3731 - ■ BD11 - ■ ■ C1		
27	39.2	50	1.1	6	2KJ3731 - ■ BD11 - ■ ■ D1		
33.8	34	40	1.3	6	2KJ3731 - ■ BD11 - ■ ■ E1		
45	27.4	30	1.6	6	2KJ3731 - ■ BD11 - ■ ■ F1		
54	23.8	25	1.6	6	2KJ3731 - ■ BD11 - ■ ■ G1		
67.5	20.3	20	2.2	6	2KJ3731 - ■ BD11 - ■ ■ H1		
90	15.9	15	2.7	6	2KJ3731 - ■ BD11 - ■ ■ J1		
135	11.1	10	3.8	6	2KJ3731 - ■ BD11 - ■ ■ K1		
193	8	7	5.1	6	2KJ3731 - ■ BD11 - ■ ■ L1		
270	5.8	5	6.7	6	2KJ3731 - ■ BD11 - ■ ■ M1		
S.19-LAI63ME2							
282	5.4	10	5.6	6	2KJ3731 - ■ BC11 - ■ ■ K1	P00	
403	3.9	7	7.5	6	2KJ3731 - ■ BC11 - ■ ■ L1	P00	
564	2.8	5	9.9	6	2KJ3731 - ■ BC11 - ■ ■ M1	P00	
S.09-LAI63MF4							
33.8	30.7	40	0.91	5	2KJ3730 - ■ BD11 - ■ ■ E1		
45.0	25.3	30	1.1	5	2KJ3730 - ■ BD11 - ■ ■ F1		
54.0	22.2	25	1.3	5	2KJ3730 - ■ BD11 - ■ ■ G1		
67.5	19.1	20	1.4	5	2KJ3730 - ■ BD11 - ■ ■ H1		
90	15.2	15	1.8	5	2KJ3730 - ■ BD11 - ■ ■ J1		
135	10.8	10	2.6	5	2KJ3730 - ■ BD11 - ■ ■ K1		
193	7.8	7	3.5	5	2KJ3730 - ■ BD11 - ■ ■ L1		
270	5.8	5	4.5	5	2KJ3730 - ■ BD11 - ■ ■ M1		
S.09-LAI63ME2							
282	5.2	10	3.9	5	2KJ3730 - ■ BC11 - ■ ■ K1	P00	
403	3.8	7	5.3	5	2KJ3730 - ■ BC11 - ■ ■ L1	P00	
564	2.8	5	7	5	2KJ3730 - ■ BC11 - ■ ■ M1	P00	
0.25							
S.29-LAI71MH6							
14.3	94.9	60	1	10	2KJ3732 - ■ CE11 - ■ ■ C1	P01	
17.2	84.5	50	1.1	10	2KJ3732 - ■ CE11 - ■ ■ D1	P01	
S.29-LAI71MG4							
16.9	74.3	80	1.1	10	2KJ3732 - ■ CD11 - ■ ■ B1		

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Worm geared motors

Geared motors up to 0.55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.25							
S.29-LAI71MG4							
22.5	62.3	60	1.3	10	2KJ3732	- ■ CD11 - ■ ■ C1	
27	55.3	50	1.4	10	2KJ3732	- ■ CD11 - ■ ■ D1	
33.8	47.6	40	1.7	10	2KJ3732	- ■ CD11 - ■ ■ E1	
45	38.5	30	2	10	2KJ3732	- ■ CD11 - ■ ■ F1	
54	33.4	25	2.3	10	2KJ3732	- ■ CD11 - ■ ■ G1	
S.29-LAI63MF2							
283	7.4	10	7.1	8	2KJ3732	- ■ BD11 - ■ ■ K1	P00
404	5.4	7	9.7	8	2KJ3732	- ■ BD11 - ■ ■ L1	P00
566	3.9	5	13.1	8	2KJ3732	- ■ BD11 - ■ ■ M1	P00
S.19-LAI71MG4							
27	54.5	50	0.82	8	2KJ3731	- ■ CD11 - ■ ■ D1	
33.8	47.2	40	0.95	8	2KJ3731	- ■ CD11 - ■ ■ E1	
45	38	30	1.2	8	2KJ3731	- ■ CD11 - ■ ■ F1	
54	33.1	25	1.2	8	2KJ3731	- ■ CD11 - ■ ■ G1	
67.5	28.1	20	1.5	8	2KJ3731	- ■ CD11 - ■ ■ H1	
90	22.1	15	2	8	2KJ3731	- ■ CD11 - ■ ■ J1	
135	15.5	10	2.8	8	2KJ3731	- ■ CD11 - ■ ■ K1	
193	11.2	7	3.7	8	2KJ3731	- ■ CD11 - ■ ■ L1	
270	8.1	5	4.8	8	2KJ3731	- ■ CD11 - ■ ■ M1	
S.19-LAI63MF2							
283	7.4	10	4	6	2KJ3731	- ■ BD11 - ■ ■ K1	P00
404	5.4	7	5.4	6	2KJ3731	- ■ BD11 - ■ ■ L1	P00
566	3.9	5	7.1	6	2KJ3731	- ■ BD11 - ■ ■ M1	P00
S.09-LAI63MF2							
70.8	21.3	40	1	5	2KJ3730	- ■ BD11 - ■ ■ E1	P00
94.3	17.2	30	1.2	5	2KJ3730	- ■ BD11 - ■ ■ F1	P00
113	15.2	25	1.4	5	2KJ3730	- ■ BD11 - ■ ■ G1	P00
142	13	20	1.6	5	2KJ3730	- ■ BD11 - ■ ■ H1	P00
189	10.3	15	2	5	2KJ3730	- ■ BD11 - ■ ■ J1	P00
283	7.3	10	2.8	5	2KJ3730	- ■ BD11 - ■ ■ K1	P00
404	5.3	7	3.8	5	2KJ3730	- ■ BD11 - ■ ■ L1	P00
566	3.8	5	5	5	2KJ3730	- ■ BD11 - ■ ■ M1	P00
0.37							
S.29-LAI71MH4							
22.8	90.9	60	0.89	10	2KJ3732	- ■ CE11 - ■ ■ C1	
27.4	80.7	50	0.98	10	2KJ3732	- ■ CE11 - ■ ■ D1	
34.2	69.5	40	1.1	10	2KJ3732	- ■ CE11 - ■ ■ E1	
45.7	56.2	30	1.4	10	2KJ3732	- ■ CE11 - ■ ■ F1	
54.8	48.7	25	1.5	10	2KJ3732	- ■ CE11 - ■ ■ G1	
68.5	41.3	20	1.8	10	2KJ3732	- ■ CE11 - ■ ■ H1	
S.29-LAI71MG2							
274	11.4	10	4.8	10	2KJ3732	- ■ CD11 - ■ ■ K1	P00
391	8.2	7	6.5	10	2KJ3732	- ■ CD11 - ■ ■ L1	P00
548	6	5	8.7	10	2KJ3732	- ■ CD11 - ■ ■ M1	P00
S.19-LAI71MH4							
54.8	48.3	25	0.81	8	2KJ3731	- ■ CE11 - ■ ■ G1	
68.5	41.1	20	1.1	8	2KJ3731	- ■ CE11 - ■ ■ H1	
91.3	32.2	15	1.3	8	2KJ3731	- ■ CE11 - ■ ■ J1	

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Worm geared motors

Geared motors up to 0.55 kW

Selection and ordering data

P_{rated} kW	n_2 rpm	T_2 Nm	i -	f_B -	m kg	Article No. (Article No. supplement → below)	Order code No. of poles
0.37	S.19-LAI71MH4						
	137	22.6	10	1.9	8	2KJ3731 - ■ CE11 - ■ ■ K1	
	196	16.3	7	2.5	8	2KJ3731 - ■ CE11 - ■ ■ L1	
	274	11.8	5	3.3	8	2KJ3731 - ■ CE11 - ■ ■ M1	
	S.19-LAI71MG2						
	274	11.4	10	2.7	8	2KJ3731 - ■ CD11 - ■ ■ K1	P00
	391	8.2	7	3.6	8	2KJ3731 - ■ CD11 - ■ ■ L1	P00
	548	5.9	5	4.7	8	2KJ3731 - ■ CD11 - ■ ■ M1	P00
	0.55	S.29-LAI71MH2					
280		16.5	10	3.2	10	2KJ3732 - ■ CE11 - ■ ■ K1	P00
400		11.9	7	4.4	10	2KJ3732 - ■ CE11 - ■ ■ L1	P00
560		8.7	5	5.9	10	2KJ3732 - ■ CE11 - ■ ■ M1	P00
S.19-LAI71MH2							
112		35.8	25	0.83	8	2KJ3731 - ■ CE11 - ■ ■ G1	P00
140		30.4	20	1	8	2KJ3731 - ■ CE11 - ■ ■ H1	P00
S.19-LAI71MH2							
187		23.7	15	1.3	8	2KJ3731 - ■ CE11 - ■ ■ J1	P00
280		16.5	10	1.8	8	2KJ3731 - ■ CE11 - ■ ■ K1	P00
400		11.9	7	2.4	8	2KJ3731 - ■ CE11 - ■ ■ L1	P00
560		8.6	5	3.2	8	2KJ3731 - ■ CE11 - ■ ■ M1	P00

Article No. supplement

Shaft design	1, 5, 6, 7 or 9
Frequency and voltage	2 or 9
Gearbox mounting type	A, D, F or H

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SIMOGEAR Geared Motors

Worm geared motors

Transmission ratios and torques

Selection and ordering data

i	Lead angle of the worm γ_m	$n_{mot} = 2\ 800\ rpm$				$n_{mot} = 1\ 400\ rpm$				Motor size		Article No.
		n_2	T_{2N}	P_{mot}	η	n_2	T_{2N}	P_{mot}	η	63	71	
		rpm	Nm	kW	%	rpm	Nm	kW	%			
S.09												
80	2.1	35.0	18	0.14	48	17.5	19	0.07	47	✓		2KJ3730 - ■■■■■■ - ■■ B1
60	2.7	46.7	22	0.20	55	23.3	24	0.11	52	✓		2KJ3730 - ■■■■■■ - ■■ C1
50	3.2	56.0	21	0.21	58	28.0	27	0.14	56	✓		2KJ3730 - ■■■■■■ - ■■ D1
40	3.8	70.0	21	0.24	63	35.0	28	0.17	61	✓		2KJ3730 - ■■■■■■ - ■■ E1
30	4.6	93.3	20	0.29	68	46.7	28	0.20	67	✓		2KJ3730 - ■■■■■■ - ■■ F1
25	5.2	112.0	20	0.33	72	56.0	27	0.23	70	✓		2KJ3730 - ■■■■■■ - ■■ G1
20	7.4	140.0	21	0.40	77	70.0	27	0.26	75	✓		2KJ3730 - ■■■■■■ - ■■ H1
15	9.2	186.7	20	0.48	81	93.3	27	0.33	80	✓		2KJ3730 - ■■■■■■ - ■■ J1
10	14.0	280.0	20	0.68	86	140.0	27	0.47	85	✓		2KJ3730 - ■■■■■■ - ■■ K1
7	19.0	400.0	19	0.89	89	200.0	26	0.62	88	✓		2KJ3730 - ■■■■■■ - ■■ L1
5	25.0	560.0	19	1.22	91	280.0	25	0.81	91	✓		2KJ3730 - ■■■■■■ - ■■ M1
S.19												
80	3.5	35.0	33	0.22	55	17.5	35	0.12	54	✓		2KJ3731 - ■■■■■■ - ■■ B1
60	3.5	46.7	33	0.26	61	23.3	44	0.18	59	✓		2KJ3731 - ■■■■■■ - ■■ C1
50	4.0	56.0	33	0.30	64	28.0	44	0.20	63	✓	✓	2KJ3731 - ■■■■■■ - ■■ D1
40	4.5	70.0	31	0.33	68	35.0	43	0.24	67	✓	✓	2KJ3731 - ■■■■■■ - ■■ E1
30	5.5	93.3	31	0.42	73	46.7	41	0.28	72	✓	✓	2KJ3731 - ■■■■■■ - ■■ F1
25	6.5	112.0	31	0.48	76	56.0	41	0.32	75	✓	✓	2KJ3731 - ■■■■■■ - ■■ G1
20	9.5	140.0	31	0.56	81	70.0	41	0.38	80	✓	✓	2KJ3731 - ■■■■■■ - ■■ H1
15	11.0	186.7	30	0.70	84	93.3	41	0.48	84	✓	✓	2KJ3731 - ■■■■■■ - ■■ J1
10	17.0	280.0	30	1.00	88	140.0	40	0.67	88	✓	✓	2KJ3731 - ■■■■■■ - ■■ K1
7	17.0	400.0	29	1.33	91	200.0	39	0.91	90	✓	✓	2KJ3731 - ■■■■■■ - ■■ L1
5	23.0	560.0	28	1.78	92	280.0	37	1.18	92	✓	✓	2KJ3731 - ■■■■■■ - ■■ M1
S.29												
100	2.0	28.0	57	0.33	50	14.0	72	0.22	49	✓		2KJ3732 - ■■■■■■ - ■■ A1
80	2.5	35.0	57	0.39	54	17.5	80	0.27	54	✓	✓	2KJ3732 - ■■■■■■ - ■■ B1
60	3.0	46.7	57	0.46	60	23.3	78	0.32	59	✓	✓	2KJ3732 - ■■■■■■ - ■■ C1
50	3.5	56.0	55	0.50	64	28.0	75	0.35	63	✓	✓	2KJ3732 - ■■■■■■ - ■■ D1
40	4.5	70.0	55	0.59	68	35.0	74	0.40	68	✓	✓	2KJ3732 - ■■■■■■ - ■■ E1
30	5.0	93.3	53	0.71	73	46.7	73	0.49	73	✓	✓	2KJ3732 - ■■■■■■ - ■■ F1
25	6.0	112.0	53	0.82	76	56.0	73	0.56	76	✓	✓	2KJ3732 - ■■■■■■ - ■■ G1
20	8.5	140.0	53	0.96	81	70.0	73	0.67	80	✓	✓	2KJ3732 - ■■■■■■ - ■■ H1
15	10.0	186.7	53	1.23	84	93.3	72	0.84	84	✓	✓	2KJ3732 - ■■■■■■ - ■■ J1
10	15.0	280.0	53	1.77	88	140.0	72	1.20	88	✓	✓	2KJ3732 - ■■■■■■ - ■■ K1
7	15.0	400.0	53	2.44	91	200.0	71	1.63	91	✓	✓	2KJ3732 - ■■■■■■ - ■■ L1
5	21.0	560.0	51	3.22	93	280.0	69	2.18	93	✓	✓	2KJ3732 - ■■■■■■ - ■■ M1

SIMOGEAR Geared Motors

Worm geared motors

Transmission ratios and torques

Selection and ordering data

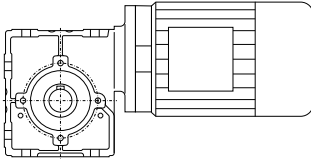
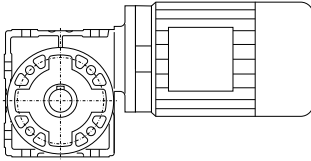
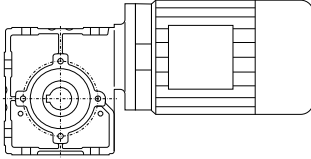
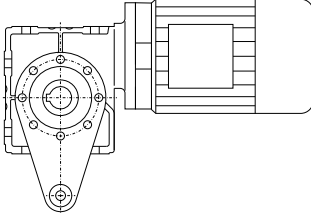
i	Lead angle of the worm γ_m	$n_{mot} = 900 \text{ rpm}$				$n_{mot} = 500 \text{ rpm}$				Motor size		Article No.
		n_2	T_{2N}	P_{mot}	η	n_2	T_{2N}	P_{mot}	η	63	71	
		rpm	Nm	kW	%	rpm	Nm	kW	%			
S.09												
80	2.1	11.3	19	0.05	44	6.3	20	0.03	40	✓		2KJ3730 - ■■■■■■ - ■■ B1
60	2.7	15.0	24	0.08	50	8.3	24	0.05	45	✓		2KJ3730 - ■■■■■■ - ■■ C1
50	3.2	18.0	27	0.10	53	10.0	28	0.06	49	✓		2KJ3730 - ■■■■■■ - ■■ D1
40	3.8	22.5	31	0.13	58	12.5	31	0.08	54	✓		2KJ3730 - ■■■■■■ - ■■ E1
30	4.6	30.0	32	0.16	64	16.7	33	0.10	60	✓		2KJ3730 - ■■■■■■ - ■■ F1
25	5.2	36.0	32	0.18	68	20.0	32	0.10	64	✓		2KJ3730 - ■■■■■■ - ■■ G1
20	7.4	45.0	31	0.20	73	25.0	31	0.12	70	✓		2KJ3730 - ■■■■■■ - ■■ H1
15	9.2	60.0	33	0.27	78	33.3	33	0.15	75	✓		2KJ3730 - ■■■■■■ - ■■ J1
10	14.0	90.0	32	0.36	84	50.0	33	0.21	81	✓		2KJ3730 - ■■■■■■ - ■■ K1
7	19.0	128.6	31	0.48	87	71.4	33	0.29	85	✓		2KJ3730 - ■■■■■■ - ■■ L1
5	25.0	180.0	30	0.63	90	100.0	33	0.39	88	✓		2KJ3730 - ■■■■■■ - ■■ M1
S.19												
80	3.5	11.3	35	0.08	51	6.3	36	0.05	47	✓		2KJ3731 - ■■■■■■ - ■■ B1
60	3.5	15.0	49	0.14	57	8.3	51	0.09	52	✓		2KJ3731 - ■■■■■■ - ■■ C1
50	4.0	18.0	51	0.16	61	10.0	59	0.11	56	✓	✓	2KJ3731 - ■■■■■■ - ■■ D1
40	4.5	22.5	51	0.18	65	12.5	64	0.14	61	✓	✓	2KJ3731 - ■■■■■■ - ■■ E1
30	5.5	30.0	50	0.22	70	16.7	63	0.17	66	✓	✓	2KJ3731 - ■■■■■■ - ■■ F1
25	6.5	36.0	49	0.25	74	20.0	62	0.19	70	✓	✓	2KJ3731 - ■■■■■■ - ■■ G1
20	9.5	45.0	50	0.30	78	25.0	62	0.22	75	✓	✓	2KJ3731 - ■■■■■■ - ■■ H1
15	11.0	60.0	50	0.38	82	33.3	62	0.27	79	✓	✓	2KJ3731 - ■■■■■■ - ■■ J1
10	17.0	90.0	49	0.53	87	50.0	61	0.38	85	✓	✓	2KJ3731 - ■■■■■■ - ■■ K1
7	17.0	128.6	47	0.70	90	71.4	58	0.49	88	✓	✓	2KJ3731 - ■■■■■■ - ■■ L1
5	23.0	180.0	44	0.91	91	100.0	56	0.65	90	✓	✓	2KJ3731 - ■■■■■■ - ■■ M1
S.29												
100	2.0	9.0	72	0.14	47	5.0	72	0.09	43	✓		2KJ3732 - ■■■■■■ - ■■ A1
80	2.5	11.3	92	0.21	52	6.3	93	0.13	48	✓	✓	2KJ3732 - ■■■■■■ - ■■ B1
60	3.0	15.0	93	0.26	57	8.3	116	0.19	53	✓	✓	2KJ3732 - ■■■■■■ - ■■ C1
50	3.5	18.0	90	0.28	61	10.0	115	0.21	57	✓	✓	2KJ3732 - ■■■■■■ - ■■ D1
40	4.5	22.5	90	0.32	66	12.5	113	0.24	62	✓	✓	2KJ3732 - ■■■■■■ - ■■ E1
30	5.0	30.0	86	0.38	72	16.7	110	0.28	68	✓	✓	2KJ3732 - ■■■■■■ - ■■ F1
25	6.0	36.0	85	0.43	75	20.0	109	0.32	71	✓	✓	2KJ3732 - ■■■■■■ - ■■ G1
20	8.5	45.0	85	0.51	79	25.0	109	0.38	76	✓	✓	2KJ3732 - ■■■■■■ - ■■ H1
15	10.0	60.0	85	0.64	83	33.3	109	0.47	81	✓	✓	2KJ3732 - ■■■■■■ - ■■ J1
10	15.0	90.0	85	0.92	87	50.0	109	0.66	86	✓	✓	2KJ3732 - ■■■■■■ - ■■ K1
7	15.0	128.6	84	1.26	90	71.4	107	0.90	89	✓	✓	2KJ3732 - ■■■■■■ - ■■ L1
5	21.0	180.0	82	1.68	92	100.0	105	1.21	91	✓	✓	2KJ3732 - ■■■■■■ - ■■ M1

Permissible radial force F_{rperm}

Gearbox type	d mm	l mm	y mm	z mm	a kNmm	F_{rperm} in N with $x = l/2$ for output speeds n_2 in rpm							
						≤ 16	≤ 25	≤ 40	≤ 63	≤ 100	≤ 160	≤ 250	≤ 400
S09	16	40	83.5	63.5	36 000	1 800	1 800	1 800	1 800	1 800	1 690	1 400	1 120
SF09			106.0	86.0		1 800	1 800	1 800	1 800	1 620	1 330	1 100	880
S19	20	40	98.0	78.0	76 000	3 800	3 800	3 800	3 200	2 650	2 180	1 780	1 420
SF19			128.0	108.0		3 200	3 120	2 920	2 450	2 030	1 670	1 360	1 090
S29	20	40	120.5	100.5	72 000	3 600	3 600	3 600	3 600	3 600	3 290	2 680	2 120
SF29			153.5	133.5		3 600	3 600	3 600	3 600	3 150	2 580	2 110	1 660

Dimensions
Dimensional drawing overview

 Information about dimensional drawings can be found in chapter [Introduction on page 1/20](#).

Design	Size	Dimensional drawing on page
Foot-mounted design		
	S.09	7/10
	S.19	7/14
	S.29	7/18
Flange-mounted design		
	S.F09	7/11
	S.F19	7/15
	S.F29	7/19
Housing flange design		
	S.Z09	7/12
	S.Z19	7/16
	S.Z29	7/20
Shaft-mounted design		
	SAD09	7/13
	SAD19	7/17
	SAD29	7/21
Additional versions and options		
	Protection cover for hollow shafts	7/22

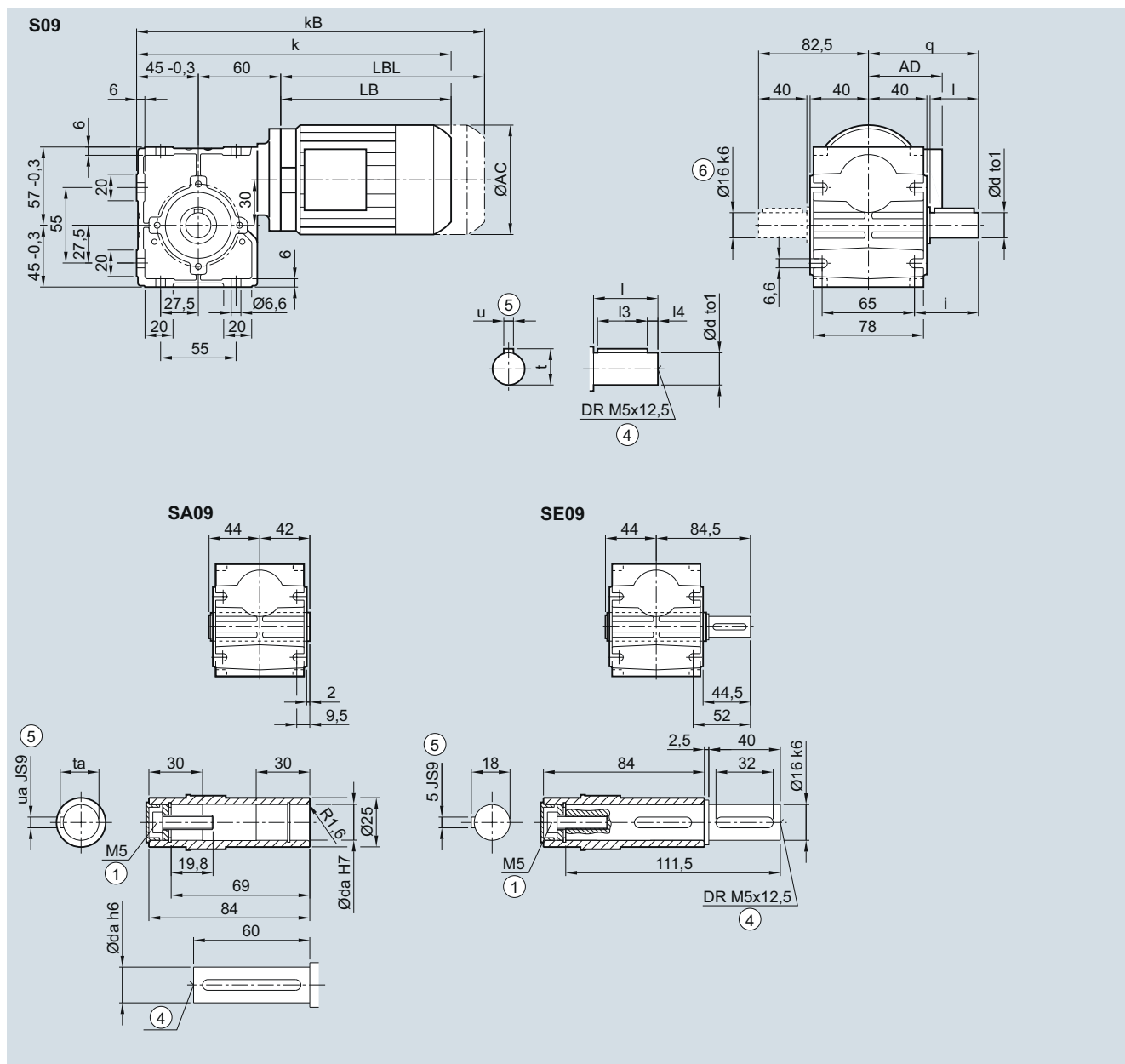
SIMOGEAR Geared Motors

Worm geared motors

Dimensions

S.09 gearbox in a foot-mounted design

S030, SA030, SE030



Solid shaft	d	to1	l	l3	l4	u	t	q	i	Hollow shaft	da	ua	ta
	14	k6	30	22	4	5	16	72.5	40			14	5
16	k6	40	32	4	5	18	82.5	50		16	5	18.3	
Motor	AC	AD ¹⁾	k			kB	LB	LBL					
LAI 63	118	101	284.5			335.5	179.5	230.5					

① ISO 4014

④ DIN 332

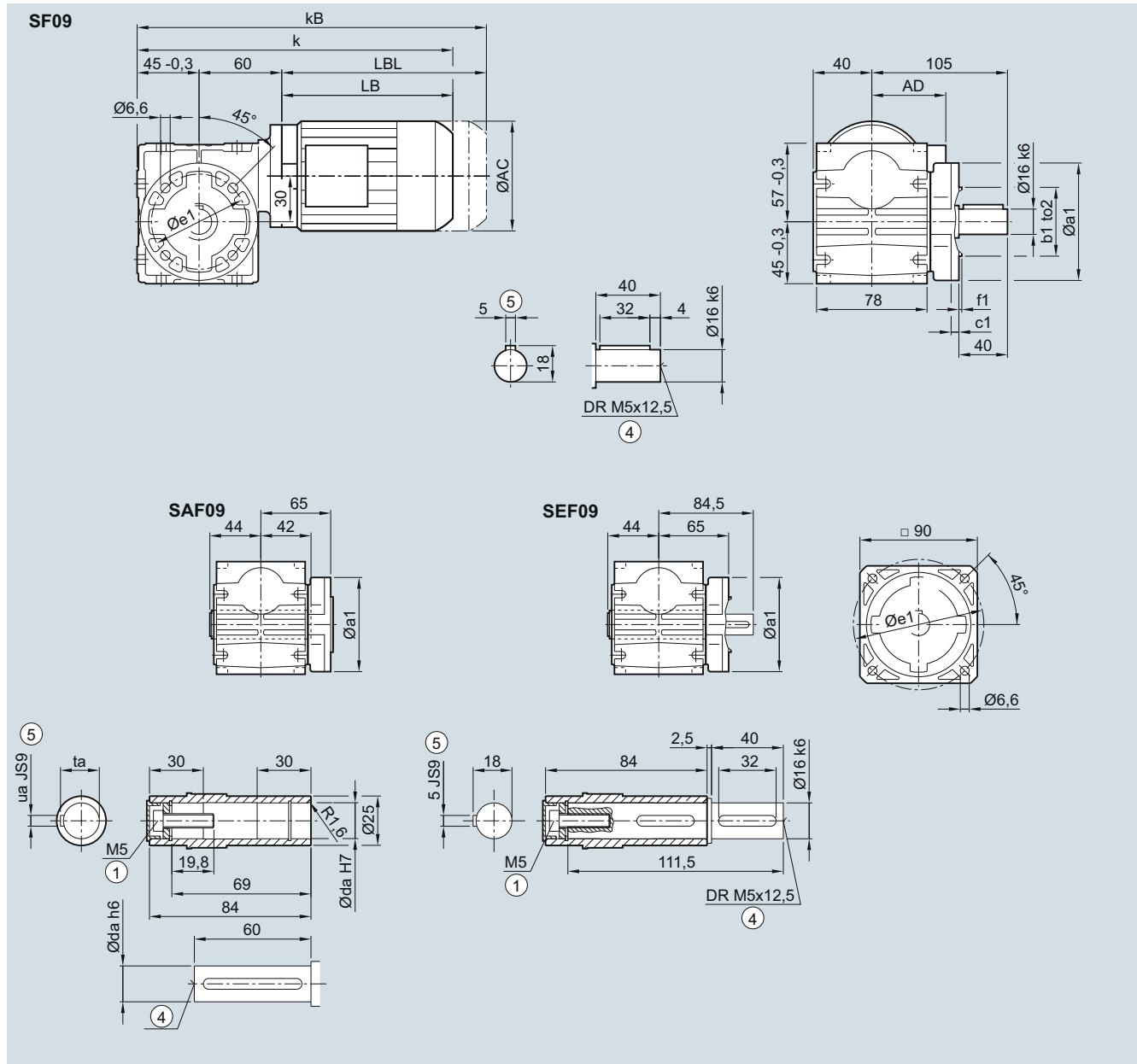
⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/48.

⑥ Solid shaft with 2nd shaft extension only d16

S.F09 gearbox in a flange-mounted design

SF030, SAF030, SEF030



Hollow shaft	da	ua	ta			
	14	5	16.3			
	16	5	18.3			
Flange	a1	e1	b1	to2	c1	f1
	80	65	50	j6	7	2.5
	120	100	80	j6	7	3.0
Motor	AC	AD ¹⁾	k	kB	LB	LBL
LAI 63	118	101	284.5	335.5	179.5	230.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/48.

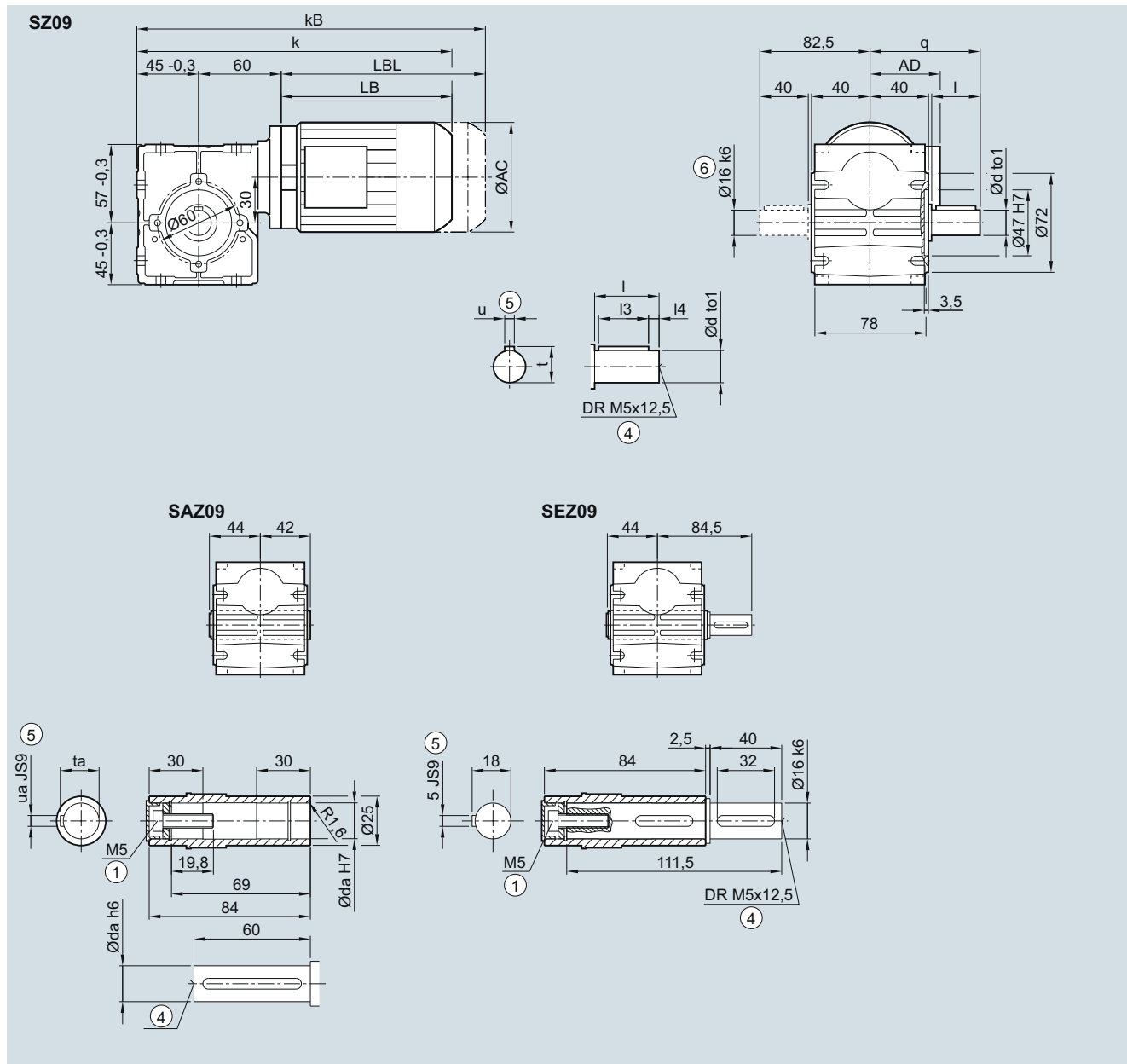
SIMOGEAR Geared Motors

Worm geared motors

Dimensions

S.Z09 gearbox in a housing flange design

SZ030, SAZ030, SEZ030



Solid shaft	d	to1	l	l3	l4	u	t	q	Hollow shaft	da	ua	ta
	14	k6	30	22	4	5	16	72.5		14	5	16.3
16	k6	40	32	4	5	18	82.5	16	5	18.3		
Motor	AC	AD ¹⁾	k	kB	LB	LBL						
LAI 63	118	101	284.5	335.5	179.5	230.5						

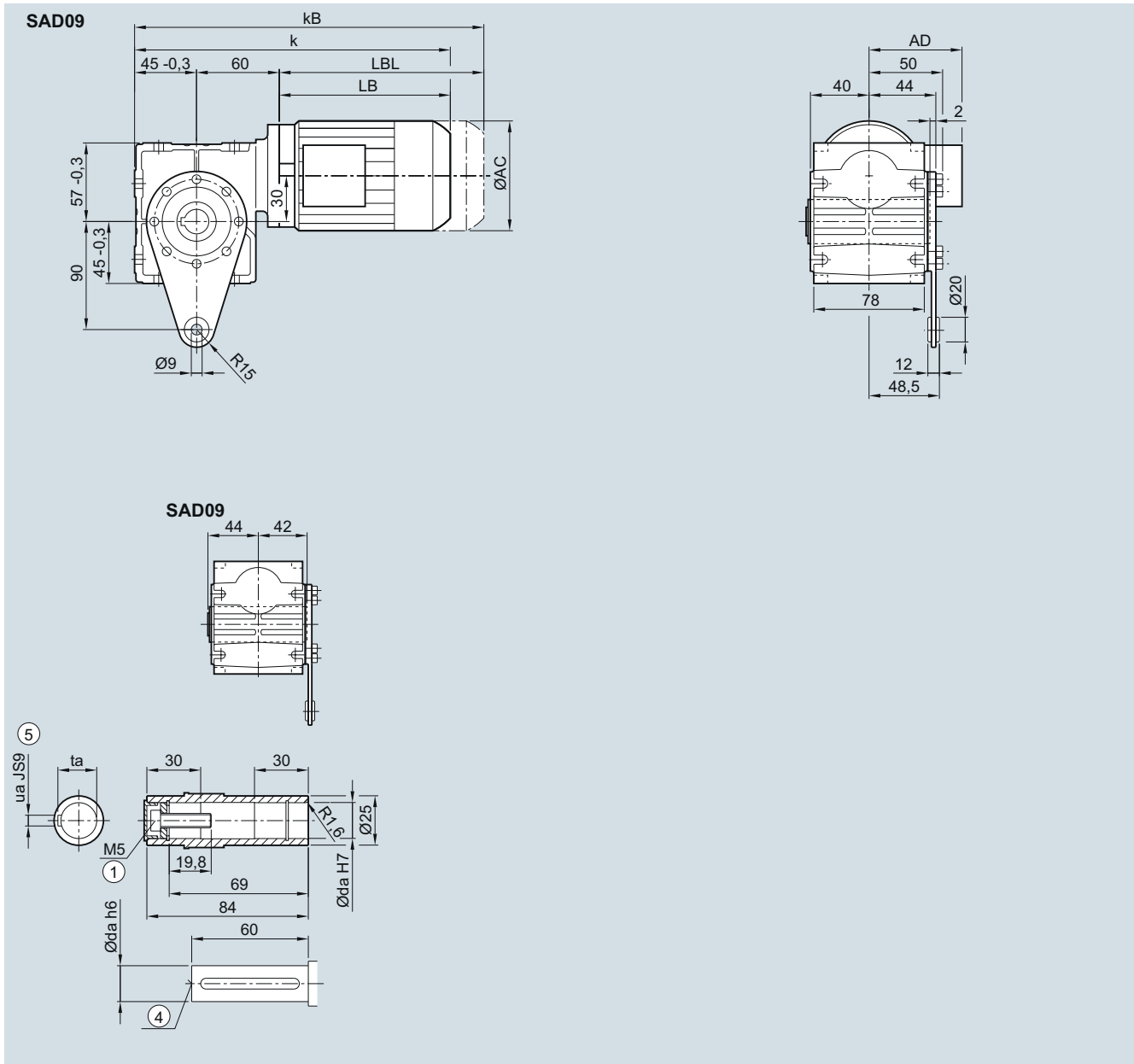
① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/48.

⑥ Solid shaft with 2nd shaft extension only d16

SAD09 gearbox in a shaft-mounted design
SAD030


Hollow shaft	da	ua	ta
	14	5	16.3
	16	5	18.3

Motor	AC	AD ¹⁾	k	kB	LB	LBL
LAI 63	118	101	284.5	335.5	179.5	230.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions, see page 8/42.

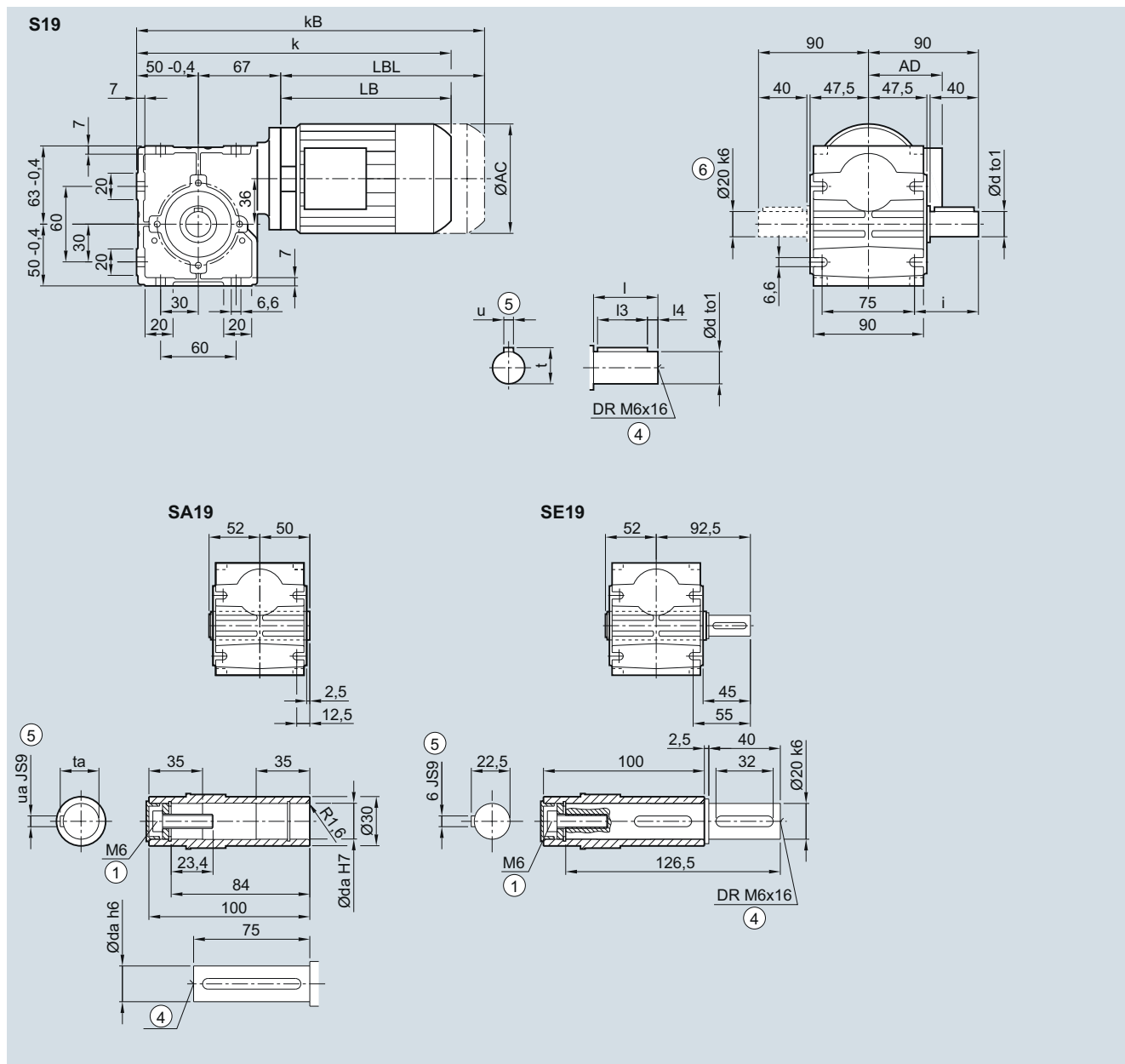
SIMOGEAR Geared Motors

Worm geared motors

Dimensions

S.19 gearbox in a foot-mounted design

S030, SA030, SE030



Solid shaft	d	to1	l	l3	l4	i	u	t	Hollow shaft	da	ua	ta
	18	k6	40	32	4	52.5	6	20.5		18	6	20.8
	20	k6	40	32	4	52.5	6	22.5		20	6	22.8
Motor	AC	AD ¹⁾			k			kB			LB	LBL
LAI 63	118	101			296.5			347.5			179.5	230.5
LAI 71	139	111			327.0			378.5			210	261.5

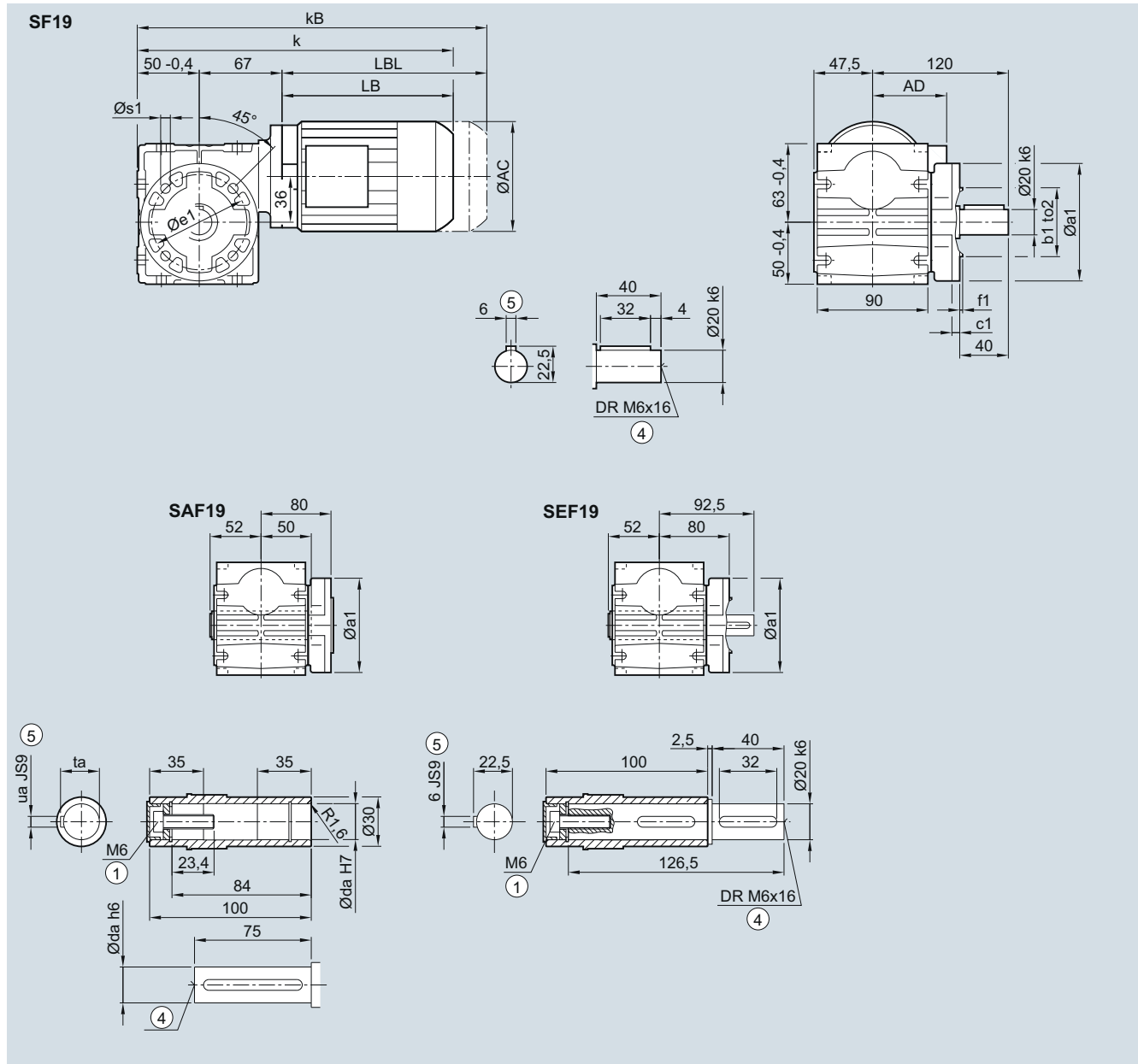
① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/48.

⑥ Solid shaft with 2nd shaft extension only d20

S.F19 gearbox in a flange-mounted design
SF030, SAF030, SEF030


Hollow shaft	da	ua	ta
	18	6	20.8
	20	6	22.8

Flange	a1	e1	b1	to2	c1	f1	s1
	110	87	60	H8	8	4.0	9
	120	100	80	j6	8	3.0	6.6

Motor	AC	AD ¹⁾	k	kB	LB	LBL
LAI 63	118	101	296.5	347.5	179.5	230.5
LAI 71	139	111	327.0	378.5	210	261.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions, see page 8/42.

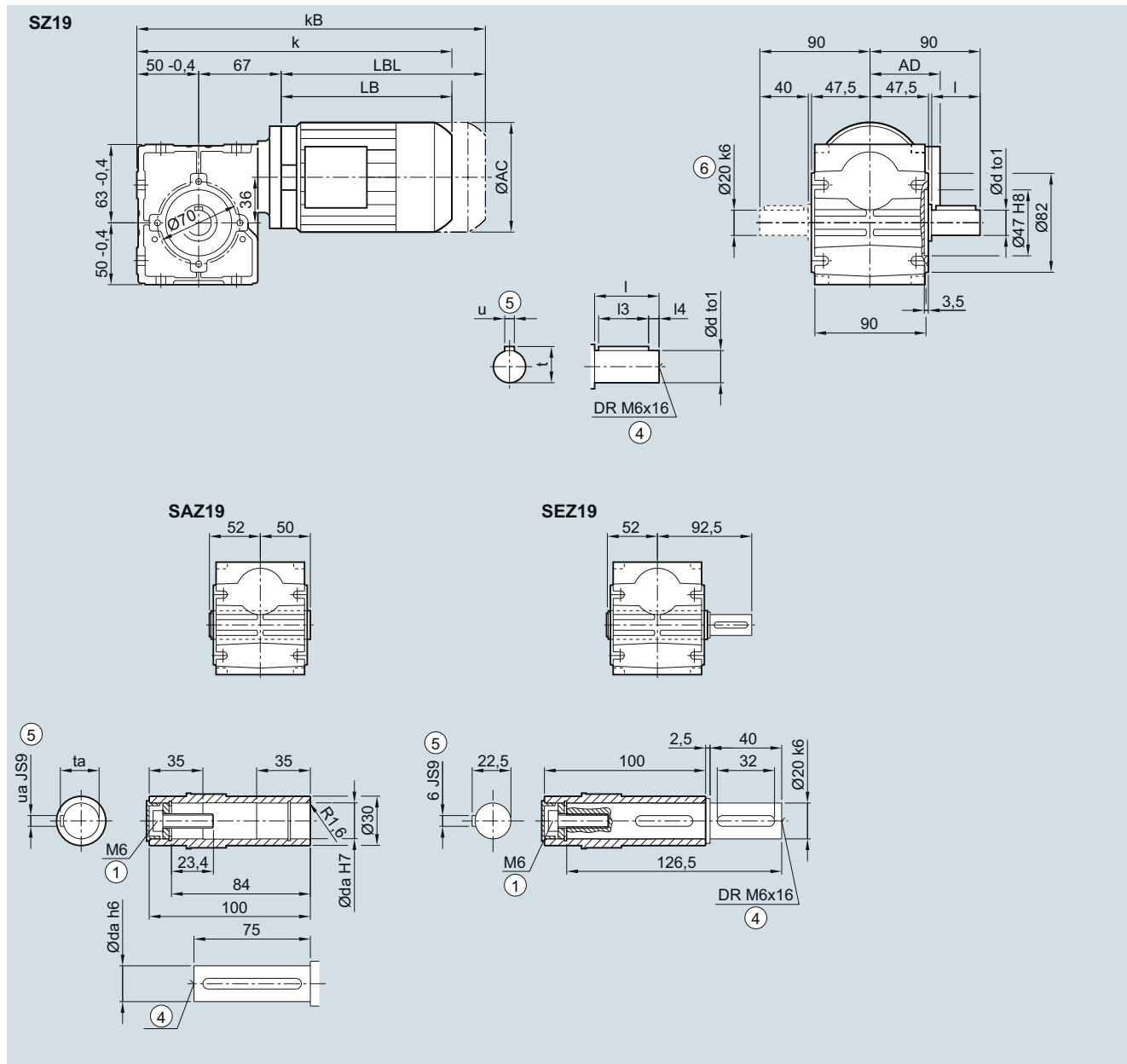
SIMOGEAR Geared Motors

Worm geared motors

Dimensions

S.Z19 gearbox in a housing flange design

SZ030, SAZ030, SEZ030



Solid shaft	d	to1	l	l3	l4	u	t	Hollow shaft	da	ua	ta
	18	k6	40	31	4	6	20.5		18	6	20.8
	20	k6	40	32	4	6	22.5		20	6	22.8
Motor	AC	AD ¹⁾	k	kB	LB	LBL					
LAI 63	118	101	296.5	347.5	179.5	230.5					
LAI 71	139	111	327.0	378.5	210	261.5					

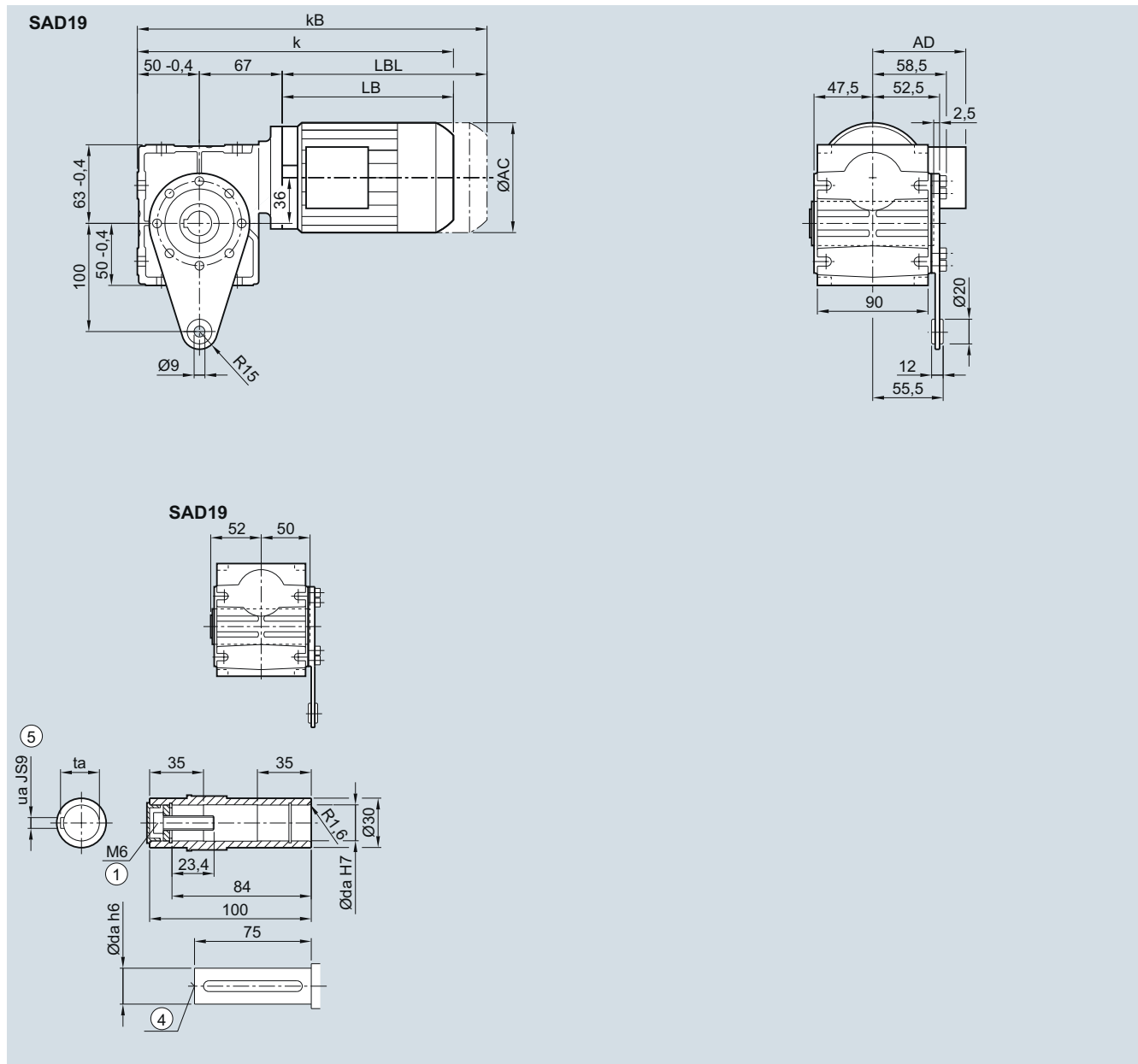
① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑥ Solid shaft with 2nd shaft extension only d20

SAD19 gearbox in a shaft-mounted design
SAD030


Hollow shaft	da	ua	ta			
	18	6	20.8			
	20	6	22.8			
Motor	AC	AD ¹⁾	k	kB	LB	LBL
LAI 63	118	101	296.5	347.5	179.5	230.5
LAI 71	139	111	327.0	378.5	210.0	261.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

1) AD depends on the motor options, for other dimensions, see page 8/42.

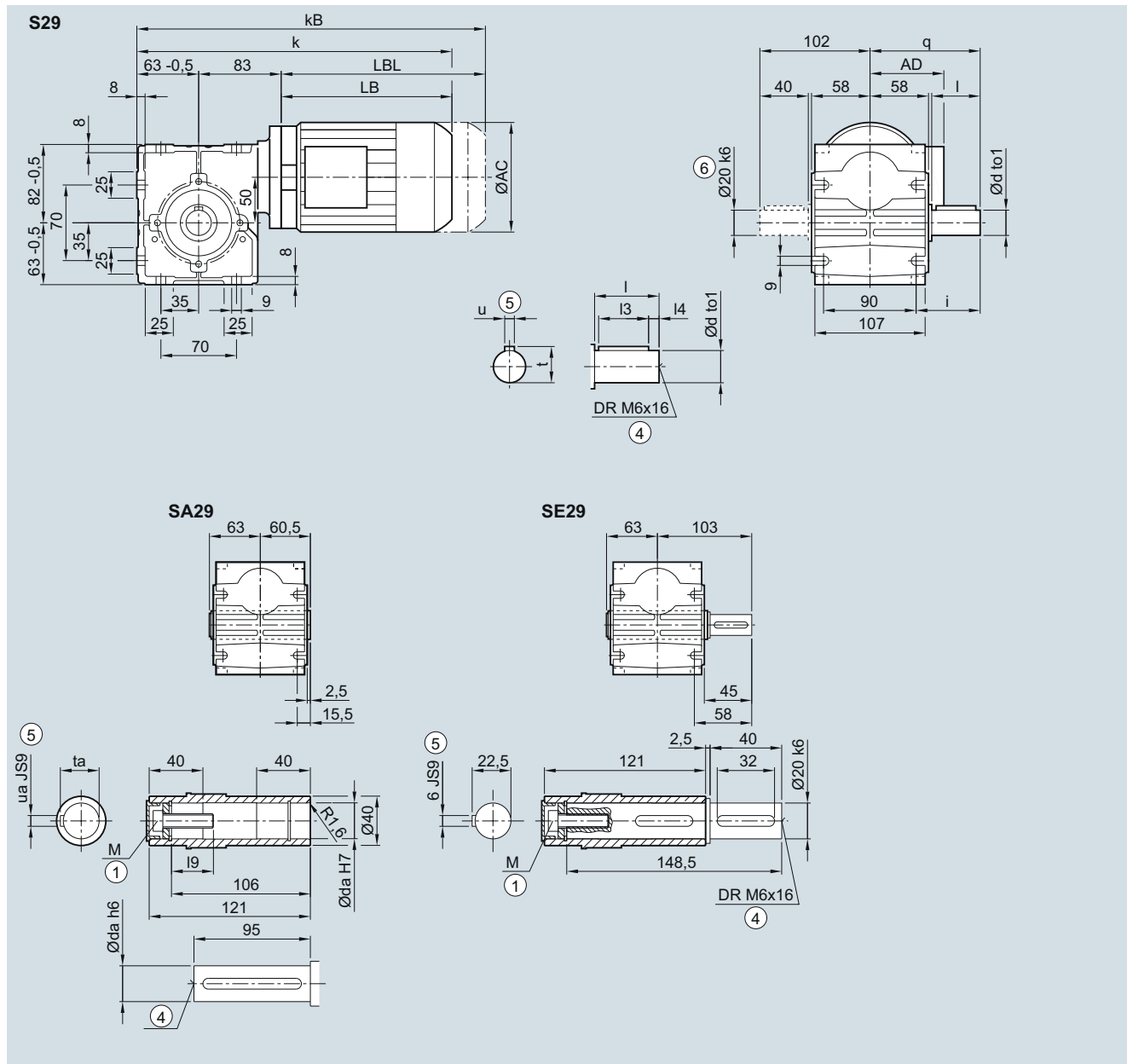
SIMOGEAR Geared Motors

Worm geared motors

Dimensions

S.29 gearbox in a foot-mounted design

S030, SA030, SE030



Solid shaft	d	to1	l	l3	l4	u	t	q	i	Hollow shaft				
	20	k6	40	32	4	6	22.5	102	57	da	ua	ta	l9	M
	25	k6	50	40	5	8	28.0	112	67	20	6	22.8	23.4	M6
										25	8	28.3	32.6	M10

Motor	AC	AD ¹⁾	k	kB	LB	LBL
LAI 63	118	101	325.5	376.5	179.5	230.5
LAI 71	139	111	356.5	407.5	210.5	261.5

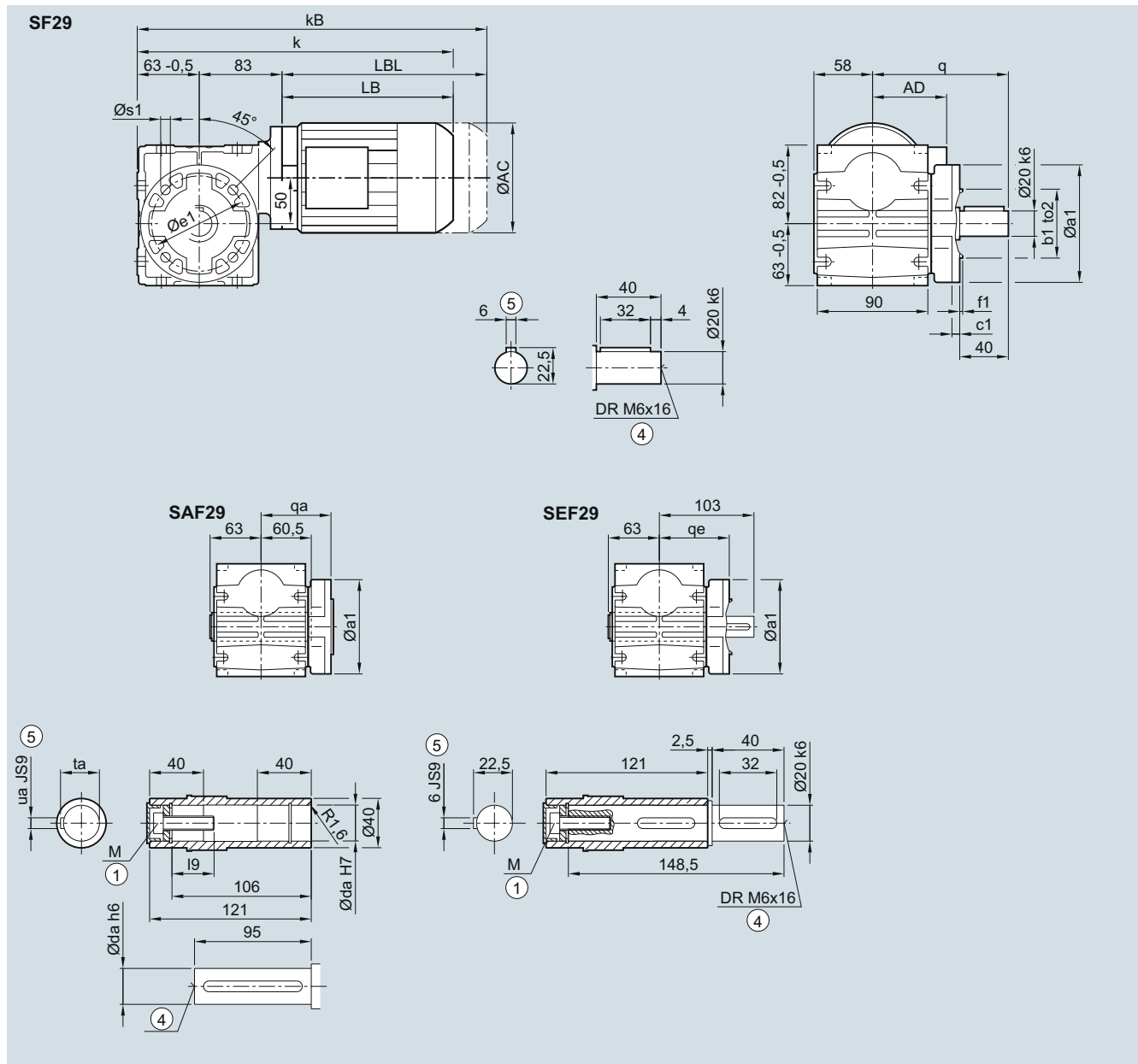
① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/42.

⑥ Solid shaft with 2nd shaft extension only d20

S.F29 gearbox in a flange-mounted design
SF030, SAF030, SEF030


Hollow shaft	da	ua	ta	I9	M				
	20	6	22.8	23.4	M6				
	25	8	28.3	32.6	M10				
Flange	a1	e1	b1	to2	c1	f1	s1	q	qa / qe
	120	100	80	j6	8	3.0	6.6	120	80
	160	130	110	j6	8	3.5	9.0	135	85
Motor	AC	AD ¹⁾	k	kB	LB	LBL			
LAI 63	118	101	325.5	376.5	179.5	230.5			
LAI 71	139	111	356.5	407.5	210.5	261.5			

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/48.

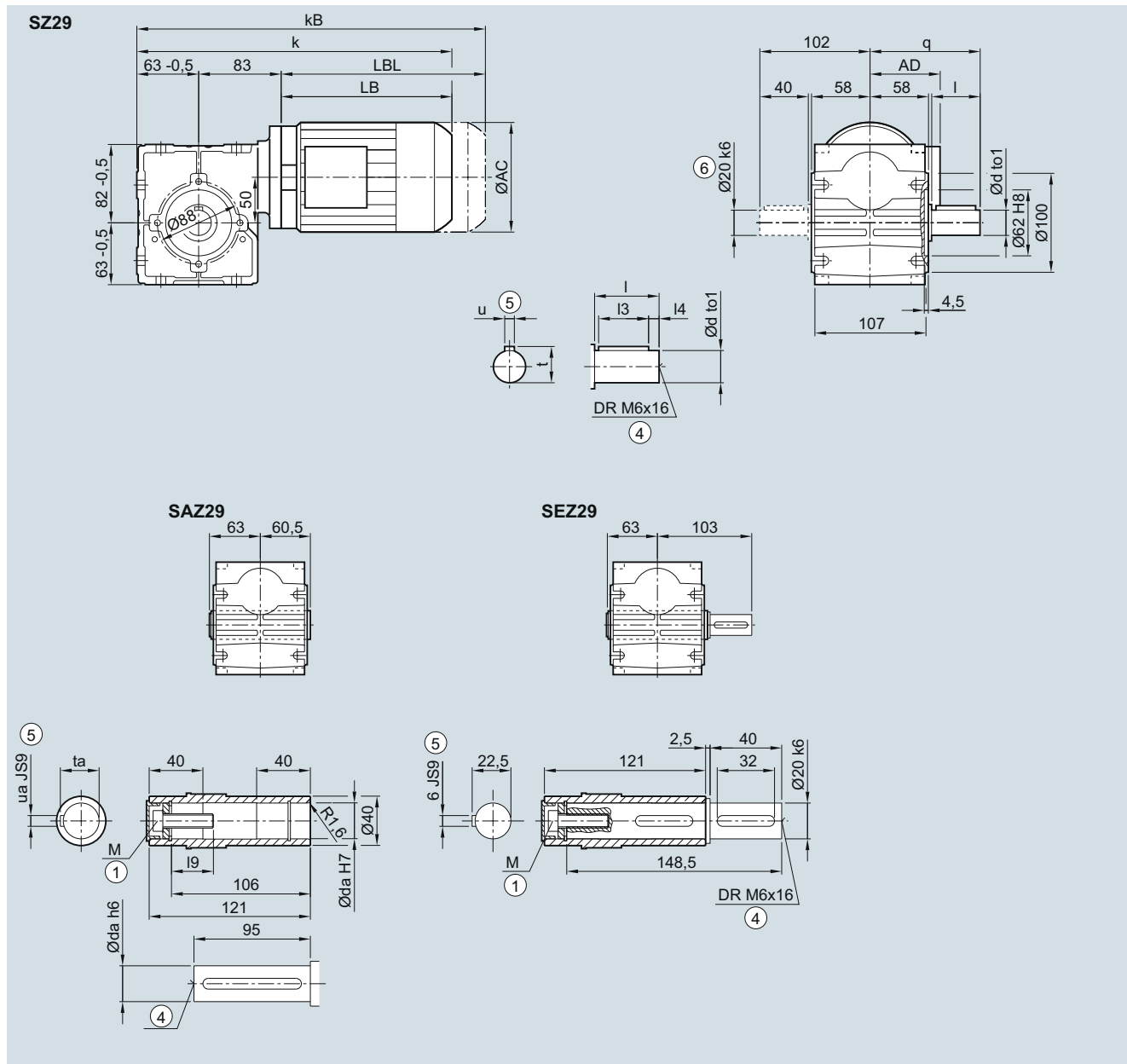
SIMOGEAR Geared Motors

Worm geared motors

Dimensions

S.Z29 gearbox in a housing flange design

SZ030, SAZ030, SEZ030



Solid shaft	d	to1	l	l3	l4	u	t	q	Hollow shaft	da	ua	ta	l9	M
	20	k6	40	32	4	6	22.5	102		20	6	22.8	23.4	M6
25	k6	50	40	5	8	28.0	112	25	8	28.3	32.6	M10		

Motor	AC	AD ¹⁾	k	kB	LB	LBL
LAI 63	118	101	325.5	376.5	179.5	230.5
LAI 71	139	111	356.5	407.5	210.5	261.5

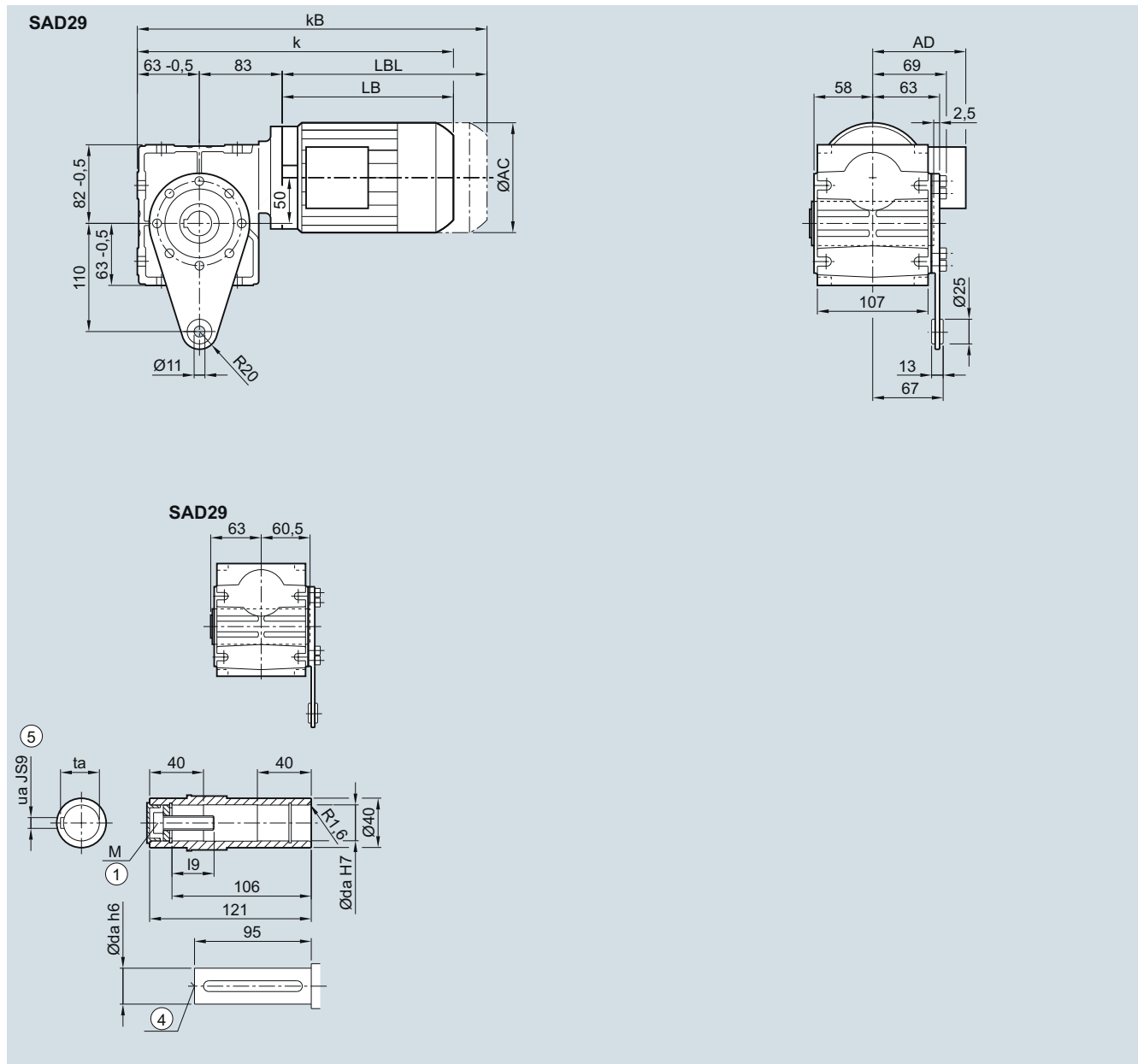
① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

¹⁾ AD depends on the motor options, for other dimensions, see page 8/48.

⑥ Solid shaft with 2nd shaft extension only d20

SAD29 gearbox in a shaft-mounted design
SAD030


Hollow shaft	da	ua	ta	I9	M	
	20	6	22.8	23.4	M6	
	25	8	28.3	32.6	M10	
Motor	AC	AD ¹⁾	k	kB	LB	LBL
LAI 63	118	101	325.5	376.5	179.5	230.5
LAI 71	139	111	356.5	407.5	210.5	261.5

① ISO 4014

④ DIN 332

⑤ Feather key/keyway DIN 6885

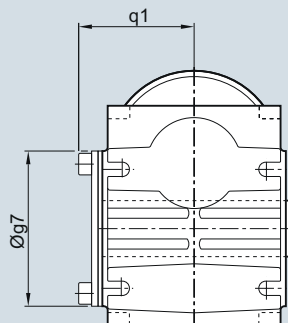
1) AD depends on the motor options, for other dimensions, see page 8/48.

SIMOGEAR Geared Motors

Worm geared motors

Dimensions**Protection cover for hollow shaft**

SA, SAZ, SAF, SE, SEZ



Gearbox type	S.09	S.19	S.29
Protection cover			
g7	72	82	100
q1	51	59.5	70

**8/2****Orientation**

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8/42**Dimensions**

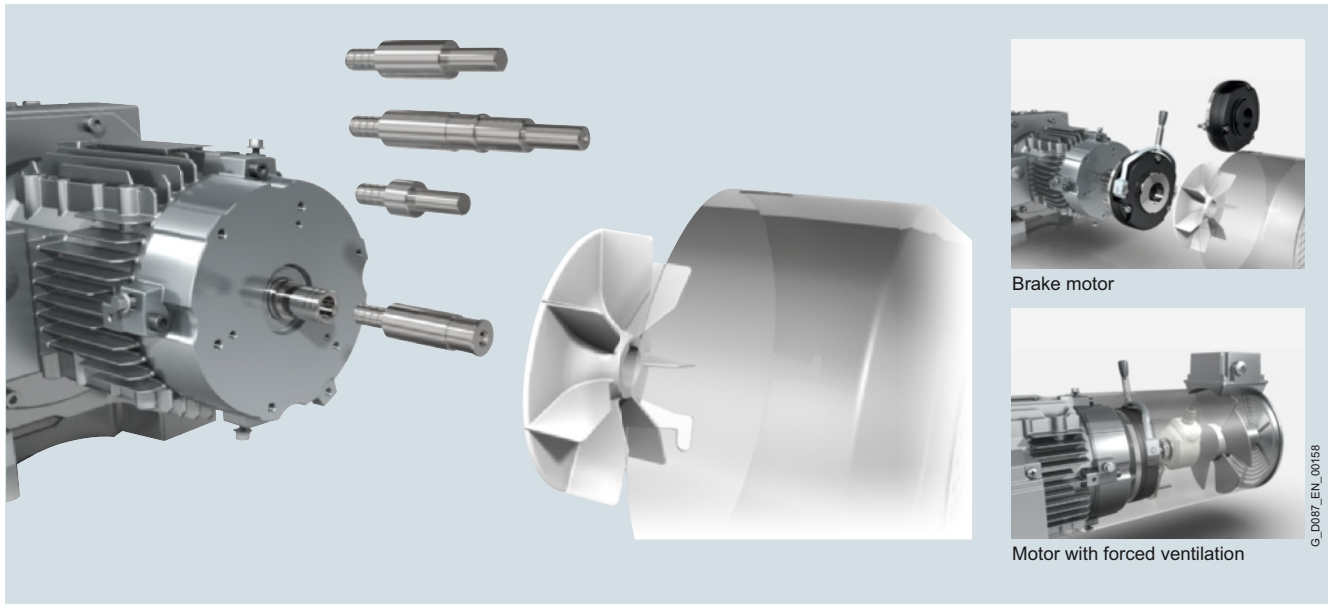
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SIMOGEAR Geared Motors

Motors

Orientation

The modular MODULOG principle



The modular MODULOG principle has a range of benefits for machine and plant designers.

The name MODULOG stands for a clear and transparent **modular** motor system, which offers optimum **logistics**, that enables users to assemble powerful, durable, and extremely easy-to-service motors in line with their own requirements for most applications, from just a few standard components.

At the heart of this modular system is the basic motor, which is designed to comply with international line supply conditions, and a mounting shaft system, which can be individually configured, at the non-drive end.

Functional expansions, such as brakes, backstops, rotary encoders, external fan, canopy, a second motor shaft extension, etc. can be combined almost arbitrarily as "additional functional components".

Technical specifications at a glance

The motors comply with all applicable international (IEC), European (EN, CENELEC), and national (DIN/VDE) standards:

Motor type	Three-phase induction motors with squirrel cage rotor
Connection types	You can establish the connection type that can be used from the product number suffixes in the selection and ordering data for the required motor.
Number of poles	2, 4, 6, 8
Rated speed (synchronous speed)	750 ... 3 600 rpm
Rated power (50 Hz)	0.09 ... 55 kW (4-pole)
Rated torque	0.85 ... 355 Nm (4-pole)
Stator winding insulation	Temperature class 155 (F) utilized to temperature class 130 (B) optionally temperature class 180 (H)
Degree of protection acc. to IEC 60034-5 (EN 60034-5)	IP55 Optional IP65, IP56
Cooling acc. to IEC 60034-6 (EN 60034-6)	Self-cooled (IC 411) Optionally, force ventilated (IC 416)
Coolant temperature	-20 ... +40 °C
Installation altitude	Up to 1 000 m above sea level
Rated voltage	200 ... 690 V You can establish the voltage that can be used from the selection and ordering data for the required motor.
Rated frequency	50 Hz, 60 Hz, 87 Hz
Vibration severity acc. to IEC 60034-14 (EN 60034-14)	Vibration severity A
Balancing type	Half-key balancing
Sound pressure level, sound power level acc. to IEC 60034-9 (EN 60034-9)	You can establish the corresponding sound pressure level and sound power level from the selection and ordering data for the required motor.
Weight	You can establish the corresponding weight from the selection and ordering data for the required motor.
Rating plates	See "Rating plate" in the Chapter "General options"
Connection and terminal boxes	See "Connection, circuit and terminal boxes" in the Chapter "Motor options"

SIMOGEAR Geared Motors

Motors

Orientation

Technical specifications at a glance (continued)

The geared motors comply with the applicable IEC/EN standards

IEC	EN/HD	DIN/VDE	Title
IEC 60027-4	EN 60027-4	DIN EN 60027-4	Formula symbols for electrical engineering Part 4: Rotating electrical machines
IEC 60034-1	EN 60034-1	DIN EN 60034-1 VDE 0530-1	Rotating electrical machines: - Rating and performance
IEC 60034-2-1	EN 60034-2-1	DIN EN 60034-2-1 VDE 0530-2-1	- Standard technique to determine the losses and efficiency based on testing (with the exception for machines for track and road vehicles) (IEC 60034-2-1:2007); German Edition EN 60034-2-1:2007
IEC 60034-5	EN 60034-5	DIN EN 60034-5 VDE 0530-5	- Degrees of protection provided by integral design of rotating electrical machines (IP code) - Classification
IEC 60034-6	EN 60034-6	DIN EN 60034-6 VDE 0530-6	- Classification of cooling methods (IC Code)
IEC 60034-7	EN 60034-7	DIN EN 60034-7 VDE 0530-7	- Classification of types of construction, mounting types and terminal box position (IM code)
IEC 60034-8	EN 60034-8	DIN EN 60034-8 VDE 0530-8	- Terminal markings and direction of rotation
IEC 60034-9	EN 60034-9	DIN EN 60034-9 VDE 0530-9	- Noise limits
IEC 60034-12	EN 60034-12	DIN EN 60034-12 VDE 0530-12	- Starting behavior of three-phase squirrel cage induction motors, with the exception of pole-changing motors
IEC 60034-14	EN 60034-14	DIN EN 60034-14 VDE 0530-14	- Mechanical vibration of certain machines with shaft heights 56 mm and higher
IEC/TS 60034-17	-	DIN VDE 0530-17	- Inverter-fed squirrel-cage induction motors - Application guide
IEC 60038	HD 472	DIN IEC 60038	IEC standard voltages
-	EN 50347	DIN EN 50347	Three-phase induction motors for general applications with standardized dimensions and power ratings – frame sizes 56 up to 315 and flange sizes 65 up to 740
IEC 60085	EN 60085	DIN EN 60085	Electrical insulation, thermal evaluation + designation
IEC 60445	EN 60445	DIN EN 60445 VDE 0197	Identification of equipment terminals, conductor terminations and conductors
IEC 60529	EN 60529	DIN EN 60529 VDE 0470-1	Degrees of protection provided by the enclosure (IP Code)
-	EN 50262	DIN EN 50262 VDE 0619	Cable glands for electrical installation
-	-	DIN 42925	Terminal box cable entries for three-phase squirrel cage induction motors at rated voltages from 400 V to 690 V

Tolerances

The following tolerances apply to the electrical values listed in the power tables according to EN 60034-1:

Description	Tolerance
Efficiency	≤ 150 kW: - 0.15 (1 - η) > 150 kW: - 0.1 (1 - η)
Power factor	$\frac{1 - \cos \varphi}{6}$ (minimum 0.02/maximum 0.07)
Slip at full load and operating temperature	± 20 % of the setpoint slip for $P_{\text{rated}} \geq 1 \text{ kW}$ ± 30 % of the setpoint slip for $P_{\text{rated}} < 1 \text{ kW}$
Starting torque	-15 % and +25 %
Breakdown torque	-10 % without upper limit
Starting current	+20 % without upper limit
Moment of inertia	± 10 %

Technical specifications at a glance (continued)

Efficiency and power factor

The efficiency η and power factor $\cos \varphi$ for each rated power are listed in the selection tables in the individual sections of this catalog.

 Partial-load power factor $\cos \varphi$

4/4 of full load	1/4	1/2	3/4	5/4
0.92	0.70	0.86	0.90	0.92
0.91	0.65	0.85	0.89	0.91
0.90	0.63	0.83	0.88	0.90
0.89	0.61	0.80	0.86	0.89
0.88	0.57	0.78	0.85	0.88
0.87	0.53	0.76	0.84	0.87
0.86	0.51	0.75	0.83	0.86
0.85	0.49	0.73	0.81	0.86
0.84	0.47	0.71	0.80	0.85
0.83	0.45	0.69	0.79	0.84
0.82	0.43	0.67	0.77	0.83
0.81	0.41	0.66	0.76	0.82
0.80	0.40	0.65	0.75	0.81
0.79	0.38	0.63	0.74	0.80
0.78	0.36	0.61	0.72	0.80
0.77	0.34	0.59	0.71	0.79
0.76	0.32	0.58	0.70	0.78
0.75	0.30	0.56	0.69	0.78
0.74	0.29	0.55	0.68	0.77
0.73	0.28	0.54	0.67	0.77
0.72	0.27	0.52	0.63	0.76
0.71	0.26	0.50	0.62	0.76

For motors with Standard Efficiency (IE1), High Efficiency (IE2) and Premium Efficiency (IE3), the 3/4 load efficiency is also listed in the selection tables. The part-load values stated in the tables below are averages; precise values can be provided on request.

 Partial-load efficiency η in %

4/4 of full load	1/4	1/2	3/4	5/4
97	93	96.0	97.0	96.5
96	92	95.0	96.0	95.5
95	90	93.5	95.0	94.5
94	89	92.5	94.0	93.5
93	88	91.5	93.0	92.5
92	87	91.0	92.0	91.5
91	86	90.0	91.0	90.0
90	85	89.0	90.0	89.0
89	84	88.0	89.0	88.0
88	80	87.0	88.0	87.0
87	79	86.0	87.0	86.0
86	78	85.0	86.0	85.0
85	76	84.0	85.0	83.5
84	74	83.0	84.0	82.5
83	72	82.0	83.0	81.5
82	70	81.0	82.0	80.5
81	68	80.0	81.0	79.5
80	66	79.0	80.0	78.5
79	64	77.0	79.5	77.5
78	62	75.5	78.5	76.5
77	60	74.0	77.5	75.0
76	58	73.0	76.0	74.0
75	56	72.0	75.0	73.0
74	55	71.0	74.0	72.0
73	54	70.0	73.0	71.0
72	53	68.0	72.0	70.0
71	52	67.0	71.0	69.0
70	51	66.0	70.0	68.0
69	50	65.0	69.0	67.0
68	49	64.0	67.5	66.0
67	48	62.0	66.5	65.0
66	47	61.0	65.0	64.0
65	46	60.0	64.0	63.0
64	45	59.0	63.0	62.0
63	44	57.0	62.0	61.0
62	43	56.0	60.5	60.5
61	42	55.0	59.5	59.5
60	41	54.0	58.5	58.5

EMC measures

SIMOGEAR geared motors are designed as components for installation in systems and machines. The manufacturer of the system or machine is responsible in complying with EMC directive 2004/108/EC.

LA and LE motors when correctly used in continuous operation connected to the line supply fulfill standards EMC EN 50081 and EN 50082.

SIMOGEAR Geared Motors

Motors

IE1

Motors with Standard Efficiency IE1

Selection and ordering data

Size	Motor	P_{rated} kW	n_{rated} rpm	T_{rated} Nm	I_{rated} A	$\cos \varphi$ -	η		I_{St}/I_{rated} -	Article No.				Order code Number of poles	
							4/4 load	3/4 load		Data position					
										9.	10.	11.	12.		
4-pole, 1 500 rpm at 50 Hz															
63	LA63MD4	0.09	1 400	0.61	0.42	0.61	51.30	45.80	2.90	B	B	1	1	-	
	LA63ME4 ¹⁾	0.12	1 350	0.85	0.42	0.75	53.60	52.10	2.80	B	C	1	1	-	
	LA63MF4 ¹⁾	0.18	1 350	1.27	0.58	0.76	58.30	56.80	3.00	B	D	1	1	-	
71	LA71MG4 ¹⁾	0.25	1 350	1.77	0.77	0.78	61.90	60.40	3.00	C	D	1	1	-	
	LA71MH4 ¹⁾	0.37	1 370	2.58	1.06	0.78	65.80	64.80	3.30	C	E	1	1	-	
80	LE80MB4	0.55	1 440	3.65	1.66	0.69	69.40	67.80	4.60	D	B	2	1	-	
	LE80MF4 ²⁾	0.75	1 430	5.01	2.00	0.75	72.10	72.00	4.70	D	D	2	1	-	
90	LE90SE4 ²⁾	1.10	1 425	7.37	2.80	0.76	75.00	75.40	5.00	E	L	2	1	-	
	LE90LD4 ²⁾	1.50	1 420	10.1	3.70	0.76	77.20	77.40	4.90	E	N	2	1	-	
100	LE100LB4 ²⁾	2.20	1 425	14.7	4.90	0.81	79.70	80.50	5.10	F	L	2	1	-	
	LE100LH4 ²⁾	3.00	1 425	20.1	6.30	0.85	81.50	83.00	5.40	F	N	2	1	-	
112	LE112ME4 ²⁾	4.00	1 435	26.6	8.20	0.85	83.10	84.50	5.30	G	H	2	1	-	
132	LE132SF4 ²⁾	5.50	1 450	36.2	11.20	0.82	84.70	85.70	5.70	H	F	2	1	-	
	LE132ME4 ²⁾	7.50	1 450	49.4	15.20	0.82	86.00	86.90	6.60	H	J	2	1	-	
	LE132ZMSA4 ²⁾	9.20	1 450	60.6	18.00	0.84	87.60	O. R.	7.40	H	V	2	1	-	
160	LE160MD4 ²⁾	11.00	1 460	71.9	22.00	0.82	87.60	88.00	6.40	J	P	2	1	-	
	LE160LA4 ²⁾	15.00	1 460	98.1	30.00	0.82	88.70	89.30	7.00	J	S	2	1	-	
2-pole, 3 000 rpm at 50 Hz															
63	LA63ME2 ¹⁾	0.18	2 820	0.61	0.51	0.79	62.00	60.50	3.70	B	C	1	1	P00	
	LA63MF2 ¹⁾	0.25	2 830	0.84	0.69	0.80	63.00	62.00	4.00	B	D	1	1	P00	
71	LA71MG2 ¹⁾	0.37	2 740	1.29	1.00	0.82	66.00	65.00	3.50	C	D	1	1	P00	
	LA71MH2 ¹⁾	0.55	2 800	1.88	1.36	0.82	71.00	71.00	4.30	C	E	1	1	P00	
100	LE100LD2 ²⁾	3.00	2 835	10.1	6.10	0.87	81.50	82.80	6.20	F	M	2	1	P00	
112	LE112MB2 ²⁾	4.00	2 930	13	8.10	0.86	83.10	83.80	7.30	G	G	2	1	P00	
132	LE132SB2 ²⁾	5.50	2 905	18.1	10.60	0.89	84.70	85.70	5.60	H	E	2	1	P00	
	LE132SF2 ²⁾	7.50	2 925	24.5	14.40	0.87	86.00	86.90	6.30	H	F	2	1	P00	
160	LE160MA2 ²⁾	11.00	2 925	35.9	21.50	0.85	87.60	87.60	5.80	J	N	2	1	P00	
	LE160MF2 ²⁾	15.00	2 930	48.9	29.00	0.84	88.70	89.00	6.10	J	Q	2	1	P00	
	LE160LB2 ²⁾	18.50	2 935	60.2	35.00	0.86	89.30	90.00	7.00	J	T	2	1	P00	
6-pole, 1 000 rpm at 50 Hz															
63	LA63MF6 ¹⁾	0.09	850	1.01	0.44	0.66	50.20	48.70	2.00	B	D	1	1	P01	
	LA63MG6	0.12	870	1.32	0.75	0.62	37.20	32.60	1.90	B	E	1	1	P01	
71	LA71MG6 ¹⁾	0.18	850	2.02	0.72	0.68	57.30	55.80	2.30	C	D	1	1	P01	
	LA71MH6 ¹⁾	0.25	830	2.88	0.79	0.76	61.90	60.40	2.70	C	E	1	1	P01	
100	LE100LD6 ²⁾	1.50	940	15.2	3.90	0.74	75.20	76.00	4.00	F	M	2	1	P01	
112	LE112MB6 ²⁾	2.20	930	22.6	5.40	0.75	77.70	78.80	4.10	G	G	2	1	P01	
132	LE132SB6 ²⁾	3.00	955	30	7.30	0.74	79.70	80.20	4.60	H	E	2	1	P01	
	LE132MA6 ²⁾	4.00	950	40.2	9.30	0.76	81.40	82.90	4.70	H	H	2	1	P01	
	LE132MJ6 ²⁾	5.50	950	55.3	12.80	0.75	83.10	84.60	5.20	H	K	2	1	P01	
160	LE160ML6 ²⁾	7.50	970	73.8	17.60	0.73	84.70	85.40	5.50	J	H	2	1	P01	
	LE160LN6 ²⁾	11.00	965	108.9	24.00	0.77	86.40	86.40	5.90	J	U	2	1	P01	
8-pole, 750 rpm at 50 Hz															
71	LA71MH8	0.09	630	1.36	0.36	0.68	51.00	49.50	2.20	C	E	1	1	P02	
	LA71MJ8	0.12	645	1.78	0.53	0.64	51.00	49.50	2.20	C	F	1	1	P02	
100	LE100LA8	0.75	705	10.2	3.01	0.62	62.60	60.80	3.00	F	B	2	1	P02	
	LE100LK8	1.10	705	14.9	3.85	0.63	65.50	64.20	3.20	F	P	2	1	P02	
112	LE112MG8	1.50	700	20.5	4.65	0.65	71.60	72.20	3.30	G	J	2	1	P02	
132	LE132SL8	2.20	715	29.4	6.30	0.66	76.80	77.40	3.90	H	G	2	1	P02	
	LE132MJ8	3.00	710	40.3	8.60	0.66	76.60	77.80	3.90	H	K	2	1	P02	
160	LE160MD8	4.00	720	53.1	10.60	0.69	78.30	78.50	3.80	J	F	2	1	P02	
	LE160ML8	5.50	720	72.9	13.80	0.70	81.70	82.50	4.00	J	H	2	1	P02	
	LE160LN8	7.50	715	100.2	18.60	0.70	83.50	84.50	3.80	J	L	2	1	P02	

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with IEC B14 flange) for worm geared motors S²⁾ Only as brake motor or motor for intermittent duty S3 - 75 %

Selection and ordering data (continued)

Size	Motor	T_{St}/T_{rated}	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code	
										Data position					
											9.	10.	11.	12.	Number of poles
					dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg						
4-pole, 1 500 rpm at 50 Hz															
63	LA63MD4	2.60	2.70	O. R.	42	53	20 000	2.9	3.20	B	B	1	1	-	
	LA63ME4 ¹⁾	1.90	2.00	O. R.	42	53	20 000	2.9	3.20	B	C	1	1	-	
	LA63MF4 ¹⁾	1.90	1.90	O. R.	42	53	10 000	3.7	3.60	B	D	1	1	-	
71	LA71MG4 ¹⁾	1.90	1.90	O. R.	44	55	10 000	5.2	4.30	C	D	1	1	-	
	LA71MH4 ¹⁾	1.90	2.10	O. R.	44	55	10 000	7.7	5.80	C	E	1	1	-	
80	LE80MB4	2.20	2.80	2.40	53	64	10 000	O. R.	O. R.	D	B	2	1	-	
	LE80MF4 ²⁾	2.10	2.50	2.30	53	64	10 000	O. R.	O. R.	D	D	2	1	-	
90	LE90SE4 ²⁾	2.20	2.60	2.40	56	67	8 000	O. R.	O. R.	E	L	2	1	-	
	LE90LD4 ²⁾	2.40	2.60	2.60	58	69	8 000	O. R.	O. R.	E	N	2	1	-	
100	LE100LB4 ²⁾	2.20	2.30	2.40	60	72	7 000	59.0	21.00	F	L	2	1	-	
	LE100LH4 ²⁾	2.40	2.60	2.60	60	72	7 000	78.0	25.00	F	N	2	1	-	
112	LE112ME4 ²⁾	2.20	2.60	2.40	58	70	5 000	100.0	31.00	G	H	2	1	-	
132	LE132SF4 ²⁾	2.30	2.70	2.50	64	76	3 000	190.0	44.00	H	F	2	1	-	
	LE132ME4 ²⁾	2.60	3.10	2.80	64	76	3 000	240.0	51.00	H	J	2	1	-	
	LE132ZMSA4 ²⁾	2.20	3.20	O. R.	65	77	1 600	330.0	O. R.	H	V	2	1	-	
160	LE160MD4 ²⁾	2.30	3.10	2.50	65	77	2 000	440.0	73.00	J	P	2	1	-	
	LE160LA4 ²⁾	2.50	3.40	2.70	65	77	2 000	560.0	84.00	J	S	2	1	-	
2-pole, 3 000 rpm at 50 Hz															
63	LA63ME2 ¹⁾	2.00	2.20	O. R.	49	60	7 000	1.8	3.20	B	C	1	1	P00	
	LA63MF2 ¹⁾	2.00	2.20	O. R.	49	60	7 000	2.2	3.60	B	D	1	1	P00	
71	LA71MG2 ¹⁾	2.30	2.30	O. R.	52	63	7 000	2.9	4.50	C	D	1	1	P00	
	LA71MH2 ¹⁾	2.50	2.60	O. R.	52	63	7 000	4.1	5.50	C	E	1	1	P00	
100	LE100LD2 ²⁾	3.20	2.90	3.50	67	79	3 000	34.0	23.00	F	M	2	1	P00	
112	LE112MB2 ²⁾	2.70	3.70	2.90	69	81	2 000	67.0	29.00	G	G	2	1	P00	
132	LE132SB2 ²⁾	1.90	2.50	2.00	68	80	1 000	130.0	40.00	H	E	2	1	P00	
	LE132SF2 ²⁾	2.10	3.20	2.30	68	80	1 000	160.0	46.00	H	F	2	1	P00	
160	LE160MA2 ²⁾	2.00	2.60	2.20	70	82	600	300.0	69.00	J	N	2	1	P00	
	LE160MF2 ²⁾	2.50	3.10	2.70	70	82	600	360.0	78.00	J	Q	2	1	P00	
	LE160LB2 ²⁾	2.50	3.20	2.70	70	82	600	440.0	90.00	J	T	2	1	P00	
6-pole, 1 000 rpm at 50 Hz															
63	LA63MF6 ¹⁾	1.80	1.90	O. R.	39	50	15 000	3.7	3.60	B	D	1	1	P01	
	LA63MG6	2.10	2.10	O. R.	39	50	15 000	3.7	3.60	B	E	1	1	P01	
71	LA71MG6 ¹⁾	2.10	1.90	O. R.	39	50	15 000	5.5	4.30	C	D	1	1	P01	
	LA71MH6 ¹⁾	2.20	2.00	O. R.	39	50	15 000	8.0	5.30	C	E	1	1	P01	
100	LE100LD6 ²⁾	2.00	2.20	2.20	59	71	9 000	65.0	22.00	F	M	2	1	P01	
112	LE112MB6 ²⁾	2.30	2.50	2.50	57	69	8 000	92.0	29.00	G	G	2	1	P01	
132	LE132SB6 ²⁾	2.00	2.60	2.20	63	75	6 000	170.0	39.00	H	E	2	1	P01	
	LE132MA6 ²⁾	2.10	2.50	2.30	63	75	6 000	210.0	45.00	H	H	2	1	P01	
	LE132MJ6 ²⁾	2.50	2.80	2.70	63	75	5 000	270.0	55.00	H	K	2	1	P01	
160	LE160ML6 ²⁾	2.10	2.90	2.30	67	79	4 000	560.0	83.00	J	H	2	1	P01	
	LE160LN6 ²⁾	1.90	2.70	2.00	67	79	4 000	780.0	106.00	J	U	2	1	P01	
8-pole, 750 rpm at 50 Hz															
71	LA71MH8	1.90	1.70	O. R.	36	47	O. R.	8.0	5.30	C	E	1	1	P02	
	LA71MJ8	2.20	2.00	O. R.	36	47	O. R.	8.0	5.30	C	F	1	1	P02	
100	LE100LA8	1.90	2.20	2.00	60	72	O. R.	56.0	17.00	F	B	2	1	P02	
	LE100LK8	2.00	2.30	2.20	60	72	O. R.	78.0	22.00	F	P	2	1	P02	
112	LE112MG8	1.60	1.90	1.70	63	75	O. R.	94.0	29.00	G	J	2	1	P02	
132	LE132SL8	1.70	2.40	1.80	63	75	O. R.	190.0	37.00	H	G	2	1	P02	
	LE132MJ8	1.80	2.20	1.90	63	75	O. R.	240.0	44.00	H	K	2	1	P02	
160	LE160MD8	1.70	2.30	1.80	63	75	O. R.	440.0	60.00	J	F	2	1	P02	
	LE160ML8	1.60	2.20	1.70	63	75	O. R.	560.0	72.00	J	H	2	1	P02	
	LE160LN8	1.70	2.20	1.80	63	75	O. R.	770.0	91.00	J	L	2	1	P02	

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with IEC B14 flange) for worm geared motors S²⁾ Only as brake motor or motor for intermittent duty S3 - 75 %

SIMOGEAR Geared Motors

Motors

IE1

Motors with Standard Efficiency IE1

Selection and ordering data (continued)

Size	Motor	P_{rated} kW	n_{rated} rpm	T_{rated} Nm	I_{rated} A	$\cos \varphi$ -	η		I_{St}/I_{rated} -	Article No.				Order code Number of poles
							4/4 load	3/4 load		Data position				
							%	%		9.	10.	11.	12.	
4-pole, 1 800 rpm at 60 Hz, 50 Hz power														
63	LA63ME4	0.12	1 670	0.69	0.42	0.68	54.10	51.80	3.20	B	C	1	1	-
	LA63MF4	0.18	1 690	1.02	0.56	0.70	58.80	56.40	3.30	B	D	1	1	-
	LA63MD4	0.09	1 695	0.51	0.41	0.60	46.00	41.00	3.30	B	B	1	1	-
71	LA71MG4	0.25	1 675	1.43	0.74	0.65	65.50	63.00	3.60	C	D	1	1	-
	LA71MH4	0.37	1 695	2.08	0.94	0.66	73.00	71.80	4.20	C	E	1	1	-
80	LE80MB4	0.55	1 745	3.01	1.41	0.69	74.00	73.00	5.70	D	B	2	1	-
	LE80MF4 ¹⁾	0.75	1 735	4.13	1.70	0.75	77.00	76.60	5.60	D	D	2	1	-
90	LE90SE4 ¹⁾	1.10	1 730	6.07	2.35	0.77	79.00	79.20	5.90	E	L	2	1	-
	LE90LD4 ¹⁾	1.50	1 730	8.28	3.15	0.77	81.50	81.70	6.40	E	N	2	1	-
100	LE100LB4 ¹⁾	2.20	1 720	12.2	4.30	0.82	83.00	83.00	5.80	F	L	2	1	-
	LE100LH4 ¹⁾	3.00	1 725	16.6	5.50	0.86	85.00	85.00	6.00	F	N	2	1	-
112	LE112ME4 ¹⁾	4.00	1 730	22.1	7.30	0.85	85.00	85.00	5.80	G	H	2	1	-
132	LE132SF4 ¹⁾	5.50	1 745	30.1	9.90	0.84	87.00	87.00	6.70	H	F	2	1	-
	LE132ME4 ¹⁾	7.50	1 750	40.9	13.40	0.84	87.50	87.50	7.00	H	J	2	1	-
	LE132ZMSA4 ¹⁾	9.20	1 760	49.9	15.4	0.85	88.50	O. R.	9.10	H	V	2	1	-
160	LE160MD4 ¹⁾	11.00	1 760	59.7	19.90	0.82	88.50	88.50	7.70	J	P	2	1	-
	LE160LA4 ¹⁾	15.00	1 760	81.4	27.00	0.82	89.50	89.50	7.60	J	S	2	1	-
2-pole, 3 600 rpm at 60 Hz, 50 Hz power														
63	LA63ME2	0.18	3 455	0.50	0.47	0.76	63.50	61.70	4.50	B	C	1	1	P00
	LA63MF2	0.25	3 455	0.69	0.65	0.75	65.00	63.20	4.60	B	D	1	1	P00
71	LA71MG2	0.37	3 410	1.04	0.91	0.76	67.00	65.10	5.00	C	D	1	1	P00
	LA71MH2	0.55	3 440	1.53	1.25	0.78	71.10	70.00	5.40	C	E	1	1	P00
100	LE100LD2 ¹⁾	3.00	3 430	8.35	5.30	0.88	84.50	84.50	6.80	F	M	2	1	P00
112	LE112MB2 ¹⁾	4.00	3 525	10.8	7.10	0.88	84.50	84.50	7.50	G	G	2	1	P00
132	LE132SB2 ¹⁾	5.50	3 505	15.0	9.30	0.90	86.00	86.00	5.70	H	E	2	1	P00
	LE132SF2 ¹⁾	7.50	3 530	20.3	12.80	0.88	87.50	87.50	6.90	H	F	2	1	P00
160	LE160MA2 ¹⁾	11.00	3 520	29.8	19.20	0.86	87.50	87.50	6.50	J	N	2	1	P00
	LE160MF2 ¹⁾	15.00	3 530	40.6	26.00	0.86	88.50	88.50	6.40	J	Q	2	1	P00
	LE160LB2 ¹⁾	18.50	3 530	50.0	31.00	0.87	89.50	89.50	7.20	J	T	2	1	P00
6-pole, 1 200 rpm at 60 Hz, 50 Hz power														
63	LA63MF6	0.09	1 075	0.8	0.38	0.63	47.10	44.90	2.20	B	D	1	1	P01
	LA63MG6	0.12	1 100	1.04	0.73	0.53	39.40	33.80	2.10	B	E	1	1	P01
71	LA71MG6	0.18	1 080	1.59	0.67	0.61	56.40	54.10	3.10	C	D	1	1	P01
	LA71MH6	0.25	1 090	2.19	0.72	0.70	62.90	60.60	3.40	C	E	1	1	P01
100	LE100LD6 ¹⁾	1.50	1 140	12.6	3.30	0.78	77.00	77.50	4.50	F	M	2	1	P01
112	LE112MB6 ¹⁾	2.20	1 130	18.6	4.70	0.78	78.50	79.00	4.50	G	G	2	1	P01
132	LE132SB6 ¹⁾	3.00	1 150	24.9	6.30	0.75	83.50	83.50	4.60	H	E	2	1	P01
	LE132MA6 ¹⁾	4.00	1 145	33.4	8.10	0.78	83.50	83.50	4.70	H	H	2	1	P01
	LE132MJ6 ¹⁾	5.50	1 150	45.7	11.20	0.76	85.00	85.00	5.20	H	K	2	1	P01
160	LE160ML6 ¹⁾	7.50	1 170	61.2	15.30	0.75	86.00	86.00	6.20	J	H	2	1	P01
	LE160LN6 ¹⁾	11.00	1 165	90.2	21.00	0.77	89.00	89.00	6.30	J	U	2	1	P01
8-pole, 900 rpm at 60 Hz, 50 Hz power														
71	LA71MH8	0.09	815	1.05	0.36	0.61	51.40	49.70	2.40	C	E	1	1	P02
	LA71MJ8	0.12	825	1.39	0.55	0.56	50.10	48.10	2.30	C	F	1	1	P02
100	LE100LA8	0.75	855	8.38	2.73	0.61	67.90	67.40	3.30	F	B	2	1	P02
	LE100LK8	1.10	855	12.3	3.20	0.62	72.40	72.40	3.50	F	P	2	1	P02
112	LE112MG8	1.50	850	16.9	4.00	0.66	74.30	74.30	3.80	G	J	2	1	P02
132	LE132SL8	2.20	865	24.3	5.40	0.66	80.60	80.60	4.60	H	G	2	1	P02
	LE132MJ8	3.00	865	33.1	7.10	0.68	81.00	81.00	4.50	H	K	2	1	P02
160	LE160MD8	4.00	870	43.9	9.60	0.70	78.30	78.80	4.30	J	F	2	1	P02
	LE160ML8	5.50	870	60.4	12.40	0.71	81.90	81.90	4.20	J	H	2	1	P02
	LE160LN8	7.50	870	82.3	17.20	0.70	81.90	81.90	4.30	J	L	2	1	P02

O. R. On request

¹⁾ Only as brake motor or motor for intermittent duty S3 - 75 %

Selection and ordering data (continued)

Size	Motor	T_{St}/T_{rated}	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code	
										Data position					
											9.	10.	11.	12.	Number of poles
					dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg						
4-pole, 1 800 rpm at 60 Hz, 50 Hz power															
63	LA63ME4	2.30	2.40	O. R.	46	57	15 000	2.9	3.20	B	C	1	1	-	
	LA63MF4	2.30	2.30	O. R.	46	57	15 000	3.7	3.60	B	D	1	1	-	
	LA63MD4	3.20	3.30	O. R.	46	57	15 000	2.9	3.20	B	B	1	1	-	
71	LA71MG4	2.20	2.30	O. R.	48	59	15 000	5.2	4.30	C	D	1	1	-	
	LA71MH4	2.30	2.50	O. R.	48	59	15 000	7.7	5.80	C	E	1	1	-	
80	LE80MB4	2.40	3.30	2.60	55	66	10 000	O. R.	O. R.	D	B	2	1	-	
	LE80MF4 ¹⁾	2.30	2.80	2.50	55	66	10 000	O. R.	O. R.	D	D	2	1	-	
90	LE90SE4 ¹⁾	2.50	3.00	2.80	54	65	8 000	O. R.	O. R.	E	L	2	1	-	
	LE90LD4 ¹⁾	2.60	3.00	2.90	55	66	8 000	O. R.	O. R.	E	N	2	1	-	
100	LE100LB4 ¹⁾	2.20	2.40	O. R.	62	74	7 000	59.0	21.00	F	L	2	1	-	
	LE100LH4 ¹⁾	2.20	2.30	O. R.	62	74	7 000	78.0	25.00	F	N	2	1	-	
112	LE112ME4 ¹⁾	2.10	2.70	O. R.	62	74	5 000	100.0	31.00	G	H	2	1	-	
132	LE132SF4 ¹⁾	2.20	2.80	O. R.	68	80	3 000	190.0	44.00	H	F	2	1	-	
	LE132ME4 ¹⁾	2.40	3.00	O. R.	68	80	3 000	240.0	51.00	H	J	2	1	-	
	LE132ZMSA4 ¹⁾	2.40	3.70	O. R.	69	81	1 600	330.0	O. R.	H	V	2	1	-	
160	LE160MD4 ¹⁾	2.30	3.10	O. R.	69	81	2 000	440.0	73.00	J	P	2	1	-	
	LE160LA4 ¹⁾	2.50	3.40	O. R.	69	81	2 000	560.0	84.00	J	S	2	1	-	
2-pole, 3 600 rpm at 60 Hz, 50 Hz power															
63	LA63ME2	2.40	2.70	O. R.	53	64	5 000	1.8	3.20	B	C	1	1	P00	
	LA63MF2	2.40	2.70	O. R.	53	64	5 000	2.2	3.60	B	D	1	1	P00	
71	LA71MG2	2.90	2.90	O. R.	56	67	5 000	2.9	4.50	C	D	1	1	P00	
	LA71MH2	3.00	2.90	O. R.	56	67	5 000	4.1	5.50	C	E	1	1	P00	
100	LE100LD2 ¹⁾	3.40	3.30	O. R.	71	83	2 000	34.0	23.00	F	M	2	1	P00	
112	LE112MB2 ¹⁾	2.70	3.80	O. R.	73	85	O. R.	67.0	29.00	G	G	2	1	P00	
132	LE132SB2 ¹⁾	1.80	2.70	O. R.	72	84	O. R.	130.0	40.00	H	E	2	1	P00	
	LE132SF2 ¹⁾	2.30	3.40	O. R.	72	84	O. R.	160.0	46.00	H	F	2	1	P00	
160	LE160MA2 ¹⁾	2.10	2.90	O. R.	77	89	O. R.	300.0	69.00	J	N	2	1	P00	
	LE160MF2 ¹⁾	2.40	3.10	O. R.	77	89	O. R.	360.0	78.00	J	Q	2	1	P00	
	LE160LB2 ¹⁾	2.40	3.20	O. R.	77	89	O. R.	440.0	90.00	J	T	2	1	P00	
6-pole, 1 200 rpm at 60 Hz, 50 Hz power															
63	LA63MF6	2.10	1.80	O. R.	43	54	10 500	3.7	3.60	B	D	1	1	P01	
	LA63MG6	2.70	2.80	O. R.	43	54	10 500	3.7	3.60	B	E	1	1	P01	
71	LA71MG6	2.50	2.50	O. R.	43	54	10 500	5.5	4.30	C	D	1	1	P01	
	LA71MH6	2.70	2.60	O. R.	43	54	10 500	8.0	5.30	C	E	1	1	P01	
100	LE100LD6 ¹⁾	2.10	2.50	O. R.	62	74	O. R.	65.0	22.00	F	M	2	1	P01	
112	LE112MB6 ¹⁾	2.30	2.60	O. R.	60	72	O. R.	92.0	29.00	G	G	2	1	P01	
132	LE132SB6 ¹⁾	1.90	2.30	O. R.	67	79	O. R.	170.0	39.00	H	E	2	1	P01	
	LE132MA6 ¹⁾	2.00	2.40	O. R.	67	79	O. R.	210.0	45.00	H	H	2	1	P01	
	LE132MJ6 ¹⁾	2.40	2.60	O. R.	67	79	O. R.	270.0	55.00	H	K	2	1	P01	
160	LE160ML6 ¹⁾	2.30	3.00	O. R.	70	82	O. R.	560.0	83.00	J	H	2	1	P01	
	LE160LN6 ¹⁾	1.90	2.70	O. R.	70	82	O. R.	780.0	106.00	J	U	2	1	P01	
8-pole, 900 rpm at 60 Hz, 50 Hz power															
71	LA71MH8	2.30	2.00	O. R.	39	50	O. R.	8.0	5.30	C	E	1	1	P02	
	LA71MJ8	2.60	2.40	O. R.	39	51	O. R.	8.0	5.30	C	F	1	1	P02	
100	LE100LA8	1.70	2.30	O. R.	63	75	O. R.	56.0	17.00	F	B	2	1	P02	
	LE100LK8	1.80	2.30	O. R.	63	75	O. R.	78.0	22.00	F	P	2	1	P02	
112	LE112MG8	1.60	2.00	O. R.	66	78	O. R.	94.0	29.00	G	J	2	1	P02	
132	LE132SL8	1.60	2.30	O. R.	66	78	O. R.	190.0	37.00	H	G	2	1	P02	
	LE132MJ8	1.70	2.20	O. R.	66	78	O. R.	240.0	44.00	H	K	2	1	P02	
160	LE160MD8	1.70	2.30	O. R.	71	83	O. R.	440.0	60.00	J	F	2	1	P02	
	LE160ML8	1.60	2.20	O. R.	71	83	O. R.	560.0	72.00	J	H	2	1	P02	
	LE160LN8	1.70	2.20	O. R.	71	83	O. R.	770.0	91.00	J	L	2	1	P02	

O. R. On request

¹⁾ Only as brake motor or motor for intermittent duty S3 - 75 %

SIMOGEAR Geared Motors

Motors

IE1

Motors with Standard Efficiency IE1

Selection and ordering data (continued)

Size	Motor	P_{rated} kW	n_{rated} rpm	T_{rated} Nm	I_{rated} A	$\cos \varphi$ -	η		I_{St}/I_{rated} -	Article No.				Order code Number of poles	
							4/4 load	3/4 load		Data position					
						%				9.	10.	11.	12.		
4-pole, 1 800 rpm at 60 Hz, 60 Hz power															
63	LA63ME4 ¹⁾	0.14	1 650	0.81	0.43	0.74	56.00	54.50	3.10	B	C	1	1	-	
	LA63MF4 ¹⁾	0.21	1 650	1.22	0.59	0.77	58.30	56.80	3.10	B	D	1	1	-	
	LA63MD4	0.11	1 675	0.63	0.42	0.64	51.80	46.20	3.20	B	B	1	1	-	
71	LA71MG4 ¹⁾	0.29	1 650	1.68	0.76	0.77	61.90	60.40	3.30	C	D	1	1	-	
	LA71MH4 ¹⁾	0.43	1 669	2.46	1.08	0.76	65.80	64.80	3.80	C	E	1	1	-	
80	LE80MB4	0.63	1 740	3.46	1.55	0.69	74.00	72.90	5.40	D	B	2	1	-	
	LE80MF4 ²⁾	0.86	1 730	4.75	1.87	0.75	77.00	76.90	5.30	D	D	2	1	-	
90	LE90SE4 ²⁾	1.27	1 725	7.03	2.60	0.77	79.00	79.30	5.60	E	L	2	1	-	
	LE90LD4 ²⁾	1.75	1 720	9.72	3.50	0.77	81.50	82.00	6.00	E	N	2	1	-	
100	LE100LB4 ²⁾	2.55	1 720	14.2	4.70	0.82	83.00	83.00	5.80	F	L	2	1	-	
	LE100LH4 ²⁾	3.45	1 725	19.1	5.90	0.86	85.00	85.00	6.00	F	N	2	1	-	
112	LE112ME4 ²⁾	4.55	1 730	25.1	7.90	0.85	85.00	85.00	5.80	G	H	2	1	-	
132	LE132SF4 ²⁾	6.30	1 745	34.5	10.80	0.84	87.00	87.00	6.70	H	F	2	1	-	
	LE132ME4 ²⁾	8.60	1 750	46.9	14.70	0.84	87.50	87.50	7.00	H	J	2	1	-	
	LE132ZMSA4 ²⁾	10.50	1 750	57.3	17.70	0.85	88.50	O. R.	8.00	H	V	2	1	-	
160	LE160MD4 ²⁾	12.60	1 760	68.4	22.00	0.82	88.50	88.50	6.80	J	P	2	1	-	
	LE160LA4 ²⁾	17.30	1 760	93.9	29.50	0.82	90.50	90.50	7.30	J	S	2	1	-	
2-pole, 3 600 rpm at 60 Hz, 60 Hz power															
63	LA63ME2 ¹⁾	0.21	3 420	0.59	0.51	0.81	64.00	63.00	4.10	B	C	1	1	P00	
	LA63MF2 ¹⁾	0.29	3 430	0.81	0.68	0.82	65.00	64.00	4.30	B	D	1	1	P00	
71	LA71MG2 ¹⁾	0.43	3 340	1.23	1.00	0.82	66.00	65.00	4.50	C	D	1	1	P00	
	LA71MH2 ¹⁾	0.63	3 400	1.77	1.36	0.82	71.00	71.00	4.90	C	E	1	1	P00	
100	LE100LD2 ²⁾	3.45	3 430	9.6	5.80	0.88	84.50	84.50	6.80	F	M	2	1	P00	
112	LE112MB2 ²⁾	4.55	3 525	12.3	7.70	0.88	84.50	84.50	7.50	G	G	2	1	P00	
132	LE132SB2 ²⁾	6.30	3 505	17.2	10.20	0.90	86.00	86.00	5.70	H	E	2	1	P00	
	LE132SF2 ²⁾	8.60	3 530	23.3	14.00	0.88	87.50	87.50	6.90	H	F	2	1	P00	
160	LE160MA2 ²⁾	12.60	3 520	34.2	21.00	0.86	87.50	87.50	5.70	J	N	2	1	P00	
	LE160MF2 ²⁾	17.30	3 530	46.8	28.00	0.86	89.50	89.50	6.40	J	Q	2	1	P00	
	LE160LB2 ²⁾	21.30	3 530	57.6	34.50	0.87	89.50	89.50	7.20	J	T	2	1	P00	
6-pole, 1 200 rpm at 60 Hz, 60 Hz power															
63	LA63MF6 ¹⁾	0.10	1 050	0.91	0.39	0.67	48.00	46.50	2.10	B	D	1	1	P01	
	LA63MG6	0.14	1 080	1.24	0.74	0.57	41.90	37.00	2.10	B	E	1	1	P01	
71	LA71MG6 ¹⁾	0.21	1 035	1.94	0.69	0.67	57.30	55.80	3.00	C	D	1	1	P01	
	LA71MH6 ¹⁾	0.29	1 030	2.69	0.78	0.75	61.90	60.40	3.10	C	E	1	1	P01	
100	LE100LD6 ²⁾	1.75	1 140	14.7	3.65	0.78	77.00	77.50	4.50	F	M	2	1	P01	
112	LE112MB6 ²⁾	2.55	1 130	21.5	5.20	0.78	78.50	79.00	4.50	G	G	2	1	P01	
132	LE132SB6 ²⁾	3.45	1 150	28.6	6.90	0.75	83.50	83.50	4.60	H	E	2	1	P01	
	LE132MA6 ²⁾	4.55	1 145	37.9	8.80	0.78	83.50	83.50	4.70	H	H	2	1	P01	
	LE132MJ6 ²⁾	6.30	1 150	52.3	12.20	0.76	85.00	85.00	5.20	H	K	2	1	P01	
160	LE160ML6 ²⁾	8.60	1 170	70.2	16.70	0.75	86.00	86.00	5.90	J	H	2	1	P01	
	LE160LN6 ²⁾	12.60	1 165	103.3	23.00	0.77	89.00	89.00	6.30	J	U	2	1	P01	
8-pole, 900 rpm at 60 Hz, 60 Hz power															
71	LA71MH8	0.104	780	1.27	0.39	0.66	50.50	49.00	2.20	C	E	1	1	P02	
	LA71MJ8	0.14	795	1.68	0.56	0.62	50.60	49.10	2.20	C	F	1	1	P02	
100	LE100LA8	0.86	855	9.61	2.73	0.61	68.00	67.50	3.30	F	B	2	1	P02	
	LE100LK8	1.27	855	14.2	3.55	0.62	72.50	72.50	3.50	F	P	2	1	P02	
112	LE112MG8	1.75	850	19.7	4.50	0.66	74.30	74.30	3.80	G	J	2	1	P02	
132	LE132SL8	2.55	865	28.2	6.00	0.66	81.40	81.40	4.10	H	G	2	1	P02	
	LE132MJ8	3.45	865	38.1	7.80	0.68	82.10	82.10	4.00	H	K	2	1	P02	
160	LE160MD8	4.55	870	49.9	10.40	0.70	78.30	78.80	4.10	J	F	2	1	P02	
	LE160ML8	6.30	870	69.2	13.60	0.71	81.90	81.90	4.20	J	H	2	1	P02	
	LE160LN8	8.60	865	94.9	18.80	0.70	82.00	82.00	4.10	J	L	2	1	P02	

O. R. On request

1) The technical specifications also apply to LAI63 and LAI71 motors (with IEC B14 flange) for worm geared motors S

2) Only as brake motor or motor for intermittent duty S3 - 75 %

SIMOGEAR Geared Motors

Motors

IE1

Motors with Standard Efficiency IE1

Selection and ordering data (continued)

Size	Motor	P_{rated}	n_{rated}	T_{rated}	I_{rated}	$\cos \varphi$	η	T_{Bk}/T_{rated}	Article No.				Order code	
		kW	rpm	Nm	400 V A	-	4/4 load %	-	Data position 9. 10. 11. 12.				Power	Number of poles
4-pole, 2 610 rpm at 87 Hz power														
63	LA63MD4	0.15	2 530	0.57	0.64	0.54	63.00	2.9	B	B	1	1	P91	-
	LA63ME4 ¹⁾	0.20	2 460	0.78	0.70	0.73	56.50	2.1	B	C	1	1	P91	-
	LA63MF4 ¹⁾	0.30	2 460	1.16	0.97	0.76	59.00	2.0	B	D	1	1	P91	-
71	LA71MG4 ¹⁾	0.45	2 460	1.75	1.40	0.78	59.50	1.9	C	D	1	1	P91	-
	LA71MH4 ¹⁾	0.65	2 480	2.5	1.80	0.79	66.00	2.1	C	E	1	1	P91	-
80	LE80MB4	0.95	2 570	3.53	2.80	0.66	74.20	2.8	D	B	2	1	P91	-
	LE80MF4	1.30	2 550	4.87	3.50	0.71	75.50	2.5	D	D	2	1	P92	-
90	LE90SE4	1.90	2 540	7.14	4.70	0.71	82.20	2.6	E	L	2	1	P92	-
	LE90LD4	2.60	2535	9.79	6.40	0.71	82.60	2.6	E	N	2	1	P92	-
100	LE100LB4	3.80	2 540	14.3	8.30	0.77	81.70	2.5	F	L	2	1	P92	-
	LE100LH4	5.00	2 540	18.8	10.80	0.80	83.80	2.7	F	N	2	1	P92	-
112	LE112ME4	6.50	2 550	24.3	13.60	0.81	85.30	2.8	G	H	2	1	P92	-
132	LE132SF4	9.00	2 560	33.6	19.20	0.79	85.70	2.9	H	F	2	1	P92	-
	LE132ME4	13.00	2 560	48.5	26.50	0.79	86.20	3.2	H	J	2	1	P92	-
	LE132ZMSA4	16.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	H	V	2	1	P92	-
160	LE160MD4	17.00	2 575	63	37.00	0.76	87.50	3.5	J	P	2	1	P92	-
	LE160LA4	26.00	2 575	96.4	49.00	0.78	88.80	3.8	J	S	2	1	P92	-
6-pole, 1 740 rpm at 87 Hz power														
63	LA63MF6 ¹⁾	0.15	1 590	0.9	0.75	0.65	44.50	2.1	B	D	1	1	P91	P01
	LA63MG6	0.20	O. R.	O. R.	O. R.	O. R.	O. R.		B	E	1	1	P91	P01
71	LA71MG6 ¹⁾	0.30	1 580	1.81	1.05	0.70	59.00	2.1	C	D	1	1	P91	P01
	LA71MH6 ¹⁾	0.45	1 570	2.74	1.40	0.75	62.00	2.1	C	E	1	1	P91	P01
100	LE100LD6	2.60	1 680	14.8	6.90	0.70	77.20	2.2	F	M	2	1	P92	P01
112	LE112MB6	3.80	1 680	21.6	9.30	0.72	82.00	2.6	G	G	2	1	P92	P01
132	LE132SB6	5.00	1 695	28.2	12.70	0.69	82.60	2.7	H	E	2	1	P92	P01
	LE132MA6	7.00	1 695	39.4	15.40	0.72	84.80	2.7	H	H	2	1	P92	P01
	LE132MJ6	9.00	1 695	50.7	21.00	0.72	85.80	3.0	H	K	2	1	P92	P01
160	LE160ML6	13.00	1 710	72.6	28.50	0.70	86.90	3.1	J	H	2	1	P92	P01
	LE160LN6	17.00	1 710	94.9	37.50	0.74	88.70	3.0	J	U	2	1	P92	P01
8-pole, 1 305 rpm at 87 Hz power														
71	LA71MH8	0.15	1 185	1.21	0.60	0.67	54.00	1.9	C	E	1	1	P92	P02
	LA71MJ8	0.20	1 200	1.59	0.85	0.63	54.00	2.2	C	F	1	1	P92	P02
100	LE100LA8	1.30	1 265	9.81	5.10	0.55	67.40	2.2	F	B	2	1	P92	P02
	LE100LK8	1.90	1 265	14.3	6.60	0.57	72.50	2.3	F	P	2	1	P92	P02
112	LE112MG8	2.60	1 255	19.8	8.00	0.61	77.20	1.9	G	J	2	1	P92	P02
132	LE132SL8	3.60	1 275	27	10.80	0.62	81.90	2.4	H	G	2	1	P92	P02
	LE132MJ8	5.00	1 270	37.6	13.90	0.63	82.40	2.3	H	K	2	1	P92	P02
160	LE160MD8	7.00	1 280	52.2	19.90	0.64	79.30	2.3	J	F	2	1	P92	P02
	LE160ML8	9.00	1 275	67.4	25.50	0.65	82.70	2.2	J	H	2	1	P92	P02
	LE160LN8	13.00	1 275	97.4	34.00	0.67	85.20	2.2	J	L	2	1	P92	P02

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with IEC B14 flange) for worm geared motors S

Selection and ordering data (continued)

Size	Motor	L_{pTA}	L_{WA}	J_{mot}	m_{mot}	Article No.				Order code	
		dB (A)	dB (A)	10^{-4} kgm ²	kg	Data position				Power	Number of poles
						9.	10.	11.	12.		
4-pole, 2 610 rpm at 87 Hz power											
63	LA63MD4	O. R.	O. R.	2.9	3.20	B	B	1	1	P91	-
	LA63ME4 ¹⁾	O. R.	O. R.	2.9	3.20	B	C	1	1	P91	-
	LA63MF4 ¹⁾	O. R.	O. R.	3.7	3.60	B	D	1	1	P91	-
71	LA71MG4 ¹⁾	O. R.	O. R.	5.2	4.30	C	D	1	1	P91	-
	LA71MH4 ¹⁾	O. R.	O. R.	7.7	5.80	C	E	1	1	P91	-
80	LE80MB4	O. R.	O. R.	15.0	O. R.	D	B	2	1	P91	-
	LE80MF4	O. R.	O. R.	19.0	O. R.	D	D	2	1	P92	-
90	LE90SE4	O. R.	O. R.	26.0	O. R.	E	L	2	1	P92	-
	LE90LD4	O. R.	O. R.	30.0	O. R.	E	N	2	1	P92	-
100	LE100LB4	O. R.	O. R.	59.0	21.00	F	L	2	1	P92	-
	LE100LH4	O. R.	O. R.	78.0	25.00	F	N	2	1	P92	-
112	LE112ME4	O. R.	O. R.	100.0	31.00	G	H	2	1	P92	-
132	LE132SF4	O. R.	O. R.	190.0	44.00	H	F	2	1	P92	-
	LE132ME4	O. R.	O. R.	240.0	51.00	H	J	2	1	P92	-
	LE132ZMSA4	O. R.	O. R.	330.0	O. R.	H	V	2	1	P92	-
160	LE160MD4	O. R.	O. R.	440.0	73.00	J	P	2	1	P92	-
	LE160LA4	O. R.	O. R.	560.0	84.00	J	S	2	1	P92	-
6-pole, 1 740 rpm at 87 Hz power											
63	LA63MF6 ¹⁾	O. R.	O. R.	3.7	3.60	B	D	1	1	P91	P01
	LA63MG6	O. R.	O. R.	3.7	3.60	B	E	1	1	P91	P01
71	LA71MG6 ¹⁾	O. R.	O. R.	5.5	4.30	C	D	1	1	P91	P01
	LA71MH6 ¹⁾	O. R.	O. R.	8.0	5.30	C	E	1	1	P91	P01
100	LE100LD6	O. R.	O. R.	65.0	22.00	F	M	2	1	P92	P01
112	LE112MB6	O. R.	O. R.	92.0	29.00	G	G	2	1	P92	P01
132	LE132SB6	O. R.	O. R.	170.0	39.00	H	E	2	1	P92	P01
	LE132MA6	O. R.	O. R.	210.0	45.00	H	H	2	1	P92	P01
	LE132MJ6	O. R.	O. R.	270.0	55.00	H	K	2	1	P92	P01
160	LE160ML6	O. R.	O. R.	560.0	83.00	J	H	2	1	P92	P01
	LE160LN6	O. R.	O. R.	780.0	106.00	J	U	2	1	P92	P01
8-pole, 1 305 rpm at 87 Hz power											
71	LA71MH8	O. R.	O. R.	8.0	5.30	C	E	1	1	P92	P02
	LA71MJ8	O. R.	O. R.	8.0	5.30	C	F	1	1	P92	P02
100	LE100LA8	O. R.	O. R.	56.0	17.00	F	B	2	1	P92	P02
	LE100LK8	O. R.	O. R.	78.0	22.00	F	P	2	1	P92	P02
112	LE112MG8	O. R.	O. R.	94.0	29.00	G	J	2	1	P92	P02
132	LE132SL8	O. R.	O. R.	190.0	37.00	H	G	2	1	P92	P02
	LE132MJ8	O. R.	O. R.	240.0	44.00	H	K	2	1	P92	P02
160	LE160MD8	O. R.	O. R.	440.0	60.00	J	F	2	1	P92	P02
	LE160ML8	O. R.	O. R.	560.0	72.00	J	H	2	1	P92	P02
	LE160LN8	O. R.	O. R.	770.0	91.00	J	L	2	1	P92	P02

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with IEC B14 flange) for worm geared motors S

SIMOGEAR Geared Motors

Motors

IE2

Motors with High Efficiency IE2

Selection and ordering data

Size	Motor	P_{rated} kW	n_{rated} rpm	T_{rated} Nm	I_{rated} A	$\cos \varphi$ -	η		I_{St}/I_{rated} -	Article No.				Order code Number of poles	
							4/4 load	3/4 load		Data position					
										9.	10.	11.	12.		
4-pole, 1 500 rpm at 50 Hz															
80	LE80MD4E	0.55	1 440	3.65	1.37	0.74	78.10	78.90	5.30	D	C	2	2	-	
	LE80MH4E	0.75	1 440	4.97	1.79	0.76	79.60	80.20	5.60	D	E	2	2	-	
90	LE90SG4E	1.10	1 425	7.37	2.50	0.78	81.40	81.70	5.60	E	K	2	2	-	
	LE90LH4E	1.50	1 435	9.98	3.30	0.79	82.80	83.50	6.40	E	M	2	2	-	
100	LE100LE4E	2.20	1 455	14.4	4.65	0.81	84.30	85.10	6.90	F	L	2	2	-	
	LE100LK4E	3.00	1 455	19.7	6.20	0.82	85.50	86.70	6.90	F	M	2	2	-	
112	LE112ME4E	4.00	1 460	26.2	8.20	0.81	86.60	87.30	7.10	G	H	2	2	-	
132	LE132SF4E	5.50	1 465	35.9	11.30	0.80	87.70	89.00	6.90	H	G	2	2	-	
	LE132MF4E	7.50	1 465	48.9	14.70	0.83	88.70	90.30	6.90	H	J	2	2	-	
	LE132ZMM4E	9.20	1 455	60.4	17.90	0.83	89.30	O. R.	7.10	H	V	2	2	-	
160	LE160MF4E	11.00	1 470	71.5	21.00	0.85	89.80	90.90	6.70	J	P	2	2	-	
	LE160LD4E	15.00	1 475	97.1	28.00	0.85	90.60	91.30	7.30	J	U	2	2	-	
180	LES180MM4E	18.50	1 465	120.6	35.00	0.84	91.20	92.00	7.20	K	L	3	2	-	
	LES180ZLJ4E	22.00	1 465	143.4	41.50	0.84	91.60	92.20	7.30	K	N	3	2	-	
200	LES200LN4E	30.00	1 470	194.9	56.00	0.84	92.30	92.80	6.70	L	M	3	2	-	
225	LES225SD4E	37.00	1 470	240.4	65.00	0.88	92.70	93.50	6.60	M	F	3	2	-	
	LES225YMF4E	45.00	1 475	291	80.00	0.87	93.10	93.80	6.90	M	T	3	2	-	
250	LES250MD4E	55.00	1 480	355	100.00	0.85	93.50	93.90	6.80	N	M	3	2	-	
2-pole, 3 000 rpm at 50 Hz															
80	LE80MA2E	0.75	2 805	2.55	1.67	0.84	77.40	79.50	4.90	D	B	2	2	P00	
	LE80ME2E	1.10	2 835	3.71	2.40	0.83	79.60	81.30	6.00	D	M	2	2	P00	
90	LE90SG2E	1.50	2 885	4.96	3.15	0.84	81.30	82.30	6.90	E	K	2	2	P00	
	LE90LH2E	2.20	2 890	7.27	4.50	0.85	83.20	83.90	7.10	E	M	2	2	P00	
100	LE100LD2E	3.00	2 905	9.86	6.10	0.84	84.60	85.20	7.00	F	K	2	2	P00	
112	LE112MA2E	4.00	2 950	12.9	7.80	0.86	85.80	86.70	7.40	G	G	2	2	P00	
132	LE132SB2E	5.50	2 950	17.8	10.50	0.87	87.00	88.00	6.60	H	E	2	2	P00	
	LE132SF2E	7.50	2 950	24.3	14.10	0.87	88.10	88.70	7.50	H	G	2	2	P00	
160	LE160MB2E	11.00	2 955	35.5	20.50	0.87	89.40	90.00	7.40	J	N	2	2	P00	
	LE160MG2E	15.00	2 955	48.5	27.00	0.88	90.30	90.90	7.60	J	Q	2	2	P00	
	LE160LB2E	18.50	2 955	59.8	33.50	0.88	90.90	91.20	7.90	J	T	2	2	P00	
6-pole, 1 000 rpm at 50 Hz															
80	LE80MD6E	0.37	925	3.82	1.08	0.69	71.40	71.50	4.00	D	C	2	2	P01	
	LE80MK6E	0.55	935	5.62	1.63	0.66	74.00	74.00	4.40	D	F	2	2	P01	
90	LE90SH6E	0.75	935	7.66	2.05	0.70	75.90	76.00	4.10	E	C	2	2	P01	
	LE90LLB6E	1.10	935	11.2	2.90	0.70	78.10	78.60	4.40	E	P	2	2	P01	
100	LE100LLB6E	1.50	970	14.8	3.70	0.73	79.80	80.50	5.40	F	P	2	2	P01	
112	LE112ME6E	2.20	965	21.8	5.20	0.75	81.80	82.60	5.00	G	H	2	2	P01	
132	LE132SC6E	3.00	970	29.5	7.20	0.72	83.30	83.40	5.00	H	F	2	2	P01	
	LE132MB6E	4.00	970	39.4	9.10	0.75	84.60	85.50	5.00	H	H	2	2	P01	
	LE132MJ6E	5.50	970	54.1	12.10	0.76	86.00	87.00	5.60	H	L	2	2	P01	
160	LE160ML6E	7.50	975	73.5	16.80	0.74	87.20	88.00	4.70	J	H	2	2	P01	
	LE160LL6E	11.00	975	107.7	23.50	0.76	88.70	89.60	4.80	J	V	2	2	P01	
180	LES180LE6E	15.00	975	146.9	31.00	0.78	89.70	90.10	6.00	K	M	3	2	P01	
200	LES200LG6E	18.50	978	180.6	36.00	0.82	90.40	91.30	5.80	L	L	3	2	P01	
	LES200LP6E	22.00	978	214.8	42.50	0.82	90.90	91.60	6.20	L	N	3	2	P01	
225	LES225YMF6E	30.00	980	292	57.00	0.83	91.70	92.50	6.10	M	K	3	2	P01	
250	LES250MD6E	37.00	982	360	70.00	0.83	92.20	93.10	6.00	N	D	3	2	P01	
8-pole, 750 rpm at 50 Hz															
180	LES180LE8E	11.00	720	145.9	26.00	0.70	86.60	87.60	4.90	K	M	3	2	P02	
200	LES200LP8E	15.00	718	199.5	32.00	0.76	88.90	90.80	5.40	L	N	3	2	P02	
225	LES225SD8E	18.50	730	242	38.50	0.78	89.00	89.90	5.40	M	F	3	2	P02	
	LES225MD8E	22.00	730	288	44.00	0.80	90.30	91.30	5.50	M	G	3	2	P02	
250	LES250MD8E	30.00	732	391	59.00	0.80	91.30	92.20	5.60	N	D	3	2	P02	

O. R. On request

Selection and ordering data (continued)

Size	Motor	T_{St}/T_{rated}	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code	
										Data position					
											9.	10.	11.	12.	Number of poles
					dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg						
4-pole, 1 500 rpm at 50 Hz															
80	LE80MD4E	2.20	3.10	2.40	53	64	10 000	17	9.30	D	C	2	2	-	
	LE80MH4E	2.20	3.10	2.40	53	64	10 000	21	10.00	D	E	2	2	-	
90	LE90SG4E	2.30	2.90	2.50	56	68	8 000	28	12.00	E	K	2	2	-	
	LE90LH4E	2.60	3.40	2.80	56	68	8 000	36	15.00	E	M	2	2	-	
100	LE100LE4E	2.10	3.30	2.30	60	72	7 000	86	20.00	F	L	2	2	-	
	LE100LK4E	2.00	3.10	2.20	60	72	7 000	110	24.00	F	M	2	2	-	
112	LE112ME4E	2.50	3.20	2.70	58	70	5 000	140	24.00	G	H	2	2	-	
132	LE132SF4E	2.30	2.90	2.50	64	76	3 000	270	35.00	H	G	2	2	-	
	LE132MF4E	2.30	2.90	2.50	64	76	3 000	340	42.00	H	J	2	2	-	
	LE132ZMM4E	2.30	3.10	O. R.	64	76	1 600	410	O. R.	H	V	2	2	-	
160	LE160MF4E	2.10	2.80	2.30	65	77	2 000	650	61.00	J	P	2	2	-	
	LE160LD4E	2.30	3.00	2.50	65	77	2 000	830	73.00	J	U	2	2	-	
180	LES180MM4E	2.50	3.40	O. R.	58	71	O. R.	1 200	151.00	K	L	3	2	-	
	LES180ZLJ4E	2.60	3.50	O. R.	58	71	O. R.	1 300	156.00	K	N	3	2	-	
200	LES200LN4E	2.50	3.30	O. R.	62	75	O. R.	2 000	211.00	L	M	3	2	-	
225	LES225SD4E	2.30	2.90	2.00	62	75	O. R.	4 200	280.00	M	F	3	2	-	
	LES225YM4E	2.50	3.10	2.10	63	76	O. R.	4 600	305.00	M	T	3	2	-	
250	LES250MD4E	2.70	3.00	2.10	62	75	O. R.	7 500	385.00	N	M	3	2	-	
2-pole, 3 000 rpm at 50 Hz															
80	LE80MA2E	1.90	2.30	2.00	60	71	6 000	8	8.30	D	B	2	2	P00	
	LE80ME2E	2.70	3.10	2.90	60	71	6 000	11	10.00	D	M	2	2	P00	
90	LE90SG2E	2.70	3.60	2.90	65	77	5 000	17	12.00	E	K	2	2	P00	
	LE90LH2E	2.50	3.70	2.70	65	77	5 000	21	14.00	E	M	2	2	P00	
100	LE100LD2E	2.30	3.30	2.50	67	79	3 000	44	21.00	F	K	2	2	P00	
112	LE112MA2E	2.40	3.30	2.60	69	81	2 000	92	22.00	G	G	2	2	P00	
132	LE132SB2E	1.80	2.90	1.90	68	80	1 000	200	32.00	H	E	2	2	P00	
	LE132SF2E	2.20	3.10	2.40	68	80	1 000	240	36.00	H	G	2	2	P00	
160	LE160MB2E	2.10	3.20	2.30	70	82	600	450	57.00	J	N	2	2	P00	
	LE160MG2E	2.40	3.40	2.60	70	82	600	530	65.00	J	Q	2	2	P00	
	LE160LB2E	2.90	3.60	3.10	70	82	600	610	74.00	J	T	2	2	P00	
6-pole, 1 000 rpm at 50 Hz															
80	LE80MD6E	2.10	2.40	2.30	42	53	12 000	17	8.30	D	C	2	2	P01	
	LE80MK6E	2.50	2.90	2.70	42	53	12 000	25	11.30	D	F	2	2	P01	
90	LE90SH6E	2.00	2.50	2.20	43	55	10 000	30	12.00	E	C	2	2	P01	
	LE90LLB6E	2.20	2.60	2.40	43	55	10 000	40	15.00	E	P	2	2	P01	
100	LE100LLB6E	2.00	2.80	O. R.	59	71	9 000	110	24.00	F	P	2	2	P01	
112	LE112ME6E	2.00	2.80	O. R.	62	74	8 000	140	24.00	G	H	2	2	P01	
132	LE132SC6E	1.60	2.50	O. R.	63	75	6 000	240	31.00	H	F	2	2	P01	
	LE132MB6E	1.60	2.30	O. R.	63	75	6 000	290	36.00	H	H	2	2	P01	
	LE132MJ6E	1.90	2.60	O. R.	63	75	5 000	370	45.00	H	L	2	2	P01	
160	LE160ML6E	1.90	2.20	O. R.	67	79	4 000	750	67.00	J	H	2	2	P01	
	LE160LL6E	1.90	2.20	O. R.	67	79	4 000	980	83.00	J	V	2	2	P01	
180	LES180LE6E	2.50	3.10	O. R.	56	70	O. R.	1 700	141.00	K	M	3	2	P01	
200	LES200LG6E	2.40	2.60	O. R.	58	72	O. R.	2 500	181.00	L	L	3	2	P01	
	LES200LP6E	2.50	2.60	O. R.	58	72	O. R.	3 000	201.00	L	N	3	2	P01	
225	LES225YM6E	2.50	2.80	2.00	56	70	O. R.	5 800	285.00	M	K	3	2	P01	
250	LES250MD6E	2.80	2.50	2.00	57	71	O. R.	8 600	370.00	N	D	3	2	P01	
8-pole, 750 rpm at 50 Hz															
180	LES180LE8E	2.30	2.60	O. R.	67	74	O. R.	1 950	155.00	K	M	3	2	P02	
200	LES200LP8E	2.40	2.80	O. R.	57	64	O. R.	3 440	220.00	L	N	3	2	P02	
225	LES225SD8E	2.20	2.70	1.80	53	66	O. R.	4 300	250.00	M	F	3	2	P02	
	LES225MD8E	2.30	2.70	1.90	53	66	O. R.	5 000	270.00	M	G	3	2	P02	
250	LES250MD8E	2.40	2.70	1.90	58	72	O. R.	8 600	370.00	N	D	3	2	P02	

O. R. On request

SIMOGEAR Geared Motors

Motors

IE2

Motors with High Efficiency IE2

Selection and ordering data (continued)

Size	Motor	P_{rated} kW	n_{rated} rpm	T_{rated} Nm	I_{rated} A	$\cos \varphi$ -	η		I_{St}/I_{rated} -	Article No.				Order code Number of poles	
							4/4 load	3/4 load		Data position					
										9.	10.	11.	12.		
4-pole, 1 800 rpm at 60 Hz, 50 Hz power															
80	LE80MD4E	0.55	1 750	3	1.17	0.74	80.00	80.00	5.70	D	C	2	2	-	
	LE80MH4E	0.75	1 750	4.09	1.58	0.72	82.50	82.50	6.80	D	E	2	2	-	
90	LE90SG4E	1.10	1 740	6.04	2.20	0.74	84.00	84.00	7.00	E	K	2	2	-	
	LE90LH4E	1.50	1 745	8.21	3.00	0.75	84.00	84.00	7.50	E	M	2	2	-	
100	LE100LE4E	2.20	1 760	11.9	4.05	0.78	87.50	87.10	8.10	F	L	2	2	-	
	LE100LK4E	3.00	1 765	16.2	5.40	0.79	87.50	88.30	8.30	F	M	2	2	-	
112	LE112ME4E	3.70	1 770	20	6.90	0.77	87.50	87.00	8.70	G	H	2	2	-	
132	LE132SF4E	5.50	1 770	29.7	9.90	0.78	89.50	89.60	8.00	H	G	2	2	-	
	LE132MF4E	7.50	1 770	40.5	12.80	0.82	89.50	90.30	8.00	H	J	2	2	-	
	LE132ZMM4E	9.20	1 760	49.9	15.50	0.82	89.50	O. R.	8.10	H	V	2	2	-	
160	LE160MF4E	11.00	1 775	59.2	18.10	0.84	91.00	91.30	7.70	J	P	2	2	-	
	LE160LD4E	15.00	1 780	80.5	24.50	0.84	91.00	90.70	8.50	J	U	2	2	-	
180	LES180MM4E	18.50	1 770	99.8	30.50	0.83	92.40	92.60	7.70	K	L	3	2	-	
	LES180ZLJ4E	22.00	1 770	118.7	36.00	0.83	92.40	92.50	8.40	K	N	3	2	-	
200	LES200LN4E	30.00	1 778	161.1	48.00	0.84	93.00	92.90	8.20	L	M	3	2	-	
225	LES225SD4E	37.00	1 778	198.7	57.00	0.87	93.00	93.20	7.20	M	F	3	2	-	
	LES225YM4E	45.00	1 778	241.7	70.00	0.86	93.60	93.80	7.60	M	T	3	2	-	
250	LES250MD4E	55.00	1 785	294	87.00	0.84	94.10	94.10	7.30	N	M	3	2	-	
2-pole, 3 600 rpm at 60 Hz, 50 Hz power															
80	LE80MA2E	0.75	3 445	2.08	1.50	0.83	75.50	75.50	6.00	D	B	2	2	P00	
	LE80ME2E	1.10	3 465	3.03	2.05	0.82	82.50	82.50	6.80	D	M	2	2	P00	
90	LE90SG2E	1.50	3 505	4.09	2.75	0.82	84.00	84.00	8.50	E	K	2	2	P00	
	LE90LH2E	2.20	3 510	5.99	3.90	0.83	85.50	85.50	8.70	E	M	2	2	P00	
100	LE100LD2E	3.00	3 520	8.14	5.20	0.83	87.50	87.30	8.10	F	K	2	2	P00	
112	LE112MA2E	3.70	3 565	9.91	6.30	0.84	87.50	87.40	9.30	G	G	2	2	P00	
132	LE132SB2E	5.50	3 555	14.8	9.10	0.86	88.50	88.30	7.60	H	E	2	2	P00	
	LE132SF2E	7.50	3 560	20.1	12.10	0.87	89.50	89.60	8.20	H	G	2	2	P00	
160	LE160MB2E	11.00	3 560	29.5	17.80	0.86	90.20	89.60	8.20	J	N	2	2	P00	
	LE160MG2E	15.00	3 565	40.2	24.00	0.87	90.20	89.90	8.40	J	Q	2	2	P00	
	LE160LB2E	18.50	3 565	49.6	29.50	0.87	91.00	90.50	8.90	J	T	2	2	P00	
6-pole, 1 200 rpm at 60 Hz, 50 Hz power															
80	LE80MD6E	0.37	1 140	3.1	0.98	0.63	75.30	74.10	4.60	D	C	2	2	P01	
	LE80MK6E	0.55	1 135	4.63	1.47	0.61	77.00	77.50	5.20	D	F	2	2	P01	
90	LE90SH6E	0.75	1 145	6.25	1.98	0.65	73.00	O. R.	4.50	E	C	2	2	P01	
	LE90LLB6E	1.10	1 145	9.17	2.80	0.66	75.00	O. R.	4.80	E	P	2	2	P01	
100	LE100LLB6E	1.50	1 175	12.2	3.15	0.69	86.50	86.30	6.40	F	P	2	2	P01	
112	LE112ME6E	2.20	1 170	18	4.30	0.73	87.50	87.30	6.30	G	H	2	2	P01	
132	LE132SC6E	3.00	1 175	24.4	6.20	0.69	87.50	87.10	6.00	H	F	2	2	P01	
	LE132MB6E	3.70	1 180	29.9	7.50	0.71	87.50	87.50	6.20	H	H	2	2	P01	
	LE132MJ6E	5.50	1 175	44.7	10.60	0.73	89.50	89.80	6.50	H	L	2	2	P01	
160	LE160ML6E	7.50	1 180	60.7	14.40	0.73	89.50	89.60	5.40	J	H	2	2	P01	
	LE160LL6E	11.00	1 180	89	20.50	0.74	90.20	90.50	5.50	J	V	2	2	P01	
180	LES180LE6E	15.00	1 178	121.6	27.00	0.77	90.20	90.20	6.90	K	M	3	2	P01	
200	LES200LG6E	18.50	1 182	149.5	31.50	0.81	91.70	92.10	6.70	L	L	3	2	P01	
	LES200LP6E	22.00	1 182	177.7	37.00	0.81	91.70	92.10	7.40	L	N	3	2	P01	
225	LES225YM6E	30.00	1 182	242.4	49.00	0.83	93.00	93.30	7.00	M	K	3	2	P01	
250	LES250MD6E	37.00	1 185	298	60.00	0.83	93.00	93.30	7.30	N	D	3	2	P01	
8-pole, 900 rpm at 60 Hz, 50 Hz power															
180	LES180LE8E	11.00	875	120	O. R.	0.69	88.50	88.80	5.60	K	M	3	2	P02	
200	LES200LP8E	15.00	875	163.7	O. R.	0.74	89.50	90.70	6.30	L	N	3	2	P02	
225	LES225SD8E	18.50	885	199.6	38.50	0.75	89.50	89.70	6.30	M	F	3	2	P02	
	LES225MD8E	22.00	885	237.4	45.00	0.78	91.00	91.30	6.40	M	G	3	2	P02	
250	LES250MD8E	30.00	885	324	60.00	0.79	91.00	91.30	6.40	N	D	3	2	P02	

O. R. On request

Selection and ordering data (continued)

Size	Motor	T_{St}/T_{rated}	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code	
										Data position					
											9.	10.	11.	12.	Number of poles
					dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg						
4-pole, 1 800 rpm at 60 Hz, 50 Hz power															
80	LE80MD4E	2.40	3.30	O. R.	55	66	10 000	17	9.30	D	C	2	2	-	
	LE80MH4E	2.50	3.80	O. R.	55	66	10 000	21	10.00	D	E	2	2	-	
90	LE90SG4E	2.70	3.60	O. R.	58	70	8 000	28	12.00	E	K	2	2	-	
	LE90LH4E	2.90	4.00	O. R.	58	70	8 000	36	15.00	E	M	2	2	-	
100	LE100LE4E	2.50	3.90	O. R.	62	74	7 000	86	20.00	F	L	2	2	-	
	LE100LK4E	2.40	3.70	O. R.	62	74	7 000	110	24.00	F	M	2	2	-	
112	LE112ME4E	3.00	4.00	O. R.	62	74	5 000	140	24.00	G	H	2	2	-	
132	LE132SF4E	2.60	3.30	O. R.	68	80	3 000	270	35.00	H	G	2	2	-	
	LE132MF4E	2.70	3.40	O. R.	68	80	3 000	340	42.00	H	J	2	2	-	
	LE132ZMM4E	2.50	3.60	O. R.	64	76	1 600	410	O. R.	H	V	2	2	-	
160	LE160MF4E	2.50	3.20	O. R.	69	81	2 000	650	61.00	J	P	2	2	-	
	LE160LD4E	2.60	3.40	O. R.	69	81	2 000	830	73.00	J	U	2	2	-	
180	LES180MM4E	2.80	3.90	O. R.	61	74	O. R.	1 200	151.00	K	L	3	2	-	
	LES180ZLJ4E	3.00	3.90	O. R.	62	74	O. R.	1 300	156.00	K	N	3	2	-	
200	LES200LN4E	3.20	3.70	O. R.	67	80	O. R.	2 000	211.00	L	M	3	2	-	
225	LES225SD4E	2.70	3.30	2.30	66	80	O. R.	4 200	280.00	M	F	3	2	-	
	LES225YMF4E	3.00	3.50	2.40	67	80	O. R.	4 600	305.00	M	T	3	2	-	
250	LES250MD4E	3.10	3.30	2.40	66	80	O. R.	7 500	385.00	N	M	3	2	-	
2-pole, 3 600 rpm at 60 Hz, 50 Hz power															
80	LE80MA2E	2.10	3.00	O. R.	64	75	3 000	8	8.30	D	B	2	2	P00	
	LE80ME2E	2.20	3.20	O. R.	64	75	3 000	11	10.00	D	M	2	2	P00	
90	LE90SG2E	3.10	4.50	O. R.	69	81	2 000	17	12.00	E	K	2	2	P00	
	LE90LH2E	3.00	4.60	O. R.	69	81	2 000	21	14.00	E	M	2	2	P00	
100	LE100LD2E	2.60	3.80	O. R.	71	83	2 000	44	21.00	F	K	2	2	P00	
112	LE112MA2E	2.90	4.00	O. R.	73	85	1 300	92	22.00	G	G	2	2	P00	
132	LE132SB2E	2.00	3.30	O. R.	72	84	800	200	32.00	H	E	2	2	P00	
	LE132SF2E	2.30	3.60	O. R.	72	84	800	240	36.00	H	G	2	2	P00	
160	LE160MB2E	2.40	3.60	O. R.	77	89	500	450	57.00	J	N	2	2	P00	
	LE160MG2E	2.80	3.90	O. R.	77	89	500	530	65.00	J	Q	2	2	P00	
	LE160LB2E	3.30	4.10	O. R.	77	89	500	610	74.00	J	T	2	2	P00	
6-pole, 1 200 rpm at 60 Hz, 50 Hz power															
80	LE80MD6E	2.30	2.90	O. R.	45	56	8 400	17	8.30	D	C	2	2	P01	
	LE80MK6E	2.90	3.60	O. R.	45	56	8 400	25	11.30	D	F	2	2	P01	
90	LE90SH6E	2.20	3.00	O. R.	46	58	7 000	30	12.00	E	C	2	2	P01	
	LE90LLB6E	2.40	3.10	O. R.	46	58	7 000	40	15.00	E	P	2	2	P01	
100	LE100LLB6E	2.20	3.20	O. R.	62	74	6 300	110	24.00	F	P	2	2	P01	
112	LE112ME6E	2.10	3.20	O. R.	65	77	5 600	140	24.00	G	H	2	2	P01	
132	LE132SC6E	1.80	2.90	O. R.	67	79	4 200	240	31.00	H	F	2	2	P01	
	LE132MB6E	1.90	3.00	O. R.	67	79	4 200	290	36.00	H	H	2	2	P01	
	LE132MJ6E	2.10	2.90	O. R.	67	79	3 500	370	45.00	H	L	2	2	P01	
160	LE160ML6E	2.10	2.50	O. R.	70	82	2 800	750	67.00	J	H	2	2	P01	
	LE160LL6E	2.20	2.50	O. R.	70	82	2 800	980	83.00	J	V	2	2	P01	
180	LES180LE6E	2.80	3.40	O. R.	60	74	O. R.	1 700	141.00	K	M	3	2	P01	
200	LES200LG6E	2.60	3.00	O. R.	62	76	O. R.	2 500	181.00	L	L	3	2	P01	
	LES200LP6E	3.00	3.00	O. R.	62	76	O. R.	3 000	201.00	L	N	3	2	P01	
225	LES225YMF6E	2.90	3.10	2.30	60	73	O. R.	5 800	285.00	M	K	3	2	P01	
250	LES250MD6E	3.30	2.80	2.30	63	77	O. R.	8 600	370.00	N	D	3	2	P01	
8-pole, 900 rpm at 60 Hz, 50 Hz power															
180	LES180LE8E	2.60	2.90	O. R.	71	78	O. R.	1 950	155.00	K	M	3	2	P02	
200	LES200LP8E	2.80	3.30	O. R.	59	66	O. R.	3 440	220.00	L	N	3	2	P02	
225	LES225SD8E	2.50	3.10	2.10	54	67	O. R.	4 300	250.00	M	F	3	2	P02	
	LES225MD8E	2.50	3.00	2.10	55	68	O. R.	5 000	270.00	M	G	3	2	P02	
250	LES250MD8E	2.70	3.00	2.10	57	71	O. R.	8 600	370.00	N	D	3	2	P02	

O. R. On request

SIMOGEAR Geared Motors

Motors

IE2

Motors with High Efficiency IE2

Selection and ordering data (continued)

Size	Motor	P_{rated} kW	n_{rated} rpm	T_{rated} Nm	I_{rated} A	$\cos \varphi$ -	η		I_{St}/I_{rated} -	Article No.				Order code Number of poles	
							4/4 load	3/4 load		Data position					
						%				9.	10.	11.	12.		
4-pole, 1 800 rpm at 60 Hz, 60 Hz power															
80	LE80MD4E	0.63	1 735	3.47	1.30	0.76	80.00	79.50	6.00	D	C	2	2	-	
	LE80MH4E	0.86	1 740	4.72	1.72	0.76	82.50	82.30	6.20	D	E	2	2	-	
90	LE90SG4E	1.27	1 725	7.03	2.45	0.78	84.00	84.60	6.10	E	K	2	2	-	
	LE90LH4E	1.75	1 730	9.66	3.30	0.79	84.00	84.70	6.40	E	M	2	2	-	
100	LE100LE4E	2.55	1 755	13.9	4.45	0.81	87.50	87.60	7.30	F	L	2	2	-	
	LE100LK4E	3.45	1 755	18.8	6.00	0.82	87.50	88.30	7.50	F	M	2	2	-	
112	LE112ME4E	4.55	1 760	24.7	8.00	0.82	87.50	88.00	7.50	G	H	2	2	-	
132	LE132SF4E	6.30	1 765	34.1	10.90	0.81	89.50	89.80	7.30	H	G	2	2	-	
	LE132MF4E	8.60	1 765	46.5	14.50	0.83	89.50	90.50	7.10	H	J	2	2	-	
	LE132ZMM4E	10.50	1 760	57	17.70	0.83	91.00	O. R.	7.20	H	V	2	2	-	
160	LE160MF4E	12.60	1 770	68	20.50	0.85	91.00	91.40	7.00	J	P	2	2	-	
	LE160LD4E	17.30	1 775	93.1	27.50	0.86	92.40	92.40	7.70	J	U	2	2	-	
180	LES180MM4E	21.30	1 765	115.2	34.00	0.85	92.40	93.10	6.80	K	L	3	2	-	
	LES180ZLJ4E	25.30	1 765	136.9	40.50	0.85	92.40	92.90	7.50	K	N	3	2	-	
200	LES200LN4E	34.50	1 770	186.1	55.00	0.85	93.00	93.40	7.20	L	M	3	2	-	
225	LES225SD4E	42.50	1 770	229.3	65.00	0.88	93.60	94.20	6.60	M	F	3	2	-	
	LES225YMF4E	52.00	1 775	280	80.00	0.87	94.10	94.70	6.80	M	T	3	2	-	
250	LES250MD4E	63.00	1 780	338	99.00	0.85	94.10	94.40	6.60	N	M	3	2	-	
2-pole, 3 600 rpm at 60 Hz, 60 Hz power															
80	LE80MA2E	0.86	3 410	2.41	1.70	0.84	75.50	77.00	5.20	D	B	2	2	P00	
	LE80ME2E	1.27	3 430	3.54	2.30	0.84	82.50	83.80	6.30	D	M	2	2	P00	
90	LE90SG2E	1.75	3 480	4.8	3.10	0.85	84.00	84.50	7.40	E	K	2	2	P00	
	LE90LH2E	2.55	3 485	6.99	4.35	0.86	85.50	86.40	7.60	E	M	2	2	P00	
100	LE100LD2E	3.45	3 505	9.4	5.80	0.85	87.50	86.40	7.30	F	K	2	2	P00	
112	LE112MA2E	4.55	3 550	12.2	7.50	0.87	87.50	87.40	7.80	G	G	2	2	P00	
132	LE132SB2E	6.30	3 550	16.9	10.20	0.88	88.50	89.30	6.90	H	E	2	2	P00	
	LE132SF2E	8.60	3 550	23.1	13.70	0.88	89.50	90.50	7.40	H	G	2	2	P00	
160	LE160MB2E	12.60	3 555	33.8	19.90	0.85	90.20	89.60	7.40	J	N	2	2	P00	
	LE160MG2E	17.30	3 555	46.5	27.00	0.88	91.00	90.60	7.60	J	Q	2	2	P00	
	LE160LB2E	21.30	3 555	57.2	33.00	0.88	91.00	90.60	7.90	J	T	2	2	P00	
6-pole, 1 200 rpm at 60 Hz, 60 Hz power															
80	LE80MD6E	0.43	1 125	3.65	1.04	0.69	75.30	75.30	4.20	D	C	2	2	P01	
	LE80MK6E	0.63	1 135	5.3	1.56	0.66	77.00	77.50	4.80	D	F	2	2	P01	
90	LE90SH6E	0.86	1 145	7.17	1.85	0.73	73.00	73.00	4.80	E	C	2	2	P01	
	LE90LLB6E	1.27	1 135	10.7	3.05	0.70	75.00	75.00	4.40	E	P	2	2	P01	
100	LE100LLB6E	1.75	1 170	14.3	3.45	0.74	86.50	87.10	5.80	F	P	2	2	P01	
112	LE112ME6E	2.55	1 165	20.9	4.90	0.75	87.50	88.10	5.50	G	H	2	2	P01	
132	LE132SC6E	3.45	1 170	28.2	6.90	0.72	87.50	87.80	5.20	H	F	2	2	P01	
	LE132MB6E	4.55	1 170	37.1	8.70	0.75	87.50	88.50	5.30	H	H	2	2	P01	
	LE132MJ6E	6.30	1 170	51.4	11.60	0.76	89.50	90.00	5.80	H	L	2	2	P01	
160	LE160ML6E	8.60	1 175	69.9	16.10	0.75	89.50	90.20	4.90	J	H	2	2	P01	
	LE160LL6E	12.60	1 175	102.4	23.00	0.76	90.20	91.00	4.90	J	V	2	2	P01	
180	LES180LE6E	18.00	1 170	146.9	31.00	0.80	91.70	92.20	6.00	K	M	3	2	P01	
200	LES200LG6E	22.00	1 175	178.8	36.50	0.83	91.00	91.90	5.80	L	L	3	2	P01	
	LES200LP6E	26.50	1 175	215.4	43.50	0.83	91.70	92.80	6.30	L	N	3	2	P01	
225	LES225YMF6E	36.00	1 175	293	59.00	0.84	91.70	92.50	6.00	M	K	3	2	P01	
250	LES250MD6E	44.50	1 180	360	73.00	0.84	91.70	92.50	6.30	N	D	3	2	P01	
8-pole, 900 rpm at 60 Hz, 60 Hz power															
180	LES180LE8E	12.60	865	139.1	26.00	0.73	86.80	87.80	4.90	K	M	3	2	P02	
200	LES200LP8E	18.00	865	198.7	32.50	0.78	89.50	91.20	5.40	L	N	3	2	P02	
225	LES225SD8E	22.00	880	238.7	38.50	0.79	90.30	91.20	5.40	M	F	3	2	P02	
	LES225MD8E	26.50	880	288	45.00	0.81	91.00	91.90	5.40	M	G	3	2	P02	
250	LES250MD8E	36.00	880	391	60.00	0.82	91.70	92.50	5.40	N	D	3	2	P02	

O. R. On request

Selection and ordering data (continued)

Size	Motor	T_{St}/T_{rated}	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code
										Data position				
					dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg	9.	10.	11.	12.	Number of poles
4-pole, 1 800 rpm at 60 Hz, 60 Hz power														
80	LE80MD4E	2.30	3.20	2.50	55	66	10 000	17	9.30	D	C	2	2	-
	LE80MH4E	2.20	3.30	2.40	55	66	10 000	21	10.00	D	E	2	2	-
90	LE90SG4E	2.30	3.00	2.50	58	70	8 000	28	12.00	E	K	2	2	-
	LE90LH4E	2.60	3.40	2.80	58	70	8 000	36	15.00	E	M	2	2	-
100	LE100LE4E	2.10	3.30	2.30	62	74	7 000	86	20.00	F	L	2	2	-
	LE100LK4E	2.00	3.10	2.20	62	74	7 000	110	24.00	F	M	2	2	-
112	LE112ME4E	2.40	3.20	2.60	62	74	5 000	140	24.00	G	H	2	2	-
132	LE132SF4E	2.30	2.90	2.50	68	80	3 000	270	35.00	H	G	2	2	-
	LE132MF4E	2.30	2.90	2.50	68	80	3 000	340	42.00	H	J	2	2	-
	LE132ZMM4E	2.10	3.00	O. R.	64	76	1 600	410	O. R.	H	V	2	2	-
160	LE160MF4E	2.20	2.80	2.40	69	81	2 000	650	61.00	J	P	2	2	-
	LE160LD4E	2.30	2.90	2.50	69	81	2 000	830	73.00	J	U	2	2	-
180	LES180MM4E	2.50	3.40	O. R.	61	74	O. R.	1200	151.00	K	L	3	2	-
	LES180ZLJ4E	2.60	3.40	O. R.	62	74	O. R.	1300	156.00	K	N	3	2	-
200	LES200LN4E	2.70	3.20	O. R.	67	80	O. R.	2000	211.00	L	M	3	2	-
225	LES225SD4E	2.30	2.90	2.00	66	80	O. R.	4200	280.00	M	F	3	2	-
	LES225YMF4E	2.50	3.10	2.10	67	80	O. R.	4600	305.00	M	T	3	2	-
250	LES250MD4E	2.80	2.90	2.10	66	80	O. R.	7500	385.00	N	M	3	2	-
2-pole, 3 600 rpm at 60 Hz, 60 Hz power														
80	LE80MA2E	1.90	2.30	2.00	64	75	3 000	8	8.30	D	B	2	2	P00
	LE80ME2E	2.70	3.30	2.90	64	75	3 000	11	10.00	D	M	2	2	P00
90	LE90SG2E	2.60	3.80	2.80	69	81	2 000	17	12.00	E	K	2	2	P00
	LE90LH2E	2.60	3.90	2.80	69	81	2 000	21	14.00	E	M	2	2	P00
100	LE100LD2E	2.20	3.30	2.40	71	83	2 000	44	21.00	F	K	2	2	P00
112	LE112MA2E	2.40	3.30	2.60	73	85	1 300	92	22.00	G	G	2	2	P00
132	LE132SB2E	1.80	2.90	1.90	72	84	800	200	32.00	H	E	2	2	P00
	LE132SF2E	2.00	3.10	2.20	72	84	800	240	36.00	H	G	2	2	P00
160	LE160MB2E	2.10	3.20	2.30	77	89	500	450	57.00	J	N	2	2	P00
	LE160MG2E	2.40	3.40	2.60	77	89	500	530	65.00	J	Q	2	2	P00
	LE160LB2E	2.90	3.60	3.10	77	89	500	610	74.00	J	T	2	2	P00
6-pole, 1 200 rpm at 60 Hz, 60 Hz power														
80	LE80MD6E	2.10	2.60	2.30	45	56	8 400	17	8.30	D	C	2	2	P01
	LE80MK6E	2.60	3.10	2.80	45	56	8 400	25	11.30	D	F	2	2	P01
90	LE90SH6E	1.90	2.60	1.80	46	58	7 000	30	12.00	E	C	2	2	P01
	LE90LLB6E	2.10	2.60	O. R.	46	58	7 000	40	15.00	E	P	2	2	P01
100	LE100LLB6E	1.90	2.80	O. R.	62	74	6 300	110	24.00	F	P	2	2	P01
112	LE112ME6E	1.90	2.80	O. R.	65	77	5 600	140	24.00	G	H	2	2	P01
132	LE132SC6E	1.60	2.60	O. R.	67	79	4 200	240	31.00	H	F	2	2	P01
	LE132MB6E	1.60	2.40	O. R.	67	79	4 200	290	36.00	H	H	2	2	P01
	LE132MJ6E	1.90	2.60	O. R.	67	79	3 500	370	45.00	H	L	2	2	P01
160	LE160ML6E	1.90	2.20	O. R.	70	82	2 800	750	67.00	J	H	2	2	P01
	LE160LL6E	1.90	2.20	O. R.	70	82	2 800	980	83.00	J	V	2	2	P01
180	LES180LE6E	2.40	2.90	O. R.	60	74	O. R.	1 700	141.00	K	M	3	2	P01
200	LES200LG6E	2.30	2.50	O. R.	62	76	O. R.	2 500	181.00	L	L	3	2	P01
	LES200LP6E	2.50	2.50	O. R.	62	76	O. R.	3 000	201.00	L	N	3	2	P01
225	LES225YMF6E	2.40	2.70	1.90	60	73	O. R.	5 800	285.00	M	K	3	2	P01
250	LES250MD6E	2.70	2.30	1.90	63	77	O. R.	8 600	370.00	N	D	3	2	P01
8-pole, 900 rpm at 60 Hz, 60 Hz power														
180	LES180LE8E	2.20	2.40	O. R.	71	78	O. R.	1 950	155.00	K	M	3	2	P02
200	LES200LP8E	2.30	2.70	O. R.	59	66	O. R.	3 440	220.00	L	N	3	2	P02
225	LES225SD8E	2.10	2.60	1.80	54	67	O. R.	4 300	250.00	M	F	3	2	P02
	LES225MD8E	2.20	2.60	1.80	55	68	O. R.	5 000	270.00	M	G	3	2	P02
250	LES250MD8E	2.20	2.50	1.80	57	71	O. R.	8 600	370.00	N	D	3	2	P02

O. R. On request

SIMOGEAR Geared Motors

Motors

IE2

Motors with High Efficiency IE2

Selection and ordering data (continued)

Size	Motor	P_{rated}	n_{rated}	T_{rated}	I_{rated}	$\cos \varphi$	η	T_{Bk}/T_{rated}	Article No.				Order code	
		kW	rpm	Nm	400 V A	-	4/4 load %	-	Data position 9. 10. 11. 12.				Power	Number of poles
4-pole, 2 610 rpm at 87 Hz, 400 V, duty type S9														
80	LE80MD4E	0.95	2 555	3.55	2.45	0.68	82.10	3.1	D	C	2	2	P91	-
	LE80MH4E	1.30	2 555	4.86	3.20	0.71	83.00	3.1	D	E	2	2	P91	-
90	LE90SG4E	1.90	2 540	7.14	4.50	0.72	84.30	2.9	E	K	2	2	P91	-
	LE90LH4E	2.60	2 550	9.74	5.80	0.73	85.70	3.6	E	M	2	2	P91	-
100	LE100LE4E	3.60	2 570	13.4	7.50	0.79	87.80	3.5	F	L	2	2	P91	-
	LE100LK4E	5.00	2 565	18.6	10.30	0.80	88.00	3.2	F	M	2	2	P91	-
112	LE112ME4E	6.50	2 570	24.2	14.00	0.76	88.20	3.4	G	H	2	2	P91	-
132	LE132SF4E	9.00	2 575	33.4	18.80	0.78	88.60	3.1	H	G	2	2	P91	-
	LE132MF4E	12.50	2 575	46.4	24.50	0.82	89.80	3.0	H	J	2	2	P91	-
	LE132ZMM4E	16.00	2 570	59.5	30.50	0.82	90.00	3.1	H	V	2	2	P91	-
160	LE160MF4E	17.00	2 585	62.8	33.00	0.81	91.20	3.1	J	P	2	2	P91	-
	LE160LD4E	23.50	2 585	86.8	45.50	0.81	92.20	3.3	J	U	2	2	P91	-
180	LES180MM4E	29.00	2 580	107.3	55.00	0.82	92.6	3.8	K	L	3	2	P91	-
	LES180ZLJ4E	34.00	2 575	126.1	65.00	0.83	91.0	3.9	K	N	3	2	P91	-
200	LES200LN4E	46.50	2 580	172.1	88.00	0.83	91.8	3.7	L	M	3	2	P91	-
225	LES225SD4E	55.50	2 580	205.4	105.00	0.87	91.90	3.2	M	F	3	2	P91	-
	LES225YMF4E	67.50	2 580	249.8	128.00	0.87	92.20	3.3	M	T	3	2	P91	-
250	LES250MD4E	82.50	2 590	304	160.00	0.83	93.20	3.4	N	M	3	2	P91	-
6-pole, 1 740 rpm at 87 Hz, 400 V, duty type S9														
80	LE80MD6E	0.65	1 675	3.71	1.85	0.63	78.90	2.5	D	C	2	2	P91	P01
	LE80MK6E	0.95	1 675	5.42	2.75	0.61	81.20	3.0	D	F	2	2	P91	P01
90	LE90SH6E	1.30	1 680	7.39	3.30	0.68	83.10	2.5	E	C	2	2	P91	P01
	LE90LLB6E	1.90	1 680	10.8	5.00	0.66	82.20	2.7	E	P	2	2	P91	P01
100	LE100LLB6E	2.60	1 710	14.5	6.10	0.70	88.00	2.8	F	P	2	2	P91	P01
112	LE112ME6E	3.80	1 710	21.2	8.60	0.73	87.00	2.8	G	H	2	2	P91	P01
132	LE132SC6E	5.00	1 715	27.8	11.80	0.70	87.40	2.6	H	F	2	2	P91	P01
	LE132MB6E	6.50	1 715	36.2	14.30	0.74	88.40	2.5	H	H	2	2	P91	P01
	LE132MJ6E	9.00	1 715	50.1	19.50	0.74	89.80	2.8	H	L	2	2	P91	P01
160	LE160ML6E	12.00	1 720	66.6	26.00	0.74	90.10	2.4	J	H	2	2	P91	P01
	LE160LL6E	17.00	1 720	94.4	35.00	0.77	90.80	2.5	J	V	2	2	P91	P01
180	LES180LE6E	26.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	K	M	3	2	P91	P01
200	LES200LG6E	32.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	L	L	3	2	P91	P01
	LES200LP6E	38.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	L	N	3	2	P91	P01
225	LES225YMF6E	45.00	1 182	364	O. R.	0.83	93.00	3.1	M	K	3	2	P91	P01
250	LES250MD6E	55.50	1 185	447	O. R.	0.83	93.00	2.8	N	D	3	2	P91	P01
8-pole, 1 305 rpm at 87 Hz, 400 V, duty type S9														
180	LES180LE8E	19.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	K	M	3	2	P91	P02
200	LES200LP8E	26.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	L	N	3	2	P91	P02
225	LES225SD8E	32.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	M	F	3	2	P91	P02
	LES225MD8E	38.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	M	G	3	2	P91	P02
250	LES250MD8E	45.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	N	D	3	2	P91	P02

O. R. On request

Selection and ordering data (continued)

Size	Motor	L_{pFA}	L_{WA}	J_{mot}	m_{mot}	Article No.				Order code							
		dB (A)	dB (A)	10^{-4} kgm ²	kg	Data position				Power	Number of poles						
												9.	10.	11.	12.		
4-pole, 2 610 rpm at 87 Hz, 400 V, duty type S9																	
80	LE80MD4E	O. R.	O. R.	17	9.30	D	C	2	2	P91	-						
	LE80MH4E	O. R.	O. R.	21	10.00	D	E	2	2	P91	-						
90	LE90SG4E	O. R.	O. R.	28	12.00	E	K	2	2	P91	-						
	LE90LH4E	O. R.	O. R.	36	15.00	E	M	2	2	P91	-						
100	LE100LE4E	O. R.	O. R.	86	20.00	F	L	2	2	P91	-						
	LE100LK4E	O. R.	O. R.	110	24.00	F	M	2	2	P91	-						
112	LE112ME4E	O. R.	O. R.	140	24.00	G	H	2	2	P91	-						
132	LE132SF4E	O. R.	O. R.	270	35.00	H	G	2	2	P91	-						
	LE132MF4E	O. R.	O. R.	340	42.00	H	J	2	2	P91	-						
	LE132ZMM4E	O. R.	O. R.	410	O. R.	H	V	2	2	P91	-						
160	LE160MF4E	O. R.	O. R.	650	61.00	J	P	2	2	P91	-						
	LE160LD4E	O. R.	O. R.	830	73.00	J	U	2	2	P91	-						
180	LES180MM4E	O. R.	O. R.	1 200	151.00	K	L	3	2	P91	-						
	LES180ZLJ4E	O. R.	O. R.	1 300	156.00	K	N	3	2	P91	-						
200	LES200LN4E	O. R.	O. R.	2 000	211.00	L	M	3	2	P91	-						
225	LES225SD4E	79	O. R.	4 200	280.00	M	F	3	2	P91	-						
	LES225YMF4E	79	O. R.	4 600	305.00	M	T	3	2	P91	-						
250	LES250MD4E	78	O. R.	7 500	385.00	N	M	3	2	P91	-						
6-pole, 1 740 rpm at 87 Hz, 400 V, duty type S9																	
80	LE80MD6E	O. R.	O. R.	17	8.30	D	C	2	2	P91	P01						
	LE80MK6E	O. R.	O. R.	25	11.30	D	F	2	2	P91	P01						
90	LE90SH6E	O. R.	O. R.	30	12.00	E	C	2	2	P91	P01						
	LE90LLB6E	O. R.	O. R.	40	15.00	E	P	2	2	P91	P01						
100	LE100LLB6E	O. R.	O. R.	110	24.00	F	P	2	2	P91	P01						
	LE112ME6E	O. R.	O. R.	140	24.00	G	H	2	2	P91	P01						
132	LE132SC6E	O. R.	O. R.	240	31.00	H	F	2	2	P91	P01						
	LE132MB6E	O. R.	O. R.	290	36.00	H	H	2	2	P91	P01						
	LE132MJ6E	O. R.	O. R.	370	45.00	H	L	2	2	P91	P01						
160	LE160ML6E	O. R.	O. R.	750	67.00	J	H	2	2	P91	P01						
	LE160LL6E	O. R.	O. R.	980	83.00	J	V	2	2	P91	P01						
180	LES180LE6E	O. R.	O. R.	1 700	141.00	K	M	3	2	P91	P01						
200	LES200LG6E	O. R.	O. R.	2 500	181.00	L	L	3	2	P91	P01						
	LES200LP6E	O. R.	O. R.	3 000	201.00	L	N	3	2	P91	P01						
225	LES225YMF6E	O. R.	O. R.	5 800	285.00	M	K	3	2	P91	P01						
250	LES250MD6E	O. R.	O. R.	8 600	370.00	N	D	3	2	P91	P01						
8-pole, 1 305 rpm at 87 Hz, 400 V, duty type S9																	
180	LES180LE8E	O. R.	O. R.	1 950	155.00	K	M	3	2	P91	P02						
200	LES200LP8E	O. R.	O. R.	3 440	220.00	L	N	3	2	P91	P02						
225	LES225SD8E	O. R.	O. R.	4 300	250.00	M	F	3	2	P91	P02						
	LES225MD8E	O. R.	O. R.	5 000	270.00	M	G	3	2	P91	P02						
250	LES250MD8E	O. R.	O. R.	8 600	370.00	N	D	3	2	P91	P02						

O. R. On request

1) Variable data as a result of inverter operation

SIMOGEAR Geared Motors

Motors

IE3

Motors with Premium Efficiency IE3

Selection and ordering data

Size	Motor	P_{rated} kW	n_{rated} rpm	T_{rated} Nm	I_{rated} A	$\cos \varphi$ -	η		I_{St}/I_{rated} -	Article No.				Order code Number of poles	
							4/4 load	3/4 load		Data position					
										9.	10.	11.	12.		
4-pole, 1 500 rpm at 50 Hz															
80	LE80ZMQ4P	0.75	1 450	4.94	1.73	0.75	82.50	82.30	7.10	D	F	2	3	-	
90	LE90SM4P	1.10	1 440	7.29	2.40	0.78	84.10	84.60	6.90	E	K	2	3	-	
	LE90ZLR4P	1.50	1 445	9.91	3.15	0.80	85.30	85.90	7.20	E	M	2	3	-	
100	LE100ZLSA4P	2.20	1 465	14.3	4.40	0.83	86.70	86.70	7.60	F	N	2	3	-	
	LE100ZLSB4P	3.00	1 460	19.6	5.90	0.83	87.70	87.70	7.30	F	P	2	3	-	
112	LE112ZMKB4P	4.00	1 460	26.2	7.90	0.82	88.60	88.60	7.10	G	J	2	3	-	
132	LE132ZST4P	5.50	1 470	35.7	10.50	0.84	89.60	89.60	7.20	H	J	2	3	-	
	LE132ZMS4P	7.50	1 470	48.7	14.30	0.84	90.40	90.40	7.40	H	L	2	3	-	
160	LE160MPA4P	9.20	1 480	59.4	18.70	0.78	91.00	O. R.	7.60	J	Q	2	3	-	
	LE160MPB4P	11.00	1 475	71.2	20.50	0.84	91.40	91.40	6.90	J	R	2	3	-	
	LE160ZLL4P	15.00	1 475	97.1	28.50	0.82	92.10	92.10	8.50	J	U	2	3	-	
180	LES180MQ4P	18.50	1 470	120.2	35.00	0.82	92.60	93.10	7.20	K	L	3	3	-	
	LES180ZLN4P	22.00	1 470	142.9	41.00	0.83	93.00	93.60	6.80	K	N	3	3	-	
200	LES200ZLU4P	30.00	1 470	194.9	55.00	0.84	93.60	94.20	7.30	L	N	3	3	-	
225	LES225SD4P	37.00	1 478	239.1	66.00	0.86	93.90	94.50	6.40	M	F	3	3	-	
	LES225YMF4P	45.00	1 478	291	80.00	0.86	94.20	94.90	6.40	M	T	3	3	-	
250	LES250MD4P	55.00	1 482	354	96.00	0.87	94.60	95.10	6.80	N	M	3	3	-	
2-pole, 3 000 rpm at 50 Hz															
80	LE80ME2P	0.75	2 850	2.51	1.56	0.86	80.70	82.00	6.20	D	B	2	3	P00	
	LE80ZMJ2P	1.10	2 885	3.64	2.25	0.85	82.70	82.70	7.40	D	M	2	3	P00	
90	LE90SM2P	1.50	2 910	4.92	3.00	0.86	84.20	84.50	8.10	E	K	2	3	P00	
	LE90ZLR2P	2.20	2 910	7.22	4.20	0.88	85.90	86.80	8.30	E	M	2	3	P00	
100	LE100ZLK2P	3.00	2 920	9.81	5.60	0.88	87.10	87.10	8.00	F	K	2	3	P00	
112	LE112ZMH2P	4.00	2 950	12.9	7.40	0.89	88.10	88.10	7.50	G	G	2	3	P00	
132	LE132SF2P	5.50	2 950	17.8	9.90	0.90	89.20	89.20	7.40	H	E	2	3	P00	
	LE132ZSQB2P	7.50	2 950	24.3	13.10	0.92	90.10	90.10	8.30	H	H	2	3	P00	
160	LE160MG2P	11.00	2 955	35.5	19.60	0.89	91.20	91.20	7.90	J	N	2	3	P00	
	LE160MM2P	15.00	2 960	48.4	27.00	0.87	91.90	91.90	8.70	J	P	2	3	P00	
	LE160ZLJ2P	18.50	2 955	59.8	32.00	0.90	92.40	92.40	9.00	J	T	2	3	P00	
6-pole, 1 000 rpm at 50 Hz															
90	LE90SQ6P	0.75	945	7.58	1.96	0.70	78.90	80.00	4.60	E	C	2	3	P01	
	LE90ZLR6P	1.10	940	11.2	2.85	0.69	81.00	80.00	4.60	E	M	2	3	P01	
100	LE100LLB6P	1.50	970	14.8	3.60	0.73	82.50	83.10	5.20	F	M	2	3	P01	
112	LE112ZMKB6P	2.20	970	21.7	5.00	0.75	84.30	85.10	5.60	G	J	2	3	P01	
132	LE132SH6P	3.00	975	29.4	6.60	0.77	85.60	87.50	5.30	H	H	2	3	P01	
	LE132MJ6P	4.00	975	39.2	8.60	0.77	86.80	88.10	5.60	H	K	2	3	P01	
	LE132ZMS6P	5.50	975	53.9	11.70	0.77	88.00	89.00	5.70	H	L	2	3	P01	
160	LE160MW6P	7.50	980	73.1	16.00	0.76	89.10	89.90	4.90	J	J	2	3	P01	
	LE160ZLW6P	11.00	975	107.7	23.00	0.77	90.30	91.10	5.00	J	V	2	3	P01	
180	LES180LJ6P	15.00	975	146.9	29.50	0.80	91.20	91.90	5.90	K	M	3	3	P01	
200	LES200LM6P	18.50	978	180.6	37.00	0.79	91.70	92.50	5.60	L	L	3	3	P01	
	LES200ZLS6P	22.00	978	214.8	43.50	0.79	92.20	93.10	5.60	L	M	3	3	P01	
225	LES225YMF6P	30.00	982	292.0	56.00	0.83	92.90	93.60	6.60	M	K	3	3	P01	
250	LES250MD6P	37.00	985	359.0	70.00	0.85	93.30	94.00	7.00	N	D	3	3	P01	

O. R. On request

Selection and ordering data (continued)

Size	Motor	T_{St}/T_{rated}	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code
										Data position				
										9.	10.	11.	12.	Number of poles
4-pole, 1 500 rpm at 50 Hz														
80	LE80ZMQ4P	2.70	3.90	O. R.	53	64	15 000	29	10.00	D	F	2	3	-
90	LE90SM4P	2.90	3.60	O. R.	56	68	9 000	36	12.00	E	K	2	3	-
	LE90ZLR4P	2.60	2.70	O. R.	56	68	7 500	49	15.00	E	M	2	3	-
100	LE100ZLSA4P	2.10	3.60	3.50	60	72	6 000	140	29.00	F	N	2	3	-
	LE100ZLSB4P	2.30	3.70	2.70	60	72	6 000	140	29.00	F	P	2	3	-
112	LE112ZMKB4P	2.40	3.70	2.60	58	70	5 100	170	29.00	G	J	2	3	-
132	LE132ZST4P	2.10	3.40	3.00	64	76	4 500	460	57.00	H	J	2	3	-
	LE132ZMS4P	2.40	3.50	2.80	64	76	4 500	460	57.00	H	L	2	3	-
160	LE160MPA4P	2.30	3.60	O. R.	65	77	3 000	830	73.00	J	Q	2	3	-
	LE160MPB4P	2.20	3.20	2.80	65	77	3 000	830	73.00	J	R	2	3	-
	LE160ZLL4P	2.50	3.80	2.70	65	77	3 000	990	90.00	J	U	2	3	-
180	LES180MQ4P	2.50	3.30	2.80	66	73	600	1 300	165.00	K	L	3	3	-
	LES180ZLN4P	2.30	3.30	2.50	68	75	550	1 400	170.00	K	N	3	3	-
200	LES200ZLU4P	2.60	3.10	2.90	65	72	400	2 200	240.00	L	N	3	3	-
225	LES225SD4P	2.50	2.70	2.00	57	70	400	4 200	285.00	M	F	3	3	-
	LES225YMF4P	2.60	2.70	2.00	57	70	435	4 700	320.00	M	T	3	3	-
250	LES250MD4P	2.50	2.90	2.00	57	70	170	8 500	420.00	N	M	3	3	-
2-pole, 3 000 rpm at 50 Hz														
80	LE80ME2P	2.60	3.00	O. R.	60	71	5 100	11	9.30	D	B	2	3	P00
	LE80ZMJ2P	2.80	3.80	O. R.	60	71	8 700	13	10.00	D	M	2	3	P00
90	LE90SM2P	2.70	4.20	O. R.	65	77	6 000	21	12.00	E	K	2	3	P00
	LE90ZLR2P	2.60	4.00	O. R.	65	77	6 000	31	15.00	E	M	2	3	P00
100	LE100ZLK2P	2.80	4.30	3.50	67	79	2 700	54	26.00	F	K	2	3	P00
112	LE112ZMH2P	1.90	3.90	3.10	69	81	1 350	120	29.00	G	G	2	3	P00
132	LE132SF2P	1.80	3.60	2.00	68	80	1 350	240	36.00	H	E	2	3	P00
	LE132ZSQB2P	1.90	3.90	2.30	68	80	1 080	310	50.00	H	H	2	3	P00
160	LE160MG2P	2.40	3.80	2.70	70	82	600	530	65.00	J	N	2	3	P00
	LE160MM2P	2.70	4.30	3.00	70	82	600	610	74.00	J	P	2	3	P00
	LE160ZLJ2P	2.80	4.20	3.00	70	82	840	680	84.00	J	T	2	3	P00
6-pole, 1 000 rpm at 50 Hz														
90	LE90SQ6P	2.20	2.60	2.40	43	55	13 700	40	15.00	E	C	2	3	P01
	LE90ZLR6P	2.30	2.70	2.50	43	55	O. R.	48	18.00	E	M	2	3	P01
100	LE100LLB6P	1.90	2.80	O. R.	59	71	6 900	110	29.00	F	M	2	3	P01
112	LE112ZMKB6P	2.20	2.80	O. R.	65	74	6 900	170	29.00	G	J	2	3	P01
132	LE132SH6P	1.60	2.40	O. R.	63	75	3 900	290	36.00	H	H	2	3	P01
	LE132MJ6P	1.70	2.50	O. R.	63	75	3 900	370	45.00	H	K	2	3	P01
	LE132ZMS6P	1.80	2.60	O. R.	63	75	3 900	460	45.00	H	L	2	3	P01
160	LE160MW6P	1.90	2.30	O. R.	67	79	3 300	980	83.00	J	J	2	3	P01
	LE160ZLW6P	1.90	2.30	O. R.	67	79	2 700	1 200	105.00	J	V	2	3	P01
180	LES180LJ6P	2.30	2.80	2.50	61	68	800	1 900	180.00	K	M	3	3	P01
200	LES200LM6P	2.50	2.60	2.80	64	71	680	2 800	215.00	L	L	3	3	P01
	LES200ZLS6P	2.50	2.60	2.80	61	68	680	3 200	230.00	L	M	3	3	P01
225	LES225YMF6P	2.60	3.00	2.10	O. R.	O. R.	270	6 700	325.00	M	K	3	3	P01
250	LES250MD6P	2.70	2.90	2.10	O. R.	O. R.	205	10 000	405.00	N	D	3	3	P01

O. R. On request

SIMOGEAR Geared Motors

Motors

IE3

Motors with Premium Efficiency IE3

Selection and ordering data (continued)

Size	Motor	P_{rated} kW	n_{rated} rpm	T_{rated} Nm	I_{rated} A	$\cos \varphi$ -	η		I_{St}/I_{rated} -	Article No.				Order code Number of poles	
							4/4 load	3/4 load		Data position					
										9.	10.	11.	12.		
4-pole, 1 800 rpm at 60 Hz, 50 Hz power															
80	LE80ZMQ4P	0.75	1 760	4.07	1.53	0.71	85.50	84.50	8.30	D	F	2	3	-	
90	LE90SM4P	1.10	1 750	6	2.10	0.75	86.50	86.30	8.20	E	K	2	3	-	
	LE90ZLR4P	1.50	1 755	8.16	2.85	0.77	86.50	87.00	8.40	E	M	2	3	-	
100	LE100ZLSA4P	2.20	1 770	11.9	3.80	0.81	87.50	87.50	8.70	F	N	2	3	-	
	LE100ZLSB4P	3.00	1 765	16.2	5.10	0.81	89.50	89.50	8.60	F	P	2	3	-	
112	LE112ZMKB4P	3.70	1 770	20	6.50	0.80	89.50	89.50	8.20	G	J	2	3	-	
132	LE132ZST4P	5.50	1 775	29.6	9.10	0.83	89.50	89.50	8.20	H	J	2	3	-	
	LE132ZMS4P	7.50	1 775	40.3	12.40	0.83	89.50	89.50	8.50	H	L	2	3	-	
160	LE160MPA4P	9.20	1 785	49.2	16.40	0.77	91.70	O. R.	8.80	J	Q	2	3	-	
	LE160MPB4P	11.00	1 780	59	18.00	0.83	92.40	92.40	7.90	J	R	2	3	-	
	LE160ZLL4P	15.00	1 780	80.5	25.00	0.81	93.00	93.00	9.50	J	U	2	3	-	
180	LES180MQ4P	18.50	1 775	99.5	31.00	0.81	93.60	93.70	7.80	K	L	3	3	-	
	LES180ZLN4P	22.00	1 775	118.4	37.50	0.81	93.60	93.80	7.70	K	N	3	3	-	
200	LES200ZLU4P	30.00	1 778	161.1	48.00	0.83	94.10	94.30	8.10	L	N	3	3	-	
225	LES225SD4P	37.00	1 782	198.3	58.00	0.85	94.50	94.70	7.50	M	F	3	3	-	
	LES225YMF4P	45.00	1 782	241.1	70.00	0.85	95.00	95.30	7.20	M	T	3	3	-	
250	LES250MD4P	55.00	1 786	294	84.00	0.86	95.40	95.60	7.60	N	M	3	3	-	
2-pole, 3 600 rpm at 60 Hz, 50 Hz power															
80	LE80ME2P	0.75	3 480	2.06	1.46	0.84	77.00	78.00	7.10	D	B	2	3	P00	
	LE80ZMJ2P	1.10	3 500	3	1.98	0.83	84.00	84.00	8.40	D	M	2	3	P00	
90	LE90SM2P	1.50	3 525	4.06	2.60	0.84	85.50	85.00	9.80	E	K	2	3	P00	
	LE90ZLR2P	2.20	3 530	5.95	3.65	0.87	86.50	86.30	9.60	E	M	2	3	P00	
100	LE100ZLK2P	3.00	3 530	8.12	4.90	0.87	88.50	88.50	9.60	F	K	2	3	P00	
112	LE112ZMH2P	3.70	3 560	9.92	6.00	0.87	88.50	88.50	9.20	G	G	2	3	P00	
132	LE132SF2P	5.50	3 555	14.8	8.60	0.89	89.50	89.50	8.60	H	E	2	3	P00	
	LE132ZSQB2P	7.50	3 560	20.1	11.50	0.91	90.20	90.20	9.40	H	H	2	3	P00	
160	LE160MG2P	11.00	3 560	29.5	17.20	0.88	91.00	91.00	8.90	J	N	2	3	P00	
	LE160MM2P	15.00	3 565	40.2	24.00	0.87	91.00	91.00	10.00	J	P	2	3	P00	
	LE160ZLJ2P	18.50	3 560	49.6	28.00	0.89	91.70	91.70	10.20	J	T	2	3	P00	
6-pole, 1 200 rpm at 60 Hz, 50 Hz power															
90	LE90SQ6P	0.75	1 155	6.2	1.76	0.65	82.50	82.30	5.30	E	C	2	3	P01	
	LE90ZLR6P	1.10	1 150	O. R.	2.8	0.66	75.0	O. R.	4.9	E	M	2	3	P01	
100	LE100LLB6P	1.50	1 175	12.2	3.15	0.69	86.50	86.30	6.00	F	M	2	3	P01	
112	LE112ZMKB6P	2.20	1 175	17.9	4.40	0.72	87.50	87.50	6.50	G	J	2	3	P01	
132	LE132SH6P	3.00	1 180	24.3	5.70	0.75	87.50	87.80	6.10	H	H	2	3	P01	
	LE132MJ6P	3.70	1 180	29.9	7.10	0.73	89.50	89.70	6.80	H	K	2	3	P01	
	LE132ZMS6P	5.50	1 180	44.5	10.30	0.75	89.50	90.00	6.60	H	L	2	3	P01	
160	LE160MW6P	7.50	1 185	60.4	14.00	0.75	89.50	89.70	5.60	J	J	2	3	P01	
	LE160ZLW6P	11.00	1 180	89	20.50	0.75	90.20	90.50	5.70	J	V	2	3	P01	
180	LES180LJ6P	15.00	1 178	121.6	26.00	0.79	91.70	92.00	6.80	K	M	3	3	P01	
200	LES200LM6P	18.50	1 180	149.7	32.00	0.78	93.00	93.80	6.50	L	L	3	3	P01	
	LES200ZLS6P	22.00	1 180	178	37.50	0.79	93.00	93.50	6.30	L	M	3	3	P01	
225	LES225YMF6P	30.00	1 185	241.8	49.00	0.82	94.10	94.40	7.40	M	K	3	3	P01	
250	LES250MD6P	37.00	1 188	297	59.00	0.83	94.10	94.40	7.80	N	D	3	3	P01	

O. R. On request

Selection and ordering data (continued)

Size	Motor	T_{St}/T_{rated}	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code
										Data position				
					dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg	9.	10.	11.	12.	Number of poles
4-pole, 1 800 rpm at 60 Hz, 50 Hz power														
80	LE80ZMQ4P	3.10	4.70	O. R.	55	66	O. R.	29	10.00	D	F	2	3	-
90	LE90SM4P	3.40	4.40	O. R.	58	70	O. R.	36	12.00	E	K	2	3	-
	LE90ZLR4P	3.00	4.30	O. R.	58	70	O. R.	49	15.00	E	M	2	3	-
100	LE100ZLSA4P	2.50	4.30	O. R.	62	74	O. R.	140	29.00	F	N	2	3	-
	LE100ZLSB4P	2.60	4.30	O. R.	62	74	O. R.	140	29.00	F	P	2	3	-
112	LE112ZMKB4P	2.90	4.30	O. R.	62	74	O. R.	170	29.00	G	J	2	3	-
132	LE132ZST4P	2.60	3.90	O. R.	68	80	O. R.	460	57.00	H	J	2	3	-
	LE132ZMS4P	2.40	4.00	O. R.	68	80	O. R.	460	57.00	H	L	2	3	-
160	LE160MPA4P	2.80	4.10	O. R.	69	81	O. R.	830	73.00	J	Q	2	3	-
	LE160MPB4P	2.30	3.70	O. R.	69	81	O. R.	830	73.00	J	R	2	3	-
	LE160ZLL4P	2.90	4.30	O. R.	69	81	O. R.	990	90.00	J	U	2	3	-
180	LES180MQ4P	2.70	3.60	3.00	68	75	O. R.	1 300	165.00	K	L	3	3	-
	LES180ZLN4P	2.80	3.70	3.10	70	77	O. R.	1 400	170.00	K	N	3	3	-
200	LES200ZLU4P	3.00	3.50	3.30	70	77	O. R.	2 200	240.00	L	N	3	3	-
225	LES225SD4P	2.80	3.00	2.20	60	73	O. R.	4 200	285.00	M	F	3	3	-
	LES225YMF4P	2.90	3.00	2.20	60	73	O. R.	4 700	320.00	M	T	3	3	-
250	LES250MD4P	2.80	3.20	2.30	60	74	O. R.	8 500	420.00	N	M	3	3	-
2-pole, 3 600 rpm at 60 Hz, 50 Hz power														
80	LE80ME2P	3.00	3.60	O. R.	64	75	O. R.	11	9.30	D	B	2	3	P00
	LE80ZMJ2P	3.30	4.50	O. R.	64	75	O. R.	13	10.00	D	M	2	3	P00
90	LE90SM2P	3.10	4.90	O. R.	69	81	O. R.	21	12.00	E	K	2	3	P00
	LE90ZLR2P	3.00	4.90	O. R.	69	81	O. R.	31	15.00	E	M	2	3	P00
100	LE100ZLK2P	3.10	5.20	O. R.	71	83	O. R.	54	26.00	F	K	2	3	P00
112	LE112ZMH2P	2.20	4.90	O. R.	73	85	O. R.	120	29.00	G	G	2	3	P00
132	LE132SF2P	2.10	4.20	O. R.	72	84	O. R.	240	36.00	H	E	2	3	P00
	LE132ZSQB2P	2.20	4.50	O. R.	72	84	O. R.	310	50.00	H	H	2	3	P00
160	LE160MG2P	3.20	4.30	O. R.	77	89	O. R.	530	65.00	J	N	2	3	P00
	LE160MM2P	3.20	4.90	O. R.	77	89	O. R.	610	74.00	J	P	2	3	P00
	LE160ZLJ2P	3.00	4.80	O. R.	77	89	O. R.	680	84.00	J	T	2	3	P00
6-pole, 1 200 rpm at 60 Hz, 50 Hz power														
90	LE90SQ6P	2.40	3.10	O. R.	46	58	O. R.	40	15.00	E	C	2	3	P01
	LE90ZLR6P	2.50	3.20	O. R.	O. R.	O. R.	O. R.	48	18.00	E	M	2	3	P01
100	LE100LLB6P	2.10	3.10	O. R.	62	74	O. R.	110	29.00	F	M	2	3	P01
112	LE112ZMKB6P	2.50	3.30	O. R.	65	77	O. R.	170	29.00	G	J	2	3	P01
132	LE132SH6P	1.70	2.80	O. R.	67	79	O. R.	290	36.00	H	H	2	3	P01
	LE132MJ6P	2.00	3.10	O. R.	67	79	O. R.	370	45.00	H	K	2	3	P01
	LE132ZMS6P	2.00	3.00	O. R.	67	79	O. R.	460	45.00	H	L	2	3	P01
160	LE160MW6P	2.30	2.50	O. R.	70	82	O. R.	980	83.00	J	J	2	3	P01
	LE160ZLW6P	2.20	2.50	O. R.	67	79	O. R.	1 200	105.00	J	V	2	3	P01
180	LES180LJ6P	2.50	3.00	2.80	61	68	O. R.	1 900	180.00	K	M	3	3	P01
200	LES200LM6P	2.80	3.00	3.10	64	71	O. R.	2 800	215.00	L	L	3	3	P01
	LES200ZLS6P	2.60	2.80	2.90	63	70	O. R.	3 200	230.00	L	M	3	3	P01
225	LES225YMF6P	2.90	3.30	2.30	59	72	O. R.	6 700	325.00	M	K	3	3	P01
250	LES250MD6P	3.10	3.20	2.40	61	75	O. R.	10 000	405.00	N	D	3	3	P01

O. R. On request

SIMOGEAR Geared Motors

Motors

IE3

Motors with Premium Efficiency IE3

Selection and ordering data (continued)

Size	Motor	P_{rated} kW	n_{rated} rpm	T_{rated} Nm	I_{rated} A	$\cos \varphi$ -	η		I_{St}/I_{rated} -	Article No.				Order code Number of poles	
							4/4 load	3/4 load		Data position					
										9.	10.	11.	12.		
4-pole, 1 800 rpm at 60 Hz, 60 Hz power															
80	LE80ZMQ4P	0.86	1 755	4.68	1.66	0.75	85.50	85.50	7.70	D	F	2	3	-	
90	LE90SM4P	1.27	1 740	6.97	2.35	0.79	86.50	86.50	7.40	E	K	2	3	-	
	LE90ZLR4P	1.75	1 740	9.6	3.15	0.80	86.50	86.50	7.50	E	M	2	3	-	
100	LE100ZLSA4P	2.55	1 760	13.8	4.25	0.84	87.50	87.50	7.70	F	N	2	3	-	
	LE100ZLSB4P	3.45	1 760	18.7	5.80	0.84	89.50	89.50	7.60	F	P	2	3	-	
112	LE112ZMKB4P	4.55	1 770	24.5	7.70	0.83	89.50	89.50	8.20	G	J	2	3	-	
132	LE132ZST4P	6.30	1 770	34	10.30	0.84	89.50	89.50	7.30	H	J	2	3	-	
	LE132ZMS4P	8.60	1 770	46.4	13.80	0.85	89.50	89.50	7.50	H	L	2	3	-	
160	LE160MPA4P	10.50	1 780	56.3	18.00	0.80	92.40	O. R.	7.80	J	Q	2	3	-	
	LE160MPB4P	12.60	1 775	67.8	20.00	0.85	92.40	92.40	7.10	J	R	2	3	-	
	LE160ZLL4P	18.00	1 775	96.8	28.00	0.83	93.60	93.60	8.50	J	U	2	3	-	
180	LES180MQ4P	21.30	1 770	114.9	34.50	0.83	93.60	94.00	7.20	K	L	3	3	-	
	LES180ZLN4P	25.30	1 770	136.5	41.00	0.83	93.60	94.10	6.80	K	N	3	3	-	
200	LES200ZLU4P	34.50	1 770	186.1	55.00	0.85	93.00	93.50	7.30	L	N	3	3	-	
225	LES225SD4P	42.50	1 778	228.3	66.00	0.86	93.60	94.10	6.70	M	F	3	3	-	
	LES225YMF4P	52.00	1 778	279	81.00	0.86	94.10	94.60	6.60	M	T	3	3	-	
250	LES250MD4P	63.00	1 782	338	97.00	0.87	94.10	94.50	6.70	N	M	3	3	-	
2-pole, 3 600 rpm at 60 Hz, 60 Hz power															
80	LE80ME2P	0.86	3 450	2.38	1.65	0.86	77.00	77.50	6.40	D	B	2	3	P00	
	LE80ZMJ2P	1.27	3 480	3.48	2.25	0.85	84.00	84.00	7.40	D	M	2	3	P00	
90	LE90SM2P	1.75	3 510	4.76	2.95	0.87	85.50	85.50	8.70	E	K	2	3	P00	
	LE90ZLR2P	2.55	3 510	6.94	4.20	0.88	86.50	86.50	8.30	E	M	2	3	P00	
100	LE100ZLK2P	3.45	3 515	9.37	5.50	0.88	87.50	87.50	8.50	F	K	2	3	P00	
112	LE112ZMH2P	4.55	3 550	12.2	7.20	0.89	87.50	87.50	7.60	G	G	2	3	P00	
132	LE132SF2P	6.30	3 545	17	9.70	0.90	89.50	89.50	7.50	H	E	2	3	P00	
	LE132ZSQB2P	8.60	3 550	23.1	13.00	0.92	90.20	90.20	8.20	H	H	2	3	P00	
160	LE160MG2P	12.60	3 555	33.8	19.50	0.89	91.00	91.00	7.90	J	N	2	3	P00	
	LE160MM2P	18.00	3 555	48.4	27.00	0.88	91.70	91.70	8.80	J	P	2	3	P00	
	LE160ZLJ2P	22.00	3 555	59.1	32.00	0.91	91.70	91.70	9.00	J	T	2	3	P00	
6-pole, 1 200 rpm at 60 Hz, 60 Hz power															
80	LE80MD6E	0.43	1 125	3.65	1.04	0.69	75.30	75.30	4.20	D	C	2	2	P01	
	LE80MK6E	0.63	1 135	5.3	1.56	0.66	77.00	77.50	4.80	D	F	2	2	P01	
90	LE90SH6E	0.86	1 145	7.17	1.85	0.73	73.00	73.00	4.80	E	C	2	2	P01	
	LE90LLB6E	1.27	1 135	10.7	3.05	0.70	75.00	75.00	4.40	E	P	2	2	P01	
100	LE100LLB6E	1.75	1 170	14.3	3.45	0.74	86.50	87.10	5.80	F	P	2	2	P01	
112	LE112ME6E	2.55	1 165	20.9	4.90	0.75	87.50	88.10	5.50	G	H	2	2	P01	
132	LE132SC6E	3.45	1 170	28.2	6.90	0.72	87.50	87.80	5.20	H	F	2	2	P01	
	LE132MB6E	4.55	1 170	37.1	8.70	0.75	87.50	88.50	5.30	H	H	2	2	P01	
	LE132MJ6E	6.30	1 170	51.4	11.60	0.76	89.50	90.00	5.80	H	L	2	2	P01	
160	LE160ML6E	8.60	1 175	69.9	16.10	0.75	89.50	90.20	4.90	J	H	2	2	P01	
	LE160LL6E	12.60	1 175	102.4	23.00	0.76	90.20	91.00	4.90	J	V	2	2	P01	
180	LES180LE6E	18.00	1 170	146.9	31.00	0.80	91.70	92.20	6.00	K	M	3	2	P01	
200	LES200LG6E	22.00	1 175	178.8	36.50	0.83	91.00	91.90	5.80	L	L	3	2	P01	
	LES200LP6E	26.50	1 175	215.4	43.50	0.83	91.70	92.80	6.30	L	N	3	2	P01	
225	LES225YMF6E	36.00	1 175	293	59.00	0.84	91.70	92.50	6.00	M	K	3	2	P01	
250	LES250MD6E	44.50	1 180	360	73.00	0.84	91.70	92.50	6.30	N	D	3	2	P01	

O. R. On request

Selection and ordering data (continued)

Size	Motor	T_{St}/T_{rated}	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pfa}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code	
										Data position					
											9.	10.	11.	12.	Number of poles
					dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg						
4-pole, 1 800 rpm at 60 Hz, 60 Hz power															
80	LE80ZMQ4P	2.70	4.10	O. R.	55	66	O. R.	29	10.00	D	F	2	3	-	
90	LE90SM4P	2.90	3.80	O. R.	58	70	O. R.	36	12.00	E	K	2	3	-	
	LE90ZLR4P	2.60	3.70	O. R.	58	70	O. R.	49	15.00	E	M	2	3	-	
100	LE100ZLSA4P	2.20	3.70	3.30	62	74	O. R.	140	29.00	F	N	2	3	-	
	LE100ZLSB4P	2.20	3.80	2.90	62	74	O. R.	140	29.00	F	P	2	3	-	
112	LE112ZMKB4P	2.90	4.30	2.70	62	74	O. R.	170	29.00	G	J	2	3	-	
132	LE132ZST4P	2.30	3.40	2.70	68	80	O. R.	460	57.00	H	J	2	3	-	
	LE132ZMS4P	2.10	3.50	2.50	68	80	O. R.	460	57.00	H	L	2	3	-	
160	LE160MPA4P	2.40	3.50	O. R.	69	81	O. R.	830	73.00	J	Q	2	3	-	
	LE160MPB4P	2.00	3.20	2.80	69	81	O. R.	830	73.00	J	R	2	3	-	
	LE160ZLL4P	2.50	3.70	2.70	69	81	O. R.	990	90.00	J	U	2	3	-	
180	LES180MQ4P	2.40	3.20	2.60	68	75	O. R.	1 300	165.00	K	L	3	3	-	
	LES180ZLN4P	2.20	3.20	2.40	70	77	O. R.	1 400	170.00	K	N	3	3	-	
200	LES200ZLU4P	2.40	3.00	2.60	70	77	O. R.	2 200	240.00	L	N	3	3	-	
225	LES225SD4P	2.40	2.70	1.90	60	73	O. R.	4 200	285.00	M	F	3	3	-	
	LES225YMF4P	2.60	2.60	2.00	60	73	O. R.	4 700	320.00	M	T	3	3	-	
250	LES250MD4P	2.40	2.80	2.00	60	74	O. R.	8 500	420.00	N	M	3	3	-	
2-pole, 3 600 rpm at 60 Hz, 60 Hz power															
80	LE80ME2P	2.60	3.10	O. R.	64	75	O. R.	11	9.30	D	B	2	3	P00	
	LE80ZMJ2P	2.80	3.80	O. R.	64	75	O. R.	13	10.00	D	M	2	3	P00	
90	LE90SM2P	2.60	4.20	O. R.	69	81	O. R.	21	12.00	E	K	2	3	P00	
	LE90ZLR2P	2.60	4.20	O. R.	69	81	O. R.	31	15.00	E	M	2	3	P00	
100	LE100ZLK2P	2.70	4.50	3.60	71	83	O. R.	54	26.00	F	K	2	3	P00	
112	LE112ZMH2P	1.80	4.00	3.30	73	85	O. R.	120	29.00	G	G	2	3	P00	
132	LE132SF2P	1.80	3.70	2.00	72	84	O. R.	240	36.00	H	E	2	3	P00	
	LE132ZSQB2P	2.00	3.90	2.30	72	84	O. R.	310	50.00	H	H	2	3	P00	
160	LE160MG2P	2.80	3.70	2.60	77	89	O. R.	530	65.00	J	N	2	3	P00	
	LE160MM2P	2.70	4.20	2.90	77	89	O. R.	610	74.00	J	P	2	3	P00	
	LE160ZLJ2P	2.60	4.20	2.90	77	89	O. R.	680	84.00	J	T	2	3	P00	
6-pole, 1 200 rpm at 60 Hz, 60 Hz power															
80	LE80MD6E	2.10	2.60	2.30	45	56	O. R.	17	8.30	D	C	2	2	P01	
	LE80MK6E	2.60	3.10	2.80	45	56	O. R.	25	11.30	D	F	2	2	P01	
90	LE90SH6E	1.90	2.60	1.80	46	58	O. R.	30	12.00	E	C	2	2	P01	
	LE90LLB6E	2.10	2.60	O. R.	46	58	O. R.	40	15.00	E	P	2	2	P01	
100	LE100LLB6E	1.90	2.80	O. R.	62	74	O. R.	110	24.00	F	P	2	2	P01	
112	LE112ME6E	1.90	2.80	O. R.	65	77	O. R.	140	24.00	G	H	2	2	P01	
132	LE132SC6E	1.60	2.60	O. R.	67	79	O. R.	240	31.00	H	F	2	2	P01	
	LE132MB6E	1.60	2.40	O. R.	67	79	O. R.	290	36.00	H	H	2	2	P01	
	LE132MJ6E	1.90	2.60	O. R.	67	79	O. R.	370	45.00	H	L	2	2	P01	
160	LE160ML6E	1.90	2.20	O. R.	70	82	O. R.	750	67.00	J	H	2	2	P01	
	LE160LL6E	1.90	2.20	O. R.	70	82	O. R.	980	83.00	J	V	2	2	P01	
180	LES180LE6E	2.40	2.90	O. R.	60	74	O. R.	1 700	141.00	K	M	3	2	P01	
200	LES200LG6E	2.30	2.50	O. R.	62	76	O. R.	2 500	181.00	L	L	3	2	P01	
	LES200LP6E	2.50	2.50	O. R.	62	76	O. R.	3 000	201.00	L	N	3	2	P01	
225	LES225YMF6E	2.40	2.70	1.90	60	73	O. R.	5 800	285.00	M	K	3	2	P01	
250	LES250MD6E	2.70	2.30	1.90	63	77	O. R.	8 600	370.00	N	D	3	2	P01	

O. R. On request

SIMOGEAR Geared Motors

Motors

IE3

Motors with Premium Efficiency IE3

Selection and ordering data (continued)

Size	Motor	P_{rated}	n_{rated}	T_{rated}	I_{rated}	$\cos \varphi$	η	T_{Bk}/T_{rated}		Article No.				Order code	
		kW	rpm	Nm	A	-	%	4/4 load	3/4 load	-	Data position				Power	Number of poles
										9.	10.	11.	12.		
4-pole, 2 610 rpm at 87 Hz power															
80	LE80ZMQ4P	1.30	2 565	4.84	3.05	0.71	86.20	O. R.	3.9	D	F	2	3	P91	-
90	LE90SM4P	1.90	2 550	7.12	4.15	0.75	87.30	O. R.	3.6	E	K	2	3	P91	-
	LE90ZLR4P	2.60	2 555	9.72	5.30	0.76	88.00	O. R.	2.8	E	M	2	3	P91	-
100	LE100ZLSA4P	3.60	2 575	13.4	7.10	0.81	89.10	O. R.	3.8	F	N	2	3	P91	-
	LE100ZLSB4P	5.00	2 570	18.6	9.80	0.82	89.60	O. R.	3.9	F	P	2	3	P91	-
112	LE112ZMKB4P	6.50	2 575	24.1	13.00	0.81	90.20	O. R.	3.9	G	J	2	3	P91	-
132	LE132ZST4P	9.00	2 585	33.2	17.40	0.83	90.60	O. R.	3.6	H	J	2	3	P91	-
	LE132ZMS4P	12.50	2 580	46.3	23.50	0.83	91.20	O. R.	3.7	H	L	2	3	P91	-
160	LE160MPA4P	16.00	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	J	Q	2	3	P91	-
	LE160MPB4P	17.00	2 585	62.8	32.50	0.83	92.00	O. R.	3.6	J	R	2	3	P91	-
	LE160ZLL4P	23.50	2 590	86.6	46.00	0.80	92.50	O. R.	4.2	J	U	2	3	P91	-
180	LES180MQ4P	27.20	2 585	100.0	53.0	O. R.	O. R.	O. R.	3.9	K	L	3	3	P91	-
	LES180ZLN4P	32.40	2 580	119.9	62.0	O. R.	O. R.	O. R.	3.9	K	N	3	3	P91	-
200	LES200ZLU4P	44.20	2 585	163.3	81.00	O. R.	O. R.	O. R.	3.7	L	N	3	3	P91	-
225	LES225YMF4P	71.0	2 588	262.0	128.00	0.86	93.40	7.80	2.8	M	T	3	3	P91	-
250	LES250MD4P	87.0	2 598	319.8	156.00	0.86	93.80	9.50	3.3	N	M	3	3	P91	-
6-pole, 1 740 rpm at 87 Hz power															
90	LE90SQ6P	1.30	1 685	7.37	3.35	0.66	84.50	O. R.	2.6	E	C	2	3	P91	P01
	LE90ZLR6P	1.90	1 685	10.8	4.95	0.65	85.30	O. R.	2.8	E	M	2	3	P91	P01
100	LE100LLB6P	2.60	1 710	14.5	6.20	0.70	87.10	O. R.	2.8	F	M	2	3	P91	P01
132	LE132SH6P	5.00	1 710	27.9	10.70	0.76	89.70	O. R.	2.5	H	H	2	3	P91	P01
	LE132MJ6P	6.50	1 715	36.2	13.80	0.73	91.20	O. R.	2.7	H	K	2	3	P91	P01
	LE132ZMS6P	9.00	1 715	50.1	18.80	0.76	90.90	O. R.	2.7	H	L	2	3	P91	P01
160	LE160MW6P	12.00	1 720	66.6	24.50	0.75	90.80	O. R.	2.5	J	J	2	3	P91	P01
	LE160ZLW6P	17.00	1 720	94.4	34.50	0.78	91.80	O. R.	2.5	J	V	2	3	P91	P01
180	LES180LJ6P	23.4	1 715	130.3	46.5	O. R.	O. R.	O. R.	3.1	K	M	3	3	P91	P01
200	LES200LM6P	28.5	1 720	158.2	56.0	O. R.	O. R.	O. R.	2.9	L	L	3	3	P91	P01
	LES200ZLS6P	34.3	1 720	190.4	68.0	O. R.	O. R.	O. R.	2.9	L	M	3	3	P91	P01
225	LES225YMF6P	47.0	1 720	261.0	O. R.	O. R.	O. R.	O. R.	O. R.	M	K	3	3	P91	P01
250	LES250MD6P	58.0	1 725	321.1	O. R.	O. R.	O. R.	O. R.	O. R.	N	D	3	3	P91	P01

O. R. On request

Selection and ordering data (continued)

Size	Motor	L_{pTA}	L_{WA}	J_{mot}	m_{mot}	Article No.				Order code	
		dB (A)	dB (A)	10^{-4} kgm ²	kg	Data position 9. 10. 11. 12.				Number of poles	
4-pole, 2 610 rpm at 87 Hz power											
80	LE80ZMQ4P	O. R.	O. R.	29	10.00	D	F	2	3	P91	-
90	LE90SM4P	O. R.	O. R.	36	12.00	E	K	2	3	P91	-
	LE90ZLR4P	O. R.	O. R.	49	15.00	E	M	2	3	P91	-
100	LE100ZLSA4P	O. R.	O. R.	140	29.00	F	N	2	3	P91	-
	LE100ZLSB4P	O. R.	O. R.	140	29.00	F	P	2	3	P91	-
112	LE112ZMKB4P	O. R.	O. R.	170	29.00	G	J	2	3	P91	-
132	LE132ZST4P	O. R.	O. R.	460	57.00	H	J	2	3	P91	-
	LE132ZMS4P	O. R.	O. R.	460	57.00	H	L	2	3	P91	-
160	LE160MPA4P	O. R.	O. R.	830	73.00	J	Q	2	3	P91	-
	LE160MPB4P	O. R.	O. R.	830	73.00	J	R	2	3	P91	-
	LE160ZLL4P	O. R.	O. R.	990	90.00	J	U	2	3	P91	-
180	LES180MQ4P	O. R.	O. R.	1 300	165.00	K	L	3	3	P91	-
	LES180ZLN4P	O. R.	O. R.	1 400	170.00	K	N	3	3	P91	-
200	LES200ZLU4P	O. R.	O. R.	2 200	240.00	L	N	3	3	P91	-
225	LES225YMF4P	79	92	4 700	320.00	M	T	3	3	P91	-
250	LES250MD4P	80	93	8 500	420.00	N	M	3	3	P91	-
6-pole, 1 740 rpm at 87 Hz power											
90	LE90SQ6P	O. R.	O. R.	40	15.00	E	C	2	3	P91	P01
	LE90ZLR6P	O. R.	O. R.	48	18.00	E	M	2	3	P91	P01
100	LE100LLB6P	O. R.	O. R.	110	29.00	F	M	2	3	P91	P01
132	LE132SH6P	O. R.	O. R.	290	36.00	H	H	2	3	P91	P01
	LE132MJ6P	O. R.	O. R.	370	45.00	H	K	2	3	P91	P01
	LE132ZMS6P	O. R.	O. R.	460	45.00	H	L	2	3	P91	P01
160	LE160MW6P	O. R.	O. R.	980	83.00	J	J	2	3	P91	P01
	LE160ZLW6P	O. R.	O. R.	1 200	105.00	J	V	2	3	P91	P01
180	LES180LJ6P	O. R.	O. R.	1 900	180.00	K	M	3	3	P91	P01
200	LES200LM6P	O. R.	O. R.	2 800	215.00	L	L	3	3	P91	P01
	LES200ZLS6P	O. R.	O. R.	3 200	230.00	L	M	3	3	P91	P01
225	LES225YMF6P	O. R.	O. R.	6 700	325.00	M	K	3	3	P91	P01
250	LES250MD6P	O. R.	O. R.	10 000	405.00	N	D	3	3	P91	P01

O. R. On request

Selection and ordering data

Size	Motor	P_{rated}		n_{rated}	T_{rated}	EISA	I_{rated}	$\cos \varphi$	η		I_{St}/I_{rated}	T_{St}/T_{rated}
		kW	hp						rpm	Nm			CC no.	460 V	4/4 load	3/4 load
4-pole, 1 800 rpm at 60 Hz, 50 Hz power												
63	LA63MD4	0.09	0.12	1 695	0.51	-	0.41	0.60	46.00	41.00	3.30	3.20
	LA63ME4 ¹⁾	0.12	0.16	1 670	0.69	-	0.42	0.68	54.10	51.80	3.20	2.30
	LA63MF4 ¹⁾	0.18	0.25	1 690	1.02	-	0.56	0.70	58.80	56.40	3.30	2.30
71	LA71MG4	0.25	0.33	1 675	1.43	-	0.74	0.65	65.50	63.00	3.60	2.20
	LA71MH4	0.37	0.50	1 695	2.08	-	0.97	0.66	73.00	71.80	4.20	2.30
80	LE80MD4E	0.55	0.75	1 750	3	-	1.17	0.74	80.00	80.00	5.70	2.40
	LE80MH4E	0.75	1.00	1 750	4.09	-	1.58	0.72	82.50	82.50	6.80	2.50
90	LE90SG4E	1.10	1.50	1 740	6.04	-	2.20	0.74	84.00	84.00	7.00	2.70
	LE90LH4E	1.50	2.00	1 745	8.21	-	3.00	0.75	84.00	84.00	7.50	2.90
100	LE100LE4E	2.20	3.00	1 760	11.9	-	4.05	0.78	87.50	87.10	8.10	2.50
	LE100LK4E	3.00	4.00	1 765	16.2	-	5.40	0.79	87.50	88.30	8.30	2.40
112	LE112ME4E	3.70	5.00	1 770	20	✓	6.90	0.77	87.50	87.00	8.70	3.00
132	LE132SF4E	5.50	7.50	1 770	29.7	✓	9.90	0.78	89.50	89.60	8.00	2.60
	LE132MF4E	7.50	10.00	1 770	40.5	✓	12.80	0.82	89.50	90.30	8.00	2.70
	LE132ZMM4E	9.20	12.30	1 760	49.9	-	15.70	0.82	89.50	O. R.	8.10	2.50
160	LE160MF4E	11.00	15.00	1 775	59.2	✓	18.10	0.84	91.00	91.30	7.70	2.50
	LE160LD4E	15.00	20.00	1 780	80.5	✓	24.50	0.84	91.00	90.70	8.50	2.60
180	LES180MM4E	18.50	25.00	1 770	99.8	✓	30.50	0.83	92.40	92.60	7.70	2.80
	LES180ZLJ4E	22.00	30.00	1 770	118.7	✓	36.00	0.83	92.40	92.50	8.40	3.00
200	LES200LN4E	30.00	40.00	1 778	161.1	✓	48.00	0.84	93.00	92.90	8.20	3.20
225	LES225SD4E	37.00	50.00	1 778	198.7	-	57.00	0.87	93.00	93.20	7.20	2.70
	LES225YMF4E	45.00	60.00	1 778	241.7	✓	70.00	0.86	93.60	93.80	7.60	3.00
250	LES250MD4E	55.00	75.00	1 785	294	-	87.00	0.84	94.10	94.10	7.30	3.10
2-pole, 3 600 rpm at 60 Hz, 50 Hz power												
63	LA63ME2 ¹⁾	0.18	0.25	3 455	0.5	-	0.47	0.76	63.50	61.70	4.50	2.40
	LA63MF2 ¹⁾	0.25	0.33	3 455	0.69	-	0.65	0.75	65.00	63.20	4.60	2.40
71	LA71MG2 ¹⁾	0.37	0.50	3 410	1.04	-	0.91	0.76	67.00	65.10	5.00	2.90
	LA71MH2 ¹⁾	0.55	0.75	3 440	1.53	-	1.25	0.78	71.10	70.00	5.40	3.00
80	LE80MA2E	0.75	1.00	3 445	2.08	-	1.50	0.83	75.50	75.50	6.00	2.10
	LE80ME2E	1.10	1.50	3 465	3.03	-	2.05	0.82	82.50	82.50	6.80	2.20
90	LE90SG2E	1.50	2.00	3 505	4.09	-	2.75	0.82	84.00	84.00	8.50	3.10
	LE90LH2E	2.20	3.00	3 510	5.99	-	3.90	0.83	85.50	85.50	8.70	3.00
100	LE100LD2E	3.00	4.00	3 520	8.14	-	5.20	0.83	87.50	87.30	8.10	2.60
112	LE112MA2E	3.70	5.00	3 565	9.91	✓	6.30	0.84	87.50	87.40	9.30	2.90
132	LE132SB2E	5.50	7.50	3 555	14.8	✓	9.10	0.86	88.50	88.30	7.60	2.00
	LE132SF2E	7.50	10.00	3 560	20.1	✓	12.10	0.87	89.50	89.60	8.20	2.30
160	LE160MB2E	11.00	15.00	3 560	29.5	✓	17.80	0.86	90.20	89.60	8.20	2.40
	LE160MG2E	15.00	20.00	3 565	40.2	✓	24.00	0.87	90.20	89.90	8.40	2.80
	LE160LB2E	18.50	25.00	3 565	49.6	✓	29.50	0.87	91.00	90.50	8.90	3.30

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with IEC B14 flange) for worm geared motors S


Selection and ordering data (continued)

Size	Motor	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pfA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code		
									Data position				Number of poles	Specification	
		-	-	dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg	9.	10.	11.	12.	NEMA	UL-R/CSA	
4-pole, 1 800 rpm at 60 Hz, 50 Hz power															
63	LA63MD4	3.30	O. R.	46	57	15 000	2.9	3.20	B	B	1	1	-	N65	N38
	LA63ME4 ¹⁾	2.40	O. R.	46	57	15 000	2.9	3.20	B	C	1	1	-	N65	N38
	LA63MF4 ¹⁾	2.30	O. R.	46	57	15 000	3.7	3.60	B	D	1	1	-	N65	N38
71	LA71MG4	2.30	O. R.	48	59	15 000	5.2	4.30	C	D	1	1	-	N65	N38
	LA71MH4	2.50	O. R.	48	59	15 000	7.7	5.80	C	E	1	1	-	N65	N38
80	LE80MD4E	3.30	O. R.	55	66	10 000	17	9.30	D	C	2	2	-	N65	N38
	LE80MH4E	3.80	O. R.	55	66	10 000	21	10.00	D	E	2	2	-	N65	N38
90	LE90SG4E	3.60	O. R.	58	70	8 000	28	12.00	E	K	2	2	-	N65	N38
	LE90LH4E	4.00	O. R.	58	70	8 000	36	15.00	E	M	2	2	-	N65	N38
100	LE100LE4E	3.90	O. R.	62	74	7 000	86	20.00	F	L	2	2	-	N65	N38
	LE100LK4E	3.70	O. R.	62	74	7 000	110	24.00	F	M	2	2	-	N65	N38
112	LE112ME4E	4.00	O. R.	62	74	5 000	140	24.00	G	H	2	2	-	N65	N38
132	LE132SF4E	3.30	O. R.	68	80	3 000	270	35.00	H	G	2	2	-	N65	N38
	LE132MF4E	3.40	O. R.	68	80	3 000	340	42.00	H	J	2	2	-	N65	N38
	LE132ZMM4E	3.60	O. R.	64	76	1 600	410	O. R.	H	V	2	2	-	N65	N38
160	LE160MF4E	3.20	O. R.	69	81	2 000	650	61.00	J	P	2	2	-	N65	N38
	LE160LD4E	3.40	O. R.	69	81	2 000	830	73.00	J	U	2	2	-	N65	N38
180	LES180MM4E	3.90	O. R.	61	74	O. R.	1 200	151.00	K	L	3	2	-	N65	N38
	LES180ZLJ4E	3.90	O. R.	62	74	O. R.	1 300	156.00	K	N	3	2	-	N65	N38
200	LES200LN4E	3.70	O. R.	67	80	O. R.	2 000	211.00	L	M	3	2	-	N65	N38
225	LES225SD4E	3.30	2.30	66	80	O. R.	4 200	280.00	M	F	3	2	-	N65	N38
	LES225YM4E	3.50	2.40	67	80	O. R.	4 600	305.00	M	T	3	2	-	N65	N38
250	LES250MD4E	3.30	2.40	66	80	O. R.	7 500	385.00	N	M	3	2	-	N65	N38
2-pole, 3 600 rpm at 60 Hz, 50 Hz power															
63	LA63ME2 ¹⁾	2.70	O. R.	53	64	5 000	1.8	3.20	B	C	1	1	P00	N65	N38
	LA63MF2 ¹⁾	2.70	O. R.	53	64	5 000	2.2	3.60	B	D	1	1	P00	N65	N38
71	LA71MG2 ¹⁾	2.90	O. R.	56	67	5 000	2.9	4.50	C	D	1	1	P00	N65	N38
	LA71MH2 ¹⁾	2.90	O. R.	56	67	5 000	4.1	5.50	C	E	1	1	P00	N65	N38
80	LE80MA2E	3.00	O. R.	64	75	3 000	8	8.30	D	B	2	2	P00	N65	N38
	LE80ME2E	3.20	O. R.	64	75	3 000	11	10.00	D	M	2	2	P00	N65	N38
90	LE90SG2E	4.50	O. R.	69	81	2 000	17	12.00	E	K	2	2	P00	N65	N38
	LE90LH2E	4.60	O. R.	69	81	2 000	21	14.00	E	M	2	2	P00	N65	N38
100	LE100LD2E	3.80	O. R.	71	83	2 000	44	21.00	F	K	2	2	P00	N65	N38
112	LE112MA2E	4.00	O. R.	73	85	1 300	92	22.00	G	G	2	2	P00	N65	N38
132	LE132SB2E	3.30	O. R.	72	84	800	200	32.00	H	E	2	2	P00	N65	N38
	LE132SF2E	3.60	O. R.	72	84	800	240	36.00	H	G	2	2	P00	N65	N38
160	LE160MB2E	3.60	O. R.	77	89	500	450	57.00	J	N	2	2	P00	N65	N38
	LE160MG2E	3.90	O. R.	77	89	500	530	65.00	J	Q	2	2	P00	N65	N38
	LE160LB2E	4.10	O. R.	77	89	500	610	74.00	J	T	2	2	P00	N65	N38

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with IEC B14 flange) for worm geared motors S

SIMOGEAR Geared Motors

Motors

IE2



NEMA Energy Efficient motors MG1, Table 12-11

Selection and ordering data (continued)

Size	Motor	P_{rated}		n_{rated}	T_{rated}	EISA CC no.	I_{rated} 460 V CC032A	$\cos \varphi$	η		I_{St}/I_{rated}	T_{St}/T_{rated}
		kW	hp						rpm	Nm			4/4 load	3/4 load
6-pole, 1 200 rpm at 60 Hz, 50 Hz power												
63	LA63MF6 ¹⁾	0.09	0.12	1 075	0.8	-	0.38	0.63	47.10	44.90	2.20	2.10
	LA63MG6	0.12	0.16	1 100	1.04	-	0.73	0.53	39.40	33.80	2.10	2.70
71	LA71MG6 ¹⁾	0.18	0.25	1 080	1.59	-	0.67	0.61	56.40	54.10	3.10	2.50
	LA71MH6 ¹⁾	0.25	0.33	1 090	2.19	-	0.72	0.70	62.90	60.60	3.40	2.70
80	LE80MD6E	0.37	0.50	1 140	3.1	-	0.98	0.63	75.30	74.10	4.60	2.30
	LE80MK6E	0.55	0.75	1 135	4.63	-	1.47	0.61	77.00	77.50	5.20	2.90
90	LE90LLA6E	0.75	1.00	1 155	6.2	-	1.73	0.69	80.00	80.00	5.30	2.20
100	LE100LLA6E	1.10	1.50	1 175	8.94	-	2.20	0.73	85.50	85.40	6.00	2.10
	LE100LLB6E	1.50	2.00	1 175	12.2	-	3.15	0.69	86.50	86.30	6.40	2.20
112	LE112ME6E	2.20	3.00	1 170	18	✓	4.30	0.73	87.50	87.30	6.30	2.10
132	LE132SC6E	3.00	4.00	1 175	24.4	-	6.20	0.69	87.50	87.10	6.00	1.80
	LE132MB6E	3.70	5.00	1 180	29.9	✓	7.50	0.71	87.50	87.50	6.20	1.90
	LE132MJ6E	5.50	7.50	1 175	44.7	✓	10.60	0.73	89.50	89.80	6.50	2.10
160	LE160ML6E	7.50	10.00	1 180	60.7	✓	14.40	0.73	89.50	89.60	5.40	2.10
	LE160LL6E	11.00	15.00	1 180	89	✓	20.50	0.74	90.20	90.50	5.50	2.20
180	LES180LE6E	15.00	20.00	1 178	121.6	✓	27.00	0.77	90.20	90.20	6.90	2.80
200	LES200LG6E	18.50	25.00	1 182	149.5	✓	31.50	0.81	91.70	92.10	6.70	2.60
	LES200LP6E	22.00	30.00	1 182	177.7	✓	37.00	0.81	91.70	92.10	7.40	3.00
225	LES225YMF6E	30.00	40.00	1 182	242.4	✓	49.00	0.83	93.00	93.30	7.00	2.90
250	LES250MD6E	37.00	50.00	1 185	298	-	60.00	0.83	93.00	93.30	7.30	3.30

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with IEC B14 flange) for worm geared motors S


Selection and ordering data (continued)

Size	Motor	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pfA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code		
									Data position				Number of poles	Specification	
		-	-	dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg	9.	10.	11.	12.	NEMA	UL-R/CSA	
6-pole, 1 200 rpm at 60 Hz, 50 Hz power															
63	LA63MF6 ¹⁾	1.80	O. R.	43	54	10 500	3.7	3.60	B	D	1	1	P01	N65	N38
	LA63MG6	2.80	O. R.	43	54	10 500	3.7	3.60	B	E	1	1	P01	N65	N38
71	LA71MG6 ¹⁾	2.50	O. R.	43	54	10 500	5.5	4.30	C	D	1	1	P01	N65	N38
	LA71MH6 ¹⁾	2.60	O. R.	43	54	10 500	8	5.30	C	E	1	1	P01	N65	N38
80	LE80MD6E	2.90	O. R.	45	56	8 400	17	8.30	D	C	2	2	P01	N65	N38
	LE80MK6E	3.60	O. R.	45	56	8 400	25	11.30	D	F	2	2	P01	N65	N38
90	LE90LLA6E	3.00	O. R.	46	58	7 000	30	15.00	E	E	2	2	P01	N65	N38
100	LE100LLA6E	3.00	O. R.	62	74	6 300	110	24.00	F	N	2	2	P01	N65	N38
	LE100LLB6E	3.20	O. R.	62	74	6 300	110	24.00	F	P	2	2	P01	N65	N38
112	LE112ME6E	3.20	O. R.	65	77	5 600	140	24.00	G	H	2	2	P01	N65	N38
132	LE132SC6E	2.90	O. R.	67	79	4 200	240	31.00	H	F	2	2	P01	N65	N38
	LE132MB6E	3.00	O. R.	67	79	4 200	290	36.00	H	H	2	2	P01	N65	N38
	LE132MJ6E	2.90	O. R.	67	79	3 500	370	45.00	H	L	2	2	P01	N65	N38
160	LE160ML6E	2.50	O. R.	70	82	2 800	750	67.00	J	H	2	2	P01	N65	N38
	LE160LL6E	2.50	O. R.	70	82	2 800	980	83.00	J	V	2	2	P01	N65	N38
180	LES180LE6E	3.40	O. R.	60	74	O. R.	1 700	141.00	K	M	3	2	P01	N65	N38
200	LES200LG6E	3.00	O. R.	62	76	O. R.	2 500	181.00	L	L	3	2	P01	N65	N38
	LES200LP6E	3.00	O. R.	62	76	O. R.	3 000	201.00	L	N	3	2	P01	N65	N38
225	LES225YMF6E	3.10	2.30	60	73	O. R.	5 800	285.00	M	K	3	2	P01	N65	N38
250	LES250MD6E	2.80	2.30	63	77	O. R.	8 600	370.00	N	D	3	2	P01	N65	N38

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with IEC B14 flange) for worm geared motors S

SIMOGEAR Geared Motors

Motors

IE2



NEMA Energy Efficient motors MG1, Table 12-11

Selection and ordering data (continued)

Size	Motor	P_{rated}		n_{rated}	T_{rated}	EISA CC no.	I_{rated} 460 V	$\cos \varphi$	η		I_{St}/I_{rated}	T_{St}/T_{rated}
		kW	hp						rpm	Nm			CC032A	A	-	4/4 load %	3/4 load %
4-pole, 1 800 rpm at 60 Hz, 60 Hz power												
63	LA63ME4 ¹⁾	0.14	0.19	1 650	0.81	-	0.43	0.74	56.00	54.50	3.10	2.00
	LA63MF4 ¹⁾	0.21	0.28	1 650	1.22	-	0.59	0.77	58.30	56.80	3.10	2.00
	LA63MD4	0.11	0.15	1 695	0.62	-	0.41	0.60	46.00	41.00	3.30	3.20
71	LA71MG4 ¹⁾	0.29	0.39	1 650	1.68	-	0.76	0.77	61.90	60.40	3.30	1.90
	LA71MH4 ¹⁾	0.43	0.58	1 669	2.46	-	1.08	0.76	65.80	64.80	3.80	2.00
80	LE80MD4E	0.63	0.85	1 735	3.47	-	1.30	0.76	80.00	79.50	6.00	2.30
	LE80MH4E	0.86	1.15	1 740	4.72	-	1.72	0.76	82.50	82.30	6.20	2.20
90	LE90SG4E	1.27	1.70	1 725	7.03	-	2.45	0.78	84.00	84.60	6.10	2.30
	LE90LH4E	1.75	2.35	1 730	9.66	-	3.30	0.79	84.00	84.70	6.40	2.60
100	LE100LE4E	2.55	3.40	1 755	13.9	-	4.50	0.81	87.50	87.60	7.30	2.10
	LE100LK4E	3.45	4.60	1 755	18.8	-	6.00	0.82	87.50	88.30	7.50	2.00
112	LE112ME4E	4.55	6.10	1 760	24.7	-	8.00	0.82	87.50	88.00	7.50	2.40
132	LE132SF4E	6.30	8.40	1 765	34.1	-	10.90	0.81	89.50	89.80	7.30	2.30
	LE132MF4E	8.60	11.50	1 765	46.5	-	14.50	0.83	89.50	90.50	7.10	2.30
	LE132ZMM4E	10.50	14.00	1 760	57	-	17.70	0.83	91.00	O. R.	7.20	2.10
160	LE160MF4E	12.60	16.90	1 770	68	-	20.50	0.85	91.00	91.40	7.00	2.20
	LE160LD4E	17.30	23.20	1 775	93.1	-	27.50	0.86	92.40	92.40	7.70	2.30
180	LES180MM4E	21.30	28.60	1 765	115.2	-	34.00	0.85	92.40	93.10	6.80	2.50
	LES180ZLJ4E	25.30	33.90	1 765	136.9	-	40.50	0.85	92.40	92.90	7.50	2.60
200	LES200LN4E	34.50	46.30	1 770	186.1	-	55.00	0.85	93.00	93.40	7.20	2.70
2-pole, 3 600 rpm at 60 Hz, 60 Hz power												
63	LA63ME2 ¹⁾	0.21	0.28	3 420	0.59	-	0.51	0.81	64.00	63.00	4.10	2.10
	LA63MF2 ¹⁾	0.29	0.39	3 430	0.81	-	0.68	0.82	65.00	64.00	4.30	2.10
71	LA71MG2 ¹⁾	0.43	0.58	3 340	1.23	-	1.00	0.82	66.00	65.00	4.50	2.50
	LA71MH2 ¹⁾	0.63	0.85	3 400	1.77	-	1.36	0.82	71.00	71.00	4.90	2.60
80	LE80MA2E	0.86	1.15	3 410	2.41	-	1.70	0.84	75.50	77.00	5.20	1.90
	LE80ME2E	1.27	1.70	3 430	3.54	-	2.30	0.84	82.50	83.80	6.30	2.70
90	LE90SG2E	1.75	2.35	3 480	4.8	-	3.10	0.85	84.00	84.50	7.40	2.60
	LE90LH2E	2.55	3.40	3 485	6.99	-	4.35	0.86	85.50	86.40	7.60	2.60
100	LE100LD2E	3.45	4.60	3 505	9.4	-	5.80	0.85	87.50	86.40	7.30	2.20
112	LE112MA2E	4.55	6.10	3 550	12.2	-	7.50	0.87	87.50	87.40	7.80	2.40
132	LE132SB2E	6.30	8.40	3 550	16.9	-	10.20	0.88	88.50	89.30	6.90	1.80
	LE132SF2E	8.60	11.50	3 550	23.1	-	13.70	0.88	89.50	90.50	7.40	2.00
160	LE160MB2E	12.60	16.90	3 555	33.8	-	20.50	0.85	90.20	89.60	7.40	2.10
	LE160MG2E	17.30	23.20	3 555	46.5	-	27.00	0.88	91.00	90.60	7.60	2.40
	LE160LB2E	21.30	28.60	3 555	57.2	-	33.50	0.88	91.00	90.60	7.90	2.90

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with B14 flange) for worm geared motors S


Selection and ordering data (continued)

Size	Motor	T_{Br}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code		
									Data position				Number of poles	Specification	
		-	-	dB (A)	dB (A)	1/h	10^{-4} kgm ² kg		9.	10.	11.	12.		NEMA	UL-R/CSA
4-pole, 1 800 rpm at 60 Hz, 60 Hz power															
63	LA63ME4 ¹⁾	2.10	O. R.	46	57	15 000	2.9	3.20	B	C	1	1	-	N65	N38
	LA63MF4 ¹⁾	2.00	O. R.	46	57	15 000	3.7	3.60	B	D	1	1	-	N65	N38
	LA63MD4	3.30	O. R.	46	57	15 000	2.9	3.20	B	B	1	1	-	N65	N38
71	LA71MG4 ¹⁾	2.00	O. R.	48	59	15 000	5.2	4.30	C	D	1	1	-	N65	N38
	LA71MH4 ¹⁾	2.20	O. R.	48	59	15 000	7.7	5.80	C	E	1	1	-	N65	N38
80	LE80MD4E	3.20	2.50	55	66	10 000	17	9.30	D	C	2	2	-	N65	N38
	LE80MH4E	3.30	2.40	55	66	10 000	21	10.00	D	E	2	2	-	N65	N38
90	LE90SG4E	3.00	2.50	58	70	8 000	28	12.00	E	K	2	2	-	N65	N38
	LE90LH4E	3.40	2.80	58	70	8 000	36	15.00	E	M	2	2	-	N65	N38
100	LE100LE4E	3.30	2.30	62	74	7 000	86	20.00	F	L	2	2	-	N65	N38
	LE100LK4E	3.10	2.20	62	74	7 000	110	24.00	F	M	2	2	-	N65	N38
112	LE112ME4E	3.20	2.60	62	74	5 000	140	24.00	G	H	2	2	-	N65	N38
132	LE132SF4E	2.90	2.50	68	80	3 000	270	35.00	H	G	2	2	-	N65	N38
	LE132MF4E	2.90	2.50	68	80	3 000	340	42.00	H	J	2	2	-	N65	N38
	LE132ZMM4E	3.00	O. R.	64	76	1 600	410	O. R.	H	V	2	2	-	N65	N38
160	LE160MF4E	2.80	2.40	69	81	2 000	650	61.00	J	P	2	2	-	N65	N38
	LE160LD4E	2.90	2.50	69	81	2 000	830	73.00	J	U	2	2	-	N65	N38
180	LES180MM4E	3.40	O. R.	61	74	O. R.	1200	151.00	K	L	3	2	-	N65	N38
	LES180ZLJ4E	3.40	O. R.	62	74	O. R.	1300	156.00	K	N	3	2	-	N65	N38
200	LES200LN4E	3.20	O. R.	67	80	O. R.	2000	211.00	L	M	3	2	-	N65	N38
2-pole, 3 600 rpm at 60 Hz, 60 Hz power															
63	LA63ME2 ¹⁾	2.30	O. R.	53	64	5 000	1.8	3.20	B	C	1	1	P00	N65	N38
	LA63MF2 ¹⁾	2.30	O. R.	53	64	5 000	2.2	3.60	B	D	1	1	P00	N65	N38
71	LA71MG2 ¹⁾	2.50	O. R.	56	67	5 000	2.9	4.50	C	D	1	1	P00	N65	N38
	LA71MH2 ¹⁾	2.50	O. R.	56	67	5 000	4.1	5.50	C	E	1	1	P00	N65	N38
80	LE80MA2E	2.30	2.00	64	75	3 000	8	8.30	D	B	2	2	P00	N65	N38
	LE80ME2E	3.30	2.90	64	75	3 000	11	10.00	D	M	2	2	P00	N65	N38
90	LE90SG2E	3.80	2.80	69	81	2 000	17	12.00	E	K	2	2	P00	N65	N38
	LE90LH2E	3.90	2.80	69	81	2 000	21	14.00	E	M	2	2	P00	N65	N38
100	LE100LD2E	3.30	2.40	71	83	2 000	44	21.00	F	K	2	2	P00	N65	N38
112	LE112MA2E	3.30	2.60	73	85	1 300	92	22.00	G	G	2	2	P00	N65	N38
132	LE132SB2E	2.90	1.90	72	84	800	200	32.00	H	E	2	2	P00	N65	N38
	LE132SF2E	3.10	2.20	72	84	800	240	36.00	H	G	2	2	P00	N65	N38
160	LE160MB2E	3.20	2.30	77	89	500	450	57.00	J	N	2	2	P00	N65	N38
	LE160MG2E	3.40	2.60	77	89	500	530	65.00	J	Q	2	2	P00	N65	N38
	LE160LB2E	3.60	3.10	77	89	500	610	74.00	J	T	2	2	P00	N65	N38

O. R. On request

¹⁾ The technical specifications also apply to LAI63 and LAI71 motors (with B14 flange) for worm geared motors S

SIMOGEAR Geared Motors

Motors

IE2



NEMA Energy Efficient motors MG1, Table 12-11

Selection and ordering data (continued)

Size	Motor	P_{rated}		n_{rated}	T_{rated}	EISA	I_{rated}	$\cos \varphi$	η		I_{St}/I_{rated}	T_{St}/T_{rated}
		kW	hp						rpm	Nm			CC no.	460 V	4/4 load	3/4 load
6-pole, 1 200 rpm at 60 Hz, 60 Hz power												
63	LA63MF6	0.10	0.13	1 050	0.91	-	0.39	0.67	48.00	46.50	2.10	1.90
	LA63MG6	0.14	0.19	1 080	1.24	-	0.74	0.57	41.90	37.00	2.10	2.30
71	LA71MG6	0.21	0.28	1 035	1.94	-	0.69	0.67	57.30	55.80	3.00	2.10
	LA71MH6	0.29	0.39	1 030	2.69	-	0.78	0.75	61.90	60.40	3.10	2.30
80	LE80MD6E	0.43	0.58	1 125	3.65	-	1.04	0.69	75.30	75.30	4.20	2.10
	LE80MK6E	0.63	0.85	1 135	5.3	-	1.56	0.66	77.00	77.50	4.80	2.60
90	LE90LLA6E	0.86	1.15	1 145	7.17	-	1.85	0.73	73.00	73.00	4.80	1.90
100	LE100LLA6E	1.27	1.70	1 170	10.4	-	2.50	0.75	85.50	86.10	5.20	1.80
	LE100LLB6E	1.75	2.35	1 170	14.3	-	3.45	0.74	86.50	87.10	5.80	1.90
112	LE112ME6E	2.55	3.40	1 165	20.9	-	4.90	0.75	87.50	88.10	5.50	1.90
132	LE132SC6E	3.45	4.60	1 170	28.2	-	6.90	0.72	87.50	87.80	5.20	1.60
	LE132MB6E	4.55	6.10	1 170	37.1	-	8.70	0.75	87.50	88.50	5.30	1.60
	LE132MJ6E	6.30	8.40	1 170	51.4	-	11.60	0.76	89.50	90.00	5.80	1.90
160	LE160ML6E	8.60	11.50	1 175	69.9	-	16.10	0.75	89.50	90.20	4.90	1.90
	LE160LL6E	12.60	16.90	1 175	102.4	-	23.00	0.76	90.20	91.00	4.90	1.90
180	LES180LE6E	18.00	24.00	1 170	146.9	-	31.00	0.80	91.70	92.20	6.00	2.40
200	LES200LG6E	22.00	30.00	1 175	178.8	-	36.50	0.83	91.0	91.9	5.8	2.3
	LES200LP6E	26.50	35.50	1 175	215.4	-	43.50	0.83	91.7	92.8	6.3	2.5

O. R. On request


Selection and ordering data (continued)

Size	Motor	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code		
									Data position				Number of poles	Specification	
		-	-	dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg	9.	10.	11.	12.		NEMA	UL-R/CSA
6-pole, 1 200 rpm at 60 Hz, 60 Hz power															
63	LA63MF6	1.60	O. R.	43	54	10 500	3.7	3.60	B	D	1	1	P01	N65	N38
	LA63MG6	2.30	O. R.	43	54	10 500	3.7	3.60	B	E	1	1	P01	N65	N38
71	LA71MG6	2.10	O. R.	43	54	10 500	5.5	4.30	C	D	1	1	P01	N65	N38
	LA71MH6	2.20	O. R.	43	54	10 500	8	5.30	C	E	1	1	P01	N65	N38
80	LE80MD6E	2.60	2.30	45	56	8 400	17	8.30	D	C	2	2	P01	N65	N38
	LE80MK6E	3.10	2.80	45	56	8 400	25	11.30	D	F	2	2	P01	N65	N38
90	LE90LLA6E	2.60	1.80	46	58	7 000	30	15.00	E	E	2	2	P01	N65	N38
100	LE100LLA6E	2.60	O. R.	62	74	6 300	110	24.00	F	N	2	2	P01	N65	N38
	LE100LLB6E	2.80	O. R.	62	74	6 300	110	24.00	F	P	2	2	P01	N65	N38
112	LE112ME6E	2.80	O. R.	65	77	5 600	140	24.00	G	H	2	2	P01	N65	N38
132	LE132SC6E	2.60	O. R.	67	79	4 200	240	31.00	H	F	2	2	P01	N65	N38
	LE132MB6E	2.40	O. R.	67	79	4 200	290	36.00	H	H	2	2	P01	N65	N38
	LE132MJ6E	2.60	O. R.	67	79	3 500	370	45.00	H	L	2	2	P01	N65	N38
160	LE160ML6E	2.20	O. R.	70	82	2 800	750	67.00	J	H	2	2	P01	N65	N38
	LE160LL6E	2.20	O. R.	70	82	2 800	980	83.00	J	V	2	2	P01	N65	N38
180	LES180LE6E	2.90	O. R.	60	74	O. R.	1 700	141.00	K	M	3	2	P01	N65	N38
200	LES200LG6E	2.50	O. R.	62	76	O. R.	2 500	181	L	L	3	2	P01	N65	N38
	LES200LP6E	2.50	O. R.	62	76	O. R.	3 000	201	L	N	3	2	P01	N65	N38

O. R. On request

NEMA Premium Efficient motors MG1, Table 12-12
Selection and ordering data

Size	Motor	P_{rated}		n_{rated}	T_{rated}	EISA	I_{rated}	$\cos \varphi$	η		I_{St}/I_{rated}	T_{St}/T_{rated}
		kW	hp						rpm	Nm			CC no.	460 V	4/4 load	3/4 load
4-pole, 1 800 rpm at 60 Hz, 50 Hz power												
80	LE80ZMQ4P	0.75	1.00	1 760	4.07	✓	1.53	0.71	85.50	84.50	8.30	3.10
90	LE90SM4P	1.10	1.50	1 750	6	✓	2.10	0.75	86.50	86.30	8.20	3.40
	LE90ZLR4P	1.50	2.00	1 755	8.16	✓	2.85	0.77	86.50	87.00	8.40	3.00
100	LE100ZLSA4P	2.20	3.00	1 770	11.9	-	3.80	0.81	89.50	89.50	9.60	3.50
	LE100ZLSB4P	3.00	4.00	1 760	16.3	-	5.10	0.82	89.50	89.50	9.50	3.10
112	LE112ZMKB4P	3.70	5.00	1 770	20	✓	6.50	0.80	89.50	89.50	8.20	2.90
132	LE132ZST4P	5.50	7.50	1 780	29.5	✓	9.10	0.83	91.70	91.70	9.50	2.90
	LE132ZMS4P	7.50	10.00	1 770	40.5	✓	12.40	0.83	91.70	91.70	9.60	2.70
160	LE160MPA4P	9.20	12.30	O. R.	O. R.	-	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
	LE160MPB4P	11.00	15.00	1 775	59.2	✓	18.00	0.83	92.40	92.40	8.90	3.00
	LE160ZLL4P	15.00	20.00	1 780	80.5	✓	25.00	0.81	93.00	93.00	9.50	2.90
180	LES180MQ4P	18.50	25.00	1 775	99.5	✓	30.50	0.81	93.60	93.70	7.80	2.70
	LES180ZLN4P	22.00	30.00	1 775	118.4	✓	36.50	0.81	93.60	93.80	7.70	2.80
200	LES200ZLU4P	30.00	40.00	1 778	161.1	✓	48.00	0.83	94.10	94.30	8.10	3.00
225	LES225SD4P	37.00	50.00	1 782	198.3	-	58.00	0.85	94.50	94.70	7.50	2.80
	LES225YMF4P	45.00	60.00	1 782	241.1	✓	70.00	0.85	95.00	95.30	7.20	2.90
250	LES250MD4P	55.00	75.00	1 786	294	-	84.00	0.86	95.40	95.60	7.60	2.80
2-pole, 3 600 rpm at 60 Hz, 50 Hz power												
80	LE80ME2P	0.75	1.00	3 480	2.06	✓	1.46	0.84	77.00	78.00	7.10	3.00
	LE80ZMJ2P	1.10	1.50	3 500	3	✓	1.98	0.83	84.00	84.00	8.40	3.30
90	LE90SM2P	1.50	2.00	3 525	4.06	✓	2.60	0.84	85.50	85.00	9.80	3.10
	LE90ZLR2P	2.20	3.00	3 530	5.95	✓	3.65	0.87	86.50	86.30	9.60	3.00
100	LE100ZLK2P	3.00	4.00	3 525	8.13	-	4.90	0.87	88.50	88.50	9.70	3.80
112	LE112ZMH2P	3.70	5.00	3 565	9.91	✓	6.00	0.87	88.50	88.50	10.00	3.80
132	LE132SF2P	5.50	7.50	3 555	14.8	✓	8.60	0.90	89.50	89.50	8.60	2.10
	LE132ZSQB2P	7.50	10.00	3 555	20.1	✓	11.50	0.91	90.20	90.20	9.50	2.40
160	LE160MG2P	11.00	15.00	3 560	29.5	✓	17.20	0.88	91.00	91.00	8.50	2.80
	LE160MM2P	15.00	20.00	3 565	40.2	✓	24.00	0.86	91.00	91.00	9.70	3.10
	LE160ZLJ2P	18.50	25.00	3 560	49.6	✓	28.00	0.90	91.70	91.70	9.40	3.10
6-pole, 1 200 rpm at 60 Hz, 50 Hz power												
90	LE90SQ6P	0.75	1.00	1 155	6.2	-	1.76	0.65	82.50	82.30	5.30	2.40
100	LE100ZLSA6P	1.10	1.50	1 180	8.9	-	2.30	0.69	87.50	87.20	6.70	2.40
112	LE112ZMKA6P	1.50	2.00	1 175	12.2	-	2.90	0.73	88.50	88.30	6.90	2.20
132	LE132SQB6P	3.00	4.00	1 185	24.2	-	5.60	0.75	89.50	89.60	7.50	2.30
	LE132SQA6P	2.20	3.00	1 185	17.7	✓	4.15	0.74	89.50	89.30	8.00	2.30
	LE132MJ6P	3.70	5.00	1 180	29.9	✓	7.10	0.73	89.50	89.50	7.60	2.40
	LE132ZMS6P	5.50	7.50	1 180	44.5	✓	10.30	0.74	91.00	91.30	7.20	2.30
160	LE160MW6P	7.50	10.00	1 185	60.4	✓	13.80	0.75	91.00	91.00	5.90	2.40
	LE160ZLW6P	11.00	15.00	1 180	89	✓	20.00	0.75	91.70	91.90	5.80	2.30
180	LES180LJ6P	15.00	20.00	1 178	121.6	✓	26.00	0.79	91.70	92.00	6.80	2.50
200	LES200LM6P	18.50	25.00	1 180	149.7	✓	32.00	0.78	93.00	93.80	6.50	2.80
	LES200ZLS6P	22.00	30.00	1 180	178	✓	37.50	0.79	93.00	93.50	6.30	2.60

O. R. On request


Selection and ordering data (continued)

Size	Motor	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pFA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code		
									Data position				Number of poles	Specification	
		-	-	dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg	9.	10.	11.	12.		NEMA	UL-R/CSA
4-pole, 1 800 rpm at 60 Hz, 50 Hz power															
80	LE80ZMQ4P	4.70	O. R.	55	66	O. R.	29	10.00	D	F	2	3	-	N65	N38
90	LE90SM4P	4.40	O. R.	58	70	O. R.	36	12.00	E	K	2	3	-	N65	N38
	LE90ZLR4P	4.30	O. R.	58	70	O. R.	49	15.00	E	M	2	3	-	N65	N38
100	LE100ZLSA4P	5.10	O. R.	62	74	O. R.	140	29.00	F	N	2	3	-	N65	N38
	LE100ZLSB4P	4.60	O. R.	62	74	O. R.	140	29.00	F	P	2	3	-	N65	N38
112	LE112ZMKB4P	4.30	O. R.	62	74	O. R.	170	29.00	G	J	2	3	-	N65	N38
132	LE132ZST4P	4.40	O. R.	68	80	O. R.	460	57.00	H	J	2	3	-	N65	N38
	LE132ZMS4P	4.20	O. R.	68	80	O. R.	460	57.00	H	L	2	3	-	N65	N38
160	LE160MPA4P	O. R.	O. R.	69	81	O. R.	830	73.00	J	Q	2	3	-	N65	N38
	LE160MPB4P	3.80	O. R.	69	81	O. R.	830	73.00	J	R	2	3	-	N65	N38
	LE160ZLL4P	4.30	O. R.	69	81	O. R.	990	90.00	J	U	2	3	-	N65	N38
180	LES180MQ4P	3.60	3.00	68	75	O. R.	1 300	165.00	K	L	3	3	-	N65	N38
	LES180ZLN4P	3.70	3.10	70	77	O. R.	1 400	170.00	K	N	3	3	-	N65	N38
200	LES200ZLU4P	3.50	3.30	70	77	O. R.	2 200	240.00	L	N	3	3	-	N65	N38
225	LES225SD4P	3.00	2.20	60	73	O. R.	4 200	285.00	M	F	3	3	-	N65	N38
	LES225YMF4P	3.00	2.20	60	73	O. R.	4 700	320.00	M	T	3	3	-	N65	N38
250	LES250MD4P	3.20	2.30	60	74	O. R.	8 500	420.00	N	M	3	3	-	N65	N38
2-pole, 3 600 rpm at 60 Hz, 50 Hz power															
80	LE80ME2P	3.60	O. R.	64	75	O. R.	11	9.30	D	B	2	3	P00	N65	N38
	LE80ZMJ2P	4.50	O. R.	64	75	O. R.	13	10.00	D	M	2	3	P00	N65	N38
90	LE90SM2P	4.90	O. R.	69	81	O. R.	21	12.00	E	K	2	3	P00	N65	N38
	LE90ZLR2P	4.90	O. R.	69	81	O. R.	31	15.00	E	M	2	3	P00	N65	N38
100	LE100ZLK2P	5.50	O. R.	71	83	O. R.	54	26.00	F	K	2	3	P00	N65	N38
112	LE112ZMH2P	5.60	O. R.	73	85	O. R.	120	29.00	G	G	2	3	P00	N65	N38
132	LE132SF2P	4.40	O. R.	72	84	O. R.	240	36.00	H	E	2	3	P00	N65	N38
	LE132ZSQB2P	4.70	O. R.	72	84	O. R.	310	50.00	H	H	2	3	P00	N65	N38
160	LE160MG2P	4.30	O. R.	77	89	O. R.	530	65.00	J	N	2	3	P00	N65	N38
	LE160MM2P	4.80	O. R.	77	89	O. R.	610	74.00	J	P	2	3	P00	N65	N38
	LE160ZLJ2P	4.40	O. R.	77	89	O. R.	680	84.00	J	T	2	3	P00	N65	N38
6-pole, 1 200 rpm at 60 Hz, 50 Hz power															
90	LE90SQ6P	3.10	O. R.	46	58	O. R.	40	15.00	E	C	2	3	P01	N65	N38
100	LE100ZLSA6P	3.30	O. R.	62	74	O. R.	140	25.00	F	N	2	3	P01	N65	N38
112	LE112ZMKA6P	3.20	O. R.	65	77	O. R.	170	29.00	G	H	2	3	P01	N65	N38
132	LE132SQB6P	3.30	O. R.	67	79	O. R.	370	45.00	H	H	2	3	P01	N65	N38
	LE132SQA6P	3.50	O. R.	67	79	O. R.	370	45.00	H	G	2	3	P01	N65	N38
	LE132MJ6P	3.40	O. R.	67	79	O. R.	370	45.00	H	K	2	3	P01	N65	N38
	LE132ZMS6P	3.30	O. R.	67	79	O. R.	460	45.00	H	L	2	3	P01	N65	N38
160	LE160MW6P	2.60	O. R.	70	82	O. R.	980	83.00	J	J	2	3	P01	N65	N38
	LE160ZLW6P	2.60	O. R.	70	82	O. R.	1 200	105.00	J	V	2	3	P01	N65	N38
180	LES180LJ6P	3.00	2.80	61	68	O. R.	1 900	180.00	K	M	3	3	P01	N65	N38
200	LES200LM6P	3.00	3.10	64	71	O. R.	2 800	215.00	L	L	3	3	P01	N65	N38
	LES200ZLS6P	2.80	2.90	63	70	O. R.	3 200	230.00	L	M	3	3	P01	N65	N38

O. R. On request

SIMOGEAR Geared Motors

Motors

IE3



NEMA Premium Efficient motors MG1, Table 12-12

Selection and ordering data (continued)

Size	Motor	P_{rated}		n_{rated}	T_{rated}	EISA CC no.	I_{rated} 460 V CC032A	$\cos \varphi$	η		I_{St}/I_{rated}	T_{St}/T_{rated}
		kW	hp						rpm	Nm		
4-pole, 1 800 rpm at 60 Hz, 60 Hz power												
80	LE80ZMQ4P	0.86	1.15	1 755	4.68	-	1.66	0.75	85.50	85.10	7.70	2.70
90	LE90SM4P	1.27	1.70	1 740	6.97	-	2.35	0.79	86.50	86.70	7.40	2.90
	LE90ZLR4P	1.75	2.35	1 740	9.6	-	3.15	0.80	86.50	87.00	7.50	2.60
100	LE100ZLSA4P	2.55	3.40	1 765	13.8	-	4.25	0.84	89.50	89.50	8.50	3.00
	LE100ZLSB4P	3.45	4.60	1 755	18.8	-	5.80	0.84	89.50	89.50	8.40	2.70
112	LE112ZMKB4P	4.55	6.10	1 760	24.7	-	7.70	0.83	89.50	89.50	7.30	2.50
132	LE132ZST4P	6.30	8.40	1 775	33.9	-	10.30	0.84	91.70	91.70	8.40	2.50
	LE132ZMS4P	8.60	11.50	1 765	46.5	-	13.80	0.85	91.70	91.70	8.40	2.30
160	LE160MPA4P	10.50	14.00	O. R.	O. R.	-	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
	LE160MPB4P	12.60	16.90	1 770	68	-	20.00	0.85	92.40	92.40	7.90	2.60
	LE160ZLL4P	18.00	24.00	1 775	96.8	-	28.00	0.83	93.60	93.60	8.50	2.50
180	LES180MQ4P	21.30	28.60	1 770	114.9	-	34.50	0.83	93.60	94.00	7.20	2.40
	LES180ZLN4P	25.30	33.90	1 770	136.5	-	41.00	0.83	93.60	94.10	6.80	2.20
200	LES200ZLU4P	34.50	46.30	1 770	186.1	-	55.00	0.85	93.00	93.50	7.30	2.40
2-pole, 3 600 rpm at 60 Hz, 60 Hz power												
80	LE80ME2P	0.86	1.15	3 450	2.38	-	1.63	0.86	77.00	78.00	6.40	2.60
	LE80ZMJ2P	1.27	1.70	3 480	3.48	-	2.25	0.85	84.00	84.00	7.40	2.80
90	LE90SM2P	1.75	2.35	3 510	4.76	-	2.95	0.87	85.50	85.60	8.70	2.60
	LE90ZLR2P	2.55	3.40	3 510	6.94	-	4.20	0.88	86.50	86.90	8.30	2.60
100	LE100ZLK2P	3.45	4.60	3 520	9.36	-	5.50	0.89	88.50	88.50	8.50	3.30
112	LE112ZMH2P	4.60	6.20	3 555	12.4	-	7.20	0.90	88.50	88.50	8.20	3.00
132	LE132SF2P	6.30	8.40	3 545	17	-	9.70	0.91	89.50	89.50	7.50	1.90
	LE132ZSQB2P	8.60	11.50	3 550	23.1	-	13.00	0.92	90.20	90.20	8.40	2.10
160	LE160MG2P	12.60	16.90	3 555	33.8	-	19.50	0.89	91.00	91.00	7.60	2.40
	LE160MM2P	18.00	24.00	3 560	48.3	-	27.00	0.88	91.70	91.70	8.70	2.70
	LE160ZLJ2P	22.00	30.00	3 550	59.2	-	32.00	0.91	91.70	91.70	8.20	2.70
6-pole, 1 200 rpm at 60 Hz, 60 Hz power												
90	LE90SQ6P	0.86	1.15	1 140	7.2	-	1.87	0.70	82.50	83.00	4.90	2.10
100	LE100ZLSA6P	1.27	1.70	1 175	10.3	-	2.55	0.71	87.50	87.20	6.10	2.10
112	LE112ZMKA6P	1.75	2.35	1 170	14.3	-	3.25	0.76	88.50	88.70	6.20	2.00
132	LE132SQB6P	3.45	4.60	1 180	27.9	-	6.30	0.77	89.50	90.00	6.70	2.00
	LE132SQA6P	2.55	3.40	1 180	20.6	-	4.65	0.77	89.50	89.80	7.10	2.00
	LE132MJ6P	4.60	6.20	1 175	37.4	-	8.30	0.77	89.50	90.50	6.40	2.00
	LE132ZMS6P	6.30	8.40	1 175	51.2	-	11.30	0.77	91.00	91.80	6.60	2.00
160	LE160MW6P	8.60	11.50	1 180	69.6	-	15.60	0.76	91.00	91.40	5.20	2.00
	LE160ZLW6P	12.60	16.90	1 175	102.4	-	22.50	0.77	91.70	92.20	5.20	2.00
180	LES180LJ6P	18.00	24.00	1 170	146.9	-	30.50	0.81	91.70	92.50	5.80	2.10
200	LES200LM6P	22.00	30.00	1 175	178.8	-	37.50	0.80	91.70	92.00	5.60	2.40
	LES200ZLS6P	26.50	35.50	1 175	215.4	-	44.00	0.81	93.00	94.00	5.50	2.30

O. R. On request


Selection and ordering data (continued)

Size	Motor	T_{Bk}/T_{rated}	T_A/T_{rated}	L_{pfA}	L_{WA}	Z_0	J_{mot}	m_{mot}	Article No.				Order code		
									Data position				Number of poles	Specification	
		-	-	dB (A)	dB (A)	1/h	10^{-4} kgm ²	kg	9.	10.	11.	12.	NEMA	UL-R/CSA	
4-pole, 1 800 rpm at 60 Hz, 60 Hz power															
80	LE80ZMQ4P	4.10	O. R.	55	66	O. R.	29	10.00	D	F	2	3	-	N65	N38
90	LE90SM4P	3.80	O. R.	58	70	O. R.	36	12.00	E	K	2	3	-	N65	N38
	LE90ZLR4P	3.70	O. R.	58	70	O. R.	49	15.00	E	M	2	3	-	N65	N38
100	LE100ZLSA4P	4.40	3.80	62	74	O. R.	140	29.00	F	N	2	3	-	N65	N38
	LE100ZLSB4P	3.90	3.40	62	74	O. R.	140	29.00	F	P	2	3	-	N65	N38
112	LE112ZMKB4P	3.80	3.10	62	74	O. R.	170	29.00	G	J	2	3	-	N65	N38
132	LE132ZST4P	3.90	3.10	68	80	O. R.	460	57.00	H	J	2	3	-	N65	N38
	LE132ZMS4P	3.60	2.90	68	80	O. R.	460	57.00	H	L	2	3	-	N65	N38
160	LE160MPA4P	O. R.	O. R.	69	81	O. R.	830	73.00	J	Q	2	3	-	N65	N38
	LE160MPB4P	3.30	3.30	69	81	O. R.	830	73.00	J	R	2	3	-	N65	N38
	LE160ZLL4P	3.70	3.10	69	81	O. R.	990	90.00	J	U	2	3	-	N65	N38
180	LES180MQ4P	3.20	2.60	68	75	O. R.	1 300	165.00	K	L	3	3	-	N65	N38
	LES180ZLN4P	3.20	2.40	70	77	O. R.	1 400	170.00	K	N	3	3	-	N65	N38
200	LES200ZLU4P	3.00	2.60	70	77	O. R.	2 200	240.00	L	N	3	3	-	N65	N38
2-pole, 3 600 rpm at 60 Hz, 60 Hz power															
80	LE80ME2P	3.10	O. R.	64	75	O. R.	11	9.30	D	B	2	3	P00	N65	N38
	LE80ZMJ2P	3.80	O. R.	64	75	O. R.	13	10.00	D	M	2	3	P00	N65	N38
90	LE90SM2P	4.20	O. R.	69	81	O. R.	21	12.00	E	K	2	3	P00	N65	N38
	LE90ZLR2P	4.20	O. R.	69	81	O. R.	31	15.00	E	M	2	3	P00	N65	N38
100	LE100ZLK2P	4.70	4.10	71	83	O. R.	54	26.00	F	K	2	3	P00	N65	N38
112	LE112ZMH2P	4.50	4.10	73	85	O. R.	120	29.00	G	G	2	3	P00	N65	N38
132	LE132SF2P	3.80	2.30	72	84	O. R.	240	36.00	H	E	2	3	P00	N65	N38
	LE132ZSQB2P	4.10	2.60	72	84	O. R.	310	50.00	H	H	2	3	P00	N65	N38
160	LE160MG2P	3.70	3.00	77	89	O. R.	530	65.00	J	N	2	3	P00	N65	N38
	LE160MM2P	4.20	3.40	77	89	O. R.	610	74.00	J	P	2	3	P00	N65	N38
	LE160ZLJ2P	3.80	3.40	77	89	O. R.	680	84.00	J	T	2	3	P00	N65	N38
6-pole, 1 200 rpm at 60 Hz, 60 Hz power															
90	LE90SQ6P	2.70	2.60	46	58	O. R.	40	15.00	E	C	2	3	P01	N65	N38
100	LE100ZLSA6P	2.80	O. R.	62	74	O. R.	140	25.00	F	N	2	3	P01	N65	N38
112	LE112ZMKA6P	2.80	O. R.	65	77	O. R.	170	29.00	G	H	2	3	P01	N65	N38
132	LE132SQB6P	2.90	O. R.	67	79	O. R.	370	45.00	H	H	2	3	P01	N65	N38
	LE132SQA6P	3.10	O. R.	67	79	O. R.	370	45.00	H	G	2	3	P01	N65	N38
	LE132MJ6P	2.80	O. R.	67	79	O. R.	370	45.00	H	K	2	3	P01	N65	N38
	LE132ZMS6P	2.90	O. R.	67	79	O. R.	460	45.00	H	L	2	3	P01	N65	N38
160	LE160MW6P	2.30	O. R.	70	82	O. R.	980	83.00	J	J	2	3	P01	N65	N38
	LE160ZLW6P	2.30	O. R.	70	82	O. R.	1 200	105.00	J	V	2	3	P01	N65	N38
180	LES180LJ6P	2.60	2.30	61	68	O. R.	1 900	180.00	K	M	3	3	P01	N65	N38
200	LES200LM6P	2.50	2.60	64	71	O. R.	2 800	215.00	L	L	3	3	P01	N65	N38
	LES200ZLS6P	2.40	2.50	63	70	O. R.	3 200	230.00	L	M	3	3	P01	N65	N38

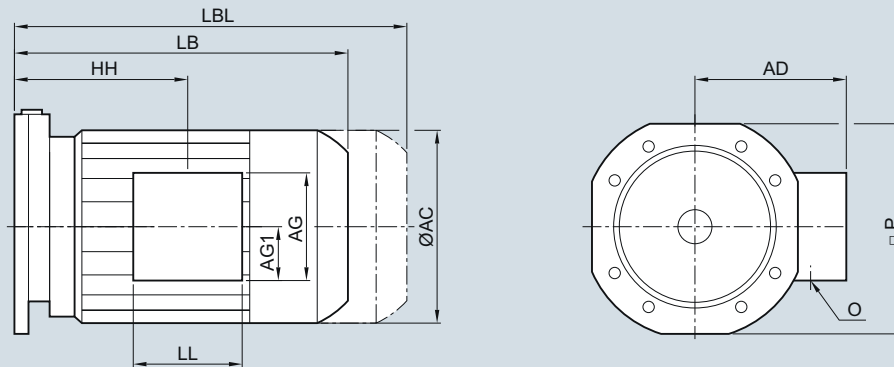
O. R. On request

SIMOGEAR Geared Motors

Motors

Dimensions

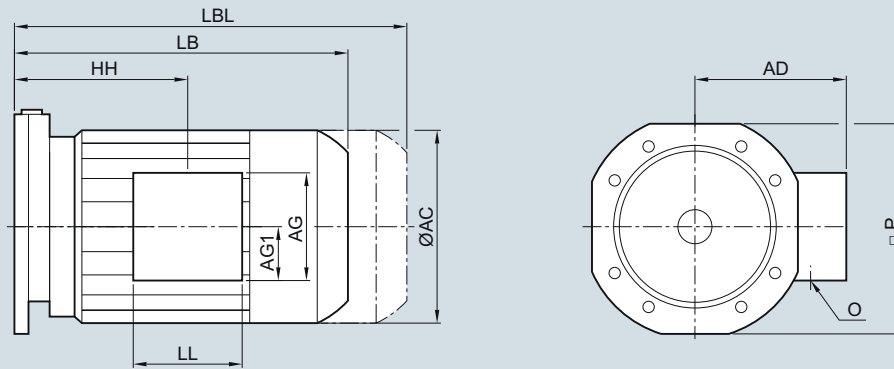
Motors



Motor	Gearbox type					Dimensions						Terminal box								
	D/Z	FD/FZ	B	K	C	P	HH	LB	LBL	AC	Type ¹⁾	AD	LL	AG	AG1	O metric	O NPT			
LA63M	19	-	19	-	-	-	61.5	160.5	205.0	117.8	gk127	124.0	90	90	45.0	M20x1.5/	2 x 1/2"			
	29	29	29	-	29	120	95.0	194.0	238.5			gk030	101.0	75	75	37.5	M25x1.5	-		
	39	39	39	39	39								TB1E10	132.0	123	119.5	58.0	On request		
	49	49	49	49	49	160	85.5	184.5	229.0											
	59	-	-	-	-															
	69	69	-	69	69															
-	-	-	79	-																
LA71M	19	-	19	-	-	-	93.5	184.5	239.5	138.8	gk127	134.0		90	90	45.0	M20x1.5/	2 x 1/2"		
	29	29	29	-	29	120	135.0	226.0	281.0			gk030	111.0	75	75	37.5	M25x1.5	-		
	39	39	39	39	39								TB1E10	142.0	123	119.5	58.0	On request		
	49	49	49	49	49	160	125.5	216.5	271.5											
	59	-	-	-	-															
	69	69	-	69	69															
	-	-	-	79	-															
	79	79	-	-	-	198	123.5	214.5	269.5											
-	-	-	89	89																
LE80M	19	-	19	-	-	0	120.0	240.0	300.0	156.3	TB1E10	149.2		123	119.5	58.0	M20x1.5/	2 x 1/2"		
	29	29	29	-	29	120	170.0	290.0	350.0			TB1E00	121.0	79	93	50.0	M25x1.5	-		
	39	39	39	39	39															
	49	49	49	49	49	160	160.5	280.5	340.5											
	59	-	-	-	-															
	69	69	-	69	69															
	-	-	-	79	-															
	79	79	-	-	-	198	154.5	274.5	334.5											
	-	-	-	89	89															
89	89	-	-	-	245	141.5	261.5	321.5												
-	-	-	109	-																
LE80ZM	19	-	19	-	-	0	155.0	275.0	335.0	156.3	TB1E10	149.2	123	119.5	58.0	M20x1.5/	2 x 1/2"			
	29	29	29	-	29	120	205.0	325.0	385.0			TB1E00	121.0	79	93	50.0	M25x1.5	-		
	39	39	39	39	39															
	49	49	49	49	49	160	195.5	315.5	375.5											
	59	-	-	-	-															
	69	69	-	69	69															
	-	-	-	79	-															
	79	79	-	-	-	198	189.5	309.5	369.5											
	-	-	-	89	89															
89	89	-	-	-	245	176.5	296.5	356.5												
-	-	-	109	-																

¹⁾ Terminal box type is dependent on the motor options, see page 11/13.

Motors (continued)



Motor	Gearbox type					Dimensions					AC	Terminal box					
	D/Z	FD/FZ	B	K	C	P	HH	LB	LBL	Type ¹⁾		AD	LL	AG	AG1	O metric	O NPT
LE90S/L	29	29	29	-	29	120	207.5	351.5	421.5	173.8	TB1E10	154.2	123	119.5	58	M20x1.5/	3/4"+1/2"
	39	39	39	39	39							TB1E00	126.0	79	93	50	M25x1.5
	49	49	49	49	49	160	198.0	342.0	412.0								
	59	-	-	-	-												
	69	69	-	69	69												
	-	-	-	79	-												
	79	79	-	-	-	198	192.0	336.0	406.0								
	-	-	-	89	89												
	89	89	-	-	-	245	179.0	323.0	393.0								
	-	-	-	109	-												
	-	-	-	129	-	300	172.0	316.0	386.0								
	109	109	-	-	-												
129	129	-	-	-	350	165.0	309.0	379.0									
-	-	-	149	-													
LE90ZL	29	29	29	-	29	120	247.5	391.5	461.5	173.8	TB1E10	154.2	123	119.5	58	M20x1.5/	3/4"+1/2"
	39	39	39	39	39							TB1E00	126.0	79	93	50	M25x1.5
	49	49	49	49	49	160	238.0	382.0	452.0								
	59	-	-	-	-												
	69	69	-	69	69												
	-	-	-	79	-												
	79	79	-	-	-	198	232.0	376.0	446.0								
	-	-	-	89	89												
	89	89	-	-	-	245	219.0	363.0	433.0								
	-	-	-	109	-												
	-	-	-	129	-	300	212.0	356.0	426.0								
	109	109	-	-	-												
129	129	-	-	-	350	205.0	349.0	419.0									
-	-	-	149	-													
LE100L	29	29	29	-	29	120	242.5	408.0	486.5	198.0	TB1F10	170.5	135	135	67.5	2xM32x1.5	3/4"+1/2"
	39	39	39	39	39							TB1F00	166.0	112	135	71.5	
	49	49	49	49	49	160	233.0	398.5	477.0								
	59	-	-	-	-												
	69	69	-	69	69												
	-	-	-	79	-												
	79	79	-	-	-	198	227.0	392.5	471.0								
	-	-	-	89	89												
	89	89	-	-	-	245	210.0	375.5	454.0								
	-	-	-	109	-												
	-	-	-	129	-	300	201.0	366.5	445.0								
	109	109	-	-	-												
129	129	-	-	-	350	192.0	357.5	436.0									
-	-	-	149	-													
149	149	-	169	-	405	190.5	356.0	434.5									

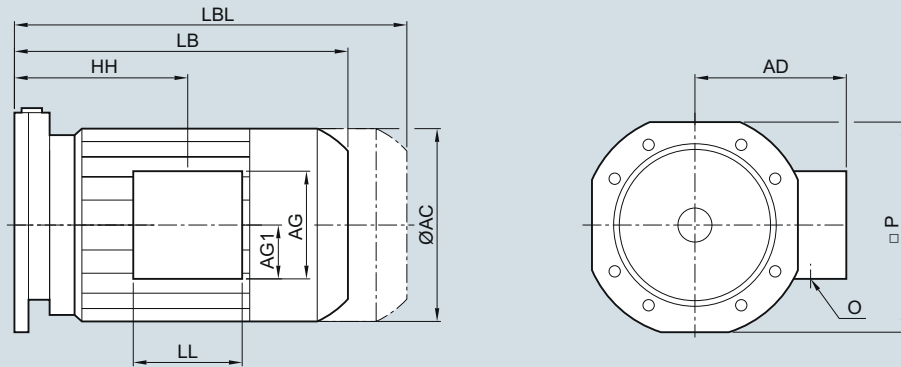
¹⁾ Terminal box type is dependent on the motor options, see page 11/13.

SIMOGEAR Geared Motors

Motors

Dimensions

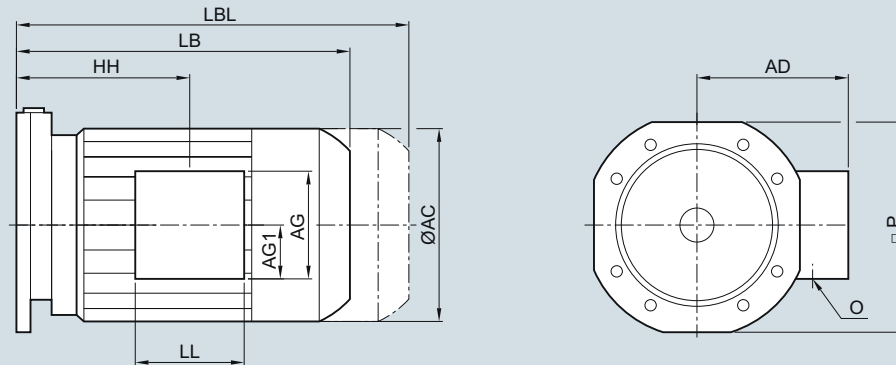
Motors (continued)



Motor	Gearbox type					Dimensions					Terminal box						
	D/Z	FD/FZ	B	K	C	P	HH	LB	LBL	AC	Type ¹⁾	AD	LL	AG	AG1	O metric	O NPT
LE100ZL	29	29	29	-	29	120	277.5	443.0	521.5	198.0	TB1F10	170.5	135	135	67.5	2xM32x1.5	3/4"+1/2"
	39	39	39	39	39							TB1F00	166.0	112	135		
	49	49	49	49	49	160	268.0	433.5	512.0								
	59	-	-	-	-												
	69	69	-	69	69												
	-	-	-	79	-												
	79	79	-	-	-	198	262.0	427.5	506.0								
	-	-	-	89	89												
	89	89	-	-	-	245	245.0	410.5	489.0								
	-	-	-	109	-												
	-	-	-	129	-	300	236.0	401.5	480.0								
	109	109	-	-	-												
129	129	-	-	-	350	227.0	392.5	471.0									
-	-	-	149	-													
149	149	-	169	-	405	225.5	391.0	469.5									
LE112M	29	29	29	-	29	120	244.0	418.0	491.0	222.0	TB1F10	181.5	135	135	67.5	2xM32x1.5	3/4"+1/2"
	39	39	39	39	39							TB1F00	177.0	112	135			71.5		-
	49	49	49	49	49	160	234.5	408.5	481.5								
	59	-	-	-	-												
	69	69	-	69	69												
	-	-	-	79	-												
	79	79	-	-	-	198	228.5	402.5	475.5								
	-	-	-	89	89												
	89	89	-	-	-	245	211.5	385.5	458.5								
	-	-	-	109	-												
	-	-	-	129	-	300	202.5	376.5	449.5								
	109	109	-	-	-												
129	129	-	-	-	350	193.5	367.5	440.5									
-	-	-	149	-													
149	149	-	169	-	405	192.0	366.0	439.0									
169	169	-	-	-	465	179.5	353.5	426.5									
189	189	-	189	-													
LE112ZM	29	29	29	-	29	120	269.0	443.0	516.0	222.0	TB1F10	181.5	135	135	67.5	2xM32x1.5	3/4"+1/2"
	39	39	39	39	39							TB1F00	177.0	112	135		
	49	49	49	49	49	160											
	59	-	-	-	-												
	69	69	-	69	69												
	-	-	-	79	-												
	79	79	-	-	-	198	253.5	427.5	500.5								
	-	-	-	89	89												
	89	89	-	-	-	245	236.5	410.5	483.5								
	-	-	-	109	-												
	-	-	-	129	-	300	227.5	401.5	474.5								
	109	109	-	-	-												
129	129	-	-	-	350	218.5	392.5	465.5									
-	-	-	149	-													
149	149	-	169	-	405	217.0	391.0	464.0									
169	169	-	-	-	465	204.5	378.5	451.5									
189	189	-	189	-													

¹⁾ Terminal box type is dependent on the motor options, see page 11/13.

Motors (continued)



Motor	Gearbox type					Dimensions					Terminal box							
	D/Z	FD/FZ	B	K	C	P	HH	LB	LBL	AC	Type ¹⁾	AD	LL	AG	AG1	O metric	O NPT	
LE132S/M	49	49	49	49	49	160	266.0	461.5	566.0	264.0	TB1H10	207.0	162	162	81.0	2xM32x1.5	3/4"+1/2"	
	59	-	-	-	-							TB1H00	202.0	130	155	84.5		-
	69	69	-	69	69													
	-	-	-	79	-													
	79	79	-	-	-	198	260.0	455.5	560.0									
	-	-	-	89	89													
	89	89	-	-	-	245	243.0	438.5	543.0									
	-	-	-	109	-													
	-	-	-	129	-	300	234.0	429.5	534.0									
	109	109	-	-	-													
	129	129	-	-	-	350	223.0	418.5	523.0									
-	-	-	149	-														
149	149	-	169	-	405	216.5	412.0	516.5										
169	169	-	-	-	465	203.5	399.0	503.5										
189	189	-	189	-														
LE132ZM	49	49	49	49	49	160	316.0	511.5	616.0	264.0	TB1H10	207.0	162	162	81.0	2xM32x1.5	3/4"+1/2"	
	59	-	-	-	-							TB1H00	202.0	130	155	84.5		-
	69	69	-	69	69													
	-	-	-	79	-													
	79	79	-	-	-	198	310.0	505.5	610.0									
	-	-	-	89	89													
	89	89	-	-	-	245	293.0	488.5	593.0									
	-	-	-	109	-													
	-	-	-	129	-	300	284.0	479.5	584.0									
	109	109	-	-	-													
	129	129	-	-	-	350	273.0	468.5	573.0									
-	-	-	149	-														
149	149	-	169	-	405	266.5	462.0	566.5										
169	169	-	-	-	465	253.5	499	553.5										
189	189	-	189	-														
LE160M/L	49	49	49	49	49	160	299.5	543.5	659.5	318.0	TB1J10	241.0	180	180	90.0	2xM40x1.5	1 1/4"+1/2"	
	59	-	-	-	-							TB1J00	236.5	145	175	97.5		-
	69	69	-	69	69													
	-	-	-	79	-													
	79	79	-	-	-	198	293.5	537.5	653.5									
	-	-	-	89	89													
	89	89	-	-	-	245	276.5	520.5	636.5									
	-	-	-	109	-													
	-	-	-	129	-	300	267.5	511.5	627.5									
	109	109	-	-	-													
	129	129	-	-	-	350	256.5	500.5	616.5									
-	-	-	149	-														
149	149	-	169	-	405	250.0	494.0	610.0										
169	169	-	-	-	465	237.0	481.0	597.0										
189	189	-	189	-														

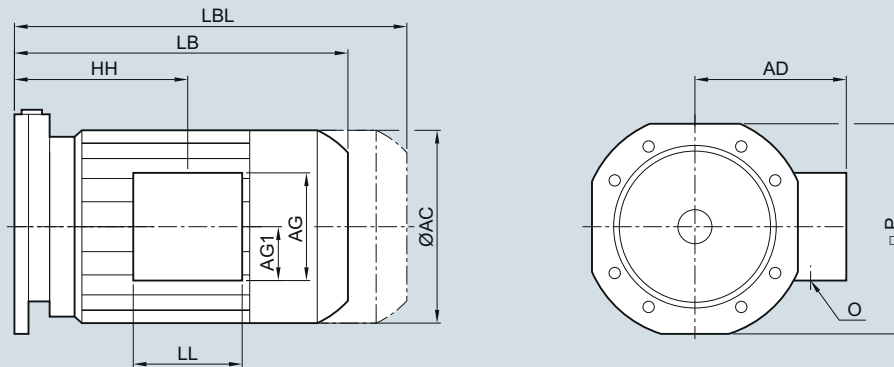
¹⁾ Terminal box type is dependent on the motor options, see page 11/13.

SIMOGEAR Geared Motors

Motors

Dimensions

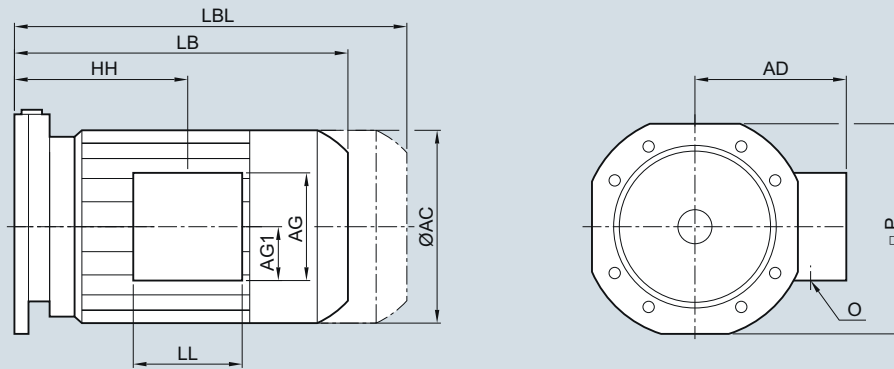
Motors (continued)



Motor	Gearbox type					Dimensions					Terminal box						
	D/Z	FD/FZ	B	K	C	P	HH	LB	LBL	AC	Type ¹⁾	AD	LL	AG	AG1	O metric	O NPT
LE160ZL	49	49	49	49	49	160	359.5	603.5	719.5	318.0	TB1J10	241.0	180	180	90.0	2xM40x1.5	1 1/4"+1/2"
	59	-	-	-	-							TB1J00	236.5	145	175	97.5	
	69	69	-	69	69												
	-	-	-	79	-												
	79	79	-	-	-	198	353.5	597.5	713.5								
	-	-	-	89	89												
	89	89	-	-	-	245	336.5	580.5	696.5								
	-	-	-	109	-												
	-	-	-	129	-	300	327.5	571.5	687.5								
	109	109	-	-	-												
	129	129	-	-	-	350	316.5	560.5	676.5								
	-	-	-	149	-												
	149	149	-	169	-	405	310.0	554.0	670.0								
169	169	-	-	-	465	297.0	541.0	657.0									
189	189	-	189	-													
LES180M/L	89	89	-	-	-	245	336.0	593.5	722.5	352.5	TB1K01	292.0	197	265	153	2xM40x1.5	1 1/2"+1/2"
	-	-	-	109	-												
	-	-	-	129	-	300	327.0	584.5	713.5								
	109	109	-	-	-												
	129	129	-	-	-	350	316.0	573.5	702.5								
	-	-	-	149	-												
	149	149	-	169	-	405	309.5	567.0	696.0								
169	169	-	-	-	465	296.0	553.5	682.5									
189	189	-	189	-													
LES180ZL	89	89	-	-	-	245	366.0	623.5	752.5	352.5	TB1K01	292.0	197	265	153	2xM40x1.5	1 1/2"+1/2"
	-	-	-	109	-												
	-	-	-	129	-	300	357.0	614.5	743.5								
	109	109	-	-	-												
	129	129	-	-	-	350	346.0	603.5	732.5								
	-	-	-	149	-												
	149	149	-	169	-	405	339.5	597.0	726.0								
169	169	-	-	-	465	326.0	583.5	712.5									
189	189	-	189	-													
LES200L	-	-	-	129	-	300	391.5	652.5	799.5	392.5	TB1L01	315.0	197	266	154	2xM50x1.5	1 1/2"+1/2"
	109	109	-	-	-												
	129	129	-	-	-	350	380.5	641.5	788.5								
	-	-	-	149	-												
	149	149	-	169	-	405	374.0	635.0	782.0								
	169	169	-	-	-	465	360.5	621.5	768.5								
189	189	-	189	-													

¹⁾ Terminal box type is dependent on the motor options, see page 11/13.

Motors (continued)



Motor	Gearbox type					Dimensions					Terminal box						
	D/Z	FD/FZ	B	K	C	P	HH	LB	LBL	AC	Type ¹⁾	AD	LL	AG	AG1	O metric	O NPT
LES200ZL	-	-	-	129	-	300	416.5	677.5	824.5	392.5	TB1L01	315.0	197	266	154	2xM50x1.5	1 1/2"+1/2"
	109	109	-	-	-	350	405.5	666.5	813.5								
	-	-	-	149	-	405	399.0	660.0	807.0								
	149	149	-	169	-	466	385.5	646.5	793.5								
	169	169	-	-	-	189	189	-	189	-							
	189	189	-	189	-												
LES225S/M	-	-	-	129	-	300	420.0	698.0	937.0	439.0	TB1L01	337.0	197	266	154	2xM50x1.5	1 1/2"+1/2"
	109	109	-	-	-	350	415.0	693.0	932.0	TB1N01	407.5	233	319	174	2xM63x1.5	-	
	-	-	-	149	-	405	402.5	680.5	919.5								
	149	149	-	169	-	465	388.0	666.0	905.0								
	169	169	-	-	-	189	189	-	189	-							
	189	189	-	189	-												
LES225YM	-	-	-	129	-	300	480.0	758.0	997.0	439.0	TB1L01	337.0	197	266	154	2xM50x1.5	1 1/2"+1/2"
	109	109	-	-	-	350	475.0	753.0	992.0	TB1N01	407.5	233	319	174	2xM63x1.5	-	
	-	-	-	149	-	405	462.5	740.5	979.5								
	149	149	-	169	-	465	448.0	726.0	965.0								
	169	169	-	-	-	189	189	-	189	-							
	189	189	-	189	-												
LES250M	129	129	-	-	-	350	487.5	798.5	1 023.5	487.0	TB1N01	407.5	233	319	174	2xM63x1.5	2 1/2"+1/2"
	-	-	-	149	-	405	481.0	792.0	1 017.0	TB1Q01	457.0	299	374	210	2xM63x1.5	-	
	149	149	-	169	-	465	462.5	773.5	998.5								
	169	169	-	-	-												
	189	189	-	189	-												

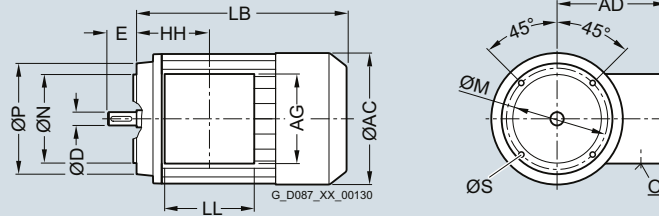
¹⁾ Terminal box type is dependent on the motor options, see page 11/13.

SIMOGEAR Geared Motors

Motors

Dimensions

Motors for worm geared motors S with B14 flange



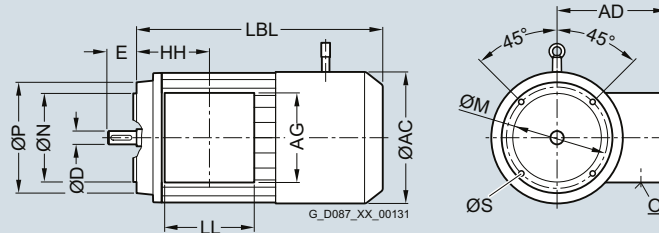
Motor	P	HH	LB	AC	N	M	S	D	E	AD	LL	AG	O
LAI63	90	69.5	179.5	118.0	60	75	M5	11	23	101.0	75	75	M20x1.5/M25x1.5
										115.0 ¹⁾	90 ¹⁾	90 ¹⁾	
										135.5 ²⁾	90 ²⁾	90 ²⁾	
LAI71	105	63.5	210.0	139.0	70	85	M6	14	30	111.0	75	75	M20x1.5/M25x1.5
										125.0 ¹⁾	90 ¹⁾	90 ¹⁾	
										146.0 ²⁾	90 ²⁾	90 ²⁾	

¹⁾ for motors with more than 6 terminals and 2 auxiliary terminals

²⁾ for motors with encoder or brake

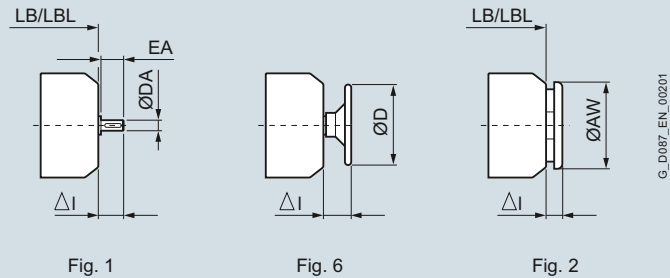
8

Motors with brake for worm geared motors S with B14 flange



Motor	P	HH	LBL	AC	N	M	S	D	E	AD	LL	AG	O
LAI63	90	69.5	230.5	118.0	60	75	M5	11	23	135.5	90	90	M20x1.5/M25x1.5
LAI71	105	63.5	261.5	139.0	70	85	M6	14	30	146.0	90	90	M20x1.5/M25x1.5

Additional lengths for second shaft extension, handwheel and canopy



Relevant diagram Motor	1 Second shaft extension			6 Handwheel at the second shaft extension		2 Canopy	
	DA	EA	ΔI	D	ΔI	AW	ΔI
LAI63 ¹⁾	-	-	-	-	-	124	27
LAI71 ¹⁾	-	-	-	-	-	124	27
LA63M	-	-	-	-	-	122.8	11.9
LA71M	14	30	34	100	50	137.8	25.9
LE80M	14	30	34	100	50	137.8	25.9
LE80ZM							
LE90S/L	19	40	45	160	65	175.8	16
LE90ZL							
LE100L	19	40	45	160	65	195	40
LE100ZL							
LE112M	24	50	56	200	77	195	40
LE112ZM							
LE132S/M	28	60	68	200	89	260	60
LE132ZM							
LE160M/L	38	80	88	315	111	260	60
LE160ZL	38	80	88	315	111	260	60
LES180M/L	42	110	125	-	-	340	90
LES180ZL							
LES200L	48	110	130	-	-	340	90
LES200ZL							
LES225S/M	55	110	115	-	-	425	96
LES225YM							
LES250M	60	140	145	-	-	470	96

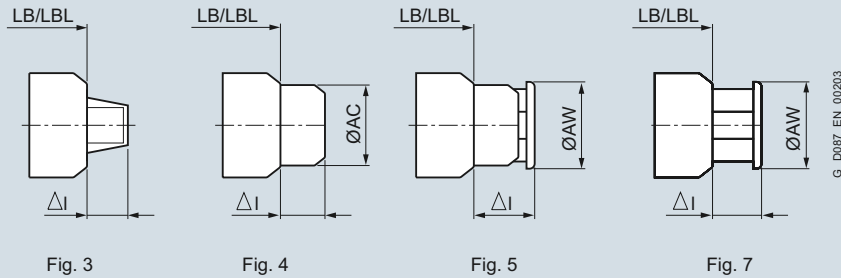
¹⁾ Only for worm geared motors S

SIMOGEAR Geared Motors

Motors

Dimensions

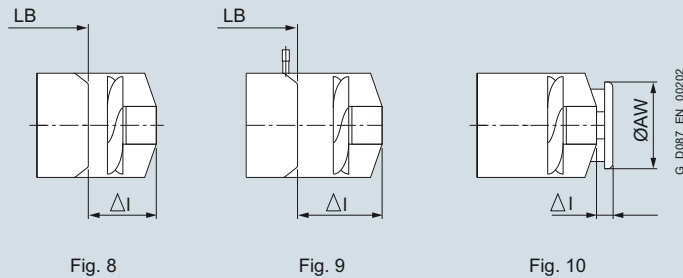
Additional lengths for encoder



Relevant diagram Motor	3	4			5			7			
	Encoder with protective plate	Encoder under cover			Encoder under cover with canopy			Encoder with canopy			
	ΔI 1XP	AC	ΔI 1XP IN 8.5834 IA 8.5883	LL, HOG9, HOG10	AW	ΔI 1XP	LL, HOG9, HOG10	AW	ΔI 1XP	LL, HOG9	HOG10
LAI63 ¹⁾	70	-	-	-	-	-	-	-	-	-	-
LAI71 ¹⁾	70	-	-	-	-	-	-	-	-	-	-
LA63M	70	-	-	-	-	-	-	-	-	-	-
LA71M	70	139	92.5	-	138	118.5	-	-	-	-	-
LE80M	70	156.5	92.5	-	138	118.5	-	155	67.5	-	-
LE80ZM											
LE90S/L	70	174	92.5	-	176	107	-	155	67.5	-	-
LE90ZL											
LE100L	-	174	93.5	-	176	108	-	195	83	-	-
LE100ZL											
LE112M	-	195	95.0	-	194	111	-	195	83	83	-
LE122ZM											
LE132S/M	-	195	95.0	-	194	111	-	260	87	87	130
LE132ZM								260	87	87	
LE160M/L	-	195	95.0	-	310	111	-	260	87	87	130
LE160ZL								260	87	87	
LE180M/L	-	195	95.0	-	310	111	-	340	91	91	131
LE180ZL											
LES200L	-	195	95.0	-	310	111	-	340	91	91	131
LES200ZL											
LES225S/M	-	-	-	-	-	-	-	425	158.2	124.5	158.2
LES225YM											
LES250M	-	-	-	-	-	-	-	472	158.2	124.5	158.2

¹⁾ Only for worm geared motors S

Additional lengths for external fan, encoder and canopy



Relevant diagram Motor	8		9		9		9			10		
	External fan Δl	Cable gland	Brake + external fan Δl	Encoder + external fan Δl	LL, HOG9, HOG10	Brake + encoder + external fan Δl	1XP	LL, HOG9	HOG10	SINAMICS G110M Δl	Canopy for external fan Δl	AW
LA63M	-	-	-	-	-	-	-	-	-	-	-	-
LA71M	110.5	M16 x 1.5	134.5	229.5	-	229.5	-	-	-	229.5	37	150
LE80M	89	M16 x 1.5	118	213	-	213	-	-	-	213	40	170
LE80ZM												
LE90S/L	85	M16 x 1.5	120	213	-	213	-	-	-	213	30	188
LE90ZL												
LE100L	81.5	M16 x 1.5	121.5	218.5	-	218.5	-	-	-	218.5	28	210
LE100ZL												
LE112M	81	M16 x 1.5	113	206	-	206	-	-	-	206	33	249
LE112ZM												
LE132S/M	114.5	M16 x 1.5	164.5	258.5	258.5	258.5	258.5	302.5	-	-	25	300
LE132ZM												
LE160M/L	131	M16 x 1.5	191	285	285	285	285	329	-	-	32	338
LE160ZL												
LES180M/L	132	M16 x 1.5	199	274	274	274	274	319	-	-	32	338
LES180ZL												
LES200M/L	141	M16 x 1.5	233	293	293	293	293	337	-	-	32	338
LES200ZL												
LES225S/M	227.5	M25 x 1.5 + M16 x 1.5	-	-	786.5	-	-	-	-	-	258	470
LES225YM												
LES250M	232.5	M25 x 1.5 + M16 x 1.5	-	-	826.5	-	-	-	-	-	256	525

SIMOGEAR Geared Motors

Motors

Dimensions

Prepared for encoder mounting

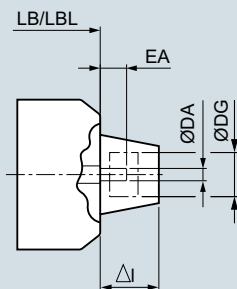


Fig. 1

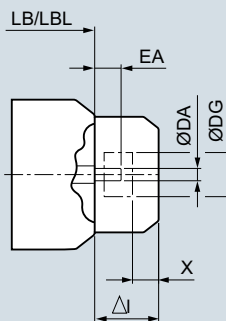


Fig. 2

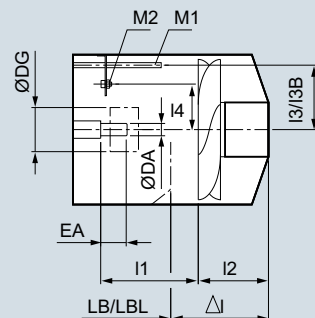
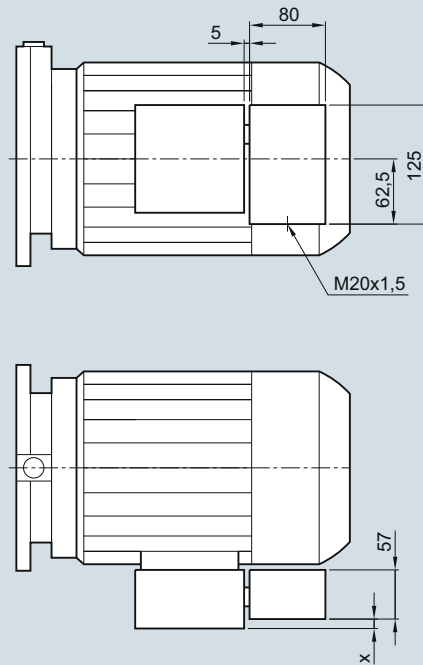


Fig. 3

G_D087_EN_0020

Relevant diagram	1			2			3									
Motor	DA	EA	DG	Encoder prepared Δl	Encoder prepared under cover Δl	X	Δl	I1	I2	I3	Brake	I1B	I3B	I4	M1	M2
LA63M	12	25	Max. 60	70		Min. 10	-	-	-	-	-	-	-	-	-	-
LA71M		30					229.5	134.5	95	59.0	L4, L8	115.0	59.0	37	M5x120	2xM4
LE80M		30 (25) ¹⁾					213.0	121.2	95	56.0	L4, L8	95.5	67.0		M6x130	
LE80ZM											L16	95.5	56.0			
LE90S/L							213.0	109.4	105	66.0	L8, L16	93.5	75.0			
LE90ZL											L32	93.5	66.0			
LE100L	-	25					218.5	115.3	105	66.0	L16, L32	97.0	85.0			
LE100ZL											L60	97.0	72.5		M8x160	
LE112M							206.0	115.5	105	72.5	L32, L60	93.5	95.0			
LE112ZM											L16, L32	97.0	85.0		M6x130	
LE132S/M							258.5	132.0	127	98.0	L80	97.5	116.0			
LE132ZM											L150	97.5	98.0			
LE160M/L							285.0	147.0	152	115.0	L150, L260	93.0	141.0		M8x170	
LE160ZL											L150, L260	93.0	141.0			
LES180M/L							274.0	162.0	151.5	157.0	L260	95.0	157.0		M10x210	
LES180ZL																
LES200M/L							293.0	136.5	151.5	175.0	L260, L400	96.0	175.0			
LES200ZL																

¹⁾ Value in parenthesis applies to motor with forced ventilation and brake

Application terminal box


Motor	x
LA63	5.0 (17)
LA71	5.0 (17)
LE80	5.5
LE90	5.5
LE100	9.0
LE112	9.0
LE132	14.5
LE160	22.0
LES180	41.5
LES200	41.5

() Dimensions in brackets for terminal box with 9 terminals (YY/Y connection)

SIMOGEAR Geared Motors

Motors

Dimensions

HAN10E motor plug

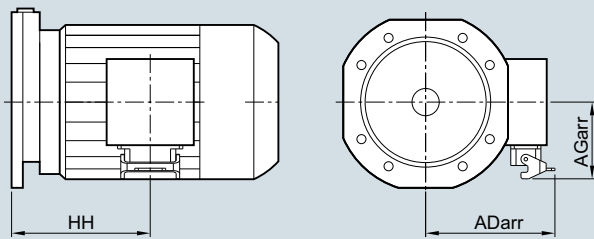


Fig. 1

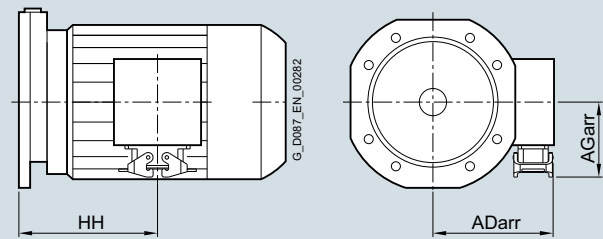


Fig. 2

Relevant diagram						Figure 1			Figure 2		
Motor	Gearbox type					HAN 10E motor plug with one bracket			HAN 10E motor plug with two brackets		
	D/Z	FD/FZ	B	K	C	HH	ADarr	AGarr	HH	ADarr	AGarr
LA63M	19	-	19	-	-	61.5	132	92.0	61.5	127.0	89.5
	39	29, 39	29, 39	39	29, 39	95.0			95.0		
	49 ... 69	49, 69	49	49 ... 79	49, 69	85.5			85.5		
LA71M	19	-	19	-	-	93.5	142.0	92.0	93.5	127.0	89.5
	29, 39	29, 39	29, 39	39	29, 39	135.0			135.0		
	49 ... 69	49, 69	49	49 ... 79	49, 69	125.5			125.5		
	79	79	-	89	89	123.5			123.5		
LE80M	19	-	19	-	-	120.0	155.0	106.0	120.0	139.5	103.5
	29, 39	29, 39	29, 39	39	29, 39	170.0			170.0		
	49 ... 69	49, 69	49	49 ... 79	49, 69	160.5			160.5		
	79	79	-	89	89	154.5			154.5		
	89	89	-	109	-	141.5			141.5		
LE80ZM	19	-	19	-	-	155.0	155.0	106.0	155.0	139.5	103.5
	29, 39	29, 39	29, 39	39	29, 39	205.0			205.0		
	49 ... 69	49, 69	49	49 ... 79	49, 69	195.5			195.5		
	79	79	-	89	89	189.5			189.5		
	89	89	-	109	-	176.5			176.5		
LE90S/L	29, 39	29, 39	29, 39	39	29, 39	207.5	160.0	106.0	207.5	144.5	103.5
	49 ... 69	49, 69	49	49 ... 79	49, 69	198.0			198.0		
	79	79	-	89	89	192.0			192.0		
	89	89	-	109	-	179.0			179.0		
	109	109	-	129	-	172.0			172.0		
	129	129	-	149	-	165.0			165.0		
LE90ZL	29, 39	29, 39	29, 39	39	29, 39	247.5	160.0	106.0	247.5	144.5	103.5
	49 ... 69	49, 69	49	49 ... 79	49, 69	238.0			238.0		
	79	79	-	89	89	232.0			232.0		
	89	89	-	109	-	219.0			219.0		
	109	109	-	129	-	212.0			212.0		
	129	129	-	149	-	205.0			205.0		
LE100L	29, 39	29, 39	29, 39	39	29, 39	242.5	179.5	115.5	242.5	164.0	113.0
	49 ... 69	49, 69	49	49 ... 79	49, 69	233.0			233.0		
	79	79	-	89	89	227.0			227.0		
	89	89	-	109	-	210.0			210.0		
	109	109	-	129	-	201.0			201.0		
	129	129	-	149	-	192.0			192.0		
	149	149	-	169	-	190.5			190.5		
LE100ZL	29, 39	29, 39	29, 39	39	29, 39	277.5	179.5	115.5	277.5	164.0	113.0
	49 ... 69	49, 69	49	49 ... 79	49, 69	268.0			268.0		
	79	79	-	89	89	262.0			262.0		
	89	89	-	109	-	245.0			245.0		
	109	109	-	129	-	236.0			236.0		
	129	129	-	149	-	227.0			227.0		
	149	149	-	169	-	225.5			225.5		

HAN10E motor plug

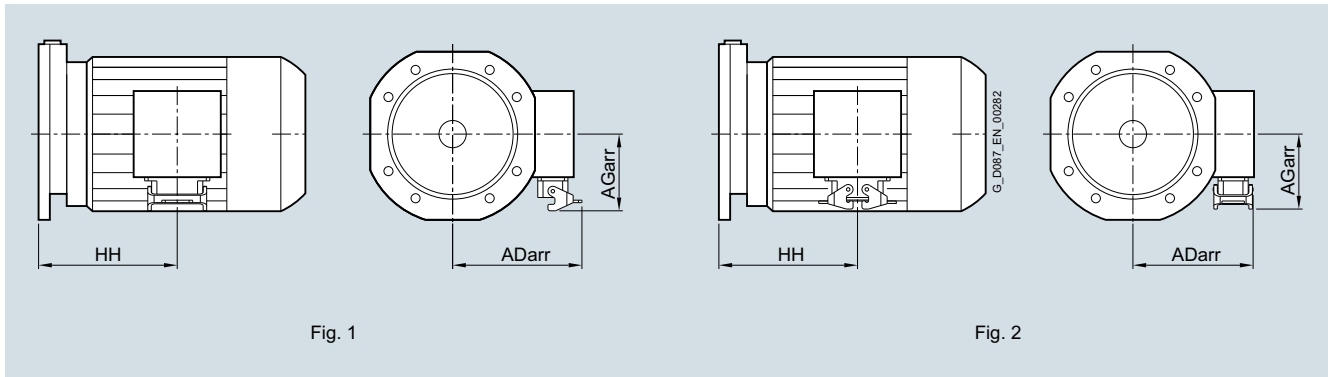


Fig. 1

Fig. 2

Relevant diagram						Figure 1			Figure 2		
Motor	Gearbox type					HAN 10E motor plug with one bracket			HAN 10E motor plug with two brackets		
	D/Z	FD/FZ	B	K	C	HH	ADarr	AGarr	HH	ADarr	AGarr
LE112M	29, 39	29, 39	29, 39	39	29, 39	244.0	190.5	115.5	244.0	175.0	113.0
	49 ... 69	49, 69	49	49 ... 79	49, 69	234.5					
	79	79	-	89	89	228.5					
	89	89	-	109	-	211.5					
	109	109	-	129	-	202.5					
	129	129	-	149	-	193.5					
	149	149	-	169	-	192.0					
169, 189	169, 189	-	189	-	179.5	179.5					
LE112ZM	29, 39	29, 39	29, 39	39	29, 39	269.0	190.5	115.5	269.0	1175.0	113.0
	49 ... 69	49, 69	49	49 ... 79	49, 69	234.5					
	79	79	-	89	89	253.5					
	89	89	-	109	-	236.5					
	-	-	-	129	-	227.5					
	129	129	-	149	-	218.5					
	149	149	-	169	-	217.0					
169, 189	169, 189	-	189	-	204.5	204.5					
LE132S/M	49 ... 69	49, 69	49	49 ... 79	49, 69	266.0	209.5	138.0	266.0	223.0	135.5
	79	79	-	89	89	260.0					
	89	89	-	109	-	243.0					
	109	109	-	129	-	234.0					
	129	129	-	149	-	223.0					
	149	149	-	169	-	216.5					
	169, 189	169, 189	-	189	-	203.5			203.5		
LE132ZM	49 ... 69	49, 69	49	49 ... 79	49, 69	316.0	209.5	138.0	316.0	223.0	135.5
	79	79	-	89	89	310.0					
	89	89	-	109	-	293.0					
	109	109	-	129	-	284.0					
	129	129	-	149	-	273.0					
	149	149	-	169	-	266.5					
	169, 189	169, 189	-	189	-	253.5			253.5		

SIMOGEAR Geared Motors

Motors

Dimensions

K/4 motor plug

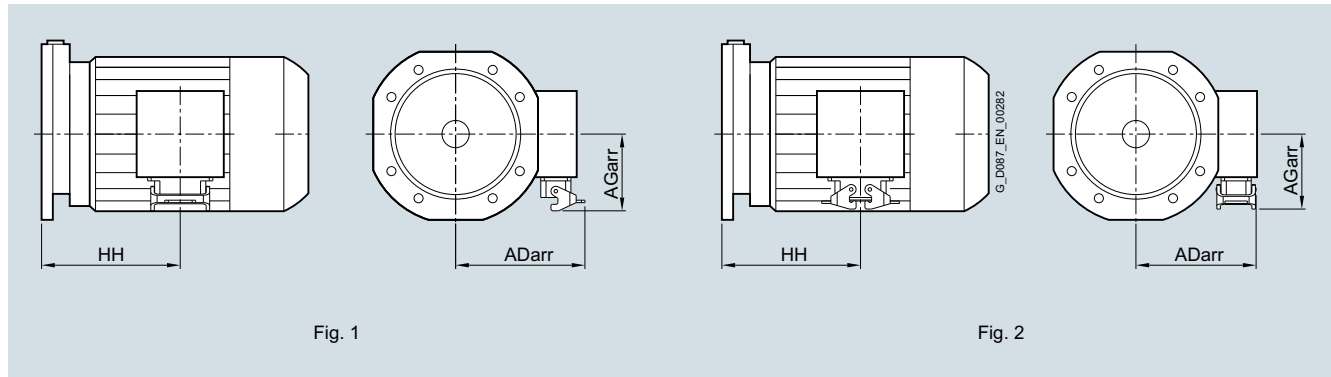


Fig. 1

Fig. 2

Relevant diagram						Figure 1			Figure 2		
Motor	Gearbox type					K/4 motor plug with one bracket			K/4 motor plug with two brackets		
	D/Z	FD/FZ	B	K	C	HH	ADarr	AGarr	HH	ADarr	AGarr
LE112M	29, 39	29, 39	29, 39	39	29, 39	244.0	190.5	115.5	244.0	175.0	113.0
	49 ... 69	49, 69	49	49 ... 79	49, 69	234.5					
	79	79	-	89	89	228.5					
	89	89	-	109	-	211.5					
	109	109	-	129	-	202.5					
	129	129	-	149	-	193.5					
	149	149	-	169	-	192.0					
169, 189	169, 189	-	189	-	179.5	179.5					
LE112ZM	29, 39	29, 39	29, 39	39	29, 39	269.0	190.5	115.5	269.0	1175.0	113.0
	49 ... 69	49, 69	49	49 ... 79	49, 69	234.5					
	79	79	-	89	89	253.5					
	89	89	-	109	-	236.5					
	-	-	-	129	-	227.5					
	129	129	-	149	-	218.5					
	149	149	-	169	-	217.0					
169, 189	169, 189	-	189	-	204.5	204.5					
LE132S/M	49 ... 69	49, 69	49	49 ... 79	49, 69	266.0	209.5	138.0	266.0	223.0	135.5
	79	79	-	89	89	260.0					
	89	89	-	109	-	243.0					
	109	109	-	129	-	234.0					
	129	129	-	149	-	223.0					
	149	149	-	169	-	216.5					
	169, 189	169, 189	-	189	-	203.5			203.5		
LE132ZM	49 ... 69	49, 69	49	49 ... 79	49, 69	316.0	209.5	138.0	316.0	223.0	135.5
	79	79	-	89	89	310.0					
	89	89	-	109	-	293.0					
	109	109	-	129	-	284.0					
	129	129	-	149	-	273.0					
	149	149	-	169	-	266.5					
	169, 189	169, 189	-	189	-	253.5			253.5		
LE160M/L	49 ... 69	49, 69	49	49 ... 79	49, 69	299.5	138.5	138.0	299.5	123.0	135.5
	79	79	-	89	89	293.5					
	89	89	-	109	-	276.5					
	109	109	-	129	-	267.5					
	129	129	-	149	-	256.5					
	149	149	-	169	-	250.0					
	169, 189	169, 189	-	189	-	237.0			237.0		
LE160ZL	49 ... 69	49, 69	49	49 ... 79	49, 69	359.5	138.5	138.0	359.5	123.0	135.5
	79	79	-	89	89	353.5					
	89	89	-	109	-	336.5					
	109	109	-	129	-	327.5					
	129	129	-	149	-	316.5					
	149	149	-	169	-	310.0					
	169, 189	169, 189	-	189	-	297.0			297.0		

K4/4 motor plug

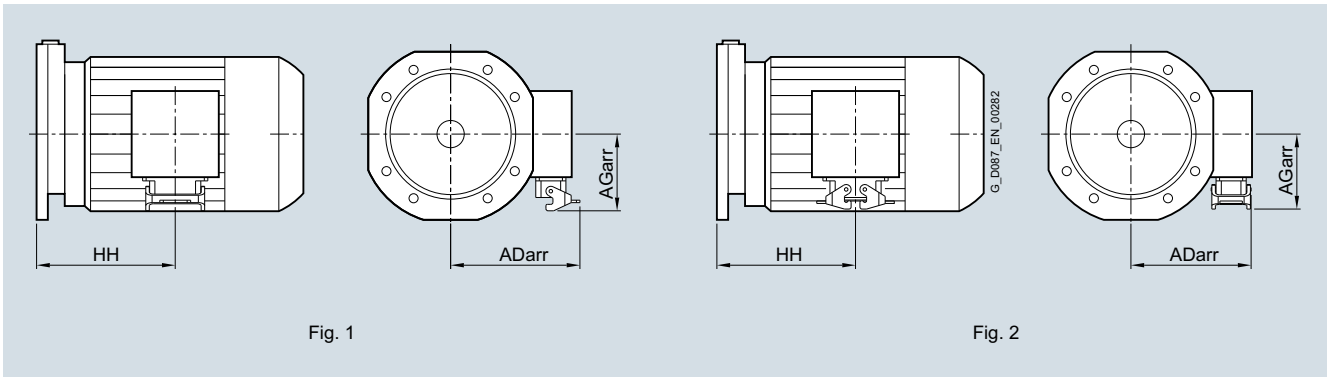


Fig. 1

Fig. 2

Relevant diagram					Figure 1			Figure 2			
Motor	Gearbox type				K4/4 motor plug with one bracket			K4/4 motor plug with two brackets			
	D/Z	FD/FZ	B	K	C	HH	ADarr	AGarr	HH	ADarr	AGarr
LES180M/L	89	89	-	109	-	336.0	278.5	201.0	336.0	263.0	198.5
	109	109	-	129	-	327.0			327.0		
	129	129	-	149	-	316.0			316.0		
	149	149	-	169	-	309.5			309.5		
	169, 189	169, 189	-	189	-	296.0			296.0		
LES180ZL	89	89	-	109	-	366.0	278.5	201.0	366.0	263.0	198.5
	-	-	-	129	-	357.0			357.0		
	129	129	-	149	-	346.0			346.0		
	149	149	-	169	-	339.5			339.5		
	169, 189	169, 189	-	189	-	326.0			326.0		
LES200L	109	109	-	129	-	391.5	302.5	201.0	391.5	287.0	198.5
	129	129	-	149	-	380.5			380.5		
	149	149	-	169	-	374.0			374.0		
	169, 189	169, 189	-	189	-	360.5			360.5		
LES200ZL	109	109	-	129	-	300.0	302.5	201.0	300.0	287.0	198.5
	129	129	-	149	-	350.0			350.0		
	149	149	-	169	-	405.0			405.0		
	169, 189	169, 189	-	189	-	466.0			466.0		

SIMOGEAR Geared Motors

Motors

Dimensions

HAN Q8 and HAN Q12 motor plugs

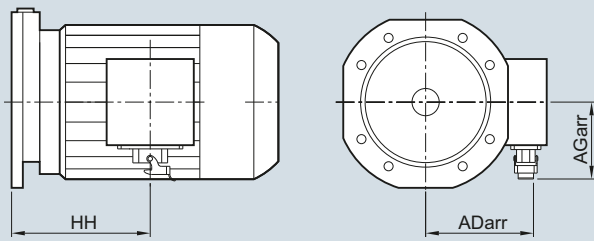


Fig. 1

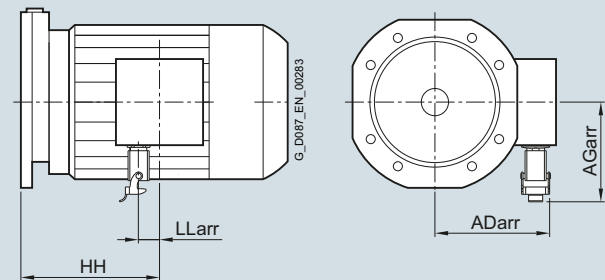
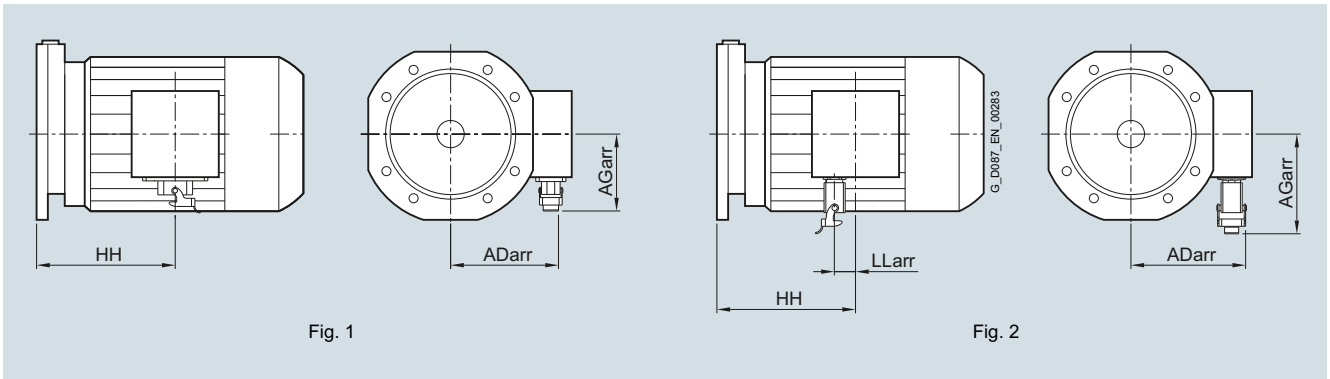


Fig. 2

Relevant diagram		Figure 1						Figure 2				
Motor	Gearbox type					HAN Q8 motor plug			HAN Q12 motor plug			
	D/Z	FD/FZ	B	K	C	HH	ADarr	AGarr	HH	ADarr	AGarr	LLarr
LA63M	19	-	19	-	-	61.5	110.0	87.5	61.5	104.0	109.0	18
	39	29, 39	29, 39	39	29, 39	95.0			95.0			
	49 ... 69	49, 69	49	49 ... 79	49, 69	85.5			85.5			
LA71M	19	-	19	-	-	93.5	120.0	87.5	93.5	114.0	109.0	
	29, 39	29, 39	29, 39	39	29, 39	135.0			135.0			
	49 ... 69	49, 69	49	49 ... 79	49, 69	125.5			125.5			
	79	79	-	89	89	123.5			123.5			
LE80M	19	-	19	-	-	120.0	134.0	107.0	120.0	128.0	122.0	
	29, 39	29, 39	29, 39	39	29, 39	170.0			170.0			
	49 ... 69	49, 69	49	49 ... 79	49, 69	160.5			160.5			
	79	79	-	89	89	154.5			154.5			
	89	89	-	109	-	141.5			141.5			
LE80ZM	19	-	19	-	-	155.0	134.0	107.0	155.0	233.0	122.0	
	29, 39	29, 39	29, 39	39	29, 39	205.0			205.0			
	49 ... 69	49, 69	49	49 ... 79	49, 69	195.5			195.5			
	79	79	-	89	89	189.5			189.5			
	89	89	-	109	-	176.5			176.5			
LE90S/L	29, 39	29, 39	29, 39	39	29, 39	207.5	139.0	107.0	207.5	133.0	122.0	
	49 ... 69	49, 69	49	49 ... 79	49, 69	198.0			198.0			
	79	79	-	89	89	192.0			192.0			
	89	89	-	109	-	179.0			179.0			
	109	109	-	129	-	172.0			172.0			
	129	129	-	149	-	165.0			165.0			
LE90ZL	29, 39	29, 39	29, 39	39	29, 39	247.5	139.0	107.0	247.5	152.5	122.0	
	49 ... 69	49, 69	49	49 ... 79	49, 69	238.0			238.0			
	79	79	-	89	89	232.0			232.0			
	89	89	-	109	-	219.0			219.0			
	109	109	-	129	-	212.0			212.0			
	129	129	-	149	-	205.0			205.0			
LE100L	29, 39	29, 39	29, 39	39	29, 39	242.5	158.5	116.5	-	-	-	-
	49 ... 69	49, 69	49	49 ... 79	49, 69	233.0						
	79	79	-	89	89	227.0						
	89	89	-	109	-	210.0						
	109	109	-	129	-	201.0						
	129	129	-	149	-	192.0						
LE100ZL	29, 39	29, 39	29, 39	39	29, 39	277.5	158.5	116.5	-	-	-	-
	49 ... 69	49, 69	49	49 ... 79	49, 69	268.0						
	79	79	-	89	89	262.0						
	89	89	-	109	-	245.0						
	109	109	-	129	-	236.0						
	129	129	-	149	-	227.0						
149	149	-	169	-	225.5							

HAN Q8 and HAN Q12 motor plugs

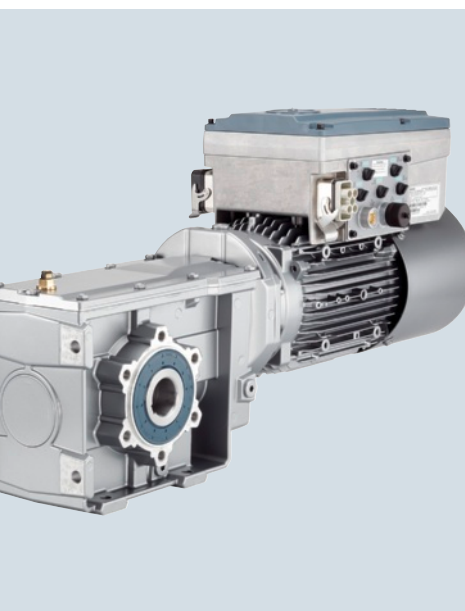


Relevant diagram						Figure 1			Figure 2		
Motor	Gearbox type					HAN Q8 motor plug			HAN Q12 motor plug		
	D/Z	FD/FZ	B	K	C	HH	ADarr	AGarr	HH	ADarr	AGarr
LE112M	29, 39	29, 39	29, 39	39	29, 39	244.0	169.5	116.5	-	-	-
	49 ... 69	49, 69	49	49 ... 79	49, 69	234.5					
	79	79	-	89	89	228.5					
	89	89	-	109	-	211.5					
	109	109	-	129	-	202.5					
	129	129	-	149	-	193.5					
	149	149	-	169	-	192.0					
169, 189	169, 189	-	189	-	179.5						
LE112ZM	29, 39	29, 39	29, 39	39	29, 39	269.0	169.5	116.5	-	-	-
	49 ... 69	49, 69	49	49 ... 79	49, 69	234.5					
	79	79	-	89	89	253.5					
	89	89	-	109	-	236.5					
	-	-	-	129	-	227.5					
	129	129	-	149	-	218.5					
	149	149	-	169	-	217.0					
169, 189	169, 189	-	189	-	204.5						
LE132S/M	49 ... 69	49, 69	49	49 ... 79	49, 69	266.0	188.5	130.0	-	-	-
	79	79	-	89	89	260.0					
	89	89	-	109	-	243.0					
	109	109	-	129	-	234.0					
	129	129	-	149	-	223.0					
	149	149	-	169	-	216.5					
	169, 189	169, 189	-	189	-	203.5					
LE132ZM	49 ... 69	49, 69	49	49 ... 79	49, 69	316.0	188.5	130.0	-	-	-
	79	79	-	89	89	310.0					
	89	89	-	109	-	293.0					
	109	109	-	129	-	284.0					
	129	129	-	149	-	273.0					
	149	149	-	169	-	266.5					
	169, 189	169, 189	-	189	-	253.5					

SIMOGEAR Geared Motors

Notes

Motor integrated frequency inverter SINAMICS G110M



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- 9/4 Application
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Motor integrated frequency inverter SINAMICS G110M

Introduction

Type designation SINAMICS G110M (integrated in the motor in SIMOGEAR)¹⁾

Motor size	
71	A
80, 90	B
100, 112	C

Power Module	
0.37 kW	0037
0.75 kW	0075
1.1 kW	0110
1.5 kW	0150
2.2 kW	0220
3.0 kW	0300
4.0 kW	0400

Control Unit	
Connection (line voltage and 24 V DC)	
Terminal strip, cable entry via cable gland	A
HAN Q4/2 + connector 7/8"	B
Bus system	
USS	1
Profibus	3
Profinet	4

Motor connection	
Star	S
Delta	D

Braking resistor	
Without	0
Internal (FSA)	1
Internal (FSB)	2

Externally mounted components	
Without	0
24 V DC power supply	1
Repair switch	2

Example:

G110M	- B	0110	- A	1	S	- 0	0
	↓	↓	↓	↓	↓	↓	↓
	(1)	(2)	(3)	(4)	(5)	(6)	(7)

- (1) Motor size
- (2) Power Module rated power
- (3) Control Unit: Connection (line voltage and 24 V DC)
- (4) Control Unit: Bus system
- (5) Motor connection
- (6) Braking resistor
- (7) Externally mounted components

¹⁾ SINAMICS G110M can also be ordered as individual components. The components are supplied in separate packages. Installation must be performed by the customer. For further details, see Catalog [D31 · 2015](#)

Selection and ordering data ¹⁾

Motor size	Power Module power kW	Motor connection	Type designation	Order code
71	0.37	Star	G110M - A0037 - ■ ■ S - ■ ■	U01
	0.75	Delta	G110M - A0075 - ■ ■ D - ■ ■	U02
80	0.75	Star	G110M - B0075 - ■ ■ S - ■ ■	U07
	1.1	Delta	G110M - B0110 - ■ ■ D - ■ ■	U08
		Star	G110M - B0110 - ■ ■ S - ■ ■	U09
	1.5	Delta	G110M - B0150 - ■ ■ D - ■ ■	U10
90	1.1	Star	G110M - B0110 - ■ ■ S - ■ ■	U09
	1.5	Star	G110M - B0150 - ■ ■ S - ■ ■	U11
	2.2	Delta	G110M - B0220 - ■ ■ D - ■ ■	U12
		Star	G110M - B0220 - ■ ■ S - ■ ■	U13
	3.0	Delta	G110M - B0300 - ■ ■ D - ■ ■	U14
100	2.2	Star	G110M - C0220 - ■ ■ S - ■ ■	U19
	3.0	Star	G110M - C0300 - ■ ■ S - ■ ■	U21
	4.0	Delta	G110M - C0400 - ■ ■ D - ■ ■	U22
		Star	G110M - C0400 - ■ ■ S - ■ ■	U23
112	4.0	Star	G110M - C0400 - ■ ■ S - ■ ■	U23

Type designation supplement and additional order code

Control Unit	Connection (400 V 3 AC and 24 V DC) Cable gland ^{*)}	Bus system			
		USS/Modbus RTU	A	1	U40
		PROFIBUS DP (DP)	A	3	U42
		PROFINET/ EtherNet IP (PN)	A	4	U43
	HAN Q4/2 + connector 7/8"	PROFIBUS DP (DP)	B	3	U52
		PROFINET/ EtherNet IP (PN)	B	4	U53
Braking resistor	Without			0	-
	Internal (FSA)			1	U60
	Internal (FSB)			2	U61
Externally mounted components	Without			0	-
	24 V DC power supply			1	U70
	Repair switch			2	U71

* On delivery, the openings in the housing for 24 V DC line voltage and brake are sealed with a dummy screw cap (exception: on brake motors, the brake cable is already connected via a cable gland).
Cable glands are available optionally as an installation kit, see page 9/27.

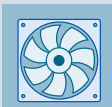
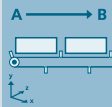

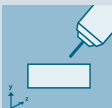
¹⁾ SINAMICS G110M can also be ordered as individual components.
The components are supplied in separate packages. Installation must be performed by the customer.
For further details, see Catalog D31 · 2015

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

Introduction

Application

Use	Requirements for torque accuracy/speed accuracy/position accuracy/coordination of axes/functionality					
	Continuous motion			Non-continuous motion		
	Basic	Medium	High	Basic	Medium	High
Pumping, ventilating, compressing 	Centrifugal pumps Radial/axial fans Compressors	Centrifugal pumps Radial/axial fans Compressors	Eccentric screw pumps	Hydraulic pumps Metering pumps	Hydraulic pumps Metering pumps	Descaling pumps Hydraulic pumps
	V20 G110 G120C G120P	G120P G130/G150 G180 ¹⁾	S120	G120	S110	S120
Moving 	Conveyor belts Roller conveyors Chain conveyors	Conveyor belts Roller conveyors Chain conveyors Lifting/lowering devices Elevators Escalators/moving walkways Indoor cranes Marine drives Cable railways	Elevators Container cranes Mining hoists Excavators for open-cast mining Test bays	Acceleration conveyors Storage and retrieval machines	Acceleration conveyors Storage and retrieval machines Cross cutters Reel changers	Storage and retrieval machines Robotics Pick & place Rotary indexing tables Cross cutters Roll feeds Engagers/disengagers
	V20 G110 G110D G110M G120C	G120 G120D G130/G150 G180 ¹⁾	S120 S150 DCM	G120 G120D	S110 DCM	S120 DCM
Processing 	Mills Mixers Kneaders Crushers Agitators Centrifuges	Mills Mixers Kneaders Crushers Agitators Centrifuges Extruders Rotary furnaces	Extruders Winders and unwinders Lead/follower drives Calenders Main press drives Printing machines	Tubular bagging machines Single-axis motion control such as • Position profile • Path profile	Tubular bagging machines Single-axis motion control such as • Position profile • Path profile	Servo presses Rolling mill drives Multi-axis motion control such as • Multi-axis positioning • Cams • Interpolations
	V20 G120C	G120 G130/G150 G180 ¹⁾	S120 S150 DCM	G120	S110	S120 DCM
Machining 	Main drives for • Turning • Milling • Drilling	Main drives for • Drilling • Sawing	Main drives for • Turning • Milling • Drilling • Gear cutting • Grinding	Axle drives for • Turning • Milling • Drilling	Axle drives for • Drilling • Sawing	Axle drives for • Turning • Milling • Drilling • Lasering • Gear cutting • Grinding • Nibbling and punching
	S110	S110 S120	S120	S110	S110 S120	S120

SINAMICS G110M fulfills all requirements that plant manufacturers demand from their frequency inverters in drives for conveyor system applications. It is available integrated in the motor up to IP66 degree of protection²⁾ and sets standards in efficiency – from the installation phase through commissioning as far as handling. SINAMICS G110M is also suitable for pump and

fan applications in which a motor integrated inverter is required as a distributed system.

Practical application examples and descriptions are available on the Internet at

www.siemens.com/sinamics-applications
www.siemens.com/conveyor-technology

More information

You may also be interested in these frequency inverters:

- Simple applications with AS-Interface in degree of protection IP65 ⇒ SINAMICS G110D
- More performance for the control cabinet in IP20 degree of protection ⇒ SINAMICS G120, SINAMICS G120C
- With enhanced functionality, with positioning function in IP65 degree of protection ⇒ SINAMICS G120D
- With positioning function in the control cabinet in IP20 degree of protection ⇒ SINAMICS G120

¹⁾ Industry-specific inverters.

²⁾ Geared motors are available to IP55/IP65 degree of protection

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

SINAMICS G110M distributed frequency inverters**Overview**

The SINAMICS G110M motor integrated frequency inverters are the solution for drive tasks in which a motor integrated frequency inverter is required. With different device versions (frame sizes FSA to FSB) in a power range from 0.37 kW to 4 kW, the SINAMICS G110M is suitable for a wide variety of drive solutions. SINAMICS G110M supports continuous speed control of three-phase asynchronous motors and fulfills all the requirements of conveyor system applications from simple speed control through to demanding sensorless vector control. It can be integrated seamlessly into the system thanks to its compact design in IP65/IP66 degree of protection.

Through the integrated functions such as quick stop and the limit switch function, the SINAMICS G110M is particularly suited for conveyor system applications.

For applications that require safety engineering, the SINAMICS G110M has the integrated STO (Safe Torque Off) function, which can be implemented without further external components.

Integration via PROFIBUS, PROFINET or USS into a higher-level SIMATIC controller is very easy thanks to the full TIA Portal integration – one tool, one operating concept, one data storage.

Observe the configuring information when making your selection.



Fig. 9/1 SINAMICS G110M Control Unit CU240M PN, cable gland and Power Module PM240M FSA 1.5 kW



Fig. 9/2 SINAMICS G110M Control Unit CU240M PN, plug-in and Power Module PM240M FSA 1.5 kW

Reasons for using distributed drive systems

- Modular drive solutions – thus standardized mechatronic elements that can be individually tested
- No need for a cabinet, resulting in a smaller space requirement and less cooling
- Long cables between the inverter and motor can be avoided (which means lower power losses, reduced interference emission and lower costs for shielded cables and additional filters)
- Considerable benefits for conveyor systems with their extensive coverage (e.g. in the automotive and logistics industries)

Siemens family of distributed drives

Siemens offers an innovative portfolio of frequency inverters to optimally implement distributed drive solutions. The strengths of the individual members of the drive family permit simple adaptation to the widest range of application demands:

- Identical connection systems
- Standard commissioning and configuration tools

Products from the family of distributed drives:

- **SINAMICS G110M** inverters
- SINAMICS G110D inverters
- SINAMICS G120D inverters
- SIMATIC ET200pro FC-2 frequency converters (available soon)
- SIRIUS M200D motor starters

Modularity

SINAMICS G110M is a modular, motor integrated inverter system with IP65/66 degree of protection comprising various function units. The main units are:

- Control Unit (CU)
- Power Module (PM)

The Control Unit controls and monitors the Power Module and the connected motor using several different closed-loop control types that can be selected. The digital and analog inputs and digital outputs on the device support the simple wiring of sensors and actuators directly at the drive. The input signals can either be directly linked within the Control Unit and initiate local responses independently or they can be transferred to the central control via PROFIBUS or PROFINET for further processing within the context of the overall plant.

The Power Module supplies the motor in a power range from 0.37 kW to 4 kW. The Power Module is controlled by a microprocessor in the Control Unit. State-of-the-art IGBT technology with pulse width modulation is used for highly reliable and flexible motor operation. Comprehensive protection functions provide a high degree of protection for the Power Module and the motor.

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

SINAMICS G110M distributed frequency inverters

Overview (continued)

Safety Integrated

The distributed SINAMICS G110M inverters are already equipped with the integrated STO safety function (Safe Torque Off, certified in accordance with IEC 61508 SIL 2 as well as ISO 13849-1 Category 3 and PL d). It can be activated either over PROFIsafe or over the safety input.

Benefits

Fast commissioning

- Preconfigured with SIMOGEAR
- Loop-through of 24 V DC and 400 V 3 AC and communication – no T-distributor necessary
- Internal braking resistors – typical applications can be implemented without external braking resistors
- Rugged, with IP65/66 degree of protection, up to 55 °C ambient temperature
- Commissioning via fieldbus

Fast commissioning on site

- Local commissioning via DIP switch, standard USB interface and potentiometer or Intelligent Operator Panel (IOP)
- Plug-in connections for 400 V 3 AC and 24 V DC, plug-in I/Os and communication
- Local diagnostics with LEDs
- Uploading, saving and cloning of parameters with SINAMICS SD card and IOP Intelligent Operator Panel

Full functionality

- Integrated safety functions (STO locally via F-DI or via PROFIsafe)
- PROFINET communication to PROFIBUS at no extra cost
- Integrated communication: USS, Modbus RTU, PROFIBUS, PROFINET and EtherNet/IP
- Basic PLC functions and additional conveyor technology functions
- I/O can be used as distributed I/O of the PLC

Efficient engineering

- Fully integrated in Totally Integrated Automation, Totally Integrated Automation Portal and Integrated Drive System
- Automatic diagnostics in combination with SIMATIC controller

Flexible commissioning

- Integrated, specific software functionality for conveyor systems:
 - Quick stop function for fast reaction times to sensors
 - Limit switch functionality, e.g. for rotary table, corner transfer unit
- Use of the same software tools (STARTER and SINAMICS Startdrive) as for all SINAMICS drives

Design

The SINAMICS G110M distributed inverters are modular frequency inverters for standard drives. Each SINAMICS G110M comprises two operative units: a Power Module and a Control Unit.



Fig. 9/3 SINAMICS G110M Control Unit CU240M PN plug-in and Power Module PM240M FSA 1.5 kW

Power Modules

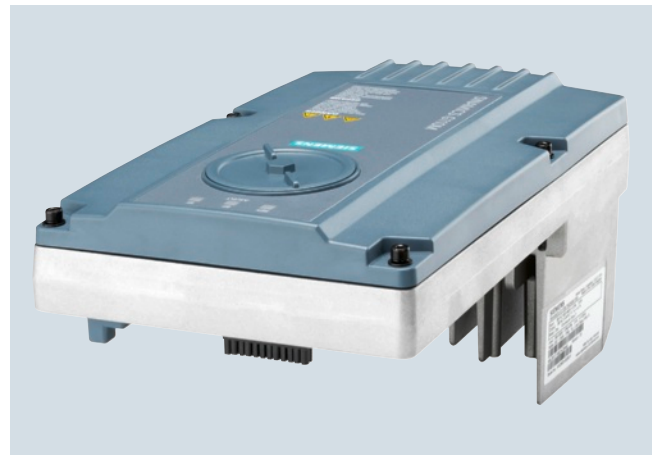


Fig. 9/4 SINAMICS G110M Power Module PM240M FSA 1.5 kW

The following PM240M Power Modules are available for the SINAMICS G110M distributed inverters:

PM240M Power Modules Rated power	Frame size
0.37 kW	FSA
0.75 kW	FSA
1.1 kW	FSA
1.5 kW	FSA
2.2 kW	FSB
3 kW	FSB
4 kW	FSB

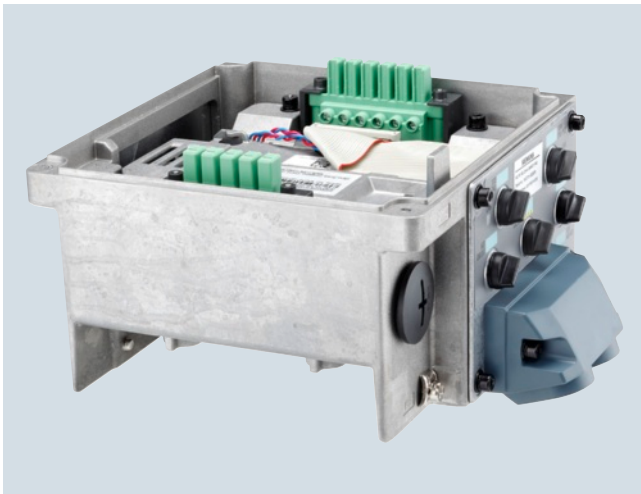
Design (continued)**Control Units**

Fig. 9/5 SINAMICS G110M Control Unit CU240M PN cable gland

A Control Unit performs closed-loop control functions for the inverter. In addition to closed-loop control, it has additional functions that can be adapted to the particular application through parameterization.

Various Control Units are available for SINAMICS G110M distributed inverters, [see page 9/9](#).

Supplementary system componentsIntelligent Operator Panel IOP Handheld

The IOP supports both entry-level personnel and drive experts. Thanks to the large plain text display, menu-based operation and the application wizards, it is easy to commission, diagnose and locally control standard drives.

Memory card

The parameter settings for an inverter can be stored on the SINAMICS SD card. When service is required, e.g. after the inverter has been replaced and the data has been downloaded from the memory card, the system is immediately ready for use again.

PC inverter connection kit (mini USB interface cable) for communication with a PC)

For controlling and commissioning an inverter directly from a PC if the appropriate software (STARTER commissioning tool V4.3 and higher or SINAMICS Startdrive V13 and higher) has been installed.

Internal braking resistors

Excess energy in the DC link is dissipated in the internal braking resistor.

24 V DC power supply

A 24 V DC power supply is also available for SINAMICS G110M. This is mounted directly on the inverter and supplies the device with 24 V DC, so there is no need to connect an external 24 V DC power supply.

Repair switch

A repair switch is available for SINAMICS G110M inverters. This is installed directly on the inverter and disconnects the input end of the SINAMICS G110M from the 400 V line voltage.

Connecting cable for the Control Units

Flexible plug-in cables to transfer data between the Industrial Ethernet stations or PROFIBUS stations, as well as to supply power to the Control Unit (24 V DC).

Connector sets and pre-assembled cables can be ordered as accessories as well as pre-assembled cables for the line supply.

Installation kits

Different installation kits can be ordered as accessories for the Control Units with plug-in connections and Control Units with cable gland connections.

These contain caps or cable glands for protection or electrical connection respectively.

Spare Parts Kit

A Spare Parts Kit is available which comprises small parts such as seals, caps and screws.

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

SINAMICS G110M distributed frequency inverters

Technical specifications

SINAMICS G110M	
Mechanical specifications	
Vibratory load	
• Transport acc. to EN 60721-3-2 ¹⁾	Class 1M2
• Operation acc. to EN 60721-3-3	Class 3M3
Shock load	
• Transport acc. to EN 60721-3-2 ¹⁾	Class 1M2
• Operation acc. to EN 60721-3-3	Class 3M3
Ambient conditions	
Protection class acc. to EN 61800-5-1	Class III (PELV)
Touch protection acc. to EN 61800-5-1	Class I (with protective conductor system)
Permissible ambient and coolant temperature (air) during operation for Power Modules	-10 ... +40 °C (14 ... 104 °F) without derating > 40 ... 55 °C (104 ... 131 °F) see derating characteristics
Permissible ambient and coolant temperature (air) during operation for Control Units	-10 ... +55 °C (14 ... 131 °F) without derating
Humidity, max.	95 % at 40 °C (104 °F)
Ambient temperature	
• Storage ¹⁾ acc. to EN 60068-2-1	-40 ... +70 °C (-40 ... +158 °F)
• Transport ¹⁾ acc. to EN 60068-2-1	-40 ... +70 °C (-40 ... +158 °F)
• Operation acc. to EN 60068-2-2	-10 ... +40 °C (14 ... 104 °F) without derating
Environmental class/harmful chemical substances	
• Operation acc. to EN 60721-3-3	Class 3C2
Degree of pollution acc. to EN 61800-5-1	2
Certification for fail-safe versions	
• According to IEC 61508	SIL 2
• According to ISO 13849-1	PL d and Category 3
Standards	
Compliance with standards	CE (UL 508C, UL list number E121068; C-Tick; cUL) ²⁾
CE marking, according to	Low-Voltage Directive 2006/95/EC
EMC Directive ³⁾	Category C2 ⁴⁾ according to EN 61800-3 (corresponds to class A according to EN 55011)
• Frame sizes FSA to FSB with integrated line filter class A	Note: The EMC product standard EN 61800-3 does not apply directly to a frequency inverter, but to a PDS (Power Drive System), which comprises the complete circuitry, motor and cables in addition to the inverter. The frequency inverters on their own do not generally require identification according to the EMC Directive.

¹⁾ In product packaging.

²⁾ Available only on request in combination with SIMOGEAR geared motors.

³⁾ For further information, see Catalog [D31 · 2015](#).

⁴⁾ With shielded motor cable up to 5 m.

Overview

The Control Unit performs closed-loop control functions for the inverter. In addition to the primary closed-loop control function, it has many additional functions that can be adapted to the particular application through parameterization.

The Control Units are available in two versions for connection to 400 V 3 AC and 24 V DC – screw-type or plug-in. The version in USS fieldbus communication is only available as screw-type. The differences between the screw-type and plug-in versions are presented in the following pictures:

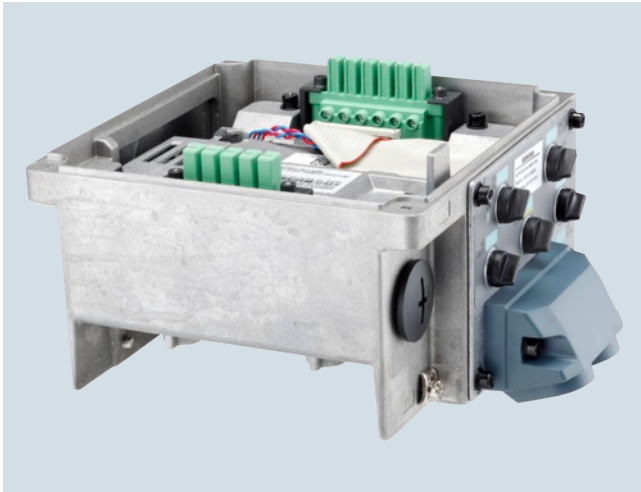


Fig. 9/6 SINAMICS G110M Control Unit CU240M PN cable gland

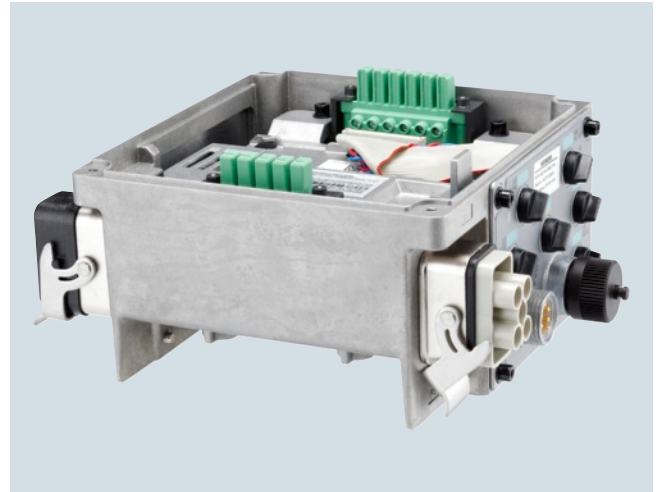


Fig. 9/7 SINAMICS G110M Control Unit CU240M PN plug-in

Each Control Unit is available in 3 different versions (for motor size 71, 80/90, 100/112) for mounting directly on the respective motor terminal box base.

Control Unit		Communication via	Connection system	For motor sizes
Control Unit CU240M, screw-type	CU240M	USS, Modbus RTU	Screw-type	71, 80/90, 100/112
Control Unit CU240M DP, screw-type	CU240M DP	PROFIBUS	Screw-type	71, 80/90, 100/112
Control Unit CU240M DP, plug-in	CU240M DP	PROFIBUS	Plug-in	71, 80/90, 100/112
Control Unit CU240M PN, screw-type	CU240M PN	PROFINET, EtherNet/IP	Screw-type	71, 80/90, 100/112
Control Unit CU240M PN, plug-in	CU240M PN	PROFINET, EtherNet/IP	Plug-in	71, 80/90, 100/112

Safety Integrated functions

The safety function "Safe Torque Off" (STO) (certified according to IEC 61508 SIL 2 and ISO 13849-1 PL d and Category 3) is already integrated into the basic versions of the CU240M series (CU240M, CU240M DP and CU240M PN). It prevents active movement of the drive. It can be activated either over PROFIsafe or over the safety input.

Existing systems in particular can be simply updated with safety technology without the need to change the motor or mechanical system.

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

CU240M Control Units

Design

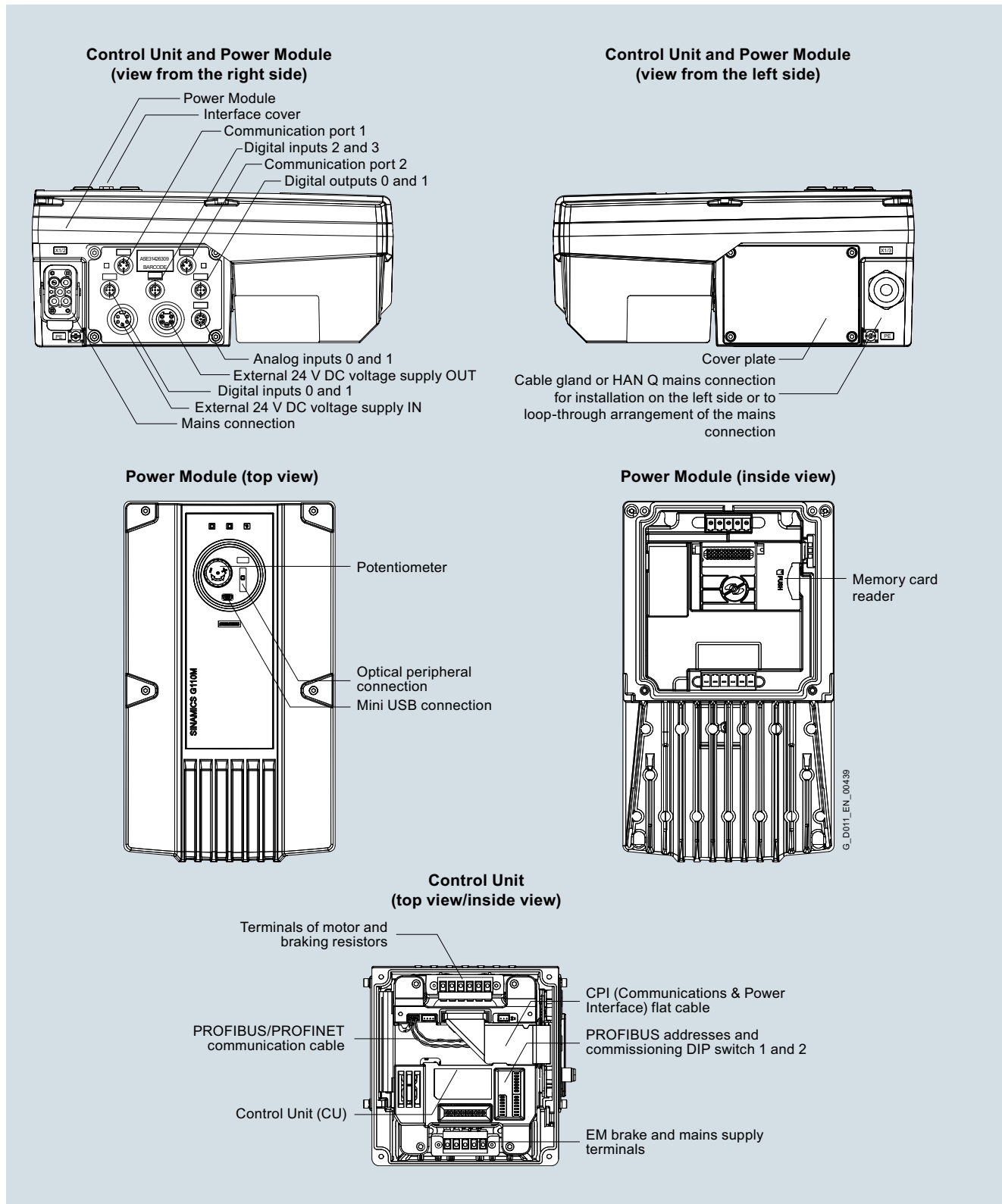


Fig. 9/8 Design of the Control Unit and Power Module

Integration

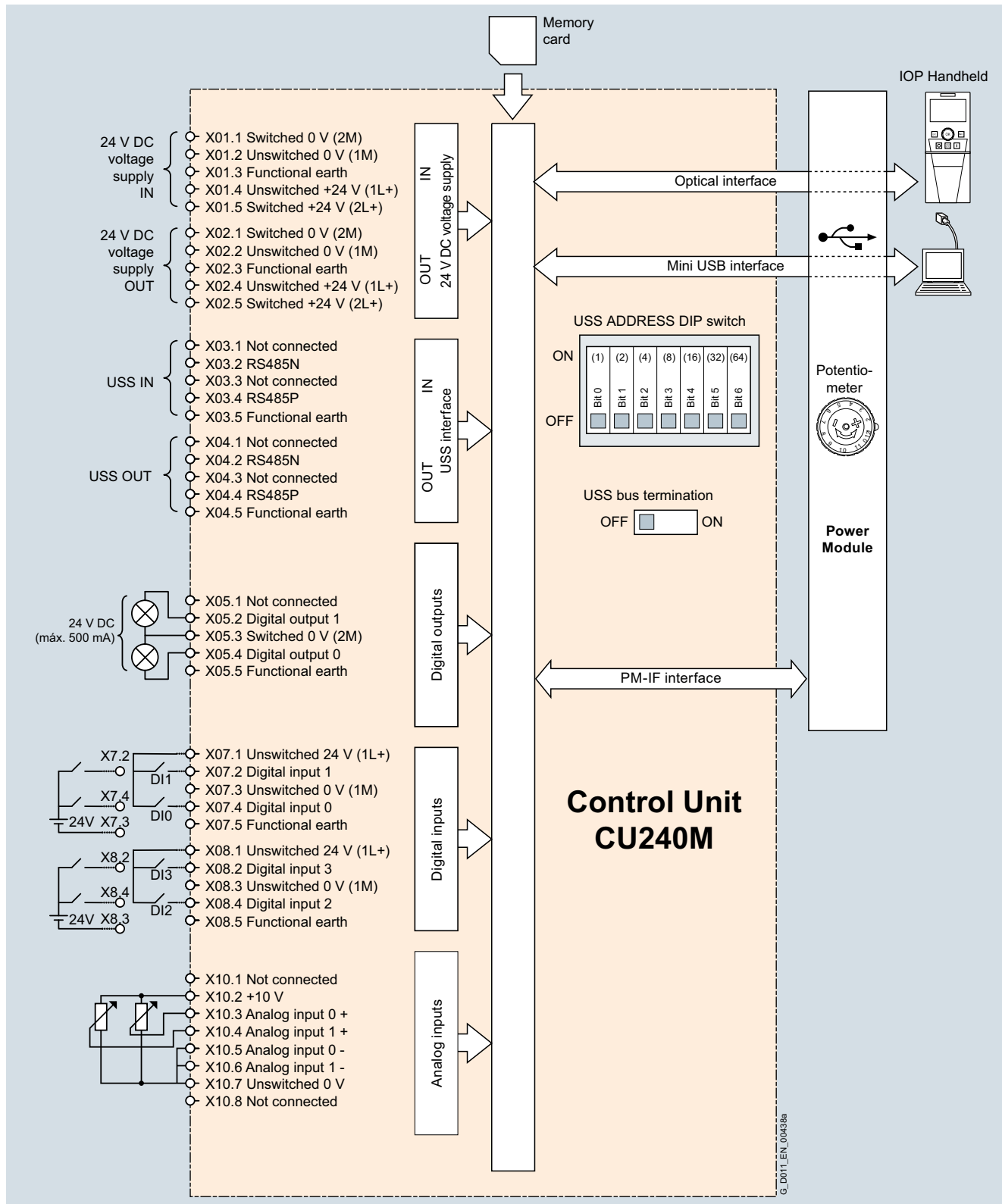


Fig. 9/9 Connection diagram for CU240M Control Units

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

CU240M Control Units

Integration (continued)

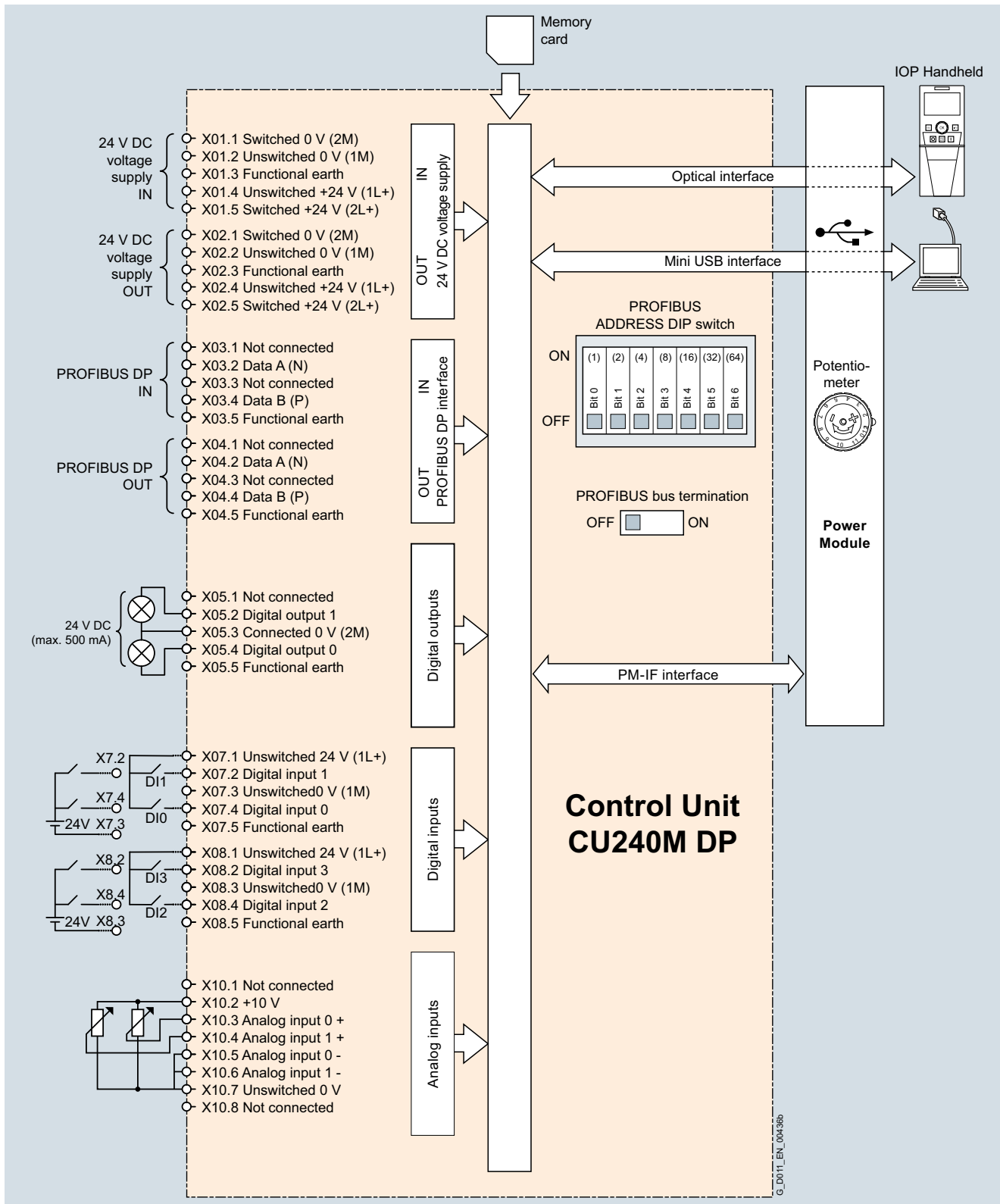


Fig. 9/10 Connection diagram for CU240M DP Control Units

G_0011_EN_004360

Integration (continued)

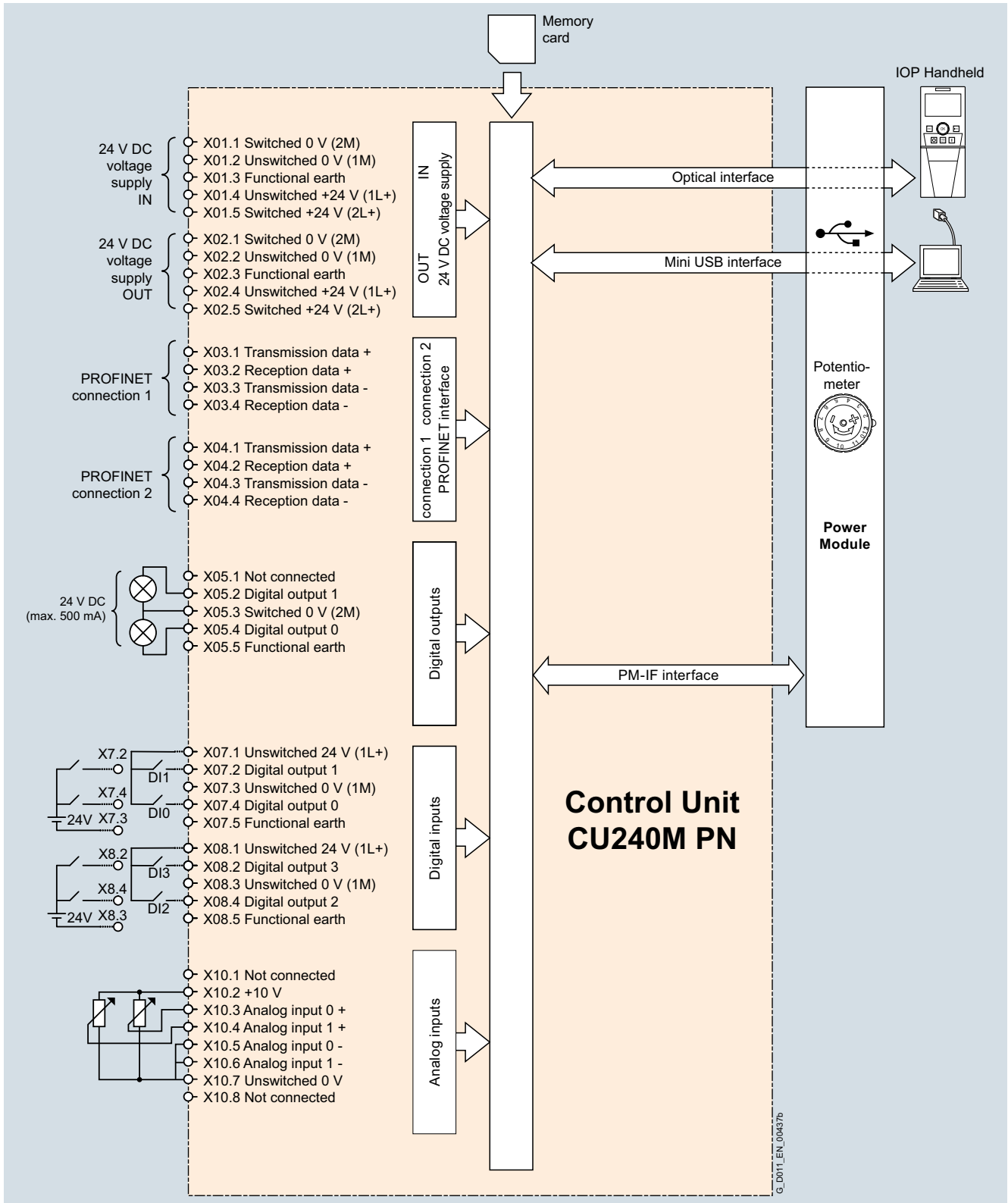


Fig. 9/11 Connection diagram for CU240M PN Control Units

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

CU240M Control Units

Technical specifications

Control Unit	CU240M USS With screw-type connections	CU240M PROFIBUS With screw-type connections	CU240M PROFIBUS With plug-in connections	CU240M PROFINET With screw-type connections	CU240M PROFINET With plug-in connections
Electrical specifications					
Operating voltage	External 24 V DC \pm 15 % power supply with protective extra low voltage PELV acc. to EN 61800-5-1 must be used.	External 24 V DC \pm 15 % power supply with protective extra low voltage PELV acc. to EN 61800-5-1 must be used.	External 24 V DC \pm 15 % power supply with protective extra low voltage PELV acc. to EN 61800-5-1 must be used.	External 24 V DC \pm 15 % power supply with protective extra low voltage PELV acc. to EN 61800-5-1 must be used.	External 24 V DC \pm 15 % power supply with protective extra low voltage PELV acc. to EN 61800-5-1 must be used.
Current consumption ¹⁾ (from the 24 V DC supply)					
• With Power Module frame sizes FSA	235 mA	235 mA	235 mA	290 mA	290 mA
• With Power Module frame sizes FSB	235 mA	235 mA	235 mA	290 mA	290 mA
Interfaces					
Digital inputs (non-isolated)	4 programmable, PNP, SIMATIC compatible	4 programmable, PNP, SIMATIC compatible	4 programmable, PNP, SIMATIC compatible	4 programmable, PNP, SIMATIC compatible	4 programmable, PNP, SIMATIC compatible
• Optionally parameterizable as safe inputs	1	1	1	1	1
Analog inputs (0 ... 10 V or 0 ... 20 mA with 12 bit resolution)	2	2	2	2	2
Digital outputs (24 V DC, 0 ... 0.5 A)	2, programmable	2, programmable	2, programmable	2, programmable	2, programmable
Bus interface	USS	PROFIBUS DP	PROFIBUS DP	PROFINET	PROFINET
• Fieldbus protocols	USS Modbus RTU	PROFIBUS DP incl. PROFIsafe	PROFIBUS DP incl. PROFIsafe	PROFINET incl. PROFIsafe EtherNet/IP	PROFINET incl. PROFIsafe EtherNet/IP
• Profiles	–	PROFIdrive	PROFIdrive	PROFIdrive PROFInergy	PROFIdrive PROFInergy
PTC/KTY interface (connection via Power Module)	✓	✓	✓	✓	✓
• Motor temperature sensor	1 input, sensors that can be connected: PTC, KTY or bimetal	1 input, sensors that can be connected: PTC, KTY or bimetal	1 input, sensors that can be connected: PTC, KTY or bimetal	1 input, sensors that can be connected: PTC, KTY or bimetal	1 input, sensors that can be connected: PTC, KTY or bimetal
Control of a mechanical motor brake (connection via the Control Unit)	✓	✓	✓	✓	✓
Slot for SINAMICS memory card (SD card)	✓	✓	✓	✓	✓
Commissioning interface (mini USB)	✓	✓	✓	✓	✓
Safety functions					
Integrated safety functions acc. to IEC 61508 SIL 2 and ISO 13849-1 Category 3 and PL d	Safe Torque Off (STO)	Safe Torque Off (STO)	Safe Torque Off (STO)	Safe Torque Off (STO)	Safe Torque Off (STO)
Open-loop/closed-loop control techniques					
V/f linear/square/parameterizable	✓	✓	✓	✓	✓
V/f with flux current control (FCC)	✓	✓	✓	✓	✓
Vector control, sensorless	✓	✓	✓	✓	✓
Torque control, sensorless	✓	✓	✓	✓	✓

¹⁾ The current consumption of connected sensors (total, max. 200 mA) as well as the current drawn from the digital outputs (total, max. 500 mA).

Motor integrated frequency inverter **SINAMICS G110M**

0.37 kW to 4 kW

CU240M Control Units

Technical specifications

Control Unit	CU240M USS With screw-type connections	CU240M PROFIBUS With screw-type connections	CU240M PROFIBUS With plug-in connections	CU240M PROFINET With screw-type connections	CU240M PROFINET With plug-in connections
Software functions					
Fixed frequencies	16, parameterizable	16, parameterizable	16, parameterizable	16, parameterizable	16, parameterizable
Signal interconnection with BICO technology	✓	✓	✓	✓	✓
Automatic restart after line supply failure or operational fault	✓	✓	✓	✓	✓
Slip compensation	✓	✓	✓	✓	✓
Free function blocks (FFB) for logical and arithmetic operations	✓	✓	✓	✓	✓
Ramp smoothing	✓	✓	✓	✓	✓
4 selectable drive data sets	✓	✓	✓	✓	✓
4 selectable command data sets (CDS) (manual/auto)	✓	✓	✓	✓	✓
Flying restart	✓	✓	✓	✓	✓
JOG	✓	✓	✓	✓	✓
Cyclic recording of ramp-up and ramp-down	✓	✓	✓	✓	✓
Technology controller (PID)	✓	✓	✓	✓	✓
Quick stop	✓	✓	✓	✓	✓
Limit switch logic	✓	✓	✓	✓	✓
Thermal motor protection	✓	✓	✓	✓	✓
Thermal inverter protection	✓	✓	✓	✓	✓
Setpoint input	✓	✓	✓	✓	✓
Motor identification	✓	✓	✓	✓	✓
Motor holding brake	✓	✓	✓	✓	✓
Mechanical specifications and ambient conditions					
Degree of protection	IP66/UL Type 3	IP66/UL Type 3	IP65/UL Type 3	IP66/UL Type 3	IP65/UL Type 3
Operating temperature	-10 ... +55 °C (14 ... 131 °F)	-10 ... +55 °C (14 ... 131 °F)	-10 ... +55 °C (14 ... 131 °F)	-10 ... +55 °C (14 ... 131 °F)	-10 ... +55 °C (14 ... 131 °F)
Air temperature	-40 ... +70 °C (40 ... 158 °F)	-40 ... +70 °C (40 ... 158 °F)	-40 ... +70 °C (40 ... 158 °F)	-40 ... +70 °C (40 ... 158 °F)	-40 ... +70 °C (40 ... 158 °F)
Relative humidity	< 95 % RH, condensation not permissible	< 95 % RH, condensation not permissible	< 95 % RH, condensation not permissible	< 95 % RH, condensation not permissible	< 95 % RH, condensation not permissible
Dimensions					
• Width	205 mm	205 mm	205 mm	205 mm	205 mm
• Height	105 mm	105 mm	105 mm	105 mm	105 mm
• Depth	171 mm	171 mm	171 mm	171 mm	171 mm
Weight, approx.	1.75 kg	1.85 kg	1.85 kg	1.85 kg	1.85 kg

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

PM240M Power Modules

Overview



Fig. 9/12 SINAMICS G110M Power Module PM240M FSA
(0.37 to 1.5 kW)

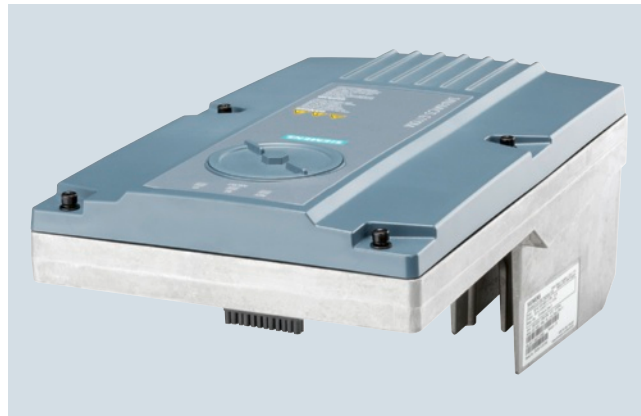


Fig. 9/13 SINAMICS G110M Power Module PM240M FSB
(2.2 to 4 kW)

The PM240M Power Modules are suitable for safety-related applications. In conjunction with the CU240M Control Unit, the drive can be transformed into a Safety Integrated drive (see Control Units).

The PM240M Power Modules with integrated line filter class A are suitable for connection to TN and TT supply systems.

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

PM240M Power Modules

Integration

PM240M Power Modules feature the following interfaces as standard:

- PM-IF interface for connection of the PM240M Power Module and Control Unit
- Motor connection including control of the motor brake and temperature sensor
- Line connection via cable gland or HAN Q4/2 (connector)
- Line supply loop-through via cable gland/terminal or HAN Q4/2 (socket)
- USB connection for connection of a PC
- Analog potentiometer for setting a speed
- SD card slot for the use of memory cards

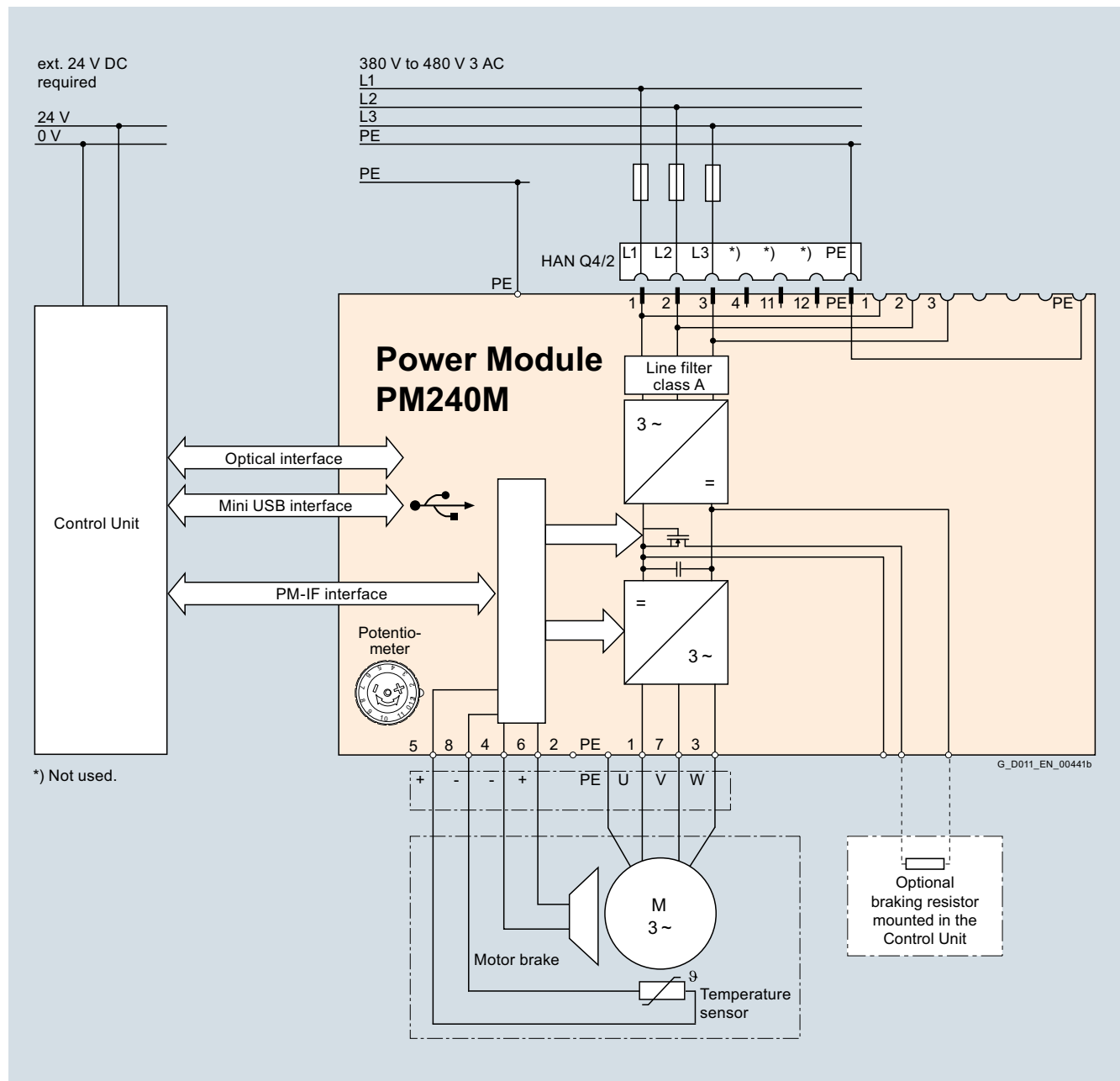


Fig. 9/14 Connection diagram for PM240M Power Module with integrated line filter class A

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

PM240M Power Modules

Technical specifications

General technical specifications

PM240M Power Modules	
System operating voltage	380 V (-10 %) ... 480 V (+10 %) 3 AC
Line supply requirements Short-circuit power ratio R_{SC}	> 100
Input frequency	47 ... 63 Hz
Output frequency	
• Control type V/f	0 ... 550 Hz
• Control type Vector	0 ... 200 Hz
Pulse frequency	4 kHz (standard); 4 ... 16 kHz (in steps of 2 kHz) see derating data
Power factor	0.95
Inverter efficiency	95 ... 97 %
Output voltage, max. in % of input voltage	87 %
Overload capability	
• High overload (HO)	0.37 ... 3 kW: 2 × rated output current for 3 s, followed by 1.5 × rated output current for 57 s, over a cycle time of 300 s (110 % on average) 4 kW: 1.6 × rated output current for 3 s, followed by 1.5 × rated output current for 57 s, over a cycle time of 300 s (110 % on average)
Electromagnetic compatibility	Integrated line filter class A according to EN 55011
Possible braking methods	Dynamic braking with internal braking resistors DC brake Integrated brake control supplies DC power supply for the brake
Line input voltage	380 V AC 400 V AC 440 V AC 480 V AC 400 V AC
Resulting brake voltage	171 V DC 180 V DC 198 V DC 216 V DC 225 V DC
	Disconnection on the DC side permits "fast" braking (max. output current 1 A)
Degree of protection	IP65/66 (applicable to Power Module and Control Unit in mounted state)
Operating temperature	-10 ... +55 °C (14 ... +131 °F)
Storage temperature	-40 ... +70 °C (-40 ... +158 °F)
Permissible mounting positions	All
Relative humidity	< 95 % RH, condensation not permissible
Cooling	External cooling with motor fan
Installation altitude	Up to 1000 m above sea level without derating Over 1000 m, see derating data
Short Circuit Current Rating (SCCR)¹⁾	40 kA
Protection functions	<ul style="list-style-type: none"> • Undervoltage • Phase failure detection • Overvoltage • Overload • Ground fault • Short-circuit • Stall protection • Motor blocking protection • Motor overtemperature • Inverter overtemperature • Parameter locking
Compliance with standards	CE (UL, cUL, C-Tick) ²⁾
CE marking, according to	EC Low Voltage Directive 73/23/EEC; filtered variants also: EC Low Voltage Directive 89/336/EEC

¹⁾ Applies to industrial control cabinet installations to NEC Article 409/UL 508A.

²⁾ Available only on request in combination with SIMOGEAR geared motors.

Motor integrated frequency inverter **SINAMICS G110M**

0.37 kW to 4 kW

PM240M Power Modules

Technical specifications (continued)

Line voltage 380 ... 480 V 3 AC		PM240M Power Modules			
Rated output current I_{rated} ¹⁾	A	1.3	2.2	3.1	4.1
Maximum output current I_{max}	A	2.6	4.4	6.2	8.2
Rated power	kW	0.37	0.75	1.1	1.5
Rated pulse frequency	kHz	4	4	4	4
Efficiency η	%	96.8	98.1	98.2	97.3
Power loss ²⁾ at rated output current	kW	0.025	0.032	0.041	0.052
Cooling air requirement	m ³ /s	0.0048	0.0048	0.0048	0.0048
Sound pressure level L_{pA} (1 m)	dB	–	–	–	–
Rated input current ³⁾	A	1.3	2	2.8	3.6
Line supply connection U1/L1, V1/L2, W1/L3, PE					
• Conductor cross-section, recommended	mm ²	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG
PE connection (external connection)					
• Conductor cross-section (recommended)	mm ²	10	10	10	10
Motor connection U2, V2, W2, PE, motor brake, temperature sensor					
• Conductor cross-section	mm ²	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG
Motor cable length, max. Shielded	m	–	–	–	–
Degree of protection		IP66	IP66	IP66	IP66
Dimensions					
• Width	mm	161	161	161	161
• Height	mm	135	135	135	135
• Depth	mm	270	270	270	270
Frame size		FSA	FSA	FSA	FSA
Weight, approx.	kg	2.1	2.1	2.1	2.1

¹⁾ The rated output current I_{rated} is based on the duty cycle for high overload (HO).

²⁾ Typical values. Additional information can be found on the Internet at <http://support.automation.siemens.com/WWW/view/en/94059311>

³⁾ The input current depends on the motor load and line impedance. The input currents apply for load at rated power for a line impedance corresponding to $u_k = 1\%$.

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

PM240M Power Modules

Technical specifications (continued)

Line voltage 380 ... 480 V 3 AC		PM240M Power Modules		
Rated output current I_{rated} ¹⁾	A	5.6	7.3	8.8
Maximum output current I_{max}	A	11.2	14.6	14.1
Rated power	kW	2.2	3	4
Rated pulse frequency	kHz	4	4	4
Efficiency η	%	97.6	97.6	97.7
Power loss ²⁾ at rated output current	kW	0.078	0.103	0.126
Cooling air requirement	m ³ /s	0.024	0.024	0.024
Sound pressure level L_{pA} (1 m)	dB	–	–	–
Rated input current ²⁾	A	5.3	6.9	8
Line supply connection U1/L1, V1/L2, W1/L3, PE				
• Conductor cross-section, recommended	mm ²	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG
PE connection (external connection)				
• Conductor cross-section (recommended)	mm ²	10	10	10
Motor connection U2, V2, W2, PE, motor brake, temperature sensor				
• Conductor cross-section	mm ²	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG	1 ... 2.5 18 ... 14 AWG
Motor cable length, max. Shielded	m	–	–	–
Degree of protection		IP66	IP66	IP66
Dimensions				
• Width	mm	181	181	181
• Height	mm	135	135	135
• Depth	mm	309	309	309
Frame size		FSB	FSB	FSB
Weight, approx.	kg	3.4	3.4	3.4

¹⁾ The rated output current I_{rated} is based on the duty cycle for high overload (HO).

²⁾ The input current depends on the motor load and line impedance. The input currents apply for load at rated power for a line impedance corresponding to $u_{\kappa} = 1\%$.

Characteristic curves

Derating data

Rated power at 400 V 3 AC		Rated output current in A for a pulse frequency of (derating as a function of the pulse frequency)						
kW	hp	4 kHz	6 kHz	8 kHz	10 kHz	12 kHz	14 kHz	16 kHz
0.37	0.5	1.3	1.3	1.11	0.91	0.78	0.65	0.59
0.75	1.0	2.2	1.9	1.5	1.3	1.1	1.0	0.9
1.1	1.5	3.1	2.6	2.2	1.9	1.6	1.4	1.2
1.5	2.0	4.1	3.5	2.9	2.5	2.1	1.8	1.6
2.2	3.0	5.6	4.8	3.9	3.4	2.8	2.5	2.2
3.0	4.0	7.3	6.2	5.1	4.4	3.7	3.3	2.9
4.0	5.0	8.8	7.5	6.2	5.3	4.4	4.0	3.5

Ambient temperature

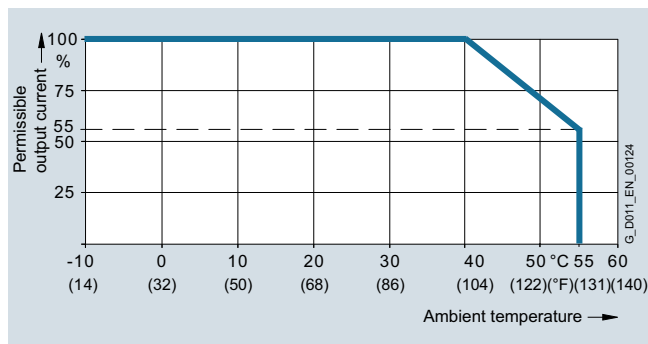


Fig. 9/15 Permissible output current as a function of ambient temperature for PM240M Power Modules, frame sizes FSA and FSB

Note:

The ambient temperature of the Control Units and the SIMOGEAR geared motors must be taken into account. The temperature ranges are specified in the technical specifications under Control Units.

Installation altitude

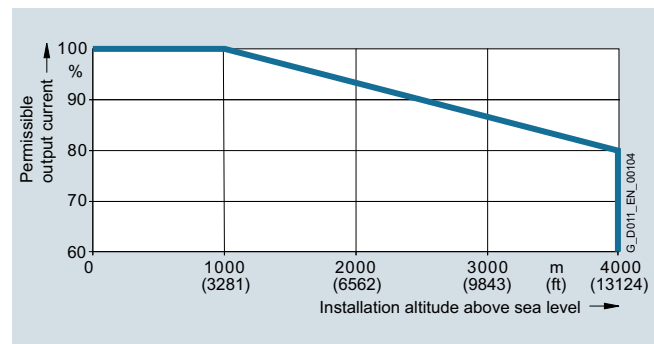


Fig. 9/16 Permissible output current as a function of installation altitude for PM240M Power Modules, frame sizes FSA and FSB

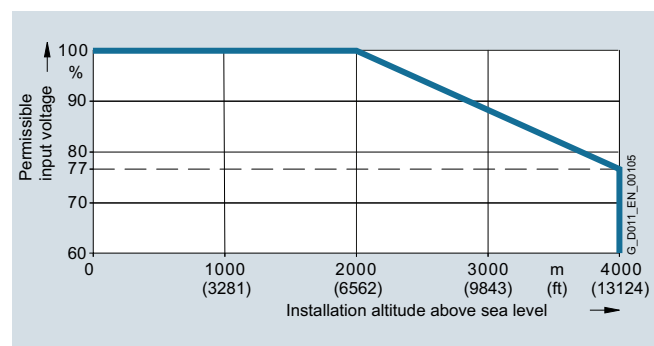


Fig. 9/17 Permissible input voltage as a function of installation altitude for PM240M Power Modules, frame sizes FSA and FSB

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

Line-side components

Repair switch



Fig. 9/18 SINAMICS G110M repair switch

With the optional repair switch, the SINAMICS G110M can be isolated easily from the line supply at the 400 V 3 AC level on the input side. When this switch is used, no additional external components are required in the 400 V feeder cable.

The repair switch can be locked with three locks. It can therefore be locked to prevent unintentional restart of the drive system.

The repair switch is installed and delivered ready for use in combination with our SIMOGEAR geared motor.



Fig. 9/19 SINAMICS G110M repair switch, installed

Note:

It is possible to install either a repair switch or a 24 V DC power supply, but it is not possible to install both options on the same unit.

9

Fuses and circuit breakers

The following table lists recommendations for additional line-side components, such as fuses and circuit breakers.

Note regarding use in compliance with IEC standards: 3NA3 type fuses and 3RV type circuit breakers are recommended for European countries. The values in the table take into account the overload capability of the inverter.

Note regarding use in compliance with UL regulations: Fuses for use in North America must be UL-certified, Class J fuses with a rated voltage of 600 V AC.

Individual protection

Rated power			Fuse		Circuit breaker
kW	hp	Frame size	A	Article No.	Article No.
3 AC 380 ... 480 V					
0.37	0.5	FSA	10	3NA3803	3RV2011-1JA10
0.75	1.0	FSA	10	3NA3803	3RV2011-1JA10
1.1	1.5	FSA	10	3NA3803	3RV2011-1JA10
1.5	2.0	FSA	10	3NA3803	3RV2011-1JA10
2.2	3	FSB	20	3NA3807	3RV2021-4BA10
3	4	FSB	20	3NA3807	3RV2021-4BA10
4	5	FSB	20	3NA3807	3RV2021-4BA10

The SINAMICS G110M system supports an inverter loop-through of line current to several inverters connected in series.

Further information can be found in the operating instructions on the Internet at

www.siemens.com/sinamics-g110m

Short Circuit Current Rating (SCCR) according to UL

Applies to industrial control panel installations according to NEC Article 409 or UL 508A.

- PM240M: 40 kA

Additional information about the listed fuses and circuit breakers can be found in Catalogs LV 10, IC 10 and IC 10 AO.

Overview

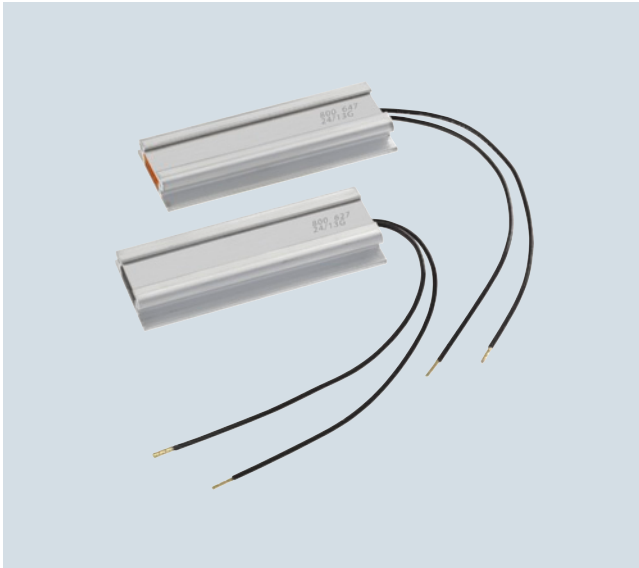


Fig. 9/20 SINAMICS G braking resistors FSA and FSB

Excess energy in the DC link is dissipated in the braking resistors in regenerative operation.

The braking resistors are intended for use with SINAMICS G110M, which have an integrated braking chopper, but cannot regenerate energy to the line supply. For regenerative operation, e.g. the braking of a rotating mass with high moment of inertia, a braking resistor must be connected to convert the resulting energy into heat.

The braking resistors can be mounted on the side of the Control Unit housing at the bottom. The heat from the braking resistor is dissipated over the Control Unit housing. Every braking resistor is equipped with thermal protection. The thermal protection prevents the braking resistor from being thermally overloaded.

All braking resistors are provided as standard with a cable for connecting to the internal terminals.

Technical specifications

Line voltage 380 ... 480 V 3 AC		Braking resistor	
Resistor	Ω	350	175
Rated power P_{DB} (Continuous braking power)	kW	0.0075	0.02
Peak power P_{max} (load duration $t_a = 12$ s with period $t = 120$ s)	kW	0.075	0.2
Degree of protection		IP20	IP20
Dimensions			
• Width	mm	11	11
• Height	mm	34	34
• Length	mm	84	84
Weight, approx.	kg	0.1	0.1
Suitable for SINAMICS G110M (frame size)		FSA	FSB

Characteristic curve

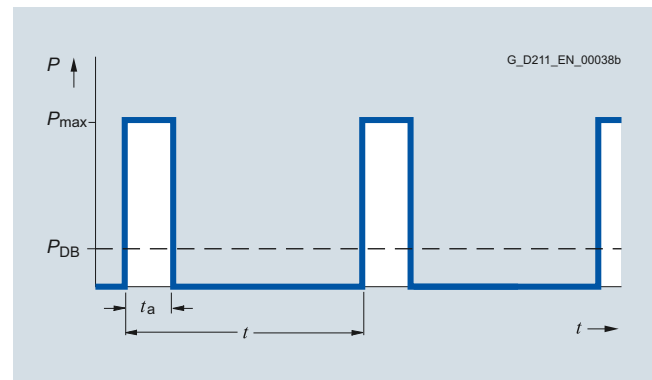


Fig. 9/21 Load diagram for braking resistors
 $t_a = 12$ s
 $t = 120$ s

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

DC link components – 24 V DC power supply

Overview



Fig. 9/22 24 V DC power supply



Fig. 9/23 24 V DC power supply, installed

The optional 24 V DC power supply enables the internal electronics to be supplied with 24 V DC directly from the DC link. No external cable is needed for the 24 V DC supply and only the 400 V 3 AC line supply has to be connected. The optional 24 V DC power supply supplies power to the internal circuitry of the Control Unit, the low-voltage circuits of the Power Module and all inputs and outputs.

Note:

It is possible to install either a 24 V DC power supply or a repair switch, but it is not possible to install both options on the same unit.

9

Technical specifications

24 V DC power supply	
Operating voltage	24 V DC $\pm 10\%$
Current consumption (from the DC link, with PM, CU and DOs operating at a maximum)	1.2 A
Output current, max.	2 A

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

Available motor/inverter combinations

Overview

The available motor/inverter combinations that are integrated in the motor as standard are listed in the tables below.

Due to the specific properties of SINAMICS G110M, the following restrictions apply to the options that can be ordered with the motors:

- The inverter and the manual release lever of the brake cannot be mounted in the same position
- Standby heating is not possible for the motor
- Terminal box position 4 (i.e. the inverter is directed downwards in installation position M1) on request

4-pole, 1 500 rpm at 50 Hz power ¹⁾

Size	Motor	P _{50Hz} kW	Power Module Frame Size A (FSA)					Frame Size B (FSB)	
			0.37	0.75	1.1	1.5	2.2	3	4
Motors with Standard Efficiency IE1									
71	LA71MG4	0.25	On request						
	LA71MH4	0.37	✓						
Motors with High Efficiency IE2									
80	LE80MD4E	0.55		✓					
	LE80MH4E	0.75		✓	✓				
90	LE90SG4E	1.1			✓	✓			
	LE90LH4E	1.5				✓	✓		
100	LE100LE4E	2.2					✓	✓	
	LE100LK4E	3						✓	✓
112	LE112ME4E	4							✓

4-pole, 2 610 rpm at 87 Hz power ¹⁾

Size	Motor	P _{87Hz} kW	Power Module Frame Size A (FSA)					Frame Size B (FSB)	
			0.37	0.75	1.1	1.5	2.2	3	4
Motors with Standard Efficiency IE1									
71	LA71MH4	0.65		✓					
Motors with High Efficiency IE2									
80	LE80MD4E	0.95			✓				
	LE80MH4E	1.30				✓			
90	LE90SG4E	1.90					✓		
	LE90LH4E	2.60						✓	
100	LE100LE4E	3.60							✓

¹⁾ Other motor/inverter combinations on request.

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

Supplementary system components

Accessories

Intelligent Operator Panel IOP Handheld



Fig. 9/24 IOP Handheld for mobile use

The Intelligent Operator Panel IOP Handheld is a very user-friendly and powerful operator panel for commissioning and diagnostics as well as local operator control and monitoring of the SINAMICS G110M distributed inverter.

The IOP supports both entry-level personnel and drive experts. Thanks to the large plain text display, the menu-based operation and the application wizards, it is easy to commission standard drives. A drive can be essentially commissioned without having to use a printed parameter list – as the parameters are displayed in plain text, and explanatory help texts and the parameter filtering function are provided.

Application wizards interactively guide you when commissioning important applications such as conveyor technology, pumps, fans and compressors.

There is a basic commissioning wizard for general commissioning.

The drives are easily controlled manually using directly assigned buttons and the navigation wheel. The IOP Handheld has a dedicated switchover button to switch over from automatic to manual mode.

The drive can be diagnosed in a user-friendly fashion using the plain text display of faults and alarms. Help texts can be obtained by pressing the INFO button.

Up to 2 process values can be displayed graphically or numerically on the status/status display.

Process values can also be displayed in technological units.

The IOP Handheld supports standard commissioning of identical drives. For this purpose, a parameter list can be copied from a drive unit into the IOP Handheld and downloaded into other drive units of the same type as required.

The IOP supports the following languages 1): German, English, French, Italian, Spanish, Portuguese, Dutch, Swedish, Russian, Czech, Polish, Turkish, Finnish.

¹⁾ For additional information, see <http://support.automation.siemens.com/WWW/view/en/67273266>

In addition to the IOP, the IOP Handheld includes a housing with the rechargeable batteries, charging unit and RS 232 connecting cable. The charging unit is supplied with connector adapters for Europe, the US and UK. When the batteries are fully charged, the operating time is up to 8 hours.

To connect the IOP Handheld to SINAMICS G110M, the RS 232 connecting cable with optical interface is required in addition.

Updating the IOP Handheld

The IOP Handheld can be updated and expanded using the integrated USB interface.

Data to support future drive systems can be transferred from the PC to the IOP Handheld via drag & drop. Further, the USB interface allows user languages and wizards that will become available in the future to be subsequently downloaded and the firmware to be updated for the IOP Handheld.

Selection and ordering data

Description	Article No.
IOP Handheld For use with SINAMICS G120, SINAMICS G120C, SINAMICS G120P, SINAMICS G110D, SINAMICS G120D, SINAMICS G110M Included in the scope of delivery: <ul style="list-style-type: none"> • IOP • Handheld housing • Rechargeable batteries (4 x AA) • Charging unit (international) • RS 232 connecting cable (3 m long, can only be used for SINAMICS G110) • USB cable (1 m long) 	6SL3255-0AA00-4HA0
RS 232 connecting cable With optical interface to connect the SINAMICS G110D, SINAMICS G120D or SINAMICS G110M inverters to the IOP Handheld (2.5 m long)	3RK1922-2BP00

Accessories**Memory cards**

Fig. 9/25 SINAMICS memory card (SD card)

The parameter settings for an inverter can be stored on the SINAMICS SD card. When service is required, e.g. after the inverter has been replaced and the data has been downloaded from the memory card, the system is immediately ready for use again.

- Parameter settings can be written from the memory card to the inverter or saved from the inverter to the memory card.
- Up to 100 parameter sets can be stored.
- The memory card supports standard commissioning without the use of the Intelligent Operator Panel IOP Handheld or the STARTER and SINAMICS Startdrive commissioning tools.

Note:

The memory card is not required for operation and does not have to remain inserted.

In the case of SINAMICS G110M, the parameter set is stored on the Control Unit. Only when a Control Unit is replaced is it necessary to transfer the parameter set to the replacement device.

Selection and ordering data

Description	Article No.
SINAMICS SD Card (memory card) 512 MB	6SL3054-4AG00-2AA0

PC inverter connection kit 2 (mini USB interface cable for communication with a PC)

For controlling and commissioning an inverter directly from a PC via a point-to-point connection if the appropriate software (STARTER commissioning tool¹⁾, V4.3 SP3 and higher or SINAMICS Startdrive V13 and higher) has been installed.

Selection and ordering data

Description	Article No.
PC inverter connection kit 2 PC inverter connection kit 2 for CU240M Control Units including USB cable (length 3 m)	6SL3255-0AA00-2CA0

Installation kits

Different installation kits can be ordered as accessories for the Control Units with plug-in connections and Control Units with cable gland connections.

These contain caps or cable glands for protection or electrical connection respectively.

Selection and ordering data

Description	Article No.
Installation kit for Control Units with cable gland connections Contains cable glands for the electrical connections	6SL3566-2VA00-0GA0
Installation kit for Control Units with plug-in connections Contains caps for protection of the electrical connections	6SL3566-2LA00-0GA0

STARTER commissioning tool

The STARTER commissioning tool (V4.3 SP3 and higher) supports the commissioning and maintenance of SINAMICS G110M inverters.

The operator guidance combined with comprehensive, user-friendly functions for the relevant drive solution allow you to commission the device quickly and easily.

Selection and ordering data

Description	Article No.
STARTER commissioning tool¹⁾ on DVD-ROM	6SL3072-0AA00-0AG0

SINAMICS Startdrive commissioning tool

The SINAMICS Startdrive commissioning tool (V13 and higher) supports the commissioning and maintenance of SINAMICS G110M inverters. SINAMICS Startdrive is part of the TIA Portal engineering platform. It supports the intuitive integration of SINAMICS drives in automation. The same operator control concept, the elimination of interfaces and a high degree of user-friendliness make it possible to quickly integrate SINAMICS into an automation process and start it up with the TIA Portal. The TIA Portal with SINAMICS Startdrive offers you a totally integrated engineering platform for the complete application from the project engineering phase through to commissioning and diagnostics.

Selection and ordering data

Description	Article No.
SINAMICS Startdrive commissioning tool²⁾ on DVD-ROM	6SL3072-4DA02-0XG0

¹⁾ The STARTER commissioning tool is also available on the Internet at <http://support.automation.siemens.com/WW/view/en/10804985/133100>

²⁾ The SINAMICS Startdrive commissioning tool is also available on the Internet at <http://support.automation.siemens.com/WW/view/en/68034568>

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

Supplementary system components

Accessories

An overview of all available accessories (e.g. connectors and cables) can be found under the following link:
www.siemens.com/distributeddrives-supplementaryproducts

Connecting cables for the Control Unit

PROFINET connecting cable

Flexible connecting cables and plug-in connectors that can be assembled in the field for transmission of data (up to 100 Mbit/s) between industrial Ethernet stations with IP65 degree of protection.

Selection and ordering data

Description	Article No.
IE connecting cable M12-180/M12-180 axial outlet Pre-assembled IE FC TP trailing cable GP 2 x 2 PROFINET type C with two 4-pole M12 plugs (4-pole, D-coded), IP65/IP67 degree of protection, UL, plug connector/plug connector (IN/OUT) Length: <ul style="list-style-type: none"> • 0.3 m • 0.5 m • 1.0 m • 1.5 m • 2.0 m • 3.0 m • 5.0 m • 10 m • 15 m 	<ul style="list-style-type: none"> 6XV1870-8AE30 6XV1870-8AE50 6XV1870-8AH10 6XV1870-8AH15 6XV1870-8AH20 6XV1870-8AH30 6XV1870-8AH50 6XV1870-8AN10 6XV1870-8AN15
IE connecting cable M12-180/IE FC RJ45 Plug 145 axial outlet Pre-assembled IE FC TP trailing cable GP 2 x 2 (PROFINET Type C) with M12 plugs (D-coded) and IE FC RJ45 plug, IP65/IP67 degree of protection Length: <ul style="list-style-type: none"> • 2.0 m • 3.0 m • 5.0 m • 10 m • 15 m 	<ul style="list-style-type: none"> 6XV1871-5TH20 6XV1871-5TH30 6XV1871-5TH50 6XV1871-5TN10 6XV1871-5TN15
IE M12 Plug PRO axial outlet For assembly in the field, M12 plug-in connector (D-coded), metal enclosure, UL, fast connection method, plug connector <ul style="list-style-type: none"> • 1 unit • 8 units 	<ul style="list-style-type: none"> 6GK1901-0DB20-6AA0 6GK1901-0DB20-6AA8

PROFIBUS connecting cable

Flexible plug-in cables/connectors for transmission of data (up to 12 Mbit/s) from PROFIBUS stations.

Selection and ordering data

Description	Article No.
PROFIBUS M12 plug-in cable axial outlet Pre-assembled with two 5-pole M12 plug/socket connectors, UL Length: <ul style="list-style-type: none"> • 0.3 m • 0.5 m • 1.0 m • 1.5 m • 2.0 m • 3.0 m • 5.0 m • 10 m • 15 m 	<ul style="list-style-type: none"> 6XV1830-3DE30 6XV1830-3DE50 6XV1830-3DH10 6XV1830-3DH15 6XV1830-3DH20 6XV1830-3DH30 6XV1830-3DH50 6XV1830-3DN10 6XV1830-3DN15
PROFIBUS M12 plug connector axial outlet 5-pole, B-coded, metal enclosure, 1 package = 5 units <ul style="list-style-type: none"> • Pin insert • Female contact insert 	<ul style="list-style-type: none"> 6GK1905-0EA00 6GK1905-0EB00

Accessories

Connecting cables/connectors for supplying the Control Unit with power

Selection and ordering data

Description	Article No.
7/8" plug-in cable, axial outlet For 24 V switched and unswitched, pre-assembled with 2 x 7/8" at both ends (axial), 5 x 1.5 mm ² , 5-pole plug/socket connectors Length: <ul style="list-style-type: none"> • 0.3 m • 0.5 m • 1.0 m • 1.5 m • 2.0 m • 3.0 m • 5.0 m • 10 m • 15 m 	6XV1822-5BE30 6XV1822-5BE50 6XV1822-5BH10 6XV1822-5BH15 6XV1822-5BH20 6XV1822-5BH30 6XV1822-5BH50 6XV1822-5BN10 6XV1822-5BN15
7/8" power cable, angled outlet, pre-assembled at one end For 24 V switched and unswitched, pre-assembled with 1 x 7/8" at one end, 5 x 1.5 mm ² , 5-pole socket connector Length: <ul style="list-style-type: none"> • 3.0 m • 5.0 m • 10 m 	3RK1902-3GB30 3RK1902-3GB50 3RK1902-3GC10
7/8" power cable, angled outlet For 24 V switched and unswitched, pre-assembled with 2 x 7/8" at both ends (angled), 5 x 1.5 mm ² , 5-pole plug/socket connectors Length: <ul style="list-style-type: none"> • 3.0 m • 5.0 m • 10 m 	3RK1902-3NB30 3RK1902-3NB50 3RK1902-3NC10
7/8" plug-in connector, axial outlet 5-pole, B-coded, plastic enclosure, 1 package = 5 units <ul style="list-style-type: none"> • Pin insert (IN) • Female contact insert (OUT) 	6GK1905-0FA00 6GK1905-0FB00
7/8" plug-in connector, axial outlet 5-pole, B-coded, plastic enclosure, 1 package = 5 units <ul style="list-style-type: none"> • Pin insert (IN) • Female contact insert (OUT) 	3RK1902-3BA00 3RK1902-3DA00

Connecting cables and connectors for digital inputs and outputs

Selection and ordering data

Description	Article No.
M12 plug-in cable pre-assembled at both ends, axial outlet M12 straight plug, M12 straight socket, screw mounting, 3-pin, 3 x 0.34 mm ² , A-coded, black PUR sheath, max. 4 A Length: <ul style="list-style-type: none"> • 1.5 m 	3RK1902-4PB15-3AA0
M12 connector Y cable for distributed I/O for dual connection of I/Os using single 5-pole M12 cables, 200 mm <ul style="list-style-type: none"> • Straight 	6ES7194-6KA00-0XA0

Connecting cables and connectors for analog inputs

Selection and ordering data

Description	Article No.
M12 cable connector 8-pole plug connector <ul style="list-style-type: none"> • Straight cable outlet 	Ordered from and supplied by KnorrTec
T distribution piece To connect two analog inputs 8-pole M12 male connector to 2 x 4-pole M12 socket, angled	Ordered from and supplied by KnorrTec

Connecting cables to the power supply

Connecting cables pre-assembled at one end and connector sets to connect to the line supply

Selection and ordering data

Description	Article No.
Connecting cable pre-assembled at one end Power supply cable, open at one end, for HAN Q4/2, angled, 4 x 4 mm ² <ul style="list-style-type: none"> • 1.5 m long • 5 m long 	3RK1911-0DB13 3RK1911-0DB33
Connector set for the power supply Socket insert HAN Q4/2, 5 socket contacts, grommet housing, angled outlet including screw connection <ul style="list-style-type: none"> • 2.5 mm² • 4 mm² • 6 mm² 	3RK1911-2BE50 3RK1911-2BE10 3RK1911-2BE30

Connector insert for power loop-through

Selection and ordering data

Description	Article No.
Connector set for power loop-through Plug insert HAN Q4/2, 4 socket contacts, grommet housing, angled outlet including screw connection <ul style="list-style-type: none"> • 2.5 mm² • 4 mm² 	3RK1911-2BF50 3RK1911-2BF10

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

Supplementary system components

Accessories

Power bus distribution 400 V in IP65 degree of protection

Selection and ordering data

Not essential (daisy chaining within device);
use is optional.

Description	Article No. (to order, see Solution Partners)
Power T clamp connector for 2.5 ... 6 mm² With attached 7-pole connector, female contact insert, grommet housing, UL Seals for various cable cross-sections must be ordered separately	Ordered from and supplied by Harting
T clamp connector Completely pre-assembled	Ordered from and supplied by KnorrTec
T distributor box, IDC connection power cable Pre-assembled, UL, uncut power cable, 2.5 ... 6 mm ² , Push-in connection: 1.5 ... 6 mm ² Seals for various cable cross-sections must be ordered separately	Ordered from and supplied by Weidmüller
Y distributor For direct connection of 400 V supply line, HAN Q4/2, conductor cross-section 1.5 ... 4 mm ²	Ordered from and supplied by Harting

More information

An overview of supplementary products (connectors and cables) can be found under the following link:
www.siemens.com/distributeddrives-supplementaryproducts

For further information about the connecting cables and plug-in connectors mentioned above, please refer to Catalog IK PI.

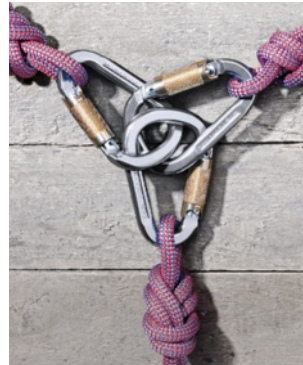


Fig. 9/26 Siemens Solution Partners image

Further selected accessories are available from Siemens Solution Partners.
 Please go to the "Solution Partner Finder" and select technology "Distributed Field Installation System".
www.siemens.com/automation/partnerfinder

9

Spare parts > Spare parts kit

Overview

A Spare Parts Kit can be ordered, comprising small parts such as replacement seals, caps, PROFIBUS address windows and screws.

Selection and ordering data

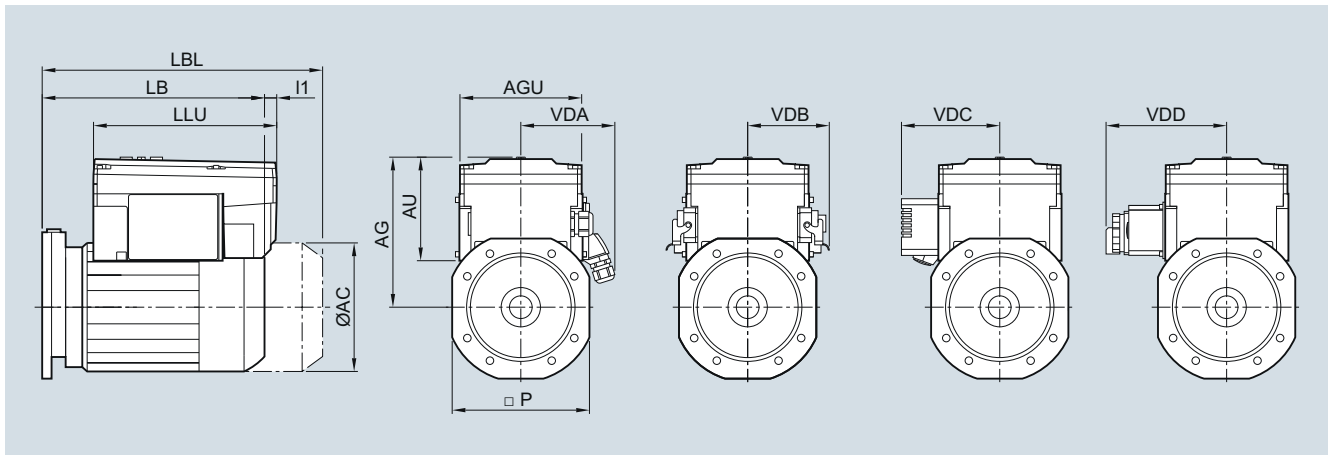
Description	Article No.
Spare Parts Kit for SINAMICS G110M Comprising replacement seals, caps, connectors and screws	6SL3500-0TK02-0AA0

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

Dimensions

Motors with SINAMICS G110M



The diagram is for terminal box position 2A (for further information about the terminal box position, see [page 11/10](#))

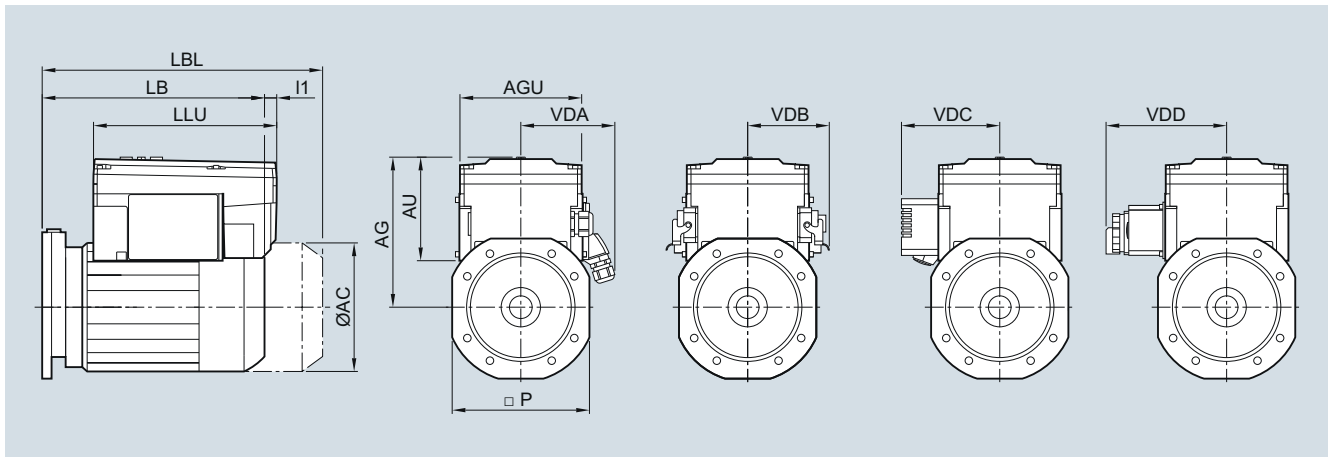
Motor	Gearbox type					SINAMICS G110M												
						Power Module	Dimensions										Cable gland	Plug-in technology	24 V DC power supply	Repair switch
	D/Z	FD/FZ	B	K	C	Frame size	LB	LBL	AC	I1	AG	AU	LLU	AGU	VDA	VDB	VDC	VDD
LA71M	19	-	19	-	-	FSA	184.5	239.5	138.8	74.5	184.5	137	270	161	127.5	108	130	171
	29	29	29	-	29		226	281										
	39	39	39	39	39		216.5	271.5										
	49	49	49	49	49													
	59	-	-	-	-													
	69	69	-	69	69													
	-	-	-	79	-													
	79	79	-	-	-		214.5	269.5										
-	-	-	89	89														
LE80M	19	-	19	-	-	FSA	240	300	156.3	35	191	137	270	161	127.5	108	130	171
	29	29	29	-	29		290	350										
	39	39	39	39	39		280.5	340.5										
	49	49	49	49	49													
	59	-	-	-	-													
	69	69	-	69	69													
	-	-	-	79	-													
	79	79	-	-	-		274.5	334.5										
-	-	-	89	89														
89	89	-	-	-	261.5	321.5												
-	-	-	109	-														
LE80ZM	19	-	19	-	-	FSA	275	335	156.3	35	191	137	270	161	127.5	108	130	171
	29	29	29	-	29		325	385										
	39	39	39	39	39		315.5	375.5										
	49	49	49	49	49													
	59	-	-	-	-													
	69	69	-	69	69													
	-	-	-	79	-													
	79	79	-	-	-		309.5	369.5										
-	-	-	89	89														
89	89	-	-	-	296.5	356.5												
-	-	-	109	-														

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

Dimensions

Motors with SINAMICS G110M (continued)



The diagram is for terminal box position 2A (for further information about the terminal box position, see [page 11/10](#))

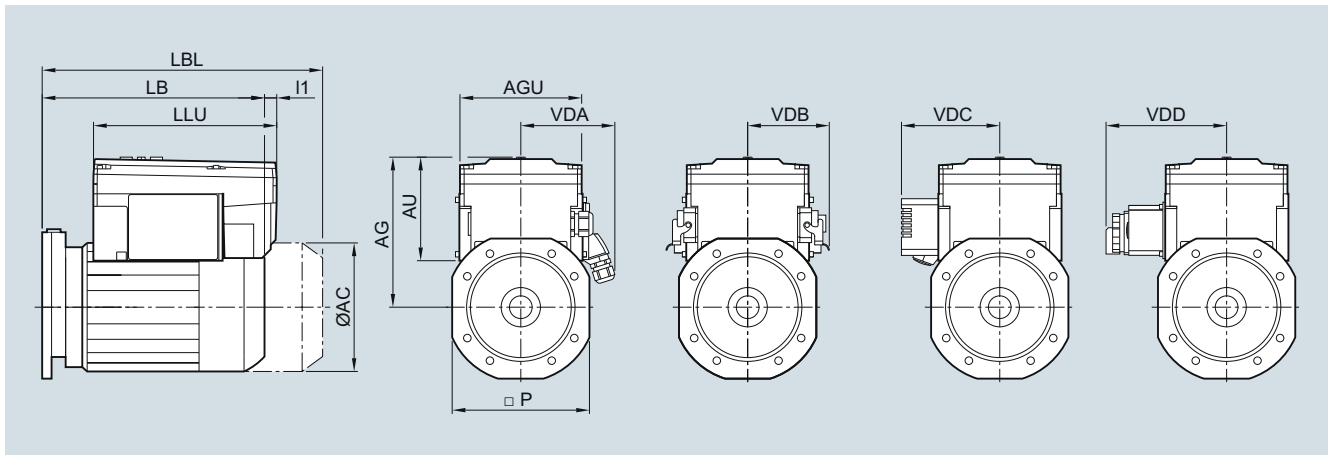
Motor	Gearbox type					SINAMICS G110M										Cable gland	Plug-in technology	24 V DC power supply	Repair switch
	D/Z	FD/FZ	B	K	C	Power Module	Dimensions					VDA	VDB	VDC	VDD				
						Frame size	LB	LBL	AC	I1	AG	AU	LLU	AGU	VDA	VDB	VDC	VDD	
LE90S/L	29	29	29	-	29	FSA	351.5	421.5	173.8	11	196	137	270	161	127.5	108	130	171	
	39	39	39	39	39		342	412											
	49	49	49	49	49														
	59	-	-	-	-														
	69	69	-	69	69														
	-	-	-	79	-														
	79	79	-	-	-		336	406											
	-	-	-	89	89														
	89	89	-	-	-		323	393											
	-	-	-	109	-														
	-	-	-	129	-		316	386											
	109	109	-	-	-														
129	129	-	-	-	309	379													
-	-	-	149	-															
LE90ZL	29	29	29	-	29	FSA	391.5	461.5	173.8	11	196	137	270	161	127.5	108	130	171	
	39	39	39	39	39														
	49	49	49	49	49		382	452											
	59	-	-	-	-														
	69	69	-	69	69														
	-	-	-	79	-														
	79	79	-	-	-		376	446											
	-	-	-	89	89														
	89	89	-	-	-		363	433											
	-	-	-	109	-														
	-	-	-	129	-		356	426											
	109	109	-	-	-														
129	129	-	-	-	349	419													
-	-	-	149	-															
LE90S/L	29	29	29	-	29	FSB	351.5	421.5	173.8	50.5	196	137	309.5	181	127.5	108	130	171	
	39	39	39	39	39														
	49	49	49	49	49		342	412											
	59	-	-	-	-														
	69	69	-	69	69														
	-	-	-	79	-														
	79	79	-	-	-		336	406											
	-	-	-	89	89														
	89	89	-	-	-		323	393											
	-	-	-	109	-														
	-	-	-	129	-		316	386											
	109	109	-	-	-														
129	129	-	-	-	309	379													
-	-	-	149	-															

Motor integrated frequency inverter **SINAMICS G110M**

0.37 kW to 4 kW

Dimensions

Motors with **SINAMICS G110M** (continued)



The diagram is for terminal box position 2A (for further information about the terminal box position, see [page 11/10](#))

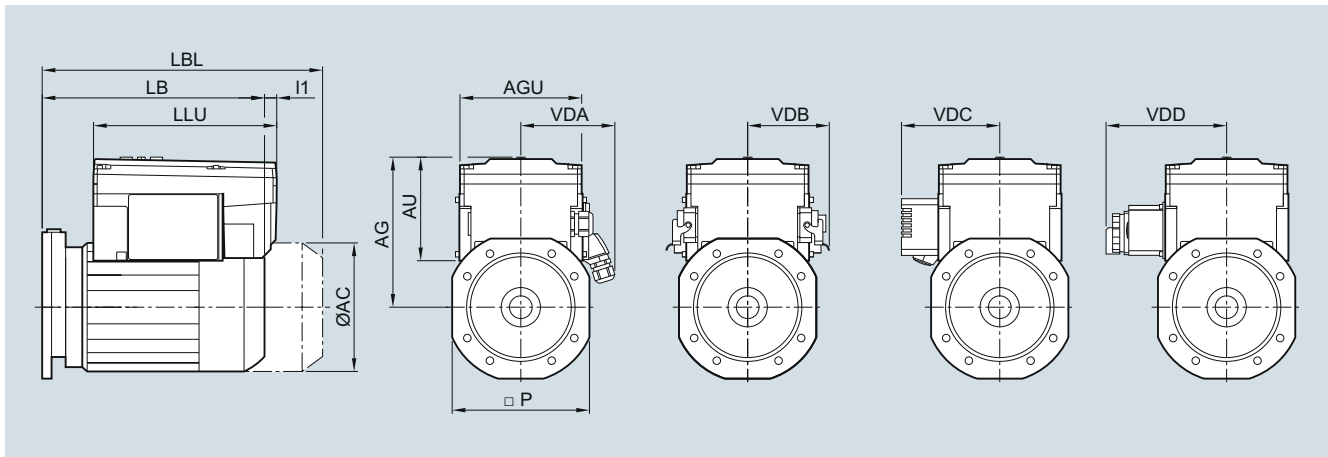
Motor	Gearbox type					SINAMICS G110M										Cable gland	Plug-in	24 V DC power supply	Repair switch		
	D/Z	FD/FZ	B	K	C	Power Module	Dimensions					VDA	VDB	VDC	VDD						
						Frame size	LB	LBL	AC	I1	AG	AU	LLU	AGU	VDA	VDB	VDC	VDD			
LE90ZL	29	29	29	-	29	FSB	391.5	461.5	173.8	50.5	196	137	309.5	181	127.5	108	130	171			
	39	39	39	39	39		382	452													
	49	49	49	49	49																
	59	-	-	-	-																
	69	69	-	69	69																
	-	-	-	79	-																
	79	79	-	-	-			376	446												
	-	-	-	89	89																
	89	89	-	-	-			363	433												
	-	-	-	109	-																
	-	-	-	129	-				356	426											
	109	109	-	-	-																
129	129	-	-	-			349	419													
-	-	-	149	-																	
LE100L	29	29	29	-	29	FSB	408	486.5	198	37.5	226	137	309.5	181	127.5	108	130	171			
	39	39	39	39	39																
	49	49	49	49	49			398.5	477												
	59	-	-	-	-																
	69	69	-	69	69																
	-	-	-	79	-																
	79	79	-	-	-			392.5	471												
	-	-	-	89	89																
	89	89	-	-	-			375.5	454												
	-	-	-	109	-																
	-	-	-	129	-				366.5	445											
	109	109	-	-	-																
129	129	-	-	-			357.5	436													
-	-	-	149	-																	
149	149	-	-	-			356	434.5													

Motor integrated frequency inverter SINAMICS G110M

0.37 kW to 4 kW

Dimensions

Motors with SINAMICS G110M (continued)



The diagram is for terminal box position 2A (for further information about the terminal box position, see [page 11/10](#))

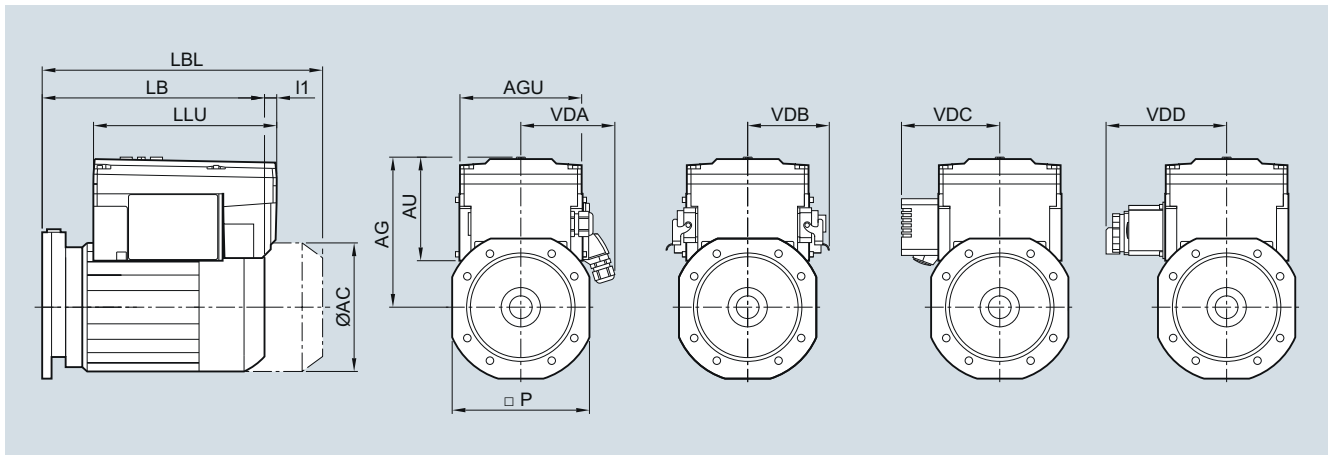
Motor	Gearbox type					SINAMICS G110M												
	D/Z	FD/FZ	B	K	C	Power Module	Dimensions					Cable gland	Plug-in	24 V DC power supply	Repair switch			
						Frame size	LB	LBL	AC	I1	AG	AU	LLU	AGU	VDA	VDB	VDC	VDD
LE100ZL	29	29	29	-	29	FSB	443	521.5	198	37.5	226	137	309.5	181	127.5	108	130	171
	39	39	39	39	39		433.5	512										
	49	49	49	49	49													
	59	-	-	-	-													
	69	69	-	69	69													
	-	-	-	79	-													
	79	79	-	-	-		427.5	506										
	-	-	-	89	89													
	89	89	-	-	-		410.5	489										
	-	-	-	109	-													
	-	-	-	129	-													
	109	109	-	-	-													
	129	129	-	-	-		392.5	471										
	-	-	-	149	-													
149	149	-	-	-	391	469.5												
LE112M	29	29	29	-	29	FSB	418	491	222	29	237	137	309.5	181	127.5	108	130	171
	39	39	39	39	39													
	49	49	49	49	49		408.5	481.5										
	59	-	-	-	-													
	69	69	-	69	69													
	-	-	-	79	-													
	79	79	-	-	-		402.5	475.5										
	-	-	-	89	89													
	89	89	-	-	-		385.5	458.5										
	-	-	-	109	-													
	-	-	-	129	-		376.5	449.5										
	109	109	-	-	-													
	129	129	-	-	-		367.5	440.5										
	-	-	-	149	-													
149	149	-	-	-	366	439												

Motor integrated frequency inverter **SINAMICS G110M**

0.37 kW to 4 kW

Dimensions

Motors with **SINAMICS G110M** (continued)



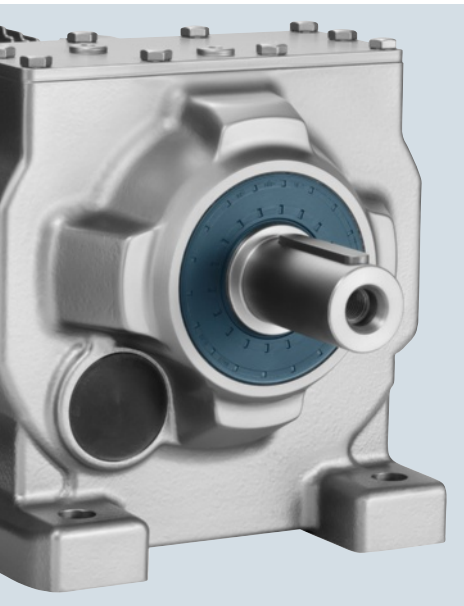
The diagram is for terminal box position 2A (for further information about the terminal box position, see [page 11/10](#))

Motor	Gearbox type					SINAMICS G110M																			
	D/Z	FD/FZ	B	K	C	Power Module	Dimensions												Cable gland	Plug-in	24 V DC power supply	Repair switch			
						Frame size	LB	LBL	AC	I1	AG	AU	LLU	AGU	VDA	VDB	VDC	VDD							
LE112ZM	29	29	29	-	29	FSB	443	516	222	29	237	137	309.5	181	127.5	108	130	171							
	39	39	39	39	39																				
	49	49	49	49	49																				
	59	-	-	-	-																				
	69	69	-	69	69																				
	-	-	-	79	-																				
	79	79	-	-	-			427.5	500.5																
	-	-	-	89	89																				
	89	89	-	-	-			410.5	483.5																
	-	-	-	109	-																				
	-	-	-	129	-																				
	109	109	-	-	-																				
	129	129	-	-	-			392.5	465.5																
	-	-	-	149	-																				
149	149	-	-	-		391	464																		

Motor integrated frequency inverter SINAMICS G110M

Notes

Gearbox options



10/2	Mounting position	10/34	Mounting
10/2	Overview		<u>Mounting types</u>
	<u>Helical gearbox</u>	10/34	Overview
10/4	Foot-mounted design	10/35	Flange-mounted designs
10/6	Foot/flange-mounted design	10/35	• Water drain holes at the output flange
10/8	Flange-mounted design or with housing flange	10/37	Parallel shaft gearboxes F.AD in a shaft-mounted design
	<u>Parallel shaft gearbox</u>	10/37	Bevel gearboxes KAD in a shaft-mounted design
10/11	Shaft-mounted design	10/37	Bevel gearboxes BAD and helical worm gearboxes CAD in a shaft-mounted design
10/13	Flange-mounted design or with housing flange	10/38	Worm gearboxes SAD in a shaft-mounted design
10/15	Foot-mounted design		<u>Shaft designs</u>
	<u>Bevel gearbox B</u>	10/39	Selection and ordering data
10/17	Foot-mounted design	10/41	SIMOLOC assembly system
10/19	Housing flange design and flange-mounted design	10/42	Hollow shaft cover
10/21	Shaft-mounted design		10/42 Output shaft bearings
	<u>Bevel gearbox K</u>	10/42	Radially reinforced output shaft bearings
10/23	Foot-mounted design		10/43 Lubrication and sealing
10/24	Housing flange design and flange-mounted design		<u>Overview</u>
10/25	Shaft-mounted design	10/43	• Lubrication
	<u>Helical worm gearbox</u>	10/43	• Sealing
10/26	Shaft-mounted design	10/43	• Oil quantities
10/28	Housing flange design and flange-mounted design	10/43	Sealing system
10/30	Foot-mounted design	10/43	Roller bearing greases for gearboxes and motors
	<u>Worm gearbox</u>	10/43	Selection
10/32	Foot-mounted, flange-mounted, shaft-mounted and housing flange design		10/45 Venting and oil level control
10/33	<u>Special mounting positions</u>		<u>Venting</u>
		10/45	Overview
		10/46	Pressure breather valve
		10/47	Oil expansion unit
			<u>Oil level control</u>
		10/49	Oil sight glass
		10/49	Oil drain
			10/50 Reduced-backlash version
		10/50	Overview

Gearbox options

Mounting position

Overview

The mounting position must be specified when you place your order to ensure that the gearbox is supplied with the correct quantity of oil.

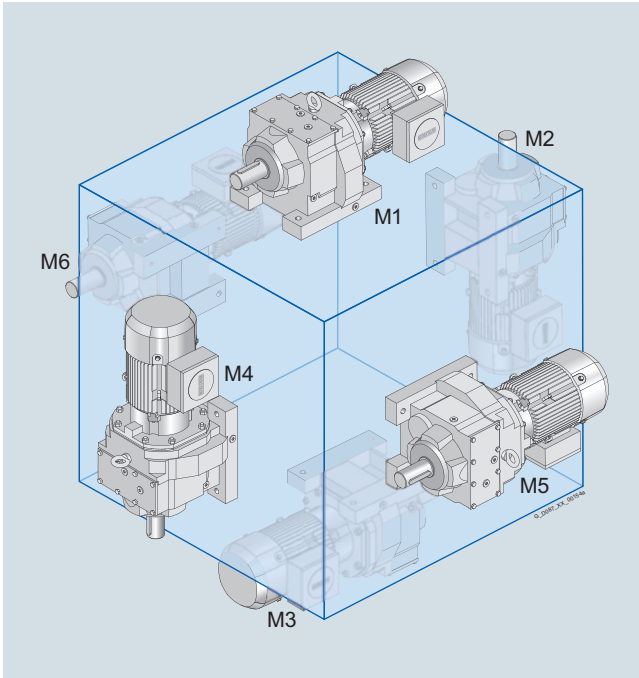


Fig. 10/1 Helical geared motors

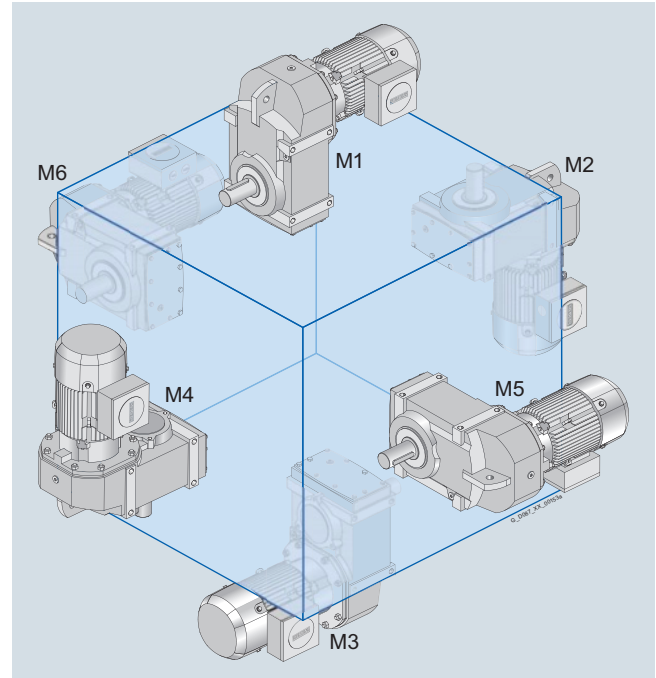


Fig. 10/2 Parallel shaft geared motors

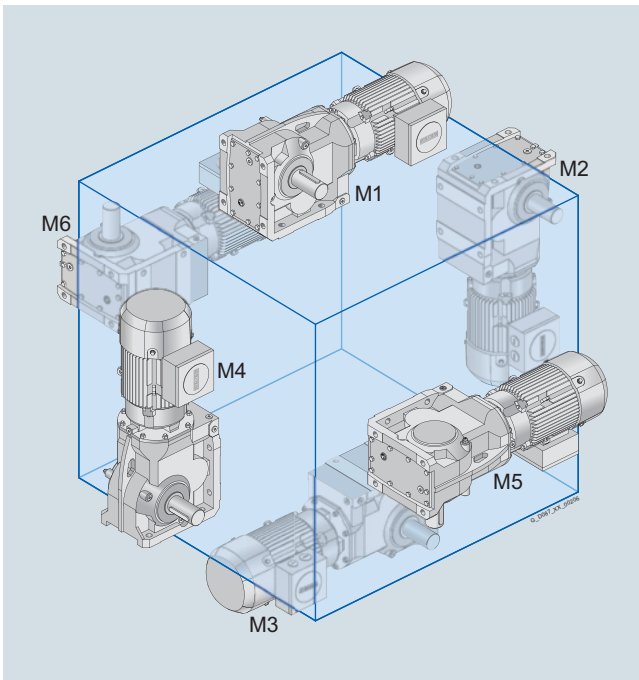


Fig. 10/3 Bevel geared motors

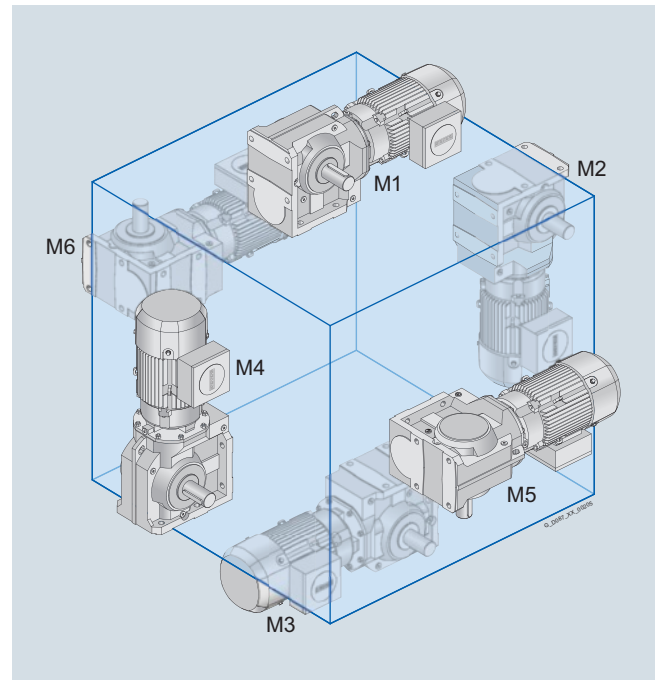


Fig. 10/4 Helical worm geared motors

Overview (continued)

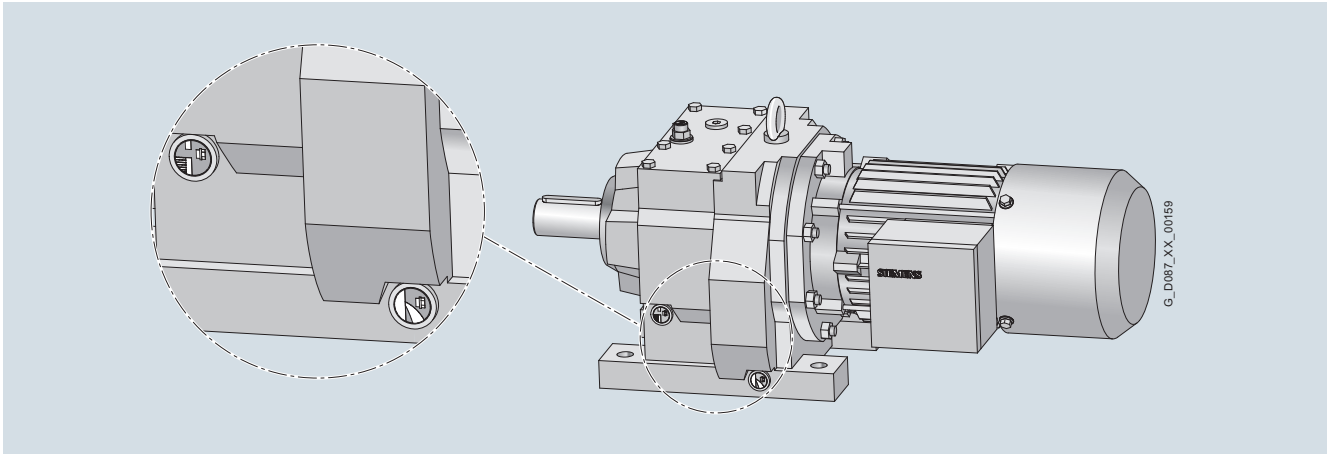


Fig. 10/5 Dimensional drawing from EKat with details

Note:

Utilize the new function of our [SIMOGEAR Configurator](#) electronic catalog.

For the selected mounting position, the 3D dimensional drawings show the exact position of the oil valves.

Explanation of symbols

Symbol

Oil valves



Venting



Oil drain



Oil level checking screw

Supplements

*	On opposite side
A, B	Output side A, output side B
②	2-stage gearbox
③	3-stage gearbox
① ... ④	Terminal box position
A ... D	Position of the cable entry

Gearbox options

Mounting position

Helical gearbox

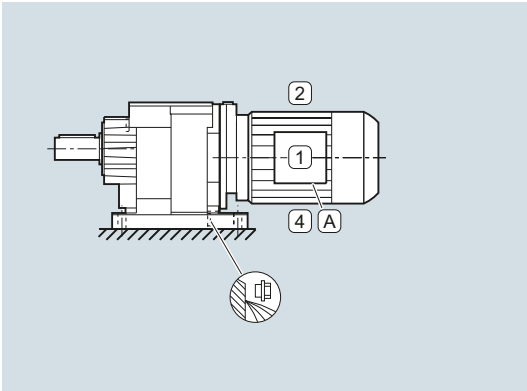
Foot-mounted design

Helical gearboxes Z and D, sizes 19 and 29

Oil valves

Sizes 19 and 29 are lubricated for life.

M1

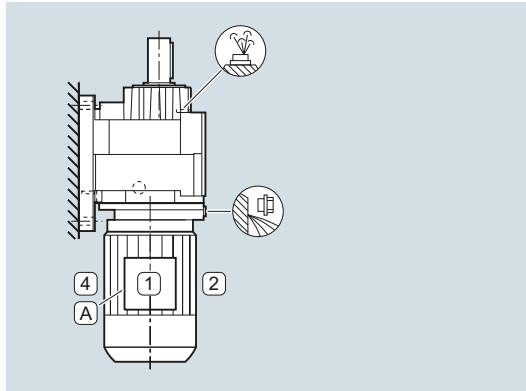


Order code:

M1

D01

M2

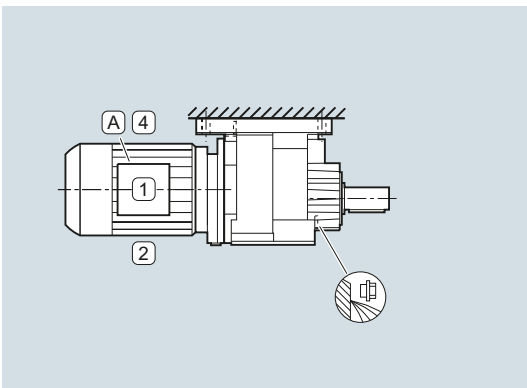


Order code:

M2

D02

M3

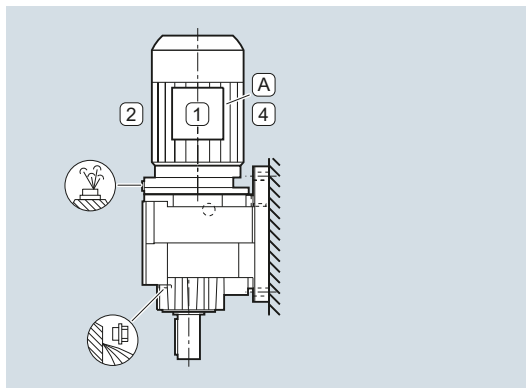


Order code:

M3

D03

M4

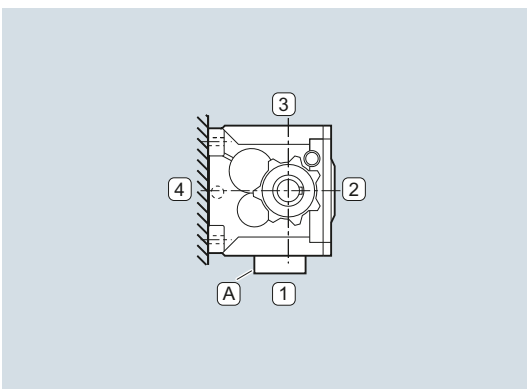


Order code:

M4

D04

M5

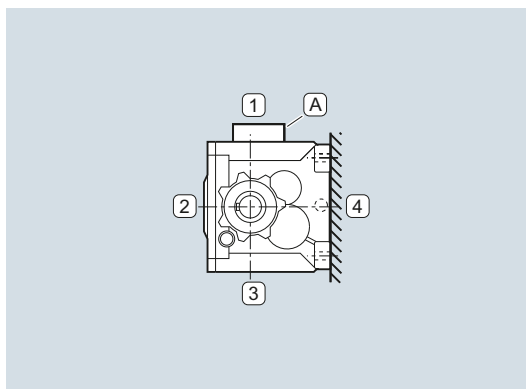


Order code:

M5

D05

M6



Order code:

M6

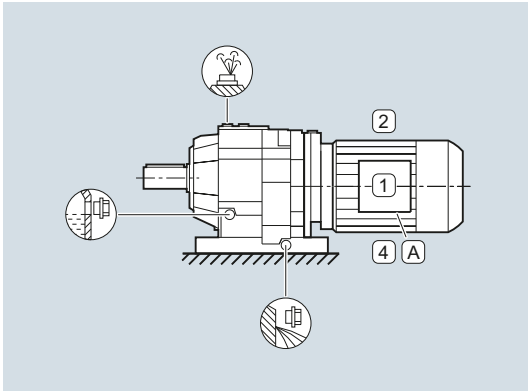
D06

Foot-mounted design (continued)

Helical gearboxes Z and D, sizes 39 to 189

Oil valves

M1

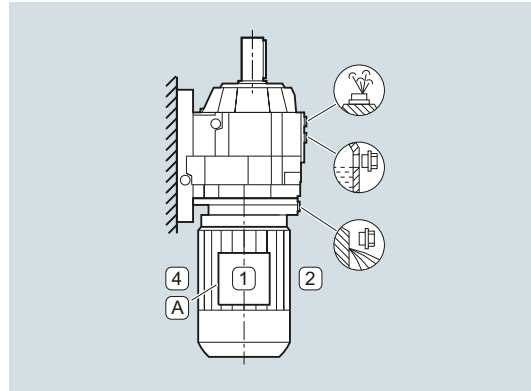


Order code:

M1

D01

M2

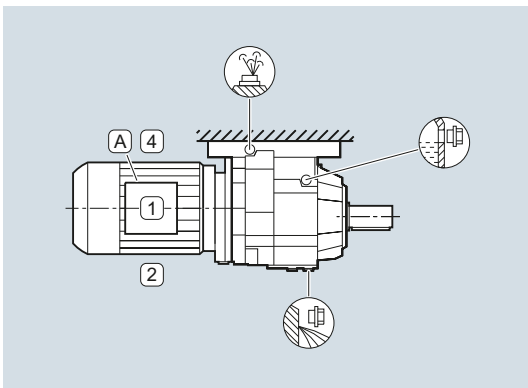


Order code:

M2

D02

M3

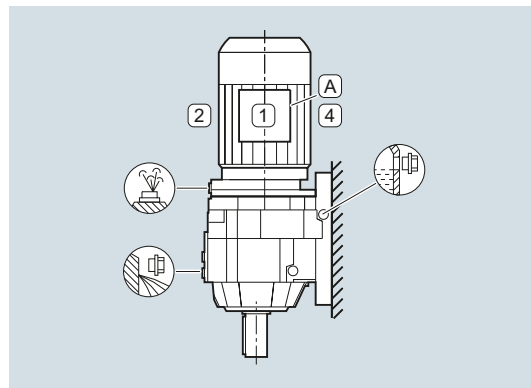


Order code:

M3

D03

M4

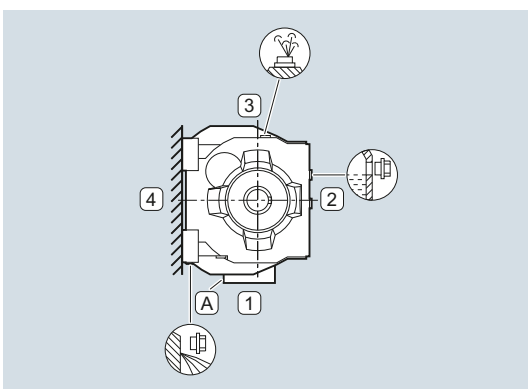


Order code:

M4

D04

M5

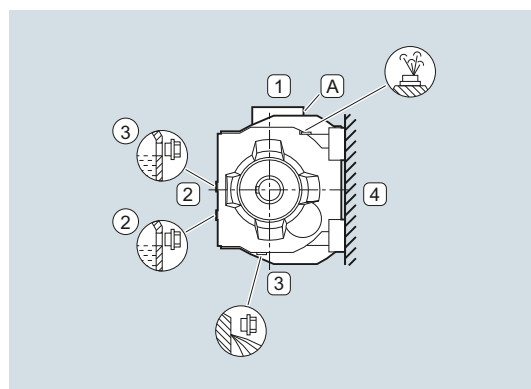


Order code:

M5

D05

M6



Order code:

M6

D06

Gearbox options

Mounting position

Helical gearbox

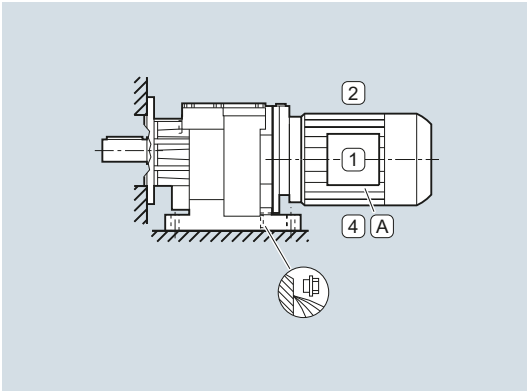
Foot/flange-mounted design

Helical gearboxes ZB and DB, size 29

Oil valves

Size 29 is lubricated for life.

M1

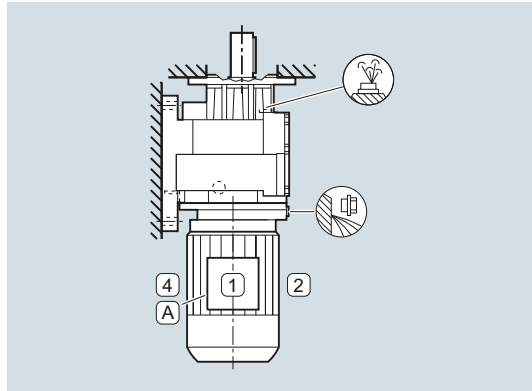


Order code:

M1

D01

M2

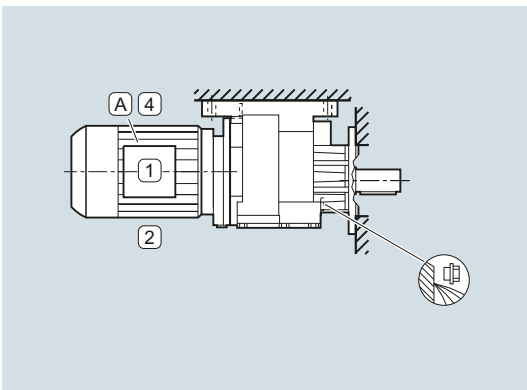


Order code:

M2

D02

M3

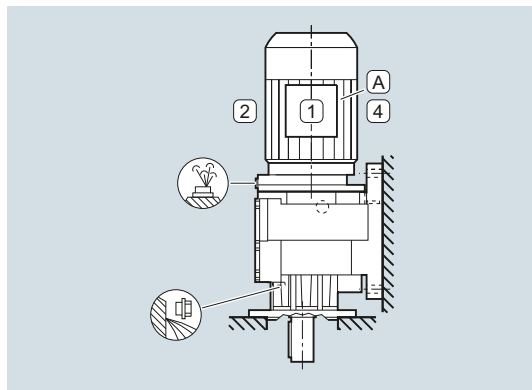


Order code:

M3

D03

M4

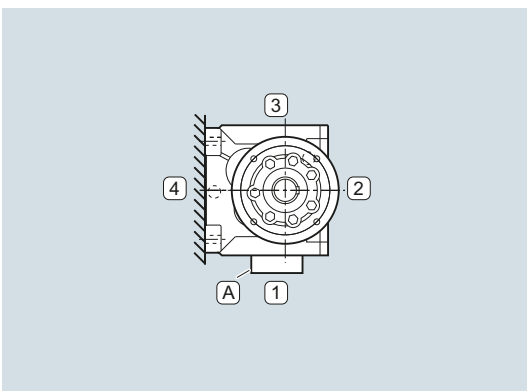


Order code:

M4

D04

M5

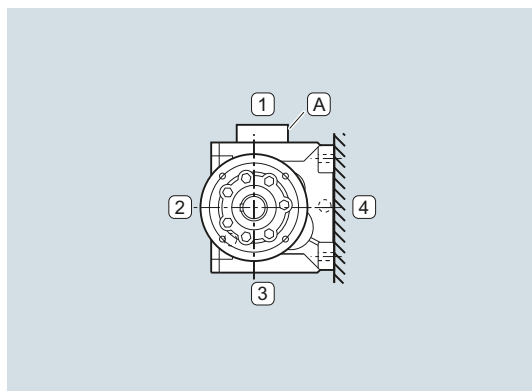


Order code:

M5

D05

M6



Order code:

M6

D06

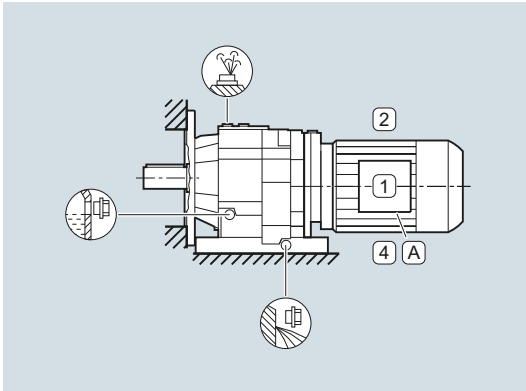
10

Foot/flange-mounted designs (continued)

Helical gearboxes ZB and DB, sizes 39 to 89

Oil valves

M1

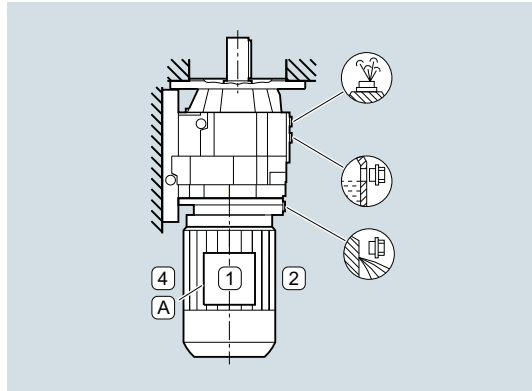


Order code:

M1

D01

M2

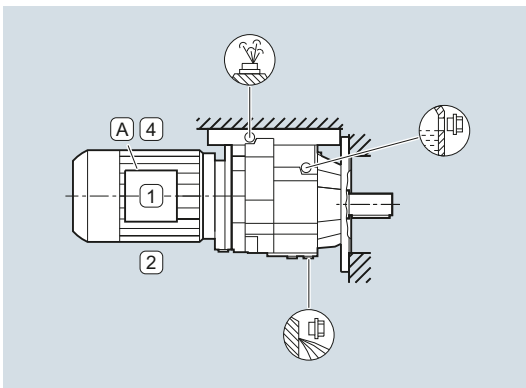


Order code:

M2

D02

M3

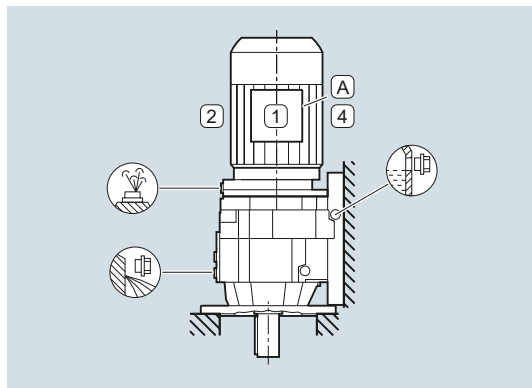


Order code:

M3

D03

M4

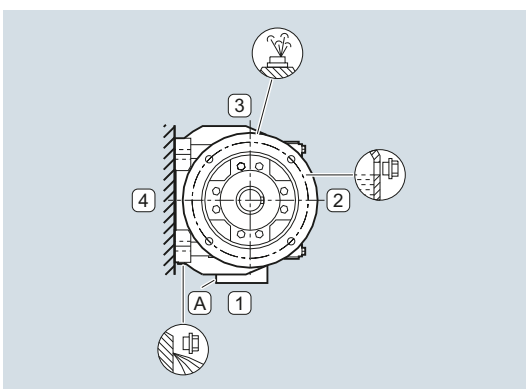


Order code:

M4

D04

M5

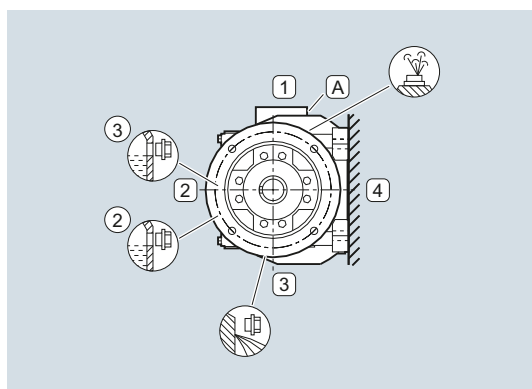


Order code:

M5

D05

M6



Order code:

M6

D06

Gearbox options

Mounting position

Helical gearbox

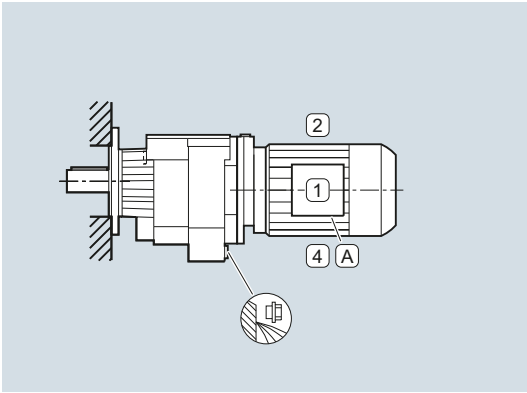
Flange-mounted design or with housing flange

Helical gearboxes ZF and DF or ZZ and DZ, sizes 19 and 29

Oil valves

Sizes 19 and 29 are lubricated for life.

M1

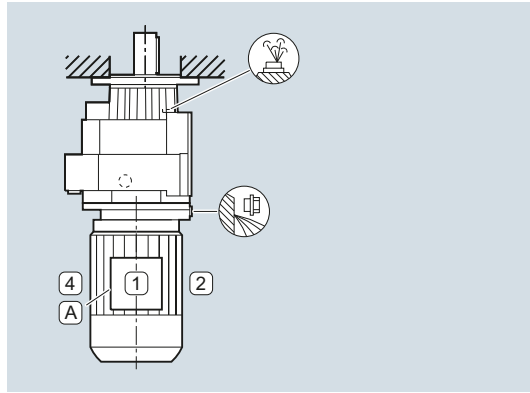


Order code:

M1

D01

M2

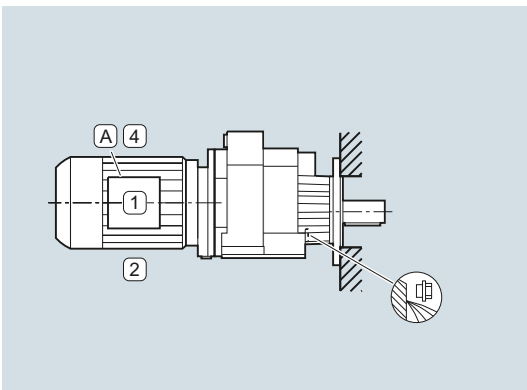


Order code:

M2

D02

M3

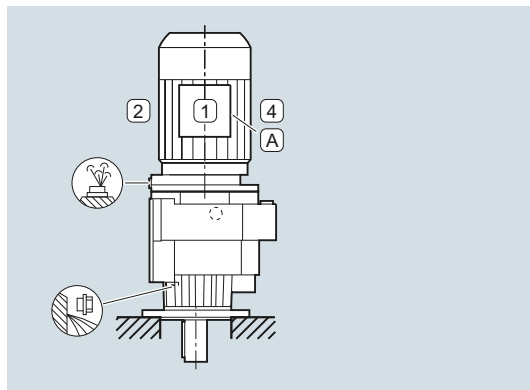


Order code:

M3

D03

M4

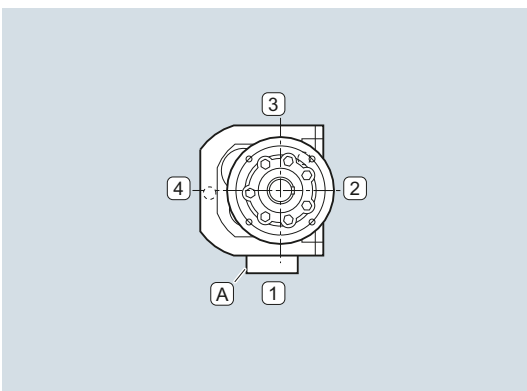


Order code:

M4

D04

M5

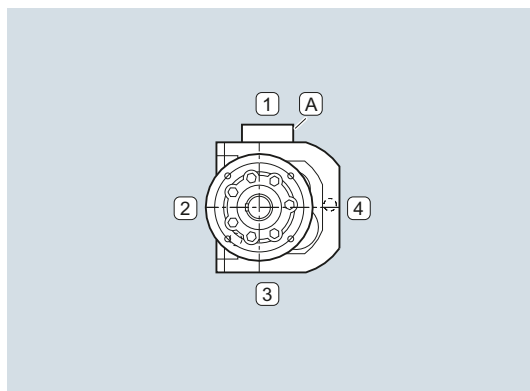


Order code:

M5

D05

M6



Order code:

M6

D06

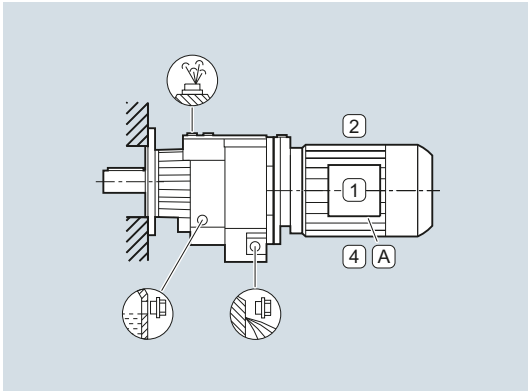
10

Flange-mounted design or with housing flange (continued)

Helical gearboxes ZF and DF or ZZ and DZ, size 39

Oil valves

M1

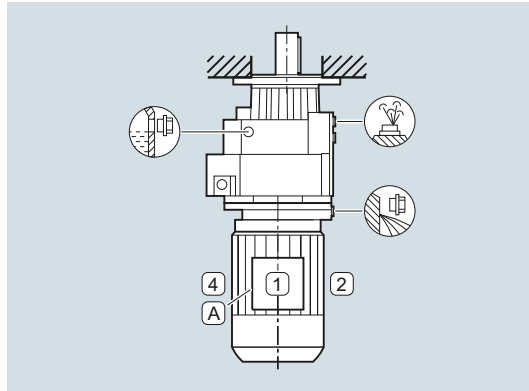


Order code:

M1

D01

M2

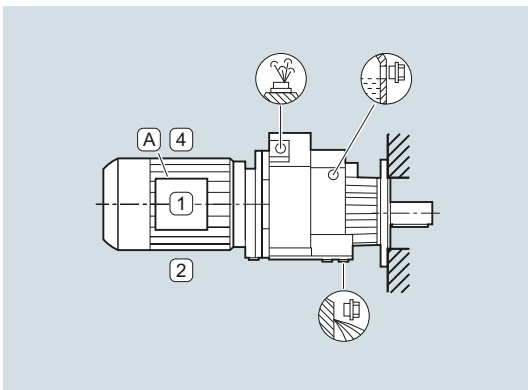


Order code:

M2

D02

M3

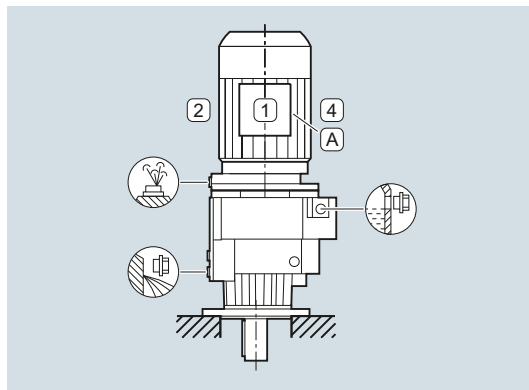


Order code:

M3

D03

M4

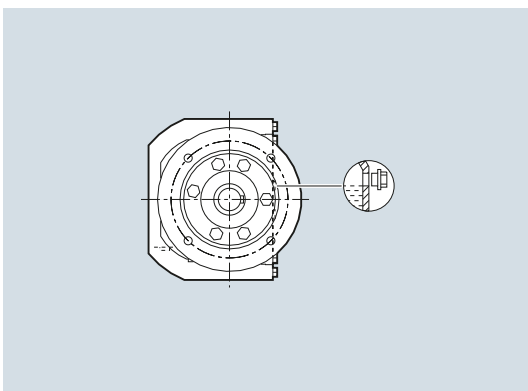


Order code:

M4

D04

M5

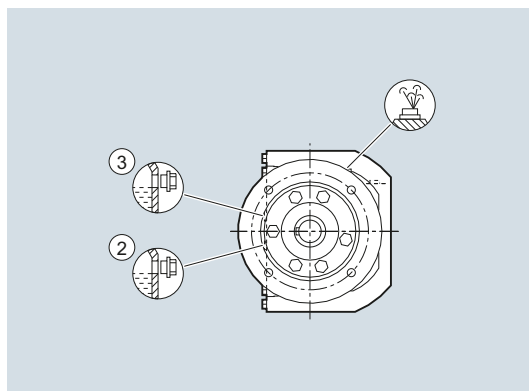


Order code:

M5

D05

M6



Order code:

M6

D06

Gearbox options

Mounting position

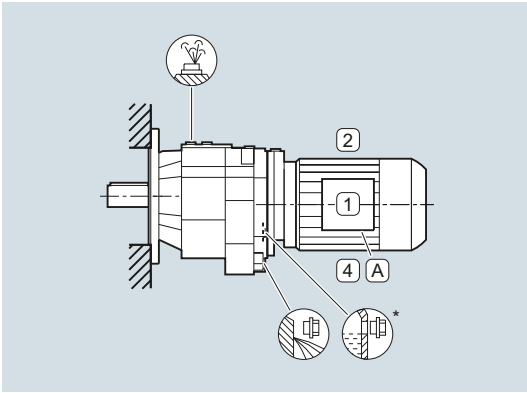
Helical gearbox

Flange-mounted design or with housing flange (continued)

Helical gearboxes ZF and DF, sizes 49 to 189, or ZZ and DZ, sizes 49 to 129

Oil valves

M1

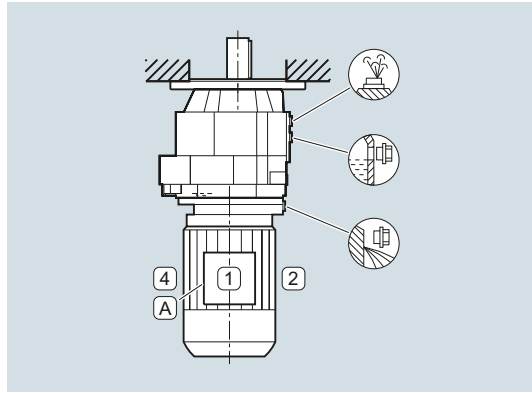


Order code:

M1

D01

M2

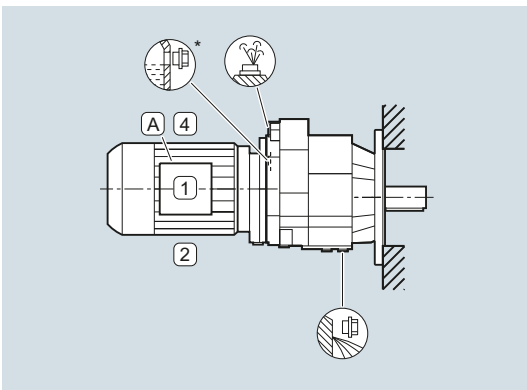


Order code:

M2

D02

M3

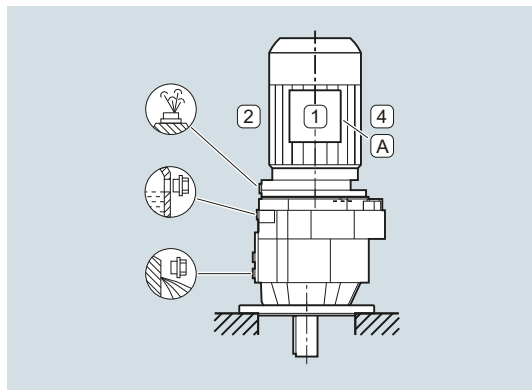


Order code:

M3

D03

M4

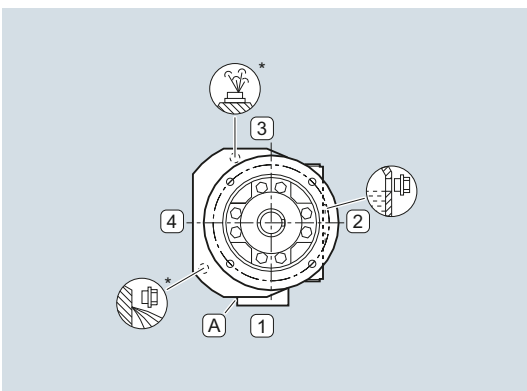


Order code:

M4

D04

M5

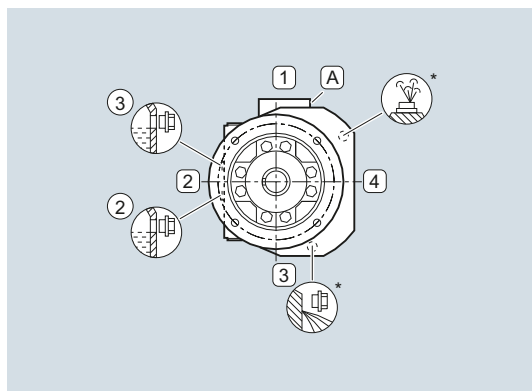


Order code:

M5

D05

M6



Order code:

M6

D06

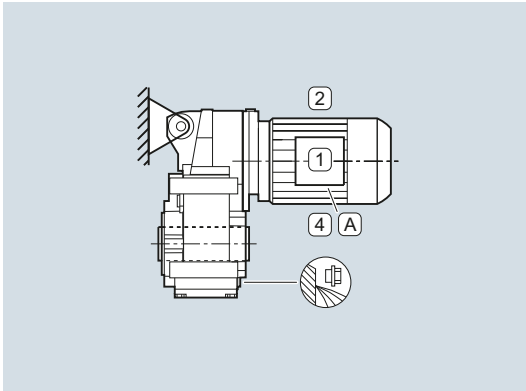
Shaft-mounted design

Parallel shaft gearboxes F.AD, size 29

Oil valves

Size 29 is lubricated for life.

M1

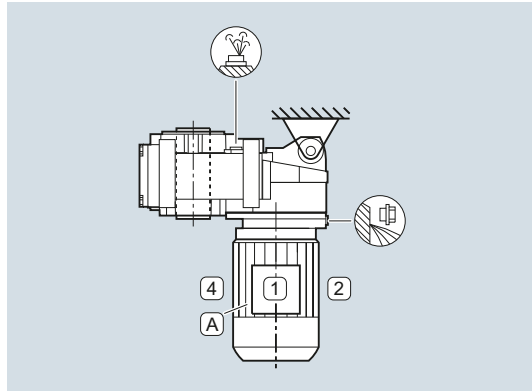


Order code:

M1

D01

M2

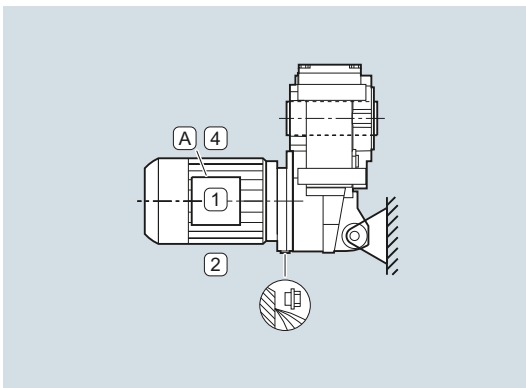


Order code:

M2

D02

M3

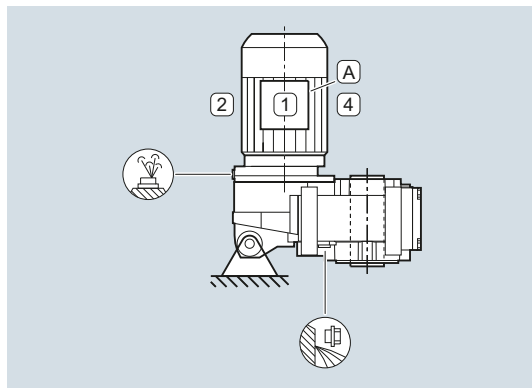


Order code:

M3

D03

M4

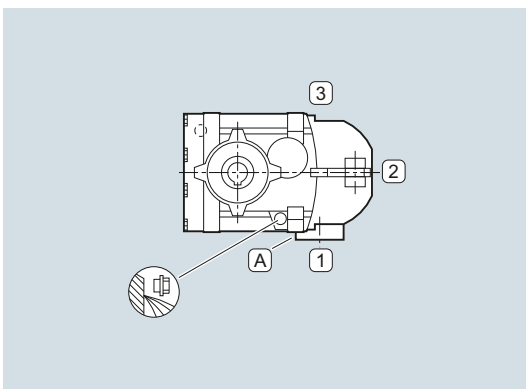


Order code:

M4

D04

M5

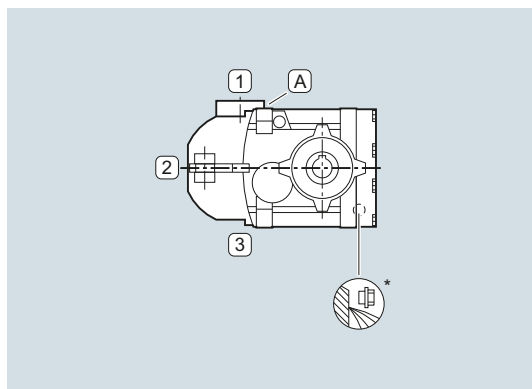


Order code:

M5

D05

M6



Order code:

M6

D06

Gearbox options

Mounting position

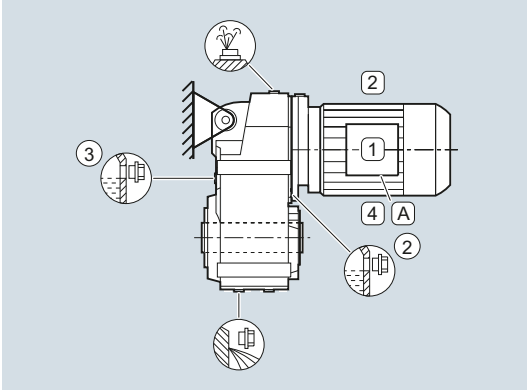
Parallel shaft gearbox

Shaft-mounted design (continued)

Parallel shaft gearboxes F.AD, sizes 39 to 189

Oil valves

M1

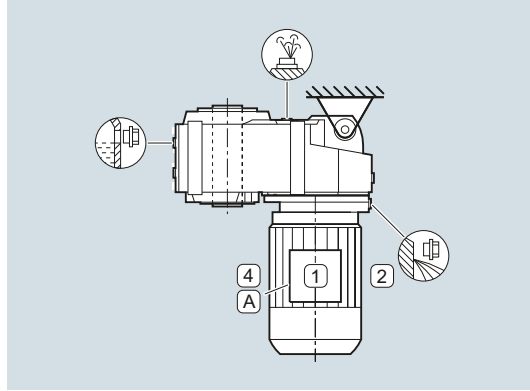


Order code:

M1

D01

M2

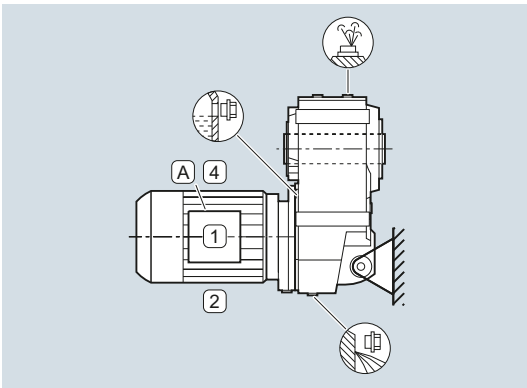


Order code:

M2

D02

M3

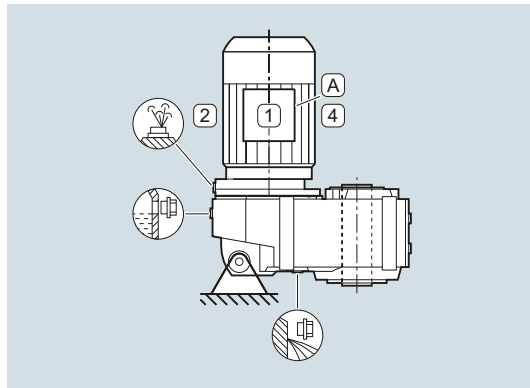


Order code:

M3

D03

M4

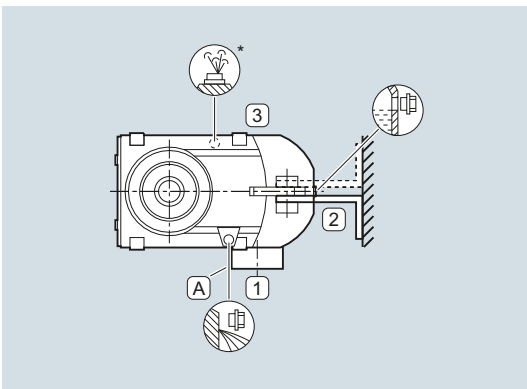


Order code:

M4

D04

M5

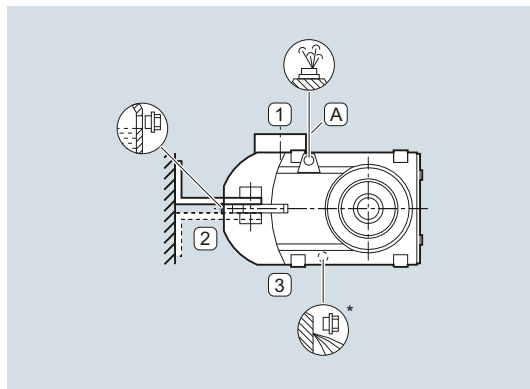


Order code:

M5

D05

M6



Order code:

M6

D06

10

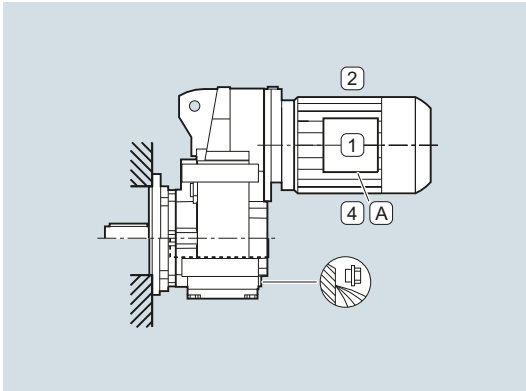
Flange-mounted design or with housing flange

Parallel shaft gearboxes F..F or F..Z, size 29

Oil valves

Size 29 is lubricated for life.

M1

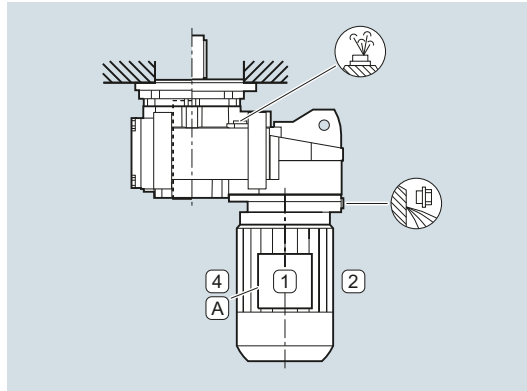


Order code:

M1

D01

M2

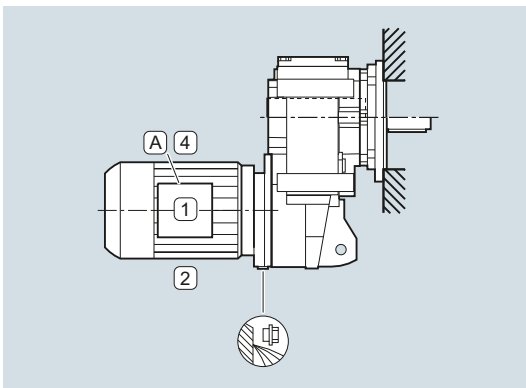


Order code:

M2

D02

M3

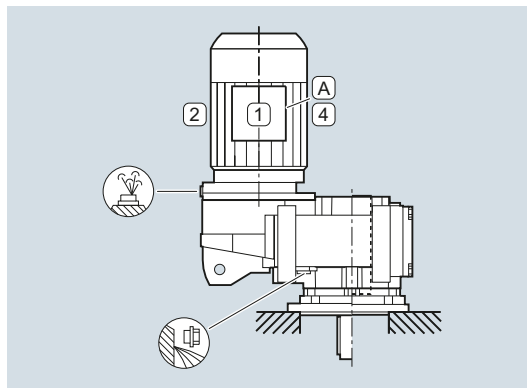


Order code:

M3

D03

M4

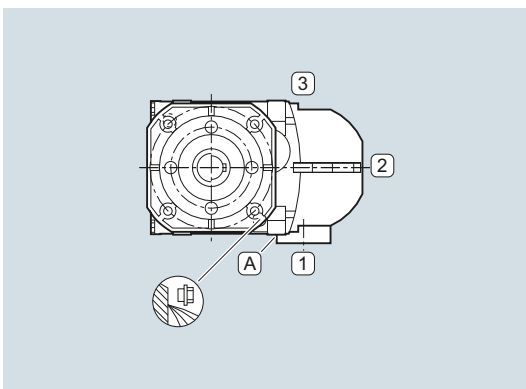


Order code:

M4

D04

M5

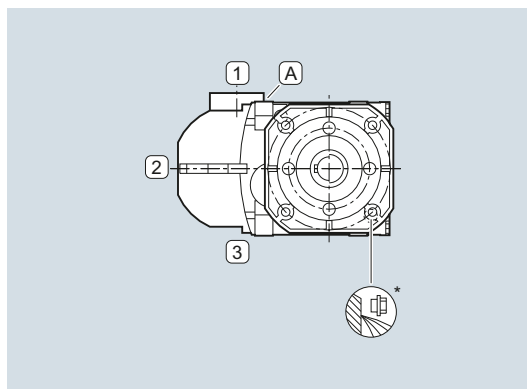


Order code:

M5

D05

M6



Order code:

M6

D06

Gearbox options

Mounting position

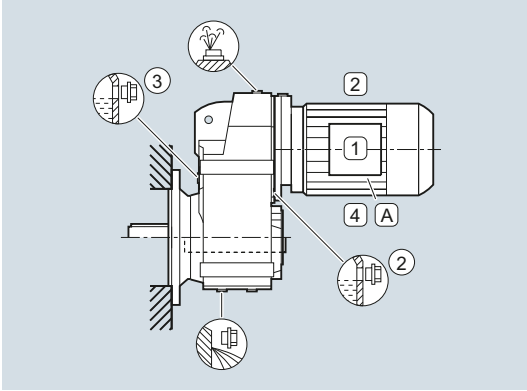
Parallel shaft gearbox

Flange-mounted design or with housing flange (continued)

Parallel shaft gearboxes F..F or F..Z, size 39 to 189

Oil valves

M1

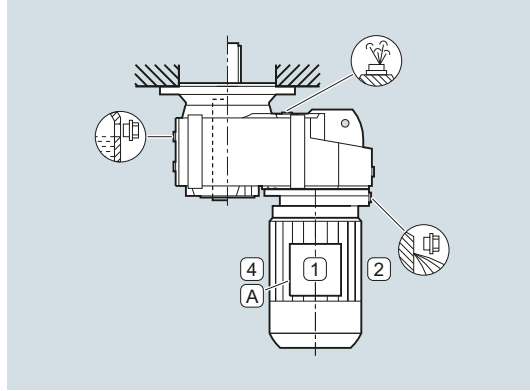


Order code:

M1

D01

M2

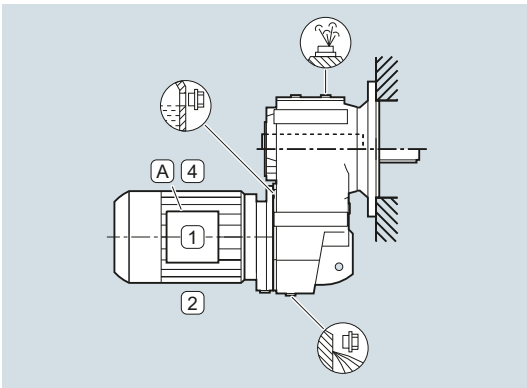


Order code:

M2

D02

M3

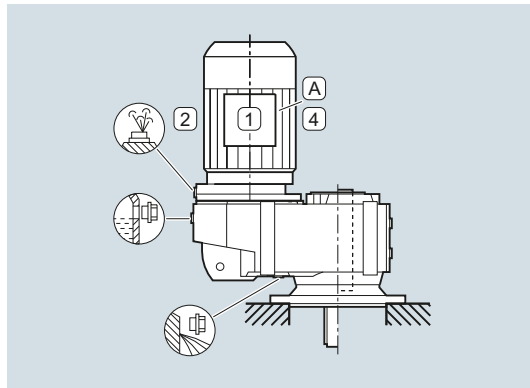


Order code:

M3

D03

M4

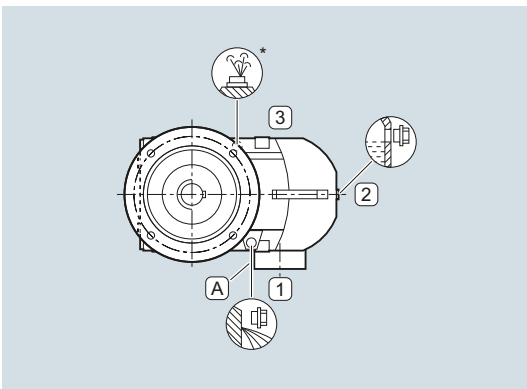


Order code:

M4

D04

M5

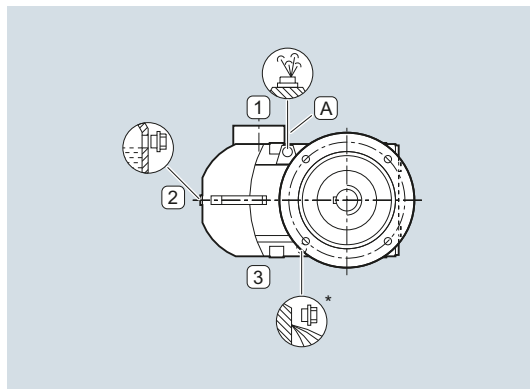


Order code:

M5

D05

M6



Order code:

M6

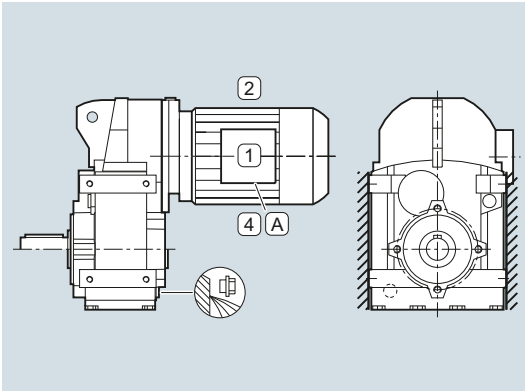
D06

Foot-mounted design

Parallel shaft gearboxes F, size 29

Oil valves

M1

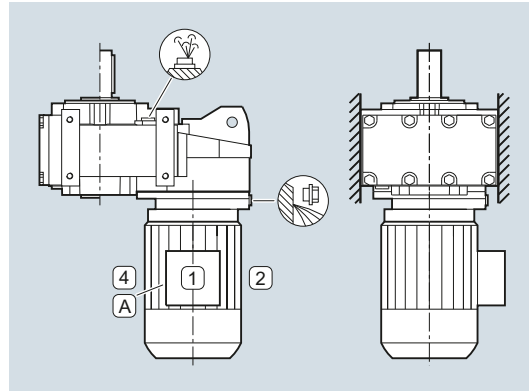


Order code:

M1

D01

M2

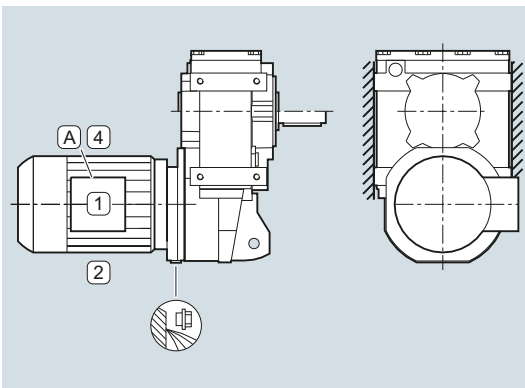


Order code:

M2

D02

M3

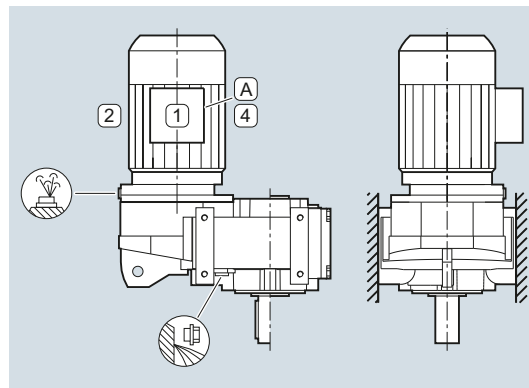


Order code:

M3

D03

M4

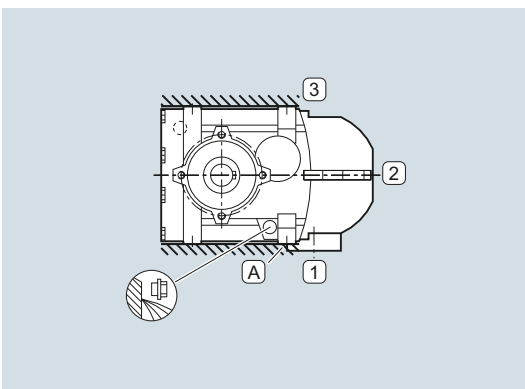


Order code:

M4

D04

M5

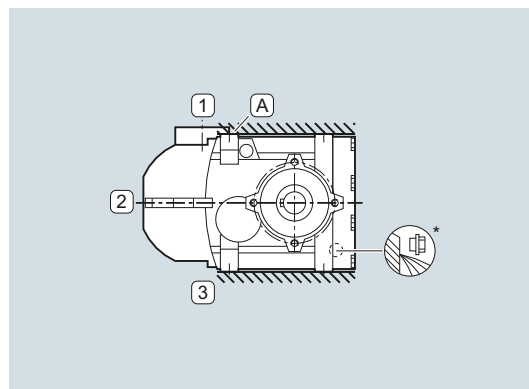


Order code:

M5

D05

M6



Order code:

M6

D06

Gearbox options

Mounting position

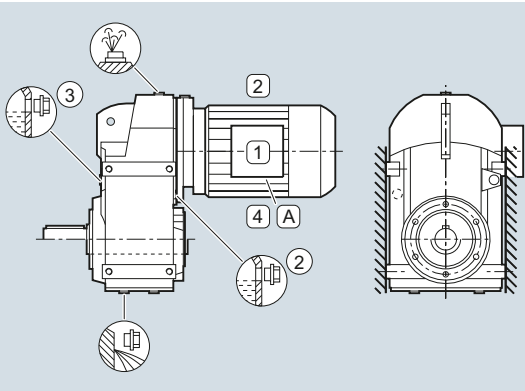
Parallel shaft gearbox

Foot-mounted design (continued)

Parallel shaft gearboxes F, sizes 39 to 189

Oil valves

M1

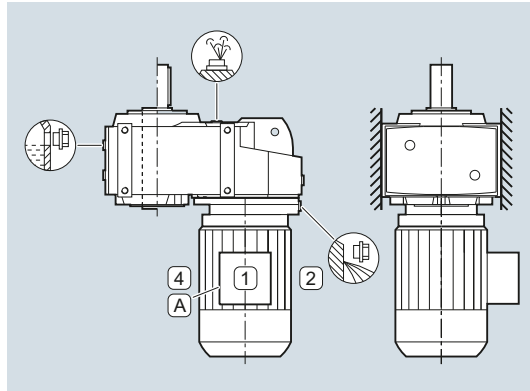


Order code:

M1

D01

M2

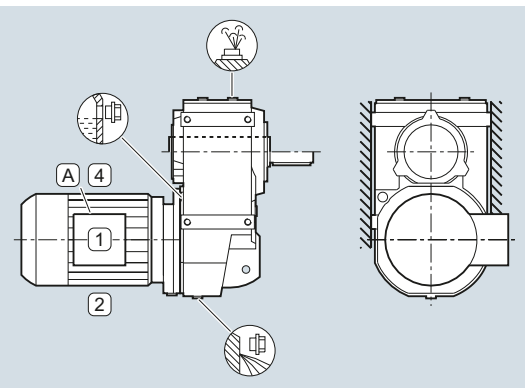


Order code:

M2

D02

M3

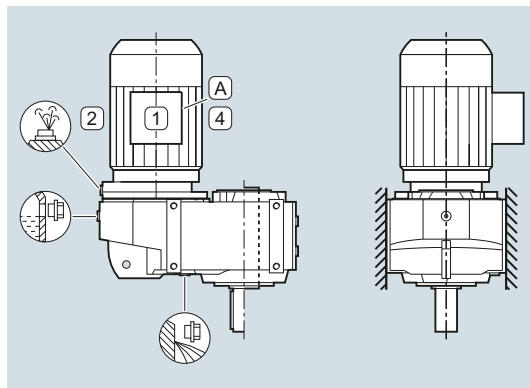


Order code:

M3

D03

M4

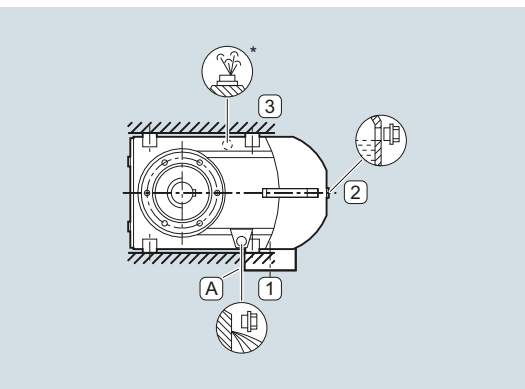


Order code:

M4

D04

M5

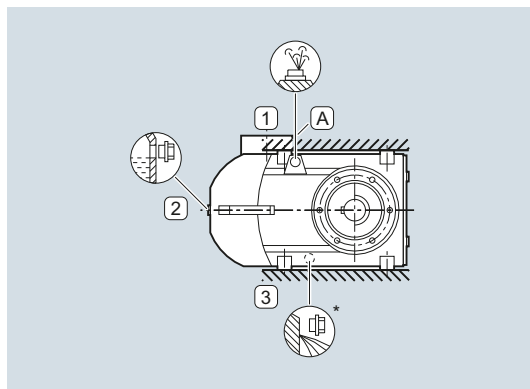


Order code:

M5

D05

M6



Order code:

M6

D06

10

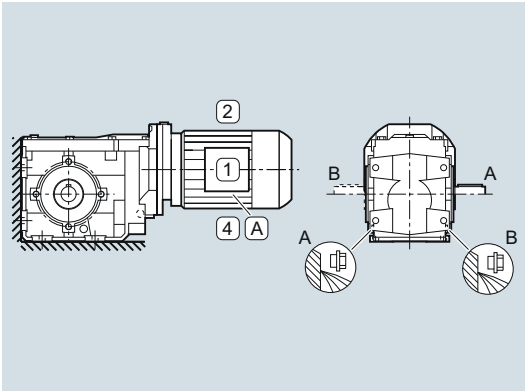
Foot-mounted design

Bevel gearboxes B, size 19 and 29

Oil valves

Sizes 19 and 29 are lubricated for life.

M1



Order code:

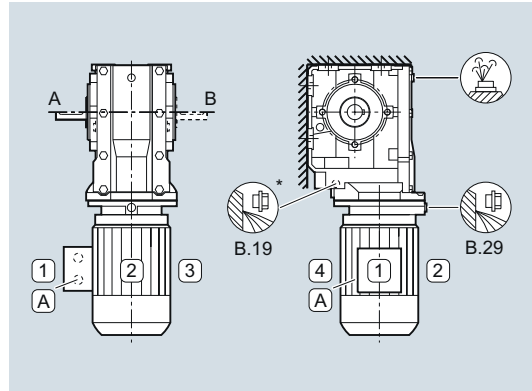
M1 output side A

D11

M1 output side B

D21

M2



Order code:

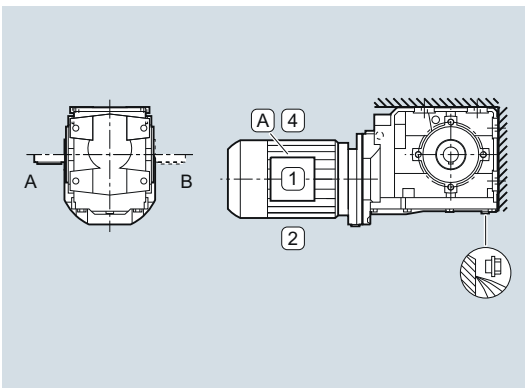
M2 output side A

D12

M2 output side B

D22

M3



Order code:

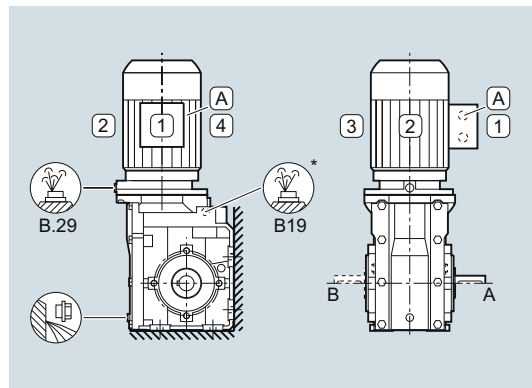
M3 output side A

D13

M3 output side B

D23

M4



Order code:

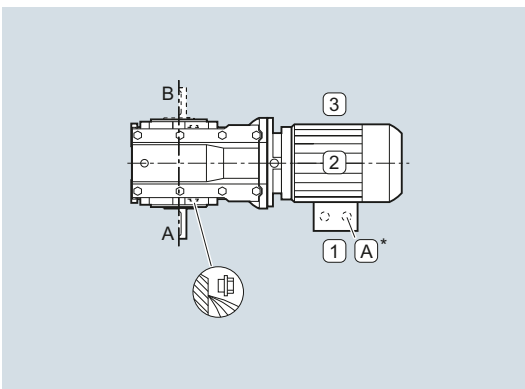
M4 output side A

D14

M4 output side B

D24

M5



Order code:

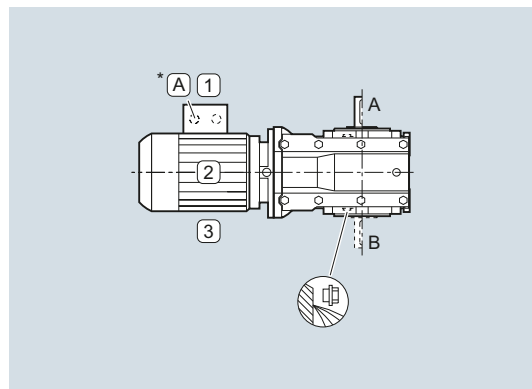
M5 output side A

D15

M5 output side B

D25

M6



Order code:

M6 output side A

D16

M6 output side B

D26

Gearbox options

Mounting position

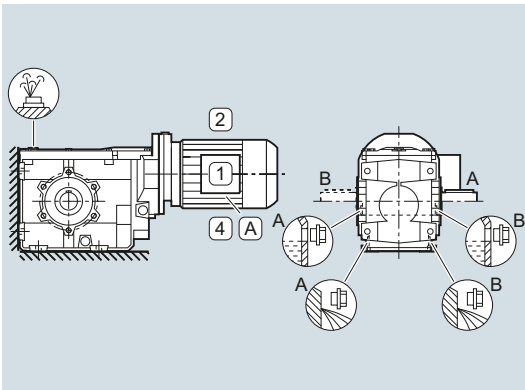
Bevel gearbox B

Foot-mounted design (continued)

Bevel gearboxes B, sizes 39 and 49

Oil valves

M1



Order code:

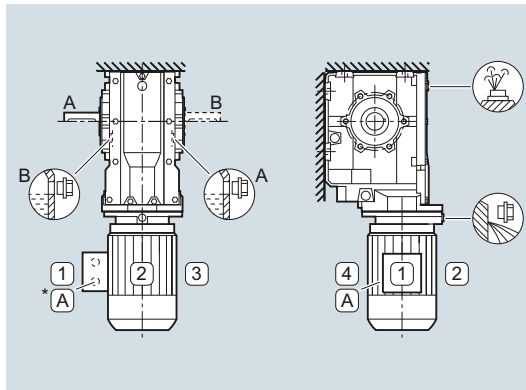
M1 output side A

M1 output side B

D11

D21

M2



Order code:

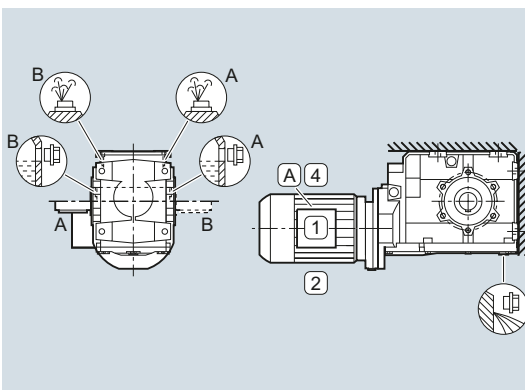
M2 output side A

M2 output side B

D12

D22

M3



Order code:

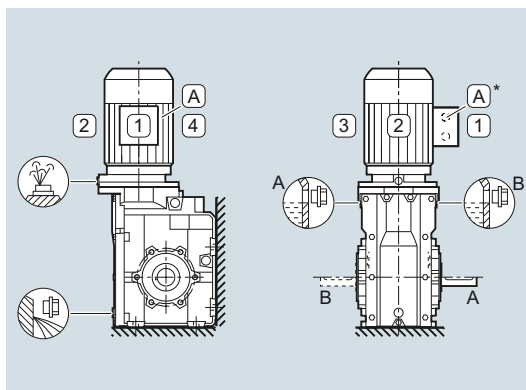
M3 output side A

M3 output side B

D13

D23

M4



Order code:

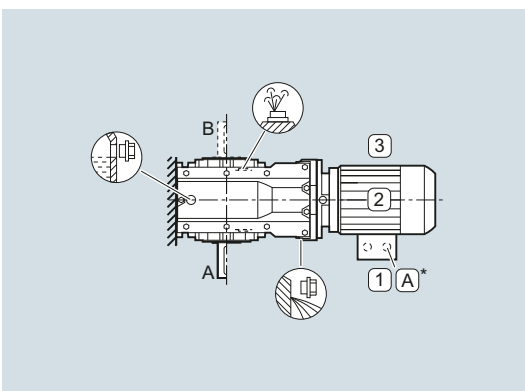
M4 output side A

M4 output side B

D14

D24

M5



Order code:

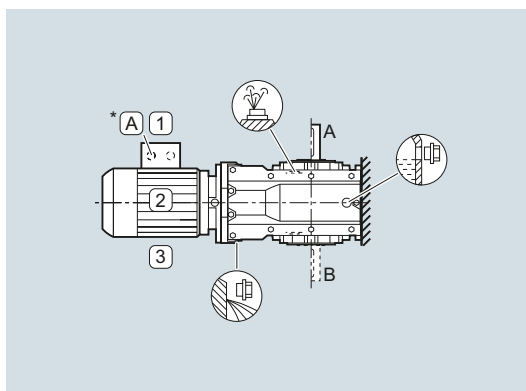
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

10

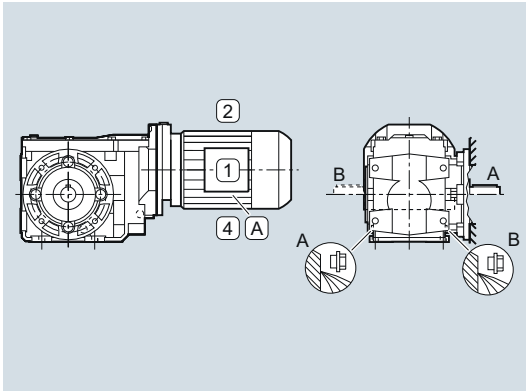
Housing flange design and flange-mounted design

Bevel gearboxes B.Z and B.F, size 19 and 29

Oil valves

Sizes 19 and 29 are lubricated for life.

M1



Order code:

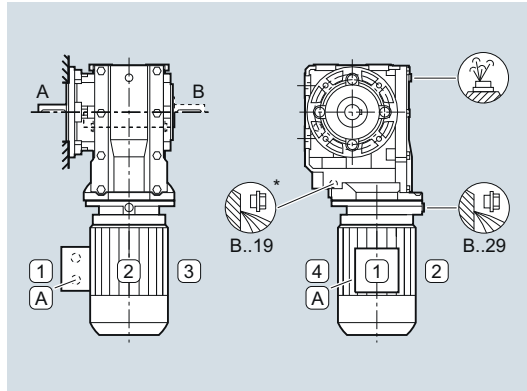
M1 output side A

M1 output side B

D11

D21

M2



Order code:

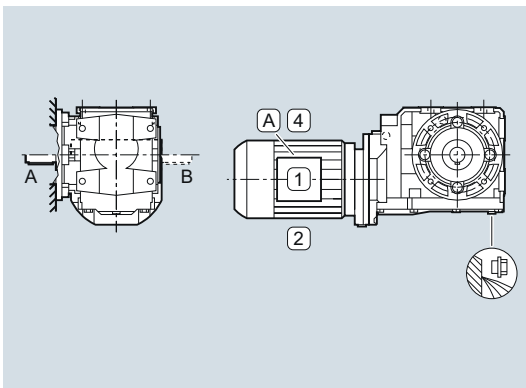
M2 output side A

M2 output side B

D12

D22

M3



Order code:

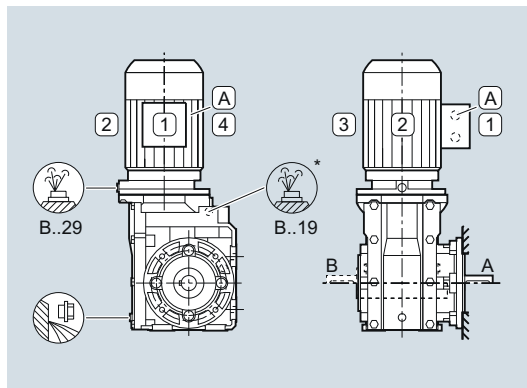
M3 output side A

M3 output side B

D13

D23

M4



Order code:

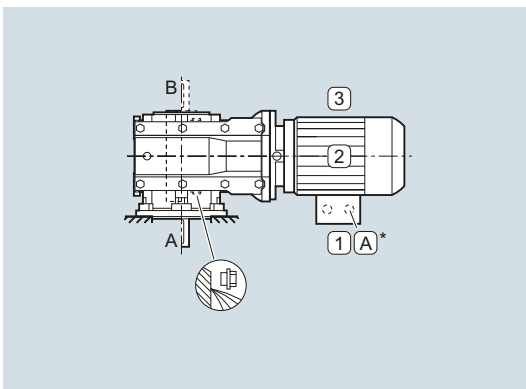
M4 output side A

M4 output side B

D14

D24

M5



Order code:

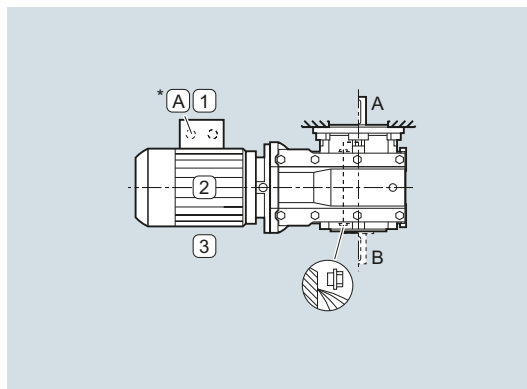
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

Gearbox options

Mounting position

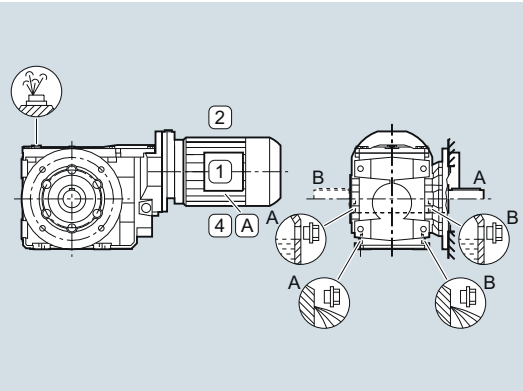
Bevel gearbox B

Housing flange design and flange-mounted design (continued)

Bevel gearboxes B.Z and B.F, sizes 39 and 49

Oil valves

M1



Order code:

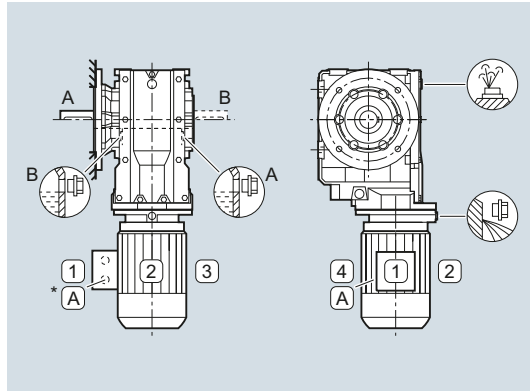
M1 output side A

M1 output side B

D11

D21

M2



Order code:

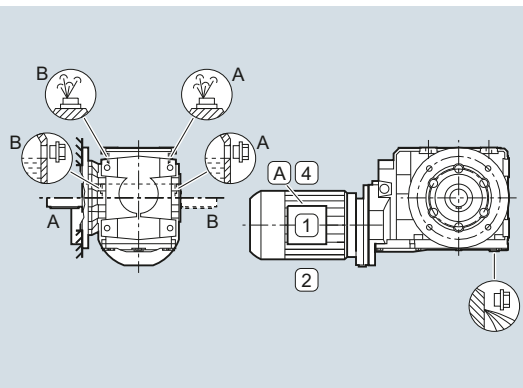
M2 output side A

M2 output side B

D12

D22

M3



Order code:

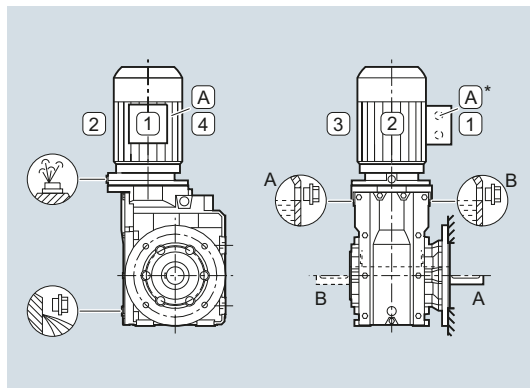
M3 output side A

M3 output side B

D13

D23

M4



Order code:

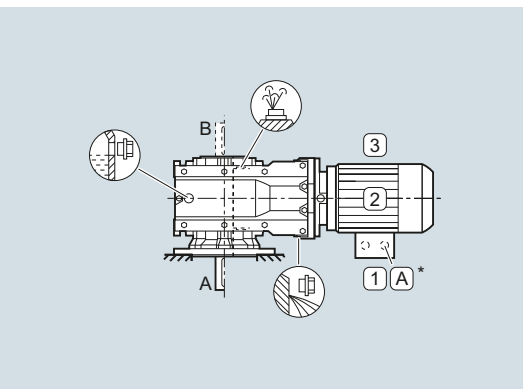
M4 output side A

M4 output side B

D14

D24

M5



Order code:

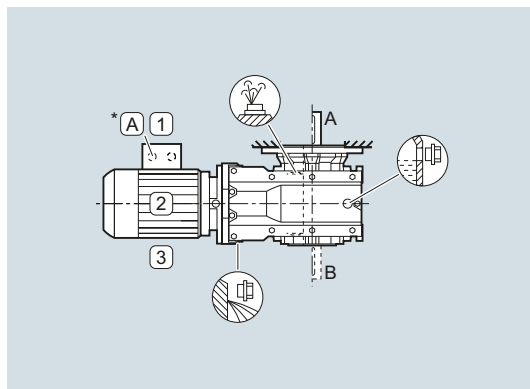
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

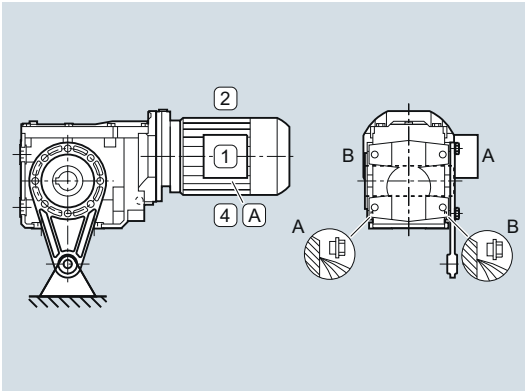
Shaft-mounted design

Bevel gearboxes BAD, sizes 19 and 29

Oil valves

Sizes 19 and 29 are lubricated for life.

M1



Order code:

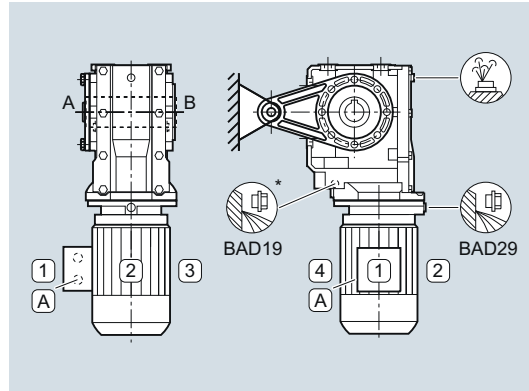
M1 output side A

M1 output side B

D11

D21

M2



Order code:

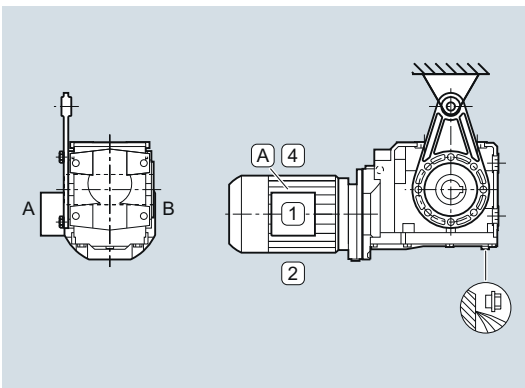
M2 output side A

M2 output side B

D12

D22

M3



Order code:

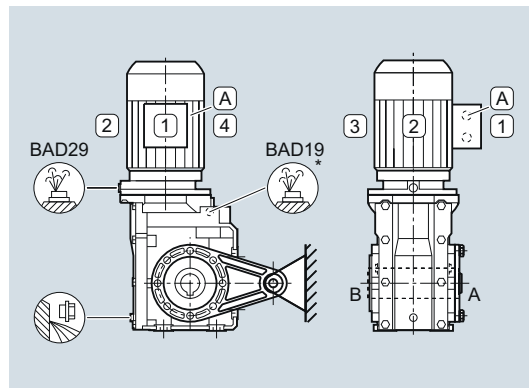
M3 output side A

M3 output side B

D13

D23

M4



Order code:

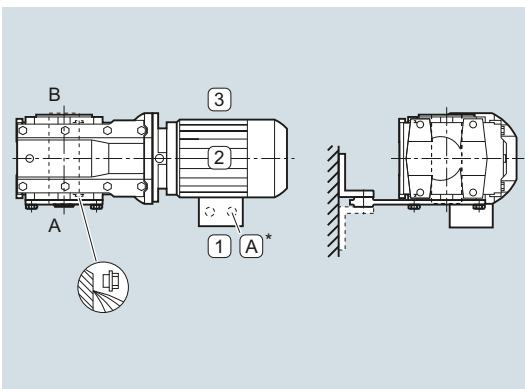
M4 output side A

M4 output side B

D14

D24

M5



Order code:

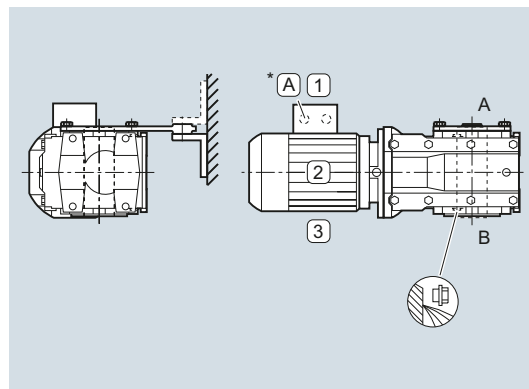
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

Gearbox options

Mounting position

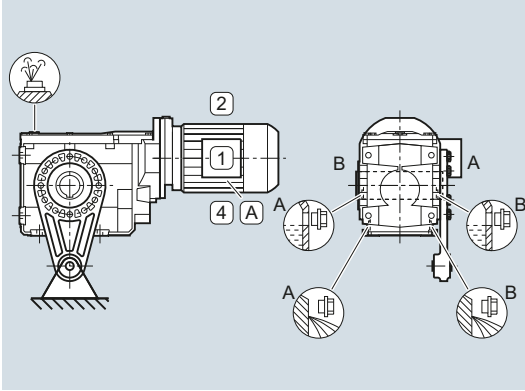
Bevel gearbox B

Shaft-mounted design (continued)

Bevel gearboxes BAD, sizes 39 and 49

Oil valves

M1



Order code:

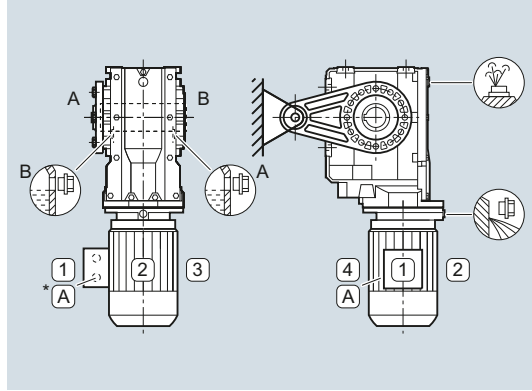
M1 output side A

M1 output side B

D11

D21

M2



Order code:

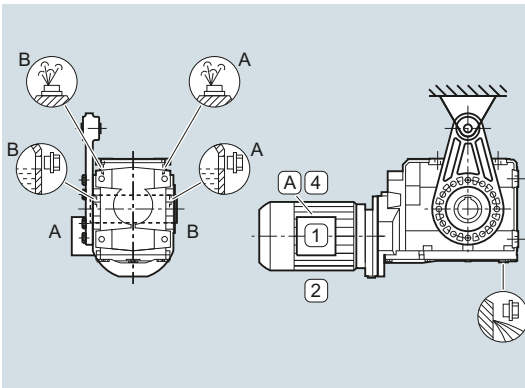
M2 output side A

M2 output side B

D12

D22

M3



Order code:

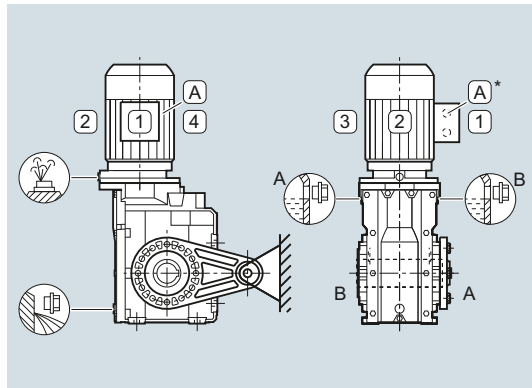
M3 output side A

M3 output side B

D13

D23

M4



Order code:

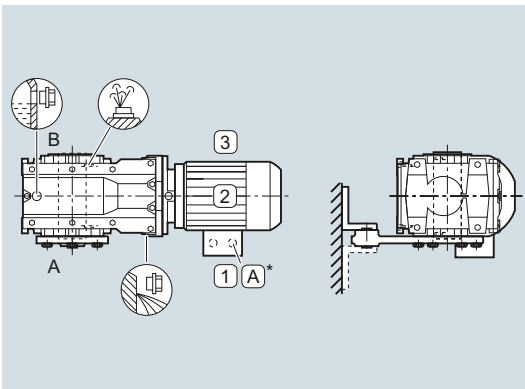
M4 output side A

M4 output side B

D14

D24

M5



Order code:

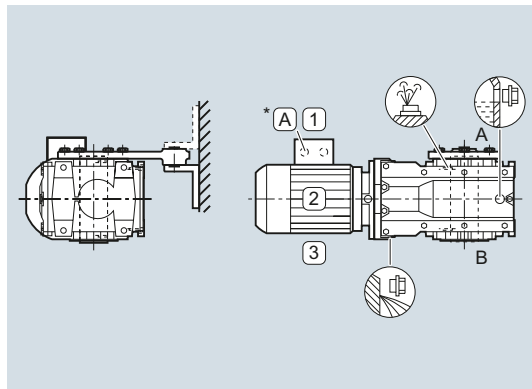
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

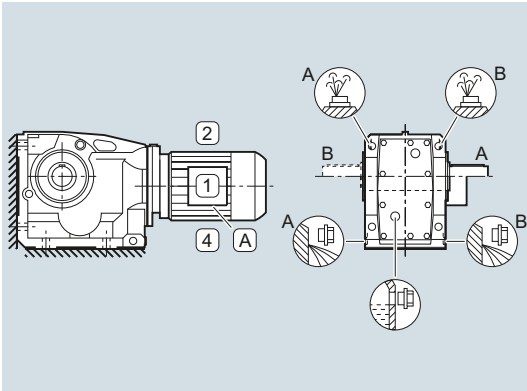
10

Foot-mounted design

Bevel gearboxes K, sizes 39 to 189

Oil valves

M1



Order code:

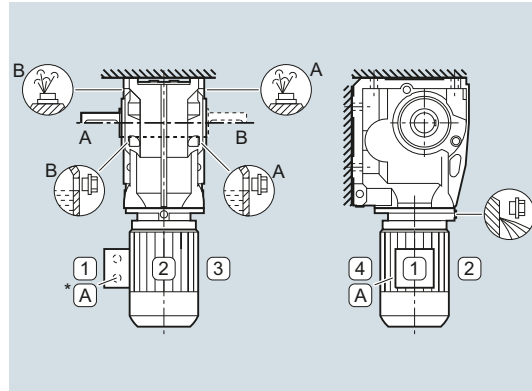
M1 output side A

M1 output side B

D11

D21

M2



Order code:

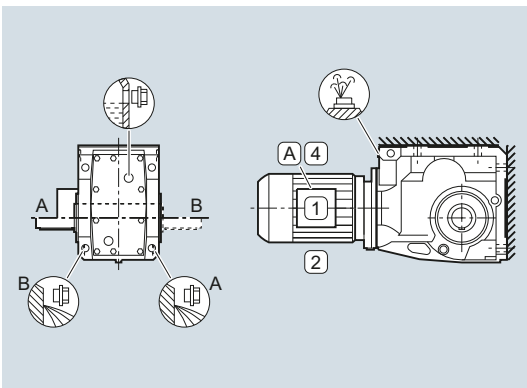
M2 output side A

M2 output side B

D12

D22

M3



Order code:

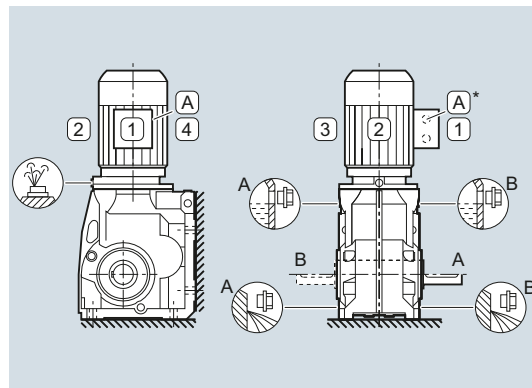
M3 output side A

M3 output side B

D13

D23

M4



Order code:

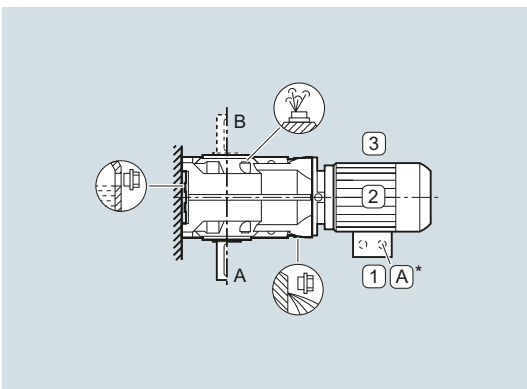
M4 output side A

M4 output side B

D14

D24

M5



Order code:

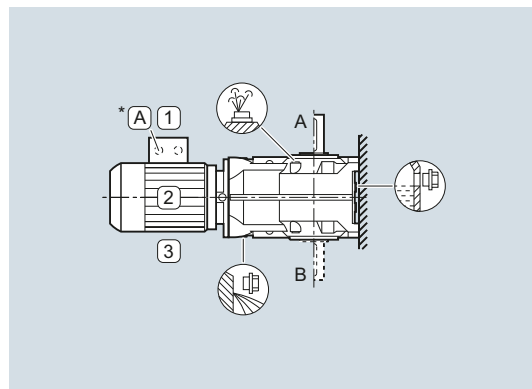
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

Gearbox options

Mounting position

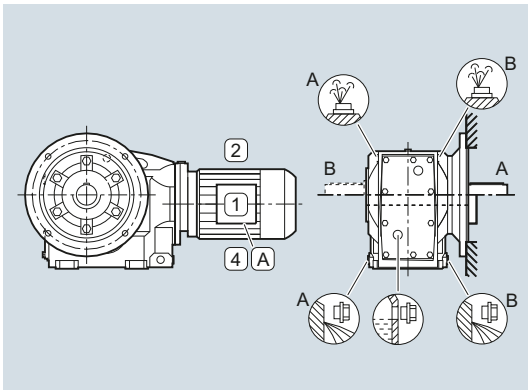
Bevel gearbox K

Housing flange design and flange-mounted design

Bevel gearboxes KAZ and K.F, sizes 39 to 189

Oil valves

M1



Order code:

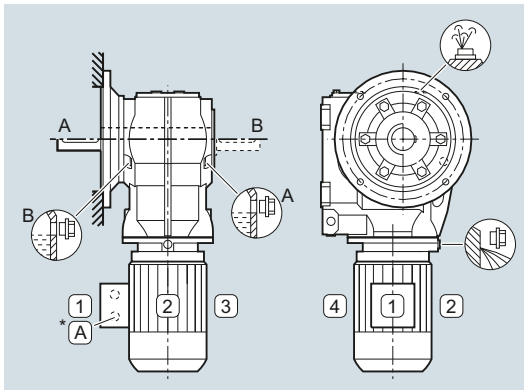
M1 output side A

D11

M1 output side B

D21

M2



Order code:

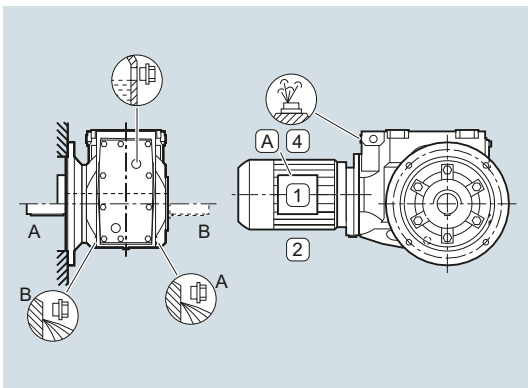
M2 output side A

D12

M2 output side B

D22

M3



Order code:

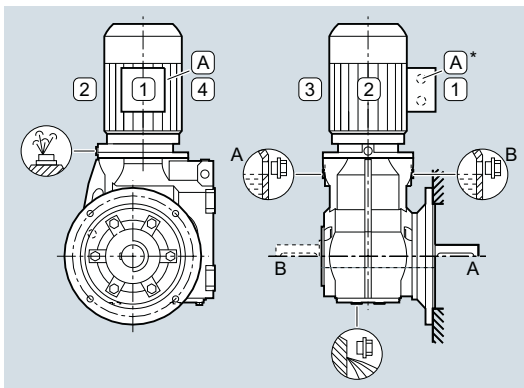
M3 output side A

D13

M3 output side B

D23

M4



Order code:

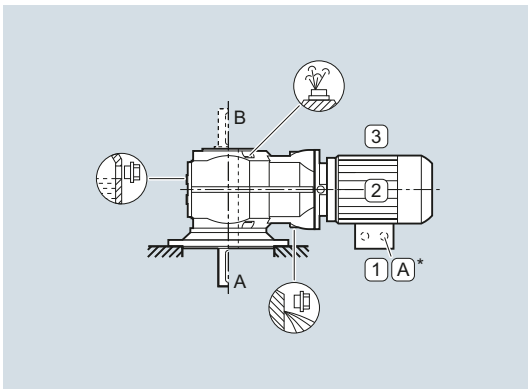
M4 output side A

D14

M4 output side B

D24

M5



Order code:

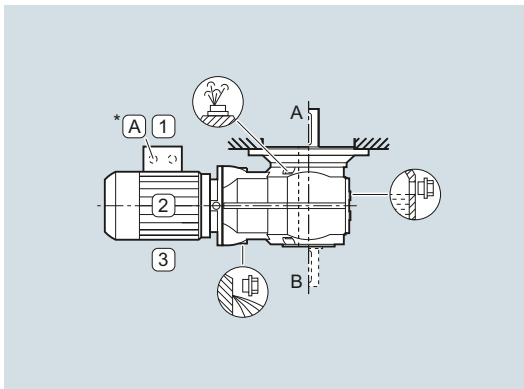
M5 output side A

D15

M5 output side B

D25

M6



Order code:

M6 output side A

D16

M6 output side B

D26

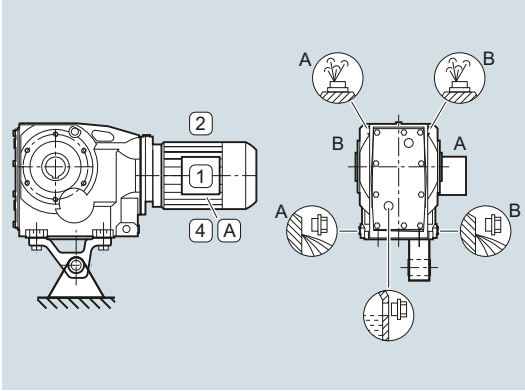
10

Shaft-mounted design

Bevel gearboxes KAD, sizes 39 to 189

Oil valves

M1



Order code:

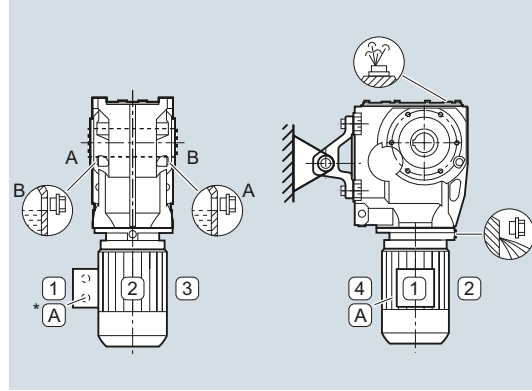
M1 output side A

M1 output side B

D11

D21

M2



Order code:

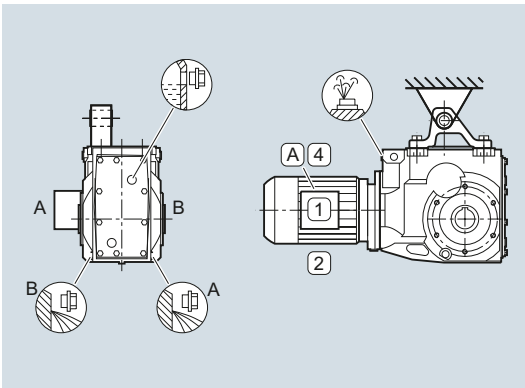
M2 output side A

M2 output side B

D12

D22

M3



Order code:

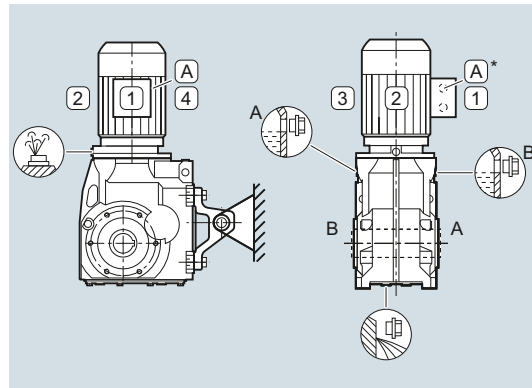
M3 output side A

M3 output side B

D13

D23

M4



Order code:

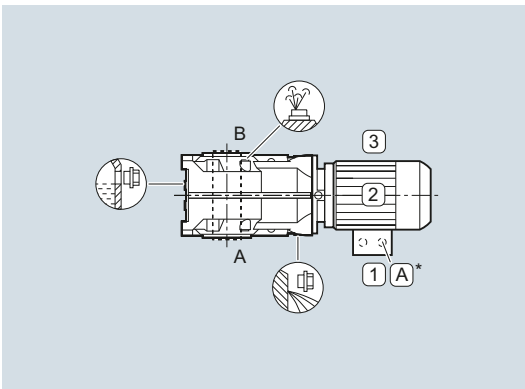
M4 output side A

M4 output side B

D14

D24

M5



Order code:

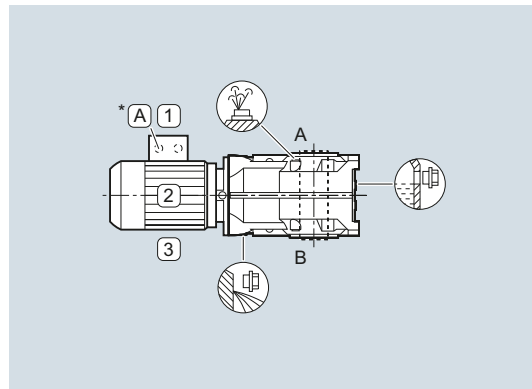
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

Gearbox options

Mounting position

Helical worm gearbox

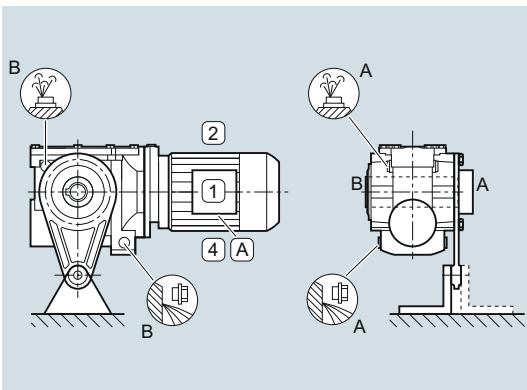
Shaft-mounted design

Helical worm gearboxes CAD, size 29

Oil valves

Size 29 is lubricated for life.

M1



Order code:

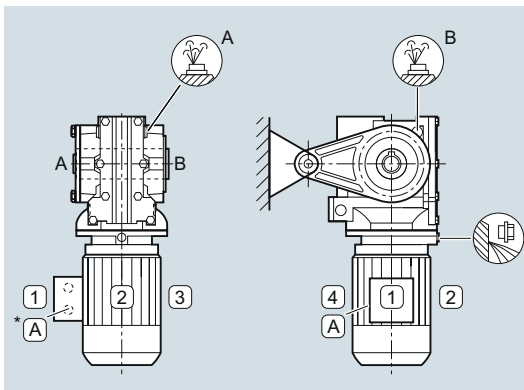
M1 output side A

M1 output side B

D11

D21

M2



Order code:

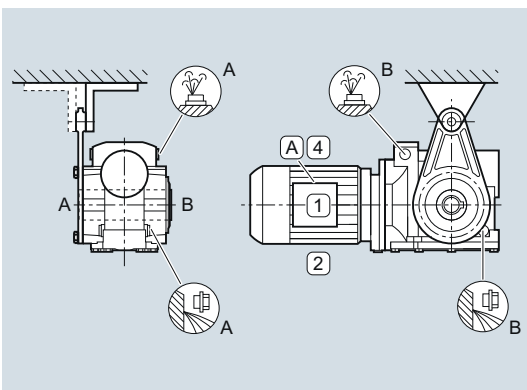
M2 output side A

M2 output side B

D12

D22

M3



Order code:

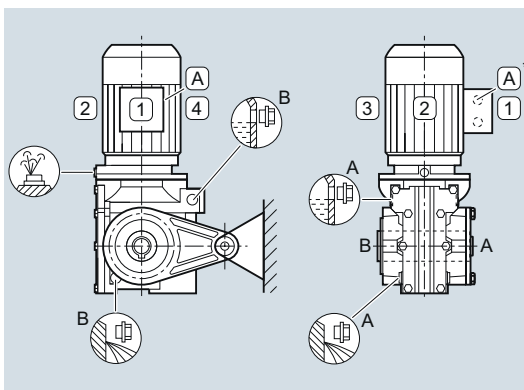
M3 output side A

M3 output side B

D13

D23

M4



Order code:

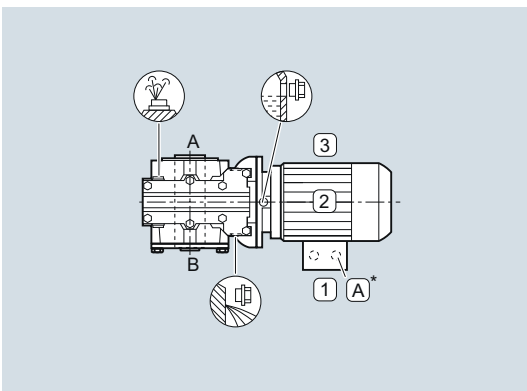
M4 output side A

M4 output side B

D14

D24

M5



Order code:

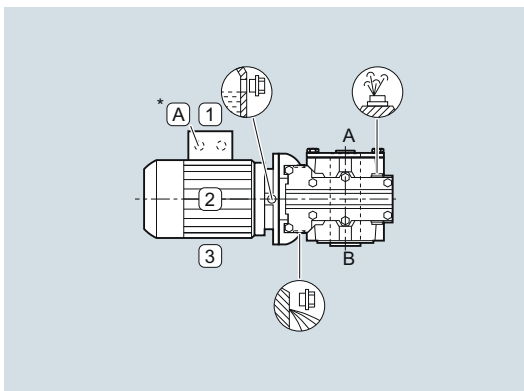
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

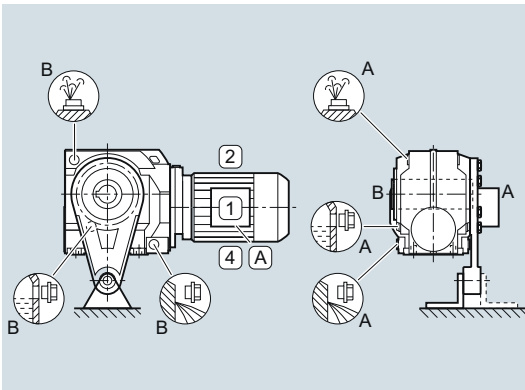
10

Shaft-mounted design (continued)

Helical worm gearboxes CAD, sizes 39 to 89

Oil valves

M1



Order code:

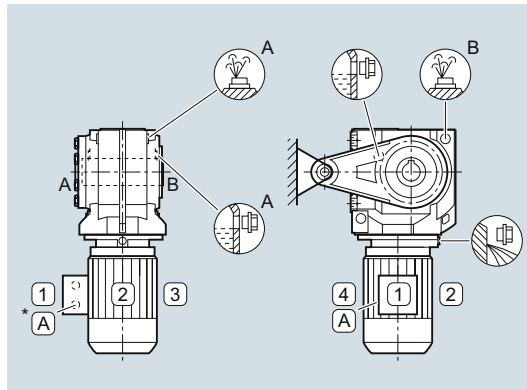
M1 output side A

D11

M1 output side B

D21

M2



Order code:

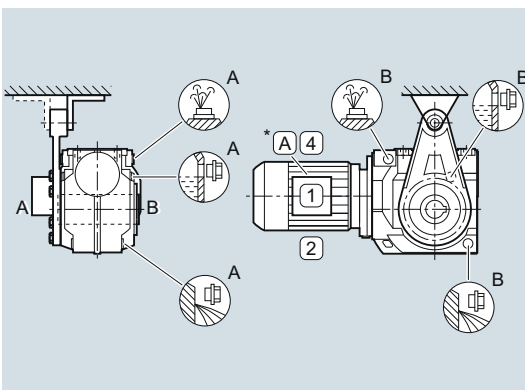
M2 output side A

D12

M2 output side B

D22

M3



Order code:

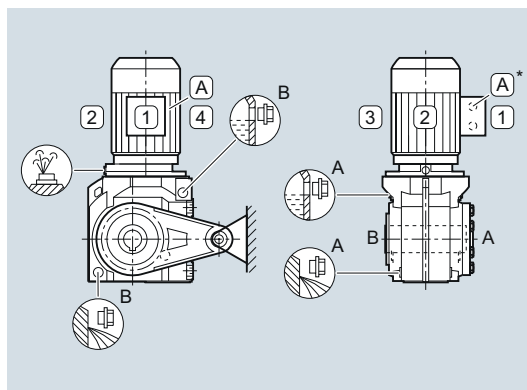
M3 output side A

D13

M3 output side B

D23

M4



Order code:

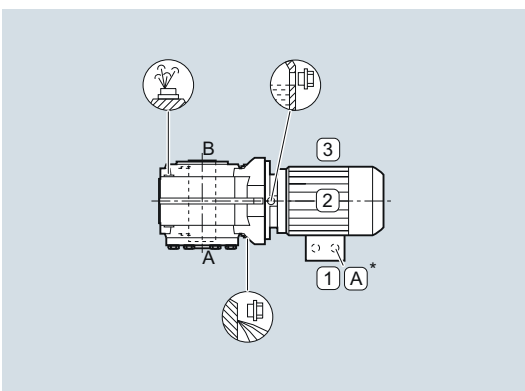
M4 output side A

D14

M4 output side B

D24

M5



Order code:

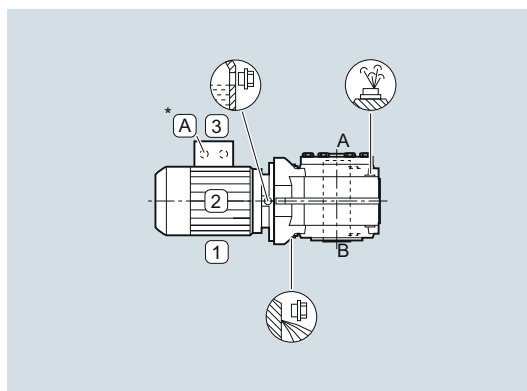
M5 output side A

D15

M5 output side B

D25

M6



Order code:

M6 output side A

D16

M6 output side B

D26

Gearbox options

Mounting position

Helical worm gearbox

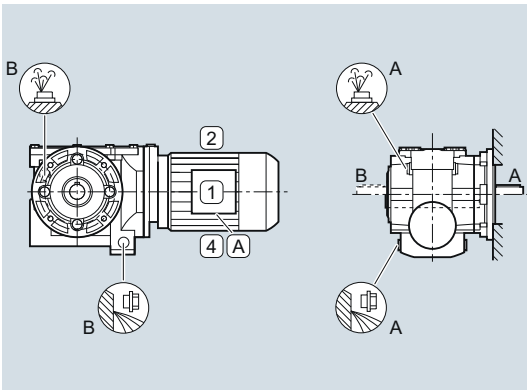
Housing flange design and flange-mounted design

Helical worm gearboxes CAZ and C.F, size 29

Oil valves

Size 29 is lubricated for life.

M1



Order code:

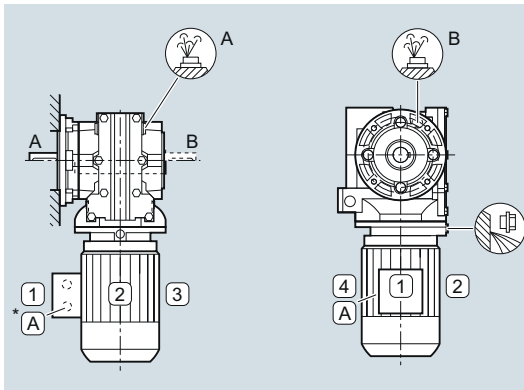
M1 output side A

D11

M1 output side B

D21

M2



Order code:

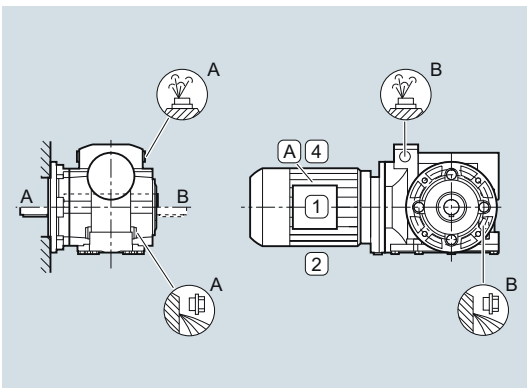
M2 output side A

D12

M2 output side B

D22

M3



Order code:

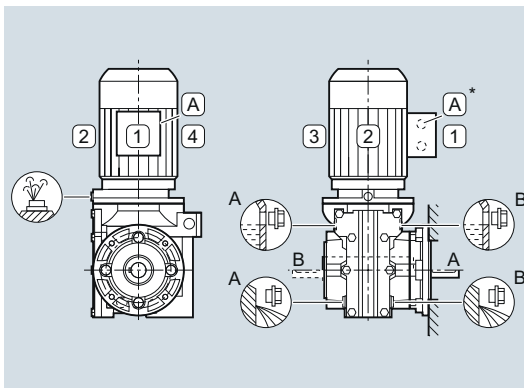
M3 output side A

D13

M3 output side B

D23

M4



Order code:

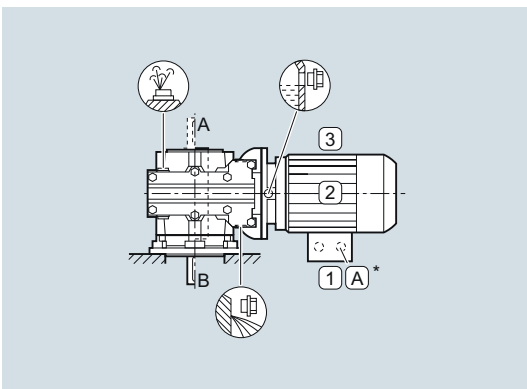
M4 output side A

D14

M4 output side B

D24

M5



Order code:

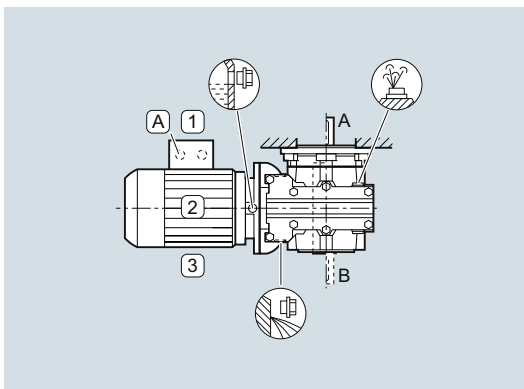
M5 output side A

D15

M5 output side B

D25

M6



Order code:

M6 output side A

D16

M6 output side B

D26

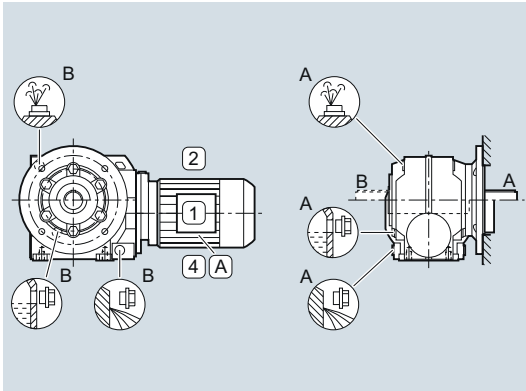
10

Housing flange design and flange-mounted design (continued)

Helical worm gearboxes CAZ and C.F, sizes 39 to 89

Oil valves

M1



Order code:

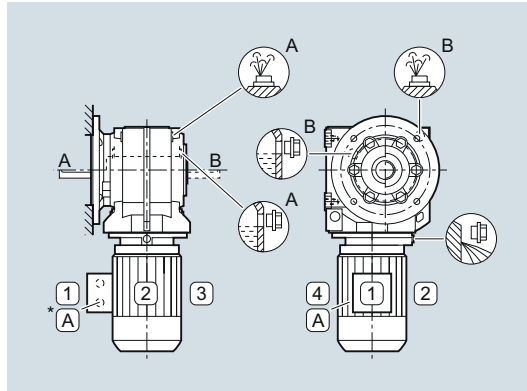
M1 output side A

M1 output side B

D11

D21

M2



Order code:

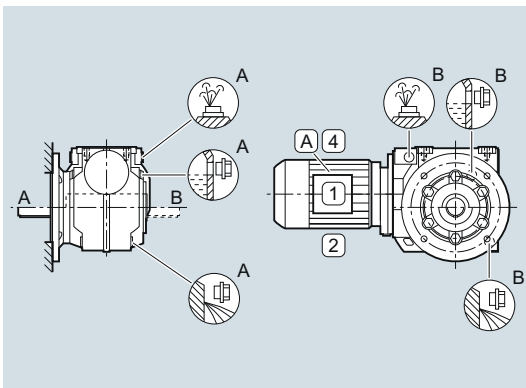
M2 output side A

M2 output side B

D12

D22

M3



Order code:

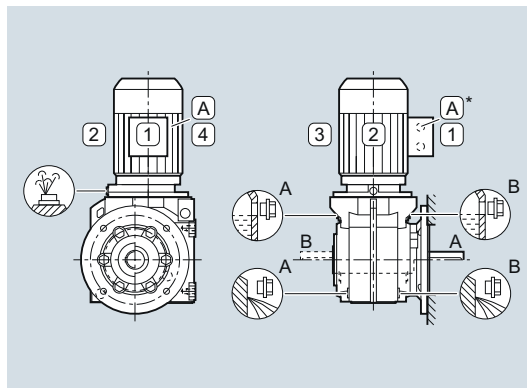
M3 output side A

M3 output side B

D13

D23

M4



Order code:

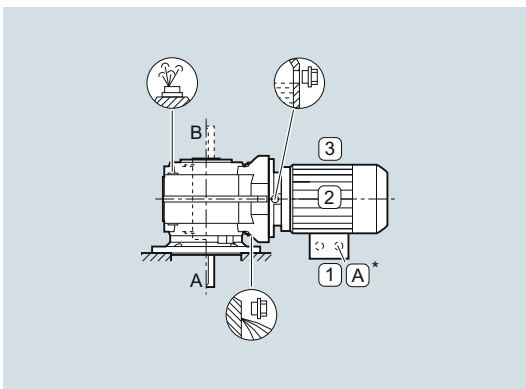
M4 output side A

M4 output side B

D14

D24

M5



Order code:

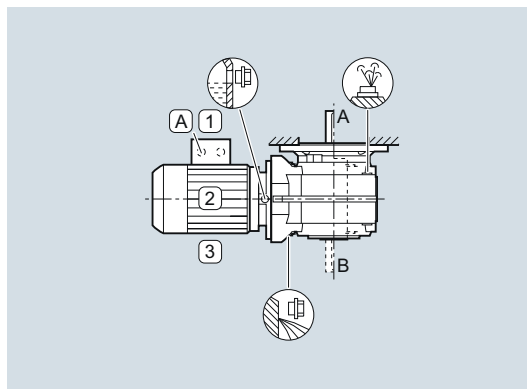
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

Gearbox options

Mounting position

Helical worm gearbox

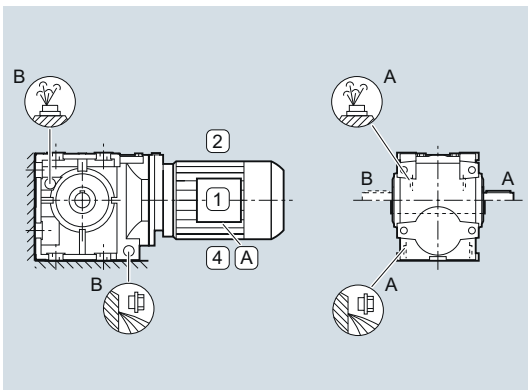
Foot-mounted design

Helical worm gearboxes C, size 29

Oil valves

Size 29 is lubricated for life.

M1



Order code:

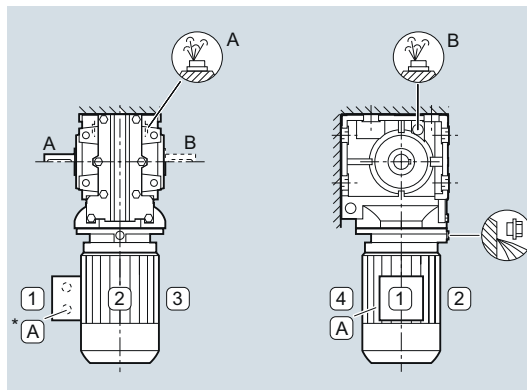
M1 output side A

D11

M1 output side B

D21

M2



Order code:

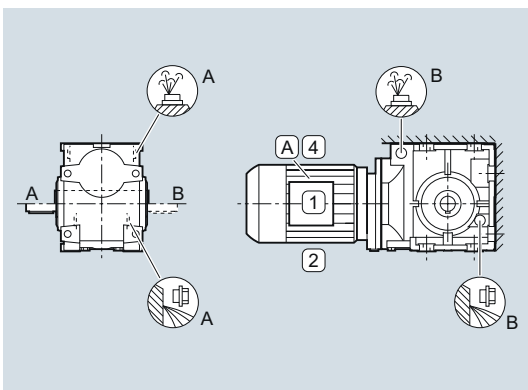
M2 output side A

D12

M2 output side B

D22

M3



Order code:

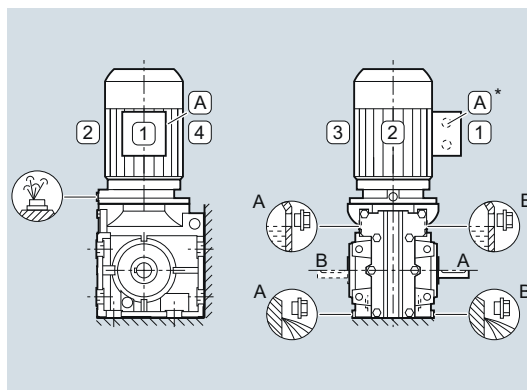
M3 output side A

D13

M3 output side B

D23

M4



Order code:

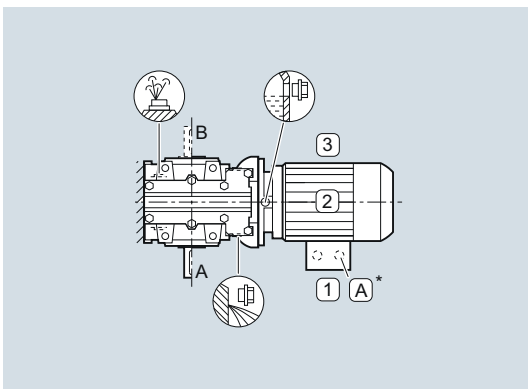
M4 output side A

D14

M4 output side B

D24

M5



Order code:

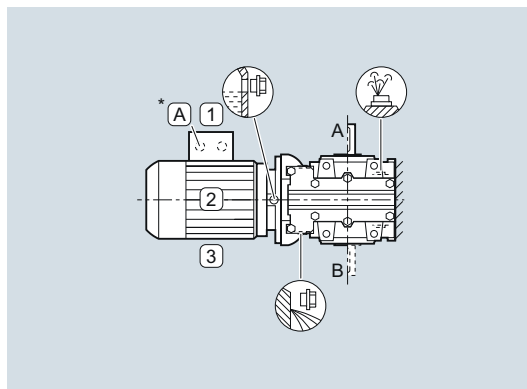
M5 output side A

D15

M5 output side B

D25

M6



Order code:

M6 output side A

D16

M6 output side B

D26

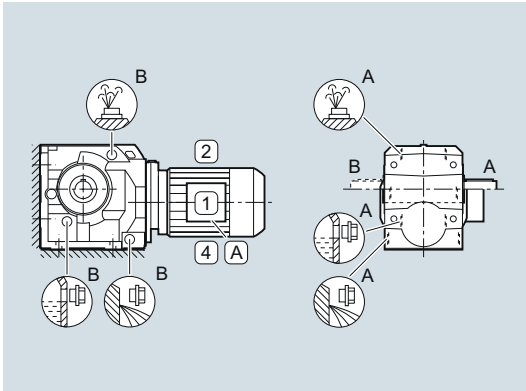
10

Foot-mounted design (continued)

Helical worm gearboxes C, sizes 39 to 89

Oil valves

M1



Order code:

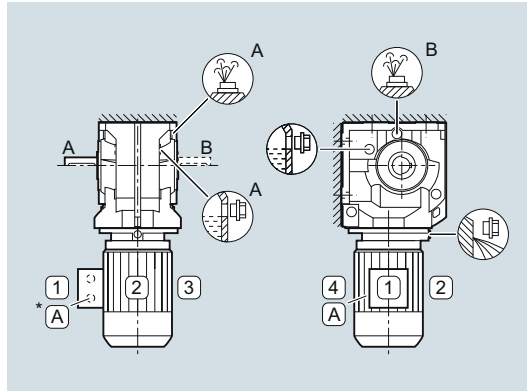
M1 output side A

M1 output side B

D11

D21

M2



Order code:

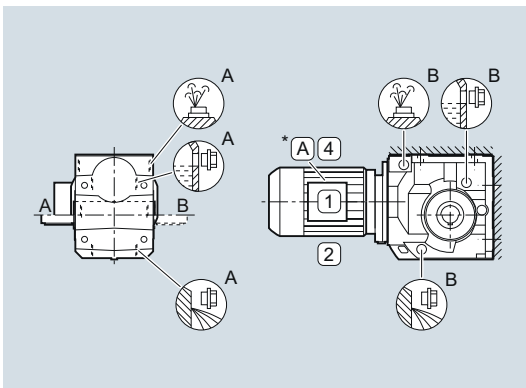
M2 output side A

M2 output side B

D12

D22

M3



Order code:

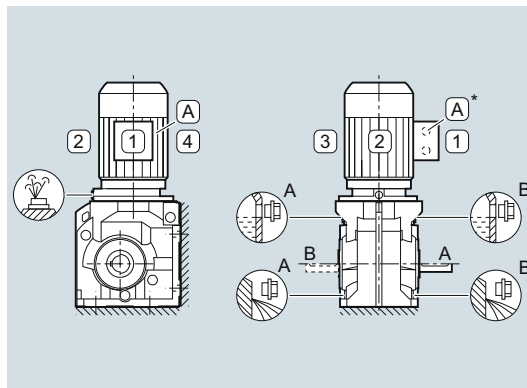
M3 output side A

M3 output side B

D13

D23

M4



Order code:

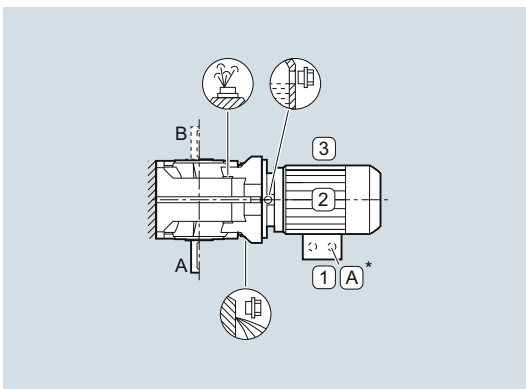
M4 output side A

M4 output side B

D14

D24

M5



Order code:

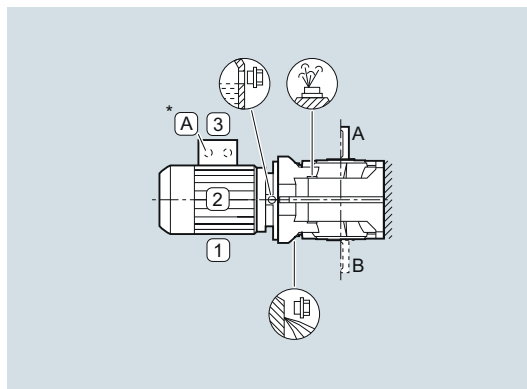
M5 output side A

M5 output side B

D15

D25

M6



Order code:

M6 output side A

M6 output side B

D16

D26

Gearbox options

Mounting position

Worm gearbox

Foot-mounted, flange-mounted, shaft-mounted and housing flange design

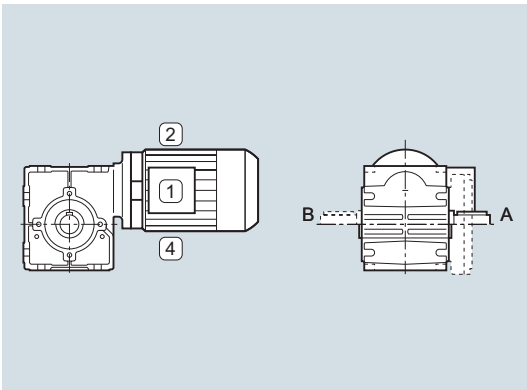
Worm gearboxes S., sizes 09 to 29

Oil valves

The worm gearboxes S are lubricated for life.

M0 is a universal mounting position in which the geared motor can be installed in any position.

M1



Order code:

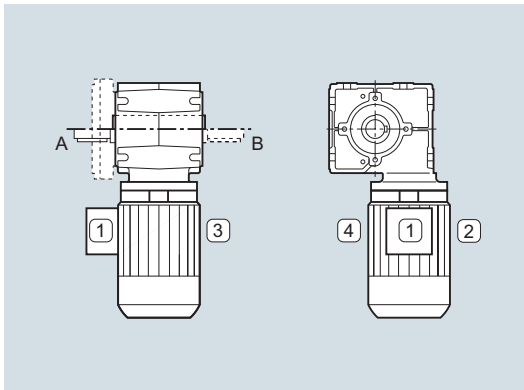
M1 output side A

D11

M1 output side B

D21

M2



Order code:

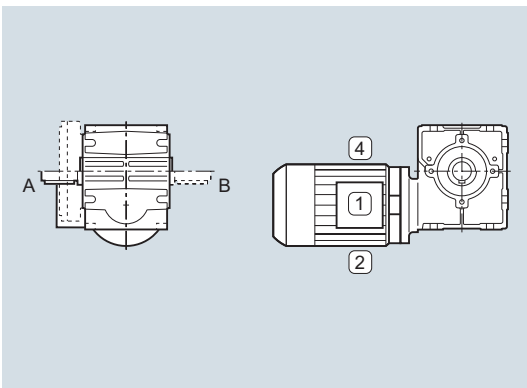
M2 output side A

D12

M2 output side B

D22

M3



Order code:

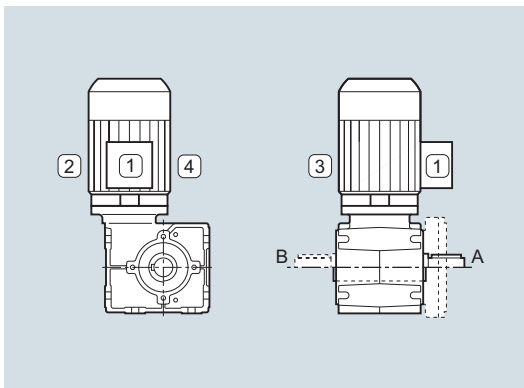
M3 output side A

D13

M3 output side B

D23

M4



Order code:

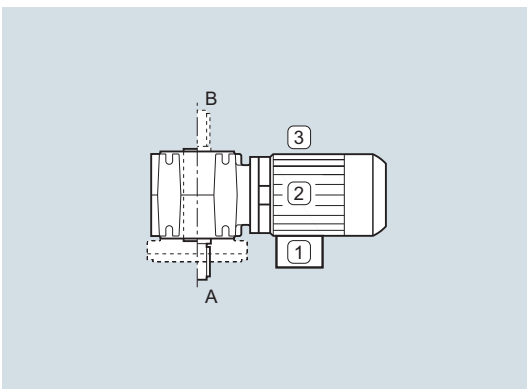
M4 output side A

D14

M4 output side B

D24

M5



Order code:

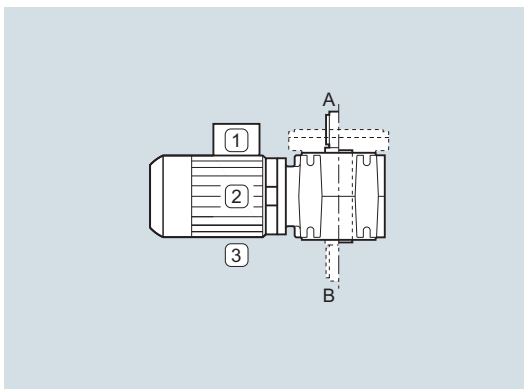
M5 output side A

D15

M5 output side B

D25

M6



Order code:

M6 output side A

D16

M6 output side B

D26

10

Overview

Apart from the standard types of construction, geared motors can also be supplied in different angled positions.

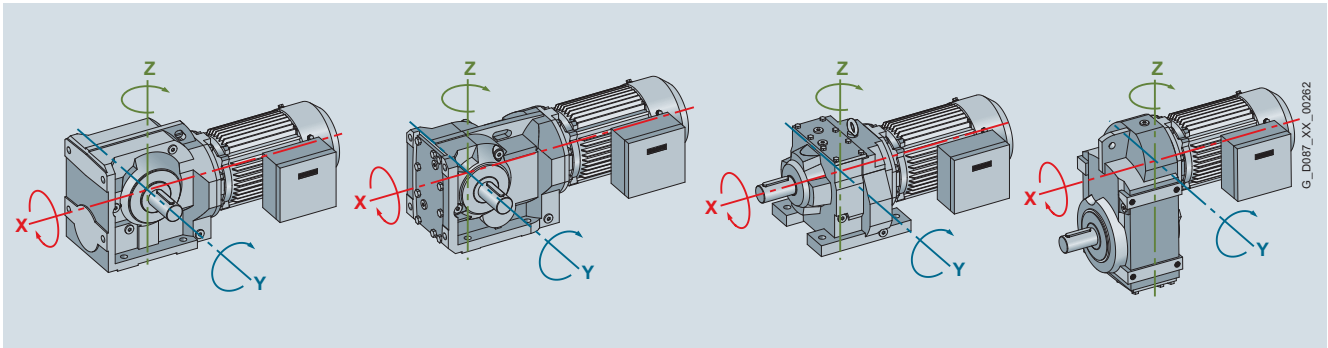


Fig. 10/6 Axes of rotation of the geared motors

Order code:

Y axis		X axis		Z axis	
Rotation angle 5°	E01	Rotation angle 5°	E21	Rotation angle 5°	E41
Rotation angle 10°	E02	Rotation angle 10°	E22	Rotation angle 10°	E42
Rotation angle 15°	E03	Rotation angle 15°	E23	Rotation angle 15°	E43
Rotation angle 20°	E04	Rotation angle 20°	E24	Rotation angle 20°	E44
Rotation angle 25°	E05	Rotation angle 25°	E25	Rotation angle 25°	E45
Rotation angle 30°	E06	Rotation angle 30°	E26	Rotation angle 30°	E46
Rotation angle 35°	E07	Rotation angle 35°	E27	Rotation angle 35°	E47
Rotation angle 40°	E08	Rotation angle 40°	E28	Rotation angle 40°	E48
Rotation angle 45°	E09	Rotation angle 45°	E29	Rotation angle 45°	E49
Rotation angle 50°	E10	Rotation angle 50°	E30	Rotation angle 50°	E50
Rotation angle 55°	E11	Rotation angle 55°	E31	Rotation angle 55°	E51
Rotation angle 60°	E12	Rotation angle 60°	E32	Rotation angle 60°	E52
Rotation angle 65°	E13	Rotation angle 65°	E33	Rotation angle 65°	E53
Rotation angle 70°	E14	Rotation angle 70°	E34	Rotation angle 70°	E54
Rotation angle 75°	E15	Rotation angle 75°	E35	Rotation angle 75°	E55
Rotation angle 80°	E16	Rotation angle 80°	E36	Rotation angle 80°	E56
Rotation angle 85°	E17	Rotation angle 85°	E37	Rotation angle 85°	E57

Use the functions of our electronic catalog SIMOGEAR Configurator for the exact design of the special mounting position you require.

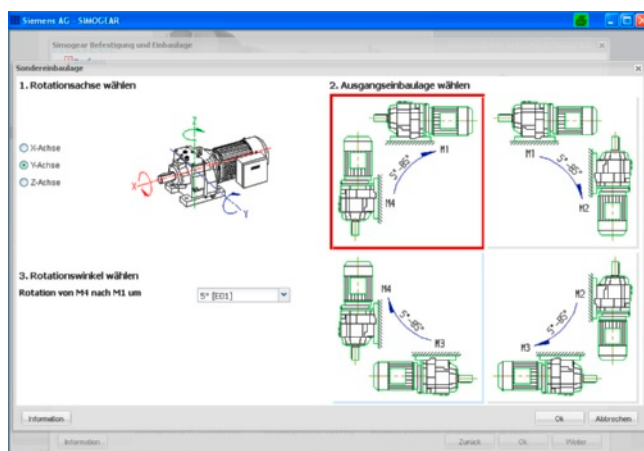


Fig. 10/7 SIMOGEAR Configurator

Gearbox options

Mounting

Mounting types

Overview

Mounting type	Type designation 2nd data position	Possible for						Example	Article No. 14th data position
		D, Z	F	B, K	C	S			
Foot-mounted design	-	✓	✓	✓	✓	✓		A	
Foot/ flange-mounted design	B	✓ ¹⁾	-	-	-	-		B	
Flange-mounted design (A type)	F	✓	✓	✓	✓	✓		F	
Housing flange (C type)	Z	✓	✓	✓	✓	✓		H	
Shaft-mounted design (torque arm)	D	-	✓	✓	✓	✓		D	

¹⁾ Only for sizes 29 to 89

Flange-mounted designs

The flange-mounted designs are available with different diameters.

Gearbox type	Flange diameter													Order code
	mm													
Helical gearboxes DF and ZF or DB and ZB¹⁾														
Gearbox size	19	29	39	49	59	69	79	89	109	129	149	169	189	
	120	120 ²⁾	120 ²⁾											H02
	140	140		140 ²⁾										H03
	160	160	160	160	160 ²⁾									H04
			200	200	200	200 ²⁾								H05
				250	250	250 ²⁾								H06
						300	300 ²⁾							H07
							350	350	350					H08
								450	450	450	450			H09
										550	550	550		H10
												660		H11
Parallel shaft gearboxes F..F														
Gearbox size	29	39	49	69	79	89	109	129	149	169	189			
	120													H02
	160	160												H04
			200											H05
				250	250									H06
						300								H07
							350							H08
								450	450					H09
										550				H10
												660		H11
Bevel gearboxes B.F														
Gearbox size	19	29			39			49						
	120	120											H02	
		160			160								H04	
					200			200					H05	
Bevel gearboxes K.F														
Gearbox size	39	49	69	79	89	109	129	149	169	189				
	160													H04
		200												H05
			250	250										H06
					300									H07
						350								H08
							450	450						H09
									550					H10
												660		H11
Helical worm gearboxes C.F														
Gearbox size	29	39			49		69		89					
	120												H02	
	160	160											H04	
					200		200						H05	
									250				H06	
Worm gearboxes S.F														
Gearbox size	09			19			29							
	80			110			120						H01	
	120 / Q90			120			160/Q136						H02	

¹⁾ Helical gearboxes in sizes 19, 109 to 189 are not available in the foot/flange-mounting design DB/ZB

²⁾ Helical gearboxes of sizes 29 to 89 in a foot/flange-mounted design DB/ZB are only available with small flange

Gearbox options

Mounting

Mounting types

Flange-mounted designs (continued)

Water drain holes at the output flange

For gearboxes in a flange-mounted design, water drain holes can be located at the output flange. This is required for mounting position M2 (output shaft facing upwards), if there is a risk that water will collect in the output flange.

Order code:

Water drain holes at the output flange

G77

Flange diameter	Possible for												
mm													
Helical gearboxes Z and D													
Gearbox size	19	29	39	49	59	69	79	89	109	129	149	169	189
120													
140				✓									
160				✓	✓ ¹⁾								
200				✓	✓	✓ ²⁾							
250					✓	✓	✓ ¹⁾						
300							✓	✓					
350								✓	✓	✓			
450									✓	✓	✓		
550											✓		
660													

1) Water drain holes are possible for foot/flange-mounted designs

2) Water drain holes are only possible for foot/flange-mounted designs

Parallel shaft gearboxes F													
Gearbox size	29	39	49	69	79	89	109	129	149	169	189		
120													
140													
160		✓											
200			✓										
250				✓	✓								
300						✓							
350							✓						
450								✓	✓				
550										✓			
660													✓

Bevel gearboxes K													
Gearbox size	39	49	69	79	89	109	129	149	169	189			
120													
140													
160	✓												
200		✓											
250			✓	✓									
300					✓								
350						✓							
450							✓	✓					
550									✓				
660													✓

Parallel shaft gearboxes F.AD in a shaft-mounted design

The rubber buffers (supplied loose) are used to flexibly support the gearbox on the housing plate provided.

When mounting, the rubber buffers must be pretensioned to the dimension specified in the dimensional drawing.

The elastomer used for support is manufactured out of natural rubber $70^\circ \pm 5$ Shore A.

The rubber buffers are suitable for all mounting positions and can withstand temperatures of between -40 and $+80$ °C.

Article No. at 14th position

Shaft-mounted design

D

The dimensions of the torque arm can be seen in the dimensional drawings.

Bevel gearboxes KAD in a shaft-mounted design

The torque arm of bevel gearboxes K is mounted on the underside of the housing. The rubber buffers are used to flexibly support the gearbox on the torque arm.

The elastomer used for support is manufactured out of natural rubber 60° Shore A.

The rubber elastic buffers are suitable for all mounting positions and can withstand temperatures of between -40 and $+80$ °C.

Article No. at 14th position

Shaft-mounted design

D

The dimensions of the torque arm can be seen in the dimensional drawings.

Bevel gearboxes BAD. in a shaft-mounted design

The torque arm can be screwed to the gearbox housing at various positions.

The elastomer used for support is manufactured out of natural rubber 60° Shore A.

The rubber elastic buffers are suitable for all mounting positions and can withstand temperatures of between -40 and $+80$ °C.

Article No. at 14th position

Shaft-mounted design

D

When ordered, the torque arm is supplied loose.

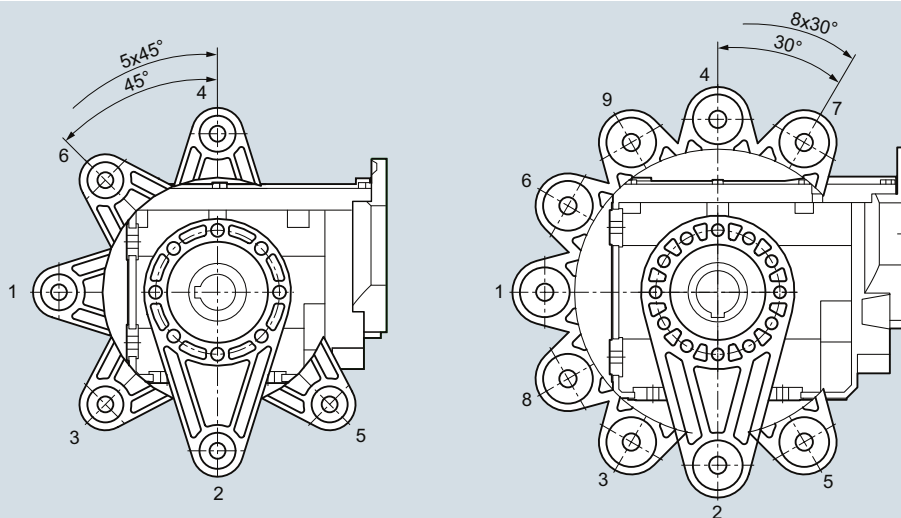
Sizes BAD.19 and BAD.29**Sizes BAD.39 and BAD.49**

Fig. 10/8 Bevel gearboxes B in a shaft-mounted design

Gearbox options

Mounting

Mounting types

Helical worm gearboxes CAD. in a shaft-mounted design

The torque arm can be screwed to the gearbox housing at various positions.

The elastomer used for support is manufactured out of natural rubber 60° Shore A.

The rubber elastic buffers are suitable for all mounting positions and can withstand temperatures of between -40 and +80 °C.

Article No. at 14th position

Shaft-mounted design

D

When ordered, the torque arm is supplied loose.

Figure 1, Sizes CAD.29 to CAD.89

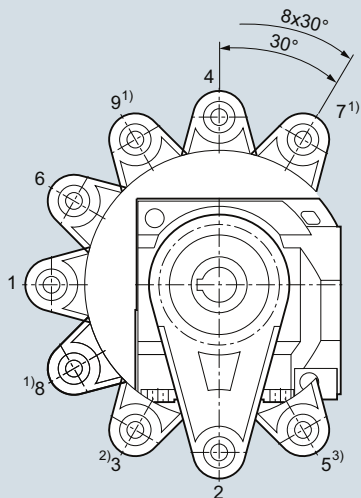


Figure 2, Sizes CAD.39 to CAD.89

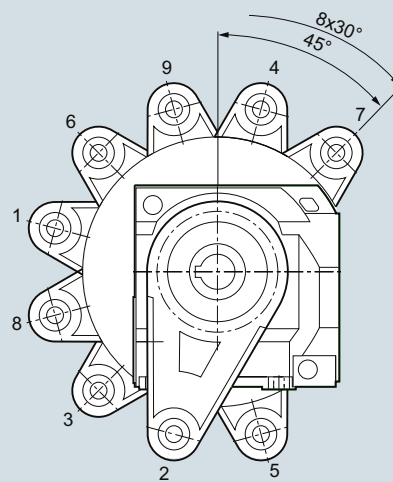


Fig. 10/9 Helical worm gearboxes C in shaft-mounted design

1) Position not possible for size CAD.29

2) Position not possible for sizes CAD.39 and CAD.69

3) Position not possible for size CAD.39

Order code:

Figure 1

G09

Figure 2

G10

Worm gearboxes SAD. in a shaft-mounted design

The torque arm can be screwed to the gearbox housing at various positions.

Article No. at 14th position

Shaft-mounted design

D

When ordered, the torque arm is supplied loose.

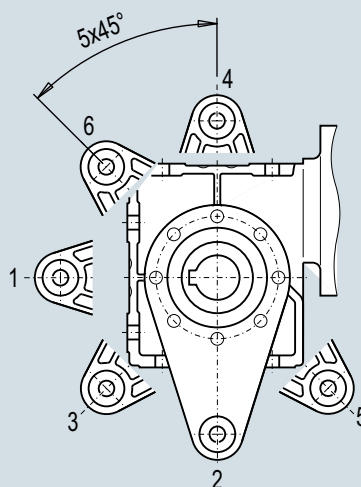


Fig. 10/10

Selection and ordering data

Shaft design	Dimensions						Article No.	Article number suffix
	mm						8th data position	
Helical gearboxes Z and D								
Gearbox size	19	29	39	49	59	69		
Solid shaft	V20 x 40	V25 x 50	V25 x 50	V30 x 60	V35 x 70	V35 x 70	1	
	V16 x 28	-	-	-	-	-	2	
	V16 x 40	-	-	-	-	-	3	
Solid shaft without feather key	VG20 x 40	VG25 x 50	VG25 x 50	VG30 x 60	VG35 x 70	VG35 x 70	9	H1G
Solid shaft, inches	V0.75" x 1.57"	V1" x 1.97"	V1" x 1.97"	V1.25" x 2.36"	V1.35" x 2.76"	V1.35" x 2.76"	9	H6A
Gearbox size	79	89	109	129	149	169		
Solid shaft	V40 x 80	V50 x 100	V60 x 120	V70 x 140	V90 x 170	V110x210	1	
Solid shaft without feather key	VG40 x 80	VG50 x 100	-	-	-	-	9	H1G
Solid shaft, inches	V1.625" x 3.15"	V2.125" x 3.94"	V2.375" x 4.72"	V2.875" x 5.51"	V3.625" x 6.69"	V4.375"x8.27"	9	H6A
Gearbox size	189							
Solid shaft	V120x210						1	
Solid shaft, inches	V4.75"x8.27"						9	H6A
Parallel shaft gearboxes F								
Gearbox size	29	39	49	69	79	89		
Solid shaft	V25 x 50	V25 x 50	V30 x 60	V35 x 70	V40 x 80	V50 x 100	1	
Solid shaft without feather key	VG25 x 50	VG25 x 50	VG30 x 60	VG35 x 70	VG40 x 80	VG50 x 100	9	H1G
Solid shaft, inches	V1" x 1.97"	V1" x 1.97"	V1.25" x 2.36"	V1.375" x 2.76"	V1.625" x 3.15"	V2" x 3.94"	9	H6A
Hollow shaft	H25	H30	H35	H40	H40	H50	5	
Hollow shaft, inches	H1"	H1.25"	H1.375"	H1.5"	H1.5"	H2"	9	H7A
Hollow shaft with shrink disk	HS25	HS30	HS35	HS40	HS40	HS50	9	H3A
SIMOLOC assembly system, metric	HF25	HF30	HF35	HF40	HF40	HF50	9	H3G
	HF20	HF25	HF30	HF35	HF35	HF40	9	H3H
SIMOLOC assembly system, imperial dimensions	HF1.0"	HF1.25"	HF1.375"	HF1.5"	HF1.5"	HF2.0"	9	H3J
	HF0.75"	HF1.1875"	HF1.4375"	HF1.625"	HF1.625"	HF1.9375"	9	H3K
	-	HF1.0"	HF1.25"	HF1.4375"	HF1.4375"	HF1.75"	9	H3L
	-	-	HF1.1875"	HF1.375"	HF1.375"	HF1.625"	9	H3M
Splined hollow shaft	-	N30	N35	N35	N45	N50	9	H4A
Gearbox size	109	129	149	169	189			
Solid shaft	V60 x 120	V70 x 140	V90 x 170	V110x120	V120x210		1	
Solid shaft, inches	V2.375" x 4.72"	V2.875" x 5.51"	V3.625" x 6.69"	V4.375"x8.27"	V4.75"x8.27"		9	H6A
Hollow shaft	H60	H70	H90	H100	H120		5	
Hollow shaft, inches	H2.375"	H2.75"	H3.625"	H4"	H4.5"		9	H7A
Hollow shaft with shrink disk	HS65	HS75	HS95	HS105	HS125		9	H3A
Splined hollow shaft	N65	N70	N85	N90	N110		9	H4A
Bevel gearboxes B								
Gearbox size	19	29	39	49				
Solid shaft	V20 x 40	V20 x 40	V30 x 60	V35 x 70			1	
Solid shaft without feather key	VG20 x 40	VG20 x 40	VG30 x 60	VG35 x 70			9	H1G
Solid shaft, inches	V0.75" x 1.57"	V0.75" x 1.57"	V1" x 1.97"	V1.375" x 2.76"			9	H6A
Solid shaft, both ends	VD20 x 40	VD20 x 40	VD30 x 60	VD35 x 70			9	H5A
Hollow shaft	H20	H20	H30	H40			5	
	-	H25	H35	H35			6	
	-	-	H40	-			7	
Hollow shaft, inches	H0.75"	H0.75"	H1.25"	H1.5"			9	H7A
Hollow shaft with shrink disk	-	HS20	HS35	HS40			9	H3A
SIMOLOC assembly system, metric	-	HF25	HF30	HF35			9	H3G
	-	HF20	HF25	HF30			9	H3H
	-	-	-	HF40			9	H3I
SIMOLOC assembly system, imperial dimensions	-	HF1.0"	HF1.25"	HF1.375"			9	H3J
	-	HF0.75"	HF1.1875"	HF1.4375"			9	H3K
	-	-	HF1.0"	HF1.25"			9	H3L
	-	-	-	HF1.1875"			9	H3M
	-	-	-	HF1.625"			9	H3I

Gearbox options

Mounting

Shaft designs

Selection and ordering data (continued)

Shaft design	Dimensions					Article No.	Article number suffix
	mm					8th data position	
Bevel gearboxes K							
Gearbox size	39	49	69	79	89		
Solid shaft	V25 x 50	V30 x 60	V35 x 70	V40 x 80	V50 x 100	1	
Solid shaft without feather key	VG25 x 50	VG30 x 60	VG35 x 70	VG40 x 80	VG50 x 100	9	H1G
Solid shaft, inches	V1" x 1.97"	V1.25" x 2.36"	V1.375" x 2.76"	V1.625" x 3.15"	V2" x 3.94"	9	H6A
Solid shaft, both ends	VD25 x 50	VD30 x 60	VD35 x 70	VD40 x 80	VD50 x 100	9	H5A
Hollow shaft	H30	H35	H40	H40	H50	5	
Hollow shaft, inches	H1.25"	H1.375"	H1.5"	H1.5"	H2"	9	H7A
Hollow shaft with shrink disk	HS30	HS35	HS40	HS40	HS50	9	H3A
SIMOLOC assembly system, metric	HF30	HF35	HF40	HF40	HF50	9	H3G
	HF25	HF30	HF35	HF35	HF40	9	H3H
SIMOLOC assembly system, imperial dimensions	HF1.25"	HF1.375"	HF1.5"	HF1.5"	HF2.0"	9	H3J
	HF1.1875"	HF1.4375"	HF1.625"	HF1.625"	HF1.9375"	9	H3K
	HF1.0"	HF1.25"	HF1.4375"	HF1.4375"	HF1.75"	9	H3L
	-	HF1.1875"	HF1.375"	HF1.375"	HF1.625"	9	H3M
Splined hollow shaft	N30	N35	N35	N45	N50	9	H4A
Gearbox size	109	129	149	169	189		
Solid shaft	V60 x 120	V70 x 140	V90 x 170	V110x210	V120x210	1	
Solid shaft, inches	V2.375" x 4.72"	V2.875" x 5.51"	V3.625" x 6.69"	V4.375" x 8.27"	V4.5" x 8.27"	9	H6A
Solid shaft, both ends	VD60 x 120	VD70 x 140	VD90 x 170	VD110 x 210	VD120 x 210	9	H5A
Hollow shaft	H60	H70	H90	H100	H120	5	
Hollow shaft, inches	H2.375"	H2.75"	H3.625"	H4"	H4.5"	9	H7A
Hollow shaft with shrink disk	HS65	HS75	HS95	HS105	HS125	9	H3A
Splined hollow shaft	N65	N70	N85	N90	N110	9	H4A
Helical worm gearboxes C							
Gearbox size	29	39	49	69	89		
Solid shaft	V20 x 40	V25 x 50	V30 x 60	V35 x 70	V45 x 90	1	
Solid shaft without feather key	VG20 x 40	VG25 x 50	VG30 x 60	VG35 x 70	VG45 x 90	9	H1G
Solid shaft, inches	V0.75" x 1.57"	V1" x 1.97"	V1.25" x 2.36"	V1.375" x 2.76"	V1.75" x 3.15"	9	H6A
Solid shaft, both ends	VD20 x 40	VD25 x 50	VD30 x 60	VD35 x 70	VD45 x 90	9	H5A
Hollow shaft	H20	H25	H30	H40	H50	5	
	-	H30	H35	H45	H60	6	
Hollow shaft, inches	H0.75"	H1.25"	H1.375"	H1.5"	H2"	9	H7A
Hollow shaft with shrink disk	HS20	HS30	HS35	HS40	HS50	9	H3A
SIMOLOC assembly system, metric	HF25	HF30	HF35	HF40	HF50	9	H3G
	HF20	HF25	HF30	HF35	HF40	9	H3H
SIMOLOC assembly system, imperial dimensions	HF1.0"	HF1.25"	HF1.375"	HF1.5"	HF2.0"	9	H3J
	HF0.75"	HF1.1875"	HF1.4375"	HF1.625"	HF1.9375"	9	H3K
	-	HF1.0"	HF1.25"	HF1.4375"	HF1.75"	9	H3L
	-	-	HF1.1875"	HF1.375"	HF1.625"	9	H3M
Worm gearboxes S							
Gearbox size	09	19	29				
Solid shaft	V16 x 40	V20 x 40	V20 x 40			1	
	V14 x 30	V18 x 40	V25 x 50			3	
Solid shaft, both ends	VD16 x 40	VD20 x 40	VD20 x 40			9	H5A
Hollow shaft	H16	H20	H20			5	
	H14	H18	H25			6	
Hollow shaft stainless steel	HX16	HX20	HX20			9	H8A
Plug-in shaft	VE16 x 40	VE20 x 40	VE20 x 40			7	

SIMOLOC assembly system

The new SIMOLOC assembly system has been designed to provide a friction-locked connection between the motor shaft made of drawn shaft material of grade h11 or lower and the hollow shaft in the gearbox.

The SIMOLOC assembly system offers a low-cost, easy-to-fit alternative to conventional shaft connections such as hollow shaft

with a feather key, hollow shaft with shrink disk or hollow shaft with spline.

It is compatible with the shaft-mounted designs of the parallel shaft, bevel and helical worm gearboxes.

Several diameters are available for each gearbox size.

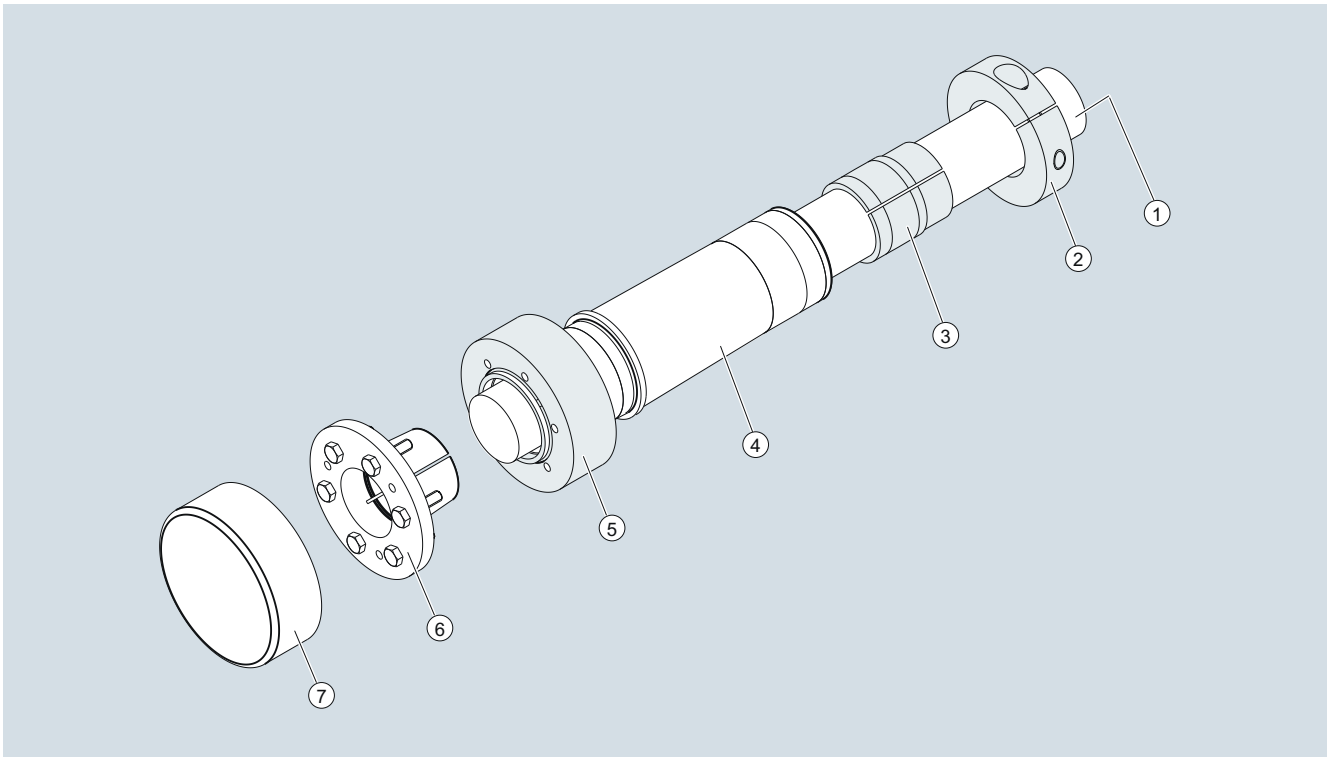
Components of the SIMOLOC assembly system

Fig. 10/11 SIMOLOC assembly system

- | | |
|---------------------------|-----------------------------|
| ① Machine shaft | ⑤ V-ring |
| ② Clamping ring | ⑥ Taper bushing |
| ③ Bronze bushing | ⑦ Rotating protection cover |
| ④ Hollow shaft of gearbox | |

BenefitsCost reduction

- The drive shaft of the motor can be made of low-cost, drawn shaft material of grade h11 or lower.
- The shaft is cheaper to machine because there is no need to machine the shaft seat and a keyway is not required.

Quick and easy mounting

- Easy to mount and dismantle thanks to adequate clearance between the motor shaft and hollow shaft. The press fit is not made until the taper bushing is inserted.
- The press fit prevents the formation of fretting corrosion. The taper bushing can be removed easily in order to separate the press-fit connection.
- No tight fits need to be overcome when the gearbox is pushed onto the motor shaft.

Variability

- Quick adjustment of the gearbox to different motor shaft diameters is possible by replacement of the taper and bronze bushings.
- Easy conversion from metric to inch dimensions and vice versa.

Available diameters

The SIMOLOC assembly system can be supplied for shaft-mounted designs. 2 metric versions and 2 to 4 inch versions are available for all sizes.

Scope of supply

The gearbox is shipped with a SIMOLOC hollow shaft. The diameter-specific components are supplied as a separate assembly kit. The unit is supplied with pre-assembled rotating protection cover. The non-rotating protection cover can be ordered as an option.

Gearbox options

Mounting

Shaft designs

Hollow shaft cover

Sealing cap

The bore of the hollow shaft is sealed using a plastic sealing cap. Gearboxes in size 39 and larger with hollow shaft and shrink disk have a rotating protective cap.

The dimensions of the rotating protection cover can be seen in the dimensional drawings provided in the gearbox chapters.

For safety reasons, stationary protection covers may be required.

Protection cover

For sizes 39 to 189, a stationary protection cover for the hollow shaft and hollow shaft with shrink disk can be selected.

Sizes 19 and 29 have, as standard, a stationary protection cover for the design with shrink disk. For the design with hollow shaft, for sizes 19 and 29, a protection cover can also be selected.

The dimensions of the protection cover can be seen in the separate dimensional drawing provided in the gearbox chapters.

Order code:

Protection cover

G60

Radially reinforced output shaft bearings

The gearboxes can be supplied with the standard design or with a reinforced output shaft bearing design. The reinforced bearings allow higher radial and combined forces (radial and axial) to be absorbed.

Design	Possible for													Order code
Helical gearboxes Z and D														
Gearbox size	19	29	39	49	59	69	79	89	109	129	149	169	189	
Radially reinforced output shaft bearings						✓	✓	✓	✓	✓	✓			G20
Parallel shaft gearboxes F														
Gearbox size	29	39	49	69	79	89	109	129	149	169	189			
Radially reinforced output shaft bearings			✓*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G20
Bevel gearboxes K														
Gearbox size	39	49	69	79	89	109	129	149	169	189				
Radially reinforced output shaft bearings		✓*	✓	✓	✓	✓	✓	✓	✓	✓	✓			G20

* Not possible for flange-mounted design with solid shaft (gearbox type FZF, FDF, KF)

Overview

Lubrication

The gearboxes are filled in the factory with a high-quality lubricant. Lubricants permitted for the various gearbox types and applications are listed in the lubricant table.

Other oils from various lubricant manufacturers that have been approved by Siemens AG can be found on the Internet in the Service and Support pages in the List of approved and recommended gear lubricants T 7300:

<http://support.automation.siemens.com/WW/view/en/44231658>

Note:

For ambient conditions with a high air humidity and salt-laden atmosphere, we recommend that only mineral or PAO oils are used.

Oil quantities

The lubricant quantity depends on the gearbox type, size and mounting position. The corresponding oil quantities are specified in the operating instructions and on the rating plate of the geared motor.

Sealing

The standard models of gearbox are supplied with high-quality radial shaft sealing rings with dust protection lips. This sealing design is reliable for a wide range of applications.

Special application areas and environmental conditions require special radial shaft sealing rings and materials, which are coordinated with the particular gearbox oil and environment. This coordinated sealing system results in a high reliability and availability of the plant.

When compared to standard sealing systems, the maintenance intervals can be extended. This therefore reduces maintenance costs.

Sealing system

Output shaft sealing	Description	Ambient condition	Order code
Normal environmental stress			
Standard seal	High-quality NBR radial shaft sealing ring with dust protection lip.	Environment with low dust and pollution levels with low moisture.	-
Longer service life			
Seal with longer service life	The radial shaft sealing ring with protective lip is designed with an additional seal on the internal gearbox side. The sealing system has a high degree of reliability due to its resistance to impurities in the oil.	Environment with low dust and pollution levels with low moisture.	G23
Longer service life and increased environmental stress			
Seal for increased environmental stress	This seal is equipped with an additional fiber disk. In addition to the longer service life, it also provides increased protection against higher environmental stress as a result of dust and dirt deposits. As a consequence, the sealing system has a high degree of reliability. For additional environmental stress, e.g. water jets or significant levels of pollution as a result of production materials, please contact your local Siemens office.	Environments with increased pollution and dust levels as well as low moisture. Typical applications: Production areas with increased pollution and dust, such as wood chips, dusts or granulate as well as occasional spray water.	G24

Roller bearing greases for gearboxes and motors

The roller bearings of gearboxes and motors are lubricated in the factory with a roller bearing grease that is coordinated with the selected application area. The quantity of grease between the rolling elements and the space in front of the bearing depends on the operating conditions and the gearbox mounting position. For operation in the selected application areas, it is not necessary to lubricate the roller bearings.

We recommend that the grease filling of the roller bearings is also changed when the oil or shaft sealing rings are replaced.

Other greases supplied by different lubricant manufacturers that have been approved by Siemens AG are specified in the List of approved and recommended gearbox lubricants T 7300.

Gearbox options

Lubrication and sealing

Selection

The standard gearbox design can be used in the range from -20 up to +40° C. Additional oils for lower or higher ambient temperatures are available for selection.

Please inquire regarding geared motors outside the temperature range from -20 to +40 °C, as the suitability of the components used for the respective application must be checked.

Selection of lubricant				Selection of seal		
Area of application	Ambient temperature °C	Oil type Designation acc. to DIN 51502	Order code	Environmental stress		
				Standard	Standard	Increased
				Service life		
				Standard	Longer	Longer
				-	G23	G24
Helical gearboxes Z and D, parallel shaft gearboxes F and bevel gearboxes K						
Standard	-10 ... +40	CLP ISO VG220	K06	✓	✓	✓
	-30 ... +40	CLP ISO PAO VG220	K12	✓	✓	✓
	-40 ... +10	CLP ISO PAO VG68	K13	✓	✓	✓
	0 ... +80	CLP ISO PG VG460	K08	-	✓	✓
	-20 ... +50	CLP ISO PG VG220	K07	-	✓	✓
Foodstuff area	0 ... +40	CLP ISO H1 VG460	K11	-	✓	-
	-30 ... +10	CLP ISO H1 VG100	K14	-	✓	-
Biodegradable oil	-20 ... +40	CLP ISO E VG220	K10	✓	✓	-
Bevel gearboxes B						
Standard	-10 ... +40	CLP ISO PG VG220	K07	-	✓	✓ ¹⁾
	-30 ... +40	CLP ISO PAO VG220	K12	✓	✓	✓ ¹⁾
	-40 ... +10	CLP ISO PAO VG68	K13	✓	✓	✓ ¹⁾
	0 ... +80	CLP ISO PG VG460	K08	-	✓	✓ ¹⁾
Foodstuff area	0 ... +40	CLP ISO H1 VG460	K11	-	✓	-
	-30 ... +10	CLP ISO H1 VG100	K14	-	✓	-
Helical worm gearboxes C						
Standard	-10 ... +60	CLP ISO PG VG460	K08	-	✓	✓
	-30 ... +40	CLP ISO PAO VG220	K12	✓	✓	✓
	-40 ... +10	CLP ISO PAO VG68	K13	✓	✓	✓
Foodstuff area	0 ... +40	CLP ISO H1 VG460	K11	-	✓	-
	-30 ... +10	CLP ISO H1 VG100	K14	-	✓	-
Worm gearboxes S						
Standard	-10 ... +40	CLP ISO PG VG460	K08	✓	-	-
	-30 ... +20	CLP ISO PG VG220	K07	✓	-	-
Foodstuff area	0 ... +40	CLP ISO H1 VG460	K11	✓	-	-
	-30 ... +10	CLP ISO H1 VG100	K14	✓	-	-

¹⁾ Not possible with size B19

CLP = mineral oil

CLP PG = polyglycol oil

E = Ester oil, organic oil (bio oil/risk of water pollution, class WGK1)

PAO = Poly-alpha-olefin oil

CLP H1 = Physically safe oil (USDA-H1 approval)

Overview

Gearboxes from size 39 for standard mounting positions are supplied as standard with pressure breather valve, oil level control and drain screw.

Gearbox sizes 19 and 29 are supplied ready for operation, lubricated for life and can be operated in mounting positions M1, M3, M5 and M6 without requiring a pressure breather valve. For mounting positions M2 and M4, they are equipped with a pressure breather valve.

Possible venting and oil level control options

Design	Possible for													Order code
Helical gearboxes Z and D														
Size	19	29	39	49	59	69	79	89	109	129	149	169	189	
Lubricated for life	✓	✓												
Pressure breather valve			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G45
Oil expansion unit			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G47
Oil sight glass				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G34
Magnetic oil drain screw			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G53
Oil drain valve, straight			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G54
Oil drain valve, angled			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G55
Parallel shaft gearboxes F														
Size	29	39	49	69	79	89	109	129	149	169	189			
Lubricated for life	✓													
Pressure breather valve		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G45
Oil expansion unit		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G47
Oil sight glass			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G34
Magnetic oil drain screw		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G53
Oil drain valve, straight		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G54
Oil drain valve, angled		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	G55
Bevel gearboxes B														
Size	19		29		39		49							
Lubricated for life	✓		✓											
Pressure breather valve					✓		✓							G45
Oil expansion unit					✓		✓							G47
Oil sight glass							✓							G34
Magnetic oil drain screw							✓							G53
Oil drain valve, straight							✓							G54
Oil drain valve, angled							✓							G55
Bevel gearboxes K														
Size	39	49	69	79	89	109	129	149						
Pressure breather valve	✓	✓	✓	✓	✓	✓	✓	✓						G45
Oil expansion unit	✓	✓	✓	✓	✓	✓	✓	✓						G47
Oil sight glass		✓	✓	✓	✓	✓	✓	✓						G34
Magnetic oil drain screw	✓	✓	✓	✓	✓	✓	✓	✓						G53
Oil drain valve, straight	✓	✓	✓	✓	✓	✓	✓	✓						G54
Oil drain valve, angled	✓	✓	✓	✓	✓	✓	✓	✓						G55
Helical worm gearboxes C														
Size	29		39		49		69		89					
Lubricated for life	✓ ¹⁾													
Pressure breather valve	✓		✓		✓		✓		✓		✓			G45
Oil expansion unit			✓		✓		✓		✓		✓			G47
Oil sight glass					✓		✓		✓		✓			G34
Magnetic oil drain screw			✓		✓		✓		✓		✓			G53
Oil drain valve, straight			✓		✓		✓		✓		✓			G54
Oil drain valve, angled			✓		✓		✓		✓		✓			G55
Worm gearboxes S														
Size	09			19			29							
Lubricated for life	✓			✓			✓							

¹⁾ Helical worm gearboxes for all mounting positions are equipped with a pressure breather valve.

Gearbox options

Venting and oil level control

Venting

Pressure breather valve

Gearboxes from size 39 are supplied with an installed pressure breather valve; this is suitable for both indoors and outdoors use.

Gearbox sizes 19 and 29 can be operated in mounting positions M1, M3, M5 and M6 without requiring a pressure breather valve. For mounting positions M2 and M4, they are equipped with a pressure breather valve.

Order code:

Pressure breather valve

G45

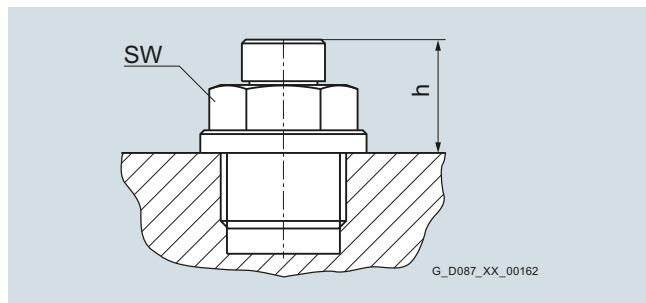


Fig. 10/12 Pressure breather valve

Technical specifications

Gearbox type	Size	Width across flats	Thread	Dimension h mm
		SW		
Helical gearboxes Z and D	19, 29	12	G 1/8 A	15
	39	12	G 1/8 A	15
	49 ... 79	13	G 1/4 A	15
	89 ... 129	17	G 3/8 A	15
	149 ... 189	24	G 3/4 A	18
Parallel shaft gearboxes F	29	12	G 1/8 A	15
	39	12	G 1/8 A	15
	49 ... 79	13	G 1/4 A	15
	89 ... 129	17	G 3/8 A	15
	149 ... 189	24	G 3/4 A	18
Bevel gearboxes B	19, 29	12	G 1/8 A	15
	39	12	G 1/8 A	15
	49	13	G 1/4 A	15
Bevel gearboxes K	39	12	G 1/8 A	15
	49 ... 89	13	G 1/4 A	15
	109 ... 129	17	G 3/8 A	15
	149 ... 189	24	G 3/4 A	18
Helical worm gearboxes C	29	12	G 1/8 A	15
	39	12	G 1/8 A	15
	49 ... 89	13	G 1/4 A	15

Oil expansion unit

The oil expansion unit increases the expansion space for the lubricant. For certain types of construction and at high operating temperatures, this avoids that lubricant escapes.

The oil expansion unit is supplied as a mounting kit, and can be mounted onto the geared motor vertically or at an angle.

Order code:

Oil expansion unit

G47

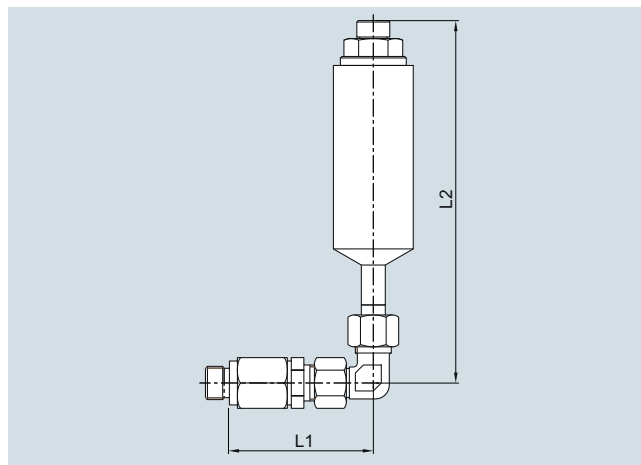


Fig. 10/13 Oil expansion unit type 1

Technical specifications

Gearbox type	Size	Motor size	Width across flats SW	Thread	Dimension L1 mm	Dimension L2 mm	
Helical gearboxes Z and D	39	63 ... 90		G1/8A	69.5	155	
		100 ... 112			82.5		
	49 ... 69	63 ... 90	19/22	G1/4A	42	155	
		100 ... 112			71.5		
		132			93.5		
	79	80 ... 90	19/22	G1/4A	42	155	
		100 ... 132			71.5		
		160			93.5		
	89	100 ... 132	22	G3/8A	42.5	155	
		160			71.5		
	Parallel shaft gearboxes F	39	63 ... 90	22	G1/8A	69.5	155
			100 ... 112	...		82.5	
49 ... 69		63 ... 90	19/22	G1/4A	42	155	
		100 ... 112			71.5		
		132			93.5		
79		80 ... 90	19/22	G1/4A	42.5	155	
		100 ... 132			71.5		
		160			93.5		
89		100 ... 132	22	G3/8A	42.5	155	
		160			71.5		
Bevel gearboxes B		49	63 ... 90	19/22	G1/4A	42	155
			100 ... 112			71.5	
	132		93.5				
Bevel gearboxes K	39	63 ... 90	22	G1/8A	69.5	155	
		100 ... 112			82.5		
	49	63 ... 90	19/22	G1/4A	42	155	
		100 ... 112			71.5		
	69	71 ... 90	19/22	G1/4A	42	155	
		100 ... 112			71.5		
		132			93.5		
	79	71 ... 90	19/22	G1/4A	42	155	
		100 ... 132			71.5		
		160			93.5		
	89	80 ... 132	19/22	G1/4A	71.5	155	
		160			93.5		
109	100 ... 132	22	G3/8A	42.5	155		
	160			71.5			
180	100 ... 132			71.5			
	180						
Helical worm gearboxes C	49 ... 69	63 ... 90	19/22	G1/4A	42	155	
		100 ... 112			71.5		
		132			93.5		
	89	80 ... 90	19/22	G1/4A	71.5	155	
		100 ... 132			71.5		

Gearbox options

Venting and oil level control

Venting

Oil expansion unit (continued)

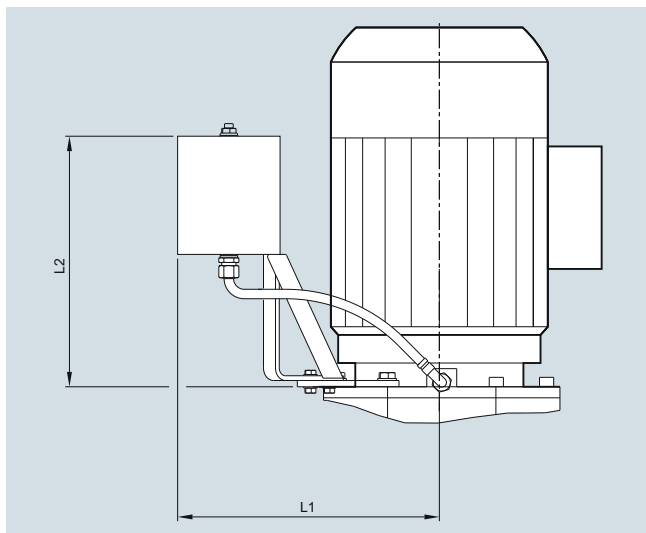


Fig. 10/14 Oil expansion unit type 2

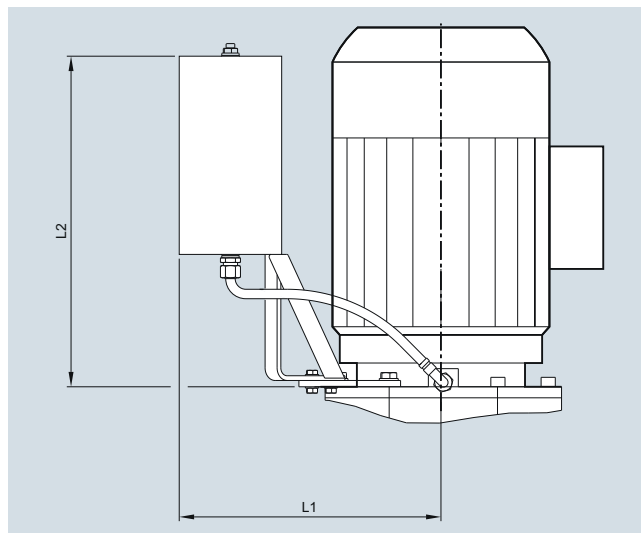


Fig. 10/15 Oil expansion unit type 3

Technical specifications

Gearbox type	Size	Motor size	Type	Thread	Dimension L1 mm	Dimension L2 mm
Helical gearboxes Z and D	109	90 ... 225	2	G3/8A	406	334
	129	90 ... 250	2	G3/8A	442	334
	149	100 ... 250	3	G3/4A	465	505
	169	112 ... 250	3	G3/4A	493	505
	189	112 ... 250	3	G3/4A	493	505
Parallel shaft gearboxes F	109	90 ... 225	2	G3/8A	406	334
	129	90 ... 250	2	G3/8A	442	334
	149	100 ... 250	3	G3/4A	465	505
	169	112 ... 250	3	G3/4A	493	505
	189	112 ... 250	3	G3/4A	493	505
Bevel gearboxes K	129	90 ... 225	2	G3/8A	442	334
	149	90 ... 250	2	G3/4A (G3/8A)	465	334
	169	100 ... 250	3	G3/4A	493	505
	189	112 ... 250	3	G3/4A	493	505

Value in parenthesis applies to mounting position M4

Oil sight glass

For sizes 49 and higher, the oil level is checked using the oil level checking screw.

The oil sight glass is fitted with a reflector for visual monitoring.

Order code:

Oil sight glass

G34

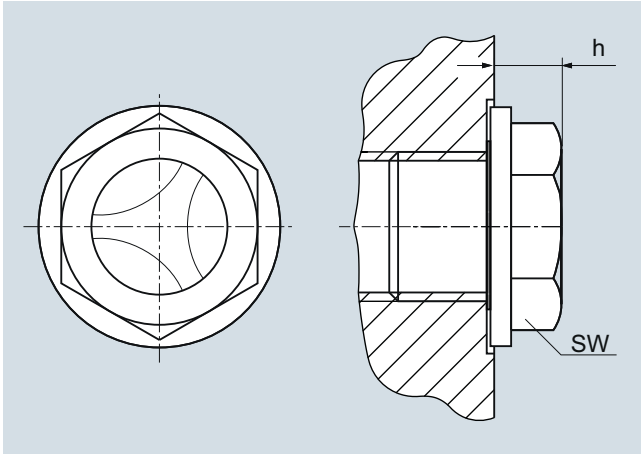


Fig. 10/16 Oil sight glass

Technical specifications

Gearbox type	Size	Width	Thread	Dimension
		across flats		
		SW		h
Helical gearboxes Z and D	49 ... 79	16	G 1/4 A	10
	89 ... 129	19	G 3/8 A	9
	149 ... 189	24	G 3/4 A	10
Parallel shaft gearboxes F	49 ... 79	16	G 1/4 A	10
	89 ... 129	19	G 3/8 A	9
	149 ... 189	24	G 3/4 A	10
Bevel gearboxes B	49	16	G 1/4 A	10
Bevel gearboxes K	49 ... 89	16	G 1/4 A	10
	109 ... 129	19	G 3/8 A	9
	149 ... 189	24	G 3/4 A	10
Helical worm gearboxes C	49 ... 89	16	G 1/4 A	10

Oil drain

Magnetic oil drain screw

For gearboxes from size 39, a magnetic oil drain screw is available that is inserted in the oil drain hole. This serves to collect any metal particles in the gearbox oil.

Order code:

Magnetic oil drain screw

G53

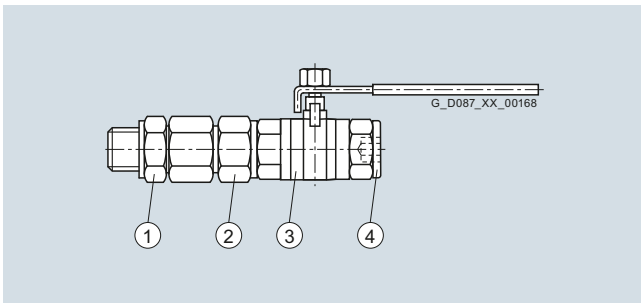


Fig. 10/17 Oil drain valve, straight

- ① Oil drain valve, straight
- ② Screw gland
- ③ Screw gland
- ④ Screw plug

Oil drain valve

For gearboxes from size 39, an oil drain valve is available in either a straight or angled design.

The oil drain valve is supplied complete with screw plug as a kit.

Order code:

Oil drain valve, straight

G54

Oil drain valve, angled

G55

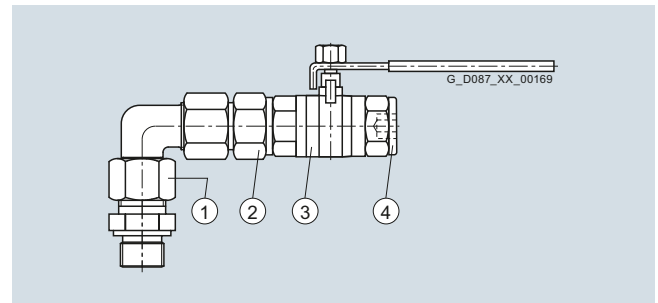


Fig. 10/18 Oil drain valve, angled

- ① Oil drain valve, angled
- ② Screw gland
- ③ Screw gland
- ④ Screw plug

Gearbox options

Reduced-backlash version

Overview

Gearboxes with low torsional backlash are required for high-precision positioning tasks. A minimal torsional backlash also has a favorable effect on torque spikes during startup and on load switching in the drive train.

The torsional backlash of a geared motor depends on several factors. The total torsional backlash is primarily influenced by circumferential backlash, bearing clearance and shaft-hub connections. In addition to the standard versions, reduced-backlash versions of SIMOGEAR geared motors are also available.

Thanks to the overall concept and the plug-on pinion system, motors with lower torsional backlash values can be supplied.

To ensure that the entire driven machine can be designed with minimum possible backlash, it is advisable to select the solution with integral motor mounting (without adapter), output shafts with shrink disk connection or with smooth shafts (without feather key). In this case, only backlash-free power transmission elements should be used.

The specified torsional backlash in minutes of the angle ['] is based on the maximum rotation angle of the output shaft (no load, max. 1 % of rated output torque) with stationary input shaft.

For the exact values, refer to the torque tables. If no values are specified in the tables, this means that a reduced-backlash version is not available for the specific version.

The dimensions of the reduced-backlash gearboxes are identical to those of the standard versions.

Order code:

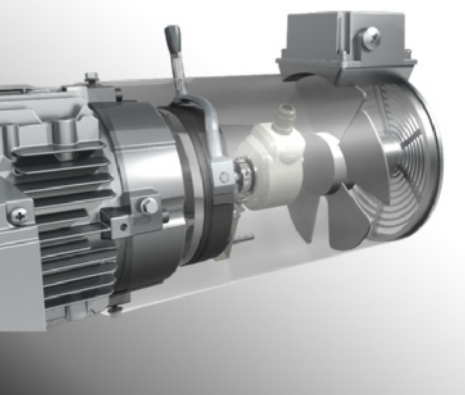
Reduced-backlash version

G99

The following gearboxes are available in reduced-backlash versions

Gearbox	Size									
	09	19	29	39	49	59	69	79	89	
Helical gearboxes Z and D	-	✓	✓	✓	✓	✓	✓	✓	✓	
Parallel shaft gearboxes F	-	-	✓	✓	✓	-	✓	✓	✓	
Bevel gearboxes B	-	✓	✓	✓	✓	-	-	-	-	
Bevel gearboxes K	-	-	✓	✓	✓	-	✓	✓	✓	
Helical worm gearboxes C	-	-	-	-	-	-	-	-	-	
Worm gearboxes S	-	-	-	-	-	-	-	-	-	

Motor options



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Motor options

Electrical design

Voltages and frequencies

Duty types

The three-phase AC motors are designed for duty type S1 according to IEC 60034 (continuous duty).

For inverter operation, the motors with the applicable voltages are also stamped with duty type Inv. Duty.

With IE2 motors with power rating 7.5 kW and above, the notice "IE2 Inv. Duty only" is also attached to the motor.

Order code:

Duty type S1//Inv. Duty

Duty type S3 - 75 % ¹⁾

Duty type Inv. Duty ¹⁾

¹⁾ IE1 motors only

P91

P90

P92

IE2 | EU REGULATION 640/2009
USE WITH VARIABLE
SPEED DRIVE ONLY!

Standard voltages

The three-phase motors are available with rated voltages from 200 up to 690 V.

Motor sizes 63 up to 112 are generally supplied for the voltage range 230/400 V at 50 Hz.

For motor sizes from 132 and above, the standard version is 400/690 V at 50 Hz.

The standard voltages are listed in the following table. These voltages are available at short notice.

Standard motor voltages

Fre- quency	Voltages	Power	Possible specifications						Motor size										Article No.	Suffix Article No.		
			CE	NEMA	UL-R/ CSA	China	EAC	Ex- port ¹⁾	63	71	80	90	100	112	132	160	180	200			225	250	13th data position
Voltages for 50/60 Hz																						
50 Hz	230 V Δ/400 V Y	P ₅₀	✓				✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	2	
60 Hz	460 V Y	P ₆₀			✓	✓				✓	✓	✓	✓	✓	-	-	-	-	-	-	4	
50 Hz	230 V Δ/400 V Y	P ₅₀	✓				✓	✓		✓	✓	✓	✓	✓	-	-	-	-	-	-	9	N2A
60 Hz	460 V Y	P ₅₀			✓	✓									✓	✓	✓	✓	✓	✓	9	N2A
50 Hz	230 V Δ/400 V Y	P ₅₀	✓				✓	✓		-	-	-	-	-	✓	✓	✓	✓	✓	✓	2	
60 Hz	460 V Δ	P ₆₀			✓	✓				-	-	-	-	-	✓	✓	✓	✓	✓	✓	2	
50 Hz	400 V Δ/690 V Y	P ₅₀	✓				✓	✓		-	-	-	-	-	✓	✓	✓	✓	✓	✓	4	
60 Hz	460 V Δ	P ₅₀			✓	✓				-	-	-	-	-	✓	✓	✓	✓	✓	✓	4	
50 Hz	400 V Δ/690 V Y	P ₅₀	✓				✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9	N2B
60 Hz	460 V Δ	P ₆₀			✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9	N2B
Voltages for 50 Hz																						
50 Hz	500 V Y	P ₅₀	✓				✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9	N1C
50 Hz	500 V Δ	P ₅₀	✓				✓	✓		-	-	-	-	✓	✓	✓	✓	✓	✓	✓	9	N1D
50 Hz	220 V Δ/380 V Y ± 10 %	P ₅₀	✓			✓	✓	✓		■	■	■	■	■	■	■	■	■	■	■	9	N1F
50 Hz	380 V Δ/660 V Y ± 10 %	P ₅₀	✓			✓	✓	✓		■	■	■	■	■	■	■	■	■	■	■	9	N1G
50 Hz +3/-5 %	240 V Δ/415 V Y ± 10 %	P ₅₀	✓				✓	✓		■	■	■	■	■	■	■	■	■	■	■	9	N1H
50 Hz +3/-5 %	415 V Δ ± 10 %	P ₅₀	✓				✓	✓		■	■	■	■	■	■	■	■	■	■	■	9	N1J
50 Hz	200 V Δ	P ₅₀	✓				✓	✓		■	■	■	■	■	■	■	■	■	■	■	9	N1K

■ With additional price

¹⁾ With motor power 7.5 kW or higher

Standard voltages (continued)

Standard motor voltages

Fre- quency	Voltages	Power	Possible specifications						Motor size										Article No. 13th data position	Suffix Article No.	
			CE	NEMA	UL-R/ CSA	China	EAC	Ex- port	63	71	80	90	100	112	132	160	180	200			225	250
Voltages for 50//60 Hz																					
60 Hz	220 V Δ/380 V Y	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N4C
60 Hz	220 V Δ/380 V Y	P ₆₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N5C
60 Hz	380 V Δ/660 V Y	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N4D
60 Hz	380 V Δ/660 V Y	P ₆₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N5D
60 Hz	440 V Y	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N4E
60 Hz	440 V Y	P ₆₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N5E
60 Hz	440 V Δ	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N4F
60 Hz	440 V Δ	P ₆₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N5F
60 Hz	460 V Y	P ₅₀	✓	✓	✓		✓		■	■	■	■	■	■	■	■	■	■	■	9	N4H
60 Hz	460 V Y	P ₆₀	✓	✓	✓		✓		■	■	■	■	■	■	■	■	■	■	■	9	N5H
60 Hz	460 V Δ	P ₅₀	✓	✓	✓		✓		■	■	■	■	■	■	■	■	■	■	■	9	N4J
60 Hz	460 V Δ	P ₆₀	✓	✓	✓		✓		■	■	■	■	■	■	■	■	■	■	■	9	N5J
60 Hz	575 V Y	P ₅₀	✓	✓	✓		✓		■	■	■	■	■	■	■	■	■	■	■	9	N4L
60 Hz	575 V Y	P ₆₀	✓	✓	✓		✓		■	■	■	■	■	■	■	■	■	■	■	9	N5L
60 Hz	575 V Δ	P ₅₀	✓	✓	✓		✓		-	-	-	-	■	■	■	■	■	■	■	9	N4M
60 Hz	575 V Δ	P ₆₀	✓	✓	✓		✓		-	-	-	-	■	■	■	■	■	■	■	9	N5M
60 Hz	230 V YY/460 V Y	P ₅₀	✓	✓	✓		✓		■	■	■	■	■	■	■	■	■	■	■	9	N4N
60 Hz	230 V YY/460 V Y	P ₆₀	✓	✓	✓		✓		■	■	■	■	■	■	■	■	■	■	■	9	N5N
60 Hz	230 V Δ/400 V Y	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N4A
60 Hz	400 V Δ/690 V Y	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N4B
60 Hz	200 V Δ	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N4P
60 Hz	208 V Δ	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N4Q
Motor voltages for inverter operation																					
50 Hz	400 V Y	P ₅₀	✓			✓	✓		■	■	■	■	■	■	■	■	■	■	■	9	N6B
50 Hz	400 V Δ	P ₅₀	✓			✓	✓		■	■	■	■	■	■	■	■	■	■	■	9	N6C
50/87 Hz	230 V Δ/400 V Δ	P ₅₀ /P ₈₇	✓			✓	✓		■	■	■	■	■	■	■	■	■	■	■	9	N6A
Voltages for brake motors with function rectifier																					
50 Hz	400 V Y	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N6B
50 Hz	400 V Δ	P ₅₀	✓				✓		■	■	■	■	■	■	■	■	■	■	■	9	N6C
60 Hz	440 V Δ	P ₅₀	✓	✓			✓		■	■	■	■	■	■	■	■	■	■	■	9	N4G
60 Hz	440 V Δ	P ₆₀	✓	✓			✓		■	■	■	■	■	■	■	■	■	■	■	9	N5G
60 Hz	460 V Δ	P ₅₀	✓	✓			✓		■	■	■	■	■	■	■	■	■	■	■	9	N4K
60 Hz	460 V Δ	P ₆₀	✓	✓			✓		■	■	■	■	■	■	■	■	■	■	■	9	N5K

■ With additional price

Motor options

Electrical design

Motor protection

Temperature sensor

The temperature sensor is a **positive temperature coefficient (PTC)** thermistor which offers comprehensive protection against thermal motor overload. The temperature of the winding can be accurately monitored thanks to its low thermal capacity and the excellent heat contact with the winding. The PTC thermistor exhibits a sudden change in resistance when a rated response temperature is reached.

A tripping unit is used to evaluate the change in resistance and to open auxiliary circuits via auxiliary contacts.

The switching hysteresis of the PTC thermistor is low, which facilitates fast restarting of the drive. Motors with this type of protection are recommended for heavy duty starting, intermittent duty, extreme changes in load, high ambient temperatures, or fluctuating supply systems.

In order to prevent serious damage by impulse voltage peaks to the sensor and the downstream evaluation electronic circuitry which can occur in inverter-fed operation as a result of the close contact between PTC thermistor and winding, the connecting cables and the PTC thermistor have reinforced insulation designed to provide "protective separation".

Order code:

PTC thermistor for disconnection

M10

PTC thermistor for warning and disconnection ¹⁾

M11

¹⁾ Not possible for worm geared motors S

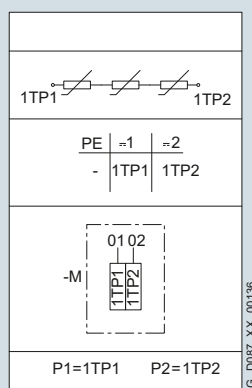


Fig. 11/1 Connection circuit diagram

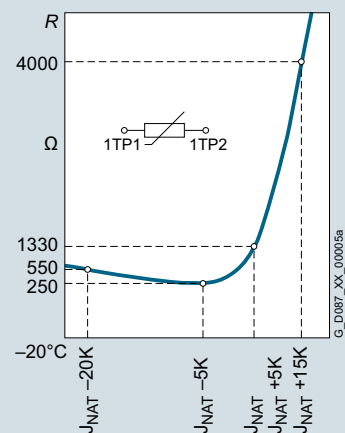


Fig. 11/2 Temperature sensor characteristic

Temperature switch

The temperature switch is a **winding thermostat (NC contact)** and is suitable as a protection device for slowly increasing motor temperatures. When the rated response temperature is reached, it can open an auxiliary circuit. When the motor temperature decreases, the winding thermostat closes again as soon as the temperature falls significantly below the rated response temperature.

When the motor current rises quickly (e.g. with a locked rotor), these switches are not suitable due to their large thermal time constants.

Order code:

Winding thermostat for disconnection

M12

Winding thermostat for warning and disconnection ¹⁾

M13

¹⁾ Not possible for worm geared motors S

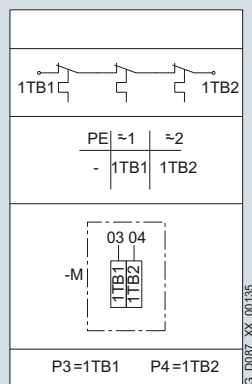


Fig. 11/3 Connection circuit diagram

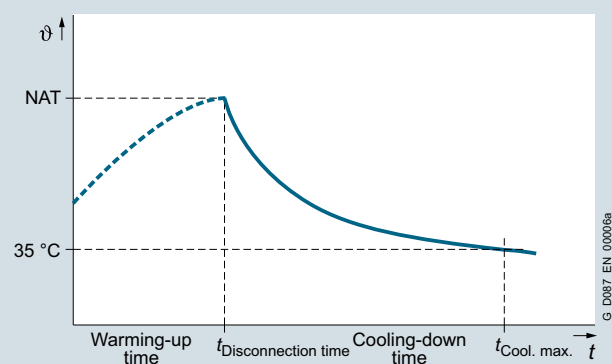


Fig. 11/4 Temperature switch characteristic

Temperature sensor KTY 84-130

This sensor is a PTC thermistor that changes its resistance depending on the temperature in accordance with a defined curve. The KTY 84-130 thermistor can be used for monitoring the motor temperature for inverter operation.

Some inverters determine the motor temperature using the resistance of the temperature sensor. They can be set to a required temperature for warning and disconnection.

In order to prevent serious damage by impulse voltage peaks to the sensor and the downstream evaluation electronic circuitry which can occur in inverter-fed operation as a result of the close contact between temperature sensor and winding, the connecting cables and the temperature sensor have reinforced insulation designed to provide "protective separation".

Order code:

Temperature sensor KTY 84-130 ¹⁾

M16

¹⁾ Not possible for worm geared motors S

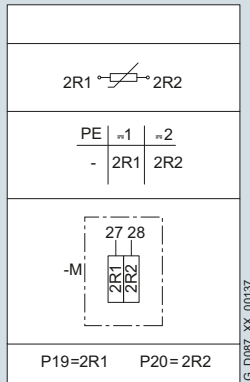


Fig. 11/5 Connection circuit diagram

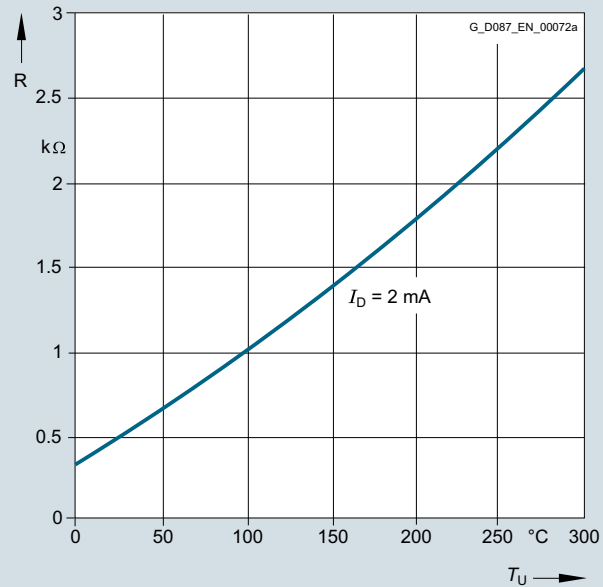


Fig. 11/6 Temperature sensor characteristic

1x PT100 resistance thermometer

This sensor is a PTC thermistor and at 0 °C has a resistance of 100 Ω. Its resistance changes almost linearly in the range between 0 and 100 °C. Changes in temperature are transferred to an evaluation device in the form of resistance changes.

The evaluation device is not included in the scope of supply.

In order to prevent serious damage by impulse voltage peaks to the sensor and the downstream evaluation electronic circuitry which can occur in inverter-fed operation as a result of the close contact between resistance thermometer and winding, the connecting cables and the resistance thermometer have reinforced insulation designed to provide "protective separation".

Order code:

1x PT100 resistance thermometer

M19

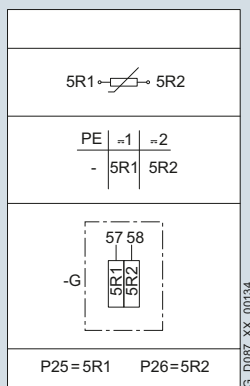


Fig. 11/7 Connection circuit diagram

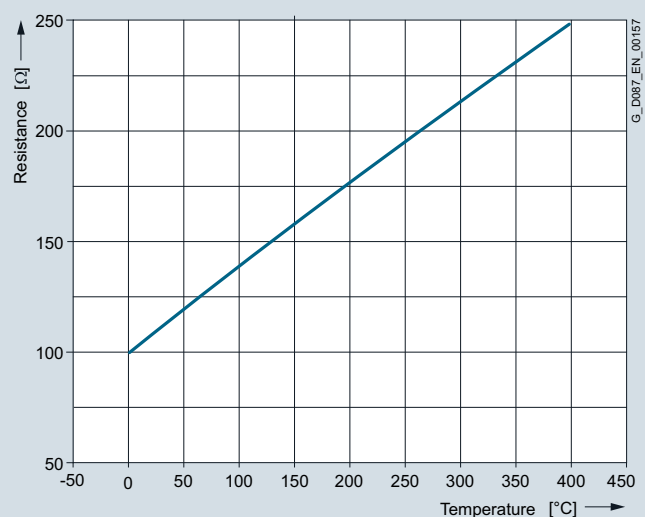


Fig. 11/8 Resistance thermometer characteristic

Motor options

Electrical design

Motor protection

Selection and ordering data

Motor protection	Motor size												Order code
	63	71	80	90	100	112	132	160	180	200	225	250	
PTC thermistor disconnection	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	M10
PTC thermistor, warning and disconnection ¹⁾	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	M11
Winding thermostat, disconnection	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	M12
Winding thermostat, warning and disconnection ^{1) 2)}	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	M13
Temperature sensor KTY 84-130 ¹⁾	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	M16
1x PT100 resistance thermometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	M19

¹⁾ Not possible for worm geared motors S

²⁾ Not possible for inverter operation

Protective devices

Number of windings	Example	Function	Number of temperature-dependent protective devices	Number of terminals
1	Motors with one pole number	Disconnection	3	2
		Warning and disconnection	6	3 (motor size 71 to 200)
				4 (motor size 225 to 250)

Anti-condensation heating

Anti-condensation heaters can be fitted to motors whose windings are exposed to climatic conditions where there is a risk of condensation, e.g. stationary motors in a damp environment or motors subject to considerable temperature fluctuations. Anti-condensation heating must not be switched on during operation.

Instead of an anti-condensation heater, another possibility is to connect a voltage that is approximately 4 to 10 % of the rated motor voltage to stator terminals U1 and V1; 20 to 30 % of rated motor current is sufficient to heat the motor.

Order code:

115 V anti-condensation heating

M40

230 V anti-condensation heating

M41

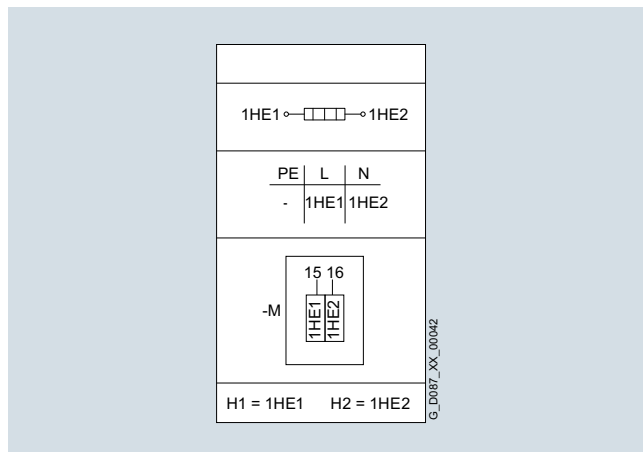


Fig. 11/9 Connection circuit diagram for the anti-condensation heating

Technical specifications

Motor size	Heating power W
63 ... 80 ¹⁾	12.5
90 ... 112	25
132 ... 200	50
225 ... 250	92

¹⁾ Only possible for worm geared motors S in motor size 71

DURIGNIT IR 2000 insulation

The DURIGNIT IR 2000 insulating system consists of high-quality enamel wires and insulating sheet materials in conjunction with temperature-resistant resin impregnation.

This ensures that these motors will have a high mechanical and electrical strength, high service value, and a long service life. The insulating system protects the winding to a large degree against aggressive gases, vapors, dust, oil, and increased air humidity. It can withstand the usual vibration stressing.

Inverter-fed operation up to 500 V +10 % line voltage

The standard insulation of SIMOGEAR geared motors is designed such that inverter-fed operation is possible at line voltages of 400 V, 460 V and 500 V.

Depending on the line voltage, insulation systems with different insulation strengths are used as the standard insulation.

When SIMOGEAR geared motors are operated on inverters with step-up converter (ALM, AFE), the data in the table below must be observed.

Module type	Line voltage		
	400 V (+10 %)	460 V (+10 %)	500 V (+10 %)
Inverters without regenerative feedback capability with / without brake chopper			
BLM (Basic Line Module)	Standard insulation		
Inverters with regenerative feedback capability			
SLM (Smart Line Module)	Standard insulation		
Step-up converter ALM (Active Line Module) AFE (Active Front End)	Standard insulation	On request	On request

Compliance with the following limit values for permissible voltage stress is essential (voltage values are peak values).

	Line voltage		
	400 V (+10 %)	460 V (+10 %)	500 V (+10 %)
$\dot{U}_{\text{phase-to-phase}}$	$\leq 1\,500\text{ V}$	$\leq 1\,500\text{ V}$	$\leq 1\,600\text{ V}$
$\dot{U}_{\text{phase-to-ground}}$	$\leq 1\,100\text{ V}$	$\leq 1\,100\text{ V}$	$\leq 1\,400\text{ V}$
Voltage rise times t_s	$> 0.1\ \mu\text{s}$	$> 0.1\ \mu\text{s}$	$> 0.1\ \mu\text{s}$

During installation, the EMC guidelines must be taken into account.

Temperature class

All motors are designed for temperature class 155 (F). They are utilized to temperature class 130 (B).

The 4-pole motors can be optionally implemented for temperature class 180 (H). The winding is utilized to temperature class 155 (F).

Order code:

Temperature class 180 (H)¹⁾

M08

¹⁾ Not possible for worm geared motors S

Increased air humidity/temperature with 30 to 60 g water per m³ of air

The motors in the standard range are designed for up to 30 g water per m³. A design for increased air humidity in the range between 30 and 60 g water per m³ air as a function of the temperature is possible, as shown in the following table.

Order code:

Increased air humidity/temperature with 30 to 60 g water per m³ of air ¹⁾

N54

¹⁾ Not possible for worm geared motors S

Relative humidity	Temperature						
	+20 °C	+30 °C	+40 °C	+50 °C	+60 °C	+70 °C	+80 °C
10 %	2	3	5	8	13	20	29
15 %	3	5	8	12	19	30	44
20 %	3	6	10	17	26	39	58
25 %	4	8	13	21	32	49	
30 %	5	9	15	25	39	59	
35 %	6	11	18	29	45		
40 %	7	12	20	33	52		
45 %	8	14	23	38	58		
50 %	9	15	26	41			
55 %	10	17	28	46			
60 %	10	19	31	50			
65 %	11	20	33	54			
70 %	12	21	36	58			
75 %	13	23	38				
80 %	14	24	41				
85 %	15	26	43				
90 %	16	27	46				
95 %	16	29	49				
100 %	17	30	51				

Motor options

Mechanical design

Degrees of protection

Overview

Note:

The degree of protection only applies to the electrical equipment (motor, brake, encoder). Depending on the application area, the applicable measures must be applied to the gearbox.

Available degrees of protection

Degree of protection	Motor options that can be mounted	Order code
IP55	No restrictions	K01
IP56 ¹⁾	Possible in conjunction with external fan, incremental encoder and absolute encoder	K02
IP65 ¹⁾	Possible in conjunction with a brake, backstop, external fan, incremental encoder, absolute encoder, resolver, and motor plug	K03

¹⁾ Not possible for worm geared motors S

Cooling and ventilation

Overview

The motors have radial-flow fans, which cool regardless of the direction of rotation of the motor (cooling method IC 411, IEC 60034-6). The air flows from the non-drive end (NDE) to the drive end (DE).

Self ventilation

The motor fan can either be a standard fan, metal fan, or high inertia fan.

Fan design

Motor size	Fan	Material Fan	Fan cover	Order code
63 ... 90	Standard fan	Plastic	Sheet metal	M21
	Metal fan	Aluminum	Sheet metal	
	High inertia fan	Steel core with plastic fan blades	Sheet metal	
100 ... 132	Standard fan	Plastic	Sheet metal	M21
	Metal fan	Aluminum	Sheet metal	
	High inertia fan	Cast iron	Sheet metal	
160	Standard fan	Plastic	Sheet metal	M21
	Metal fan	Aluminum	Sheet metal	
180 ... 250	Standard fan	Plastic	Plastic / sheet metal ¹⁾	M21
	Metal fan	Steel	Plastic / sheet metal ¹⁾	

¹⁾ The fan cover is made of sheet metal for motors with brake

Standard fan

As standard, the motors are equipped with a plastic fan. This can be used for the entire standard ambient temperature range.

Metal fan

As an alternative to the standard plastic fans, aluminum fans are available for the motors.

Metal fans are used for specific environmental conditions, e.g.:

- If there are solid or dirt particles, such as wood chips, textile fibers in the cooling air
- Special motor designs for increased ambient temperatures exceeding +60 °C

Order code:

Metal fan	M21
-----------	------------

High inertia fan

When required, 4-pole motors up to size 132 can be equipped with a high inertia fan.

High inertia fans as additional inertia are finely balanced according to DIN ISO 1940. Applications typically involve drives for travel gear, conveying equipment or generally to support soft starting and/or soft braking for line operation.

Order code:

High inertia fan ¹⁾	M22
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¹⁾ Not possible for worm geared motors S

A high inertia fan increases the moment of inertia of the motor according to the table below.

Motor size	J_z 10 ⁻⁴ kgm ²	m_{fan} kg
71	17.1	1.38
80	27.9	1.75
90S/90L	54.0	2.55
100L	116.0	3.30
112M	230.0	5.30
132S/132M/132ZM	562.0	9.10

Forced ventilation

Forced ventilation (external fan) can be combined with almost all brakes and encoders as required.

Order code:

Separately driven fan ¹⁾

M23

¹⁾ Not possible for worm geared motors S

Technical specifications

Motor size	Frequency Hz	Rated voltage range			Rated current A	Power consumption W	Volume flow m ³ /h	Weight kg
		Phase	V	Connection				
71	50	1 AC	230 ... 277	Δ(Δ)	0.12	33.0	78	1.45
		3 AC	220 ... 303/346 ... 525	Δ/Y	0.11/0.06	31.0		
	60	1 AC	230 ... 277	Δ(Δ)	0.12	33.0	98	
		3 AC	220 ... 332/380 ... 575	Δ/Y	0.11/0.06	31.0		
80	50	1 AC	230 ... 277	Δ(Δ)	0.14	37.0	127	1.50
		3 AC	200 ... 330/346 ... 525	Δ/Y	0.11/0.05	34.0		
	60	1 AC	230 ... 277	Δ(Δ)	0.14	37.0	148	
		3 AC	220 ... 332/380 ... 575	Δ/Y	0.11/0.06	34.0		
90	50	1 AC	230 ... 277	Δ(Δ)	0.29	65.0	200	1.90
		3 AC	200 ... 303/346 ... 525	Δ/Y	0.38/0.22	91.0		
	60	1 AC	230 ... 277	Δ(Δ)	0.29	65.0	240	
		3 AC	220 ... 332/380 ... 575	Δ/Y	0.38/0.22	91.0		
100	50	1 AC	230 ... 277	Δ(Δ)	0.30	75.0	260	2.05
		3 AC	200 ... 303/346 ... 525	Δ/Y	0.37/0.22	91.0		
	60	1 AC	230 ... 277	Δ(Δ)	0.30	75.0	310	
		3 AC	220 ... 332/380 ... 575	Δ/Y	0.37/0.22	91.0		
112	50	1 AC	230 ... 277	Δ(Δ)	0.37	94.0	337	2.15
		3 AC	200 ... 303/346 ... 525	Δ/Y	0.35/0.20	103.0		
	60	1 AC	230 ... 277	Δ(Δ)	0.37	94.0	411	
		3 AC	220 ... 332/380 ... 575	Δ/Y	0.35/0.20	103.0		
132	50	1 AC	230 ... 277	Δ(Δ)	0.57	149.0	532	3.00
		3 AC	200 ... 303/346 ... 525	Δ/Y	0.58/0.33	148.0		
	60	1 AC	230 ... 277	Δ(Δ)	0.57	149.0	633	
		3 AC	220 ... 332/380 ... 575	Δ/Y	0.58/0.33	148.0		
160	50	1 AC	230 ... 277	Δ(Δ)	0.97	253.0	953	4.20
		3 AC	200 ... 303/346 ... 525	Δ/Y	0.93/0.56	360.0		
	60	3 AC	220 ... 332/380 ... 575	Δ/Y	0.93/0.56	360.0	1 068	
		1 AC	230 ... 277	Δ(Δ)	-	-		
180	50	1 AC	230 ... 277	Δ(Δ)	0.93	225.0	860	8.15
		3 AC	220 ... 290/380... 500	Δ/Y	0.71/0.40	220.0		
	60	1 AC	230 ... 277	Δ(Δ)	-	-	On request	
		3 AC	220 ... 332/380... 575	Δ/Y	0.85/0.51	280.0		
200	50	1 AC	230 ... 277	Δ(Δ)	0.93	225.0	950	9.75
		3 AC	220 ... 290/380... 500	Δ/Y	0.85/0.51	220.0		
	60	1 AC	230 ... 277	Δ(Δ)	-	-	On request	
		3 AC	220 ... 332/380... 575	Δ/Y	0.71/0.40	280.0		
225 ... 250	50	3 AC	220 ... 240/380 ... 420	Δ/Y	2.0/1.15	450.0	On request	22.0
	60	3 AC	440 ... 480	Y	1.05	520.0	On request	

Modular system in combination with self ventilation and forced ventilation for motor size 63 to 200

Cooling method	Motor plug	Encoder				Brake					Back-stop	2nd shaft extension		
		Incremental encoders		Absolute encoder		Resolver	Encoder under cover	Encoder accessories	Without manual release	With manual release			Microswitch	
		Functionally safe no	Functionally safe yes	Functionally safe no	Functionally safe yes									
Self ventilation														
Standard fan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	On request	✓	✓
Metal fan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	On request	✓	✓
High inertia fan ²⁾	✓	✓	-	✓	-	✓	✓	✓	✓	✓	✓	On request	✓	✓
Canopy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	On request	✓	-
Forced ventilation ²⁾														
Canopy	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	On request	✓	-

¹⁾ Not in conjunction with L4, L8, L16

²⁾ Not possible for worm geared motors S

Motor options

Mechanical design

Motor connection and terminal boxes

Connection, circuit and terminal boxes

Location and position of the terminal box

The terminal box of the motor can be mounted in four different locations or positions. The position of the terminal box is always when viewing the drive end (DE) of the motor.

The standard position of the terminal box is on the right-hand side, with the cable entry from below (1A).

The terminal box is always located at the non-drive end (NDE) of the motor.

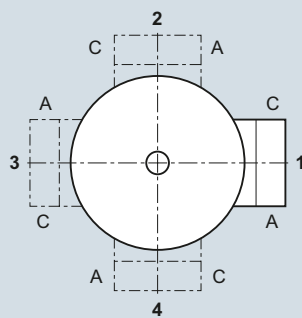
Selection data, cable entry

Terminal box position	Position of the cable entry	Order code
Motor	LA63 ... 71, LE80 ... 160, LES180 ... 250	
1	A	M55
	B	M56
	C	M57
	D	M58
2	A	M59
	B	M60
	C	M61
	D	M62
3	A	M63
	B	M64
	C	M65
	D	M66
4	A	M67
	B	M68
	C	M69
	D	M70 ¹⁾

1) Not possible for worm geared motors S

Terminal box position

When viewing DE



Position of the cable entry

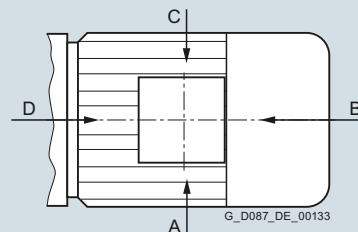


Fig. 11/10 Terminal box position and cable entry

Motor connection

The number of winding ends depends on the winding design. Three-phase AC motors are connected to the three phase conductors L1, L2, and L3 of a three-phase line supply. The motor rated voltage in the operating connection must match the phase conductor voltages of the line supply.

When the three phases operate in sequence and are connected to the terminals of the motor in alphabetical order U1, V1 and W1, the motor rotates clockwise when viewing the DE motor shaft.

The direction of rotation of the motor can be reversed if two connecting cables are interchanged. Labeled terminals are provided to connect the protective conductor.

The connections for a brake, anti-condensation heating or thermal motor protection are also located in the terminal box.

Connection, circuit and terminal boxes (continued)

Terminal box assignment

Motor size	Terminals Number	Contact screw thread	Max. connectable conductor mm ²	Cable entry		Auxiliary terminals						
				metric	NPT	Number	Max. connectable conductor mm ²					
63	6 (9 for YY/Y motor connection)	M4	1.5 (2.5 with cable lug)	1 x M25 x 1.5 + 1 x M20 x 1.5	2 x 1/2"	8	2.5					
71												
80												
90S/L												
100L												
112M	M5	16	2 x M32 x 1.5	3/4" + 1/2"	10							
132S/M												
160M/L												
180M/L												
200L												
225S/M												
250M												
							M6	25	2 x M40 x 1.5	1 1/4" + 1/2"		
							M8	35	2 x M50 x 1.5	1 1/2" + 1/2"		
							M10	120	2 x M63 x 1.5			
	M12	240		2 1/2" + 1/2"								

Motor connection Δ/Y

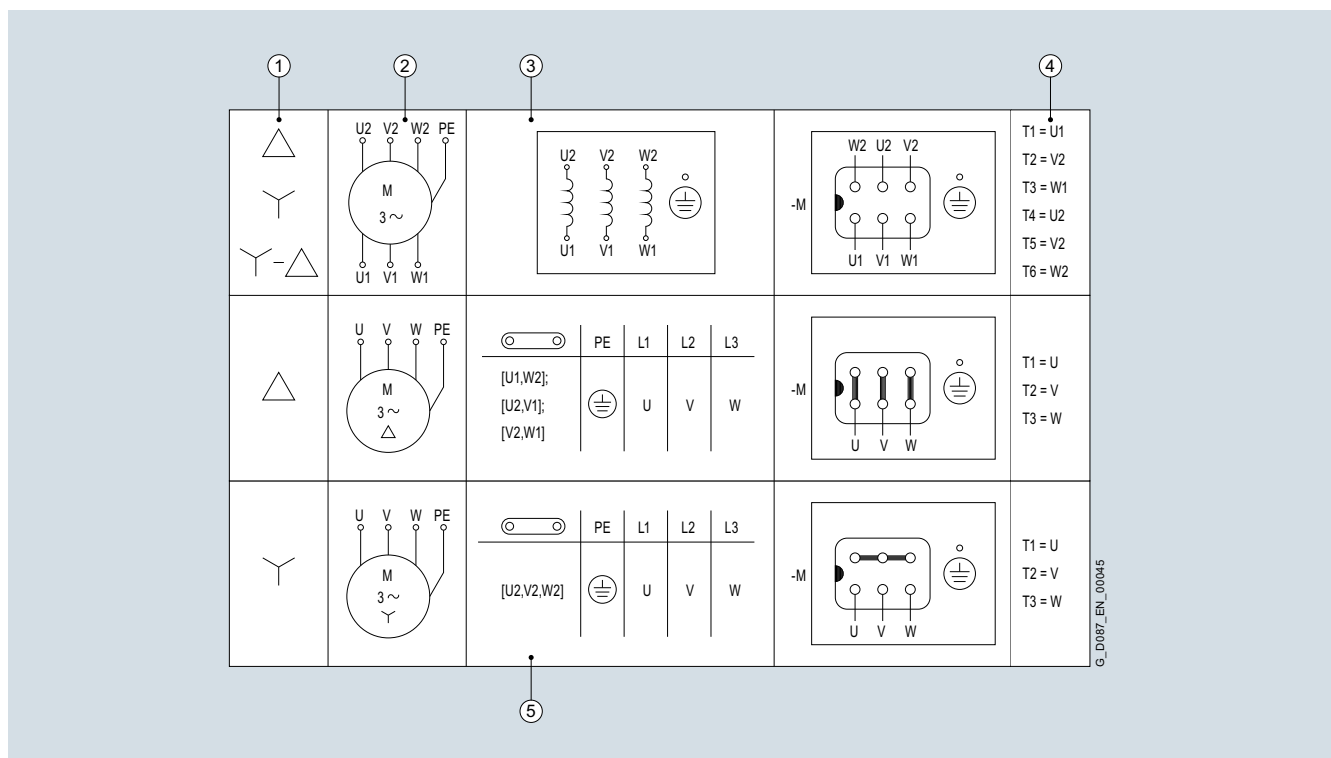


Fig. 11/11 Connection circuit diagram, motor connection Δ/Y

- ① Motor connection
- ② Circuit diagram symbols
- ③ Winding arrangement in the motor
- ④ Comparison:
Terminal designation acc. to NEMA MG1/acc. to IEC 60034-8
- ⑤ Location of the jumpers on the terminal board and juxtaposition of the line connection with the motor connection

Motor options

Mechanical design

Motor connection and terminal boxes

Connection, circuit and terminal boxes (continued)

Motor connection Y

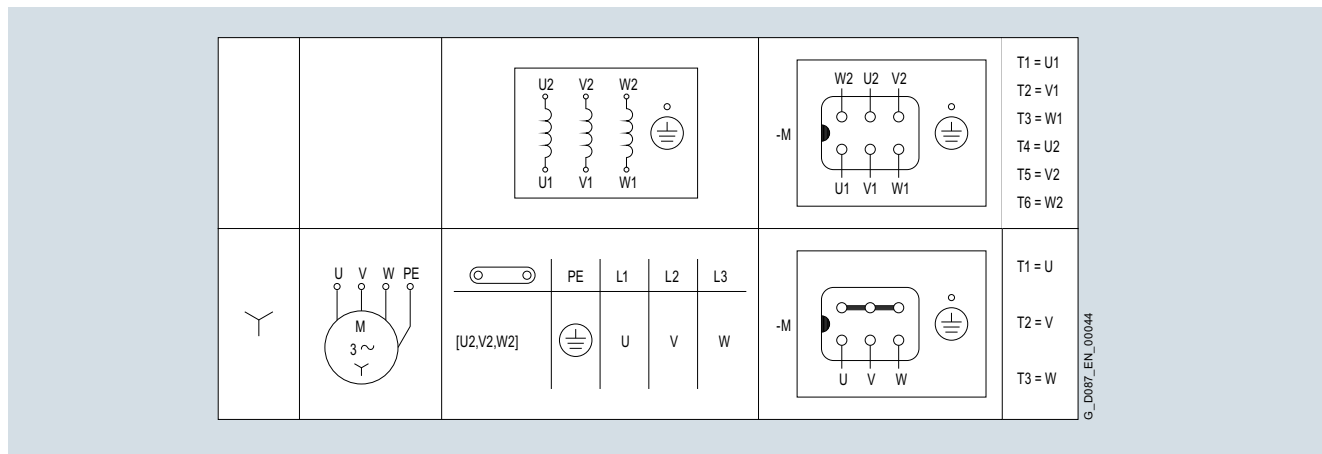


Fig. 11/12 Connection circuit diagram, motor connection Y

Motor connection YY/Y

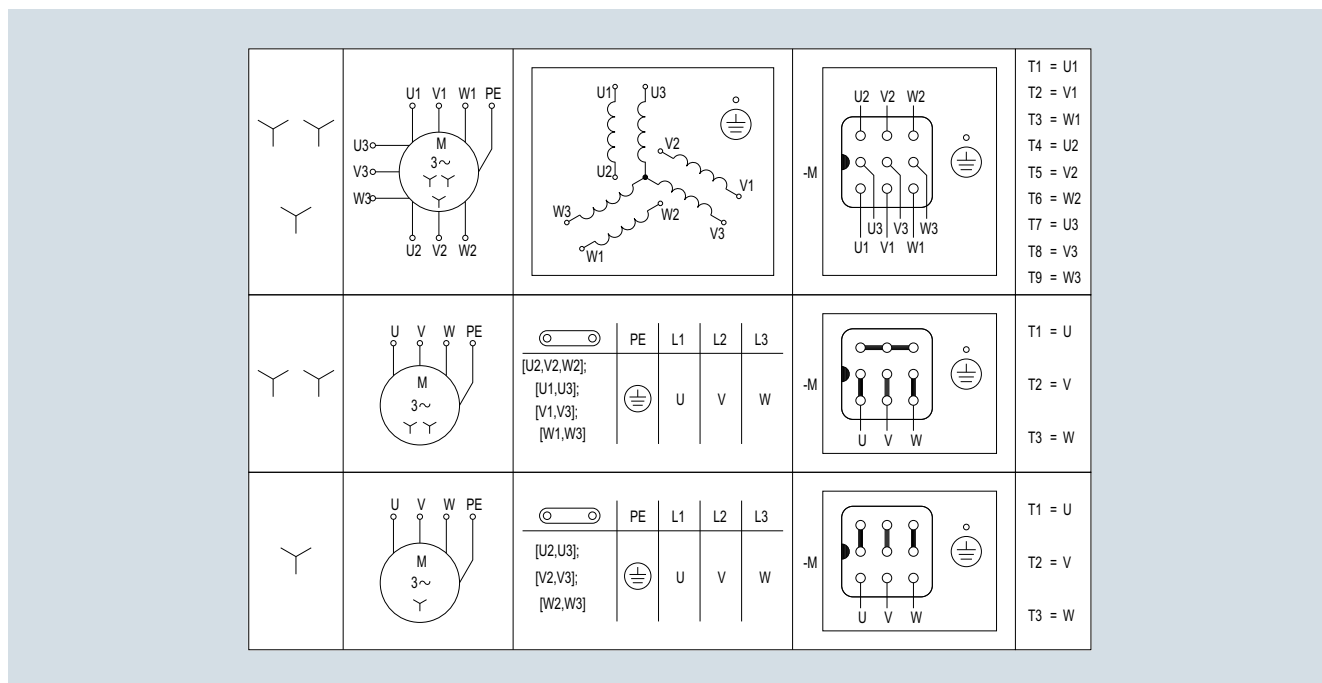


Fig. 11/13 Connection circuit diagram, motor connection YY/Y

Terminal connection

The terminal board accommodates the terminals that are connected to the leads to the motor windings.

The terminals are designed so that up to size 160, the external (line) connections can be established without requiring cable lugs.

Cable entries

Motor size	Number of cable entries	Terminal box material	Line feeder cable connection
63 ... 160	2 cable entries incl. screw plugs	Aluminum alloy	With or without cable lug
180 ... 250	2 cable entries incl. screw plugs	Cast iron	With cable lug

Connection, circuit and terminal boxes (continued)

Terminal box type

The terminal box contains all the electrical connections that are installed in the motor. Different sizes of terminal box are used depending on the connections required.

The dimensions of terminal boxes can be found in [chapter Motors from page 8/42](#).



Fig. 11/14 Terminal box type gk030, TB1E00, TB1F00, TB1H00, TB1J00

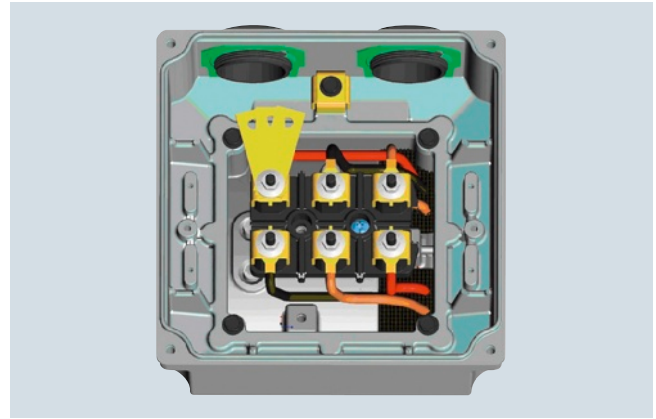


Fig. 11/15 Terminal box type gk127, TB1E10, TB1F10, TB1H10, TB1J10, TB1K01, TB1L01, TB1N01

Cable entry metric

Motor size	Motor options				Terminal box type
	Brake	Winding protection	Heating	Application terminal box	
63 ... 71	Without	PTC thermistor for disconnection	Without	Without	gk030 ¹⁾
		Winding thermostat for disconnection			
		Temperature sensor KTY 84-130			
		1x PT100 resistance thermometer			
With	No restriction	With	gk127 ¹⁾		
80 ... 90	Without	PTC thermistor for disconnection	No restriction	Without	TB1E00
		Winding thermostat for disconnection			
		Temperature sensor KTY 84-130			
		1x PT100 resistance thermometer			
With	No restriction	TB1E10			
100 ... 112	Without	PTC thermistor for disconnection	No restriction	Without	TB1F00
		Winding thermostat for disconnection			
		Temperature sensor KTY 84-130			
		1x PT100 resistance thermometer			
With	No restriction	TB1F10			
132	Without	PTC thermistor for disconnection	No restriction	Without	TB1H00
		Winding thermostat for disconnection			
		Temperature sensor KTY 84-130			
		1x PT100 resistance thermometer			
With	No restriction	TB1H10			
160	Without	PTC thermistor for disconnection	No restriction	Without	TB1J00
		Winding thermostat for disconnection			
		Temperature sensor KTY 84-130			
		1x PT100 resistance thermometer			
With	No restriction	TB1J10			
180	Without	No restriction	TB1K01		
	With	No restriction			
200	Without	No restriction	TB1L01		
	With	No restriction			
225	Without	No restriction	-	TB1L01	
	With	No restriction	-	TB1N01	
250	Without	No restriction	-	TB1N01	
	With	No restriction	-		

¹⁾ For terminal boxes with 9 terminals (circuit YY/Y) terminal box type TB1E10

Motor options

Mechanical design

Motor connection and terminal boxes

Connection, circuit and terminal boxes (continued)

Cable entry NPT

The cable entry with national pipe thread (NPT) can be ordered as an option.

The dimensions of terminal boxes can be found in [chapter Motors from page 8/42](#).

Order code:

Cable entry NPT

M45

Motor size	Terminal box type
63 ... 71	gk127 ¹⁾
80 ... 90	TB1E10
100 ... 112	TB1F10
132	TB1H10
160	TB1J10
180	TB1K01
200	TB1L01
225	TB1L01
250	TB1N01

External grounding

IEC 60034 specifies additional external grounding for motors with ratings of 100 kW and higher. For motors, sizes 63 up to 160, this is optionally available.

Motors in sizes 180 to 250 are supplied as standard with external grounding.

Order code:

External grounding

N53

Maximum conductor connection for external grounding

Motor size	Thread size
63 ... 90	M4
100 ... 112	M5
132 ... 180	M6
200	2 x M6
225 ... 250	2 x M8

Modular system in combination with motor connection and terminal box for motor size 63 to 200

Modular system	Encoder system	Brake				Self ventilation Forced ventilation	Back-stop	Second shaft extension
		Without manual release	With manual release	Microswitch				
			Without locking mechanism	With locking mechanism	Air flow monitoring ¹⁾	Wear monitoring		
Terminal box	✓	✓	✓	✓	✓	On request	✓	✓
Motor plug	✓	✓	✓	✓	-	On request	✓	✓

¹⁾ Not in conjunction with L4, L8, L16

Modular system in combination with motor connection and terminal box for motor size 225 to 250

Modular system	Encoder system	Brake				Self ventilation Forced ventilation	Back-stop	Second shaft extension
		Without manual release	With manual release	Microswitch				
			With locking mechanism	Fan monitoring	Wear monitoring			
Terminal box	✓	✓	✓	✓	On request	✓	✓	✓

Overview

The motor plug is supplied ready for use, and replaces the terminal box with terminal board.

Motor plugs are also available in an EMC design. A counterplug can also be provided.

In the basic design, the motor plug connection is in position B, see 11/10. The dimensions depend on the motor size.

Especially if a brake with a manual release lever is used in the direction of the non-drive end (NDE), a check must be made to ensure that the motor plug does not collide with the manual release lever in the direction of the drive and (DE).

The main advantages of a motor plug over a terminal box with terminals are as follows:

- Peripheral equipment can be quickly installed
- Reduction of installation and repair times for end users
- No wiring errors as a result of the plug system
- Replacement of a geared motor without having to make any intervention in the electronics

The winding connections and, optionally, the power supply for the brake and the signal cables for the thermistors are connected in the plug housing.

The motor connection (star or delta connection) is selected by the customer in the form of the counterplug used.

HAN 10E motor plug

The motor plug is compatible with the products from the ECOFAST field device system.

The motor plug is available for motor sizes 63 to 132 and can be used for line voltages at the motor plug ≤ 500 V and rated currents ≤ 16 A.

The motor plug can be used in the standard temperature range from -20 up to +40 °C. A special design is required for higher temperatures.

Technical specifications

Number of contacts	10 + ⊕
Max. voltage	500 V
Max. current load	16 A
Specifications	CE, cUL-Rus
Degree of protection	IP65

Order code:

HAN 10E motor plug (2 brackets) ¹⁾	N00
HAN 10E motor plug (2 brackets) EMC ¹⁾	N01
HAN 10E motor plug (1 bracket) ¹⁾	N04
HAN 10E motor plug (1 bracket) EMC ¹⁾	N06
HAN 10E counterplug ¹⁾	N18

¹⁾ Not possible for worm geared motors S

Connection assignment

PIN	1	2	3	4	5	6	7	8	9	10	PE
Connection	U1	V1	W1	Brake	Brake	W2	U2	V2	Temperature-dependent winding protection		Protective conductor

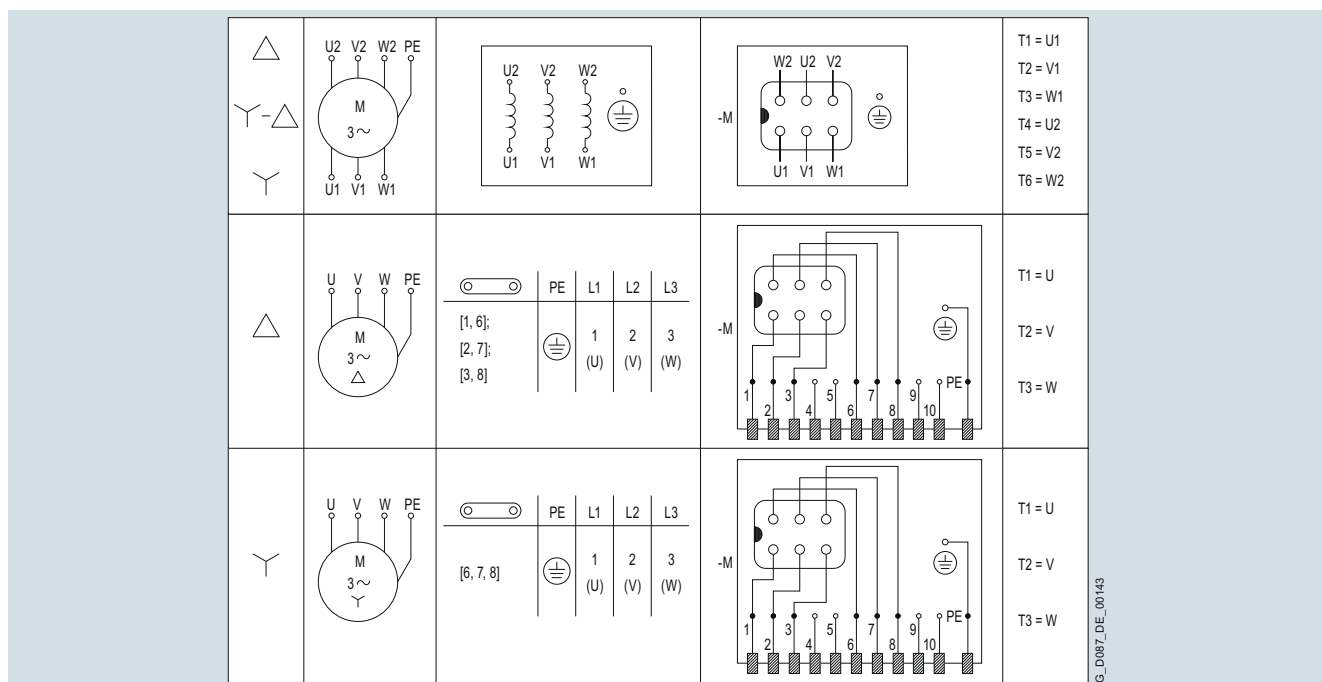


Fig. 11/16 Connection circuit diagram for motor winding

Motor options

Mechanical design

Motor plug

HAN K4/4 motor plug

The motor plug is available for motor sizes 132 up to 200, and can be used for line voltages ≤ 690 V at the power connection and ≤ 250 V at the control connection – as well as rated currents ≤ 63 A at the power connection and ≤ 16 A at the control connection.

Technical specifications

Number of contacts	4 + 4 + ⊕
Max. voltage power range	690 V (pollution degree 3)
Max. current load power range	63 A
Max. voltage control range	250 V (pollution degree 3)
Max. current load control range	16 A
Specifications	CE, cUL-Rus
Degree of protection (interlocked)	IP65

Order code:

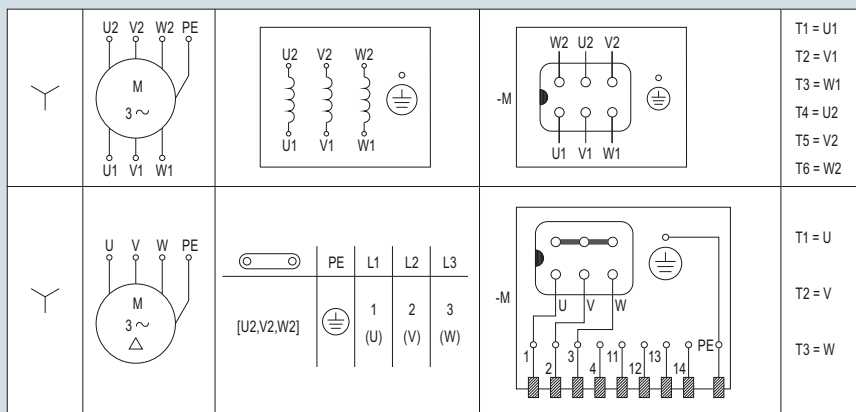
- HAN K4/4 motor plug (1 bracket) ¹⁾
- HAN K4/4 motor plug (1 bracket) EMC ¹⁾
- HAN K4/4 motor plug (2 brackets) ¹⁾
- HAN K4/4 motor plug (2 brackets) EMC ¹⁾
- HAN K4/4 counterplug ¹⁾

- N08**
- N09**
- N10**
- N11**
- N19**

¹⁾ Not possible for worm geared motors S

Connection assignment

PIN	1	2	3	4	11	12	13	14	PE
Connection	U	V	W	-	Brake	Brake	Temperature-dependent winding protection		Protective conductor



G_D087_DE_00144

Fig. 11/17 Connection circuit diagram for motor winding

HAN Q8 motor plug

The motor plug is available for motor sizes 63 to 132 and can be used for line voltages ≤ 500 V as well as rated currents ≤ 16 A.

Technical specifications

Number of contacts	8 + ⊕
Max. voltage power range	500 V (pollution degree 3)
Max. current load power range	16 A
Specifications	CE, cUL-Rus
Degree of protection (interlocked)	IP65

Order code:

HAN Q8 motor plug (1 bracket) EMC ¹⁾

N12

¹⁾ Not possible for worm geared motors S

Connection assignment

PIN	1	2	3	4	5	6	7	8	PE
Connection	U	-	W	Brake	Temperature-dependent motor protection	Brake	V	Temperature-dependent motor protection	Protective conductor

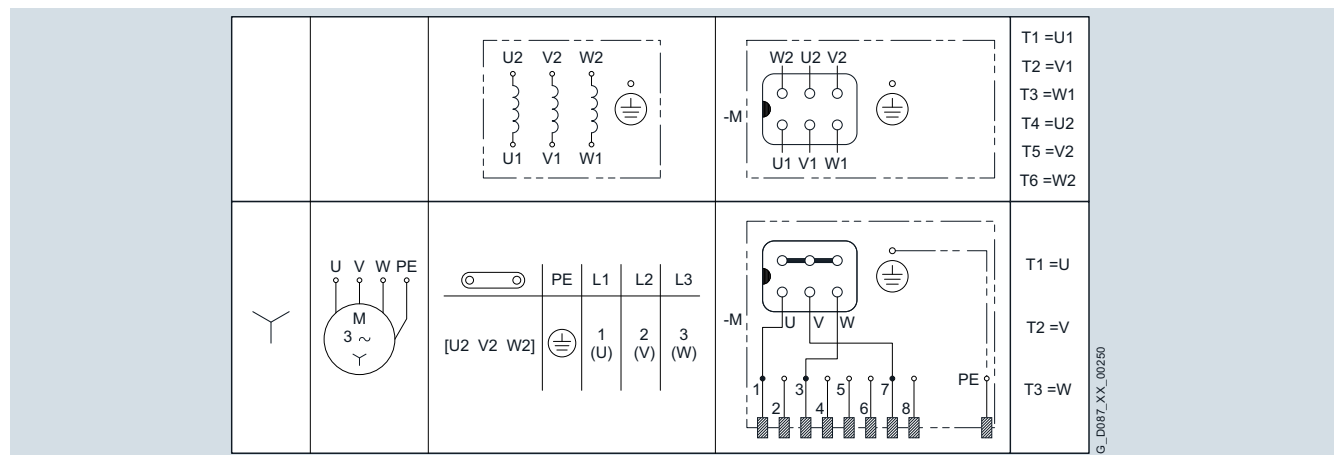


Fig. 11/18 Connection circuit diagram for motor winding

Motor options

Mechanical design

Motor plug

HAN Q12 motor plug

The motor plug is available for motor sizes 63 to 90 and can be used for line voltages ≤ 400 V as well as rated currents ≤ 10 A.

Technical specifications

Number of contacts	12 + ⊕
Max. voltage power range	400 V (pollution degree 3)
Max. current load power range	10 A
Specifications	CE
Degree of protection (interlocked)	IP65

Order code:

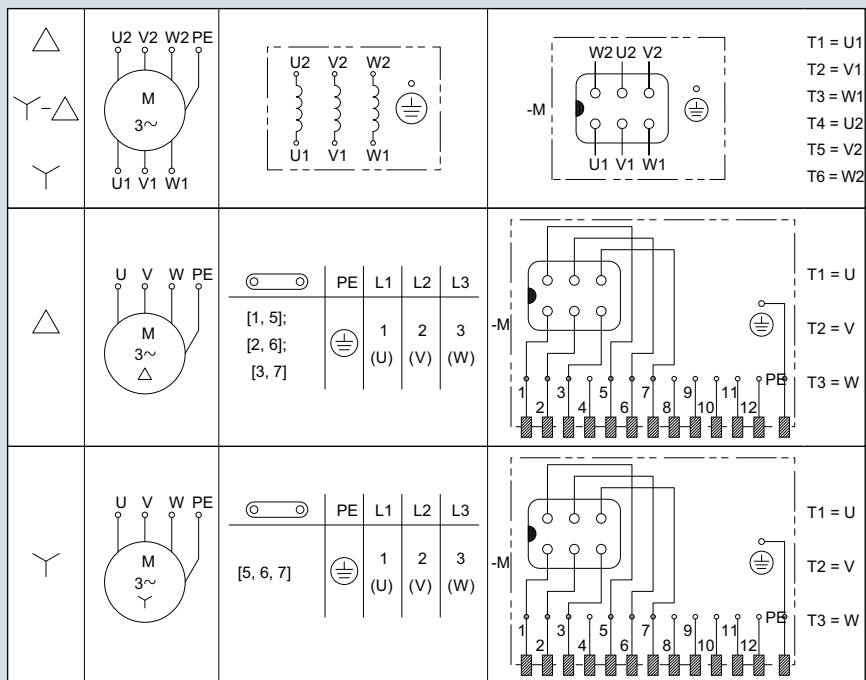
HAN Q12 motor plug (1 bracket) ¹⁾

N13

¹⁾ Not possible for worm geared motors S

Connection assignment

PIN	1	2	3	4	5	6	7	8	9	10	11	12	PE
Connection	U1	V1	W1	-	W2	U2	V2	-	Brake	Temperature-dependent winding protection	Brake	Temperature-dependent winding protection	Protective conductor



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Fig. 11/19 Connection circuit diagram for motor winding

Overview

SIMOGEAR geared motors can be supplied with fail-safe spring-operated disk brakes in order to reduce the motor run-on time or to hold loads, for example.

Our MODULOG modular system can be used to assign/mount several brake sizes to one motor size. This chapter specifies the assignment to the motor sizes and possible brake options.

Design and principle of operation

Single-disk, spring-operated brakes have two friction surfaces. When the brake is in a zero current state, a braking torque is generated using several springs.

The brake is released electromagnetically. When the motor brakes, the rotor which can be axially shifted on the hub or the shaft is pressed via the armature disk against the friction surface by means of the springs. In the braked state, there is a gap between the armature disk and the solenoid component.

To release the brake, the solenoid is energized with DC voltage. The resulting magnetic force attracts the armature disk onto the solenoid component against the spring force.

The spring force is then no longer applied to the rotor, which can now rotate freely.

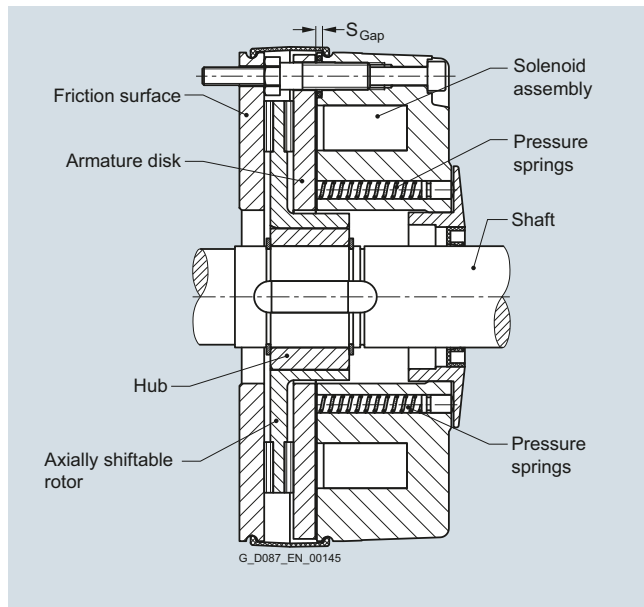


Fig. 11/20 Brake L

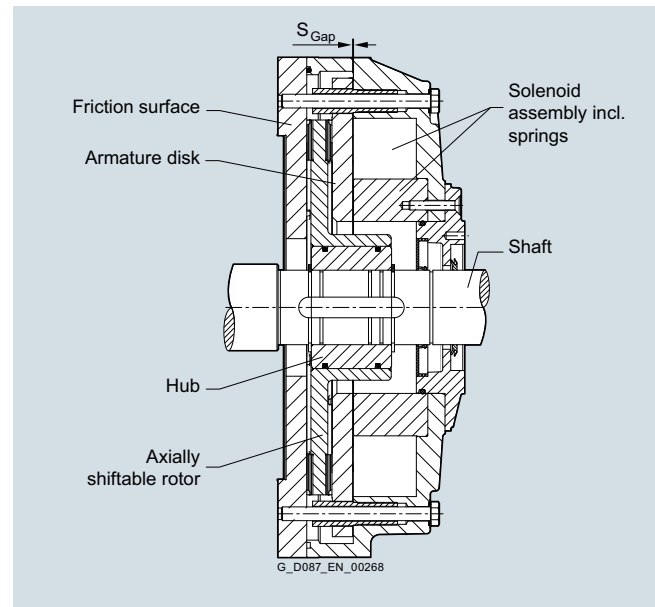


Fig. 11/21 Brake FDX

Motor options

Mounted components

Brake

Selecting the brake

Our MODULOG modular system allows several brake sizes to be used with one motor size.

Brake assignment

Brake type	Braking torque Nm	Motor size											Order code				
		63	71	80	90	100	112	132	160	180	200	225		250			
L4/1,4	1,4	○	○	○													B01
L4/2	2	○	○	○													B02
L4/3	3	○	○	○													B03
L4	4	□	□	○													B00
L4/5	5	○	○	○													B57
L8/3	3		○ ¹⁾	○	○												B05
L8/4	4		○ ¹⁾	○	○												B06
L8/5	5		○ ¹⁾	○	○												B07
L8/6,3	6,3		○ ¹⁾	○	○												B08
L8	8		○ ¹⁾	□	○												B04
L8/10	10		○ ¹⁾	○	○												B09
L16/8	8			○	○	○											B14
L16/10	10			○	○	○											B11
L16/13	13			○	○	○											B12
L16	16			●	□	○											B10
L16/20	20				○	○	○										B13
L32/14	14				○	○	○										B66
L32/18	18				○	○	○										B16
L32/23	23				○	○	○										B17
L32	32				○	□	□										B15
L32/40	40					○	○										B18
L60/25	25					○	○										B67
L60/38	38					○	○										B20
L60/50	50					○	○										B21
L60	60						○										B19
L80/25	25							○									B24
L80/35	35							○									B25
L80/50	50							○									B26
L80/63	63							○									B27
L80	80							□									B22
L80/100	100							○									B23
L150/60	60							○	○								B31
L150/80	80							○	○								B32
L150/100	100							○	○								B29
L150/125	125							○	○								B30
L150	150							○	□								B28
L260/100	100								○	○	○	○					B34
L260/145	145								○	○	○	○	○				B35
L260/180	180								○	○	○	○					B36
L260/200	200								○	○	○	○					B37
L260/240	240								○	○	○	○					B38
L260	260								○	□	□	□					B33
L260/315	315									○	○	○	○				B58
L400/265	265										○	○					B40
L400/300	300										○	○					B41
L400/360	360										○	○					B42
L400	400										○	○					B39
L400/600	600										●	●					B59
FDX30/265	265											○	○				B50
FDX30/300	300											○	○				B51
FDX30/360	360											○	○				B52
FDX30/400	400											□	○				B53
FDX30/500	500											○	○				B54
FDX30/650	650											○	○				B55
FDX30/750	750												○				B56
FDX30/850	850												○				B64
FDX40/650	650												○				B60
FDX40/750	750												○				B61
FDX40/850	850												□				B62
FDX40/1000	1 000												○				B63

- Standard assignment
 ○ Working brake and holding brake
 ● Can only be used as holding brake

¹⁾ Not possible for worm geared motors S

Connecting the brake

Labeled terminals are provided in the main terminal box of the motor to connect the brake.

Connection circuit diagram with AC or DC control

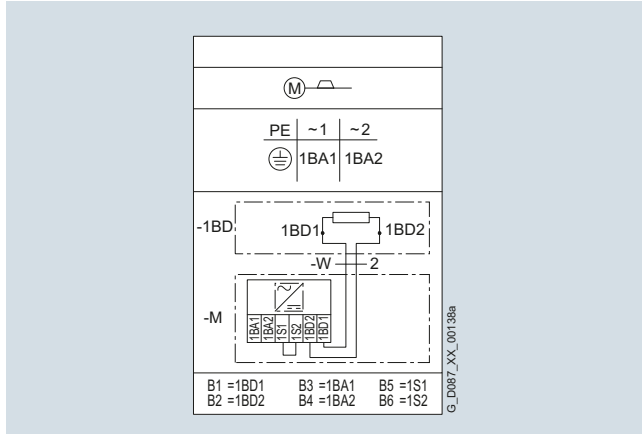


Fig. 11/22 Connection circuit diagram with AC control voltage

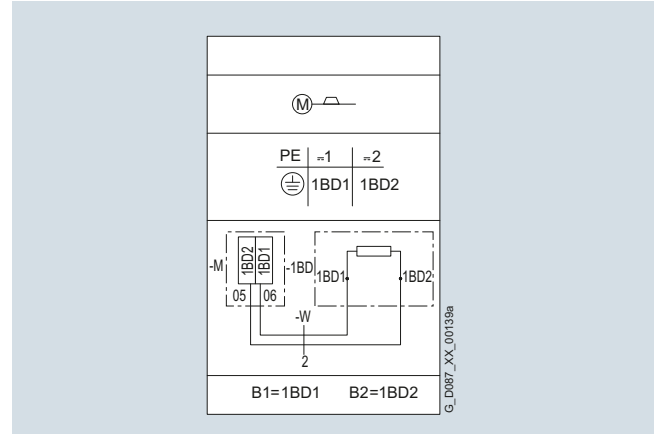


Fig. 11/23 Connection circuit diagram with DC control voltage

Function diagram of a brake switched on the AC or DC and AC sides

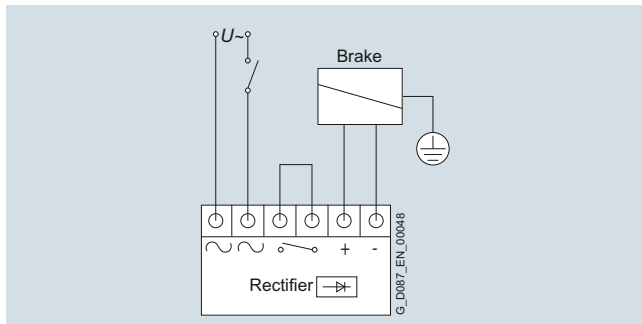


Fig. 11/24 Function diagram of a brake switched on the AC side

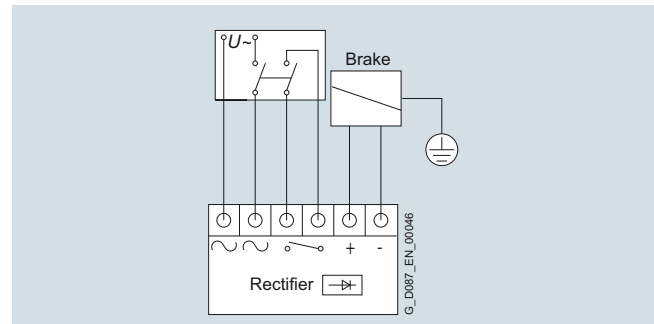


Fig. 11/25 Function diagram of a brake switched on the DC and AC sides

Supply voltages

The following supply voltages are available for brakes.

Supply voltage	Possible specifications						Motor sizes	Brake type L4 ... L400	FDX30 / FDX40	Order code
	CE	NEMA	UL-R/ CSA	China	EAC	Ex- port ¹⁾				
DC voltages										
DC 24 V ± 10 %	✓	✓	✓	✓	✓	✓	63 ... 200	✓	-	C66
DC 170 ... 200 V	✓	✓	✓	✓	✓	✓	63 ... 200	✓	-	C53
AC voltages										
AC 190 ... 240 V	✓			✓	✓	✓	63 ... 250	✓	✓	C46
AC 380 ... 440 V	✓		✓	✓	✓	✓	63 ... 250	✓	✓	C47
AC 410 ... 480 V	✓		✓	✓	✓	✓	63 ... 250	✓	✓	C63
			✓				80 ... 250			
AC voltages with function rectifier with disconnection on the DC side using current sensing ¹⁾										
AC 220 ... 240 V	✓			✓	✓	✓	63 ... 200	✓	-	C72
AC 380 ... 440 V	✓			✓	✓	✓	63 ... 200	✓	-	C47
AC 410 ... 460 V	✓			✓	✓	✓	63 ... 200	✓	-	C74
AC voltages with function rectifier with disconnection on the DC side using voltage sensing ¹⁾										
AC 220 ... 240 V	✓			✓	✓	✓	63 ... 200	✓	-	C72
AC 410 ... 460 V	✓			✓	✓	✓	63 ... 200	✓	-	C74

¹⁾ Not possible for worm geared motors S

Motor options

Mounted components

Brake

Brake control

The brakes are released by DC voltage. The brake is controlled by the DC supply voltage in systems without a rectifier, or by the AC supply voltage in systems with a rectifier. Half-wave rectifiers or rectifier bridges are used as rectifiers.

The rectifiers are listed in the following table.

Supply voltage	DC voltages	AC voltages	Switching frequency
Brake L	Without	Rectifier	No restriction
		Function rectifier	See Section "Function rectifier", page 11/23
Brake FDX	-	Rectifier PMG	See table "Switching frequency of PMG rectifiers"

Switching frequency of PMG rectifiers

Duty cycle/switching frequency for the 205 V DC brake solenoid

Supply voltage V_{AC}	Switching frequency s/h														
	1	10	20	30	40	50	60	70	80	90	100	110	120	130	140
AC 410 ... 480 V															
410	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
420	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
440	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.40	98.53	97.66	96.80	95.93
460	98.08	97.21	96.34	95.48	94.61	93.74	92.88	92.01	91.14	90.28	89.41	88.54	87.68	86.81	85.94
480	90.07	89.21	88.34	87.47	86.61	85.74	84.87	84.01	83.14	82.27	81.41	80.54	79.67	78.81	77.94

Duty cycle/switching frequency for the 180 V DC brake solenoid

Supply voltage V_{AC}	Switching frequency s/h														
	1	10	20	30	40	50	60	70	80	90	100	110	120	130	140
AC 380 ... 440															
380	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.54	98.67
400	100.00	99.13	98.27	97.40	96.53	95.67	94.80	93.93	93.07	92.20	91.33	90.47	89.60	88.73	87.87
410	95.18	94.31	93.45	92.58	91.71	90.85	89.98	89.11	88.25	87.38	86.51	85.65	84.78	83.91	83.05
420	90.70	89.84	88.97	88.10	87.24	86.37	85.50	84.64	83.77	82.90	82.04	81.17	80.30	79.44	78.57
440	82.64	81.78	80.91	80.04	79.18	78.31	77.44	76.58	75.71	74.84	73.98	73.11	72.24	71.38	70.51

Duty cycle/switching frequency for the 103 V DC brake solenoid

Supply voltage V_{AC}	Switching frequency s/h														
	1	10	20	30	40	50	60	70	80	90	100	110	120	130	140
AC 190 ... 240 V															
190	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
200	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
210	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
220	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.58	98.71	97.84	96.98	96.11
230	99.04	98.17	97.30	96.44	95.57	94.70	93.84	92.97	92.10	91.24	90.37	89.50	88.64	87.77	86.90
240	90.96	90.09	89.22	88.36	87.49	86.62	85.76	84.89	84.02	83.16	82.29	81.42	80.56	79.69	78.82

Function rectifier

The following table provides an overview of brake control with function rectifiers.

Function rectifier		High-speed rectifier + disconnection on the DC side using	
Technical specifications	Unit	Current sensing ⁴⁾	Voltage sensing ⁴⁾
Supply voltage	$V_{AC} \pm 10\%$	220 ... 460	220 ... 500
Supply frequency	Hz	40 ... 60	40 ... 60
Max. output current up to an ambient temperature of +40 °C ¹⁾	A_{DC}	1.2	1.2
Output voltage	V_{DC}	0.445 x supply voltage (0.89 - max. 8 %) x supply voltage	0.445 x supply voltage (0.89 - max. 8 %) x supply voltage
Permissible continuous current of the current sensor	A_{DC}	0.27 ... 34	-
Max. switching frequency ²⁾	rpm	76 ²⁾³⁾	76 ²⁾³⁾
Supported motors		Max. motor current 34 A	No restrictions
Supported brakes		L4 ... L400	L4 ... L400
Suitable for		Braking operation for fast brake release + application	Braking operation for fast brake release + application
Inverter operation		Not suitable	Separate power supply required
Line operation		Direct-on-line starting	Direct-on-line star-delta starting
Motor starters		Not suitable	No restrictions
Operation with driving loads and/or high moment of inertia		No restrictions	Separate power supply required
Suppressor circuit		Spark suppressor	Spark suppressor
Order code		C59	C60

1) At higher ambient temperatures the output current decreases.

2) The specified maximum switching frequencies are upper limit values. They are essentially dependent on the braking power and the permissible operating energy of the brakes.

3) The maximum switching frequency is obtained from the overexcitation times and recovery times as well as switching-off in holding operation.

4) Not possible for worm geared motors S

Duty cycle, function rectifier

The high-speed rectifier releases the brake with overexcitation and thus reduces the maximum duty cycle (on-load factor) of the brake.

Depending on the supply voltage and the switching frequency, the maximum duty cycle of the brake solenoid can be taken from the following diagrams and tables.

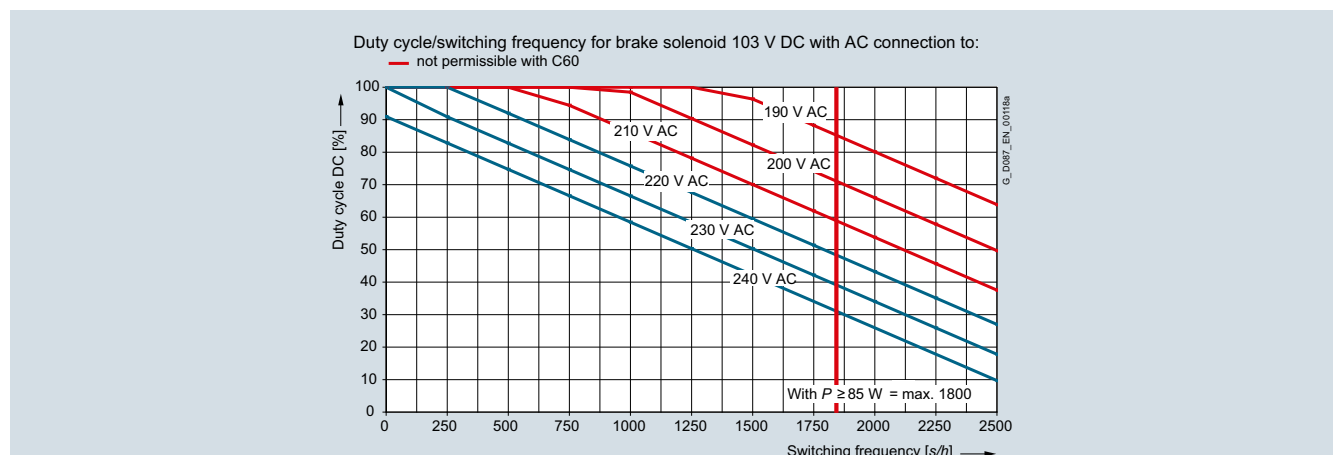


Fig. 11/26 Duty cycle/switching frequency for the 103 V DC brake solenoid

Supply voltage	Switching frequency										
	s/h										
V_{AC}	1	250	500	750	1 000	1 250	1 500	1 750	Up to brake size L80		
									2 000	2 250	2 500
220 ... 240 V AC for separate power supply											
220	100	100	91	83	75	67	59	51	43	35	26
230	100	90	82	74	66	58	50	42	34	25	17
240	100	82	74	66	58	50	42	34	25	17	9

Motor options

Mounted components

Brake

Function rectifier (continued)

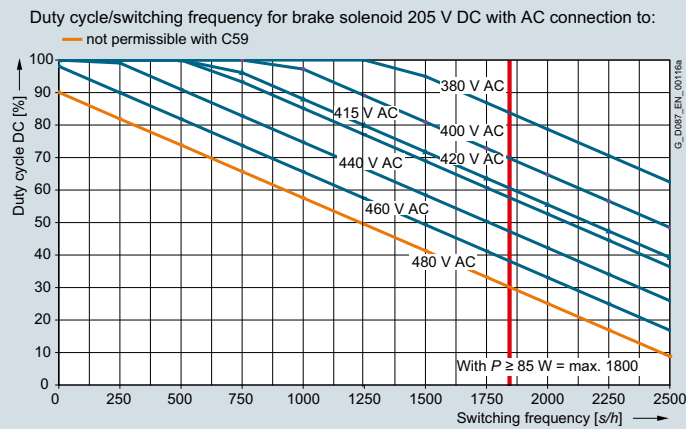


Fig. 11/27 Duty cycle/switching frequency for the 205 V DC brake solenoid

Supply voltage V_{AC}	Switching frequency s/h									Up to brake size L80		
	1	250	500	750	1 000	1 250	1 500	1 750	2 000	2 250	2 500	
400 V AC for connection at the motor terminal board												
380	100	100	100	100	100	100	94	86	78	70	62	
400	100	100	100	100	97	89	80	72	64	56	48	
420	100	100	100	93	85	77	68	60	52	44	36	
380 ... 440 V AC for separate power supply												
380	100	100	100	100	100	100	94	86	78	70	62	
400	100	100	100	100	97	89	80	72	64	56	48	
440	100	99	90	82	74	66	58	50	42	34	25	

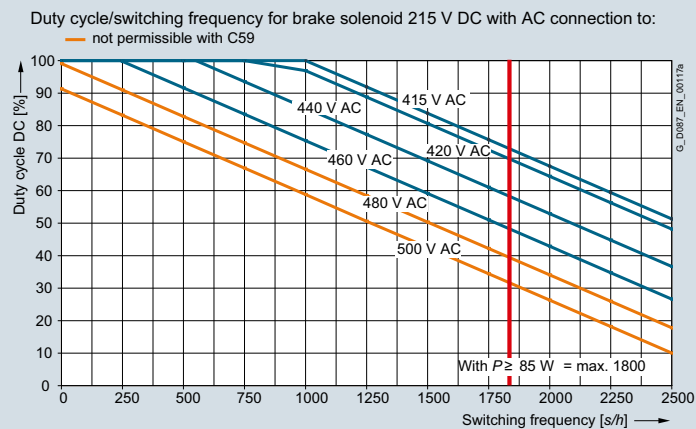


Fig. 11/28 Duty cycle/switching frequency for the 215 V DC brake solenoid

Supply voltage V_{AC}	Switching frequency s/h									Up to brake size L80		
	1	250	500	750	1 000	1 250	1 500	1 750	2 000	2 250	2 500	
AC 410 ... 480 V bei getrennter Spannungsversorgung¹⁾												
410	100	100	100	100	100	95	87	78	70	62	54	
460	100	99	91	83	75	67	59	51	42	34	26	
480	100	90	82	74	66	58	50	42	34	25	17	

¹⁾ The brake power supply voltage can be limited by the rectifier.

Brake options

Manual brake release

The brakes L can be supplied with a manual brake release lever. The manual brake release lever can be used to release the brake at zero current. When the brake has been released, the motor shaft can rotate freely in order to bring the output shaft to a certain position or for use as an emergency release in the event of a power failure, for example.

The manual brake release lever can be fixed in the released position using an additional locking mechanism mounted on the brake.

Only the manual brake release lever with locking mechanism can be selected for brakes FD_X.

The manual brake release lever can be mounted in various different positions. The position of the manual brake release lever relates to the standard design of the motor. The standard position is "2".

Order code:

Manual brake release lever	C02
Manual brake release lever with locking mechanism ¹⁾	C03

¹⁾ Not possible for worm geared motors S

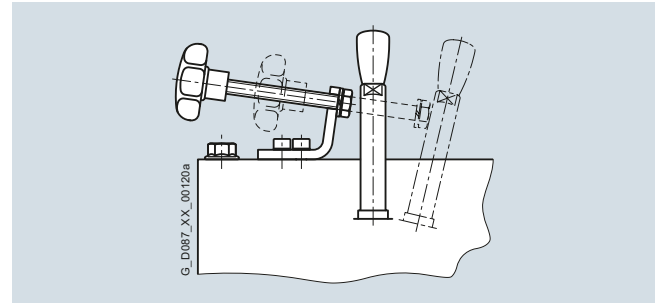


Fig. 11/29 Example of manual brake release lever with locking mechanism for brake L

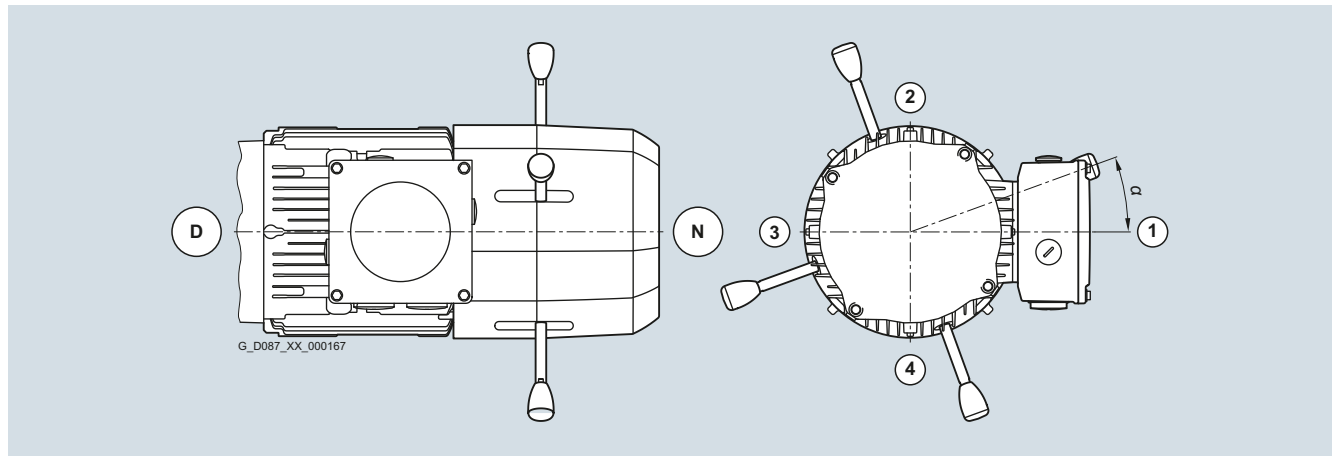


Fig. 11/30 Manual brake release lever position

Manual brake release lever position	Motor size												Order code
	63	71	80	90	100	112	132	160	180	200	225	250	
	Angle α												
1	0°	10°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	C26
2	90°	100°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	C27
3	180°	190°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	C28
4	270°	280°	270°	270°	270°	270°	270°	270°	270°	270°	270°	270°	C29 ¹⁾

¹⁾ Not possible for worm geared motors S

Motor options

Mounted components

Brake

Brake options (continued)

The dimensions of the manual brake release lever depend on the size.

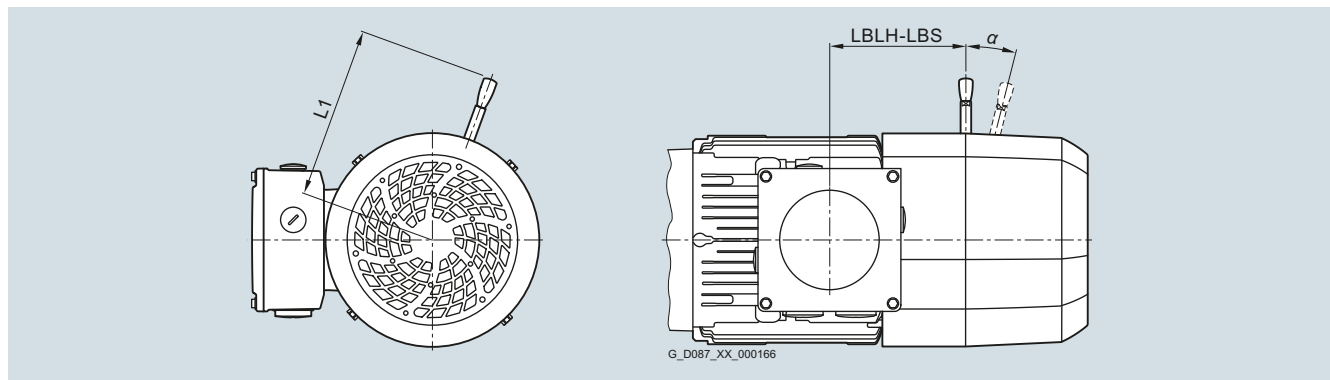


Fig. 11/31 Dimensions, manual brake release lever

Motor size	Brake type	Terminal box position	Distance		Distance		Angle, manual brake release lever
			Without locking mechanism	With locking mechanism	Standard corrosion protection	Increased corrosion protection	With the brake released
			mm	mm	mm	mm	Tolerance +3°
			L1	L1	LBLH-LBS	LBLH-LBS	χ
63	L4	1A, 2A, 3A, 4A	107	127	83.3	83.3	12°
71	L4	1A, 2A, 3A, 4A	107	127	71.8	71.8	12°
	L8	1A, 2A, 3A, 4A	116	136	72.3	72.3	10°
80	L4	1A, 2A, 3A, 4A	107	127	97.3	97.3	12°
	L8	1A, 2A, 3A, 4A	116	136	97.8	97.8	10°
	L16	1A, 2A, 3A, 4A	132	151	108.9	108.9	9°
90	L8	1A, 2A, 3A, 4A	116	136	102.8	102.8	10°
	L16	1A, 2A, 3A, 4A	132	151	113.9	113.9	9°
	L32	1A, 2A, 3A, 4A	161	161	115.9	115.9	10°
100	L16	1A, 2A, 3A, 4A	132	151	126.9	126.9	9°
	L32	1A, 2A, 3A, 4A	161	161	128.9	128.9	10°
	L60	1A, 2A, 3A, 4A	195	195	132.5	132.5	9°
112	L32	1A, 2A, 3A, 4A	161	161	128.9	128.9	10°
	L60	1A, 2A, 3A, 4A	195	195	132.5	132.5	9°
132	L80	1A, 2A, 3A, 4A	240	240	158	158	10°
	L150	1A, 2A, 3A, 4A	279	279	171.1	171.1	9°
132Z	L80	1A, 2A, 3A, 4A	240	240	158	158	10°
	L150	1A, 2A, 3A, 4A	279	279	171.1	171.1	9°
160	L150	1A, 2A, 3A, 4A	279	279	204.1	204.1	9°
	L260	1A, 2A, 3A, 4A	319	319	210.6	210.6	10°
180	L260	1A, 2A, 3A, 4A	319	319	198.6	209.6	10°
	L400	1A, 2A, 3A, 4A	445	445	207.6	218.6	10°
200	L400	1A, 2A, 3A, 4A	445	445	217.7	230.2	10°
	FDX30	1A, 2A, 3A, 4A	330	330	269.2	269.2	10°
225	FDX30	1A, 2A, 3A, 4A	330	330	270.0	270.0	12°
	FDX40	1A, 2A, 3A, 4A	377	377	273.0	273.0	10°

Brake options (continued)

Monitoring
Brake with microswitch to monitor the release

The air gap s_{gap} of the brake is monitored by a microswitch, which can be mounted on the base plate of the solenoid.

The motor does not start up until the brake has been fully released ($s_{\text{gap}} = 0$) and the armature disk is in contact with the solenoid. The microswitch is actuated and controls the motor contactor.

When the brake is switched off, the armature disk reaches the maximum air gap (s_{gapmax}) and the microswitch opens. This means that the motor contactor is not controlled and the motor does not start.

This method is used for machines and units which require a precisely defined starting and braking procedures, as well as for fault monitoring of faulty rectifiers, interrupted connecting cables, faulty solenoids, and excessively large air gaps (brake solenoid cannot fully attract the armature disk).

The microswitch for air gap monitoring is available for brakes in sizes L32 to L400 and FDX30 and FDX40.

Order code:

Microswitch for monitoring brake release

C04

For brakes in sizes L32 to L400, this option cannot be combined with option "Increased corrosion protection" (**C10**).

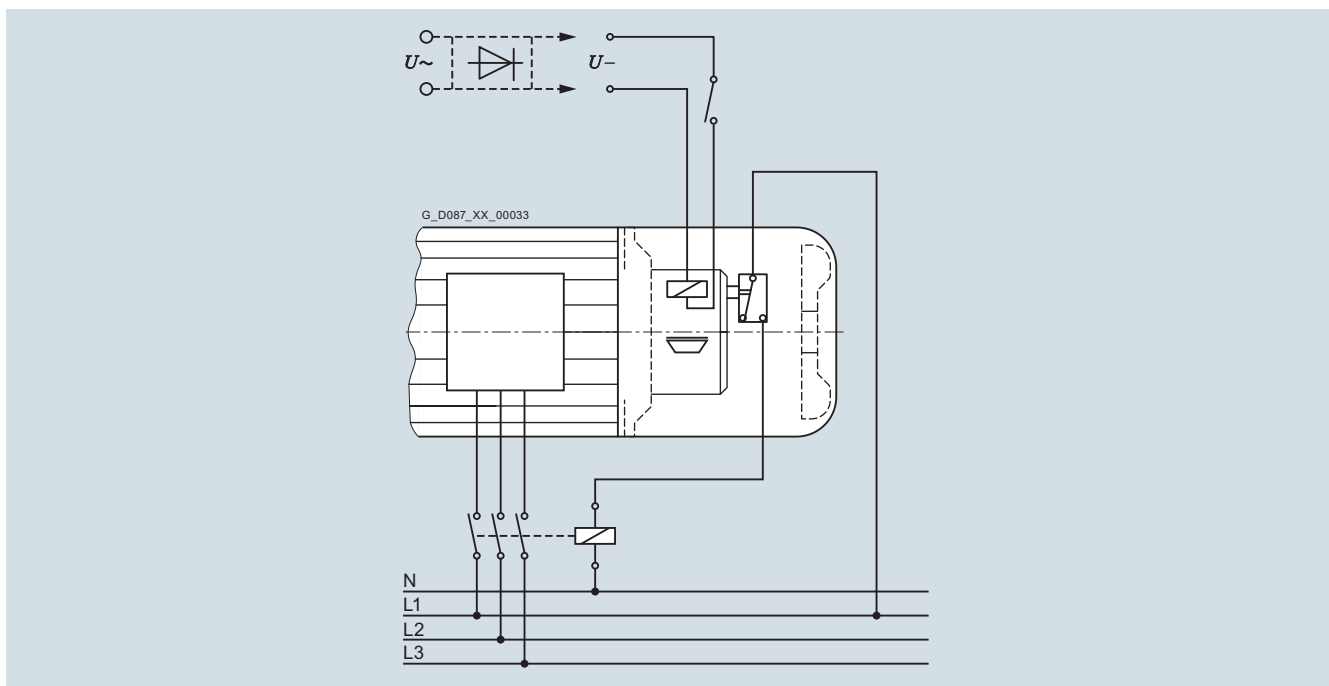


Fig. 11/32 Circuit principle with microswitch

Motor options

Mounted components

Brake

Brake options (continued)

Enclosed brake

The brakes L can be supplied as enclosed brakes. This version is standard for brakes FDX.

Enclosed brakes include a dust protection ring around the circumference and an integrated shaft sealing ring at the shaft outlet. This prevents the release and penetration of dust, moisture, and other pollution. Other advantages are reduced noise when applying the brake as well as, in combination with a motor anti-condensation heater, a reduced risk of the rotor freezing on the friction surfaces.

In addition, a condensation drain hole can be incorporated in the dust protection ring for brakes L.

The enclosed brake can also be shipped in combination with a manual brake release lever and a manual brake release lever with locking mechanism.

Order code:

Enclosed brake	C01
Enclosed brake with condensation drain hole	C11

Corrosion protection

The brakes L are supplied as standard with corrosion protection. A friction plate or adapter flange is always mounted between the mating friction surface (end shield on the ventilation side) and the rotor. The rotor is made of a rustproof material.

Order code:

Increased corrosion protection	C10
--------------------------------	------------

Brake with increased corrosion protection

The adapter flanges and armature disks of the brakes are chromium-plated for increased protection against corrosion. This prevents the friction surfaces from seizing up.

Increased corrosion protection is employed when a motor is used in corrosive environmental conditions (high air humidity, dripping water, crane systems, for example) and/or when longer standstill times are involved.

The brakes FDX are supplied as standard with increased corrosion protection.

Corrosion protection		Brake type										
Design	Material	L4	L8	L16	L32	L60	L80	L150	L260	L400	FDX30	FDX40
Standard corrosion protection												
Friction surface to the motor	Friction plate of stainless steel	✓	✓	✓	✓	✓	✓					
	Adapter flange with thin zinc film							✓	✓	✓		
	End shield								✓ ¹⁾	✓		
Armature disk	Gas-nitrided	✓	✓	✓	✓							
	Thin zinc film					✓	✓	✓	✓	✓		
Increased corrosion protection												
Friction surface to the motor	Friction plate of stainless steel	✓	✓	✓	✓	✓	✓					
	Chromium-plated adapter flange							✓	✓	✓	✓	✓
Armature disk	Chromium-plated	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

¹⁾ For motor sizes 180 and 200

Brake options (continued)

Reduced-noise rotor-hub connection

The brakes are supplied with a reduced-noise rotor-hub connection. This reduces rattling noise of the rotor, particularly at low speeds and in inverter-fed operation.

Wear-resistant friction lining

The brakes can also be selected with a wear-resistant friction lining.

Order code:

Wear-resistant friction lining

C06
Brake options for motor sizes 63 up to 250

Option	Brake type											
	L4	L8	L16	L32	L60	L80	L150	L260	L400	FDX30	FDX40	
Without rectifier	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	
Rectifier for disconnection on the DC and AC sides ¹⁾	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Function rectifier for quickly releasing and applying the brake ¹⁾	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	
Standard friction lining	✓	✓	✓	✓	✓	✓	✓	✓	✓	☐	☐	
Wear-resistant friction lining	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Microswitch for monitoring brake release	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	
Manual brake release	✓	✓	✓	✓	✓ ²⁾	✓	✓	✓	✓	-	-	
Manual brake release with locking mechanism	✓	✓	✓	✓	✓ ²⁾	✓	✓	✓	✓	✓	✓	
Standard corrosion protection	☐	☐	☐	☐	☐	☐	☐	☐	☐	-	-	
Increased corrosion protection	✓	✓	✓	✓	✓	✓	✓	✓	✓	☐	☐	
Enclosed brake	✓	✓	✓	✓	✓	✓	✓	✓	✓	☐	☐	
Enclosed brake with condensation drain hole	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	

☐ Standard design

¹⁾ Not possible for UL-R or CSA versions

²⁾ Not possible for LE100

Possible modular system in combination with brake for motor size 63 to 250

Design	Motor plug	Encoder					Ventilation		Back-stop	Second shaft extension
		Incremental encoder	Absolute encoder	Resolver	Encoder under cover without canopy	Encoder accessories	Self ventilation	Forced ventilation		
Brake	✓	✓	✓		✓	✓	✓		✓	
Manual brake release	✓	✓	✓	-	✓	✓	✓	-	✓	
• Without locking mechanism	✓	✓	✓	-	✓	✓	✓	-	✓	
• With locking mechanism	✓	✓	✓	-	✓	✓	✓	-	✓	
Microswitch	✓	✓	✓	-	✓	✓	✓	-	✓	
• Air flow monitoring ¹⁾	✓	✓	✓	-	✓	✓	✓	-	✓	

¹⁾ Not in conjunction with L4, L8, L16

Motor options

Mounted components

Brake

Technical specifications

Braking torques as a function of the speed and permissible speed limits

Brake type	Maximum permissible operating speed rpm	Max. permissible no-load speed with emergency-stop function rpm	Braking torque measured at the rated braking torque at 100 rpm			
			1 500 rpm %	2 500 rpm %	3 000 rpm %	maximal %
L4	3 600	6 000	87	-	80	65
L8	3 600	6 000	85	-	78	66
L16	4 000	4 000	83	-	76	
L32	3 600	3 600	81	-	74	
L60	6 000	6 000	80	-	73	67
L80	5 300	5 300	79	-	72	66
L150	4 400	4 400	77	-	70	
L260	3 700	3 700	75	-	68	
L400	3 000	3 000	73	-	66	
FDX30	3 000	6 000	90	90	90	90
FDX40	3 000	6 000	90	90	90	

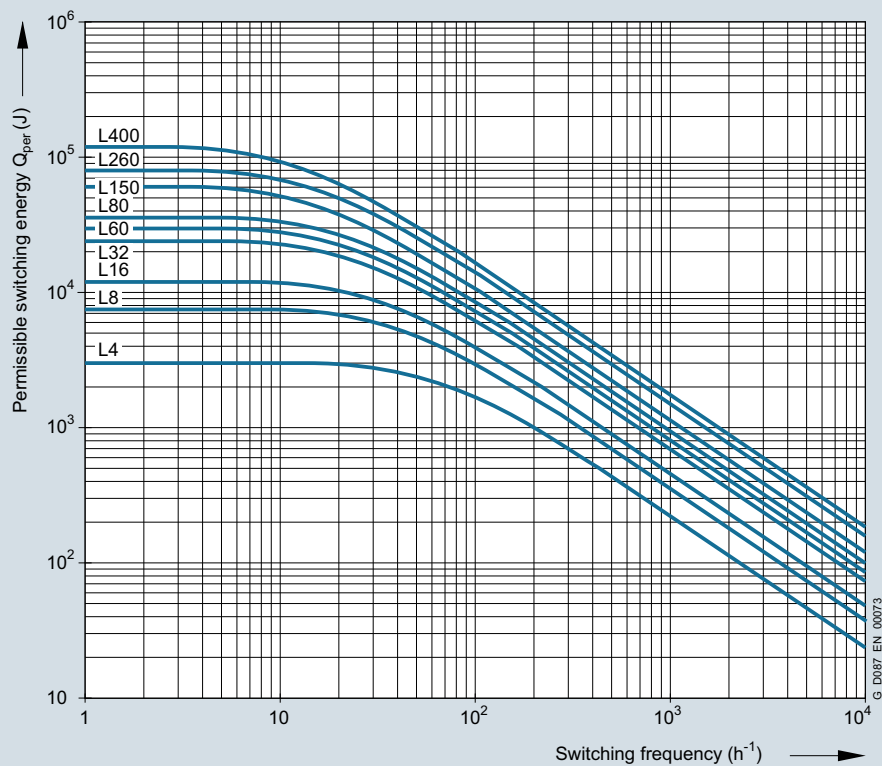


Fig. 11/33 Permissible operating energy

Technical specifications (continued)

Disconnection times, application times and moments of inertia for brakes L

Brake type	Rated braking torque T_{br} at 100 rpm Nm	Disconnection time		Application time		Response time		Rise time		Weight kg	Moment of inertia J_B for wear-resistant lining 10^{-4} kgm^2				
		t_2 Standard excitation ms	Over-excitation ms	$t_1 = t_{11} + t_{12}$ AC and DC switched or DC switched ms	t_{11} ms	t_{12} ms	$t_1 = t_{11} + t_{12}$ AC switched ms	t_{11} ms	t_{12} ms		J_B	J_B			
L4/1,4	1.4	20	13	31	13.0	18.0	250	110	140	0.85	0.11	0.15			
L4/2	2.0	27	17	22	9.0	13.0	175	77	98						
L4/3	3.0	29	18	30	12.0	18.0	230	101	129						
L4	4.0	45	28	28	15.0	13.0	190	120	70						
L4/5	5.0	56	35	25	13.0	12.0	158	100	58						
L8/3	3.0	21	12	65	39.0	26.0	510	326	184	1.5	0.34	0.61			
L8/4	4.0	30	17	50	30.0	20.0	390	250	140						
L8/5	5.0	35	20	40	24.0	16.0	310	200	110						
L8/6,3	6.3	45	30	38	18.0	20.0	315	174	141						
L8	8.0	57	38	31	15.0	16.0	245	135	110						
L8/10	10.0	71	47	26	12.5	13.5	205	113	92						
L16/8	8.0	55	41	36	22.0	14.0	350	183	167				2.6	2	2
L16/10	10.0	48	36	58	35.0	23.0	680	355	325						
L16/13	13.0	60	34	50	30.0	20.0	560	293	267						
L16	16.0	76	48	47	28.0	19.0	460	240	220						
L16/20	20.0	93	59	38	23.0	15.0	390	204	186						
L32/14	14.0	65	50	46	27.0	19.0	400	210	290	3.9	4.5	4.5			
L32/18	18.0	65	44	70	45.0	25.0	600	325	275						
L32/23	23.0	82	56	75	40.0	35.0	680	300	380						
L32	32.0	115	78	53	28.0	25.0	490	215	275						
L32/40	40.0	140	95	45	24.0	21.0	440	194	246						
L60/25	25.0	130	66	47	25.0	22.0	540	220	320				5.8	6.3	6.3
L60/38	38.0	140	60	60	24.0	36.0	800	290	510						
L60/50	50.0	175	75	50	20.0	30.0	665	240	425						
L60	60.0	210	90	42	17.0	25.0	580	210	370						
L80/25	25.0	95	56	103	48.0	55.0	1 600	690	710							8.4	15	15
L80/35	35.0	128	75	73	34.0	39.0	1 200	520	680						
L80/50	50.0	160	94	90	42.0	48.0	1 920	830	1 090						
L80/63	63.0	170	100	72	34.0	38.0	1 550	670	880						
L80	80.0	220	130	57	27.0	30.0	1 200	520	680						
L80/100	100.0	280	165	49	24.0	25.0	990	430	560						
L150/60	60.0	135	81	55	27.5	27.5	920	470	450	12.5	29	29			
L150/80	80.0	180	108	40	20.0	20.0	690	350	340						
L150/100	100.0	180	108	93	48.0	45.0	1 300	700	600						
L150/125	125.0	225	135	85	44.0	41.0	1 200	650	550						
L150	150.0	270	160	78	33.0	45.0	1 080	480	600						
L260/100	100.0	210	95	205	82.0	123.0	1 775	605	1 170				21.0	73	73
L260/145	145.0	230	170	180	72.0	108.0	1 200	440	790						
L260/180	180.0	230	100	185	73.0	112.0	2 500	850	1 650						
L260/200	200.0	260	120	178	70.0	108.0	2 720	920	1 800						
L260/240	240.0	312	140	170	67.0	103.0	2 300	570	1 530						
L260	260.0	340	150	165	65.0	100.0	2 100	700	1 400						
L260/315	315.0	410	180	150	60.0	90.0	1 750	590	1 160						
L400/265	265.0	260	140	275	155.0	120.0	3 100	2 000	1 100	32.0	200	200			
L400/300	300.0	290	150	260	125.0	135.0	2 800	1 540	1 260						
L400/360	360.0	350	165	255	125.0	130.0	2 660	1 440	1 220						
L400	400.0	390	185	230	110.0	120.0	2 400	1 300	1 100						
L400/600	600.0	585	265	175	55.0	120.0	1 400	300	1 100						

Motor options

Mounted components

Brake

Technical specifications (continued)

Working capacity for brakes L

Brake type	Rated braking torque T_{br} at 100 rpm Nm	Power consumption at +20 °C W	Working capacity				Working capacity with wear-resistant friction lining						
			per braking operation W_{1max}	Friction energy until the brake lining is replaced W_{Tot} MJ	Friction energy until the air gap is readjusted W_{γ} With over-excitation MJ		per braking operation W_{1max}	Friction energy until the brake lining is replaced W_{Tot} MJ	Friction energy until the air gap is readjusted W_{γ} With over-excitation MJ				
L4/1,4	1.4	20	3	156	46.8	52	3	312	94	104			
L4/2	2.0			176	59	351		117					
L4/3	3.0			170	39.6	57		339	80	113			
L4	4.0			180	36.0	60		360	72	120			
L4/5	5.0			176	23.4	59		351	46	117			
L8/3	3.0	25	7.5	324	86.4	108	7.5	648	173	216			
L8/4	4.0												
L8/5	5.0				75.6					151			
L8/6,3	6.3								756				
L8	8.0							64.8	648		130		
L8/10	10.0				54.0			108					
L16/8	8.0	30	12	405	108.0	162	12	810	216	324			
L16/10	10.0												
L16/13	13.0												
L16	16.0												
L16/20	20.0				396	80.0		158		792	160	317	
L32/14	14.0	40	24	948	285.0	284	7	1 896	570	568			
L32/18	18.0												
L32/23	23.0					260.0				1 885	518		
L32	32.0					212.0		284		1 888	425		
L32/40	40.0					165.0				1 893	331		
L60/25	25.0	50	30	1 276	306.0	306	18	2 560	612	612			
L60/38	38.0					280.0				2 553	560		
L60/50	50.0					1 320		238.0	317		2 640	476	635
L60	60.0					1 322							
L80/25	25.0	55	36	2 310	396.0	396	11	4 536	792	792			
L80/35	35.0												
L80/50	50.0												
L80/63	63.0												
L80	80.0												
L80/100	100.0				260.0	389			519	778			
L150/60	60.0	85	60	2 295	612.0	612	36	4 590	1 224	1 224			
L150/80	80.0												
L150/100	100.0												
L150/125	125.0												
L150	150.0												
L260/100	100.0	100	80	4 680	936.0	1 287	10	7 020	1 872	2 574			
L260/145	145.0												
L260/180	180.0				3 510								
L260/200	200.0												
L260/240	240.0												
L260	260.0												
L260/315	315.0	130		3 489	756.0	1 279		6 978	1 512	2 559			
L400/265	265.0	110	120	6 480	1 440.0	1 872	28	12 960	2 880	3 744			
L400/300	300.0												
L400/360	360.0												
L400	400.0												
L400/600	600.0							576.0				1 152	

Technical specifications (continued)
No-load switching frequency for brakes L

Motor type	Power 4-pole at 50 Hz kW	Brake type	Overexcitation							
			Without		With		Without		With	
			No-load switching frequency (Z_A)							
			1/h	1/h	1/h	1/h	1/h	1/h	1/h	1/h
			4-pole		2-pole		6-pole		8-pole	
LA63..	0.12	L4/5, L4	-	-	-	-	-	-	-	-
	0.18	L4/3, L4/2, L4/1,4	-	-	-	-	-	-	-	-
LA71..	0.25	L4/5, L4	7 300	9 500	2 500	3 200	10 500	14 000	14 500	19 000
	0.37	L4/3, L4/2, L4/1,4	12 500	13 500	4 300	4 500	18 500	20 000	25 000	27 000
		L8/10, L8, L8/6,3	6 000	7 600	1 800	2 500	9 000	11 000	12 000	15 000
		L8/5, L8/4	8 900	11 000	2 900	3 500	13 000	16 000	17 500	22 000
		L8/3	11 000	12 000	3 500	4 000	16 500	18 000	22 000	24 000
LE80.. LE80..E LE80..P	0.55	L4/5, L4	9 000	9 500	2 900	3 100	13 500	14 000	-	-
	0.75	L4/3, L4/2, L4/1,4	10 500	11 500	3 500	3 800	15 500	16 500	-	-
		L8/10, L8, L8/6,3	6 300	7 500	2 100	2 500	9 400	11 000	-	-
		L8/5, L8/4, L8/3	9 500	10 000	3 100	3 300	14 000	15 000	-	-
		L16	6 500	7 500	2 100	2 500	9 700	11 000	-	-
		L16/13, L16/10, L16/8	7 500	8 000	2 500	2 600	11 000	12 000	-	-
LE90.. LE90..E LE90..P	1.1	L8/10, L8, L8/6,3	6 500	7 000	2 100	2 300	9 700	10 500	-	-
	1.5	L8/5, L8/4, L8/3	8 000	8 500	2 600	2 800	12 000	12 500	-	-
		L16/20, L16	3 200	4 300	1 000	1 400	4 800	6 400	-	-
		L16/13, L16/10, L16/8	6 500	7 000	2 100	2 300	9 700	10 500	-	-
		L32	2 200	3 000	700	1 000	3 300	4 500	-	-
		L32/23, L32/18	3 300	4 200	1 100	1 400	4 900	6 300	-	-
		L32/14	5 500	6 000	1 800	2 000	8 200	12 000	-	-
LE100.. LE100..E LE100..P	2.2	L16/20, L16	6 000	6 500	2 000	2 100	9 000	9 700	12 000	13 000
	3.0	L16/13, L16/10, L16/8	6 500	7 000	2 100	2 300	9 700	10 500	14 000	14 000
		L32/40, L32	3 200	4 600	1 000	1 500	4 800	6 900	6 400	9 200
		L32/23, L32/18, L32/14	6 000	6 500	2 000	2 100	9 000	9 700	12 000	13 000
		L60/50	1 100	2 100	350	700	1 600	3 100	2 200	4 200
		L60/38, L60/25	3 200	4 600	1 000	1 500	4 800	6 900	9 200	9 200
LE112.. LE112..E LE112..P	4.0	L32/40, L32	3 300	3 500	1 100	1 100	4 900	5 200	6 600	7 000
		L32/23, L32/18, L32/14	3 600	3 800	1 200	1 200	5 400	5 700	7 600	7 600
		L60, L60/50	2 600	3 200	850	1 050	3 900	4 800	5 200	6 400
		L60/38, L60/25	3 200	3 600	1 050	1 200	4 800	5 400	7 200	7 200
LE132.. LE132..E LE132..P	5.5 7.5	L80/100, L80	1 850	2 050	600	6 500	2 700	3 000	3 700	4 100
		L80/63, L80/50	2 050	2 200	650	700	3 000	3 300	4 100	4 400
		L80/35, L80/25	2 200	2 350	700	750	3 300	3 500	4 400	4 700
		L150, L150/125	1 200	1 500	400	500	1 800	2 200	2 400	3 000
		L150/100, L150/80, L150/60	1 900	2 050	600	650	2 800	3 000	3 800	4 100
LE160.. LE160..E LE160..P	11.0 15.0	L150, L150/125	1 400	1 550	450	500	2 100	2 300	2 800	3 100
		L150/100, L150/80, L150/60	1 650	1 750	550	550	2 400	2 600	3 300	3 500
		L260, L260/240	850	1 200	250	400	1 200	1 800	1 700	2 400
		L260/200, L260/180	1 050	1 300	350	400	1 500	1 900	2 100	2 600
		L260/145, L260/100	1 450	1 550	450	500	2 100	2 300	2 900	3 100
LES180..E	18.5	L260/315, L260, L260/240	500	550	320	330	750	800	1 000	1 100
	22.0	L260/200, L260/180, L260/145, L260/100	550	600	174	200	800	900	1 100	1 200
LES200..E	30.0	L260/315, L260, L260/240	450	500	150	150	650	750	900	1 000
		L260/200, L260/180, L260/145, L260/100	500	525	150	175	750	750	1 000	1 050
		L400, L400/360, L400/300, L400/265	400	425	125	125	600	600	800	850

Conversion factors for no-load switching frequency:

 60 Hz operation $0.75 \times Z_A$

 IE3 motors $0.1 \times Z_A$

No-load switching frequencies for IE1 motors on request.

Motor options

Mounted components

Brake

Technical specifications (continued)

Disconnection times, application times and moments of inertia for brakes FDX

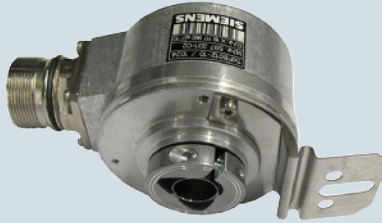
Brake type	Rated braking torque T_{br} at 100 rpm Nm	Solenoid voltage V_{DC}	Disconnection time		Application time $t_1 = t_{11} + t_{12}$ AC and DC switched or DC switched ms	Response time t_{11} ms	Rise time t_{12} ms	Application time $t_1 = t_{11} + t_{12}$ AC switched ms	Response time t_{11} ms	Rise time t_{12} ms	Weight kg	Moment of inertia J_B 10^{-4} kgm^2
			t_2 Standard excitation ms	Over-excitation ms								
FDX30/265	265	all	-	173	255	125	130	1 710	1 360	350	45	195
FDX30/300	300		-	180	250	120	130	1 620	1 270	350	45	195
FDX30/360	360		-	192	243	113	130	1 460	1 110	350	45	195
FDX30/400	400		-	200	235	105	130	1 350	1 000	350	45	195
FDX30/500	500		-	220	220	90	130	800	740	350	45	195
FDX30/650	650		-	250	200	70	130	690	340	350	45	195
FDX30/750	750		103	-	260	190	60	130	670	320	350	45	195
FDX30/750	750	180; 205	-	200	190	60	130	620	270	350	45	195
FDX30/850	850	103	-	270	180	50	130	600	250	350	45	195
FDX30/850	850	180; 205	-	210	180	50	130	550	200	350	45	195
FDX40/650	650	all	-	280	390	230	160	2 600	2 100	500	80	445
FDX40/750	750		-	315	370	210	160	2 230	1 730	500	80	445
FDX40/850	850		-	350	350	190	160	1 860	1 360	500	80	445
FDX40/1000	1 000		-	400	320	160	160	1 300	800	500	80	445

Working capacity for brakes FDX

Brake type	Rated braking torque at 100 rpm Nm	Solenoid voltage V_{DC}	Power consumption at +20 °C W	Working capacity			
				Schaltung W_{1max}	Friction energy until the brake lining is replaced W_{Tot} MJ	Friction energy until the air gap is readjusted W_V MJ	With overexcitation MJ
FDX30/265	265	all	560/140	150	3 700	-	-
FDX30/300	300		560/140	150	3 700	-	-
FDX30/360	360		560/140	150	3 700	-	-
FDX30/400	400		560/140	150	3 700	-	-
FDX30/500	500		560/140	150	3 700	-	-
FDX30/650	650		560/140	150	3 700	-	-
FDX30/750	750		103	560/140	150	3 700	-
FDX30/750	750	180; 205	880/220	150	3 700	-	-
FDX30/850	850	103	560/140	150	3 700	-	-
FDX30/850	850	180; 205	880/220	150	3 700	-	-
FDX40/650	650	all	560/140	200	4 000	-	-
FDX40/750	750		560/140	200	4 000	-	-
FDX40/850	850		560/140	200	4 000	-	-
FDX40/1000	1 000		560/140	200	4 000	-	-

Incremental encoders
Incremental encoder 1XP8012

The incremental encoder is available up to motor size 200.

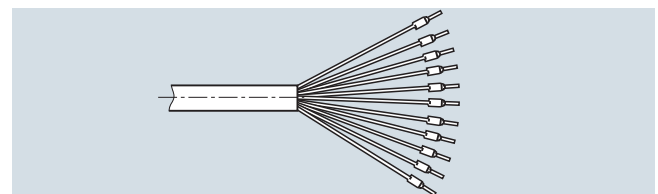
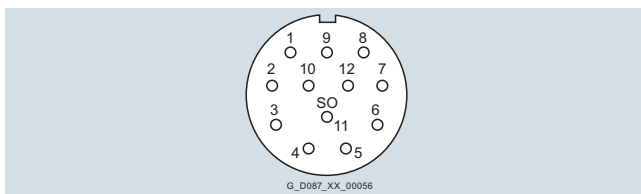

Technical specifications

Incremental encoder 1XP8012	-11	-10	-12	-21	-20	-22
Pulses per revolution	2 048	1 024	512	2 048	1 024	512
Incremental signals	HTL			TTL		
Supply voltage U_p	10 ... 30 V _{DC}			5 V _{DC} ± 10 %		
Maximum current consumption without load	150 mA			120 mA		
Permissible load per output	$I_{Load} \leq 100$ mA (except for $\overline{U_{aS}}$)			$I_{Load} \leq 20$ mA		
Outputs	2 short-circuit proof square-wave pulses U_{a1} , U_{a2} (maximum 1 min) 2 short-circuit proof square-wave pulses $\overline{U_{a1}}$, $\overline{U_{a2}}$ (maximum 1 min) Zero pulse U_{a0} Zero pulse $\overline{U_{a0}}$ Fault-detection signal $\overline{U_{aS}}$			Square-wave pulses U_{a1} , U_{a2} Square-wave pulses $\overline{U_{a1}}$, $\overline{U_{a2}}$ Zero pulse U_{a0} Zero pulse $\overline{U_{a0}}$ Fault-detection signal $\overline{U_{aS}}$		
Signal level	$U_{High} \geq 2.1$ V at $-I_{High} = 20$ mA $U_{Low} \leq 2.8$ V $I_{Low} = 20$ mA ($U_p = 24$ V)			$U_{High} \geq 2.5$ V at $-I_{High} = 20$ mA $U_{Low} \leq 0.5$ V $I_{Low} = 20$ mA		
Minimum edge interval	0.8 μs at 160 kHz			0.45 μs at 300 kHz		
Switching times (10 ... 90 %)	t_+ $t_- \leq 200$ ns (with 1 m cable), except for $\overline{U_{aS}}$			t_+ $t_- \leq 30$ ns (for 1 m cable)		
Maximum frequency	160 kHz			300 kHz		
Moment of inertia of rotor	$4,3 \times 10^{-6}$ kgm ²					
Maximum mechanical speed	6 000 rpm					
Vibration (55 ... 2 000 Hz)	≤ 150 m/s ² (EN 60068-2-6)					
Shock (6/2 ms)	$\leq 1 000$ m/s ² (EN 60068-2-27)/ $\leq 2 000$ m/s ² (EN 60068-2-27)					
Degree of protection	IP66					
Connection system → Page 11/51	12-pole flange socket, 0° coding					
Weight, approx.	0.30 kg					
Certification	CE, cUL-Rus					
Order code	Q54¹⁾	Q53¹⁾	Q55¹⁾	Q51¹⁾	Q50¹⁾	Q52¹⁾

1) For worm geared motors S, the incremental encoder is available only for units in motor size 71.

Connection assignment

For cable available as an option, see „Encoder accessories (continued)” on page 11/52.



	Voltage supply				Incremental signals				Other signals			
Connection	U_p	Sensor U_p	0 V	Sensor 0 V	U_{a1}	$\overline{U_{a1}}$	U_{a2}	$\overline{U_{a2}}$	U_{a0}	$\overline{U_{a0}}$	$\overline{U_{aS}}$	Free
Flange socket	12	2	10	11	5	6	8	1	3	4	7	9
Core color	brown/green	blue	white/green	white	brown	green	gray	pink	red	black	violet	yellow

Motor options

Mounted components

Encoder

Incremental encoders (continued)

Incremental encoder 1XP8032

The incremental encoder is available up to motor size 200.

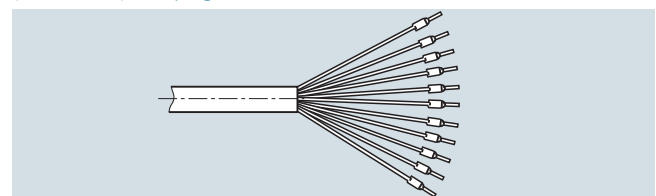
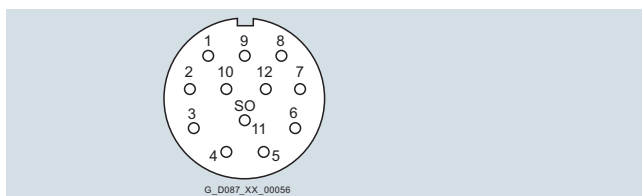
Technical specifications

Incremental encoder 1XP8032	-11	-10	-12	-21	-20	-22
Pulses per revolution	2 048	1 024	512	2 048	1 024	512
Incremental signals	HTL			TTL		
Supply voltage U_p	10 ... 30 V _{DC}			5 V _{DC} ± 10 %		
Maximum current consumption without load	150 mA			120 mA		
Permissible load per output	$I_{Load} \leq 100$ mA (except for $\overline{U_{aS}}$)			$I_{Load} \leq 20$ mA		
Outputs	2 short-circuit proof square-wave pulses U_{a1} , U_{a2} (maximum 1 min) 2 short-circuit proof square-wave pulses $\overline{U_{a1}}$, $\overline{U_{a2}}$ (maximum 1 min) Zero pulse U_{a0} Zero pulse $\overline{U_{a0}}$ Fault-detection signal $\overline{U_{aS}}$			Square-wave pulses U_{a1} , U_{a2} Square-wave pulses $\overline{U_{a1}}$, $\overline{U_{a2}}$ Zero pulse U_{a0} Zero pulse $\overline{U_{a0}}$ Fault-detection signal $\overline{U_{aS}}$		
Signal level	$U_{High} \geq 21$ V at $-I_{High} = 20$ mA $U_{Low} \leq 2.8$ V $I_{Low} = 20$ mA ($U_p = 24$ V)			$U_{High} \geq 2.5$ V at $-I_{High} = 20$ mA $U_{Low} \leq 0.5$ V $I_{Low} = 20$ mA		
Minimum edge interval	0.8 μs at 160 kHz			0.45 μs at 300 kHz		
Switching times (10 ... 90 %)	t_+ , $t_- \leq 200$ ns (with 1 m cable), except for $\overline{U_{aS}}$			t_+ , $t_- \leq 30$ ns (for 1 m cable)		
Maximum frequency	160 kHz			300 kHz		
Moment of inertia of rotor	4.3 × 10 ⁻⁶ kgm ²					
Maximum mechanical speed	6 000 rpm					
Vibration (55 ... 2 000 Hz)	≤ 150 m/s ² (EN 60068-2-6)					
Shock (6/2 ms)	≤ 1 000 m/s ² (EN 60068-2-27)/≤ 2 000 m/s ² (EN 60068-2-27)					
Degree of protection	IP66					
Connection system → Page 11/51	0.8 m cable with 12-pole coupling socket, 0° coding					
Weight, approx.	0.30 kg					
Certification	CE, cUL-Rus					
Order code	Q48¹⁾	Q47¹⁾	Q49¹⁾	Q45¹⁾	Q44¹⁾	Q46¹⁾

¹⁾ For worm geared motors S, the incremental encoder is available only for units in motor size 71.

Connection assignment

For cable available as an option, see „Encoder accessories (continued)” on page 11/52.



	Voltage supply				Incremental signals				Other signals			
Connection	U_p	Sensor U_p	0 V	Sensor 0 V	U_{a1}	$\overline{U_{a1}}$	U_{a2}	$\overline{U_{a2}}$	U_{a0}	$\overline{U_{a0}}$	$\overline{U_{aS}}$	Free
Flange socket	12	2	10	11	5	6	8	1	3	4	7	9
Core color	brown/green	blue	white/green	white	brown	green	gray	pink	red	black	violet	yellow

Incremental encoders (continued)

Incremental encoder 1XP8022

The incremental encoder is available up to motor size 200.

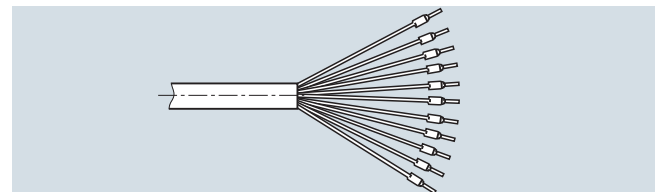
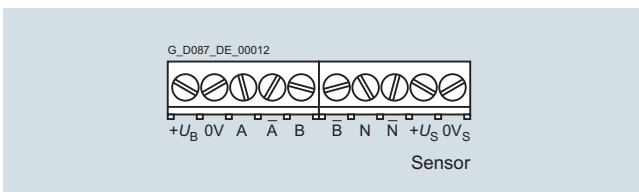

Technical specifications

Incremental encoder 1XP8022	-11	-10	-12	-21	-20	-22
Pulses per revolution	2 048	1 024	512	2 048	1 024	512
Incremental signals	HTL			TTL		
Supply voltage U_B	8 ... 30 V _{DC} (reverse polarity protection)			5 V _{DC} ± 5 % (reverse polarity protection)		
Maximum current consumption without load	≤ 100 mA					
Permissible load per output	$I_L \leq 70$ mA					
Outputs	2 square-wave pulses A, B 2 square-wave pulses \bar{A} , \bar{B} Zero pulse N Zero pulse \bar{N}					
Signal level	$U_{High} \geq U_B - 3$ V $U_{Low} \leq 1.5$ V			$U_{High} \geq 2.5$ V $U_{Low} \leq 0.5$ V		
Minimum edge interval	500 ns			≤ 200 ns		
Switching times (10 ... 90 %)	≤ 1 μs					
Maximum frequency	120 kHz					
Moment of inertia of rotor	6×10^{-6} kgm ²					
Maximum mechanical speed	8 000 rpm					
Vibration (55 ... 2 000 Hz)	≤ 100 m/s ² (EN 60068-2-6)					
Shock (11 ms)	≤ 1 000 m/s ² (EN 60068-2-27)					
Degree of protection	IP66					
Connection system → Page 11/51	Cable terminal box					
Weight, approx.	0.35 kg					
Certification	CE, cUL-Rus					
Order code	Q60¹⁾	Q59¹⁾	Q61¹⁾	Q57¹⁾	Q56¹⁾	Q58¹⁾

¹⁾ For worm geared motors S, the incremental encoder is available only for units in motor size 71.

Connection assignment

For cable available as an option, see „Encoder accessories (continued)” on page 11/52.


Connections

Connection	+U _B	0V	A	\bar{A}	B	\bar{B}	N	\bar{N}	+U _S	0V _S
Cable terminal box										
Core color	red	blue	green	brown	gray	black	pink	white	yellow	violet

Motor options

Mounted components

Encoder

Resolvers 1XP8013 and 1XP8023

Resolvers are available up to motor size 200.

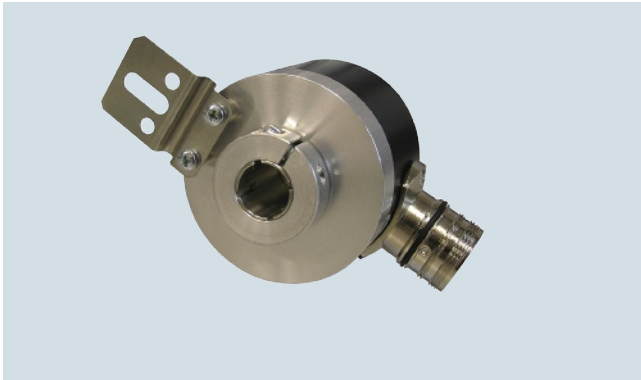


Fig. 11/34 Resolver 1XP8013

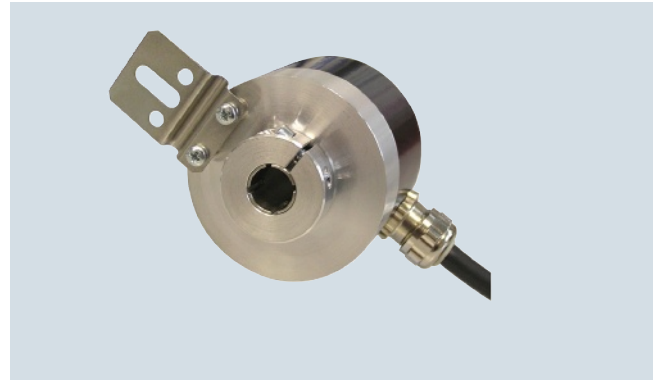


Fig. 11/35 Resolver 1XP8023

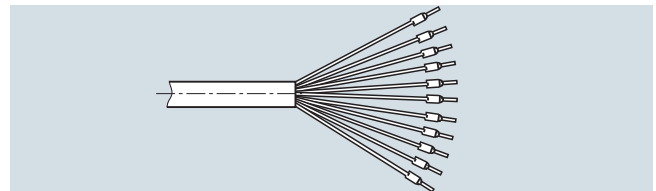
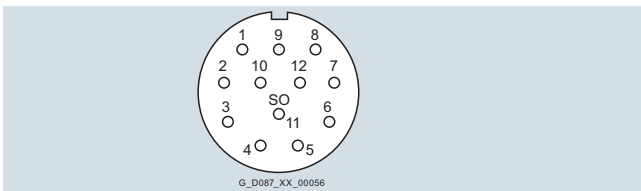
Technical specifications

Resolver	1XP8013-10	1XP8023-10	1XP8013-11	1XP8023-11
Input voltage	7 V _{RMS}		7 V _{RMS}	
Current consumption (maximum)	120 mA		65 mA	
Input frequency	5 kHz		10 kHz	
Phase shift	0° (+25°)		0° (± 10°)	
Zero voltage (maximum)	50 mV		50 mV	
Pole pairs	1		1	
Primary side	R1 - R2		R1 - R2	
Impedance				
Z _{TO}	55 + j50 (± 20 %) Ω		70 + j100 (± 20 %) Ω	
Z _{SO}	115 + j175 (± 20 %) Ω		180 + j300 (± 20 %) Ω	
Z _{SS}	115 + j160 (± 20 %) Ω		175 + j275 (± 20 %) Ω	
DC resistance				
Rotor	36 (± 10 %) Ω		36 (± 10 %) Ω	
Stator	60 (± 10 %) Ω		60 (± 10 %) Ω	
Maximum permissible mechanical speed	≤ 8 000 rpm		≤ 8 000 rpm	
Permissible electrical speed	≤ 8 000 rpm		≤ 8 000 rpm	
Vibration (55 ... 2 000 Hz)	≤ 100 m/s ²		≤ 100 m/s ²	
Shock (6 ms)	≤ 1 000 m/s ²		≤ 1 000 m/s ²	
Connection system → Page 11/51	Flange socket, 0° coding	1 m cable with coupling socket	Flange socket, 0° coding	1 m cable with coupling socket
Degree of protection	IP65		IP65	
Weight, approx.	320 g	500 g	320 g	500 g
Certification	CE, cUL-Rus			
Order code	Q85¹⁾	Q88¹⁾	Q87¹⁾	Q86¹⁾

¹⁾ For worm geared motors S, the resolver is available only for units in motor size 71.

Connection assignment

For cable available as an option, see „Encoder accessories (continued)” on page 11/52.



	Input voltage		Sine tap		Cosine tap	
Connection	R1	R2	S1	S3	S2	S4
Flange socket	10	7	11	12	1	2
Core color	pink	white	red	blue	yellow	violet

Absolute encoders 1XP8014 and 1XP8024

Absolute encoders are available up to motor size 200.

The multiturn absolute encoder can be shipped with ENnDAT protocol or SSI protocol and mounted on the shaft.

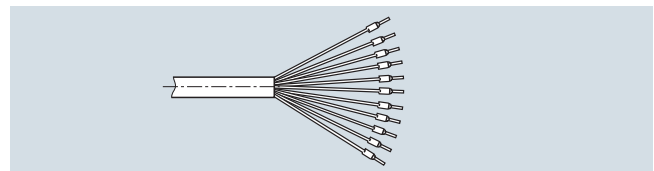
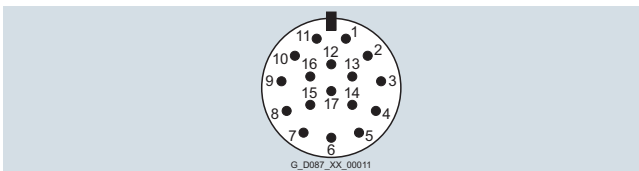
Technical specifications

Absolute encoder	1XP8014-20	1XP8024-20	1XP8014-10	1XP8024-10
Supply voltage U_P	10 ... 30 V		5 V \pm 5 %	
Maximum current consumption without load	\leq 200 mA			
Absolute position values	SSI		EnDAT 2.1	
• Code	Gray		Dual	
• Positions per revolution	8 192 (13 bit)			
• Differentiable revolutions	4 096			
Incremental signals	\sim 1 V_{SS}			
• Pulses per revolution	512		2 048	
• Outputs	Sine/cosine pulses A, B			
• Limit frequency -3 dB	\geq 200 kHz			
• Signal size	0.8 ... 1.2 V_{pp}			
Moment of inertia of rotor	4.3×10^{-6} kgm ²			
Maximum permissible mechanical speed	\leq 6 000 rpm			
Permissible electrical speed with system accuracy	\leq 1 500 rpm/ \pm 1 LSB \leq 10 000 rpm/ \pm 50 LSB			
Vibration (55 ... 2 000 Hz)	15 g	30 g	15 g	30 g
Shock (6 ms)	100 g			
Degree of protection	IP66			
Connection system \rightarrow Page 11/51	Flange socket, 17-pole with 0° coding	1 m cable with coupling socket	Flange socket, 17-pole with 0° coding	1 m cable with coupling socket
Weight, approx.	0.3 kg			
Certification	CE, cUL-Rus			
Order code	Q80 ¹⁾	Q81 ¹⁾	Q82 ¹⁾	Q83 ¹⁾

¹⁾ For worm geared motors S, the absolute encoder is available only for units in motor size 71.

Connection assignment

For cable available as an option, see „Encoder accessories (continued)” on page 11/52.



	Voltage supply				Incremental signals				Absolute position values				Other signals		
Connection	U_P	Sen- sor U_P	0 V	Sen- sor 0 V	Inner shield	A+	A-	B+	B-	DATA	$\overline{\text{DATA}}$	CLOCK	$\overline{\text{CLOCK}}$	Direc- tion of rotation	Zeros of rotation
Flange socket (SSI)	7	1	10	4	11	15	16	12	13	14	17	8	9	2	5
Core color	brown/ green	blue	white/ green	white		green/ black	yellow/ black	blue/ black	red/ black	gray	pink	violet	yellow/ black	black	green

	Voltage supply				Incremental signals				Absolute position values						
Connection	U_P	Sen- sor U_P	0 V	Sen- sor 0 V	Inner shield	A+	A-	B+	B-	DATA	$\overline{\text{DATA}}$	CLOCK	$\overline{\text{CLOCK}}$	-	-
Flange socket (EnDAT 2.1)	7	1	10	4	11	15	16	12	13	14	17	8	9		
Core color	brown/ green	blue	white/ green	white		green/ black	yellow/ black	blue/ black	red/ black	gray	pink	violet	yellow/ black	black	green

Motor options

Mounted components

Encoder

Absolute encoder 1XP8024-21

The absolute encoder is available with SSI protocol and HTL incremental signals up to motor size 200. This is ideally suited to SINAMICS G120D.

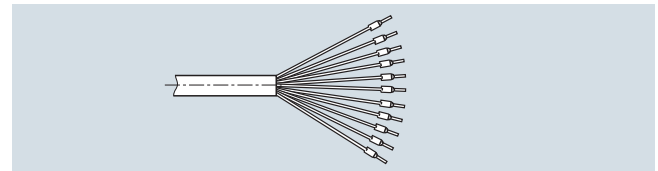
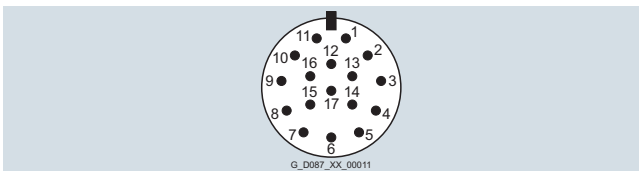
Technical specifications

Absolute encoder	1XP8024-21
Supply voltage U_P	10 ... 30 V
Maximum current consumption without load	28 mA at 24 V
Absolute position values	SSI
• Code	Gray
• Positions per revolution	8 192 (13 bit)
• Differentiable revolutions	4 096
• Calculation time t_{cal}	$\leq 5 \mu s$
Incremental signals	HTL
• Outputs	2 short-circuit proof square-wave pulses U_{a1} , U_{a2} (maximum 1 min) 2 short-circuit proof square-wave pulses $\overline{U_{a1}}$, $\overline{U_{a2}}$ (maximum 1 min)
• Signal level	$U_{High} U_P - 2.5 V$ $I_{High} = 20 mA$ $U_{Low} \leq 1.6 V$ $I_{Low} = 20 mA$
• Pulses per revolution	2 048
• Sampling rate	$\geq 205 kHz$
• Edge interval	0.43 μs
Starting torque at 20 °C	$\leq 0.01 Nm$
Moment of inertia of rotor	$4.3 \times 10^{-6} kgm^2$
Maximum permissible mechanical speed	$\leq 6 000 rpm$
Vibration (55 ... 2 000 Hz)	$\leq 150 m/s^2$ (EN 60068-2-6)
Shock (6 ms)	$\leq 1 000 m/s^2$ (EN 60068-2-27)
Degree of protection	IP66
Connection system → Page 11/51	1 m cable with 17-pole coupling socket, 0° coding
Weight, approx.	0.3 kg
Certification	CE, cUL-Rus
Order code	Q79¹⁾

¹⁾ For worm geared motors S, the absolute encoder is available only for units in motor size 71.

Connection assignment

For cable available as an option, see „Encoder accessories (continued)” on page 11/52.



	Voltage supply				Incremental signals				Absolute position values				Other signals		
Connection	U_P	Sensor U_P	0 V	Sensor 0 V	Inner shield	U_{a1}	$\overline{U_{a1}}$	U_{a2}	$\overline{U_{a2}}$	DATA	DATA	CLOCK	CLOCK	Counting direction	Zeros
	● — ●		● — ●												
Flange socket (SSI)	7	1	10	4	11	15	16	12	13	14	17	8	9	2	5
Core color	brown/ blue/ green	blue/ green	white/ green	white		green/ black	yellow/ black	blue/ black	red/ black	gray	pink	violet	yellow	black	green

Rugged encoders
Rotary pulse encoder LL 861 900 220


Fig. 11/36 Leine und Linde LL 861 900 220

With its rugged design, this rotary pulse encoder is also suitable for demanding operating environments. It is resistant to shock and vibration and has insulated bearings.

The rotary pulse encoder LL 861 900 220 is available in combination with self-ventilated motors in size 112 or larger, or in combination with forced-ventilated motors in size 160 or larger.

The version of the rotary pulse encoder with a diagnostics system (ADS) can be supplied by Leine und Linde.

Technical specifications

Supply voltage U_p	+9 ... +30 V
Current consumption without load	Max. 80 mA
Permissible load current per output	40 mA
Pulses per revolution	1 024
Outputs	6 short-circuit proof square-wave pulses A, A', B, B', 0, 0', high current HTL
Pulse offset between the two outputs	$90^\circ \pm 25^\circ$ electrical
Output amplitude	$U_{\text{High}} \geq U_B - 4 \text{ V}$ $U_{\text{Low}} \leq 2.5 \text{ V}$
Pulse duty factor	$1:1 \pm 10 \%$
Rate of change	50 V/ μs (without load)
Maximum frequency	100 kHz for 350 m cable
Maximum speed	4 000 rpm
Degree of protection	IP66
Maximum permissible radial cantilever force	300 N
Maximum permissible axial force	100 N
Connection system → Page 11/51	Terminal strips in the encoder Cable connection, M20 x 1.5 radial
Weight, approx.	1.3 kg
Order code	Q92

Manufacturer:

Leine und Linde (Germany) GmbH
 Bahnhofstrasse 36
 73430 Aalen, Germany
 Phone: +49 (0) 73 61-78093-0
 Fax: +49 (0) 73 61-78093-11
<http://www.leinelinde.com>
 E-mail: info@leinelinde.de

Motor options

Mounted components

Encoder

Rugged encoders (continued)

Rotary pulse encoder HOG9 D 1024 I



Fig. 11/37 Hübner HOG9 D 1024 I

The encoder is equipped with insulated bearings.

The rotary pulse encoder HOG9 D 1024 I is available in combination with self-ventilated motors in size 112 or larger, or in combination with forced-ventilated motors in size 160 or larger.

Technical specifications

Supply voltage U_p	+9 ... +30 V
Current consumption without load	50 ... 100 mA
Permissible load current per output	60 mA, 300 mA peak
Pulses per revolution	1 024
Outputs	4 short-circuit proof square-wave pulses A, B and A', B'
Pulse offset between the two outputs	$90^\circ \pm 20^\circ$
Output amplitude	$U_{\text{High}} \geq U_B - 3.5 \text{ V}$ $U_{\text{Low}} \leq 1.5 \text{ V}$
Pulse duty factor	$1:1 \pm 20 \%$
Rate of change	10 V/ μs (without load)
Maximum frequency	120 kHz
Maximum speed	7 000 rpm
Degree of protection	IP56
Maximum permissible radial cantilever force	300 N
Maximum permissible axial force	200 N
Connection system → Page 11/51	Radial connector (mating connector is part of the scope of delivery)
Mechanical design acc. to Hübner Ident. No.	73 522 E
Weight	0.7 kg
Order code	Q93

Manufacturer:

Baumer Hübner GmbH
Max-Dohrn-Str. 2+4
10589 Berlin, Germany

Phone: +49 (0) 30-6 90 03-0

Fax: +49 (0) 30-6 90 03-1 04

<http://www.baumerhuebner.com>

E-mail: info@baumerhuebner.com

Rugged encoders (continued)

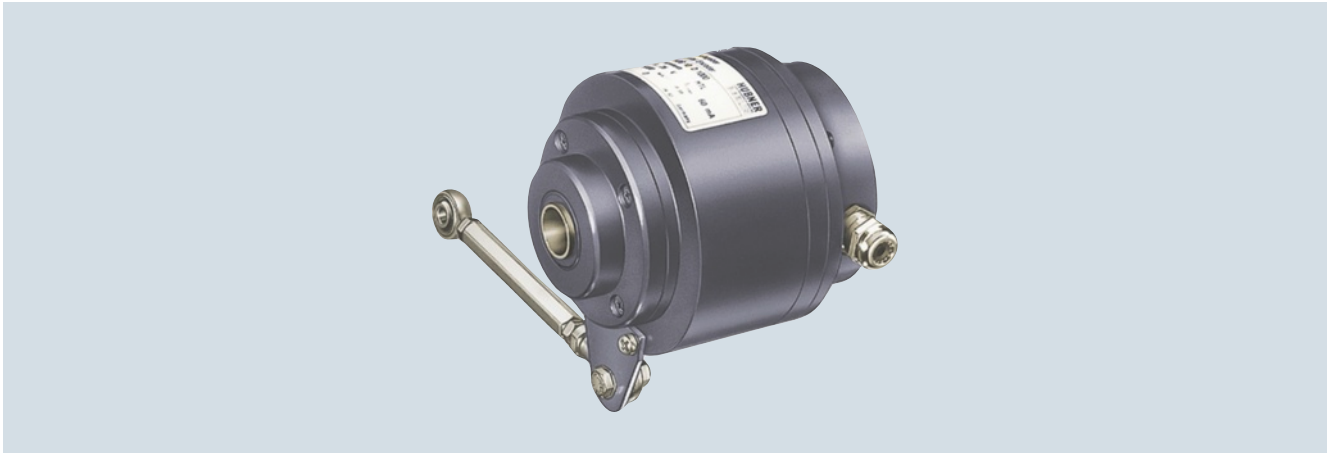
Rotary pulse encoder HOG10 D 1024 I


Fig. 11/38 Hübner HOG10 D 1024 I

This encoder is extremely rugged and is therefore suitable for difficult operating conditions. It is equipped with insulated bearings.

The rotary pulse encoder HOG10 D 1024 I is available for motor size 132 and higher.

Technical specifications

Supply voltage U_p	+9 ... +30 V
Current consumption without load	Approx. 100 mA
Permissible load current per output	60 mA, 300 mA peak
Pulses per revolution	1 024
Outputs	4 short-circuit proof square-wave pulses A, B and A', B'
Pulse offset between the two outputs	$90^\circ \pm 20\%$
Output amplitude	$U_{High} \geq U_B - 3.5\text{ V}$ $U_{Low} \leq 1.5\text{ V}$
Pulse duty factor	$1:1 \pm 20\%$
Rate of change	10 V/ μs (without load)
Maximum frequency	120 kHz
Maximum speed	7 000 rpm
Degree of protection	IP66
Maximum permissible radial cantilever force	400 N
Maximum permissible axial force	250 N
Connection system → Page 11/51	Terminals, cable connection M20 x 1.5
Mechanical design acc. to Hübner Ident. No.	74 055 E
Weight, approx.	1.6 kg
Order code	Q94

Manufacturer:

Baumer Hübner GmbH
 Max-Dohrn-Str. 2+4
 10589 Berlin, Germany

Phone: +49 (0) 30-6 90 03-0

Fax: +49 (0) 30-6 90 03-1 04

<http://www.baumerhuebner.com>

E-mail: info@baumerhuebner.com

Motor options

Mounted components

Safety
Integrated

Encoder

Functionally safe rotary encoder

Information about the configuring and application of the functionally safe rotary encoder can be found in chapter [Configuring guide on page 2/21](#).

Incremental encoder IN 8.5834

This incremental encoder is available for motor sizes 71 to 200.



Fig. 11/39 Incremental encoder IN 8.5834

Technical specifications

Incremental encoders	IN 8.5834FS2	IN 8.5834FS3
Pulses per revolution	1 024	
Supply voltage U_p	5 V _{DC} ± 5 %	
Maximum current consumption without load	≤ 70 mA	
Reverse polarity protection for supply voltage	Yes	
Outputs	Sinusoidal/cosinusoidal	
• Max. frequency -3 dB	400 kHz	
• Signal level	1 V _{pp} (± 10 %)	
• Outputs	Sine signal: B, B_Inv Cosine signal: A, A_Inv	
• Short-circuit strength	Yes (short-circuit proof to 0 V or output, only one channel at a time, when supply voltage is correctly applied)	
Starting torque (at 20 °C/68 °F)	< 0.03 Nm	
Moment of inertia of rotor	7 x 10 ⁻⁶ kgm ²	
Max. permissible mechanical speed	≤ 3 000 rpm	
Vibration (10 ... 150 Hz)	200 m/s ² (EN 60068-2-6)	
Shock resistance (11 ms)	500 m/s ² (EN 60068-2-27)	
Degree of protection	IP 65	
Connection system	Tangential 1 m cable with coupling socket 12-pole, M23 with 0° coding	
Weight, approx.	0.45 kg	
Certification	CE, cUL, SIL/PL	
UL file	File 224618	
CE-compliant (compliance with applicable national and regional laws, standards and regulations is also essential)	EMC Directive 2004/108/EC Machinery Directive 2006/42/EC RoHS Directive 2011/65/EU	
Safety values		
Classification	PLd/SIL2	PLe/SIL3
System structure	2-channel (Cat. 3)	2-channel (Cat. 4)
PFH d value	2.16 x 10 ⁻⁸ h ⁻¹ (The specified value refers to a diagnostic coverage of 90 % that must be achieved with an encoder evaluation unit. The encoder evaluation unit must at least comply with the requirements for SIL2.)	1.09 x 10 ⁻⁸ h ⁻¹ (The specified value refers to a diagnostic coverage of 99 % that must be achieved with an encoder evaluation unit. The encoder evaluation unit must at least comply with the requirements for SIL3.)
Service life	20 years	20 years
Relevant standards (compliance with applicable national and regional laws, standards and regulations is also essential)	EN ISO 13849-1:2008 EN ISO 13849-2:2012 EN 61800-5-2:2007	EN ISO 13849-1:2008 EN ISO 13849-2:2012 EN 61800-5-2:2007
Order code	Q42¹⁾	Q43¹⁾

¹⁾ The functionally safe rotary encoder is not compatible with worm geared motors S


Functionally safe rotary encoder (continued)

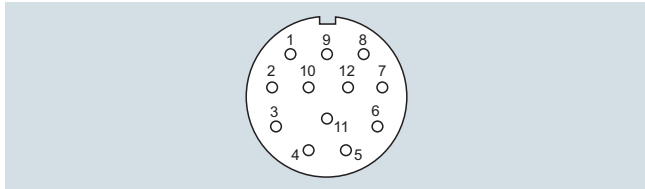
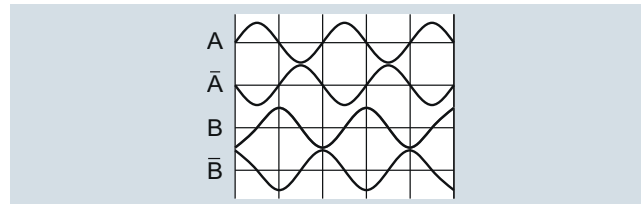
Incremental encoder IN 8.5834
Connection assignment

Signal


Fig. 11/40 Chart pattern with shaft rotating in clockwise direction (looking in direction of clamping ring)

	Voltage supply		Incremental signals					
Connection	U_P	Sensor U_P ¹⁾	0 V	Sensor 0 V ¹⁾	A+	A-	B+	B-
Flange socket	12	2	10	11	5	6	8	1

¹⁾ Jumpers between sensor pins in rotary encoder

Manufacturer:

 Fritz Kübler GmbH
 Schubertstr. 47
 78054 Villingen-Schwenningen, Germany

Phone: +49 (0) 77 20 - 39 03-0

Fax: +49 (0) 77 20 - 21 56 4

<http://www.kuebler.com>

 E-mail: info@kuebler.com

Motor options

Mounted components



Encoder

Functionally safe rotary encoder

Absolute encoder IA 8.5883

This absolute encoder is available for motor sizes 71 to 200.



Fig. 11/41 Absolute encoder IA 8.5883

Technical specifications

Absolute encoder	IA 8.5883FS2	IA 8.5883FS3
Supply voltage U_p	5 V _{DC} ± 5 %	
Maximum current consumption without load	≤ 80 mA	
Reverse polarity protection for supply voltage	Yes	
Absolute position values	SSI	
• Output driver	RS 485 transceiver type	
• Permitted load/channel	Max. ± 20 mA	
• Signal level	HIGH type 3.8 V LOW with I load = 20 mA type 1.3 V	
• Positions per revolution	8 192 (13 bit)	
• Differentiable revolutions	4 096 (12-bit)	
• Code	Gray	
• SSI clock rate	50 kHz ... 2 MHz	
• Monoflop time	≤ 15 μs	
• Data refresh rate	ST resolution ≤ 1 μs	
SinCos signals	~1 V _{pp}	
• Max. frequency -3 dB	400 kHz	
• Signal level	1 V _{pp} (± 10 %)	
• Short-circuit strength	Yes (short-circuit proof to 0 V or output, only one channel at a time, when supply voltage is correctly applied)	
• Pulses per revolution	2 048	
• Outputs	Sine signal: B, B_Inv Cosine signal: A, A_Inv	
Starting torque (at 20 °C/68 °F)	< 0.03 Nm	
Moment of inertia of rotor	7 x 10 ⁻⁶ kgm ²	
Max. permissible mechanical speed	≤ 3 000 rpm	
Vibration (10 ... 150 Hz)	200 m/s ² (EN 60068-2-6)	
Shock resistance (11 ms)	500 m/s ² (EN 60068-2-27)	
Degree of protection	IP 65	
Connection system	Tangential 1 m cable with coupling socket 17-pole, M23 with 0° coding	
Weight, approx.	0.45 kg	
Certification	CE, cUL, SIL/PL	
UL file	File 224618	
CE-compliant (compliance with applicable national and regional laws, standards and regulations is also essential)	EMC Directive 2004/108/EC Machinery Directive 2006/42/EC RoHS Directive 2011/65/EU	
Order code	Q77¹⁾	Q78¹⁾

¹⁾ The functionally safe rotary encoder is not compatible with worm geared motors S


Functionally safe rotary encoder (continued)

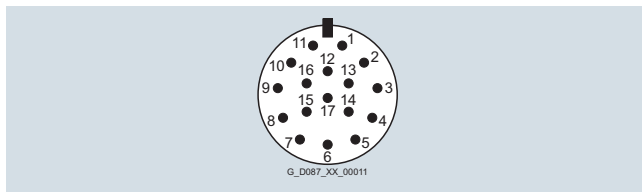
Absolute encoder IA 8.5883

Technical specifications

Absolute encoder	IA 8.5883FS2	IA 8.5883FS3
Safety values		
Classification	PLd/SIL2	PLe/SIL3
System structure	2-channel (Cat. 3)	2-channel (Cat. 4)
PFH d value	$2.16 \times 10^{-8} \text{ h}^{-1}$ (The specified value refers to a diagnostic coverage of 90 % that must be achieved with an encoder evaluation unit. The encoder evaluation unit must at least comply with the requirements for SIL2.)	$1.09 \times 10^{-8} \text{ h}^{-1}$ (The specified value refers to a diagnostic coverage of 99 % that must be achieved with an encoder evaluation unit. The encoder evaluation unit must at least comply with the requirements for SIL3.)
Service life	20 years	20 years
Relevant standards (compliance with applicable national and regional laws, standards and regulations is also essential)	EN ISO 13849-1:2008 EN ISO 13849-2:2012 EN 61800-5-2:2007	EN ISO 13849-1:2008 EN ISO 13849-2:2012 EN 61800-5-2:2007
Order code	Q77¹⁾	Q78¹⁾

¹⁾ The functionally safe rotary encoder is not compatible with worm geared motors S

Connection assignment



Signal

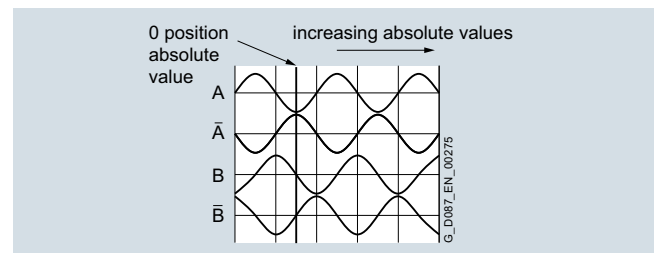


Fig. 11/42 Chart pattern with shaft rotating in clockwise direction (looking in direction of clamping ring)

	Voltage supply				Incremental signals				Absolute position values				Other signals		
Connection	U_p	Sensör U_p ¹⁾	0 V	Sensör 0 V ¹⁾	Inner shield ²⁾	A+	A-	B+	B-	DATA	$\overline{\text{DATA}}$	CLOCK	$\overline{\text{CLOCK}}$	Rot. direction	Zeros
										D+	D-	C+	C-	DIR ³⁾	SET ⁴⁾
Flange socket (SSI)	7	1	10	4	11	15	16	12	13	14	17	8	9	2	5

¹⁾ Sensor pins jumpered internally in connector

²⁾ No inner shield

³⁾ When the input is activated, the absolute values are counted backwards

⁴⁾ When the input is activated, the absolute value is set to zero

Manufacturer:

Fritz Kübler GmbH
 Schubertstr. 47
 78054 Villingen-Schwenningen, Germany

Phone: +49 (0) 77 20 - 39 03-0

Fax: +49 (0) 77 20 - 21 56 4

<http://www.kuebler.com>

E-mail: info@kuebler.com

Motor options

Mounted components



Encoder

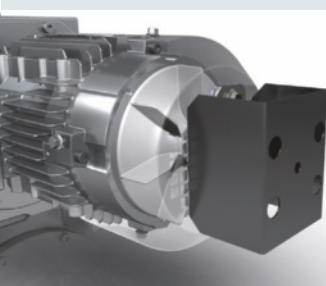
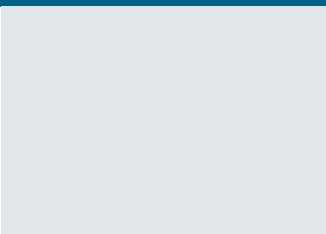
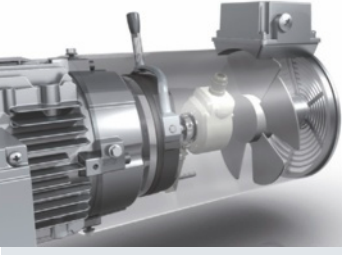
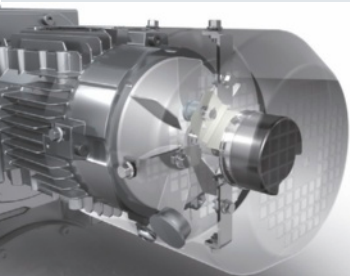
Functionally safe rotary encoder (continued)

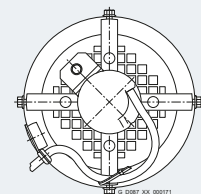
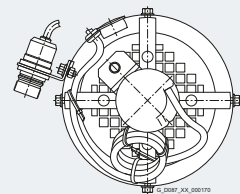
The maximum permissible air gaps for brake motors with functionally safe rotary encoder are different, see table.

Technical specifications of brake with functionally safe rotary encoder

Brake type	Rated braking torque T_{br} at 100 rpm Nm	Working capacity Friction energy until the air gap is readjusted W_f MJ	Rated air gap S_{LSN}	Max. rated air gap S_{LSM}
			mm	mm
L4/1.4	1.4	46.8	0.2	0.65
L4/2	2	46.8	0.2	0.6
L4/3	3	39.6	0.2	0.55
L4	4	36.0	0.2	0.5
L4/5	5	23.4	0.2	0.4
L8/3	3	86.4	0.2	0.6
L8/4	4	86.4	0.2	0.6
L8/5	5	75.6	0.2	0.6
L8/6.3	6.3	75.6	0.2	0.6
L8	8	64.8	0.2	0.5
L8/10	10	54	0.2	0.5
L16/4	4	108	0.2	0.6
L16/8	8	108	0.2	0.6
L16/10	10	108	0.2	0.6
L16/13	13	108	0.2	0.6
L16	16	108	0.2	0.6
L16/20	20	80	0.2	0.5
L32/8	8	190	0.3	0.7
L32/14	14	190	0.3	0.7
L32/18	18	190	0.3	0.7
L32/23	23	173	0.3	0.7
L32	32	141	0.3	0.6
L32/40	40	110	0.3	0.5
L60/25	25	204	0.3	0.7
L60/35	35	204	0.3	0.7
L60/38	38	187	0.3	0.7
L60/50	50	159	0.3	0.6
L60	60	159	0.3	0.6
L80/25	25	264	0.3	0.7
L80/35	35	264	0.3	0.7
L80/50	50	264	0.3	0.7
L80/63	63	264	0.3	0.7
L80	80	264	0.3	0.7
L80/100	100	173	0.3	0.6
L150/60	60	273	0.4	0.8
L150/80	80	273	0.4	0.8
L150/100	100	273	0.4	0.8
L150/125	125	273	0.4	0.8
L150	150	273	0.4	0.8
L260/100	100	418	0.4	0.8
L260/145	145	418	0.4	0.8
L260/180	180	418	0.4	0.8
L260/200	200	418	0.4	0.8
L260/240	240	418	0.4	0.8
L260	260	418	0.4	0.8
L260/315	315	338	0.4	0.7
L400/265	265	643	0.5	0.9
L400/300	300	643	0.5	0.9
L400/360	360	643	0.5	0.9
L400	400	643	0.5	0.9
L400/600	600	257	0.5	0.7

Mechanical protection

Design	Figure	Encoder type	Connection system	Flange/coupling socket mounting
Protection plate				
For self-ventilated motors up to size 90, the encoder is mounted outside the fan cover. In the standard version, the encoder is covered by a protective metal plate.		1XP8012-.. 1XP8014-.. 1XP8013-..	Flange socket	
		1XP8022-.. 1XP8032-..	Cable terminal box 0.8 m cable + coupling socket	
		1XP8024-.. 1XP8023-..	1 m cable + coupling socket	
Canopy				
From motor size 100, a canopy (painted red) is used to protect the encoder.		1XP8012-.. 1XP8014-.. 1XP8013-..	Flange socket	
		1XP8022-.. 1XP8032-..	Cable terminal box 0.8 m cable + coupling socket	
		1XP8024-.. 1XP8023-..	1 m cable + coupling socket	
Fan cover of the motor (with external fan)				
For force-ventilated motors the encoder is mounted inside the fan cover.		1XP8012-.. 1XP8014-.. 1XP8013-..	Flange socket (from motor size 132)	
		1XP8022-.. 1XP8032-..	Cable terminal box 0.8 m cable + coupling socket	The coupling socket is attached to the motor cooling fins using a claw.
		1XP8024-.. 1XP8023-..	1 m cable + coupling socket	The cable is freely fed out of the fan cover.
Encoder under cover				
Optionally, for motor sizes 71 to 200, instead of the protective metal plate, a protection cover can be ordered. This provides additional mechanical protection for the encoder.		1XP8022-.. 1XP8032-..	Cable terminal box 0.8 m cable + coupling socket	The coupling socket is attached to the cover using a bracket.
		1XP8024-.. 1XP8023-..	1 m cable + coupling socket	The cable is fed to the outside through a cutout with protective envelope.



Motor options

Mounted components

Encoder

Motors prepared for encoder mounting

The interface for the modular encoder-mounting shaft is designed for a total maximum weight of $m = 500g$. The connections and wiring for the encoder system must be selected such that the rotary encoder is not subjected to any additional forces. The encoder must be mounted in such a way that normal linear expansion does not subject the torque arm to any impermissible forces.

In the delivery state, the encoder-mounting shaft has a maximum radial runout of ≤ 0.1 mm. When the encoder is selected, it must be ensured that the minimum immersion depth of the solid shaft into the hollow shaft corresponds to the encoder manufacturer's specifications. The encoder manufacturer's instructions and recommendations must also be observed.

The interface "Prepared for encoder mounting" is always shipped with an encoder protection device for protection during transportation. The encoder protection device should be used in order to protect the mounted encoder and the mounting system against mechanical damage.

For the dimensions of the available mounting space and other dimensions, please refer to [page 8/52](#).

This option is suitable for applications with medium shock and vibration requirements. At medium cycle frequencies of the application, speeds up to 3 600 rpm are possible.

Order code:

Prepared for encoder mounting (12 mm) ¹⁾

N50

¹⁾ Not possible for worm geared motors S

MOTION-CONNECT signal cables


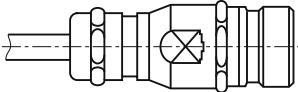
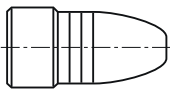
MOTION-CONNECT signal cables for encoder types incremental encoder (HTL/TTL), absolute encoder (SSI/EnDat 2.1) and resolver are available for connecting SIEMENS 1XP8 encoders to SINAMICS S110/120 and G120.

These cables can be ordered in precise 10 cm lengths.

Description	Article No.:
Incremental encoder (HTL/TTL) 1XP8012; 1XP8032 and 1XP8022	
Pre-assembled signal cable (fixed routing/ with D-sub connector on control side)	6FX5002-2CR00-■■■■■
Pre-assembled signal cable (fixed routing/ with bare wire ends on control side)	6FX5002-2CA12-■■■■■
Pre-assembled signal cable (trailing type/ with bare wire ends on control side)	6FX8002-2CA12-■■■■■
Absolute encoder (SSI) 1XP8014-20; 1XP8024-20; 1XP8024-21	
Pre-assembled signal cable (fixed routing)	6FX5002-2CC06-■■■■■
Pre-assembled signal cable (trailing type)	6FX8002-2CC06-■■■■■
Absolute encoder (EnDat 2.1) 1XP8014-10; 1XP8024-10	
Pre-assembled signal cable (fixed routing/ with D-sub connector on control side)	6FX5002-2CH00-■■■■■
Pre-assembled signal cable (trailing type/ with D-sub connector on control side)	6FX8002-2CH00-■■■■■
Resolvers 1XP8013 and 1XP8023	
Pre-assembled signal cable (fixed routing)	6FX5002-2CF06-■■■■■
Pre-assembled signal cable (trailing type)	6FX8002-2CF06-■■■■■

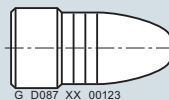
For further selection options and information about MOTION-CONNECT signal cables, please refer to Catalog [PM21](#).

Encoder accessories

Connection system	Description	Design
Flange socket		
	The flange socket is mounted directly on the encoder.	Pin contacts External thread
Coupling socket		
	The coupling socket is connected to the encoder via a cable.	Pin contacts External thread
Connector		
	The connector is connected to the flange/coupling socket.	Socket contacts Union nut

Connector

A straight connector for shielded cables up to 8 mm in diameter is available for encoders with flange/coupling socket.

Selection table


Encoder type	Order code Article No.
Incremental encoders 1XP8012, 1XP8032, IN 8.5834 Resolvers 1XP8013 and 1XP8023	Q62 FDU:55190000565002
Absolute encoders 1XP8014, 1XP8024, IA 8.5883	Q62 FDU:55190000565003

Motor options

Mounted components

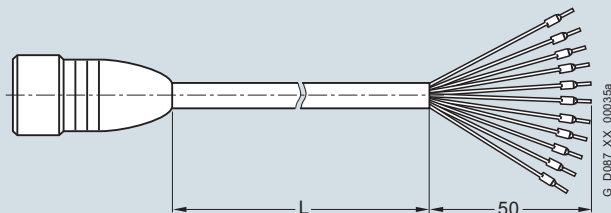
Encoder

Encoder accessories (continued)

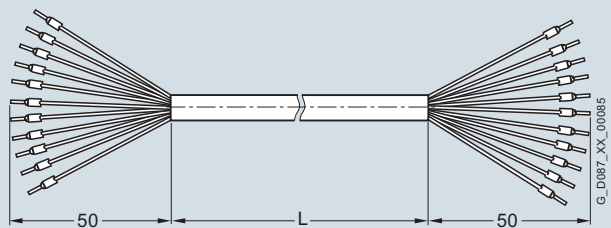
Cable with end sleeves

A pre-assembled cable with end sleeves and three different cable lengths can be supplied for the encoders.

Selection table



Encoder type	Order code		
	Article No.		
Free cable length L	2 m	8 m	15 m
Incremental encoders 1XP8012, 1XP8032	Q69 FDU:70000004013446	Q70 FDU:70000004013447	Q71 FDU:70000004013448
Resolvers 1XP8013 and 1XP8023	Q69 FDU:70000004013576	Q70 FDU:70000004013577	Q71 FDU:70000004013578
Absolute encoders 1XP8014 and 1XP8024	Q69 FDU:70000004013454	Q70 FDU:70000004013455	Q71 FDU:70000004013456



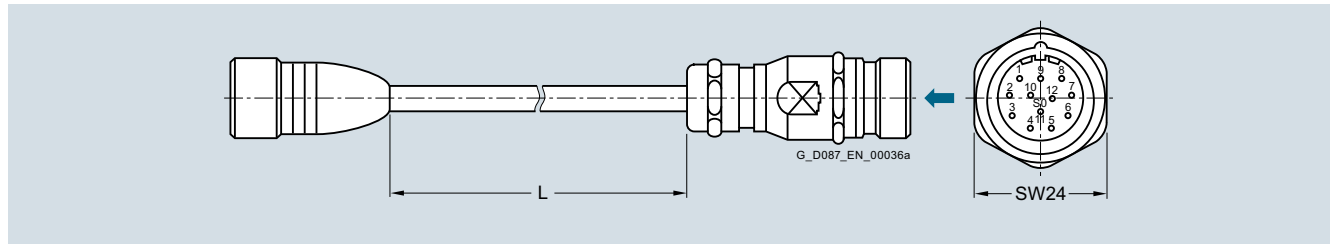
Encoder type	Order code		
	Article No.		
Free cable length L	2 m	8 m	15 m
Incremental encoder 1XP8022	Q63 FDU:70000004013418	Q64 FDU:70000004013419	Q65 FDU:70000004013420

Encoder accessories (continued)

Cable with coupling socket

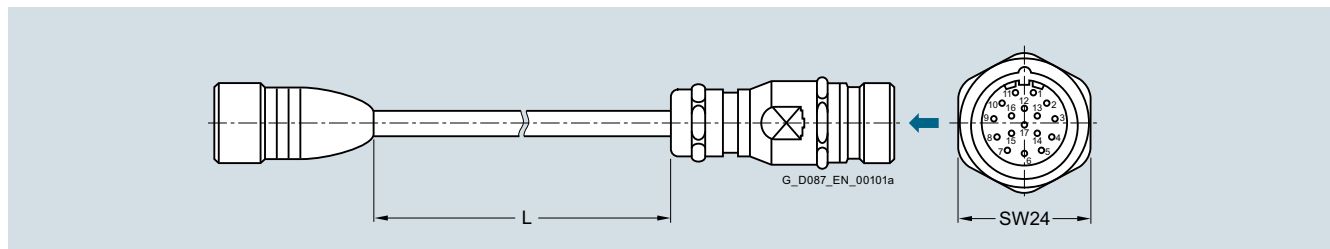
A cable with a straight coupling socket can be supplied for the encoders.

Selection table

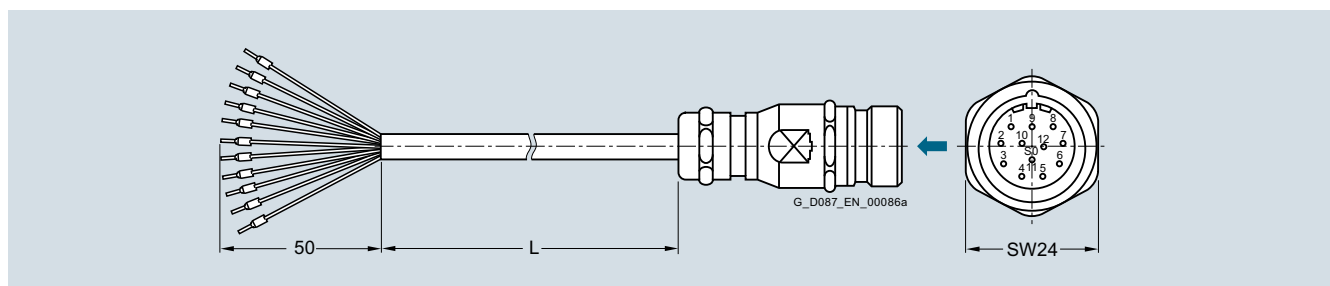


Encoder type	Order code		
	Article No.		
Free cable length L	2 m	8 m	15 m
Incremental encoders 1XP8012, 1XP8032	Q72	Q73	Q74
	FDU:70000004013449	FDU:70000004013450	FDU:70000004013451
Resolvers 1XP8013 and 1XP8023	Q72	Q73	Q74
	FDU:70000004013579	FDU:70000004013580	FDU:70000004013581

For the connection assignment, see the encoder flange socket.



Encoder type	Order code		
	Article No.		
Free cable length L	2 m	8 m	15 m
Absolute encoders 1XP8014 and 1XP8024	Q72	Q73	Q74
	FDU:70000004013457	FDU:70000004013458	FDU:70000004013459



Encoder type	Order code		
	Article No.		
Free cable length L	2 m	8 m	15 m
Incremental encoder 1XP8022	Q66	Q67	Q68
	FDU:70000004013421	FDU:70000004013422	FDU:70000004013443

Motor options

Mounted components

Encoder

Encoder accessories (continued)

EnDAT gateways for absolute encoders

Using interface converters (gateways), EnDAT absolute encoders can be integrated in networks with a serial bus system (Profibus DP, CANopen and DeviceNET).

The absolute encoder can be connected to the gateway using cables for absolute encoders **Q72**, **Q73** or **Q74**.

Order code:

Gateway EnDAT Profinet ¹⁾	Q01
Gateway EnDAT Profibus DP ¹⁾	Q02
Gateway EnDAT CANopen ¹⁾	Q03
Gateway EnDAT DeviceNET ¹⁾	Q04

¹⁾ Not possible for worm geared motors S

Application terminal box for sensors

The application terminal box contains the connections for the sensors in the motor (temperature measurement) and on the motor (encoder). This is used to isolate the connections for the power section from those for the sensor section.

The application terminal box is available for motor sizes 63 to 200.

The following encoders are possible in combination with the application terminal box:

- Incremental encoder IXP8022 (**Q56 ... Q60**)
- Incremental encoder LL 861 900 220 (**Q92**)

Order code:

Application terminal box ¹⁾	Q75
--	------------

¹⁾ Not possible for worm geared motors S

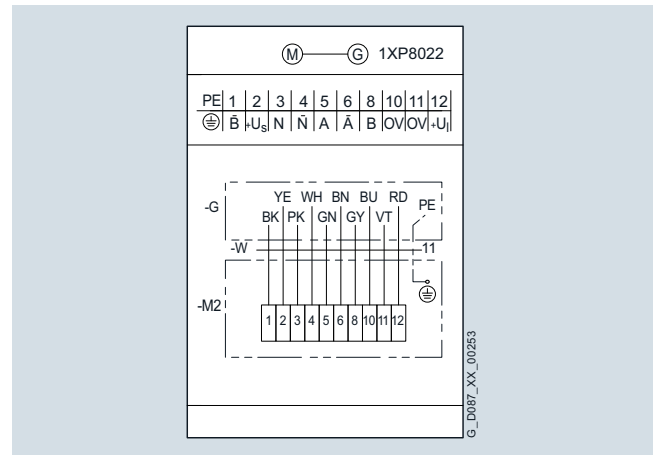


Fig. 11/43 Connection circuit diagram

Modular system in combination with encoder systems

Encoder	Motor plug	Brake	Self ventilation			Forced ventilation	Backstop
			Standard fan	Metal fan	High inertia fan		
Incremental encoder							
1XP8012-..	✓	✓	✓	✓	✓	✓	✓
1XP8022-..	✓	✓	✓	✓	✓	✓	✓
1XP8032-..	✓	✓	✓	✓	✓	✓	✓
Absolute encoder							
1XP8014-..	✓	✓	✓	✓	✓	✓	✓
1XP8024-..	✓	✓	✓	✓	✓	✓	✓
Resolver							
1XP8013-..	✓	-	✓	✓	✓	✓	✓
1XP8023-..	✓	-	✓	✓	✓	✓	✓
Functionally safe rotary encoder							
IN 8.5834-..	✓	✓	✓	✓	✓	✓	-
IA 8.5883-..	✓	✓	✓	✓	✓	✓	-

Backstop

Motors, sizes 71 to 200, can be supplied with a backstop, which prevents them from rotating in the opposite direction to that used in operation.

Above the disengage speed, in the operational direction of rotation, there is no connection between the inner and outer rings of the backstop.

For starting and stopping below the disengage speed, the operating time may be a maximum of 20 seconds.

In the direction of rotation opposite to the operational direction of rotation, there is a fixed connection between the inner and outer rings of the backstop. This allows the rated backstop torque to be transmitted.

When selecting the backstop, the direction of rotation of the geared motor output shaft must be specified.

Please note that motor speeds that are lower (e.g. in inverter-fed operation) than the disengage speed can damage the backstop.

Order code:

Backstop ¹⁾

N23

¹⁾ Not possible for worm geared motors S

Order code, output shaft direction of rotation:

Clockwise

K18

Counterclockwise

K19

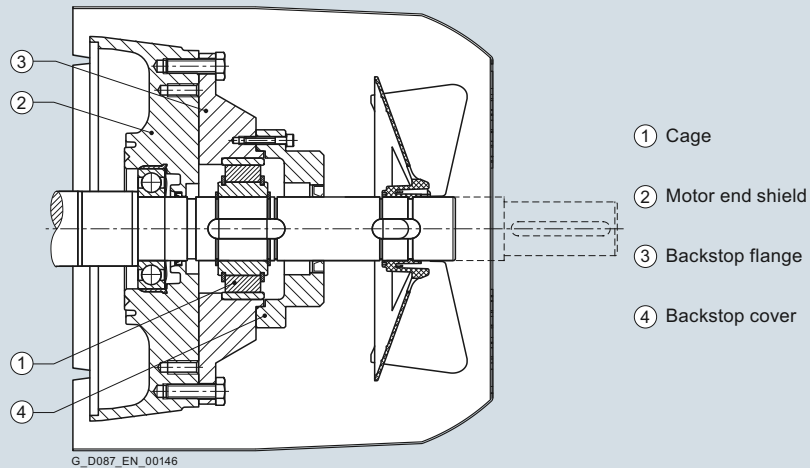


Fig. 11/44 Backstop

Technical specifications

Motor size	Rated torque	Disengage speed	Maximum speed	Weight	Moment of inertia of cage and inner ring
	T_{SP} Nm	n_{dis} min^{-1}	n_{max} min^{-1}	m_{Bstp} kg	J_{Bstp} $10^{-4} kgm^2$
71	100	890	5 000	0.26	1.0
80	100	890	5 000	0.26	1.0
90	150	860	5 000	0.42	2.0
100	150	860	5 000	0.42	2.0
112	150	860	5 000	0.42	2.0
132	420	750	5 000	1.16	8.0
160	800	700	5 000	1.16	8.0
180	1 050	670	5 000	1.60	20.0
200	1 050	670	5 000	1.60	20.0
225	1 350	630	5 000	4.20	27.0
250	1 350	630	5 000	4.20	27.0

Modular system in combination with backstop

Modular system	Motor plug	Brake	Encoder	Self ventilation Forced ventilation	Second shaft extension
Backstop	✓	-	✓	✓	✓

Motor options

Mounted components

Second shaft extension and handwheel

Second shaft extension

For 4-pole motors a free, second shaft extension can be supplied on the non-drive end (NDE). The second shaft extension has a 60° centering hole to DIN 332, Part 2 with M3 to M24 tapped hole depending on the shaft diameter.

For a coupling output, the second shaft extension can transmit the full rated power. Please also inquire about the power that can be transmitted and permissible cantilever force if belt pulleys, chains, or gear pinions are used on the second shaft extension.

A second shaft extension cannot be provided if a rotary pulse encoder and/or an external fan has been mounted to the motor.

Order code:

Second shaft extension ¹⁾

N39

¹⁾ Not possible for worm geared motors S

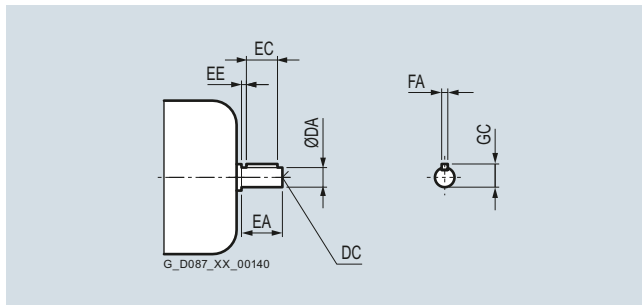


Fig. 11/45 Second motor shaft extension

Handwheel

Motors, sizes 71 to 160, can be supplied with a second shaft extension and additionally with a handwheel.

The handwheel is a disk-type handwheel in accordance with DIN 3670. By mounting it on the second shaft extension of the motor, the geared motor can be rotated even when the motor winding is in a no-voltage state.

Order code:

Handwheel ¹⁾

N40

¹⁾ Not possible for worm geared motors S

Technical specifications

Motor size	DA	EA	Distance between fan cover and shaft shoulder	DC	EC	EE	FA	GC
63	-	-	-	-	-	-	-	-
71	14	30	4	M5	22	4	5	16.0
80	14	30	4	M5	22	4	5	16.0
90	19	40	5	M6	32	4	6	21.5
100	19	40	5	M6	32	4	6	21.5
112	24	50	6	M8	40	5	8	27.0
132	28	60	8	M10	50	5	8	31.0
160	38	80	8	M12	70	5	10	41.0
180	42	110	15	M16	90	10	12	45.0
200	48	110	20	M16	100	5	14	51.5
225	55	110	5	M20	100	5	5	59.0
250	60	140	5	M20	125	10	10	64.0

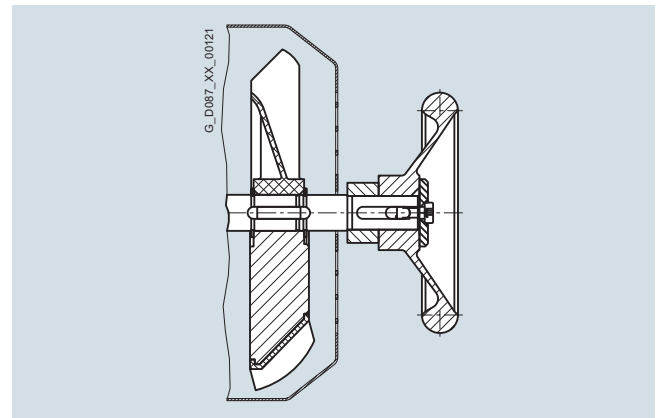


Fig. 11/46 Handwheel

Modular system in combination with second shaft extension

Modular system	Motor plug	Brake	Backstop	Encoder	Self ventilation	Forced ventilation
Second shaft extension						
Without handwheel	✓	✓	✓	-	✓	-
With handwheel	✓	✓	✓	-	✓	-

Hexagonal recess

All self-ventilated motors, sizes 71 to 160 with mounted brake or backstop have a hexagonal recess in the motor shaft extension at the non-drive end (NDE). As a consequence, frequently it is not necessary to mount a handwheel.

A hexagonal recess is not possible for rotary pulse encoder or second shaft extension.

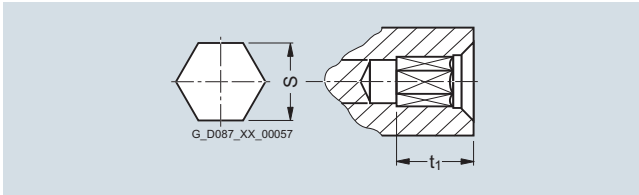


Fig. 11/47 Hexagonal recess

Width across flats for hexagonal recess

Motor size	Width across flats mm	Bore depth mm
LA71	6	9
LE80		
LE90		
LE100		
LE112	10	12
LE132		
LE160		

Canopy

Geared motors with a vertical mounting position (motor at the top) can also be fitted with a canopy. The canopy prevents small items from falling into the geared motor; in the case of outdoors installation, its primary function is to serve as a rain canopy.

If the motor is to be used or stored in the open air, we recommend that it is kept under additional cover to protect it from prolonged exposure to direct sunlight, rain, snow, ice, or dust.

Order code:

Canopy

N22

Motor options

Designs for special environmental conditions

Condensation drain hole

Condensation can accumulate inside the motor as the result of environmental effects. This can result in corrosion and lower clearances and creepage distances.

The condensation is drained to the outside through the condensation drain hole. Depending on the mounting position, the drain holes are located at the DE and/or NDE of the motor.

For gearbox F.29, a condensation drain hole is not possible for mounting position M3.

For gearbox Z19, a condensation drain hole is only possible for mounting position M2.

Order code:

Condensation drain hole ¹⁾

N46

¹⁾ Not possible for worm geared motors S

Internal motor corrosion protection

The outer surfaces of the geared motors have a high quality paint finish.

For special applications, it may be necessary to apply a protective coating to the inner surfaces of the motor as well.

Order code:

Internal motor corrosion protection ¹⁾

N41

¹⁾ Not possible for worm geared motors S

General options



12/2	Designs for special environmental conditions
12/2	Increased protection against humidity and tropical climates
12/2	Increased protection against acids and alkalis
12/2	Extreme ambient temperatures
12/3	Surface treatment and preservation
12/3	Surface treatment
12/3	• Surface pretreatment
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12/5	Preservation
12/5	• Long-term preservation up to 36 months
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12/6	Overview
12/6	Rating plate for helical, parallel shaft, bevel and helical worm geared motor
12/7	Rating plate for worm geared motor
12/8	Second rating plate
12/9	Documentation
12/9	Operating instructions
12/9	Test certificates

General options

Designs for special environmental conditions

Increased protection against humidity and tropical climates

Increased protection against humidity and tropical climates can be optionally supplied for the (geared) motors, sizes 63 to 200. This design is suitable for air humidity in the range between 30 and 60 g water per m³ air as a function of the temperature (see page 9/7).

The increased protection against humidity and tropical climates includes surface treatment with corrosivity category C2 (**L03**), increased winding protection against moisture and acid (**N54**), internal motor corrosion protection (**N41**) and temperature class (155) F.

Please contact Siemens, if the motor requires other functions (brake, backstop, encoder systems).

Order code:

Increased protection against humidity and tropical climates

N43

Extreme ambient temperatures

The ambient temperature range for products listed in the catalog extends from -10 to +40 °C. In addition, when using the recommended oils, drives can be selected for the range extending from -20 to +40 °C.

When appropriately modified, SIMOGEAR geared motors can be operated at temperatures extending from -40 to -20 °C. After specifying the temperature range, the operating and starting mode as well as the load, we will gladly offer this design.

Technical changes especially involve the electrical components as well as the selection of lubricants and seals.

At higher ambient temperatures above +40 °C, the permissible oil sump temperature must not be exceeded. Please contact Siemens if your drive has to be thermally checked.

In addition, at higher temperatures, a special motor design is required, which we will be glad to offer.

Increased protection against acids and alkalis

Increased protection against acids and alkalis can be optionally supplied for the (geared) motors, sizes 63 to 200. This design is suitable for city and industrial atmospheres with moderate pollution as a result of sulfur dioxide, coastal areas with low salt levels and aggressive atmospheres up to 1% acid or alkali concentration.

The increased protection against acids and alkalis includes surface treatment with corrosivity category C3 (**L04**), increased winding protection against moisture and acid (**N54**), internal motor corrosion protection (**N41**) and temperature class (155) F.

Please contact Siemens, if the motor requires other functions (brake, backstop, encoder systems).

Order code:

Increased protection against acids and alkalis

N44

Surface treatment

We offer five high-quality paint systems in various colors to protect drives against corrosion and external environmental effects.

Our corrosion protection system is designed in accordance with the corrosivity categories of EN ISO 12944-2.

Geared motors, size 49 and higher, are painted in RAL 7016 (anthracite gray) to corrosivity category C1 as standard. This ensures that they are protected against corrosion for indoors use.

Geared motors, sizes 19 to 39 with an aluminum housing are supplied unpainted as standard.

All of the unpainted parts of the products are treated with corrosion protection for 6 months.

Surface pretreatment

For especially demanding applications, the drives can also be pretreated in order to achieve a uniform paint coat thickness also at hidden locations or those difficult to access.

Order code:

Special pretreatment

L19

Corrosivity category	Paint system			Description	Order code
	Primer	Intermediate coat	Top coat		
Surface protection					
<i>Aluminum gearbox housing¹⁾</i>					
C1/unpainted (standard)	-	-	-	<ul style="list-style-type: none"> Indoor installation Heated buildings with neutral atmospheres 	L00
C1 Normal environmental stress	-	-	1-component hydro paint	<ul style="list-style-type: none"> Resistant to greases, conditionally resistant to mineral oils, aliphatic solvents Standard paint 	L02
<i>Cast iron gearbox housing²⁾</i>					
C1 Normal environmental stress	-	-	1-component hydro paint	<ul style="list-style-type: none"> Indoor installation Heated buildings with neutral atmospheres Resistant to greases, conditionally resistant to mineral oils, aliphatic solvents Standard paint 	L02
<i>All geared motors</i>					
C2 Low environmental stress	2-component polyurethane	-	2-component polyurethane	<ul style="list-style-type: none"> Indoor and outdoor installation Unheated buildings with condensation, production areas with low humidity, e.g. warehouses and sports facilities Atmospheres with little pollution, rural areas Resistant to greases, mineral oils and sulfuric acid (10 %), caustic soda (10 %) and conditionally resistant to aliphatic solvents 	L03
C3 Average environmental stress	2-component polyurethane	-	2-component polyurethane	<ul style="list-style-type: none"> Indoor and outdoor installation Production areas with high humidity and some air pollution, e.g. food production areas, dairies, laundries and breweries Urban and industrial atmospheres, moderate contamination from sulfur dioxide, coastal areas with low salt levels Resistant to greases, mineral oils, aliphatic solvents, sulfuric acid (10 %), caustic soda (10 %) 	L04
C4 High environmental stress	2-component epoxy zinc phosphate	-	2-component polyurethane	<ul style="list-style-type: none"> Indoor and outdoor installation Chemical plants, swimming pools, wastewater treatment plants, electroplating shops, and bathhouses above seawater Industrial areas and coastal areas with moderate salt levels Resistant to greases, mineral oils, aliphatic solvents, sulfuric acid (10 %), caustic soda (10 %) 	L20
C5 Very high environmental stress	2-component epoxy zinc phosphate	2-component epoxy iron mica	2-component polyurethane	<ul style="list-style-type: none"> Indoor and outdoor installation Buildings/areas with almost constant condensation and high degrees of pollution, e.g. malt factories and aseptic areas Industrial areas with high humidity and aggressive atmosphere, coastal areas and offshore environments with high salt levels Resistant to greases, mineral oils, aliphatic solvents, sulfuric acid (10 %), caustic soda (20 %) 	L05

¹⁾ Helical gearboxes D/Z19 to D/Z39, parallel shaft gearboxes F29 and bevel gearboxes B29 and B39

²⁾ The bevel gearbox B49 is supplied painted

General options

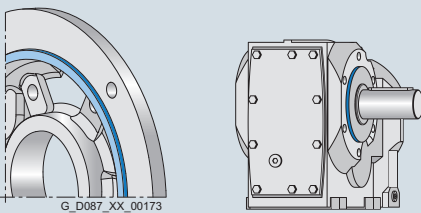
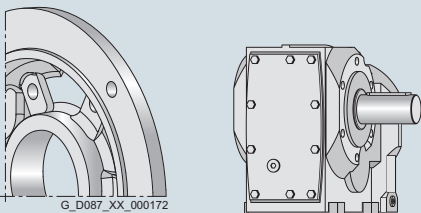
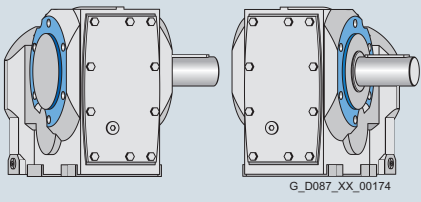
Surface treatment and preservation

Surface treatment (continued)

Corrosivity category	Paint system			Description	Order code
	Primer	Intermediate coat	Top coat		
Primer				Ability to be painted	
C3 G	2-component polyurethane	-	-	<ul style="list-style-type: none"> 2-component polyurethane paint, 2-component epoxy paint and acid-hardening paint, 2-component acrylic paint 	L01
C4 G	2-component epoxy zinc phosphate	-	-	<ul style="list-style-type: none"> 2-component polyurethane paint, 2-component epoxy paint and acid-hardening paint, 2-component acrylic paint 	L09
Unpainted	-	-	-	<ul style="list-style-type: none"> Plastic paint, synthetic resin paint, oil paint, 2-component polyurethane paint, 2-component epoxy paint 	L00

Painting flange surfaces







For flange-mounted designs, the flange surface and centering are not painted. The versions listed in the table can be optionally selected.

Design	Figure	Possible for	Order code
Centering not painted		<ul style="list-style-type: none"> Flange-mounted design Housing flange design 	L11
Flange completely painted		<ul style="list-style-type: none"> Flange-mounted design Housing flange design 	L12
Centering flange not painted on both sides		<ul style="list-style-type: none"> Housing flange design for bevel gearbox and helical worm gearbox 	L27

Surface treatment (continued)

Colors

In addition to anthracite gray (RAL 7016), you can select from other standard colors.

RAL color	Designation	Color, example	Order code
RAL 7016	Anthracite gray (standard)		L75
RAL 5015	Sky blue		L50
RAL 7011	Iron gray		L51
RAL 7030	Stone gray		L55
RAL 7031	Blue gray		L53
RAL 7035	Light gray		L54

You can find additional colors in our [SIMOGEAR Configurator](#) electronic catalog.

Note

For light colors in corrosivity category C1 we recommend selection of surface treatment in the corrosivity category one level higher to ensure adequate and uniform coloring for the geared motor.

Preservation

All gearboxes and geared motors are preserved as standard for 6 months.

Long-term preservation up to 36 months

If the gearboxes are stored for longer than 6 months, then we recommend the "Long-term preservation" option. A VCI corrosion inhibitor (volatile corrosion inhibitor) is added to the gearbox oil.

Until commissioning, it is not permissible that the gearbox is opened, as otherwise the VCI corrosion inhibitor will vaporize. The oil level must be checked before commissioning. Corrosion protection is also applied to the flange contact surfaces and shaft extensions. We recommend that the gearbox is stored in the appropriate mounting position.

Storage conditions

Geared motors, stored in dry, dust free and evenly tempered rooms do not require any special packaging.

In all other areas, the units must be packaged in foil with desiccant and moisture indicator. If required, protection must be provided against mold and termites. The storage location must be vibration- and shock-free. The storage conditions must be regularly checked.

Order code:

Long-term preservation up to 36 months

K17

[For information about storage and commissioning please refer to the operating instructions.](#)

General options

Rating plate

Overview

The rating plates on the gearboxes and geared motors are normally manufactured out of coated aluminum foil. They are covered with a special masking film which ensures permanent resistance to UV radiation and media of all kinds (oils, greases, salt water, cleaning agents, etc.).

The adhesive and the material ensure firm adhesion and long-term legibility within the operating temperature range from -40 °C to +155 °C.

For geared motors, the rating plate is attached to a stainless steel plate on the motor.

For specific designs, additional rating plates are attached to the motor.

Rating plate for helical, parallel shaft, bevel and helical worm geared motors

SIEMENS		IEC60034		SIEMENS		1		2	
FDU1508/8999999 nnn		CE		3				4	
2KJ3105-1EM22-2AV1-Z		M1		5				7	
ZF59-LE90SG4E-L32/14N-IA S104				6					
IP55 30kg				8		9			
K-Id: 1234567890				10					
1.5L OIL CLP PG VG220 i=28				11		12		13	
50Hz n2:49.3/min		60Hz n2: 59.7/min		15		16		19	
T2: 1213Nm fB:2.1		T2: 203Nm fB:2.2		17		18		21	
3-Mot. ThCl.155(F)		14 Nm		20		22		25	
50Hz 230/400V +/-10% D/Y		60Hz 460V Y		23		24		26	
4.33/2.5A cosPhi 0.78		2.2 A cosPhi 0.78		28		29		30	
1.1kW IE2-81.4%		1425/min		31		32		33	
Mot. 1LE1001-0EB0		1.27kW IE2-84%		33		34		35	
		1725/min		35		36		37	
				38		39		40	
				41		42		43	
				42		43		44	

Fig. 12/1 Example, rating plate on helical geared motor

General data

- 1 Matrix code
- 2 Applicable standard
- 3 **Serial No.**
- 4 CE marking or other marking, if required
- 5 Article No.
- 6 Model-type-size-SI marking
- 7 Type of construction (IM)
- 8 Degree of protection acc. to IEC 60034-5 or IEC 60529
- 9 Weight m [kg]
- 10 Customer ID and free text (max. 55 characters)
- 11 Oil quantity [l] main gearbox/intermediate gearbox
- 12 Oil type
- 13 Oil viscosity ISO VG class to DIN 51519/ISO 3448
- 14 Total transmission ratio

Frequency 1

- 15 Rated frequency f [Hz]
- 16 Gearbox output speed n_2 [rpm]
- 17 Geared motor output torque T_2 [Nm]
- 18 Service factor f_B

Frequency 2

- 19 Rated frequency f [Hz]
- 20 Gearbox output speed n_2 [rpm]
- 21 Geared motor output torque T_2 [Nm]
- 22 Service factor f_B

When ordering a replacement/spare part, always specify the serial No.

Motor data

- 23 Phase number and type of current for the motor
- 24 Temperature class Th.Cl.
- 25 Symbols (IEC 60617-2): = brake
- 26 Rated braking torque T_{br} [Nm]
- 27 Brake supply voltage U [V]

Frequency 1

- 28 Rated frequency f [Hz]
- 29 Rated voltage/range U [V]
- 30 Circuit, graphic symbols acc. to EN 60617 Part 6/IEC 60617-6
- 31 Rated current I_{rated} [A]
- 32 Power factor $\cos \varphi$
- 33 Rated power P_{rated} [kW], duty type if $\neq S1$
- 34 Efficiency class marking according to IEC 60034-30
- 35 Rated speed n_{rated} [rpm]

Frequency 2

- 36 Rated frequency f [Hz]
- 37 Rated voltage/range U [V]
- 38 Rated current I_{rated} [A]
- 39 Power factor $\cos \varphi$
- 40 Circuit, graphic symbols acc. to EN 60617 Part 6/IEC 60617-6
- 41 Rated power P_{rated} [kW], duty type if $\neq S1$
- 42 Efficiency class marking
- 43 Rated speed n_{rated} [rpm]
- 44 Motor designation, active part

Rating plate worm geared motor S

The worm geared motors S have separate rating plates for the gearbox side and the motor side.

Rating plate on the gearbox side

The rating plate on the gearbox side particularly contains the output data of the worm geared motor S.

SIEMENS FDU1508/8999999 nnn 2KJ3731-1CD11-2AM1-Z S19-LAI71MG4-L4N IP55 10kg M1-A	
i=5	
50Hz	n2:270/min | 60Hz
T2: 8.1Nm	fB:4.8 | T2: 7.7Nm
	n2: 330/min
	fB:4.7
	4Nm 380-440V AC

SIEMENS	1		
2			
3			
4			
6	7		5
8			
9	10	13	14
11	12	15	16
	17	18	19

Fig. 12/2 Example of rating plate on gearbox side on worm geared motor S

General data

- 1 Matrix code
- 2 **Serial No.**
- 3 Article No.
- 4 Model - Type - Size
- 5 Type of construction (IM)
- 6 Degree of protection acc. to IEC 60034-5 or IEC 60529
- 7 Weight m [kg]
- 8 Total transmission ratio

Frequency 1

- 9 Rated frequency f [Hz]
- 10 Gearbox output speed n_2 [rpm]
- 11 Geared motor output torque T_2 [Nm]
- 12 Service factor f_B

When ordering a replacement/spare part, always specify the serial No.

General data,

- Frequency 2
- 13 Rated frequency f [Hz]
 - 14 Gearbox output speed n_2 [rpm]
 - 15 Geared motor output torque T_2 [Nm]
 - 16 Service factor f_B

Motor data

- 17 Symbols (IEC 60617-2): = brake
- 18 Rated braking torque T_{br} [Nm]
- 19 Brake supply voltage U [V]

Rating plate on the motor side

In addition a rating plate with the electrical data of the motor is attached to the motor on the worm geared motor S.

SIEMENS 3~Mot. 1LA7070-4AB12-Z (H) CE Made in Czech Republic UD 1505/1726907-016-001 IP55 71M IM B14 IEC/EN60034 ThCl155(F)-20°C<TAMB<=40°C			
50Hz	230/400V Δ/Y	60Hz	460V Y
0.25 kW	1.47/0.85A	0.30kW	0.77 A
cosPhi 0.76	1350/min	cosPhi 0.77	1650/min
S1/S9-INV. DUTY			
70000004061966			

SIEMENS	1	2	3	4
5	6			
7	8	9	10	11
12	13		18	19
14	15		20	21
16	17		22	23
				24
			25	

Fig. 12/3 Example of rating plate on the motor side on worm geared motor S

Motor data

- 1 Number of phases
- 2 Model - Type - Size
- 3 Balancing type (H=half-key balancing)
- 4 CE marking or other marking, if required
- 5 Country of production
- 6 Identification No.
- 7 Degree of protection acc. to IEC 60034-5 or IEC 60529
- 8 Sizes
- 9 Type of construction
- 10 Applicable standard
- 11 Temperature class Th.Cl. and operating temperature range

Motor data

- Frequency 1
- 12 Rated frequency f [Hz]
 - 13 Rated voltage [V] and circuit, graphic symbols acc. to EN 60617 Part 6/IEC 60617-6
 - 14 Rated power P_{rated} [kW], duty type if ≠ S1
 - 15 Rated current I_{rated} [A]
 - 16 Power factor $\cos \varphi$
 - 17 Rated speed n_{rated} [rpm]
- Frequency 2
- 18 Rated frequency f [Hz]
 - 19 Rated voltage/range U [V]
 - 20 Rated power P_{rated} [kW], duty type if ≠ S1
 - 21 Rated current I_{rated} [A]
 - 22 Power factor $\cos \varphi$
 - 23 Rated speed n_{rated} [rpm]
 - 24 Duty type
 - 25 Material number

General options

Rating plate

Second rating plate

Second rating plate, supplied loose

For the gearboxes and geared motors, an additional rating plate can be supplied loose.

For worm geared motors the rating plate on the gearbox side is supplied.

Order code:

Second rating plate, supplied loose

K41

Second rating plate, attached

When requested, a second rating plate can be attached to the motor.

Order code:

Second rating plate, attached ¹⁾

K68

¹⁾ Not possible for worm geared motors S



Fig. 12/4 Example, rating plate on the motor

Operating instructions

The geared motors are shipped with a set of operating instructions in German/English and a Manual Collection on CD for each delivery batch.

The operating instructions include the following documents:

- Replacement part drawings and lists
- Declaration of incorporation of partly completed machinery according to the EC Machinery Directive 2006/42/EC (gearboxes)
- EC Declaration of Conformity according to Directive 2006/95/EC (motors)

The Manual Collection contains all of the operating instructions in Czech, Dutch, English, French, German, Italian, Russian, Spanish, and Swedish.

Documentation provided with the product	Language	Order code
1 set of operating instructions and 1 Manual Collection (CD) for each geared motor	German	W21
	English	W22

Test certificates

On request, the following documents are available by e-mail:

Additional documentation	The following is checked:	Order code
Declaration of compliance with the order EN 10204-2.1 and factory test report EN 10204-2.2, geared motor	-	On request
Factory test report EN 10204-2.2 for material	-	On request
Acceptance test certificate EN 10204-3.1 for the motor	<ul style="list-style-type: none"> • 3 no-load currents of the 3 phases • Power loss for no-load operation • No-load speed 	W10
Acceptance test certificate EN 10204-3.1 for gearboxes	<ul style="list-style-type: none"> • Output shaft diameter • Concentricity of the output shaft • Concentricity of the input shaft (for gearboxes with input unit A only) • Input shaft diameter (for gearboxes with input unit A only) • Noise (subjective evaluation) 	W11
Acceptance test certificate EN 10204-3.1 for paint finish	-	W12

General options

Notes

Appendix



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13/2	List of order codes
13/7	List of variables to dimension the drive
13/11	Subject index
13/16	List of abbreviations
13/17	Training
13/17	<u>Training for Industry</u>
13/17	You benefit from practical training right from the manufacturer
13/17	Important key data
13/17	Contact
13/18	Partner at Siemens
13/19	Online Services
	<u>Information and Ordering Options on the Internet and DVD</u>
13/19	The Future of Manufacturing in the WWW
13/19	Product Selection Using the Interactive CA 01 Automation and Drives Catalog
13/19	Easy Shopping with the Industry Mall <u>Information and Download Center, Social Media, Mobile Media</u>
13/20	Downloading Catalogs
13/20	Social and Mobile Media
13/21	Industry Services
13/21	<u>Your machines and plant can do more – with Industry Services.</u>
13/22	<u>Industry Services for the entire life cycle</u>
13/22	Online Support
13/22	Technical Support
13/23	Spare Parts
13/23	Repair Services
13/23	Field Services
13/24	Training
13/24	Technical Consulting & Engineering Support
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Appendix

Lists

List of order codes

Order code	Special version Designation	Detailed data Chapter/Page
Brake type		
B00 to B66	Brake types according to size and braking torque	11/20
Brake design		
C01	Enclosed brake	11/28
C02	Manual brake release lever	11/25
C03	Manual brake release lever with locking mechanism	11/25
C04	Microswitch for monitoring brake release	11/27
C06	Wear-resistant friction lining	11/29
C10	Increased corrosion protection for brake	11/28
C11	Enclosed brake with condensation drain hole	11/28
Manual brake release lever position		
C26	1	11/25
C27	2	11/25
C28	3	11/25
C29	4	11/25
Brake supply voltage		
C46 ... C74	Standard voltages, brake	11/21
Function rectifier		
C59	Function rectifier with disconnection on the DC side by sensing the current	11/23
C60	Function rectifier with disconnection on the DC side by sensing the voltage	11/23
Mounting positions		
D01 ... D06	Mounting positions of the geared motors (helical and parallel shaft gearboxes)	10/4 ... 10/16
D11 ... D16	Mounting position of the geared motors (bevel, helical worm and worm gearboxes)	10/17 ... 10/32
D21 ... D26		
Special mounting positions		
E01 ... E17	Y axis of rotation	10/33
E21 ... E37	X axis of rotation	10/33
E41 ... E57	Z axis of rotation	10/33
Shaft-mounted version helical worm gearbox		
G09	Figure 1	10/38
G10	Figure 2	10/38
Output shaft bearings		
G20	Radially reinforced output shaft bearings	10/42
Output sealing		
G23	Seal with longer service life	10/43
G24	Seal for increased environmental stress	10/43
Oil level control		
G34	Oil sight glass	10/49
Gearbox venting		
G45	Pressure breather valve	10/46
G47	Oil expansion unit	10/47
Oil drain		
G53	Magnetic oil drain screw	10/49
G54	Oil drain valve, straight	10/49
G55	Oil drain valve, angled	10/49
Hollow shaft cover		
G60	Protection cover	10/42
Reduced-backlash version		
G99	Reduced-backlash version	10/50
Water drain holes		
G77	Water drain holes at the output flange	10/36

Order code	Special version Designation	Detailed data Chapter/Page
Flange diameter		
H02 ... H11	Flange diameter	10/35
Degree of protection		
K01	IP55	11/8
K02	IP56	11/8
K03	IP65	11/8
Lubricants		
K06	CLP ISO VG220	10/43
K07	CLP ISO PG VG220	10/43
K08	CLP ISO PG VG460	10/43
K10	CLP ISO E VG220	10/43
K11	CLP ISO H1 VG460	10/43
K12	CLP ISO PAO VG220	10/43
K13	CLP ISO PAO VG68	10/43
K14	CLP ISO H1 VG100	10/43
Long-term preservation		
K17	Long-term preservation up to 36 months	12/5
Direction of rotation of the output shaft (required with backstop)		
K18	Clockwise	1/26
K19	Counterclockwise	1/26
Rating plate and additional plates		
K41	Second rating plate, supplied loose	12/8
K68	Second rating plate, attached	12/8
Surface treatment		
L00	Unpainted	12/3
L01	Primed according to corrosivity category C3 G	12/4
L02	Surface protection for normal environmental stress C1	12/3
L03	Surface protection for low environmental stress C2	12/3
L04	Surface protection for average environmental stress C3	12/3
L05	Surface protection for very high environmental stress C5	12/3
L09	Primed according to corrosivity category C4 G	12/4
L11	Centering not painted	12/4
L12	Flange completely painted	12/4
L19	Special pretreatment	12/4
L20	Surface protection for high environmental stress C4	12/3
L27	Centerings not painted on both sides	12/4
RAL colors		
L50	RAL 5015 sky blue	12/5
L51	RAL 7011 steel gray	12/5
L53	RAL 7031 blue gray	12/5
L54	RAL 7035 light gray	12/5
L55	RAL 7030 stone gray	12/5
L75	RAL 7016 anthracite gray	12/5
	Other colors on request	12/5
Insulating material class		
M08	Temperature class 180 (H)	11/7
N54	Increased air humidity/temperature with 30 to 60 g water per m ³ of air	11/7
Thermal motor protection		
M10	PTC thermistor for disconnection (PTC)	11/4
M11	PTC thermistor for warning and disconnection (PTC)	11/4
M12	Winding thermostat for disconnection (WT)	11/4
M13	Winding thermostat for warning and disconnection (WT)	11/4

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Order code	Special version Designation	Detailed data Chapter/Page
Thermal motor protection		
M16	Temperature sensor KTY 84-130	11/5
M19	1x PT100 resistance thermometer	11/5
Fan		
M21	Metal fan	11/8
M22	High inertia fan	11/8
M23	External fan	11/8
Anti-condensation heating		
M40	Supply voltage 115 V	11/6
M41	Supply voltage 230 V	11/6
Terminal box position		
M55 ... M70	Location and position of the terminal box	11/10
Motor plug		
N00	HAN 10E motor plug (2 brackets)	11/15
N01	HAN 10E motor plug (2 brackets) EMC	11/15
N04	HAN 10E motor plug (1 bracket)	11/15
N06	HAN 10E motor plug (1 bracket) EMC	11/15
N08	HAN K4/4 motor plug (1 bracket)	11/16
N09	HAN K4/4 motor plug (1 bracket) EMC	11/16
N10	HAN K4/4 motor plug (2 brackets)	11/16
N11	HAN K4/4 motor plug (2 brackets) EMC	11/16
N12	HAN Q8 motor plug (1 bracket) EMC	11/17
N13	HAN Q12 motor plug (1 bracket) EMC	11/18
N18	HAN 10E counterplug	11/15
N19	HAN K4/4 counterplug	11/16
Canopy		
N22	Canopy	11/57
Backstop on motor		
N23	Motor backstop	11/55
Second shaft extension on motor		
N39	Second shaft extension	11/56
Handwheel		
N40	Handwheel	11/56
Geared motors for use worldwide		
N30	Version in accordance with EAC	1/23
N38	Design in accordance with UL-R and CSA	1/22
N65	Design in accordance with NEMA electrically	1/22
N67	Design for the Chinese market	1/22
Designs for special environmental conditions		
N41	Internal motor corrosion protection	11/58
N43	Increased protection against humidity and tropical climates	12/2
N44	Increased protection against acids and alkalis	12/2
N46	Condensation drain hole	11/58
External grounding		
N53	External grounding	11/14
Motors prepared for encoder mounting		
N50	Prepared for encoder mounting	11/50
Pole number of the motor		
P00	2-pole	Chapter 8
P01	6-pole	Chapter 8
P02	8-pole	Chapter 8

Order code	Special version Designation	Detailed data Chapter/Page
Duty types		
P90	Duty type S3 - 75 %	11/2
P91	Duty type S1//Inv. Duty	11/2
P92	Duty type Inv. Duty	11/2
EnDAT gateways for absolute encoders		
Q01	Gateway EnDAT Profinet	11/54
Q02	Gateway EnDAT Profibus DP	11/54
Q03	Gateway EnDAT CANopen	11/54
Q04	Gateway EnDAT DeviceNET	11/54
Application terminal box for sensors		
Q75	Application terminal box	11/54
Incremental encoder IN		
Q42	Functionally safe rotary encoder IN 8.5834FS2	11/44
Q43	Functionally safe rotary encoder IN 8.5834FS3	11/44
Q44	Rotary pulse encoder 1XP8032-20 (IN 1024 TTL with coupling socket)	11/36
Q45	Rotary pulse encoder 1XP8032-21 (IN 2048 TTL with coupling socket)	11/36
Q46	Rotary pulse encoder 1XP8032-22 (IN 512 TTL with coupling socket)	11/36
Q47	Rotary pulse encoder 1XP8032-10 (IN 1024 HTL with coupling socket)	11/36
Q48	Rotary pulse encoder 1XP8032-11 (IN 2048 HTL with coupling socket)	11/36
Q49	Rotary pulse encoder 1XP8032-12 (IN 512 HTL with coupling socket)	11/36
Q50	Rotary pulse encoder 1XP8012-20 (IN 1024 TTL with flange socket)	11/35
Q51	Rotary pulse encoder 1XP8012-21 (IN 2048 TTL with flange socket)	11/35
Q52	Rotary pulse encoder 1XP8012-22 (IN 512 TTL with flange socket)	11/35
Q53	Rotary pulse encoder 1XP8012-10 (IN 1024 HTL with flange socket)	11/35
Q54	Rotary pulse encoder 1XP8012-11 (IN 2048 HTL with flange socket)	11/35
Q55	Rotary pulse encoder 1XP8012-12 (IN 512 HTL with flange socket)	11/35
Q56	Rotary pulse encoder 1XP8022-20 (IN 1024 TTL with cable box)	11/37
Q57	Rotary pulse encoder 1XP8022-21 (IN 2048 TTL with cable box)	11/37
Q58	Rotary pulse encoder 1XP8022-22 (IN 512 TTL with cable box)	11/37
Q59	Rotary pulse encoder 1XP8022-10 (IN 1024 HTL with cable box)	11/37
Q60	Rotary pulse encoder 1XP8022-11 (IN 2048 HTL with cable box)	11/37
Q61	Rotary pulse encoder 1XP8022-12 (IN 512 HTL with cable box)	11/37
Modular set of cables for encoders 1XP8012, 1XP8032, 1XP8013, 1XP8023, 1XP8014 and 1XP8024		
Q62	Connector	11/51
Q69	Cable with connector and end sleeves, 2 m	11/52
Q70	Cable with connector and end sleeves, 8 m	11/52
Q71	Cable with connector and end sleeves, 15 m	11/52
Q72	Cable with coupling socket, 2 m	11/53
Q73	Cable with coupling socket, 8 m	11/53
Q74	Cable with coupling socket, 15 m	11/53
Modular set of cables for encoder 1XP8022		
Q63	Cable with end sleeves, 2 m	11/52
Q64	Cable with end sleeves, 8 m	11/52
Q65	Cable with end sleeves, 15 m	11/52
Q66	Cable with coupling socket, 2 m	11/53
Q67	Cable with coupling socket, 8 m	11/53
Q68	Cable with coupling socket, 15 m	11/53
Absolute encoder IA		
Q77	Functionally safe rotary encoder IA 8.5883FS2	11/46
Q78	Functionally safe rotary encoder IA 8.5883FS3	11/46
Q79	Absolute encoder 1XP8024-21 (IA SSI protocol with coupling socket)	11/40
Q80	Absolute encoder 1XP8014-20 (IA SSI protocol with flange socket)	11/39

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List of order codes

Order code	Special version Designation	Detailed data Chapter/Page
Absolute encoder IA		
Q81	Absolute encoder 1XP8024-20 (IA SSI protocol cable with coupling socket)	11/39
Q82	Absolute encoder 1XP8014-10 (IA EnDAT protocol with flange socket)	11/39
Q83	Absolute encoder 1XP8024-10 (IA EnDAT protocol cable with coupling socket)	11/39
Resolver IR		
Q85	Resolver 1XP8013-10 (IR with flange socket)	11/38
Q86	Resolver 1XP8023-11 (IR cable with coupling socket)	11/38
Q87	Resolver 1XP8013-11 (IR with flange socket)	11/38
Q88	Resolver 1XP8023-10 (IR cable with coupling socket)	11/38
Rugged encoders		
Q92	Rotary pulse encoder LL Leine und Linde	11/41
Q93	Rotary pulse encoder HOG 9	11/42
Q94	Rotary pulse encoder HOG 10	11/43
Mechanical protection		
Q95	Encoder under cover	11/49
SINAMICS G110M		
U01 ... U23	Power Module	9/3
U40 ... U43	Control Unit with cable gland	9/3
U52 ... U53	Control Unit, plug-in version	9/3
U60	Internal braking resistor (FSA)	9/3
U61	Internal braking resistor (FSB)	9/3
U70	24 V DC power supply	9/3
Documentation		
W10	Acceptance test certificate EN 10204-3.1 for the motor	12/9
W11	Acceptance test certificate EN 10204-3.1 for gearboxes	12/9
W12	Acceptance test certificate EN 10204-3.1 for paint finish	12/9
W21	Operating Instructions (German)	12/9
W22	Operating Instructions (English)	12/9

List of variables to dimension the drive

Overview of data to dimension drives

Code	Description	Unit
a	Gearbox constants for calculating the radial force	kNm
α	Force application angle	°
b, d, l, y, z	Gearbox constants	mm
C	Additional factor to calculate the radial force	-
$\cos \varphi$	Power factor	-
d	Diameter of the input element	mm
d_0	Average diameter of the mounted transmission element	mm
DC	Cyclic duration factor	%
η	Efficiency	%
f	Rated frequency	Hz
f_B	Service factor	-
f_{B1}	Required service factor	-
f_{Btot}	Service factor of the driven machine	-
f_{br}	Braking torque correction factor	-
f_{limit}	Limit frequency	Hz
f_{rated}	Rated motor frequency	Hz
F_{ax}	Permissible axial force	N
F_r	Radial force at the output shaft	N
F_{R2}	Permissible radial force at the center of shaft extension (l/2)	N
F_{Ravail}	Available radial force from the mounted transmission element	N
F_x	Permissible radial force from out of center force application point	N
F_{xperm1}	Permissible radial force, limited by the bearing service life, at a distance of x from the shaft shoulder	N
F_{xperm2}	Permissible radial force, limited by the shaft strength, at a distance of x from the shaft shoulder	N
i	Transmission ratio	-
I_{St}	Starting current	A
I_{rated}	Rated current	A
J_2	Moment of inertia referred to the output speed of the gearbox	kgm ²
J_{AD}	Moment of inertia of the adapter	kgm ²
J_B	Moment of inertia of the brake	kgm ²
J_G	Moment of inertia of the gearbox reduced to the input shaft	kgm ²
J_{mot}	Moment of inertia of the motor	kgm ²
J_{Bstp}	Moment of inertia of cage and inner ring	kgm ²
J_x	Moment of inertia of the load referred to the motor shaft	kgm ²
J_z	Additional moment of inertia of a high inertia fan	kgm ²
J_{add}	Additional moment of inertia	kgm ²
k	Factor for taking into account operating conditions	-
k_{DC}	Factor for increased power	-
k_{FI}	Factor for taking into account the additional moment of inertia	-
k_{HT}	Factor for abnormal coolant temperature and installation altitude	-

Code	Description	Unit
k_M	Factor for taking into account the load torque while accelerating	-
k_P	Factor for taking into account the required power and duty cycle	-
L_{h10}	Nominal bearing service life	h
L_{na}	Modified bearing service life	h
L_{rated}	Service life of the brake lining until readjustment	h
$L_{ratedmax}$	Service life of the brake lining until replacement	h
L_{ptA}	Measuring surface sound pressure level	dB (A)
L_{WA}	Sound power level	dB (A)
m	Drive weight without any oil	kg
m_{AF}	Mass acceleration factor	-
m_{fan}	Fan weight	kg
m_{mot}	Motor weight (without end shield at DE)	kg
m_{Bstp}	Weight of the backstop	kg
n_1	Input speed of the gearbox	rpm
n_2	Output speed of the gearbox	rpm
n_{dis}	Disengage speed	rpm
n_{br}	Braking speed	rpm
n_{max}	Maximum speed	rpm
n_{rated}	Rated speed	rpm
P_1	Actual steady-state power of the motor	kW
P_{DC}	Power for the new duty cycle	kW
P_{req}	Required input power	kW
P_{mot}	Motor output	kW
P_{rated}	Rated motor power	kW
P_S	Actual steady-state power of the motor	kW
P_{perm}	Permissible motor power	kW
Q_{perm}	Permissible operating energy	J
r	Radius of the output element	m
R_{ex}	Exact number of teeth ratio	-
s_{br}	Braking distance	m
s_{Gap}	Brake air gap	mm
s_{Gapmax}	Maximum brake air gap	mm
t_1	Application time of the brake	ms
t_2	Disconnection time	ms
t_3	Slipping time	ms
t_{11}	Response time	ms
t_{12}	Rise time	ms
t_R	Duty cycle (decimal)	-
t_s	Cycle duration	ms
t_{br}	Braking time	s
T_2	Geared motor output torque	Nm
T_{2req}	Required input torque of the driven machine	Nm
T_{2N}	Maximum output torque of the gearbox	Nm

Appendix

Lists

List of variables to dimension the drive

Overview of data to dimension drives (continued)

Code	Description	Unit
T_{St}	Relative starting torque	Nm
T_{br}	Rated braking torque	Nm
T_{DC}	Torque for the new duty cycle	Nm
T_{req}	Required torque	Nm
T_A	Acceleration torque of the motor	Nm
T_{Bd}	Breakdown torque	Nm
T_{load}	Rated motor torque	Nm
T_{SP}	Rated backstop torque	Nm
T_x	Load torque	Nm
U	Rated voltage	V
v	Travel velocity	m/s
W	Friction energy per braking operation	J
W_{tot}	Friction energy until the brake lining is replaced	MJ
W_V	Friction energy until the brake is readjusted	MJ
x	Distance from the shaft shoulder up to the point where force is applied	mm
Z	Switching frequency	1/h
Z_A	No-load switching frequency, motor with brake	1/h
Z_0	No-load switching frequency, motor without brake	1/h
Z_{perm}	Permissible switching frequency	1/h
ϑ_{amb}	Ambient temperature	°C

Important drive technology variables

SI unit Size	Symbol		Unit symbol		Designation or conversion factor*
	SI	Previously	SI	Previously	
Length (distance)	l	L, s	m	m	1 km = 1 000 m
Area	A	F	m ²	m ²	1 m ² = 100 dm ²
Volume	V	V	m ³	m ³	1 m ³ = 1 000 dm ³ 1 dm ³ = 1 l
Plane angle	α, β, γ	α, β, γ	rad	Degrees °	1 rad = 1 m/m 1 L = $\pi/2$ rad 1° = $\pi/180$ rad
Rotation angle	ϕ	φ		Degrees °	1' = 1°/60; 1'' = 1'/60
Time					1 min = 60 s 1 h = 60 min
Time period/duration	t	t	s	s	1 d = 24 h
Frequency	f	f	Hz	1/s	1 Hz = 1/s
Speed	n	n	rpm	rpm	Rotations per minute
Velocity	v	v	m/s	m/s	1 km/h = $\frac{1}{3,6}$ m/s
Acceleration	a	b	m/s ²	m/s ²	g = 9.81 m/s ²
Acceleration due to gravity	g	g			
Angular velocity	ω	Ω	rad/s	1/s	
Angular acceleration	α	ζ	rad/s ²	1/s ²	
Mass	m	m	kg	kg	1
Density		d	kg/dm ³	kg/dm ³	10 ³
Force	F	P, K	N	kp	9,81
Force due to weight	G	G			1 N = 1 kg · 1 m/s ²
Pressure	p	p	Pa N/m ²	kp/cm ²	1 Pa = 1 N/m ² 9,81 · 10 ⁴
Mechanical tension	σ	σ	N/mm ²	kp/mm ²	9,81
Work	W	A		kpm	9,81
Energy	W	E	J	kcal	4187
Quantity of heat	Q	Q			1 J = 1 Nm = 1 Ws
Torque of a force		M _t			9,81
Torque	T	M _d	Nm	kpm	1 Nm = 1 J
Bending torque		M _b			
Power	P	N	W	PS	735,5 1 W = 1 J/s = 1 Nm/s = $\frac{\text{kgm}^2}{\text{s}^3}$
Moment of inertia	J	θ	kgm ²	kpm ²	9,81

* The numerical value of a variable in previously used units multiplied by the conversion rate gives the numerical value of the variable in SI units.

Conversion from kW to hp:

1 kW = 1.34102 hp

1 hp = 0.745700 kW

1 hp = 1.01387 PS

hp = horse power (US)

PS = Pferdestärke (horsepower in German)

Appendix

Lists

List of variables to dimension the drive

Important drive technology variables (continued)

SI unit Size	Symbol		Unit symbol		Designation or conversion factor ^{*)}
	SI	Previously	SI	Previously	
Dynamic viscosity	η	η	Pa · s	P	10^{-1}
Kinematic viscosity	ν	ν	m ² /s	St	10^{-4}
Electrical current	I	I	A	A	1 A = 1 W/V = 1 V/Ω
Electrical voltage	U	U	V	V	1 V = 1 W/A
Electrical resistance	R	R	Ω	Ω	1 Ω = 1 V/A = 1/S
Electrical conductance	G	G	S	S	1 S = 1/Ω
Electrical capacitance	C	C	F	F	1 F = 1 C/V
Electric charge	Q	Q	C	C	1 C = 1 A · s
Inductance	L	L	H	H	1 H = 1 Vs/A
Magnetic flux density Induction	B	B	T	G	10^4 1 T = 1 Wb/m ²
Magnetic field strength	H	H	A/m	A/m	
Magnetic flux	ϕ	ϕ	Wb	M	10^8 1 Wb = 1 V · s
Temperature	T(θ)	t	K(°C)	°C	0 K = -273.15 °C

* The numerical value of a variable in previously used units multiplied by the conversion rate gives the numerical value of the variable in SI units.

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List of abbreviations

Abbreviation	Meaning	Abbreviation	Meaning
AC	Alternating Current, three-phase	NAT	Rated response temperature
CAD	Computer-Aided Design	NDE	Non-drive end
CCC	China Compulsory Certification	NEE	NEMA Energy Efficient
CEL	China Energy Label	NEMA	National Electrical Manufacturers Association
CEMEP	Comité Européen de Constructeurs de Machines Électriques et d'Électronique de Puissance (European sector committee of manufacturers of electrical machines)	NN	Sea level
CONT	Continuous duty	NPT	National Pipe Thread
CQC	China Quality Certification Center	PAO	Polyalphaolefine
CSA	Canadian Standards Association	PE	Protective Earth, grounding
CT	Coolant temperature	PG	Polyglycol
DC	Direct Current	PTC	Positive Temperature Coefficient
DC	Duty cycle	SA	Site altitude (installation altitude)
DE	Drive end	SSI	Simple Sensor Interface
DIN	German Institute for Standardization (Deutsches Institut für Normen e. V. - DIN)	SW	Width across flats
EBPG	Energy-related products directive	TIA	Totally Integrated Automation
EC	European Community	TIP	Totally Integrated Power
EFF	Efficiency	TTL	Transistor Transistor Logic
EGE	Europäische Größeneinheit	UL-R	Underwriters Laboratories Inc. - Recognition Mark
EISA	Energy Independence and Security Act	VDE	Association of Electrical Engineering, Electronics and Information Technology (Verband der Elektrotechnik Elektronik Informationstechnik e. V.)
EMC	Electromagnetic compatibility	VDI	Association of German Engineers (Verein Deutscher Ingenieure)
EN	European standard	WGK	Class, signifying risk of water pollution
EPAct	Energy Policy Act		
EU	European Union		
EuP	Energy Using Products		
FVA	Research Association for Drive Technology (Forschungsvereinigung Antriebstechnik e. V.)		
HF	High frequency		
HTL	High Transistor Logic		
IEC	International Electrotechnical Commission		
IP	International Protection		
ISO	International Organization for Standardization		
MODULOG	Modular logistically optimized design (motor)		

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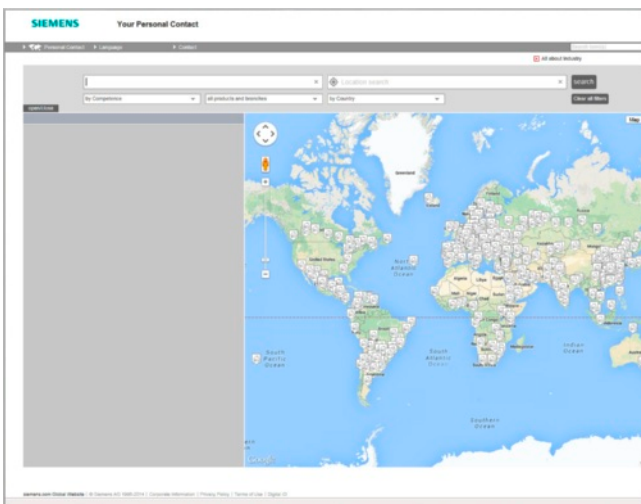
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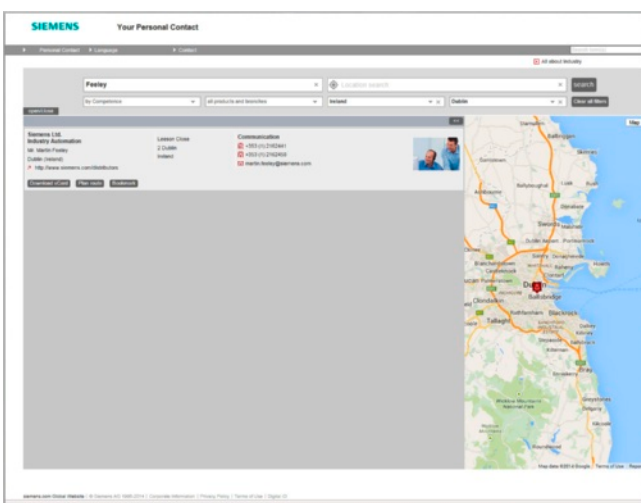
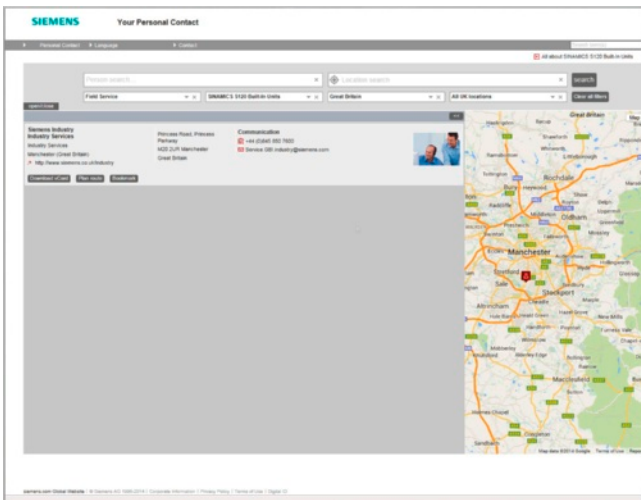
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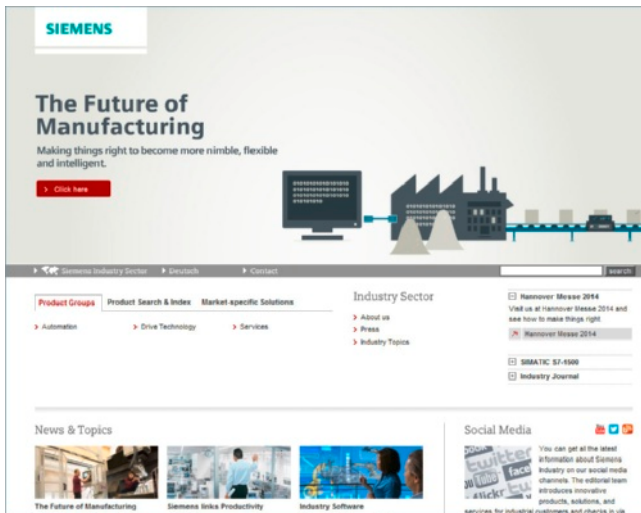
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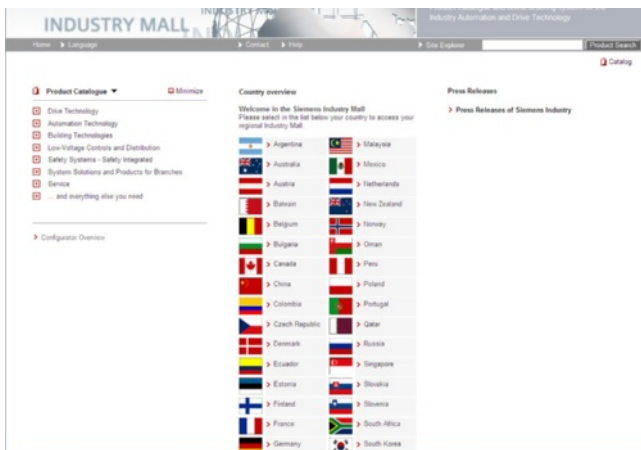
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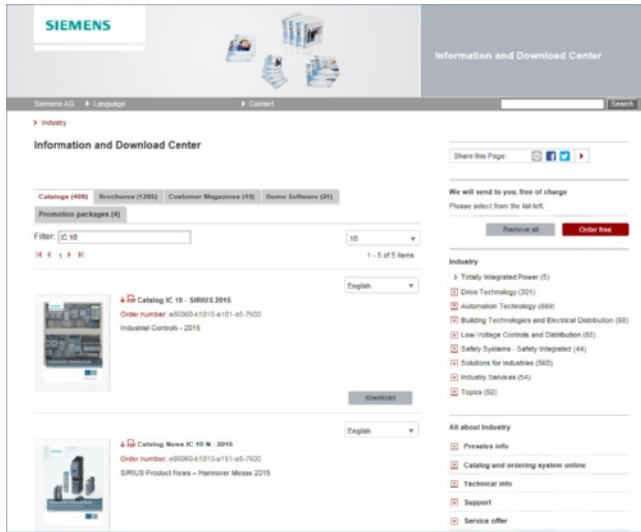
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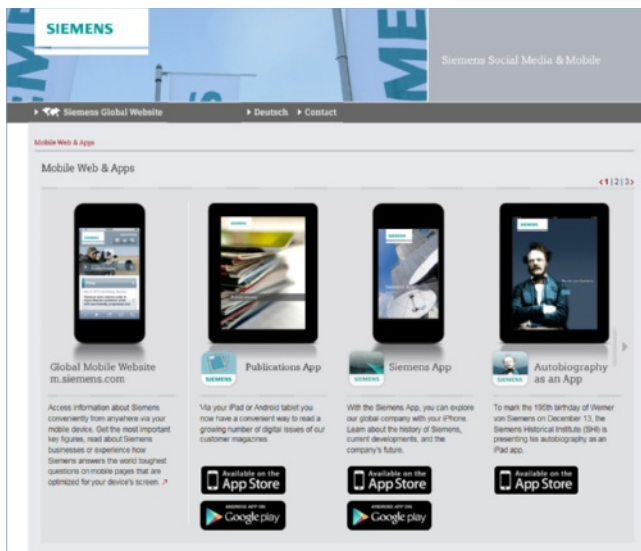
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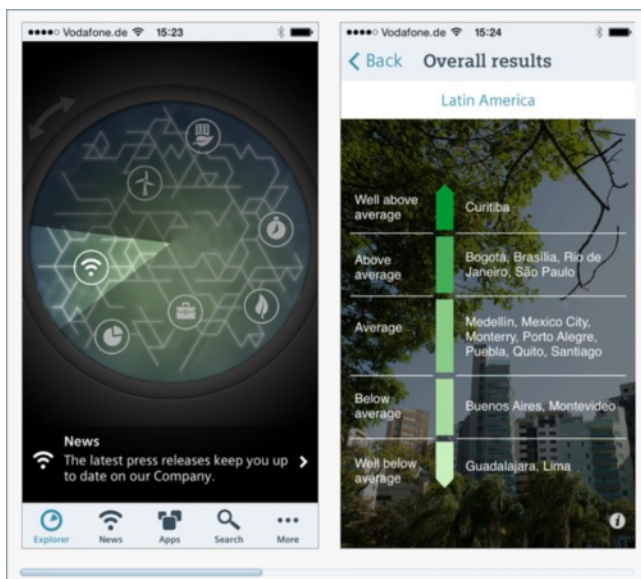
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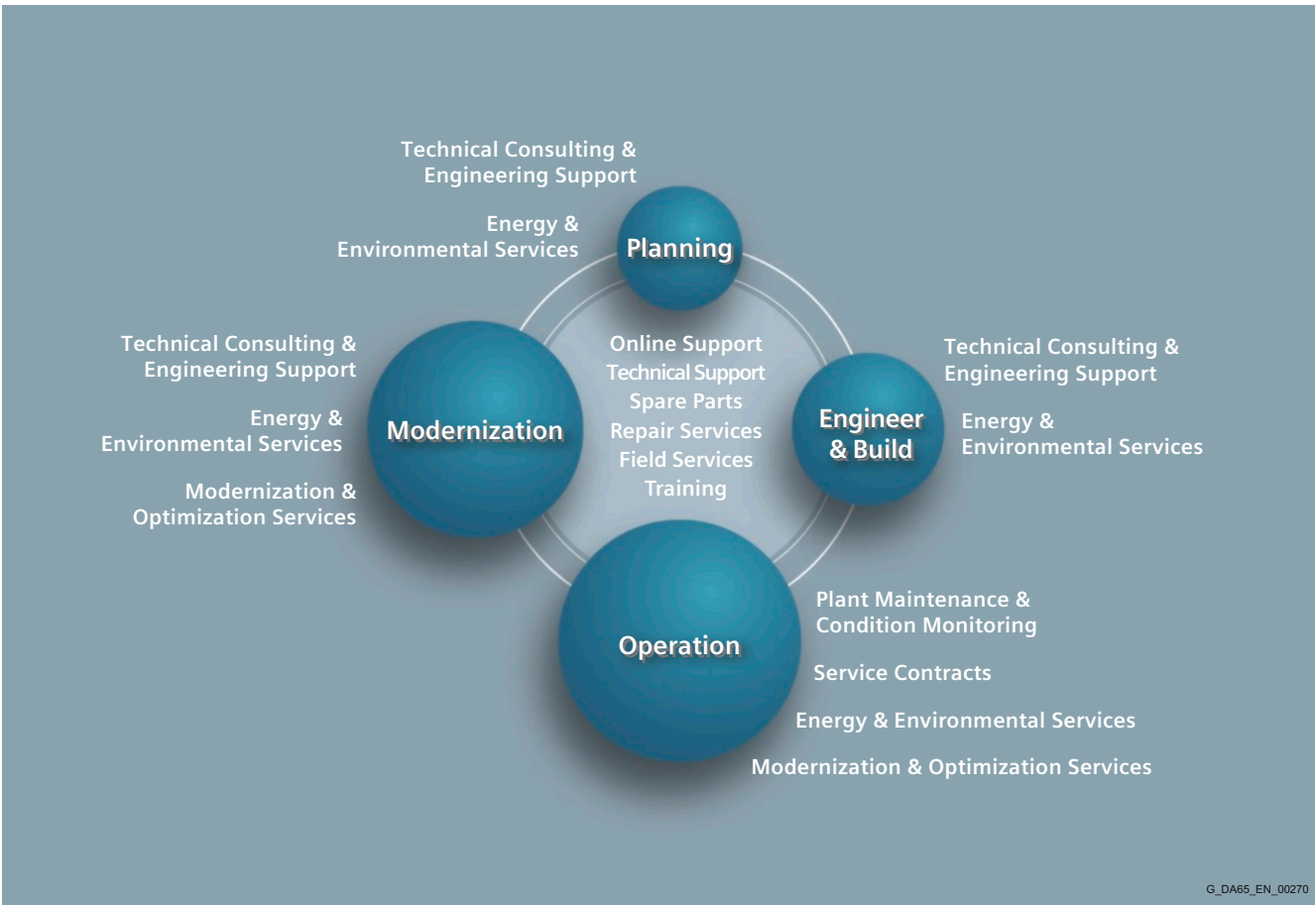


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Industry Services

Industry Services for the entire life cycle

Online Support

Online support is a comprehensive information system for all questions relating to products, systems, and solutions that Siemens has developed for industry over time. With more than 300,000 documents, examples and tools, it offers users of automation and drive technology a way to quickly find up-to-date information. The 24-hour service enables direct, central access to detailed product information as well as numerous solution examples for programming, configuration and application.

The content, in six languages, is increasingly multimediated – and now also available as a mobile app. Online support's "Technical Forum" offers users the opportunity to share information with each other. The "Support Request" option can be used to contact Siemens' technical support experts. The latest content, software updates, and news via newsletters and Twitter ensure that industry users are always up to date.



www.siemens.com/industry/onlinesupport

Online Support App



Using the Online Support app, you can access over 300,000 documents covering all Siemens industrial products - anywhere, any time. Regardless of whether you need help implementing your project, fault-finding, expanding your system or are planning a new machine.

You have access to FAQs, manuals, certificates, characteristics curves, application examples, product notices (e.g. announcements of new products) and information on successor products in the event that a product is discontinued.

Just scan the product code printed on the product directly using the camera of your mobile device to immediately see all technical information available on this product at a glance. The graphical CAx information (3D model, circuit diagrams or EPLAN macros) is also displayed. You can forward this information to your workplace using the e-mail function.

The search function retrieves product information and articles and supports you with a personalized suggestion list. You can find your favorite pages – articles you need frequently – under "mySupport". You also receive selected news on new functions, important articles or events in the News section.

Scan the QR code for information on our Online Support app.

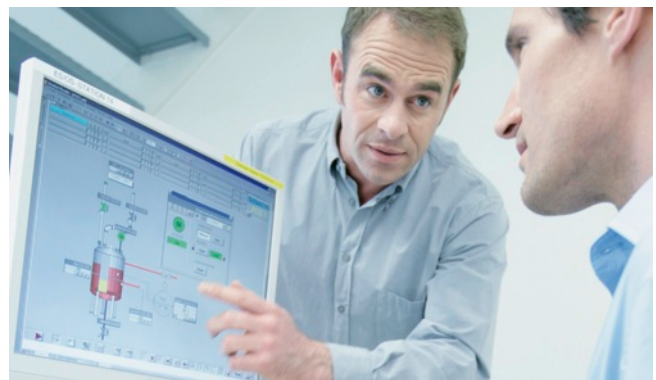


The app is available free of charge from the Apple App Store (iOS) or from Google Play (Android).

www.siemens.com/industry/onlinesupportapp

Technical Support

The ability to quickly analyze system and error messages and take appropriate action are key factors in ensuring that plants run safely and efficiently. Questions can arise at any time and in any industry, whether it's an individual product or a complete automation solution. Siemens technical support offers individual technical assistance in matters related to functionality, how to operate, applications, and fault clearance in industrial products and systems – at any time and globally, over the phone, by e-mail, or via remote access. Experienced experts from Siemens answer incoming questions promptly. Depending on the requirements, they first consult specialists in the areas of development, on-site services, and sales. Technical support is also available for discontinued products that are no longer available. Using the support request number, any inquiry can be clearly identified and systematically tracked.



Spare Parts

Drive and automation systems must be available at all times. Even a single missing spare part can bring the entire plant to a standstill – and result in substantial financial losses for the operator. The spare parts services from Siemens protects against such losses – with the aid of quickly available, original spare parts that ensure smooth interaction with all other system components. Spare parts are kept on hand for up to ten years; defective parts can be returned. For many products and solutions, individual spare parts packages ensure a preventive stock of spare parts on-site. The spare parts services is available around the world and around the clock. Optimum supply chain logistics ensure that replacement components reach their destination as quickly as possible. Siemens' logistics experts take care of planning and management as well as procurement, transportation, customs handling, warehousing, and complete order management for spare parts.



Repair Services

Reliable electrical and electronic equipment is crucial for operating continuous processes. That is why it is essential that motors and converters always undergo highly specialized repair and maintenance. Siemens offers complete customer and repair services – on site and in repair centers – as well as technical emergency services worldwide. The repair services include all measures necessary to quickly restore the functionality of defective units. In addition, services such as spare parts logistics, spare parts storage and rapid manufacturing are available to plant operators in all verticals. With a global network of certified repair shops operated by Siemens as well as third parties, Siemens handles the maintenance and overhaul of motors, converters, and other devices as an authorized service partner.



Field Services

It's a top priority in all industries: the availability of plants and equipment. Siemens offers specialized maintenance services such as inspection and upkeep as well as rapid fault clearance in industrial plants – worldwide, continuously, and even with emergency services as needed. The services include startup as well as maintenance and fault clearance during operation. The startup service includes checking the installation, function tests, parameterization, integration tests for machines and plants, trial operation, final acceptance, and employee training. All services, including remote maintenance of drives, are also available as elements of customized service contracts.



Appendix

Industry Services

Industry Services for the entire life cycle

Training

Increasingly, up-to-date knowledge is becoming a determining factor in success. One of the key resources of any company is well-trained staff that can make the right decision at the right moment and take full advantage of the potential. With SITRAIN – Training for Industry, Siemens offers comprehensive advanced training programs. The technical training courses convey expertise and practical knowledge directly from the manufacturer. SITRAIN covers Siemens' entire product and system portfolio in the field of automation and drives. Together with the customer, Siemens determines the company's individual training needs and then develops an advanced training program tailored to the desired requirements. Additional services guarantee that the knowledge of all Siemens partners and their employees is always up-to-date.



Technical Consulting & Engineering Support

The efficiency of plants and processes leads to sustainable economic success. Individual services from Siemens help save substantial time and money while also guaranteeing maximum safety. Technical consulting covers the selection of products and systems for efficient industrial plants. The services include planning, consulting, and conceptual design as well as product training, application support, and configuration verification – in all phases of a plant's lifecycle and in all questions related to product safety. Engineering support offers competent assistance throughout the entire project, from developing a precise structure for startup to product-specific preparation for implementation as well as support services in areas such as prototype development, testing and acceptance.



Energy & Environmental Services

Efficient energy use and resource conservation – these top sustainability concerns pay off – both for the environment and for companies. Siemens offers integrated solutions that unlock all technical and organizational potential for successful environmental management. Customized consulting services are aimed at sustainably lowering the cost of energy and environmental protection and thus increasing plant efficiency and availability. The experts provide support in the conceptual design and implementation of systematic solutions in energy and environmental management, enabling maximum energy efficiency and optimized water consumption throughout the entire company. Improved data transparency makes it possible to identify savings potential, reduce emissions, optimize production processes, and thereby noticeably cut costs.



Modernization & Optimization Services

High machine availability, expanded functionality and selective energy savings – in all industries, these are decisive factors for increasing productivity and lowering costs. Whether a company wants to modernize individual machines, optimize drive systems, or upgrade entire plants, Siemens' experts support the projects from planning to commissioning.

Expert consulting and project management with solution responsibility lead to security and make it possible to specifically identify savings potential in production. This secures investments over the long term and increases economic efficiency in operation.



Plant Maintenance & Condition Monitoring

Modern industrial plants are complex and highly automated. They must operate efficiently in order to ensure the company's competitive strength. In addition, the steadily increasing networking of machines and plants require consistent security concepts. Maintenance and status monitoring as well as the implementation of integrated security concepts by Siemens' experts support optimum plant use and avoid downtime. The services include maintenance management as well as consulting on maintenance concepts, including the complete handling and execution of the necessary measures. Complete solutions also cover remote services, including analysis, remote diagnosis, and remote monitoring. These are based on the Siemens Remote Services platform with certified IT security.



Service Contracts

Making maintenance costs calculable, reducing interfaces, speeding up response times, and unburdening the company's resources – the reduced downtimes that these measures achieve increase the productivity of a plant. Service contracts from Siemens make maintenance and repairs more cost-effective and efficient. The service packages include local and remote maintenance for a system or product group in automation and drive technology. Whether you need extended service periods, defined response times, or special maintenance intervals, the services are compiled individually and according to need. They can be adjusted flexibly at any time and used independently of each other. The expertise of Siemens' specialists and the capabilities of remote maintenance thus ensure reliable and fast maintenance processes throughout a plant's entire lifecycle.



Appendix

Notes

Appendix

Conditions of sale and delivery

1. General Provisions

By using this catalog you can acquire hardware and software products described therein from Siemens AG subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as "T&C"). Please note that the scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

1.1 For customers with a seat or registered office in Germany

For customers with a seat or registered office in Germany, the following applies subordinate to the T&C:

- the "General Terms of Payment"¹⁾ and,
- for software products, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or Registered Office in Germany"¹⁾ and,
- for other supplies and services, the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"¹⁾.

1.2 For customers with a seat or registered office outside Germany

For customers with a seat or registered office outside Germany, the following applies subordinate to the T&C:

- the "General Terms of Payment"¹⁾ and,
- for software products, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or Registered Office outside of Germany"¹⁾ and
- for other supplies and/or services, the "General Conditions for Supplies of Siemens Industry for Customers with a Seat or Registered Office outside of Germany"¹⁾.

2. Prices

The prices are in € (Euro) ex point of delivery, exclusive of packaging.

The sales tax (value added tax) is not included in the prices. It shall be charged separately at the respective rate according to the applicable statutory legal regulations.

Prices are subject to change without prior notice. We will charge the prices valid at the time of delivery.

To compensate for variations in the price of raw materials (e.g. silver, copper, aluminum, lead, gold, dysprosium and neodym), surcharges are calculated on a daily basis using the so-called metal factor for products containing these raw materials. A surcharge for the respective raw material is calculated as a supplement to the price of a product if the basic official price of the raw material in question is exceeded.

The metal factor of a product indicates the basic official price (for those raw materials concerned) as of which the surcharges on the price of the product are applied, and with what method of calculation.

An exact explanation of the metal factor can be downloaded at:

www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

To calculate the surcharge (except in the cases of dysprosium and neodym), the official price from the day prior to that on which the order was received or the release order was effected is used.

To calculate the surcharge applicable to dysprosium and neodym ("rare earths"), the corresponding three-month basic average price in the quarter prior to that in which the order was received or the release order was effected is used with a one-month buffer (details on the calculation can be found in the explanation of the metal factor).

3. Additional Terms and Conditions

The dimensions are in mm. In Germany, according to the German law on units in measuring technology, data in inches apply only to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the individual pages of this catalog - especially with regard to data, dimensions and weights given - these are subject to change without prior notice.

4. Export regulations

We shall not be obligated to fulfill any agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes and/or other sanctions.

Export of goods listed in this catalog may be subject to licensing requirements. We will indicate in the delivery details whether licenses are required under German, European and US export lists. Goods labeled with "AL" not equal to "N" are subject to European or German export authorization when being exported out of the EU. Goods labeled with "ECCN" not equal to "N" are subject to US re-export authorization.

The export indications can be viewed in advance in the description of the respective goods on the Industry Mall, our online catalog system. Only the export labels "AL" and "ECCN" indicated on order confirmations, delivery notes and invoices are authoritative.

Even without a label, or with label "AL:N" or "ECCN:N", authorization may be required i .a. due to the final disposition and intended use of goods.

If you transfer goods (hardware and/or software and/or technology as well as corresponding documentation, regardless of the mode of provision) delivered by us or works and services (including all kinds of technical support) performed by us to a third party worldwide, you must comply with all applicable national and international (re-)export control regulations.

If required for the purpose of conducting export control checks, you (upon request by us) shall promptly provide us with all information pertaining to the particular end customer, final disposition and intended use of goods delivered by us respectively works and services provided by us, as well as to any export control restrictions existing in this relation.

The products listed in this catalog may be subject to European/German and/or US export regulations. Any export requiring approval is therefore subject to authorization by the relevant authorities.

Errors excepted and subject to change without prior notice.

¹⁾ The text of the Terms and Conditions of Siemens AG can be downloaded at www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

Further information can be obtained from our branch offices listed at www.siemens.com/automation/partner

Interactive Catalog on DVD Products for Automation and Drives	<i>Catalog</i> CA 01	Low-Voltage Power Distribution and Electrical Installation Technology	<i>Catalog</i>
Building Control GAMMA Building Control	ET G1	SETRON · SIVACON · ALPHA Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems	LV 10
Drive Systems SINAMICS G130 Drive Converter Chassis Units	D 11	Standards-Compliant Components for Photovoltaic Plants	LV 11
SINAMICS G150 Drive Converter Cabinet Units		Electrical Components for the Railway Industry	LV 12
SINAMICS GM150, SINAMICS SM150 Medium-Voltage Converters	D 12	<i>Digital: TÜV-certified Power Monitoring System</i>	LV 14
SINAMICS PERFECT HARMONY GH180 Medium-Voltage Air-Cooled Drives Germany Edition	D 15.1	Components for Industrial Control Panels according to UL Standards	LV 16
SINAMICS G180 Converters – Compact Units, Cabinet Systems, Cabinet Units Air-Cooled and Liquid-Cooled	D 18.1	3WT Air Circuit Breakers up to 4000 A	LV 35
SINAMICS S120 Chassis Format Units and Cabinet Modules	D 21.3	3VT Molded Case Circuit Breakers up to 1600 A	LV 36
SINAMICS S150 Converter Cabinet Units		<i>Digital: SIVACON System Cubicles, System Lighting and System Air-Conditioning</i>	LV 50
SINAMICS DCM DC Converter, Control Module	D 23.1	<i>Digital: ALPHA Distribution Systems</i>	LV 51
SINAMICS DCM Cabinet	D 23.2	ALPHA FIX Terminal Blocks	LV 52
SINAMICS Inverters for Single-Axis Drives and SIMOTICS Motors	D 31	SIVACON S4 Power Distribution Boards	LV 56
SINAMICS G120P and SINAMICS G120P Cabinet pump, fan, compressor converters	D 35	SIVACON 8PS Busbar Trunking Systems	LV 70
Three-Phase Induction Motors SIMOTICS HV, SIMOTICS TN	D 84.1	<i>Digital: DELTA Switches and Socket Outlets</i>	ET D1
• Series H-compact		Motion Control	
• Series H-compact PLUS		SINUMERIK 840D sl Type 1B Equipment for Machine Tools	NC 62
Three-Phase Induction Motors SIMOTICS HV, Series H-compact	D 86.1	SINUMERIK 808 Equipment for Machine Tools	NC 81.1
Synchronous Motors with Permanent-Magnet Technology, HT-direct	D 86.2	SINUMERIK 828 Equipment for Machine Tools	NC 82
DC Motors	DA 12	SIMOTION, SINAMICS S120 & SIMOTICS Equipment for Production Machines	PM 21
SIMOREG DC MASTER 6RA70 Digital Chassis Converters	DA 21.1	Drive and Control Components for Cranes	CR 1
SIMOREG K 6RA22 Analog Chassis Converters	DA 21.2	Power Supply	
<i>Digital: SIMOREG DC MASTER 6RM70 Digital Converter Cabinet Units</i>	DA 22	SITOP Power supply	KT 10.1
SIMOVERT PM Modular Converter Systems	DA 45	Safety Integrated	
SIEMOSYN Motors	DA 48	Safety Technology for Factory Automation	SI 10
MICROMASTER 420/430/440 Inverters	DA 51.2	SIMATIC HMI / PC-based Automation	
MICROMASTER 411/COMBIMASTER 411	DA 51.3	Human Machine Interface Systems/ PC-based Automation	ST 80/ ST PC
SIMODRIVE 611 universal and POSMO	DA 65.4	SIMATIC Ident	
<i>Note: Additional catalogs on the SINAMICS drive system and SIMOTICS motors with SINUMERIK and SIMOTION can be found under Motion Control</i>		Industrial Identification Systems	ID 10
Low-Voltage Three-Phase-Motors		SIMATIC Industrial Automation Systems	
SIMOTICS Low-Voltage Motors	D 81.1	Products for Totally Integrated Automation	ST 70
SIMOTICS FD Flexible Duty Motors	D 81.8	SIMATIC PCS 7 Process Control System	ST PCS 7
LOHER Low-Voltage Motors	D 83.1	System components	
MOTOX Geared Motors	D 87.1	SIMATIC PCS 7 Process Control System Technology components	ST PCS 7 T
SIMOGEAR Geared Motors	MD 50.1	Add-ons for the SIMATIC PCS 7 Process Control System	ST PCS 7 AO
SIMOGEAR Gearboxes with adapter	MD 50.11	SIMATIC NET	
Mechanical Driving Machines		Industrial Communication	IK PI
FLENDER Standard Couplings	MD 10.1	SIRIUS Industrial Controls	
FLENDER High Performance Couplings	MD 10.2	SIRIUS Industrial Controls	IC 10
FLENDER Backlash-free Couplings	MD 10.3		
FLENDER SIG Standard industrial gear units	MD 30.1		
FLENDER SIP Standard industrial planetary gear units	MD 31.1		
Process Instrumentation and Analytics			
<i>Digital: Field Instruments for Process Automation</i>	FI 01		
<i>Digital: SIPART Controllers and Software</i>	MP 31		
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<i>Digital: Process Analytical Instruments</i>	AP 01		
<i>Digital: Process Analytics, Components for the System Integration</i>	PA 11		
<i>Digital: These catalogs are only available as a PDF.</i>			
		Information and Download Center	
		Digital versions of the catalogs are available on the Internet at: www.siemens.com/industry/infocenter	
		There you'll find additional catalogs in other languages.	
		Please note the section "Downloading catalogs" on page "Online services" in the appendix of this catalog.	

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