Voltages

Additional order codes for other voltages or voltage codes (without **-Z** supplement)

For some non-standard voltages at 50 or 60 Hz, order codes are specified. They are ordered by specifying the code **9** for voltage in the 11th position of the Order No. and the appropriate order code.

Special versions	Voltage code 11th position of the Order No.	Additional identification code with order code and, if required, with plain text	Motor type frame size														
			56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Aluminum series 1LA7 and 1LA5																	
								1LA7 (aluminum)				**1LA5 (aluminum)**					
Non-standard voltage and/or frequencies																	
Non-standard winding for voltages between 200 and 690 V (voltages outside this range are available on request) [1]	**9**	**L1Y •**						✓	✓	✓	✓	✓	✓	✓			
Self-ventilated motors with special insulation for voltages up to 690 V – Cast-iron series 1LG6																	
												1LG6 (cast-iron)					
Non-standard voltage and/or frequencies																	
Non-standard winding for voltages between 200 and 690 V (voltages outside this range are available on request) [1]	**9**	**L1Y •**										✓	✓	✓	✓	✓	✓ [2]

✓ With additional charge

• This order code only determines the price of the version – Additional plain text is required.

[1] Plain text must be specified in the order: Voltage, frequency, circuit, required rated output in kW.

[2] For voltages in the 200 V range, please contact your local Siemens representative.

Additional order codes for other types of construction or type of construction codes (without **-Z** supplement)

Order codes have been defined for some special types of construction. They are ordered by specifying the code **9** for the type of construction in the 12th position of the Order No. and the appropriate order code.

Special versions	Type of construction code 12th position of the Order No.	Additional identification code with order code and, if required, with plain text	Motor type frame size 56	63	71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4-, 6, 8-pole
Self-ventilated motors with special insulation for voltages up to 690 V – Aluminum series 1LA7 and 1LA5																			
								1LA7 (aluminum)				**1LA5 (aluminum)**							
Without flange																			
IM V5 with protective cover [1]	**9**	**M1F**						✓	✓	✓	✓	✓	✓	✓					
With flange																			
IM V3 [2]	**9**	**M1G**						–	–	–	–	✓	✓	✓					
With standard flange																			
IM V18 with protective cover [1]	**9**	**M2A**						✓	✓	✓	✓	–	–	–					
With special flange																			
IM V18 with protective cover [1]	**9**	**M2B**						✓	✓	✓	✓	–	–	–					
IM B34	**9**	**M2C**						✓	✓	✓	✓	–	–	–					
Self-ventilated motors with special insulation for voltages up to 690 V – Cast-iron series 1LG6																			
												1LG6 (cast-iron)							
Without flange																			
IM V5 without protective cover [4]	**9**	**M1D**										–	–	–	–	–	–	✓ [3]	○
IM V6 [4]	**9**	**M1E**										–	–	–	–	–	–	✓ [3]	○
IM V5 with protective cover [1] [4]	**9**	**M1F**										✓	✓	✓	✓	✓	✓	✓ [3]	✓
With flange																			
IM V3 [5]	**9**	**M1G**										✓	✓	✓	✓	✓	✓	–	–

○ Without additional charge
✓ With additional charge
– Not possible

[1] The "Second shaft extension" option, order code **K16** is not possible.

[2] For frame sizes 180 M to 225 M, the 1LA5 motors can be supplied with two additional eyebolts; state Order No. suffix "**Z**" and order code **K32**.

[3] 60 Hz version is possible on request

[4] If motors of frame sizes 180 M to 315 L are mounted on the wall, it is recommended that the motor feet are supported.

[5] 1LG6 motors of frame sizes 225 S to 315 M are supplied with two screw-in eyebolts in accordance with IM B5, whereby one can be relocated in accordance with IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

Options

Options or order codes (supplement **-Z** is required)

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size														
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Aluminum series 1LA7 and 1LA5																
							1LA7 (aluminum)				**1LA5 (aluminum)**					
Motor protection																
Motor protection with PTC thermistors with 3 embedded temperature sensors for tripping [1]	**A11**						✓	✓	✓	✓	✓	✓	✓			
Motor protection with PTC thermistors with 6 embedded temperature sensors for tripping and alarm [1]	**A12**						✓	✓	✓	✓	✓	✓	✓			
Motor temperature detection with embedded temperature sensor KTY 84-130 [1]	**A23**						✓	✓	✓	✓	✓	✓	✓			
Motor temperature detection with embedded temperature sensors 2 x KTY 84-130 [1]	**A25**						✓	✓	✓	✓	✓	✓	✓			
Motor connection and connection box																
Connection box on RHS	**K09**						✓	✓	✓	✓	✓	✓	✓			
Connection box on LHS	**K10**						✓	✓	✓	✓	✓	✓	✓			
One cable gland, metal	**K54**						✓	✓	✓	✓	✓	✓	✓			
Cable gland, maximum configuration	**K55**						✓	✓	✓	✓	✓	✓	✓			
Rotation of the connection box through 90°, entry from DE (AS)	**K83**						✓	✓	✓	✓	✓	✓	✓			
Rotation of the connection box through 90°, entry from NDE (BS)	**K84**						✓	✓	✓	✓	✓	✓	✓			
Rotation of connection box through 180°	**K85**						O	O	O	O	✓	✓	✓			
Next larger connection box	**L00**						–	–	–	–	✓	✓	✓			
External earthing	**L13**						✓	✓	✓	✓	✓	✓	✓			
3 cables protruding, 0.5 m long [2]	**L44**						O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
3 cables protruding, 1.5 m long [2]	**L45**						O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
6 cables protruding, 0.5 m long [2]	**L47**						O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
6 cables protruding, 1.5 m long [2]	**L48**						O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
6 cables protruding, 3 m long [2]	**L49**						–	–	–	–	O. R.	O. R.	O. R.			
Connection box on NDE (BS)	**M64**						✓	✓	✓	✓	✓	✓	✓			
Windings and insulation																
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	**C22**						✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	**C23**						✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	**C24**						✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	**C25**						✓	✓	✓	✓	✓	✓	✓			

For legend and footnotes, see Page 7.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size														
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Aluminum series 1LA7 and 1LA5																
							1LA7 (aluminum)				**1LA5 (aluminum)**					
Colors and paint finish																
Special finish in RAL 7030 stone gray							□	□	□	□	□	□	□			
Special finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005	**Y54•** and special finish RAL ….						✓	✓	✓	✓	✓	✓	✓			
Special finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" on Catalog D 81.1 part 0	**Y51•** and special finish RAL ….						✓	✓	✓	✓	✓	✓	✓			
Sea air resistant special finish	**M94**						O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
Unpainted (only cast iron parts primed)	**K23**						○	○	○	○	○	○	○			
Unpainted, only primed	**K24**						✓	✓	✓	✓	✓	✓	✓			
Modular technology – Basic versions [3]																
Mounting of separately driven fan	**G17**						✓	✓	✓	✓	✓	✓	✓			
Mounting of brake [4]	**G26**						✓	✓	✓	✓	✓	✓	✓			
Mounting of 1XP8 001-1 (HTL) rotary pulse encoder	**H57**						✓	✓	✓	✓	✓	✓	✓			
Mounting of 1XP8 001-2 (TTL) rotary pulse encoder	**H58**						✓	✓	✓	✓	✓	✓	✓			
Modular technology – Combinations of basic versions [3]																
Mounting of separately driven fan and 1XP8 001-1 rotary pulse encoder	**H61**						✓	✓	✓	✓	✓	✓	✓			
Mounting of brake and 1XP8 001-1 rotary pulse encoder [4]	**H62**						✓	✓	✓	✓	✓	✓	✓			
Mounting of brake and separately driven fan [4]	**H63**						✓	✓	✓	✓	✓	✓	✓			
Mounting of brake, separately driven fan and 1XP8 001-1 rotary pulse encoder [4]	**H64**						✓	✓	✓	✓	✓	✓	✓			
Mounting of separately driven fan and 1XP8 001-2 rotary pulse encoder	**H97**						✓	✓	✓	✓	✓	✓	✓			
Mounting of brake and 1XP8 001-2 rotary pulse encoder [4]	**H98**						✓	✓	✓	✓	✓	✓	✓			
Mounting of brake, separately driven fan and 1XP8 001-2 rotary pulse encoder [4]	**H99**						✓	✓	✓	✓	✓	✓	✓			

For legend and footnotes, see Page 7.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size														
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Aluminum series 1LA7 and 1LA5																
							1LA7 (aluminum)				**1LA5 (aluminum)**					
Modular technology – Additional versions																
Brake supply voltage 24 V DC	**C00**						✓	✓	✓	✓	✓	✓	✓			
Brake supply voltage 400 V AC	**C01**						✓	✓	✓	✓	✓	✓	✓			
Brake supply voltage 180 V DC, for operation on MM411-ECOFAST	**C02**						✓	✓	✓	–	–	–	–			
Mechanical manual brake release with lever (no locking)	**K82**						✓	✓	✓	✓	✓	✓	✓			
Special technology [3]																
Mounting of LL 861 900 220 rotary pulse encoder	**H70**						✓	✓	✓	✓	✓	✓	✓			
Mounting of HOG 9 D 1024 I rotary pulse encoder	**H72**						✓	✓	✓	✓	✓	✓	✓			
Mounting of HOG 10 D 1024 I rotary pulse encoder	**H73**						✓	✓	✓	✓	✓	✓	✓			
Prepared for mounting LL 861 900 220	**H78**						✓	✓	✓	✓	✓	✓	✓			
Prepared for mounting HOG 9 D 1024 I	**H79**						✓	✓	✓	✓	✓	✓	✓			
Prepared for mounting HOG 10 D 1024 I	**H80**						✓	✓	✓	✓	✓	✓	✓			
Mechanical design and degrees of protection																
Drive-end seal for flange-mounting motors with oil resistance up to 0.1 bar Not possible for IM V3 type of construction.	**K17**						✓	✓	✓	✓	✓	✓	✓			
With two additional eyebolts for IM V1/IM V3	**K32**						–	–	–	–	✓	✓	✓			
Low-noise version for 2-pole motors with clockwise direction of rotation	**K37**						–	–	✓	✓	✓	✓	✓			
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	**K38**						–	–	✓	✓	✓	✓	✓			
IP65 degree of protection [5]	**K50**						✓	✓	✓	✓	✓	✓	✓			
IP56 degree of protection (non-heavy-sea) [6]	**K52**						✓	✓	✓	✓	✓	✓	✓			
Vibration-proof version	**L03**						✓	✓	✓	✓	✓	✓	✓			
Condensation drainage holes [7]	**L12**						✓	✓	✓	✓	✓	✓	✓			
Non-rusting screws (externally)	**M27**						✓	✓	✓	✓	✓	✓	✓			
Mechanical protection for encoder [8]	**M68**						✓	✓	✓	✓	✓	✓	✓			
Coolant temperature and site altitude																
Coolant temperature –40 to +40 °C [9]	**D03**						✓	✓	✓	✓	✓	✓	✓			
Coolant temperature –30 to +40 °C [9]	**D04**						✓	✓	✓	✓	✓	✓	✓			

For legend and footnotes, see Page 7.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size														
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Aluminum series 1LA7 and 1LA5																
							1LA7 (aluminum)				**1LA5 (aluminum)**					
Designs in accordance with standards and specifications																
CCC China Compulsory Certification [10]	**D01**						✓	✓	–	–	–	–	–			
Electrical according to NEMA MG1-12	**D30**						✓	✓	✓	✓	✓	✓	✓			
Bearings and lubrication																
Measuring nipple for SPM shock pulse measurement for bearing inspection [11]	**G50**						✓	✓	✓	✓	✓	✓	✓			
Bearing design for increased cantilever forces	**K20**						✓	✓	✓	✓	✓	✓	✓			
Regreasing device [11]	**K40**						✓	✓	✓	✓	✓	✓	✓			
Located bearing DE (AS)	**K94**						✓	✓	✓	✓	✓	✓	✓			
Located bearing NDE (BS)	**L04**						✓	✓	✓	□	□	□	□			
Balance and vibration quantity																
Vibration quantity level A							□	□	□	□	□	□	□			
Vibration quantity level B	**K02**						✓	✓	✓	✓	✓	✓	✓			
Full key balancing	**L68**						✓	✓	✓	✓	✓	✓	✓			
Balancing without key	**M37**						✓	✓	✓	✓	✓	✓	✓			
Shaft and rotor																
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors [12]	**K04**						✓	✓	✓	✓	✓	✓	✓			
Second standard shaft extension	**K16**						✓	✓	✓	✓	✓	✓	✓			
Shaft extension with normal dimensions without feather key	**K42**						✓	✓	✓	✓	✓	✓	✓			
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	**L39**						✓	✓	✓	✓	✓	✓	✓			
Standard shaft made of non-rusting steel	**M65**						✓	✓	✓	✓	✓	✓	✓			
Non-standard cylindrical shaft extension [13]	**Y55** • and identification code						✓	✓	✓	✓	✓	✓	✓			
Heating and ventilation																
Fan cover for textile industry	**H17**						✓	✓	✓	✓	✓	✓	✓			
Metal external fan [14]	**K35**						✓	✓	✓	✓	✓	✓	✓			
Anti-condensation heaters for 230 V	**K45**						O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
Anti-condensation heaters for 115 V	**K46**						O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
Rating plate and extra rating plates																
Second lubricating plate, supplied loose	**B06**						✓	✓	✓	✓	✓	✓	✓			
Second rating plate, loose	**K31**						✓	✓	✓	✓	✓	✓	✓			
Extra rating plate or rating plate with deviating rating plate data	**Y80** • and identification code						✓	✓	✓	✓	✓	✓	✓			
Extra rating plate with identification code	**Y82** • and identification code						✓	✓	✓	✓	✓	✓	✓			
Additional information on rating plate and on package label (maximum of 20 characters)	**Y84** • and identification code						✓	✓	✓	✓	✓	✓	✓			

For legend and footnotes, see Page 7.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size														
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Aluminum series 1LA7 and 1LA5																
							1LA7 (aluminum)				**1LA5 (aluminum)**					
Packaging, safety notes, documentation and test certificates																
Without safety and commissioning note. Customer's declaration of renouncement required.	**B00**						○	○	○	○	○	○	○			
With one safety and startup guide per box pallet	**B01**						○	○	○	○	○	–	–			
Acceptance test certificate 3.1 according to EN 10204	**B02**						✓	✓	✓	✓	✓	✓	✓			
Operating instructions German/ English enclosed in print	**B23**						✓	✓	✓	✓	✓	✓	✓			
Wire-lattice pallet	**L99**						○	○	○	○	○	–	–			
Connected in star for dispatch	**M32**						✓	✓	✓	✓	✓	✓	✓			
Connected in delta for dispatch	**M33**						✓	✓	✓	✓	✓	✓	✓			

□ Standard version
○ Without additional charge
• This order code only determines the price of the version – Additional plain text is required.
O.R. Possible on request
✓ With additional charge
– Not possible

1) Evaluation with appropriate tripping unit (see Catalog LV 1) is recommended.

2) In combination with the PTC thermistor option or anti-condensation heating option, please inquire before ordering.

3) A second shaft extension is not possible. Please inquire for mounted brakes. The order codes listed cannot be combined within the various technologies nor with each other within the same technology system. This applies for:
– Modular technology – Basic versions
– Modular technology – Combination of basic versions
– Special technology

4) The standard brake supply voltage is 230 V AC, 50/60 Hz. Other brake supply voltages are possible with order codes **C00**, **C01** and **C02**.

5) Not possible in combination with rotary pulse encoder HOG 9 D 1024I (order code **H72**, **H79**) and/or brake 2LM8 (used for motors up to and including frame size 225, order code **G26**).

6) Not possible in combination with brake 2LM8 (used for motors up to and including frame size 225, order code **G26**).

7) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE for IP55, IP56 and IP65 degrees of protection. If condensation drainage holes are required in motors of the IM B6, IM B7 or IM B8 type of construction (feet located on side or top), it is necessary to relocate the bearing plates at the drive end (DE) and non-drive end (NDE) so that the condensation drainage holes situated between the feet on delivery are underneath.

8) Not necessary when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.

9) In connection with mountings, the respective technical data must be observed; request required.

10) CCC certification is required for
– 2-pole motors ≤2.2 kW
– 4-pole motors ≤1.1 kW
– 6-pole motors ≤0.75 kW
– 8-pole motors ≤0.55 kW

11) Not possible when brake is mounted.

12) Can be combined with deep-groove bearings of series 60.., 62.. and 63.. . Not possible with parallel roller bearings (e.g. bearings for increased cantilever forces, order code **K20**) brake or encoder fitting.

13) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the featherkey way must be specified in a sketch. It must be ensured that only featherkeys in accordance with DIN 6885, Form A are permitted to be used. The featherkey way is positioned centrally on the shaft extension. The length is defined by the manufacturer normatively.
Not applicable for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts.
Valid for non-standard shaft extensions DE or NDE. The featherkeys are supplied in every case.
The add-on prices also apply for "Shaft extension DE without featherkey way".
For order codes **Y55** and **K16**:
– Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
– Dimensions E and EA ≤2 x Length E (normal) of the shaft extension
For explanation of the order codes, see Catalog D 81.1 part 0 "Introduction".

14) For 1LA5, 1LA6, 1LA7, 1LA9 motors and 1LG with metal external fan, converter-fed operation is permitted. The metal external fan is not possible in combination with the low-noise version – order code **K37** or **K38**.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size															
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Cast-iron series 1LG6																	
											1LG6 (cast-iron)						
Motor protection																	
Motor protection with PTC thermistors with 3 embedded temperature sensors for tripping [1]	**A11**										✓	✓	✓	✓	✓	✓
Motor protection with PTC thermistors with 6 embedded temperature sensors for tripping and alarm [1]	**A12**										✓	✓	✓	✓	✓	✓
Motor temperature detection with embedded temperature sensor KTY 84-130 [1]	**A23**										✓	✓	✓	✓	✓	✓
Motor temperature detection with embedded temperature sensors 2 x KTY 84-130 [1]	**A25**										✓	✓	✓	✓	✓	✓
Temperature detectors for tripping [1]	**A31**										✓	✓	✓	✓	✓	✓
Installation of 2 PT 100 screw-in resistance thermometers (basic circuit) for rolling-contact bearings [1] [2]	**A72**										✓	✓	✓	✓	✓	✓
Installation of 2 PT 100 screw-in resistance thermometers (3-wire circuit) for rolling-contact bearings [1]	**A78**										✓	✓	✓	✓	✓	✓
Installation of 2 PT 100 double screw-in resistance thermometers (3-wire circuit) for rolling-contact bearings [1]	**A80**										✓	✓	✓	✓	✓	✓
Motor connection and connection box																	
Two-part plate on connection box	**K06**										–	✓	✓	✓	✓	✓
Connection box on RHS	**K09**										✓	✓	✓	✓	✓	✓
Connection box on LHS	**K10**										✓	✓	✓	✓	✓	✓
Connection box on top, feet screwed on	**K11**										✓	✓	✓	✓	✓	✓
Connection box in cast-iron version	**K15**										✓	✓	✓	–	–	–
One cable gland, metal	**K54**										✓	✓	✓	✓	✓	✓
Cable gland, maximum configuration	**K55**										✓	✓	✓	✓	✓	✓
Rotation of the connection box through 90°, entry from DE	**K83**										✓	✓	✓	✓	✓	✓
Rotation of the connection box through 90°, entry from NDE	**K84**										✓	✓	✓	✓	✓	✓
Rotation of connection box through 180°	**K85**										✓	✓	✓	✓	✓	✓
Next larger connection box	**L00**										✓	✓	✓	✓	✓	✓
6 cables protruding, 1.5 m long [3]	**L48**										O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
6 cables protruding, 3 m long [3]	**L49**										O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
Protruding cable ends – right side [3] [4]	**L51**										O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
Protruding cable ends – left side [3] [4]	**L52**										O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
Auxiliary connection box 1XB3 020	**L97**										✓	✓	✓	✓	✓	✓
Stud terminal for cable connection, accessories pack (3 items)	**M46**										–	–	–	✓	✓	✓
Saddle terminal for connection without cable lug, accessories pack (6 items)	**M47**										–	–	–	✓	✓	✓

For legend and footnotes, see Page 12.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size															
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Cast-iron series 1LG6																	
											1LG6 (cast-iron)						
Windings and insulation																	
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	**C22**										✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	**C23**										✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	**C24**										✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	**C25**										✓	✓	✓	✓	✓	✓
Colors and paint finish																	
Standard finish in RAL 7030 stone gray											□	□	□	□	□	□
Standard finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005	**Y53** • and standard finish RAL ….										✓	✓	✓	✓	✓	✓
Special finish in RAL 7030 stone gray	**K26**										✓	✓	✓	✓	✓	✓
Special finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005	**Y54** • and special finish RAL ….										✓	✓	✓	✓	✓	✓
Special finish in special RAL colors: For RAL colors, see “Special finish in special RAL colors” on Catalog D 81.1 part 0	**Y51** • and special finish RAL ….										✓	✓	✓	✓	✓	✓
Offshore special finish	**M91**										✓	✓	✓	✓	✓	✓
Sea air resistant special finish	**M94**										O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
Unpainted (only cast iron parts primed)	**K23**										○	○	○	○	○	○
Unpainted, only primed	**K24**										✓	✓	✓	✓	✓	✓
Modular technology – Basic versions [5]																	
Mounting of separately driven fan [6]	**G17**										✓	✓	✓	✓	✓	✓
Mounting of brake [6] [7]	**G26**										✓	✓	✓	✓	✓	✓
Mounting of 1XP8 001-1 (HTL) rotary pulse encoder	**H57**										✓	✓	✓	✓	✓	✓
Mounting of 1XP8 001-2 (TTL) rotary pulse encoder	**H58**										✓	✓	✓	✓	✓	✓

For legend and footnotes, see Page 12.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size															
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Cast-iron series 1LG6																	
											1LG6 (cast-iron)						
Modular technology – Combinations of basic versions [5]																	
Mounting of separately driven fan and 1XP8 001-1 rotary pulse encoder	**H61**										✓	✓	✓	✓	✓	✓
Mounting of brake and 1XP8 001-1 rotary pulse encoder [7]	**H62**										✓	✓	✓	✓	✓	✓
Mounting of brake and separately driven fan [7]	**H63**										✓	✓	✓	✓	✓	✓
Mounting of brake, separately driven fan and 1XP8 001-1 rotary pulse encoder [7]	**H64**										✓	✓	✓	✓	✓	✓
Mounting of separately driven fan and 1XP8 001-2 rotary pulse encoder	**H97**										✓	✓	✓	✓	✓	✓
Mounting of brake and 1XP8 001-2 rotary pulse encoder [7]	**H98**										✓	✓	✓	✓	✓	✓
Mounting of brake, separately driven fan and 1XP8 001-2 rotary pulse encoder [7]	**H99**										✓	✓	✓	✓	✓	✓
Modular technology – Additional versions																	
Brake supply voltage 24 V DC	**C00**										✓	✓	✓	✓	✓	✓
Brake supply voltage 400 V AC	**C01**										✓	✓	✓	✓	✓	✓
Mechanical manual brake release with lever (no locking)	**K82**										✓	✓	✓	✓	✓	✓
Special technology [5]																	
Mounting of LL 861 900 220 rotary pulse encoder	**H70**										✓	✓	✓	✓	✓	✓
Mounting of HOG 9 D 1024 I rotary pulse encoder	**H72**										✓	✓	✓	✓	✓	✓
Mounting of HOG 10 D 1024 I rotary pulse encoder	**H73**										✓	✓	✓	✓	✓	✓
Prepared for mounting LL 861 900 220	**H78**										✓	✓	✓	✓	✓	✓
Prepared for mounting HOG 9 D 1024 I	**H79**										✓	✓	✓	✓	✓	✓
Prepared for mounting HOG 10 D 1024 I	**H80**										✓	✓	✓	✓	✓	✓
Mechanical design and degrees of protection																	
Drive-end seal for flange-mounting motors with oil resistance to 0.1 bar Not possible for IM V3 type of construction and 2-pole motors.	**K17**										✓	✓	✓	✓	✓	✓
Low-noise version for 2-pole motors with clockwise direction of rotation [8]	**K37**										–	–	–	–	–	–
Low-noise version for 2-pole motors with counter-clockwise direction of rotation [8]	**K38**										–	–	–	–	–	–
IP65 degree of protection [9]	**K50**										✓	✓	✓	✓	✓	✓
IP56 degree of protection (non-heavy-sea) [10]	**K52**										✓	✓	✓	✓	✓	✓
Condensation water holes [11]	**L12**										□	□	□	□	□	□
Non-rusting screws (externally)	**M27**										✓	✓	✓	✓	✓	✓
Earth brushes for converter-fed operation	**M44**										–	–	–	–	O. R.	O. R.
Mechanical protection for encoder [12]	**M68**										✓	✓	✓	✓	✓	✓

For legend and footnotes, see Page 12.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size															
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Cast-iron series 1LG6																	
											1LG6 (cast-iron)						
Coolant temperature and site altitude																	
Coolant temperature –50 to +40 °C [13]	**D02**										✓	✓	✓	✓	✓	✓
Coolant temperature –40 to +40 °C [13]	**D03**										✓	✓	✓	✓	✓	✓
Coolant temperature –30 to +40 °C [13]	**D04**										✓	✓	✓	✓	✓	✓
Bearings and lubrication																	
Measuring nipple for SPM shock pulse measurement for bearing inspection	**G50**										✓	✓	✓	✓	✓	✓
Bearing design for increased cantilever forces [14]	**K20**										✓	✓	✓	✓	✓	✓
Special bearing for DE and NDE, bearing size 63	**K36**										✓	✓	✓	✓	✓ [15]	✓ [15]
Regreasing device	**K40**										✓	✓	✓	✓	□	□
Located bearing DE	**K94**										✓	✓	✓	✓	✓	✓
Located bearing NDE	**L04**										□	□	□	□	□	□
Insulated bearing cartridge [16]	**L27**										–	–	✓	✓	✓	✓
Balance and vibration quantity																	
Vibration quantity level A											□	□	□	□	□	□
Vibration quantity level B	**K02**										✓	✓	✓	✓	✓	✓
Full key balancing	**L68**										✓	✓	✓	✓	✓	✓
Balancing without key	**M37**										✓	✓	✓	✓	✓	✓
Shaft and rotor																	
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors [17]	**K04**										✓	✓	✓	✓	✓	✓
Second standard shaft extension [18]	**K16**										✓	✓	✓	✓	✓	✓
Shaft extension with normal dimensions without feather key	**K42**										✓	✓	✓	✓	✓	✓
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	**L39**										✓	✓	✓	✓	✓	✓
Non-standard cylindrical shaft extension [19]	**Y55** • and identification code										✓	✓	✓	✓	✓	✓
Heating and ventilation																	
Metal external fan [20]	**K35**										✓	✓	✓	✓	✓	✓
Anti-condensation heaters for 230 V	**K45**										✓	✓	✓	✓	✓	✓
Anti-condensation heaters for 115 V	**K46**										✓	✓	✓	✓	✓	✓
Sheet metal fan cover	**L36**										✓	✓	✓	✓	✓	✓
Separately driven fan with non-standard voltage and/or frequency	**Y81** • and identification code										–	–	✓	✓	✓	✓

For legend and footnotes, see Page 12.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor type frame size															
		56	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Self-ventilated motors with special insulation for voltages up to 690 V – Cast-iron series 1LG6																	
											1LG6 (cast-iron)						
Rating plate and extra rating plates																	
Second lubricating plate, supplied loose	**B06**										✓	✓	✓	✓	✓	✓
Second rating plate, loose	**K31**										✓	✓	✓	✓	✓	✓
Extra rating plate or rating plate with deviating rating plate data	**Y80** • and identification code										✓	✓	✓	✓	✓	✓
Extra rating plate with identification code	**Y82** • and identification code										✓	✓	✓	✓	✓	✓
Additional information on rating plate and on package label (max. of 20 characters)	**Y84** • and identification code										✓	✓	✓	✓	✓	✓
Packaging, safety notes; documentation and test certificates																	
Acceptance test certificate 3.1 according to EN 10204	**B02**										✓	✓	✓	✓	✓	✓
Operating instructions German/ English enclosed in print	**B23**										✓	✓	✓	✓	✓	✓
Connected in star for dispatch	**M32**										✓	✓	✓	✓	✓	✓
Connected in delta for dispatch	**M33**										✓	✓	□	□	□	□

□ Standard version
○ Without additional charge
• This order code only determines the price of the version – Additional plain text is required.
O.R. Possible on request
✓ With additional charge
– Not possible

1) Evaluation with appropriate tripping unit (see Catalog LV 1) is recommended.

2) This option is not possible for frame sizes 225 to 315 in combination with the option “Insulated bearing cartridge “ – order code **L27**.

3) In combination with the PTC thermistor option or anti-condensation heating option, please inquire before ordering.

4) Possible in combination with order code **L44** to **L49** or length specification in plain text.

5) A second shaft extension is not possible. Please inquire for mounted brakes. The order codes listed cannot be combined within the various technologies nor with each other within the same technology system. This applies for:
– Modular technology – Basic versions
– Modular technology – Combination of basic versions

6) For 1LG6 motors, order codes **G17**, **G26** and **H63** frame size 225 and above can also be combined with rotary pulse encoders, see the “Special technology” range.

7) The standard brake supply voltage is 230 V AC, 50/60 Hz. Other brake supply voltages are possible with order codes **C00** and **C01**.

8) Not necessary for 1LG6 motors because these motors are already noise optimized.

9) Not possible in combination with rotary pulse encoder HOG 9 D 1024I (order code **H72**, **H79**) and/or brake 2LM8 (used for motors up to and including frame size 225, order code **G26**).

10) Not possible in combination with brake 2LM8 (used for motors up to and including frame size 225, order code **G26**).

11) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If condensation drainage holes are required in motors of the IM B6, IM B7 or IM B8 type of construction (feet located on side or top), it is necessary to relocate the bearing plates at the drive end (DE) and non-drive end (NDE) so that the condensation drainage holes situated between the feet on delivery are underneath.

12) Not necessary when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.

13) In connection with mountings, the respective technical data must be observed; request required.

14) Not possible for 2-pole 1LG6 motors, frame size 315 L in vertical types of construction; bearings for increased cantilever forces at vibration quantity level B available on request for 1LG6 motors. Not possible for 1LG6 motors in the combination “Concentricity of the shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors” – order code **K04**.

15) Additional charge for 2-pole motors. With 4-pole to 8-pole motors, standard version.

16) This option is not possible for frame sizes 225 to 315 in combination with the option “Installation of 2 PT 100 screw-in resistance thermometers (basic circuit) for rolling-contact bearings” – order code **A72**.

17) Can be combined with deep-groove bearings of series 60.., 62.. and 63... . Not possible with parallel roller bearings (e.g. bearings for increased cantilever forces, order code **K20**) brake or encoder fitting.

18) Possible for motors of frame size 315 and above in vertical types of construction or 2-pole for version with second shaft extension on request. Version with protective cover not possible.

19) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the featherkey way must be specified in a sketch. It must be ensured that only featherkeys in accordance with DIN 6885, Form A are permitted to be used. The featherkey way is positioned centrally on the shaft extension. The length is defined by the manufacturer normatively.
Not applicable for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely “thin” shafts, special geometry dimensions (e.g. square journals), hollow shafts.
Valid for non-standard shaft extensions DE or NDE. The featherkeys are supplied in every case.
For order codes **Y55** and **K16**:
– Dimensions D and DA ≤ internal diameter of roller bearing (see dimension tables under “Dimensions”)
– Dimensions E and EA ≤2 x length E (normal) of the shaft extension
For an explanation of the order codes, see Catalog D 81.1 part 0 “Introduction”.

20) For 1LA5/6/7/9 motors and 1LG with metal external fan, converter-fed operation is permitted. The metal external fan is not possible in combination with the low-noise version – order code **K37** or **K38**.