Supplements to order numbers and special versions

Standard delivery times:

10 working days	20 working days	On request

Voltages
Cast-iron series 1LA8, 1LL8, 1PQ8

Selection and ordering data

Voltages	Voltage code 11th position of the Order No.	Additional identification code with order code and plain text if required	Motor category			Standard delivery time (colored area)						
			Motor version	**Motor type**	**Number of poles**	**Motor type – Frame size**						
						315	**355**	**400**		**450**		
			Mains-fed operation	1LA8	2, 4, 6, 8	**1LA8**						
				1LL8	2, 4, 6, 8	**1LL8**						
			Converter-fed operation	1LA8	2, 4, 6, 8	**1LA8**						
				1LL8	2, 4, 6, 8	**1LL8**						
				1PQ8	2, 4, 6, 8	**1PQ8**						
1PQ8. . . - . . . ■ . **1L . . . . . - . . . ■ .**			Motor version	Motor type	Number of poles	Motor type 1LA8 ... /1LL8 ... /1PQ8 ...						
						315 317	353 355 356 357	403 405	407	453	455	457
Voltage at 50 Hz and 50 Hz output												
400 VΔ/690 VY [1]	**6**	–	Mains-fed operation	1LA8, 1LL8	2, 4	□	□	□	–	–	–	–
					6	□	□	□	□	□	–	–
					8	□	□	□	□	□	□	□ [2]
	8	–	Converter-fed operation with standard insulation	1LA8, 1LL8, 1PQ8	2, 4	□	□	□	–	–	–	–
					6	□	□	□	□	□	–	–
					8	□	□	□	□	□	□	□ [2]
400 VΔ	**4**	–	Mains-fed operation	1LA8, 1LL8	2, 4, 6, 8	–	–	–	–	–	–	–
			Converter-fed operation with standard insulation	1LA8, 1LL8, 1PQ8	2, 4	○	○	○	–	–	–	–
					6	○	○	○	○	○	–	–
					8	○	○	○	○	○	○	○
500 VΔ	**5**	–	Mains-fed operation	1LA8, 1LL8	2, 4, 6, 8	○	○	○	○	○	○	○
			Converter-fed operation with standard insulation	1LA8, 1LL8, 1PQ8	2, 4, 6, 8	○	○	○	○	○	○	○
690 VΔ [1]	**0**	–	Mains-fed operation	1LA8, 1LL8	2, 4	_ [3]	_ [3]	_ [3]	□	□	□	□
					6	_ [3]	_ [3]	_ [3]	_ [3]	_ [3]	□	□
					8	_ [3]	_ [3]	_ [3]	_ [3]	_ [3]	_ [3]	□ [4]
	7	–	Converter-fed operation with standard insulation	1LA8, 1LL8, 1PQ8	2, 4	_ [5]	_ [5]	_ [5]	□	□	□	□
					6	_ [5]	_ [5]	_ [5]	_ [5]	_ [5]	□	□
					8	_ [3]	_ [3]	_ [3]	_ [3]	_ [3]	_ [3]	□ [4]
Voltage at 60 Hz and required output at 60 Hz												
380 VΔ/660 VY, 50 Hz output [6]	**9**	**L2C**	All	All	All	✓	✓ [7]	✓ [7]	✓ [7]	✓ [7]	✓ [7]	✓ [7]
380 VΔ/660 VY, 60 Hz output [6]	**9**	**L2D**	All	All	All	✓	✓	✓	✓	✓	✓	✓
440 VΔ; 50 Hz output [6]	**9**	**L2R**	All	All	All	✓	✓	✓	✓	✓	✓	✓
440 VΔ; 60 Hz output [6]	**9**	**L2X**	All	All	All	✓	✓	✓	✓	✓	✓	✓
460 VΔ; 50 Hz output [6]	**9**	**L2T**	All	All	All	✓	✓	✓	✓	✓	✓	✓
460 VΔ; 60 Hz output [6]	**9**	**L2F**	All	All	All	✓	✓	✓	✓	✓	✓	✓
575 VΔ; 50 Hz output	**9**	**L2V**	All	All	All	✓	✓	✓	✓	✓	✓	✓
575 VΔ; 60 Hz output	**9**	**L2M**	All	All	All	✓	✓	✓	✓	✓	✓	✓
Non-standard voltage and/or frequencies												
Standard winding [8]	**9**	**L8Y** • and identification code	All	All	All	✓	✓	✓	✓	✓	✓	✓
Non-standard winding [9]	**9**	**L1Y** • and identification code	All	All	All	✓	✓	✓	✓	✓	✓	✓

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

Note:
The order codes listed above are only valid for motor series 1PQ8 with forced-air cooled motor.
For the mounted separately driven fan, the required voltage/frequency must be ordered according to order code Y81 "Separately driven fan with non-standard voltage and/or frequency" in plain text with indication of the voltage, frequency and circuit.

1) Operation of the 1LA8, 1LL8 and 1PQ8 motors with standard insulation is only possible when connected to a converter (d*u*/d*t* filter or sine-wave filter).

2) Not possible for 8-pole motors 1LL8457-8.

3) As special version with voltage code 9 and order code L1Y (specify output, voltage and frequency).

4) Not possible for 8-pole motors 1LA8457-8 and 1PQ8457-8.

5) For 1LL8 motors, as special version with voltage code 9 and order code L1Y (specify output, voltage and frequency).

6) Only possible with rated outputs of up to 630 kW.

7) Not possible for 2-pole 1LL8 motors in 60 Hz version of frame size 355 and above.

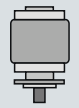
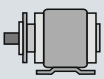
8) Plain text must be specified in the order: Voltage, frequency, circuit, required rated output in kW.
Winding according to voltage code:
- 0, 4, 5, 6, 7 or 8 for 1LA8 motors
- 4, 5, 7 or 8 for 1PQ8 motors
- 0, 5 or 6 for 1LL8 motors.
The rating plate will be stamped in accordance with identification code.
The order code Y80 is not necessary, as it is included in the price of L8Y.

9) Plain text must be specified in the order: Voltage between 380 V and 690 V (voltages outside this range are available on request), frequency, circuit, required rated output in kW.

Standard delivery times:

10 working days	20 working days	On request

Selection and ordering data

Types of construction		Type of construction code 12th position of the Order No.	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)			
				Motor version	**Motor type**	**Motor type – Frame size**			
						315	**355**	**400**	**450**
				Mains-fed operation	1LA8	**1LA8**			
					1LL8	**1LL8**			
				Converter-fed operation	1LA8	**1LA8**			
					1LL8	**1LL8**			
					1PQ8	**1PQ8**			
	1PQ8. . . -. . . . ■			Motor version	Motor type	Frame size			
	1L. . . . . -. . . . ■					315	355	400	450
Without flange									
IM B3		**0**	–	All	All	□	□ 1)	□ 1)	□ 1)
IM V6		**0**	– *New!*	Mains-fed operation	1LA8	O. R.	O. R.	O. R.	O. R.
					1LL8	–	–	–	–
				Converter-fed operation	1LA8	O. R.	O. R.	O. R.	O. R.
					1LL8	–	–	–	–
					1PQ8	O. R.	O. R.	O. R.	O. R.
IM V5		**0**	– *New!*	Mains-fed operation	1LA8	O. R.	O. R.	O. R.	O. R.
					1LL8	–	–	–	–
				Converter-fed operation	1LA8	O. R.	O. R.	O. R.	O. R.
					1LL8	–	–	–	–
					1PQ8	O. R.	O. R.	O. R.	O. R.
With flange		**acc. to DIN EN 50347 acc. to DIN 42948**				– **A 800**	– **A 900**	– **A 1000**	– **A 1150**
IM V1 without protective cover 2)		**8**	–	Mains-fed operation	1LA8	✓	✓ 3)	✓ 3)	✓ 3)
					1LL8	✓	✓ 1)	✓ 1)	✓ 1)
				Converter-fed operation	1LA8	✓	✓ 3)	✓ 3)	✓ 3)
					1LL8	✓	✓	✓	✓
					1PQ8	✓	✓ 3)	✓ 3)	✓ 3)
IM V1 with protective cover 4)		**4**	–	Mains-fed operation	1LA8	✓	✓ 3)	✓ 3)	✓ 3)
					1LL8	✓	✓ 1)	✓ 1)	✓ 1)
				Converter-fed operation	1LA8	✓	✓	✓	✓
					1LL8	✓	✓	✓	✓
					1PQ8	✓	✓ 3)	✓ 3)	✓ 3)
IM B35		**6**	–	Mains-fed operation	1LA8	✓	✓	✓	✓
					1LL8	O. R.	O. R.	O. R.	O. R.
				Converter-fed operation	1LA8	✓	✓	✓	✓
					1LL8	O. R.	O. R.	O. R.	O. R.
					1PQ8	✓	✓	✓	✓

□ Standard version
O. R. Possible on request
✓ With additional charge

Note:
With the same order number supplement in the 12th position, the respective basic type of construction will always be specified on the rating plate.

Ordering example:

Selection criteria	Requirement	Structure of the Order No.
Motor type	Non-standard motor specially designed for mains-fed operation, self-ventilated, cast-iron version, IP55 degree of protection	**1LA8■■■-■■■■■**
Motor frame size/No. of poles/speed	315/6-pole/1000 rpm	**1LA8315-6AB■■**
Rated output	200 kW	
Voltage and frequency	400 VΔ/690 VY, 50 Hz	**1LA8315-6AB6■**
Type	IM V1 with protective cover	**1LA8315-6AB64**

1) Not possible for 2-pole 1LL8 motors in 60 Hz version for mains-fed operation.

2) For explosion-proof 1LA8 and 1PQ8 motors, the type of construction IM V1 without protective cover is not possible.

3) For 2-pole 1LA8 and 1PQ8 motors for mains-fed and converter-fed operation up to 500 V, the 60 Hz version is not possible.

4) The "Second shaft extension" option, order code K16 is not possible.

Supplements to order numbers and special versions

Standard delivery times:

10 working days	20 working days	On request

Options
Cast-iron series 1LA8, 1LL8, 1PQ8

Selection and ordering data

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category		Standard delivery time (colored area)			
		Motor version	**Motor type**	**Motor type – Frame size**			
				315	**355**	**400**	**450**
		Mains-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
		Converter-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
			1PQ8	**1PQ8**			
1PQ8. . . -.	**-Z**	Motor version	Motor type	Frame size			
1L . . . . . -.	**-Z**			315	355	400	450
Standardline							
Standardline version [1] The price reduction refers to the basic machine. Possible range of options: A23, A61, A72, G50, H70, H73, K09, K10, K45, K46, K57, K83, K84, K85, L00, L97, M58 (frame size 315 only), M88, Y53	**B20**	Mains-fed operation	1LA8	○	○	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	○	○	–	–
			1LL8	–	–	–	–
			1PQ8	–	–	–	–
Motor protection							
Motor protection with PTC thermistors with 6 embedded temperature sensors for alarm and tripping [2]	**A12**	All	All	□	□	□	□
Motor temperature detection with embedded temperature sensor KTY 84-130 [3]	**A23**	All	All	○	○	○	○
Installation of 6 PT100 resistance thermometers in stator winding [3]	**A61**	All	All	✓	✓	✓	✓
Installation of 6 PT100 resistance thermometers in stator winding, 3-wire circuit from auxiliary terminal box (Option M50 or M88)	**A64**	All	All	✓	✓	✓	✓
Installation of 2 PT100 screw-in resistance thermometers in basic circuit for rolling-contact bearings	**A72**	All	All	✓	✓	✓	✓
Installation of 2 PT100 screw-in resistance thermometers for rolling-contact bearings, in 3-wire circuit from auxiliary terminal box (Option M50 or M88)	**A78**	All	All	✓	✓	✓	✓
Installation of 2 PT100 double screw-in resistance thermometers in 3-wire circuit for rolling-contact bearings	**A80** *New!*	All	All	✓	✓	✓	✓
6 x PT100 Smart transmitter –40 to +140 °C Rosemount [4]	**M62**	All	All	✓	✓	✓	✓
Motor connection and connection box							
Two-part plate on connection box	**K06**	Mains-fed operation	1LA8	✓ [5]	✓	✓	✓
			1LL8	✓	✓	✓	✓
		Converter-fed operation	1LA8	O. R.	O. R.	O. R.	O. R.
			1LL8	O. R.	O. R.	O. R.	O. R.
			1PQ8	O. R.	O. R.	O. R.	O. R.
Undrilled entry plate	**L01**	All	All	○ [6]	○	○	○
Connection box on RHS	**K09**	All	All	□	□	□	□
Connection box on LHS	**K10** *New!*	All	All	○	○	○	○
Cable entry in direction of NDE with rotation of the terminal box console through 180°	**N81**	All	All	○	○	○	○
Cable entry in direction of DE with rotation of the terminal box console through 180°	**N82** *New!*	All	All	○	○	○	○
Cable entry from the top	**N83** *New!*	All	All	○	○	○	○
Rotation of the terminal box console through 180°	**N84** *New!*	All	All	○	○	○	○
Connection box on NDE	**N85** *New!*	All	All	O. R.	O. R.	O. R.	O. R.
Connection box on top (1XB1634 connection box) [7]	**K11**	All	All	✓	✓	✓	✓
DIN 89280 cable gland, maximum configuration	**K57**	All	All	✓	✓	✓	✓
Rotation of the connection box through 90°, entry from DE	**K83**	All	All	○	○	○	○
Rotation of the connection box through 90°, entry from NDE	**K84**	All	All	○	○	○	○
Rotation of the connection box through 180°	**K85**	All	All	○	○	○	○
Larger connection box (1XB1621 connection box)	**M58**	All	All	✓	– [8]	–	–
PE connection without cable lug	**Q00** *New!*	All	All	✓	✓	✓	✓
Larger connection box (1XB1631 connection box)	**L00**	Mains-fed operation	1LA8	✓	✓ [8]	□	□
			1LL8	✓	□	□	□
		Converter-fed operation	1LA8	✓	✓ [8]	□	□
			1LL8	✓	□	□	□
			1PQ8	✓	✓ [8]	□	□

For legends, see Page 11; for footnotes, see Page 12.

Standard delivery times:

10 working days	20 working days	On request

Options
Cast-iron series 1LA8, 1LL8, 1PQ8

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category		Standard delivery time (colored area)			
		Motor version	**Motor type**	**Motor type – Frame size**			
				315	**355**	**400**	**450**
		Mains-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
		Converter-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
			1PQ8	**1PQ8**			
1PQ8. . . -.	**-Z**	Motor version	Motor type	Frame size			
1L . . . . . -.	**-Z**			315	355	400	450
Motor connection and connection box (continued)							
Larger connection box (1XB9600 connection box) [9]	**M63** *New!*	All	All	–	✓	✓	✓
Subsequently rotatable main connection box	**J12** *New!*	All	All	✓	✓	✓	✓
6 cables protruding, 1.5 m long	**L48**	All	All	O. R.	O. R.	O. R.	O. R.
6 cables protruding, 3 m long	**L49**	All	All	O. R.	O. R.	O. R.	O. R.
Auxiliary connection box 1XB9016 (cast-iron)	**M50**	All	All	✓	✓	✓	✓
Auxiliary connection box 1XB9015 (stainless steel)	**M51**	All	All	✓	✓	✓	✓
Flange version A660 instead of standard version [10]	**M61**	Mains-fed operation	1LA8	✓	✓	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	–	–
			1LL8	–	–	–	–
			1PQ8	✓	✓	–	–
Auxiliary connection box 1XB3020 [11]	**L97**	All	All	✓	✓	✓	✓
Auxiliary connection box 1XB9014 (aluminum)	**M88**	All	All	✓	✓	✓	✓
Connection box on NDE	**M64**	All	All	✓	✓	✓	✓
Windings and insulation							
Temperature class 155 (F), utilized to 155 (F), with service factor (1LA8 motors: SF 1.1 from frame size 400 SF 1.05; 1LL8 motors: SF 1.05) [12]	**C11**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
		Converter-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
			1PQ8	–	–	–	–
Temperature class 155 (F), utilized to 155 (F), with increased output (1LA8 motors: 10 %, from frame size 400 5 %; 1LL8 motors: 5 %) [12]	**C12**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
		Converter-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
			1PQ8	–	–	–	–
Temperature class 155 (F), utilized to 155 (F), with increased coolant temperature (1LA8 motors: 55 °C, from frame size 400 50 °C; 1LL8 motors: 50 °C) [12]	**C13**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
		Converter-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
			1PQ8	–	–	–	–
Temperature class 180 (H), utilized to 155 (F), with service factor (SF 1.1) [12]	**C14**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	O. R.	O. R.	O. R.	O. R.
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	O. R.	O. R.	O. R.	O. R.
			1PQ8	✓	✓	✓	✓
Colors and paint finish							
Standard finish in RAL 7030 stone gray		All	All	◘	◘	◘	◘
Standard paint finish in other colors	**Y53** • and standard finish RAL ….	All	All	✓	✓	✓	✓
Special finish in RAL 7030 stone gray	**K26**	All	All	✓	✓	✓	✓
Special finish in other colors	**Y54** • and special finish RAL ….	All	All	✓	✓	✓	✓
Unpainted (only cast-iron parts primed)	**K23**	All	All	O	O	O	O
Special technology							
Mounting of brake (incl. the brake from Stromag)	**H47**	Mains-fed operation	1LA8	O. R.	O. R.	O. R.	O. R.
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	O. R.	O. R.	O. R.	O. R.
			1LL8	–	–	–	–
			1PQ8	O. R.	O. R.	O. R.	O. R.
Mounting of the holding brake SFB 160, 1600 Nm, 230 V, Pintsch-Bubenzer [13]	**J48** *New!*	Mains-fed operation	1LA8	✓	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	–	–	–
			1LL8	–	–	–	–
			1PQ8	✓	–	–	–

For legends, see Page 11; for footnotes, see Page 12.

Supplements to order numbers and special versions

Standard delivery times:

10 working days | **20 working days** | **On request**

Options
Cast-iron series 1LA8, 1LL8, 1PQ8

Special versions	Additional identification code **-Z** with order code and plain text if required		Motor category		Standard delivery time (colored area)			
			Motor version	**Motor type**	**Motor type – Frame size**			
					315	**355**	**400**	**450**
			Mains-fed operation	1LA8	**1LA8**			
				1LL8	**1LL8**			
			Converter-fed operation	1LA8	**1LA8**			
				1LL8	**1LL8**			
				1PQ8	**1PQ8**			
1PQ8. . . -.	**-Z**		Motor version	Motor type	Frame size			
1L. . . . . -.	**-Z**				315	355	400	450
Special technology (continued)								
Mounting of the holding brake SFB 160 SH, 2100 Nm, 230 V, Pintsch-Bubenzer [13]	**J49**	*New!*	Mains-fed operation	1LA8	✓	–	–	–
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	✓	–	–	–
				1LL8	–	–	–	–
				1PQ8	✓	–	–	–
Mounting of the holding brake SFB 160 H, 2500 Nm, 230 V, Pintsch-Bubenzer [13]	**J56**	*New!*	Mains-fed operation	1LA8	✓	✓	–	–
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	✓	✓	–	–
				1LL8	–	–	–	–
				1PQ8	✓	✓	–	–
Mounting of the holding brake SFB 250 SH, 3300 Nm, 230 V, Pintsch-Bubenzer [13]	**J57**	*New!*	Mains-fed operation	1LA8	–	✓	–	–
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	–	✓	–	–
				1LL8	–	–	–	–
				1PQ8	–	✓	–	–
Mounting of the holding brake SFB 250 H, 4000 Nm, 230 V, Pintsch-Bubenzer [13]	**J58**	*New!*	Mains-fed operation	1LA8	–	✓	–	–
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	–	✓	–	–
				1LL8	–	–	–	–
				1PQ8	–	✓	–	–
Mounting of the holding brake SFB 250 H, 4000 Nm, 400 V, Pintsch-Bubenzer [13]	**J59**	*New!*	Mains-fed operation	1LA8	–	–	✓	–
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	–	–	✓	–
				1LL8	–	–	–	–
				1PQ8	–	–	✓	–
Mounting of the holding brake SFB 400 SH, 5200 Nm, 400 V, Pintsch-Bubenzer [13]	**J66**	*New!*	Mains-fed operation	1LA8	–	–	✓	–
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	–	–	✓	–
				1LL8	–	–	–	–
				1PQ8	–	–	✓	–
Mounting of the holding brake SFB 400 H, 6300 Nm, 400 V, Pintsch-Bubenzer [13]	**J67**	*New!*	Mains-fed operation	1LA8	–	–	✓	✓
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	–	–	✓	✓
				1LL8	–	–	–	–
				1PQ8	–	–	✓	✓
Mounting of the holding brake SFB 630 SH, 8000 Nm, 400 V, Pintsch-Bubenzer [13]	**J68**	*New!*	Mains-fed operation	1LA8	–	–	–	✓
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	–	–	–	✓
				1LL8	–	–	–	–
				1PQ8	–	–	–	✓
Mounting of the holding brake SFB 630 H, 10000 Nm, 400 V, Pintsch-Bubenzer [13]	**J69**	*New!*	Mains-fed operation	1LA8	–	–	–	✓
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	–	–	–	✓
				1LL8	–	–	–	–
				1PQ8	–	–	–	✓
Prepared for mounting of the holding brake SFB for shaft height 315 [13]	**J06**	*New!*	Mains-fed operation	1LA8	✓	–	–	–
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	✓	–	–	–
				1LL8	–	–	–	–
				1PQ8	✓	–	–	–
Prepared for mounting of the holding brake SFB for shaft height 355 [13]	**J07**	*New!*	Mains-fed operation	1LA8	–	✓	–	–
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	–	✓	–	–
				1LL8	–	–	–	–
				1PQ8	–	✓	–	–

For legends, see Page 11; for footnotes, see Page 12.

Standard delivery times:

10 working days	20 working days	On request

Options
Cast-iron series 1LA8, 1LL8, 1PQ8

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category		Standard delivery time (colored area)			
		Motor version	**Motor type**	**Motor type – Frame size**			
				315	**355**	**400**	**450**
		Mains-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
		Converter-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
			1PQ8	**1PQ8**			
1PQ8. . . -.	**-Z**	Motor version	Motor type	Frame size			
1L. . . . . -.	**-Z**			315	355	400	450
Special technology (continued)							
Prepared for mounting of the holding brake SFB for shaft height 400 [13]	**J08** *New!*	Mains-fed operation	1LA8	–	–	✓	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	–	–	✓	–
			1LL8	–	–	–	–
			1PQ8	–	–	✓	–
Prepared for mounting of the holding brake SFB for shaft height 450 [13]	**J09** *New!*	Mains-fed operation	1LA8	–	–	–	✓
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	–	–	–	✓
			1LL8	–	–	–	–
			1PQ8	–	–	–	✓
Mounting of LL 861 900 220 rotary pulse encoder	**H70**	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting of HOG 10 D 1024 I rotary pulse encoder	**H73**	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Prepared for mounting of LL 861 900 220	**H78**	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Prepared for mounting of HOG 10 D 1024 I	**H80**	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting of HOG10 DN 2048 incremental encoder	**H83** *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting of HOG11 DN 2048 incremental encoder	**H84** *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting of LL861 incremental encoder (2048 pulses)	**H85** *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting of LL861900 222 rotary pulse encoder with Advanced Diagnostic System	**H16** *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
HOG 11 DN 1024 I rotary pulse encoder (16 mm) with special anti-corrosion protection	**H88** *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓

For legends, see Page 11; for footnotes, see Page 12.

Supplements to order numbers and special versions

Standard delivery times:

10 working days | **20 working days** | **On request**

Options
Cast-iron series 1LA8, 1LL8, 1PQ8

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category		Standard delivery time (colored area)			
		Motor version	**Motor type**	**Motor type – Frame size** 315	355	400	450
		Mains-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
		Converter-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
			1PQ8	**1PQ8**			
1PQ8. . . -.	**-Z**	Motor version	Motor type	Frame size 315	355	400	450
1L . . . . . -.	**-Z**						
Special technology (continued)							
Mounting of HOG 10 DN 1024 I rotary pulse encoder + centrifugal switch, (speed .... rpm), terminal box protection against humidity	**Y74 •** and required speed .... rpm *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting of HOG 10 DN 1024 I rotary pulse encoder + centrifugal switch, (speed .... rpm), terminal box protection against dust	**Y76 •** and required speed .... rpm *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting of HOG 10 D 1024 I with terminal box/protection against dust	**N05** *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting of HOG 10 DN 1024 I with terminal box/protection against dust (zero signal)	**N06** *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting of HOG 10 DN 1024 I with terminal box/protection against humidity (zero signal)	**N08** *New!*	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	✓	✓	✓	✓
Mounting a special type of rotary pulse encoder	**Y70 •** and encoder designation	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	O. R.	O. R.	O. R.	O. R.
			1LL8	O. R.	O. R.	O. R.	O. R.
			1PQ8	O. R.	O. R.	O. R.	O. R.
Mechanical design and degrees of protection							
Low-noise version for 2-pole motors with clockwise direction of rotation	**K37**	Mains-fed operation	1LA8	✓	◘	◘	◘
			1LL8	✓	○	○	○
		Converter-fed operation	1LA8	✓	◘	◘	◘
			1LL8	✓	○	○	○
			1PQ8	–	–	–	–
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	**K38**	Mains-fed operation	1LA8	✓	◘	◘	◘
			1LL8	✓	○	○	○
		Converter-fed operation	1LA8	✓	◘	◘	◘
			1LL8	✓	○	○	○
			1PQ8	–	–	–	–
IP65 degree of protection	**K50**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
			1PQ8	✓	✓	✓	✓
IP56 degree of protection (non-heavy-sea)	**K52**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
			1PQ8	O. R.	O. R.	O. R.	O. R.
Rust-resistant screws (externally) [14]	**M27**	All	All	✓	✓	✓	✓

For legends, see Page 11; for footnotes, see Page 12.

Standard delivery times:

10 working days	20 working days	On request

Options
Cast-iron series 1LA8, 1LL8, 1PQ8

Special versions	Additional identification code -Z with order code and plain text if required		Motor category		Standard delivery time (colored area)			
			Motor version	**Motor type**	**Motor type – Frame size**			
					315	**355**	**400**	**450**
			Mains-fed operation	1LA8	1LA8			
				1LL8	1LL8			
			Converter-fed operation	1LA8	1LA8			
				1LL8	1LL8			
				1PQ8	1PQ8			
1PQ8. . . -.	**-Z**		Motor version	Motor type	Frame size			
1L . . . . . -.	**-Z**				315	355	400	450
Coolant temperature and site altitude								
Coolant temperature –50 to +40 °C	**D02**	*New!*	Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
				1PQ8	✓	✓	✓	✓
Coolant temperature –40 to +40 °C	**D03**		Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
				1PQ8	✓	✓	✓	✓
Coolant temperature –30 to +40 °C	**D04**		Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
				1PQ8	✓	✓	✓	✓
Coolant temperature 45 °C, derating 4 % [15]	**D11**		All	All	○	○	○	○
Coolant temperature 50 °C, derating 8 % [15]	**D12**		All	All	○	○	○	○
Coolant temperature 55 °C, derating 13 % [15]	**D13**		All	All	○	○	○	○
Coolant temperature 60 °C, derating 18 % [15]	**D14**		All	All	○	○	○	○
Designs in accordance with standards and specifications								
Electrical according to NEMA MG1-12 [14]	**D30**		All	All	✓	✓	✓	✓
Design according to UL with "Recognition Mark"	**D31**		All	All	✓	✓	✓	✓
China Energy Efficiency Label [16]	**D34**	*New!*	Mains-fed operation	1LA8	○	○	–	–
				1LL8	○	○	–	–
			Converter-fed operation	1LA8	–	–	–	–
				1LL8	–	–	–	–
				1PQ8	–	–	–	–
Ex certification for Russia – only in combination with order codes M35, M39, M72 and M73	**D35**	*New!*	Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
				1PQ8	✓	✓	✓	✓
Conformity statement in accordance with 94/9/EC (ATEX) of an independent body for Zone 2 motors (Ex nA)	**D36**	*New!*	Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
				1PQ8	✓	✓	✓	✓
IEC Ex certificate – only in combination with order codes M72 and M73	**D37**	*New!*	Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
			Converter-fed operation	1LA8	✓	✓	✓	✓
				1LL8	–	–	–	–
				1PQ8	O. R.	O. R.	O. R.	O. R.
Canadian regulations (CSA)	**D40**		All	All	✓	✓	✓	✓
Pump drives for sea water desalination plants								
Commissioning of the classification society by Siemens [17]	**E88**	*New!*	All	All	✓	✓	✓	✓
Commissioning of the classification society by third party [17]	**E89**	*New!*	All	All	✓	✓	✓	✓
Pump drive for sea water desalination plants certified according to Lloyd's Register [17]	**E90**	*New!*	All	All	✓	✓	✓	✓

For legends, see Page 11; for footnotes, see Page 12.

Supplements to order numbers and special versions

Standard delivery times:

10 working days | **20 working days** | **On request**

Options
Cast-iron series 1LA8, 1LL8, 1PQ8

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category		Standard delivery time (colored area)			
		Motor version	**Motor type**	**Motor type – Frame size** 315	355	400	450
		Mains-fed operation	1LA8	1LA8			
			1LL8	1LL8			
		Converter-fed operation	1LA8	1LA8			
			1LL8	1LL8			
			1PQ8	1PQ8			
1PQ8. . . -.	**-Z**	Motor version	Motor type	Frame size 315	355	400	450
1L . . . . -.	**-Z**						
Design for Zones according to ATEX [18]							
Design for Zone 2 for mains-fed operation Ex nA II T3 according to IEC/EN 60079-15 [19] [20]	**M72**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
			1PQ8	–	–	–	–
Design for Zone 2 for converter-fed operation, with derating Ex nA II T3 according to IEC/EN 60079-15 [19] [20] [21]	**M73**	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	O. R.	O. R.	O. R.	O. R.
			1LL8	–	–	–	–
			1PQ8	O. R.	O. R.	O. R.	O. R.
Design for Zone 22 for non-conductive dust (IP55) for mains-fed operation [20]	**M35**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
			1PQ8	–	–	–	–
Design for Zone 22 for non-conductive dust (IP55) for converter-fed operation, with derating [19] [20]	**M39**	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
			1PQ8	–	–	–	–
VIK version (comprises Zone 2 for mains-fed operation, without Ex nA II marking on rating plate) [20] [22]	**K30**	Mains-fed operation	1LA8	✓	✓	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	O. R.	O. R.	–	–
			1LL8	–	–	–	–
			1PQ8	–	–	–	–
Ex nA II on VIK rating plate	**C27**	Mains-fed operation	1LA8	✓	✓	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	O. R.	O. R.	–	–
			1LL8	–	–	–	–
			1PQ8	–	–	–	–
Bearings and lubrication							
Measuring nipple for SPM shock pulse measurement for bearing inspection	**G50**	All	All	✓	✓	✓	✓
Shock pulse measurement, fixed sensor and distributor box	**H05** *New!*	All	All	✓	✓	✓	✓
Shock pulse measurement, complete alarm box [23]	**H07** *New!*	All	All	✓	✓	✓	✓
Automatic re-lubricating device EasyMatic [24]	**N30** *New!*	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
			1PQ8	✓	✓	✓	✓
Automatic re-lubricating device STAR CONTROL TIME M120 [25]	**N31** *New!*	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
			1PQ8	✓	✓	✓	✓
Automatic re-lubricating device STAR CONTROL IMPULSE L250 [26]	**N32** *New!*	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	–	–	–	–
			1PQ8	✓	✓	✓	✓
Bearing design for increased cantilever forces [27]	**K20**	Mains-fed operation	1LA8	✓	✓	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	✓	✓	–	–
			1LL8	–	–	–	–
			1PQ8	✓	✓	–	–

For legends, see Page 11; for footnotes, see Page 12.

Supplements to order numbers and special versions

Standard delivery times:

10 working days | **20 working days** | **On request**

Options
Cast-iron series 1LA8, 1LL8, 1PQ8

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category		Standard delivery time (colored area)			
		Motor version	**Motor type**	**Motor type – Frame size**			
				315	**355**	**400**	**450**
		Mains-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
		Converter-fed operation	1LA8	**1LA8**			
			1LL8	**1LL8**			
			1PQ8	**1PQ8**			
1PQ8. . . -.	**-Z**	Motor version	Motor type	Frame size			
1L . . . . . -.	**-Z**			315	355	400	450
Balance and vibration severity							
Vibration severity level B	**K02**	All	All	✓	✓	✓	✓
Full-key balancing	**L68**	All	All	✓	✓	✓	✓
Shaft and rotor							
Second standard shaft extension [28]	**K16**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	–	–	–	–
Shaft extension with standard dimensions, without feather keyway	**K42**	All	All	✓	✓	✓	✓
Non-standard cylindrical shaft extension	**Y55** • and identification code	All	All	✓	✓	✓	✓
Heating and ventilation							
Metal external fan	**K35**	Mains-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
		Converter-fed operation	1LA8	✓	✓	✓	✓
			1LL8	✓	✓	✓	✓
			1PQ8	–	–	–	–
Anti-condensation heating for 230 V	**K45**	All	All	✓	✓	✓	✓
Anti-condensation heating for 115 V	**K46**	All	All	✓	✓	✓	✓
Anti-condensation heating for 400 V	**L08** *New!*	All	All	✓	✓	✓	✓
Anti-condensation heating for 500 V	**L09** *New!*	All	All	✓	✓	✓	✓
Sheet metal fan cover	**L36**	Mains-fed operation	1LA8	–	–	–	–
			1LL8	□	□	□	□
		Converter-fed operation	1LA8	–	–	–	–
			1LL8	□	□	□	□
			1PQ8	–	–	–	–
Separately driven fan with non-standard voltage and/or frequency [29]	**Y81** • and identification code	Mains-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
		Converter-fed operation	1LA8	–	–	–	–
			1LL8	–	–	–	–
			1PQ8	✓	✓	✓	✓
Rating plate and extra rating plates							
Second rating plate, loose	**K31**	All	All	✓	✓	✓	✓
Extra rating plate or rating plate with deviating rating plate data	**Y80** • and identification code	All	All	✓	✓	✓	✓
Extra rating plate with identification codes	**Y82** • and identification code	All	All	✓	✓	✓	✓
Extension of liability for defects [30] (percentage additional charge refers to the basic machine)							
Extension of liability for defects by 12 to 24 months	**Q80** *New!*	All	All	✓	✓	✓	✓
Extension of liability for defects by 18 to 30 months [31]	**Q81** *New!*	All	All	✓	✓	✓	✓
Extension of liability for defects by 24 to 36 months [31]	**Q82** *New!*	All	All	✓	✓	✓	✓
Extension of liability for defects by 30 to 42 months [31]	**Q83** *New!*	All	All	✓	✓	✓	✓
Extension of liability for defects by 36 to 48 months [32]	**Q84** *New!*	All	All	✓	✓	✓	✓
Extension of liability for defects by 48 to 60 months [32]	**Q85** *New!*	All	All	✓	✓	✓	✓

For legends, see Page 11; for footnotes, see Page 12.

Supplements to order numbers and special versions

Standard delivery times:

10 working days | **20 working days** | **On request**

Options
Cast-iron series 1LA8, 1LL8, 1PQ8

Special versions	Additional identification code **-Z** with order code and plain text if required		Motor category		Standard delivery time (colored area)			
			Motor version	**Motor type**	**Motor type – Frame size**			
					315	**355**	**400**	**450**
			Mains-fed operation	1LA8	1LA8			
				1LL8	1LL8			
			Converter-fed operation	1LA8	1LA8			
				1LL8	1LL8			
				1PQ8	1PQ8			
1PQ8. . . -.	**-Z**		Motor version	Motor type	Frame size			
1L . . . . . -.	**-Z**				315	355	400	450
Packaging, safety notes, documentation and test certificates [33]								
Document – Electrical data sheet	**B31**		All	All	✓	✓	✓	✓
Document – Order dimension drawing	**B32**		All	All	○	○	○	○
Document – Standard test schedule	**B34**	*New!*	All	All	✓	✓	✓	✓
Document – Load characteristics	**B37**		All	All	O. R.	O. R.	O. R.	O. R.
Document – Production schedule: Generated once	**B43**	*New!*	All	All	✓	✓	✓	✓
Document – Production schedule: Updated every two weeks	**B44**	*New!*	All	All	✓	✓	✓	✓
Document – Production schedule: Updated monthly	**B45**	*New!*	All	All	✓	✓	✓	✓
Standard test (routine test) with acceptance	**F01**		All	All	✓	✓	✓	✓
Visual acceptance and report handover with acceptance	**F03**		All	All	✓	✓	✓	✓
Temperature-rise test, without acceptance	**F04**		All	All	✓	✓	✓	✓
Temperature-rise test with acceptance	**F05**		All	All	✓	✓	✓	✓
Noise measurement in no-load operation, no noise analysis, without acceptance	**F28**		All	All	✓	✓	✓	✓
Noise measurement in no-load operation, no noise analysis, with acceptance	**F29**		All	All	✓	✓	✓	✓
Noise measurement in no-load operation, with noise analysis, without acceptance	**F62**		All	All	✓	✓	✓	✓
Noise measurement in no-load operation, with noise analysis, with acceptance	**F63**		All	All	✓	✓	✓	✓
Recording of current and torque curves with torque metering shaft during starting, without acceptance	**F34**		Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	✓	✓	✓	✓
			Converter-fed operation	1LA8	–	–	–	–
				1LL8	–	–	–	–
				1PQ8	–	–	–	–
Recording of current and torque curves with torque metering shaft during starting, with acceptance	**F35**		Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	✓	✓	✓	✓
			Converter-fed operation	1LA8	–	–	–	–
				1LL8	–	–	–	–
				1PQ8	–	–	–	–
Measurement of locked-rotor torque and current, without acceptance	**F52**		Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	✓	✓	✓	✓
			Converter-fed operation	1LA8	–	–	–	–
				1LL8	–	–	–	–
				1PQ8	–	–	–	–
Measurement of locked-rotor torque and current, with acceptance	**F53**		Mains-fed operation	1LA8	✓	✓	✓	✓
				1LL8	✓	✓	✓	✓
			Converter-fed operation	1LA8	–	–	–	–
				1LL8	–	–	–	–
				1PQ8	–	–	–	–
Type test with heat run for horizontal motors, without acceptance	**F82**		All	All	✓	✓	✓	✓
Type test with heat run for horizontal motors, with acceptance	**F83**		All	All	✓	✓	✓	✓
Type test with heat run for vertical motors, without acceptance	**F92**		All	All	✓	✓	✓	✓
Type test with heat run for vertical motors, with acceptance	**F93**		All	All	✓	✓	✓	✓

- ◘ 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

For footnotes, see Page 12.

Ordering example:

Selection criteria	Requirement	Structure of the Order No.
Motor type	Non-standard motor specially designed for mains-fed operation, self-ventilated, cast-iron version, IP55 degree of protection	**1LA8■■■-■■■■■**
Motor frame size/No. of poles/speed	315/6-pole/1000 rpm	**1LA8315-6AB■■**
Rated output	200 kW	
Voltage and frequency	400 VΔ/690 VY, 50 Hz	**1LA8315-6AB6■**
Type	IM V1 with protective cover	**1LA8315-6AB64**
Special versions	Metal external fan	**1LA8315-6AB64-Z K35**
	Extension of liability for defects by 12 to 24 months	**1LA8315-6AB64-Z K35+Q10**

1) Only for 1LA8 motors in 4-pole version, IM B3 type of construction, voltage 400 VΔ/690 VY or 500 VΔ (without special insulation). Only the following order codes can be ordered in combination with the Standardline: A23, A61, A72, G50, H70, H73, K09, K10, K45, K46, K57, K83, K84, K85, L00, L97, M58 (frame size 315 only), M88, Y53.

2) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

3) The standard thermistors are omitted. If PTC thermistors are required as well as KTYs or PT100s, this must be specified in the order in plain text. A combination of A12 and A23 or A12 and A61 is available on request for an additional charge.

4) Only possible in combination with the stainless steel auxiliary terminal box (order code M51).

5) Only possible in combination with the larger connection boxes 1XB1621 or 1XB1631 (order codes M58 or L00).

6) For 1LA8 and 1PQ8 motors, only possible in combination with the larger connection boxes 1XB1621 or 1XB1631 (order codes M58 or L00).

7) Combination with the order codes M88 and M50 is not possible. The 1XB1634 connection box is rotatable by 4 x 90°. Cable entry is from NDE or the delivery position. Dimension drawings available on request.

8) For motors 1LA8357-2, 1LA8357-4, 1PQ8357-2 and 1PQ8357-4, connection box 1XB1631 is supplied in the standard version.

9) For 1LA8357-2, 1PQ8357-2, 1LA8357-4, 1PQ8357-4, 1LA8 and 1PQ8 motors frame size 400 and 450, terminal box 1XB9600 can be ordered as the next largest connection box.
For 1LA8353 to 1LA8355 and 1PQ8353 to 1PQ8355 as well as for 1LA8356-6, 1LA8357-6 and 1LA8357-8 and with 1PQ8356-6, 1PQ8357-6 and 1PQ8357-8, only terminal box 1XB1631 can be ordered as the next largest connection box.

10) Only possible for 4-pole and 6-pole 1LA8 and 1PQ8 motors with frame size 315 or 355 in versions IM V1 or IM B35.

11) VIK version is not possible for 1LA8 motors.

12) Utilization according to temperature class 180 (H) is not possible. All 400 V versions are available upon request only. Due to the rated current, for frame size 400 (2-pole and 4-pole) and 450 (all numbers of poles), a larger connection box with the type designation 1XB9600 is provided in some cases which is part of the order code C14.

13) Only possible for horizontal version IM B3 – other versions (such as type, rated voltage, mounting position) on request.

14) For 1PQ8 motors, only possible for the main motor – not for the separately driven fan motor.

15) Site altitude 1000 m above sea level.

16) For 1LA8 motors in mains-fed operation up to 315 kW.

17) Sector solution for pump drives certified according to Lloyds Register LR-T-3600 (Rev. 9 of August 2008), (Electric Motors higher than 100 hp) and LR-T-3601 (Rev. 8 of August 2008), (Vertical Electric Motors higher than 100 hp). Only combination of order codes E88 + E90 or E89 + E90 can be ordered.

18) Explosion-proof encoders are available on request.

19) These motors do not have a rated voltage range stamped on the rating plate.

20) For 1LA8 motors, with options K30, M35, M39, M72 and M73, the metal external fan order code K35 must also be ordered.

21) In the order, the "Speed range and torque characteristic" must be specified in plain text.
A system test is necessary for M = constant.

22) For 2-pole 1LA8 motors of frame size 315, the low-noise version is also required. Order code K37 or K38 and, in addition, the metal external fan order code K35. Note the specified output and dimensions. For 1LA8353 to 1LA8357 motors, the connection box cannot be rotated by 4 x 90°.

23) Does not apply to explosion-proof motors.

24) Only approved for 1LA8 and 1PQ8 motors of the IM V1 type of construction, maintenance interval 2 years.

25) Only approved for 1LA8 and 1PQ8 motors of the IM B3 type of construction, maintenance interval 1 year.

26) Only approved for 1LA8 and 1PQ8 motors of the IM B3 type of construction, maintenance interval 2 years.

27) Not possible for 2-pole motors and motors of vertical type of construction.

28) Please inquire in the case of 2-pole motors and motors in vertical type of construction.

29) When ordering, specify in plain text: Voltage, frequency and circuit.

30) Extension is only valid in the case of proper use. For long-term storage > 6 months, a special agreement is necessary.

31) Registration and declaration of the installation site.

32) Additional condition: Simultaneous completion of a maintenance contract subject to charge, with regular inspection.

33) Type testing is also performed for converter-fed operation.