2

Selection and ordering data

P_{rated1}, 50 Hz	P_{rated2}, 50 Hz	Frame size	Operating values at rated output for N1: n_{rated1}, 50 Hz	T_{rated1}, 50 Hz	η_{rated1}, 50 Hz, 4/4	cos φ_{rated1}, 50 Hz, 4/4	I_{rated1}, 50 Hz, 400 V	T_{LR}/T_{rated1}, 50 Hz	I_{LR}/I_{rated1}, 50 Hz	T_B/T_{rated1}, 50 Hz	Operating values at rated output for N2: n_{rated2}, 50 Hz	T_{rated2}, 50 Hz	η_{rated2}, 50 Hz, 4/4	cos φ_{rated2}, 50 Hz, 4/4	I_{rated2}, 50 Hz, 400 V	T_{LR}/T_{rated2}, 50 Hz	I_{LR}/I_{rated2}, 50 Hz	T_B/T_{rated2}, 50 Hz	**Aluminum series 1LE1011** – *One winding pole-changing for constant load torque* Article No.	$m_{IM\ B3}$	J	Torque class
kW	kW	FS	rpm	Nm	%		A				rpm	Nm	%		A					kg	kgm²	CL
• Cooling: self-ventilated (IC411) • Line operation: double pole-changing for constant load torque • Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																						
4/2-pole: 1500/3000 rpm at 50 Hz with one winding connected in Dahlander circuit																						
1500 rpm	*3000 rpm*		*1500 rpm*								*3000 rpm*											
1.9	**2.4**	**100 L**	1390	13.1	72	0.87	4.40	1.7	4.1	1.8	2800	8.2	70	0.88	5.6	1.8	4.2	1.8	**1LE1011-1AJ4** ■-■■■■	18	0.0059	13
2.5	**3.1**	**100 L**	1440	16.6	76.3	0.87	5.4	1.9	5.2	2.8	2840	10.4	77.3	0.9	6.4	2.1	5.2	2.9	**1LE1011-1AJ5** ■-■■■■	22	0.0078	13
3.7	**4.4**	**112 M**	1420	24.9	79.9	0.86	7.8	1.8	4.9	2.3	2885	14.6	80.8	0.92	8.5	2.1	6.4	2.6	**1LE1011-1BJ2** ■-■■■■	27	0.01	13
4.7	**5.9**	**132 S**	1440	31.2	82	0.84	9.8	1.6	5.6	2.7	2875	19.6	80	0.89	12.0	1.8	5.6	2.8	**1LE1011-1CJ0** ■-■■■■	38	0.019	13
6.5	**8.0**	**132 M**	1435	43.3	82	0.86	13.3	1.7	5.4	2.6	2880	26.5	82	0.92	15.3	1.8	6.3	2.8	**1LE1011-1CJ2** ■-■■■■	44	0.024	13
9.3	**11.5**	**160 M**	1440	61.7	84.5	0.87	18.3	1.7	5.7	2.8	2870	38.3	82	0.92	22.0	1.8	6	2.9	**1LE1011-1DJ2** ■-■■■■	62	0.044	13
13.0	**16**	**160 L**	1450	85.6	87	0.85	25.5	1.6	6	2.3	2920	52.3	86	0.94	35.5	1.9	7.1	2.8	**1LE1011-1DJ6** ■-■■■■	85	0.068	13
8/4-pole: 750/1500 rpm at 50 Hz with one winding connected in Dahlander circuit																						
750 rpm	*1500 rpm*		*750 rpm*								*1500 rpm*											
0.55	**1.1**	**100 L**	715	7.3	57	0.53	2.65	2	3	2.7	1425	7.4	77.7	0.87	2.35	1.7	4.6	2.1	**1LE1011-1AL4** ■-■■■■	18	0.0059	10
0.9	**1.5**	**100 L**	700	12.3	64.2	0.64	3.15	1.5	2.9	2	1415	10.1	77.7	0.89	3.15	1.5	4.5	1.9	**1LE1011-1AL5** ■-■■■■	22	0.0078	10
1.1	**1.9**	**112 M**	715	14.7	66.5	0.6	4.00	1.6	3.2	2.3	1440	12.6	80.9	0.87	3.90	1.6	5.4	2.3	**1LE1011-1BL2** ■-■■■■	27	0.01	10
1.6	**3.2**	**132 S**	730	20.9	61.5	0.53	7.1	1.6	3.3	2.6	1450	21.1	82.3	0.87	6.5	1.4	5	2.1	**1LE1011-1CL0** ■-■■■■	38	0.019	10
2.2	**4.4**	**132 M**	730	28.8	68	0.52	9.0	2	3.8	3	1450	29	84.5	0.88	8.5	1.5	5.5	2.3	**1LE1011-1CL2** ■-■■■■	44	0.024	10
3.5	**7**	**160 M**	730	45.8	77.5	0.57	11.4	2	4.2	2.8	1450	46.1	84	0.9	13.4	1.6	5.2	2.2	**1LE1011-1DL2** ■-■■■■	62	0.044	10
5.6	**11**	**160 L**	725	73.8	80.2	0.6	16.8	1.9	4	2.7	1445	72.7	84.4	0.9	21.0	1.5	5.1	2.2	**1LE1011-1DL4** ■-■■■■	73	0.056	10

Voltages		No. of poles	Frame size	Motor type	Version				Order code(s)
50 Hz	230 V	4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	**Standard**	**2**	**2**		–
50 Hz	400 V	4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	**Standard**	**3**	**4**		–
50 Hz	500 V	4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	Without add. charge	**4**	**0**		–
50 Hz	690 V	4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	Without add. charge	**4**	**7**		–
Further voltages [1]		For price information, code numbers, order codes and descriptions, see from Page 2/59				**9**	**0**		. . .
Types of construction		No. of poles	Frame size	Motor type	Version				Order code(s)
Without flange	IM B3 [2]	4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	**Standard**		**A**		–
With flange	IM B5 [2]	4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	With additional charge		**F**		–
With standard flange	IM B14 [2]	4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	With additional charge		**K**		–
Further types of construction		For price information, code letters and descriptions, see from Page 2/62					■		. . .
Motor protection		No. of poles	Frame size	Motor type	Version				Order code(s)
Without		4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	**Standard**			**A**	–
PTC thermistor with 3 temperature sensors		4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	With additional charge			**B**	–
Further motor protection		For price information, code letters and descriptions, see from Page 2/70						■	. . .
Terminal box position		No. of poles	Frame size	Motor type	Version				Order code(s)
Terminal box at top		4/2, 8/4	100 L ... 160 L	1LE1011-1A ... -1D	**Standard**				–
Further terminal box positions		For price information, code numbers and descriptions, see from Page 2/72							
Special versions									Order code(s)
Options		For price information, order codes and descriptions, see from Page 2/74			**1LE1011-. . . .** ■-■■■■				**-Z** . . .+. . .+. . .+. . .

Note: Pole-changing motors (4-/2-pole) do not comply with the vibration values stipulated in IEC 60034-14 when rigidly installed (see also Page 1/46).

[1] Operating values at rated output for 60 Hz are stored in the Drive Technology (DT) Configurator.

[2] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) and stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. When ordering with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

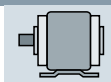
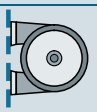
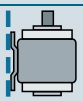
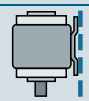
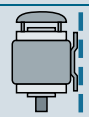
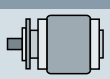
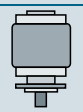
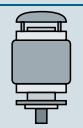
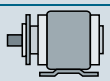
Voltages	Voltage code 12th and 13th position of the Article No.		Additional identification code with order code and plain text if required	Motor category							
				Motor version	**Motor type (alum.)**	**Motor type – frame size**					
						100	**112**	**132**	**160**	**180**	**200**
				Pole-changing	1LE1011	**1LE1011**					
					1LE1012	**1LE1012**					
				Motor version	Motor type	Frame size					
1LE1. . . - . . . . ■ - ■ . . .			Order code			100	112	132	160	180	200
Voltage at 50 Hz and 50 Hz output											
230 V	**2**	**2**	**–**	All	All	□	□	□	□	□	□
400 V	**3**	**4**	**–**	All	All	□	□	□	□	□	□
500 V	**4**	**0**	**–**	All	All	○	○	○	○	○	○
690 V	**4**	**7**	**–**	All	All	○	○	○	○	○	○
Voltage at 60 Hz and required output											
220 V; 50 Hz output	**9**	**0**	**M5K**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
220 V; 60 Hz output	**9**	**0**	**M5C**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
380 V; 50 Hz output	**9**	**0**	**M5L**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
380 V; 60 Hz output	**9**	**0**	**M5D**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
440 V; 50 Hz output	**9**	**0**	**M5M**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
440 V; 60 Hz output	**9**	**0**	**M5E**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
460 V; 50 Hz output	**9**	**0**	**M5N**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
460 V; 60 Hz output	**9**	**0**	**M5F**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
575 V; 50 Hz output	**9**	**0**	**M5P**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
575 V; 60 Hz output	**9**	**0**	**M5G**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
Non-standard voltage and/or frequencies											
Non-standard winding [1]	**9**	**0**	**M1Y** • and customer specifications	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
O. R. Possible on request

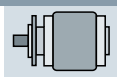
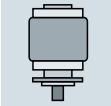
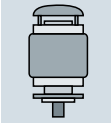
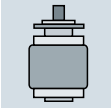
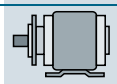
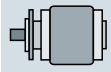
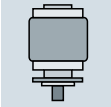
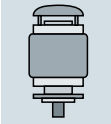
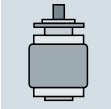
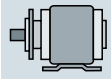
[1] Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated output in kW.

2

Selection and ordering data

Types of construction		Type of construction letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Motor category								
				Motor version	**Motor type (alum.)**	**Motor type – frame size** 80	90	100	112	132	160	180	200
				IE2 High Efficiency	1LE1001	**1LE1001** ①							
					1PC1001			**1PC1001** ②					
					1LE1041	**1LE1041 APAC Line** ③							
				IE3 Premium Efficiency	1LE1003	**1LE1003** ④							
					1LE1043	**1LE1043 APAC Line** ⑤							
				IE4 Super Premium Efficiency	1LE1004			**1LE1004** ⑥					
				IE1 Standard Efficiency	1LE1002			**1LE1002** ⑦					
					1PC1002			**1PC1002** ⑧					
				NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line** ⑨							
				NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line** ⑩							
				Pole-changing	1LE1011			**1LE1011** ⑪					
					1LE1012			**1LE1012** ⑫					
1LE10 . . - . . . . . - . ■ . . (-Z) **1PC10 . . - . . . . . - . ■ . . (-Z)**			Order code	Motor version	Motor type	Frame size 80	90	100	112	132	160	180	200
Without flange													
IM B3 [1] [2] [3]		**A**	–	All except ③ and ⑨		□	□	□	□	□	□	□	□
IM B6 [2] [3]		**T**	–	All except ③ and ⑨		□	□	□	□	□	□	□	□
IM B7 [2] [3]		**U**	–	All except ③ and ⑨		□	□	□	□	□	□	□	□
IM B8 [2] [3]		**V**	–	All except ③ and ⑨		□	□	□	□	□	□	□	□
IM V6 [2] [3]		**D**	–	All except ③ and ⑨		□	□	□	□	□	□	□	□
IM V5 without protective cover [2] [3]		**C**	–	All except ③ and ⑨		□	□	□	□	□	□	□	□
IM V5 with protective cover [2] [3] [4] [5] [6]		**C**	**H00**	All except ②, ③, ⑧, ⑨ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
With flange		**Acc. to EN 50347** **Acc. to DIN 42948**				**FF165 A 200**	**FF165 A 200**	**FF215 A 250**	**FF215 A 250**	**FF265 A 300**	**FF300 A 350**	**FF300 A 350**	**FF350 A 400**
IM B5 [2] [7]		**F**	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
IM V1 without protective cover [2]		**G**	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
IM V1 with protective cover [2] [4] [5] [6]		**G**	**H00**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
IM V3 [4]		**H**	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
IM B35 [3]		**J**	–	All except ③ and ⑨		✓	✓	✓	✓	✓	✓	✓	✓

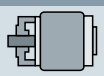
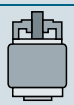
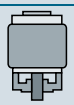
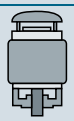
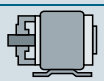
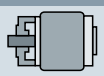
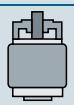
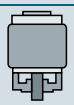
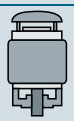
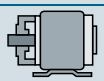
For legends and footnotes, see Page 2/65.

Types of construction		Type of construction letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	Motor category								
				Motor version	**Motor type (alum.)**	**Motor type – frame size** 80	90	100	112	132	160	180	200
				IE2 High Efficiency	1LE1001	**1LE1001** ①							
					1PC1001			**1PC1001** ②					
					1LE1041	**1LE1041 APAC Line** ③							
				IE3 Premium Efficiency	1LE1003	**1LE1003** ④							
					1LE1043	**1LE1043 APAC Line** ⑤							
				IE4 Super Premium Efficiency	1LE1004			**1LE1004** ⑥					
				IE1 Standard Efficiency	1LE1002			**1LE1002** ⑦					
					1PC1002			**1PC1002** ⑧					
				NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line** ⑨							
				NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line** ⑩							
				Pole-changing	1LE1011			**1LE1011** ⑪					
					1LE1012			**1LE1012** ⑫					
1LE10 . . - . . . . . - . ■ . . (-Z) **1PC10 . . - . . . . . - . ■ . . (-Z)**			Order code	Motor version	Motor type	Frame size 80	90	100	112	132	160	180	200
With special flange next larger		**Acc. to EN 50347** **Acc. to DIN 42948**				– –	– –	**FF265** **A 300**	**FF265** **A 300**	**FF300** **A 350**	–	–	–
IM B5 [2) 7)]		**F**	**P01**	All	All	–	–	✓	✓	✓	–	–	–
IM V1 without protective cover [2)]		**G**	**P01**	All	All	–	–	✓	✓	✓	–	–	–
IM V1 with protective cover [2) 4) 5) 6)]		**G**	**P01+H00**	All except ②, ⑧ and in combination with order code F90		–	–	✓	✓	✓	–	–	–
IM V3 [4)]		**H**	**P01**	All	All	–	–	✓	✓	✓	–	–	–
IM B35 [3)]		**J**	**P01**	All except ③ and ⑨		–	–	✓	✓	✓	–	–	–
With special flange next smaller		**Acc. to EN 50347** **Acc. to DIN 42948**				– –	– –	**FF165** **A 200**	**FF165** **A 200**	**FF215** **A 250**	**FF265** **A 300**	**FF265** **A 300**	**FF300** **A 350**
IM B5 [2) 7)]		**F**	**P02**	All	All	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
IM V1 without protective cover [2)]		**G**	**P02**	All	All	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
IM V1 with protective cover [2) 4) 5) 6)]		**G**	**P02+H00**	All except ②, ⑧ and in combination with order code F90		–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
IM V3 [4)]		**H**	**P02**	All	All	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
IM B35 [3)]		**J**	**P02**	All except ③ and ⑨		–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.

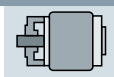
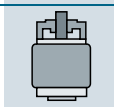
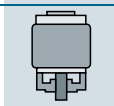
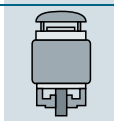
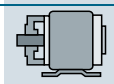
For legends and footnotes, see Page 2/65.

Supplements to article numbers and special versions
SIMOTICS GP 1LE1/1PC1 Standard Motors

Types of construction · Aluminum series 1LE10, 1PC10

Types of construction	Type of construction letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Motor category								
			Motor version	**Motor type (alum.)**	**Motor type – frame size**						
					80	**90**	**100**	**112**	**132**	**160**	**180**	**200**
			IE2 High Efficiency	1LE1001	**1LE1001** ①							
				1PC1001			**1PC1001** ②					
				1LE1041	**1LE1041 APAC Line** ③							
			IE3 Premium Efficiency	1LE1003	**1LE1003** ④							
				1LE1043	**1LE1043 APAC Line** ⑤							
			IE4 Super Premium Efficiency	1LE1004			**1LE1004** ⑥					
			IE1 Standard Efficiency	1LE1002			**1LE1002** ⑦					
				1PC1002			**1PC1002** ⑧					
			NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line** ⑨							
			NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line** ⑩							
			Pole-changing	1LE1011			**1LE1011** ⑪					
				1LE1012			**1LE1012** ⑫					
1LE10 . . - . . . . . - . ■ . . (-Z) **1PC10 . . - . . . . . - . ■ . . (-Z)**		Order code	Motor version	Motor type	Frame size							
					80	90	100	112	132	160	180	200
With standard flange		**Acc. to EN 50347** **Acc. to DIN 42948**			**FT100** **C 120**	**FT115** **C 140**	**FT130** **C 160**	**FT130** **C 160**	**FT165** **C 200**	**FT215** **C 250**	**–** **–**	**–** **–**
IM B14 2) 8)		**K**	**–**	All	All	✓	✓	✓	✓	✓	✓	–	–
IM V19 2)		**L**	**–**	All	All	✓	✓	✓	✓	✓	✓	–	–
IM V18 without protective cover 2)		**M**	**–**	All	All	✓	✓	✓	✓	✓	✓	–	–
IM V18 with protective cover 2) 4) 5) 6)		**M**	**H00**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	–	–
IM B34 3)		**N**	**–**	All except ③ and ⑨		✓	✓	✓	✓	✓	✓	–	–
With special flange next larger		**Acc. to EN 50347** **Acc. to DIN 42948**				**FT130** **C 160**	**FT130** **C 160**	**FT165** **C 200**	**FT165** **C 200**	**FT215** **C 250**	**–** **–**	**–** **–**
IM B14 2) 8)		**K**	**P01**	All	All	✓	✓	✓	✓	✓	–	–	–
IM V19 2)		**L**	**P01**	All	All	✓	✓	✓	✓	✓	–	–	–
IM V18 without protective cover 2)		**M**	**P01**	All	All	✓	✓	✓	✓	✓	–	–	–
IM V18 with protective cover 2) 4) 5) 6)		**M**	**P01+H00**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	–	–	–
IM B34 3)		**N**	**P01**	All except ③ and ⑨		✓	✓	✓	✓	✓	–	–	–

For legends and footnotes, see Page 2/65.

Types of construction		Type of construction letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	Motor category								
				Motor version	**Motor type (alum.)**	**Motor type – frame size**						
						80	**90**	**100**	**112**	**132**	**160**	**180**	**200**
				IE2 High Efficiency	1LE1001	**1LE1001** ①							
					1PC1001			**1PC1001** ②					
					1LE1041	**1LE1041 APAC Line** ③							
				IE3 Premium Efficiency	1LE1003	**1LE1003** ④							
					1LE1043	**1LE1043 APAC Line** ⑤							
				IE4 Super Premium Efficiency	1LE1004			**1LE1004** ⑥					
				IE1 Standard Efficiency	1LE1002			**1LE1002** ⑦					
					1PC1002			**1PC1002** ⑧					
				NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line** ⑨							
				NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line** ⑩							
				Pole-changing	1LE1011			**1LE1011** ⑪					
					1LE1012			**1LE1012** ⑫					
1LE10 . . - . . . . . - . ■ . . (-Z)				Motor version	Motor type	Frame size							
1PC10 . . - . . . . . - . ■ . . (-Z)			Order code			80	90	100	112	132	160	180	200
With special flange next smaller		**Acc. to EN 50347**				**–**	**–**	**FT115**	**FT115**	**FT130**	**FT165**	**–**	**–**
		Acc. to DIN 42948				**–**	**–**	**C 140**	**C 140**	**C 160**	**C 200**	**–**	**–**
IM B14 [2) 8)]		**K**	**P02**	All except ⑥		–	–	O. R.	O. R.	O. R.	O. R.	–	–
IM V19 [2)]		**L**	**P02**	All except ⑥		–	–	O. R.	O. R.	O. R.	O. R.	–	–
IM V18 without protective cover [2)]		**M**	**P02**	All except ⑥		–	–	O. R.	O. R.	O. R.	O. R.	–	–
IM V18 with protective cover [2) 4) 5) 6)]		**M**	**P02+H00**	All except ②, ⑥ and ⑧ and in combination with order code F90		–	–	O. R.	O. R.	O. R.	O. R.	–	–
IM B34 [3)]		**N**	**P02**	All except ③, ⑥ and ⑨		–	–	O. R.	O. R.	O. R.	O. R.	–	–

□ Standard version
✓ With additional charge
– Not possible
O. R. Possible on request

1) The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

2) The type of construction is stamped on the rating plate. When ordering with condensation drainage holes (order code **H03**), if mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

3) For North America export version Eagle Line 1LE1021 NEMA Energy Efficient, types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with NEMA MG1 Table 12-11.

4) The "Standard cylindrical shaft extension" option (order code **L05**) is not possible.

5) In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).

6) Not possible for 1PC1 naturally cooled motors and 1LE1 forced-air cooled motors with order code **F90** without external fan and fan cover.

7) The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

8) The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

2

Selection and ordering data

Motor protection	Motor protection letter 15th position in Article No.	Additional identification code with order code and plain text if required	Motor category									
			Motor version	**Motor type (alum.)**	**Motor type – frame size**							
					80	**90**	**100**	**112**	**132**	**160**	**180**	**200**
			IE2 High Efficiency	1LE1001	**1LE1001**							
				1PC1001			**1PC1001**					
				1LE1041	**1LE1041 APAC Line**							
			IE3 Premium Efficiency	1LE1003	**1LE1003**							
				1LE1043	**1LE1043 APAC Line**							
			IE4 Super Premium Efficiency	1LE1004			**1LE1004**					
			IE1 Standard Efficiency	1LE1002			**1LE1002**					
				1PC1002			**1PC1002**					
			NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line**							
			NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line**							
			Pole-changing	1LE1011			**1LE1011**					
				1LE1012			**1LE1012**					
1LE10 . . - . . . . . - . . ■ .			Motor version	Motor type	Frame size							
1PC10 . . - . . . . . - . . ■ .		Order code			80	90	100	112	132	160	180	200
Motor protection (winding protection)												
Without motor protection [1]	**A**	**–**	All	All	□	□	□	□	□	□	□	□
Motor protection with PTC thermistors with 1 or 3 embedded temperature sensors for tripping [2]	**B**	**–**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Motor protection by PTC thermistors with 2 or 6 embedded temperature sensors for alarm and tripping [2]	**C**	**–**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Motor temperature detection with embedded temperature sensor KTY 84-130 [2]	**F**	**–**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Motor temperature detection with embedded temperature sensor 2 × KTY 84-130 [2]	**G**	**–**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 3 Pt100 resistance thermometers [2]	**H**	**–**	All	All	–	–	✓	✓	✓	✓	✓	✓
NTC thermistors for tripping	**Z**	**Q2A**	All	All	–	–	✓	✓	✓	✓	–	–
Temperature detectors for tripping [2]	**Z**	**Q3A**	All	All	✓	✓	✓	✓	✓	✓	✓	✓

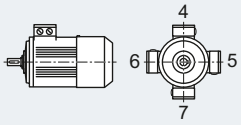
□ Standard version
✓ With additional charge
– Not possible

[1] Frame sizes 80 and 90 with voltage code 02 can only be supplied without motor protection (motor protection code A).

[2] Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended. For pole-changing motors, double the number of temperature sensors or temperature detectors is required. This also results in a double additional charge.

2

Selection and ordering data

Terminal box position	Terminal box position code 16th position of the Article No.	Additional identification code with order code and plain text if required	Motor category									
			**Motor version**	**Motor type (alum.)**	**Motor type – frame size**							
					80	**90**	**100**	**112**	**132**	**160**	**180**	**200**
			IE2 High Efficiency	1LE1001	**1LE1001**							
				1PC1001			**1PC1001**					
				1LE1041	**1LE1041 APAC Line**							
			IE3 Premium Efficiency	1LE1003	**1LE1003**							
				1LE1043	**1LE1043 APAC Line**							
			IE4 Super Premium Efficiency	1LE1004			**1LE1004**					
			IE1 Standard Efficiency	1LE1002			**1LE1002**					
				1PC1002			**1PC1002**					
			NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line**							
			NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line**							
			Pole-changing	1LE1011			**1LE1011**					
				1LE1012			**1LE1012**					
1LE10 . . - . . . . . - . . . ■			Motor version	Motor type	Frame size							
1PC10 . . - . . . . . - . . . ■		Order code			80	90	100	112	132	160	180	200
Terminal box position												
Terminal box top [1]	**4**	–	All	All	□	□	□	□	□	□	□	□
Terminal box on RHS [2]	**5**	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Terminal box on LHS [2]	**6**	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Terminal box at bottom [2] [3]	**7**	–	All	All	–	–	✓	✓	✓	✓	–	–

□ Standard version
✓ With additional charge
– Not possible

[1] For types of construction with feet up to and including frame size 160, cast feet are standard. Screwed-on feet are available with order code **H01**. Frame sizes 180 and 200 are fitted as standard with screwed-on feet.

[2] For types of construction with feet, screwed-on feet are standard.

[3] Not generally possible for motors with feet.

2

Selection and ordering data

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category								
		Motor version	**Motor type (alum.)**	**Motor type – frame size**						
				80	**90**	**100**	**112**	**132**	**160**	**180**	**200**
		IE2 High Efficiency	1LE1001	**1LE1001** ①							
			1PC1001			**1PC1001** ②					
			1LE1041	**1LE1041 APAC Line** ③							
		IE3 Premium Efficiency	1LE1003	**1LE1003** ④							
			1LE1043	**1LE1043 APAC Line** ⑤							
		IE4 Super Premium Efficiency	1LE1004			**1LE1004** ⑥					
		IE1 Standard Efficiency	1LE1002			**1LE1002** ⑦					
			1PC1002			**1PC1002** ⑧					
		NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line** ⑨							
		NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line** ⑩							
		Pole-changing	1LE1011			**1LE1011** ⑪					
			1LE1012			**1LE1012** ⑫					
1LE10 . . - . . . . . - . . . . -Z **1PC10 . . - . . . . . - . . . . -Z**	Order code	Motor version	Motor type	Frame size 80	90	100	112	132	160	180	200
Motor connection and terminal box											
External grounding	**H04**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Terminal box on NDE [3]	**H08**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Rotation of the terminal box through 90°, entry from DE [1]	**R10**	All	All	○	○	○	○	○	○	✓	✓
Rotation of the terminal box through 90°, entry from NDE	**R11**	All	All	○	○	○	○	○	○	✓	✓
Rotation of the terminal box through 180°	**R12**	All	All	○	○	○	○	○	○	✓	✓
One metal cable gland	**R15**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Cable gland, maximum configuration	**R18**	All	All	–	–	–	–	–	–	✓	✓
3 cables protruding, 0.5 m long [4][5]	**R20**	All except ⑪ and ⑫		✓	✓	✓	✓	✓	✓	–	–
3 cables protruding, 1.5 m long [4][5]	**R21**	All except ⑪ and ⑫		✓	✓	✓	✓	✓	✓	O. R.	O. R.
6 cables protruding, 0.5 m long [4]	**R22**	All	All	✓	✓	✓	✓	✓	✓	–	–
6 cables protruding, 1.5 m long [4]	**R23**	All	All	✓	✓	✓	✓	✓	✓	O. R.	O. R.
6 cables protruding, 3 m long [4]	**R24**	All	All	✓	✓	✓	✓	✓	✓	O. R.	O. R.
Reduction piece for M cable gland in accordance with British Standard, both cable entries mounted [2]	**R30**	All	All	–	–	✓	✓	✓	✓	–	–
Larger terminal box	**R50**	All, standard version for Eagle Line ⑨ and ⑩ < Size 100		✓	✓	✓	✓	✓	✓	✓	✓
Auxiliary terminal box, aluminum	**R60** *New!*	All	All	–	–	–	–	–	–	✓	✓
Motor connector Han-Drive 10e for 230 VΔ/400 VY [30]	**R70**	All	All	✓	✓	✓	✓	✓	–	–	–
Motor connector Han-Drive 10e EMC for 230 VΔ/400 VY [30]	**R71**	All	All	✓	✓	✓	✓	✓	–	–	–
Small motor connector CQ12 with EMC	**R72**	All	All	✓	✓	–	–	–	–	–	–
Small motor connector CQ12 without EMC	**R73**	All	All	✓	✓	–	–	–	–	–	–
6-piece terminal board	**R76** *New!*	All, only possible for 2 and 4-pole motors, not possible for ⑥		○	○	–	–	–	–	–	–
Windings and insulation											
Temperature class 155 (F), utilized acc. to 155 (F), with service factor (SF)	**N01**	All	All	–	–	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 155 (F), with increased output	**N02**	All	All	–	–	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature	**N03**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	**N05**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	**N06**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	**N07**	All	All	✓	✓	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/79.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category								
		Motor version	**Motor type (alum.)**	**Motor type – frame size** 80	90	100	112	132	160	180	200
		IE2 High Efficiency	1LE1001	**1LE1001** ①							
			1PC1001			**1PC1001** ②					
			1LE1041	**1LE1041 APAC Line** ③							
		IE3 Premium Efficiency	1LE1003	**1LE1003** ④							
			1LE1043	**1LE1043 APAC Line** ⑤							
		IE4 Super Premium Efficiency	1LE1004			**1LE1004** ⑥					
		IE1 Standard Efficiency	1LE1002			**1LE1002** ⑦					
			1PC1002			**1PC1002** ⑧					
		NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line** ⑨							
		NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line** ⑩							
		Pole-changing	1LE1011			**1LE1011** ⑪					
			1LE1012			**1LE1012** ⑫					
1LE10 . . - . . . . . - . . . . -Z **1PC10 . . - . . . . . - . . . . -Z**	Order code	Motor version	Motor type	Frame size 80	90	100	112	132	160	180	200
Windings and insulation (continued)											
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	**N08**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class H [31]	**N10**	All except ③, ⑤, ⑥, ⑨ and ⑩		✓	✓	–	–	–	–	–	–
Temperature class 180 (H) at rated output and max. CT 60 °C [6] [31]	**N11**	All except ⑥		✓	✓	✓	✓	✓	✓	✓	✓
Increased air humidity/temperature with 30 to 60 g water per m^3 of air	**N20**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Increased air humidity/temperature with 60 to 100 g water per m^3 of air	**N21**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude	**Y50** • and specified output, CT .. °C or IA …. m above sea level	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized according to 155 (F), other requirements	**Y52** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 180 (H), utilized according to 155 (F), other requirements	**Y75** • *New!* and specified output, CT .. °C or IA …. m above sea level	All except ⑥		–	–	O. R.	O. R.	O. R.	O. R.	–	–
Colors and paint finish											
Standard finish in RAL 7030 stone gray		All	All	◘	◘	◘	◘	◘	◘	◘	◘
Unpainted (only cast-iron parts primed)	**S00**	All	All	○	○	○	○	○	○	○	○
Unpainted, only primed	**S01**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Special finish	**S02** *New!*	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Special finish sea air resistant	**S03**	All	All	–	–	✓	✓	✓	✓	✓	✓
Top coat polyurethane [34]	**S06** *New!*	All	All	✓	✓	✓	✓	✓	✓	✓	✓
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 (see Catalog Section 1 "Introduction")	**Y53** • *New!* and finish RAL ….	All	All	–	–	–	–	–	–	✓	✓
Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog Section 1 "Introduction")	**Y56** • *New!* and finish RAL ….	All	All	✓	✓	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/79.

Options · Aluminum series 1LE10, 1PC10

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category								
		Motor version	**Motor type (alum.)**	**Motor type – frame size**						
				80	**90**	**100**	**112**	**132**	**160**	**180**	**200**
		IE2 High Efficiency	1LE1001	**1LE1001 ①**							
			1PC1001			**1PC1001 ②**					
			1LE1041	**1LE1041 APAC Line ③**							
		IE3 Premium Efficiency	1LE1003	**1LE1003 ④**							
			1LE1043	**1LE1043 APAC Line ⑤**							
		IE4 Super Premium Efficiency	1LE1004			**1LE1004 ⑥**					
		IE1 Standard Efficiency	1LE1002			**1LE1002 ⑦**					
			1PC1002			**1PC1002 ⑧**					
		NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line ⑨**							
		NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line ⑩**							
		Pole-changing	1LE1011			**1LE1011 ⑪**					
			1LE1012			**1LE1012 ⑫**					
1LE10 . . - . . . . . - . . . . -Z **1PC10 . . - . . . . . - . . . . -Z**	Order code	Motor version	Motor type	Frame size							
				80	90	100	112	132	160	180	200
Modular technology – Basic versions [7]											
Mounting of holding brake (standard assignment) [8] [28]	**F01**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Mounting of brake for higher switching frequency (operating brake)	**F02**	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	–	–
Mounting of separately driven fan [29]	**F70**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Mounting of 1XP8012-10 (HTL) rotary pulse encoder [9] [10]	**G01**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Mounting of 1XP8012-20 (TTL) rotary pulse encoder [9] [10]	**G02**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Modular technology – Additional versions											
Brake supply voltage 24 V DC	**F10**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Brake supply voltage 230 V AC, 50/60 Hz	**F11**	All except ②, ⑧ and in combination with order code F90		✓	✓	○	○	○	○	○	○
Brake supply voltage 400 V AC, 50/60 Hz	**F12**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Mechanical manual brake release with lever (no locking)	**F50**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Special technology [6]											
Mounting of LL 861 900 220 rotary pulse encoder [9]	**G04**	All except ②, ⑧ and in combination with order code F90		–	–	✓	✓	✓	✓	✓	✓
Mounting of HOG 9 D 1024 I rotary pulse encoder [9]	**G05**	All except ②, ⑧ and in combination with order code F90		–	–	✓	✓	✓	✓	✓	✓
Mounting of HOG 10 D 1024 I rotary pulse encoder [9]	**G06**	All except ②, ⑧ and in combination with order code F90		–	–	✓	✓	✓	✓	✓	✓
Mechanical design and degrees of protection											
Low-noise version for 2-pole motors with clockwise direction of rotation	**F77**	All except ②, ⑧ and in combination with order code F90		–	–	–	–	✓	✓	✓	✓
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	**F78**	All except ②, ⑧ and in combination with order code F90		–	–	–	–	✓	✓	✓	✓
Prepared for mountings, center hole only [10]	**G40**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	□	□
Prepared for mountings with D12 shaft [15]	**G41**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Prepared for mountings with D16 shaft [15]	**G42**	All except ②, ⑧ and in combination with order code F90		O. R.	O. R.	✓	✓	✓	✓	✓	✓
Protective cover for encoder (pre-assembled or supplied loose depending on frame size)	**G43**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Protective cover [9] [11]	**H00**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Screwed-on (instead of cast) feet	**H01**	All	All	✓	✓	✓	✓	✓	✓	□	□
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3	**H02**	All	All	–	–	✓	✓	✓	✓	✓	✓
Condensation drainage holes [14]	**H03**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Rust-resistant screws (externally)	**H07**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Housing with screw mounting [32]	**H10**	Only possible for ① and ③ (frame sizes 80 and 90), ④, ⑤, ⑨ and ⑩		✓	✓	–	–	–	–	✓	✓
IP65 degree of protection [13]	**H20**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
IP56 degree of protection [12]	**H22**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar [16]	**H23**	All	All	✓	✓	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/79.

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category								
		Motor version	**Motor type (alum.)**	**Motor type – frame size** 80	90	100	112	132	160	180	200
		IE2 High Efficiency	1LE1001	**1LE1001** ①							
			1PC1001			**1PC1001** ②					
			1LE1041	**1LE1041 APAC Line** ③							
		IE3 Premium Efficiency	1LE1003	**1LE1003** ④							
			1LE1043	**1LE1043 APAC Line** ⑤							
		IE4 Super Premium Efficiency	1LE1004			**1LE1004** ⑥					
		IE1 Standard Efficiency	1LE1002			**1LE1002** ⑦					
			1PC1002			**1PC1002** ⑧					
		NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line** ⑨							
		NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line** ⑩							
		Pole-changing	1LE1011			**1LE1011** ⑪					
			1LE1012			**1LE1012** ⑫					
1LE10 . . - . . . . . - . . . . -Z **1PC10 . . - . . . . . - . . . . -Z**	Order code	Motor version	Motor type	Frame size 80	90	100	112	132	160	180	200
Coolant temperature and installation altitude											
Coolant temperature –40 to +40 °C [16) 28)]	**D03**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Coolant temperature –30 to +40 °C [16) 28)]	**D04**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Designs in accordance with standards and specifications											
VIK version	**C02**	Only possible for ① and ④		✓	✓	✓	✓	✓	✓	–	–
Motor without CE marking for export outside EEA (see EU Directive 640/2009)	**D22**	Only possible for ①, ②, ⑦ and ⑧		–	–	○	○	○	○	○	○
Electrical according to NEMA MG1-12 [18)]	**D30**	All, standard version for ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓
Version according to UL with "Recognition Mark" [19)]	**D31**	All, standard version for ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓
KEMCO Korea Energy Efficiency Label	**D33**	Only possible for ⑤		○	○	○	○	○	○	○	○
China Energy Efficiency Label	**D34**	Only possible for ①, ④, ⑤, ⑥, ⑨ and ⑩		–	–	○	○	○	○	○	○
Canadian regulations (CSA) [37) 33)]	**D40**	All, standard version for ⑤, ⑨ and ⑩; not possible for ⑪ and ⑫		✓	✓	✓	✓	✓	✓	Av. soon	Av. soon
TR CU product safety certificate EAC for Eurasian customs union [35)]	**D47** *New!*	All	All	✓	✓	✓	✓	✓	✓	–	–
Train-compatible version [31)]	**L82**	All except ②, ⑥ and ⑧		✓	✓	✓	✓	✓	✓	Av. soon	Av. soon
Bearings and lubrication											
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A	**L19** *New!*	All	All	–	–	–	–	–	–	✓	✓
Located bearing DE	**L20**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Located bearing NDE	**L21**	All	All	✓	✓	✓	✓	✓	◘	◘	◘
Bearing design for increased cantilever forces [36)]	**L22**	All	All	–	–	✓	✓	✓	✓	✓	✓
Regreasing device [20)]	**L23**	All	All	–	–	✓	✓	✓	✓	✓	✓
Deep-groove bearings reinforced at both ends for DE and NDE, bearing size 63	**L25**	All	All	–	–	✓	✓	✓	✓	✓	✓
Measuring nipple for SPM shock pulse measurement for bearing inspection [20)]	**Q01**	All	All	–	–	✓	✓	✓	✓	✓	✓
Balance and vibration quantity											
Vibration quantity level A		All	All	◘	◘	◘	◘	◘	◘	◘	◘
Vibration quantity level B	**L00**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Half-key balancing (standard)		All	All	◘	◘	◘	◘	◘	◘	◘	◘
Balancing without key	**L01**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Full-key balancing	**L02**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Shaft and rotor											
Shaft extension with standard dimensions, without feather keyway	**L04**	All	All	–	–	✓	✓	✓	✓	✓	✓
Standard cylindrical shaft extension	**L05**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Standard shaft made of stainless steel (e.g. 1.4021)	**L06**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	**L07**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 tolerance R for flange-mounting motors	**L08**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Non-standard shaft extension, DE [21)]	**Y58** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Non-standard shaft extension, NDE [21)]	**Y59** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/79.

Options · Aluminum series 1LE10, 1PC10

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category									
		Motor version	**Motor type (alum.)**	**Motor type – frame size**							
				80	**90**	**100**	**112**	**132**	**160**	**180**	**200**
		IE2 High Efficiency	1LE1001	**1LE1001** ①							
			1PC1001			**1PC1001** ②					
			1LE1041	**1LE1041 APAC Line** ③							
		IE3 Premium Efficiency	1LE1003	**1LE1003** ④							
			1LE1043	**1LE1043 APAC Line** ⑤							
		IE4 Super Premium Efficiency	1LE1004			**1LE1004** ⑥					
		IE1 Standard Efficiency	1LE1002			**1LE1002** ⑦					
			1PC1002			**1PC1002** ⑧					
		NEMA Energy Efficient	1LE1021	**1LE1021 Eagle Line** ⑨							
		NEMA Premium Efficient	1LE1023	**1LE1023 Eagle Line** ⑩							
		Pole-changing	1LE1011			**1LE1011** ⑪					
			1LE1012			**1LE1012** ⑫					
1LE10 . . - . . . . . - . . . . -Z **1PC10 . . - . . . . . - . . . . -Z**	Order code	Motor version	Motor type	Frame size							
				80	90	100	112	132	160	180	200
Heating and ventilation											
Sheet metal fan cover	**F74**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Fan cover for textile industry [22]	**F75**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Metal external fan [23] [29]	**F76**	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
Without external fan and without fan cover	**F90**	All except ②, ⑧, ⑪ and ⑫		✓	✓	✓	✓	✓	✓	✓	✓
Anti-condensation heating for 230 V	**Q02**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Anti-condensation heating for 115 V	**Q03**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Rating plate and extra rating plates											
Extra rating plate for voltage tolerance [24]	**B07**	All except ②, ⑧, ⑪, ⑫ and 8-pole motors		✓	✓	✓	✓	✓	✓	✓	✓
Second rating plate, loose [25]	**M10**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Rating plate, stainless steel	**M11**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Extra rating plate or rating plate with deviating rating plate data	**Y80** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Extra rating plate with customer specifications	**Y82** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Additional information on rating plate and on package label (max. 20 characters)	**Y84** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Adhesive label, supplied loose (printed with: Article No., Serial No.: 2 lines of text)	**Y85** • and customer specifications	All	All	–	–	✓	✓	✓	✓	✓	✓
Packaging, safety notes, documentation and test certificates											
Printed German/English Operating Instructions (Compact) enclosed [27]		All	All	□	□	□	□	□	□	□	□
Printed German/English Operating Instructions (Compact) enclosed in each wire-lattice pallet [27]	**B01**	All	All	○	○	○	○	○	○	○	○
Acceptance test certificate 3.1 according to EN 10204 [26]	**B02**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Printed German/English Operating Instructions enclosed	**B04**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Document - Electrical data sheet	**B60**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Document - Order dimensional drawing	**B61**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Type test with heat run for horizontal motors, with acceptance	**B83**	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Wire-lattice pallet packaging	**B99**	All	All	○	○	○	○	○	○	○	○
Connected in star for dispatch	**M01**	All	All	–	–	✓	✓	✓	✓	✓	✓
Connected in delta for dispatch	**M02**	All	All	–	–	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/79.

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

1) With IM B5 flange, only possible in combination with **H08**.

2) Not possible in combination with order code **R15** "One metal cable gland".

3) With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in DT Configurator (see Appendix, "Tools and Configuring").

4) In combination with motor protection (15th position of the Article No.) or anti-condensation heating option, please inquire before ordering.

5) Not possible in combination with voltage code **22** or **34**.

6) Cannot be used for motors in UL version (order code **D31**). The grease lifetime specified in Catalog Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.

7) A second shaft extension is not possible. Please inquire for mounted brakes.

8) For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.

9) All encoders are supplied with a protective cover as standard. The protective cover is omitted at the factory 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. In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.

10) Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**. Not possible in combination with order code **L00** vibration quantity level B. In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.

11) Order code **H00** provides mechanical protection for encoders.

12) Not possible in combination with brake 2LM8 – order code **F01**.

13) Not possible in combination with HOG 9 D 1024I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).

14) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.

15) Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**. Not possible in combination with order code **L00** vibration quantity level B.

16) In connection with mountings, the respective technical specifications must be observed, please inquire before ordering.

17) 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

18) Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range. Order codes **D30** and **D31** do not authorize importing into USA and Mexico. The North America export versions Eagle Line 1LE1021 NEMA Energy Efficient and 1LE1023 NEMA Premium Efficient are available for this purpose.

19) In connection with mountings, the respective technical specifications must be observed, please inquire before ordering.

20) Not possible when brake is mounted.

21) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid 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 feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:
– Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
– Dimensions E and EA ≤2 × length E (normal) of the shaft extension.

22) The special requirements of the textile industry regarding the sheet metal cover open up the possibility that a finger may be inserted between the cover and enclosure. The customer must implement appropriate measures to ensure that the installed system is "finger-safe".

23) Converter operation is permitted for 1LE1 motors with metal external fans. The metal external fan is not possible in combination with the low-noise version – order code **F77** or **F78**.

24) Can be ordered for 230 VΔ/400 VY or 400 VΔ/690 VY (voltage code "**22**" or "**34**"). Not possible in combination with order code **D34**.

25) As adhesive label for frame sizes 80 and 90.

26) The delivery time for the factory test certificate may differ from the delivery time for the motor and it will be dispatched by email.

27) The Operating Instructions (compact) are available in PDF format for all official EU languages at http://support.automation.siemens.com/WW/view/en/40761976.

28) Not possible in combination with order code **N05**, **N06**, **N07**, **N08** and **N11**.

29) Order codes **F70** and **F76** cannot be combined.

30) When ordering with order code **R70** and **R71**, order code **R50** is included.

31) Not possible for 2-pole and 4-pole motors with increased output (11th position of Article No.: 6) in frame sizes 80 and 90.

32) Possible with frame sizes 180 and 200 with screw-mounted fan cover.

33) Frame sizes 180 and 200 are designed with metric entry thread.

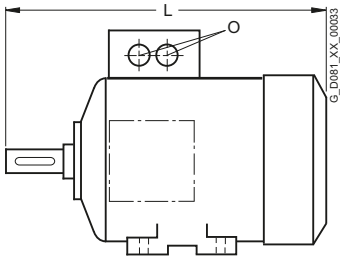
34) Order code **S06** cannot be combined with order code **S00** and **S01**. It can be combined with **Y53** and **Y56** on request.

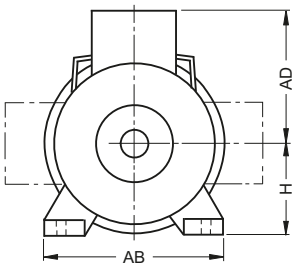
35) Please note the additional use of order code **D22** "Motor without CE marking for export outside EEA (see EU Directive 640/2009)".

36) A minimum cantilever force F_{min} of 0.5 · F_{max} is required for NU bearings (cylindrical roller bearings) in contrast to bearings. Cylindrical roller bearings are not suitable for coupling output or for brief periods of no-load operation without cantilever force.

37) The rated voltage is indicated on the rating plate without voltage range. Order code **D40** does not authorize importing into Canada. The North America export versions Eagle Line 1LE1021 NEMA Energy Efficient and 1LE1023 NEMA Premium Efficient are available for this purpose.

Übersicht





Baugröße	Typ	Maß L	AD	H	AB	O
71 M	Graugussreihen, eigengekühlt					
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-0CA2, 0CB2, 0CC2	240	148	71	132	2 × M25 × 1,5
	1LE1503-, 1LE1523-0CA3, 0CB3, 0CC3	280	148	71	132	2 × M25 × 1,5
80 M	Aluminiumreihe, eigengekühlt					
	1LE1001	292	121	80	150	1 × M25 × 1,5
	Aluminiumreihe, fremd- bzw. selbstgekühlt					
	1LE1001	253	121	80	150	1 × M25 × 1,5
	Graugussreihen, eigengekühlt					
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-0DA2, 0DB2, 0DC2	292	158	80	150	2 × M25 × 1,5
	1LE1503-, 1LE1523-0DA3, 0DB3, 0DC3	327	158	80	150	2 × M25 × 1,5
90 S/ 90 L	Aluminiumreihe, eigengekühlt					
	1LE1001	347	126	90	165	1 × M25 × 1,5
	Aluminiumreihe, fremd- bzw. selbstgekühlt					
	1LE1001	295	126	90	165	1 × M25 × 1,5
	Graugussreihen, eigengekühlt					
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-0EA0, 0EB0, 0EC0	347	163	90	165	2 × M25 × 1,5
	1LE1503-, 1LE1523-0EA4, 0EB4, 0EC4	387	163	90	165	2 × M25 × 1,5
100 L	Aluminiumreihen, eigengekühlt					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	396 [1]	166	100	196	2 × M32 × 1,5
	Aluminiumreihen, eigengekühlt, mit erhöhter Leistung					
	1LE1001, 1LE1002	431 [1]	166	100	196	2 × M32 × 1,5
	Aluminiumreihen, fremd- bzw. -selbstgekühlt					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	322	166	100	196	2 × M32 × 1,5
	Aluminiumreihen, eigengekühlt					
	1LE1003, 1LE1023	431	166	100	196	2 × M32 × 1,5
	Aluminiumreihe, fremdgekühlt					
	1LE1023	357	166	100	196	2 × M32 × 1,5
	Graugussreihen, eigengekühlt					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	389	193	100	196	2 × M32 × 1,5
	1LE1523, 1LE1623	425	193	100	196	2 × M32 × 1,5

Baugröße	Typ	Maß L	AD	H	AB	O
112 M	Aluminiumreihen, eigengekühlt					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	389 [1]	177	112	226	2 × M32 × 1,5
	Aluminiumreihen, eigengekühlt, mit erhöhter Leistung					
	1LE1001, 1LE1002	414 [1]	177	112	226	2 × M32 × 1,5
	Aluminiumreihen, fremd- bzw. selbstgekühlt					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	311	177	112	226	2 × M32 × 1,5
	Aluminiumreihen, eigengekühlt					
	1LE1003, 1LE1023	414	177	112	226	2 × M32 × 1,5
	Aluminiumreihe, fremdgekühlt					
	1LE1023	336	177	112	226	2 × M32 × 1,5
	Graugussreihen, eigengekühlt					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	382	195	112	226	2 × M32 × 1,5
	1LE1523, 1LE1623	409	195	112	226	2 × M32 × 1,5
132 S/M	Aluminiumreihen, eigengekühlt					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	465 [1]	202	132	256	2 × M32 × 1,5
	Aluminiumreihen, eigengekühlt, mit erhöhter Leistung					
	1LE1001, 1LE1002	515 [1]	202	132	256	2 × M32 × 1,5
	Aluminiumreihen, fremd- bzw. -selbstgekühlt					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	381	202	132	256	2 × M32 × 1,5
	Aluminiumreihen, eigengekühlt					
	1LE1003-, 1LE1023-					
	1CA0, 1CC0, 1CC2	465	202	132	256	2 × M32 × 1,5
	1CA1, 1CB0, 1CB2, 1CC3	515	202	132	256	2 × M32 × 1,5
	Aluminiumreihe, fremdgekühlt					
	1LE1023-					
	1CA0, 1CC0, 1CC2	381	202	132	256	2 × M32 × 1,5
	1CA1, 1CB0, 1CB2, 1CC3	431	202	132	256	2 × M32 × 1,5
	Graugussreihen, eigengekühlt					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	457	215	132	256	2 × M32 × 1,5
	1LE1523-, LE1623-					
	1CA0, 1CC0, 1CC2	458	215	132	256	2 × M32 × 1,5
	1CA1, 1CB0, 1CB2, 1CC3	508	215	132	256	2 × M32 × 1,5

[1] Die Länge ist bis zur Lüfterhaubenspitze angegeben.

[2] Nur für polumschaltbare Typen 1LE1011-1DP6 und 1LE1012-1DQ6 beträgt das Maß L 664 mm.

2

Übersicht (Fortsetzung)

Baugröße	Typ	Maß L	AD	H	AB	O
160 M/L	Aluminiumreihen, eigengekühlt					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	604 [1) 2)]	237	160	300	2 × M40 × 1,5
	Aluminiumreihen, eigengekühlt, mit erhöhter Leistung					
	1LE1001, 1LE1002	664 [1)]	237	160	300	2 × M40 × 1,5
	Aluminiumreihen, fremd- bzw. selbstgekühlt					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	510	237	160	300	2 × M40 × 1,5
	Graugussreihen, eigengekühlt					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	594	265	160	300	2 × M40 × 1,5
160 M	Aluminiumreihen, eigengekühlt					
	1LE1003, 1LE1023	604	237	160	300	2 × M40 × 1,5
	Aluminiumreihe, fremdgekühlt					
	1LE1023	510	237	160	300	2 × M40 × 1,5
	Graugussreihen, eigengekühlt					
	1LE1523, 1LE1623	596	261	160	300	2 × M40 × 1,5
160 L	Aluminiumreihen, eigengekühlt					
	1LE1003, 1LE1023	664	237	160	300	2 × M40 × 1,5
	Aluminiumreihe, fremdgekühlt					
	1LE1023	570	237	160	300	2 × M40 × 1,5
	Graugussreihen, eigengekühlt					
	1LE1523, 1LE1623	656	261	160	300	2 × M40 × 1,5
180 M	Aluminumreihe, eigengekühlt					
	1LE1001					
	1EA2, 1EB2	668	286	180	339	2 × M40 × 1,5
	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	1EA2, 1EB2	668	286	180	339	2 × M40 × 1,5
	1EA6	698				
	1LE15.3-, 1LE16.3-					
	1EB2	668	286	180	339	2 × M40 × 1,5
	1EA2	698				
180 L	Aluminiumreihen, eigengekühlt					
	1LE1001					
	1EB4, 1EC4, 1ED4	668	286	180	339	2 × M40 × 1,5
	1EA6, 1EB6, 1EC6, 1ED6	698				
	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	1EC4, 1EC6	668	286	180	339	2 × M40 × 1,5
	1EB6	698				
	1LE15.3-, 1LE16.3-					
	1EC4	668	286	180	339	2 × M40 × 1,5
	1EB4	698				
200 L	Aluminiumreihen, eigengekühlt					
	1LE1001					
	2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5	721	315	200	378	2 × M50 × 1,5
	2AA6, 2AB6, 2AC6, 2AD6	746				
	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	2AA4, 2AA5, 2AB5, 2AC4, 2AC5	721	315	200	378	2 × M50 × 1,5
	2AA6	746				
	1LE15.3-, 1LE16.3-					
	2AA4, 2AC4	721	315	200	378	2 × M50 × 1,5
	2AA5, 2AB5, 2AC5	746				

Baugröße	Typ	Maß L	AD	H	AB	O
225 S	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	2BB0, 2BD0	788	338	225	436	2 × M50 × 1,5
	1LE15.3-, 1LE16.3-					
	2BB0	788	338	225	436	2 × M50 × 1,5
225 M	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	2BA2, 2BA6	818	338	225	436	2 × M50 × 1,5
	2BB2, 2BB6, 2BC2, 2BC6, 2BD6	848				
	1LE15.3-, 1LE16.3-					
	2BA2	818	338	225	436	2 × M50 × 1,5
	2BB2, 2BC2	848				
250 M	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	2CA2, 2CA6, 2CB2, 2CC2, 2CC6, 2CD2, 2CD6	887	410	250	490	2 × M63 × 1,5
	2CB6	957				
	1LE15.3-, 1LE16.3-					
	2CA2, 2CB2, 2CC2	887	410	250	490	2 × M63 × 1,5
280 S	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	2DA0, 2DB0, 2DC0, 2DD0	960	433	280	540	2 × M63 × 1,5
	1LE15.3, 1LE16.3					
	2DA0, 2DB0, 2DC0	960	433	280	540	2 × M63 × 1,5
280 M	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	2DA2, 2DB2, 2DC2, 2DC6, 2DD2, 2DD6	960	433	280	540	2 × M63 × 1,5
	2DA6, 2DB6	1070				
	1LE15.3-, 1LE16.3-					
	2DC2	960	433	280	540	2 × M63 × 1,5
	2DA2, 2DB2	1070				
315 S	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	3AA0	1052	515	315	610	2 × M63 × 1,5
	3AB0, 3AC0, 3AD0	1082				
	1LE15.3-, 1LE16.3-					
	3AA0	1052	515	315	610	2 × M63 × 1,5
	3AB0, 3AC0	1082				
315 M	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	3AC2, 3AD2	1082	515	315	610	2 × M63 × 1,5
	3AA2	1217				
	3AB2	1247				
	1LE15.3-, 1LE16.3-					
	3AA2	1217	515	315	610	2 × M63 × 1,5
	3AB2, 3AC2	1247				
315 L	Graugussreihen, eigengekühlt					
	1LE15.1-, 1LE16.1-					
	3AA4	1217	515	315	610	2 × M63 × 1,5
	3AB4, 3AC4, 3AC5, 3AD4, 3AD5, 3AD6	1247				
	3AA5, 3AA6	1372				
	3AB5, 3AB6, 3AC6	1402				
	1LE15.3-, 1LE16.3-					
	3AA4	1217	515	315	610	2 × M63 × 1,5
	3AB4, 3AC4	1247	515	315	610	2 × M63 × 1,5
	3AA5	1372				
	3AB5, 3AC5, 3AC6	1402				

Übersicht

- Maßbezeichnungen nach DIN EN 50347 und IEC 60072.
- Passungen
  Die in den Maßtabellen angegebenen Wellenenden (DIN 748) und Zentrierranddurchmesser (DIN EN 50347) werden mit folgenden Passungen ausgeführt:

Maßbezeichnung	ISO-Passung DIN ISO 286-2	
D, DA	bis 30	j6
	über 30 bis 50	k6
	über 50	m6
N	bis 250	j6
	über 250	h6
F, FA		h9
K		H17
S	Flansch (FF)	H17

  Bohrungen von Kupplungen und Riemenscheiben sollen eine ISO-Passung von mindestens H7 erhalten.

- Maßtoleranzen
  Für folgende Maßbezeichnungen gelten die nachstehenden zulässigen Abweichungen:

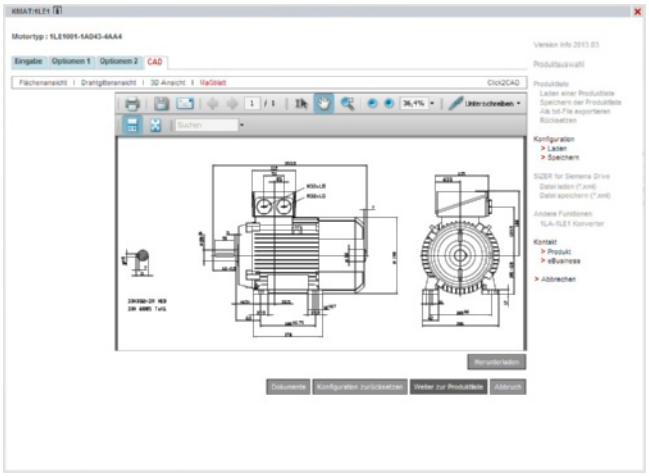
Maßbezeichnung	Abmessung	zulässige Abweichung
H	bis 250	– 0,5
	über 250	– 1,0
E, EA		– 0,5

  Passfedernuten und Passfedern (Maße GA, GC, F und FA) werden nach DIN 6885 Teil 1 hergestellt.
- Alle Maßangaben in mm.

2

Übersicht

Zu jedem konfigurierbaren Motor kann im Drive Technology Konfigurator (DT-Konfigurator) ein Maßbild erzeugt werden. Für alle anderen Motoren kann ein Maßbild angefordert werden.



Sobald eine vollständige Artikel-Nr. mit oder ohne Kurzangaben eingegeben oder konfiguriert ist, besteht unter der Lasche Dokumentation die Möglichkeit ein Maßblatt aufzurufen.
Diese Maßbilder können in verschiedenen Ansichten und Ausschnitten dargestellt und gedruckt werden.
Die entsprechenden Maßblätter können als DXF-Format (Interchange-/Import-Format für CAD-Systeme) oder als Bitmap-Graphik exportiert, gespeichert und weiterverarbeitet werden.

Online-Zugang in der Siemens Industry Mall

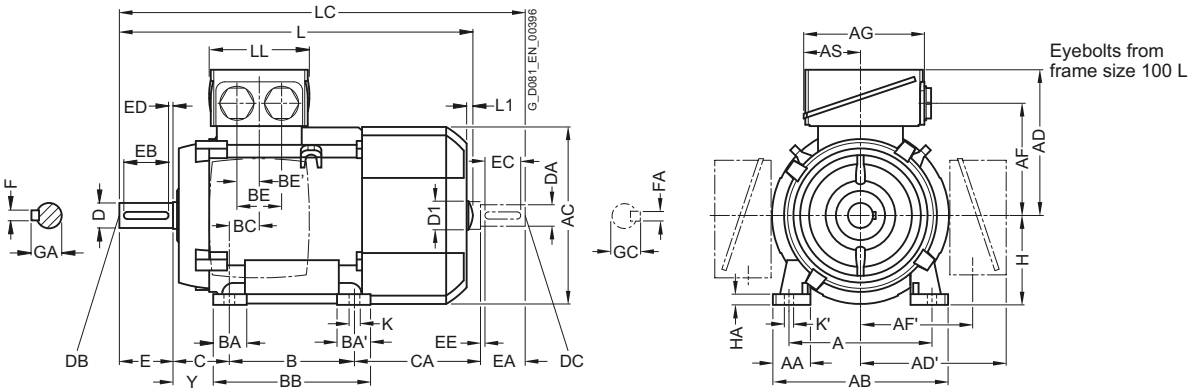
Der DT-Konfigurator ist in der Siemens Industry Mall integriert und kann ohne Installation im Internet genutzt werden.
Deutsch: www.siemens.de/dt-konfigurator
Englisch: www.siemens.com/dt-configurator

Offline-Zugang im interaktiven Katalog CA01

Zusätzlich ist der DT-Konfigurator auch Bestandteil des interaktiven Kataloges CA01 auf DVD – der Offline-Version der Siemens Industry Mall. Der CA 01 kann über den jeweiligen Siemens Vertriebsansprechpartner angefordert oder im Internet bestellt werden: www.siemens.com/automation/CA01

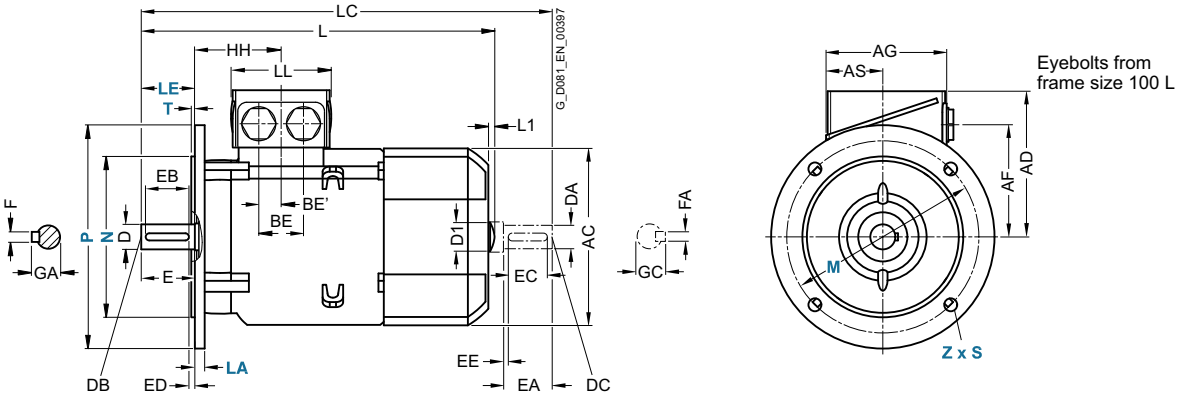
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type 1LE100. 1LE101. 1LE1021	No. of poles	A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B*	BA	BA'	BB	BC	BE	BE'	C	CA*	H	HA	Y
80 M	1LE1001 1LE1041	2, 4, 6	125	30.5	150	159	121	–	96.5	–	93	43	100	32	–	118	23	–	18 [1]	50	–	80	8	41
90 S		2, 4, 6	140	30.5	165	178	126	–	101.5	–	93	43	100	33	–	143	22.5	–	18 [1]	56	–	90	10	47
90 L		2, 4, 6	140	30.5	165	178	126	–	101.5	–	93	43	125	33	–	143	22.5	–	18 [1]	56	–	90	10	47
100 L	All	2, 4, 6, 8	160	42	196	198	166	166	125.5	125.5	135	63.5	140	37.5	–	176	33.5	50	25	63	141	100	12	45
112 M	All	2, 4, 6, 8	190	46	226	222	177	177	136.5	136.5	135	63.5	140	35.4	–	176	26	50	25	70	129.7	112	12	52
132 S	All	2, 4, 6, 8	216	53	256	262	202	202	159.5	159.5	155	70.5	140	38	76	218	26.5	48	24	89	128.5	132	15	69
132 M	All	2, 4, 6, 8	216	53	256	262	202	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	128.5	132	15	69
160 M	All	2, 4, 6, 8	254	60	300	314	236.5	236.5	190	190	175	77.5	210	44	89	300	47	57	28.5	108	148	160	18	85
160 L	All	2, 4, 6, 8	254	60	300	314	236.5	236.5	190	190	175	77.5	254	44	89	300	47	57	28.5	108	148 [2]	160	18	85
180 M	All	2, 4 ,6	279	65	339	356	259	259	212.5	212.5	175	77.5	241/ 279	80	100	328	30	57	28.5	121	–	180	20	95
180 L	All	2, 4 ,6	279	65	339	356	259	259	212.5	212.5	175	77.5	241/ 279	80	100	328	30	57	28.5	121	–	180	20	95
200 L	All	2, 4, 6	318	70	378	396	296	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	–	200	25	108

* This dimension is assigned in EN 50347 to the frame size listed.

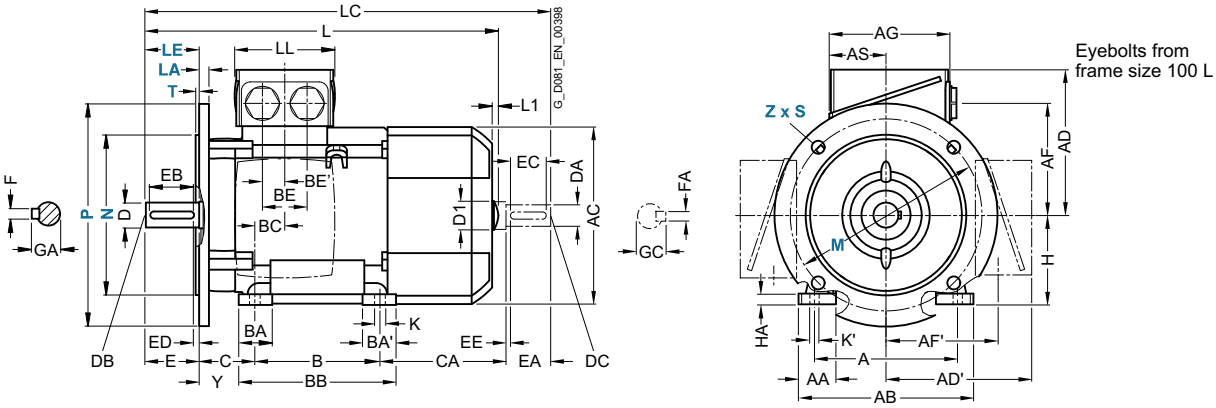
[1] Connecting hole for terminal box is on the side at the rear of the terminal box.

[2] Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension CA* is 208 mm.

Dimensional drawings (continued)

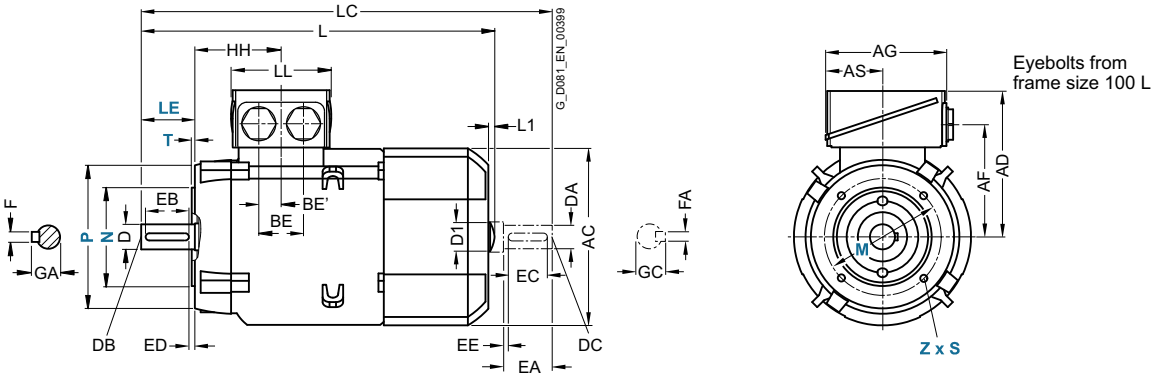
Type of construction IM B35

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



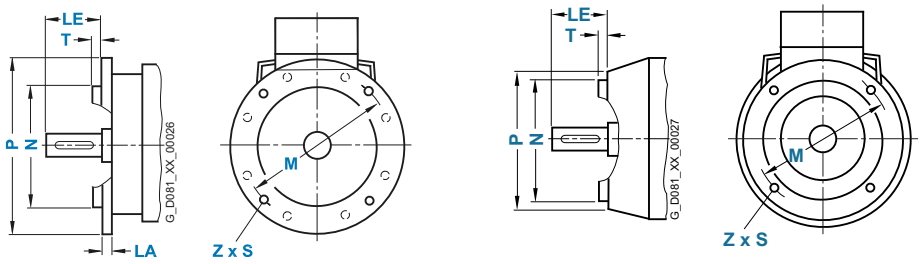
For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension					
Frame size	Motor type 1LE100. 1LE101. 1LE1021	No. of poles	HH	K	K'	L	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
80 M	1LE1001 1LE1041	2, 4, 6	73	9.5	13.5	292	–	–	–	79	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
90 S		2, 4, 6	78.5	10	14	347	–	–	–	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
90 L		2, 4, 6	78.5	10	14	347	–	–	–	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
100 L	All	2, 4, 6, 8	96.5	12	16	395.5 [1]	7	32	454	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	All	2, 4, 6, 8	96	12	16	389 [1] 414	7	32	450 475	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	All	2, 4, 6, 8	115.5	12	16	465 [1]	8.5	39	535.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
132 M	All	2, 4, 6, 8	115.5	12	16	465 [1]	8.5	39	535.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 M	All	2, 4, 6, 8	155	15	19	604 [1]	10	45	730	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	All	2, 4, 6, 8	155	15	19	604 [1] [2]	10	45	730 [3]	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M	All	2, 4, 6	151	14.5	19	699	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
180 L	All	2, 4, 6	151	14.5	19	699	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
200 L	All	2, 4, 6	178	18.5	25	746	–	–	860	185	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

[1] The length is specified as far as the tip of the fan cover.

[2] Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension L is 664 mm.

[3] Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension LC is 790 mm.

Overview (continued)



In EN 50347, the frame sizes are allocated flange FF with through holes and flange FT with tapped holes.
The designation of flange A and C according to DIN 42948 (invalid since September 2003) are also listed for information purposes. See the table below. (**Z** = the number of retaining holes)

Frame size	Type of construction	Flange type	Flange with through holes (**FF**/A) Flange with tapped holes (**FT**/C)		Dimension designation acc. to **IEC**							
			Acc. to EN 50347	Acc. to DIN 42948	**LA**	**LE**	**M**	**N**	**P**	**S**	**T**	**Z**
71 M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF130**	A 160	9	30	130	110	160	10	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT85**	C 105	–	30	85	70	105	M6	2.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT115**	C 140	–	30	115	95	140	M8	3	4
80 M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF165**	A 200	10	40	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT100**	C 120	–	40	100	80	120	M6	3	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT130**	C 160	–	40	130	110	160	M8	3.5	4
90 S/L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF165**	A 200	10	50	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT115**	C 140	–	50	115	95	140	M8	3	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT130**	C 160	–	50	130	110	160	M8	3.5	4
100 L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF215**	A 250	11	60	215	180	250	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next larger standard flange – Order code **P01**	**FF265**	A 300	12	60	265	230	300	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF165**	A 200	11	60	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT130**	C 160	–	60	130	110	160	M8	3.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT165**	C 200	–	60	165	130	200	M10	3.5	4
112 M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF215**	A 250	11	60	215	180	250	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next larger standard flange – Order code **P01**	**FF265**	A 300	12	60	265	230	300	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF165**	A 200	11	60	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT130**	C 160	–	60	130	110	160	M8	3.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT165**	C 200	–	60	165	130	200	M10	3.5	4
132 S/M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF265**	A 300	12	80	265	230	300	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next larger standard flange – Order code **P01**	**FF300**	A 350	13	80	300	250	350	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF215**	A 250	11	80	215	180	250	14.5	4	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT165**	C 200	–	80	165	130	200	M10	3.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT215**	C 250	–	80	215	180	250	M12	4	4
160 M/L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF300**	A 350	13	110	300	250	350	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF265**	A 300	12	110	265	230	300	14.5	4	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT215**	C 250	–	110	215	180	250	M12	4	4
180 M/L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF300**	A 350	13	110	300	250	350	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF 265**	A 300	12	110	265	230	300	14.5	4	4
200 L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF350**	A 400	15	110	350	300	400	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF300**	A 350	13	110	300	250	350	18.5	5	4
225 S/M 2-pole 4- ... 8-pole	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF400**	A 450	16	110 140	400	350	450	18.5	5	8
250 M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF500**	A 550	18	140	500	450	550	18.5	5	8
280 S/M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF500**	A 550	18	140	500	450	550	18.5	5	8
315 S/M/L 2-pole 4- ... 8-pole	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF600**	A 660	22	140 170	600	550	660	24	6	8