

Motors with IE1 Standard Efficiency

SIMOTICS GP 1LE1 Standard Motors



IE1

Self-ventilated or forced-air cooled motors · Aluminum series 1LE1002

Selection and ordering data

Operating values at rated output															Aluminum series 1LE1002 – IE1 version in accordance with IEC 60034-30 Article No.	m _{IM B3} J	Torque class
P _{rated} , 50 Hz	P _{rated} , 60 Hz	Frame size	n _{rated} , 50 Hz	T _{rated} , 50 Hz	IE class	η _{rated} , 50 Hz, 4/4	η _{rated} , 50 Hz, 3/4	η _{rated} , 50 Hz, 2/4	cos φ _{rated} , 50 Hz, 4/4	I _{rated} , 50 Hz, 400 V	T _{LR} /I _{rated} , 50 Hz	I _{LR} /I _{rated} , 50 Hz	T _B /I _{rated} , 50 Hz	L _{ptA} , 50 Hz	L _{WA} , 50 Hz		
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	kg	kgm ² CL
• Cooling: self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC416) • Efficiency: IE1 Standard Efficiency, service factor (SF) 1.1 • Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz ¹⁾																	
3	3.45	100 L	2835	10	IE1	81.5	82.8	82.1	0.87	6.1	3.2	6.2	2.9	67	79	1LE1002-1AA4	20 0.0034 16
4	4.55	112 M	2930	13	IE1	83.1	83.8	82.2	0.86	8.1	2.7	7.3	3.7	69	81	1LE1002-1BA2	25 0.0067 16
5.5	6.3	132 S	2905	18	IE1	84.7	85.7	85.0	0.89	10.5	1.9	5.6	2.5	68	80	1LE1002-1CA0	35 0.013 16
7.5	8.6	132 S	2925	24	IE1	86.0	86.9	85.8	0.87	14.5	2.1	6.3	3.2	68	80	1LE1002-1CA1	40 0.016 16
11	12.6	160 M	2925	36	IE1	87.6	87.6	86.1	0.85	21.5	2.0	5.8	2.6	70	82	1LE1002-1DA2	60 0.030 16
15	17.3	160 M	2930	49	IE1	88.7	89.0	88.0	0.84	29	2.5	6.1	3.1	70	82	1LE1002-1DA3	68 0.036 16
18.5	21.3	160 L	2935	60	IE1	89.3	90.0	89.7	0.86	35	2.5	7.0	3.2	70	82	1LE1002-1DA4	78 0.044 16
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz ¹⁾																	
2.2	2.55	100 L	1425	15	IE1	79.7	80.5	78.5	0.81	4.9	2.2	5.1	2.3	60	72	1LE1002-1AB4	18 0.0059 16
3	3.45	100 L	1425	20	IE1	81.5	83.0	82.3	0.85	6.3	2.4	5.4	2.6	60	72	1LE1002-1AB5	22 0.0078 16
4	4.55	112 M	1435	27	IE1	83.1	84.5	84.0	0.85	8.2	2.2	5.3	2.6	58	70	1LE1002-1BB2	27 0.010 16
5.5	6.3	132 S	1450	36	IE1	84.7	85.7	84.9	0.82	11.2	2.3	5.7	2.7	64	76	1LE1002-1CB0	38 0.019 16
7.5	8.6	132 M	1450	49	IE1	86.0	86.9	86.3	0.82	15.2	2.6	6.6	3.1	64	76	1LE1002-1CB2	44 0.024 16
11	12.6	160 M	1460	72	IE1	87.6	88.0	86.6	0.82	22	2.3	6.4	3.1	65	77	1LE1002-1DB2	62 0.044 16
15	17.3	160 L	1460	98	IE1	88.7	89.3	88.3	0.82	30	2.5	7.0	3.4	65	77	1LE1002-1DB4	73 0.056 16
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz ¹⁾																	
1.5	1.75	100 L	940	15	IE1	75.2	76.0	72.4	0.74	3.9	2.0	4.0	2.2	59	71	1LE1002-1AC4	19 0.0065 16
2.2	2.55	112 M	930	23	IE1	77.7	78.8	76.9	0.75	5.4	2.3	4.1	2.5	57	69	1LE1002-1BC2	25 0.0092 16
3	3.45	132 S	955	30	IE1	79.7	80.2	77.7	0.74	7.3	2.0	4.6	2.6	63	75	1LE1002-1CC0	34 0.017 16
4	4.55	132 M	950	40	IE1	81.4	82.9	82.1	0.76	9.3	2.1	4.7	2.5	63	75	1LE1002-1CC2	39 0.021 16
5.5	6.3	132 M	950	55	IE1	83.1	84.6	84.0	0.75	12.7	2.5	5.2	2.8	63	75	1LE1002-1CC3	48 0.027 16
7.5	8.6	160 M	970	74	IE1	84.7	85.4	85.0	0.73	17.5	2.1	5.5	2.9	67	79	1LE1002-1DC2	72 0.056 16
11	12.6	160 L	965	109	IE1	86.4	86.4	85.4	0.77	24	1.9	5.9	2.7	67	79	1LE1002-1DC4	92 0.078 16
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz ¹⁾																	
0.75	0.86	100 L	705	10	–	62.6	60.8	53.9	0.62	3.0	1.9	3.0	2.2	60	72	1LE1002-1AD4	17 0.0056 16
1.1	1.27	100 L	705	15	–	65.5	64.2	60.0	0.63	3.9	2.0	3.2	2.3	60	72	1LE1002-1AD5	22 0.0078 16
1.5	1.75	112 M	700	20	–	71.6	72.2	68.5	0.65	4.7	1.6	3.3	1.9	63	75	1LE1002-1BD2	29 0.0094 16
2.2	2.55	132 S	715	29	–	76.8	77.4	75.2	0.66	6.3	1.7	3.9	2.4	63	75	1LE1002-1CD0	37 0.019 16
3	3.45	132 M	715	40	–	76.6	77.8	75.8	0.66	8.6	1.8	3.9	2.2	63	75	1LE1002-1CD2	44 0.024 16
4	4.55	160 M	720	53	–	78.3	78.5	75.6	0.69	10.7	1.7	3.8	2.3	63	75	1LE1002-1DD2	60 0.044 16
5.5	6.3	160 M	720	73	–	81.7	82.5	81.4	0.70	13.9	1.6	4.0	2.2	63	75	1LE1002-1DD3	72 0.056 16
7.5	8.6	160 L	715	100	–	83.5	84.5	83.6	0.70	18.5	1.7	3.8	2.2	63	75	1LE1002-1DD4	91 0.077 16
Voltages 50 Hz 230 VΔ/400 VY 60 Hz ¹⁾ 460 VY 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D Standard 2 2 – 50 Hz 400 VΔ/690 VY 60 Hz ¹⁾ 460 VΔ 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D Standard 3 4 – 50 Hz 500 VY 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D Without add. charge 2 7 – 50 Hz 500 VΔ 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D Without add. charge 4 0 – Further voltages ¹⁾ For price information, code numbers, order codes and descriptions, see from Page 2/57 9 0 ...																	
Types of construction Without flange IM B3 ²⁾ 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D Standard A – With flange IM B5 ²⁾ 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D With additional charge F – With standard flange IM B14 ²⁾ 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D With additional charge K – Further types of construction For price information, code letters and descriptions, see from Page 2/62 ...																	
Motor protection Without 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D Standard A – PTC thermistor with 3 temperature sensors 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D With additional charge B – Further motor protection For price information, code letters and descriptions, see from Page 2/70 ...																	
Terminal box position Terminal box at top 2, 4, 6, 8 100 L ... 160 L 1LE1002-1A ... -1D Standard 4 – Further terminal box positions For price information, code numbers and descriptions, see from Page 2/72																	
Special versions Forced-air cooled motors without ext. fan/fan cover (IC416) 100 L ... 160 L 1LE1002-1A ... -1D 1LE1002-... -Z F90 +...+...+... Options For price information, order codes and descriptions, see from Page 2/74 1LE1002-... -Z ...+...+...+...																	

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.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Voltages · Aluminum series 1LE10, 1PC10
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																			
					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																			
1LE10...-.....- - - - - 1PC10...-.....- - - - -					Order code																			
Motor version														Motor type	Frame size									
															80	90	100	112	132	160	180	200		
Voltage at 50 Hz or 60 Hz – Operating values at rated output for 60 Hz are stored in the Drive Technology Configurator (DTC)																								
50 Hz 230 VΔ/400 VY, 60 Hz 460 VY	2	2		–	All	All	□	□	□	□	□	□	□	□	□									
50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ ¹⁾	3	4		–	All except ③, ⑤, ⑨ and ⑩		□	□	□	□	□	□	□	□	□									
50 Hz 400 VΔ, 60 Hz 460 VΔ ¹⁾					Only applicable for ③, ⑤, ⑨ and ⑩		□	□	□	□	□	□	□	□	□									
50 Hz 400 VY, 60 Hz 460 VY ^{2) 3)}	0	2			All except ⑥		□	□	–	–	–	–	–	–	–									
50 Hz 500 VY ⁶⁾ , 60 Hz 575 VY	2	7		–	All except ⑥		○	○	○	○	○	○	○	○	○									
50 Hz 500 VΔ, 60 Hz 575 VΔ	4	0		–	All except ⑥		–	–	○	○	○	○	○	○	○									
50 Hz 220 VΔ/380 VY, 60 Hz 440 VY	2	1		–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓									
50 Hz 380 VΔ/660 VY ¹⁾ , 60 Hz 440 VΔ	3	3		–	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓									
50 Hz 380 VΔ ¹⁾					Only applicable for ③, ⑤, ⑨ and ⑩		–	–	✓	✓	✓	✓	✓	✓	✓									
50 Hz 240 VΔ/415 VY, 60 Hz 480 VY	2	3		–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓									
50 Hz 415 VΔ, 60 Hz 480 VΔ	3	5		–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓									
Multi-voltage at 60 Hz and required output at 60 Hz																								
60 Hz 230 VYY/460 VY; 50 Hz output, 9 main terminals and electrical design to NEMA	6	0		–	All except ②, ③, ⑦ and ⑧		–	–	–	–	–	–	–	✓	✓									
60 Hz 230 VYY/460 VY; 60 Hz output, 9 main terminals and electrical design to NEMA	6	1		–	All except ②, ③, ⑦ and ⑧		–	–	–	–	–	–	–	✓	✓									
60 Hz 230 VΔΔ/460 VΔ; 50 Hz output, 12 main terminals and electrical design to NEMA	6	2		–	All except ②, ③, ⑦ and ⑧		–	–	–	–	–	–	–	✓	✓									
60 Hz 230 VΔΔ/460 VΔ; 60 Hz output, 12 main terminals and electrical design to NEMA	6	3		–	All except ②, ③, ⑦ and ⑧		–	–	–	–	–	–	–	✓	✓									
Voltage at 60 Hz and required output at 60 Hz																								
220 VΔ/380 VY; 50 Hz output	9	0		M2A	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓									
220 VΔ/380 VY; 60 Hz output	9	0		M1A	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓									
380 VΔ/660 VY; 50 Hz output ¹⁾	9	0		M2B	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓									
380 VΔ; 50 Hz output ¹⁾					Only applicable for ③, ⑤, ⑨ and ⑩		–	–	✓	✓	✓	✓	✓	✓	✓									
380 VΔ/660 VY; 60 Hz output ¹⁾	9	0		M1B	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓									
440 VY; 50 Hz output	9	0		M2C	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓									
440 VY; 60 Hz output	9	0		M1C	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓									
440 VΔ; 50 Hz output	9	0		M2D	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓									
440 VΔ; 60 Hz output	9	0		M1D	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓									
460 VY; 50 Hz output	9	0		M2E	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓									
460 VY; 60 Hz output	9	0		M1E	All except ③, ⑤, ⑨ and ⑩		○	○	○	○	○	○	○	○	○									
460 VΔ; 50 Hz output	9	0		M2F	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓									

For legends and footnotes, see Page 2/58.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Voltages · Aluminum series 1LE10, 1PC10

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							
					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										
			</									

- 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

¹⁾ For North America export versions Eagle Line 1LE1021 NEMA Energy Efficient and 1LE1023 NEMA Premium Efficient, voltages above 600 V will not be stamped.

²⁾ Frame sizes 80 and 90 with voltage code 02 can only be supplied without motor protection (motor protection code A).

³⁾ Delta connection is not possible.

⁴⁾ Only possible for 4-pole, 6-pole and 8-pole motors. The operating data for converter operation is also provided in a table on the rating plate.

⁵⁾ 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.

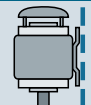
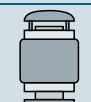
⁶⁾ Not possible for 2-pole and 4-pole motors with increased output (11th position of Article No.: 6) in frame sizes 80 and 90.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Types of construction · Aluminum series 1LE10, 1PC10

Selection and ordering data

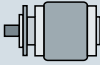
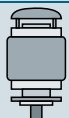
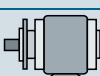
Types of construction	Type of construction letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Motor category											
			Motor version	Motor type (alum.)	Motor type – frame size									
					80	90	100	112	132	160	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)	Order code	Motor version	Motor type	Frame size									
1PC10	■ ... (-Z)				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, ⑥, ⑧ and in combination with order code F90	✓	✓	✓	✓	✓	✓	✓	✓	✓	
With flange					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, ⑥ 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.

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			Motor version	Motor type	Frame size							
1PC10 -Z		Order code			80	90	100	112	132	160	180	200
With special flange next larger	Acc. to EN 50347				–	–	FF265 A 300	FF265 A 300	FF300 A 350	–	–	–
	Acc. to DIN 42948				–	–	–	–	–	–	–	–
IM B5 2) 7)		F	P01	All	–	–	✓	✓	✓	–	–	–
IM V1 without protective cover 2)		G	P01	All	–	–	✓	✓	✓	–	–	–
IM V1 with protective cover 2) 4) 5) 6)		G	P01+H00	All except ②, ⑩ and in combination with order code F90	–	–	✓	✓	✓	–	–	–
IM V3 4)		H	P01	All	–	–	✓	✓	✓	–	–	–
IM B35 3)		J	P01	All except ③ and ⑨	–	–	✓	✓	✓	–	–	–
With special flange next smaller	Acc. to EN 50347				–	–	FF165 A 200	FF165 A 200	FF215 A 250	FF265 A 300	FF265 A 300	FF300 A 350
	Acc. to DIN 42948				–	–	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.
IM B5 2) 7)		F	P02	All	–	–	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.
IM V1 without protective cover 2)		G	P02	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, ⑩ 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	–	–	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.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Types of construction · Aluminum series 1LE10, 1PC10

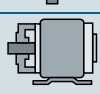
Types of construction	Type of construction letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Motor category									
			Motor version	Motor type (alum.)	Motor type – frame size							
					80	90	100	112	132	160	180	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			Motor version	Motor type	Frame size							
1PC10 -Z		Order code			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.

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 (-Z)			Motor version	Motor type	Frame size							
1PC10 -Z (-Z)		Order code			80	90	100	112	132	160	180	200
With special flange next smaller		Acc. to EN 50347 Acc. to DIN 42948			–	–	FT115 C 140	FT115 C 140	FT130 C 160	FT165 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.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Motor protection · Aluminum series 1LE10, 1PC10

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 ■ .				80	90	100	112	132	160	180	200	
Order code												
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												

- 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).

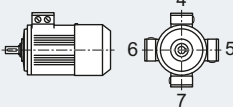
²⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended. For pole-changing motors, double the number of temperature sensors or temperature detectors is required. This also results in a double additional charge.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Terminal box position · Aluminum series 1LE10, 1PC10

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 <table><tr><th rowspan="2">Motor version</th><th rowspan="2">Motor type (alum.)</th><th colspan="8">Motor type – frame size</th></tr><tr><th>80</th><th>90</th><th>100</th><th>112</th><th>132</th><th>160</th><th>180</th><th>200</th></tr><tr><td rowspan="3">IE2 High Efficiency</td><td>1LE1001</td><td colspan="8">1LE1001</td></tr><tr><td>1PC1001</td><td></td><td></td><td colspan="4">1PC1001</td><td></td><td></td></tr><tr><td>1LE1041</td><td colspan="6">1LE1041 APAC Line</td><td></td><td></td></tr><tr><td rowspan="2">IE3 Premium Efficiency</td><td>1LE1003</td><td colspan="8">1LE1003</td></tr><tr><td>1LE1043</td><td colspan="8">1LE1043 APAC Line</td></tr><tr><td>IE4 Super Premium Efficiency</td><td>1LE1004</td><td></td><td></td><td colspan="6">1LE1004</td></tr><tr><td rowspan="2">IE1 Standard Efficiency</td><td>1LE1002</td><td></td><td></td><td colspan="4">1LE1002</td><td></td><td></td></tr><tr><td>1PC1002</td><td></td><td></td><td colspan="4">1PC1002</td><td></td><td></td></tr><tr><td>NEMA Energy Efficient</td><td>1LE1021</td><td colspan="8">1LE1021 Eagle Line</td></tr><tr><td>NEMA Premium Efficient</td><td>1LE1023</td><td colspan="8">1LE1023 Eagle Line</td></tr><tr><td rowspan="2">Pole-changing</td><td>1LE1011</td><td></td><td></td><td colspan="4">1LE1011</td><td></td><td></td></tr><tr><td>1LE1012</td><td></td><td></td><td colspan="4">1LE1012</td><td></td><td></td></tr><tr><td>Motor version</td><td>Motor type</td><td colspan="2">Frame size</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>80</td><td>90</td><td>100</td><td>112</td><td>132</td><td>160</td><td>180</td><td>200</td><td></td><td></td></tr></table>										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						Motor version	Motor type	Frame size												80	90	100	112	132	160	180	200		
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																																																																																																																																																																						
Motor version	Motor type	Frame size																																																																																																																																																																								
		80	90	100	112	132	160	180	200																																																																																																																																																																	
1LE10.....			Order code																																																																																																																																																																							
1PC10.....																																																																																																																																																																										
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.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Options · Aluminum series 1LE10, 1PC10

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		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	<i>New!</i>	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	<i>New!</i>	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.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

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		Motor version	Motor type	Frame size							
Order code				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, ⑧ 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 m³ of air	N20	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Increased air humidity/temperature with 60 to 100 g water per m³ 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 • <i>New!</i> 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 <i>New!</i>	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Special finish sea air resistant	S03	All	All	–	–	✓	✓	✓	✓	✓	✓
Top coat polyurethane ³⁴⁾	S06 <i>New!</i>	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 • <i>New!</i> 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 • <i>New!</i> and finish RAL	All	All	✓	✓	✓	✓	✓	✓	✓	✓

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

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	Order code	Motor version	Motor type	Frame size							
1PC10 -Z				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.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

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
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	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	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.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

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		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	–	–	✓	✓	✓	✓	✓	✓

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

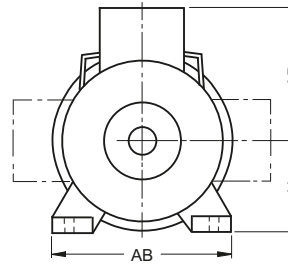
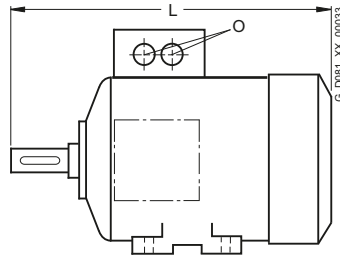
Options · Aluminum series 1LE10, 1PC10

- 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

2

- 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 1024l 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 $\leq$ Inner diameter of roller bearing (see tables under "Dimensions")
 - Dimensions E and EA $\leq 2 \times$ 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 $0.5 \cdot F_{\max}$ 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.

Overview



Frame size	Type	Dimension	L	AD	H	AB	O
71 M	Cast-iron series, self-ventilated						
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-0CA2, 0CB2, OCC2		240	148	71	132	2 × M25 × 1.5
	1LE1503-, 1LE1523-0CA3, 0CB3, OCC3		280	148	71	132	2 × M25 × 1.5
80 M	Aluminum series, self-ventilated						
	1LE1001		292	121	80	150	1 × M25 × 1.5
	Aluminum series, forced-air cooled or naturally cooled						
	1LE1001		253	121	80	150	1 × M25 × 1.5
	Cast-iron series, self-ventilated						
	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	Aluminum series, self-ventilated						
	1LE1001		347	126	90	165	1 × M25 × 1.5
	Aluminum series, forced-air cooled or naturally cooled						
	1LE1001		295	126	90	165	1 × M25 × 1.5
	Cast-iron series, self-ventilated						
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-0EA0, 0EB0, 0EC0		347	163	90	165	2 × M25 × 1.5
100 L	1LE1503-, 1LE1523-0EA4, 0EB4, 0EC4		387	163	90	165	2 × M25 × 1.5
	Aluminum series, self-ventilated						
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021		396 ¹⁾	166	100	196	2 × M32 × 1.5
	Aluminum series, self-ventilated with increased output						
	1LE1001, 1LE1002		431 ¹⁾	166	100	196	2 × M32 × 1.5
	Aluminum series, forced-air cooled or naturally cooled						
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021		322	166	100	196	2 × M32 × 1.5
	Aluminum series, self-ventilated						
	1LE1003, 1LE1023		431	166	100	196	2 × M32 × 1.5
	Aluminum series, forced-air cooled						
	1LE1023		357	166	100	196	2 × M32 × 1.5
	Cast-iron series, self-ventilated						
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621		389	193	100	196	2 × M32 × 1.5
	1LE1523, 1LE1623		425	193	100	196	2 × M32 × 1.5

Frame size	Type	Dimension	L	AD	H	AB	O
112 M	Aluminum series, self-ventilated						
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021		389 ¹⁾	177	112	226	2 × M32 × 1.5
	Aluminum series, self-ventilated with increased output						
	1LE1001, 1LE1002		414 ¹⁾	177	112	226	2 × M32 × 1.5
	Aluminum series, forced-air cooled or naturally cooled						
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021		311	177	112	226	2 × M32 × 1.5
	Aluminum series, self-ventilated						
	1LE1003, 1LE1023		414	177	112	226	2 × M32 × 1.5
	Aluminum series, forced-air cooled						
	1LE1023		336	177	112	226	2 × M32 × 1.5
	Cast-iron series, self-ventilated						
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621		382	195	112	226	2 × M32 × 1.5
132 S/M	1LE1523, 1LE1623		409	195	112	226	2 × M32 × 1.5
	Aluminum series, self-ventilated						
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021		465 ¹⁾	202	132	256	2 × M32 × 1.5
	Aluminum series, self-ventilated with increased output						
	1LE1001, 1LE1002		515 ¹⁾	202	132	256	2 × M32 × 1.5
	Aluminum series, forced-air cooled or naturally cooled						
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021		381	202	132	256	2 × M32 × 1.5
	Aluminum series, self-ventilated						
	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
	Aluminum series, forced-air cooled						
	1LE1023-						
	1CA0, 1CC0, 1CC2		381	202	132	256	2 × M32 × 1.5
	1CA1, 1CB0, 1CB2, 1CC3		431	202	132	256	2 × M32 × 1.5
	Cast-iron series, self-ventilated						
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621		457	215	132	256	2 × M32 × 1.5
	1LE1523-, 1LE1623-						
	1CA0, 1CC0, 1CC2		458	215	132	256	2 × M32 × 1.5
	1CA1, 1CB0, 1CB2, 1CC3		508	215	132	256	2 × M32 × 1.5

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.

Dimensions

SIMOTICS GP/SD 1LE1/1PC1 Standard Motors

Overall dimensions

Overview (continued)

Frame size	Type	Dimension				
		L	AD	H	AB	O
160 M/L	Aluminum series, self-ventilated					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	604 ^{1) 2)}	237	160	300	2 × M40 × 1.5
	Aluminum series, self-ventilated with increased output					
	1LE1001, 1LE1002	664 ¹⁾	237	160	300	2 × M40 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
160 M	1LE1001, 1PC1001, 1LE1021, 1PC1002, 1LE1021	510	237	160	300	2 × M40 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	594	265	160	300	2 × M40 × 1.5
	Aluminum series, self-ventilated					
	1LE1003, 1LE1023	604	237	160	300	2 × M40 × 1.5
160 M	Aluminum series, forced-air cooled					
	1LE1023	510	237	160	300	2 × M40 × 1.5
	Cast-iron series, self-ventilated					
	1LE1523, 1LE1623	596	261	160	300	2 × M40 × 1.5
160 L	Aluminum series, self-ventilated					
	1LE1003, 1LE1023	664	237	160	300	2 × M40 × 1.5
	Aluminum series, forced-air cooled					
	1LE1023	570	237	160	300	2 × M40 × 1.5
	Cast-iron series, self-ventilated					
160 L	1LE1523, 1LE1623	656	261	160	300	2 × M40 × 1.5
	Aluminum series, self-ventilated					
	1LE1001					
	1EA2, 1EB2	668	286	180	339	2 × M40 × 1.5
	Cast-iron series, self-ventilated					
160 L	1LE15.1-, 1LE16.1- 1EA2, 1EB2 1EA6 1LE15.3-, 1LE16.3- 1EB2 1EA2	668 698 668 698	286	180	339	2 × M40 × 1.5
	Aluminum series, self-ventilated					
	1LE1001					
	1EB4, 1EC4, 1ED4 1EA6, 1EB6, 1EC6, 1ED6	668 698	286	180	339	2 × M40 × 1.5
	Cast-iron series, self-ventilated					
160 L	1LE15.1-, 1LE16.1- 1EC4, 1EC6 1EB6 1LE15.3-, 1LE16.3- 1EC4 1EB4	668 698 668 698	286	180	339	2 × M40 × 1.5
	Aluminum series, self-ventilated					
	1LE1001					
	2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5 2AA6, 2AB6, 2AC6, 2AD6	721 746	315	200	378	2 × M50 × 1.5
	Cast-iron series, self-ventilated					
160 L	1LE15.1-, 1LE16.1- 2AA4, 2AA5, 2AB5, 2AC4, 2AC5 2AA6 1LE15.3-, 1LE16.3- 2AA4, 2AC4 2AA5, 2AB5, 2AC5	721 746 721 746 721 746	315	200	378	2 × M50 × 1.5
	Aluminum series, self-ventilated					
	1LE1001					
	2AA4, 2AA5, 2AB5, 2AC4, 2AC5 2AA6 1LE15.3-, 1LE16.3- 2AA4, 2AC4 2AA5, 2AB5, 2AC5	721 746 721 746	315	200	378	2 × M50 × 1.5
	Cast-iron series, self-ventilated					
160 L	1LE15.1-, 1LE16.1- 2AA4, 2AA5, 2AB5, 2AC4, 2AC5 2AA6 1LE15.3-, 1LE16.3- 2AA4, 2AC4 2AA5, 2AB5, 2AC5	721 746 721 746	315	200	378	2 × M50 × 1.5

Frame size	Type	Dimension				
		L	AD	H	AB	O
225 S	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1- 2BB0, 2BD0 1LE15.3-, 1LE16.3- 2BB0	788	338	225	436	2 × M50 × 1.5
	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1- 2BA2, 2BA6 2BB2, 2BB6, 2BC2, 2BC6, 2BD6 1LE15.3-, 1LE16.3- 2BA2 2BB2, 2BC2	818 848 818 848	338	225	436	2 × M50 × 1.5
	Cast-iron series, self-ventilated					
225 M	1LE15.1-, 1LE16.1- 2CA2, 2CA6, 2CB2, 2CC2, 2CC6, 2CD2, 2CD6 2CB6 1LE15.3-, 1LE16.3- 2CA2, 2CB2, 2CC2	887 957 887	410	250	490	2 × M63 × 1.5
	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1- 2DA0, 2DB0, 2DC0, 2DD0 1LE15.3, 1LE16.3 2DA0, 2DB0, 2DC0	960 960	433	280	540	2 × M63 × 1.5
	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1- 2DA2, 2DB2, 2DC2, 2DC6, 2DD2, 2DD6 2DA6, 2DB6 1LE15.3-, 1LE16.3- 2DC2 2DA2, 2DB2	960 1070 960 1070	433	280	540	2 × M63 × 1.5
280 S	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1- 3AA0 3AB0, 3AC0, 3AD0 1LE15.3-, 1LE16.3- 3AA0 3AB0, 3AC0	1052 1082 1052 1082	515	315	610	2 × M63 × 1.5
	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1- 3AC2, 3AD2 3AA2 3AB2 1LE15.3-, 1LE16.3- 3AA2 3AB2, 3AC2	1082 1217 1247 1247	515	315	610	2 × M63 × 1.5
	Cast-iron series, self-ventilated					
280 M	1LE15.1-, 1LE16.1- 3AB4, 3AC4, 3AC5, 3AD4, 3AD5, 3AD6 3AA5, 3AA6 3AB5, 3AB6, 3AC6 1LE15.3-, 1LE16.3- 3AA4 3AB4, 3AC4 3AA5 3AB5, 3AC5, 3AC6	1217 1247 1372 1402 1217 1247 1372 1402	515	315	610	2 × M63 × 1.5
	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1- 3AB4, 3AC4, 3AC5, 3AD4, 3AD5, 3AD6 3AA5, 3AA6 3AB5, 3AB6, 3AC6 1LE15.3-, 1LE16.3- 3AA4 3AB4, 3AC4 3AA5 3AB5, 3AC5, 3AC6	1217 1247 1372 1402 1217 1247 1372 1402	515	315	610	2 × M63 × 1.5
	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1- 3AB4, 3AC4, 3AC5, 3AD4, 3AD5, 3AD6 3AA5, 3AA6 3AB5, 3AB6, 3AC6 1LE15.3-, 1LE16.3- 3AA4 3AB4, 3AC4 3AA5 3AB5, 3AC5, 3AC6	1217 1247 1372 1402 1217 1247 1372 1402	515	315	610	2 × M63 × 1.5

Overview

- Dimensional drawings according to EN 50347 and IEC 60072.

Fits

The shaft extensions specified in the dimension tables (DIN 748) and centering spigot diameters (EN 50347) are machined with the following fits:

Dimension designation D, DA	ISO fit ISO 286-2	
	to 30	j6
	over 30 to 50	k6
	over 50	m6
N	to 250	j6
	over 250	h6
F, FA		h9
K		H17
S	Flange (FF)	H17

The drilled holes of couplings and belt pulleys should have an ISO fit of at least H7.

Dimension tolerances

For the following dimensions, the admissible deviations are given below:

Dimension designation	Dimension	Admissible deviation
H	to 250	– 0.5
	over 250	– 1.0
E, EA		– 0.5

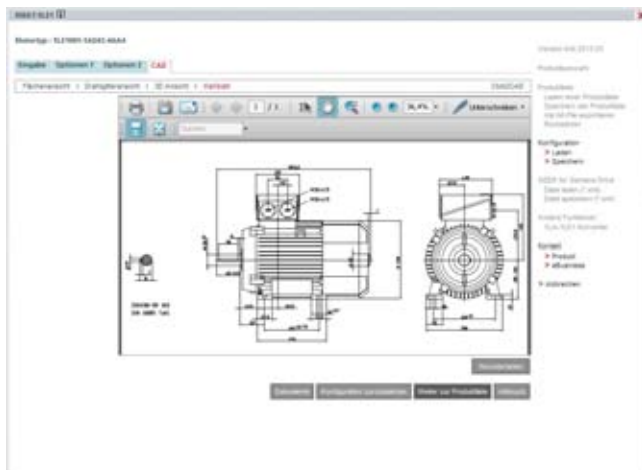
Keyways and feather keyways (dimensions GA, GC, F and FA) are made in compliance with DIN 6885 Part 1.

- All dimensions are specified in mm.

Dimension sheet generator (within the Drive Technology Configurator)

Overview

A dimensional drawing can be created in the Drive Technology (DT) Configurator for every configurable motor. A dimensional drawing can be requested for every other motor.



When a complete Article No. is entered with or without order codes, a dimensional drawing can be called up under the "Documentation" tab.

These dimensional drawings can be presented in different views and sections and printed.

The corresponding dimension sheets can be exported, saved and processed further in DXF format (interchange/import format for CAD systems) or as bitmap graphics.

Online access in the Siemens Industry Mall

The DT Configurator is integrated into the Siemens Industry Mall and can be used on the Internet without installation.

English: www.siemens.com/dt-configurator

Offline access in the Interactive Catalog CA 01

The DT Configurator is also part of the Interactive Catalog CA 01 on DVD – the offline version of Siemens Industry Mall. CA 01 can be ordered from the relevant Siemens sales office or via the Internet: www.siemens.com/automation/CA01

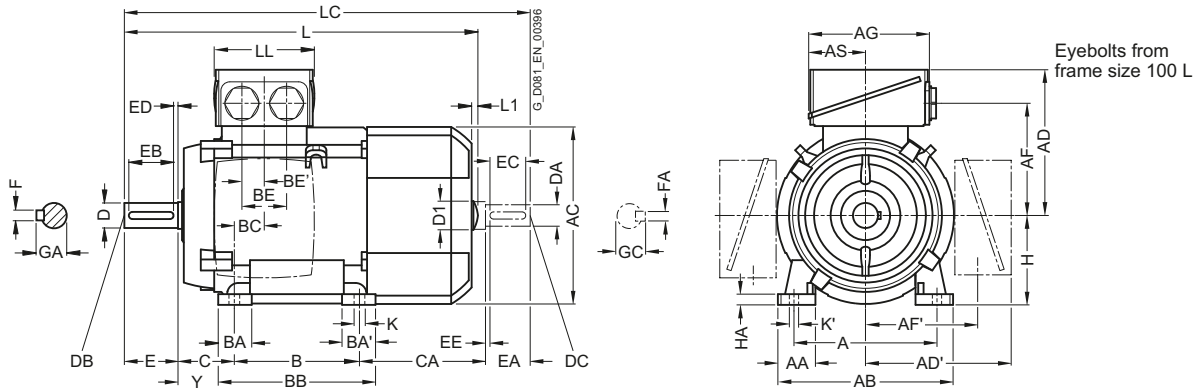
Dimensions

SIMOTICS GP 1LE1 Standard Motors

Aluminum series 1LE100., 1LE1011, 1LE1012, 1LE1021, 1LE1041 · Self-ventilated, frame sizes 80 M to 200 L

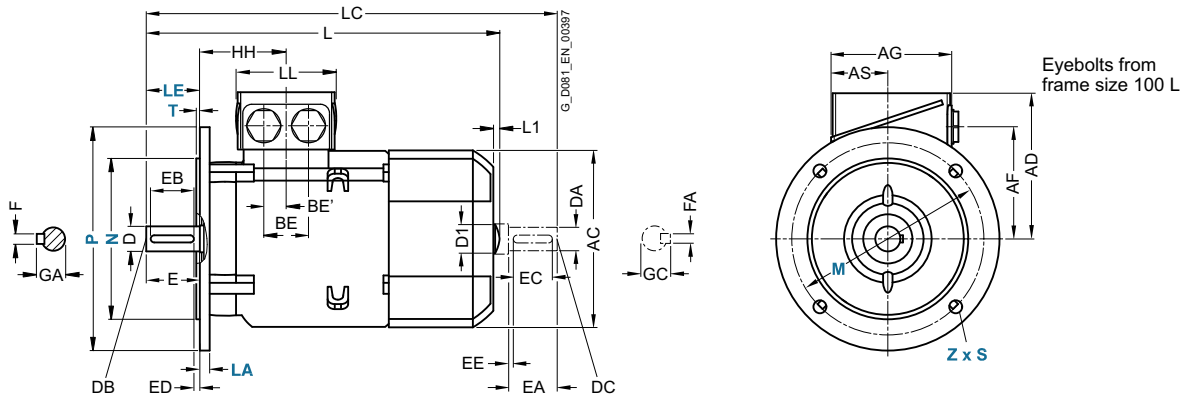
Dimensional drawings

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	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	
	1LE100. 1LE101. 1LE1021																								
80 M	1LE1001	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	1LE1041	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.

Dimensions

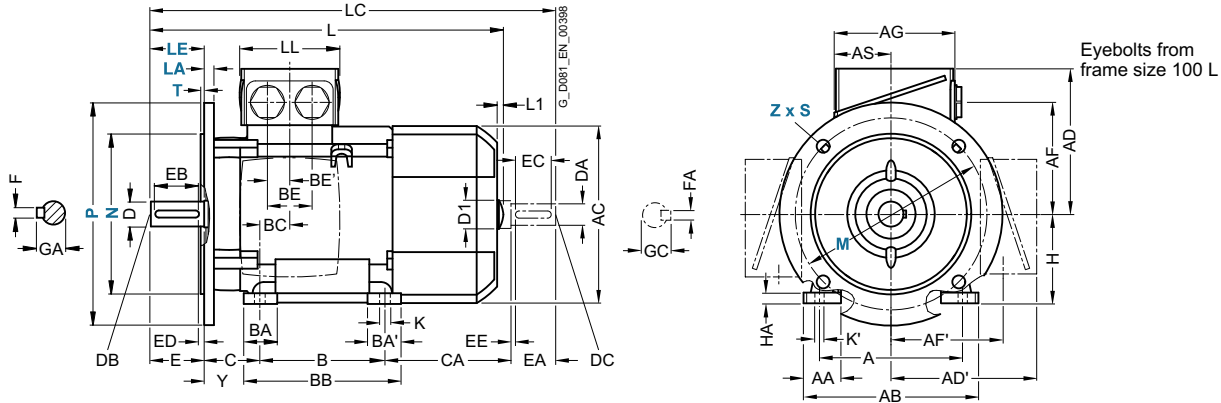
SIMOTICS GP 1LE1 Standard Motors

Aluminum series 1LE100., 1LE1011, 1LE1012, 1LE1021, 1LE1041 · Self-ventilated, frame sizes 80 M to 200 L

Dimensional drawings (continued)

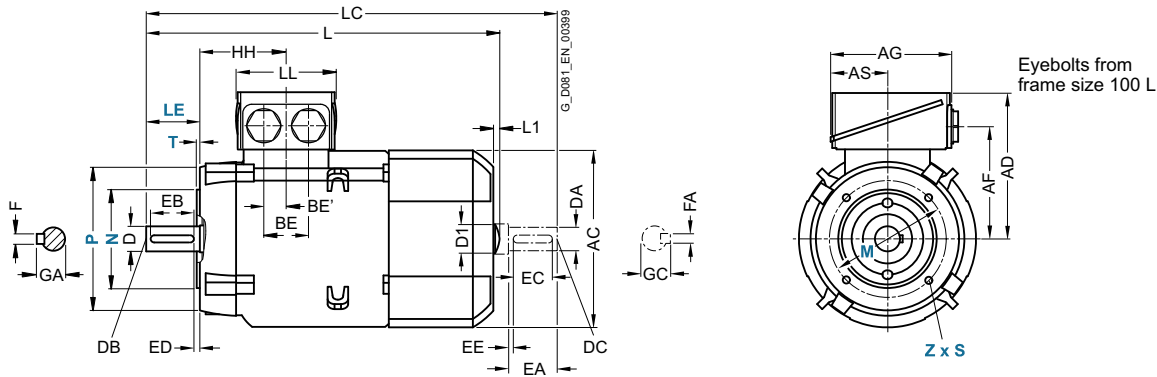
Type of construction IM B35

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	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	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	1LE1041	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⁾	7	32	450	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.

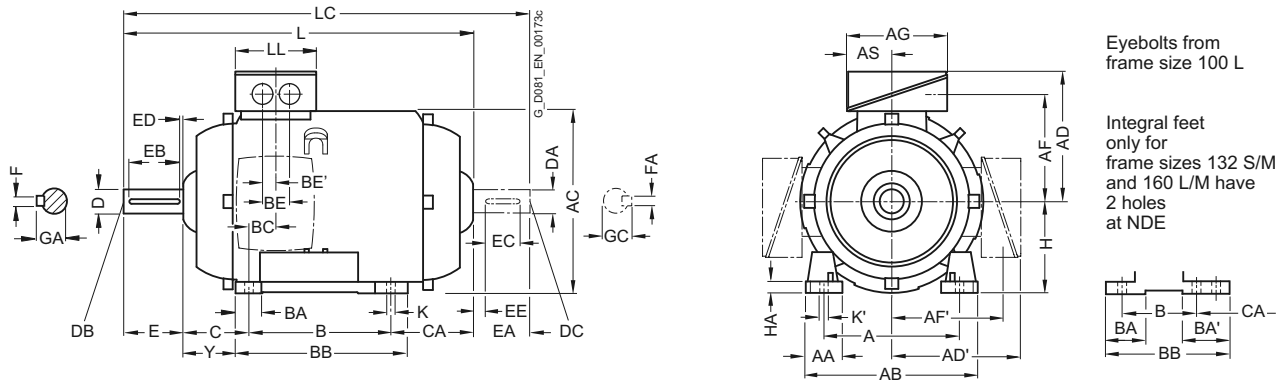
Dimensions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Aluminum series 1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021 · Forced-air cooled/naturally cooled, frame sizes 80 M to 200 L

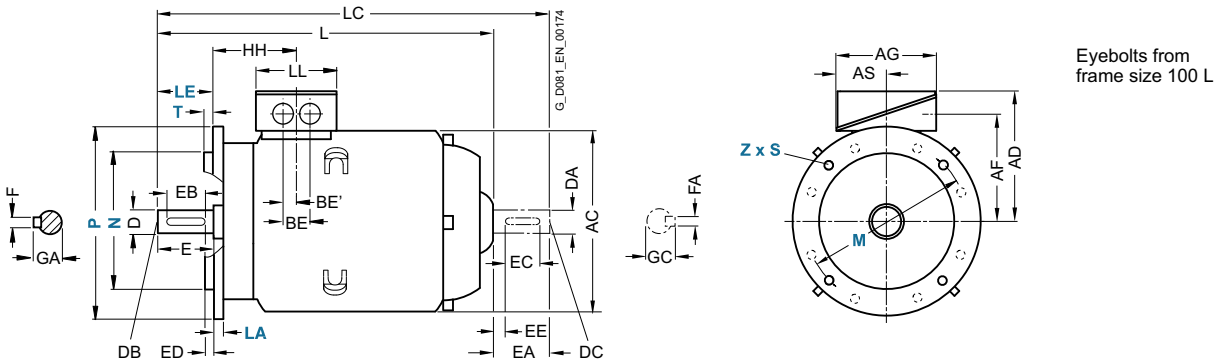
Dimensional drawings

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. 1PC100. 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	2, 4, 6	125	30.5	150	159	121	–	96.5	–	93	43	100	32	–	118	23	–	18	50	–	80	8	41	
	1LE1021	2, 4, 6					149		112		119.5	61.5													
90 S	1LE1001	2, 4, 6	140	30.5	165	178	126	–	101.5	–	93	43	100	33	–	143	22.5	–	18	56	–	90	10	47	
	1LE1021	2, 4, 6					154		117		119.5	61.5													
90 L	1LE1001	2, 4, 6	140	30.5	165	178	126	–	101.5	–	93	43	125	33	–	143	22.5	–	18	56	–	90	10	47	
	1LE1021	2, 4, 6					154		117		119.5	61.5													
100 L	All	2, 4, 6, 8	160	42	196	197	166	166	125.5	125.5	135	63.5	140	37.5	–	176	33.5	50	25	63	–	100	12	45	
112 M	All	2, 4, 6, 8	190	46	226	221	177	177	136.5	136.5	135	63.5	140	35.4	–	176	26	50	25	70	–	112	12	52	
132 S	All	2, 4, 6, 8	216	53	256	261	202	202	159.5	159.5	155	70.5	140	38	76 ¹⁾	218 ²⁾	26.5	48	24	89	–	132	15	69	
132 M	All	2, 4, 6, 8	216	53	256	261	202	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	–	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 ³⁾	300 ⁴⁾	47	57	28.5	108	–	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	–	160	18	85	
180 M	1LE1001	2, 4, 6, 8	279	65	339	356	259	259	212.5	212.5	175	77.5	241/ 80	100	328	30	57	28.5	121	–	180	20	95		
	1LE1021											279													
200 L	1LE1001	2, 4, 6, 8	318	70	378	396	296	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	–	200	25	108	
	1LE1021																								

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

1) With screwed-on feet, dimension BA' is 38 mm.

2) With screwed-on feet, dimension BB is 180 mm.

3) With screwed-on feet, dimension BA' is 44 mm.

4) With screwed-on feet, dimension BB is 256 mm.

Dimensions

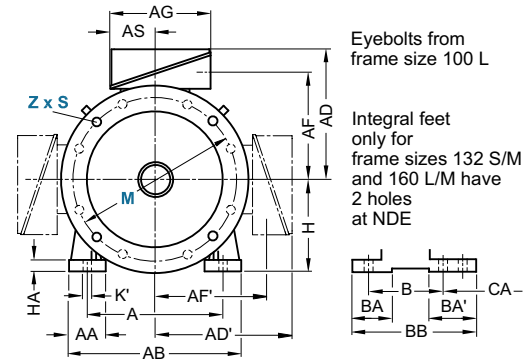
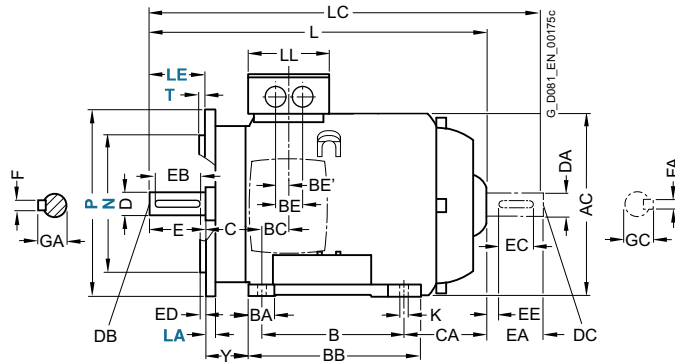
SIMOTICS GP 1LE1/1PC1 Standard Motors

Aluminum series 1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021 · Forced-air cooled/naturally cooled, frame sizes 80 M to 200 L

Dimensional drawings (continued)

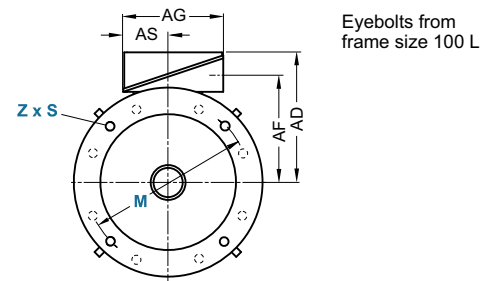
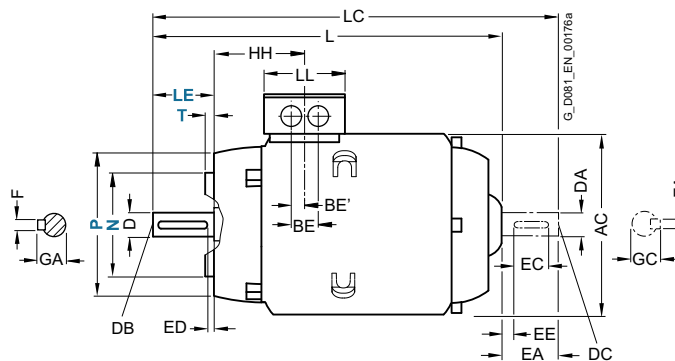
Type of construction IM B35

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)



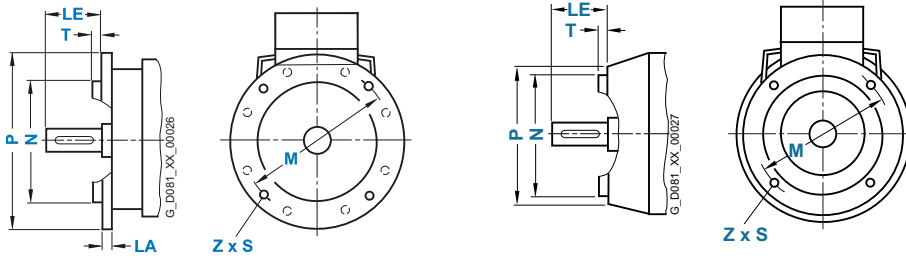
For motor	Motor type	No. of poles	Dimension designation acc. to IEC					DE shaft extension					NDE shaft extension									
Frame size			HH	K	K'	L	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
80 M	1LE1001	2, 4, 6	73	9.5	13.5	253	—	79	19	M6	40	32	4	6	21.5	—	—	—	—	—	—	—
	1LE1021	2, 4, 6						123														
90 S	1LE1021	2, 4, 6	78.5	10	14	295	—	79	24	M8	50	40	5	8	27	—	—	—	—	—	—	—
	1LE1021	2, 4, 6						123														
90 L	1LE1021	2, 4, 6	78.5	10	14	295	—	123	24	M8	50	40	5	8	27	—	—	—	—	—	—	—
	1LE1021	2, 4, 6						123														
100 L	All	2, 4, 6, 8	96.5	12	16	321.5	—	112	28	M10	60	50	5	8	31	—	—	—	—	—	—	—
112 M	All	2, 4	96	12	16	311	—	112	28	M10	60	50	5	8	31	—	—	—	—	—	—	—
		6, 8				336																
132 S	All	2, 4, 6, 8	115.5	12	16	380.5	—	130	38	M12	80	70	5	10	41	—	—	—	—	—	—	—
132 M	All	2, 4, 6, 8	115.5	12	16	380.5	—	130	38	M12	80	70	5	10	41	—	—	—	—	—	—	—
160 M	All	2, 4, 6, 8	155	15	19	510	—	145	42	M16	110	90	10	12	45	—	—	—	—	—	—	—
160 L	All	2, 4, 6, 8	155	15	19	510	—	145	42	M16	110	90	10	12	45	—	—	—	—	—	—	—
180 M	1LE1001	2, 4, 6, 8	151	14.5	19	592	706	145	48	M16	110	100	5	14	52	—	—	—	—	—	—	—
	1LE1021																					
200 L	1LE1001	2, 4, 6, 8	178	18.5	25	642	759	185	55	M20	110	100	5	16	59	—	—	—	—	—	—	—
	1LE1021																					

Introduction

General technical specifications

Flange dimensions

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
	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
	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
	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	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	600	550	660	24	6	8