

Standard delivery times:

10 working days	20 working days	On request
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# SIMOTICS GP 1LE1/1PC1 Standard Motors

Supplements to order numbers and special versions

Voltages  
Aluminum series 1LE10, 1PC10

**Selection and ordering data**

Voltages	Voltage code 12th and 13th position of the Order No.	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)											
			Motor version	Motor type (alum.)	Motor type – Frame size											
					63	71	80	90	100	112	132	160	180	200	225	
1LE1..... ■ - ■ ... 1PC1..... ■ - ■ ...			IE2 High Efficiency	1LE1001	1LE1001 ①											
				1PC1001	1PC1001 ②											
			IE1 Standard Efficiency	1LE1002	1LE1002 ③											
				1PC1002	1PC1002 ④											
			NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line ⑤											
			NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line ⑥											
			Motor version	Motor type	Frame size											
						63	71	80	90	100	112	132	160	180	200	225
<b>Voltage at 50 Hz or 60 Hz</b>																
50 Hz 230 VΔ/400 VY, 60 Hz 460 VY <sup>1)</sup>	2	2	-	All	All	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ <sup>1)2)</sup>	3	4	-	All except ⑤ and ⑥		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
50 Hz 400 VΔ, 60 Hz 460 VΔ <sup>1)2)</sup>				Only applicable for ⑤ and ⑥		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
50 Hz 400 VY, 60 Hz 460 VY <sup>1)</sup>	0	2	New!	All	All	☐	☐	-	-	-	-	-	-	-	-	-
50 Hz 500 VY <sup>1)</sup>	2	7	-	All	All	○	○	○	○	○	○	○	○	○	○	○
50 Hz 500 VΔ	4	0	-	All	All	-	-	○	○	○	○	○	○	○	○	○
50 Hz 220 VΔ/380 VY <sup>1)</sup>	2	1	-	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50 Hz 380 VΔ/660 VY <sup>2)</sup>	3	3	-	All except ⑤ and ⑥		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50 Hz 380 VΔ <sup>2)</sup>				Only applicable for ⑤ and ⑥		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
50 Hz 240 VΔ/415 VY, 60 Hz 480 VY <sup>1)</sup>	2	3	-	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50 Hz 415 VΔ, 60 Hz 480 VΔ	3	5	-	All	All	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Voltage at 60 Hz and required output at 60 Hz</b>																
220 VΔ/380 VY; 50 Hz output <sup>1)</sup>	9	0	M2A	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
220 VΔ/380 VY; 60 Hz output <sup>1)3)</sup>	9	0	M1A	All except ⑤ and ⑥		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 VΔ/660 VY; 50 Hz output <sup>2)</sup>	9	0	M2B	All except ⑤ and ⑥		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 VΔ; 50 Hz output <sup>2)</sup>				Only applicable for ⑤ and ⑥		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 VΔ/660 VY; 60 Hz output <sup>2)3)</sup>	9	0	M1B	All except ⑤ and ⑥		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VY; 50 Hz output	9	0	M2C	All	All	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VY; 60 Hz output <sup>3)</sup>	9	0	M1C	All except ⑤ and ⑥		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VΔ; 50 Hz output	9	0	M2D	All	All	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VΔ; 60 Hz output <sup>3)</sup>	9	0	M1D	All except ⑤ and ⑥		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 VY; 50 Hz output	9	0	M2E	All	All	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 VY; 60 Hz output <sup>3)</sup>	9	0	M1E	All except ⑤ and ⑥		-	-	○	○	○	○	○	○	○	○	○
460 VΔ; 50 Hz output	9	0	M2F	All	All	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 VΔ; 60 Hz output <sup>3)</sup>	9	0	M1F	All except ⑤ and ⑥		-	-	○	○	○	○	○	○	○	○	○
575 VY; 50 Hz output	9	0	M2G	All	All	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 VY; 60 Hz output <sup>3)</sup>	9	0	M1G	All except ⑤ and ⑥		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 VΔ; 50 Hz output	9	0	M2H	All	All	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 VΔ; 60 Hz output <sup>3)</sup>	9	0	M1H	All except ⑤ and ⑥		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Voltage at 87 Hz and 87 Hz output</b>																
400 VΔ <sup>4)</sup>	9	0	New! M3A	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Non-standard voltage and/or frequencies</b>																
Non-standard winding <sup>5)</sup>	9	0	M1Y • and identification code	All	All	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

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

1) For shaft heights 80 and 90, depending on the selected voltage, motor protection is either not possible (motor protection code A), or only with PTC thermistors with one embedded temperature sensor for tripping (motor protection code B).

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

3) Not admissible for North America export versions Eagle Line 1LE1021 NEMA Energy Efficient and 1LE1023 NEMA Premium Efficient.

4) Only possible for 4-pole, 6-pole and 8-pole motors. The operating data for converter-fed 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.

# SIMOTICS GP 1LE1/1PC1 Standard Motors

Supplements to order numbers and special versions

Standard delivery times:

10  
working  
days

20  
working  
days

On  
request

**Voltages**  
Aluminum series 1LE1011, 1LE1012 – pole-changing

## Selection and ordering data (continued)

Voltages	Voltage code 12th and 13th position of the Order No.	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)															
			Motor version	Motor type (alum.)	Motor type – Frame size															
					63	71	80	90	100	112	132	160	180	200	225					
1LE1...-...-...-...-...-...			Pole-changing	1LE1011 1LE1012						1LE1011 1LE1012										
			Motor version	Motor type	Frame size															
					63	71	80	90	100	112	132	160	180	200	225					
<b>Voltage at 50 Hz and 50 Hz output</b>																				
230 V	2	2	-	All	All					□	□	□	□							
400 V	3	4	-	All	All					□	□	□	□							
500 V	4	0	-	All	All					○	○	○	○							
690 V	4	7	-	All	All					○	○	○	○							
<b>Voltage at 60 Hz and required output at 60 Hz</b>																				
220 V; 50 Hz output	9	0	M5K	All	All					✓	✓	✓	✓							
220 V; 60 Hz output	9	0	M5C	All	All					✓	✓	✓	✓							
380 V; 50 Hz output	9	0	M5L	All	All					✓	✓	✓	✓							
380 V; 60 Hz output	9	0	M5D	All	All					✓	✓	✓	✓							
440 V; 50 Hz output	9	0	M5M	All	All					✓	✓	✓	✓							
440 V; 60 Hz output	9	0	M5E	All	All					✓	✓	✓	✓							
460 V; 50 Hz output	9	0	M5N	All	All					✓	✓	✓	✓							
460 V; 60 Hz output	9	0	M5F	All	All					✓	✓	✓	✓							
575 V; 50 Hz output	9	0	M5P	All	All					✓	✓	✓	✓							
575 V; 60 Hz output	9	0	M5G	All	All					✓	✓	✓	✓							
<b>Non-standard voltage and/or frequencies</b>																				
Non-standard winding <sup>1)</sup>	9	0	M1Y • and identification code	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

<sup>1)</sup> 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.

# SIMOTICS GP 1LE1/1PC1 Standard Motors

Supplements to order numbers and special versions

Standard delivery times:








10  
working  
days

20  
working  
days

On  
request

## Types of construction Aluminum series 1LE10, 1PC10

### Selection and ordering data

Types of construction	Type of construc. code 14th pos. of the Order No.	Additional identification code <b>-Z</b> with order code and plain text if required	Motor category		Standard delivery time (colored area)																		
			Motor version	Motor type (alum.)	Motor type – Frame size																		
					63	71	80	90	100	112	132	160	180	200	225								
			IE2 High Efficiency	1LE1001 1PC1001				1LE1001 ①															
			IE1 Standard Efficiency	1LE1002 1PC1002									1PC1001 ②	1LE1002 ③	1PC1002 ④								
			NEMA Energy Efficient	1LE1021									1LE1021 Eagle Line ⑤										
			NEMA Premium Efficient	1LE1023									1LE1023 Eagle Line ⑥										
			Pole-changing	1LE1011									1LE1011 ⑦										
				1LE1012										1LE1012 ⑧									
	1LE1.....			Motor version	Motor type	Frame size																	
	1PC1.....					63	71	80	90	100	112	132	160	180	200	225							
Without flange																							
IM B3 1) 2) 3)		A	–	All except ⑤					☐	☐	☐	☐	☐	☐	☐	☐							
IM B6 2) 3)		T	–	All except ⑤					☐	☐	☐	☐	☐	☐	☐	☐							
IM B7 2) 3)		U	–	All except ⑤					☐	☐	☐	☐	☐	☐	☐	☐							
IM B8 2) 3)		V	–	All except ⑤					☐	☐	☐	☐	☐	☐	☐	☐							
IM V6 2) 3)		D	–	All except ⑤					☐	☐	☐	☐	☐	☐	☐	☐							
IM V5 without protective cover 2) 3)		C	–	All except ⑤					☐	☐	☐	☐	☐	☐	☐	☐							
IM V5 with protective cover 2) 3) 4) 5) 6)		C	<b>-Z H00</b>	All except ②, ④, ⑤ and in combination with order code F90					☑	☑	☑	☑	☑	☑	☑	☑							

Standard delivery times:

10 working days

20 working days

On request

# SIMOTICS GP 1LE1/1PC1 Standard Motors

Supplements to order numbers and special versions

Types of construction  
Aluminum series 1LE10, 1PC10

Types of construction	Type of construc. code 14th pos. of the Order No.	Additional identification code <b>-Z</b> with order code and plain text if required	Motor category		Standard delivery time (colored area)													
			Motor version	Motor type (alum.)	Motor type – Frame size													
					63	71	80	90	100	112	132	160	180	200	225			
			IE2 High Efficiency	1LE1001 1PC1001						1LE1001 ①								
			IE1 Standard Efficiency	1LE1002 1PC1002							1PC1001 ②							
			NEMA Energy Efficient	1LE1021							1LE1002 ③							
			NEMA Premium Efficient	1LE1023							1PC1002 ④							
			Pole-changing	1LE1011 1LE1012							1LE1021 Eagle Line ⑤							
											1LE1023 Eagle Line ⑥							
											1LE1011 ⑦							
											1LE1012 ⑧							
	1LE1.....	■ ..																
	1PC1.....	■ ..																
			Motor version	Motor type	Frame size													
					63	71	80	90	100	112	132	160	180	200	225			
<b>With flange</b>			acc. to DIN EN 50347						FF165	FF165	FF215	FF215	FF265	FF300				
			acc. to DIN 42948						A 200	A 200	A 250	A 250	A 300	A 350				
IM B5 <sup>2) 7)</sup>		<b>F</b>	–	All	All		✓	✓	✓	✓	✓	✓						
IM V1 without protective cover <sup>2)</sup>		<b>G</b>	–	All	All		✓	✓	✓	✓	✓	✓						
IM V1 with protective cover <sup>2) 4) 5) 6)</sup>		<b>G</b>	<b>-Z H00</b>	All except ②, ④ and in combination with order code F90			✓	✓	✓	✓	✓	✓						
IM V3 <sup>4)</sup>		<b>H</b>	–	All	All		✓	✓	✓	✓	✓	✓						
IM B35 <sup>3)</sup>		<b>J</b>	–	All except ⑤			✓	✓	✓	✓	✓	✓						
<b>With standard flange</b>			acc. to DIN EN 50347						✓	✓	✓	✓	✓	✓				
			acc. to DIN 42948															
IM B14 <sup>2) 8)</sup>		<b>K</b>	–	All	All		✓	✓	✓	✓	✓	✓						
IM V19 <sup>2)</sup>		<b>L</b>	–	All	All		✓	✓	✓	✓	✓	✓						
IM V18 without protective cover <sup>2)</sup>		<b>M</b>	–	All	All		✓	✓	✓	✓	✓	✓						
IM V18 with protective cover <sup>2) 4) 5) 6)</sup>		<b>M</b>	<b>-Z H00</b>	All except ②, ④ and in combination with order code F90			✓	✓	✓	✓	✓	✓						
IM B34 <sup>3)</sup>		<b>N</b>	–	All except ⑤			✓	✓	✓	✓	✓	✓						

# SIMOTICS GP 1LE1/1PC1 Standard Motors

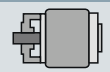


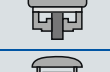
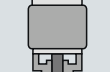
Supplements to order numbers and special versions

Standard delivery times:

10 working days	20 working days	On request
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## Types of construction

Aluminum series 1LE10, 1PC10

Types of construction	Type of construc. code 14th pos. of the Order No.	Additional identification code <b>-Z</b> with order code and plain text if required	Motor category		Standard delivery time (colored area)															
			Motor version	Motor type (alum.)	Motor type – Frame size															
					63	71	80	90	100	112	132	160	180	200	225					
<b>1LE1</b> ..... ■ .. <b>1PC1</b> ..... ■ ..			IE2 High Efficiency	1LE1001 1PC1001					1LE1001 ①											
			IE1 Standard Efficiency	1LE1002 1PC1002						1PC1001 ②										
			NEMA Energy Efficient	1LE1021						1LE1002 ③										
			NEMA Premium Efficient	1LE1023						1PC1002 ④										
			Pole-changing	1LE1011						1LE1021 Eagle Line ⑤										
				1LE1012						1LE1023 Eagle Line ⑥										
			Motor version	Motor type	Frame size															
					63	71	80	90	100	112	132	160	180	200	225					
With special flange		acc. to DIN EN 50347 acc. to DIN 42948						FT130 C 160	FT130 C 160	FT165 C 200	FT165 C 200	FT215 C 250	FT265 C 300							
IM B14 <sup>2) 8)</sup>		<b>K</b>	<b>-Z P01</b>	All	All			-	-	✓	✓	✓	-							
IM V19 <sup>2)</sup>		<b>L</b>	<b>-Z P01</b>	All	All			-	-	✓	✓	✓	-							
IM V18 without protective cover <sup>2)</sup>		<b>M</b>	<b>-Z P01</b>	All	All			-	-	✓	✓	✓	-							
IM V18 with protective cover <sup>2) 4) 5) 6)</sup>		<b>M</b>	<b>-Z P01+H00</b>	All except ②, ④ and in combination with order code F90				-	-	✓	✓	✓	-							
IM B34 <sup>3)</sup>		<b>N</b>	<b>-Z P01</b>	All except ⑤				-	-	✓	✓	✓	-							

- Standard version
- ✓ With additional charge
- Not possible

- 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 "Second 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.

# SIMOTICS GP 1LE1/1PC1 Standard Motors

Supplements to order numbers and special versions

Standard delivery times:

10  
working  
days

20  
working  
days

On  
request

**Motor protection**  
**Aluminum series 1LE10, 1PC10**

## Selection and ordering data

Motor protection	Motor protection code 15th position of the Order No.	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)										
			Motor version	Motor type (alum.)	Motor type – Frame size										
					63	71	80	90	100	112	132	160	180	200	225
			IE2 High Efficiency	1LE1001	1LE1001										
				1PC1001	1PC1001										
			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													
1LE1.....			Motor version	Motor type	Frame size										
1PC1.....					63	71	80	90	100	112	132	160	180	200	225
<b>Motor protection (winding protection)</b>															
Without motor protection <sup>1)</sup>	<b>A</b>	–	All	All		☐	☐	☐	☐	☐	☐	☐			
Motor protection with PTC thermistors with 1 or 3 embedded temperature sensors for tripping <sup>1) 2)</sup>	<b>B</b>	–	All	All		✓	✓	✓	✓	✓	✓	✓			
Motor protection with PTC thermistors with 6 embedded temperature sensors for alarm and tripping <sup>2)</sup>	<b>C</b>	–	All	All		–	–	✓	✓	✓	✓	✓			
Motor temperature detection with embedded temperature sensor KTY 84-130 <sup>2)</sup>	<b>F</b>	–	All	All		–	–	✓	✓	✓	✓	✓			
Motor temperature detection with embedded temperature sensors 2 x KTY 84-130 <sup>2)</sup>	<b>G</b> <i>New!</i>	–	All	All		–	–	✓	✓	✓	✓	✓			
Installation of 3 PT100 resistance thermometers <sup>2)</sup>	<b>H</b> <i>New!</i>	–	All	All		–	–	✓	✓	✓	✓	✓			
NTC thermistors for tripping	<b>Z</b>	<b>Q2A</b>	All	All		–	–	✓	✓	✓	✓	✓			
Temperature detectors for tripping <sup>2)</sup>	<b>Z</b>	<b>Q3A</b>	All	All		–	–	✓	✓	✓	✓	✓			

- ☐ Standard version
- ✓ With additional charge
- Not possible

<sup>1)</sup> For shaft heights 80 and 90, depending on the selected voltage, motor protection is either not possible (motor protection code A), or only with PTC thermistors with one embedded temperature sensor for tripping (motor protection code B).

<sup>2)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended. For pole-changing motors with separate windings, double the number of temperature sensors or temperature detectors is required and will be installed at the factory. This also results in a double additional charge.

# SIMOTICS GP 1LE1/1PC1 Standard Motors

Supplements to order numbers and special versions

Standard delivery times:

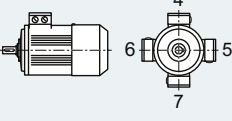
10  
working  
days

20  
working  
days

On  
request

Connection box position  
Aluminum series 1LE10, 1PC10

## Selection and ordering data

Connection box position		Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)										
Motor version			Motor type (alum.)	Motor type – Frame size											
				63	71	80	90	100	112	132	160	180	200	225	
	Connection box position code 16th position of the Order No.		IE2 High Efficiency	1LE1001	1LE1001										
				1PC1001					1PC1001						
			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						
1LE1..... 1PC1.....			Motor version	Motor type	Frame size										
					63	71	80	90	100	112	132	160	180	200	225
Connection box position															
Connection box top <sup>1)</sup>		4	–	All	All			☐	☐	☐	☐	☐	☐		
Connection box on RHS <sup>2)</sup>		5	–	All	All		–	–	✓	✓	✓	✓			
Connection box on LHS <sup>2)</sup>		6	–	All	All		–	–	✓	✓	✓	✓			
Connection box bottom <sup>2) 3)</sup>		7	–	All	All		–	–	✓	✓	✓	✓			

- ☐ Standard version
- ✓ With additional charge
- Not possible

<sup>1)</sup> For types of construction with feet, cast feet are standard. Screwed-on feet are available with order code H01.

<sup>2)</sup> For types of construction with feet, screwed-on feet are standard.

<sup>3)</sup> Not generally possible for motors with feet.

# SIMOTICS GP 1LE1/1PC1 Standard Motors

Supplements to order numbers and special versions

Standard delivery times:

10 working days	20 working days	On request
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**Options**  
Aluminum series 1LE10, 1PC10

## Selection and ordering data

Special versions	Additional identification code <b>-Z</b> with order code and plain text if required	Motor category		Standard delivery time (colored area)													
		Motor version	Motor type (alum.)	Motor type – Frame size													
				63	71	80	90	100	112	132	160	180	200	225			
		IE2 High Efficiency	1LE1001							1LE1001 ①							
			1PC1001										1PC1001 ②				
		IE1 Standard Efficiency	1LE1002										1LE1002 ③				
			1PC1002										1PC1002 ④				
		NEMA Energy Efficient	1LE1021										1LE1021 Eagle Line ⑤				
		NEMA Premium Efficient	1LE1023										1LE1023 Eagle Line ⑥				
		Pole-changing	1LE1011										1LE1011 ⑦				
			1LE1012											1LE1012 ⑧			
		1LE1.....-Z 1PC1.....-Z	Motor version	Motor type	Frame size	63	71	80	90	100	112	132	160	180	200	225	
<b>Motor connection and connection box</b>																	
One metal cable gland	R15	All	All		✓	✓	✓	✓	✓	✓	✓	✓	✓				
Rotation of the connection box through 90°, entry from DE	R10	All	All		○	○	○	○	○	○	○	○	○				
Rotation of the connection box through 90°, entry from NDE	R11	All	All		○	○	○	○	○	○	○	○	○				
Rotation of the connection box through 180°	R12	All	All		○	○	○	○	○	○	○	○	○				
Larger connection box	R50	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Reduction piece for M cable gland in accordance with British Standard, both cable entries mounted <sup>1)</sup>	R30	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
External grounding	H04	All	All		✓	✓	✓	✓	✓	✓	✓	✓	✓				
3 cables protruding, 0.5 m long <sup>2) 3)</sup>	R20	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
3 cables protruding, 1.5 m long <sup>2) 3)</sup>	R21	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
6 cables protruding, 0.5 m long <sup>2)</sup>	R22	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
6 cables protruding, 1.5 m long <sup>2)</sup>	R23	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
6 cables protruding, 3 m long <sup>2)</sup>	R24	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Connection box on NDE <sup>4)</sup>	H08	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
<b>Windings and insulation</b>																	
Temperature class 155 (F), used acc. to 155 (F), with service factor (SF)	N01	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Temperature class 155 (F), used acc. to 155 (F), with increased output	N02	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Temperature class 155 (F), used acc. to 155 (F), with increased coolant temperature	N03	All	All		✓	✓	✓	✓	✓	✓	✓	✓	✓				
Temperature class 180 (H) at rated output and max. CT 60 °C <sup>5)</sup>	N11	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Increased air humidity/temperature with 30 to 60 g water per m <sup>3</sup> of air	N20	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	N05	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	N06	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	N07	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	N08	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Increased air humidity/temperature with 60 to 100 g water per m <sup>3</sup> of air	N21	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Temperature class 155 (F), used acc. to 130 (B), with higher coolant temperature and/or site altitude	Y50 • and specified output, CT ... °C or SA .... m above sea level	All	All		–	–	✓	✓	✓	✓	✓	✓	✓				
Temperature class 155 (F), used acc. to 155 (F), other requirements	Y52 • and specified output, CT ... °C or SA .... m above sea level	All	All		✓	✓	✓	✓	✓	✓	✓	✓	✓				



**Standard delivery times:**

<b>10 working days</b>	<b>20 working days</b>	<b>On request</b>
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# SIMOTICS GP 1LE1/1PC1 Standard Motors

## Supplements to order numbers and special versions

**Options**  
**Aluminum series 1LE10, 1PC10**

Special versions	Additional identification code <b>-Z</b> with order code and plain text if required	Motor category		Standard delivery time (colored area)																			
		Motor version	Motor type (alum.)	Motor type – Frame size																			
				63	71	80	90	100	112	132	160	180	200	225									
		IE2 High Efficiency	1LE1001																				
			1PC1001																				
		IE1 Standard Efficiency	1LE1002																				
			1PC1002																				
		NEMA Energy Efficient	1LE1021																				
		NEMA Premium Efficient	1LE1023																				
		Pole-changing	1LE1011																				
			1LE1012																				
<b>1LE1.....-Z</b>																							
<b>1PC1.....-Z</b>																							
<b>Colors and paint finish</b>																							
Special finish in RAL 7030 stone gray		All	All																				
Special finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 - 2008 Part 0 "Introduction")	<b>Y54 •</b> and special finish RAL .....	All	All																				
Special finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 - 2008 Part 0 "Introduction")	<b>Y51 •</b> and special finish RAL .....	All	All																				
Special paint for use offshore	<b>S04</b> <i>New!</i>	All	All																				
Special finish sea air resistant	<b>S03</b>	All	All																				
Unpainted (only cast-iron parts primed)	<b>S00</b>	All	All																				
Unpainted, only primed	<b>S01</b>	All	All																				
<b>Modular technology – Basic versions</b> <sup>6)</sup>																							
Mounting of separately driven fan	<b>F70</b>	All except ②, ④ and in combination with order code F90																					
Mounting of brake <sup>7)</sup>	<b>F01</b>	All except ②, ④ and in combination with order code F90																					
Mounting of 1XP8012-10 (HTL) rotary pulse encoder <sup>8) 9)</sup>	<b>G01</b>	All except ②, ④ and in combination with order code F90																					
Mounting of 1XP8012-20 (TTL) rotary pulse encoder <sup>8) 9)</sup>	<b>G02</b>	All except ②, ④ and in combination with order code F90																					
<b>Modular technology – Additional versions</b>																							
Brake supply voltage 24 V DC	<b>F10</b>	All except ②, ④ and in combination with order code F90																					
Brake supply voltage 230 V AC	<b>F11</b>	All except ②, ④ and in combination with order code F90																					
Brake supply voltage 400 V AC	<b>F12</b>	All except ②, ④ and in combination with order code F90																					
Mechanical manual brake release with lever (no locking)	<b>F50</b>	All except ②, ④ and in combination with order code F90																					
<b>Special technology</b> <sup>6)</sup>																							
Mounting of LL 861 900 220 rotary pulse encoder <sup>8)</sup>	<b>G04</b>	All except ②, ④ and in combination with order code F90																					
Mounting of HOG 9 D 1024 I rotary pulse encoder <sup>8)</sup>	<b>G05</b>	All except ②, ④ and in combination with order code F90																					
Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>8)</sup>	<b>G06</b>	All except ②, ④ and in combination with order code F90																					
<b>Mechanical design and degrees of protection</b>																							
Protective cover <sup>8) 10)</sup>	<b>H00</b>	All except ②, ④ and in combination with order code F90																					
Next larger standard flange	<b>P01</b>	All	All																				
Screwed-on (instead of cast) feet	<b>H01</b>	All	All																				
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar <sup>11)</sup>	<b>H23</b>	All	All																				
Low-noise version for 2-pole motors with clockwise direction of rotation	<b>F77</b>	All except ②, ④ and in combination with order code F90																					
Low-noise version for 2-pole motors with counter-clockwise direct. of rotation	<b>F78</b>	All except ②, ④ and in combination with order code F90																					
IP65 degree of protection <sup>12)</sup>	<b>H20</b>	All	All																				
IP56 degree of protection <sup>13)</sup>	<b>H22</b>	All	All																				
Vibration-proof version	<b>H02</b>	All	All																				
Condensation drainage holes <sup>14)</sup>	<b>H03</b>	All	All																				

# SIMOTICS GP 1LE1/1PC1 Standard Motors

Supplements to order numbers and special versions

Standard delivery times:

10  
working  
days

20  
working  
days

On  
request

## Options Aluminum series 1LE10, 1PC10

Special versions	Additional identification code <b>-Z</b> with order code and plain text if required	Motor category		Standard delivery time (colored area)													
		Motor version	Motor type (alum.)	Motor type – Frame size													
				63	71	80	90	100	112	132	160	180	200	225			
		IE2 High Efficiency	1LE1001							1LE1001 ①							
			1PC1001														1PC1001 ②
		IE1 Standard Efficiency	1LE1002														1LE1002 ③
			1PC1002														1PC1002 ④
		NEMA Energy Efficient	1LE1021														1LE1021 Eagle Line ⑤
		NEMA Premium Efficient	1LE1023														1LE1023 Eagle Line ⑥
		Pole-changing	1LE1011														1LE1011 ⑦
			1LE1012														
1LE1.....-Z		Motor version	Motor type	Frame size													
1PC1.....-Z				63	71	80	90	100	112	132	160	180	200	225			
<b>Mechanical design and degrees of protection (continued)</b>																	
Rust-resistant screws (externally)	<b>H07</b>	All	All						✓	✓	✓	✓	✓				
Prepared for mountings, center hole only <sup>15)</sup>	<b>G40</b>	All except ②, ④ and in combination with order code F90							✓	✓	✓	✓	✓				
Prepared for mountings with shaft D12 <sup>15)</sup>	<b>G41</b>	All except ②, ④ and in combination with order code F90							✓	✓	✓	✓	✓				
Prepared for mountings with shaft D16 <sup>15)</sup>	<b>G42</b>	All except ②, ④ and in combination with order code F90							✓	✓	✓	✓	✓				
Protective cover for encoder (supplied loose – only for mountings with order codes G40, G41 and G42)	<b>G43</b>	All except ②, ④ and in combination with order code F90							✓	✓	✓	✓	✓				
<b>Coolant temperature and site altitude</b>																	
Coolant temperature –40 to +40 °C <sup>16)</sup>	<b>D03</b>	All	All						✓	✓	✓	✓	✓				
Coolant temperature –30 to +40 °C <sup>16)</sup>	<b>D04</b>	All	All						✓	✓	✓	✓	✓				
<b>Designs in accordance with standards and specifications</b>																	
CCC China Compulsory Certification <sup>17)</sup>	<b>D01</b>	<i>New!</i> All	All						✓	✓							
IE1 motor without CE marking for export outside EEA (see EU Directive 640/2009)	<b>D22</b>	<i>New!</i> Only possible for ③ and ④							○	○	○	○	○				
Electrical according to NEMA MG1-12 <sup>18)</sup>	<b>D30</b>	All; for Eagle Line ⑤ and ⑥ standard version							✓	✓	✓	✓	✓				
Design according to UL with "Recognition Mark" <sup>18)</sup>	<b>D31</b>	All; for Eagle Line ⑤ and ⑥ standard version							✓	✓	✓	✓	✓				
China Energy Efficiency Label	<b>D34</b>	<i>New!</i> Only possible for ①, ②, ⑤ and ⑥							○	○	○	○	○				
Canadian regulations (CSA) <sup>19)</sup>	<b>D40</b>	All; for Eagle Line ⑤ and ⑥ standard version							✓	✓	✓	✓	✓				
<b>Bearings and lubrication</b>																	
Measuring nipple for SPM shock pulse measurement for bearing inspection <sup>20)</sup>	<b>Q01</b>	All	All						✓	✓	✓	✓	✓				
Bearing design for increased cantilever forces	<b>L22</b>	All	All						✓	✓	✓	✓	✓				
Special bearing for DE and NDE, bearing size 63	<b>L25</b>	All	All						✓	✓	✓	✓	✓				
Regreasing device <sup>20)</sup>	<b>L23</b>	All	All						✓	✓	✓	✓	✓				
Located bearing DE	<b>L20</b>	All	All					✓	✓	✓	✓	✓	✓				
Located bearing NDE	<b>L21</b>	All	All						✓	✓	✓	✓	✓				□
<b>Balance and vibration quantity</b>																	
Vibration quantity level A		All	All						□	□	□	□	□	□	□	□	□
Vibration quantity level B	<b>L00</b>	All	All						✓	✓	✓	✓	✓	✓	✓	✓	✓
Half-key balancing (standard)		All	All						□	□	□	□	□	□	□	□	□
Full-key balancing	<b>L02</b>	All	All						✓	✓	✓	✓	✓	✓	✓	✓	✓
Balancing without key	<b>L01</b>	All	All						✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Shaft and rotor</b>																	
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	<b>L08</b>	All	All						✓	✓	✓	✓	✓	✓	✓	✓	✓
Second standard shaft extension	<b>L05</b>	All except ②, ④ and in combination with order code F90							✓	✓	✓	✓	✓	✓	✓	✓	✓
Shaft extension with standard dimensions, without feather keyway	<b>L04</b>	All	All								✓	✓	✓	✓	✓	✓	✓
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	<b>L07</b>	All	All						✓	✓	✓	✓	✓	✓	✓	✓	✓
Standard shaft made of stainless steel	<b>L06</b>	All	All						✓	✓	✓	✓	✓	✓	✓	✓	✓
Non-standard cylindrical shaft extension <sup>21)</sup>	<b>Y55 •</b> and identification code	All	All						✓	✓	✓	✓	✓	✓	✓	✓	✓

**Standard delivery times:**
**10  
working  
days**
**20  
working  
days**
**On  
request**

# SIMOTICS GP 1LE1/1PC1 Standard Motors

## Supplements to order numbers and special versions

**Options  
Aluminum series 1LE10, 1PC10**

Special versions	Additional identification code <b>-Z</b> with order code and plain text if required	Motor category		Standard delivery time (colored area)													
		Motor version	Motor type (alum.)	Motor type – Frame size													
				63	71	80	90	100	112	132	160	180	200	225			
		IE2 High Efficiency	1LE1001					1LE1001 ①									
			1PC1001							1PC1001 ②							
		IE1 Standard Efficiency	1LE1002							1LE1002 ③							
			1PC1002							1PC1002 ④							
		NEMA Energy Efficient	1LE1021							1LE1021 Eagle Line ⑤							
		NEMA Premium Efficient	1LE1023							1LE1023 Eagle Line ⑥							
		Pole-changing	1LE1011							1LE1011 ⑦							
			1LE1012								1LE1012 ⑧						
		1LE1.....-Z															
		1PC1.....-Z															
<b>Shaft and rotor (continued)</b>																	
Non-standard shaft extension, DE	<b>Y58</b> • <i>New!</i> and identification code	All	All				-	-	✓	✓	✓	✓					
Non-standard shaft extension, NDE	<b>Y59</b> • <i>New!</i> and identification code	All	All				-	-	✓	✓	✓	✓					
<b>Heating and ventilation</b>																	
Fan cover for textile industry <sup>22)</sup>	<b>F75</b>	All except ②, ④ and in combination with order code F90					-	-	✓	✓	✓	✓					
Metal external fan <sup>23)</sup>	<b>F76</b>	All except ②, ④ and in combination with order code F90					-	-	✓	✓	✓	✓					
Without external fan and without fan cover	<b>F90</b>	All except ②, ④, ⑦ and ⑧					✓	✓	✓	✓	✓	✓					
Anti-condensation heating for 230 V	<b>Q02</b>	All	All				-	-	✓	✓	✓	✓					
Anti-condensation heating for 115 V	<b>Q03</b>	All	All				-	-	✓	✓	✓	✓					
Sheet metal fan cover	<b>F74</b>	All except ②, ④ and in combination with order code F90					✓	✓	✓	✓	✓	✓					
<b>Rating plate and extra rating plates</b>																	
Extra rating plate for voltage tolerance <sup>24)</sup>	<b>B07</b> <i>New!</i>	All except ②, ④, ⑦, ⑧ and 8-pole motors					-	-	✓	✓	✓	✓					
Second rating plate, loose <sup>25)</sup>	<b>M10</b>	All	All				✓	✓	✓	✓	✓	✓					
Rating plate, stainless steel	<b>M11</b>	All	All				✓	✓	✓	✓	✓	✓					
Extra rating plate or rating plate with deviating rating plate data	<b>Y80</b> • and identification code	All	All				✓	✓	✓	✓	✓	✓					
Extra rating plate with identification codes	<b>Y82</b> • and identification code	All	All				✓	✓	✓	✓	✓	✓					
Additional information on rating plate and on package label (max. 20 characters)	<b>Y84</b> • and identification code	All	All				✓	✓	✓	✓	✓	✓					
Adhesive label, supplied loose	<b>Y85</b> • <i>New!</i> and identification code	All	All				-	-	✓	✓	✓	✓					
<b>Packaging, safety notes, documentation and test certificates</b>																	
With one safety and start-up guide per box pallet	<b>B01</b>	All	All				○	○	○	○	○	○					
Acceptance test certificate 3.1 in accordance with EN 10204 <sup>26)</sup>	<b>B02</b>	All	All				✓	✓	✓	✓	✓	✓					
Printed German/English Operating Instructions (Compact) enclosed <sup>27)</sup>		All	All				▣	▣	▣	▣	▣	▣					
Printed German/English Operating Instructions enclosed	<b>B04</b>	All	All				-	-	✓	✓	✓	✓					
Type test with heat run for horizontal motors, with acceptance	<b>B83</b>	All	All				✓	✓	✓	✓	✓	✓					
Wire-lattice pallet	<b>B99</b>	All	All				○	○	○	○	○	○					
Connected in star for dispatch	<b>M01</b>	All	All				-	-	✓	✓	✓	✓					
Connected in delta for dispatch	<b>M02</b>	All	All				-	-	✓	✓	✓	✓					

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

# SIMOTICS GP 1LE1/1PC1 Standard Motors

## Supplements to order numbers and special versions

### Options

### Aluminum series 1LE10, 1PC10

- 1) Not possible in combination with order code R15 "One metal cable gland".
- 2) In combination with motor protection (15th position of the Order No.) or anti-condensation heating option, please inquire before ordering.
- 3) Not possible for pole-changing motors and/or in combination with voltage code 22 or 34.
- 4) Not possible in combination with the following order codes: N01, N02, N03, N05, N06, N07, N08, N11. Use is only possible according to temperature class 155 (F).
- 5) Cannot be used for motors in UL version (order code D31). The grease lifetime specified in Catalog D 81.1 · 2008 in Part 0 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- 6) A second shaft extension is not possible. Please inquire for mounted brakes.
- 7) For order codes F10, F11 and F12, the brake supply voltage must be specified or ordered.
- 8) 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.
- 9) 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) Order code H00 provides mechanical protection for encoders.
- 11) Not possible for type of construction IM V3.
- 12) Not possible in combination with rotary pulse encoder HOG 9 D 1024 I (order code G05) and/or brake 2LM8 (order code F01).
- 13) Not possible in combination with 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 using order code G43. Not possible in combination with order code L00 vibration quantity level B.
- 16) In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 17) CCC certification is required for
  - 2-pole motors  $\leq 2.2$  kW
  - 4-pole motors  $\leq 1.1$  kW
  - 6-pole motors  $\leq 0.75$  kW
  - 8-pole motors  $\leq 0.55$  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) 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.
- 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 normatively. 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 Y55 and L05:
  - Dimensions D and DA  $\leq$  internal diameter of roller bearing (see dimension tables under "Dimensions")
  - Dimensions E and EA  $\leq 2 \times$  length E (normal) of the shaft extension. For an explanation of the order codes, see Catalog D 81.1 · 2008 Part 0 "Introduction".
- 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-fed 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 230V $\Delta$ /400VY or 400V $\Delta$ /690VY (voltage code "22" or "34"). Not possible for pole-changing motors, naturally cooled 1PC1 motors, 8-pole motors and 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.
- 27) The Operating Instructions (Compact) are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WWW/view/en/10803948/133300>