

SIMOTICS GP/SD 1LE1 standard motors

Motors with IE1 Standard Efficiency

IE1

Please note
minimum legal
efficiencies
in the European
Economic Area!

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

Selection and ordering data

Operating values at rated power															Aluminum series 1LE1002		m _{IM B3}	J		
P _{rated} , 50 Hz/ P50	P _{rated} , 60 Hz/ P60 1)	Frame size	n _{ra} - ted, 50 Hz	T _{ra} - ted, 50 Hz	η _{ra} - ted, 50 Hz, 4/4	η _{ra} - ted, 50 Hz, 3/4	η _{ra} - ted, 50 Hz, 2/4	cos- φ _{rated} , 50 Hz, 4/4	I _{ra} - ted, 50 Hz, 400 V	T _{LR} / T _{ra} - ted, 50 Hz	I _{LR} / I _{ra} - ted, 50 Hz	T _B / T _{ra} - ted, 50 Hz	L _{pfA} , 50 Hz	L _{WA} , 50 Hz	Article No.					
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm ²			
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: 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⁾																				
0.18	0.21	63 M	2835	2.5	72.1	72.6	69.9	0.86	1.75	2.1	5.2	2.3	64	71	▲ 1LE1002-0BA2 ■-■■■■■	4	0.00018			
0.25	0.29	63 M	2840	3.7	75.0	75.7	73.4	0.86	2.45	2.5	5.7	2.5	64	71	▲ 1LE1002-0BA3 ■-■■■■■	4	0.00022			
0.37	0.43	71 M	2755	1.3	63.9	64.5	61.1	0.79	1.06	2.2	3.4	2.2	62	73	▲ 1LE1002-0CA2 ■-■■■■■	5	0.00029			
0.55	0.63	71 M	2750	1.9	69.0	69.9	66.5	0.79	1.46	2.2	3.7	2.2	62	73	▲ 1LE1002-0CA3 ■-■■■■■	6	0.00041			
0.75	0.86	80 M	2835	2.5	72.1	72.6	69.9	0.86	1.75	2.1	5.2	2.3	64	71	1LE1002-0DA2 ■-■■■■■	9	0.00079			
1.1	1.27	80 M	2840	3.7	75.0	75.7	73.4	0.86	2.45	2.5	5.7	2.5	64	71	1LE1002-0DA3 ■-■■■■■	12	0.0010			
1.5	1.75	90 S	2835	5.1	77.2	78.2	76.8	0.85	3.3	2.6	5.5	2.9	71	78	1LE1002-0EA0 ■-■■■■■	13	0.0014			
2.2	2.55	90 L	2855	7.4	79.7	80.9	81.3	0.85	4.7	2.8	6.5	3.2	71	78	1LE1002-0EA4 ■-■■■■■	14	0.0018			
3	3.45	100 L	2835	10	81.5	83.2	82.8	0.87	6.1	3.2	6.4	3.5	67	79	1LE1002-1AA4 ■-■■■■■	20	0.0034			
4	4.55	112 M	2935	13	83.1	83.0	80.8	0.85	8.2	3.3	8.3	4.2	69	81	1LE1002-1BA2 ■-■■■■■	25	0.0067			
5.5	6.3	132 S	2910	18	84.7	85.9	85.7	0.88	10.7	1.8	5.7	2.6	68	80	1LE1002-1CA0 ■-■■■■■	35	0.013			
7.5	8.6	132 S	2925	24	86.0	86.7	86.1	0.88	14.3	2.2	6.8	3.1	68	80	1LE1002-1CA1 ■-■■■■■	40	0.016			
11	12.6	160 M	2925	36	87.6	88.0	87.1	0.86	21.0	2.0	5.7	2.7	70	82	1LE1002-1DA2 ■-■■■■■	60	0.030			
15	17.3	160 M	2935	49	88.7	88.9	87.7	0.85	28.5	2.4	6.8	3.2	70	82	1LE1002-1DA3 ■-■■■■■	68	0.036			
18.5	21.3	160 L	2935	60	89.3	89.7	89.3	0.87	34.5	2.7	7.6	3.4	70	82	1LE1002-1DA4 ■-■■■■■	78	0.044			
22	24.5	180 M	2945	71	89.9	90.6	90.4	0.87	40.5	2.5	7.7	3.5	72	85	1LE1002-1EA2 ■-■■■■■	112	0.069			
30	33.5	200 L	2960	97	90.7	90.9	90.2	0.79	60	2.5	7.3	3.6	72	85	1LE1002-2AA4 ■-■■■■■	149	0.124			
37	41.5	200 L	2955	120	91.2	91.6	91.2	0.88	67	2.7	8.2	3.5	72	85	1LE1002-2AA5 ■-■■■■■	169	0.15			
Voltages													Version				Order code			
50 Hz 230 VΔ/400 VY			60 Hz ¹⁾ 460 VY			Standard			2		2				-					
50 Hz 400 VΔ/690 VY			60 Hz ¹⁾ 460 VΔ			Standard			3		4				-					
50 Hz 500 VY						Without additional charge			2		7				-					
50 Hz 500 VΔ						Without additional charge			4		0				-					
For other voltages ¹⁾ and more information, see from page 2/85													9		0		...			
Types of construction													Version				Order code			
Without flange			IM B3 ²⁾			Standard					A				-					
With flange			IM B5 ²⁾			With additional charge					F				-					
With flange			IM B14 ²⁾			With additional charge					K				-					
For other types of construction and more information, see from page 2/90																	...			
Motor protection													Version				Order code			
Without						Standard					A				-					
PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200)						With additional charge					B				-					
For other motor protection and more information, see from page 2/98																	...			
Terminal box position													Version						Order code(s)	
Terminal box at top						Standard							4							
For other terminal box positions and more information, see from page 2/100																				
Special versions																			Order code(s)	
Forced-air cooled motors w/o ext. fan/fan cover (IC 418)													1LE1002-.... ■-■■■■■		-Z		F90 +...+...+... .			
For options, see from page 2/102													1LE1002-.... ■-■■■■■		-Z		...+...+...+... .			

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

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) or 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. For orders with condensation drainage holes (H03), the type must be specified.



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Selection and ordering data

Operating values at rated power																Aluminum series 1LE1002		m _{IM B3}	J
P _{rated} , 50 Hz/ P50	P _{rated} , 60 Hz/ P60 1)	Frame size	n _{rated} , 50 Hz	T _{rated} , 50 Hz	η _{rated} , 50 Hz, 4/4	η _{rated} , 50 Hz, 3/4	η _{rated} , 50 Hz, 2/4	COS- φ _{rated} , 4/4	I _{rated} , 50 Hz, 400 V	T _{LR} / T _{rated} , 50 Hz	I _{LR} / I _{rated} , 50 Hz	T _B / T _{rated} , 50 Hz	L _{pfA} , 50 Hz	L _{WA} , 50 Hz	Article No.				
kW	kW	FS	rpm	Nm	%	%	%		A							▲ New	kg	kgm ²	
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: 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)																			
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz ¹⁾																			
0.12	0.14	63 M	1385	3.8	70.0	70.7	67.7	0.79	1.44	2.1	3.7	2.2	59	66	▲ 1LE1002-0BB2	4	0.00029		
0.18	0.21	63 M	1385	5.2	72.1	72.0	67.0	0.76	1.85	2.1	3.6	2.3	59	66	▲ 1LE1002-0BB3	4	0.00037		
0.25	0.29	71 M	1365	1.8	61.5	61.4	56.1	0.73	0.80	1.8	3.0	2.0	54	65	▲ 1LE1002-0CB2	5	0.00052		
0.37	0.43	71 M	1350	2.7	66.0	67.7	65.0	0.75	1.08	2.0	3.2	2.0	54	65	▲ 1LE1002-0CB3	6	0.00077		
0.55	0.63	80 M	1385	3.8	70.0	70.7	67.7	0.79	1.44	2.1	3.7	2.2	59	66	1LE1002-0DB2	9	0.0014		
0.75	0.86	80 M	1385	5.2	72.1	72.0	67.0	0.76	1.85	2.1	3.6	2.3	59	66	1LE1002-0DB3	11	0.0017		
1.1	1.27	90 S	1405	7.5	75.0	75.9	73.6	0.81	2.5	2.1	4.5	2.3	61	68	1LE1002-0EB0	12	0.0024		
1.5	1.75	90 L	1410	10	77.2	77.8	75.1	0.80	3.35	2.4	4.7	2.6	61	68	1LE1002-0EB4	15	0.0033		
2.2	2.55	100 L	1425	15	79.7	80.5	78.5	0.81	4.9	2.2	5.1	2.3	60	72	1LE1002-1AB4	18	0.0059		
3	3.45	100 L	1425	20	81.5	83.0	82.3	0.85	6.3	2.4	5.4	2.6	60	72	1LE1002-1AB5	22	0.0078		
4	4.55	112 M	1435	27	83.1	84.3	83.7	0.83	8.4	2.5	6.1	2.9	58	70	1LE1002-1BB2	27	0.010		
5.5	6.3	132 S	1450	36	84.7	85.7	84.9	0.82	11.2	2.3	5.7	2.7	64	76	1LE1002-1CB0	38	0.019		
7.5	8.6	132 M	1450	49	86.0	86.9	86.3	0.82	15.2	2.6	6.6	3.1	64	76	1LE1002-1CB2	44	0.024		
11	12.6	160 M	1460	72	87.6	87.9	86.7	0.81	22.5	2.7	6.9	3.3	65	77	1LE1002-1DB2	62	0.044		
15	17.3	160 L	1460	98	88.7	89.1	88.0	0.82	30.0	3.0	7.5	3.6	65	77	1LE1002-1DB4	73	0.056		
18.5	21.3	180 M	1468	120	89.3	90.2	90.2	0.85	35	2.2	7.3	3.1	63	76	1LE1002-1EB2	131	0.13		
22	25.3	180 L	1465	143	89.9	90.8	90.7	0.83	42.5	2.7	8	3.6	63	76	1LE1002-1EB4	132	0.13		
30	34.5	200 L	1472	195	90.7	91.5	91.4	0.83	58	2.3	6.9	3.1	64	78	1LE1002-2AB5	169	0.2		
Voltages											Version				Order code				
50 Hz 230 VΔ/400 VY			60 Hz ¹⁾ 460 VY			Standard			2 2			-							
50 Hz 400 VΔ/690 VY			60 Hz ¹⁾ 460 VΔ			Standard			3 4			-							
50 Hz 500 VY						Without additional charge			2 7			-							
50 Hz 500 VΔ						Without additional charge			4 0			-							
For other voltages ¹⁾ and more information, see from page 2/85											9 0			...					
Types of construction											Version				Order code				
Without flange			IM B3 ²⁾			Standard			A			-							
With flange			IM B5 ²⁾			With additional charge			F			-							
With flange			IM B14 ²⁾			With additional charge			K			-							
For other types of construction and more information, see from page 2/90														...					
Motor protection											Version				Order code				
Without						Standard			A			-							
PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200)						With additional charge			B			-							
For other motor protection and more information, see from page 2/98														...					
Terminal box position											Version				Order code				
Terminal box at top						Standard			4										
For other terminal box positions and more information, see from page 2/100																			
Special versions															Order code(s)				
Forced-air cooled motors w/o ext. fan/fan cover (IC 418)											1LE1002-....				-Z F90 +...+...+				
For options, see from page 2/102											1LE1002-....				-Z ...+...+...+				

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

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) or 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. For orders with condensation drainage holes (H03), the type must be specified.

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

Selection and ordering data

Operating values at rated power															Aluminum series 1LE1002		m _{IM} B3	J	
P _{rated} , 50 Hz/ P50	P _{rated} , 60 Hz/ P60 1)	Frame size	n _{ra-} ted, 50 Hz	T _{ra-} ted, 50 Hz	η _{ra-} ted, 50 Hz, 4/4	η _{ra-} ted, 50 Hz, 3/4	η _{ra-} ted, 50 Hz, 2/4	COS- φ _{rated} , 50 Hz, 4/4	I _{ra-} ted, 50 Hz, 400 V	T _{LR} / T _{ra-} ted, 50 Hz	I _{LR} / I _{ra-} ted, 50 Hz	T _B / T _{ra-} ted, 50 Hz	L _{ptA} , 50 Hz	L _{WA} , 50 Hz	Article No.				
kW	kW	FS	rpm	Nm	%	%	%		A							▲ New	kg	kgm ²	
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: 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)																			
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz ¹⁾																			
0.09	0.11	63 M	915	3.9	57.9	56.9	51.1	0.70	1.23	1.6	2.7	1.8	56	64	▲ 1LE1002-0BC2 ■■■■■■	4	0.00037		
0.18	0.21	71 M	800	2.2	45.5	44.4	38.3	0.67	0.84	1.9	2.0	2.0	51	62	▲ 1LE1002-0CC2 ■■■■■■	5	0.00055		
0.25	0.29	71 M	860	2.8	52.1	52.8	48.4	0.71	0.98	2.0	2.2	2.0	51	62	▲ 1LE1002-0CC3 ■■■■■■	6	0.00080		
0.37	0.43	80 M	915	3.9	57.9	56.9	51.1	0.70	1.23	1.6	2.7	1.8	56	64	1LE1002-0DC2 ■■■■■■	9	0.0014		
0.55	0.63	80 M	900	5.8	65.8	66.6	62.6	0.72	1.68	1.7	2.7	1.9	56	64	1LE1002-0DC3 ■■■■■■	12	0.0017		
0.75	0.86	90 S	940	7.6	70.0	70.0	66.0	0.67	2.30	2.0	3.8	2.2	59	70	1LE1002-0EC0 ■■■■■■	13	0.0033		
1.1	1.27	90 L	925	11	72.9	73.8	71.2	0.69	3.15	2.2	3.8	2.4	59	70	1LE1002-0EC4 ■■■■■■	15	0.004		
1.5	1.75	100 L	940	15	75.2	76.0	72.4	0.74	3.9	2.0	4.0	2.2	59	71	1LE1002-1AC4 ■■■■■■	19	0.0065		
2.2	2.55	112 M	940	22	77.7	78.5	76.3	0.72	5.7	2.6	4.6	2.7	57	69	1LE1002-1BC2 ■■■■■■	25	0.0092		
3	3.45	132 S	955	30	79.7	80.2	77.7	0.74	7.3	2.0	4.6	2.6	63	75	1LE1002-1CC0 ■■■■■■	34	0.017		
4	4.55	132 M	955	40	81.4	82.6	81.9	0.76	9.3	2.3	5.2	2.6	63	75	1LE1002-1CC2 ■■■■■■	39	0.021		
5.5	6.3	132 M	955	55	83.1	84.0	83.0	0.75	12.7	2.7	5.7	3.0	63	75	1LE1002-1CC3 ■■■■■■	48	0.027		
7.5	8.6	160 M	970	74	84.7	85.4	85.0	0.73	17.5	2.1	5.5	2.9	67	79	1LE1002-1DC2 ■■■■■■	72	0.056		
11	12.6	160 L	965	109	86.4	86.4	85.4	0.77	24	1.9	5.9	2.7	67	79	1LE1002-1DC4 ■■■■■■	92	0.078		
15	18	180 L	975	147	87.7	88.5	87.9	0.77	32	2.3	6.1	3	56	69	1LE1002-1EC4 ■■■■■■	119	0.17		
18.5	22	200 L	980	214	89.2	90	89.6	0.79	45	2.8	6.8	2.9	59	72	1LE1002-2AC4 ■■■■■■	149	0.25		
22	26.5	200 L	980	214	89.2	90	89.6	0.79	45	2.8	6.8	2.9	59	72	1LE1002-2AC5 ■■■■■■	166	0.3		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz ¹⁾																			
0.09	0.11	71 M	925	11	72.9	73.8	71.2	0.69	3.15	2.2	3.8	2.4	59	70	▲ 1LE1002-0CD2 ■■■■■■	6	0.00080		
0.12	0.14	71 M	925	11	72.9	73.8	71.2	0.69	3.15	2.2	3.8	2.4	59	70	▲ 1LE1002-0CD3 ■■■■■■	6	0.00080		
0.75	0.86	100 L	705	10	61.2	58.1	50.5	0.62	2.85	1.9	3	2.2	60	72	1LE1002-1AD4 ■■■■■■	17	0.0056		
1.1	1.27	100 L	690	15	66.5	66.0	61.8	0.61	3.90	2.0	3.2	2.3	60	72	1LE1002-1AD5 ■■■■■■	22	0.0078		
1.5	1.75	112 M	700	20	70.2	71.1	68.7	0.66	4.65	1.9	3.5	2.1	63	75	1LE1002-1BD2 ■■■■■■	29	0.0094		
2.2	2.55	132 S	715	29	74.2	74.1	71.4	0.66	6.5	1.7	3.9	2.4	63	75	1LE1002-1CD0 ■■■■■■	37	0.019		
3	3.45	132 M	715	40	77.0	77.4	75.2	0.68	8.3	1.8	3.9	2.2	63	75	1LE1002-1CD2 ■■■■■■	44	0.024		
4	4.55	160 M	720	53	79.2	79.3	76.3	0.67	10.9	1.6	4.1	2.3	63	75	1LE1002-1DD2 ■■■■■■	60	0.044		
5.5	6.3	160 M	720	73	81.4	81.9	80.3	0.68	14.3	1.6	4	2.2	63	75	1LE1002-1DD3 ■■■■■■	72	0.056		
7.5	8.6	160 L	715	100	83.1	83.7	82.4	0.69	18.9	1.7	3.8	2.2	63	75	1LE1002-1DD4 ■■■■■■	91	0.077		
11	13.2	180 L	720	146	85	86.2	86	0.7	26.5	1.9	5	2.5	65	78	1LE1002-1ED4 ■■■■■■	122	0.2		
15	18	200 L	718	199	86.2	87.9	88.4	0.75	33.5	2.5	5.5	2.9	55	69	1LE1002-2AD5 ■■■■■■	170	0.3		
Voltages															Version		Order code		
50 Hz 230 VΔ/400 VY															Standard		2	2	—
50 Hz 400 VΔ/690 VY															Standard		3	4	—
50 Hz 500 VY															Without additional charge		2	7	—
50 Hz 500 VΔ															Without additional charge		4	0	—
For other voltages ¹⁾ and more information, see from page 2/85																	9	0	...
Types of construction															Version		Order code		
Without flange															IM B3 ²⁾		A		—
With flange															IM B5 ²⁾		F		—
With flange															IM B14 ²⁾		K		—
For other types of construction and more information, see from page 2/90																			...
Motor protection															Version		Order code		
Without															Standard		A		—
PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200)															With additional charge		B		—
For other motor protection and more information, see from page 2/98																			...
Terminal box position															Version		Order code(s)		
Terminal box at top															Standard		4		—
For other terminal box positions and more information, see from page 2/100																			...
Special versions																	Order code(s)		
Forced-air cooled motors w/o ext. fan/fan cover (IC 418)															1LE1002-.... ■■■■■■		-Z F90 +...+...+...		
For options, see from page 2/102															1LE1002-.... ■■■■■■		-Z ...+...+...+...		

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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) or 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. For orders with condensation drainage holes (H03), the type must be specified.



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Motors with IE1 Standard Efficiency

Self-ventilated motors · Aluminum series 1LE1002 with increased power

Selection and ordering data

Operating values at rated power															Aluminum series 1LE1002		<i>m</i> _{IM B3}	<i>J</i>		
<i>P</i> _{rated} , 50 Hz/ P50	<i>P</i> _{rated} , 60 Hz/ P60 1)	Frame size	<i>n</i> _{ra} - ted, 50 Hz	<i>T</i> _{ra} - ted, 50 Hz	<i>η</i> _{ra} - ted, 50 Hz, 4/4	<i>η</i> _{ra} - ted, 50 Hz, 3/4	<i>η</i> _{ra} - ted, 50 Hz, 2/4	COS- <i>φ</i> _{rated} , 50 Hz, 4/4	<i>I</i> _{ra} - ted, 50 Hz, 400 V	<i>T</i> _{LR} / <i>T</i> _{ra} - ted, 50 Hz	<i>I</i> _{LR} / <i>I</i> _{ra} - ted, 50 Hz	<i>T</i> _B / <i>T</i> _{ra} - ted, 50 Hz	<i>L</i> _{ptA} , 50 Hz	<i>L</i> _{WA} , 50 Hz	Article No.					
kW	kW	FS	rpm	Nm	%	%	%		A							dB(A)	dB(A) ▲	New	kg	kgm ²
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: IE1 Standard Efficiency, (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⁾																				
0.37	0.43	63 M	2835	2.5	72.1	72.6	69.9	0.86	1.75	2.1	5.2	2.3	64	71		▲ 1LE1002-0BA6 ■■■■			5	0.00018
0.75	0.86	71 M	2755	1.3	63.9	64.5	61.1	0.79	1.06	2.2	3.4	2.2	62	73		▲ 1LE1002-0CA6 ■■■■			5	0.00029
4	4.55	100 L	2850	13	83.1	83.9	83	0.85	8.2	4.5	7	4.1	67	79		1LE1002-1AA6 ■■■■			25	0.0044
5.5	6.3	112 M	2935	18	84.7	84.7	82.7	0.86	10.9	2.9	7.5	3.8	69	81		1LE1002-1BA6 ■■■■			31	0.0085
11	12.6	132 M	2920	36	87.6	88.3	87.8	0.9	20	2.8	7.5	3.7	68	80		1LE1002-1CA6 ■■■■			53	0.022
22	24.5	160 L	2935	72	89.9	90.2	89.5	0.9	39	2.6	7.5	3.4	70	82		1LE1002-1DA6 ■■■■			85	0.049
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz ¹⁾																				
0.25	0.29	63 M	1385	3.8	70.0	70.7	67.7	0.79	1.44	2.1	3.7	2.2	59	66		▲ 1LE1002-0BB6 ■■■■			5	0.00029
0.55	0.63	71 M	1350	2.7	66.0	67.7	65.0	0.75	1.08	2.0	3.2	2.0	54	65		▲ 1LE1002-0CB6 ■■■■			7	0.00077
4	4.55	100 L	1435	27	83.1	83.8	82.3	0.81	8.6	2.9	5.8	3.1	60	72		1LE1002-1AB6 ■■■■			27	0.010
5.5	6.3	112 M	1420	37	84.7	85.9	85.3	0.81	11.6	3	5.8	3.1	58	70		1LE1002-1BB6 ■■■■			33	0.012
11	12.6	132 M	1450	72	87.6	88.2	87.6	0.84	21.5	2.5	7.2	3	64	76		1LE1002-1CB6 ■■■■			58	0.033
18.5	21.3	160 L	1460	121	89.3	89.8	89.2	0.85	35	2.7	7.2	3.2	65	77		1LE1002-1DB6 ■■■■			85	0.068
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz ¹⁾																				
2.2	2.55	100 L	930	23	77.7	79.5	78.1	0.78	5.2	2	4	2.2	59	71		1LE1002-1AC6 ■■■■			24	0.0084
3	3.45	112 M	945	30	79.7	79.5	76.3	0.72	7.5	2.9	4.6	3	57	69		1LE1002-1BC6 ■■■■			32	0.013
7.5	8.6	132 M	950	75	84.7	85.3	84.1	0.74	17.3	2.4	5.3	3	63	75		1LE1002-1CC6 ■■■■			54	0.032
15	17.3	160 L	965	148	87.7	87.9	86.5	0.75	33	2.9	6	3.4	67	79		1LE1002-1DC6 ■■■■			109	0.094
Voltages															Version			</		

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

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**) or 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. For orders with condensation drainage holes (**H03**), the type must be specified.

SIMOTICS GP/SD 1LE1 standard motors

Motors with IE1 Standard Efficiency

IE1

Please note
minimum legal
efficiencies
in the European
Economic Area!

Self-ventilated or forced-air cooled motors · Cast-iron series 1LE1502 Basic Line

Selection and ordering data

Operating values at rated power														Cast-iron series 1LE1502 – Basic Line		m _{IM} B3	J
P _{rated} , 50 Hz/ P50	P _{rated} , 60 Hz/ P60 1)	Frame size	η _{ra-} ted, 50 Hz	T _{ra-} ted, 50 Hz	η _{ra-} ted, 50 Hz, 4/4	η _{ra-} ted, 50 Hz, 3/4	η _{ra-} ted, 50 Hz, 2/4	COS- φ _{rated} , 50 Hz, 4/4	I _{ra-} ted, 50 Hz, 400 V	T _{LR} / T _{ra-} ted, 50 Hz	I _{LR} / I _{ra-} ted, 50 Hz	T _B / T _{ra-} ted, 50 Hz	L _{pfA} , 50 Hz	L _{WA} , 50 Hz	Article No.		
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm ²
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: 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	81.5	83.2	82.8	0.87	6.1	3.2	6.4	3.5	66	80	1LE1502-1AA4■-■■■■■	31	0.0034
4	4.55	112 M	2935	13	83.1	83.0	80.8	0.85	8.2	3.3	8.3	4.2	70	83	1LE1502-1BA2■-■■■■■	36	0.0067
5.5	6.3	132 S	2910	18	84.7	85.9	85.7	0.88	10.7	1.8	5.7	2.6	68	82	1LE1502-1CA0■-■■■■■	53	0.013
7.5	8.6	132 S	2925	24	86.0	86.7	86.1	0.88	14.3	2.2	6.8	3.1	68	82	1LE1502-1CA1■-■■■■■	58	0.016
11	12.6	160 M	2925	36	87.6	88.0	87.1	0.86	21.0	2.0	5.7	2.7	73	86	1LE1502-1DA2■-■■■■■	87	0.030
15	18	160 M	2935	49	88.7	88.9	87.7	0.85	28.5	2.4	6.8	3.2	73	86	1LE1502-1DA3■-■■■■■	95	0.036
18.5	22	160 L	2935	60	89.3	89.7	89.3	0.87	34.5	2.7	7.6	3.4	73	86	1LE1502-1DA4■-■■■■■	105	0.044
22	24.5	180 M	2945	71	89.9	90.6	90.4	0.87	40.5	2.5	7.7	3.5	72	85	1LE1502-1EA2■-■■■■■	150	0.069
30	33.5	200 L	2960	97	90.7	90.9	90.2	0.79	60	2.5	7.3	3.6	72	85	1LE1502-2AA4■-■■■■■	195	0.124
37	41.5	200 L	2955	120	91.2	91.6	91.2	0.88	67	2.7	8.2	3.5	72	85	1LE1502-2AA5■-■■■■■	230	0.15
45	51	225 M	2960	145	91.7	92	91.6	0.88	80	2.3	6.7	3	73	86	1LE1502-2BA2■-■■■■■	280	0.22
55	62	250 M	2970	177	92.1	92.3	91.4	0.88	98	2	6.7	2.9	77	91	1LE1502-2CA2■-■■■■■	360	0.4
75	84	280 S	2975	241	92.7	92.5	91.3	0.86	136	2.2	6.8	3	78	92	1LE1502-2DA0■-■■■■■	470	0.72
90	101	280 M	2975	289	93	93.1	92.4	0.88	159	2.5	7.1	3.1	76	89	1LE1502-2DA2■-■■■■■	530	0.83
110	123	315 S	2982	352	93.3	92.9	91.5	0.86	198	2.3	7.5	3.3	80	94	1LE1502-3AA0■-■■■■■	680	1.2
132	148	315 M	2982	423	93.5	93.2	92.5	0.89	230	2.3	7.6	3	80	94	1LE1502-3AA2■-■■■■■	740	1.4
160	180	315 L	2982	512	93.8	93.6	93.1	0.91	270	2.3	7.4	2.9	80	94	1LE1502-3AA4■-■■■■■	880	1.6
200	224	315 L	2982	640	94	93.9	93.5	0.92	335	2.2	7.1	2.8	80	94	1LE1502-3AA5■-■■■■■	1000	2.1
Voltages ²⁾												Version			Order code		
50 Hz 230 VΔ/400 VY			60 Hz ¹⁾ 460 VY			Standard			2 2			–					
50 Hz 400 VΔ/690 VY			60 Hz ¹⁾ 460 VΔ			Standard			3 4			–					
50 Hz 500 VY						Without additional charge			2 7			–					
50 Hz 500 VΔ						Without additional charge			4 0			–					
For other voltages ¹⁾ and more information, see from page 2/88												9 0			...		
Types of construction												Version			Order code		
Without flange			IM B3 ³⁾			Standard			A			–					
With flange			IM B5 ³⁾			With additional charge			F			–					
With flange			IM B14 ³⁾			With additional charge			K			–					
For other types of construction and more information, see from page 2/94															...		
Motor protection												Version			Order code		
Without						Standard			A			–					
PTC thermistor with 3 temperature sensors						With additional charge			B			–					
For other motor protection and more information, see from page 2/99															...		
Terminal box position												Version			Order code(s)		
Terminal box at top						Standard			4								
For other terminal box positions and more information, see from page 2/101																	
Special versions																	
Forced-air cooled motors w/o ext. fan/fan cover (IC 418)												1LE1502- ... ■-■■■■■			-Z F90 +...+...+...		
For options, see from page 2/109												1LE1502- ... ■-■■■■■			-Z ...+...+...+...		

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

²⁾ Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

³⁾ 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 requirement exists for 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. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.



IE1

SIMOTICS GP/SD 1LE1 standard motors

Motors with IE1 Standard Efficiency

Self-ventilated or forced-air cooled motors · Cast-iron series 1LE1502 Basic Line

Selection and ordering data

Operating values at rated power															Cast-iron series		m _{IM B3}	J	
P _{rated} , 50 Hz/ P50	P _{rated} , 60 Hz/ P60	Frame size	n _{ra} - ted, 50 Hz	T _{ra} - ted, 50 Hz	η _{ra} - ted, 50 Hz, 4/4	η _{ra} - ted, 50 Hz, 3/4	η _{ra} - ted, 50 Hz, 2/4	COS- φ _{rated} , 50 Hz, 4/4	I _{ra} - ted, 50 Hz, 400 V	T _{LR} / T _{ra} - ted, 50 Hz	I _{LR} / I _{ra} - ted, 50 Hz	T _B / T _{ra} - ted, 50 Hz	L _{pfA} , 50 Hz	L _{WA} , 50 Hz	Article No.				
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm ²		
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: 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)																			
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz ¹⁾																			
2.2	2.55	100 L	1425	15	79.7	80.3	78.1	0.81	4.9	2.3	5.1	2.7	60	72	1LE1502-1AB4■-■■■■■	29	0.0059		
3	3.45	100 L	1425	20	81.5	82.6	81.5	0.85	6.3	2.4	5.4	2.6	60	72	1LE1502-1AB5■-■■■■■	33	0.0078		
4	4.55	112 M	1435	27	83.1	84.3	83.7	0.83	8.4	2.5	6.1	2.9	57	70	1LE1502-1BB2■-■■■■■	38	0.010		
5.5	56.3	132 S	1450	36	84.7	85.3	84.2	0.82	11.4	2.3	5.7	2.7	64	76	1LE1502-1CB0■-■■■■■	56	0.019		
7.5	8.6	132 M	1450	49	86.0	86.5	85.4	0.82	15.4	2.6	6.6	3.1	64	76	1LE1502-1CB2■-■■■■■	59	0.024		
11	12.6	160 M	1460	72	87.6	87.9	86.7	0.81	22.5	2.7	6.9	3.3	70	82	1LE1502-1DB2■-■■■■■	89	0.044		
15	17.3	160 L	1460	98	88.7	89.1	88.0	0.82	30.0	3.0	7.5	3.6	70	82	1LE1502-1DB4■-■■■■■	105	0.056		
18.5	21.3	180 M	1468	120	89.3	90.2	90.2	0.85	35	2.2	7.3	3.1	63	76	1LE1502-1EB2■-■■■■■	170	0.13		
22	25.3	180 L	1465	143	89.9	90.8	90.7	0.83	42.5	2.7	8	3.6	63	76	1LE1502-1EB4■-■■■■■	170	0.13		
30	34.5	200 L	1472	195	90.7	91.5	91.4	0.83	58	2.3	6.9	3.1	64	78	1LE1502-2AB5■-■■■■■	220	0.2		
37	42.5	225 S	1475	240	91.2	91.6	91.1	0.85	69	2.3	7	3.2	69	83	1LE1502-2BB0■-■■■■■	260	0.37		
45	52	225 M	1475	291	91.7	92.1	91.7	0.86	82	2.6	7.2	3.2	69	82	1LE1502-2BB2■-■■■■■	290	0.45		
55	63	250 M	1475	356	92.1	92.5	92.1	0.85	101	2.4	6.1	2.6	69	83	1LE1502-2CB2■-■■■■■	370	0.69		
75	86	280 S	1485	482	92.7	92.9	92.2	0.85	137	2.3	7	2.8	75	89	1LE1502-2DB0■-■■■■■	500	1.2		
90	104	280 M	1482	580	93	93.4	93.1	0.87	161	2.2	6.5	2.8	73	87	1LE1502-2DB2■-■■■■■	560	1.4		
110	127	315 S	1488	706	93.3	93.4	92.8	0.84	205	2.3	6.5	2.7	76	90	1LE1502-3AB0■-■■■■■	690	1.9		
132	152	315 M	1488	847	93.5	93.7	93.3	0.85	240	2.5	6.8	2.7	76	91	1LE1502-3AB2■-■■■■■	760	2.2		
160	184	315 L	1486	1028	93.8	93.9	93.5	0.86	285	2.7	7.2	2.7	76	90	1LE1502-3AB4■-■■■■■	940	2.9		
200	230	315 L	1486	1285	94	94.2	94	0.87	355	2.5	6.9	2.7	76	91	1LE1502-3AB5■-■■■■■	1140	3.5		
Voltages ²⁾												Version				Order code			
50 Hz 230 VΔ/400 VY												Standard		2 2		—			
50 Hz 400 VΔ/690 VY												Standard		3 4		—			
50 Hz 500 VY												Without additional charge		2 7		—			
50 Hz 500 VΔ												Without additional charge		4 0		—			
For other voltages ¹⁾ and more information, see from page 2/88														9 0		...			
Types of construction												Version				Order code			
Without flange												IM B3 ³⁾		Standard		A		—	
With flange												IM B5 ³⁾		With additional charge		F		—	
With flange												IM B14 ³⁾		With additional charge		K		—	
For other types of construction and more information, see from page 2/94														■		...			
Motor protection												Version				Order code			
Without												Standard		A		—			
PTC thermistor with 3 temperature sensors												With additional charge		B		—			
For other motor protection and more information, see from page 2/99														■		...			
Terminal box position												Version				Order code(s)			
Terminal box at top												Standard		4					
For other terminal box positions and more information, see from page 2/101														■					
Special versions																Order code(s)			
Forced-air cooled motors w/o ext. fan/fan cover (IC 418)												1LE1502- ■-■■■■■		-Z		F90 +...+...+...+			
For options, see from page 2/109												1LE1502- ■-■■■■■		-Z		...+...+...+...+			

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

²⁾ Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

³⁾ 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 requirement exists for 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. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

SIMOTICS GP/SD 1LE1 standard motors

Motors with IE1 Standard Efficiency

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Self-ventilated or forced-air cooled motors · Cast-iron series 1LE1502 Basic Line

Selection and ordering data

Operating values at rated power														Cast-iron series 1LE1502 – Basic Line		m _{IM} B3	J		
P _{rated} , 50 Hz/ P50	P _{rated} , 60 Hz/ P60	Frame size	η _{ra-} ted, 50 Hz	T _{ra-} ted, 50 Hz	η _{ra-} ted, 50 Hz, 4/4	η _{ra-} ted, 50 Hz, 3/4	η _{ra-} ted, 50 Hz, 2/4	cos- φ _{rated} , 50 Hz, 4/4	I _{ra-} ted, 50 Hz, 400 V	T _{LR} / T _{ra-} ted, 50 Hz	I _{LR} / I _{ra-} ted, 50 Hz	T _B / T _{ra-} ted, 50 Hz	L _{pfA} , 50 Hz	L _{WA} , 50 Hz	Article No.				
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm ²		
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: 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)																			
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz ¹⁾																			
1.5	1.75	100 L	940	15	75.2	75.6	72.3	0.74	3.9	2	4	2.2	59	71	1LE1502-1AC4■-■■■■■	30	0.0065		
2.2	2.55	112 M	940	22	77.7	78.5	76.3	0.72	5.7	2.6	4.6	2.7	59	71	1LE1502-1BC2■-■■■■■	37	0.0092		
3	3.45	132 S	955	30	79.7	79.9	77.1	0.74	7.3	2	4.6	2.6	65	78	1LE1502-1CC0■-■■■■■	52	0.017		
4	4.55	132 M	955	40	81.4	82.6	81.9	0.76	9.3	2.3	5.2	2.6	65	78	1LE1502-1CC2■-■■■■■	57	0.021		
5.5	6.3	132 M	955	55	83.1	84.0	83.0	0.75	12.7	2.7	5.7	3.0	65	78	1LE1502-1CC3■-■■■■■	66	0.027		
7.5	8.6	160 M	970	74	84.7	85.4	85.0	0.73	17.5	2.1	5.5	2.9	67	79	1LE1502-1DC2■-■■■■■	100	0.056		
11	12.6	160 L	965	109	86.4	86.8	85.9	0.77	24	1.9	5.9	2.7	67	79	1LE1502-1DC4■-■■■■■	120	0.078		
15	18	180 L	975	147	87.7	88.5	87.9	0.77	32	2.3	6.1	3	56	69	1LE1502-1EC4■-■■■■■	155	0.17		
18.5	22	200 L	978	181	88.6	89.8	89.8	0.79	38	2.5	6.3	2.6	59	72	1LE1502-2AC4■-■■■■■	200	0.25		
22	26.5	200 L	980	214	89.2	90	89.6	0.79	45	2.8	6.8	2.9	59	72	1LE1502-2AC5■-■■■■■	220	0.3		
30	36	225 M	978	293	90.2	91	90.7	0.82	59	2.7	6	2.5	65	77	1LE1502-2BC2■-■■■■■	270	0.49		
37	44.5	250 M	980	361	90.8	91.5	91.3	0.82	72	2.7	6	2.4	63	77	1LE1502-2CC2■-■■■■■	330	0.76		
45	54	280 S	986	436	91.4	92	91.6	0.84	85	2.6	7	2.6	63	77	1LE1502-2DC0■-■■■■■	440	1.1		
55	66	280 M	986	533	91.9	92.5	92.6	0.85	102	2.6	6.7	2.6	63	77	1LE1502-2DC2■-■■■■■	500	1.3		
75	90	315 S	988	725	92.6	92.8	92.1	0.83	141	2.5	7.1	2.7	62	77	1LE1502-3AC0■-■■■■■	660	2.1		
90	108	315 M	988	870	92.9	93.2	92.8	0.83	168	2.6	7.3	2.6	61	77	1LE1502-3AC2■-■■■■■	740	2.5		
110	132	315 L	988	1063	93.3	93.6	93.4	0.86	198	2.6	6.8	2.8	61	78	1LE1502-3AC4■-■■■■■	880	3.2		
132	158	315 L	988	1276	93.5	93.7	93.4	0.86	235	3	7.5	2.9	61	78	1LE1502-3AC5■-■■■■■	1030	4		
160	192	315 L	988	1546	93.8	93.9	93.6	0.86	285	3.1	7.7	3	64	79	1LE1502-3AC6■-■■■■■	1160	4.7		
Voltages ²⁾										Version				Order code					
50 Hz 230 VΔ/400 VY										Standard				2	2	–			
50 Hz 400 VΔ/690 VY										Standard				3	4	–			
50 Hz 500 VY										Without additional charge				2	7	–			
50 Hz 500 VΔ										Without additional charge				4	0	–			
For other voltages ¹⁾ and more information, see from page 2/88														9	0	...			
Types of construction										Version				Order code					
Without flange										Standard				A	–				
With flange										With additional charge				F	–				
With flange										With additional charge				K	–				
For other types of construction and more information, see from page 2/94														■	...				
Motor protection										Version				Order code					
Without										Standard				A	–				
PTC thermistor with 3 temperature sensors										With additional charge				B	–				
For other motor protection and more information, see from page 2/99														■	...				
Terminal box position										Version				Order code					
Terminal box at top										Standard				4	–				
For other terminal box positions and more information, see from page 2/101														■					
Special versions														Order code(s)					
Forced-air cooled motors w/o ext. fan/fan cover (IC 418)														1LE1502- ... ■-■■■■■	-Z	F90 +. . . +. . .			
For options, see from page 2/109														1LE1502- ... ■-■■■■■	-Z	... +. . . +. . .			

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

²⁾ Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

³⁾ 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 requirement exists for 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. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.



IE1

SIMOTICS GP/SD 1LE1 standard motors

Motors with IE1 Standard Efficiency

Self-ventilated or forced-air cooled motors · Cast-iron series 1LE1502 Basic Line

Selection and ordering data

Operating values at rated power															Cast-iron series		m _{IM} B3	J
P _{rated} , 50 Hz/ P50	P _{rated} , 60 Hz/ P60	Frame size	n _{rated} , 50 Hz	T _{rated} , 50 Hz	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} / T _{rated} , 50 Hz	I _{LR} / I _{rated} , 50 Hz	T _B / T _{rated} , 50 Hz	L _{ptA} , 50 Hz	L _{WA} , 50 Hz	Article No.			
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm ²	
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: 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)																		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz ¹⁾																		
0.75	0.86	100 L	705	10	61.2	58.1	50.5	0.62	2.85	1.9	3	2.2	64	72 ⁴⁾	1LE1502-1AD4	28	0.0056	
1.1	1.27	100 L	690	15	66.5	66.0	61.8	0.61	3.90	2.0	3.2	2.3	64	72 ⁴⁾	1LE1502-1AD5	33	0.0078	
1.5	1.75	112 M	700	20	70.2	71.1	68.7	0.66	4.65	1.9	3.5	2.1	67	78 ⁴⁾	1LE1502-1BD2	42	0.0094	
2.2	2.55	132 S	715	29	74.2	74.1	71.4	0.66	6.5	1.7	3.9	2.4	63	75	1LE1502-1CD0	60	0.019	
3	3.45	132 M	715	40	77	77.4	75.2	0.68	8.3	1.8	3.9	2.2	63	75	1LE1502-1CD2	62	0.024	
4	4.55	160 M	720	53	79.2	79.3	76.3	0.67	10.9	1.6	4.1	2.3	63	75	1LE1502-1DD2	89	0.044	
5.5	6.3	160 M	720	73	81.4	81.9	80.3	0.68	14.3	1.6	4	2.2	63	75	1LE1502-1DD3	96	0.056	
7.5	8.6	160 L	715	100	83.1	83.7	82.4	0.69	18.9	1.7	3.8	2.2	63	75	1LE1502-1DD4	120	0.077	
11	13.2	180 L	720	146	85	86.2	86	0.7	26.5	1.9	5	2.5	65	78	1LE1502-1ED4	160	0.20	
15	18	200 L	718	199	86.2	87.9	88.4	0.75	33.5	2.5	5.5	2.9	55	69	1LE1502-2AD5	220	0.3	
18.5	22	225 S	730	242	86.9	87.8	87.4	0.78	39.5	2.2	5.5	2.7	59	72	1LE1502-2BD0	250	0.43	
22	26.5	225 M	730	288	87.4	88.3	88.1	0.79	46	2.3	5.5	2.7	60	73	1LE1502-2BD2	270	0.5	
30	36	250 M	732	391	88.3	89.2	89.2	0.81	61	2.3	5.5	2.6	54	68	1LE1502-2CD2	370	0.84	
37	44.5	280 S	735	481	88.8	89.7	89.7	0.81	74	2.1	5	2.1	54	68	1LE1502-2DD0	460	1.22	
45	54	280 M	735	585	89.2	90.3	90.4	0.81	90	2.1	5.3	2.1	58	71	1LE1502-2DD2	500	1.42	
55	66	315 S	740	710	89.7	90.1	89.7	0.8	111	2.1	5.7	2.6	69	83	1LE1502-3AD0	640	2	
75	90	315 M	738	970	90.3	90.7	90.5	0.81	148	2.3	5.9	2.7	69	84	1LE1502-3AD2	720	2.5	
90	108	315 L	738	1165	90.7	91.2	91.2	0.84	171	2.2	5.9	2.6	68	83	1LE1502-3AD4	840	3.1	
110	132	315 L	740	1419	91.1	91.6	91.5	0.82	215	2.7	6.7	2.9	73	87	1LE1502-3AD5	1000	3.9	
132	158	315 L	740	1703	91.5	91.9	91.6	0.81	255	2.9	7.2	3.3	75	89	1LE1502-3AD6	1080	4.5	
Voltages ²⁾													Version				Order code	
50 Hz 230 VΔ/400 VY				60 Hz ¹⁾ 460 VY				Standard				2	2	-				
50 Hz 400 VΔ/690 VY				60 Hz ¹⁾ 460 VΔ				Standard				3	4	-				
50 Hz 500 VY								Without additional charge				2	7	-				
50 Hz 500 VΔ								Without additional charge				4	0	-				
For other voltages ¹⁾ and more information, see from page 2/88													9		0		...	
Types of construction													Version				Order code	
Without flange				IM B3 ³⁾				Standard				A		-				
With flange				IM B5 ³⁾				With additional charge				F		-				
With flange				IM B14 ³⁾				With additional charge				K		-				
For other types of construction and more information, see from page 2/94																	...	
Motor protection													Version				Order code	
Without								Standard				A		-				
PTC thermistor with 3 temperature sensors								With additional charge				B		-				
For other motor protection and more information, see from page 2/99																	...	
Terminal box position													Version				Order code	
Terminal box at top								Standard					4					
For other terminal box positions and more information, see from page 2/101																		
Special versions																	Order code(s)	
Forced-air cooled motors w/o ext. fan/fan cover (IC 418)															1LE1502- -Z		F90 +.+.+.+.+	
For options, see from page 2/109															1LE1502- -Z		+.+.+.+.+.+	

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

²⁾ Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

³⁾ 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 requirement exists for 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. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

⁴⁾ The noise limit values specified as permissible in IEC 60034-9 under load can be exceeded.

SIMOTICS GP/SD 1LE1 standard motors

Motors with IE1 Standard Efficiency

IE1

Please note
minimum legal
efficiencies
in the European
Economic Area!

Self-ventilated or forced-air cooled motors · Cast-iron series 1LE1502 Basic Line with increased power

Selection and ordering data

Operating values at rated power															Cast-iron series 1LE1502 – Basic Line		m _{IM} B3	J	
P _{rated} , 50 Hz/ P50	P _{rated} , 60 Hz/ P60 1)	Frame size	n _{ra-} ted, 50 Hz	T _{ra-} ted, 50 Hz	η _{ra-} ted, 50 Hz, 4/4	η _{ra-} ted, 50 Hz, 3/4	η _{ra-} ted, 50 Hz, 2/4	cos- φ _{rated} , 50 Hz, 4/4	I _{ra-} ted, 50 Hz, 400 V	T _{LR} / T _{ra-} ted, 50 Hz	I _{LR} / I _{ra-} ted, 50 Hz	T _B / T _{ra-} ted, 50 Hz	L _{ptA} , 50 Hz	L _{WA} , 50 Hz	Article No.				
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm ²		
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: 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 155 (temperature class F)																			
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz ¹⁾																			
4	4.6	100 L	2850	13	83.1	83.9	83	0.85	8.2	4.5	7	4.1	67	79	1LE1502-1AA6	33	0.0044		
5.5	6.3	112 M	2935	18	84.7	84.7	82.7	0.86	10.9	2.9	7.5	3.8	69	81	1LE1502-1BA6	40	0.0085		
11	12.6	132 M	2920	36	87.6	88.3	87.8	0.9	20	2.8	7.5	3.7	68	80	1LE1502-1CA6	76	0.022		
22	24.5	160 L	2935	72	89.9	90.2	89.5	0.9	39	2.6	7.5	3.4	70	82	1LE1502-1DA6	125	0.049		
30	33.5	180 L	2940	97	90.7	91.5	91.5	0.89	54	2.4	8.1	3.5	72	85	1LE1502-1EA6	180	0.094		
45	51	200 L	2955	145	91.7	92.3	92.4	0.85	83	2.5	8.1	3.6	71	85	1LE1502-2AA6	245	0.176		
55	62	225 M	2960	177	92.1	92.4	92	0.88	98	2.5	7.3	3.2	76	89	1LE1502-2BA6	330	0.27		
75	84	250 M	2970	241	92.7	92.8	92.1	0.87	134	2.4	7.3	3.1	76	89	1LE1502-2CA6	420	0.48		
110	123	280 M	2975	353	93.3	93.5	93.1	0.9	189	2.4	7.3	3.1	77	90	1LE1502-2DA6	620	1		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz ¹⁾																			
4	4.6	100 L	1435	27	83.1	83.8	82.3	0.81	8.6	2.9	5.8	3.1	60	72	1LE1502-1AB6	36	0.01		
5.5	6.3	112 M	1420	37	84.7	85.9	85.3	0.81	11.6	3	5.8	3.1	58	70	1LE1502-1BB6	43	0.012		
11	12.6	132 M	1450	72	87.6	88.2	87.6	0.84	21.5	2.5	7.2	3	64	76	1LE1502-1CB6	76	0.033		
18.5	21.3	160 L	1460	121	89.3	89.8	89.2	0.85	35	2.7	7.2	3.2	65	77	1LE1502-1DB6	125	0.068		
30	34.5	180 L	1465	196	90.7	91.7	91.9	0.79	60	2.6	7.2	3.4	64	77	1LE1502-1EB6	185	0.159		
37	42.5	200 L	1470	240	91.2	92	92.1	0.82	71	2.4	6.8	2.9	64	78	1LE1502-2AB6	240	0.246		
55	63	225 M	1475	356	92.1	92.8	92.6	0.86	100	2.5	6.7	2.6	70	83	1LE1502-2BB6	320	0.49		
75	86	250 M	1482	483	92.7	93.1	92.6	0.84	139	2.5	7.4	3	73	87	1LE1502-2CB6	440	0.86		
110	127	280 M	1486	707	93.3	93.5	93	0.85	200	2.6	8	3.3	75	89	1LE1502-2DB6	670	1.7		
Voltages ²⁾															Version		Order code		
50 Hz 230 VΔ/400 VY			60 Hz ¹⁾ 460 VY			Standard			2 2			–							
50 Hz 400 VΔ/690 VY			60 Hz ¹⁾ 460 VΔ			Standard			3 4			–							
50 Hz 500 VY						Without additional charge			2 7			–							
50 Hz 500 VΔ						Without additional charge			4 0			–							
For other voltages ¹⁾ and more information, see from page 2/88															9 0		...		
Types of construction															Version		Order code		
Without flange			IM B3 ³⁾			Standard			A			–							
With flange			IM B5 ³⁾			With additional charge			F			–							
With flange			IM B14 ³⁾			With additional charge			K			–							
For other types of construction and more information, see from page 2/94																	...		
Motor protection															Version		Order code		
Without						Standard			A			–							
PTC thermistor with 3 temperature sensors						With additional charge			B			–							
For other motor protection and more information, see from page 2/99																	...		
Terminal box position															Version		Order code(s)		
Terminal box at top						Standard			4										
For other terminal box positions and more information, see from page 2/101																			
Special versions																	Order code(s)		
Forced-air cooled motors w/o ext. fan/fan cover (IC 418)															1LE1502- ... -Z F90 +...+...+...				
For options, see from page 2/109															1LE1502- ... -Z ...+...+...+...				

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

²⁾ Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

³⁾ 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 requirement exists for 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. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.



IE1

SIMOTICS GP/SD 1LE1 standard motors

Motors with IE1 Standard Efficiency

Self-ventilated or forced-air cooled motors · Cast-iron series 1LE1502 Basic Line with increased power

Selection and ordering data

Operating values at rated power															Cast-iron series 1LE1502 – Basic Line		m _{IM B3}	J	
P _{rated} , 50 Hz/ P50	P _{rated} , 60 Hz/ P60 1)	Frame size	η _{ra} - ted, 50 Hz	T _{ra} - ted, 50 Hz	η _{ra} - ted, 50 Hz, 4/4	η _{ra} - ted, 50 Hz, 3/4	η _{ra} - ted, 50 Hz, 2/4	COS- φ _{rated} , 50 Hz, 4/4	I _{ra} - ted, 50 Hz, 400 V	T _{LR} / T _{ra} - ted, 50 Hz	I _{LR} / I _{ra} - ted, 50 Hz	T _B / T _{ra} - ted, 50 Hz	L _{pfA} , 50 Hz	L _{WA} , 50 Hz	Article No.				
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm ²		
• Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30: 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 155 (temperature class F)																			
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz ¹⁾																			
2.2	2.55	100 L	930	23	77.7	79.5	78.1	0.78	5.2	2	4	2.2	59	71	1LE1502-1AC6■-■■■■■	35	0.0084		
3	3.45	112 M	945	30	79.7	79.5	76.3	0.72	7.5	2.9	4.6	3	57	69	1LE1502-1BC6■-■■■■■	45	0.013		
7.5	8.6	132 M	950	75	84.7	85.3	84.1	0.74	17.3	2.4	5.3	3	63	75	1LE1502-1CC6■-■■■■■	78	0.032		
15	17.3	160 L	965	148	87.7	87.9	86.5	0.75	33	2.9	6	3.4	67	79	1LE1502-1DC6■-■■■■■	140	0.094		
18.5	22	180 L	970	182	88.6	89.4	89.1	0.77	39	2.2	5.9	2.9	56	69	1LE1502-1EC6■-■■■■■	165	0.206		
30	34.5	200 L	975	294	90.2	91.4	91.7	0.78	62	2.6	6	2.7	61	75	1LE1502-2AC6■-■■■■■	245	0.381		
37	44.5	225 M	978	361	90.8	91.5	91.5	0.82	72	2.5	6.1	2.8	76	93	1LE1502-2BC6■-■■■■■	310	0.62		
45	54	250 M	982	438	91.4	92.2	92.1	0.83	86	2.7	6.6	2.3	76	95	1LE1502-2CC6■-■■■■■	390	0.93		
75	90	280 M	985	727	92.6	93.3	93.2	0.84	139	2.9	7	2.7	61	75	1LE1502-2DC6■-■■■■■	560	1.7		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz ¹⁾																			
15	18	180 L	718	199	86.2	87.5	87.2	0.74	34	2.1	4.7	2.3	64	78	1LE1502-1ED6■-■■■■■	190	0.263		
18.5	22	200 L	720	245	86.9	88.2	88.4	0.76	40	2.7	6.1	3.2	59	72	1LE1502-2AD6■-■■■■■	250	0.416		
30	36	225 M	730	392	88.3	89.1	89.1	0.79	62	2.6	5.6	2.8	57	70	1LE1502-2BD6■-■■■■■	320	0.73		
37	44.5	250 M	730	484	88.8	89.8	89.9	0.83	72	2.3	5.7	2.6	63	77	1LE1502-2CD6■-■■■■■	405	1		
55	66	280 M	736	714	89.7	90.4	90.5	0.8	111	2.5	5.7	2.5	70	81	1LE1502-2DD6■-■■■■■	550	1.6		
Voltages ²⁾												Version				Order code			
50 Hz 230 VΔ/400 VY												Standard		2 2		–			
50 Hz 400 VΔ/690 VY												Standard		3 4		–			
50 Hz 500 VY												Without additional charge		2 7		–			
50 Hz 500 VΔ												Without additional charge		4 0		–			
For other voltages ¹⁾ and more information, see from page 2/88														9 0		...			
Types of construction												Version				Order code			
Without flange												IM B3 ³⁾		Standard		A		–	
With flange												IM B5 ³⁾		With additional charge		F		–	
With flange												IM B14 ³⁾		With additional charge		K		–	
For other types of construction and more information, see from page 2/94														■		...			
Motor protection												Version				Order code			
Without												Standard		A		–			
PTC thermistor with 3 temperature sensors												With additional charge		B		–			
For other motor protection and more information, see from page 2/99														■		...			
Terminal box position												Version				Order code(s)			
Terminal box at top												Standard		4					
For other terminal box positions and more information, see from page 2/101														■					
Special versions																Order code(s)			
Forced-air cooled motors w/o ext. fan/fan cover (IC 418)														1LE1502-....■-■■■■■-Z		F90 +. . . +. . . +. . .			
For options, see from page 2/109														1LE1502-....■-■■■■■-Z		+. . . +. . . +. . .			

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

²⁾ Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

³⁾ 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 requirement exists for 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. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.