

SIMOTICS GP 1LE1 Standard Motors

Motors with Standard Efficiency IE1

Self-ventilated motors Aluminum series 1LE1002 with increased output

IE1



Selection and ordering data

Operating values at rated output														Aluminum series		m _{IM B3} J	Torque class		
P _{rated} , 50 Hz	P _{rated} , 60 Hz 1)	Frame size	n _{rated} , 50 Hz	T _{rated} , 50 Hz	IE class	η _{rated} , 50 Hz, 4/4	η _{rated} , 50 Hz, 3/4	η _{rated} , 50 Hz, 2/4	COS-φ _{rated} , 50 Hz, 4/4	I _{rated} , 50 Hz, 400 V	T _{LR} /I _{rated}	I _{LR} /I _{rated}	T _B /I _{rated}	L _{pfA} , 50 Hz	L _{WA} , 50 Hz			1LE1002 – IE1 version in accordance with IEC 60034-30 with increased output	Order No.
kW	kW	FS	rpm	Nm		%	%	%	A								kg	kgm ² CL	
<ul style="list-style-type: none"> Cooling: Self-ventilated (IC 411) Efficiency: Standard Efficiency IE1, 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⁾																			
4	4.55	100 L	2850	13	IE1	83.1	84.8	84.5	0.85	8.2	4.5	7.0	4.1	67	79	1LE1002-1AA6	25	0.0044 16	
5.5	6.3	112 M	2935	18	IE1	84.7	85.5	84.7	0.86	10.9	2.9	7.5	3.8	69	81	1LE1002-1BA6	31	0.0085 16	
11	12.6	132 M	2920	36	IE1	87.6	89.0	88.8	0.90	20	2.8	7.5	3.7	68	80	1LE1002-1CA6	53	0.022 16	
22	24.5	160 L	2935	72	IE1	89.9	90.6	90.3	0.90	39	2.8	7.5	3.2	70	82	1LE1002-1DA6	85	0.049 16	
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz ¹⁾																			
4	4.55	100 L	1435	27	IE1	83.1	83.8	82.8	0.81	8.6	3.2	6.5	3.1	60	72	1LE1002-1AB6	27	0.010 16	
5.5	6.3	112 M	1420	37	IE1	84.7	86.5	86.4	0.81	11.6	3.0	5.8	3.1	58	70	1LE1002-1BB6	33	0.012 16	
11	12.6	132 M	1450	72	IE1	87.6	88.8	88.7	0.84	21.5	2.5	7.2	3.0	64	76	1LE1002-1CB6	58	0.033 16	
18.5	21.3	160 L	1460	121	IE1	89.3	90.4	89.9	0.85	35	2.7	7.2	3.2	65	77	1LE1002-1DB6	85	0.068 16	
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz ¹⁾																			
2.2	2.55	100 L	930	22	IE1	77.7	78.5	77.5	0.78	5.2	2.0	4.0	2.2	59	71	1LE1002-1AC6	24	0.0084 16	
3	3.45	112 M	945	30	IE1	79.7	79.7	76.6	0.72	7.5	2.5	4.6	2.6	57	69	1LE1002-1BC6	32	0.013 16	
7.5	8.6	132 M	950	75	IE1	84.7	84.2	82.6	0.74	17.3	2.8	5.3	3.0	63	75	1LE1002-1CC6	54	0.032 16	
15	17.3	160 L	965	148	IE1	87.7	88.2	86.8	0.75	33	2.9	6.0	3.4	67	79	1LE1002-1DC6	109	0.094 16	
Voltages				No. of poles	Frame size	Motor type	Version												Order code(s)
50 Hz	230 VA/400 VY	60 Hz ¹⁾	460 VY	2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	Standard	2	2										–
50 Hz	400 VA/690 VY	60 Hz ¹⁾	460 VA	2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	Standard	3	4										–
50 Hz	500 VY			2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	Without additional charge	2	7										–
50 Hz	500 VA			2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	Without additional charge	4	0										–
Further voltages ¹⁾		For additional charges, code numbers, order codes and descriptions, see supplements and special versions.											9	0	...				
Types of construction				No. of poles	Frame size	Motor type	Version												Order code(s)
Without flange		IM B3 ²⁾		2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	Standard	A											–
With flange		IM B5 ²⁾		2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	With additional charge	F											–
With standard flange		IM B14 ²⁾		2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	With additional charge	K											–
Further types of construction		For additional charges, code letters and descriptions, see supplements and special versions.													...				
Motor protection				No. of poles	Frame size	Motor type	Version												Order code(s)
Without				2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	Standard	A											–
PTC thermistor with 3 temperature sensors				2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	With additional charge	B											–
Further motor protection		For additional charges, code letters and descriptions, see supplements and special versions.													...				
Connection box position				No. of poles	Frame size	Motor type	Version												Order code(s)
Connection box at top				2, 4, 6	100 L ... 160 L	1LE1002-1A ... -1D	Standard	4											–
Further connection box positions		For additional charges, code numbers and descriptions, see supplements and special versions.													...				
Special versions				No. of poles	Frame size	Motor type												Order code(s)	
Options		For additional charges, order codes and descriptions, see supplements and special versions.											1LE1002- ... -Z	...+...+...+...					

¹⁾ Operating values at rated output for 60 Hz are available on request.
²⁾ Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (H03) and stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. When ordering with condensation drainage holes (H03), the type must be specified.