

SIMOTICS SD 1LG Standard Motors

Motors with High Efficiency IE2

Self-ventilated motors

Cast-iron series 1LG6 with increased output

IE2

Selection and ordering data

Operating values at rated output															Cast-iron series 1LG6 – IE2 version in accordance with IEC 60034-30 with increased output Order No.		m _{IM B3} J	Torque class					
P _{rated} , 50 Hz	P _{rated} , 60 Hz 1)	Frame size	η _{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				
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm ²	CL				
• Cooling: Self-ventilated (IC 411) • Efficiency: High Efficiency IE2, service factor (SF) 1.15 • 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)																							
45	51	200 L	2960	145	IE2	92.9	92.9	92.3	0.89	79 ²⁾	2.6	7.3	3.3	71	84	▲ 1LG6208-2AA ■■	300	0.22	16				
55	62	225 M	2965	177	IE2	93.2	93.3	92.9	0.89	96 ²⁾	3.0	7.9	3.3	70	83	1LG6228-2AA ■■	390	0.32	16				
75	84	250 M	2975	241	IE2	93.8	94.0	93.4	0.89	130 ²⁾	2.5	7.6	3.1	76	89	1LG6258-2AA ■■	470	0.57	16				
110	123	280 M	2978	353	IE2	94.3	94.6	94.3	0.90	187 ²⁾	2.8	7.8	3.3	73	86	1LG6288-2AA ■■	660	1.2	16				
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz 1)																							
55	63	225 M	1482	354	IE2	93.1	93.9	93.7	0.86	99 ²⁾	2.8	7.0	3.0	60	73	1LG6228-4AA ■■	355	0.66	16				
75	86	250 M	1485	482	IE2	94.0	94.4	94.1	0.87	132 ²⁾	2.6	7.3	2.9	65	78	1LG6258-4AA ■■	495	0.99	16				
110	127	280 M	1486	707	IE2	94.5	94.6	94.0	0.86	195 ²⁾	2.7	7.5	3.1	68	81	1LG6288-4AA ■■	710	1.9	16				
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz 1)																							
37	44.5	225 M	980	361	IE2	92.2	93.1	93.1	0.84	69 ²⁾	2.8	6.7	2.9	59	72	1LG6228-6AA ■■	355	0.76	16				
45	54	250 M	985	436	IE2	92.7	93.6	93.8	0.83	84	2.9	6.9	2.5	60	73	1LG6258-6AA ■■	435	1.1	16				
75	90	280 M	988	725	IE2	93.7	94.3	94.2	0.85	136 ²⁾	3.3	7.3	2.8	58	71	1LG6288-6AA ■■	615	1.9	16				
Voltages										No. of poles	Motor type		Version			Order code(s)							
50 Hz	230 VΔ/400 VY		60 Hz 1)		460 VY				2, 4, 6		1LG6208 ... 288		Standard		1	–							
50 Hz	400 VΔ/690 VY		60 Hz 1)		460 VΔ				2, 4, 6		1LG6208 ... 288		Standard		6	–							
50 Hz	500 VY								2, 4, 6		1LG6208 ... 288		Without additional charge		3	–							
50 Hz	500 VΔ								2, 4, 6		1LG6208 ... 288		Without additional charge		5	–							
Further voltages 1)			For additional charges, code numbers and descriptions, see supplements and special versions.														9	...					
Types of construction										No. of poles	Motor type		Version			Order code(s)							
Without flange			IM B3/6/7/8, IM V6, IM V5 without protective cover 3)						2, 4, 6		1LG6208 ... 288		Standard		0	–							
With flange			IM B5, IM V1 without protective cover 4)						2, 4, 6		1LG6208 ... 288		With additional charge		1	–							
			IM V3 4)						2, 4, 6		1LG6208 ... 288		With additional charge		9	M1G							
			IM V1 with protective cover 4) 5)						2, 4, 6		1LG6208 ... 288		With additional charge		4	–							
			IM B35						2, 4, 6		1LG6208 ... 288		With additional charge		6	–							
Further types of construction			For additional charges, code numbers and descriptions, see supplements and special versions.														9	...					
Special versions																	Order code(s)						
Options																	For additional charges, code numbers and descriptions, see supplements and special versions.		1LG6 ... -Z		...+...+...+...		

1) Operating values at rated output for 60 Hz are available on request.

2) For connection to 230 V, parallel feeders are necessary.

3) If 1LG6 motors in types of construction with feet IM B6, IM B7, IM V6 or IM V5 without protective cover are fixed to the wall, it is recommended that the motor feet are supported.

4) 1LG6228 to 1LG6288 motors are supplied with two screw-in eyebolts conforming to IM B5, whereby one can be repositioned to conform to IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

5) The "Second shaft extension" option, order code K16 is not possible.