

Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1AV3105B

SIMOTICS GP - 100 L - IM V1 - 4p

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project

Remarks

Electrical data

Safe Area

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			$\cos\phi$ ³⁾			I_A/I_N	M_A/M_N	M_K/M_N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4	I_i/I_N	T_i/T_N	T_B/T_N	
400	Δ	50	3.00	-/-	5.90	1460	19.6	87.7	88.4	88.2	0.83	0.78	0.69	7.3	2.3	3.7	IE3
690	Y	50	3.00	-/-	3.45	1460	19.6	87.7	88.4	88.2	0.83	0.78	0.69	7.3	2.3	3.7	IE3
460	Δ	60	3.45	-/-	5.80	1760	18.7	89.5	90.1	89.4	0.84	0.79	0.68	7.6	2.2	3.8	IE3
460	Δ	60	3.00	-/-	5.20	1765	16.2	89.5	89.6	88.9	0.81	0.76	0.68	8.6	2.6	4.3	IE3

IM V1 / IM 3011		FS 100 L	30 kg	IP55		IEC/EN 60034	IEC, DIN, ISO, VDE, EN		
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Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 13.9 s | 18.5 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	60.0 / 72.0 dB(A) ²⁾	62.0 / 74.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0140 kg m ²		Vibration severity grade	A
Bearing DE NDE	6206 Z C3	6206 Z C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} F _{rad min} 50 60Hz ¹⁾ for coupling operation	40000 h	32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	5 g 5 g	8000 h	Frame material	aluminum
Lubricants	Unirex N3		Coating (paint finish)	Special paint finish C3
Regreasing device	Yes		Color, paint shade	RAL7030
Grease nipple	M8x1 DIN 71412		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Type of bearing	Preloaded bearing DE		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	-/-			

Terminal box

Terminal box position	top	Max. cross-sectional area	4.0 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	11.0 mm - 21.0 mm
Type of terminal box	TB1 F00	Cable entry	2xM32x1,5-1xM16x1,5
Contact screw thread	M4	Cable gland	3 plugs

Notes:

I_A/I_N = locked rotor current / current nominal
 M_A/M_N = locked rotor torque / torque nominal
 M_K/M_N = break down torque / nominal torque

1) L10mh according to DIN ISO 281 10/2010
2) at rated power / at full load

3) Value is valid only for DOL operation with motor design IC411

responsible dep.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.
DI MC LVM		DT Configurator		

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				Page
				1/2

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Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	Q02	Anti-condensation heating for 230 V (2 terminals)
L23	Regreasing system	S02	Special paint finish C3

Additional information:

Space heaters

Technical data: 1-phase, 230 V 25W

Notes:

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