

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



Motor type : 1AV3105B

SIMOTICS GP - 100 L - IM B5 - 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	
230	Δ	50	3.00	-/-	10.70	1450	19.8	87.7	88.1	87.1	0.80	0.73	0.60	8.0	3.1	3.8	IE3
400	Y	50	3.00	-/-	6.20	1450	19.8	87.7	88.1	87.1	0.80	0.73	0.60	8.0	3.1	3.8	IE3
460	Y	60	3.45	-/-	6.10	1750	18.8	87.5	88.0	87.2	0.81	0.74	0.62	9.0	3.1	4.1	IE2
460	Y	60	3.00	-/-	5.40	1760	16.3	89.5	89.4	88.0	0.78	0.70	0.58	9.9	3.5	4.7	IE3

IM B5 / IM 3001	FS 100 L	26 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) : 12.5 s | 17.1 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	59 / 63 dB(A) ²⁾	59 / 63 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0100 kg m ²		Vibration severity grade	A
Bearing DE NDE	6206 2Z C3	6206 2Z C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} , F _{Rad min} 50 60Hz ¹⁾	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	Unirex N3		Frame material	aluminum
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Preloaded bearing DE		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes	No		Method of cooling	IC416 - separately ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	4 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	11 mm - 21 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_K/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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Special design

F01	Mounting a brake	F70	Mounting of separately driven fan
F11	Brake supply voltage, 230 V AC, 50/60 Hz		

Additional information:

Brake:

Description:	BFK458-12	Current:	.2 A
Voltage:	AC 230 V	Moment of inertia:	0.000360 kgm ²

Notes:

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