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

Motor type : 1AV2105B **SIMOTICS GP - 100 L - IM B3 - 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) 4/4	η 3) 3/4	η 3) 2/4	cosφ 3) 4/4	cosφ 3) 3/4	cosφ 3) 2/4	I_A/I_N I_I/I_N	M_A/M_N T_I/T_N	M_K/M_N T_B/T_N	IE-CL
400	Δ	50	3.00	-/-	6.20	1455	19.7	85.5	86.4	85.6	0.82	0.76	0.64	6.9	2.0	3.1	IE2
690	Y	50	3.00	-/-	3.60	1455	19.7	85.5	86.4	85.6	0.82	0.76	0.64	6.9	2.0	3.1	IE2
460	Δ	60	3.45	-/-	6.00	1755	18.8	87.5	88.2	87.3	0.82	0.77	0.65	7.5	2.0	3.1	IE2
460	Δ	60	3.00	-/-	5.40	1765	16.2	87.5	87.5	86.0	0.79	0.72	0.60	8.3	2.4	3.7	IE2

IM B3 / IM 1001	FS 100 L	25 kg	IP55	IEC/EN 60034	IEC, DIN, ISO, VDE, EN

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 9.57 s | 14.6 s

Mechanical data

Sound level (SPL / SWL) at 50Hz|60Hz	60.0 / 72.0 dB(A) 2)	62.0 / 74.0 dB(A) 2)
Moment of inertia	0.0140 kg m²	
Bearing DE | NDE	6206 2Z C3	6206 2Z C3
bearing lifetime		
L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)	40000 h	32000 h
Lubricants	Unirex N3	
Regreasing device	No	
Grease nipple	-/-	
Type of bearing	Preloaded bearing DE	
Condensate drainage holes	-/-	

External earthing terminal	No
Vibration severity grade	A
Insulation	155(F) to 130(B)
Duty type	S1
Direction of rotation	bidirectional
Frame material	aluminum
Coating (paint finish)	Standard paint finish C2
Color, paint shade	RAL7030
Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	4.0 mm²
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	
DI MC LVM		DT Configurator		*Technical data are subject to change! There may be discrepancies between calculated and rating plate values.*

SIEMENS

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