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

Motor type : 1AV3105B **SIMOTICS GP Premium Insulation - 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
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	3.00	-/-	5.90	1460	19.6	87.7	88.4	87.8	0.84	0.79	0.69	8.5	2.4	3.4	IE3
690	Y	50	3.00	-/-	3.40	1460	19.6	87.7	88.4	87.8	0.84	0.79	0.69	8.5	2.4	3.4	IE3
460	Δ	60	3.45	-/-	5.80	1760	18.7	87.5	87.9	87.0	0.85	0.81	0.81	8.9	2.4	3.6	IE2
460	Δ	60	3.00	-/-	5.10	1765	16.2	89.5	89.5	88.0	0.83	0.78	0.67	10.0	2.7	4.1	IE3
IM B3 / IM 1001			FS 100 L			IP55	UKCA	IEC/EN 60034			IEC, DIN, ISO, VDE, EN					KS C IEC60034-2-1	

Environmental conditions : -20 °C - +40 °C / 1000 m

Locked rotor time (hot / cold) : 13.6 s | 17.2 s

Mechanical data

Sound level (SPL / SWL) at 50Hz|60Hz	67 / 75 dB(A) 2) 3)	70 / 78 dB(A) 2) 3)	Vibration severity grade	A
Moment of inertia	0.0160 kg m²		Thermal class	F
Bearing DE | NDE	6206 2Z C3	6206 2Z C3 INS	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)	40000 h	32000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	42 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Preloaded bearing DE		Color, paint shade	RAL7030
Bearing insulation DE / Bearing insulation NDE	Yes (non-drive end)		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes	Without		Method of cooling	IC411 - self ventilated, surface cooled
External earthing terminal	Without			

Terminal box

Terminal box position	top	Max. cross-sectional area	4 mm²
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_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.*

Link documents

SIEMENS

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Special design

L51	Bearing insulation NDE

Notes:

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