

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



Motor type : 1AV3112B

SIMOTICS GP - 112 M - IM B5 - 4p

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

Remarks

Electrical data

Safe Area

U	Δ / Y	f	P	P	I	n	M	η ³⁾			cosφ ³⁾			I _A /I _N	M _A /M _N	M _K /M _N	IE-CL	
[V]		[Hz]	[kW]	[hp]	[A]	[1/min]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4	I _I /I _N	T _I /T _N	T _B /T _N		
DOL duty (S1) - 155(F) to 130(B)																		
220	Δ	50	4.00	-/-	14.40	1460	26.0	88.6	89.2	88.6	0.82	0.76	0.65	7.1	2.4	3.7	IE3	
380	Y	50	4.00	-/-	8.40	1460	26.0	88.6	89.2	88.6	0.82	0.76	0.65	7.1	2.4	3.7	IE3	
440	Y	60	4.55	-/-	8.00	1760	24.5	89.5	90.0	89.3	0.83	0.78	0.67	7.3	2.5	3.8	IE3	
440	Y	60	4.00	-/-	7.20	1770	21.5	89.5	90.0	88.3	0.81	0.72	0.60	8.2	2.9	4.3	IE3	
IM B5 / IM 3001			FS 112 M			IP55	UKCA		IEC/EN 60034			IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 16.1 s 21.8 s									

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	58 / 70 dB(A) ^{2) 3)}	62 / 74 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0170 kg m ²		Thermal class	F
Bearing DE NDE	6206 2Z C3	6206 2Z C3	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	No		Net weight of the motor (IM B3)	34 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Preloaded bearing DE		Color, paint shade	RAL7030
Condensate drainage holes	No		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
External earthing terminal	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.		Link documents	
DI MC LVM		DT Configurator					
	document type			document status			
	datasheet			released			
	title			document number			
	1LE1003-1BB22-1FB4-Z						
	F01+F11+F70+G11			rev.	creation date	language	Page
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F01	Mounting of holding brake	F70	Mounting of separately driven fan
F11	Brake supply voltage, 230 V AC, 50/60 Hz	G11	Rotary pulse encoder Sendix 5020 (HTL)

Brake:

Description:	BFK458-14	Current:	.25 A
Voltage:	AC 230 V	Moment of inertia:	0.000630 kgm ²

Notes:

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