

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



Motor type : 1AV3112B

SIMOTICS GP - 112 M - IM B3 - 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	60	4.55	-/-	16.10	1760	24.5	89.5	90.0	89.3	0.83	0.78	0.67	7.3	2.5	3.8	IE3	
380	Y	60	4.55	-/-	9.30	1760	24.5	89.5	90.0	89.3	0.83	0.78	0.67	7.3	2.5	3.8	IE3	
220	Δ	60	3.70	-/-	13.60	1770	20.0	89.5	89.4	87.7	0.80	0.73	0.61	8.2	2.9	4.3	IE3	
380	Y	60	3.70	-/-	7.90	1770	20.0	89.5	89.4	87.7	0.80	0.73	0.61	8.2	2.9	4.3	IE3	
IM B3 / IM 1001			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
Lubricants	Unirex N3		Net weight of the motor (IM B3)	34 kg
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Preloaded bearing DE		Motor protection	(A) without (Standard)
Condensate drainage holes	No		Method of cooling	IC411 - self ventilated, surface cooled
External earthing terminal	No			

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	1) L10mh according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
M _K /M _N = locked rotor torque / torque nominal	2) at rated power / at full load	
M _K /M _N = break down torque / nominal torque		

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
	1LE1003-1BB21-7AA4-Z				
© Siemens AG 2022	D22+F01+F10+F50				rev.
					929
				creation date	2022-11-08
				language	en
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Special design

D22	Motor without CE character for export outside the EEA (see EU regulation 2019/1781)	F10	Brake supply voltage 24 V DC
F01	Mounting a brake	F50	Mechanical manual brake release with lever (cannot be locked)

Additional information:

Brake:

Description:	BFK458-14	Current:	2.1 A
Voltage:	DC 24 V	Moment of inertia:	0.000630 kgm ²

Notes:

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	document type datasheet			document status released			
	title 1LE1003-1BB21-7AA4-Z D22+F01+F10+F50			document number			
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