

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



Motor type : 1AV3104B

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	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	2.20	-/-	8.10	1455	14.4	86.7	87.2	86.3	0.82	0.76	0.64	8.3	3.0	3.8	IE3
380	Y	50	2.20	-/-	4.70	1455	14.4	86.7	87.2	86.3	0.82	0.76	0.64	8.3	3.0	3.8	IE3
440	Y	60	2.54	-/-	4.50	1750	13.9	89.5	90.1	89.2	0.83	0.77	0.66	8.8	3.0	3.9	IE3
440	Y	60	2.20	-/-	4.05	1760	11.9	89.5	89.5	88.0	0.80	0.73	0.61	9.9	3.5	4.6	IE3
IM B5 / IM 3001		FS 100 L				IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN					Grade 3	
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 18.9 s 23 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	60 / 72 dB(A) ^{2) 3)}	62 / 74 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0101 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)	25 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	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)
Condensate drainage holes	Yes (standard)		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 _A /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			
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Special design

D34	China Energy Efficiency Label	Q3A	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)
N30	Increased air humidity/temperature with 30 to 60 g water per m3 air		

Notes:

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents		
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