

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)																	
230	Δ	50	2.20	-/-	7.80	1455	14.4	86.7	87.2	86.3	0.82	0.76	0.64	8.3	3.0	3.8	IE3
400	Y	50	2.20	-/-	4.45	1455	14.4	86.7	87.2	86.3	0.82	0.76	0.64	8.3	3.0	3.8	IE3
460	Y	60	2.54	-/-	4.30	1750	13.9	89.5	90.1	89.2	0.83	0.77	0.66	8.8	3.0	3.9	IE3
460	Y	60	2.20	-/-	3.85	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						
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 18.6 s 22.6 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	59 / 63 dB(A) ²⁾	59 / 63 dB(A) ²⁾	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 ¹⁾ for coupling operation	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	(B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes	No		Method of cooling	IC416 - separately 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					
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	datasheet			released			
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Special design

F01	Mounting a brake	G11	Rotary pulse encoder Sendix 5020 (HTL)
F11	Brake supply voltage, 230 V AC, 50/60 Hz	Q35	1 Pt1000 resistance thermometer (2 terminals)
F70	Mounting of separately driven fan	Y53	Paint finish in other standard RAL colours

Additional information:

Brake:

Description:	BFK458-12	Current:	.2 A
Voltage:	AC 230 V	Moment of inertia:	0.000360 kgm ²

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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