

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 [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			$\cos\phi$ ³⁾			I_A/I_N	M_A/M_N	M_K/M_N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4	I_l/I_N	T_l/T_N	T_B/T_N	
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	25 kg	IP55		IEC/EN 60034	IEC, DIN, ISO, VDE, EN						
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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	59.0 / 63.0 dB(A) ₂₎	59.0 / 63.0 dB(A) ₂₎	External earthing terminal	No
Moment of inertia	0.0101 kg m ²		Vibration severity grade	A
Bearing DE NDE	6206 2Z C3	6206 2Z C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L_{10mh} $F_{Rad, min}$ for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	Unirex N3		Frame material	aluminum
Regreasing device	No		Coating (paint finish)	Special paint finish C3
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

Terminal box

Terminal box position	top	Max. cross-sectional area	4.0 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	11.0 mm - 21.0 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	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.
DI MC LVM		DT Configurator		

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Special design

F70	Mounting of separately driven fan	Y53	Paint finish in other standard RAL colours
G11	Rotary pulse encoder Sendix 5020 (HTL)	Y80	Supplementary rating plate with different data
S02	Special paint finish C3		

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.			
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