

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



Motor type : 1AV2164B

SIMOTICS GP - 160 L - 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	
380	Δ	50	15.00	-/-	29.50	1475	97.0	90.6	91.2	90.8	0.85	0.81	0.71	7.3	2.3	3.0	IE2
660	Y	50	15.00	-/-	17.00	1475	97.0	90.6	91.2	90.8	0.85	0.81	0.71	7.3	2.3	3.0	IE2
440	Δ	60	17.30	-/-	28.50	1775	93.0	92.4	92.9	92.4	0.86	0.83	0.74	7.7	2.3	2.9	IE2
440	Δ	60	15.00	-/-	25.50	1780	80.0	91.0	91.1	90.1	0.84	0.80	0.69	8.5	2.6	3.4	IE2

IM B3 / IM 1001		FS 160 L	83 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) : 14.1 s | 23.3 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65.0 / 77.0 dB(A) ²⁾	69.0 / 81.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0710 kg m ²		Vibration severity grade	A
Bearing DE NDE	6309 Z C3	6209 Z 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
Relubrication interval/quantity DE NDE	10 g 10 g	8000 h	Frame material	aluminum
Lubricants	Unirex N3		Coating (paint finish)	Standard paint finish C2
Regreasing device	Yes		Color, paint shade	RAL7030
Grease nipple	M8x1 DIN 71412		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Type of bearing	Locating bearing NDE		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	-/-			

Terminal box

Terminal box position	top	Max. cross-sectional area	16.0 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	19.0 mm - 28.0 mm
Type of terminal box	TB1 J00	Cable entry	2xM40x1,5-1xM16x1,5
Contact screw thread	M5	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 _B /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.
DI MC LVM		DT Configurator		

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Special design

G11	Rotary pulse encoder Sendix 5020 (HTL)	L23	Regreasing system
L22	Bearing design for increased cantilever forces		

Notes:

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