

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



Motor type : 1AV3166A

SIMOTICS GP - 160 L - IM B5 - 2p

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)																	
400	Δ	50	22.00	-/-	37.50	2945	71.0	92.7	92.8	92.2	0.91	0.88	0.80	9.9	3.5	4.4	IE3
690	Y	50	22.00	-/-	22.00	2945	71.0	92.7	92.8	92.2	0.91	0.88	0.80	9.9	3.5	4.4	IE3
460	Δ	60	25.30	-/-	38.00	3545	68.0	91.7	91.7	90.7	0.91	0.89	0.82	9.7	3.4	4.4	IE3
460	Δ	60	22.00	-/-	33.50	3555	59.0	91.7	91.2	89.7	0.90	0.87	0.80	11.0	3.9	5.0	IE3
IM B5 / IM 3001		FS 160 L				IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 12.9 s 18.8 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	70 / 82 dB(A) ²⁾	77 / 89 dB(A) ²⁾	Vibration severity grade	A
Moment of inertia	0.0603 kg m ²		Thermal class	F
Bearing DE NDE	6209 2Z C3	6209 2Z C3	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad} min 50 60Hz	40000 h	32000 h	Frame material	aluminum
Lubricants	Unirex N3		Net weight of the motor (IM B3)	108 kg
Regreasing device	No		Coating (paint finish)	Special paint finish C3
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
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	16 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	19 mm - 28 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.		Link documents	
DI MC LVM		DT Configurator					
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Special design

B07	Supplementary plate, voltage tolerance	Y53	Paint finish in other standard RAL colours
S02	Special paint finish C3		

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