

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



Motor type : 1AV3162B

SIMOTICS GP - 160 M - 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	
400	Δ	50	10.55	-/-	20.00	1475	68.3	91.5	91.8	91.2	0.83	0.79	0.68	7.1	2.3	3.3	IE3
690	Y	50	10.55	-/-	11.60	1475	68.3	91.5	91.8	91.2	0.83	0.79	0.68	7.1	2.3	3.3	IE3
460	Δ	60	12.09	-/-	19.50	1775	65.0	92.4	92.6	91.9	0.84	0.80	0.72	7.4	2.1	3.3	IE3
460	Δ	60	11.00	-/-	18.00	1780	59.0	92.4	92.4	91.3	0.83	0.78	0.68	7.9	2.3	3.7	IE3
IM B3 / IM 1001		FS 160 M		83 kg		IP56		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions : -20 °C - +45 °C / 1,000 m

Locked rotor time (hot / cold) : 22.9 s | 32.3 s

These values are calculated. The final rating plate data will be calculated when the order is placed

The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions.

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	6209 2Z C3	6209 2Z C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} 50 60Hz ¹⁾ for coupling operation	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	Locating bearing NDE		Motor protection	(A) without (Standard)
Condensate drainage holes	Yes (standard)		Method of cooling	IC411 - self ventilated, surface cooled

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
Contact screw thread	M5	Cable gland	2 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.			
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B01	With safety and commissioning information for each lattice pallet	N05	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 45°C, power reduced
H22	IP 56 degree of protection	N31	Increased air humidity/temperature with 60 to 100 g water per m3 air

Notes:

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