

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



Motor type : 1AV3163A

SIMOTICS GP - 160 M - IM B3 - 2p

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	
400	Δ	50	13.05	-/-	24.00	2965	42.0	91.8	91.3	89.1	0.85	0.79	0.69	10.1	3.2	4.9	IE3
690	Y	50	13.05	-/-	14.00	2965	42.0	91.8	91.3	89.1	0.85	0.79	0.69	10.1	3.2	4.9	IE3
460	Δ	60	15.05	-/-	24.00	3565	40.3	91.5	90.7	88.0	0.86	0.82	0.73	10.0	3.1	4.8	IE3
460	Δ	60	15.00	-/-	24.00	3565	40.0	91.0	90.0	87.6	0.86	0.82	0.73	9.7	3.1	4.8	IE3
IM B3 / IM 1001		FS 160 M		84 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions : -20 °C - +55 °C / 1,000 m

Locked rotor time (hot / cold) : 12.8 s | 19.9 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	70.0 / 82.0 dB(A) ²⁾	77.0 / 89.0 dB(A) ²⁾	External earthing terminal	Yes
Moment of inertia	0.0610 kg m ²		Vibration severity grade	A
Bearing DE NDE	6209 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 4000 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 DE		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	No			

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	1 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.
DI MC LVM		DT Configurator		

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Special design

F76	Metal external fan	M10	Additional rating plate, loose
H04	External grounding at housing	N07	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 55°C, power reduced
L20	Locating bearing, DE	R15	One metal cable gland
L23	Regreasing system		

Notes:

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