

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



Motor type : 1AV2162B SIMOTICS XP - 160 M - IM B3 - 4p

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project

Remarks

Electrical data II 3G Ex ec IIC T3 Gc
-/-

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	9.02	-/-	17.30	1475	58.4	90.7	90.9	90.8	0.83	0.77	0.67	8.2	2.6	3.4	IE2
690	Y	50	9.02	-/-	10.00	1475	58.4	90.7	90.9	90.8	0.83	0.77	0.67	8.2	2.6	3.4	IE2
460	Δ	60	10.33	-/-	17.00	1775	55.6	91.5	91.4	90.2	0.84	0.79	0.69	8.5	2.7	3.4	IE2
460	Δ	60	10.67	-/-	17.60	1775	57.4	91.0	91.1	89.8	0.84	0.79	0.70	7.9	2.6	3.3	IE2
IM B3 / IM 1001			FS 160 M			IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +60 °C / 1,000 m									Locked rotor time (hot / cold) : 17.8 s 28.7 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 / 77 dB(A) ^{2) 3)}	69 / 81 dB(A) ^{2) 3)}	External earthing terminal	With (standard)
Moment of inertia	0.0550 kg m ²		Vibration severity grade	A
Bearing DE NDE	6209 Z C3	6209 Z C3	Thermal class	F
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		Net weight of the motor (IM B3)	71 kg
Regreasing device	With		Coating (paint finish)	Standard paint finish C2
Grease nipple	M8x1 DIN 71412		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes	With (standard)		Method of cooling	IC411 - self ventilated, surface cooled

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	2xM40x1,5-2xM16x1,5
Contact screw thread	M5		

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) L_{10mh} 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. IN LVM	technical reference	created by SPC	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.	Link documents
SIEMENS	document type datasheet				document status released
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F76	Metal external fan	N08	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 60°C, power reduced
L23	Regreasing system	N30	Increased air humidity/temperature with 30 to 60 g water per m3 air
M10	Additional rating plate, loose		

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