

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



Motor type : 1AV3162B

SIMOTICS XP - 160 M - IM B3 - 4p

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

Remarks

II 2D Ex tb IIIC T 120°C Db

-/-

Electrical data

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			cosφ ³⁾			I _A /I _N I _I /I _N	M _A /M _N T _I /T _N	M _K /M _N T _B /T _N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	11.00	-/-	21.00	1470	71.0	91.4	91.9	91.9	0.82	0.76	0.65	8.0	2.5	3.5	IE3
690	Y	50	11.00	-/-	12.30	1470	71.0	91.4	91.9	91.9	0.82	0.76	0.65	8.0	2.5	3.5	IE3
460	Δ	60	12.60	-/-	20.50	1765	68.0	92.4	92.9	92.6	0.83	0.78	0.68	8.1	3.3	3.5	IE3
460	Δ	60	11.00	-/-	18.40	1775	59.0	92.4	92.6	92.0	0.81	0.75	0.63	9.0	3.8	4.0	IE3
IM B3 / IM 1001		FS 160 M		IP65		IEC/EN 60034		IEC, DIN, ISO, VDE, EN									

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 26.5 s | 34.3 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	67 / 75 dB(A) ^{2) 3)}	70 / 75 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0583 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 ¹⁾ for coupling operation	40000 h	32000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	78 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Locating bearing NDE		Color, paint shade	RAL7030
Condensate drainage holes	Without		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
External earthing terminal	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_K/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	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	Link documents
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