

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



Motor type : 1AV3164A 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)																	
230	Δ	50	18.50	-/-	56.00	2955	60.0	92.4	92.8	92.4	0.90	0.87	0.80	9.0	2.8	4.2	IE3
400	Y	50	18.50	-/-	32.00	2955	60.0	92.4	92.8	92.4	0.90	0.87	0.80	9.0	2.8	4.2	IE3
460	Y	60	21.30	-/-	32.00	3555	57.0	91.7	91.5	90.3	0.91	0.88	0.80	9.0	2.6	4.2	IE3
460	Y	60	18.50	-/-	28.50	3560	49.5	91.7	91.5	90.3	0.89	0.86	0.78	10.2	3.0	4.8	IE3
IM B5 / IM 3001		FS 160 L				IP55	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 13.5 s 19.9 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	70 / 82 dB(A) ^{2) 3)}	77 / 89 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0680 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} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	94 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	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)
External earthing terminal	Without		Method of cooling	IC416 - separately 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	2xM40x1,5-1xM16x1,5
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_K/M_N = break down torque / nominal torque

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 		
	document type datasheet				document status released			
	title 1LE1003-1DA42-2FZ4-Z				document number			
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Special design

F70	Mounting of separately driven fan	M10	Additional rating plate, loose
G11	Rotary pulse encoder Sendix 5020 (HTL)	Q3A	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)

Notes:

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