

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



Motor type : 1AV2083C

SIMOTICS XP - 80 M - IM B5 - 6p

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

II 3G Ex ec IIC T3 Gc

-/-

Electrical data

U [V]	Δ/Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	$\eta^{3)}$			$\cos\phi^{3)}$			I_A/I_N I_f/I_N	M_A/M_N T_f/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	Y	50	0.55	-/-	1.65	935	5.6	73.1	73.8	70.8	0.66	0.57	0.45	4.4	2.5	2.9	IE2

Converter duty (S9) - 155(F) to 130(B)

49	Y	5	.0174		1.16	70	2.37				0.43	Type of converter Voltage source converter, general.					
205	Y	25	.21		1.39	445	4.51				0.69						
380	Y	50	.415		1.34	950	4.17				0.63						
380	Y	100	.33		.94	1905	1.65				0.69						

IM B5 / IM 3001	FS 80 M	IP55	IEC/EN 60034	IEC, DIN, ISO, VDE, EN
Environmental conditions : -20 °C - +40 °C / 1,000 m			Locked rotor time (hot / cold) : 21.8 s 30.3 s	

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	42 / 53 dB(A) ^{2) 3)}	45 / 56 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0025 kg m ²		Thermal class	F
Bearing DE NDE	6004 2Z C3	6004 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)	12 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Preloaded bearing DE		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	1.5 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	9 mm - 17 mm
Type of terminal box	TB1 E00	Cable entry	1xM25x1,5-1xM16x1,5
Contact screw thread	M4		

Notes:

I_A/I_N = locked rotor current / current nominal	1) L_{10mh} according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
M_A/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
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	title 1MB1031-ODC39-0FB4-Z B02+B43+M4A	document number			
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Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	M4A	400 VY for 50 Hz
B43	Version for converter operation with operating data on voltage-source DC link converter		

Notes:

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