

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



Motor type : 1AV3090B SIMOTICS XP - 90 S - IM B3 - 4p

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

Remarks

Electrical data II 3D Ex tc IIIB T 120°C Dc -/-

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)																	
220	Δ	50	1.10	-/-	4.40	1440	7.3	84.1	84.7	83.4	0.78	0.70	0.58	6.9	2.9	3.6	IE3
380	Y	50	1.10	-/-	2.55	1440	7.3	84.1	84.7	83.4	0.78	0.70	0.58	6.9	2.9	3.6	IE3
440	Y	60	1.27	-/-	2.50	1740	7.0	84.0	84.4	83.1	0.79	0.72	0.60	7.4	2.9	3.8	IE2
440	Y	60	1.10	-/-	2.20	1750	6.0	86.5	86.4	84.2	0.75	0.67	0.54	8.2	3.4	4.4	IE3
IM B3 / IM 1001		FS 90 S				IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 21.1 s 25.4 s								

Mechanical data				
Sound level (SPL / SWL) at 50Hz 60Hz	56 / 68 dB(A) ^{2) 3)}	58 / 70 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0036 kg m²		Thermal class	F
Bearing DE NDE	6205 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)	16 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	(A) without (Standard)
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 mm²
Material of terminal box	Aluminium	Cable diameter from ... to ...	9 mm - 17 mm
Type of terminal box	TB1 E00	Cable entry	1xM25x1,5
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_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.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			Link documents	
IN LVM		SPC						
SIEMENS	document type	datasheet			document status			
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