

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



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

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)																	
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	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN						Grade 3	
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 m ²		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} 50 60Hz ¹⁾ for coupling operation	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	Without		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
Contact screw thread	M4	Cable gland	1 plug

Notes:		
I_L/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_L/M_N = locked rotor torque / torque nominal	2) at rated power / at full load	
M_B/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		
DI MC LVM		DT Configurator						
	document type				document status			
	datasheet				released			
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Special design

D01	CCC China Compulsory Certification	D34	China Energy Efficiency Label
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Notes:

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