

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



Motor type : 1AV3090A

SIMOTICS GP - 90 S - IM B3 - 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	1.50	-/-	5.20	2910	4.9	84.2	84.6	83.2	0.86	0.80	0.69	8.1	2.7	4.2	IE3
400	Y	50	1.50	-/-	3.00	2910	4.9	84.2	84.6	83.2	0.86	0.80	0.69	8.1	2.7	4.2	IE3
460	Y	60	1.75	-/-	2.95	3510	4.8	85.5	85.6	84.0	0.87	0.82	0.72	8.7	2.6	4.2	IE3
460	Y	60	1.50	-/-	2.60	3525	4.0	85.5	84.8	82.3	0.84	0.77	0.66	9.8	3.1	4.9	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) : 7.9 s | 10.6 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65 / 77 dB(A) ²⁾	69 / 81 dB(A) ²⁾	Vibration severity grade	A
Moment of inertia	0.0021 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} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material	aluminum
Lubricants	Unirex N3		Net weight of the motor (IM B3)	15 kg
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Preloaded bearing DE		Motor protection	(B) 1 PTC thermistor - for tripping (2 terminals)
Condensate drainage holes	No		Method of cooling	IC411 - self ventilated, surface cooled
External earthing terminal	No			

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	Cable gland	2 plugs

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) L10mh 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.	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	datasheet			document status	released	
	title	1LE1003-0EA02-2AB4			document number		
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