

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



Motor type : 1AV1090B

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	
230	Δ	50	1.10	-/-	4.55	1405	7.5	75.0	75.9	73.6	0.81	0.72	0.58	4.5	2.1	2.3	IE1
400	Y	50	1.10	-/-	2.60	1405	7.5	75.0	75.9	73.6	0.81	0.72	0.58	4.5	2.1	2.3	IE1
460	Y	60	1.27	-/-	2.50	1705	7.1	79.0	79.8	77.7	0.81	0.73	0.59	5.0	2.2	2.5	IE1
IM B3 / IM 1001		FS 90 S		kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 12.4 s 23.2 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	56.0 / 67.0 dB(A) ²⁾	54.0 / 65.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0050 kg m ²		Vibration severity grade	A
Bearing DE NDE	6205 2Z C3	6004 2Z C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} 50 60Hz ¹⁾ for coupling operation	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	Unirex N3		Frame material	aluminum
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Preloaded bearing DE		Motor protection	(A) without (Standard)
Condensate drainage holes	-/-		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 ...	9.0 mm - 17.0 mm
Type of terminal box	TB1 E00	Cable entry	1xM25x1,5
Contact screw thread	M4	Cable gland	1 plug

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 _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.			
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Special design

D22	motor without CE character for export outside the EEA (see EU regulation 640/2009)	D47	TR CU product safety certificate EAC for the Eurasian Customs Union
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Notes:

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by		Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			
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