

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



Motor type : 1AV3090B

SIMOTICS GP - 90 S - IM B5 - 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	-/-	4.20	1440	7.3	84.1	84.7	83.4	0.78	0.70	0.58	6.9	2.9	3.6	IE3
400	Y	50	1.10	-/-	2.40	1440	7.3	84.1	84.7	83.4	0.78	0.70	0.58	6.9	2.9	3.6	IE3
460	Y	60	1.27	-/-	2.35	1740	7.0	86.5	86.9	85.6	0.79	0.72	0.60	7.4	2.9	3.8	IE3
460	Y	60															MG1
IM B5 / IM 3001		FS 90 S		16 kg		IP55	CC032A	IEC/EN 60034		IEC, EN, UL, CSA, NEMA MG1-12-12				kVA Code: N			

Environmental conditions : -20 °C - + °C / m

Locked rotor time (hot / cold) : 21.4 s | 25.8 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	56.0 / 68.0 dB(A) ²⁾	58.0 / 70.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0036 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	(B) 1 PTC thermistor - for tripping (2 terminals)
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 E10	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.			
DI MC LVM		DT Configurator					
	document type	datasheet		document status		customer	
	released						
	title	1LE1023-0EB02-2FB4-Z		document number			
© Siemens AG 2021	Y50			rev.	creation date	language	Page
				01	2021-04-22 08:23	en	1/2

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



Motor type : 1AV3090B

SIMOTICS GP - 90 S - IM B5 - 4p

Special design

Y50 Temperature class 155(F), utilized acc. to 130(B), customer indication of coolant temperature and/or installation altitude

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.			
	document type datasheet				document status released		customer	
	title 1LE1023-0EB02-2FB4-Z				document number			
© Siemens AG 2021	Y50				rev. 01	creation date 2021-04-22 08:23	language en	Page 2/2