

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



Motor type : 1AV3090C

SIMOTICS GP - 90 S - IM B3 - 6p

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	0.75	-/-	3.40	945	7.6	78.9	80.0	78.8	0.70	0.62	0.50	4.6	2.2	2.6	IE3
400	Y	50	0.75	-/-	1.96	945	7.6	78.9	80.0	78.8	0.70	0.62	0.50	4.6	2.2	2.6	IE3
460	Y	60	0.86	-/-	1.87	1140	7.2	82.5	83.2	81.7	0.70	0.62	0.50	4.9	2.1	2.7	IE3
460	Y	60	0.75	1.00	1.76	1155	6.2	82.5	82.4	79.9	0.65	0.56	0.44	5.3	2.4	3.1	MG1
IM B3 / IM 1001		FS 90 S		16 kg		IP55	CC032A	IEC/EN 60034		IEC, EN, UL, CSA, NEMA MG1-12-12				kVA Code: K			

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 40.4 s | 50.1 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	43.0 / 55.0 dB(A) ²⁾	46.0 / 58.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0040 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 E10	Cable entry	1xM25x1,5
Contact screw thread	M4	Cable gland	1 plug

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			document status		customer	
	datasheet			released			
	title			document number			
	1LE1023-0EC02-2AA4						
© Siemens AG 2021				rev.	creation date	language	Page
				01	2021-04-20 19:04	en	1/1