

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



Motor type : 1AV3094A

SIMOTICS GP - 90 L - IM B5 - 2p

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project

Remarks

Electrical data

Safe Area

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			$\cos\phi$ ³⁾			I_A/I_N I_i/I_N	M_A/M_N T_i/T_N	M_K/M_N T_B/T_N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
230	Δ	50	2.20	-/-	7.30	2910	7.2	85.9	86.8	86.1	0.88	0.83	0.73	8.3	2.6	4.0	IE3
400	Y	50	2.20	-/-	4.20	2910	7.2	85.9	86.8	86.1	0.88	0.83	0.73	8.3	2.6	4.0	IE3
460	Y	60	2.54	-/-	4.20	3510	6.9	86.5	87.0	85.9	0.88	0.84	0.75	8.3	2.6	4.2	IE3
460	Y	60	2.20	3.00	3.65	3530	6.0	86.5	86.4	84.5	0.87	0.82	0.71	9.6	3.0	4.9	MG1

IM B5 / IM 3001	FS 90 L	19 kg	IP55	CC032A	IEC/EN 60034	IEC, EN, UL, CSA, NEMA MG1-12-12	kVA Code: N
-----------------	---------	-------	------	--------	--------------	----------------------------------	-------------

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

Locked rotor time (hot / cold) : 5.92 s | 8.52 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65.0 / 77.0 dB(A) ₂₎	69.0 / 81.0 dB(A) ₂₎	External earthing terminal	No
Moment of inertia	0.0031 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} $F_{Rad, min}$ for coupling operation 50 60Hz ¹⁾	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	No		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_A/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. DI MC LVM	technical reference	created by DT Configurator	approved by	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>
-------------------------------	---------------------	-------------------------------	-------------	---

	document type datasheet	document status released	customer	
	title 1LE1023-0EA42-2FB4	document number	rev. 01	creation date 2021-07-12 14:34
© Siemens AG 2021				Page 1/1