

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



Motor type : 1AV3094B

SIMOTICS GP - 90 L - 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⁾			$\cos\phi$ 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	1.50	-/-	5.50	1445	9.9	85.3	85.7	84.4	0.80	0.73	0.60	7.3	2.9	3.5	IE3
400	Y	50	1.50	-/-	3.15	1445	9.9	85.3	85.7	84.4	0.80	0.73	0.60	7.3	2.9	3.5	IE3
460	Y	60	1.75	-/-	3.15	1740	9.6	86.5	86.7	85.4	0.80	0.74	0.62	7.7	2.9	3.7	IE3
460	Y	60	1.50	-/-	2.85	1755	8.2	86.5	86.6	84.7	0.77	0.69	0.57	8.6	3.4	4.3	IE3

IM B5 / IM 3001		FS 90 L		IP55		IEC/EN 60034	IEC, DIN, ISO, VDE, EN						
-----------------	--	---------	--	------	--	--------------	------------------------	--	--	--	--	--	--

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

Locked rotor time (hot / cold) : 17.6 s | 21.8 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	56 / 68 dB(A) ²⁾	58 / 70 dB(A) ²⁾	Vibration severity grade	A
Moment of inertia	0.0049 kg m ²		Insulation	155(F) to 130(B)
Bearing DE NDE	6205 2Z C3	6004 2Z C3	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} , F _{Rad min} 50 60Hz ¹⁾	40000 h	32000 h	Frame material	aluminum
Lubricants	Unirex N3		Net weight of the motor (IM B3)	19 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	(A) without (Standard)
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 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	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_K/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.
DI MC LVM		DT Configurator		

	document type	document status	customer	
	datasheet	released		
	title	document number		
	1LE1003-0EB42-2FA4-Z			
© Siemens AG 2021	F01+F11+G11	rev.	creation date	language
		01	2021-10-28 09:41	en
				Page
				1/2

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



Motor type : 1AV3094B

SIMOTICS GP - 90 L - IM B5 - 4p

Special design

F01	Mounting a brake	G11	Rotary pulse encoder Sendix 5020 (HTL)
F11	Brake supply voltage, 230 V AC, 50/60 Hz		

Additional information:

Brake:

Description:	BFK458-10	Current:	.15 A
Voltage:	AC 230 V	Moment of inertia:	0.000160 kgm ²

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 1LE1003-0EB42-2FA4-Z	document number					
© Siemens AG 2021	F01+F11+G11	rev. 01	creation date 2021-10-28 09:41	language en	Page 2/2		