

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



Motor type : 1AV2094B

SIMOTICS GP - 90 L - IM B3 - 4p

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_f/I_N	M_A/M_N T_f/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	1.50	-/-	5.80	1435	10.0	82.8	83.5	82.2	0.79	0.71	0.58	6.4	2.6	3.4	IE2
400	Y	50	1.50	-/-	3.30	1435	10.0	82.8	83.5	82.2	0.79	0.71	0.58	6.4	2.6	3.4	IE2
460	Y	60	1.75	-/-	3.30	1730	9.7	84.0	85.0	84.0	0.79	0.73	0.61	6.7	2.5	3.4	IE2
460	Y	60	1.50	-/-	3.00	1745	8.2	84.0	84.0	81.9	0.75	0.67	0.54	7.5	2.9	4.0	IE2

IM B3 / IM 1001	FS 90 L	16 kg	IP55	IEC/EN 60034	IEC, DIN, ISO, VDE, EN
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Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 13 s | 18 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} 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	(F) 1 temperature sensor KTY84-130 (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 E00	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>
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