

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⁾			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	1.50	-/-	5.50	1445	9.9	85.3	86.0	85.2	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	86.0	85.2	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	87.0	85.7	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	86.2	84.5	0.77	0.69	0.57	8.6	3.4	4.3	IE3
IM B5 / IM 3001		FS 90 L		19 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

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

Locked rotor time (hot / cold) : 17.9 s | 21.8 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	0.0049 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)	Special paint finish C3
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	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 _B /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.				
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S02	Special paint finish C3	Y84	Additional data on the rating plate and on the packing label :
Y56	Paint finish in special RAL colours		

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