

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



Motor type : 1AV3094B

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	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	
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	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
690	Y	50	1.50	-/-	1.84	1445	9.9	85.3	85.7	84.4	0.80	0.73	0.60	7.3	2.9	3.5	IE3
460	Δ	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	Δ	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 B3 / IM 1001		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) 3)}	58 / 70 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0049 kg m ²		Thermal class	F
Bearing DE NDE	6205 2Z C3	6004 2Z C3	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad min} for coupling operation 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	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)
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 _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.	Link documents
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Special design

F01	Mounting a brake	Q3A	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)
F12	Brake supply voltage 400 V AC, 50/60 Hz		

Additional information:

Brake:

Description:	BFK458-10	Current:	.17 A
Voltage:	AC 400 V	Moment of inertia:	0.000160 kgm ²

Notes:

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