

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	
DOL duty (S1) - 155(F) to 130(B)																	
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	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1.000 m									Locked rotor time (hot / cold) : 17.3 s 21.5 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	40000 h	32000 h	Frame material	aluminum
Regreasing device	No		Net weight of the motor (IM B3)	19 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Preloaded bearing DE		Color, paint shade	RAL7030
Condensate drainage holes	No		Motor protection	(B) 1 PTC thermistor - for tripping (2 terminals)
External earthing terminal	No		Method of cooling	IC416 - separately 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 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.	Link documents
DI MC LVM		DT Configurator			
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Special design

F01	Mounting a brake	F70	Mounting of separately driven fan
F11	Brake supply voltage, 230 V AC, 50/60 Hz	G11	Rotary pulse encoder Sendix 5020 (HTL)

Additional information:

Brake:

Description:	BFK458-10	Current:	.15 A
Voltage:	AC 230 V	Moment of inertia:	0.000160 kgm²

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.	Link documents	
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