

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



Motor type : 1AV3090A

SIMOTICS GP - 90 S - IM B5 - 2p

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	-/-	5.20	2910	4.9	84.2	84.6	83.2	0.86	0.80	0.69	8.1	2.7	4.2	IE3
400	Y	50	1.50	-/-	3.00	2910	4.9	84.2	84.6	83.2	0.86	0.80	0.69	8.1	2.7	4.2	IE3
460	Y	60	1.75	-/-	2.95	3510	4.8	85.5	85.6	84.0	0.87	0.82	0.72	8.7	2.6	4.2	IE3
460	Y	60	1.50	-/-	2.60	3525	4.0	85.5	84.8	82.3	0.84	0.77	0.66	9.8	3.1	4.9	IE3
IM B5 / IM 3001		FS 90 S				IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN					Grade 3	
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 7.9 s 10.6 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65 / 77 dB(A) ^{2) 3)}	69 / 81 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0021 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)	15 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 E00	Cable entry	1xM25x1,5
Contact screw thread	M4	Cable gland	1 plug

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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					1/2



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Special design

D01

CCC China Compulsory Certification

D34

China Energy Efficiency Label

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