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

Safe Area

Electrical data **-/-**

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η 3) 4/4	η 3) 3/4	η 3) 2/4	cosφ 3) 4/4	cosφ 3) 3/4	cosφ 3) 2/4	I_A/I_N I_I/I_N	M_A/M_N T_I/T_N	M_K/M_N T_B/T_N	IE-CL
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	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions : -20 °C - +40 °C / 1000 m | Locked rotor time (hot / cold) : 8 s | 10.7 s

Mechanical data

Sound level (SPL / SWL) at 50Hz|60Hz	65 / 77 dB(A) 2) 3)	69 / 81 dB(A) 2) 3)	
Moment of inertia	0.0021 kg m²		
Bearing DE | NDE	6205 2Z C3	6004 2Z C3	
bearing lifetime			
L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)	40000 h	32000 h	
Regreasing device	Without		
Grease nipple	-/-		
Type of bearing	Preloaded bearing DE		
Condensate drainage holes	Without		
External earthing terminal	Without		

Vibration severity grade	A
Thermal class	F
Duty type	S1
Direction of rotation	bidirectional
Frame material	aluminum
Net weight of the motor (IM B3)	15 kg
Coating (paint finish)	Standard paint finish C2
Color, paint shade	RAL7030
Motor protection	(B) 1 PTC thermistor - for tripping (2 terminals)
Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	1.5 mm²
Material of terminal box	Aluminium	Cable diameter from ... to ...	9 mm - 17 mm
Type of terminal box	TB1 E00	Cable entry	1xM25x1,5-1xM16x1,5
Contact screw thread	M4	Cable gland	2 plugs

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) L_{10mh} 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 department	Technical reference	Created by	Approved by	*Technical data are subject to change! There may be discrepancies between calculated and rating plate values.*	Link documents
IN LVM		SPC	Created automatically		

SIEMENS

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