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

Motor type : 1AV3090A **SIMOTICS GP - 90 S - IM B3 - 2p**

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project
Remarks		

Electrical data

Safe Area

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
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 B3 / IM 1001	FS 90 S	15 kg	IP55	IEC/EN 60034	IEC, DIN, ISO, VDE, EN

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	65.0 / 77.0 dB(A) 2)	69.0 / 81.0 dB(A) 2)	External earthing terminal	No
Moment of inertia	0.0021 kg m²		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} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	Unirex N3		Frame material	aluminum
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

Terminal box

Terminal box position	top	Max. cross-sectional area	1.5 mm²
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
Contact screw thread	M4	Cable gland	1 plug

Notes:

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) L10mh 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 dep.	technical reference	created by	approved by	
DI MC LVM		DT Configurator		*Technical data are subject to change! There may be discrepancies between calculated and rating plate values.*

SIEMENS

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