

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



Motor type : 1AV2105B SIMOTICS XP - 100 L - IM V1 - 4p

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

Remarks

Electrical data II 3G Ex ec IIC T3 Gc
-/-

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	3.00	-/-	6.20	1455	19.7	85.5	86.4	85.6	0.82	0.76	0.64	6.9	2.0	3.1	IE2
690	Y	50	3.00	-/-	3.60	1455	19.7	85.5	86.4	85.6	0.82	0.76	0.64	6.9	2.0	3.1	IE2
460	Δ	60	3.45	-/-	6.00	1755	18.8	87.5	88.2	87.3	0.82	0.77	0.65	7.5	2.0	3.1	IE2
460	Δ	60	3.00	-/-	5.40	1765	16.2	87.5	87.5	86.0	0.79	0.72	0.60	8.3	2.4	3.7	IE2
IM V1 / IM 3011		FS 100 L				IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 9.8 s 15 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	60 / 72 dB(A) ^{2) 3)}	62 / 74 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0140 kg m ²		Thermal class	F
Bearing DE NDE	6206 2Z C3	6206 2Z C3	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	20000 h	16000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	25 kg
Grease nipple	-/-		Coating (paint finish)	No paint finish (cast iron parts primed)
Type of bearing	Preloaded bearing DE		Color, paint shade	RAL7030
Condensate drainage holes	Without		Motor protection	(A) without (Standard)
External earthing terminal	With (standard)		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	4 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	11 mm - 21 mm
Type of terminal box	TB1 F00	Cable entry	2xM32x1,5
Contact screw thread	M4		

Notes:
I_A/I_N = locked rotor current / current nominal
M_K/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 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		
IN LVM		SPC						
SIEMENS	document type	datasheet			document status			
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Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	S00	No paint finish, only GG parts primed
H00	Canopy		

H00	Canopy
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Notes:

responsible dep. IN LVM	technical reference	created by SPC	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents		
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