

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



Motor type : 1AV3104B SIMOTICS XP - 100 L - IM B14 - 4p

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

Remarks

Electrical data II 3D Ex tc IIIB T 120°C Dc -/-

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	2.20	-/-	4.45	1455	14.4	86.7	87.2	86.3	0.82	0.76	0.64	8.3	3.0	3.8	IE3
690	Y	50	2.20	-/-	2.60	1455	14.4	86.7	87.2	86.3	0.82	0.76	0.64	8.3	3.0	3.8	IE3
460	Δ	60	2.55	-/-	4.30	1750	13.9	89.5	90.1	89.2	0.83	0.77	0.66	8.8	3.0	3.9	IE3
460	Δ	60	2.20	-/-	3.85	1760	11.9	89.5	89.5	88.0	0.80	0.73	0.61	9.9	3.5	4.6	IE3
IM B14 / IM 3601		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) : 18.9 s 23 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	67 / 75 dB(A) ^{2) 3)}	70 / 78 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0101 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⁾	40000 h	32000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	25 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
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 1) L_{10mh} 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
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