

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



Motor type : 1CV3314B

SIMOTICS XP - 315 L - IM B3 - 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 -/-
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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 _f /I _N	T _f /T _N	T _B /T _N	
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	160.00	-/-	275.00	1490	1030.0	95.8	96.1	96.1	0.87	0.85	0.77	7.3	2.9	3.1	IE3
Converter duty (S9) - 155(F) to 130(B)																	
49	Δ	5	9.2		173	143	614				0.84	Type of converter	Voltage source converter, general.				
205	Δ	25	67		230	742	862				0.86						
380	Δ	50	120		220	1,491	769				0.86						
380	Δ	86.6	118		220	2581	437				0.86						
IM B3 / IM 1001			FS 315 L				IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 28.3 s 47.6 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	73 / 87 dB(A) ^{2) 3)}	78 / 92 dB(A) ^{2) 3)}	External earthing terminal	With (standard)
Moment of inertia	3.1000 kg m ²		Vibration severity grade	A
Bearing DE NDE	NU 319	6319 C3	Thermal class	F
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad, min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	40 g 40 g 6000 h		Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	990 kg
Regreasing device	With (standard)		Coating (paint finish)	Standard paint finish C2
Grease nipple	M10x1 DIN 3404 A		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Bearing insulation DE / Bearing insulation NDE	Yes (non-drive end)		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	With (standard)			

Terminal box

Terminal box position	top	Max. cross-sectional area	150 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	38 mm - 45 mm
Type of terminal box	TB1 Q01	Cable entry	2xM63x1,5-2xM20x1,5
Contact screw thread	M12		

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_A/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. 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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Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	L22	Bearing design for increased cantilever forces
B43	Version for converter operation with operating data on voltage-source DC link converter	M4B	400 VD for 50 Hz

Notes:

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