

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



Motor type : 1CV3316C

SIMOTICS XP - 315 L - IM B3 - 6p

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

Remarks

Electrical data II 2D Ex tb IIIC T 120°C Db
-/-

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	160.00	-/-	295.00	992	1540.0	95.6	95.8	95.5	0.82	0.77	0.66	8.5	3.5	3.6	IE3

Converter duty (S9) - 155(F) to 130(B)																	
49	Δ	5	8		184	95	804				0.70	Type of converter Voltage source converter, general.					
205	Δ	25	62		235	493	1,200				0.79						
380	Δ	50	115		230	993	1,110				0.79						
380	Δ	100	114		220	1984	549				0.86						
IM B3 / IM 1001		FS 315 L				IP65		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions : -20 °C - +40 °C / 1,000 m Locked rotor time (hot / cold) : 18.6 s | 32.6 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	67 / 82 dB(A) ^{2) 3)}	69 / 83 dB(A) ^{2) 3)}	External earthing terminal	With (standard)
Moment of inertia	5.4100 kg m ²		Vibration severity grade	A
Bearing DE NDE	6319 C3	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)	1260 kg
Regreasing device	With (standard)		Coating (paint finish)	Special paint finish C3
Grease nipple	M10x1 DIN 3404 A		Color, paint shade	RAL7030
Type of bearing	Locating bearing DE		Motor protection	(B) 3 PTC thermistors - for tripping (standard) (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
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 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					
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Special design

B43	Version for converter operation with operating data on voltage-source DC link converter	Q02	Anti-condensation heating for 230 V (2 terminals)
M4B	400 VD for 50 Hz		

Additional information:

Space heaters

Technical data:	1-phase, 230 V 109W
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Notes:

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