

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



Motor type : 1CD3312A SIMOTICS XP - 315 M - IM B3 - 2p

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

Remarks

Electrical data	II 2G Ex db eb IIC T4 Gb -/-
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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 _I /I _N	T _I /T _N	T _B /T _N	
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	132.00	-/-	220.00	2982	425.0	95.4	95.3	94.7	0.91	0.90	0.86	7.4	2.3	2.9	IE3
690	Y	50	132.00	-/-	127.00	2982	425.0	95.4	95.3	94.7	0.91	0.90	0.86	7.4	2.3	2.9	IE3
460	Δ	60	132.00	-/-	191.00	3586	350.0	95.4	95.0	93.9	0.91	0.89	0.85	8.3	2.6	3.2	IE3
Converter duty (S9) - 155(F) to 155(F)																	
40	Δ	5	9.3		163	288	309				0.81	Type of converter Voltage source converter, general (utilized to F)					
200	Δ	25	64		215	1,484	411				0.91						
400	Δ	50	136		225	2,982	435				0.91						
400	Δ	60	136		225	3580	363				0.91						
IM B3 / IM1001		FS 315 M				IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 59.5 s 92.7 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	77 / 92 dB(A) ^{2) 3)}	81 / 96 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	1.9900 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6316 C3	6316 C3 INS	Thermal class	F
permissible lateral force on (N)	X ₀ : 5480	X _{0.5} : 5210	X _{max} : 4790	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	cast iron
Relubrication interval/quantity DE NDE	30 g 30 g 3000 h		Net weight of the motor	1290 kg
Lubricants	UNIREX N3		Motor weight incl. options	1290 kg
Regreasing device	-/-		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing DE		Motor protection	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	No			

Terminal box

Terminal box position	box at the top	Max. cross-sectional area	240 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	42 mm - 54 mm
Type of terminal box	TB3Q61	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM12		

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.	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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	datasheet			released	
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B02	Acceptance test certificate 3.1 acc. to EN 10204	Q02	Anti-condensation heating for 230 V (2 terminals)
B44	Version for converter operation with voltage source converter with operation data utilisation thermal class F		

Space heaters

Technical data:	1-phase, 230V, 218W
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Notes:

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