

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



Motor type : 1CV4314B

SIMOTICS SD - 315 L - IM B3 - 4p

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

Remarks

Electrical data	Safe Area -/-
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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)																	
IM B3 / IM1001			FS 315 L			IP65	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 30.3 s 45.9 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	68 / 83 dB(A) ^{2) 3)}	72 / 87 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	3.7900 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F
permissible lateral force on (N)	X ₀ : 9300	X _{0,5} : 8650	X _{max} : 8000	Duty type S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} , F _{Rad min} ¹⁾ for coupling operation 50 60Hz	40000 h	32000 h	Frame material	cast iron
Relubrication interval/quantity DE NDE	40 g 40 g 6000 h		Net weight of the motor	1200 kg
Lubricants	UNIREX N3		Coating (paint finish)	Special paint finish C3
Regreasing device	-/-		Color, paint shade	
Grease nipple	-/-		Motor protection	3 Bi-metallic sensors (opener) for tripping (2 terminals)
Type of bearing	Locating bearing NDE		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	(Standard) Yes			

Terminal box

Terminal box position	at the right	Max. cross-sectional area	240 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	44 mm - 54 mm
Type of terminal box	TB1R01	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM16	Cable gland	4 plugs

Notes:		
I_L/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_L/M_N = locked rotor torque / torque nominal	2) at rated power / at full load	
M_B/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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	title 1LE5504-3AB49-0AZ5-Z				document number	
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B02	Acceptance test certificate 3.1 acc. to EN 10204	Q82	Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery
B65	Normal test (routine test) with acceptance	R11	Terminal box rotated through 90°, cable entry from NDE
H20	IP 65 degree of protection	R50	Larger terminal box
M1Y	Non-standard winding:	R62	Cast iron auxiliary terminal box (small)
N30	Increased air humidity/temperature with 30 to 60 g water per m3 air	S02	Special paint finish C3
Q01	Measuring nipple for SPM shock pulse measurement to monitor bearings	Y53	Paint finish in other standard RAL colours
Q02	Anti-condensation heating for 230 V (2 terminals)	Y82	Auxiliary name plate with customer data
Q3A	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)		

Space heaters

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

Notes:

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