

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



Motor type : 1CV4314B

SIMOTICS SD - 315 L - IM B5 - 4p

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

Remarks

Electrical data Safe Area
-/-

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 B5 / IM3001		FS 315 L		IP55		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	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	1250 kg
Lubricants	UNIREX N3		Coating (paint finish)	Standard paint finish C2
Regreasing device	(Standard) Flat type lubricating nipple acc. DIN 3404		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	3 PTC thermistors - 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	box at the top	Max. cross-sectional area	240 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	34 mm - 45 mm
Type of terminal box	TB1Q01	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM12	Cable gland	4 plugs

Notes:

I_A/I_N = locked rotor current / current nominal
M_K/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			
SIEMENS	document type	datasheet			document status
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					Page
					951
					2023-12-14
					en
					1/2

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Special design

M1Y	Non-standard winding:	R17	Bolt-type terminals for cable connection, supplementary pack (3 terminals)
Q02	Anti-condensation heating for 230 V (2 terminals)		

Additional information:

Space heaters

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