

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) - 180(H) to 130(B)																	
400	Δ	50	160.00	-/-	280.00	1490	1030.0	96.6	96.8	96.6	0.85	0.81	0.73	7.9	3.3	3.1	IE4
690	Y	50	160.00	-/-	163.00	1490	1030.0	96.6	96.8	96.6	0.85	0.81	0.73	7.9	3.3	3.1	IE4
460	Δ	60	160.00	-/-	250.00	1791	850.0	96.5	96.5	96.0	0.84	0.80	0.71	8.9	3.7	3.4	IE4
460	Δ	60	184.00	-/-	280.00	1790	980.0	96.5	96.6	96.4	0.86	0.83	0.75	7.9	3.2	3.0	IE4
IM B3 / IM1001			FS 315 L				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - + °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	H
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} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material	cast iron
Lubricants			Net weight of the motor	1200 kg
Regreasing device	(Standard) Flat type lubricating nipple acc. DIN 3404		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	without (Standard)
Condensate drainage holes	(Standard) Yes		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	at the left	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
Contact screw thread	6xM12	Cable gland	2 plugs

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 _K /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.	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						
	document type				document status			
	datasheet				released			
	title				document number			
	1LE5504-3AB43-4AA6-Z							
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Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	N11	Temperature class 180(H), and coolant temperature max. 60°C
F76	Metal external fan		

Notes:

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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