

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



Motor type : 1CV4310B

SIMOTICS SD - 315 S - IM V1 - 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)																	
415	Δ	50	110.00	-/-	185.00	1491	700.0	96.3	96.4	96.0	0.86	0.83	0.74	8.6	3.3	3.3	IE4
480	Δ	60	110.00	-/-	162.00	1792	590.0	96.2	96.1	95.4	0.85	0.81	0.72	9.7	3.7	3.6	IE4
480	Δ	60	127.00	-/-	185.00	1790	680.0	96.2	96.2	95.8	0.86	0.83	0.76	8.5	3.2	3.1	IE4
IM V1 / IM3011			FS 315 S		IP55		UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 30.8 s 44.1 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	66 / 80 dB(A) ^{2) 3)}	71 / 85 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	2.7400 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F
permissible lateral force on (N) (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} for coupling operation 50 60Hz ¹⁾	20000 h	16000 h	Frame material	cast iron
Relubrication interval/quantity DE NDE	40 g 40 g 6000 h		Net weight of the motor	971 kg
Lubricants	UNIREX N3		Coating (paint finish)	Special paint finish, resistant to salt-laden air C4
Regreasing device	(Standard) Flat type lubricating nipple acc. DIN 3404		Color, paint shade	
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 _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 		
	document type datasheet				document status released			
	title 1LE5504-3AB03-5GB4-Z				document number			
© INNOMOTICS 2023	S03+Y53				rev. 951	creation date 2023-12-14	language en	Page 1/2

SIMOTICS SD - 315 S - IM V1 - 4p

Special design

S03	Special paint finish in sea air resistant C4	Y53	Paint finish in other standard RAL colours
-----	--	-----	--

Notes:

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			
	1LE5504-3AB03-5GB4-Z						
	S03+Y53			rev.	creation date	language	Page
© INNOMOTICS 2023				951	2023-12-14	en	2/2