

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

Safe Area

Electrical data

-/-

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	101.20	-/-	178.00	1490	648.6	96.3	96.3	95.7	0.85	0.81	0.71	9.3	3.6	3.6	IE4
690	Y	50	101.20	-/-	103.00	1490	648.6	96.3	96.3	95.7	0.85	0.81	0.71	9.3	3.6	3.6	IE4
460	Δ	60	110.00	-/-	169.00	1792	590.0	96.2	96.1	95.4	0.85	0.81	0.72	9.7	3.7	3.6	IE4
460	Δ	60	116.84	-/-	179.00	1790	623.4	96.2	96.1	95.5	0.85	0.81	0.74	9.2	3.5	3.4	IE4
IM V1 / IM3011			FS 315 S				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +50 °C / 1,000 m									Locked rotor time (hot / cold) : 30.8 s 44.1 s								
These values are calculated. The final rating plate data will be calculated when the order is placed																	
The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions.																	

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)	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⁾	20000 h	16000 h	Frame material	cast iron
Relubrication interval/quantity DE NDE	40 g 40 g 3000 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	-/-		Color, paint shade	
Grease nipple	-/-		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 ...	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 _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						
SIEMENS	document type	datasheet			document status			
					released			
	title	1LE5504-3AB03-4GB4-Z			document number			
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Special design

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
F74	Sheet steel fan cowl	R50	Larger terminal box
H00	Canopy	R62	Cast iron auxiliary terminal box (small)
N06	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 50°C, power reduced	S03	Special paint finish in sea air resistant C4
Q02	Anti-condensation heating for 230 V (2 terminals)	Y53	Paint finish in other standard RAL colours

Additional information:

Space heaters

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

Notes:

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