

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



Motor type : 1CV4315B

SIMOTICS SD - 315 L - IM B3 - 4p

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

Remarks

Safe Area

-/-

Electrical data

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			$\cos\phi$ ³⁾			I_A/I_N I_I/I_N	M_A/M_N T_I/T_N	M_K/M_N T_B/T_N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50		-/-													IE4
690	Y	50		-/-													IE4
460	Δ	60		-/-													IE4
460	Δ	60		-/-													IE4

IM B3 / IM1001	FS 315 L	IP65	UKCA	IEC/EN 60034	IEC, DIN, ISO, VDE, EN
Environmental conditions : -30 °C - + °C / m				Locked rotor time (hot / cold) : 26.6 s 41.9 s	

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	69 / 83 dB(A) ^{2) 3)}	73 / 88 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes	
Moment of inertia	4.3700 kg m ²		Vibration severity grade	Grade A	
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F	
permissible lateral force on (N)	$X_{0.2}$ 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⁾	40000 h	32000 h	Frame material	cast iron	
Lubricants				Net weight of the motor	1290 kg
Regreasing device	-/-			Coating (paint finish)	Special paint finish C3
Grease nipple	-/-			Color, paint shade	RAL7030
Type of bearing	Locating bearing DE			Motor protection	6 resistance thermometers PT100 (12 terminals)
Bearing insulation DE / Bearing insulation NDE	Yes (Non-drive end)			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_A/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. IN LVM	technical reference	created by SPC	approved by	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	Link documents
	document type datasheet	document status released			document number
	title 1LE5504-3AB53-4AJ4-Z B02+B60+B61+D04+F74+G11+H20+L51+Q02+Q78+Q82+R62+S02+Y50		rev. 951		
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Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	L51	Bearing insulation NDE
B60	Document electrical datasheet	Q02	Anti-condensation heating for 230 V (2 terminals)
B61	Document order dimension drawing	Q78	2 Pt100 resistance thermometers for bearing (6 terminals)
D04	Minimum ambient temperature -30°C	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	R62	Cast iron auxiliary terminal box (small)
G11	Rotary pulse encoder Sendix 5020 (HTL)	S02	Special paint finish C3
H20	IP 65 degree of protection	Y50	Temperature class 155(F), utilized acc. to 130(B), customer indication of coolant temperature and/or installation altitude

Additional information:

Space heaters

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

Notes:

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