

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



Motor type : 1CV4314A

SIMOTICS SD - 315 L - IM B3 - 2p

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	160.00	-/-	265.00	2986	510.0	96.3	96.3	95.8	0.90	0.88	0.82	9.6	2.5	3.9	IE4	
690	Y	50	160.00	-/-	154.00	2986	510.0	96.3	96.3	95.8	0.90	0.88	0.82	9.6	2.5	3.9	IE4	
460	Δ	60	160.00	-/-	235.00	3588	425.0	95.8	95.5	94.6	0.90	0.88	0.81	11.0	2.8	4.3	IE4	
460	Δ	60	179.00	-/-	260.00	3586	475.0	96.2	96.1	95.3	0.90	0.88	0.83	9.5	2.5	3.9	IE4	
IM B3 / IM1001			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) : 21.8 s 36.5 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	75 / 89 dB(A) ^{2) 3)}	79 / 94 dB(A) ^{2) 3)}	Condensate drainage holes	(Standard) Yes	
Moment of inertia	2.2500 kg m ²		External earthing terminal	(Standard) Yes	
Bearing DE NDE	6316 C3		Vibration severity grade	Grade A	
permissible lateral force on (N) (N)	X ₀ : 5800	X _{0.5} : 5500	X _{max} : 5200	Thermal class	F
bearing lifetime			Duty type	S1	
L _{10mh} F _{Rad} min for coupling operation 50 60Hz ¹⁾	40000 h		32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	30 g 30 g		3000 h	Frame material	cast iron
Lubricants	UNIREX N3		Net weight of the motor	1050 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 DE		Motor protection	3 PTC thermistors - for tripping (2 terminals)	
Bearing insulation DE / Bearing insulation NDE	Yes (Non-drive end)		Method of cooling	IC411 - self ventilated, surface cooled	

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	
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Special design

L51 Bearing insulation NDE

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