

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

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	$\eta^{3)}$			$\cos\phi^{3)}$			I_A/I_N I_f/I_N	M_A/M_N T_f/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	-/-	280.00	1490	1030.0	96.6	96.7	96.5	0.86	0.83	0.75	9.0	3.6	3.2	IE4
690	Y	50	160.00	-/-	161.00	1490	1030.0	96.6	96.7	96.5	0.86	0.83	0.75	9.0	3.6	3.2	IE4
460	Δ	60	184.00	-/-	280.00	1790	980.0	96.5	96.6	96.3	0.86	0.83	0.76	9.0	3.6	3.2	IE4
460	Δ	60	160.00	-/-	240.00	1792	850.0	96.5	96.4	95.9	0.86	0.82	0.73	10.0	4.1	3.6	IE4
IM B3 / IM 1001		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) : 29.5 s 43.2 s							

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	73 / 87 dB(A) ^{2) 3)}	78 / 93 dB(A) ^{2) 3)}	External earthing terminal	With (standard)
Moment of inertia	3.7000 kg m ²		Vibration severity grade	A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F
bearing lifetime			Duty type	S1
L_{10mh} F_{Rad} f_{min} for coupling operation 50 60Hz	40000 h	32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	40 g 40 g 6000 h		Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	1220 kg
Regreasing device	With (standard)		Coating (paint finish)	Special paint finish C3
Grease nipple	M10x1 DIN 3404 A		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	(B) 3 PTC thermistors - for tripping (standard) (2 terminals)
Condensate drainage holes	With (standard)		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	150 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	38 mm - 45 mm
Type of terminal box	TB1 Q01	Cable entry	2xM63x1,5-2xM20x1,5
Contact screw thread	M12	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) L10mh 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. DI MC LVM	technical reference	created by DT Configurator	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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