

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	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)																	
380	Δ	50	200.00	-/-	370.00	1490	1280.0	96.7	96.9	96.8	0.85	0.82	0.73	7.8	3.4	3.1	IE4
660	Y	50	200.00	-/-	215.00	1490	1280.0	96.7	96.9	96.8	0.85	0.82	0.73	7.8	3.4	3.1	IE4
440	Δ	60	200.00	-/-	320.00	1791	1070.0	96.5	96.5	96.2	0.85	0.81	0.72	9.5	3.7	3.4	IE4
440	Δ	60	230.00	-/-	365.00	1788	1230.0	96.8	97.0	96.8	0.86	0.83	0.75	8.2	3.2	3.0	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) : 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 : 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⁾	40000 h	32000 h	Frame material	cast iron
Relubrication interval/quantity DE NDE	40 g 40 g 6000 h		Net weight of the motor	1290 kg
Lubricants	UNIREX N3		Coating (paint finish)	Standard paint finish C2
Regreasing device	-/-		Color, paint shade	RAL7030
Grease nipple	-/-		Motor protection	3 resistance thermometers PT100 (6 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_A/I_N = locked rotor current / current nominal
M_K/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	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 1LE5504-3AB53-3AH4-Z				document number			
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Special design			
G15	Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box moisture protection	Q02	Anti-condensation heating for 230 V (2 terminals)
Additional information:			
Space heaters			
Technical data: 1-phase, 230V, 218W			
Notes:			
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