

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		

Electrical data																		Safe Area			
																		-/-			
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	200.00	-/-	350.00	1490	1280.0	96.7	96.9	96.8	0.85	0.82	0.73	7.8	3.4	3.1	IE4				
690	Y	50	200.00	-/-	205.00	1490	1280.0	96.7	96.9	96.8	0.85	0.82	0.73	7.8	3.4	3.1	IE4				
460	Δ	60	200.00	-/-	305.00	1791	1070.0	96.5	96.5	96.2	0.85	0.81	0.72	9.5	3.7	3.4	IE4				
460	Δ	60	230.00	-/-	345.00	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	NU 319	6319 C3	Thermal class	F
permissible lateral force on (N) (N)	X ₀ : 34000	X _{0.5} : 23000	X _{max} : 15000	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 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 ...	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 	
SIEMENS	document type datasheet			document status released			
	title 1LE5504-3AB53-4AB4-Z			document number			
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Special design

L22

Bearing design for increased cantilever forces

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