

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	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	139.19	-/-	245.00	2985	445.3	96.3	96.1	95.3	0.89	0.86	0.79	11.0	2.9	4.5	IE4
660	Y	50	139.19	-/-	142.00	2985	445.3	96.3	96.1	95.3	0.89	0.86	0.79	11.0	2.9	4.5	IE4
440	Δ	60	160.00	-/-	245.00	3588	425.0	95.8	95.5	94.6	0.90	0.88	0.81	11.0	2.8	4.3	IE4
440	Δ	60	155.72	-/-	240.00	3585	414.8	96.1	95.8	94.5	0.89	0.86	0.80	10.9	2.9	4.5	IE4
IM B3 / IM1001			FS 315 L				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +55 °C / 1000 m									Locked rotor time (hot / cold) : 21.8 s 36.5 s								
These values are calculated. The final rating plate data will be calculated when the order is placed																	
The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions.																	

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	6316 C3	Vibration severity grade	Grade A
permissible lateral force on (N) (N)	X ₀ : 5800	X _{0.5} : 5500	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	1500 h	Frame material	cast iron
Lubricants	UNIREX N3		Net weight of the motor	1050 kg
Regreasing device	Flat type lubricating nipple		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	1) L _{10mh} according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
M _K /M _N = locked rotor torque / torque nominal	2) at rated power / at full load	
M _B /M _N = break down torque / nominal torque		

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 1LE5504-3AA43-3AB4-Z				document number			
© INNOMOTICS 2024	L51+N07				rev. 953	creation date 2024-02-21	language en	Page 1/2

SIMOTICS SD - 315 L - IM B3 - 2p

Special design

L51	Bearing insulation NDE	N07	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 55°C, power reduced
-----	------------------------	-----	--

Notes:

responsible dep.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
IN LVM		SPC					
	document type			document status			
	datasheet			released			
	title			document number			
	1LE5504-3AA43-3AB4-Z						
	L51+N07			rev.	creation date	language	Page
© INNOMOTICS 2024				953	2024-02-21	en	2/2