

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



Motor type : 1CV4310B

SIMOTICS SD - 315 S - 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	110.00	-/-	192.00	1491	700.0	96.3	96.4	96.0	0.86	0.83	0.74	8.6	3.3	3.3	IE4
690	Y	50	110.00	-/-	111.00	1491	700.0	96.3	96.4	96.0	0.86	0.83	0.74	8.6	3.3	3.3	IE4
460	Δ	60	110.00	-/-	169.00	1792	590.0	96.2	96.1	95.4	0.85	0.81	0.72	9.7	3.7	3.6	IE4
460	Δ	60	127.00	-/-	193.00	1790	680.0	96.2	96.2	95.8	0.86	0.83	0.76	8.5	3.2	3.1	IE4
IM B3 / IM1001			FS 315 S				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 30.8 s 44.1 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	66 / 80 dB(A) ^{2) 3)}	71 / 85 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	2.7400 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	922 kg
Lubricants	UNIREX N3		Coating (paint finish)	Special paint finish C3
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_L/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_L/M_N = locked rotor torque / torque nominal	2) at rated power / at full load	
M_K/M_N = break down torque / nominal torque		

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					
SIEMENS	document type	datasheet			document status		
					released		
	title	1LE5504-3AB03-4AB4-Z			document number		
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L22	Bearing design for increased cantilever forces	S02	Special paint finish C3
Q82	Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery		

Notes:

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