

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



Motor type : 1CV4310B

SIMOTICS SD - 315 S - IM B8 - 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)																	
380	Δ	50	110.00	-/-	200.00	1491	700.0	96.3	96.4	96.0	0.86	0.83	0.74	8.6	3.3	3.3	IE4
660	Y	50	110.00	-/-	116.00	1491	700.0	96.3	96.4	96.0	0.86	0.83	0.74	8.6	3.3	3.3	IE4
440	Δ	60	110.00	-/-	177.00	1792	590.0	96.2	96.1	95.4	0.85	0.81	0.72	9.7	3.7	3.6	IE4
440	Δ	60	127.00	-/-	200.00	1790	680.0	96.2	96.2	95.8	0.86	0.83	0.76	8.5	3.2	3.1	IE4
IM B8 / IM1071			FS 315 S		IP65		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)}	Condensate drainage holes	(Standard) Yes
Moment of inertia	2.7400 kg m ²		External earthing terminal	(Standard) Yes
Bearing DE NDE	NU 319 6319 C3		Vibration severity grade	Grade A
permissible lateral force on (N) (N)	X ₀ : 34000	X _{0.5} : 23000	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	40 g 40 g 6000 h		Frame material	cast iron
Lubricants	UNIREX N3		Net weight of the motor	922 kg
Regreasing device	-/-		Coating (paint finish)	Special paint finish C3
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	6 PTC thermistors - for alarm and tripping (4 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
M_A/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.	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			document status			
	datasheet			released			
	title			document number			
	1LE5504-3AB03-3VC4-Z						
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F74	Sheet steel fan cowl	M11	Stainless steel rating plate
H20	IP 65 degree of protection	Q01	Measuring nipple for SPM shock pulse measurement to monitor bearings
L22	Bearing design for increased cantilever forces	Q82	Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery
L51	Bearing insulation NDE	S02	Special paint finish C3

Notes:

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