

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



Motor type : 1CV3316B

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	250.00	-/-	440.00	1490	1600.0	96.0	96.1	95.7	0.85	0.82	0.74	7.9	2.8	3.2	IE3	
690	Y	50	250.00	-/-	255.00	1490	1600.0	96.0	96.1	95.7	0.85	0.82	0.74	7.9	2.8	3.2	IE3	
460	Δ	60	250.00	-/-	385.00	1791	1330.0	96.2	96.1	95.3	0.85	0.81	0.73	8.6	3.1	3.5	IE3	
460	Δ	60	290.00	-/-	440.00	1788	1550.0	96.2	96.3	95.7	0.86	0.83	0.76	7.6	2.7	3.0	IE3	
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) : 24.9 s 47.1 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	75 / 91 dB(A) ^{2) 3)}	82 / 97 dB(A) ^{2) 3)}	Condensate drainage holes	(Standard) Yes
Moment of inertia	4.2700 kg m ²		External earthing terminal	(Standard) Yes
Bearing DE NDE	6319 C4	6319 C4	Vibration severity grade	Grade A
permissible lateral force on (N) (N)	X ₀ : 9300	X _{0.5} : 8650	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	1290 kg
Regreasing device	-/-		Coating (paint finish)	No paint finish (cast iron parts primed)
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing DE		Motor protection	3 resistance thermometers PT100 (6 terminals)
Bearing insulation DE / Bearing insulation NDE	Yes (Non-drive end)		Method of cooling	IC416 - separately ventilated, surface cooled

Terminal box

Terminal box position	box at the top, socket right	Max. cross-sectional area	240 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	42 mm - 54 mm
Type of terminal box	TB3Q61	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.	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		
	title	1LE5503-3AB63-4AH1-Z F70+G11+L51+M11+Q02+S00			released		
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					rev.	creation date	language Page
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F70	Mounting of separately driven fan	M11	Stainless steel rating plate
G11	Rotary pulse encoder Sendix 5020 (HTL)	Q02	Anti-condensation heating for 230 V (2 terminals)
L51	Bearing insulation NDE	S00	No paint finish, only GG parts primed

Space heaters

Technical data: 1-phase, 230V, 218W

Notes:

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