

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



Motor type : 1CV4310C

SIMOTICS SD - 315 S - IM B3 - 6p

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) - 180(H) to 130(B)																	
460	Δ	60	90.00	-/-	139.00	1192	720.0	95.8	96.0	95.7	0.85	0.81	0.72	8.0	2.5	3.3	IE4
IM B3 / IM1001			FS 315 S		IP55		UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - + °C / 1,000 m									Locked rotor time (hot / cold) : 25 s 34 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	63 / 77 dB(A) ^{2) 3)}	65 / 79 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	3.1800 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	H
permissible lateral force on (N)	X ₀ : 10600	X _{0.5} : 9900	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	-/-	32000 h	Frame material	cast iron
Lubricants			Net weight of the motor	830 kg
Regreasing device	-/-		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing DE		Motor protection	1 resistance thermometer PT100 in stator winding - 2 wire (2 terminals)
Bearing insulation DE / Bearing insulation NDE	Yes (Non-drive end)		Method of cooling	IC416 - separately 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 ...	38 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_B/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	1LE5504-3AC09-0AP4-Z			document number		
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B02	Acceptance test certificate 3.1 acc. to EN 10204	M1F	460 VD for 60 Hz, 60-Hz power
F70	Mounting of separately driven fan	N11	Temperature class 180(H), and coolant temperature max. 60°C
H02	Vibration-proof version	R11	Terminal box rotated through 90°, cable entry from NDE
L51	Bearing insulation NDE	Y76	Mounting of HOG 10 DN 1024 I + centrifugal switch, (speed rpm), terminal box protection against dust

Notes:

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