

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



Motor type : 1CV4316C

SIMOTICS SD - 315 L - IM B3 - 6p

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project

Remarks

Safe Area

-/-

Electrical data

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			cosφ ³⁾			I _A /I _N I _I /I _N	M _A /M _N T _I /T _N	M _K /M _N T _B /T _N	IE-CL	
								4/4	3/4	2/4	4/4	3/4	2/4					
DOL duty (S1) - 155(F) to 130(B)																		
400	Δ	50	160.00	-/-	295.00	993	1540.0	96.2	96.4	96.1	0.82	0.77	0.67	8.0	2.9	3.1	IE4	
690	Y	50	160.00	-/-	170.00	993	1540.0	96.2	96.4	96.1	0.82	0.77	0.67	8.0	2.9	3.1	IE4	
460	Δ	60	160.00	-/-	255.00	1194	1280.0	96.2	96.2	95.7	0.82	0.77	0.67	9.2	3.1	3.4	IE4	
460	Δ	60	192.00	-/-	300.00	1192	1540.0	96.2	96.4	96.2	0.84	0.80	0.72	7.8	2.6	2.8	IE4	
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) : 46.2 s 69.1 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	70 / 85 dB(A) ^{2) 3)}	71 / 85 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	5.6700 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3		Thermal class	F
permissible lateral force on (N)	X ₀ : 10600	X _{0.5} : 9900	X _{max} : 9200	Duty type
bearing lifetime	40000 h		32000 h	Direction of rotation
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h		32000 h	Frame material
Relubrication interval/quantity DE NDE	40 g 40 g		6000 h	Net weight of the motor
Lubricants	UNIREX N3			Coating (paint finish)
Regreasing device	-/-			Standard paint finish C2
Grease nipple	-/-			Color, paint shade
Type of bearing	Locating bearing NDE			RAL7030
Condensate drainage holes	(Standard) Yes			Motor protection
				without (Standard)
				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
Contact screw thread	6xM12	Cable gland	2 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. 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 1LE5504-3AC63-4AA4	document number			
© INNOMOTICS 2023	rev. 951	creation date 2023-12-14	language en		