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

Motor type : 1CV4315B **SIMOTICS SD - 315 L - IM B3 - 4p**

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) 4/4	η 3) 3/4	η 3) 2/4	cosφ 3) 4/4	cosφ 3) 3/4	cosφ 3) 2/4	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
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	200.00	-/-	350.00	1490	1280.0	96.7	96.9	96.8	0.85	0.82	0.73	7.8	3.4	3.1	IE4
690	Y	50	200.00	-/-	205.00	1490	1280.0	96.7	96.9	96.8	0.85	0.82	0.73	7.8	3.4	3.1	IE4
460	Δ	60	200.00	-/-	305.00	1791	1070.0	96.5	96.5	96.2	0.85	0.81	0.72	9.5	3.7	3.4	IE4
460	Δ	60	230.00	-/-	345.00	1788	1230.0	96.8	97.0	96.8	0.86	0.83	0.75	8.2	3.2	3.0	IE4
IM B3 / IM1001		FS 315 L			IP55	UKCA		IEC/EN 60034			IEC, DIN, ISO, VDE, EN						

Environmental conditions : -20 °C - +40 °C / 1000 m | Locked rotor time (hot / cold) : 26.6 s | 41.9 s

Mechanical data

Sound level (SPL / SWL) at 50Hz|60Hz	69 / 83 dB(A) 2) 3)	73 / 88 dB(A) 2) 3)	
Moment of inertia	4.3700 kg m²		
Bearing DE | NDE	NU 319	6319 C3	
permissible lateral force on (N) *(N)*	x_0: 34000	$x_{0.5}$: 23000	x_{max}: 15000
bearing lifetime			
L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)	40000 h	32000 h	
Relubrication interval/quantity DE | NDE	40 g | 40 g 6000 h		
Lubricants	UNIREX N3		
Regreasing device	Flat type lubricating nipple		
Grease nipple	M10x1 DIN 3404 A		
Type of bearing	Locating bearing NDE		
Bearing insulation DE / Bearing insulation NDE	Yes (Non-drive end)		

Condensate drainage holes	(Standard) Yes
External earthing terminal	(Standard) Yes
Vibration severity grade	Grade A
Thermal class	F
Duty type	S1
Direction of rotation	bidirectional
Frame material	cast iron
Net weight of the motor	1290 kg
Coating (paint finish)	Standard paint finish C2
Color, paint shade	RAL7030
Motor protection	1 temperature sensor KTY84-130 (2 terminals)
Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	box at the top	Max. cross-sectional area	240 mm²
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

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 department	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	Created automatically		

SIEMENS

Document type	Document status
Technical data sheet	Released
Document title	**Document number**
1LE5504-3AB53-4AF4-Z **G06+L22+L51**	TDS-240731-084825

Restricted	Revision	Creation date	Language	Page
© Innomotics 2024	AA	2024-07-31	en	1/2

Branding disclaimer applies

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

Motor type : 1CV4315B **SIMOTICS SD - 315 L - IM B3 - 4p**

Special design

G06	Mounting a rotary pulse encoder HOG 10 D 1024 I	L51	Bearing insulation NDE
L22	Bearing design for increased cantilever forces		