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

Motor type : 1CV4310B **INNOMOTICS SD - 315 S - 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	110.00	-/-	192.00	1491	700.0	96.3	96.4	96.0	0.86	0.83	0.74	8.6	3.3	3.3	IE4
690	Y	50	110.00	-/-	111.00	1491	700.0	96.3	96.4	96.0	0.86	0.83	0.74	8.6	3.3	3.3	IE4
460	Δ	60	110.00	-/-	169.00	1792	590.0	96.2	96.1	95.4	0.85	0.81	0.72	9.7	3.7	3.6	IE4
460	Δ	60	127.00	-/-	193.00	1790	680.0	96.2	96.2	95.8	0.86	0.83	0.76	8.5	3.2	3.1	IE4
IM B3 / IM1001			FS 315 S			IP55	UKCA	IEC/EN 60034			IEC, DIN, ISO, VDE, EN						

Environmental conditions : -20 °C - +40 °C / 1000 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)	
Moment of inertia	2.7400 kg m²		
Bearing DE | NDE	NU 319	6319 C3	
permissible lateral force on (N) *(N)*	x_0: 31000	$x_{0.5}$: N/A	x_{max}: 10500
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	kg
Coating (paint finish)	Standard paint finish C2
Color, paint shade	RAL7030
Motor protection	3 PTC thermistors - for tripping (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		

INNOMOTICS

Document type	Document status
Technical data sheet	Released
Document title	**Document number**
1LE5504-3AB03-4AB4-Z **L22+L51**	TDS-241003-103025

Restricted	Revision	Creation date	Language	Page
© Innomotics 2024	AA	2024-10-03	en	1/2

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Special design

L22	Bearing design for increased cantilever forces	L51	Bearing insulation NDE