

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



Motor type : 1CV4312B

SIMOTICS SD - 315 M - 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⁾			cos φ ³⁾			I _A /I _N I _f /I _N	M _A /M _N T _f /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	132.00	-/-	235.00	1490	850.0	96.4	96.6	96.3	0.85	0.81	0.73	8.2	3.3	3.2	IE4	
690	Y	50	132.00	-/-	135.00	1490	850.0	96.4	96.6	96.3	0.85	0.81	0.73	8.2	3.3	3.2	IE4	
460	Δ	60	132.00	-/-	205.00	1791	700.0	96.5	96.5	95.9	0.84	0.80	0.71	9.2	3.6	3.6	IE4	
460	Δ	60	152.00	-/-	235.00	1790	810.0	96.5	96.6	96.3	0.85	0.82	0.74	8.1	3.2	3.1	IE4	
IM B3 / IM1001			FS 315 M			IP55		UKCA		IEC/EN 60034			IEC, DIN, ISO, VDE, EN, GB 18613-2012			Grade 2		

Environmental conditions : -20 °C - +40 °C / 1000 m

Locked rotor time (hot / cold) : 25.4 s | 39.5 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	67 / 81 dB(A) ^{2) 3)}	72 / 86 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes	
Moment of inertia	2.9100 kg m ²		Vibration severity grade	Grade A	
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F	
permissible lateral force on (N) (N)	X ₀ : 9300	X _{0.5} : 8650	X _{max} : 8000	Duty type	S1
bearing lifetime	Direction of rotation			bidirectional	
L _{10mh} F _{Rad, min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material	cast iron	
Relubrication interval/quantity DE NDE	40 g 40 g 6000 h		Net weight of the motor	942 kg	
Lubricants	UNIREX N3			Coating (paint finish)	Standard paint finish C2
Regreasing device	Flat type lubricating nipple			Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A			Motor protection	3 PTC thermistors - for tripping (2 terminals)
Type of bearing	Locating bearing NDE			Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	(Standard) Yes				

Terminal box

Terminal box position	at the left	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 - 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

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	Link documents
	Document type Technical data sheet	Document status Released			
	Document title 1LE5504-3AB23-4AB6-Z	Document number TDS-240509-122557			
Restricted © Innomotics 2024	D34	Revision AA	Creation date 2024-05-09		

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



Motor type : 1CV4312B

SIMOTICS SD - 315 M - IM B3 - 4p

Special design

D34 China Energy Efficiency Label

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	Link documents
	Document type Technical data sheet	Document status Released			
	Document title 1LE5504-3AB23-4AB6-Z	Document number TDS-240509-122557			
Restricted © Innomatics 2024	D34	Revision AA	Creation date 2024-05-09		