

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⁾			$\cos\phi$ 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) - 180(H) 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					
Environmental conditions : -20 °C - +40 °C / 1,000 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	H	
permissible lateral force on (N)	$X_{0.5}$: 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)	Special paint finish, resistant to salt-laden air C4	
Regreasing device	-/-		Color, paint shade		
Grease nipple	-/-		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	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 - 2xM20x1,5
Contact screw thread	6xM12	Cable gland	4 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	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	Link documents
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Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	Q82	Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery
F74	Sheet steel fan cowl	S03	Special paint finish in sea air resistant C4
M11	Stainless steel rating plate	Y53	Paint finish in other standard RAL colours
N10	Temperature class 180 (H)		

Notes:

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SIEMENS	document type datasheet	document status released			
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