

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



Motor type : 1CV1316D

SIMOTICS SD - 315 L - IM B3 - 8p

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

Remarks

Electrical data

Safe Area

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	M_A/M_N	M_K/M_N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4	I_i/I_N	T_i/T_N	T_B/T_N	
400	Δ	50	126.72	-/-	250.00	740	1635.4	91.6	91.9	91.5	0.80	0.75	0.63	7.5	3.0	3.4	IE1
690	Y	50	126.72	-/-	144.00	740	1635.4	91.6	91.9	91.5	0.80	0.75	0.63	7.5	3.0	3.4	IE1
460	Δ	60	151.68	-/-	250.00	885	1636.8	92.6	92.9	92.6	0.82	0.78	0.69	7.1	2.8	3.2	IE1
IM B3 / IM 1001		FS 315 L		1080 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions : -40 °C - +45 °C / 1,000 m

Locked rotor time (hot / cold) : 32.7 s | 32.7 s

These values are calculated. The final rating plate data will be calculated when the order is placed

The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions.

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	72.9 / 87.3 dB(A) ²⁾	76.7 / 91.1 dB(A) ²⁾	External earthing terminal	Yes (standard)
Moment of inertia	4.5000 kg m ²		Vibration severity grade	A
Bearing DE NDE	6319 C3	6319 C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	40 g 40 g 3000 h		Frame material	cast iron
Lubricants	AERO SHELL GREASE 22		Coating (paint finish)	Special paint finish C3
Regreasing device	Yes (standard)		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	(C) 6 PTC thermistors - for alarm and tripping (4 terminals)
Type of bearing	Locating bearing DE		Method of cooling	IC416 - separately ventilated, surface cooled
Condensate drainage holes	Yes (standard)			

Terminal box

Terminal box position	top	Max. cross-sectional area	240.0 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	38.0 mm - 45.0 mm
Type of terminal box	TB1 Q01	Cable entry	2xM63x1,5-2xM20x1,5
Contact screw thread	M12	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) L10mh 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.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.
DI MC LVM		DT Configurator		

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	01	2021-04-23 16:58	en	1/2

SIMOTICS SD - 315 L - IM B3 - 8p

B02	Acceptance test certificate 3.1 acc. to EN 10204	L51	Bearing insulation NDE
D03	Minimum ambient temperature -40°C	M11	Stainless steel rating plate
D22	motor without CE character for export outside the EEA (see EU regulation 640/2009)	N05	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 45°C, power reduced
D47	TR CU product safety certificate EAC for the Eurasian Customs Union	Q02	Anti-condensation heating for 230 V (2 terminals)
F70	Mounting of separately driven fan	R12	Terminal box rotated through 180°
G06	Mounting a rotary pulse encoder HOG 10 D 1024 I	S02	Special paint finish C3

Space heaters

Technical data: 1-phase, 230 V 109W

Notes:

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