

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



Motor type : 1CV4314C

SIMOTICS SD - 315 L - IM B3 - 6p

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

Remarks

Safe Area

Electrical data -/-

U	Δ / Y	f	P	P	I	n	M	η ³⁾			cosφ ³⁾			I _A /I _N	M _A /M _N	M _K /M _N	IE-CL	
[V]		[Hz]	[kW]	[hp]	[A]	[1/min]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4	I _I /I _N	T _I /T _N	T _B /T _N		
DOL duty (S1) - 155(F) to 130(B)																		
400	Δ	50	110.00	-/-	193.00	992	1060.0	95.8	96.1	96.0	0.86	0.82	0.73	8.3	2.8	3.5	IE4	
690	Y	50	110.00	-/-	112.00	992	1060.0	95.8	96.1	96.0	0.86	0.82	0.73	8.3	2.8	3.5	IE4	
460	Δ	60	110.00	-/-	169.00	1193	880.0	96.2	96.3	95.9	0.85	0.80	0.70	9.3	3.1	3.9	IE4	
460	Δ	60	132.00	-/-	198.00	1191	1060.0	96.2	96.5	96.4	0.87	0.84	0.76	7.9	2.6	3.3	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) : 22.1 s 31.6 s									

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	63 / 78 dB(A) ^{2) 3)}	66 / 80 dB(A) ^{2) 3)}	Condensate drainage holes	(Standard) Yes
Moment of inertia	4.4900 kg m ²		External earthing terminal	(Standard) Yes
Bearing DE NDE	6319 C3	6319 C3	Vibration severity grade	Grade A
permissible lateral force on (N) (N)	X ₀ : 10600	X _{0.5} : 9900	Thermal class	F
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	6000 h	Frame material	cast iron
Lubricants	UNIREX N3		Net weight of the motor	1020 kg
Regreasing device	Flat type lubricating nipple		Coating (paint finish)	Standard paint finish C2
Grease nipple	M10x1 DIN 3404 A		Color, paint shade	RAL7030
Type of bearing	Locating bearing DE		Motor protection	3 PTC thermistors - for tripping (2 terminals)
Bearing insulation DE / Bearing insulation NDE	Yes (Non-drive end)		Method of cooling	IC411 - self ventilated, surface cooled

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 ...	38 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 I at full load
3) Value is valid only for DOL operation with motor design IC411

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L51	Bearing insulation NDE
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