

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



Motor type : 1CV4314B

SIMOTICS SD - 315 L - IM V1 - 4p

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

Remarks

Electrical data

Safe Area

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)																	
380	Δ	50	160.00	-/-	295.00	1490	1030.0	96.6	96.7	96.5	0.86	0.83	0.75	9.0	3.6	3.2	IE4
660	Y	50	160.00	-/-	168.00	1490	1030.0	96.6	96.7	96.5	0.86	0.83	0.75	9.0	3.6	3.2	IE4
440	Δ	60	184.00	-/-	290.00	1790	980.0	96.5	96.6	96.3	0.86	0.83	0.76	9.0	3.6	3.2	IE4
440	Δ	60	160.00	-/-	255.00	1792	850.0	96.5	96.4	95.9	0.86	0.82	0.73	10.0	4.1	3.6	IE4
IM V1 / IM 3011		FS 315 L				IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 29.7 s 43.5 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	73 / 87 dB(A) ²⁾	78 / 93 dB(A) ²⁾	External earthing terminal	Yes (standard)
Moment of inertia	3.7000 kg m ²		Vibration severity grade	A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad} min ¹⁾ for coupling operation	40000 h	32000 h	Direction of rotation	bidirectional
50 60Hz			Frame material	cast iron
Relubrication interval/quantity DE	40 g 40 g		Net weight of the motor (IM B3)	1220 kg
NDE	6000 h		Coating (paint finish)	Standard paint finish C2
Lubricants	Unirex N3		Color, paint shade	RAL7030
Regreasing device	Yes (standard)		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Grease nipple	M10x1 DIN 3404 A		Method of cooling	IC411 - self ventilated, surface cooled
Type of bearing	Locating bearing NDE			
Condensate drainage holes	Yes (standard)			

Terminal box

Terminal box position	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	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	1) L10mh according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
M _K /M _N = locked rotor torque / torque nominal	2) at rated power / at full load	
M _B /M _N = break down torque / nominal torque		

responsible dep.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.	Link documents
DI MC LVM		DT Configurator			
	document type				document status
	datasheet				released
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