

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



Motor type : 1CV4312C

SIMOTICS SD - 315 M - IM B5 - 6p

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)																	
230	Δ	50	90.00	-/-	280.00	992	870.0	95.6	95.9	95.7	0.85	0.81	0.71	8.2	2.8	3.5	IE4
400	Y	50	90.00	-/-	160.00	992	870.0	95.6	95.9	95.7	0.85	0.81	0.71	8.2	2.8	3.5	IE4
460	Y	60	99.00	-/-	153.00	1192	790.0	95.8	95.9	95.6	0.85	0.81	0.71	8.5	2.7	3.5	IE4
IM B5 / IM3001			FS 315 M				IP55	UKCA		IEC/EN 60034							
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 22.2 s 31.5 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	62 / 76 dB(A) ^{2) 3)}	64 / 79 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	3.7700 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F
permissible lateral force on (N)	X ₀ : 10600	X _{0.5} : 9900	Duty type	S1
		X _{max} : 9200	Direction of rotation	bidirectional
bearing lifetime			Frame material	cast iron
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Net weight of the motor	949 kg
Relubrication interval/quantity DE NDE	40 g 40 g 6000 h		Coating (paint finish)	Standard paint finish C2
Lubricants	UNIREX N3		Color, paint shade	RAL7030
Regreasing device	with conical grease nipple acc. DIN 71412A		Motor protection	3 PTC thermistors - for tripping (2 terminals)
Grease nipple	M10x1 DIN 71412 A		Method of cooling	IC411 - self ventilated, surface cooled
Type of bearing	Locating bearing DE		'SIMOTICS Connect 400' in IP65	No
Bearing insulation DE / Bearing insulation NDE	Yes (Non-drive end)			
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 ...	38 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	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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Special design

F74	Sheet steel fan cowl	L51	Bearing insulation NDE
L19	Regreasing device with regreasing nipple M10X1 acc.to DIN 71412-A	M11	Stainless steel rating plate

Notes:

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