

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

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)																	
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 / 1000 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)}	Condensate drainage holes	(Standard) Yes
Moment of inertia	2.9100 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 : 9300	X _{0.5} : 8650	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	942 kg
Regreasing device	Flat type lubricating nipple		Coating (paint finish)	Special paint finish C3
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	IC416 - separately 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 ...	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.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
IN LVM		SPC					
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Special design

F70	Mounting of separately driven fan	Q82	Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery
L51	Bearing insulation NDE	S02	Special paint finish C3

Notes:

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