

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



Motor type : 1CV4314B

SIMOTICS SD Pro - 315 L - 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)																	
380	Δ	50	160.00	-/-	295.00	1492	1020.0	96.6	96.7	96.4	0.85	0.81	0.72	8.3	2.8	3.2	IE4
660	Y	50	160.00	-/-	170.00	1492	1020.0	96.6	96.7	96.4	0.85	0.81	0.72	8.3	2.8	3.2	IE4
440	Δ	60	160.00	-/-	260.00	1793	850.0	96.5	96.4	95.8	0.84	0.80	0.70	9.1	3.1	3.5	IE4
440	Δ	60	184.00	-/-	295.00	1791	980.0	96.5	96.6	96.2	0.85	0.82	0.74	8.1	2.7	3.0	IE4
440	Δ	60		200	245.68	1794	800.0	96.5	96.3	95.6	0.84	0.80	0.70	9.7	3.3	3.7	MG1
IM B3 / IM1001		FS 315 L				IP55	UKCA	IEC/EN 60034		IEC, EN, UL, CSA, NEMA MG1-12							
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 36.7 s 55.5 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	69 / 84 dB(A) ^{2) 3)}	76 / 91 dB(A) ^{2) 3)}	Condensate drainage holes	(Standard) Yes
Moment of inertia	3.9000 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	1230 kg
Regreasing device	-/-		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		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	2 glands

Notes:

I _A /I _N = locked rotor current / current nominal	1) L _{10mh} according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
M _A /M _N = locked rotor torque / torque nominal	2) at rated power / at full load	
M _K /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	
IN LVM		SPC					
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Special design

F70	Mounting of separately driven fan	L51	Bearing insulation NDE
G06	Mounting a rotary pulse encoder HOG 10 D 1024 I	R18	Cable gland metal, max. number

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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