

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



Motor type : 1CV3316B

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 155(F)																	
380	Δ	50	250.00	-/-	470.00	1491	1600.0	96.0	96.0	95.6	0.84	0.80	0.71	8.1	3.2	3.0	IE3
660	Y	50	250.00	-/-	270.00	1491	1600.0	96.0	96.0	95.6	0.84	0.80	0.71	8.1	3.2	3.0	IE3
440	Δ	60	250.00	-/-	405.00	1792	1330.0	96.2	96.0	95.3	0.84	0.80	0.70	8.8	3.4	3.3	IE3
440	Δ	60	290.00	-/-	465.00	1790	1550.0	96.2	96.2	95.7	0.85	0.82	0.74	7.7	2.9	2.9	IE3
440	Δ	60		300	365.91	1793	1170.0	96.2	95.9	95.0	0.84	0.80	0.70	9.7	3.9	3.8	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) : 24.6 s 41 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	75 / 90 dB(A) ^{2) 3)}	80 / 94 dB(A) ^{2) 3)}	Condensate drainage holes	(Standard) Yes
Moment of inertia	4.6000 kg m ²		External earthing terminal	(Standard) Yes
Bearing DE NDE	6319 C4	6319 C4	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	1450 kg
Regreasing device	-/-		Coating (paint finish)	Special paint finish C3
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 angle 45°, socket right	Max. cross-sectional area	240 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	42 mm - 54 mm
Type of terminal box	TB3Q61	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM12	Cable gland	2 glands

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					
	document type	datasheet			document status		
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				951	2023-12-14	en	1/2

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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

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