

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



Motor type : 1CV3316B

SIMOTICS SD - 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)																	
400	Δ	50	250.00	-/-	440.00	1490	1600.0	96.0	96.1	95.7	0.85	0.82	0.74	7.9	2.8	3.2	IE3
690	Y	50	250.00	-/-	255.00	1490	1600.0	96.0	96.1	95.7	0.85	0.82	0.74	7.9	2.8	3.2	IE3
460	Δ	60	250.00	-/-	385.00	1791	1330.0	96.2	96.1	95.3	0.85	0.81	0.73	8.6	3.1	3.5	IE3
460	Δ	60	290.00	-/-	440.00	1788	1550.0	96.2	96.3	95.7	0.86	0.83	0.76	7.6	2.7	3.0	IE3
IM B3 / IM1001			FS 315 L				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - + °C / 1,000 m										Locked rotor time (hot / cold) : 24.9 s 47.1 s							

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	75 / 91 dB(A) ^{2) 3)}	82 / 97 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	4.2700 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	NU 319	6319 C4	Thermal class	F
permissible lateral force on (N) (N)	X ₀ : 34000	X _{0.5} : 23000	X _{max} : 15000	Duty type
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material	cast iron
Lubricants			Net weight of the motor	1290 kg
Regreasing device	-/-		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	6 PTC thermistors - for alarm and tripping (4 terminals)
Condensate drainage holes	(Standard) Yes		Method of cooling	IC411 - self 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	4 plugs

Notes:		
I_L/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_L/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	
IN LVM		SPC					
SIEMENS	document type			document status			
	datasheet			released			
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Special design

L22	Bearing design for increased cantilever forces	N03	Temperature class 155 (F), utilised to 155 (F), with increased cooling medium temperature
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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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