

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



Motor type : 1CV3316A

SIMOTICS SD - 315 L - IM B3 - 2p

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	240.00	-/-	415.00	2985	767.8	95.8	95.6	94.8	0.88	0.84	0.76	9.7	3.1	4.4	IE3
690	Y	50	240.00	-/-	240.00	2985	767.8	95.8	95.6	94.8	0.88	0.84	0.76	9.7	3.1	4.4	IE3
460	Δ	60	250.00	-/-	370.00	3588	670.0	95.8	95.4	94.4	0.88	0.84	0.76	11.0	4.1	4.6	IE3
460	Δ	60	268.80	-/-	405.00	3585	716.0	95.8	95.4	94.4	0.88	0.84	0.77	10.0	3.9	4.3	IE3
IM B3 / IM1001			FS 315 L				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +45 °C / 1,000 m									Locked rotor time (hot / cold) : 27.4 s 43.2 s								
These values are calculated. The final rating plate data will be calculated when the order is placed																	
The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions.																	

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	80 / 94 dB(A) ^{2) 3)}	84 / 98 dB(A) ^{2) 3)}	Condensate drainage holes	(Standard) Yes
Moment of inertia	2.8200 kg m ²		External earthing terminal	(Standard) Yes
Bearing DE NDE	NU 316	6316 C4	Vibration severity grade	Grade A
permissible lateral force on (N)	X ₀ : 21300	X _{0.5} : 15000	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	30 g 30 g	1500 h	Frame material	cast iron
Lubricants	UNIREX N3		Net weight of the motor	1340 kg
Regreasing device	-/-		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	without (Standard)
Bearing insulation DE / Bearing insulation NDE	Yes (Non-drive end)		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	box at the top, socket left	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
Contact screw thread	6xM12	Cable gland	2 plugs

Notes:

I_A/I_N = locked rotor current / current nominal
M_K/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

L22	Bearing design for increased cantilever forces	N05	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 45°C, power reduced
L51	Bearing insulation NDE		

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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