

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



Motor type : 1CV4316A SIMOTICS SD - 315 L - IM B3 - 2p

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project

Remarks

Safe Area

Electrical data -/-

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	250.00	-/-	425.00	2986	800.0	96.5	96.4	95.7	0.88	0.85	0.77	9.3	3.0	4.2	IE4
690	Y	50	250.00	-/-	245.00	2986	800.0	96.5	96.4	95.7	0.88	0.85	0.77	9.3	3.0	4.2	IE4
460	Δ	60	250.00	-/-	370.00	3588	670.0	96.2	95.8	94.8	0.88	0.84	0.76	11.0	4.1	4.6	IE4
460	Δ	60	280.00	-/-	415.00	3586	750.0	96.2	95.9	95.1	0.88	0.85	0.78	9.6	3.7	4.1	IE4
IM B3 / IM1001			FS 315 L				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 31.1 s 47.7 s								

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	6316 C4	6316 C4	Vibration severity grade	Grade A
permissible lateral force on (N) (N)	X ₀ : 5800	X _{0.5} : 5500	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	3000 h	Frame material	cast iron
Lubricants	UNIREX N3		Net weight of the motor	1340 kg
Regreasing device	Flat type lubricating nipple		Coating (paint finish)	Standard paint finish C2
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	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 - 2xM20x1,5
Contact screw thread	6xM12	Cable gland	4 plugs

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 I at full load
M_K/M_N = break down torque / nominal torque

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Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
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Special design

L51	Bearing insulation NDE
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