

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



Motor type : 1CV4316D SIMOTICS SD Add - 315 L - IM B3 - 8p

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) - 180(H) to 130(B)																	
415	Δ	50	132.00	-/-	235.00	741	1700.0	94.9	95.3	95.1	0.82	0.78	0.70	6.1	2.4	2.5	IE4
480	Δ	60	132.00	-/-	205.00	893	1410.0	95.4	95.5	95.0	0.82	0.78	0.69	6.9	2.7	2.8	IE4
480	Δ	60	148.00	-/-	225.00	891	1590.0	95.4	95.7	95.4	0.83	0.80	0.72	6.5	2.5	2.5	IE4
480	Δ	60		175	201.25	893	1410.0	95.4	95.5	95.0	0.82	0.78	0.69	6.9	2.7	2.8	MG1
IM B3 / IM1001			FS 315 L				IP55	UKCA		IEC/EN 60034		IEC, EN, UL, CSA, NEMA MG1-12					
Environmental conditions : -20 °C - + °C / 1000 m									Locked rotor time (hot / cold) : 32.5 s 58 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65 / 80 dB(A) ^{2) 3)}	67 / 82 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	5.0900 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	H
permissible lateral force on (N) (N)	X ₀ : 12000	X _{0.5} : 10600	X _{max} : 9200	Duty type
bearing lifetime				Direction of rotation
L _{10mh} F _{Rad, min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	bidirectional	
Lubricants				Frame material
Regreasing device	Flat type lubricating nipple	cast iron		
Grease nipple	M10x1 DIN 3404 A	Net weight of the motor		
Type of bearing	Locating bearing NDE	1110 kg		
Condensate drainage holes	(Standard) Yes	Coating (paint finish)		
			Standard paint finish C2	
			Color, paint shade	
			RAL7030	
			Motor protection	
			1 temperature sensor KTY84-130 (2 terminals)	
			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 ...	38 mm - 45 mm
Type of terminal box	TB1Q01	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM12	Cable gland	4 plugs

I_A/I_N = locked rotor current / current nominal
M_K/M_N = locked rotor torque / torque nominal
M_B/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

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Special design

F70	Mounting of separately driven fan	N11	Temperature class 180(H), and coolant temperature max. 60°C
G06	Mounting a rotary pulse encoder HOG 10 D 1024 I		

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