

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



Motor type : 1CV4310B

SIMOTICS SD - 315 S - IM V1 - 4p

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	110.00	-/-	192.00	1491	700.0	96.3	96.4	96.0	0.86	0.83	0.74	8.6	3.3	3.3	IE4
690	Y	50	110.00	-/-	111.00	1491	700.0	96.3	96.4	96.0	0.86	0.83	0.74	8.6	3.3	3.3	IE4
460	Δ	60	110.00	-/-	169.00	1792	590.0	96.2	96.1	95.4	0.85	0.81	0.72	9.7	3.7	3.6	IE4
460	Δ	60	127.00	-/-	193.00	1790	680.0	96.2	96.2	95.8	0.86	0.83	0.76	8.5	3.2	3.1	IE4
IM V1 / IM3011			FS 315 S				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 30.8 s 44.1 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	66 / 80 dB(A) ^{2) 3)}	71 / 85 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	2.7400 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F
permissible lateral force on (N) (N)	X ₀ : 9300	X _{0.5} : 8650	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad, min} for coupling operation 50 60Hz ¹⁾	20000 h	16000 h	Frame material	cast iron
Relubrication interval/quantity DE NDE	40 g 40 g	6000 h	Net weight of the motor	971 kg
Lubricants	UNIREX N3		Coating (paint finish)	Standard paint finish C2
Regreasing device	Flat type lubricating nipple		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	without (Standard)
Type of bearing	Locating bearing NDE		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	(Standard) Yes			

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 ...	34 mm - 45 mm
Type of terminal box	TB1Q01	Cable entry	2xM63x1,5
Contact screw thread	6xM12	Cable gland	2 plugs

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

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