

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



Motor type : 1CV4315B INNOMOTICS SD - 315 L - 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 _f /I _N	T _f /T _N	T _B /T _N	
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	200.00	-/-	350.00	1490	1280.0	96.7	96.9	96.8	0.85	0.82	0.73	7.8	3.4	3.1	IE4
690	Y	50	200.00	-/-	205.00	1490	1280.0	96.7	96.9	96.8	0.85	0.82	0.73	7.8	3.4	3.1	IE4
460	Δ	60	200.00	-/-	305.00	1791	1070.0	96.5	96.5	96.2	0.85	0.81	0.72	9.5	3.7	3.4	IE4
460	Δ	60	230.00	-/-	345.00	1788	1230.0	96.8	97.0	96.8	0.86	0.83	0.75	8.2	3.2	3.0	IE4
IM V1 / IM3011			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) : 26.6 s 41.9 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	69 / 83 dB(A) ^{2) 3)}	73 / 88 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	4.3700 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F
permissible lateral force on (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	kg
Lubricants	UNIREX N3		Coating (paint finish)	Special paint finish C3
Regreasing device	Flat type lubricating nipple		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	6 PTC thermistors - for alarm and tripping (4 terminals)
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 - 2xM20x1,5
Contact screw thread	6xM12	Cable gland	4 plugs

I_f/I_N = locked rotor current / current nominal
M_f/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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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

C06	Performance Line Process industry	Q60	3 PT100 resistance thermometers in stator winding - 2 wire (6 terminals)
Q01	Measuring nipple for SPM shock pulse measurement to monitor bearings	Q72	2 Pt100 resistance thermometers for bearings (4 terminals)
Q02	Anti-condensation heating for 230 V (2 terminals)	R62	Cast iron auxiliary terminal box (small)

Additional information:

Space heaters

Technical data: 1-phase, 230V, 218W

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