

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



Motor type : 1CV4314B

SIMOTICS SD - 315 L - IM B3 - 4p

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

Remarks **Safe Area**

**Electrical data** -/-

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η <sup>3)</sup>			cos φ <sup>3)</sup>			I <sub>A</sub> /I <sub>N</sub> I <sub>I</sub> /I <sub>N</sub>	M <sub>A</sub> /M <sub>N</sub> T <sub>I</sub> /T <sub>N</sub>	M <sub>K</sub> /M <sub>N</sub> T <sub>B</sub> /T <sub>N</sub>	IE-CL	
								4/4	3/4	2/4	4/4	3/4	2/4					
<b>DOL duty (S1) - 155(F) to 130(B)</b>																		
400	Δ	50	160.00	-/-	280.00	1490	1030.0	96.6	96.8	96.6	0.85	0.81	0.73	7.9	3.3	3.1	IE4	
690	Y	50	160.00	-/-	163.00	1490	1030.0	96.6	96.8	96.6	0.85	0.81	0.73	7.9	3.3	3.1	IE4	
460	Δ	60	160.00	-/-	250.00	1791	850.0	96.5	96.5	96.0	0.84	0.80	0.71	8.9	3.7	3.4	IE4	
460	Δ	60	184.00	-/-	280.00	1790	980.0	96.5	96.6	96.4	0.86	0.83	0.75	7.9	3.2	3.0	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) : 30.3 s   45.9 s								

**Mechanical data**

Sound level (SPL / SWL) at 50Hz 60Hz	68 / 83 dB(A) <sup>2) 3)</sup>	72 / 87 dB(A) <sup>2) 3)</sup>	Condensate drainage holes	(Standard) Yes
Moment of inertia	3.7900 kg m <sup>2</sup>		External earthing terminal	(Standard) Yes
Bearing DE   NDE	6319 C3	6319 C3	Vibration severity grade	Grade A
permissible lateral force on (N)	X <sub>0</sub> <sup>2)</sup> 9300	X <sub>0</sub> <sup>2)</sup> 8650	Thermal class	F
<b>bearing lifetime</b>			Duty type	S1
L <sub>10mh</sub> F <sub>Rad, min</sub> for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE   NDE	40 g   40 g 6000 h		Frame material	cast iron
Lubricants	UNIREX N3		Net weight of the motor	1200 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	1 temperature sensor KTY84-130 (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	Max. cross-sectional area	240 mm <sup>2</sup>
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<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal      1) L<sub>10mh</sub> according to DIN ISO 281 10/2010      3) Value is valid only for DOL operation with motor design IC411  
M<sub>A</sub>/M<sub>N</sub> = locked rotor torque / torque nominal      2) at rated power / at full load

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Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	<a href="#">Link documents</a>
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## Special design

D47	TR CU product safety certificate EAC for the Eurasian Customs Union	L51	Bearing insulation NDE
G04	Mounted rotary pulse encoder LL 861 900 220		

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