

# 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>			cosφ <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)	Special paint finish C3
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	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>
	Document type Technical data sheet	Document status Released			
	Document title <b>1LE5504-3AB43-4AB4-Z</b>	Document number TDS-240409-111447			
Restricted © Innomatics 2024	L51+M11+S02	Revision AA	Creation date 2024-04-09		

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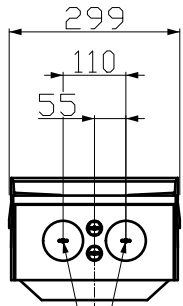
## Special design

L51	Bearing insulation NDE	S02	Special paint finish C3
M11	Stainless steel rating plate		

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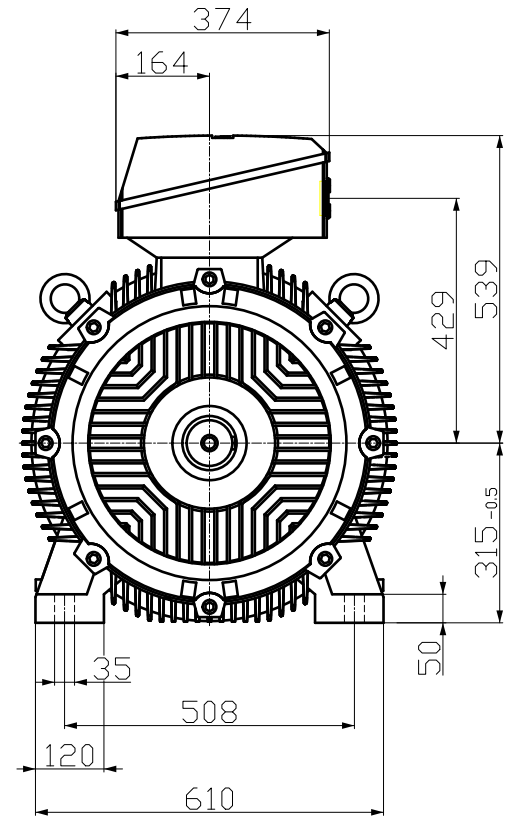
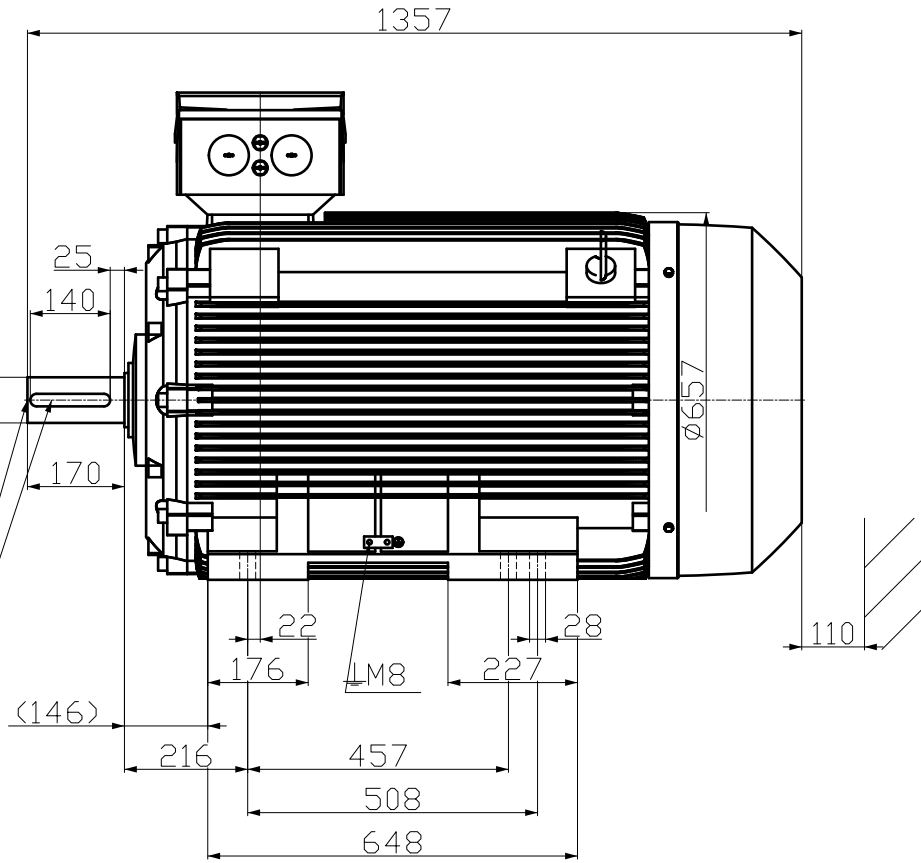
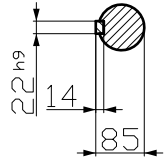
Terminal box -  
Front view



2xM63x1.5

DIN 332-DS M20

DIN 6885-1



Tolerance	Surface	Material	Weight	Scale
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SIEMENS	Doc. State	Item No	Paper Size	
	Revision	Index	2nd Language	
	Project No	È	Sheet	
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