

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



Motor type : 1CV4310A

SIMOTICS SD - 315 S - IM B3 - 2p

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

## Electrical data

## Safe Area

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	110.00	-/-	184.00	2988	350.0	96.0	95.9	95.1	0.90	0.88	0.82	9.1	2.5	3.7	IE4
690	Y	50	110.00	-/-	107.00	2988	350.0	96.0	95.9	95.1	0.90	0.88	0.82	9.1	2.5	3.7	IE4
460	Δ	60	110.00	-/-	161.00	3588	295.0	95.4	94.9	93.6	0.90	0.87	0.81	10.0	2.8	4.0	IE4
460	Δ	60	123.00	-/-	178.00	3588	325.0	95.4	95.1	94.0	0.91	0.89	0.83	9.1	2.6	3.6	IE4
IM B3 / IM1001			FS 315 S			IP55		UKCA		IEC/EN 60034							
Environmental conditions : -20 °C - +40 °C / 1000 m										Locked rotor time (hot / cold) : 29.7 s   47.1 s							

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	72 / 86 dB(A) <sup>2) 3)</sup>	77 / 91 dB(A) <sup>2) 3)</sup>	External earthing terminal	(Standard) Yes	
Moment of inertia	1.8400 kg m <sup>2</sup>		Vibration severity grade	Grade A	
Bearing DE   NDE	6316 C3		Thermal class	F	
permissible lateral force on (N)	X <sub>0</sub> : 5800	X <sub>0.5</sub> : 5500	Duty type	S1	
<b>bearing lifetime</b>			Direction of rotation	bidirectional	
L <sub>10mh</sub> F <sub>Rad</sub> min for coupling operation 50 60Hz <sup>1)</sup>	40000 h		32000 h	Frame material	cast iron
Relubrication interval/quantity DE   NDE	30 g   30 g		3000 h	Net weight of the motor	916 kg
Lubricants	UNIREX N3		Coating (paint finish)	Special paint finish C3	
Regreasing device	(Standard) Flat type lubricating nipple acc. DIN 3404		Color, paint shade	RAL7030	
Grease nipple	M10x1 DIN 3404 A		Motor protection	3 PTC thermistors - for tripping (2 terminals)	
Type of bearing	Locating bearing DE		Method of cooling	IC411 - self ventilated, surface cooled	
Condensate drainage holes	(Standard) Yes		'SIMOTICS Connect 400' in IP65	Yes	

## 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

### Notes:

I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>K</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>B</sub>/M<sub>N</sub> = break down torque / nominal torque  
1) L10mh 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

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	<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 datasheet	document status released			
	title 1LE5504-3AA03-4AB4-Z G81+L51+M11+S02	document number			
© Siemens AG 2023	rev. 929	creation date 2023-01-10	language en		

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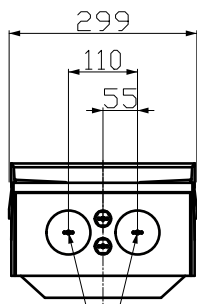
## Special design

G81	Installation of SIMOTICS CONNECT 400	M11	Stainless steel rating plate
L51	Bearing insulation NDE	S02	Special paint finish C3

Notes:

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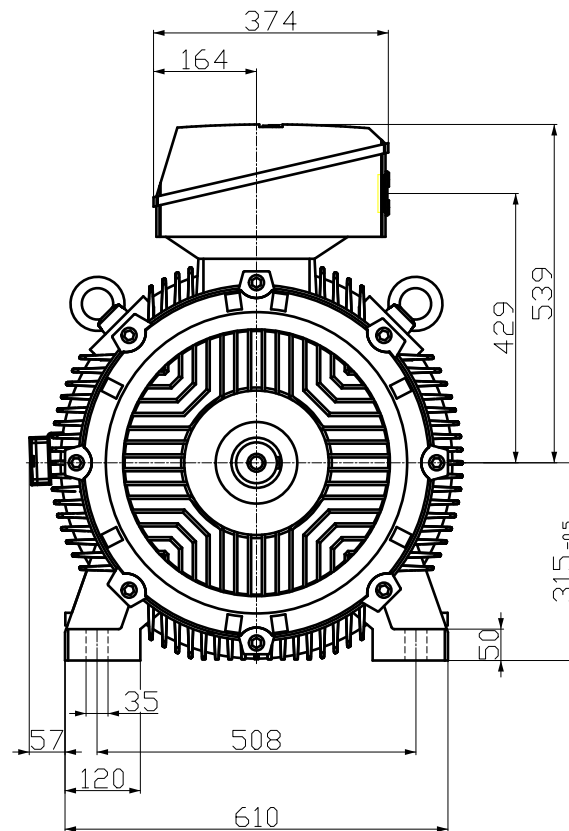
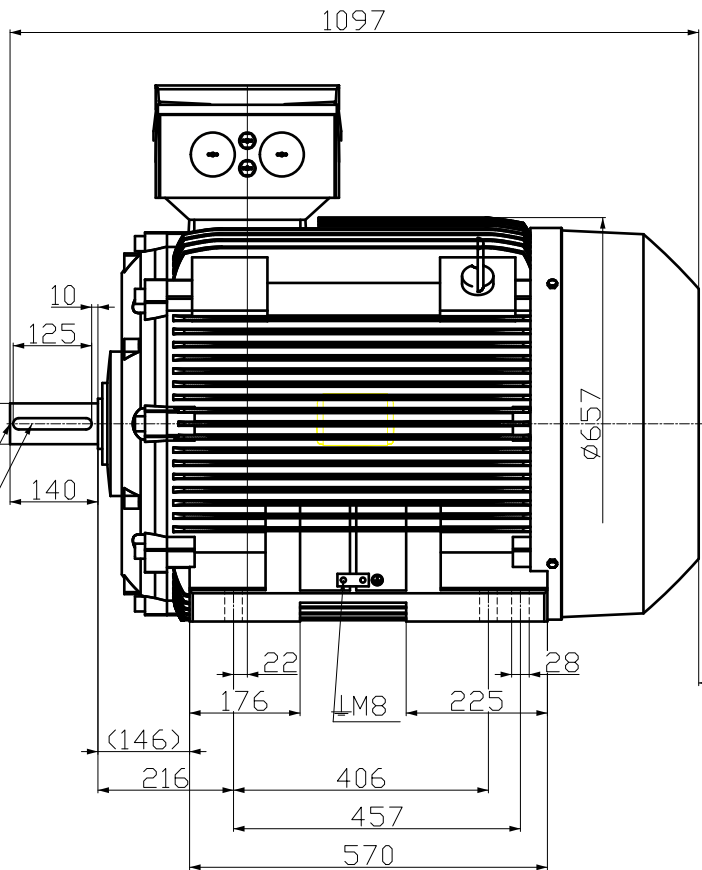
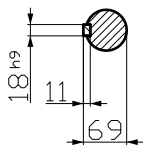
Terminal box -  
Front view



2xM63x1.5

DIN 332-DS M20

DIN 6885-1



Tolerance	Surface	Material	Weight	Scale
F50 í e 1000-01 E	Author	ÖS	E	{ }
ÖI FÉSI FÉT FFÉÜEG	Creator	ÖVS		
	Approval	T æ : ^ & @ } *		
	Department			
	Change Order	MLFB		Doc Type
	Doc. State	FBFBH		Paper Size CH
	Revision	Index RS		1st Language ^
				2nd Language á^
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