

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



Motor type : 1CV4314A

SIMOTICS SD - 315 L - 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>L</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	-/-	265.00	2986	510.0	96.3	96.3	95.8	0.90	0.88	0.82	9.6	2.5	3.9	IE4	
690	Y	50	160.00	-/-	154.00	2986	510.0	96.3	96.3	95.8	0.90	0.88	0.82	9.6	2.5	3.9	IE4	
460	Δ	60	160.00	-/-	235.00	3588	425.0	95.8	95.5	94.6	0.90	0.88	0.81	11.0	2.8	4.3	IE4	
460	Δ	60	179.00	-/-	260.00	3586	475.0	96.2	96.1	95.3	0.90	0.88	0.83	9.5	2.5	3.9	IE4	
IM B3 / IM1001			FS 315 L			IP55		UKCA		IEC/EN 60034								
Environmental conditions : -20 °C - +40 °C / 1000 m										Locked rotor time (hot / cold) : 21.4 s   36 s								

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	75 / 89 dB(A) <sup>2) 3)</sup>	79 / 94 dB(A) <sup>2) 3)</sup>	External earthing terminal	(Standard) Yes
Moment of inertia	2.2500 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
X <sub>max</sub> : 5200			Direction of rotation	bidirectional
<b>bearing lifetime</b>			Frame material	cast iron
L <sub>10mh</sub> F <sub>Rad</sub> min for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Net weight of the motor	1050 kg
Relubrication interval/quantity DE   NDE	30 g   30 g 3000 h		Coating (paint finish)	Special paint finish C3
Lubricants	UNIREX N3		Color, paint shade	RAL7030
Regreasing device	(Standard) Flat type lubricating nipple acc. DIN 3404		Motor protection	3 PTC thermistors - for tripping (2 terminals)
Grease nipple	M10x1 DIN 3404 A		Method of cooling	IC411 - self ventilated, surface cooled
Type of bearing	Locating bearing DE		'SIMOTICS Connect 400' in IP65	Yes
Condensate drainage holes	(Standard) 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>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>L</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>K</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 1LE5504-3AA43-4AB4-Z G81+L51+M11+S02	document number			
© Siemens AG 2023	rev. 929	creation date 2023-01-10	language en		

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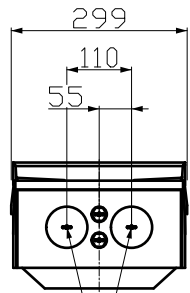
**Special design**

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

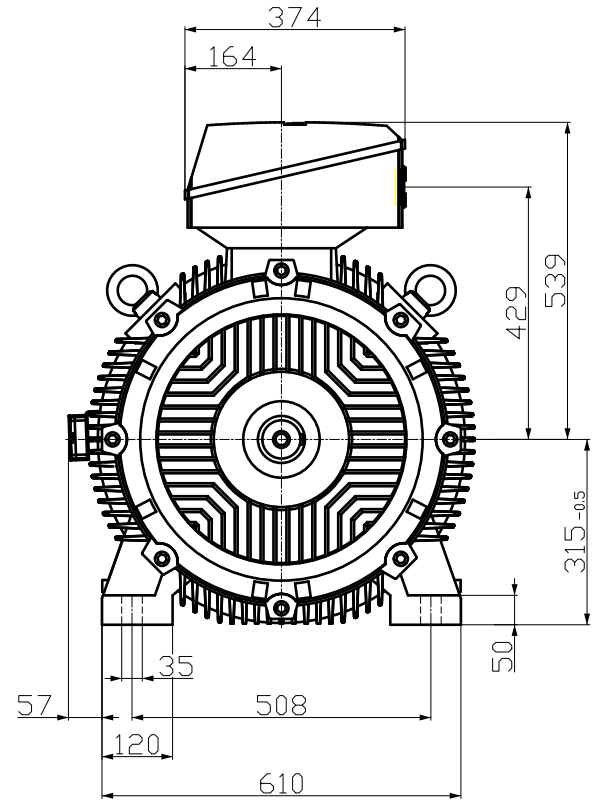
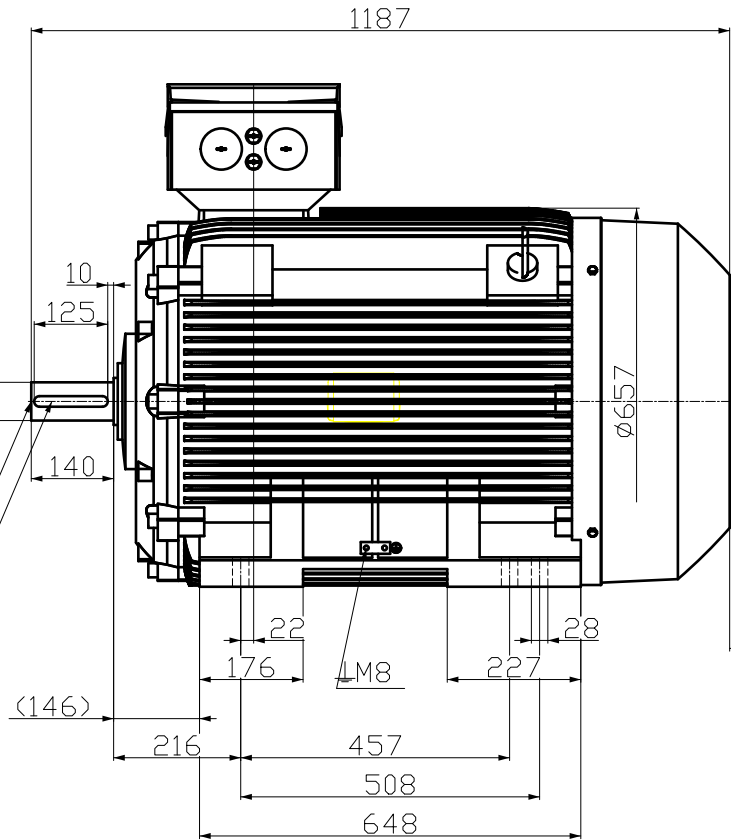
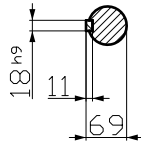
**Notes:**

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Terminal box -  
Front view



2xM63x1.5  
DIN 332-DS M20  
DIN 6885-1



Tolerance	Surface	Material	Weight	Scale
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