

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



Motor type : 1CV4315B

SIMOTICS SD - 315 L - IM B3 - 4p

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

## Electrical data

## Safe Area

U [V]	$\Delta / Y$	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	$\eta$ <sup>3)</sup>			$\cos\phi$ <sup>3)</sup>			$I_A/I_N$ $I_f/I_N$	$M_A/M_N$ $T_f/T_N$	$M_K/M_N$ $T_B/T_N$	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	$\Delta$	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	$\Delta$	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	$\Delta$	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 B3 / IM1001			FS 315 L			IP55		UKCA		IEC/EN 60034							
Environmental conditions : -20 °C - +40 °C / 1000 m										Locked rotor time (hot / cold) : 25.9 s   40.7 s							

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	69 / 83 dB(A) <sup>2) 3)</sup>	73 / 88 dB(A) <sup>2) 3)</sup>	External earthing terminal	(Standard) Yes
Moment of inertia	4.3700 kg m <sup>2</sup>		Vibration severity grade	Grade A
Bearing DE   NDE	6319 C3		Thermal class	F
permissible lateral force on (N)	$X_{0:}$ 9300	$X_{0.5:}$ 8650	$X_{max:}$ 8000	Duty type
<b>bearing lifetime</b>			Direction of rotation	bidirectional
$L_{10mh}$ $F_{rad, min}$ for coupling operation 50 60Hz <sup>1)</sup>	40000 h		32000 h	Frame material
Relubrication interval/quantity DE   NDE	40 g   40 g		6000 h	Net weight of the motor
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:

$I_A/I_N$  = locked rotor current / current nominal  
 $M_A/M_N$  = locked rotor torque / torque nominal  
 $M_K/M_N$  = 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 1LE5504-3AB53-4AB4-Z G81+L51+M11+S02	document number			
© Siemens AG 2023	rev. 929	creation date 2023-01-10	language en		

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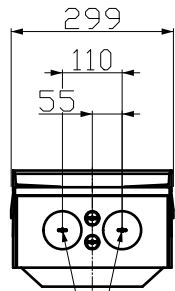
**Special design**

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

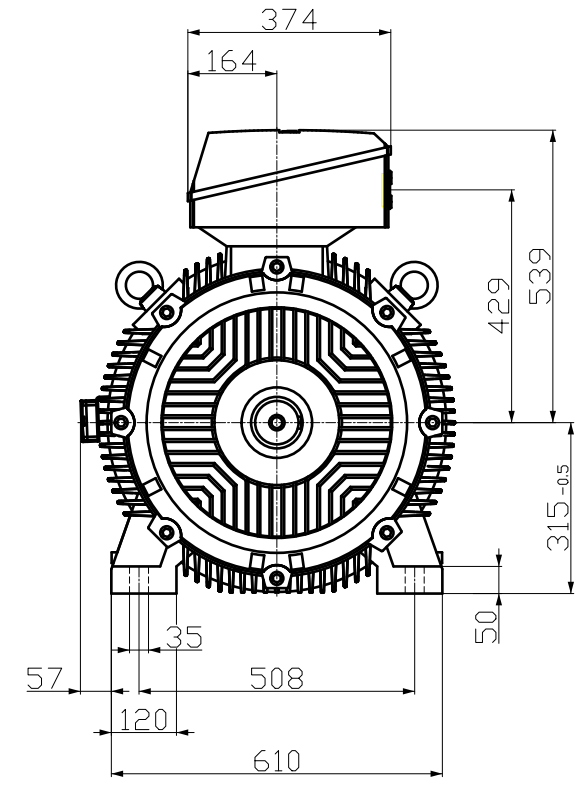
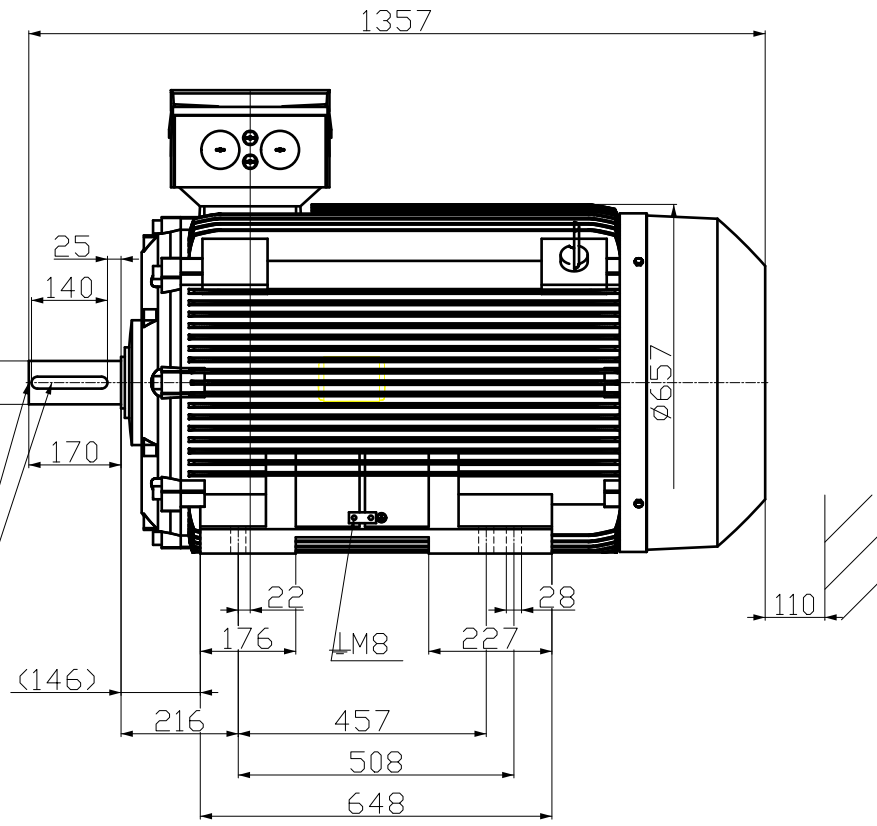
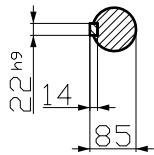
**Notes:**

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Terminal box -  
Front view



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



Tolerance	Surface	Material	Weight E	Scale 1:1
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