

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



Motor type : 1CV3316B

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>f</sub> /I <sub>N</sub>	M <sub>A</sub> /M <sub>N</sub> T <sub>f</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	250.00	-/-	440.00	1490	1600.0	96.0	96.1	95.7	0.85	0.82	0.74	7.9	2.8	3.2	IE3
690	Y	50	250.00	-/-	255.00	1490	1600.0	96.0	96.1	95.7	0.85	0.82	0.74	7.9	2.8	3.2	IE3
460	Δ	60	250.00	-/-	385.00	1791	1330.0	96.2	96.1	95.3	0.85	0.81	0.73	8.6	3.1	3.5	IE3
460	Δ	60	290.00	-/-	440.00	1788	1550.0	96.2	96.3	95.7	0.86	0.83	0.76	7.6	2.7	3.0	IE3
IM B3 / IM1001			FS 315 L		IP55		UKCA		IEC/EN 60034			IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +40 °C / 1,000 m										Locked rotor time (hot / cold) : 24.9 s   47.1 s							

**Mechanical data**

Sound level (SPL / SWL) at 50Hz 60Hz	75 / 91 dB(A) <sup>2) 3)</sup>	82 / 97 dB(A) <sup>2) 3)</sup>	External earthing terminal	(Standard) Yes		
Moment of inertia	4.2700 kg m <sup>2</sup>		Vibration severity grade	Grade A		
Bearing DE   NDE	6319 C4		6319 C4	Thermal class	F	
permissible lateral force on (N)	X <sub>0</sub> : 9300	X <sub>0.5</sub> : 8650	X <sub>max</sub> : 8000	Duty type	S1	
<b>bearing lifetime</b>	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	1290 kg		
Regreasing device	with conical grease nipple acc. DIN 71412A		Coating (paint finish)	Standard paint finish C2		
Grease nipple	M10x1 DIN 71412 A		Color, paint shade	RAL7030		
Type of bearing	Locating bearing NDE		Motor protection	3 PTC thermistors - for tripping (2 terminals)		
Condensate drainage holes	(Standard) Yes		Method of cooling	IC416 - separately ventilated, surface cooled		

**Terminal box**

Terminal box position	box at the angle 45°, socket right	Max. cross-sectional area	240 mm <sup>2</sup>
Material of terminal box	cast iron	Cable diameter from ... to ...	42 mm - 54 mm
Type of terminal box	TB3Q61	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>K</sub>/M<sub>N</sub> = break down torque / nominal torque  
 1) L<sub>10mh</sub> 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. IN LVM	technical reference	created by SPC	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			document number
	title 1LE5503-3AB63-4AB3-Z F70+G12+L19	rev. 951	creation date 2023-12-14		
© INNOMOTICS 2023					

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




Motor type : 1CV3316B

SIMOTICS SD - 315 L - IM B3 - 4p

## Special design

F70	Mounting of separately driven fan	L19	Regreasing device with regreasing nipple M10X1 acc.to DIN 71412-A
G12	Rotary pulse encoder Sendix 5020 (TTL)		

Notes:

responsible dep. IN LVM	technical reference	created by SPC	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>
<b>SIEMENS</b>	document type datasheet	document status released			
	title 1LE5503-3AB63-4AB3-Z F70+G12+L19	document number			
© INNOMOTICS 2023	rev. 951	creation date 2023-12-14	language en	Page 2/2	