

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



Motor type : 1CV3104B

SIMOTICS SD - 100 L - IM B5 - 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>																	
230	Δ	50	2.20	-/-	7.80	1455	14.4	86.7	87.2	86.3	0.82	0.76	0.64	8.3	3.0	3.8	IE3
400	Y	50	2.20	-/-	4.45	1455	14.4	86.7	87.2	86.3	0.82	0.76	0.64	8.3	3.0	3.8	IE3
460	Y	60	2.55	-/-	4.30	1750	13.9	89.5	90.1	89.2	0.83	0.77	0.66	8.8	3.0	3.9	IE3
460	Y	60	2.20	-/-	3.85	1760	11.9	89.5	89.5	88.0	0.80	0.73	0.61	9.9	3.5	4.6	IE3
IM B5 / IM 3001		FS 100 L		IP55		UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1000 m										Locked rotor time (hot / cold) : 18.9 s   23 s							

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	67 / 75 dB(A) <sup>2) 3)</sup>	70 / 78 dB(A) <sup>2) 3)</sup>	Vibration severity grade	A
Moment of inertia	0.0101 kg m <sup>2</sup>		Thermal class	F
Bearing DE   NDE	6206 2Z C3	6206 2Z C3	Duty type	S1
<b>bearing lifetime</b>			Direction of rotation	bidirectional
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Frame material	cast iron
Regreasing device	Without		Net weight of the motor (IM B3)	40 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Preloaded bearing DE		Color, paint shade	RAL7030
Condensate drainage holes	With (standard)		Motor protection	(A) without (Standard)
External earthing terminal	Without		Method of cooling	IC411 - self ventilated, surface cooled

## Terminal box

Terminal box position	top	Max. cross-sectional area	4 mm <sup>2</sup>
Material of terminal box	cast iron	Cable diameter from ... to ...	11 mm - 21 mm
Type of terminal box	TB1 F01	Cable entry	2xM32x1,5
Contact screw thread	M4	Cable gland	2 plugs

I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal  
 M<sub>A</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

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

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 1LE1503-1AB42-2FA4	Document number TDS-240417-154320			
Restricted © Innomotics 2024	Revision AA	Creation date 2024-04-17	Language en		