

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

Data sheet for three-phase Squirrel-Cage-Motors



Motor type / Motor type : 1CV3104C

SIMOTICS SD - 100 L - IM B5 - 6p

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

Remarks / Remarks

Safe Area

## Electrical data / Electrical data

-/-

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η <sup>3)</sup>			cos φ <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) / DOL duty (S1) - 155(F) to 130(B)</b>																	
230	Δ	50	1.50	-/-	6.30	970	14.8	82.5	83.1	81.5	0.73	0.65	0.52	5.2	1.9	2.8	IE3
400	Y	50	1.50	-/-	3.60	970	14.8	82.5	83.1	81.5	0.73	0.65	0.52	5.2	1.9	2.8	IE3
IM B5 / IM 3001			FS 100 L		IP55		UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions / Environmental conditions : -20 °C - +40 °C / 1000 m Locked rotor time (hot / cold) / Locked rotor time (hot / cold) : 26.6 s | 34.7 s

## Mechanical data / Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz Sound level (SPL / SWL) at 50Hz 60Hz	59 / 71 dB(A) <sup>2) 3)</sup>	62 / 74 dB(A) <sup>2) 3)</sup>	Vibration severity grade Vibration severity grade	A A
Moment of inertia Moment of inertia	0.0110 kg m <sup>2</sup>		Thermal class Thermal class	F F
Bearing DE   NDE Bearing DE   NDE	6306 2Z C3	6306 2Z C3	Duty type Duty type	S1
<b>bearing lifetime / bearing lifetime</b>			Direction of rotation Direction of rotation	bidirectional bidirectional
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Frame material Frame material	cast iron cast iron
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>			Net weight of the motor (IM B3) Net weight of the motor (IM B3)	36 kg
Regreasing device Regreasing device	Without Without		Coating (paint finish) Coating (paint finish)	Special paint finish C3 Special paint finish C3
Grease nipple Grease nipple	-/-		Color, paint shade Color, paint shade	RAL7030
Type of bearing Type of bearing	Preloaded bearing DE Preloaded bearing DE		Motor protection Motor protection	(B) 3 PTC thermistors - for tripping (standard) (2 terminals) (B) 3 PTC thermistors - for tripping (standard) (2 terminals)
Condensate drainage holes Condensate drainage holes	With (standard) With (standard)		Method of cooling Method of cooling	IC411 - self ventilated, surface cooled IC411 - self ventilated, surface cooled
External earthing terminal External earthing terminal	Without Without			

## Terminal box / Terminal box

Terminal box position Terminal box position	top top	Max. cross-sectional area Max. cross-sectional area	4 mm <sup>2</sup>
Material of terminal box Material of terminal box	cast iron cast iron	Cable diameter from ... to ... Cable diameter from ... to ...	11 mm - 21 mm
Type of terminal box Type of terminal box	TB1 F01	Cable entry Cable entry	2xM32x1,5-1xM16x1,5
Contact screw thread Contact screw thread	M4	Cable gland Cable gland	3 plugs 3 plugs

I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal 1) L<sub>10mh</sub> according to DIN ISO 281 10/2010 3) Value is valid only for DOL operation with motor design IC411  
M<sub>A</sub>/M<sub>N</sub> = locked rotor torque / torque nominal 2) at rated power / at full load  
M<sub>K</sub>/M<sub>N</sub> = break down torque / nominal torque

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