

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



Motor type : 1CV3105B

SIMOTICS SD - 100 L - IM B5 - 4p

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 ³⁾			$\cos\phi$ ³⁾			I_A/I_N	M_A/M_N	M_K/M_N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4	I_f/I_N	T_f/T_N	T_B/T_N	
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	2.76	-/-	5.80	1450	18.2	87.8	87.9	86.5	0.78	0.70	0.56	8.7	3.4	4.1	IE3
690	Y	50	2.76	-/-	3.40	1450	18.2	87.8	87.9	86.5	0.78	0.70	0.56	8.7	3.4	4.1	IE3
460	Δ	60	3.17	-/-	5.80	1750	17.3	87.7	87.8	86.7	0.79	0.71	0.58	9.8	3.4	4.5	IE2
460	Δ	60	3.00	-/-	5.40	1760	16.3	89.5	89.4	88.0	0.78	0.70	0.58	9.9	3.5	4.7	IE3
IM B5 / IM 3001		FS 100 L		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN									

Environmental conditions : -20 °C - +50 °C / 1,000 m

Locked rotor time (hot / cold) : 12.5 s | 17.1 s

These values are calculated. The final rating plate data will be calculated when the order is placed

The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions.

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	60 / 72 dB(A) ²⁾	62 / 74 dB(A) ²⁾	Vibration severity grade	A
Moment of inertia	0.0100 kg m ²		Thermal class	F
Bearing DE NDE	6206 2Z C3	6206 2Z C3	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
$L_{10mh} F_{Rad, min}$ for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	40 kg
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Preloaded bearing DE		Motor protection	(A) without (Standard)
Condensate drainage holes	Yes (standard)		Method of cooling	IC411 - self ventilated, surface cooled
External earthing terminal	No			

Terminal box

Terminal box position	top	Max. cross-sectional area	4 mm ²
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	1 gland, 1 plug

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>	Link documents
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Special design

N06	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 50°C, power reduced	Y80	Supplementary rating plate with different data
R15	One metal cable gland	Y84	Additional data on the rating plate and on the packing label :

Notes:

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