

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]	$\eta^{3)}$			$\cos\phi^{3)}$			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_i/I_N	T_i/T_N	T_B/T_N	
400	Δ	50	3.00	-/-	5.90	1460	19.6	87.7	88.4	88.2	0.83	0.78	0.69	7.3	2.3	3.7	IE3
690	Y	50	3.00	-/-	3.45	1460	19.6	87.7	88.4	88.2	0.83	0.78	0.69	7.3	2.3	3.7	IE3
460	Δ	60	3.45	-/-	5.80	1760	18.7	89.5	90.1	89.4	0.84	0.79	0.68	7.6	2.2	3.8	IE3
460	Δ	60	3.00	-/-	5.20	1765	16.2	89.5	89.6	88.9	0.81	0.76	0.68	8.6	2.6	4.3	IE3

IM B5 / IM 3001	SF: 1.15	FS 100 L	40 kg	IP65		IEC/EN 60034	IEC, DIN, ISO, VDE, EN		
-----------------	----------	----------	-------	------	--	--------------	------------------------	--	--

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 13.9 s | 18.5 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	60.0 / 72.0 dB(A) ²⁾	62.0 / 74.0 dB(A) ²⁾	External earthing terminal	Yes
Moment of inertia	0.0140 kg m ²		Vibration severity grade	A
Bearing DE NDE	6206 2Z C3	6206 2Z C3	Insulation	155(F) to 155(F)
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} 50 60Hz ¹⁾ for coupling operation	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	Unirex N3		Frame material	cast iron
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing DE		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes	Yes (standard)		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	4.0 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	11.0 mm - 21.0 mm
Type of terminal box	TB1 F01	Cable entry	2xM32x1,5-1xM16x1,5
Contact screw thread	M4	Cable gland	3 plugs

Notes:

I_A/I_N = locked rotor current / current nominal
 M_K/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.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.
DI MC LVM		DT Configurator		

	document type	document status	customer	
	datasheet	released		
	title	document number		
	1LE1503-1AB53-4FB4-Z			
	B02+H04+H20+L20+N01+N30+Y82			
© Siemens AG 2021		rev.	creation date	language Page
		01	2021-04-22 10:16	en 1/2

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



Motor type : 1CV3105B

SIMOTICS SD - 100 L - IM B5 - 4p

Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	N01	Temperature class 155 (F), utilised to 155 (F), with service factor (SF)
H04	External grounding at housing	N30	Increased air humidity/temperature with 30 to 60 g water per m3 air
H20	IP 65 degree of protection	Y82	Auxiliary name plate with customer data
L20	Locating bearing, DE		

Notes:

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by		Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			
	document type datasheet				document status released		customer	
	title 1LE1503-1AB53-4FB4-Z B02+H04+H20+L20+N01+N30+Y82				document number			
© Siemens AG 2021				rev. 01	creation date 2021-04-22 10:16	language en	Page 2/2	