

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



Motor type : 1CV3105B

SIMOTICS SD - 100 L - IM B3 - 4p

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

Remarks

Electrical data

Safe Area

U	Δ / Y	f	P	P	I	n	M	η ³⁾			cosφ ³⁾			I _A /I _N	M _A /M _N	M _K /M _N	IE-CL
[V]		[Hz]	[kW]	[hp]	[A]	[1/min]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4	I _I /I _N	T _I /T _N	T _B /T _N	
DOL duty (S1) - 180(H) to 180(H)																	
400	Δ	50	3.00	-/-	6.20	1450	19.8	87.7	88.1	87.1	0.80	0.73	0.60	8.0	3.1	3.8	IE3
690	Y	50	3.00	-/-	3.60	1450	19.8	87.7	88.1	87.1	0.80	0.73	0.60	8.0	3.1	3.8	IE3
460	Δ	60	3.45	-/-	6.10	1750	18.8	87.5	88.0	87.2	0.81	0.74	0.62	9.0	3.1	4.1	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 B3 / IM 1001		FS 100 L				IP56	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 12.8 s 17.6 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	60 / 72 dB(A) ^{2) 3)}	62 / 74 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0100 kg m ²		Thermal class	H
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
Regreasing device	No		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	Yes (standard)		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
External earthing terminal	No		Method of cooling	IC411 - self ventilated, surface cooled

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	2xM32x1,5-1xM16x1,5
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. 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.	Link documents
	document type datasheet				
	title 1LE1503-1AB53-4AB4-Z F74+F76+H22+N10				
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Special design

F74	Sheet steel fan cowl	H22	IP 56 degree of protection
F76	Metal external fan	N10	Temperature class 180 (H)

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