

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	
230	Δ	50	3.00	-/-	10.30	1460	19.6	87.7	88.4	88.2	0.83	0.78	0.69	7.3	2.3	3.7	IE3
400	Y	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
460	Y	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	Y	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 B3 / IM 1001		FS 100 L	40 kg	IP55		IEC/EN 60034	IEC, DIN, ISO, VDE, EN		
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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	No
Moment of inertia	0.0140 kg m ²		Vibration severity grade	A
Bearing DE NDE	6306 2Z C3	6206 2Z C3	Insulation	155(F) to 130(B)
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	Preloaded bearing DE		Motor protection	(A) without (Standard)
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
Contact screw thread	M4	Cable gland	2 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		

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Special design

L22 Bearing design for increased cantilever forces R12 Terminal box rotated through 180°

Notes:

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