

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



Motor type : 1CV2184B

SIMOTICS SD - 180 L - IM B3 - 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⁾			cosφ 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	22.00	-/-	41.50	1465	143.0	91.6	92.2	91.9	0.84	0.79	0.69	7.3	2.6	3.5	IE2
690	Y	50	22.00	-/-	24.00	1465	143.0	91.6	92.2	91.9	0.84	0.79	0.69	7.3	2.6	3.5	IE2
460	Δ	60	25.30	-/-	40.50	1765	137.0	92.4	92.9	92.5	0.85	0.80	0.72	7.5	2.6	3.4	IE2
460	Δ	60	22.00	-/-	36.00	1770	119.0	92.4	92.5	91.8	0.83	0.78	0.68	8.4	3.0	3.9	IE2
IM B3 / IM 1001		FS 180 L		170 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

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

Locked rotor time (hot / cold) : 9.79 s | 18.7 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	69.0 / 76.0 dB(A) ²⁾	72.0 / 79.0 dB(A) ²⁾	External earthing terminal	Yes (standard)
Moment of inertia	0.1300 kg m ²		Vibration severity grade	A
Bearing DE NDE	6310 C3	6310 C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	15 g 10 g	8000 h	Frame material	cast iron
Lubricants	Unirex N3		Coating (paint finish)	Special paint finish, resistant to salt-laden air C4
Regreasing device	Yes (standard)		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	(F) 1 temperature sensor KTY84-130 (2 terminals)
Type of bearing	Locating bearing NDE		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	Yes (standard)			

Terminal box

Terminal box position	top	Max. cross-sectional area	16.0 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	19.0 mm - 28.0 mm
Type of terminal box	TB1 J01	Cable entry	2xM40x1,5-1xM16x1,5
Contact screw thread	M5	Cable gland	2 glands, 1 plug

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				
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	1LE1601-1EB43-4AF4-Z							
	D22+D47+G04+G43+Q01+R16+S03			rev.	creation date	language	Page	
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D22	motor without CE character for export outside the EEA (see EU regulation 640/2009)	Q01	Measuring nipple for SPM shock pulse measurement to monitor bearings
D47	TR CU product safety certificate EAC for the Eurasian Customs Union	R16	
G04	Mounted rotary pulse encoder LL 861 900 220	S03	
G43	Mechanical protection for encoder		Special paint finish in sea air resistant C4

Notes:

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