

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



Motor type : 1CV4182B

SIMOTICS SD - 180 M - 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	18.50	-/-	35.00	1470	120.0	94.2	94.7	94.5	0.81	0.76	0.66	7.9	2.7	3.6	IE4
690	Y	50	18.50	-/-	20.50	1470	120.0	94.2	94.7	94.5	0.81	0.76	0.66	7.9	2.7	3.6	IE4
460	Δ	60	21.30	-/-	34.50	1770	115.0	94.5	94.9	94.7	0.82	0.77	0.67	8.0	2.5	3.5	IE4
460	Δ	60	18.50	-/-	30.50	1775	100.0	94.5	94.6	94.0	0.80	0.74	0.63	9.0	2.9	4.0	IE4

IM B3 / IM 1001		FS 180 M		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) : 36.5 s | 48.6 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	62 / 75 dB(A) ²⁾	76 / 87 dB(A) ²⁾	External earthing terminal	Yes (standard)
Moment of inertia	0.1700 kg m ²		Vibration severity grade	A
Bearing DE NDE	NU 210	6210 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
Relubrication interval/quantity DE NDE	10 g 10 g	8000 h	Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	187 kg
Regreasing device	Yes		Coating (paint finish)	Standard paint finish C2
Grease nipple	M10x1 DIN 3404 A		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		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	16 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	19 mm - 28 mm
Type of terminal box	TB1 J01	Cable entry	2xM40x1,5-1xM16x1,5
Contact screw thread	M5	Cable gland	3 plugs

Notes:

I _A /I _N = locked rotor current / current nominal	1) L10mh according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
M _K /M _N = locked rotor torque / torque nominal	2) at rated power / at full load	
M _K /M _N = break down torque / nominal torque		

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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L22	Bearing design for increased cantilever forces	L23	Regreasing system
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