

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	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) - 155(F) to 130(B)																	
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						
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) 3)}	76 / 87 dB(A) ^{2) 3)}	External earthing terminal	Yes (standard)
Moment of inertia	0.1700 kg m ²		Vibration severity grade	A
Bearing DE NDE	6310 C3	6310 C3	Thermal class	F
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad} ¹⁾ for coupling operation	40000 h	32000 h	Direction of rotation	bidirectional
50 60Hz			Frame material	cast iron
Relubrication interval/quantity DE NDE	15 g 15 g	8000 h	Net weight of the motor (IM B3)	187 kg
Lubricants	Unirex N3		Coating (paint finish)	Special paint finish C3
Regreasing device	Yes (standard)		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	(B) 3 PTC thermistors - for tripping (standard) (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 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 _B /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.	Link documents
DI MC LVM		DT Configurator			
	document type				document status
	datasheet				released
	title				document number
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