

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



Motor type : 1CV4280B

SIMOTICS SD - 280 S - 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)																	
230	Δ	50	75.00	-/-	230.00	1490	480.0	96.0	96.1	95.6	0.85	0.81	0.70	9.2	3.4	3.8	IE4
400	Y	50	75.00	-/-	133.00	1490	480.0	96.0	96.1	95.6	0.85	0.81	0.70	9.2	3.4	3.8	IE4
460	Y	60	86.00	-/-	132.00	1788	460.0	96.2	96.2	95.6	0.85	0.81	0.72	9.1	3.4	3.6	IE4
460	Y	60	75.00	-/-	116.00	1791	400.0	96.2	96.0	95.2	0.84	0.79	0.68	10.0	4.0	4.2	IE4
IM B3 / IM 1001		FS 280 S				IP55	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 34 s 45.6 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	69 / 83 dB(A) ^{2) 3)}	74 / 88 dB(A) ^{2) 3)}	External earthing terminal	With (standard)
Moment of inertia	1.7000 kg m ²		Vibration severity grade	A
Bearing DE NDE	6317 C3	6317 C3	Thermal class	F
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad} _{50 60Hz} for coupling operation	40000 h	32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	30 g 30 g 8000 h		Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	670 kg
Regreasing device	With regreasing nipple		Coating (paint finish)	Special paint finish C3
Grease nipple	M10x1 DIN 71412 A		Color, paint shade	RAL7030
Type of bearing	Locating bearing DE		Motor protection	(B) 3 PTC thermistors - for tripping (standard) (2 terminals)
Bearing insulation DE / Bearing insulation NDE	Yes (non-drive end)		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	With (standard)			

Terminal box

Terminal box position	top	Max. cross-sectional area	120 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	34 mm - 45 mm
Type of terminal box	TB1 N61	Cable entry	2xM63x1,5-2xM20x1,5
Contact screw thread	M10	Cable gland	4 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_A/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.		Link documents		
DI MC LVM		DT Configurator						
	document type	datasheet			document status			
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H01	Bolted on mounting feet (instead of cast)	L51	Bearing insulation NDE
L19	Regreasing device with regreasing nipple M10X1 acc.to DIN 71412-A	R52	Drilled removable entry plate

Notes:

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