

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



Motor type : 1CV2280B

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	
400	Δ	50	75.00	-/-	132.00	1485	480.0	94.0	94.2	93.8	0.87	0.85	0.78	6.8	2.5	3.0	IE2
690	Y	50	75.00	-/-	77.00	1485	480.0	94.0	94.2	93.8	0.87	0.85	0.78	6.8	2.5	3.0	IE2
460	Δ	60	86.00	-/-	130.00	1785	460.0	94.5	94.6	94.0	0.88	0.86	0.80	6.7	2.5	2.8	IE2
460	Δ	60	75.00	-/-	114.00	1788	400.0	94.5	94.3	93.2	0.87	0.84	0.77	7.6	2.7	3.2	IE2
IM B3 / IM 1001		FS 280 S		550 kg		IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 29.6 s 46.7 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	71.0 / 85.0 dB(A) ²⁾	79.0 / 92.0 dB(A) ²⁾	External earthing terminal	Yes (standard)
Moment of inertia	1.3000 kg m ²		Vibration severity grade	A
Bearing DE NDE	6317 C3	6317 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	30 g 30 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 DE		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	Yes (standard)			

Terminal box

Terminal box position	top	Max. cross-sectional area	120.0 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	34.0 mm - 42.0 mm
Type of terminal box	TB1 N01	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 _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.			
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L51	Bearing insulation NDE	S03	Special paint finish in sea air resistant C4
Q01	Measuring nipple for SPM shock pulse measurement to monitor bearings		

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