

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)																	
400	Δ	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
690	Y	50	75.00	-/-	77.00	1490	480.0	96.0	96.1	95.6	0.85	0.81	0.70	9.2	3.4	3.8	IE4
460	Δ	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	Δ	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						Grade 2	
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} ¹⁾ for coupling operation 50 60Hz	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 (standard)		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	(F) 1 temperature sensor KTY84-130 (2 terminals)
Condensate drainage holes	With (standard)		Method of cooling	IC416 - separately ventilated, surface cooled

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 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

M_K/M_N = locked rotor torque / torque nominal

M_B/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.		Link documents	
IN LVM		SPC					
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B02	Acceptance test certificate 3.1 acc. to EN 10204	G04	Mounted rotary pulse encoder LL 861 900 220
D34	China Energy Efficiency Label	R62	Cast iron auxiliary terminal box (small)
F70	Mounting of separately driven fan		

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