

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

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Motor type / Motor type : 1CV4282B

SIMOTICS SD - 280 M - IM B3 - 4p

Client order no. / Client order no.	Item-No. / Item-No.	Offer no. / Offer no.
Order no. / Order no.	Consignment no. / Consignment no.	Project / Project

Remarks / Remarks

Safe Area

-/-

Electrical data / Electrical data

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 I _f /I _N	M _A /M _N T _f /T _N	M _K /M _N T _B /T _N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
DOL duty (S1) / DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	90.00	-/-	157.00	1488	580.0	96.1	96.3	96.1	0.86	0.82	0.73	9.0	3.2	3.4	IE4
690	Y	50	90.00	-/-	91.00	1488	580.0	96.1	96.3	96.1	0.86	0.82	0.73	9.0	3.2	3.4	IE4
460	Δ	60	104.00	-/-	158.00	1790	550.0	96.2	96.2	95.6	0.86	0.82	0.72	9.0	3.2	3.4	IE4
460	Δ	60	90.00	-/-	137.00	1788	480.0	96.2	96.3	95.8	0.86	0.82	0.74	9.5	3.5	3.7	IE4
IM B3 / IM 1001		FS 280 M		IP55		UKCA		IEC/EN 60034			IEC, DIN, ISO, VDE, EN						

Environmental conditions / Environmental conditions : -20 °C - +40 °C / 1000 m Locked rotor time (hot / cold) / Locked rotor time (hot / cold) : 26.6 s | 40.9 s

Mechanical data / Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz Sound level (SPL / SWL) at 50Hz 60Hz	69 / 83 dB(A) ^{2) 3)}	74 / 88 dB(A) ^{2) 3)}	Bearing insulation DE / Bearing insulation NDE	
Moment of inertia Moment of inertia	2.0000 kg m ²		Condensate drainage holes Condensate drainage holes	With (standard) With (standard)
Bearing DE NDE Bearing DE NDE	NU 317	6317 C3	External earthing terminal External earthing terminal	With (standard) With (standard)
bearing lifetime / bearing lifetime			Vibration severity grade Vibration severity grade	A A
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Thermal class Thermal class	F F
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾			Duty type Duty type	S1
Relubrication interval/quantity DE NDE	30 g 30 g 8000 h		Direction of rotation Direction of rotation	bidirectional bidirectional
Relubrication interval/quantity DE NDE Lubricants	Unirex N3		Frame material Frame material	cast iron cast iron
Regreasing device Regreasing device	With (standard) With (standard)		Net weight of the motor (IM B3) Net weight of the motor (IM B3)	730 kg
Grease nipple Grease nipple	M10x1 DIN 3404 A		Coating (paint finish) Coating (paint finish)	Standard paint finish C2 Standard paint finish C2
Type of bearing Type of bearing	Locating bearing NDE Locating bearing NDE		Color, paint shade Color, paint shade	RAL7030
Bearing insulation DE / Bearing insulation NDE	Yes (non-drive end) Yes (non-drive end)		Motor protection Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals) (B) 3 PTC thermistors - for tripping (2 terminals)
			Method of cooling Method of cooling	IC411 - self ventilated, surface cooled IC411 - self ventilated, surface cooled

Terminal box / Terminal box

Terminal box position Terminal box position	top top	Max. cross-sectional area Max. cross-sectional area	150 mm ²
Material of terminal box Material of terminal box	cast iron cast iron	Cable diameter from ... to ... Cable diameter from ... to ...	34 mm - 45 mm
Type of terminal box Type of terminal box	TB1 Q01	Cable entry Cable entry	2xM63x1,5-2xM20x1,5
Contact screw thread Contact screw thread	M12	Cable gland Cable gland	4 plugs 4 plugs

Notes:

I_A/I_N = locked rotor current / current nominal 1) L_{10mh} 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. IN LVM	technical reference	created by SPC	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.	Link documents
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Special design / Special design

L22	Bearing design for increased cantilever forces <i>Bearing design for increased cantilever forces</i>	R12	Terminal box rotated through 180° <i>Terminal box rotated through 180°</i>
L51	Bearing insulation NDE <i>Bearing insulation NDE</i>	R50	Larger terminal box <i>Larger terminal box</i>

Notes:

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