

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



Motor type : 1CV3280B

SIMOTICS XP - 280 S - IM B3 - 4p

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

Remarks

Electrical data II 3D Ex tc IIIB T 120°C Dc -/-

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	1485	480.0	95.0	95.3	95.0	0.86	0.83	0.75	6.9	2.5	3.0	IE3

Converter duty (S9) - 155(F) to 130(B)																	
49	Δ	5	4.45		102	140	303.5				0.88	Type of converter SINAMICS G120 PM240-2					
205	Δ	25	32.5		116	738	420.5				0.84						
380	Δ	50	59		110	1,488	378.6				0.86						
380	Δ	100	48		105	2975	154.1				0.79						
IM B3 / IM 1001		FS 280 S				IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions : -20 °C - +40 °C / 1,000 m Locked rotor time (hot / cold) : 29.7 s | 47.7 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	69 / 83 dB(A) ^{2) 3)}	77 / 91 dB(A) ^{2) 3)}	External earthing terminal	With (standard)
Moment of inertia	1.3900 kg m ²		Vibration severity grade	A
Bearing DE NDE	NU 317	6317 C3	Thermal class	F
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		Net weight of the motor (IM B3)	570 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	(B) 3 PTC thermistors - for tripping (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 N01	Cable entry	2xM63x1,5-2xM20x1,5
Contact screw thread	M10		

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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B02	Acceptance test certificate 3.1 acc. to EN 10204	L22	Bearing design for increased cantilever forces
B40	Design for converter operation, as standard with data SINAMICS G120 with PM240-2.	M4B	400 VD for 50 Hz

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