

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 [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			$\cos\phi$ ³⁾			I_A/I_N	M_A/M_N	M_K/M_N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4	I_l/I_N	T_l/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	2 glands, 2 plugs

Notes:

I_A/I_N = locked rotor current / current nominal
 M_K/M_N = locked rotor torque / torque nominal
 M_L/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. DI MC LVM	technical reference	created by DT Configurator	approved by		Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			
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	title 1LE1601-2DB03-4AF4-Z			document number				
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D22	motor without CE character for export outside the EEA (see EU regulation 640/2009)	L51	Bearing insulation NDE
D47	TR CU product safety certificate EAC for the Eurasian Customs Union	Q01	Measuring nipple for SPM shock pulse measurement to monitor bearings
G04	Mounted rotary pulse encoder LL 861 900 220	R16	EMC cable gland, maximum number
G43	Mechanical protection for encoder	S03	Special paint finish in sea air resistant C4

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