

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⁾			cosφ 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 _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)	No paint finish (cast iron parts primed)
Regreasing device	Yes (standard)		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Type of bearing	Locating bearing NDE		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
M_K/M_N = locked rotor torque / torque nominal
M_K/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.			
DI MC LVM		DT Configurator					
	document type	datasheet		document status	released		
	title	1LE1501-2DB03-4AB4-Z		document number			
© Siemens AG 2021		F74+M11+Q60+Q72+S00		rev.	creation date	language	Page
				01	2021-04-21 09:58	en	1/2

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Special design

F74	Sheet steel fan cowl	Q72	2 Pt100 resistance thermometers in basic configuration for bearings (4 terminals)
M11	Stainless steel rating plate	S00	No paint finish, only GG parts primed
Q60	3 PT100 resistance thermometers in stator winding - 2 wire (6 terminals)		

Notes:

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