

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]	$\eta^{3)}$			$\cos\phi^{3)}$			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} 50 60Hz ¹⁾ for coupling operation	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 C3
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 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	1 gland, 3 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	document status	customer	
	datasheet	released		
	title	document number	rev.	creation date
	1LE1601-2DB03-4AF4-Z		01	2021-04-23 14:49
	G43+R15			
© Siemens AG 2021			language	Page
			en	1/2

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



Motor type : 1CV2280B

SIMOTICS SD - 280 S - IM B3 - 4p

Special design

G43 Mechanical protection for encoder R15 One metal cable gland

Notes:

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.			
	document type datasheet	document status released			customer			
	title 1LE1601-2DB03-4AF4-Z							
© Siemens AG 2021	G43+R15	rev. 01	creation date 2021-04-23 14:49		language en	Page 2/2		