

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



Motor type : 1CV4280B

SIMOTICS SD - 280 S - IM V1 - 4p

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

Electrical data																		
Safe Area																		
-/-																		
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	-/-	130.00	1490	480.0	96.0	96.2	96.0	0.87	0.84	0.76	8.5	2.8	3.4	IE4	
690	Y	50	75.00	-/-	75.00	1490	480.0	96.0	96.2	96.0	0.87	0.84	0.76	8.5	2.8	3.4	IE4	
460	Δ	60	75.00	-/-	114.00	1792	400.0	96.2	96.2	95.7	0.86	0.82	0.74	10.0	3.2	3.8	IE4	
460	Δ	60	86.00	-/-	129.00	1790	460.0	96.2	96.4	96.1	0.87	0.85	0.78	8.9	2.8	3.3	IE4	
IM V1 / IM3011			FS 280 S				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1,000 m										Locked rotor time (hot / cold) : 32.7 s 46 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	64 / 78 dB(A) ^{2) 3)}	67 / 82 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	1.7400 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6316 C3 S0	6316 C3 S0	Thermal class	F
permissible lateral force on (N) (N)	X ₀ : 8600	X _{0.5} : 7900	X _{max} : 7200	Duty type
bearing lifetime			Direction of rotation	
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾			bidirectional	
Relubrication interval/quantity DE NDE			Frame material	
30 g 30 g			cast iron	
8000 h			Net weight of the motor	
UNIREX N3			620 kg	
Lubricants			Coating (paint finish)	
-/-			Standard paint finish C2	
Regreasing device			Color, paint shade	
-/-			RAL7030	
Grease nipple			Motor protection	
Locating bearing NDE			6 PTC thermistors - for alarm and tripping (4 terminals)	
Type of bearing			Method of cooling	
Condensate drainage holes			IC411 - self ventilated, surface cooled	
(Standard) Yes				

Terminal box

Terminal box position	box at the 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	TB4N01	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM10	Cable gland	-/-

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) L_{10mh} 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.		Link documents	
IN LVM		SPC					
SIEMENS	document type			document status			
	datasheet			released			
	title			document number			
	1LE5504-2DB03-4GC4-Z						
© INNOMOTICS 2023	B02+H00+H07+Q02+Q72			rev.	creation date	language	Page
				951	2023-12-14	en	1/2

SIMOTICS SD - 280 S - IM V1 - 4p

Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	Q02	Anti-condensation heating for 230 V (2 terminals)
H00	Canopy	Q72	2 Pt100 resistance thermometers for bearings (4 terminals)
H07	Stainless steel screws and bolts (outside the motor)		

Additional information:

Space heaters

Technical data:

Notes:

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	
SIEMENS	document type datasheet			document status released			
	title 1LE5504-2DB03-4GC4-Z			document number			
© INNMOTICS 2023	B02+H00+H07+Q02+Q72			rev. 951	creation date 2023-12-14	language en	Page 2/2