

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



Motor type : 1CV4280A

SIMOTICS SD - 280 S - IM B3 - 2p

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

Remarks **Safe Area**

**Electrical data**

-/-

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η <sup>3)</sup>			cos φ <sup>3)</sup>			I <sub>A</sub> /I <sub>N</sub> I <sub>f</sub> /I <sub>N</sub>	M <sub>A</sub> /M <sub>N</sub> T <sub>f</sub> /T <sub>N</sub>	M <sub>K</sub> /M <sub>N</sub> T <sub>B</sub> /T <sub>N</sub>	IE-CL	
								4/4	3/4	2/4	4/4	3/4	2/4					
<b>DOL duty (S1) - 155(F) to 130(B)</b>																		
400	Δ	50	75.00	-/-	126.00	2978	240.0	95.6	95.8	95.6	0.90	0.88	0.83	8.5	2.8	3.2	IE4	
690	Y	50	75.00	-/-	73.00	2978	240.0	95.6	95.8	95.6	0.90	0.88	0.83	8.5	2.8	3.2	IE4	
460	Δ	60	75.00	-/-	110.00	3582	200.0	95.0	94.8	94.0	0.90	0.88	0.82	9.5	3.2	3.5	IE4	
460	Δ	60	84.00	-/-	123.00	3580	225.0	95.4	95.4	94.8	0.90	0.90	0.85	8.5	2.9	3.1	IE4	
IM B3 / IM1001			FS 280 S			IP55		UKCA		IEC/EN 60034			IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +40 °C / 1000 m										Locked rotor time (hot / cold) : 34.1 s   52.9 s								

**Mechanical data**

Sound level (SPL / SWL) at 50Hz 60Hz	73 / 87 dB(A) <sup>2) 3)</sup>	76 / 90 dB(A) <sup>2) 3)</sup>	External earthing terminal	(Standard) Yes	
Moment of inertia	0.7970 kg m <sup>2</sup>		Vibration severity grade	Grade A	
Bearing DE   NDE	6315 C3 S0	6315 C3 S0	Thermal class	F	
permissible lateral force on (N)	X <sub>0</sub> : 5300	X <sub>0.5</sub> : 4750	X <sub>max</sub> : 4200	Duty type	S1
<b>bearing lifetime</b>	Direction of rotation			bidirectional	
L <sub>10mh</sub> F <sub>Rad, min</sub> for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Frame material	cast iron	
Relubrication interval/quantity DE   NDE	25 g   25 g 4000 h		Net weight of the motor	556 kg	
Lubricants	UNIREX N3			Coating (paint finish)	Standard paint finish C2
Regreasing device	Flat type lubricating nipple			Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A			Motor protection	without (Standard)
Type of bearing	Locating bearing NDE			Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	(Standard) Yes				

**Terminal box**

Terminal box position	box at the top	Max. cross-sectional area	120 mm <sup>2</sup>
Material of terminal box	cast iron	Cable diameter from ... to ...	34 mm - 45 mm
Type of terminal box	TB4N01	Cable entry	2xM63x1,5
Contact screw thread	6xM10	Cable gland	-/-

I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal  
 M<sub>K</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
 M<sub>B</sub>/M<sub>N</sub> = break down torque / nominal torque  
 1) L<sub>10mh</sub> 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

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	<a href="#">Link documents</a>
	Document type Technical datasheet motor	Document status Released			
	Title 1LE5504-2DA03-4AA4	Document number TDS-240312-144201			
Restricted © Innomatics 2024		Rev. AA	Creation date 2024-03-12	Language en	Page 1/1