

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



Motor type : 1CV4280A

SIMOTICS SD - 280 S - IM B3 - 2p

Client order no.

Item-No.	Item-Name	Unit	Rate	Quantity	Amount
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Offer no.

Order no.

Consignment no.	
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Project	
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Remarks

Safe Area

Electrical data

-/-

U	Δ / Y	f	P	P	I	n	M	$\eta^{3)}$			$\cos\varphi^{3)}$			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_A/I_N	T_A/T_N	T_B/T_N	
DOL duty (S1) - 180(H) to 130(B)																	
415	Δ	50	75.00	-/-	121.00	2978	240.0	95.6	95.8	95.6	0.90	0.88	0.83	8.5	2.8	3.2	IE4
480	Δ	60	75.00	-/-	106.00	3582	200.0	95.0	94.8	94.0	0.90	0.88	0.82	9.5	3.2	3.5	IE4
480	Δ	60	84.00	-/-	118.00	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 - + °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) ^{2) 3)}	76 / 90 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes	
Moment of inertia	0.7970 kg m²		Vibration severity grade	Grade A	
Bearing DE NDE	6315 C3 S0	6315 C3 S0	Thermal class	H	
permissible lateral force on (N) (N)	x ₀ : 5300	x _{0,5} : 4750	x _{max} : 4200	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional	
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material	cast iron	
Lubricants			Net weight of the motor	556 kg	
Regreasing device	Flat type lubricating nipple		Coating (paint finish)	Special paint finish C3	
Grease nipple	M10x1 DIN 3404 A		Color, paint shade	RAL7030	
Type of bearing	Locating bearing NDE		Motor protection	3 PTC thermistors - for tripping (2 terminals)	
Condensate drainage holes	(Standard) Yes		Method of cooling	IC411 - self ventilated, surface cooled	

Terminal box

Terminal box position	box at the top	Max. cross-sectional area	120 mm²
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	-/-

I_A/I_N = locked rotor current / current nominal M_A/M_N = locked rotor torque / torque nominal M_K/M_N = break down torque / nominal torque
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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

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	Document type Technical data sheet			Document status Released			
	Document title 1LE5504-2DA03-5AB4-Z			Document number TDS-240717-080134			
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M11	Stainless steel rating plate	Q82	Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery
N11	Temperature class 180(H), and coolant temperature max. 60°C	S02	Special paint finish C3

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