

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

Motor type: 7CV3184B SIMOTICS SD - 180L - IM B3 - 4 p

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	M	η <sup>3)</sup>			cosφ <sup>3)</sup>			I <sub>A</sub> /I <sub>N</sub>	M <sub>A</sub> /M <sub>N</sub>	M <sub>K</sub> /M <sub>N</sub>	IE-CL	
[V]±10%		[Hz]±5%	[kW]	[hp]	[A]	[1/min]	[kgf.m]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4					
Motordaten / Motor Data																			
415	Δ	50	22.00	-/-	40.00	1472	15.0	143.0	93.0	93.4	92.9	0.83	0.78	0.68	7.4	2.9	2.9	IE3	
IM B3 / IM 1001			FS 180L		183 kg		SF:1		IS 12615 / IEC 60034-1			-							
Environmental conditions : -20 °C - +50 °C / 1,000 m										Locked rotor time (hot / cold) : 22 s   38 s									

Mechanical data

Sound pressure level 50Hz   60Hz	67 dB(A)	70 dB(A)	External earthing terminal	Yes (standard)
Moment of inertia   Rotor GD <sup>2</sup>	0.1481 kg m <sup>2</sup>   0.5924 kgf.m <sup>2</sup>		Vibration severity grade	A (Standard)
Bearing DE   NDE	6310 2Z C3	6310 2Z C3	Insulation	155(F) utilized to 130(B)
bearing lifetime			Duty type	S1
L <sub>10mh</sub> F <sub>Rad max</sub> according catalogue 50 60Hz <sup>1)</sup>	20,000 h	16,000 h	Direction of rotation	Bidirectional
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>	50,000 h	40,000 h	Frame material	Cast iron
Type of bearing	Locating (fixed) bearing, NDE		Forced ventilation motor details	- / -
Relubrication interval/quantity DE   NDE	-/- g   -/- g -/- h		Net weight of the motor (IM B3)	183 kg
Type of construction	IM B3 / IM 1001		Rotor weight	45 kg
Degree of protection	IP55		Data of anti condensation heating	-/- V, -/- W
Lubricants	Esso Unirex N3		Coating (paint finish)	Standard paint finish
Regreasing device	- / -		Color, paint shade	RAL7030
Grease nipple	-/-		Motor protection	(A) without
Condensate drainage holes	Yes		Method of cooling	IC411 - Self ventilated, surface cooled

Terminal box

Terminal box position	Top	Cable diameter from ... to ...	19.0 mm - 28.0 mm
Material of terminal box	Sheet Metal	Cable entry	2xM40x1.5
Type of terminal box	TB7 J03	Cable gland	2 Plugs
Contact screw thread	M5		
Max. cross-sectional area	25 mm <sup>2</sup>		

Notes:

I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>A</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>K</sub>/M<sub>N</sub> = break down torque / nominal torque

3) Efficiency value is valid only for sinusoidal line supply operation.

1) L<sub>10mh</sub> according to DIN ISO 281 10/2010

Responsible department	Technical reference	Created by	Approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		<a href="#">Link documents</a>		
IN LVM		SPC						
	Document type				Document status			
	Datasheet				Released			
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