

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

Motor type: 7CV2090B SIMOTICS SD - 90S - 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	Y	50	1.10	-/-	2.50	1438	0.7	7.3	81.4	81.4	78.0	0.76	0.66	0.53	5.7	2.8	2.8	IE2	
IM B3 / IM 1001			FS 90S		21 kg		SF:1	IS 12615 / IEC 60034-1			-								
Environmental conditions : -20 °C - +50 °C / 1,000 m										Locked rotor time (hot / cold) : 13 s   17 s									


Mechanical data

Sound pressure level 50Hz   60Hz	62 dB(A)	65 dB(A)	External earthing terminal	Yes (standard)
Moment of inertia   Rotor GD <sup>2</sup>	0.0025 kg m <sup>2</sup>   0.0100 kgf.m <sup>2</sup>		Vibration severity grade	A (Standard)
Bearing DE   NDE	6205 2ZC3	6204 2ZC3	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)	21 kg
Type of construction	IM B3 / IM 1001		Rotor weight	4 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	No		Method of cooling	IC411 - Self ventilated, surface cooled

Terminal box

Terminal box position	Top	Cable diameter from ... to ...	9.0 mm - 17.0 mm
Material of terminal box	Aluminium	Cable entry	1xM16x1.5+1xM25x1.5
Type of terminal box	TB7 D04	Cable gland	2 Plugs
Contact screw thread	M4		
Max. cross-sectional area	6 mm <sup>2</sup>		

<b>Notes:</b>			
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>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 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.		<a href="#">Link documents</a>	
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