

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

Motor type: 7CV3314B SIMOTICS SD - 315L - 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	160.00	-/-	267.00	1489	105.0	1026.0	95.9	96.1	95.8	0.87	0.85	0.78	7.7	3.0	3.2	IE3	
IM B3 / IM 1001			FS 315L		1028 kg		SF:1		IS 12615 / IEC 60034-1			-							
Environmental conditions : -20 °C - +50 °C / 1,000 m										Locked rotor time (hot / cold) : 15 s   25 s									

Mechanical data

Sound pressure level 50Hz   60Hz	80 dB(A)	83 dB(A)	External earthing terminal	Yes (standard)
Moment of inertia   Rotor GD <sup>2</sup>	3.4367 kg m <sup>2</sup>   13.7469 kgf.m <sup>2</sup>		Vibration severity grade	A (Standard)
Bearing DE   NDE	6319 C3	6319 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	40 g   40 g 6,000 h		Net weight of the motor (IM B3)	1028 kg
Type of construction	IM B3 / IM 1001		Rotor weight	305 kg
Degree of protection	IP55		Data of anti condensation heating	-/- V, -/- W
Lubricants	Esso Unirex N3		Coating (paint finish)	Standard paint finish
Regreasing device	Yes (standard)		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 71412 A		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 ...	38.0 mm - 45.0 mm
Material of terminal box	Cast iron	Cable entry	2xM63x1.5
Type of terminal box	TB1 Q01	Cable gland	2 Plugs
Contact screw thread	M12		
Max. cross-sectional area	185 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			
	MLFB and Order Code			Document number			
	1LE7503-3AB43-5AA4						
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