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

Motor type: **7CV2220B** **SIMOTICS SD - 225S - IM B3 - 4 p**

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

Electrical data

Safe Area

U [V]±10%	Δ / Y	f [Hz]±5%	P [kW]	P [hp]	I [A]	n [1/min]	M [kgf.m]	M [Nm]	η 3) 4/4	η 3) 3/4	η 3) 2/4	cosφ 3) 4/4	cosφ 3) 3/4	cosφ 3) 2/4	I_A/I_N	M_A/M_N	M_K/M_N	IE-CL
Motordaten / *Motor Data*																		
415	Δ	50	37.00	-/-	64.00	1470	25.0	240.0	92.7	92.7	92.4	0.87	0.84	0.77	7.0	2.6	3.0	IE2
IM B3 / IM 1001		FS 225S	298 kg		SF:1	IS 12615 / IEC 60034-1			-									

Environmental conditions : -20 °C - +50 °C / 1,000 m

Locked rotor time (hot / cold) : 14 s | 24 s

Mechanical data

Sound pressure level 50Hz | 60Hz	71 dB(A)	74 dB(A)	External earthing terminal	Yes (standard)
Moment of inertia | Rotor GD²	0.4390 kg m² | 1.7562 kgf.m²		Vibration severity grade	A (Standard)
Bearing DE | NDE	6313 C3	6313 C3	Insulation	155(F) utilized to 130(B)
bearing lifetime			Duty type	S1
L_{10mh} $F_{Rad\ max}$ according catalogue 50|60Hz 1)	20,000 h	16,000 h	Direction of rotation	Bidirectional
L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)	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	20 g | 20 g 8,000 h		Net weight of the motor (IM B3)	298 kg
Type of construction	IM B3 / IM 1001		Rotor weight	82 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 ...	27.0 mm - 35.0 mm
Material of terminal box	Cast iron	Cable entry	2xM50x1.5
Type of terminal box	TB1 L01	Cable gland	2 Plugs
Contact screw thread	M8		
Max. cross-sectional area	35 mm²		

Notes:

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

1) L_{10mh} according to DIN ISO 281 10/2010

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

Responsible department	Technical reference	Created by	Approved by	*Technical data are subject to change! There may be discrepancies between calculated and rating plate values.*	Link documents
IN LVM		SPC			

SIEMENS

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