

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



Motor type : 1CV4220B SIMOTICS SD - 225 S - IM B3 - 4p

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

Remarks

Safe Area

Electrical data -/-

U	Δ / Y	f	P	P	I	n	M	η ³⁾			cosφ 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 _I /I _N	T _I /T _N	T _B /T _N	
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	37.00	-/-	67.00	1485	240.0	95.2	95.5	95.2	0.84	0.80	0.70	8.4	3.2	3.2	IE4
690	Y	50	37.00	-/-	38.50	1485	240.0	95.2	95.5	95.2	0.84	0.80	0.70	8.4	3.2	3.2	IE4
460	Δ	60	42.50	-/-	66.00	1782	230.0	95.4	95.6	95.3	0.85	0.81	0.72	8.5	3.1	3.1	IE4
460	Δ	60	37.00	-/-	59.00	1786	198.0	95.4	95.4	94.8	0.83	0.78	0.68	9.8	3.6	3.6	IE4
IM B3 / IM 1001		FS 225 S				IP55	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 35.2 s 46.8 s								

Mechanical data				
Sound level (SPL / SWL) at 50Hz 60Hz	69 / 82 dB(A) ^{2) 3)}	69 / 81 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.5200 kg m²		Thermal class	F
Bearing DE NDE	6213 Z C3	6213 Z C3	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
Regreasing device	Without		Net weight of the motor (IM B3)	345 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Locating bearing DE		Color, paint shade	RAL7030
Bearing insulation DE / Bearing insulation NDE	Yes (non-drive end)		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes	With (standard)		Method of cooling	IC411 - self ventilated, surface cooled
External earthing terminal	With (standard)			

Terminal box			
Terminal box position	top	Max. cross-sectional area	35 mm²
Material of terminal box	cast iron	Cable diameter from ... to ...	27 mm - 35 mm
Type of terminal box	TB1 L01	Cable entry	2xM50x1,5-2xM20x1,5
Contact screw thread	M8	Cable gland	4 plugs

I_A/I_N = locked rotor current / current nominal 1) L_{10mh} according to DIN ISO 281 10/2010 3) Value is valid only for DOL operation with motor design IC411
M_K/M_N = locked rotor torque / torque nominal 2) at rated power / at full load
M_B/M_N = break down torque / nominal torque

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

L51	Bearing insulation NDE
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