

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

Electrical data

Safe Area

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 / 1,000 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 m ²		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 NDE		Color, paint shade	RAL7030
Condensate drainage holes	With (standard)		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
External earthing terminal	With (standard)		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	right	Max. cross-sectional area	35 mm ²
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

Notes:

I_A/I_N = locked rotor current / current nominal
M_K/M_N = locked rotor torque / torque nominal
M_K/M_N = break down torque / nominal torque

1) L10mh according to DIN ISO 281 10/2010
2) at rated power / at full load

3) Value is valid only for DOL operation with motor design IC411

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
	document type datasheet				document status released		
	title 1LE1504-2BB03-4AB5				document number		
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