

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



Motor type : 1CV3220B

SIMOTICS SD - 225 S - IM B5 - 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	-/-	66.00	1478	240.0	93.9	94.5	94.4	0.86	0.83	0.74	6.4	2.5	2.7	IE3
690	Y	50	37.00	-/-	38.50	1478	240.0	93.9	94.5	94.4	0.86	0.83	0.74	6.4	2.5	2.7	IE3
460	Δ	60	42.50	-/-	66.00	1778	230.0	93.6	94.1	93.9	0.86	0.83	0.75	6.7	2.4	2.7	IE2
460	Δ	60	37.00	-/-	58.00	1782	198.0	94.5	94.7	94.2	0.85	0.81	0.71	7.5	2.8	3.0	IE3
IM B5 / IM 3001		FS 225 S				IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -30 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 36.2 s 54.8 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65 / 78 dB(A) ^{2) 3)}	68 / 82 dB(A) ^{2) 3)}	External earthing terminal	Yes (standard)
Moment of inertia	0.4200 kg m ²		Vibration severity grade	A
Bearing DE NDE	NU 213	6213 C3	Thermal class	F
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad} ¹⁾ for coupling operation 50 60Hz	40000 h	32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	20 g 20 g	8000 h	Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	285 kg
Regreasing device	Yes		Coating (paint finish)	Standard paint finish C2
Grease nipple	M10x1 DIN 3404 A		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes	Yes (standard)		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	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 1) L10mh according to DIN ISO 281 10/2010 3) Value is valid only for DOL operation with motor design IC411

M_A/M_N = locked rotor torque / torque nominal 2) at rated power / at full load

M_K/M_N = break down torque / nominal torque

responsible dep.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
DI MC LVM		DT Configurator					
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Special design

D04	Minimum ambient temperature -30°C	Q02	Anti-condensation heating for 230 V (2 terminals)
L22	Bearing design for increased cantilever forces	Y53	Paint finish in other standard RAL colours
L23	Regreasing system		

Additional information:

Space heaters

Technical data: 1-phase, 230 V 92W

Notes:

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