

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



Motor type : 1CV2220B

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	
230	Δ	50	37.00	-/-	114.00	1470	240.0	92.7	93.5	93.5	0.88	0.85	0.78	6.6	2.3	2.9	IE2
400	Y	50	37.00	-/-	65.00	1470	240.0	92.7	93.5	93.5	0.88	0.85	0.78	6.6	2.3	2.9	IE2
460	Y	60	42.50	-/-	65.00	1770	230.0	93.6	94.2	94.0	0.88	0.86	0.79	6.6	2.3	2.9	IE2
460	Y	60	37.00	-/-	57.00	1778	199.0	93.0	93.2	92.5	0.87	0.84	0.76	7.2	2.7	3.3	IE2
IM B5 / IM 3001		FS 225 S		280 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions : -40 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 16.2 s | 29.2 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	66.0 / 79.0 dB(A) ²⁾	69.0 / 82.0 dB(A) ²⁾	External earthing terminal	Yes (standard)
Moment of inertia	0.4200 kg m ²		Vibration severity grade	A
Bearing DE NDE	6213 Z C3	6213 Z C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} 50 60Hz ¹⁾ for coupling operation	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	AERO SHELL GREASE 22		Frame material	cast iron
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		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	35.0 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	27.0 mm - 35.0 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.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			
DI MC LVM		DT Configurator					
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Special design

D03	Minimum ambient temperature -40°C	Q32	2/6 Bi-metallic sensors (opener) for warning and tripping (4 terminals)
D22	motor without CE character for export outside the EEA (see EU regulation 640/2009)	R12	Terminal box rotated through 180°
Q02	Anti-condensation heating for 230 V (2 terminals)	Y53	Paint finish in other standard RAL colours

Additional information:

Space heaters

Technical data: 1-phase, 230 V 92W

Notes:

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