

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



Motor type : 1CV2166B

SIMOTICS SD - 160 L - 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	
400	Δ	50	18.50	-/-	34.50	1475	120.0	91.2	91.8	91.3	0.85	0.81	0.70	7.7	2.5	3.3	IE2
690	Y	50	18.50	-/-	20.00	1475	120.0	91.2	91.8	91.3	0.85	0.81	0.70	7.7	2.5	3.3	IE2
460	Δ	60	21.30	-/-	33.50	1775	115.0	92.4	92.8	92.2	0.86	0.82	0.73	7.7	2.5	3.1	IE2
460	Δ	60	18.50	-/-	30.00	1780	99.0	92.4	92.4	91.3	0.84	0.79	0.69	8.8	2.9	3.6	IE2
IM B5 / IM 3001		FS 160 L		116 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 12.8 s 21.6 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65.0 / 77.0 dB(A) ²⁾	69.0 / 81.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0850 kg m ²		Vibration severity grade	A
Bearing DE NDE	6209 2Z C3	6209 2Z 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	Unirex N3		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	(A) without (Standard)
Condensate drainage holes	Yes (standard)		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	16.0 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	19.0 mm - 28.0 mm
Type of terminal box	TB1 J01	Cable entry	2xM40x1,5-1xM16x1,5
Contact screw thread	M5	Cable gland	3 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 _K /M _N = locked rotor torque / torque nominal	2) at rated power / at full load	
M _B /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.			
DI MC LVM		DT Configurator					
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				01	2021-04-22 09:57	en	1/2

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Special design

F01	Mounting a brake	F50	Mechanical manual brake release with lever (cannot be locked)
F12	Brake supply voltage 400 V AC, 50/60 Hz	L05	Second standard shaft extension

Additional information:

Brake:

Description:	BFK458-20	Current:	.47 A
Voltage:	AC 400 V	Moment of inertia:	.0073 Nm

Notes:

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