

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



Motor type : 1CV4164B

SIMOTICS SD - 160 L - IM B3 - 4p

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

Remarks

Electrical data

Safe Area

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			$\cos\phi$ ³⁾			I_A/I_N	M_A/M_N	M_K/M_N	IE-CL
								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	15.00	-/-	29.00	1480	97.0	93.9	94.0	93.3	0.80	0.74	0.62	7.8	3.7	4.3	IE4
690	Y	50	15.00	-/-	16.70	1480	97.0	93.9	94.0	93.3	0.80	0.74	0.62	7.8	3.7	4.3	IE4
460	Δ	60	17.30	-/-	28.50	1780	93.0	94.5	94.6	94.0	0.81	0.76	0.64	7.9	3.4	4.2	IE4
460	Δ	60	15.00	-/-	25.50	1780	80.0	94.1	94.0	93.0	0.79	0.72	0.60	8.8	3.9	4.8	IE4

IM B3 / IM 1001		FS 160 L		IP55		IEC/EN 60034	IEC, DIN, ISO, VDE, EN						
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Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 33.1 s | 43.6 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	63 / 76 dB(A) ²⁾	66 / 79 dB(A) ²⁾	Vibration severity grade	A
Moment of inertia	0.0990 kg m ²		Insulation	155(F) to 130(B)
Bearing DE NDE	6209 2Z C3	6209 2Z C3	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} , F _{Rad min} 50 60Hz ¹⁾	40000 h	32000 h	Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	138 kg
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)
Condensate drainage holes	Yes (standard)		Method of cooling	IC411 - self ventilated, surface cooled
External earthing terminal	No			

Terminal box

Terminal box position	top	Max. cross-sectional area	16 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	19 mm - 28 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_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.
DI MC LVM		DT Configurator		

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Special design

F01	Mounting a brake	H01	Bolted on mounting feet (instead of cast)
F12	Brake supply voltage 400 V AC, 50/60 Hz	Q3A	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)

Additional information:

Brake:

Description:	BFK458-20	Current:	.47 A
Voltage:	AC 400 V	Moment of inertia:	0.007300 kgm ²

Notes:

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