

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



Motor type : 1CV4164B

SIMOTICS SD - 160 L - IM B5 - 4p

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

Remarks

Safe Area

Electrical data

-/-

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)																	
380	Δ	50	15.00	-/-	30.50	1480	97.0	93.9	94.0	93.3	0.80	0.74	0.62	7.8	3.7	4.3	IE4
660	Y	50	15.00	-/-	17.50	1480	97.0	93.9	94.0	93.3	0.80	0.74	0.62	7.8	3.7	4.3	IE4
440	Δ	60	17.30	-/-	29.50	1780	93.0	94.5	94.6	94.0	0.81	0.76	0.64	7.9	3.4	4.2	IE4
440	Δ	60	15.00	-/-	26.50	1780	80.0	94.1	94.0	93.0	0.79	0.72	0.60	8.8	3.9	4.8	IE4
IM B5 / IM 3001		FS 160 L				IP55	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN						Grade 2	
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 32.2 s 42.5 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	63 / 76 dB(A) ^{2) 3)}	66 / 79 dB(A) ^{2) 3)}	External earthing terminal	With
Moment of inertia	0.0990 kg m ²		Vibration severity grade	A
Bearing DE NDE	6309 Z C3	6309 Z C3 INS	Thermal class	F
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	10 g 10 g	8000 h	Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	138 kg
Regreasing device	With (standard)		Coating (paint finish)	Special paint finish C3
Grease nipple	M8x1 DIN 71412		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	(B) 3 PTC thermistors - for tripping (standard) (2 terminals)
Bearing insulation DE / Bearing insulation NDE	Yes (non-drive end)		Method of cooling	IC416 - separately ventilated, surface cooled
Condensate drainage holes	With (standard)			

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 K01	Cable entry	2xM40x1,5-1xM16x1,5
Contact screw thread	M5	Cable gland	1 gland, 2 plugs

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

1) L_{10mh} according to DIN ISO 281 10/2010
2) at rated power I at full load

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

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IN LVM		SPC	Created automatically				
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Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	H70	Second outer earthing
D34	China Energy Efficiency Label	L51	Bearing insulation NDE
F70	Mounting of separately driven fan	R15	One metal cable gland
G04	Mounted rotary pulse encoder LL 861 900 220	R50	Larger terminal box
H04	External grounding at housing	R62	Cast iron auxiliary terminal box (small)

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