

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



Motor type : 1CV4112B

SIMOTICS SD - 112 M - 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	4.00	-/-	8.20	1465	26.0	91.1	91.6	91.0	0.81	0.75	0.63	8.3	3.1	4.3	IE4
660	Y	50	4.00	-/-	4.75	1465	26.0	91.1	91.6	91.0	0.81	0.75	0.63	8.3	3.1	4.3	IE4
440	Δ	60	4.55	-/-	8.00	1765	24.5	91.0	91.3	90.6	0.82	0.76	0.65	8.5	3.0	4.3	IE4
440	Δ	60	3.70	-/-	6.80	1770	20.0	91.0	90.8	89.5	0.78	0.71	0.58	10.0	3.7	5.4	IE4
IM B5 / IM 3001		FS 112 M				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) : 20.5 s 26.1 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65 / 77 dB(A) ^{2) 3)}	68 / 80 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0200 kg m²		Thermal class	F
Bearing DE NDE	6306 2Z C3	6306 2Z C3 INS	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad min} 50 60Hz ¹⁾ for coupling operation	40000 h	32000 h	Frame material	cast iron
Regreasing device	Without		Net weight of the motor (IM B3)	58 kg
Grease nipple	-/-		Coating (paint finish)	Special paint finish C3
Type of bearing	Preloaded bearing DE		Color, paint shade	RAL7030
Bearing insulation DE / Bearing insulation NDE	Yes (non-drive end)		Motor protection	(B) 3 PTC thermistors - for tripping (standard) (2 terminals)
Condensate drainage holes	With (standard)		Method of cooling	IC416 - separately ventilated, surface cooled
External earthing terminal	With			

Terminal box

Terminal box position	top	Max. cross-sectional area	4 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	11 mm - 21 mm
Type of terminal box	TB1 J01	Cable entry	2xM32x1,5-1xM16x1,5
Contact screw thread	M4	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 / at full load

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

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.	Link documents
	Document type Technical data sheet				
	Document title 1LE1604-1BB23-3FB4-Z				
Restricted © Innomotics 2024	B02+D34+F01+F12+F50+F70+G04+H04+H70+L51+R15+R50+R62			Revision AA	Creation date 2024-03-29
				Language en	Page 1/2

SIMOTICS SD - 112 M - IM B5 - 4p

B02	Acceptance test certificate 3.1 acc. to EN 10204	H04	External grounding at housing
D34	China Energy Efficiency Label	H70	Second outer earthing
F01	Mounting of holding brake	L51	Bearing insulation NDE
F12	Brake supply voltage 400 V AC, 50/60 Hz	R15	One metal cable gland
F50	Mechanical manual brake release with lever (cannot be locked)	R50	Larger terminal box
F70	Mounting of separately driven fan	R62	Cast iron auxiliary terminal box (small)
G04	Mounted rotary pulse encoder LL 861 900 220		

Brake:

Description:	BFK458-14	Current:	0.28 A
Voltage:	AC 400 V	Moment of inertia:	0.000630 kam ²

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
	Document type Technical data sheet			Document status Released			
	Document title 1LE1604-1BB23-3FB4-Z			Document number TDS-240329-101712			
Restricted © Innomotics 2024	B02+D34+F01+F12+F50+F70+G04+H04+H70+L51+R15+R50+R62			Revision AA	Creation date 2024-03-29	Language en	Page 2/2