EC Type-Examination Certificate

Reg.-No.: 01/205/5349.01/17

Product tested	Safety Functions STO, SS1, SOS, SS2, SLS, SDI, SLI, SLP, SCA, SSM, SEL, ECS within the drive controller family MSD Servo Drive with integrated Safety Control	**Certificate holder**	Moog GmbH Hanns-Klemm-Str. 28 71034 Böblingen Germany
Type designation	MSD Servo Drive with integrated Safety Control: G39x-Series. For details see current "Revision List"		
Codes and standards	EN 61800-5-2:2007 EN 61800-5-1:2007 EN 61800-3:2004 + A1:2012 EN 62061:2005 + AC:2010 + A1:2013		EN ISO 13849-1:2008 + AC:2009 IEC 61508 Parts 1-7:2010 EN 60204-1:2006 + A1:2009 + AC:2010 (in extracts)
Intended application	The safety functions comply with the requirements of the relevant standards (Cat. 4 / PL e acc. to EN ISO 13849-1, SIL CL 3 acc. to EN 61800-5-2 / EN 62061 / IEC 61508) and can be used in applications up to PL e and SIL 3.		
Specific requirements	The instructions of the associated Installation and Operating Manual shall be considered.		

It is confirmed that the product under test complies with the requirements for machines defined in Annex I of the EC Directive 2006/42/EC.

Valid until 2020-08-14

The issue of this certificate is based upon an examination, whose results are documented in Report No. 968/M 403.01/17 dated 2017-03-20.
This certificate is valid only for products which are identical with the product tested.

TÜVRheinland 0035 Notified Body

Berlin, 2017-03-20

Notified Body for Machinery, NB 0035

Dipl.-Ing. Eberhard Frejno

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MOOG

Revision List
referred to on Certificate No.: 01/205/5349.01/17
Product Tested:
MSD Servo Drive with integrated Safety Control

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List of device types and used components

Power Class	Moog-Type Designation	Power PCB			Mains PCB			Powerstage Adapter PCB			Control PCB			
		Art.-No. PCB / Circuit Diagram	Art.-No. Assembly	FS from HW-Status	Art.-No. PCB / Circuit Diagram	Art.-No. Assembly	FS from HW-Status	Art.-No. PCB / Circuit Diagram	Art.-No. Assembly	FS from HW-Status	Art.-No. PCB / Circuit Diagram	Art.-No. Assembly	FS from HW-Status	Safety Firmware
AC Supplyed														
4 A (1 x 230 V)	G392-004A(I)(II)1xxxx*	1110.153.x	1115.910.x	.2							1102.023.x	1120.820.x	.2	V001.10-40
4 A (3 x 230/400/480 V)	G392-004-(I)(II)1xxxx*	1110.153.x	1110.950.x	.2							1102.023.x	1120.820.x	.2	V001.10-40
6 A (3 x 230/400/480 V)	G392-006-(I)(II)1xxxx*	1110.153.x	1110.950.x	.2							1102.023.x	1120.820.x	.2	V001.10-40
8 A (3 x 230/400/480 V)	G392-008-(I)(II)1xxxx*	1120.153.x	1120.950.x	.2							1102.023.x	1120.820.x	.2	V001.10-40
12 A (3 x 230/400/480 V)	G392-012-(I)(II)1xxxx*	1120.153.x	1120.950.x	.2							1102.023.x	1120.820.x	.2	V001.10-40
16 A (3 x 230/400/480 V)	G392-016-(I)(II)1xxxx* G395-016-(I)(II)1xxxx*	1130.013.x	1130.810.x	.3	1130.163.x	1130.960.x	.2	1130.173.x	1130.970.x	.3	1102.023.x	1120.820.x	.2	V001.10-40
20 A (3 x 230/400/480 V)	G392-020-(I)(II)1xxxx* G395-020-(I)(II)1xxxx*	1130.013.x	1130.810.x	.3	1130.163.x	1130.960.x	.2	1130.173.x	1130.970.x	.3	1102.023.x	1120.820.x	.2	V001.10-40
24 A (3 x 230/400/480 V)	G392-024-(I)(II)1xxxx* G395-024-(I)(II)1xxxx*	1140.013.x	1140.810.x	.2	1130.163.x	1140.960.x	.2	1140.173.x	1140.970.x	.2	1102.023.x	1120.820.x	.2	V001.10-40
32 A (3 x 230/400/480 V)	G392-032-(I)(II)1xxxx* G395-032-(I)(II)1xxxx*	1140.013.x	1140.810.x	.2	1130.163.x	1140.960.x	.2	1140.173.x	1140.970.x	.2	1102.023.x	1120.820.x	.2	V001.10-40
45 A (3 x 230/400/480 V)	G392-045-(I)(II)1xxxx* G395-053-(I)(II)1xxxx*	1004.123.x	1160.926.x	.5	1160.113.x	1160.915.x	.3	1150.173.x	1150.970.x	.1	1102.023.x	1120.820.x	.2	V001.10-40
60 A (3 x 230/400/480 V)	G392-060-(I)(II)1xxxx* G395-070-(I)(II)1xxxx*	1004.123.x	1160.926.x	.5	1160.113.x	1160.915.x	.3	1150.173.x	1150.972.x	.1	1102.023.x	1120.820.x	.2	V001.10-40
72 A (3 x 230/400/480 V)	G392-072-(I)(II)1xxxx* G395-084-(I)(II)1xxxx*	1004.123.x	1160.926.x	.5	1160.113.x	1160.915.x	.3	1150.173.x	1150.973.x	.1	1102.023.x	1120.820.x	.2	V001.10-40

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Power Class	Moog-Type Designation	Power PCB			Mains PCB			Powerstage Adapter PCB			Control PCB			
		Art.-No. PCB / Circuit Diagram	Art.-No. Assembly	FS from HW-Status	Art.-No. PCB / Circuit Diagram	Art.-No. Assembly	FS from HW-Status	Art.-No. PCB / Circuit Diagram	Art.-No. Assembly	FS from HW-Status	Art.-No. PCB / Circuit Diagram	Art.-No. Assembly	FS from HW-Status	Safety Firmware
DC Supplyed														
4 A (560 VDC - 770 VDC)	G393-004-(I)(II)1xxxx*	1110.113.x	1110.920.x	.1							1102.023.x	1120.820.x	.2	V001.10-40
6 A (560 VDC - 770 VDC)	G393-006-(I)(II)1xxxx*	1110.113.x	1110.920.x	.1							1102.023.x	1120.820.x	.2	V001.10-40
8 A (560 VDC - 770 VDC)	G393-008-(I)(II)1xxxx*	1120.113.x	1120.920.x	.1							1102.023.x	1120.820.x	.2	V001.10-40
12 A (560 VDC - 770 VDC)	G393-012-(I)(II)1xxxx*	1120.113.x	1120.920.x	.1							1102.023.x	1120.820.x	.2	V001.10-40
16 A (560 VDC - 770 VDC)	G393-016-(I)(II)1xxxx* G397-020-(I)(II)1xxxx*	1130.113.x	1130.950.x	.2	1130.153.x	1130.915.x	.2	1130.173.x	1130.975.x	.3	1102.023.x	1120.820.x	.2	V001.10-40
20 A (560 VDC - 770 VDC)	G393-020-(I)(II)1xxxx* G397-025-(I)(II)1xxxx*	1130.113.x	1130.950.x	.2	1130.153.x	1130.915.x	.2	1130.173.x	1130.975.x	.3	1102.023.x	1120.820.x	.2	V001.10-40
24 A (560 VDC - 770 VDC)	G393-024-(I)(II)1xxxx* G397-026-(I)(II)1xxxx*	1140.113.x	1140.950.x	.1	1130.153.x	1140.915.x	.2	1140.173.x	1140.975.x	.2	1102.023.x	1120.820.x	.2	V001.10-40
32 A (560 VDC - 770 VDC)	G393-032-(I)(II)1xxxx* G397-035-(I)(II)1xxxx*	1140.113.x	1140.950.x	.1	1130.153.x	1140.915.x	.2	1140.173.x	1140.975.x	.2	1102.023.x	1120.820.x	.2	V001.10-40
45 A (560 VDC - 770 VDC)	G393-045-(I)(II)1xxxx* G397-053-(I)(II)1xxxx*	1150.123.x	1150.920.x	.0	1160.113.x	1160.915.x	.4	1150.173.x	1150.870.x	.1	1102.023.x	1120.820.x	.2	V001.10-40
60 A (560 VDC - 770 VDC)	G393-060-(I)(II)1xxxx* G397-070-(I)(II)1xxxx*	1150.123.x	1150.920.x	.0	1160.113.x	1160.915.x	.4	1150.173.x	1150.872.x	.1	1102.023.x	1120.820.x	.2	V001.10-40
72 A (560 VDC - 770 VDC)	G393-072-(I)(II)1xxxx* G397-084-(I)(II)1xxxx*	1150.123.x	1150.920.x	.0	1160.113.x	1160.915.x	.4	1150.173.x	1150.873.x	.1	1102.023.x	1120.820.x	.2	V001.10-40

*Note: Type Designation according to user documentation CB38398-002 (I) = 0-8: (II) = 0-7; xxxx=not approved, not within scope of the certification

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Tech-Option Types ServoOne FS

Power Class	Moog-Type Designation	Option PCB			
Safe-Tech-Option		Art.-No. PCB / Circuit Diagram	Art.-No. Assembly	FS from HW-Status	Safety Firmware
2nd Safe Axis Monitor (SinCos)	G39x*-xxxxCxx-xxx	1106.013.x	1106.810.x	.1	V001.10-40
2nd Safe SSI Encoder	G39x*-xxxxBxx-xxx	1106.013.x	1106.870.x	.1	V001.10-40
2nd Safe SinCos Encoder	G39x*-xxxxCxx-xxx	1106.013.x	1106.880.x	.1	V001.10-40

* G392/3/5/7

The above has been agreed between the manufacturer, the certifier and the Test Institute.

Revision:

Date	Rev.	Description / Changes	Author
2013-09-24	1.0	Initial creation, based on Report-No.: 968/M 403.00/13	Sty/A-FS
2017-03-20	1.1	Supplement of additional power classes, based on Report-No.: 968/M 403.01/17	Sty/A-FS
2017-07-26	1.2	Customer change request: Title, Delete column, formal modification	Sty/A-FS

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