



Rail

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List for tracking the version releases of the safety-related automation systems: Safety PLC MOSAIC-Series

Applicant

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Testing Laboratory for Safety Components

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Table of Contents

1	Hardware.....	5
1.1	Master Unit.....	5
1.2	Master Unit stand alone	5
1.3	I/O expansions.....	5
1.4	Bus extender modules.....	7
	Type (Order No.)	7
	Description	7
	Hardware Version	7
	Software Version	7
1.5	Diagnostic connections to the fieldbuses (Non-safety related)	8
1.6	Validated pressure sensitive protective systems.....	9
2	Safety Software	9
3	Safety Characteristics.....	9
4	Temperature Range.....	10
5	Additional Documents.....	10
6	Certification Documentation	10

Changes to the previous version:

Changes:

Revision	Baugruppe / Device	Version Alt / previous version	Version Neu / new version
1.0	-	-	-
1.1	M1 Module	8023700 / 1.2	8040430 / 2.0
	MI8/MI16 Module (SW change)	0.5	0.7
	MI12T8 Module (SW change)	0.0	0.2
	MO2/MO4 Module (SW change)	0.3	0.4
	MI8O2 Module (SW change)	8040001 / 0.5	8040001 / 0.8
	MV0/1/2 Module (new added)	-	8040040 / 0.3 8040034 / 0.3 8040035 / 0.3 8040036 / 0.3 8040037 / 0.3 8040038 / 0.3 8040039 / 0.3
	MOR4/S8 Module (new added)	-	8040032 / 0.1 8040033 / 0.1

1.2	MV0/1/2 Module	8040040 / 0.3 8040034 / 0.3 - 8040035 / 0.3 8040036 / 0.3 8040037 / 0.3 - 8040038 / 0.3 8040039 / 0.3	8040040 / 1.0 8040034 / 1.0 8040053 / 1.0 8040035 / 1.0 8040036 / 1.0 8040037 / 1.0 8040054 / 1.0 8040038 / 1.0 8040039 / 1.0
1.3	M1 Module (SW change)	8040430 / 2.0	8040430 / 2.1
	MV0/1/2 Module (SW change)	1.0	1.1
	MOS8/16 Module (new added)	-	8040056 / 0.0 8040057 / 0.0
	MI8O2 Module (SW change)	8040001 / 0.8	8040001 / 0.9
1.4	MO2/MO4 Module (SW change)	0.4	0.5
1.5	MO4LHCS8 Module (new added)	-	8040070 / 0.0
1.6	M1 Module (SW change)	3.0	3.1
	MI8O2 Module (SW change)	0.9	0.10
	MO2/MO4 Module (SW change)	0.5	0.6
	MOR4/MOR4S8 Module (SW change)	0.1	0.2
	MV0/1/2 Module (SW change)	1.1	1.2
1.7	New par.1.5 – safety mat GSTS01, bumper GSBPS0x	-	-
1.8	M1S Module (new added)	-	802199601 / 5.0
	MI8O4 Module (new added)	-	802199701 / 0.0
1.9	M1 Module (SW change)	3.1	4.0
	MV0/1/2 Module (SW change)	1.2	2.0
1.10	MBCCL Module (new added)	-	-
1.11	M1S Module (SW change)	802199601 / 5.0	8040390 / 5.1
	MA4 Module (new added)	-	8040324 / 0.0
	MO4L Module (new added)	-	8042800 / 0.0
1.12	MOS8/16 Module (SIL 1 / PI c output)	-	8040056 / 0.0 8040057 / 0.0
1.13	M1 Module (SW change)	4.0	4.1
	M1S Module (SW change)	5.1	5.2
	MI8O2 Module (SW change)	0.10	0.11
	MI8O4 Module (SW change)	0.0	0.1
	MA4 Module (SW change)	0.0	0.1
	MO2 Module (SW change)	0.6	0.7
	MO4 Module (SW change)	0.6	0.7
	MO4L Module (SW change)	0.0	0.1
	MO4LHCS8 Module (SW change)	0.0	0.1
1.14	Formal update par.1.5 – add evaluation unit M1S	M1	add M1S
1.15	MV0/1/2 Module (SW change)	2.0	3.0
	MV0 Module	8040040	8044649
	MV1T Module	8040034	8044643
	MV1TB Module	8040053	8044650
	MV1H Module	8040035	8044644
	MV1S Module	8040036	8044645
	MV2T Module	8040037	8044646
	MV2TB Module	8040054	8044651
	MV2H Module	8040038	8044647
	MV2S Module	8040039	8044648
	MA2 Module (new added)	-	8046353 / 0.2
	M1S Module (SW change)	5.2	6.0
	MA4 Module (SW change)	0.1	0.2

	MI8O4 Module (SW change)	0.1	0.2
	MO4L Module (SW change)	0.1	0.2
	MO4LHCS8 Module (SW change)	0.1	0.2
	MSD Mosaic Safety Designer	1.7.x	1.8.x
1.16	MR8 Module	-	8042988
1.17	Chap.1.5 – safety edges B1N, B2N	-	-
1.18	MZero	-	8023683 0B
1.19	M1S (HW and SW change)	8040390	8047154
	M1S-COM Module (new, derived from M1S)	-	8047154
	MO4L Module (SW change)	8042800	8047156
	MI8O4 Module (SW change)	802199701	8047155
	MSD Mosaic Safety Designer	1.8.x	1.9.x
1.20	M1S COM (corrected, wrong part number)	8047154	8046967
1.21	New Format of List		
1.22	M1S RV Module (new added)	-	8047173 / 8.0
	M1S-COM RV Module (new added)	-	8047193 / 8.0
	MI8O4 RV Module (new added)	-	8047175 / 0.3
	MA4 V Module (new added)	-	8047574 / 0.3
	MBC V Module (new added)	-	8047576
	M1S Module (SW change)	7.0	8.0
	M1S-COM Module (SW change)	7.0	8.0
1.23	MBECOM Module (new added)	-	8024571 / 3.0
1.24	MV0/1/2 Module (SW change)	3.0	3.1
1.25	M1S/M1S-COM Module (SW change)	8.0	8.1
1.26	MZero Module (SW change)	0.0	0.0.1
	M1 Module (SW change)	4.1	4.1.2
	M1S/M1S-COM Module (SW change)	8.1	8.1.1
1.27	Extended temperature range for M1S and M1S RV, M1S COM and M1S COM RV, MI8O4 and MI8O4 RV, MA4 and MA4 V, MZERO and MV0	-	-
1.28	Addition of Clamp-Type connector description (No technical Modification)	-	-
1.29	M1S/M1S-COM Module (SW change)	8.1.1	9.0
	MV0/1/2 Module (SW change)	3.1	3.2

Remark All types can have an additional “C” in the name for clamp type connector, instead of screw type connector.
M1 → M1C, MI8O2 → MI8O2C, M1S COM → M1SC COM, and so on.

1 Hardware

1.1 Master Unit

Type (Order No.)	Description	Hardware Version	Software Version
M1	Master unit	8040430	4.1.2
M1S	Master unit	8047023	9.0
M1S-COM	Master unit	8046967	9.0
M1S RV	Master unit extended temperature	8047173	9.0
M1S-COM RV	Master unit extended temperature	8047193	9.0

1.2 Master Unit stand alone

Type (Order No.)	Description	Hardware Version	Software Version
MZero	Master unit	8023683 0B	0.0.1

1.3 I/O expansions

Type (Order No.)	Description	Hardware Version	Software Version
MI8O2	I/O expansions	8040001	0.11

1.3 I/O expansions

Type (Order No.)	Description	Hardware Version	Software Version
MI8O4	I/O expansions	8047155	0.3
MA2	Analog input expansion	8046353	0.2
MA4	Analog input expansion	8040324	0.2
MI8	Input only expansions	8021876 03	0.7
MI12T8	Input only expansions	8190970	0.2
MI16	Input only expansions	8021877 03	0.7
MO2	Output only expansions	8021921 03	0.7
MO4	Output only expansions	8021922 03	0.7
MO4L	Output only expansions	8047156	0.3
MO4LHCS8	Output only expansion	8040070	0.2
MR2	Guided contact safety relay output module	8021914 01	-
MR4	Guided contact safety relay output module	8021915 01	-
MR8	Guided contact safety relay output module	8042988	-
MOR4	Safety relay expansion	8040032	0.2
MOR4S8	Safety relay expansion	8040033	0.2
MV0	Speed monitoring expansion	8044649	3.2

1.3 I/O expansions

Type (Order No.)	Description	Hardware Version	Software Version
MV1T	Speed monitoring expansion	8044643	3.2
MV1TB	Speed monitoring expansion	8044650	3.2
MV1H	Speed monitoring expansion	8044644	3.2
MV1S	Speed monitoring expansion	8044645	3.2
MV2T	Speed monitoring expansion	8044646	3.2
MV2TB	Speed monitoring expansion	8044651	3.2
MV2H	Speed monitoring expansion	8044647	3.2
MV2S	Speed monitoring expansion	8044648	3.2
MOS8	Output status expansions	8040056	0.0.1
MOS16	Output status expansions	8040057	0.0.1
MI8O4 RV	I/O expansions extended temperature range	8047175	0.3
MA4 V	Analog input expansion extended temperature range	8047574	0.2

1.4 Bus extender modules

Type (Order No.)	Description	Hardware Version	Software Version
MCT1/MCT2	Bus extender modules	8023696	0.1

1.5 Diagnostic connections to the fieldbuses (Non-safety related)

Type (Order No.)	Description
MBP	Profibus
MBC	CanOpen
MBCCL	CC-Link
MBD	DeviceNet
MBEC	EtherCAT
MBECOM	Profinet, ModBus TCP, Ethernet IP, EtherCAT
MBEI	Ethernet IP
MBEP	ProfiNet
MBU	USB
MBEM	Modbus TCP
MBMR	Modbus RTU
MBEI2B	Ethernet/IP-2PORT
MBC V	CanOpen extended temperature range

1.6 Validated pressure sensitive protective systems						
Manufacturer	Type	Model (Order No.) ¹⁾	B10 _d	n _{op} / year	Evaluation Unit	Response time
GAMMA SYSTEMS S.r.l. I-10044 Pianezza (TO)	Safety Mat	GSTS01	2.0 x 10 ⁰⁵	80 x 10 ⁰³	Mosaic M1, M1S	≤ 240 ms
GAMMA SYSTEMS S.r.l. I-10044 Pianezza (TO)	Safety Bumper	GSBPS0x	2.6 x 10 ⁰⁵	12 x 10 ⁰³	Mosaic M1, M1S	≤ 240 ms
GAMMA SYSTEMS S.r.l. I-10044 Pianezza (TO)	Safety Edges	B1N, B2N	2.6 x 10 ⁰⁵	12 x 10 ⁰³	Mosaic M1, M1S	≤ 240 ms
¹⁾ The unit fulfils the requirement of EN ISO 13856-1 and EN ISO 13856-2 up to PL d / Category 3						

2 Safety Software		
Type (Order No.)	Description	Software Version
MSD	Mosaic Safety Designer	1.9.x
MZD	MZero Safety Designer	1.0.0

3 Safety Characteristics	
Function	Level
Safety Function	SIL 3 according EN / IEC 61508 Cat 4 , Pl e according EN 13849-1
Status Output	up to SIL 1 according EN / IEC 61508 up to Pl c according EN 13849-1

4 Temperature Range

MZERO, MV0, M1S, M1S COM, MI8O4, MA4

Operating temperature:	-30°C...+55°C
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Storage temperature:	-40°C...+85°C
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M1S RV, M1S COM RV, MI8O4 RV

Operating temperature:	-30°C...+70°C
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Storage temperature:	-40°C...+85°C
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MA4 V, MBC V

Operating temperature:	-10°C...+70°C
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Storage temperature:	-20°C...+85°C
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5 Additional Documents

Type (Order No.)	Title	Comment
Manual	MOSAIC Manual	Currently valid version

6 Certification Documentation

Document	Rep. No
Technical Report	RT83357T

	Release by Testing Laboratory:	Release by Certification Body:
Date:		
Signature:		