



MOSAIC - A unique safety controller: Modular, Expandable, Configurable

MOSAIC is a modular configurable safety controller capable of managing all safety functions of machinery or plants. Made up of a Master unit which can operate as a stand-alone device or control up to 14 expansion units in a system.

Capable of monitoring several safety sensors and signals such as: light curtains - photocells - laser scanners - emergency stops - electromechanical switches - safety door switches - magnetic switches - safety mats and edges - two-hand controls - hand grip switches - encoders and proximities for safety speed control - load cells - pressure switches - temperature, flow and level measurements.

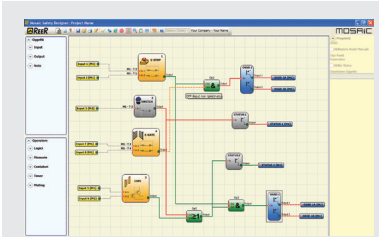
- Power supply: 24V DC ± 20%
- Safety level: SIL 3, PL e, SILCL 3, Cat. 4
- Connections: Removable (screw terminal) blocks
- Mounting: DIN rail mounting according to EN 50022-35 standard
- Dimensions: (H) 99 x (W) 22.5 x (D) 114 mm



Scan to watch video

Advantages

- Tamper-proof system configuration
- Reduced control panel dimension, design and construction time
- Logic configured via graphic interface, eliminating laborious wiring as with traditional solutions
- **Simulation function** allows to validate system functionality without connecting to a machine



FREE DESIGNER SOFTWARE included with M1/M1S units



1100000



new

1100043



1100050

type	model	digital inputs	Start / Restart inputs	OSSD safety outputs	status outputs	description
------	-------	----------------	------------------------	---------------------	----------------	-------------

MOSAIC master units

Master units can operate as stand-alone device or expanded with additional I/O modules.

M1 - Standard master unit

- 8 digital inputs
- 2 pairs SIL 3 OSSD safety outputs (PNP 400 mA)
- 2 inputs for Start/Restart interlock and external device monitoring (EDM)
- 2 programmable digital status outputs (PNP 100 mA)
- 4 test outputs (for sensor monitoring)

1100000	M1	8	2	2 pairs	2	standard master controller
---------	----	---	---	---------	---	----------------------------

M1S - Enhanced master unit

- 8 digital inputs
- 4 single SIL 3 OSSD or (2 pairs) safety outputs (PNP 400 mA)
- 4 inputs for Start/Restart interlock and external device monitoring (EDM)
- 4 programmable digital status outputs (PNP 100 mA)
- 4 test outputs (for sensor monitoring)

1100003	M1S	8	4	4 or (2 pairs)	4	enhanced master controller
---------	-----	---	---	----------------	---	----------------------------

Accessories for M1/M1S master units

1100060	MCM	memory card to store or duplicate master unit configuration as a backup
1100061	MSC	rear bus connector required to connect to any expansion module
1100062	USB	USB configuration cable (A-mini B, length 1.8 m)

MOSAIC - Expansion modules

Input/output expansion modules provides additional digital inputs and outputs to the master unit

1100010	MI8O2	2x pairs SIL 3 OSSD safety outputs, 8x digital inputs, 2x status outputs
1100011*	MI8O4	4x single SIL 3 OSSD safety outputs, 8x digital inputs, 4x status outputs
1100021	MI16	16x digital inputs and 4x test outputs (for sensor monitoring)
1100025*	MA4	4x 4-20mA (or 0-10V) analogue inputs (for analogue sensors)

* Only compatible with M1S enhanced Master unit.

1100031	MO4	4x pairs SIL 3 OSSD safety outputs, 4x status output
1100032	MO4LHC	4x single high current SIL 3 OSSD safety outputs (2A), 8x status output

Status outputs provides additional non-safety outputs to the master unit

1100092	MOS16	16x programmable digital (non-safety) signal outputs
---------	-------	------------------------------------------------------

Safety relays provides safety relay outputs with guided contacts

1100041	MR4	4x safety relay outputs with guided contacts (6A 250 VAC)
1100043	MOR4S8	4x configurable safety relay outputs with guided contacts

Communication for connection to the most common industrial Field-bus systems

1100050	MBP	Profibus DP	module for diagnostics and data communication
1100051	MBD	DeviceNET	module for diagnostics and data communication
1100052	MBC	CANopen	module for diagnostics and data communication
1100054	MBEI	EtherNET IP	module for diagnostics and data communication
1100082	MBMR	Modbus RTU	module for diagnostics and data communication