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**MOSAIC**  
Modular Safety Integrated Controller



# MOSAIC

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MOSAIC is the new modular and configurable safety controller of REER.

This new safety device is capable of monitoring several safety sensors and commands at the same time. These can be safety light curtains, safety photocells, emergency stops, safety mats, magnetic or mechanic switches, two-hand controls, etc.

Thanks to MOSAIC's modular and expandable structure, it is possible to adapt its I/O configuration and functionality to the demands of each application. This makes MOSAIC a highly versatile and flexible safety controller.

MOSAIC has solid state and/or relay outputs. They can be instantaneous or delayed.



## MAIN FEATURES

- Configurable safety controller
- Safety level: SIL 3, PLe, Cat. 4
- Easy and intuitive graphic configuration software (MSD - Mosaic Safety Designer)
- Compact design:
  - single module dimensions 22.5 x 99 x 114.5 mm
- Max 72 inputs and 8 OSSD pairs
- Max 7 expansion units in addition to Master M1
- M1 stand alone main unit:
  - 8 safety inputs, 2 OSSD pairs with separate EDM and Start/Restart
  - configurable via PC through USB interface
- MI802 expansion unit:
  - 8 safety inputs, 2 OSSD pairs with separate EDM and Start/Restart
- MI8 and MI16 expansion units:
  - with 8 and 16 safety inputs
- MO2 and MO4 expansion units:
  - with 2 and 4 OSSD pairs with separate EDM and Start/Restart
- MR2 and MR4 relay units:
  - with 2 and 4 guided contacts safety relays
- MB expansion units for connection to the most common industrial Fieldbus systems:
  - PROFIBUS DP, DeviceNet, CANopen
- Communication between units via proprietary high speed bus (MSC - Mosaic Safety Communication)
- Simple diagnostics via led signaling and configuration software
- Memory card configuration storage (MCM - Mosaic Configuration Memory)

### MSC Mosaic Safety Communication



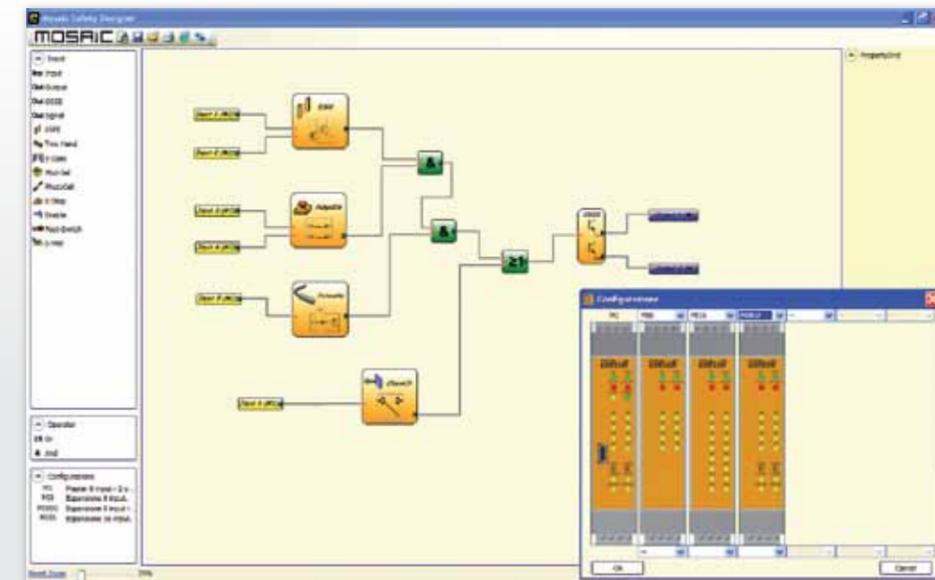
MSC allows communication between units via a proprietary high speed bus.

Mosaic Safety Designer (MSD) software is a user-friendly configuration tool which makes the programming of MOSAIC possible in just a few simple steps. By clicking on the functional icons it is easy to 'Drag&Drop' and configure any safety functions.

Thanks to an accurate functional test incorporated into the Mosaic Safety Designer (MSD) software, configuration errors are detected immediately. This also helps to guarantee that configuration errors cannot lead to an unsafe situation and valuable time is not lost during the commissioning of the machine.

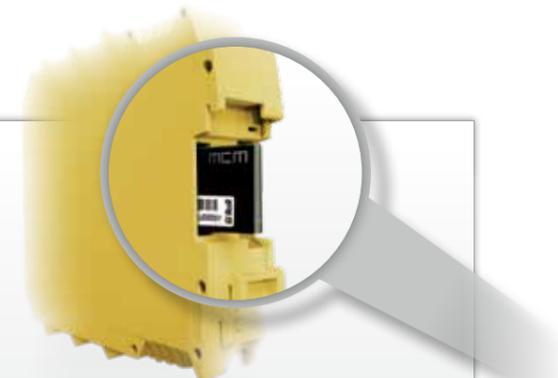
In addition, the multi-level password management of Mosaic Safety Designer (MSD) gives further security against non-authorized access to the configuration software.

### MSD Mosaic Safety Designer



### MCM Mosaic Configuration Memory

MCM is a memory card which can be used to save the configuration data for copying to a new MOSAIC safety controller as and when required.



Safety level:

**SIL 3**

**SIL 3 – SILCL 3  
PL e – Cat. 4**