

MODULAR DESIGN, EASY TO PROGRAM  
**THE SMALL SAFE CONTROL SYSTEM MSC**

**EUCHNER**

More than safety.

# THE SMALL SAFE CONTROL SYSTEM **MSC**

# FLEXIBLE – EFFICIENT – MAXIMALLY SAFE

The small control system MSC is the solution for the logic behind your safety system. Individually configured for your machine, it can be used to implement highly diverse safety engineering applications. You can select the right modules to meet the requirements for your installation, paying only for the functions you actually need. Protection using an MSC guarantees maximum safety according to the applicable standards.

## GREAT USABILITY

The device software and hardware are designed for great usability during setup, operation and maintenance work. In addition to LED displays on the modules, the simulation function and the depiction of real-time operation in the software can be used for diagnostic purposes.

## INTEGRATED SAFETY SYSTEM DESIGN

The wide range of MSC modules in conjunction with the numerous EUCHNER safety engineering products provides safety for diverse machines and installations.

## FLEXIBLE AND EFFICIENT

Highly modular and scalable to almost any size, the MSC safety control system is ideally adaptable to the respective machinery requirements – the tailor-made solution for every application.

## STANDARDS-COMPLIANT PROTECTION MEETING THE STRICTEST SAFETY REQUIREMENTS

The MSC system modules are certified up to category 4 and PL e according to EN ISO 13849-1.

## FAST SETUP

The intuitive EUCHNER Safety Designer software enables fast configuration, clear programming and detailed documentation of the MSC system.

## INTEGRATION INTO EXISTING BUS SYSTEMS

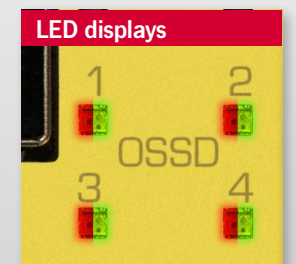
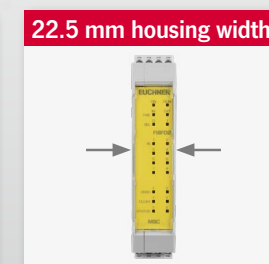
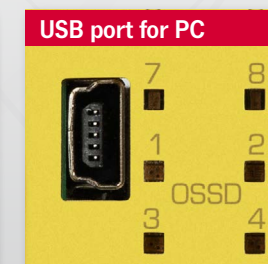
Products from the MSC range can connect the MSC to all common field-buses, allowing it to communicate with the higher-level control system.

## SAVES SPACE IN THE CONTROL CABINET

Thanks to the compact housing, even extensive safety functions can be implemented in the smallest of spaces. Special communication modules can interconnect different modules across separate control cabinets.

## SAVES TIME WHEN EXCHANGING MODULES

Transferring the program to other base units is fast and simple with a memory card. Moreover, the modules are connected via plug-in terminals to avoid any additional wiring work when a module is replaced.





# SAFETY SYSTEM **MSC** IN USE

Diverse safety switchgear can be connected and monitored with the small safe control system MSC. A large selection of expansion modules helps the MSC system fulfill diverse requirements.

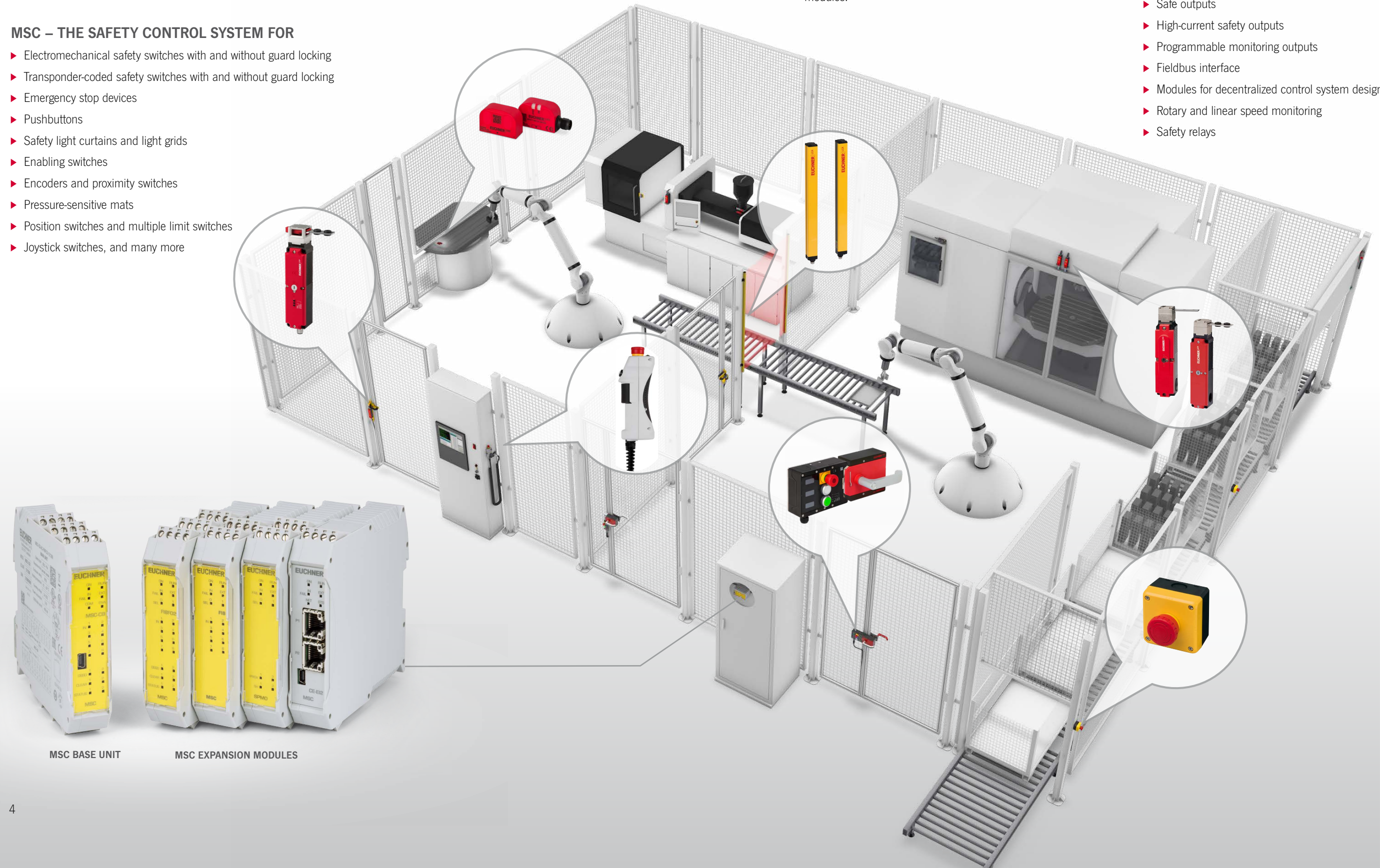
## MSC – THE SAFETY CONTROL SYSTEM FOR

- ▶ Electromechanical safety switches with and without guard locking
- ▶ Transponder-coded safety switches with and without guard locking
- ▶ Emergency stop devices
- ▶ Pushbuttons
- ▶ Safety light curtains and light grids
- ▶ Enabling switches
- ▶ Encoders and proximity switches
- ▶ Pressure-sensitive mats
- ▶ Position switches and multiple limit switches
- ▶ Joystick switches, and many more

The base unit is the foundation for every MSC system, and it can be expanded with up to 14 expansion modules.

## MSC EXPANSION OPTIONS

- ▶ Safe inputs
- ▶ Safe outputs
- ▶ High-current safety outputs
- ▶ Programmable monitoring outputs
- ▶ Fieldbus interface
- ▶ Modules for decentralized control system design
- ▶ Rotary and linear speed monitoring
- ▶ Safety relays





# OVERVIEW OF **MSC** BASE UNITS

Selecting the right base unit forms the foundation for your MSC system. In the maximum expansion stage, up to 128 inputs, 30 dual-channel safety outputs and 48 monitoring outputs can be monitored with the expansion modules using a single small control system.



## Features of the **MSC-CB-S**

- ▶ **8 safe inputs and 4 test outputs**  
For connecting commonly used safety engineering sensors
- ▶ **2 dual-channel safe semiconductor outputs**  
Meet the strictest safety requirements and are suitable for single-channel applications
- ▶ **4 connections for flexible use as a monitoring output or control input**  
The specific function is programmed using the EUCHNER Safety Designer software
- ▶ **Up to 4 monitoring outputs**  
Can be used as required
- ▶ **Up to 4 control inputs**  
For connecting start buttons or for monitoring contactors



## Features of the **MSC-CB**

- ▶ **8 safe inputs and 4 test outputs**  
For connecting commonly used safety engineering sensors
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- ▶ **2 monitoring outputs**  
Can be used as required
- ▶ **2 control inputs**  
For connecting start buttons or for monitoring contactors

# PROGRAMMING SOFTWARE „**EUCHNER SAFETY DESIGNER**“



The EUCHNER Safety Designer software can be used to configure, program and document the MSC safety system. It supports rapid setup with simple operation via the graphical user interface, diagnostic options and project report creation.

- ▶ User-friendly interface for simple, intuitive operation
- ▶ Troubleshooting support by real-time depiction of inputs and outputs
- ▶ Simple depiction of even complex functions using extensive function blocks
- ▶ Trouble-free setup by integrated simulation function
- ▶ Various access levels and passwords protect against tampering
- ▶ Free download from [www.euchner.com](http://www.euchner.com)

# OUR PRODUCTS FOR YOUR SAFETY

## SAFE DOOR DETECTION

Transponder-coded safety switches without guard locking  
CES-C04 / CES-C07

Magnetically coded safety switches without guard locking  
CMS

Electromechanical safety switches without guard locking  
NM / NP / GP / NZ

## SAFE GUARD LOCKING

Transponder-coded safety switches with guard locking  
CTS / CTM / CTP / CTA / CET

Electromechanical safety switches with guard locking  
TP / STP / STA / STM

Safety switches with integrated mounting magnet  
CEM-C40 / CEM-C60

## DOOR LOCKING SYSTEMS

MGB / MGBS / MGB2 *CLASSIC*  
MGB2 *MODULAR* (MGB2 PROFINET / MGB2 EtherCAT)

## ACCESS CONTROL SYSTEMS

EKS / EKS *Light* / EKS *Modular* / CKS / CKS2

## OPERATING DEVICES

ZSM / ZSB / HBA / HBM

## LIGHT GRIDS / LIGHT CURTAINS

LCA

## EMERGENCY STOP DEVICES

ES / RPS

## SAFETY CONTROL SYSTEMS / SAFETY RELAYS

MSC / ESM / ESM-CB / GWY

**> YOU CAN FIND MORE INFORMATION ABOUT OUR PRODUCTS HERE**

[www.euchner.de/en-us/Products](http://www.euchner.de/en-us/Products)

**> YOU CAN DOWNLOAD CATALOGS AND FLYERS HERE**

[www.euchner.de/en-us/Service/Downloads](http://www.euchner.de/en-us/Service/Downloads)

**EUCHNER GmbH + Co. KG**  
Kohlhammerstraße 16  
70771 Leinfelden-Echterdingen  
Germany

Tel. +49 711 7597-0  
Fax +49 711 753316  
[info@euchner.de](mailto:info@euchner.de)  
[www.euchner.com](http://www.euchner.com)

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