

ITEM 121289 MSC-CB-AC-FI8FO2-121289

Description	Technical data	Accessories	Downloads
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Features

- › Freely programmable small safe control system
- › 8 single-channel /4 dual-channel inputs
- › 2 control inputs
- › 2 semiconductor outputs (PL e, category 4)
- › 2 door monitoring outputs
- › PC connection for the software "EUCHNER Safety Designer"
- › Optional memory module for configuration
- › Compact housing with width of only 22.5mm
- › Straightforward diagnostics via LED displays
- › Plug-in screw terminals

Approvals



Mechanical values and environment

Dimensions	108 x 22.5 x 114.5 [1]
Material	
Housing	Polyamide
Ambient temperature	-10 ... +55 °C
Atmospheric humidity	10 ... 95 % rH
Degree of protection	IP20
Installation method	Mounting rail 35mm [2]
Connection	Plug-in screw terminal [3]
Cable length	max.100 m [4]
	USB port for PC connection
Connection	USB type B - Mini
Cable length	USB cable max.3 m
	Safety outputs OSSD1, OSSD2
Number of safety outputs	2
	For module activation
Number of inputs	2
	Safety input 1...8
Number of inputs	8
	External relay monitoring (EDM), automatic, manual operation
Number of inputs	2
	Status (can be programmed via software)
Number of monitoring outputs	2
	Pulse output 1...4
Number of outputs	4

Electrical connection ratings

Operating voltage DC	UB	24 V DC -20% ... +20% PELV [5]
Over voltage category according to IEC EN 60664-1	II	
Degree of contamination according to EN 60664-1	2	
Connection cross-section	0,5 ... 0,2 mm ²	2,5 mm ² Screw terminal
Delay time	0,0106 ... 0,0546 s [6]	
Power consumption	max.3 W	
		Safety outputs OSSD1, OSSD2
Test pulses	0,1 ms	
Inductive load	max.30 mH	
Capacitive load	max.0,82 µF	
Type of output	Semiconductor outputs, p-switching, short circuit-proof	
Output voltage	HIGH	UB-0,75 ... UB V DC
	LOW	0 ... 2 V DC

Output current	
Max. load at 24VDC	- ... 400 mA
	For module activation
Type of input	Semiconductor inputs, p-switching [7]
	Safety input 1...8
Type of input	Semiconductor inputs, p-switching [8]
	External relay monitoring (EDM), automatic, manual operation
Type of input	Semiconductor inputs, p-switching [9]
	Status (can be programmed via software)
Type of output	Semiconductor outputs, p-switching [10]
Output current	max.100 mA
	Pulse output 1...4
Test pulses	0,2 ms
Type of output	Semiconductor outputs, p-switching [11]

Reliability values according to EN ISO 13849-1

ESPE type	4 [12]
Performance Level	PL e [13]
Category	4 [14]
PFH _D	6.06E-9 1/h [15]
SIL CL	3 [16]
Mission time	20 y [17]

[1] Including screw terminals

[2] Acc. to EN 60715

[3] Terminals not included

[4] With length above 50m use cross-section > 1mm²

[5] Acc. to EN 60204-1

[6] Depending on the number of slave modules, operators and OSSD outputs. (See operating instructions and calculated values in the software "Euchner Safety Designer")

[7] "Typ2" acc. to EN 61131-2

[8, 9, 10, 11] Acc. to EN 61131-2

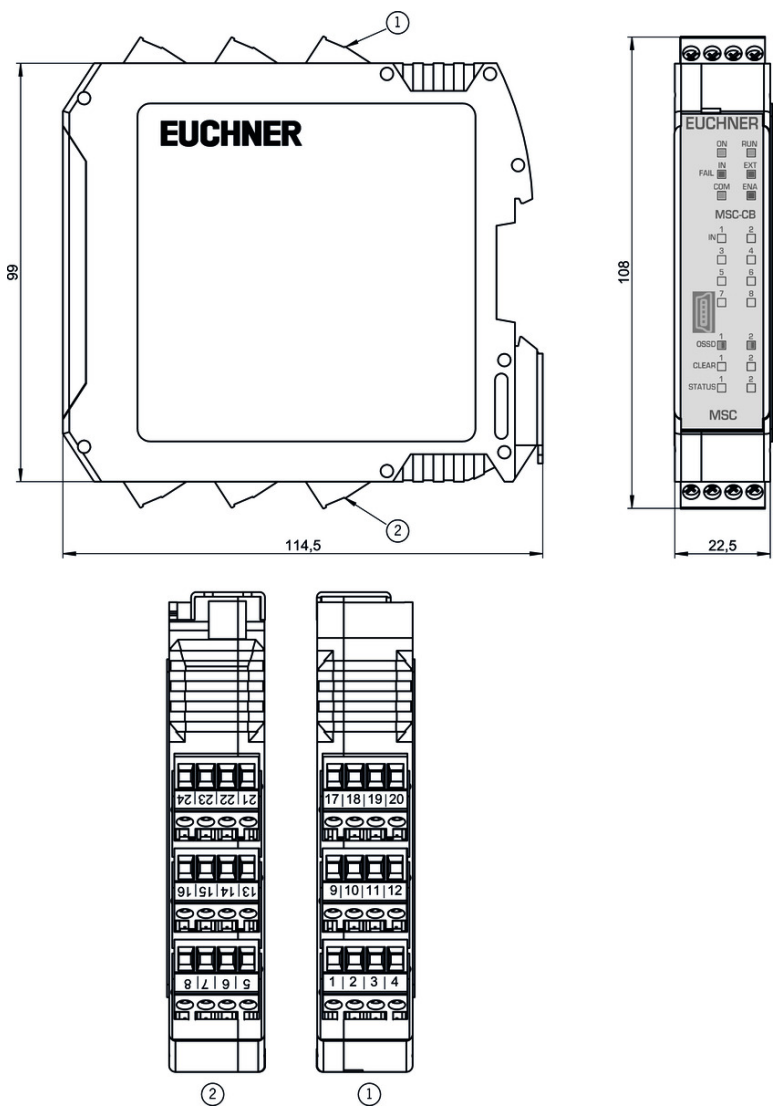
[12] Acc. to EN 61496-1

[13, 14, 17] Acc. to ISO 13849-1:2006/IEC 62061:2005

[15] Acc. to IEC 61508:2010

[16] Acc. to IEC 62061:2005

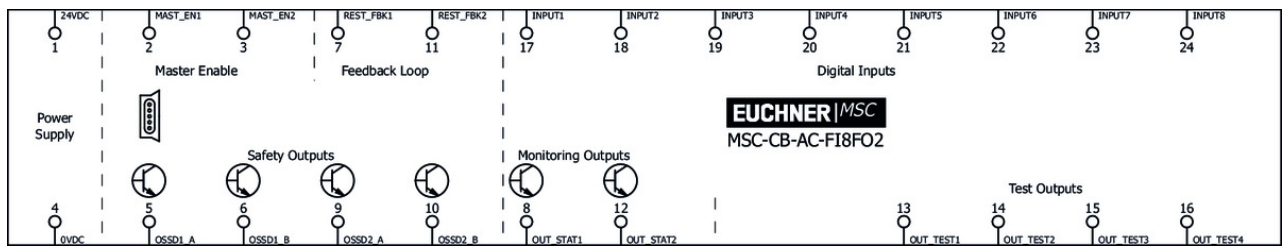
Dimension drawing



Legende

- 1 Page A
- 2 Page B

Block diagram



Connection material

▼ Terminal set 6 contacts, screw terminals



121321 AC-SC-04-V06-121321

▼ Features

- › Plug-in screw terminals

▼ Connection cable with USB type A to type Mini-USB, 1.8m



121322 C-USB-2.0-A-01,8-MINB-121322

▼ Features

- › USB 2.0 cable type A to type mini-USB
- › Cable length 1.8 m

▼ Expansion connector, MSC



121308 AC-PL-B-121308

Miscellaneous accessories

▼ Memory Card MSC-M-A1



121309 MSC-M-A1-121309

▼ Features

- › 8-pole memory module for configuration
- › Suitable for MSC-CB base module



Instructions

▼ MODULAR SAFETY INTEGRATED CONTROLLER MSC Installation and use

	Doc. no.	Version	Language	Download
MODULARE SICHERHEITSTEUERUNG MSC Installation und Verwendung	121331	03-05/16		5.9 MB
MODULAR SAFETY INTEGRATED CONTROLLER MSC Installation and use	121331	03-05/16		6.2 MB
AUTOMATE INTÉGRÉ DE SÉCURITÉ MODULAIRE MSC Installation et utilisation	121331	03-05/16		6.2 MB
MODULAR SAFETY INTEGRATED CONTROLLER MSC Instalación y uso	121331	03-05/16		6.2 MB
SISTEMA DI CONTROLLO MODULARE DI SICUREZZA MSC Installazione e uso	121331	03-05/16		6.1 MB

▼ MSC-CB MASTER MODULE

Doc. no. Version Language Download

MSC-CB MASTER MODUL MSC-CB MASTER MODULE	121335	01-07/14		 0.3 MB
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Catalogs

Easily programmable - The small safe control system MSC

	Doc. no.	Version	Language	Download
Einfach programmierbar - Die sichere Kleinststeuerung MSC	121780	05-05/16		 2.2 MB
Easily programmable - The small safe control system MSC	121888	05-05/16		 2.2 MB
Simplement programmable - L'automate de sécurité MSC	122111	05-05/16		 2.2 MB
Fácil de programar - El controlador seguro de tamaño reducido MSC	122112	05-05/16		 2.2 MB
易于编程 - MSC小型安全控制系统	157058	05-05/16		 2.7 MB

Declaration of conformity

EU declaration of conformity

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung EU declaration of conformity Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità	2122800	05-06/17	    	 0.3 MB