

ITEM 113830 SBM-11-N08

Description	Technical data	Accessories	Downloads
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Features

- › Four safe inputs, two safe semiconductor outputs
- › AS-i monitor, master and connection for 24V power supply unit (AS-interface Power 24V) integrated
- › Chip card and USB for parameter assignment
- › Connectable to AS-i power supply unit or standard power supply unit
- › With power supply unit isolation

AS-i master

The SBM includes an AS-i Master, which can be switched off as an option. This permits several SBMs to be operated on an AS-Interface circuit. Configuration is performed with a PC. LEDs signal the state on the device.

OSSDs (Output Signal Switching Devices)

- › Two OSSDs with semiconductor outputs
- › Two OSSDs with 4 normally closed contacts

Safe inputs

There are four safe inputs to which safety devices without AS-i bus can be directly connected. The inputs can be optionally used as standard inputs/monitoring outputs, e.g. for feedback loop or start button.

Logic functions

Programmable with AsiMon software. All safety components can be programmed with different functions as inputs. The inputs can be linked with AND or OR gates or via logic functions such as Flip Flop, switch-on delay, turn-off delay or pulses. Different programs can be stored on memory cards.

AS-Interface monitor

The monitor controls one AS-i circuit with up to 31 safe slaves and up to 16 OSSDs, of which two are built into the device. 14 circuits can be used externally in addition.

Power supply

Type N permits connection of several SBM devices to the same standard power supply unit. Up to ten AS-I 24 slaves can be operated with one 24V standard power supply unit.

Important

The plug-in connection terminals are not included and must be ordered separately.

Approvals



Mechanical values and environment

Housing material	Polyamide PA6.6
Weight	Net 0,147 kg
Ambient temperature	0 ... 55 °C
Degree of protection	IP20
Mounting method	Mounting rail 35mm according to DIN EN 60715 TH35
Reaction time	max.40 ms
Number of inputs	8
Standard inputs; if the safety inputs are not used	
Number of OSSDs	2 2-channel
Connection	Plug-in connection terminals
Cable length	

Connection conditions between the input terminals	max.200 m
	Output circuit 1.14 ext.out; 2.14 ext.out
Number of outputs	2
	Terminals S11, S12, S21, S22
Number of safety inputs	4

Electrical connection ratings

ASi voltage	18 ... 31,6 V
ASi operating current	max.200 mA
ASi auxiliary voltage (PELV)	20 ... 30 V
Power supply	Inputs From 24V auxiliary power AUX+ext.in; AUX-ext.in
Current consumption AUX	max.4000 mA
LED indicator	4X LEDs yellow state input S1-S8 LED green/yellow/red (SM) state safety monitor LED green/yellow/red (AS-i M) state AS-i master LED green/yellow/red (O1) output 1 has switched LED green/yellow/red (O2) output 2 has switched
Type of input	4 safe inputs of Cat. 4 or 8 standard inputs/and outputs
Rated insulation voltage U _i AS-i/AUX	500 V
Switching current	At 24 V static 4 mA At 24 V dynamic (T=100µs) 15 mA
Power supply unit isolation	Yes
Resistance	Connection conditions between the input terminals max.0,15 kΩ
Output current Per monitoring output	max.10 mA
Card slot	Yes [1]
	Output circuit 1.14 ext.out; 2.14 ext.out
Test pulses	Test pulse when output is switched on max.1 ms
Test-pulse interval	Test pulse when output is switched on min.250 ms
Type of output	Semiconductor outputs
Power supply	Outputs From 24V auxiliary voltage
Output current	

	For OSSD supply	max.1400 mA
Max. contact load		0.7A 24V
		Terminals S11, S12, S21, S22
Type of safety input		Semiconductor inputs
		Terminals S31, S32, S41, S42
Type of safety input		Semiconductor inputs
		Terminals S51, S52, S61, S62
Type of safety input		Semiconductor inputs
		Terminals S71, S72, S81, S82
Type of safety input		Semiconductor inputs

Interface, bus

Data interface	Micro USB
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Controls and indicators

Number of pushbuttons/switches	1 service push button
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Miscellaneous

in compliance with	IEC 61 508:2001, EN IEC 62 061:2005, EN 13 849-1:2006
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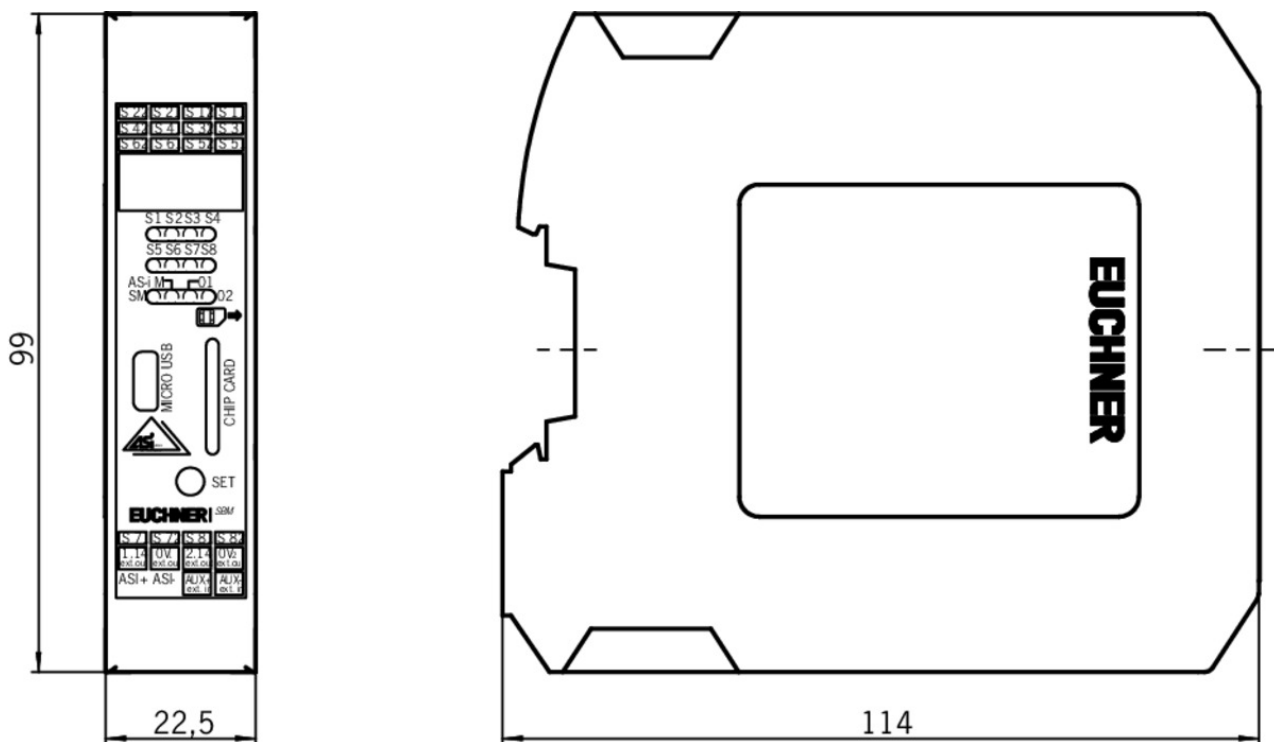
Reliability values acc. to EN ISO 13849-1

Performance Level	PL e
Category	4
PFH _D	5.1×10^{-9} [2]
SIL CL	3
Mission time	20 y

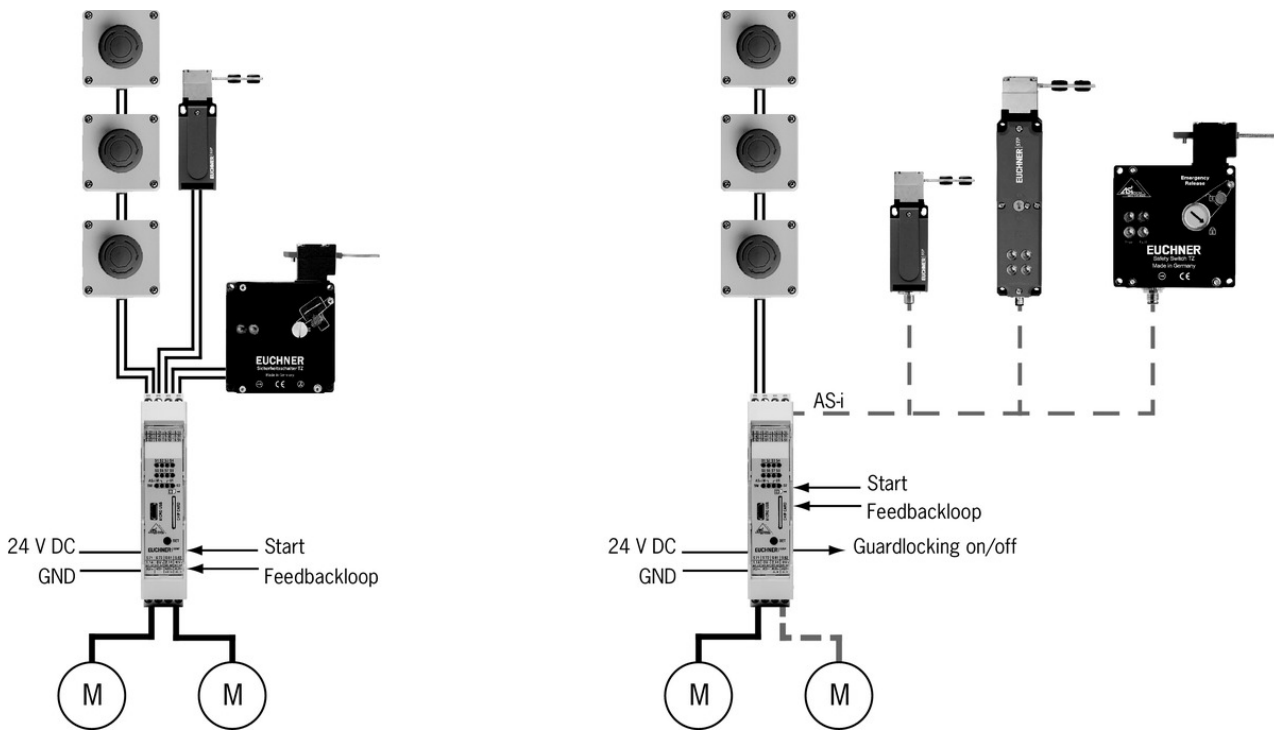
[1] Memory card to store the configuration data

[2] Probability of a hazardous failure per hour

Dimension drawing



Connection examples



Connection material

✓ Connection kit ESM...P, spring terminals







097195 ESM-F-KK4

✓ Features




- › Plug-in spring terminals safety relay ESM
- › Can be coded

Instructions





▼ Montageanweisung Safety Basis Monitor

	Doc. no.	Version	Language	Download
Montageanweisung Safety Basis Monitor	114014	01-10/12		 2.6 MB
Instrucciones de montaje Safety Basis Monitor				
Notice de montage Safety Basis Monitor				
Istruzioni per il montaggio Safety Basis Monitor				
Installation Instructions Safety Basis Monitor				

▼ SBM Safety Basis Monitor ohne Netzteilentkopplung / mit Netzteilentkopplung







	Doc. no.	Version	Language	Download
SBM Safety Basis Monitor ohne Netzteilentkopplung / mit Netzteilentkopplung	114015	02-11/14		 0.5 MB
SBM Safety Basic Monitor without Power Supply Decoupling Unit / with Power Supply Decoupling Unit				

▼ Systemhandbuch Safety Basis Monitor

	Doc. no.	Version	Language	Download
Systemhandbuch Safety Basis Monitor	114013	01-10/12		 3.3 MB
User Manual Safety Basic Monitor	114013	01-10/12		 3.3 MB

Catalogs

▼ Sicherheitsschalter mit AS-Interface Safety Switches with AS-Interface Interrupteurs de sécurité avec AS-Interface

	Doc. no.	Version	Language	Download
Sicherheitsschalter mit AS-Interface	092164	11-04/17		 2.3 MB
Interrupteurs de sécurité avec AS-Interface	112564	11-04/17		 2.3 MB
Safety Switches with AS-Interface	092332	11-04/17		 2.3 MB