EUCHNER

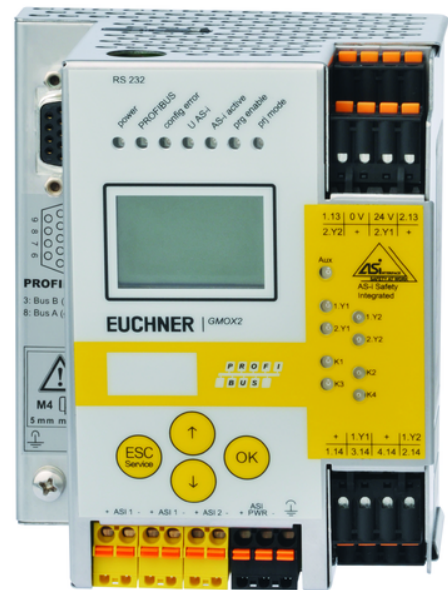# GMOX-PR-12DN-C16 (Order no. 103267)

AS-Interface Safety at Work safety monitor with integrated Gateway GMOx

▸ One AS-i master
▸ Display and pushbuttons for diagnostics and adjustment
▸ Memory card for different programs
▸ Adjustable time-delay
▸ 16 OSSDs

Gateway to Profibus

For connection to a Profibus DP as a slave and as a master for an AS-i bus according to specification 3.0.
Detection of ground shunt, double addressing and EMC problems.
Rapid setup with the display without PC. Direct display of faults with plain-text messages.
Comprehensive AS-i diagnostics integrated. AS-i configuration software is available.

OSSDs (Output Signal Switching Devices), AS-i outputs

▸ Two OSSDs with two redundant normally closed contacts each
▸ Two OSSDs with semiconductor outputs
▸ 12 additional safe AS-i outputs can be controlled

Inputs

▸ 4 inputs, freely selectable

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 FlipFlop, switch-on delay, OFF time or pulses.
Different programs can be stored on a memory card.

AS-Interface monitor

The monitor controls two AS-i circuits with up to 62 safe slaves and up to 16 outputs.

Display and pushbuttons

The display is used to operate the gateway functionality as well as the monitor at the same time. The diagnostics and maintenance functions are considerably expanded compared to the SFM monitors. They can also be launched on the display without a PC monitor.
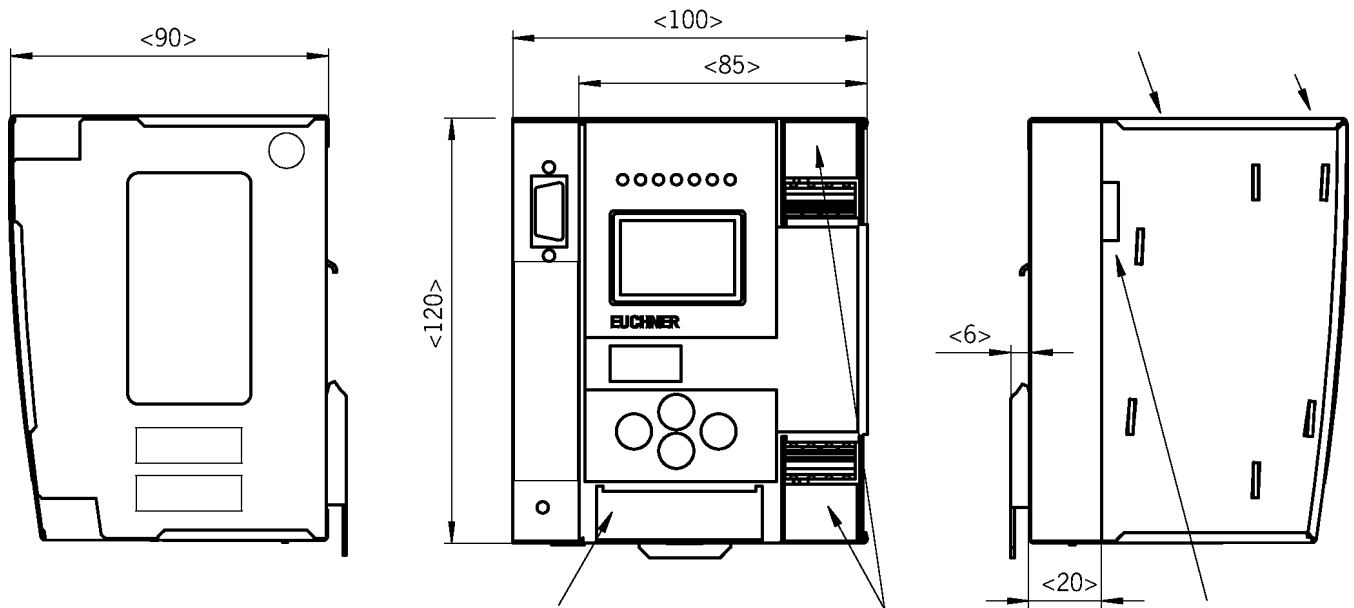
Incorporated security functions allow the programmed functionality to be protected and monitored.
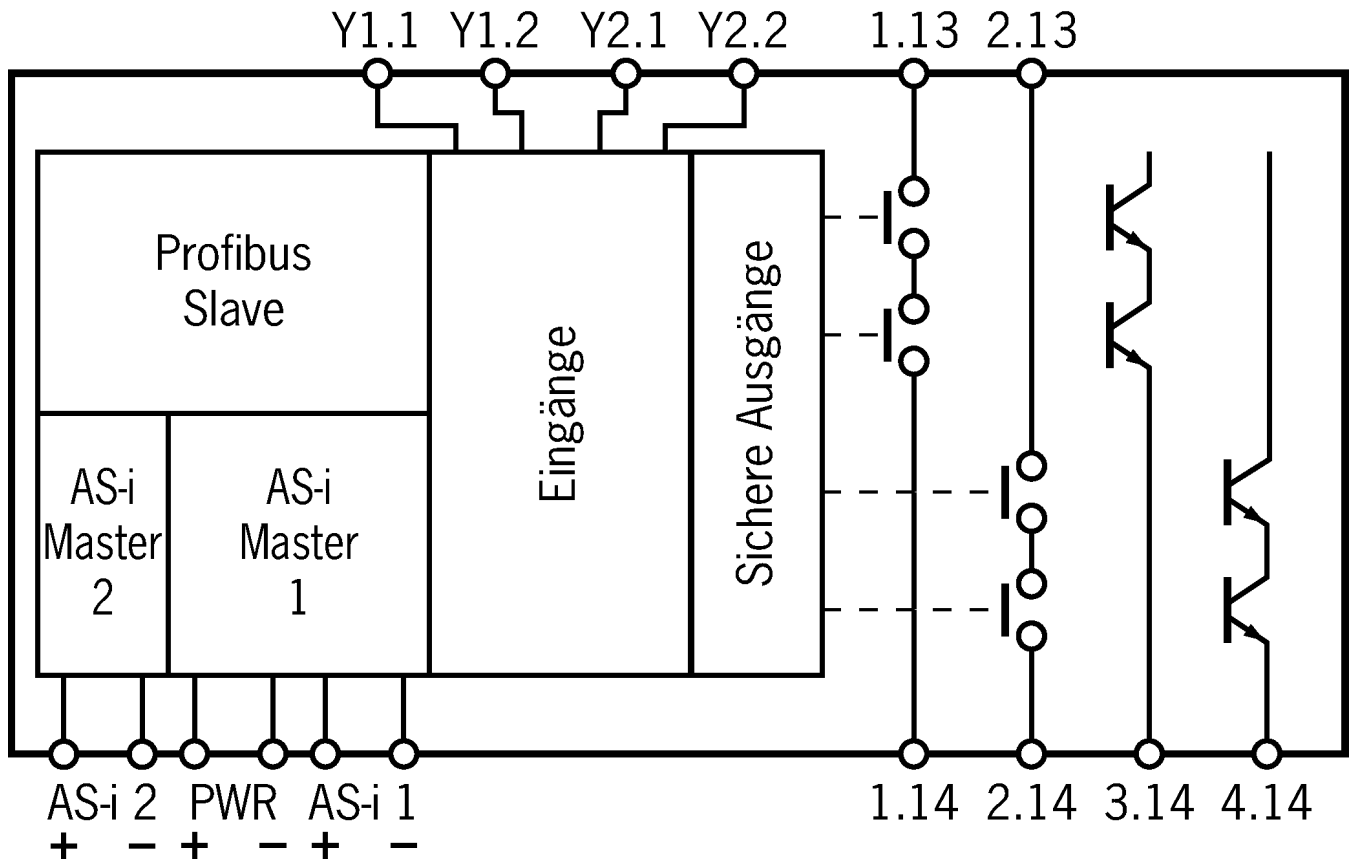
Power supply

Type N permits connection of several GMOx devices to the same power supply unit.

Important: A connection kit must be ordered for each safety monitor. See Accessories.

Dimensional drawings

Connection examples

Y1.1 Y1.2 Y2.1 Y2.2   1.13 2.13

Profibus Slave

AS-i Master 2   AS-i Master 1

Eingänge

Sichere Ausgänge

AS-i 2   PWR   AS-i 1
+   −   +   −   +   −

1.14 2.14 3.14 4.14

Technical data

Approvals

Operating and display elements

Display	LCD AS–i slave address indication, error messages
LED display	
	LED prg enable automatic slave programming possible
	LED AUX auxiliary power is present
	LED PROFIBUS master detected
	LED config error configuration error
	LED AS–i active AS–i operation normal
	LED U AS–i voltage OK
	LED prj mode, configuration mode active
	LED power, power supply ON
	4 x LEDs EDM / start state of the inputs for the external device monitoring circuits: LED off: open, LED on: closed
	4 x LEDs, output circuits, state of the output circuits: LED off: open, LED on: closed

Item	Extras	Color	Designation1	Number	LED	Version	Note slide–in label	Slide–in label	Switching element
				4		Pushbutton			

Electrical connection values

Power consumption		9 W
Connection cross section		
	for wire	2x (0.5…1.5) mm^2
		(2x AWG 24 to 12)
Flexible wire for cable end sleeve		
		(2x (0.5…1.5) mm^2)

Response delay		
	Safety circuit off	max. 40 ms

ASI operating current	max. 300 mA
ASI voltage	30 V
ASI cycle time	150 µs 150 x (number of slaves + 2)

Outputs

Number	Type	Function	Footnote
4	Output switching elements, output circuits 1, 2, 3 and 4	Relay outputs 1.13, 2.13, semiconductor outputs 1.14, 2.14, 3.14, 4.14	

Rated insulation voltage U_i	500 V

Inputs

Number	Type	Function	Footnote
4	Feedback loop/start	EDM1/Start1: 1.Y1; EDM2/Start2: 2.Y1; EDM3/ Start3:1.Y2; EDM4/ Start4: 2.Y2	(EDM: external device monitor / feedback loop)

Switch–on delay	10 s
Card slot	yes (Memory card to store the configuration data)

Mechanical values and environment

Number of OSSDs	16 (4 fed out)
Number of masters	1
Mounting type	Mounting rail 35mm according to DIN EN 60715TH35
Degree of protection	IP20
Ambient temperature	0 … +55 °C
Material	
Housing	Stainless steel
permissible shock and vibration load	According to EN 61 131–2

Characteristic values according to EN ISO 13849–1 and EN IEC 62061

Mission time	20 y
Category	4
Performance Level	PL e
PFH_D	5.36×10^{-9}

SIL CL	3

Miscellaneous

in compliance with	EN 61 000–6–2, EN 61 000–6–4, EN 62 061, IEC 61 508, EN ISO 13 849–1

Interface

Bus data protocol	PROFIBUS according to EN 50 170–3
Data rate	9.6 … 12000 kbit/s
Date interface	Serial interface RS 232
Periphery	Decentralized peripheral equipment mapping of the AS–i slaves as I/O process data in the PROFIBUS; complete diagnostics and configuration via PROFIBUS DP master

Downloads

All documentation for this material can be found on our website:
https://www.euchner.de/en-us/a/103267/?#downloads-tab

Ordering data

Ordernumber	103267
Item designation	GMOX–PR–12DN–C16
Gross weight	0,936kg
Customs tariff number	85371098
ECLASS	27–24–31–01 Configurable control component