

## Data interface - PSR-M-GW-PB-PI - 1105100

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



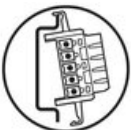
Gateway for connecting a PSR-M base module to a higher-level controller, PROFIBUS DP, TBUS interface, pluggable Push-in terminal block, TBUS connector included

### Product Description

The configurable and individually scalable PSRmodular safety system is a flexible safety solution for monitoring your machine or system. PSRmodular gateways connect a PSR-M basic module to a higher-level controller. This gateway is designed for use with PROFIBUS.


### Your advantages

- ✓ Economical safety solution with a high level of adaptability to individual requirements
- ✓ Fast startup, thanks to easy hardware and software configuration
- ✓ Machine downtime minimized with comprehensive, easy-to-understand diagnostics
- ✓ Narrow housing width of just 22.6 mm
- ✓ Tool-free and time-saving installation with Push-in technology



COMPLETE line

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 974989
GTIN	4055626974989
Weight per Piece (excluding packing)	160.000 g
Custom tariff number	85371098
Country of origin	Italy

### Technical data

#### Dimensions

Width	22.61 mm
-------	----------

# Data interface - PSR-M-GW-PB-PI - 1105100

## Technical data

### Dimensions

Height	107.74 mm
Depth	114.75 mm

### Ambient conditions

Ambient temperature (operation)	-10 °C ... 55 °C (observe derating)
Ambient temperature (storage/transport)	-20 °C ... 85 °C
Max. permissible relative humidity (operation)	95 % (non-condensing)
Max. permissible humidity (storage/transport)	95 % (non-condensing)
Maximum altitude	≤ 2000 m (Above sea level)

### Power supply

Designation	A1/A2
Rated control circuit supply voltage $U_s$	24 V DC -20 % / +20 % (external fuse, typically 4 A)
	19.2 V DC ... 28.8 V DC
Rated control supply current $I_s$	typ. 60 mA
Power consumption at $U_s$	typ. 1.44 W
Inrush current	< 2.2 A ( $\Delta t = 1$ ms at $U_s$ )
Filter time	typ. 5 ms (at A1 in the event of voltage dips at $U_s$ )
Protective circuit	Serial protection against polarity reversal
	Suppressor diode

### Device interface

Designation	Network interface
Communication protocol	PROFIBUS DP
Communication standard	IEC 61158, RS-485 2-wire
Connection method	D-SUB-9 female connector
Number of connections	1
Transmission speed	12 Mbps
Transmission length	max. 1200 m (depending on the data rate, with shielded, twisted data cable)
Designation	Service interface
Connection method	USB 2.0 Hi-Speed
Number of connections	1
Maximum cable length	3 m

### General

Nominal operating mode	100% operating factor
Net weight	125 g
Mounting position	vertical or horizontal
Mounting type	DIN rail mounting

## Data interface - PSR-M-GW-PB-PI - 1105100

### Technical data

#### General

Degree of protection	IP20
Min. degree of protection of inst. location	IP54
Protection class	III (EN 50178)
Housing material	Polyamide PA non-reinforced
Housing color	gray
Operating voltage display	1 x green LED
Status display	1 x LED (green), 2 x LED (green, red)
Indication	2 x LED (red)

#### Connection data

Connection method	Push-in connection
pluggable	Yes
Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 16
Stripping length	10 mm

#### Standards and Regulations

Standards/regulations	EN 50178
Rated insulation voltage	250 V AC
Rated surge voltage/insulation	Basic insulation 4 kV
Degree of pollution	2
Overvoltage category	II
Shock	10g for $\Delta t = 16$ ms (continuous shock, 1000 shocks in each space direction)
Vibration (operation)	10 Hz ... 150 Hz, 2g
Conformance	CE-compliant

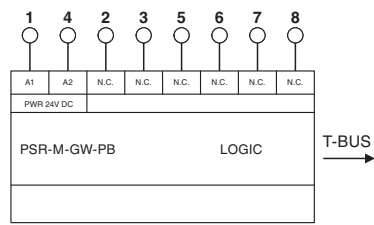
#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

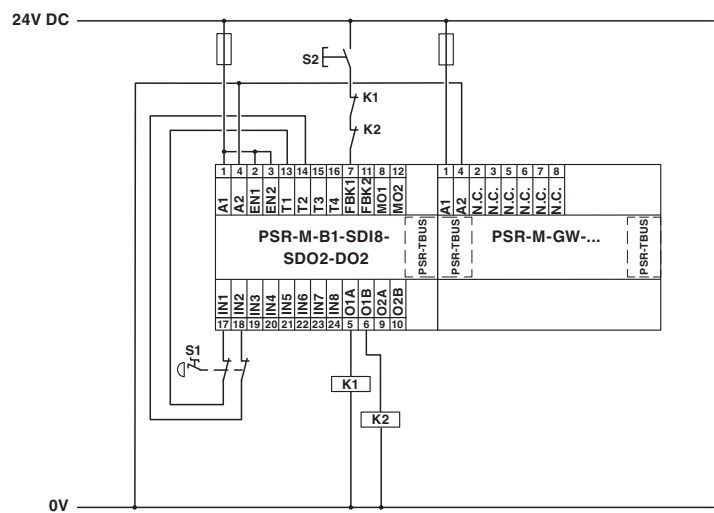
### Drawings

# Data interface - PSR-M-GW-PB-PI - 1105100

Block diagram



Application drawing



## Classifications

eCl@ss

eCl@ss 10.0.1	27242608
eCl@ss 11.0	27242608
eCl@ss 9.0	27242608

## Approvals

Approvals

Approvals




UL Listed / cUL Listed / cULus Listed

# Data interface - PSR-M-GW-PB-PI - 1105100

## Approvals

Ex Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
cULus Listed			

## Accessories

Accessories

Coding element

Coding profile - CP-MSTB - 1734634



Coding profile, is inserted into the slot on the plug or inverted header, red insulating material

Coding section - CR-MSTB - 1734401



Coding section, inserted into the recess in the header or the inverted plug, red insulating material

Programming cable

## Data interface - PSR-M-GW-PB-PI - 1105100

### Accessories

USB cable - CABLE-USB/MINI-USB-3,0M - 2986135



USB connecting cable: USB plug type A to USB plug type Mini-B; length: 3 m

---

### Safety device

Safety module - PSR-M-B1-SDI8-SDO2-DO2-SC - 1104981



Configurable safety module (basic module), 8 safe inputs, 2 safe outputs, 2 reset inputs, 2 signal outputs, 4 clock outputs, can be extended via TBUS, up to SIL 3, Cat. 4/PL e, plug-in screw terminal block, TBUS connector not included

---

Safety module - PSR-M-B1-SDI8-SDO2-DO2-PI - 1104972



Configurable safety module (basic module), 8 safe inputs, 2 safe outputs, 2 reset inputs, 2 signal outputs, 4 clock outputs, can be extended via TBUS, up to SIL 3, Cat. 4/PL e, plug-in Push-in terminal block, TBUS connector not included

---

Safety module - PSR-M-B2-SDI8-SDO4-DO4-SC - 1104974



Configurable safety module (basic module), 8 safe inputs, 4 safe outputs, 4 reset inputs or 4 signal outputs, 4 clock outputs, can be extended via TBUS, up to SIL 3, Cat. 4/PL e, plug-in screw terminal block, TBUS connector not included

---

Safety module - PSR-M-B2-SDI8-SDO4-DO4-PI - 1104975



Configurable safety module (basic module), 8 safe inputs, 4 safe outputs, 4 reset inputs or 4 signal outputs, 4 clock outputs, can be extended via TBUS, up to SIL 3, Cat. 4/PL e, plug-in Push-in terminal block, TBUS connector not included

