

Data interface - PSR-M-GW-PB-SC - 1105099

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Gateway for connecting a PSR-M base module to a higher-level controller, PROFIBUS DP, TBUS interface, plug-in screw 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



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 973371
GTIN	4055626973371
Weight per Piece (excluding packing)	160.000 g
Custom tariff number	85371098
Country of origin	Italy
Sales Key	DNA365

Technical data

Dimensions

Width	22.61 mm
Height	112.58 mm
Depth	114.75 mm

Ambient conditions

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Technical data

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	160 g
Mounting position	vertical or horizontal
Mounting type	DIN rail mounting
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

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General

Status display	1 x LED (green), 2 x LED (green, red)
Indication	2 x LED (red)

Connection data

Connection method	Screw connection
pluggable	Yes
Conductor cross section solid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 12
Stripping length	7 mm
Screw thread	M3
Torque	0.5 Nm ... 0.6 Nm

Standards and Regulations

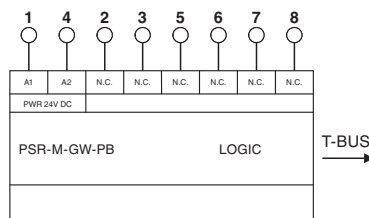
Standards/regulations	EN 50178
Rated insulation voltage	250 V AC
Rated surge voltage/insulation	Basic insulation 4 kV
Degree of pollution	2
Overvoltage category	II
Shock	10g for Δt = 16 ms (continuous shock, 1000 shocks in each space direction)
Vibration (operation)	10 Hz ... 150 Hz, 2g
Conformance	CE-compliant

Environmental Product Compliance

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

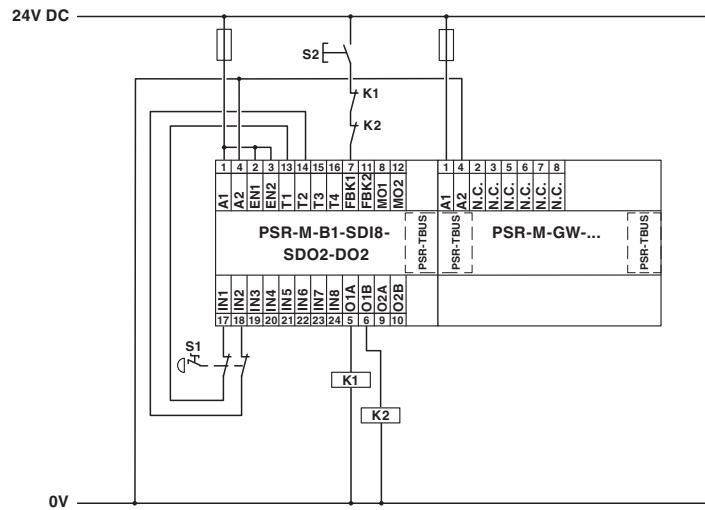
Drawings

Block diagram



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Application drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27242608
eCl@ss 11.0	27242608
eCl@ss 8.0	27242608
eCl@ss 9.0	27242608

ETIM

ETIM 5.0	EC001604
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Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
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Approvals

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
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cULus Listed			
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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

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

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Accessories

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 SILCL 3, Cat. 4/PL e, SIL 3, 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 SILCL 3, Cat. 4/PL e, SIL 3, 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 SILCL 3, Cat. 4/PL e, SIL 3, 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 SILCL 3, Cat. 4/PL e, SIL 3, plug-in Push-in terminal block, TBUS connector not included