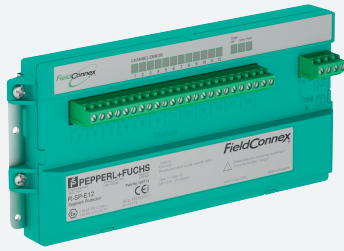


Segment Protector for Cabinet Installation

R-SP-E12



- 12 increased safety outputs (Ex e)
- Short circuit current limitation per output
- Segment Protector in Zone 1/Div. 2
- Instruments in Zone 1/Div. 1
- For FOUNDATION Fieldbus H1 and PROFIBUS PA
- High power on trunk and spurs



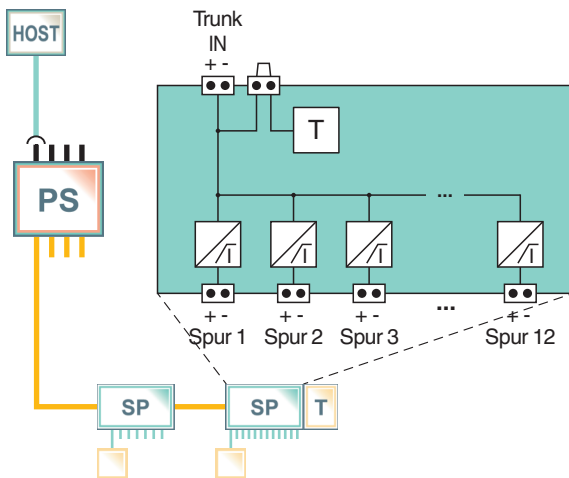
Segment Protector for Cabinet Installation



Function

The R SP E12 Segment Protector is a device coupler that connects field instruments to the segment. Flameproof (Ex d) field devices are connected to the trunk line via one output each. Trunk and spurs are certified increased safety (Ex e). Short-circuit protection ensures proper operation of the segment in case of unwanted faults at the spur. Work on devices always requires a hot work permit. The integrated fieldbus terminator features high-availability design and is selectable. Connectors are fixed screw terminals. Any grounding and shielding concept is possible based on FieldConnex enclosure solutions. Customizable housings host one or more Segment Protectors for different output counts.

Connection



Zone 1/Div. 2

Technical Data

General specifications

| | |
|---------------------------|----------------------|
| Design / Mounting | Cabinet installation |
| Fieldbus interface | |
| Power dissipation | 250 mW |
| Main cable (Trunk) | |
| Rated voltage | 9 ... 32 V DC |
| Outputs | |
| Number of outputs | 12 |
| Rated voltage | max. 32 V |
| Rated current | max. 40 mA |

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

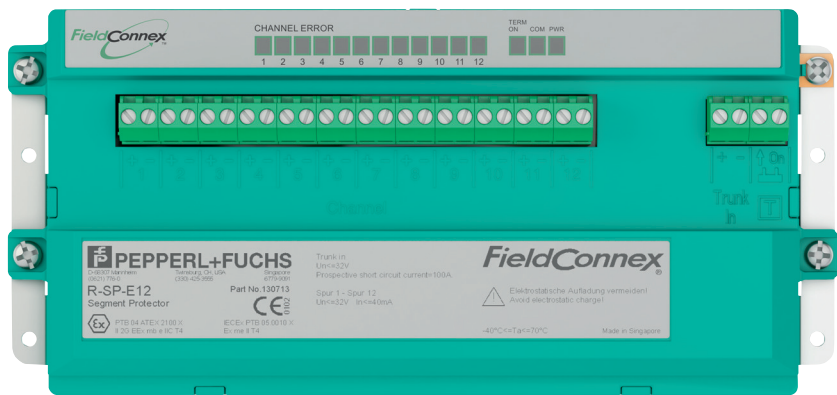
PEPPERL+FUCHS

Technical Data

| | |
|--|--|
| Short-circuit current | max. 52 mA |
| Self current consumption | max. 9 mA |
| Voltage drop main cable/outputs | max. 1.3 V |
| Terminating resistor | selectable 100 Ω integrated |
| Surge protection | trunk, spurs overvoltage protected if voltage exceeds typ. 39 V, max. 41 V |
| Indicators/operating means | |
| LED PWR | green: Fieldbus voltage > 10 V |
| LED CHANNEL ERROR | red flashing: short-circuit |
| LED COM | yellow: bus activity |
| LED TERM ON | yellow: termination activated |
| Directive conformity | |
| Electromagnetic compatibility | |
| Directive 2004/108/EC | EN 61326-1:2006 |
| Standard conformity | |
| Electromagnetic compatibility | NE 21:2006 |
| Degree of protection | IEC 60529 |
| Fieldbus standard | IEC 61158-2 |
| Shock resistance | EN 60068-2-27 |
| Vibration resistance | EN 60068-2-6 |
| Ambient conditions | |
| Ambient temperature | -40 ... 70 °C (-40 ... 158 °F) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F) |
| Relative humidity | 95 % non-condensing |
| Shock resistance | 15 g, 11 ms |
| Vibration resistance | 5 g, 10 ... 150 Hz |
| Mechanical specifications | |
| Connection type | screw fixing |
| Core cross-section | max. 2.5 mm ² / AWG 12-24 |
| Housing material | Polycarbonate |
| Housing width | 216 mm |
| Housing height | 100 mm |
| Housing depth | 50 mm |
| Degree of protection | IP20 |
| Mass | 800 g |
| Mounting | DIN rail mounting |
| Coating | resin filled |
| Data for application in connection with hazardous areas | |
| EU-Type Examination Certificate | PTB 04 ATEX 2100 X |
| Marking | Ex II 2 G Ex e mb IIC T4 Gb |
| Maximum values | |
| Rated voltage | ≤ 35 V |
| Prospective short-circuit current | 100 A |
| Directive conformity | |
| Directive 94/9/EC | EN 60079-0:2012, EN 60079-7:2007, EN 60079-18:2009 |
| International approvals | |
| IECEx approval | IECEx PTB 05.0010X |
| Approved for | Ex me II T4 |
| Certificates and approvals | |
| Marine approval | DNV A-14038 |
| General information | |
| Supplementary information | EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com . |

Release date: 2021-01-12 Date of issue: 2021-01-12 Filename: 130713_eng.pdf

Assembly



Matching System Components

| | | |
|--|---|--|
| | F.SPE.P**A**1.0.***.***. **** | |
| | F.SPE.S**A**1.0.***.***. **** | |

Release date: 2021-01-12 Date of issue: 2021-01-12 Filename: 130713_eng.pdf

Additional Information

Release date: 2021-01-12 Date of issue: 2021-01-12 Filename: 130713_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

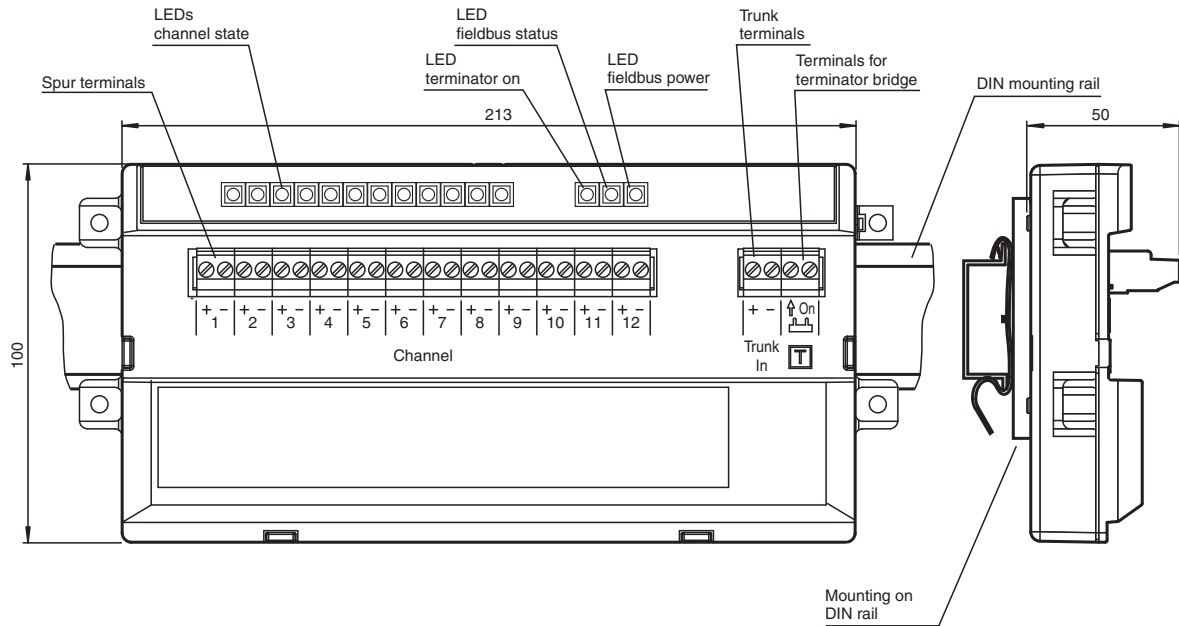
USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**

Dimensions



Note:

For the connection of the cable shields earth bars are to be used in the enclosure. With metallic enclosures the appropriate insulation has to be ensured.

Installation

see manual