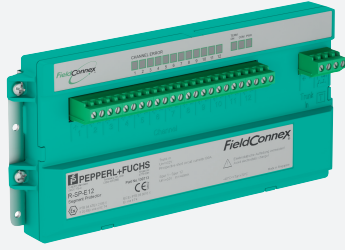


Segment Protector for Cabinet Installation



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

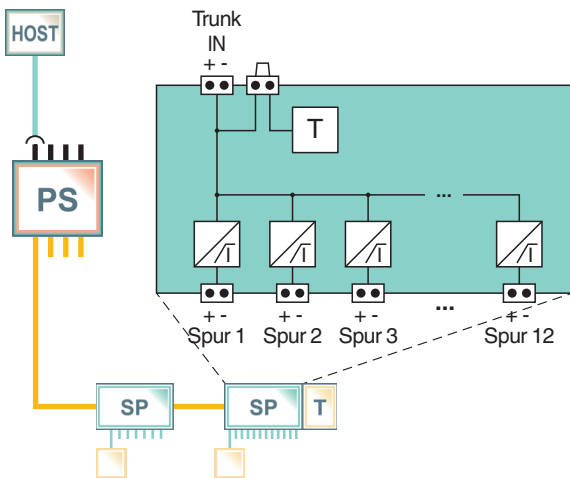
Segment Protector for Cabinet Installation



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 connection	
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
Short-circuit current	max. 52 mA

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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

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Technical Data

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	Ⓔ 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 .

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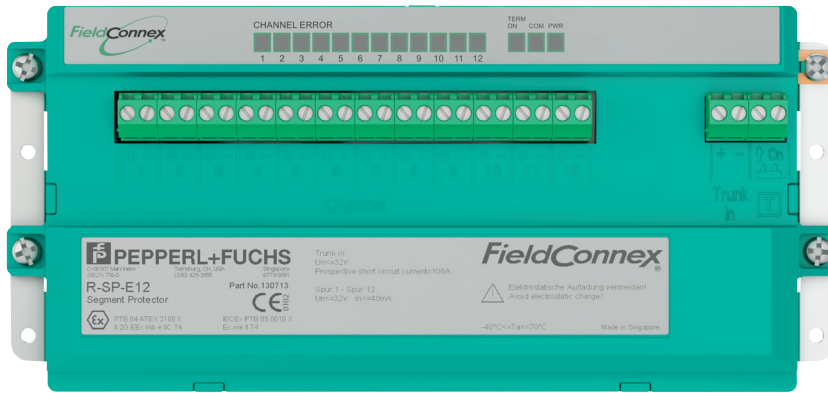
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Assembly



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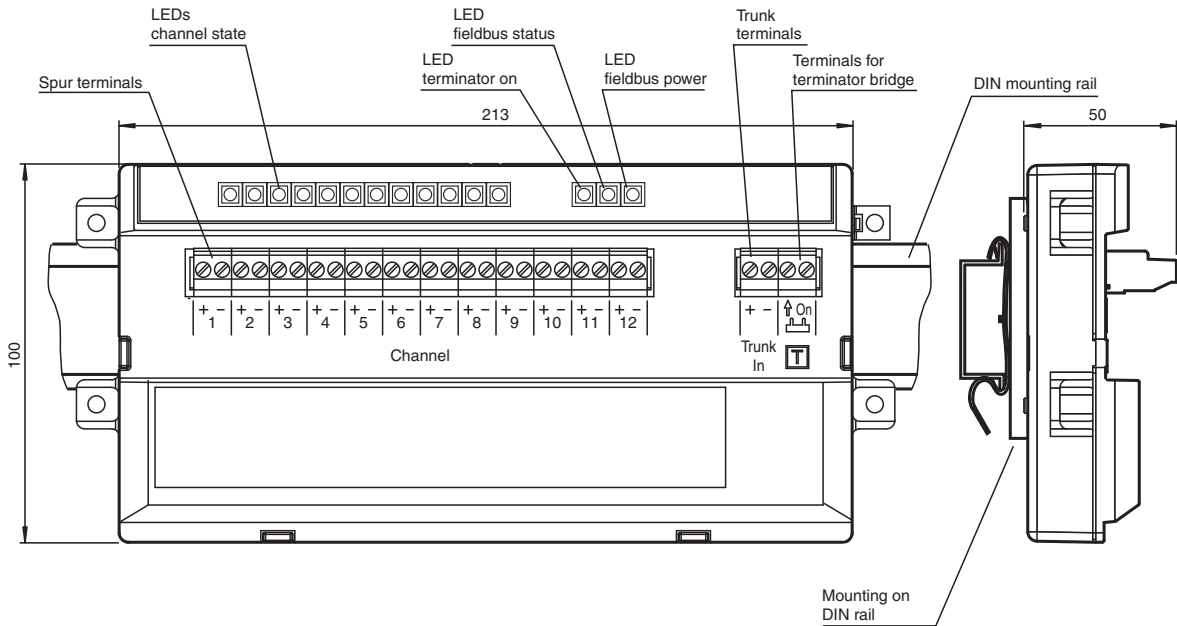
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Additional Information

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

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