Instruction Manual

1. Marking

Segment Protector R-SP-E12
ATEX certificate: PTB 04 ATEX 2100 X ATEX marking: ⟨Ex⟩ II 2 G Ex eb mb IIC T4 Gb
IECEx certificate: IECEx PTB 05.0010X IECEx marking: Ex eb mb IIC T4 Gb

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2. Validity

Specific processes and instructions in this instruction manual require special provisions to guarantee the safety of the operating personnel.

3. Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismounting lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismounting of the device. The trained and qualified personnel must have read and understood the instruction manual.

Prior to using the product make yourself familiar with it. Read the instruction manual carefully.

4. Reference to Further Documentation

Observe laws, standards, and directives applicable to the intended use and the operating location. Observe Directive 1999/92/EC in relation to hazardous areas.

The corresponding datasheets, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable supplement this document. You can find this information under www.pepperl-fuchs.com.

For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at www.pepperl-fuchs.com.

Due to constant revisions, documentation is subject to permanent change. Please refer only to the most up-to-date version, which can be found under www.pepperl-fuchs.com.

5. Intended Use

The Segment Protector is a fieldbus device coupler designed in accordance with IEC/EN 61158-2 to connect field devices via spurs to the trunk of a segment.

Each spur individually limits or isolates the current during a spur failure, ensuring that the remaining segment is not affected.

The device is designed for mounting on a 35 mm DIN mounting rail according to EN 60715.

The device must only be operated in the specified ambient temperature range and at the specified relative humidity without condensation.

6. Improper Use

Protection of the personnel and the plant is not ensured if the device is not used according to its intended use.

7. Mounting and Installation

Prior to mounting, installation, and commissioning of the device you should make yourself familiar with the device and carefully read the instruction manual.

Observe the installation instructions according to IEC/EN 60079-14.

Do not mount a damaged or polluted device.

If the device has already been operated in general electrical installations, the device may subsequently no longer be installed in electrical installations used in combination with hazardous areas.

7.1.

Requirements for Cables and Connection Lines

Observe the following points when installing cables and connection lines:

Observe the permissible core cross section of the conductor.

The insulation stripping length must be considered.

Crimp wire end ferrules on the conductor ends.

When using stranded conductors, crimp wire end ferrules on the conductor ends.

All cables and connection lines must be mechanically secured.

The cables and connection lines must not be strained. Provide an adequate strain relief.

Unused cables and connection lines must be either connected to terminals or securely tied down and isolated.

7.2. Hazardous Area

An electrostatic charge poses an ignition hazard in case of discharge.

Avoid electrostatic charges which could result in electrostatic discharges while installing, operating, or maintaining the device.

7.2.1. Gas

The device may be installed in gas group IIC.

Connection or disconnection of energized circuits is only permitted in the absence of a potentially explosive atmosphere.

7.2.1.1. Zone 1

The device may only be installed and operated in Zone 1 if mounted in a surrounding enclosure, which corresponds to equipment protection level Gb.

8. Housings and Surrounding Enclosures

The device must be installed and operated only in surrounding enclosures that

- comply with the requirements for surrounding enclosures according to IEC/EN 60079-0,
- are rated with the degree of protection IP54 according to IEC/EN 60529.

The surrounding enclosure must not be opened when the device is energized.

9. Operation, Maintenance, Repair

Do not repair, modify, or manipulate the device.

Do not use a damaged or polluted device.

If cleaning is necessary while the device is located in a hazardous area, in order to avoid electrostatic charging only use a clean damp cloth.

If there is a defect, always replace the device with an original device.

10. Delivery, Transport, Disposal

Check the packaging and contents for damage.

Check if you have received every item and if the items received are the ones you ordered.

Keep the original packaging. Always store and transport the device in the original packaging.

Store the device in a clean and dry environment. The permitted ambient conditions must be considered, see datasheet.

The device, built-in components, packaging, and any batteries contained within must be disposed in compliance with the applicable laws and guidelines of the respective country.