

# Instruction Manual

## 1. Marking

Backplane FB9262BP10220.*, FB9262BP20220.*, FB9262BP24110.*, FB9262BP24200.*
ATEX certificate: BVS 11 ATEX E 041 X ATEX marking: Ⓜ II 2G Ex db eb mb IIC T4 Gb
IECEX certificate: IECEX BVS 11.0019X IECEX marking: Ex db eb mb IIC T4 Gb

Backplane FB9271BP00200.*, FB9272BP00110.*
ATEX certificate: BVS 11 ATEX E 041 X ATEX marking: Ⓜ II 2G Ex db eb IIC T4 Gb
IECEX certificate: IECEX BVS 11.0019X IECEX marking: Ex db eb IIC T4 Gb

The \*-marked letters of the type code are placeholders for versions of the device.

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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 dismantling lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismantling 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.

Observe laws, standards, and directives applicable to the intended use and the operating location.

The corresponding datasheets, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable (see datasheet) are an integral part of this document. You can find this information under [www.pepperl-fuchs.com](http://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](http://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](http://www.pepperl-fuchs.com).

## 5. Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

Use the device only within the specified ambient and operating conditions. Only use the device stationary.

Use backplanes of the remote I/O system only with the associated modules.

The backplane connections are non-intrinsically safe.

## 6. Improper Use

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

The device is not suitable for isolating signals in power installations unless this is noted separately in the corresponding datasheet.

## 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.

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

Only use operating elements in the absence of a potentially explosive atmosphere.

Before connecting or disconnecting circuits in the presence of a potentially explosive atmosphere, ensure that all non-intrinsically safe circuits are voltage-free and currentless.

The device must be disconnected from the power supply prior to installation and maintenance. The power supply may be activated only after all the circuits required for operation have been fully assembled and connected.

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

Do not mount the device at locations where an aggressive atmosphere may be present.

The device must be installed and operated only in an environment of overvoltage category II (or better) according to IEC/EN 60664-1.

Do not mount a damaged or polluted device.

Only use accessories specified by the manufacturer.

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

Do not push the modules into the slots with too much force. The rear connections of the devices may be damaged if using excessive force. In this case the explosion protection can no longer be ensured.

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

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

If intrinsically safe and non-intrinsically safe circuits are being operated together, the connections of the non-intrinsically safe circuits must be covered. The cover must comply with degree of protection IP30 according to IEC/EN 60529.

The connection cover of the device according to the degree of protection IP30 must be attached.

If intrinsically safe and non-intrinsically safe circuits are present, the cover with a degree of protection IP30 may only be removed if the non-intrinsically safe circuits are de-energized (voltage-free and currentless) or the absence of a potentially explosive atmosphere.

Except for FB modules with front side Ex e connections, all FB I/O modules, FB power supplies, FB bus termination modules, and FB com units may be swapped in Zone 1 while energized (hot swap).

### Requirements for Surrounding Enclosures

Place warning marking "Warning – Refer to instruction manuals!" visibly on the surrounding enclosure.

Place warning marking "Warning – Non-intrinsically safe circuits protected by internal cover with a degree of protection IP30!" visibly on the surrounding enclosure.

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

Place warning marking "Warning – Avoid electrostatic charge!" visibly on the surrounding enclosure.

The surrounding enclosure may be opened for maintenance while energized in Zone 1 provided that the following conditions are met:

- The connections of the non-intrinsically safe circuits must be protected by a cover with a degree of protection IP30.
- All other devices in the surrounding enclosure must permit the opening of the surrounding enclosure while energized in Zone 1.
- An appropriate marking is placed on the surrounding enclosure.

## 8. Operation, Maintenance, Repair

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

Do not use a damaged or polluted device.

Only use accessories specified by the manufacturer.

Do not repair, modify, or manipulate the device.

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

The surrounding enclosure may be opened for maintenance while energized in Zone 1 provided that the following conditions are met:

- The connections of the non-intrinsically safe circuits must be protected by a cover with a degree of protection IP30.
- All other devices in the surrounding enclosure must permit the opening of the surrounding enclosure while energized in Zone 1.
- An appropriate marking is placed on the surrounding enclosure.

If you remove a device, observe the two-step removal process. This process is described in the instruction manual of the respective device. If required, a wait time for device removal is specified in the instruction manual.

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

Before connecting or disconnecting circuits in the presence of a potentially explosive atmosphere, ensure that all non-intrinsically safe circuits are voltage-free and currentless.

Except for FB modules with front side Ex e connections, all FB I/O modules, FB power supplies, FB bus termination modules, and FB com units may be swapped in Zone 1 while energized (hot swap).

Do not push the modules into the slots with too much force. The rear connections of the devices may be damaged if using excessive force. In this case the explosion protection can no longer be ensured.

Observe IEC/EN 60079-17 for maintenance and inspection.

Except for FB modules with front side Ex e connections, all FB I/O modules, FB power supplies, FB bus termination modules, and FB com units may be swapped in Zone 1 while energized (hot swap).

The connection cover of the device according to the degree of protection IP30 must be attached.

If intrinsically safe and non-intrinsically safe circuits are present, the cover with a degree of protection IP30 may only be removed if the non-intrinsically safe circuits are de-energized (voltage-free and currentless) or the absence of a potentially explosive atmosphere.

## **9. 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.