

# Instruction Manual

## 1. Marking

### HD2-FBPS-1.25.360 Fieldbus Power Supply

HD2-FBPS-1.25.360 (power supply module)
ATEX certificate: TÜV 06 ATEX 553229 X ATEX marking: Ⓜ II 3 G Ex nA IIC T4 Gc
IECEX certificate: IECEX TUN 11.0003X IECEX marking: Ex nA IIC T4 Gc

### HD2-FBPS\* Fieldbus Power Supplies

HD2-FBPS-1.500 (power supply module), HD2-FBPS-1.23.500 (power supply module), HD2-FBPS-1.17.500 (power supply module)
ATEX certificate: TÜV 04 ATEX 2500 X ATEX marking: Ⓜ II 3 G Ex nA IIC T4 Gc
IECEX certificate: IECEX TUN 13.0038X IECEX marking: Ex nA IIC T4 Gc
Pepperl+Fuchs Group Lilienthalstraße 200, 68307 Mannheim, Germany Internet: www.pepperl-fuchs.com

## 2. 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.

## 3. 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](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).

## 4. Intended Use

The FieldConnex® Power Hub is designed to power segments of the fieldbus according to IEC/EN 61158-2. The Power Hub consists of a motherboard and power supply modules. Depending on the configuration, further components are gateways and diagnostic modules. See the respective product documentation for these components. The device is an electrical apparatus for hazardous areas of Zone 2. The device may be installed in gas groups IIC, IIB, and IIA. The device must only be operated in the specified ambient temperature range and at the specified relative humidity without condensation.

## 5. Improper Use

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

## 6. 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. Only manipulate the connections within the specified ambient temperature range.

Temperature range	-5 °C to +70 °C
-------------------	-----------------

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

Do not mount a damaged or polluted device.

The device may be installed in a corrosive atmosphere according to ISA-S71.04-1985, severity level G3.

Observe the tightening torque of the screws.

The modules are intended for mounting on an appropriate fieldbus Power Hub motherboard.

### Requirements for Redundant Systems

Each segment on a redundant motherboard must only be fitted with 2 power modules of the same type.

### Requirements for Cables and Connection Lines

Observe the permissible core cross section of the conductor. The insulation stripping length must be considered.

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

## 6.1. Hazardous Area

### 6.1.1. Gas

#### 6.1.1.1. Zone 2

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

The device must be installed and operated only in a controlled environment that ensures a pollution degree 2 (or better) according to IEC/EN 60664-1.

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.

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

### 6.1.2. Requirements in Relation to Intrinsic Safety

When using FieldConnex® Power Hubs with suitable FieldConnex® Segment Protectors for intrinsically safe field wiring, ensure that the power supply modules used are within the limits of the required output values.

Intrinsically safe circuits of associated apparatus (installed in non-hazardous area) can be led into hazardous areas. Observe the compliance of the separation distances to all non-intrinsically safe circuits according to IEC/EN 60079-14.

If circuits with type of protection Ex ic are operated with non-intrinsically safe circuits, they must no longer be used as circuits with type of protection Ex ic.

Observe the respective peak values of the field device and the associated apparatus with regard to explosion protection when connecting intrinsically safe field devices with intrinsically safe circuits of associated apparatus (verification of intrinsic safety). Also observe IEC/EN 60079-14 and IEC/EN 60079-25.

Single conductors must not protrude > 30 mm from the cable sheath of the cables and connection lines. Ensure that exceedingly protruding single conductors are tied together with a cable tie or a heat-shrinkable tube.

## 7. 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.

## 8. 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.