# Instruction Manual

## 1. Marking

6500 series Purge and pressurization system for Zone 1 or Zone 21
6500-01-****-*** control unit EPV-6500-**-** relief vent 6500-MAN-DV-** manifold valve
ATEX approval and IECEx approval
Group, category, type of protection, temperature classification

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

You will find the exact device designation on the nameplate. Observe the specific conditions of use.

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## 2. 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.

## 3. Reference to Further Documentation

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

The corresponding datasheets, manuals, declarations of conformity, EUtype 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.

For more information see the manufacturer declaration.

If you use the device in safety-related applications, observe the requirements for functional safety. You can find these requirements in the functional safety documentation under www.pepperl-fuchs.com.

## 4. Intended Use

Observe the instruction manual and the certificate of the installed apparatus.

Devices for which specific conditions of use apply have the X marking at the end of the certificate number.

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. The device is not a safety component according to the Machinery Directive. Do not use the device to prevent personal injury.

If you use the device in safety-related applications, observe the information for safety function and safe state.

## 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.

Observe the ambient and operating conditions when mounting and installing the device.

If you intend to install the device or enclosure in areas that may be exposed to aggressive substances, ensure that the stated surface materials are compatible with these substances. If required, contact Pepperl+Fuchs for further information.

Mount the device in a way that the device is protected against mechanical hazard.

If you use the device in environments subject to adverse conditions, you must protect the device accordingly.

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

Protect pneumatic components against mechanical hazard.

Ensure that the overpressure in the cabinet does not exceed the permissible peak value.

If you install the device in safety-related applications, observe the requirements for functional safety.

Observe the tightening torque of the screws.

When connecting intrinsically safe devices with intrinsically safe circuits of associated apparatus, observe the maximum peak values with regard to explosion protection (verification of intrinsic safety). Observe the standards IEC/EN 60079-14 or IEC/EN 60079-25

For intrinsically safe circuits, the dielectric strength of the insulation against other intrinsically safe circuits and against the shield must be at least 500 V according to IEC/EN 60079-14.

Safety-relevant markings are found on the nameplate supplied. Ensure that the nameplate is present and legible. Take the ambient conditions into account.

The device is heavy. In order to avoid personal injuries or property damage, make appropriate provisions for the mounting procedure. When installing additional components, make sure that these components are listed in the relevant certificates.

Select suitable conductors in order to ensure that the maximum permitted temperature of the conductors fit to the maximum permitted ambient temperature of the terminal box.

For control panels with IECEx certification, only use cable glands with metric thread or NPT thread.

#### **Requirements for Cable Glands**

Observe the tightening torque of the cable glands.

Only use cable glands that are suitably certified for the application. Only use stopping plugs that are suitably certified for the application. Only use cable glands with a temperature range appropriate to the application.

Protect plastic cable glands against mechanical hazard. Ensure that the degree of protection is not violated by the cable glands and the stopping plugs.

#### Requirements for Cables and Connection Lines

Only use cables and connection lines with a temperature range appropriate to the application.

Install cables and cable glands in a way that they are not exposed to mechanical hazards.

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

#### **Requirements for Non-Hazardous Area**

The device may be installed in the non-hazardous area.

#### **Requirements for Hazardous Area**

The enclosure has a ground connection. Connect an equipotential bonding conductor with a minimum cross section of 4 mm<sup>2</sup> to this ground connection

Observe the installation instructions according to IEC/EN 60079-14. Observe the installation instructions according to IEC/EN 60079-25.

Only remove the cover in the absence of a potentially explosive atmosphere.

#### **Requirements in Relation to Intrinsic Safety**

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 ÌEC/EN 60079-25.

Keep the separation distances between all non-intrinsically safe circuits and intrinsically safe circuits according to IEC/EN 60079-14.

#### **Requirements for Surrounding Enclosures**

The housing must not be opened when the device is energized. Do not install fuse terminals, relays, miniature circuit breakers, contactors etc. in the enclosure.

When the enclosure cover is fitted, ensure that all fasteners are fully tightened.

# 7. Operation, Maintenance, Repair

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

Do not remove the nameplate.

Observe the warning markings.

Do not connect or disconnect the electrical connection when energized. Do not exceed the maximum permitted output current. Prevent short circuits.

Do not exceed the maximum power dissipation. Refer to nameplate for maximum power dissipation.

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

If there is a defect, always send back the device to Pepperl+Fuchs. When energized, only open the housing in the absence of a potentially explosive atmosphere.

Substitution of components may impair intrinsic safety.

Remove all adhering residues from the device. These residues can be hazardous to health.



Fill in the form **Declaration of Contamination**. You can find this form on the product detail page at www.pepperl-fuchs.com. If you operate the device in safety-related applications, observe the requirements for functional safety. In case of operating in low demand mode, plan appropriate intervals for the proof test. Remove the dust before opening the housing.

## 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.

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.

