

Instruction Manual

1. Marking

5500 series purge and pressurization system for Zone 2 or Zone 22

Control unit: 5500-SS-*-*-*-*

Enclosure protection vent: EPV-5500-*-*

ATEX and IECEx:

See the nameplate on the device side or lid for the exact designation.

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

Observe the specific conditions of use.

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

Observe Directive 1999/92/EC in relation to hazardous areas.

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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/device-information.

Observe the instructions according to NEC article 501.

Refer to manufacturer declaration for further information.

4. Intended Use

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.

5. Improper Use

Protection of 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.

7. Requirements for Cable Glands

Observe the tightening torque of the terminal screws.

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.

Ensure that the degree of protection is not violated by the cable glands.

Ensure that the degree of protection is not violated by the cable glands and the stopping plugs.

8. 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.

Observe the insulation stripping length.

Protect plastic cable glands against mechanical hazard.

In order to guarantee the temperature classes, ensure that power dissipation is lower than the figure stated in the certificate. Most of the power dissipation arises from current flowing in the cables.

Use seals that are suitable for the specified application.

9. Device-Related Information

Observe the tightening torque of the screws.

Install the device in locations with a low risk of mechanical hazard according to IEC/EN 60079-0 only.

Safety-relevant markings are found on the nameplate of the device or the nameplate supplied.

In order to protect the circuit and the load, install an external fuse.

10. Non-Hazardous Area

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

11. Hazardous Area

The enclosure has an earth connection. Connect to this earth connection an equipotential bonding conductor with a minimum cross section of 4 mm².

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

12. Gas

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

The device may be installed in gas groups IIC, IIB, and IIA.

13. Zone 2

The device may be installed in Zone 2.

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

14. Zone 22

The device may be installed in Zone 22.

15. Type of Protection Ex p – Purge and Pressurization

When mounting the device in Zone 20, Zone 21 or Zone 22, the inside of the Ex p housing must not be purged. Remove the dust inside the housing by cleaning.

16. Type of Protection Ex i – Intrinsic Safety

Intrinsically safe circuits for field connections are not allowed to be connected together in any mode.

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

Intrinsically safe circuits of associated apparatus 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.

17. 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 use a damaged or polluted device.

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.

If the voltage is greater than 50 V AC or 120 V DC, switch off the voltage before connecting or disconnecting the device.

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

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

When energized, only open the housing in the absence of a potentially explosive atmosphere.

The device may be operated in Zone 2.

Substitution of components may impair suitability for Zone 2.

Substitution of components may impair intrinsic safety.

If the device is installed in potentially explosive dust atmosphere, observe that the thickness of the dust layer does not exceed 5 mm.

Remove the dust layers in regular intervals.

When energized, only open the housing in the absence of a potentially explosive dust atmosphere.

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

Fill in the **Declaration of Contamination** form. You can find this form on the product detail page at www.pepperl-fuchs.com.

18. Return

Return

If there is a defect, always send back the device to Pepperl+Fuchs.

19. 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.