

# Instruction Manual

## 1. Marking

Ethernet-APL Surge Protector for Cabinet Installation <b>M-LBAS-IA1*</b>
ATEX certificate: TÜV 22 ATEX 8786 X ATEX marking: Ⓜ II 2 (1) G Ex ia [ia Ga] IIC T6 Gb, Ⓜ II 2 (1) D Ex ia [ia Da] IIIC T80°C Db, Ⓜ I M2 (M1) Ex ia [ia Ma] I Mb ATEX certificate: TÜV 22 ATEX 8816 X ATEX marking: Ⓜ II 3 G Ex ec IIC T6 Gc
IECEX certificate: IECEX TUR 22.0017X IECEX marking: Ex ec IIC T6 Gc, Ex ia [ia Ga] IIC T6 Gb, Ex ia [ia Da] IIIC T80°C Db, Ex ia [ia Ma] I Mb

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

You will find the exact device designation on the nameplate.

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## 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.

For mining applications, observe laws, standards, and directives applicable to the operating location.

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).

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).

In order to access this documentation, enter the product name, i. e. the type code, or the item number of the product in the search field of the website.

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).

## 4. Intended Use

The device is designed to protect equipment from damage caused by indirect effects of lightning or other transient overvoltages.

## 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.

Do not mount a damaged or polluted device.

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

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

The intrinsically safe output circuits may lead into Zone 0.

The intrinsically safe output circuits may lead into Zone 20.

The intrinsically safe circuits may lead into mining areas that require devices with equipment protection level Ma.

The device may be installed in Zone 1.

The device may be installed in Zone 21.

The intrinsically safe circuits may lead into mining areas that require devices with equipment protection level Mb.

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

The device may be installed in dust groups IIIC, IIIB, and IIIA.

The device may be installed in mining group I.

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

## 7. Hazardous Area

Observe the specific conditions of use.

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

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

Observe the installation instructions according to IEC/EN TS 60079-47.

The level of protection is determined by the connected intrinsically safe circuit.

The level of protection of the circuit is not changed by the device.

The dielectric strength of at least 500 V AC for the intrinsically safe circuit is limited by the surge protection.

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

Mount the device on a DIN mounting rail with a ground connection. Connect to this ground connection an equipotential bonding conductor with a minimum cross section of 4 mm<sup>2</sup>.

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

### 7.1.

#### Requirements for Connectors

Observe the tightening torque of the terminal screws.

Observe the permissible core cross section of the conductor.

The insulation stripping length must be considered.

When installing the conductors the insulation must reach up to the terminal.

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

Only manipulate the connections within the specified ambient temperature range.

Temperature range	-5 °C to +70 °C
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## 8. Operation, Maintenance, Repair

Do not repair, modify, or manipulate the device.

Do not use a damaged or polluted device.

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

## 9. Return

Take the following precautions before you return the device to Pepperl+Fuchs.

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](http://www.pepperl-fuchs.com).

Enclose the filled in "Declaration of Contamination" form with the device.

Pepperl+Fuchs can examine and repair a returned device, only if a completed form is included in the return.

If needed, include special handling instructions with the device.

Specify the following information:

- Chemical and physical characteristics of the product
- Description of the application
- Description of the error that occurred (specify error code if possible)
- Operating time of the 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.

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.