

Instruction Manual

Marking

H-System, Isolated barriers
Device identification
Model number
ATEX approval
Group, category, type of protection, temperature classification

table 1

The exact designation of the device can be found on the name plate on the device side.

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table 2

Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismantling lies with the plant operator.

Mounting, installation, commissioning, operation, maintenance and dismantling of the device may only be carried out by appropriate trained and qualified personnel. The instruction manual must be read and understood.

Prior to using the device you should make yourself familiar with the device and carefully read the instruction manual.

Reference to Further Documentation

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

The corresponding datasheets, declarations of conformity, EC-type-examination certificates, certificates and control drawings if applicable supplement this document. You can find this information under www.pepperl-fuchs.com.

Observe the instruction manuals for the respective termination boards.

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.

The device is used in control and instrumentation technology (C&I technology) for the galvanic isolation of signals such as 20 mA and 10 V standard signals or alternatively for adapting or standardizing signals. The device has intrinsically safe circuits that are used for operating intrinsically safe field devices in hazardous areas.

Only use the module with the designated termination boards.

Use the device only within the specified ambient conditions.

Only use the device stationary.

The device is an associated apparatus according to IEC/EN 60079-11.

Improper Use

Protection of the personnel and the plant is not ensured if the device is not being 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.

Mounting and Installation

Do not mount a damaged or polluted device.

Mount the device in a way that the device is protected against mechanical hazard. Mount the device in a surrounding enclosure for example.

The device must be installed outside of the hazardous area.

Mount the device with at least a degree of protection of IP20 according to IEC/EN 60529.

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

If used in areas with higher pollution degree, the device needs to be protected accordingly.

All circuits connected to the device must comply with the overvoltage category II (or better) according to IEC/EN 60664-1.

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

Requirements for Usage as Associated Apparatus

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

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.

Observe the compliance of the separation distances between two adjacent intrinsically safe circuits according to IEC/EN 60079-14.

Observe the maximum values of the device, when connecting the device to intrinsically safe apparatus.

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.

If no L_o and C_o values are specified for the simultaneous appearance of lumped inductances and capacitances, the following rule applies.

- The specified value for L_o and C_o is used if one of the following conditions applies:
 - The circuit has distributed inductances and capacitances only, e. g., in cables and connection lines.
 - The total value of L_i (excluding cable) of the circuit is $< 1\%$ of the specified L_o value.
 - The total value of C_i (excluding cable) of the circuit is $< 1\%$ of the specified C_o value.
- A maximum of 50 % of the specified value for L_o and C_o is used if the following condition applies:
 - The total value of L_i (excluding cable) of the circuit is $\geq 1\%$ of the specified L_o value.
 - The total value of C_i (excluding cable) of the circuit is $\geq 1\%$ of the specified C_o value.
- The reduced capacitance for gas groups I, IIA and IIB must not exceed the value of 1 μF (including cable). The reduced capacitance for gas group IIC must not exceed the value of 600 nF (including cable).

If more channels of one device are connected in parallel, ensure the parallel connection is made directly at the terminals of the device. When verifying the intrinsic safety, observe the maximum values for the parallel connection.

Operation, Maintenance, Repair

The devices must not be repaired, changed or manipulated. If there is a defect, the product must always be replaced with an original device.

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 (see datasheet) must be considered.

Disposing of device, packaging, and possibly contained batteries must be in compliance with the applicable laws and guidelines of the respective country.