

# Instruction Manual

## 1. Marking

Termination Board, H-System HiCTB**_***_***_**_****
ATEX certificate: CESI 06 ATEX 022 ATEX marking: Ⓜ II (1)G [Ex ia Ga] IIC Ⓜ II (1)D [Ex ia Da] IIIC Ⓜ I (M1) [Ex ia Ma] I
IECEX certificate: IECEX CES 06.0003 IECEX marking: [Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I
North America Certificates: E106378 (UL) Associated apparatus with intrinsically safe circuits for: Class I, Division 1, Groups A-D; Class II, Division 1, Groups E-G; Class III, Division 1 Class I, Zone 0, [AEx ia] IIC (US), [Ex ia] IIC (Canada)

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

Pepperl+Fuchs Group Lilienthalstraße 200, 68307 Mannheim, Germany
Internet: <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>

## 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.

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.

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).

Observe the instruction manuals for the associated modules.

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

## 4. 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). The device is used for the galvanic isolation of intrinsically safe circuits and non-intrinsically safe circuits. The device is used as interface between modules, field circuits and control circuits.

Only use the termination board with the designated modules.

Use the device only within the specified ambient and operating conditions.

Only use the device stationary.

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

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.

The device is not suitable for isolating signals in power installations unless this is noted separately in the corresponding datasheet.

## 6. 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.

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

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 a controlled 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.

The device must be installed and operated only in an environment of overvoltage category II (or better) according to IEC/EN 60664-1.

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

Observe the corresponding documentation or the information on the device for the correct assignment of the terminals to the modules and their respective channels.

### Requirements for Cables and Connection Lines

Use conductors with a rated temperature suitable for the application. Observe the permissible core cross section of the conductor.

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

Use only one conductor per terminal.

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

Observe the tightening torque of the terminal screws.

### 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.

The intrinsically safe circuits are provided by the connected modules.

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 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.

## 7. Operation, Maintenance, Repair

The device must not be repaired, changed, or manipulated. In case of failure, always replace the device with an original device.

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.

Replace the fuse with a suitably sized fuse. If you use a fuse that is too small or too large, the function and safety of the device are no longer ensured.

## 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.

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.