Instruction Manual

1. Marking

Termination Board HiCTF16-HON-SC-UNI16-SD-PF (SC-GPCS-UNI16-PF) HiCTF16-HON-FC-RIO16-SD-PF (FC-GPCS-RIO16-PF) HiCTB16-SDC-24C-SC-RA HiCTB16-SCT-44C-SC-RA HiCTB08-SCT-44C-SC-RA
ATEX certificate: CESI 06 ATEX 022 ATEX marking: Ⓔx II (1)G [Ex ia Ga] IIC Ⓔx II (1)D [Ex ia Da] IIIC Ⓔx I (M1) [Ex ia Ma] I ATEX certificate: DEMKO 18 ATEX 2116 X ATEX marking: Ⓔx II 3 G Ex ec nC IIC T4 Gc
IECEx certificate: IECEx CES 06.0003 IECEx marking: [Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I IECEx certificate: IECEx UL 18.0111 X IECEx marking: Ex ec nC IIC T4 Gc
North America Certifcates: Class I, Division 2, Groups A-D Intrisically safe circuits for Class I, II, III, Division 1, Groups A-G
CCC certificate: 2021322308004238 CCC marking: [Ex ia Ga] IIC, [Ex ia Da] IIIC

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

For mining applications, observe directives, standards, and national laws 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.

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 instruction manuals for the associated modules.

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.

The device is an electrical apparatus for hazardous areas of Zone 2.

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

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.

Do not mount the device in the dust 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.

Supply the device with a power supply that meets the requirements for safety extra-low voltage (SELV) or protective extra-low voltage (PELV).

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

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.

Use conductors rated for a temperature of 90 °C or conductors whose temperature is suitable for the application.

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.

Requirements for Equipment Protection Level Gc

Only use the termination board in the hazardous area if the modules are also approved for the hazardous area.

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.

Connectors for non-intrinsically safe circuits must be mechanically secured.

Warning

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

Only plug and pull the energized module in the absence of a potentially explosive atmosphere.

7. Operation, Maintenance, Repair

Do not use a damaged or polluted device.

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

Requirements for Equipment Protection Level Gc

Warning

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

Only plug and pull the energized module in the absence of a potentially explosive atmosphere.

Only change the replaceable fuse, when the device is de-energized.

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.