Instruction Manual

1. Marking

Relay output LB6001A2, LB6006A2
ATEX certificate: FIDI 23 ATEX 0078 X ATEX marking: Ⓔx II 3G Ex ec nC IIC T4 Gc
IECEx certificate: IECEx FIDI 23.0010X IECEx marking: Ex ec nC IIC T4 Gc

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2. Validity

Specific processes and instructions in this instruction manual require special provisions to guarantee the safety of the operating personnel.

3. 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.

4. 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.

The corresponding datasheets, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable (see datasheet) are an integral part of 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.

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.

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.

5. 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.

Only use the device in the industrial location.

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

Only use the device stationary.

Take the intended use of the installed devices from the corresponding documentation.

Take the intended use of the connected devices from the corresponding documentation.

The I/O modules, com units, power supplies, and bus termination modules of the remote I/O system must only be used together with the associated backplanes.

The backplane connections are non-intrinsically safe.

If you use the device in safety-related applications, observe the information for safety function and safe state.

6. 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.

7. 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 installation instructions according to IEC/EN 60079-14.

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

Observe the instruction manuals for the associated backplanes.

You can find the data for electrical values and parameters in the corresponding datasheets.

Observe the tightening torque of the screws.

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

Provide a transient protection. Ensure that the peak value of the transient protection does not exceed 140 % of the rated voltage.

Only connect safety extra-low voltage circuits (SELV) or protective extra-low voltage circuits (PELV) to the device.

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.

Do not mount the device at locations where an aggressive atmosphere may be present.

Do not mount a damaged or polluted device.

Do not push the modules into the slots with too much force. The rear connections of the devices may be damaged if using excessive force. In this case the explosion protection can no longer be ensured.

Protect the circuit against overvoltage (e. g., lightning).

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

An electrostatic charge poses an ignition hazard in case of discharge.

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

Before connecting or disconnecting circuits in the presence of a potentially explosive atmosphere, ensure that all non-intrinsically safe circuits are voltage-free and currentless.

Requirements for Surrounding Enclosures

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.

Ensure that the surrounding enclosure is not damaged, distorted, or corroded.

Ensure that all seals are clean, undamaged, and correctly fitted.

Tighten all screws of the housing/housing cover with the appropriate torque.

For cable glands only use incoming cable diameters of the appropriate size.

Tighten all cable glands with the appropriate torque.

Close all unused cable glands with the appropriate sealing plugs.

Place warning marking "Warning – Refer to instruction manuals!" visibly on the surrounding enclosure.

Place warning marking "Warning – Avoid electrostatic charge!" visibly on the surrounding enclosure.

Place warning marking "Warning – Do not connect or disconnect increased safety circuits when the circuits are energized and a potentially explosive atmosphere is present!" visibly on the surrounding enclosure.

Observe the warning markings.

Do not remove the warning markings.

Requirements for Cables and Connection Lines

Observe the permissible core cross section of the conductor.

Observe the insulation stripping length.

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

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

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

Never pull the cable. A wire could become loose from the terminal and protection against electric shock can no longer be ensured. Always pull the terminal.

Unused cables and connection lines must be either connected to terminals or securely tied down and isolated.

8. Operation, Maintenance, Repair

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.

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.

Only use accessories specified by the manufacturer.

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

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

If cleaning is required, use a clean water damp cloth.

If the device has already been operated in general electrical installations, the device may subsequently no longer be installed in electrical installations used in combination with hazardous areas.

9. 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.

Keep the original packaging. 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.