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Safety instructions

⚠ WARNING

UNCONTROLLED MACHINE ACTIONS

To avoid uncontrolled machine actions caused by data loss, configure all the data transmission devices individually.
Before you start any machine which is controlled via data transmission, be sure to complete the configuration of all data transmission devices.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

General safety instructions

You operate this device with electricity. Improper usage of the device entails the risk of physical injury or significant property damage. The proper and safe operation of this device depends on proper handling during transportation, proper storage and installation, and careful operation and maintenance procedures.

- ☐ Before connecting any cable, read this document, and the safety instructions and warnings.
- ☐ Operate the device with undamaged components exclusively.
- ☐ The device is free of any service components. In case of a damaged or malfunctioning the device, turn off the supply voltage and return the device to Hirschmann for inspection.

Certified usage

- ☐ Use the product only for the application cases described in the Hirschmann product information, including this manual.
- ☐ Operate the product only according to the technical specifications.
- ☐ Connect to the product only components suitable for the requirements of the specific application case.

Installation site requirements

- ☐ Install the device in a fire enclosure according to EN 60950-1.

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Device casing

Only technicians authorized by the manufacturer are permitted to open the casing.

- ☐ Never insert pointed objects (narrow screwdrivers, wires, etc.) into the device or into the connection terminals for electric conductors. Do not touch the connection terminals.
- ☐ Keep the ventilation slits free to ensure good air circulation.
- ☐ Install the device in the vertical position.

ualification requirements for personnel

- ☐ Only allow qualified personnel to work on the device.

Qualified personnel have the following characteristics:

- ▶ Qualified personnel are properly trained. Training as well as practical knowledge and experience make up their qualifications. This is the prerequisite for grounding and labeling circuits, devices, and systems in accordance with current standards in safety technology.
- ▶ Qualified personnel are aware of the dangers that exist in their work.
- ▶ Qualified personnel are familiar with appropriate measures against these hazards in order to reduce the risk for themselves and others.
- ▶ Qualified personnel receive training on a regular basis.

National and international safety regulations

Verify that the electrical installation meets local or nationally applicable safety regulations.

Grounding the device

The device is grounded by means of a 3-pin terminal block.

- ☐ Use a wire diameter for the ground conductor that is no smaller than the diameter of the supply voltage connection, however of at least 0.5 mm² (AWG20).

Shielding ground

The shielding ground of the connectable twisted pair cables is connected to the ground connection as a conductor.

- ☐ Beware of possible short circuits when connecting a cable section with conductive shielding braiding.

Requirements for connecting electrical wires

Before connecting the electrical wires, **always** verify that the requirements listed are complied with.

General requirements for connecting electrical wires
The following requirements apply without restrictions:
▶ The electrical wires are voltage-free. ▶ The cables used are permitted for the temperature range of the application case. ▶ The voltage connected complies with the requirements for a safety extra-low voltage (SELV) as per IEC/EN 60950-1. ▶ Relevant for North America: Use 60/75 or 75 °C copper (Cu) wire only.

Requirements for connecting the supply voltage	
The following requirements apply without restrictions:	
▶ The supply voltage corresponds to the voltage specified on the type plate of the device. ▶ The power supply conforms to overvoltage category I or II. ▶ The power supply has an easily accessible disconnecting device (e.g., a switch or a plug). This disconnecting device is clearly identified. So in the case of an emergency, it is clear which disconnecting device belongs to which power supply cable. ▶ The power supply cable is suitable for the voltage, the current and the physical load. Hirschmann recommends a wire diameter of 0.5 mm² (AWG20). ▶ The cross-section of the ground conductor is the same size as or bigger than the cross-section of the power supply cables.	
The following requirements apply alternatively:	
Alternative 1	The power supply complies with the requirements for a limited power source (LPS) as per EN 60950-1.
Alternative 2	**All** of the following requirements are complied with: ▶ The powersupply complies with the requirements for a safety extra-low voltage (SELV) as per IEC/EN 60950-1. ▶ A fuse suitable for DC voltage is located in the plus conductor of the power supply. The minus conductor is on ground potential. Otherwise, a fuse is also located in the minus conductor.
Alternative 3	Relevant for North America: The power supply complies with the requirements as per NEC Class 2

Supply voltage

The supply voltage is only connected with the ground connection via protective elements.

Wiring the terminal block for the supply voltage and the grounding

⚠ WARNING

ELECTRIC SHOCK

Connect only a supply voltage that corresponds to the type plate of your device.
Never insert sharp objects (small screwdrivers, wires, etc.) into the connection terminals for the supply voltage, and do not touch the terminals.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

CE marking

The labeled devices comply with the regulations contained in the following European directive(s):

2011/65/EU (RoHS)
Directive of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

2004/108/EC (EMC)
Directive of the European Parliament and the council for standardizing the regulations of member states with regard to electromagnetic compatibility.

In accordance with the above-named EU directive(s), the EU conformity declaration will be available to the relevant authorities at the following address:

Hirschmann Automation and Control GmbH
Stuttgarter Str. 45-51
72654 Neckartenzlingen
Germany
Tel.: +49 1805 141538

The device can be used in the industrial sector.

- Interference immunity: EN 61000-6-2
- Emitted interference: EN 55022

The assembly guidelines provided in these instructions must be strictly adhered to in order to observe the EMC threshold values.

Warning! This is a class A device. This device can cause interference in living areas, and in this case the operator may be required to take appropriate measures.

FCC note:

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference; (2) this device must accept any interference received, including interference that may cause undesired operation.
Appropriate testing has established that this device fulfills the requirements of a class A digital device in line with part 15 of the FCC regulations.
These requirements are designed to provide sufficient protection against interference when the device is being used in a business environment. The device creates and uses high frequencies and can also radiate these frequencies. If it is not installed and used in accordance with this operating manual, it can cause radio transmission interference. The use of this device in a residential area can also cause interference, and in this case the user is obliged to cover the costs of removing the interference.

Recycling note

After usage, this device must be disposed of properly as electronic waste, in accordance with the current disposal regulations of your county, state, and country.

A Further Support

Technical Questions

For technical questions, please contact any Hirschmann dealer in your area or Hirschmann directly.

You will find the addresses of our partners on the Internet at http://www.hirschmann.com

Contact our support at https://hirschmann-support.belden.eu.com

You can contact us

in the EMEA region at
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