



Installation Instructions

Temperature Monitoring System (30870)



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1 Introduction

- You can add a temperature monitoring system to Industrieelektronik Pözl GmbH's battery testing and charging system (see also **the BTL 2016/2/3/4 and BTL Powersingle 16 A and 25 A operating instructions**).
- The temperature monitoring system is fitted with a sensor and it measures the temperature directly on the vehicle's battery.
- It is possible to install it easily using the 4-pin connecting cable, which means that unsafe cabling is not necessary.
- The system transfers the measured temperature via the charging cable to the battery testing and charging system and shows it on the display. The charging behaviour is adapted to the temperature response.
- The temperature monitoring system provides an additional protective function combined with the integrated battery fuse: If the battery overheats, the battery testing and charging system interrupts the power supply.

1.1 Liability and Warranty

Use the temperature monitoring system only in accordance with its intended use (see also chapter **2.1 INTENDED USE**).

The manufacturer warrants the temperature monitoring system within the scope of the conditions of sale and delivery that apply in each case.

The manufacturer accepts no liability for damage due to ignoring the information in these installation instructions as well as

to incorrectly installing the temperature monitoring system.

1.2 Customer Service

If you need technical information or have any queries or need to order spare parts, please contact your local dealer or e-mail our customer service: office@poelz.at

To ensure that your inquiry is processed quickly, please state the following information:

- Item number (see also **5.1 TECHNICAL DATA**).

1.3 About these Installation Instructions

The installation instructions cover all of the important information that you need to install the temperature monitoring system.

Read the installation instructions carefully before use, follow the instructions and observe the safety and warning instructions.

1.4 Explanation of Symbols and Instructions

This symbol warns you of a hazard. This signal word describes the severity of the imminent danger.



Danger!

Personal injury can occur in the case of incorrect handling.

Caution!

Damage to equipment or property can occur in the case of incorrect handling.



Note!

This symbol indicates tips and useful information on handling the temperature monitoring system in the best possible way.

2 Safety Information

The temperature monitoring system has been manufactured and inspected in accordance with valid standards and guidelines and recognized technical regulations. However, incorrect use can lead to physical harm to users or damage to the temperature monitoring system or other material assets.

Always comply to the letter with the safety information and warnings given in these installation instructions.

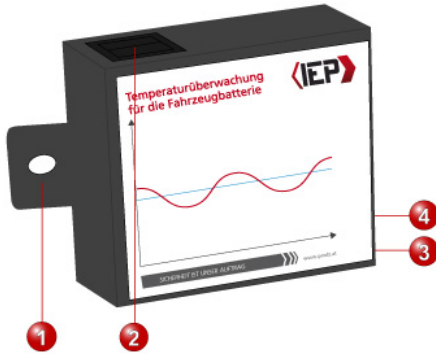
2.1 Intended Use

The temperature monitoring system is intended exclusively for monitoring the temperature directly on the battery.



3 Description of the Device

3.1 Device Overview



- ① Clip
- ② Charging terminal X1
- ③ Measuring terminal X2
- ④ Sensor

4 Installation



Danger!

Installation work may only be carried out by qualified persons who have been assigned to carry out this work.



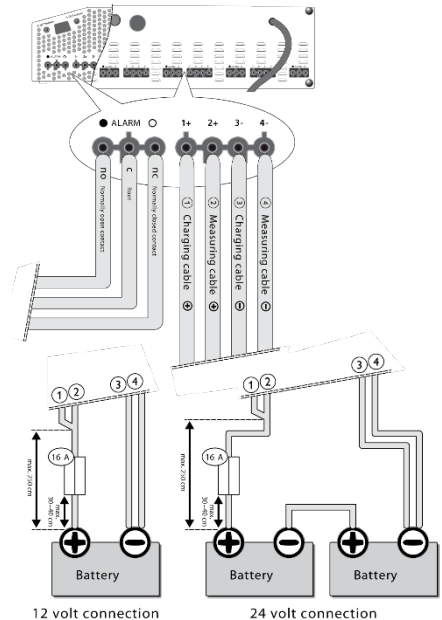
Note!

To generate the degree of protection, install the temperature monitoring system in a vertical position (fuse downwards).

Install the temperature monitoring system with the integrated 25 A fuse instead of the intermediate fuse directly in the battery box.

The system transfers additional information, like the temperature and the medium-voltage level at 24 V for example, to the battery testing and charging system via the charging cable. In this connection, the cable lengths to the battery are kept short.

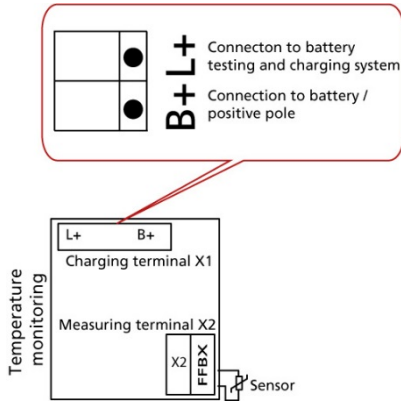
4.1.1 Connection Diagram



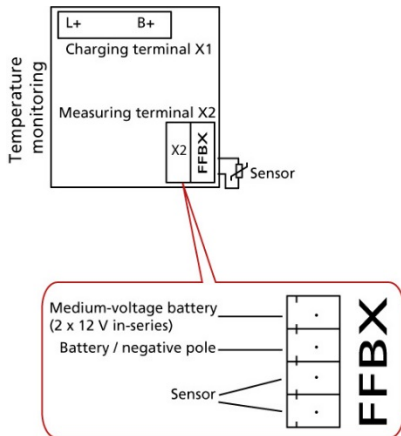
Note!

If you use a cable cross-section that is not 1.5 mm² or 2.5 mm², you must adapt the fuse appropriately.

4.1.2 Schematic of Charging Terminal X1



4.1.3 Schematic of Measuring Terminal X2



4.1.4 Connect the Temperature Monitoring System to a 12 V Battery Using the 4-Pole Connecting Cable

Note!

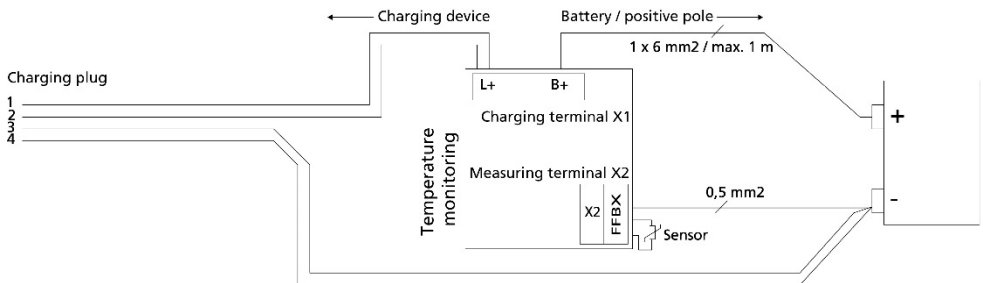
The 4-pole connection to a 12 V battery is suitable for the following battery testing and charging systems:

BTL Powersingle 16 A (30860)

BTL 2016-2-3-4

(30862, 30863 und 30864)

1. Screw the temperature monitoring system tight to the clip in the battery box.
2. Connect wires 1 and 2 (charging and measurement positive wires) of the battery testing and charging system to the L+ charging terminal of the temperature monitoring system.
3. Connect charging terminal B+ of the temperature monitoring system to the positive pole of the battery.
4. Connect wires 3 and 4 (charging and measurement negative wires) of the battery testing and charging system to the negative pole of the battery.
5. Connect measuring terminal B to the battery's negative pole.



4.1.5 Connect the Temperature Monitoring System to a 24 V Battery Using the 4-Pole Connecting Cable

Note!

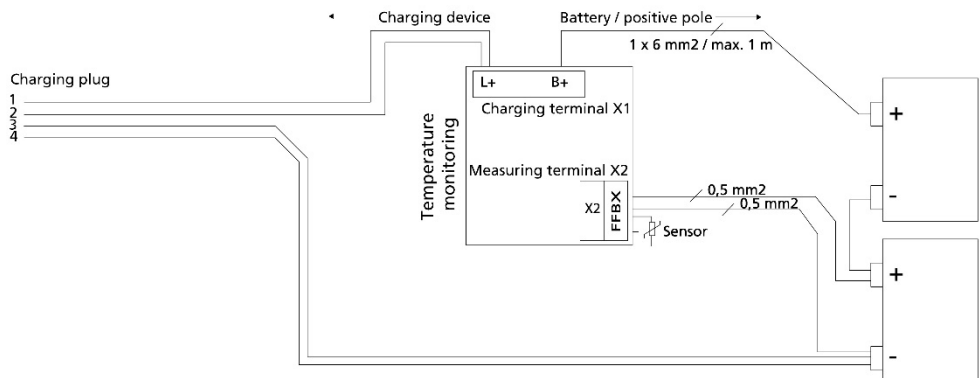
The 4-pole connection to a (series-connected) 24 V battery is suitable for the following battery testing and charging systems:

BTL Powersingle 16 A (30860)

BTL 2016-2-3-4

(30862, 30863 und 30864)

1. Screw the temperature monitoring system tight to the clip in the battery box.
2. Connect wires 1 and 2 (charging and measurement positive wires) of the battery testing and charging system to the L+ charging terminal of the temperature monitoring system.
3. Connect charging terminal B+ of the temperature monitoring system to the positive pole of the first battery.
4. Connect wires 3 and 4 (charging and measurement negative wires) of the battery testing and charging system to the negative pole of the second battery.
5. Connect measuring terminal B to the second battery's negative pole.
6. Connect measuring terminal X to the second battery's positive pole.



4.1.6 Connect the Temperature Monitoring system to a 12 V Battery Using the 2-Pole Connecting Cable

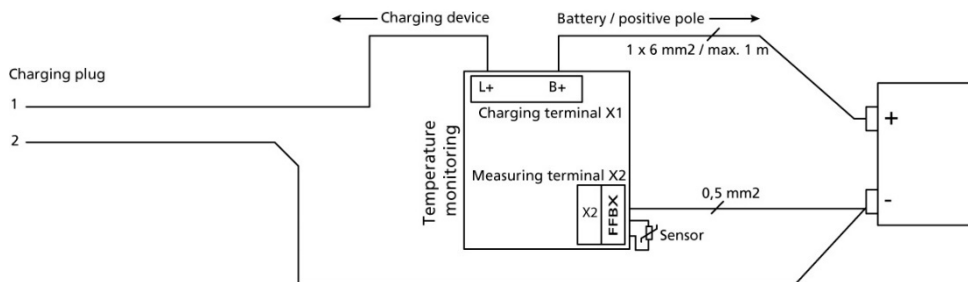
Note!



The 2-pole connection to a 12 V battery is suitable for the following battery testing and charging systems:

BTL Powersingle 25 A (30861)

1. Screw the temperature monitoring system tight to the clip in the battery box.
2. Connect the positive wire of the battery testing and charging system to the L+ charging terminal of the temperature monitoring system.
3. Connect charging terminal B+ of the temperature monitoring system to the positive pole of the battery.
4. Connect the negative wire of the battery testing and charging system to the battery's negative pole.
5. Connect measuring terminal B to the battery's negative pole.



4.1.7 Connect the Temperature Monitoring System to a 24 V Battery Using the 2-Pole Connecting Cable

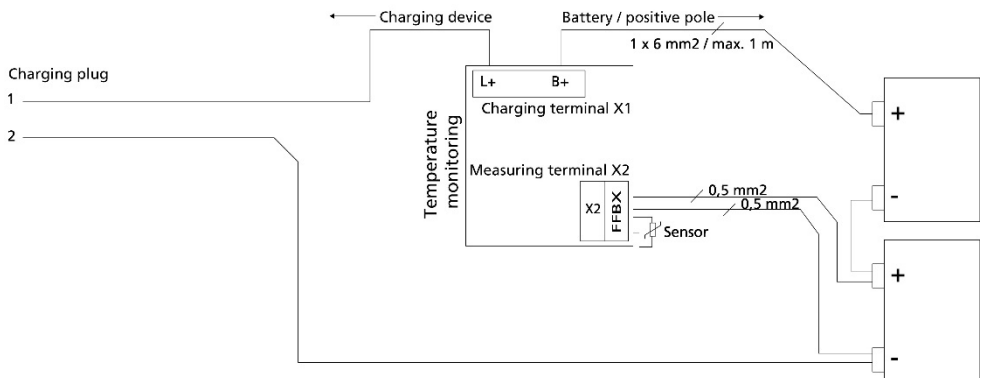
Note!



The 2-pole connection to a (series-connected) 24 V battery is suitable for the following battery testing and charging systems:

BTL Powersingle 25 A (30861)

1. Screw the temperature monitoring system tight to the clip in the battery box.
2. Connect the positive wire of the battery testing and charging system to the L+ charging terminal of the temperature monitoring system.
3. Connect charging terminal B+ of the temperature monitoring system to the positive pole of the first battery.
4. Connect the negative wire of the battery testing and charging system to the second battery's negative pole.
5. Connect measuring terminal B to the second battery's negative pole.
6. Connect measuring terminal X to the second battery's positive pole.



5 Appendix

5.1 Technical Data

Rated battery voltage	12 V / 24 V
Power current	25 A
Cable length	50 m max.
Fuse	25 A vehicle blade-type fuse
Quiescent current	12 mA
Operating current	45 mA
Degree of protection	IP22
Weight	120 g
Item number	30870

5.2 Disposal



Temperature monitoring

At the end of its useful life, never throw away the temperature monitoring system in domestic refuse under any circumstances. Consult your local council about the options available for correct environmentally friendly disposal.

Packaging



Observe locally applicable regulations for correct recycling.

5.3 Declaration of Conformity (DoC)



The CE mark confirms conformity of the device with the relevant EU directives.

To obtain the complete declaration of conformity, please contact our customer service: office@poelz.at



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