

MelfBox

Quick start guide

V 2



We make energy mobile.

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General Safety

This guide supports safe handling of the product. Use the product only in accordance with its intended use:

The MelfBox is a vehicle electrical supply system. Assembly and installation should only be carried out by qualified electricians. Any modifications to the product or its components are prohibited and do not conform to its intended use. Only use original LEAB or LEAB-approved accessories.

Observe the safety instructions:

⚠ DANGER! Danger from short circuits: Before operating, make sure there are no open or damaged cables. **⚠ DANGER!** Replace defective parts or damaged cables immediately.

NOTE! Reverse polarity can damage the unit: Before operating, make sure that all cables are connected correctly.

NOTE! Equipment damage and danger of cable fire: Only use the device within the specified voltage limits.

Package Contents

| No. | Item |
|-----|----------------|
| 1x | Cover |
| 1x | Housing |
| 1x | Housing seal |
| 1x | Body seal |
| 3x | Screw 3.5 x 14 |
| 1x | Cap |

Accessories

| Part number | Description |
|-------------|------------------------|
| 1105001001 | Connection cable 2.5 m |
| 1105001002 | Connection cable 5 m |
| 1105001003 | Connection cable 10 m |

Technical Specifications

| Part no. 1105002002 | |
|-------------------------------------|--|
| Modell | MelfBox |
| Nominal voltage (AC) | 230 V (+/- 10%) |
| Current, max. (AC) | 16 A |
| Frequency | 50 Hz |
| International Protection (IP class) | IP55 |
| Protection class | I |
| Operating display | LED |
| Switch contact | 1 A |
| Material | Polyamide, glass fibre reinforced (PA6 GF30) |
| Cable cross-section | 2.5 mm ² |
| Contacts | L1/N/PE |
| Installation depth | 56 mm |
| Installation diameter | 55 mm |
| Weight | 0.12 kg |
| Dimensions (L x W x H) | 62 mm x 67 mm x 67 mm |

Creating a Body Cutout



Fig. 1: MelfBox dimensions

To create the body cutout, proceed as follows:

- ✓ Choose a vertical surface.
 - ✓ Choose an assembly site with minimum dust and which is protected from water.
 - ✓ Make sure that there is sufficient space at the assembly site.
1. Saw a hole (Ø 55 mm) in the vehicle body.
 2. To prevent corrosion, seal the cut surfaces.
- ⇒ The body cutout is now created.

Installation

To install the device, perform the following steps:

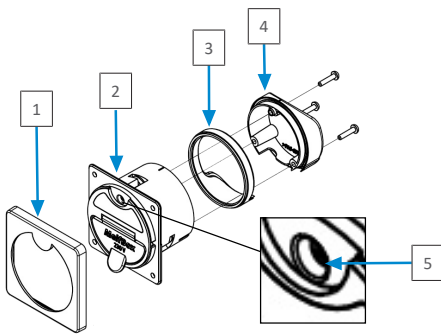
- ⚠ CAUTION!** Install a suitable fuse in the vehicle (up to 16 A).
 - 1. Route a connection cable (H07RN-F, 3 x 2.5) in the vehicle.
 - 2. Attach the connection cable to the vehicle installation.
 - 3. Pierce the housing seal at the intended location with a pointed tool.
 - 4. Feed the connection cable (H07RN-F, 3 x 2.5) through the hole.
 - 5. Connect the wires of the connection cable to the corresponding screw terminals.
- ⇒ The device is installed.

Optional: Connect the immobiliser to the potential-free switching contact (normally open contact)

To connect the immobiliser, proceed as follows:

- ⚠ CAUTION!** Install a suitable fuse in the vehicle (up to 1 A).
 - 1. Route a cable (H05RN-F, 2 x 0.5) for the immobiliser in the vehicle and connect it to the specific vehicle installation (control module or similar).
 - 2. Insert the immobiliser cable (H05RN-F, 2 x 0.5) through the second hole of the housing seal.
 - 3. Insert the wires of the immobiliser cable into the push-in terminals (max. current: 1 A).
- ⇒ The immobiliser is connected.

Assembly



- | | |
|-------------------|--------------------------|
| 1 Cover | 2 Housing with body seal |
| 3 Housing seal | 4 Cap |
| 5 Retaining screw | |

To install the device, proceed as follows:

1. Place the housing seal in the cap.
 2. Attach the cap to the supply unit with the 3 screws (3.5 x 14).
 3. Check the tightness of the housing seal.
 4. Push the supply unit into the body cutout.
 5. Tighten the 3 screws on the front until the supply unit is firmly seated in the body cutout (maximum torque: 1 Nm).
 6. Attach the cover.
- ⇒ The device is mounted and ready.

Operation

NOTE! An inactive immobiliser can cause equipment damage. The immobiliser only works when the MelfBox is active (operating display lit up).

1. Plug the two-pin earthed plug of the connection cable into a 230-V mains supply.
 2. Open the flap of the supply unit.
 3. Plug the coupling into the supply unit.
- ⇒ The voltage input is provided at the load output of the supply unit. Connected consumers are supplied. The operating display shows the operating status of the MelfBox.

| LED | Operating status |
|----------------------|--|
| Blue, flashing | The MelfBox is active. A minimum of 50 W power is removed from the supply unit (the greater the power, the faster the flashing). |
| Yellow, Steady light | The MelfBox is active. No power is removed. <ul style="list-style-type: none">– Check the connection of the consumers.– Check the fuse at the outlet of the MelfBox. |

Disposal



Dispose of the device in accordance with the Waste Electrical and Electronic Equipment Regulations (WEEE).

The system must not be disposed of with household waste. Take it to a recycling point or return it to your point of sale.

EU Declaration of Conformity



The MelfBox complies with the requirements of the following directives:

- 2014/30/EU: EMV
- 2011/65/EU: RoHS