



**General**

**Product contents**

- Energy unit including rechargeable battery (pre-charged, ready for use)
- 2 holders
- 1 connector for connecting cable of drive
- 2 screws and wall plugs (in assembly kit)
- Assembly instructions

**Intended use**

The **elero** energy unit (hereafter referred to as the “device”) consists of a solar panel for transforming sunlight into electrical energy and a built-in rechargeable battery that stores this energy. The energy unit is used exclusively for operating **elero** 12 Volt DC drives.

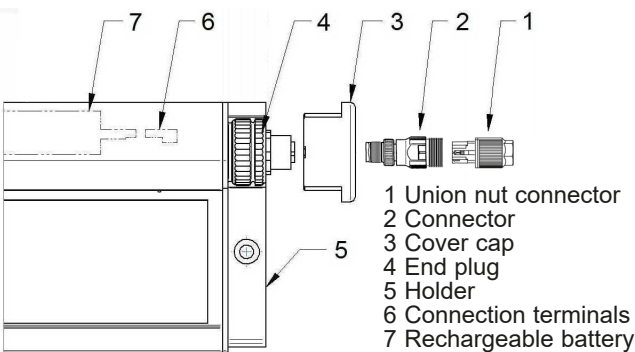
**Exclusion of liability**

**elero** accepts no liability whatsoever for personal injury or damage caused by uses other than those listed above, modifications to the device, incorrect use and/or failure to observe the instructions. Liability for material defects is excluded in such cases.

**Safety instructions**



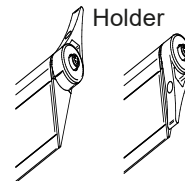
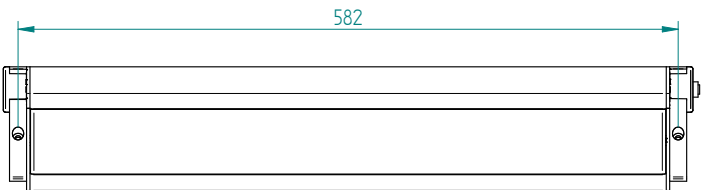
General safety instructions for use, including installation of sun protection systems and accessories, can be found in the “Safety instructions” leaflet supplied with each drive. Please read these assembly instructions carefully as the procedure in this manual is a prerequisite for correct use of the product. Some components of electrical/electronic systems or devices carry dangerous voltages during operation. Any intervention by unqualified personnel or failure to comply with warnings may lead to personal injury or material damage. Figures included are for illustration purposes only. The illustrations may differ from your product with respect to minor details and are provided for general information only. **elero** GmbH is continually striving to improve all products. As a result, the specifications, features and technology of this product may be changed at any time. The information provided is based on current information at the time of publication. No claims can be derived from the technical data, images and information in this manual.



**Assembly**



- The solar panel is intended exclusively for outdoor installation. Never install it behind glass. Position the device so that it receives as much direct sunlight as possible. Avoid installing the solar panel where it can be exposed to shade.
  - Ideally, the energy unit should be installed close to the drive.
- A.** Attach both brackets according to the following illustration at a distance of 582 mm on as smooth a surface as possible so that the surface of the panel faces downwards (at right angles to the sunlight; compartment for battery pack on top). Before final fixing, check the position of the drill holes for usability (substrate) and load-bearing capacity; if necessary, use longer screws and dowels than enclosed.



- B.** Insert the energy unit into the holders.
- C.** Press the two end caps into the first notch of the end plug. For optimum efficiency, align the energy unit with the panel surface perpendicular to the direction of the incoming sunlight. Then push the cover caps back in to the stop.
- D.** Adjust the length of the connecting cable of the drive as necessary. Remove the connector from the supplied assembly kit and install it on the connecting cable as shown in “Socket pin assignment” (see reverse side).
- E.** Insert the connector of the connecting cable of the drive (or the **elero Combio-868 JA DC**) into the socket of the energy unit and screw it on.

**Caution:**  
 Once the plug is plugged in, the drive or Combio-868 JA DC is live and ready for use.

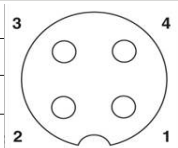
**F.** To program the drive, see the drive manual.



## Socket pin assignment



Pin	Function	Wire colour inside device
1	+ 12 V (positive terminal)	brown
2	+ 12 V (positive terminal)	white
3	+ 12 V (positive terminal)	blue
4	- 0 V (negative terminal)	black



The brown, white and blue wires are connected to one terminal inside the device (consolidated as a positive terminal in one connection terminal).

Wiring is now completed.

### Important:

After completing the wiring or replacing the rechargeable battery, always check that the drive direction (extension or retraction) is correctly assigned to the UP and UP buttons.

The correct assignment is determined by whether the drive is installed on the right or left side.

- If the direction is incorrectly assigned, do not swap the positive and negative terminals inside the device. Instead, re-program the radio drive or the elero Combio-868 JA DC or adjust the UP and DOWN assignment in the switching unit (Venetian blind button/switch).

## Replacing the rechargeable battery



1. Unscrew the connecting cable of the drive from the energy unit and pull it out.
2. Remove the energy unit from the holders.
3. Open the energy unit: Carefully use force to pull out the socket.
4. Partially pull out the rechargeable battery along with the cables and connection terminals.

### ATTENTION

*Danger of short circuit.*

*Take the necessary precautions in the presence of electrical low voltages.*

5. Disconnect the connection terminals (item ⑥ and item ⑦) on the rechargeable battery and correctly reconnect them after replacing the battery.
  - Remove the connection terminal of the red positive terminal of the new battery.
  - Connect the free red wire of the new battery to the positive terminal of the 4-pin connection terminal.
  - Remove the connection terminal of the black negative terminal of the new battery.
  - Connect the black wire of the new battery to the negative terminal of the connection terminal (black wire) ("black to black").
  - Use the other two terminals of the new battery as short circuit protection on the old battery.
6. Carefully push the battery along with the cables and connection terminals back into the housing.
7. Carefully place the end plug on the housing without pinching the cables and snap it into place.
8. Insert the energy unit back into the holders.
9. Press the two end caps of the energy unit into the first notch of the end plug. For optimum efficiency, align the energy unit with the panel surface as perpendicular as possible to the direction of the incoming sunlight.
10. Re-insert the connector of the connecting cable of the drive (or the **elero Combio-868 JA DC**) into the socket of the energy unit and screw it on.

The drive is now ready for use again.

Maximum storage time of the rechargeable battery before first charging: 6 months at 20 °C. The built-in rechargeable battery will be discharged after that.

## Cleaning

Clean the device regularly with water and a soft cloth to ensure good efficiency.  
Clear away ice and snow in the winter.

## Disposal / Notes on environmental protection



Electrical and electronic devices may not be disposed of with household waste. The consumer is legally obliged to return electrical and electronic equipment as well as batteries / rechargeable batteries to the designated public collection points or to the retailer at the end of their service life. The applicable regulations are governed by the relevant local laws. The symbol on the product, the instruction manual or the package indicates the applicable regulations.

After using the unit for the final time, disconnect the battery from the housing and protect it against short circuits. By recycling or reusing old units/batteries, you are making an important contribution to protecting our environment.

## Technical data

Rechargeable battery type	LiFePo <sub>4</sub>
Rated voltage [V]	13.2
Max. charge voltage [V]	14.4
Output [W] (peak)	4.37
Rechargeable battery capacity [mAh]	2400
Energy [Wh]	33
Protection against excessive discharge, overloading, overcharging	Built-in rechargeable battery management system
Dimensions [mm]	614 x 110 x 43
Weight (including battery) [g]	1400
Protection class	IP 44
Ambient operating temperature [°C]	-20 to +60
Item No.	22 050.0002, 22 050.0302

## EU Conformity



elero hereby declares that this product is in compliance with the essential requirements and other relevant provisions of European directives that are applicable in Europe. A declaration of conformity is available at the website [www.elero.com/downloads](http://www.elero.com/downloads). All illustrations are non-binding.

## Manufacturer's address

elero GmbH  
73278 Schlierbach  
GERMANY  
[www.elero.com](http://www.elero.com)

## Service

If malfunctions have occurred or the device has been damaged despite proper handling, contact your contractor or dealer.