
TECHNICAL DOCUMENTATION

# USER MANUAL
# ZELIOX NEO 3600

**The User Manual applys to the following Zeliox NEO power system:**

| Designation | Order No. |
|---|---|
| Zeliox NEO 3600 | 62.0150.01.2200 |

# 1 INTRODUCTION



# 2 PRODUCT INFORMATION



# 3 SERVICE



# 4 ENVIRONMENT

# 1 Introduction

## 1.1 Concept of this documentation

This document supports the end user operating the Zeliox NEO 3600 power system and provides the user with all important information about the power system and its safe operation.

**Please read first!**

- The documentation is intended for the operation of the Zeliox NEO 3600 listed on the title page and is valid to the exclusion of any liability claims.
- Before operating the Zeliox NEO 3600, be sure to read this document carefully. It contains important information that is necessary for the operation.
- Be sure to observe all hazard, warning and safety instructions in this document!
- Depending on the version or revision status of the Zeliox NEO 3600, differences may occur compared to this documentation. Please check this before carrying out the installation and take into account possible differences.
- Please keep this document in a safe place for future reference.

## 1.2 Reference documents

**Additional Product Information**

Contain additional information for operating the Zeliox NEO 3600.

## 1.3 Special text structure, presentation and pictograms

In this instruction, different facts are highlighted by special notations and pictograms. Refer to the following examples for their meanings and appropriate action.

### 1.3.1 Lists

- This dot (•) indicates a list or action step, introduced by a heading.

### 1.3.2 Cross references

Underlined blue text denotes a cross-reference, which can be clicked in the PDF document. The part of the document named in the text is then displayed.

### 1.3.3 Pictograms

**DANGER!**

"Danger" indicates a situation that can directly result in death or serious injuries if not avoided.

→ This arrow indicates the appropriate measures to avert the imminent danger.

**WARNING!**

"Warning" indicates a situation that can potentially result in death or serious injuries if not avoided.

→ This arrow indicates the appropriate measures to avert the potential danger.

**CAUTION!**

"Caution" indicates a situation that can potentially result in minor or slight injuries or damage to the device.

→ This arrow indicates the appropriate measures to avert the potential danger.

**NOTE**

This note contains recommendations for use and useful tips for the operation, installation and repair of the Zeliox NEO 3600.

## 1.4 Intended use

### 1.4.1 Range of application of the Zeliox NEO 3600

- The Zeliox NEO is an integrated lithium power supply system designed for professional and mobile applications where reliable 120V AC and 12V/24V DC power is required, independent of grid connection.
- The Zeliox NEO is taking care of collecting, storing and distributing power, all packed into one device. Simply plug your tools and appliances into the front power socket or optionally, into other sockets in your vehicle.

**NOTE**

- The Zeliox NEO 3600 must not be installed or operated in vehicles used for the transport of dangerous goods according to ADR.

**WARNUNG!**

**SAFETY INSTRUCTIONS FOR THE RANGE OF APPLICATION AND THE INTENDED USE!**

The Zeliox NEO 3600 must only be used and operated for the range of application stated by the manufacturer and in compliance with the operation instructions delivered with every product.

## 1.5 Non-intended use

Due to its functional purpose, the Zeliox NEO 3600 is not approved for the following areas of application:

- applications in medicine.
- applications in aviation.

**WARNING!**

Use, operation and deployment of the Zeliox NEO 3600 outside the intended use stated by the manufacturer can cause considerable injuries to people and/or damage to machinery and property.

→ Only use the Zeliox NEO 3600 for the stipulated purpose and in the approved area of use.

## 1.6 Disclaimer

The manufacturer is not liable for damage caused by improper use or incorrect operation. Failure to comply with the safety

instructions makes the guarantee null and void and this leads to the exclusion of any liability of Eberspächer Zeliox B.V.

### 1.7 Repair

Repair of the Zeliox NEO 3600 is not permitted. Failure to comply will make the warranty null and void and will result in Eberspächer Zeliox B.V. disclaiming all liability.

### 1.8 Target groups of this document

This document is aimed at the following target groups:

**End user**

The "end user" target group includes all natural persons who operate a Zeliox NEO 3600 power system and its components with the help of a control unit or App, regardless of whether they act as a consumer or as part of their job.

#### 1.8.1 Instruction obligation of the target groups

Each named target group must fully comply with its instructional obligation. The instruction obligation refers to the forwarding of technical documents.

Technical documents are all documents published by Eberspächer for the installation, operation, use, maintenance of Zeliox power systems and their control units, accessories and spare parts.

**NOTE**

- If not explicitly defined in the following, the technical documents can be passed on printed out as hard copies, on a data carrier or by internet download.
- Current technical documents for Zeliox power systems can be downloaded from the Eberspächer Zeliox website: https://www.eberspaecher-zeliox.com

**Responsibility of the installation company**

The installation company must pass on the following technical documents to the company that employs them, and it in turn is obliged to pass on the documents to the end user:

- User Manual

**Responsibility of the service company**

The service company must pass on the following technical documents to the end user, even if they employ a subcontractor:

- User Manual

**NOTE**

- The named target groups must ensure that the operating instructions produced by the manufacturer for the product are made available to the end user in printed form and in their own national language.
- If necessary this can be a short form of the detailed operating instructions, which are additionally enclosed with the product on a data carrier or are available to download from the internet: https://www.eberspaecher-zeliox.com

#### 1.8.2 Accident prevention

Observe the general accident prevention regulations and the relevant operating safety instructions.

### 1.9 Safety instructions for installation

**NOTE**

- The manufacturer does not assume any responsibility caused by violation of general safety installation requirements or violation of safety standards for the installation of Zeliox equipment.
- The manufacturer is not liable for damage caused by improper installation or maintenance.
- Failure to comply with the installation and maintenance specifications will void the warranty and result in Eberspächer Zeliox B.V. disclaiming all liability.
- All deviations from the safety requirements for installation are to be agreed with the manufacturer in writing before they are implemented.

**WARNING!**

**RISK OF ELECTRIC SHOCK, FIRE, AND PROTECTION FAILURE. MAY RESULT IN SERIOUS PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE.**

- The 30A AC outlet provided at the Zeliox NEO 3600 output is not equipped with Ground-Fault Circuit Interrupter (GFCI) protection. To ensure personal safety, the following measures must be taken:

→ Before use, an independent GFCI protection device must be installed between the inverter output and the connected electrical equipment. All connections shall comply with local electrical safety regulations.

- **Fire Hazard.** To reduce the risk of fire, do not connect the equipment to an AC load centre (circuit breaker panel) having multiwire branch circuits connected.

→ Consult a qualified electrician to ensure that the equipment output is connected to an appropriate distribution device in accordance with local and national electrical codes.

- This manual contains important instructions for the installation and maintenance of the Zeliox NEO 3600 All-in-One energy storage system.
- The on-site wiring shall comply with the wiring methods specified in the National Electrical Code (NEC).
- Installation, wiring, commissioning, and maintenance of this product must be carried out only by qualified professional electrical personnel.
- Before performing any operation, all power supplies (including AC and DC sides) must be disconnected, and reliable instruments must be used to verify that there is no voltage at the input/output terminals.
- The protective enclosure described in this document is an essential part of the product's safety protection system. Operation of this product without proper installation of the enclosure is

strictly prohibited, as it may result in electric shock hazards.
- After the enclosure is opened, exposed live parts may still be present inside. Even after the main power is disconnected, internal capacitors may retain dangerous voltage for a period of time. Always verify the absence of voltage before operation.

### 1.10 Pre-installation inspection of protective enclosure

Before installing the product into the enclosure, the following checks must be performed:

- Structural Integrity: Confirm that the enclosure (including door, side panels, and top panel) is free from deformation or damage. Ensure that hinges, locks, and fastening screws function properly.
- Space Compatibility: Confirm that the internal dimensions of the enclosure are sufficient to accommodate the product, and ensure that ventilation openings and control panels remain accessible after installation, in order to maintain the original safety and functionality.
- Cable Openings: All cable entry/exit openings must be fitted with smooth cable glands or insulating bushings to prevent damage to cable insulation and to maintain the enclosure's protection rating.
- Lateral Ventilation Space: To ensure effective operation of the built-in forced cooling system (fans) and prevent overheating, the mechanical installation design of the enclosure must provide continuous and unobstructed ventilation space on both sides.
  - **Minimum Clearance Requirement:** A minimum clearance distance of 200 mm must be maintained between the inner walls of the enclosure and the equipment housing on both sides. No cables, conduits, or objects that may obstruct airflow are permitted in this space.
  - **Ventilation Opening Area:** Effective ventilation openings or ventilation panels must be provided on the corresponding areas of both side panels.
  - **Total Opening Area (per side):** Not less than 150% of the required heat dissipation air duct area of the corresponding side of the equipment. Ventilation grilles or louvers shall be designed to meet protection rating requirements. The ventilation openings shall be precisely aligned with the air inlet/outlet openings of the equipment housing.
- Grounding Requirement: The enclosure must be equipped with a dedicated, unpainted and uninsulated equipment grounding conductor connection point (typically a grounding stud or grounding bar) and permanently connected to the vehicle grounding system in a reliable manner.

### 1.11 Product Installation and Mechanical Fixing

- Installation Orientation: Install the product in the enclosure according to the final installation safety diagram in Section 7.2.
- Safety Clearance: A minimum air gap of 10 mm must be maintained between all uninsulated live terminals (AC IN/OUT, DC IN/OUT) and any internal walls, doors, or metal parts of the enclosure. This clearance is critical to prevent arcing and ensure safe insulation.
- Mechanical Installation
  - **Positioning and Drilling**
    1. Use the supplied installation positioning template (or positioning template) to align it with the intended mounting position on the enclosure base plate.
    2. Drill or punch mounting holes for the guide rails according to the markings on the template. Ensure that the hole diameter matches the specifications of the supplied screws.
  - **Guide Rail Installation**
    1. Place the two supplied mounting rails over the pre-drilled holes and align them.
    2. Use all specified mounting screws provided with the product (do not fully tighten initially) to preliminarily secure the rails to the enclosure base plate.
    3. Use a spirit level or other methods to align the rails, ensuring that they are parallel and level.
    4. Use calibrated torque tools to tighten all rail fixing screws to the specified torque.
  - **Product Installation**
    1. Align the product base with the front end of the installed rails.
    2. Smoothly slide the product along the rails into the enclosure until it reaches the preset installation position.
  - **Final Fixing and Locking**
    1. Insert and tighten the supplied locking screws at the corresponding locking holes between the product base and the rails.
    2. Use a torque tool to tighten the locking screws to the specified torque, ensuring that the product and rails are firmly secured together without looseness.

> **NOTE**
> All fastening screws shall be tightened to a torque of 10 N·m to prevent loosening during operation.

### 1.12 Wiring Procedure (Power-Off Operation)

This step must be carried out under complete power isolation (AC and DC sides disconnected and verified de-energized).

- Accessing Terminals:
  Use appropriate tools to remove all fastening screws on the enclosure door and open the door.
- Performing Wiring:
  Route the prepared cables through the installed cable glands and connect them correctly to the corresponding terminal blocks. Use appropriately sized green insulated copper conductors to bond the equipment grounding terminal on the product housing to the grounding terminal of the enclosure for equipotential connection. Ensure that all terminal screws are securely tightened.
- Restoring Safety Protection:
  - First, after confirming that all wiring is correct and secure, ensure that all internal shields and covers of the product are fully reinstalled and firmly locked.
  - Then, close the enclosure door and seal it securely using all provided screws.

### 1.13 Use of graphic symbols

| | |
|---|---|
|  | PE conductor terminal |
|  | Caution, refer to documentation |
|  | Caution, risk of electric shock |
|  | Caution, hot surface |
|  | Caution, risk of electric shock<br>Capacitor discharge time |
|  | Refer to the<br>operating instructions |
|  | Direct current |
|  | Alternating current |
|  | On (Supply) |
|  | Off (Supply) |

### 1.14 Post-installation Safety Checklist

After installation, the installer must perform a final verification according to the following checklist:

- The product is securely fixed in the enclosure using specified hardware.
- All live parts maintain a safety clearance of ≥10 mm from the enclosure walls.
- All cable entries are fitted with smooth bushings, with no risk of cable damage.
- All original internal safety shields are properly installed.
- All enclosure door screws are fully installed with none missing.
- Ventilation and cooling air paths are not blocked by any objects.
- Safety labels are installed in accordance with the specified requirements.

### 1.15 Operation and Maintenance Guidelines

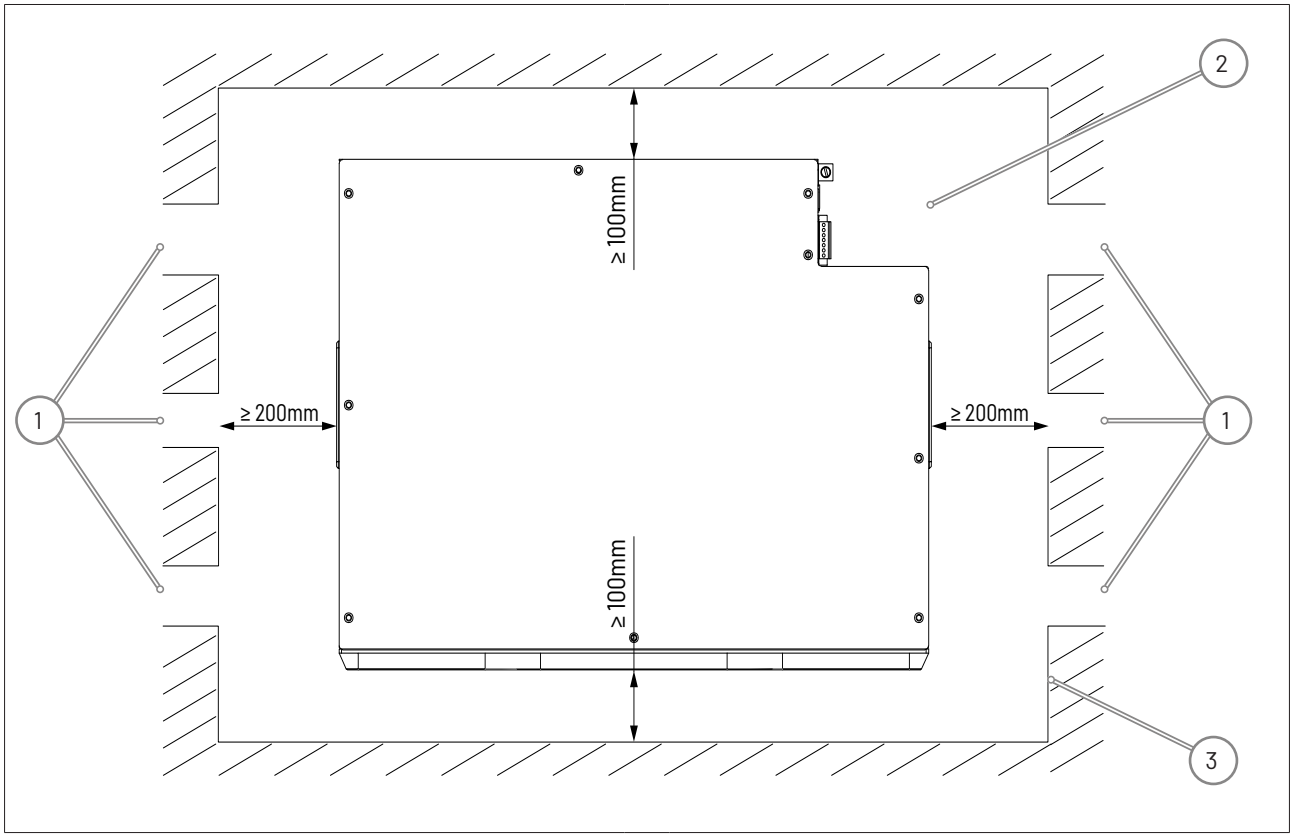
- Daily Operation:
  During normal operation, users do not need and must not open the external protective enclosure. All user operations shall be performed through the interfaces on the product housing.
- Professional Maintenance:
  When qualified personnel are required to perform internal inspection, testing, or maintenance, the following procedure must be followed:
  - Step 1: Complete Power Isolation and Lockout/Tagout:
    Perform standard power-off, voltage verification, and lock-out/tagout procedures.
  - Step 2: Open Protection:
    Use tools to remove the enclosure screws and open the door. The operator must be aware that live parts may be exposed.
  - Step 3: Safe Operation:
    If live measurements are required, insulated tools and instruments meeting the required safety ratings must be used, and appropriate personal protective equipment (PPE) must be worn.

### 1.16 Safety System Definition and Diagram Requirements

- Safety System Definition:
  This product and the external protective enclosure together form a complete "safety protection system." The protection boundary is defined by the enclosure housing to prevent accidental contact with hazardous live parts.

### 1.17 Final Installation Safety Diagram

This protective frame together with the product constitutes a saftey protection system to prevent accidental contact with live components. Any operation that disrupts the intigrity of this system will result in the risk of electric shock.




1 Ventilation Opening
2 Minimum safety spacing: 10 mm internal hazardous area
3 Protectivve frame

### 1.18 Hazard information and safety instructions for operation

**NOTE**

- The manufacturer does not assume any responsibility caused by violation of general safety operation requirements or violation of safety standards for design, production and use of equipment.
- All deviations from the safety requirements for operation are to be agreed with the manufacturer in writing before they are implemented.

**DANGER!**

**RISK OF INJURY, FIRE AND POISONING!**

- Do not operate the Zeliox NEO 3600 and its components if they are damaged.

→ The Zeliox NEO 3600 must only be operated if it is completely undamaged and only under the conditions specified in this document.

→ Do not connect Zeliox NEO 3600 components with reversed polarity.

- Components that are not correctly earthed can lead to dangerous situations.

→ Ground the Zeliox NEO before starting the operation.

- Cables that are too small can overheat and cause injury and damage to property.

→ Always use cables with sufficient dimensions.

**CAUTION!**

**GENERAL SAFETY PRECAUTIONS**

- It is strictly forbidden to put the product in water or fire to avoid explosion or other dangers.
- Please do not stab, hit, trample or strike the product in any other way.
- Avoid direct sunlight.
- The product needs to be installed in a dry and clean environment.
- During use, when the system needs to be moved or rewired,

the power must be completely cut off and the system must be completely shut down, otherwise there will be a risk of electric shock.
- In order to avoid fire and electric shock, please ensure that all cables have good electrical characteristics and suitable wire diameter; it is forbidden to use damaged or too small cables.
- When encountering a fire, please use a dry powder fire extinguisher to extinguish the fire. The use of a liquid fire extinguisher may cause secondary hazards.

**SAFETY ADVICE FOR THE OPERATION!**
- Keep Zeliox NEO 3600 clean and dry.
- Do not expose Zeliox NEO 3600 to fire, water or solvents.
- Protect Zeliox NEO 3600 from water, dust and contamination.
- Always operate Zeliox NEO 3600 within the maximum permissible technical specifications.
- Observe the plus (+) and minus (–) markings on the Zeliox NEO 3600 and ensure correct electrical connection.
- Install the components of the Zeliox NEO 3600 so that they do not move back and forth under normal operating conditions.
- Operate the Zeliox NEO 3600 in an area of the vehicle that is protected from dirt and water.
- Do not use batteries from different manufacturers, with different capacities, sizes or types together in a Zeliox system.
- The Zeliox NEO 3600 power system may only be installed, maintained or dismantled by a service partner authorised by the manufacturer in accordance with the specifications in this documentation and any special installation recommendations, and must be disposed of, recycled or reconditioned in a professional manner.
- The following measures are not permitted:
- Modifications to components
  - Use of third-party parts not approved by the manufacturer
  - Deviations from legal, safety and/or function-related specifications made in this document with regard to installation and/or operation. This applies in particular to electrical wiring.
- Only use original accessories for operation.
- During electric welding on the vehicle or chassis: To prevent catastrophic damage to the Zeliox NEO 3600 power system, the entire auxiliary power system must be fully isolated from the vehicle chassis. **Follow these procedures precisely:**
  - Turn off the inverter and all power switches in the auxiliary system.
  - Disconnect the vehicle from all external power sources (grid power, solar panels).
  - Disconnect the input cables that connect to the vehicle's starter battery (or the chassis electrical system).
  - Attach the welder's ground clamp directly to the workpiece, as close to the welding point as possible. Never clamp to any component of the electrical system.
  - Failure to comply with these instructions will result in permanent and costly damage to your electronic equipment and create a serious fire hazard.
- Remove and recycle Zeliox NEO 3600 properly when no longer needed.
- Repair to the Zeliox NEO 3600 is not permitted. It will invalidate the type approval of the battery system and, in the case of motor vehicles, may invalidate the vehicle's operating licence.
- The installation space for the components of the Zeliox NEO 3600 is not a storage space and must remain clear. In particular, do not store or transport fuel reserve cans, oil cans, spray cans, gas cartridges and other hazardous materials, fire extinguishers, cleaning rags, clothing, paper, etc. on or next to the components of the Zeliox NEO 3600.

**NOTE**
- Any deviations from the safety requirements for the operation must be agreed in writing with the manufacturer prior to implementation.

# 2 Product information

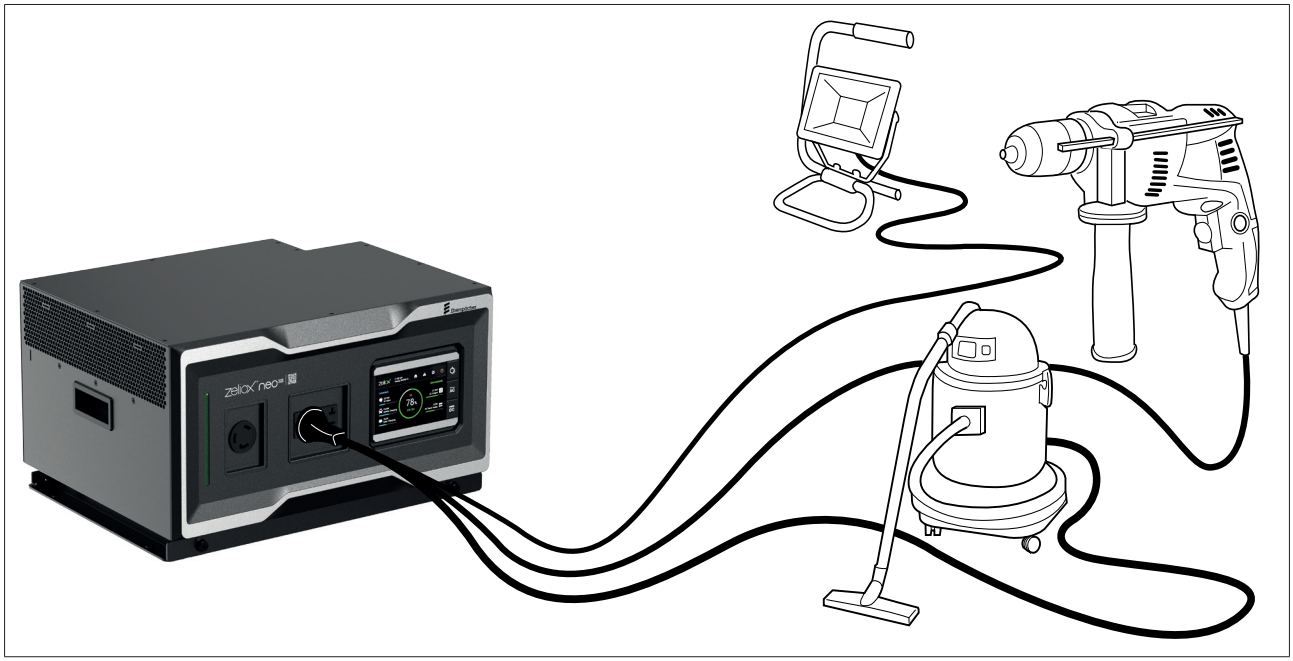
## 2.1 Safety symbols and markings on the product

**NOTE**
The safety symbols and markings are intended to ensure safe operation of the system. They must never be removed or made illegible.

| | |
|---|---|
|  | Observe instructions |
|  | WEEE Marking: Dispose of the battery in accordance with local, state and federal laws and regulations. Batteries can be returned to the manufacturer. Do not mix with other (industrial) waste. |
|  | FCC Marking |

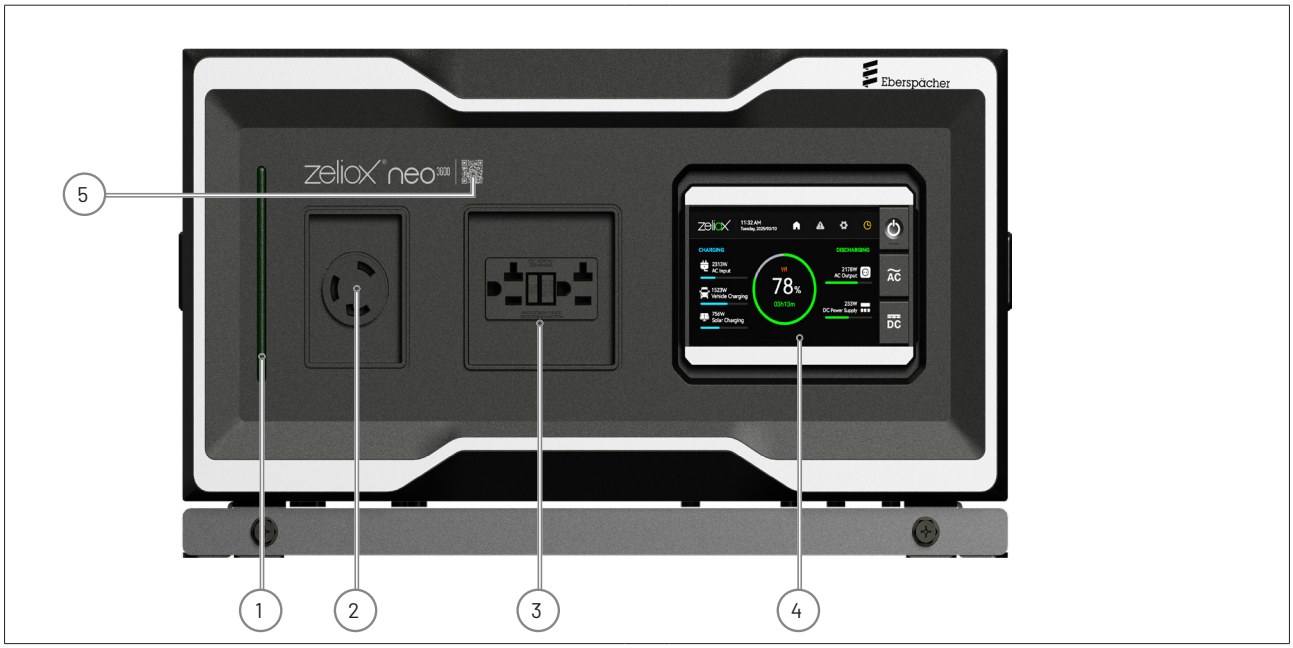
## 2.2 Use of the Zeliox NEO 3600

The Zeliox NEO 3600 is taking care of collecting, storing and distributing power, all packed into one device. Simply plug your tools and appliances into the front power socket or optionally, into other sockets in your vehicle.



## 2.3 How to operate your Zeliox NEO 3600

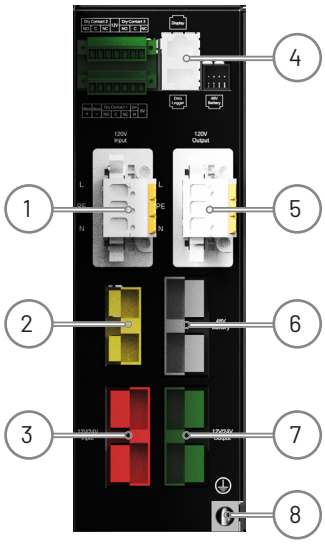
### 2.3.1 Front view




1 Status LED
2 120 V Output socket – model L5-30R (30A)
3 120 V Output sockets – model GTN20 (20A, GFCI)
4 Touch display
5 For further information scan the QR-Code

www.eberspaecher-zeliox.com

### 2.3.2 Side view



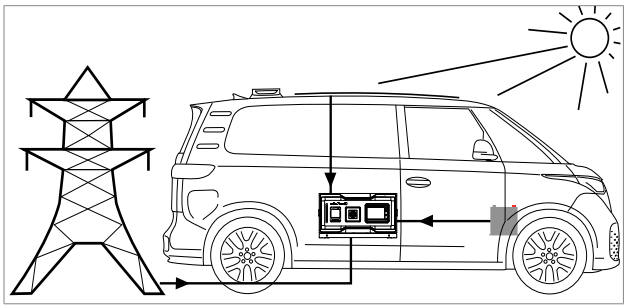

1 120V grid input
2 Solar input
3 12V/24V input
4 Communication port for the extension battery
5 120V AC output 30A
6 48V output & ext. Battery
7 12V/24V output
8 Ground

## 2.4 Touch Display


1 Zeliox icon, current date / time, Bluetooth connection status
2 Left to right: Home, Alert, Settings, Output Control
Clicking on the icon will lead to t he corresponding page.
3 Charging power. Clicking on the corresponding area will give detailed information.
4 Battery SOC and remaining charging/discharging time. Clicking on the icon will give detailed information.
5 Discharge power. Clicking on the corresponding area will give detailed information.
6 Power button. Long-press the power button (> 2 seconds) to turn on/off the machine.
7 AC output ON / OFF
8 DC output ON / OFF

## 2.5 How does your Zeliox NEO 3600 charge?

- The charging process runs automatically.
- The charging options are shown below.



### 2.5.1 Drive charge

**NOTE**

- Electric vehicles have a limited charging speed for accessories and is depending on vehicle make and type.
- When the system is ON and being charged by the alternator, the 12V/24V Output and AC Output can be activated or deactivated by ON/OFF buttons.
- If the Zeliox NEO 3600 is off when the vehicle is charging the system, the 12V/24V DC output and 120V AC output can not be activated.

### 2.5.2 Grid charge

**NOTE**

- When connected to the grid, the 120V inverter is switched off and a direct bypass is active.
- The GFCI sockets (Ground Fault Circuit Interrupter sockets) will protect against electrical faults.
- When the system is ON and being charged by the grid, the 12V/24V Output can be activated or deactivated by DC ON/OFF button. There will be AC by-pass output all the time.
- If the Zeliox NEO 3600 is off, the DC output is not activated but there will be AC by-pass output.

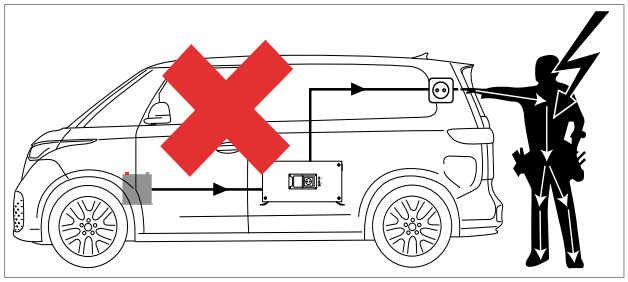
### 2.5.3 Solar charge

**NOTE**

- To harvest sun energy, optional solar panels need to be installed.
- Charging speeds may vary, depending on the intensity of the sunlight.
- When the system is ON and being charged by solar, the 12V/24V Output and AC Output can be activated or deactivated by ON/OFF buttons.
- If the Zeliox NEO 3600 is off, the 12V/24V DC output and 120V AC output can not be activated.

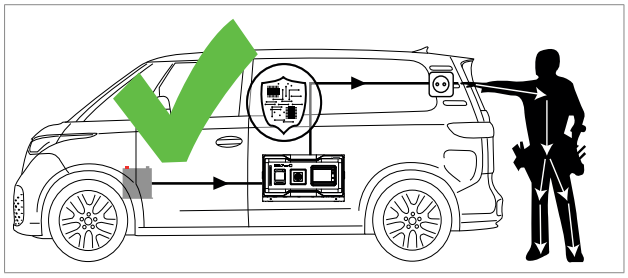
### 2.6 What does the Zeliox NEO 3600 Insulation Guard do??

Zeliox NEO 3600 is standard equipped with an insulation guard. When working in a mobile environment you are not earth grounded and thus not protected in case of a short circuit due to moisture or cable damage. The Zeliox insulation guard protects you against this risk.



**Risk**

- In a vehicle you are not earth grounded!
- In the event of a short circuit a standard socket will not be activated.
- Person in contact will get an electrical shock or could get electrocuted.

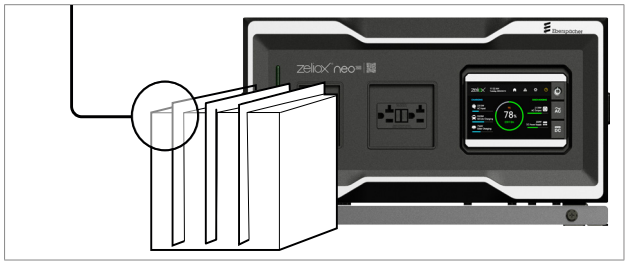


**Working of the Zeliox NEO 3600 GFCI socket**

- It detects short circuits due to moisture or touching bare wires.
- It automatically shuts down the Zeliox NEO 3600.
- In accordance with DIN VDE 0701/0702 and NEN 1010.

### 2.7 What does the Zeliox NEO 3600 Heat Pack do??

- The build in Li-ion battery in the Zeliox NEO 3600 has a special build in heating pack. Operating Li-ion batteries in low temperatures, could shorten the battery life significantly.
- Below 41° Fahrenheit the heat pack will automatically switch-on when external power sources (grid, solar, alternator) are presented.
- The charging process will start, after it has heated up the battery cells sufficiently.

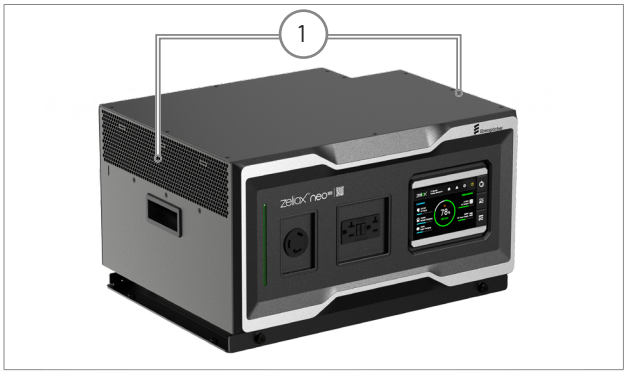


**NOTE**

In frequent low temperature environments, we recommend connecting the Zeliox to the grid as much as possible and switch it off if not in use.

### 2.8 Prevent overheating!

- Make sure that the side ventilation openings are clear. Recommendation: 4 cm air clearance to rack or vehicle walls.
- Should the Zeliox NEO 3600 become overheated, switch-off the device and let it cool down.

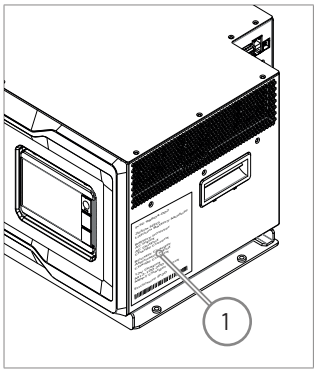



1 Make sure the air inlet and outlet are not obstructed.

### 2.9 In case of an alarm

- First look into the Zeliox App to see what happend.
  - Icon yellow warning triangle: Clicking will show the most recent alarm message.
  - Icon Gear: Click and select "Events" for the full message history.


  - Still don't know what to do? Contact your installer or dealer.




1 Serial Number on right side of the Zeliox NEO 3600.

**NOTE**

When contacting your installer be sure you have the s/n serial number of the Zeliox NEO 3600 at hand.

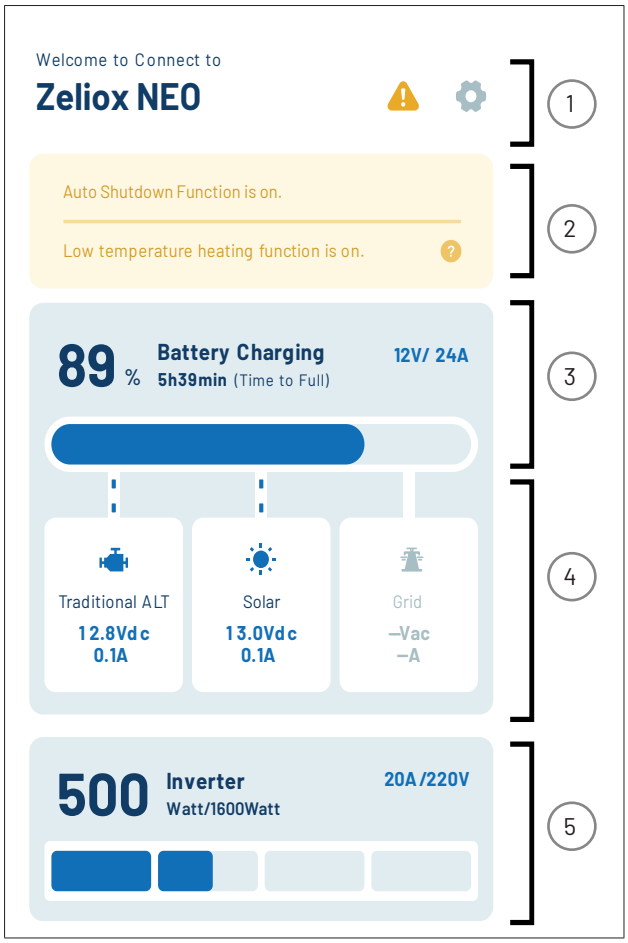
## 2.10 Keep your Zeliox NEO 3600 updated with the Zeliox app

The app gives you real-time information on battery status, remaining battery time, charging details, current consumption, (dis-)charging history, battery lifetime and alarm events. You also can use the app to keep your Zeliox NEO 3600 up to date with new developed features and the latest firmware.

> Please scan the appopriate QR Code shown below to start the download process.

Google Play Store iOS App Store

> Information on the latest updates, improvements and fixed problems can be found in the App Store as well.




1 Menu / Alarms
2 Events / Functions
3 Current battery status
4 Current charging status
5 Current consumption

## 2.11 Technical data

| Model | | Zeliox NEO 3600 |
|---|---|---|
| Battery type | | LiFePO4 |
| Battery capacity | V dc | 48 (50 Ah, 2400Wh) |
| Maximum discharging current | A dc | 98 |
| Continuous charging current | A dc | 49 |
| Battery cell heating (support reservation heating) | °F | min. 33.1 |
| **Booster charger** | | |
| ALT input voltage range | V dc | 12/24 |
| ALT input current | A dc | 120 |
| Efficiency | % | 95.5 @ 12V<br>97.5 @ 24V |
| **MPPT charger** | | |
| PV input voltage range | V dc | 15 ... 60 @77 °F |
| Max. PV short circuit current | A dc | 60 |
| Max. power of PV panels | W | 2200 |
| Max. charging current | A dc | 30 |
| MPPT efficiency | % | > 99.5 |
| **Battery inverter** | | |
| • AC input | | |
| Voltage range | V ac | 85 ... 140 |
| Frequency range | Hz | 45 ... 65 |
| Current (transfer switch) | A | Def. 15, Max. 30 |
| • AC output | | |
| Voltage | A ac | 120 ±3% |
| Frequency | Hz | 60 ±1% |
| Harmonic distortion | % | ≤ 2% |
| Max. output power | V A | 3600 (cont.), 7200 (2 s) |
| GFCI sockets | A / mA | 20 / 5 |
| • Charger | | |
| Charge voltage | V | 53.2 |
| Max. Battery charging current | A dc | 50 |
| • Transfer time | ms | 2 |
| • Inverter / | % | Maximum 95 |
| AC charger efficiency | | Full load 93.5 |
| **DC output** | | |
| Output voltage range | V dc | 12/24 |
| Continuous current | A dc | 100 |
| **External battery port** | | |
| Output voltage range | V dc | 43.5 ... 53.2 |
| Battery model | V dc | 48 (50 Ah, 2400 Wh) |
| Contiuous current | A dc | 98 |
| Default isolation guard | kΩ | 100 |
| Sleep mode consumption | mA | < 0.1 |
| Self-dicharge rate / month | % | < 3 |
| Storage temperature (< 70% rH) | °F | -13 ... +113 (< 1 month)<br>32 ... +95 (< 1 year) |
| Operating temperature | °F | -4 ... +113 |
| IP rating | NEMA | 1 |
| Product Dimensions (LxWxH) | mm | 494.4 x 380.5 x 270 |
| Product weight | kg | 43 |
| Package Dimensions (LxWxH) | mm | 575 x 485 x 365 |
| Package weight | kg | 47 |
| Certification | | FCC |

**CAUTION!**
Failure to comply with the ambient conditions stated in the technical data can result in malfunctions.

**NOTE**
Provided no other values are given, the technical data provided is with the usual tolerances of ±10 % at rated voltage, 68 °F ambient temperature and reference altitude Esslingen.

# 3 Service

## 3.1 Disassembling the Zeliox NEO 3600

- The Zeliox NEO 3600 contains a 40V 50Ah LiFePO4 battery.
- Always obey to the following safety warnings:

**WARNING!**

**RISK OF INJURY!**
**Disassembling the Zeliox NEO 3600 is not permitted.**
Therefore, never attempt to
- open or dismantle the battery.
- repair, or continue to use a damaged battery.
- Dismantling the product will invalidate the module's type approval and, in the case of motor vehicles, may invalidate the vehicle's operating licence.

## 3.2 Examination

**WARNING!**

**RISK OF INJURY!**
**The battery contains hazardous liquids and components.**
Therefore, never attempt to
- open or dismantle the battery.
- repair, charge or use a damaged battery.
- Never touch the fluid from a broken battery.

- Check the battery for loose and/or damaged cables and contacts, cracks, deformations, leaks or damage of any other kind. If damage to the battery is found, it must be replaced.
- Observe and document the runtime of the new, fully charged battery in a typical consumption cycle up to a capacity limit of 20% as a basis for comparison with the runtimes of older batteries. The runtime of the battery may vary depending on the configuration of the products and the application.
- Check the battery charge status regularly and recharge if necessary. Zeliox LiFePO batteries continuously self-discharge (approx. 1 - 2 % per month) when not in use or when in storage.
- Carefully monitor batteries whose estimated service life is nearing its end.
- Consider replacing the battery with a new one if any of the following conditions apply:
  - The battery life has fallen below 80% of its original life.
  - The charging time increases significantly.

## 3.3 Cleaning

If necessary, clean the Zeliox NEO 3600 with a soft, dry cloth.

**NOTE**
Do not use liquids, solvents or abrasive cleaners to clean the product.

## 3.4 Transport

**NOTE**

**CHECK BEFORE TRANSPORT:**
- The transport of the used, damaged or recalled product may be restricted or even prohibited in certain cases. Therefore, check all local, national and, if applicable, international regulations applicable to transport.

The packaging of the product can be kept in case the product has to be sent back.

## 3.5 Technical support

If you have any technical questions or problems with the product, the control unit or the operating software, please select the following link:
https://www.eberspaecher-zeliox.com/service

# 4 Environment

## 4.1 Certification

The high quality of Eberspächer products is the key to our success. To guarantee this quality, we have organised all work processes in the company along the lines of quality management (QM). Even so, we still pursue a large number of activities for continuous improvement of product quality in order to keep pace with the similarly constantly growing requirements made by our customers.

All the steps necessary for quality assurance are stipulated in international standards. This quality is to be considered in a total sense. It affects products, procedures and customer-supplier relationships.

Officially approved public experts assess the system and the corresponding certification company awards a certificate.
Eberspächer Climate Control Systems International GmbH has already qualified for the following standards:

**Quality management in accordance with**
**ISO TS 9001:2015 and IATF 16949:2016**
**Environmental management system in accordance with**
**ISO 14001:2015**

## 4.2 Waste disposal and recycling

### WEEE Directive 2012/19/EU

Electric and electronic devices as well as batteries must not be disposed of with household waste. Consumers are obliged by law to return electrical and electronic devices as well as batteries at the end of their service lives to the public collecting points set up for this purpose or at the point of sale. Details to this are defined by the national law of the respective country. The symbol on the product, the instruction manual or the package indicates that a product is subject to these regulations.

- Dispose of the battery in accordance with local, state and/or federal laws and regulations, or recycle it.
- The battery must be completely discharged before disposal/ recycling.
- Use insulating tape or other covers on the battery terminals to prevent short circuits.
- Batteries can be returned to the manufacturer for proper reuse.
- In many countries, the disposal of electronic devices in standard waste containers is prohibited.

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