BL3B Emaldo Keep On Power Backup Kit Installation Guide

Contents

BL3B Emaldo Keep On Power Backup Kit

Specification

- Model: City Power
- Input Voltage: AC
- Output Voltage: DC
- Maximum Power Point Tracking (MPPT): 3
- Load Capacity: 2-4
- Communication: IoT
- Grid Connection: Yes
- Protection: RCBO

Product Usage Instructions

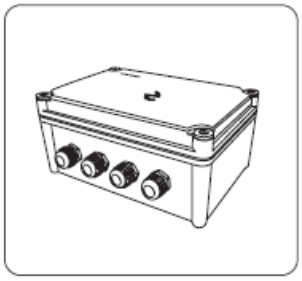
1. Initial Setup:
   Ensure all connections are secure and follow the manufacturer's guidelines for installation. Connect the input power source to the designated AC terminals and the output load to the DC terminals.
2. Powering On:
   Press the reset button to power on the device. The device will indicate power through LED lights or display screens.
3. Grid Connection:
   If connecting to the grid, ensure proper wiring as indicated in the manual. Use the Grid Connection terminals for this purpose.
4. MPPT Configuration:
   Adjust the Maximum Power Point Tracking settings as required based on your specific setup. Refer to the manual for detailed instructions on configuring the MPPT settings.
5. IoT Integration
   If utilizing IoT features, follow the provided instructions for connecting the device to your IoT network. This may involve setting up Wi-Fi or Ethernet connections.

FAQ:

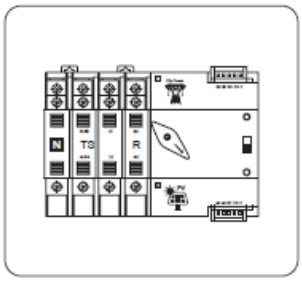
Q: What should I do in case of a power failure?

A: The device features a KeepONTM function that ensures continuity of power supply using internal fuses. Check the fuses if power failure occurs.

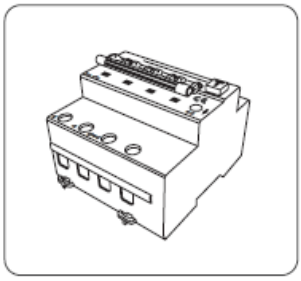
Included



KeepON™ Backup Box x 1



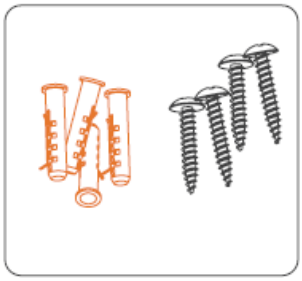
ATS x 1



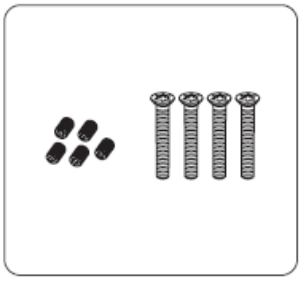
RCBO 40A 30mA x 1

Flex Port Connector x 1

ATS Connectors x 4



Installation Kit x 1



M4*6 x 5 + M3*25 x 4

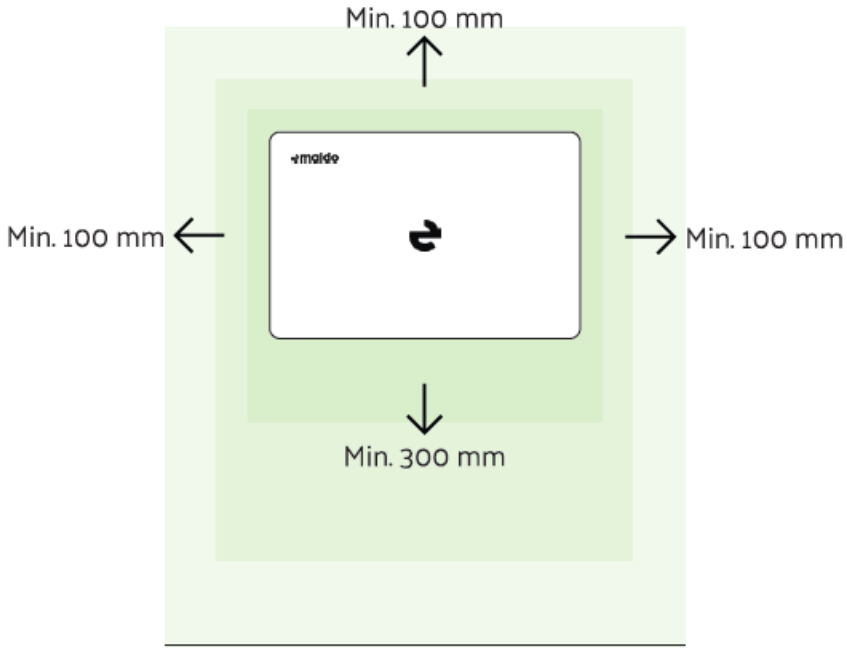
Tools required

Installation of the backup box

The Emaldo® KeepON™ Backup box kit is IP66 rated and can be installed both indoors and outdoors. Outdoor installation should be done under eaves overhang.
Prior to drilling holes, it is imperative to exercise caution and avoid potential interference with concealed water supply lines and electrical power lines within the wall.

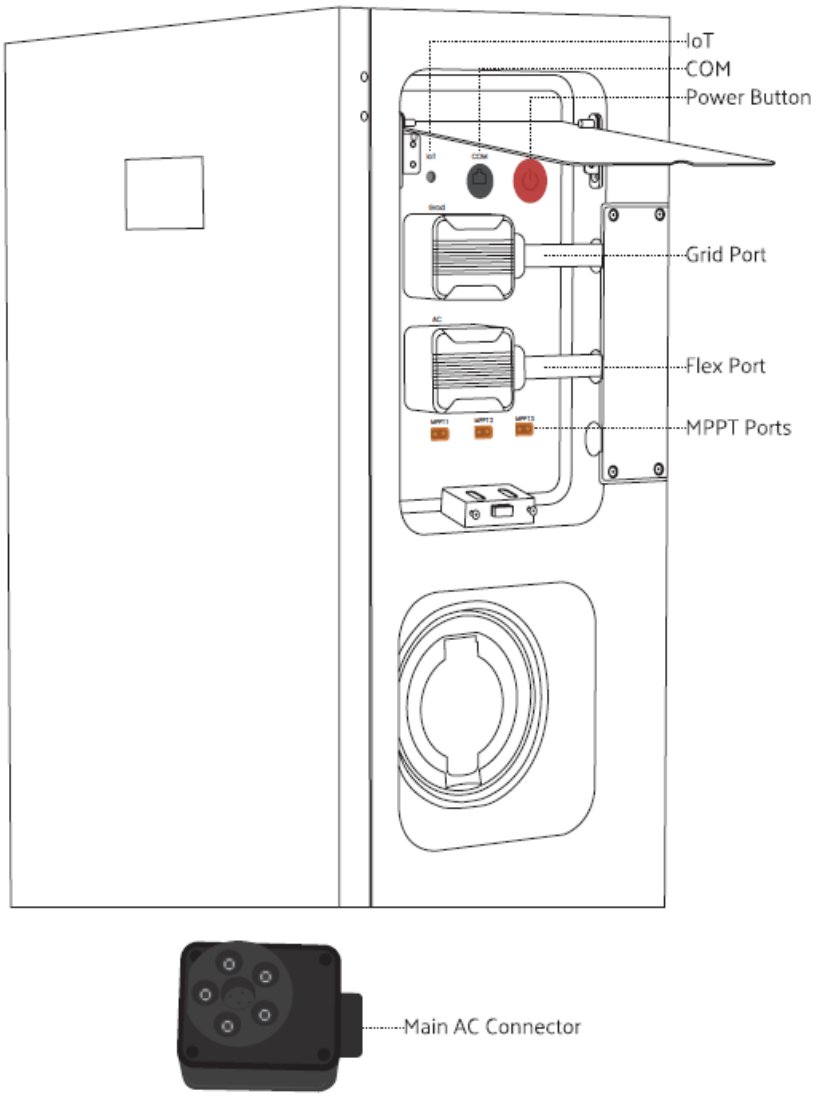
1. Step 1 o

   Make sure the installation location allows for enough free space on all sides of the Emaldo® KeepON™ Backup box, except for the backside, which must be secured to the wall.



2. Step 2Use a line marking template to determine drilling locations.
   - Level the hole location with a leveling instrument.
   - Mark the locations with a marker.
3. Step 3 • Use an electric drill to create installation hotels for 4x35mm screws at the marked points.
4. Step 4 • Align the box with the installation holes
   - Secure the box to the wall using the screws.

Electrical connection



1. Step 1

   Connect the Main AC Connector to the Flex Port on the Emaldo® Power Core.

How Emaldo® KeepON'™' Backup works

The Emaldo® Power Core can provide continuous AC backup power up to 10.800 W for AC Backup load connected to Flex output. The system can provide up to 21.600 W AC backup power to start the load. A large initial power is required when starting the load. If the ambient tempera- ture exceeds 45°C, the output of the energy storage system will decrease; if the ambient temperature exceeds 60°C, the system will be shut down.

Devices recommended for backup

Critical Electronics: These are the devices that are integral to your daily life or work. For instance, your computer or laptop is likely crucial for work or communication. Keeping them powered during outages ensures you can continue working or stay connected to important communica- tions, which can be vital in emergencies. **Security Systems**: Home security systems, including cameras, alarms, and smart locks, are essential for protecting your property and loved ones. Maintaining power to these systems ensures that your home remains secure, even if the main power goes out. Medical Equipment: If you or someone in your household relies on medical devices such as CPAP machines, oxygen concentrators, or dialysis machines, continuous power is critical for health and safety. Backup power ensures that these devices remain operational, potentially prevent- ing life-threatening situations during power outages.
Refrigeration Appliances: Fridges and freezers are essential for preserving perishable food and medications. During power outages, maintain- ing power to these appliances prevents food spoilage and medication loss,

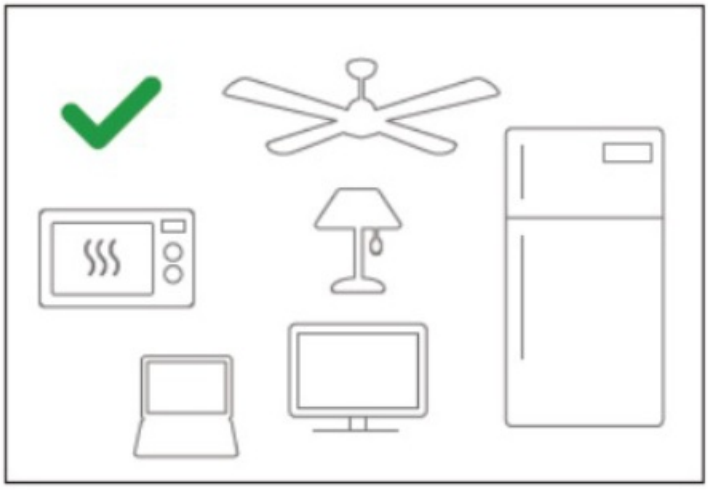
which can save money and prevent potential health hazards. Communication Devices: Phones, routers, and modems are vital for staying connected to emergency services, loved ones, and important information during outages. Ensuring these devices remain powered allows you to make emergency calls, access critical information, and stay informed about the situation.

Devices not recommended for backup

High-Power Consumption Appliances: Appliances like electric ovens, water heaters, or air conditioners draw a significant amount of power. Connecting these devices to backup power can quickly drain the battery, rendering it ineffective for powering essential devices for an extended period.
Non-Essential Electronics: Devices such as televisions, gaming consoles, and decorative lights are not critical for safety or essential functions during power outages. While they may provide entertainment or comfort, they should not be prioritized for backup power, as doing so may deplete limited resources needed for essential devices. By prioritizing the connection of critical devices to backup power and avoiding unnecessary energy consumption from non-essential devices, you can ensure that your backup power supply is effectively utilized during emergencies, providing power where it's needed most.

Example of AC backup load

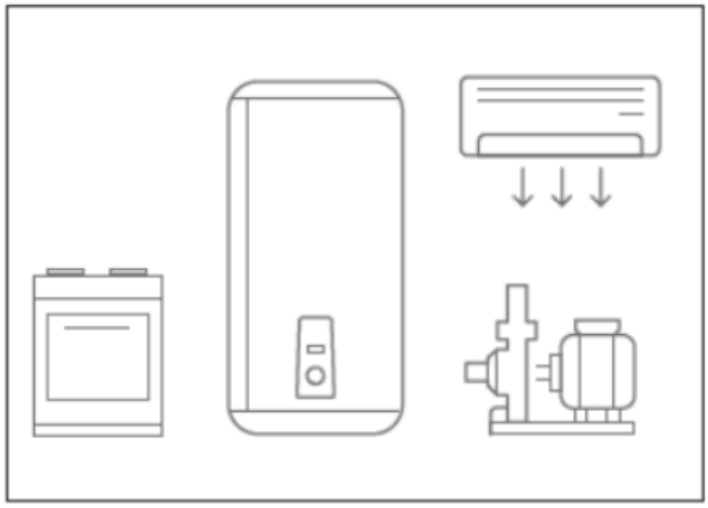
- Lighting (compact fluorescent lamp or LED recommended)
- Refrigerator and freezer
- Small-sized plug-in appliances, such as cooking utensils, microwave ovens, televisions, radios, computers



Example of a high impact AC load

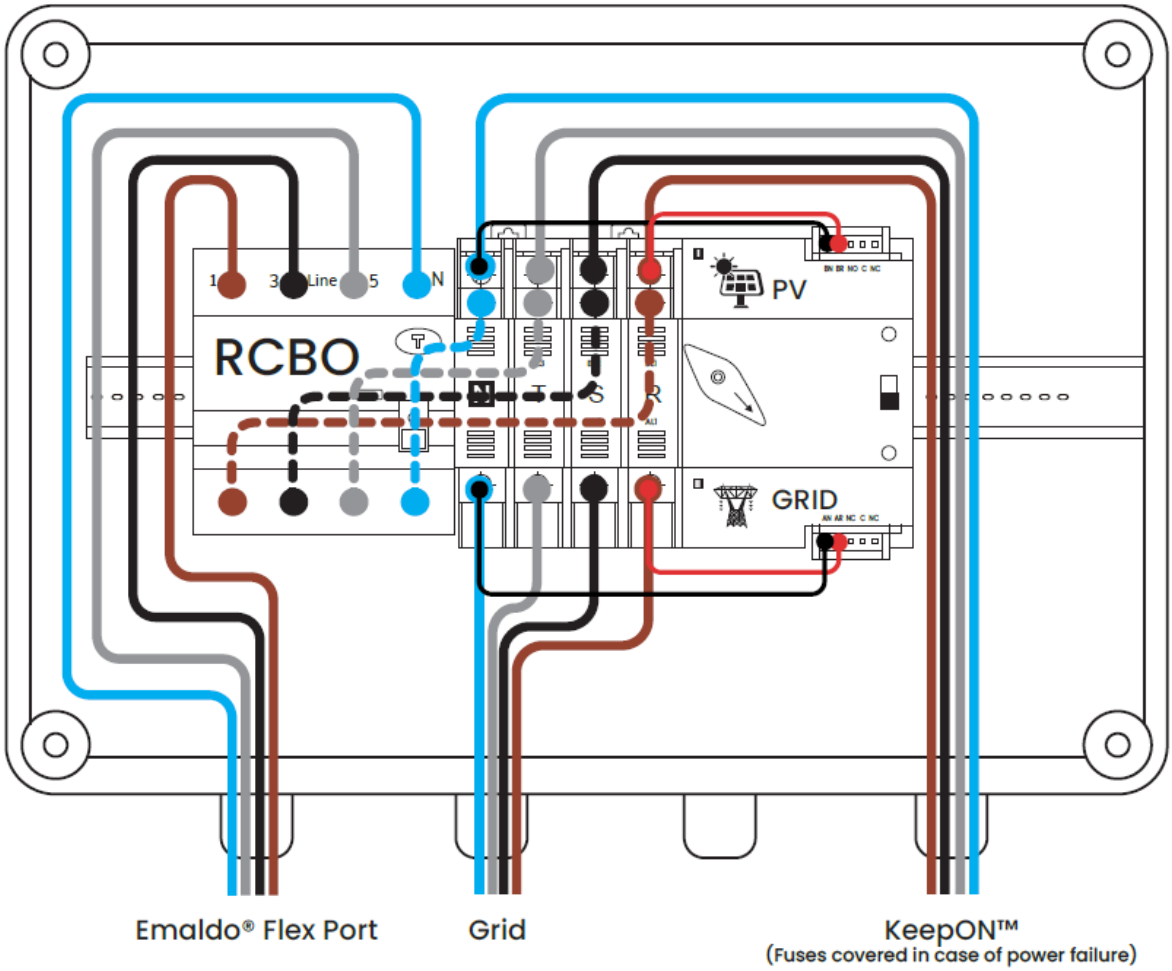
- Water pump
- Hot spring/Sauna
- Electric stove or oven
- Air-conditioner
- Hot Water heater

If the above impact load is connected to the backup load, please confirm that the total starting power does not exceed the maximum starting power of 21.600 W.



Inspection of installation

- The installation of the Emaldo® KeepON™ Backup kit has been executed with precision and security.
- The cable layout has been meticulously planned to align with the specific requirements and preferences of the end-user.
- Ensure consistent application of cable ties, cutting them uniformly to eliminate any sharp corners or edges.
- All power to the Emaldo® Power Core and its associated connections has been deactivated.
- The cables have been securely and reliably connected in accordance with proper protocols.
    - The installation space has been appropriately organized, maintaining a clean and orderly environment with no remnants from the installation process.
    - Clear information has been provided to the end-user regarding how to reach out for support and service.



emaldo.com

Documents / Resources

	emaldo BL3B Emaldo Keep On Power Backup Kit [pdf] Installation Guide BL3B Emaldo Keep On Power Backup Kit, BL3B, Emaldo Keep On Power Backup Kit, On Power Backup Kit, Backup Kit, Kit

References

- User Manual