

User manual

Battery battery pack

SLI180-SLI240-SLI360

Original Instructions



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1 Introduction

Dear Customer,

Thank you for choosing VebaBox battery power pack. This tailor-made product is designed as a back-up for VebaBox's thermal units. Please read the following manual carefully before using your product.



CAUTION:

This guide is published for informational purposes only. VebaBox makes no warranties, express or implied, with respect to the information and descriptions contained in this manual. Such information and descriptions should not be considered all-encompassing or covering for all contingencies, but with the intent of better understanding our product. If you have any questions or would like more information, please contact your local VebaBox representative.

The procedures described herein may only be carried out by suitably qualified personnel. Failure to perform these procedures correctly may cause damage to the VebaBox unit or other property or personal injury.

The VebaBox company and its affiliates shall not be liable in contract or tort (including negligence and/or strict liability) or otherwise, to any person or entity for personal injury, property damage or any other direct, indirect, special or consequential damages or liability, arising out of or arising out of any person's actions in violation of this manual or any of the information, recommendations or descriptions contained herein or the failure of any person to correctly carry out the procedures described herein or to follow caution and safety stickers on the VebaBox unit!

2 Safety measures

VebaBox is a specialized tailor-made product that includes electrical and refrigeration circuits, the installation, use and maintenance of which are subject to special directives and regulations for the protection of human health and the global environment.

This is why the company VebaBox, as the legal owner of the product design and manufacturer, declares and warns that only appointed qualified distributors and technical services are authorized to install and maintain the VebaBox products.

In normal use of the product, users should be aware of the following hazards.

	<p>CAUTION: Risk of death due to electric shock! If the VebaBox/ power pack is powered by mains voltage, make sure that the power supply has a circuit breaker when using the VebaBox! Check that the voltage specification on the plug label is the same as that of the power supply.</p>
<p>Connect the VebaBox or battery only as follows:</p>	
<ul style="list-style-type: none"> • Connect to the mains socket using the mains connection cable supplied with the battery. 	
<p>If the cable is damaged, it must be replaced to avoid potential electrical hazards.</p>	
<p>Disconnect the connecting cable for cleaning and maintenance, after use, and before replacing a fuse.</p>	
	<p>CAUTION: Risk of injury! Batteries contain aggressive and corrosive acids. Prevent battery fluid from coming into contact with your body. If your skin does come into contact with battery fluid, wash the affected body part thoroughly with water. Disconnect the VebaBox and other electrical devices from the battery before connecting the battery to a fast charger. Overvoltage can damage the electronics of the VebaBox.</p>
	<p>CAUTION: The Power Pack is not intended for use by children and teens or disabled persons unless they are adequately supervised by a responsible person to ensure that they can use the device safely.</p> <p>Do not use the power pack if it is visibly damaged. The VebaBox power pack may only be repaired by qualified personnel. Inadequate repairs can pose significant hazards. If your power pack needs to be repaired, please contact your local distributor.</p>
	<p>CAUTION: Use tools with insulated handles that are only in good condition during use and maintenance.</p>
	<p>CAUTION: Risk of death due to electric shock! Do not touch exposed cables with bare hands. This is especially true when using the Power Pack via an AC power supply.</p> <p>Before starting the battery, make sure that the power cable and plug are dry. Do not place electrical appliances connected to a live power source in the refrigerated container.</p>

Place the accumulator in a dry place where it is protected from splashing water. Protect the power pack and cable from rain and moisture. Do not place it near open flames or other heat sources (stoves, direct sunlight, gas ovens, etc.).



CAUTION: Risk of overheating! Always ensure adequate ventilation so that the heat generated during normal operation can be dissipated.

Make sure that the ventilation slots are not covered.

Leave at least 100mm clear of the power pack to ensure adequate ventilation.



WARNING: Always wear safety glasses or goggles when working with or near the cooling system or battery. Refrigerant or battery acid can cause permanent damage if it comes into contact with your eyes.



WARNING: Control circuits (except mains input) used in the VebaBox are low voltage. This voltage potential is not considered life-threatening, but the large amount of current available can cause severe burns if shorted to ground.



WARNING: Do not wear jewelry, watches, or rings. These items can short-circuit electrical circuits and cause severe burns to the wearer.



IMPORTANT: VebaBox cannot be held liable for claims for damages resulting from the following:

- Misuse, improper installation, abnormal maintenance, storage of hazardous chemicals, use of corrosive substances, shipping damage, charging of the refrigeration system, accident, fire, improper repair, tampering, or abuse.
- Incorrect voltages or faults related to the power supply that are outside the operating parameters of the VebaBox.

2.1 First aid

First Aid – Electric Shock

First: Immediately disconnect the electrical power source in the safest way possible (turn off the car's engine, or emergency switch or connect/disconnect the live circuit with a suitable insulated tool).

Second: When you are sure that the power is off, remove the victims from the hazardous area and put them in the anti-shock position.

Third, call your local emergency medical aid and act according to their instructions until the medical assistance specialist takes over and provides further assistance.

First Aid – Heat Burns

First, remove the victims from the heat source immediately in the safest way.

Second, if you are sure that the heat source has been eliminated, put the victims in the anti-shock position.

Third, call your local emergency medical aid and act according to their instructions until the medical assistance specialist takes over and provides further assistance.

3 General safety rules while using the product

WARNING: Failure to comply with safety precautions may result in death or serious injury and/or damage to the product or environment. Please read this manual carefully and keep it with the product at all times.

- Pay attention to the weight of the product and make sure that you, or the devices used, can support the weight.
- The product should not be placed on inclined surfaces.
- Please read the instruction manual carefully before connecting the product.
- Never insert objects into the vents or fans.
- Do not block air circulation by covering the grilles with objects.
- Follow your local regulations for hazardous materials such as refrigerants or batteries: fire or explosion hazard.
- VebaBox battery-powered batteries may only be used with VebaBox thermal units.

4 Application

The basic function of a power pack is to provide energy while the device is not connected to the mains or the car. The battery power supply can be charged from the mains or from the car, if it contains a 12V input.

The battery pack is intended to be installed in the closed superstructure of any type of load. Alternatively, it can be used indoors when protected from the weather.

	Versions		
Product Specifications	SLI180-230-EU SLI180-230-EN	SLI240-230-EU SLI240-230-EN	SLI360-230-EU SLI360-230-EN
Dimensions (WxHxD)	894 x 316 x 144 mm (35,2 x 12,5 x 5,7 inch)		
Weight	27kg	29kg	43kg
Power Source Input	180~265V AC (50/60Hz)		
Power Source Output	12V DC 120A (150A fuse)/ 180~265V AC (50/60Hz) Max. 1800W		
Maximum power consumption		10A@230V	
Battery Type/Rated Capacity	Sealed LiFePO battery 150Ah	Sealed LiFePO battery 200Ah	Sealed LiFePO battery 300Ah
Ambient Temperatures / Non-Condensing	-20°C to 50°C (-4°F to 122°F)		
Discharge protection	Battery voltage < 11V		
Expected life of fully charged battery at Power consumption.*	4h@30A	5.3h@30A	8h@30A
Expected battery life*	Min. 2000 cycli (25°C)		
Self-discharge (shelf-stable)*	6 months (25°C) After this period, a refresh is required		
* Informational value, real values are affected by battery status, temperature, current			

5 Installation

The battery must be attached to the floor of the car. The preferred position is below the thermal unit.

6 Operation

The battery battery, connected to the mains, automatically charges the internal battery. The charging process is automatic and the battery cannot be overcharged. At the same time, the mains voltage is available at the mains output of the battery pack as a means of connecting the thermal units. In this way, only one cord is used to connect the entire installation to the power outlet.

The battery power supply also has a 12V output, which must be connected to the thermal unit. The thermal unit prioritises mains power, if available, so that the battery does not drain when the installation is connected to the mains.

The battery power supply contains battery protection, so that the battery is disconnected when fully discharged. To prolong the life of the battery, do not fully discharge it if you don't need to, and if possible, plug it into the mains for charging.

The battery should be stored fully charged if it is not going to be used for an extended period of time. Every 6 months of storage, it should be fully charged.

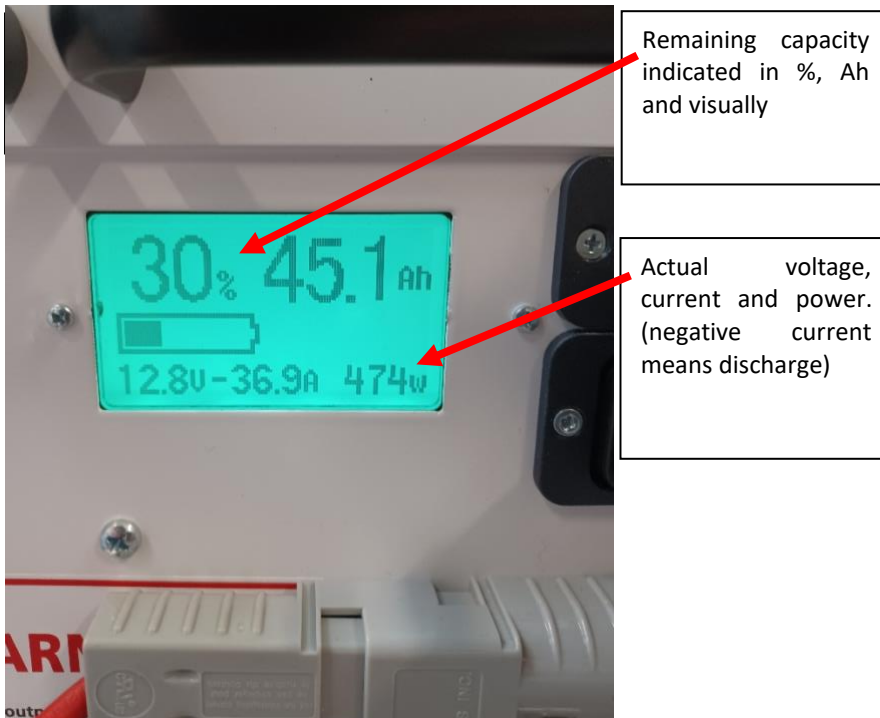
6.1 Controls

Battery power has no user controls. The function is automatic and the main switch is not used - the fully automatic charging is in progress while the power cord is plugged in.

The device includes a battery monitor, which displays the remaining capacity and the process of charging/discharging. The backlight on the display flashes when the battery is consumed.

Battery monitor also serves as an alarm, it gives an audible warning when the battery is low.


The battery monitor is factory set to the internal battery capacity.



Remaining capacity indicated in %, Ah and visually

Actual voltage, current and power. (negative current means discharge)

7 Cleaning & Maintenance

 **WARNING:** Never allow water or other liquids to enter the thermal unit and electronics

- Turn off the product and disconnect all power cables.
- Remove dust and dirt from the area around the appliance, e.g. use a vacuum cleaner or compressed air.
- Check for blockage of the vent holes – clean if they are clogged. Do not stick any objects to the vent openings.
- Check for signs of damage – corrosion, leaking electrolyte, or odor – if you notice stop using the product and contact the distributor.
- Battery has a limited lifespan. If you notice that the capacity is no longer sufficient, the internal battery should be replaced. This must be done exclusively by VebaBox, please contact the distributor for this.
- After servicing, reconnect the cables. Make sure that both the mains and 12V cables are connected to the thermal units.

8 Packaging material and safe disposal of products

The packaging protects the product from damage in transit. Keep the original packaging parts for possible future transport of the thermal unit.



Old electrical and electronic products usually contain valuable materials. However, they also contain harmful substances that have been necessary for the products to function properly and safely. Disposal of such products or improper handling of these substances can be harmful to health and the environment. Dispose of the product at a municipal collection point for electrical and electronic equipment. The discarded product should be kept out of the reach of children. Please note that the thermal unit contains refrigerants that must be disposed of in accordance with local laws and guidelines.

9 Problem solving

Problem	Analyze	Solution
Battery pack produces squeaking noise	Low battery	Connect to the mains to charge. If you continue to use the power pack, it will briefly turn off automatically by the battery protection
Won't charge even when connected to the mains	Power cord inserted incorrectly into plugh	Check the plug on both sides of the cable.
	Battery damaged	If the battery does not last long enough, it may need to be replaced. Contact the distributor
	Charger defect	If the device does not start charging even if it has been connected to the mains for 1 hour, request a service.
Noise is coming from the device	Cooling fan charger	The internal charger contains a fan that usually produces some noise. However, if the noise level changes suddenly compared to normal use, request service.
Device is not fully charged, but does not provide output voltage	Fuse blown	Device contains internal protection fuse (150A). Please contact the service/distributor before proceeding with replacement. Make sure the reason for the fault is corrected (i.e. short circuit on power cables)

10 Guarantee

VebaBox products have a manufacturing warranty of 12 months after delivery of the products. Accumulators containing a battery have the same warranty with a limitation of 18 months from the date of manufacture.

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