User Manual

Battery power pack

SLI180-SLI240-SLI360

Original instructions



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EN 3 User Manual battery power pack SLI
NL 21 Gebruikershandleiding VebaBox met STUC2000
DE 39 Bedienungsanleitung für VebaBox mit STUC2000
ES 58 Manual del usuario VebaBox equipado con STUC2000
FR 76 Manuel utilisateur VebaBox équipée de STUC2000

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2 Introduction

Dear Customer,

Thank you for choosing VebaBox battery power pack. This custom-made product is designed as a power back-up for VebaBox thermal units. Read the following manual carefully prior to using your product.

CAUTION:

This manual is published for informational purposes only. VebaBox company makes no warranties, expressed or implied, with respect to the information and descriptions contained in this manual. Such information and descriptions should not be regarded as all-inclusive or covering all contingencies but with intention for better understanding of our product. In the event you have any questions or require further information, please contact your local VebaBox authorized representative.

The procedures described herein should only be undertaken by suitably qualified personnel. Failure to implement 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 any personal injury, property damage or any other direct, indirect, special or consequential damage or liability whatsoever, arising out of or resulting from any actions by any person that are contrary to this manual or any of the information, recommendations or descriptions contained herein or the failure of any person to implement the procedures described herein correctly or to follow caution and safety decals located on the VebaBox unit!

1 Safety Precautions

VebaBox is a specialized custom-made product that contains electric and cooling circuits, installation, use and maintenance of which are subordinated to special directives and regulations for protection of human health and global environment.

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

During normal product usage the users should be aware of the following dangers.

CAUTION: Danger of fatal injury from electric shocks! When using the VebaBox, if the VebaBox/ power pack is powered by mains voltage, ensure that the power supply has a power circuit breaker! Check that the voltage specification on the plug label is the same as that of the power supply. ***Only connect the VebaBox or battery power pack as follows:*** ***• with the mains connection cable included with the battery power pack to the mains socket.*** ***If the cable is damaged, it must be replaced to prevent possible electrical hazards. Disconnect the connection cable before cleaning and maintenance, after use and before changing a fuse.***
CAUTION: Danger of injuries! Batteries contain aggressive and caustic acids. Avoid battery fluid coming into contact with your body. If your skin does come into contact with battery fluid, wash the part of your body in question thoroughly with water. Disconnect the VebaBox and other electric devices from the battery before you connect the battery to a quick charging device. Overvoltage can damage the electronics of the VebaBox.
CAUTION: The power pack is not intended for use by children and teenagers or invalid persons unless they have been adequately supervised by a responsible person to ensure that they can use the appliance safely. ***Do not operate the power pack if it is visibly damaged. The VebaBox power pack may only be repaired by qualified personnel. Inadequate repairs can cause considerable hazards. If your power pack should need repairing, please contact your local distributor.***
CAUTION: Use tools with insulated handles that during operation and maintenance are in proper condition only.
CAUTION: Danger of fatal injury due to electric shocks! Do not touch exposed cables with your bare hands. This especially applies when operating the Power pack from an AC power supply. ***Before starting the power pack ,make sure that the power supply line and the plug are dry. Do not place any electrical devices connected to a live electric power source inside the cooling container.*** ***Set up the power pack in a dry location where it is protected against splashing water. Protect the power pack and the cable against rain and moisture. Do not place it near open flames or other heat sources (heaters, direct sunlight, gas ovens etc.).***
CAUTION: Danger of overheating! Always make sure there is sufficient ventilation so that heat generated during normal operation can dissipate. ***Ensure that the ventilation slots are not covered.*** ***Leave at least 100 mm free from the of powerpack to ensure adequate ventilation.***

WARNING: Always wear goggles or safety glasses when working with or around the refrigeration system or battery. Refrigerant or battery acid can cause permanent damage if it comes in 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 shortcut electrical circuits and cause severe burns to the wearer.

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

• Misuse, improper installation, abnormal servicing, storage of hazardous chemicals, use of corrosive substances, transit damage, recharging of cooling system, accident, fire, improper repair, tampering or abuse.

• Incorrect voltages or faults with regard to power supply which falls outside of the VebaBox operating parameters.

1.1 *First Aid*

First Aid – Electric shock

First: Immediately disconnect the electric power source in the safest way (switch off the car engine, or emergency switch or disconnect / cut off the live circuit with a suitable insulated tool).

Second: When you are sure that the power is off remove the victims from the dangerous area and put them in anti-shock position.
Third: Call your local medical emergency aid and act according to their instructions until the medical aid specialist comes to take over and provide further aid.

First Aid–Burns from heat

First: Immediately remove the victims from the source of heat in the safest way.

Second: When you are sure that the heat source is eliminated put the victims in anti-shock position.

Third: Call your local medical emergency aid and act according to their instructions until the medical aid specialist comes to take over and provide further aid.

2 General safety rules during use of product

WARNING: Failure to comply with safety regulations may result in death or serious injury and/or damage to the product or its surroundings. 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 carry the weight.
- The product must not be placed on sloping surfaces.
- Please read the operating instructions carefully before connecting the product.
- Never insert objects into the ventilation openings or fans.
- Do not obstruct air circulation by covering the grilles with objects.
- Follow your local regulations for hazardous substances as refrigerants or batteries: risk of fire or explosion.
- VebaBox battery power pack is to be used with VebaBox thermal units exclusively.

3 Application

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

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

	Versions		
Product specifications	**SLI180-230-EU SLI180-230-UK**	**SLI240-230-EU SLI240-230-UK**	**SLI360-230-EU SLI360-230-UK**
Dimensions (WxHxD)	894 x 316 x 144 mm (35.2 x 12.5 x 5.7 in)		
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/ nominal 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 current consumption.*	4h@30A	5,3h@30A	8h@30A
Expected battery life*	Min. 2000 cycles (25°C)		
Self discharge (shelf life)*	6 Months (25°C) After this period freshening charge is required		
*** Informative value, real values are influenced by battery state, temperature, current**			

1 Installation

The battery power pack needs to be fixated to the floor of the car. Preferred position is underneath the thermal unit.

4 Operation

The battery power pack, while connected to mains, automatically recharges its internal battery. Charging process is automatic and battery can't be overcharged. At the same time, the mains voltage is available at the mains output of power pack as a means to connect the thermal units. This way only one cord is used to connect the whole setup to mains outlet.

The battery power pack also has a 12V output, which should be connected to thermal unit. Thermal unit prioritizes the mains voltage if available, so the battery is not drained when the setup is connected to mains.

The battery power pack contains battery protection, so the battery is disconnected when fully discharged. To extend the lifetime of the battery, do not discharge it fully if not necessary, and connected it to mains for recharging when possible.

Battery should be stored fully charged if not used for longer periods. Every 6 months of storage it should be fully recharged.

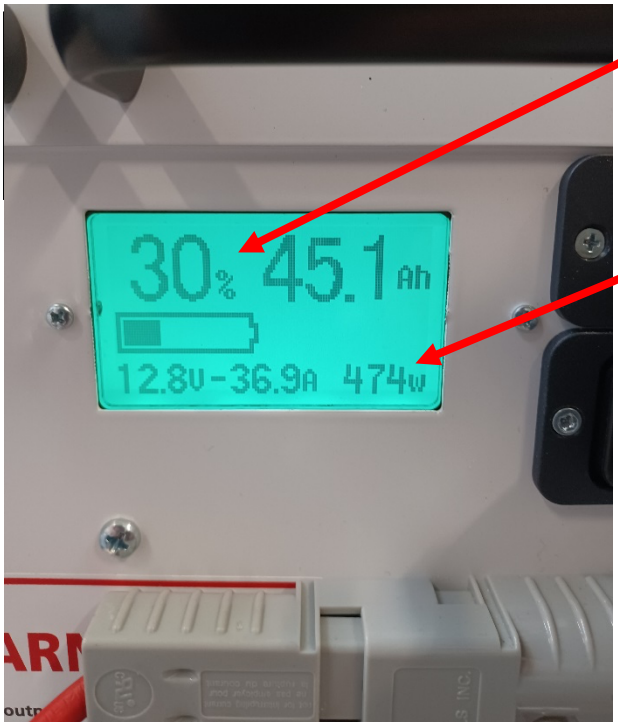
4.1 Controls

Battery power pack does not have any user controls. Its function is automatic, and main switch is not used – the fully automatic charging is ongoing while the mains cord is connected.

Device contains battery monitor, which displays remaining capacity and process of charging / discharging. The backlight on display is blinking if the battery is being consumed.

Battery monitor also serves as an alarm, it makes an audible warning if battery is close to being discharged.

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



Remaining capacity stated in %, Ah and visually

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

5 Cleaning and 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 surrounding of the device, use for example vacuun pressurized air.
- Check for blockage on venting holes – clean if blocked. Do not stick objects to the ventin
- Check for any sign of damage – corrosion, leaking electrolyte or smell - if notice stc product and contact the distributor.
- Battery has a limited lifetime. If you find that capacity is no longer sufficient, the inte needs to be exchanged. This is to be done by VebaBox exclusively, please contact the dis
- After maintenance reconnect the cables. Make sure that both mains and 12V cables connection is made to the thermal units.

6 Packaging material and safe disposal of products

The packaging protects the product from transport damage. Store 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. The disposal of such products or impropriate handling of these substances can be harmful to health and the environment. Dispose of the product in a municipal collection depot for electrical and electronic equipment. The discarded product must be stored out of reach of children. Please note that the thermal unit contains refrigerants which must be disposed of in accordance with local legislation and directives.

7 Troubleshooting

Problem	Analyze	Solution
Power pack produces beeping sound	Battery nearly discharged	Connect to mains for recharging. If you continue using the power pack, battery protection will shortly switch it off automatically
	Mains cable incorrectly inserted to pluch	Check plug on both sides of the cable.

Not charging even if connected to mains	Battery damaged	If the battery does not last long enough, it might need exchange. Contact distributor
	Charger defect	If the device does not start charging even when plugged to mains for 1 hour, request a service.
Noise coming out of the device	Charger cooling fan	The internal charger contains fan which usually generates some noise. If however the noise level changes suddenly compared to normal running, request service.
Device is not fully charged but does not provide output voltage	Fuse blown	Device contains internal protective fuse (150A). Before proceeding with replacement, contact the service/distributor. Make sure the reason for the failure is corrected (i.e. short circuit on supply cables)

8 Warranty

VebaBox products have a manufacturing warranty of 12 months after delivery of the products. Power packs, which contain a battery inside have the same warranty with a limitation to 18 months after production date.

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