

# **BEDIENUNGSANLEITUNG / OPERATING INSTRUCTION**

## **LADEGERÄT / CHARGER 42Vdc 4A**

**Artikel Nr. / Part No. 24555-x**

**Geeignet zum Laden eines  
10 Zellen in Serie / 36V, max. 25Ah Li-Ion Akkupack**

**Suitable to charge a  
10 cells in serial / 36V, max. 25Ah Li-Ion Battery pack**



**Bedienungsanleitung vor Gebrauch sorgfältig lesen! Read  
this operating instruction carefully before use!**

## General Safety Instructions



Read these operating instructions carefully before use!  
Improper handling of Lithium Batteries may cause fire, explosion or chemical danger.  
Check battery manufacturer instructions.



Charge only Li-Ion battery packs. Do not charge Lead Acid-, NiCd- NiMh or non-rechargeable primary batteries. Connect the charger to a suitable mains supply, only. Disconnect the charger from mains and the battery pack if it is not in use for a longer time.



This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.  
Children shall not play with the appliance.  
Cleaning and user maintenance shall not be made by children without supervision.



The charger is designed for usage in a damp-free, dry and ventilated environment.  
Do not expose the charger to rain or hot conditions. Don't cover the charger.  
Please keep the charger clean and dry.



Do not charge hot battery packs. Battery packs must be at ambient temperature before charging.  
Stop the charging process if the battery gets too hot during charging. ( $>55-60^{\circ}\text{C}$ )



Do not use the charger if there are any signs of damage.  
Do not open the charger or carry repairs. Repairs may be carried out only by authorized personnel with original spare parts, only.

## **Functions**

1. This charger is suitable to charge a 36 Volt Li-Ion battery pack, 10 cell in serial. The max. charge current is 4 A. The max. capacity of the battery pack can be 25 Ah.
2. The charger has an overload, short circuit, overvoltage and wrong polarity protection.  
Overload protection (cut off if the output current is higher than 7A)  
Short circuit (cut off if there is a short circuit on the DC-side)  
Overvoltage protection (cut off if the output voltage is higher than 50V)  
Wrong polarity protection (cut off if battery with wrong polarity is connected to the charge cable)
3. This charger has an additional charge capacity counter that cuts off the charge after 25Ah are charged into the battery pack. This is also indicated as error.
4. The charger has an internal temperature control that protects the charger at too high ambient temperature as well as continuous overload. If this happens the charger will reduce the output power.
5. Errors are shown by the flashing red LED.

## **Operation**

1. Before first use please check the parameters of the charger and your battery according to the rating label or the manual to ensure the accordance.
2. Check if that the local main AC voltage level is suitable for the charger.

	Minimal	Nominal	Maximal
AC input voltage	207	230	264

3. For a function test plug in the mains cable into an AC mains socket. The green LED will flash slow, that indicates stand by.
4. Now connect the DC cable to battery pack. The green LED will flash equally and shows that charging is started. If the battery voltage is less than <25V the charger will start with a pre-charge current of 500mA. If a battery voltage of >25V is not reached within 30. min. the charger will cut off. This is indicated as error. In this case please contact your battery supplier. When the voltage is reached, the charger will automatically switch to fast charge.

5. If the battery pack is fully charged the charger cuts off. The green LED will give a steady light and indicates the full battery pack.
6. The charger has an internal temperature control that protects the charger at too high ambient temperature as well as continuous overload. If this happens the charger will reduce the output power until recovery.

Status	LED Indicators			
	LED red		LED green	
Stand by	off	●	slow flash 10% on	⦿
Pre charge	off	●	flash 50% on	⦿
Charge	off	●	flash 50% on	⦿
Battery full	off	●	steady	○
Error	flash	⦿	off	●

Charge end voltage 42 V +/-1%

### **Remarks**

This charger has a wrong polarity protection. The right polarity is the base that the charger generates a charge voltage. Depending on the battery safety board, a battery pack that is discharged under its nominal discharge voltage can't be charged again. In this case please contact your battery supplier.

Error through reaching the capacity limit or the precharge limit, will be reset immediately after removing the battery. Error through short circuit or wrong polarity will be reset automatically maximum 1min after removing the Problem.

### **Content**

1. Charger with dc cable
2. AC Power cord
3. Operating instructions