

- 4KW 48V CHARGE CONTROLLER -

4Kw 48v is new generation Charge Controller. This device is not hybrid but it can be integrated into hybrid system, (important thing is suitable battery and suitable system). Solar charger and Wind charger can be connect parallel into same battery group.

The high-end device can also be used as a monitoring system. It is used to safely and efficiently charge and control your battery with the Wind Generator.

With its discreet appearance, simple operation, with integrated protection functions, this device has high efficiency and low no-load losses. This version of the controller will significantly increase the life and stability of the whole system, especially the batteries.

In addition, the control electronics in the control cabinet monitors the system voltage and brakes the wind turbine when a max. Overvoltage.

The special features and product information are listed below:

Use of external and high quality (Triacs), solid state components. Increasing the life of the controller.

Microprocessor controlled charge with integrated voltage and current limiting. Electromagnetic brake control. Integrated 3-phase short circuit breakers (brake switch)

Protection against lightning strikes. Protection against overcharging, deep discharge, short circuit, overload.

Integrated display.

The generator is automatically braked gently when the battery is full, modern braking system with external load resistance (Dump Load) to avoid the immediate blocking of the turbine. Increasing the life of the stator.

DUMP LOAD MUST BE PLACE IN HORIZONTAL , OTWERWISE IT DOESN'T WORK EFFICIENT

4KW 48V CHARGE CONTROLLER

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|--|---|
| Nominal Battery Voltage | 48VDC |
| Max Input Power Wind Turbine | 4 Kw |
| Lcd with Display | Amper, Watt, Battery Voltage, Brake, Temperature |
| Charging Voltage | 52,8 V |
| Charging Current Wind Amperes Max | 70 A |
| Generator On / Off Switch | After generator stop (after manual brake) please press mode 1 (off) , and generator is locked. (Safe braking is achieved in this way For active operation, please press mode 0 (on) and then close manual brake button |
| Manual Brake Button | 1- For manual brake, please press "off" mode 2- For operation, please press "on" mode |
| Reset Button | This button deactivates when generator was on automatic brake |
| Battery Voltage Min | 42 V |
| Automatic Brake for Wind Turbine (Over heating) | 50 °C breaking / 45°C break out |
| Automatic Brake for Wind Turbine (Stop Charging Voltage) | 58 V -+1 |
| Wind Turbine Recharge Voltage | 55 V -+1 |
| Cooling | External aluminium cooling fins |
| Cable Termination | Battery (16mm) – Wind Turbine and dump load (10mm)- Ground (6mm) |
| Protection Class | IP 20 (inside area) |
| Dump Load | 4Kw Braking resistor (The load resistance can deviate from Picture) |
| Operational Temperature | Normal: 20~ + 55 °C / 35~85%RH Industrial : 30~ + 55 °C / 35~85%RH |
| Temperature Compensation | -4mV°C/2V, -35°C --+80°C , Accuracy +1°C |
| Size | 30*40*20 cm |
| Weight | 12 kg |
| Recommended Battery Min | Acid & Gel (It can be redesign according to Lithium batteries) |

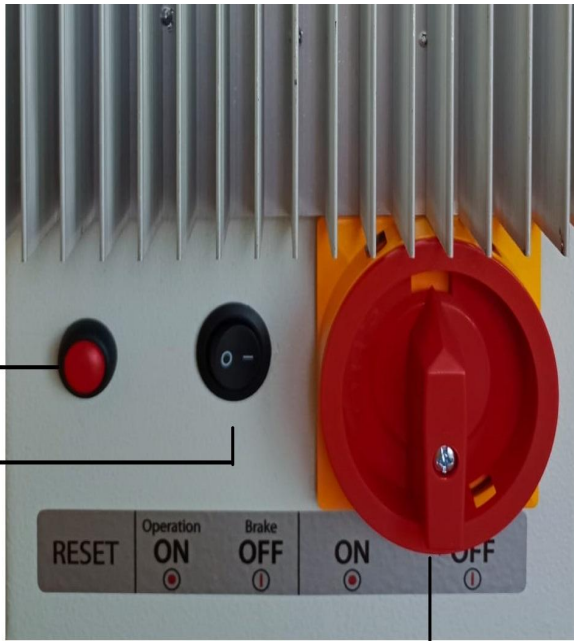
Reset Button:

This button deactivates when generator was on automatic brake

Manuel Brake Button:

1- for manual brake, please press "off" mode

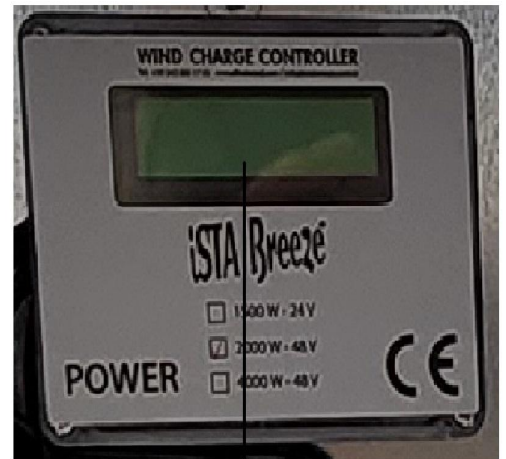
2- for operation, please press "on" mode



Generator On / Off Switch :

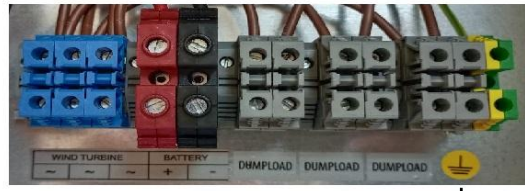
After generator stop (after manuel brake), please press mode 1 (off) , and generator is locked. (Safe braking is achieved in this way)

For active operation, please press mode 0 (on) and then close manual brake button



Lcd Display:

Amper, Watt, Battery Voltage, Brake , Temperature



Ground

