WindBright
Wind Battery Charger

CARLO GAVAZZI

WindBright

- **24V / 48VDC Battery charger**
- **Adjustable maximum charge current**
- **Battery overvoltage and overcharge protection**
- **Battery Voltage detection**
- **High wind speed protection**
- **LCD display and LED status**
- **Low stand by power**

Product Description

WindBright is an advanced battery charger using a microcontroller for digital accurancy and fully automatic operation. It can be used for 24V / 48VDC system. Especially designed to be used in combination with the Carlo Gavazzi Wind Mill (Micro Aeolic Wind Turbine). This system will use the wind generator to charge the battery. The device has a built in protection mechanism that prevent battery from over voltage and/or over charging.

Ordering Key

WBC 003 48

Serie
Model
System voltage

Type Selection

Serie	**WBC:**	Wind Battery Charger
Model	**003:**	3000W rated output power
System voltage	**24:**	24VDC battery system
	48:	48VDC battery system

Approvals

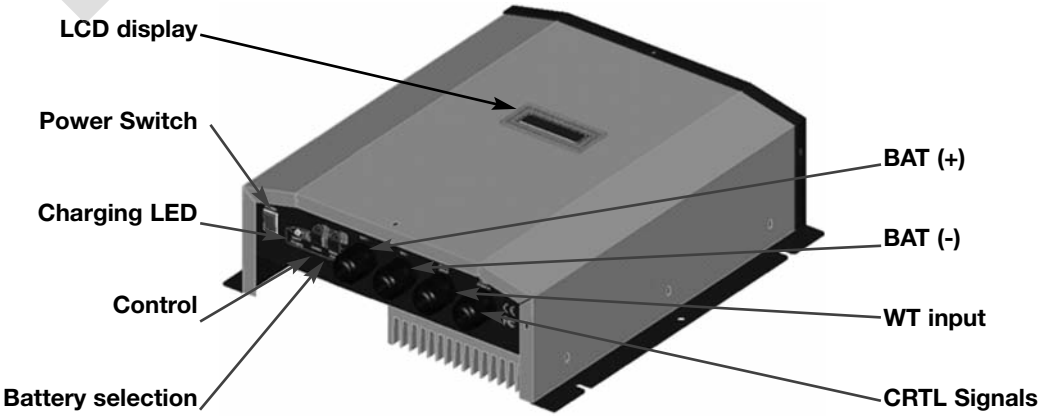
CE RoHS COMPLIANT

Technical data

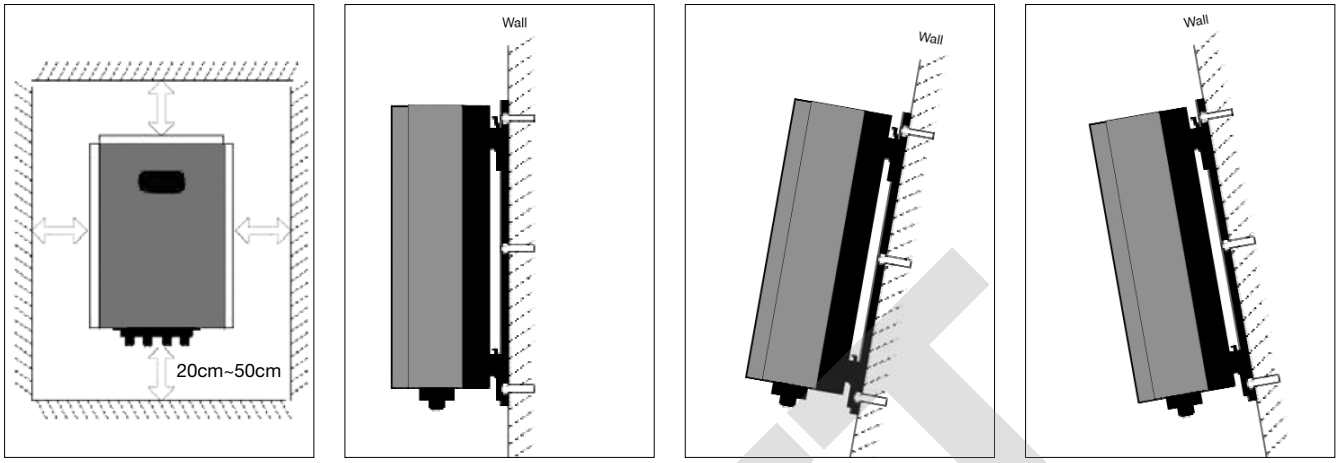
Max. Output power	3200W
Rated Output power	3000W
Input Voltage range (line voltage)	50~200Vrms
Rated input current	20A
Max. Charger efficiency	>90%
MPPT efficiency	>95%
Stand-by power	<5W
Recommended 24V / 48V: rechargable batteries	200AH/350AH/500AH/600AH

Battery protection voltage	44VDC ±1V
Float voltage	58V ±1V, 1min charging per 10min
Max. charge current	20/30/40/50Amps adjustable
Man-Machine interface	LED/LCD status indications
Working temperature	-20°C...+40°C
Degree of Protection	IP43
Dimensions (LxWxH) mm/inches	400x325x130 15,75x12.79x5.12”
Weight	15kg/33.01lb

General Overview



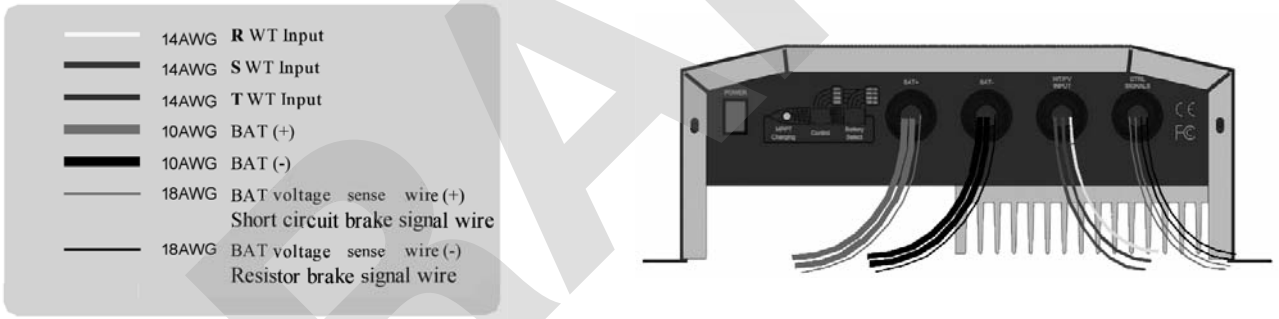
Installation Precaution



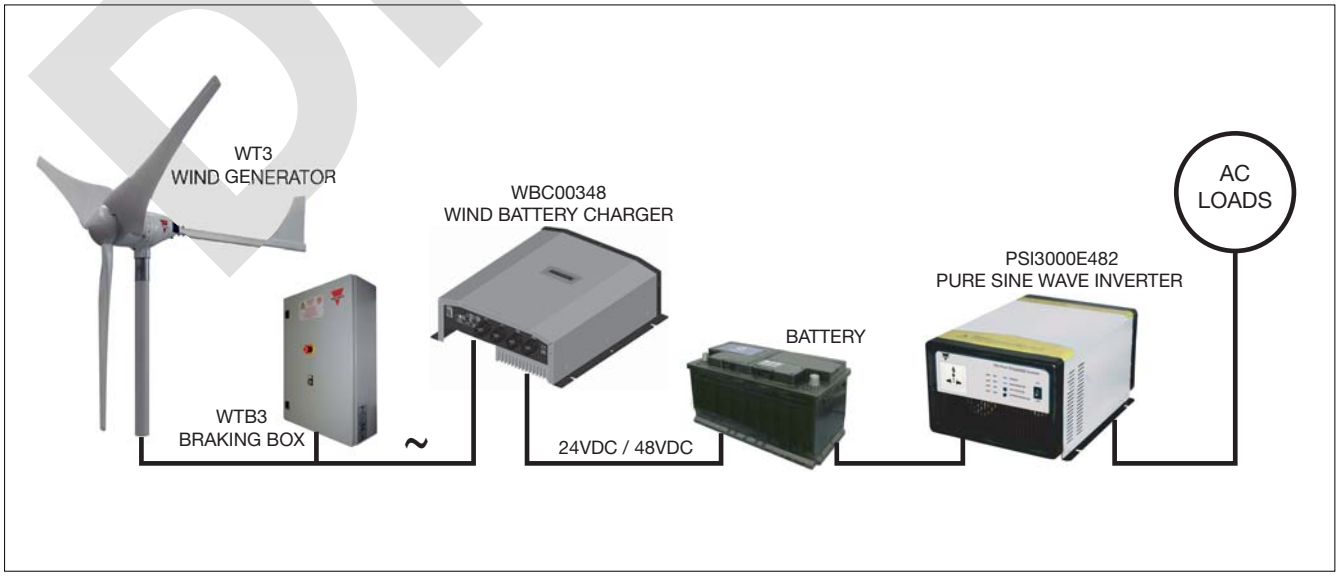
Correct | Correct | Correct | Incorrect

Mount the device on to a vertical surface.
Allow a minimum of 20 cm (7.87") space all oround the charger for air flow.
The charger uses natural cooling mode, so avoid placing the charger near heat sources and direct sunlight.

Wiring Diagram



Schematic Connection diagram



- The length of the wire, connecting the battery end and the charger should not exceed 5m.
- Pay attention to polarity when connecting anode and cathode of battery to the charger BAT(+) and BAT(-).
- In order to ensure the over speed protection of the wind turbine, the controller will activate the brake. When the wind speed is too high or in the typhoon season, you can install additional circuit breakers to use the brakes manually.