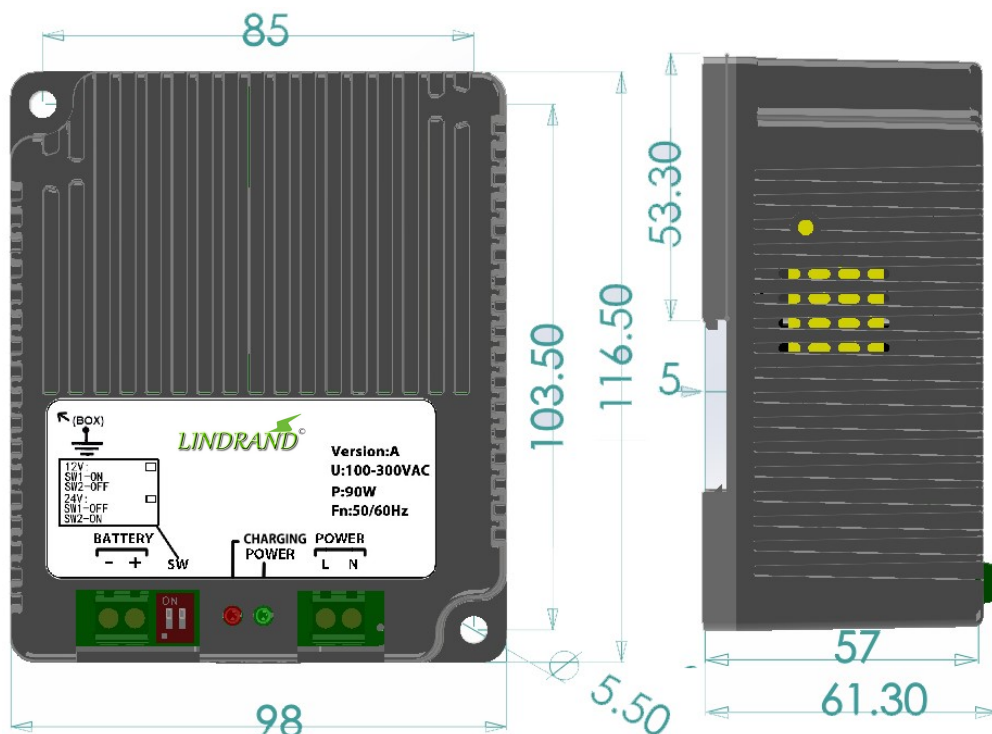


1 Introduction:

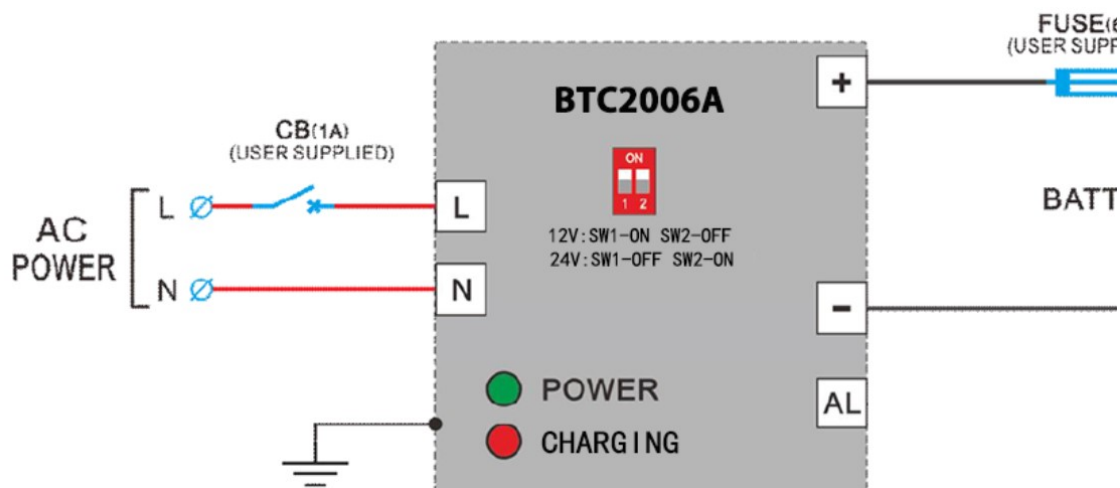
BTC2006A series switching battery charger adopts the latest switch power components, which is designed for charging lead-acid starting battery according to its property. The charger is suitable for lead-acid battery float charge. The maximum charge current for 12V charger is 6A; the maximum charge current for 24V charger is 3A.

- Compatible with 12 / 24V battery, panel microswitch selection
- 3 stage charging
- Full range AC input (Up to 300VAC)
- High efficiency of switch power supply circuit
- Precision die-cast aluminum case, compact appearance
- Fanless design, natural air-cooled
- Perfect protection function: battery high and low voltage, overcurrent, high temperature, reverse polarity protection and so on.

2 Shape and installation dimensions:



3 Typical wiring diagram:



4 Auto charging process

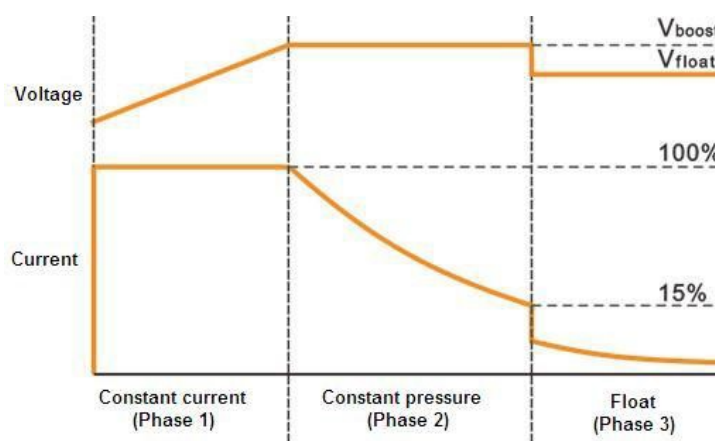
According to the features of the battery charging to design, the charger have 3 stage charging method, charging process as follows:

Phase 1 (constant current): charger at a constant current for the battery, at this stage the battery voltage is gradually increased, when the battery voltage reaches V_{boost} voltage, the charger into the charging phase 2.

Phase 2 (constant pressure) : charger at a onstant voltage V_{boost} (Fast charge voltage) for the battery, the charging current at this stage will gradually decline, when the charge current drops to 15% of rated current, the charger into the charging phase 3.

Phase 3 (float): charger at a constant voltage V_{float} (Float voltage) for the battery. Float process, the charging current is generally less for maintaining the battery fully charged.

Charge graph:



5 LED indicating lamp

POWER: When connected to the AC power, and in the normal range, the indicator illuminate.

CHARGING: Battery charging indicator. When charging current is over 0.3A, it will illuminate.

6 FAULT DIAGNOSIS

When the charger has an abnormal situation, such as the short circuit at the output end and the battery is connected backwards, it may lead to the self-protection of the charger's output (Self-restoring fuse).In this case, the charger's green LED indicator lights up after connecting the ac input power, but there is no output voltage at the output end.

a) The load is off and waiting for 5 minutes to be reconnected. It can work normally.

b) If the load is off and waiting for 5 minutes to reconnect, the charger still has no output and needs to be returned to the factory for maintenance.

7 Electrical Specifications

Selector witch (SW1/2)	Lead Acid	NiCd
V_{boost}	14.0V/28.0V	14.5V/29V
V_{float}	13.6V/27.2V	14.1V/28.2V
Rated output current	6A(12V)/3A(24V)	
AC input voltage	100 to 277AC	
Frequency	45 to 65Hz	
Maximum output power	90W	
Operating temperature range	-40 to 70°C	
Storage temperature range	-40 to 80°C	