

ZHONGLING

BAC10A BATTERY CHARGER USER MANUAL



ZHONGLING TECHNOLOGY(CHINA)LIMITED

BAC10A SERIES BATTERY CHARGER INSTALLATION INSTRUCTIONS

The contents are intended for quick guidance and supplement to the user who is using BAC10A series switch-type battery charger. Please read the standard manual for more details.

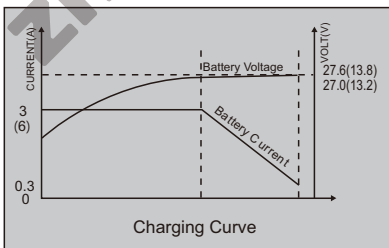
1 SUMMARY

BAC10A series switching battery charger using the latest switch power components is designed for charging lead-acid starting battery which is suitable for lead-acid battery float charge.

2 PERFORMANCE AND CHARACTERISTICS

- Designed in switching power structure, wide range of AC voltage input, small volume, light weight and high efficiency;
- Two-stage charging method(constant current firstly and then constant voltage),fully considering charging property of the lead-acid battery,can avoid overcharging and extend the battery life to the fullest;
- With short circuit and reverse connection protection;
- Charging voltage and current can be adjusted via potentiometer on the spot;
- LED display: AC power indication and charging indication;

3 CHARGING PRINCIPLE



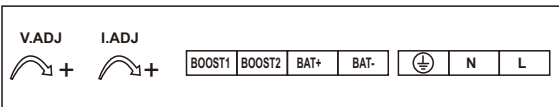
Considering charging property of the lead-acid battery, BAC10A battery charger uses 2-stage charging method and

charge mode is "constant-current".When battery voltage is under the threshold,it is charging in constant-current mode;when the battery voltage is higher than the threshold,the charging current is decreasing as the battery voltage is rising until it reaches the set voltage,and then charge mode is turned into "floating charge". Charge current is gradually reducing and battery voltage is rising up to the set value.When charging current is lower than 0.3A, the battery is basically fully charged(charging indicator eliminates). Afterwards,charging current will offset self-discharge of the battery. Thus the charger can maintain a full charged condition and extend the battery life.

4 SPECIFICATION

Category	Items	24V
Input	Nominal AC Voltage	AC (95~280)V
	Max.AC Voltage	AC (95~305)V
	AC Frequency	50Hz/60Hz
	Max.Input Current	2A
	Max.Efficiency	85%
Output	Charging Current	10A ±2% Error
	Factory Charging Current	10A
	Max.Power	275W
	Min Voltage	7.5V
	No-load Voltage	27V 1% Error
Insulation	Insulation Resistance	Between input and output, input and shell both are: DC500V 1min RL≥500MΩ
	Insulation Voltage	Between input and output, input and shell both are: AC1500V 50Hz 1min Leakage current:IL≤3.5mA
Working Condition	Working	(-30~55)°C
	Storage Temperature	(-40~85)°C
	Working Humidity	20%RH~93%RH(No condensation)
Profile	Weight	0.75kg
	Dimensi on	199mmx99mmx49mm(LengthxWidthxHeight)

5 OPERATION

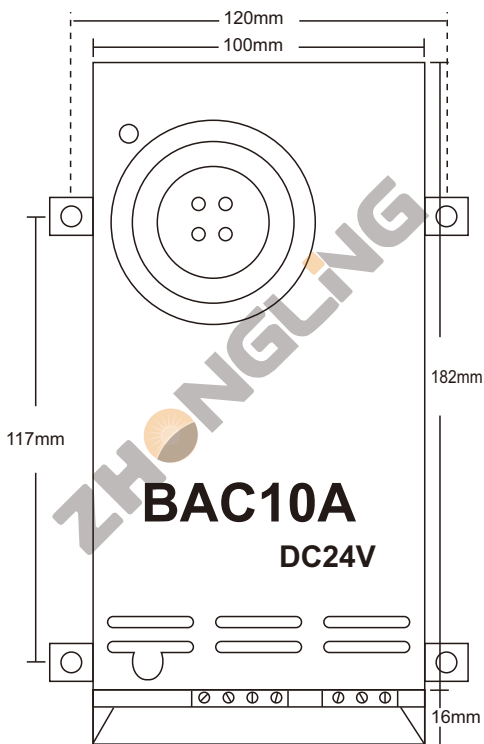


- Terminals L and N connect AC 220V, using multi-strand BVR 1mm² copper wires.
- Terminals B + and B- connect battery positive and negative, using multi-strand BVR1.5mm² copper wires.
- GREEN: Power indicator. When charger works, it'll illuminate.
- RED: Battery charging indicator. When charging current is over 0.3A, it will illuminate.
- VOLT: Voltage adjustment potentiometer.
- AMP: Current adjustment potentiometer.

Note:

- Because there is diode and current-limiting circuit inner the charger, it can be used together with charging generator, and there is no need to disconnect the charger when cranking.
- During gen-set is running, high current will cause voltage drop in charging line, so recommend separately connecting to battery terminal to avoid disturbance on saniplinq, precision .
- The voltage shown on the switch is the input rated voltage! Check input voltage avoiding damage before power on.

6 CASE DIMENSIONS



Product size: 199mm x 99mm x 49mm

Installation dimension: 120mm x 117mm