

1. Input Data:

- 1.1 Input Voltage & Frequency: Input Voltage 100~240VAC, Frequency 47Hz~63Hz;
- 1.2 Efficiency: More than 85% (load current of charger is 2.0A) ;
- 1.3 Input current: below 1.5A, when battery runs normal work;
- 1.4 Input Surge Current: When Voltage is 240VAC, Input Surge current is less than 50A;
- 1.5 Input Current Leakage: when voltage is 240VAC, leak current is less than 0.25mA;

2. Output Data:

2.1 Output Charging Voltage:

Maximum charging voltage: DC $29.6 \pm 0.30V$, float charging voltage DC $27.6V \pm 0.30V$

2.2 Output Charging Current (limited current):

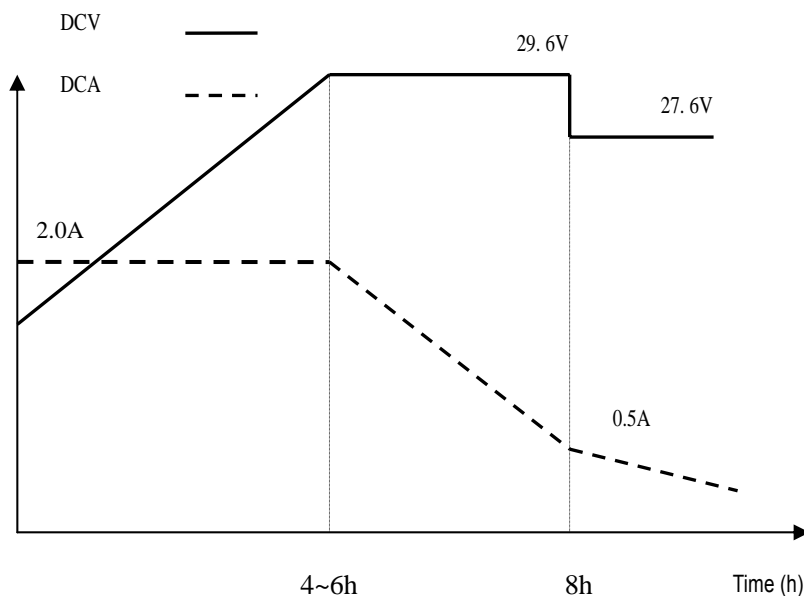
Rating charging current is DC 2.0A , in range DC 1.8A---2.2A;

2.3 LED Display:

- 1st step : LED → green (indicates power on)
- 2nd step: LED → red (indicates bulk charge)
- 3rd step: LED → green (means battery is ready to use and charge turns to float charge stage)

2.4 Output Charging Characteristic:

Relation between output voltage, current and time is as following chart:



Note: this chart is for 12V12AH battery, 2pcs use, for other 12V battery, the charging time should be adjusted accordingly.

2.5 Short Circuit Protection: This charger wouldn't be damaged in any time of short circuit.

2.6 Stability of Circuit: within the input voltage range, the charger will keep a stable performance whilst under any load;

2.7 This charger has a Polarity Protection System and will not be damaged if the polarity of connection is accidentally reversed.

3. Mechanism Characteristic:

3.1 Materials used in construction

Case: PC+ABS black;

Input Plug: UL standard plug, 0.75*2 AC cable, length 1.2m;

Output cable: AWG18# ; PVC; 1.2m black

3.2 Dimensions: L 118mm W 60mm H 37mm



3.3 Dropping Test

Charger dropped from 1.0m height to a 10mm pine board, repeat it for 4times with charger each side;

Result: no crack / break, no parts become flexible or not fastened; all related data remains correct.

With the height of 1.0m, charger fall off to 10mm pine board, 4 times/ each face;

3.4 Vibration Test:

The charger was placed upon a Vibration desk:

Frequency: 5-55Hz

Range:±1.5mm

Acceleration: 20m/s

Direction: X/Y/Z 3 directions

Test Time: 1h respectively

Result: no any damage/degeneration, all related data remains correct.

3.5 High Voltage characteristics:

A high voltage of 3,000VAC between input and output terminal, current leak is lower than 10mA, continue 60 seconds; 1 second for production line.

4. Others

4. 1 Stock Environment

Temperature : -25°C----+70°C; Humidity: 5% - 90%;

4. 2 Work Environment

Temperature:- 0°C----+40°C, Humidity: 5% - 90%;