User Manual

Caution:Please read the user manual carefully and user the product correctly based on the user manual so that you can be familiar with the product more conveniently and quickly.

Contents:

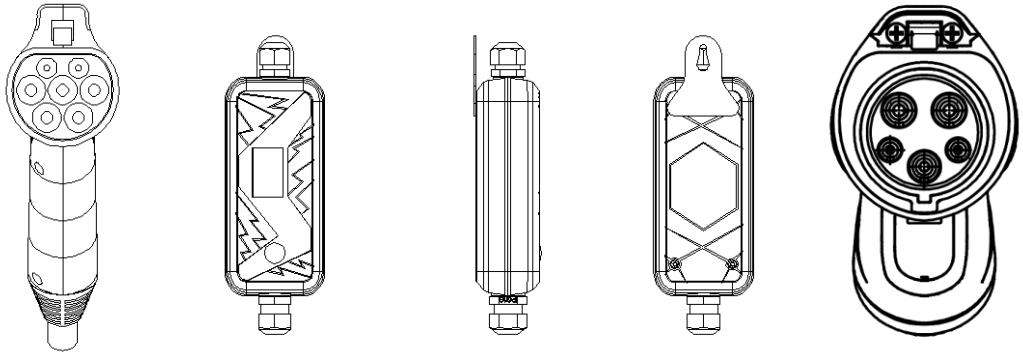
I General Information

Product Name：Ev Quick Charger

Product Model：SK-EV16

Product Part：Charge Plug、Electric Vehicle Charge Controller、 Charge Cable、Power Plug

Features



Chinese standard plug　　Charge Controller　　American standard plug

II Technical Specifications

Item	Content
Rated Input Voltage	84-264V AC
Rated Output Voltage	84-264V AC
Rated Current	Default 16A（Adjustable 10A, 13A, 20A）
Insulation Resistance	>1000MΩ （DC500V）
Contact Resistance	0.5mΩ MAX
Max. Affordable Voltage	2000V
Housing Fire Rating	UL94V-0
Wiring Harness Size	3*2.5mm^2+2*0.5mm^2
Unit N.W.	2.02KG

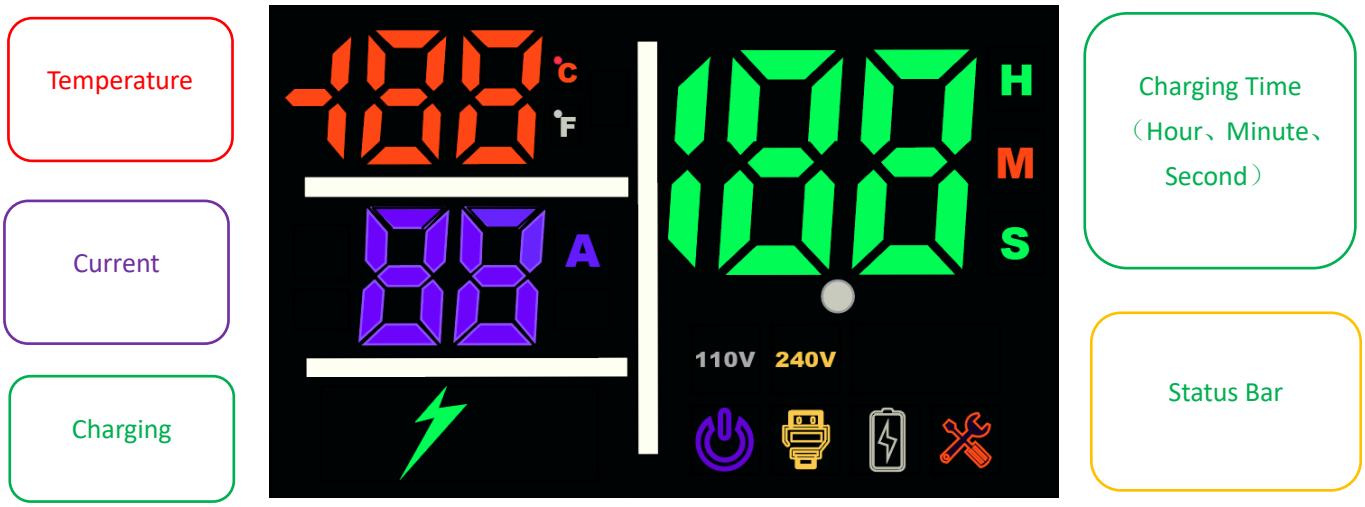
III Function

3.1Function Of Circuit Control Box

- Leakage protection(Reboot recover)

- Over-voltage or Under-voltage protection
- Over load protection (Self-checking recover)
- Lightning protection
- Over-heat protection(Cooling recover)

3.2 EV Charging Control Device And Its LED Display



3.3 Quick Guide And Functions

Rated current adjustment: After the triangle power plug is plugged in, the power indicator will light up, In the non charging state, long press the power button for more than three seconds,

then enter the rated current adjustment: short press to shift to 10A、13A、16A、20A.

Charging time: When the EV quick charger plug in the vehicle,  and  will light up, then you can short press the power button to check charging time.

Overload protection:If current effective value continuously exceed 3 times of the rating for 10s , it will self recover for 3 times every 5 mins. When the fourth, it will not self recover any more. Please manually reboot by pulling and plugging the power plug.

Over-voltage protection: NO output when voltage value is over 275(for 220V only)hysteresis voltage 10V, but it will automatic recover after power grid voltage stabilized over 5s.

Low voltage protection: NO output when voltage value is lower than 185(for 220V only)，hysteresis voltage 10V, but it will automatic recover after power grid voltage stabilized over 5s.

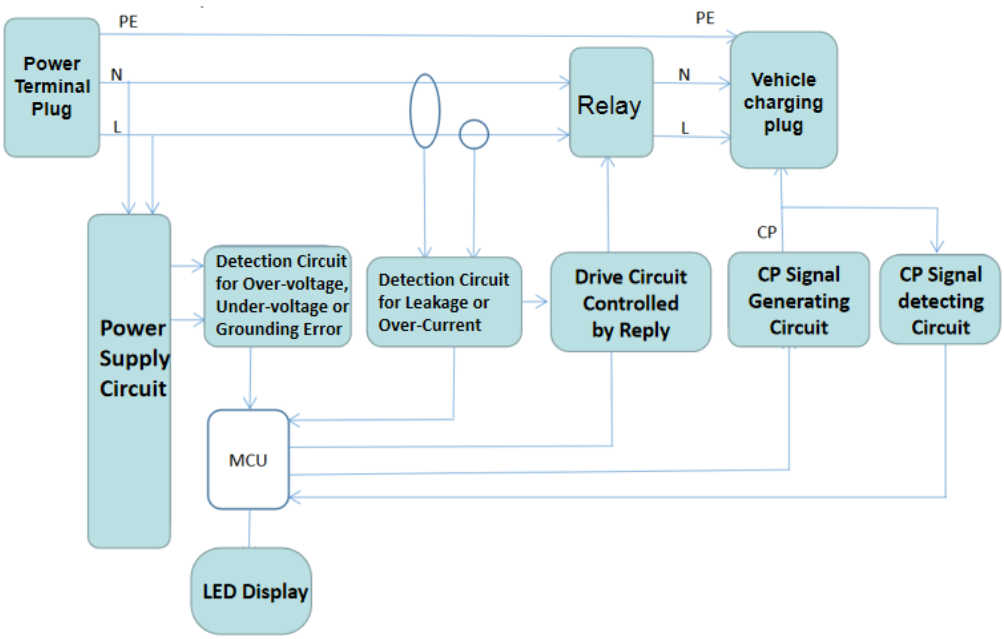
Short-circuit protection:If the current exceeds twice times of the rated current,NO output. At that time, Please manually reboot by pulling and plugging the power plug.

If temperature of the control box is over 85℃, NO output, but it will automatic recover after temperature drop back to 65℃

Lightning protection:If the charger is struck by lightning,NO output to protect rear-level circuit.

IV Schematic

4.1 Diagram Of Control Device



Power Terminal Plug

Relay

Vehicle Charging Plug

Power Supply Circuit

LED Display

Detection Circuit for Over-voltage, Under-voltage or Grounding Error

Detection Circuit for Leakage or Over-Current

Drive Circuit Controlled by Reply

CP Signal Generating Circuit

CP Signal detecting circuit

4.2 Control leading schematic circuit

➢

Power supply circuit is used for providing a suitable power supply, or protection against lightning to the entire system.

- Voltage detection circuit is used for detection of real-time supply voltage, and send the test results to the central control unit.

- Leakage and over-current detection circuit is used for detecting leakage or over-current and other dangerous conditions.

- Relay control drive circuit is for detecting the signal, and then to choose the connecting status by controlling the absorption and disconnection of the relay.

- CP signal generating circuit is used for converting the PWM generated by the central control unit into an international electric vehicle CP signal.

- CP signal detecting circuit is used for detecting the actual high and low level voltage values of the CP signal to achieve effective communication with charging pile.

- LED display is used for indicating the status of the EV quick charger.

- In the state of non-charging,The button can be used to set the rated charging current and it can be used to check the charging time information when charging.

V Safety Information

1. During charging process, mild heat of equipment is normal phenomenon but not fault.

2.

It is suggested to use the product under room temperature environment away from moisture, high temperature erosive materials or ignition source.

3.

The charger withstands large current in working process, do not contact metal conductor to prevent electric shock accident

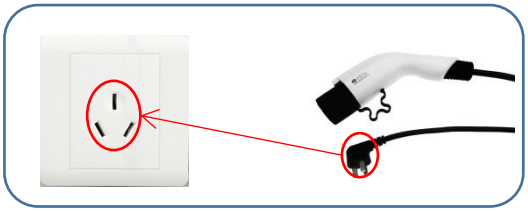
4.

Product shell is made of thermoplastic,please do not to pound it to avoid reducing performances.

5.

Do not use on electric vehicles that are not compatible with the charger charging standard.

VI Instructions



1st Plug into household 220V/110V socket

2nd:Long press the power button for more than three seconds, then enter the rated current adjustment: short press to shift to 10A、13A、16A、20A.

3rd：Insert the vehicle charging plug into the vehicle charging port

4th：After full charged, remove the charging plug from the vehicle.

Warning

1.In 16A charging mode , the minimum requirement for wire cable is 2.5 square pure copper , preferably 4 square.

2.High Power electrical Outlet is applicable of this product, Small Power ordinary household socket

Can not apply.

Small Power ordinary household socket

High Power electrical Outlet


0.8cm
1.8cm


1cm
2.2cm