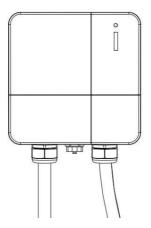
# Electric Vehicle AC Charger Installation Instructions



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#### WARNING & CAUTION

### 1. Important Safety Instructions

### 1.1 Overall Warnings & Cautions

- **WARNING:** To avoid fire, injury or death, carefully read and follow the instructions during installation, operation and maintenance.
  - **DO NOT** put fingers into the electric vehicle connector.
  - **DO NOT** use this product if the flexible power cord or EV cable is frayed, insulation-broken, or any other signs of damage.
  - **DO NOT** use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
  - DO NOT remove cover or attempt to open the enclosure because of risk of electric shock.
- **WARNING:** This device should be supervised when used around children.
- **WARNING:** This device must be grounded.
- WARNING: To avoid a risk of fire or electric shock, do not use this device with an extension cord.

| Circuit Breaker Options table |              |             |  |
|-------------------------------|--------------|-------------|--|
|                               | Single Phase | Three Phase |  |
| Output Amperage (A)           | 32A          | 16A         |  |
| Circuit Breaker Options (A)   | 40A          | 20A         |  |

### A WARNING & CAUTION

### **1.2 Installation Requirements**

- **WARNING:** Disconnect electrical power prior to installing the charging station.
- **WARNING:** Be sure to preview the user manual and ensure local building and electrical codes are reviewed before installing the AC charger.
- WARNING: The AC charger should be installed by a qualified technician according to the user manual and local safety regulations.
- **!** CAUTION: Use appropriate protection when connecting to the main power distribution cable.
- **CAUTION:** Type B, C or D breaker with the rating current for table should be installed in the upstream AC distribution box.
- **CAUTION:** The device shall be mounted at height between 600 mm and 1200 mm from ground.
- **!** CAUTION: Please keep the charger in a clean area with low humidity. Not recommended to be installed in coastal environments with high humidity or high dust.

### 1.3 Daily Maintenance

- **CAUTION:** Avoid moisture or water in the charger. If there is water or moisture ingress in the charger, it is necessary to immediately power off to avoid immediate danger, and notify the professionals to carry out maintenance before next use.
- **CAUTION:** Please use the charger properly. Do not hit or press hard on the enclosure. If it is damaged, please contact a professional technician.
- **CAUTION:** Avoid placing the charger near hot objects and at high temperature locations and away from dangerous substances such as flammable gases and corrosive materials.
- **!** CAUTION: Do not put heavy objects on the charger to avoid danger.

### 2. Product Introductions

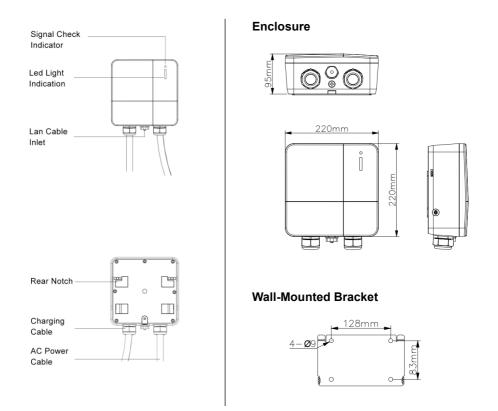
**CAUTION**: Avoid placing the charger near hot objects and at high temperature locations and away from dangerous substances such as flammable gases and corrosive materials.

2.2 Basic Dimension

### 2.1 Basic Interface

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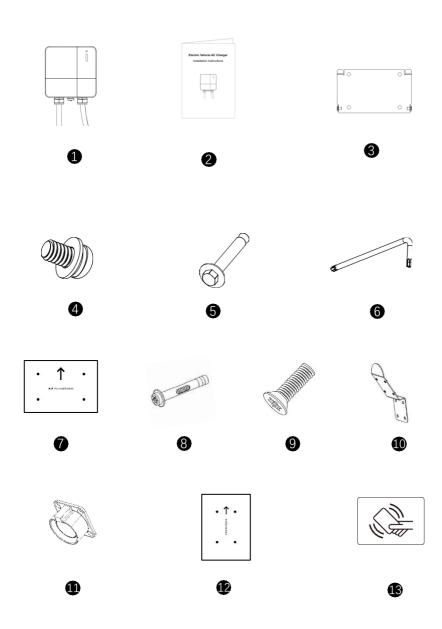
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# 2.3 Specifications

| Model Number                | EVC27                                    |                            |  |
|-----------------------------|--|----------------------------|--|
| Rated Input Voltage         | 230VAC ± 10% / Single Phase              | 400VAC ± 10% / Three Phase |  |
| Rated Output Current        | 32A                                      | 16A                        |  |
| AC Power Frequency          | 50/60 Hz                                 |                            |  |
| Input Protection            | UVP, OVP, RCD(DC 6mA), SPD,              |                            |  |
|                             | Ground Fault Protection                  |                            |  |
| Output Protection           | OCP, OTP, Control Pilot Fault Protection |                            |  |
| Output Interface            | IEC 62196-2 AC Charging Connector        |                            |  |
| Storage Temperature         | -40°C to +80°C                           |                            |  |
| Operation Temperature       | -30°C to +50°C                           |                            |  |
| Relative Operation Humidity | Up to 95% non-condensing                 |                            |  |
| Relative Storage Humidity   | Up to 95% non-condensing                 |                            |  |
| Network Connection          | LAN Version / Wi-Fi Version              |                            |  |
| Internet Function           | 10M / 100M                               |                            |  |
| Wi-Fi Function              | 802.11 b/g/n                             |                            |  |
| Cable Length                | 5m Standard (7m Optional)                |                            |  |
| Protection Level            | IP65/IK08                                |                            |  |
| Altitude                    | 2000m                                    |                            |  |

# 3. Verify Contents

Check the box to ensure you have this installation guide and these parts:

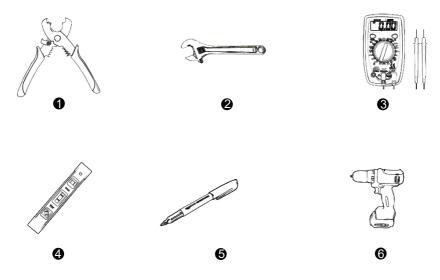


| No. | Product Name               | Quantity | Description                           |
|-----|----------------------------|----------|---------------------------------------|
| 1   | AC Charger                 | 1        | With attached input power cable       |
|     |                            |          | and output charging cable             |
| 2   | User Manual                | 1        | Please read carefully before use      |
| 3   | Wall-Mounted Bracket       | 1        | For mounting the charging station to  |
|     |                            |          | the wall/structure                    |
| 4   | M5 Anti-Theft Round        | 2        | For securing the charging station to  |
|     | Head Screws                |          | the Mounting Bracket                  |
| 5   | M6 Hexagonal Expansion     | 4        | For installing the Mounting Bracket   |
|     | Screws                     |          | to the wall/structure                 |
| 6   | Allen Wrench               | 1        | For tightening M5 Screws              |
| 7   | Corrugated Mounting        | 1        | For easy drilling of 4 screws holes   |
|     | Template                   |          | for wall-mounted bracket.             |
| 8   | M6 Anti-Theft Hexagonal    | 4        | For installing the Holster Bracket to |
|     | Expansion Screws(Optional) |          | the wall/structure                    |
| 9   | M5 Anti-Theft Countersunk  | 4        | For securing the Plug Holster to the  |
|     | Head Screws (Optional)     |          | Holster Bracket                       |
| 10  | Holster Bracket (Optional) | 1        | For mounting the Plug Holster to the  |
|     |                            |          | wall/structure                        |
| 11  | Plug Holster(Optional)     | 1        | For allowing the plugs to be neatly   |
|     |                            |          | and safely stored when not in use.    |
| 12  | Corrugated Mounting        | 1        | For easy drilling of 4 screws holes   |
|     | Template (Optional)        |          | for holster bracket.                  |
| 13  | RFID Card(Optional)        | 2        | Control the charger start/stop        |

# 4. Gather Tools

Tools required before installing the Wall-Mounted charger, gather the following tools:

- 1. Wire stripper
- 2. Adjustable Wrench
- 3. Voltmeter or digital multi-meter (for measuring AC voltage at the installation site)
- 4. Level
- 5. Pencil or marker
- 6. Drill



Note: The above tools are very important, please gather them all.

# 5. Plan The Mounting



**WARNING**: In areas with frequent thunderstorms, add surge protection at the service panel for all circuits. Ensure all power and ground connections, especially those at the breaker and bus bar, are clean and tight.

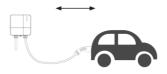


**CAUTION**: Not recommended to be installed in coastal environments with high humidity or high dust.

#### STEP 1

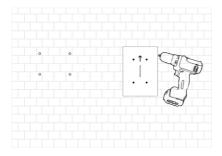
**Select** the appropriate mounting location with electrical capacity:

 Ensure the owner has chosen a mounting location that allows the charging cable to reach the car's charging port while still providing slack.



- II. The device must be anchored into mounting such as 50mm x 150mm stud or a solid wall.
- III. The device shall be mounted at height between 600 mm and 1200 mm from ground.

#### STEP 2 (Holster is optional)



**Drill 8 Screw Holes** with a diameter of 8.5mm and a depth of 55mm~60mm by using 2 mounting templates. Please drill screw holes in the direction of the template arrow. And use two templates at a horizontal distance around 300mm.

# 6. Mount the Charging Station

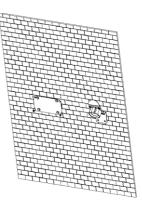
### STEP 3 (Holster is optional)

**Secure** the Plug Holster to the Holster Bracket with 4 M5 Anti-theft countersunk head screws. Please ensure the grooved part of the inner ring is always downward.

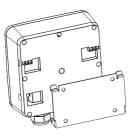


#### STEP 4 (Holster is optional)

Use 2 different sets (8 pcs in total) of Hexagonal Expansion Screws to secure the wall-mounted bracket and holster bracket (use anti-theft hexagonal expansion screws) on the wall. Then level the brackets.



STEP 5



Align the rear notch of charger with the wall-mounted bracket and fit the screw holes of the right and left side.





**Tighten** two M5 anti-theft screws to complete the installation.

# 7. Wire The Circuit



**WARNING**: This device must be grounded. Disconnect electrical power prior to installing the charging station.



**WARNING**: Improper connection of the equipment-grounding conductor would result in a risk of electric shock. Check with a qualified electrician or serviceman if you are not sure whether the product is properly grounded. Do not modify the plug provided with the product – if it doesn't fit the outlet, have a proper outlet installed by a qualified electrician.



**CAUTION**: Use appropriate protection when connecting to the main power distribution cable.

### 7.1 Incoming cable connection

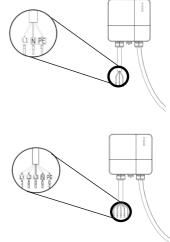
For safe use of electricity, please set circuit breaker protection in the input part of EV Charger. The wiring is not complicated, just need to follow the instructions below:

#### For Single Phase

Connect the L1 lead to the grid L1, connect the L2 lead to the grid L2, connect the PE lead to the grid PE.

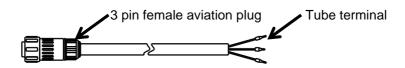
#### For Three Phase

Connect the L1 lead to the grid L1, connect the L2 lead to the grid L2, connect the L3 to the grid L3, connect the N lead to the grid N, connect the PE lead to the grid PE



### 7.2 Load balancing connection (CT-BOX Optional)

### Signal wire introduction



### Signal wire connection

Connect the female aviation plug of the signal wire to the charger's load balancing socket and tighten them.

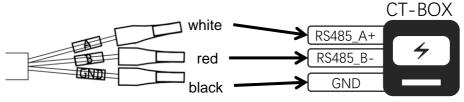


Connect three E0308 tube terminals of the signal wire to the CT BOX according to the number of the terminals and colors.

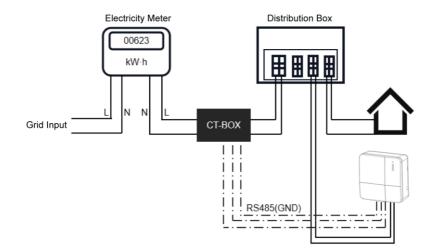
Connect white terminal to RS485\_A+

Connect red terminal to RS485\_B-

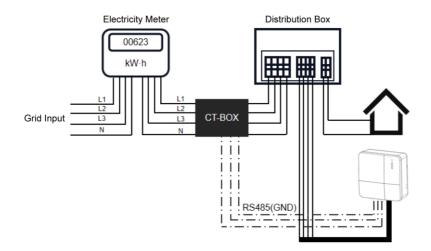
Connect black terminal to GND



### Single Phase

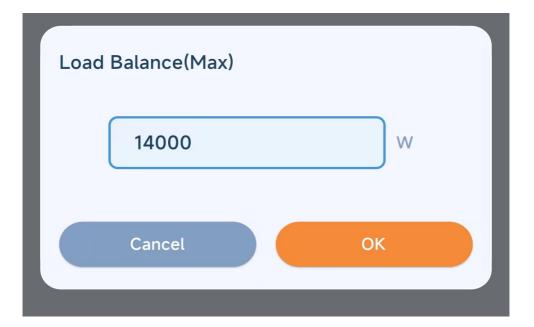


### Three Phase



### **APP settings**

After completing the circuit connection, please click gear icon which means advanced settings in the upper right of the app and set the max power. In order to avoid frequent tripping of the main circuit breaker during normal operation, it's recommended to set this value slightly lower than the maximum power supply of the main circuit breaker. For example, if the maximum power supply is 15000W, the maximum power of load balancing can be set to 13000W or 14000W



# 8. Operate Your Device



**WARNING**: This device should be supervised when used around children.



**CAUTION**: Please use the charger properly. Do not hit or press hard on the enclosure. If the case is damaged, please contact a professional technician.

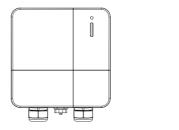


**CAUTION**: Do not put heavy objects on the charger to avoid danger.

### 8.1 Operating Steps with Plug and Charge

### STEP 1

Standby Mode: After being powered on, the lights will be all on, blue light (READY), green light (CHARGE) and red light (FAULT). Then the blue light (READY) is constantly on in standby mode.



### STEP 2

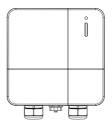
**Plug the Charging Connector:** Please plug the charging connector into the vehicle charging inlet.



### STEP 3

**Charging:** The green light (CHARGE) turns to flash automatically, charging is in process.

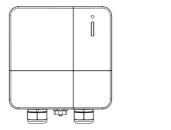
- If the red light (FAULT) is on, plug the vehicle connector again.
- If red light is still on, please refer to "Error and Warning Messages".





#### STEP 4

**Charging finished:** When the charging is finished, the green light (CHARGE) is constantly on, please press the button on connector and pull out the charging connector.



### 8.2 Smart APP Guide (Optional)

- 1. Download S-Charge app
- 2. Follow the tutorial in APP to connect your device.





# 9. Light Codes

### 9.1 Signal Indicator

| Not<br>connected | Connecting    | Connected   | Connection<br>failed |
|------------------|---------------|-------------|----------------------|
|                  |               | i<br>t      |                      |
| Solid blue       | Blue blinking | Solid green | Solid red            |

### 9.2 Status Indicator

| Standby,<br>waiting to plug<br>in | Waiting to<br>charge,<br>communicating<br>with vehicle | Charging in progress | Finished<br>charging | Fault     |
|-----------------------------------|--|----------------------|----------------------|-----------|
|                                   |  |                      |                      |           |
| Solid Blue                        | Solid Green  | Green Blinking       | Solid Green          | Solid Red |

## 9.3 Error and Warning Messages

| Fault Status        | Red                                 |
|---------------------|-------------------------------------|
| Voltmeter fault     | 1 flash followed by 3 sec pauses    |
| Control pilot fault | 2 flashes followed by 3 sec pauses  |
| Input UVP           | 3 flashes followed by 3 sec pauses  |
| Input OVP           | 4 flashes followed by 3 sec pauses  |
| OTP                 | 5 flashes followed by 3 sec pauses  |
| OCP                 | 6 flashes followed by 3 sec pauses  |
| Ground fault        | 7 flashes followed by 3 sec pauses  |
| Relay fault         | 8 flashes followed by 3 sec pauses  |
| RCD abnormal        | 9 flashes followed by 3 sec pauses  |
| RCD self-test fault | 10 flashes followed by 3 sec pauses |

# 10. Warranty and Maintenance

• The warranty period for this charger is two years.

• During the warranty period for any malfunction under normal use according to the User Manual and Service Instructions (to be determined by certified maintenance technicians of sellers), the product shall be repaired free of charge. Except for the following situations, the charger shall be subject to the above warranty terms:

1. The warranty certificate cannot be provided or the contents of the warranty certificate are modified or inconsistent with the label indication of the repaired product.

2. Those who are unable to provide valid proof of purchase.

3. Those who exceed the manufacturer's specified warranty period.

4. Those who damage the product due to not following the product service instruction for use, maintenance and storage.

5. Damage or malfunction caused by external object entering.

6. Unauthorized repair, disassembly or modification.

7. Damage caused by force majeure (such as lightning, excessive voltage, earthquake, fire, flood, etc.).

8. Malfunction and damage caused by other unavoidable external factors. Malfunction and damage caused by improper use of equipment, such as water or other solutions entering into the equipment.

9. Malfunction and damage caused by the grid power supply and voltage which is not specified for use with the charger equipment.

The above guarantees shall be made solely, and no other express or implied warranties shall be made (including the implied warranties of merchant ability, particular and applicable reason- ableness and adaptability, etc.) whether in the contract, civil negligence, or other aspects, the Company shall not be responsible for any special, incidental or consequential damages.