

# ELECTRIC VEHICLE CHARGER



**Model: EVC1S-32**

READ AND SAVE THESE INSTRUCTIONS  
Installer: Leave this manual with the homeowner



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# SAFETY INSTRUCTIONS

**Important note:** Please read this booklet before installing and switching on this appliance. The manufacturer assumes no responsibility for incorrect installation and usage as described in this booklet. Keep the instruction book for future reference. All the information in the manual is valid for the charging station model in this manual.

This instruction book details the install guidance for the EV car charger. If you're unsure which model you have, please check the rating label on the bottom of the charger.

The unit is designed for installations inside or outside, with the Innovative safety systems we have built into the charger ensuring its safe usage. This guidance provides information to assist when installing the unit. The charger must be professionally installed by a qualified electrician according to local and national regulations applicable at the time of installation and used in accordance with the manufacturer's instructions.

The unit is designed to be connected to an electrical installation that already complies with BS7671 standard as a minimum. The unit should be connected to one dedicated AC supply only and the supply must be adequately rated for the additional load required for EV charging.

- This unit must be grounded (Earthed).
- This unit is only to be installed by a qualified electrician in accordance with local building and electrical codes and standards.
- This unit is designed to be installed on a electrical supply voltage of AC220V~240V 50/60Hz.
- The charger must be installed on a secure solid surface that can support the weight of the charger. Failure to install on a secure surface or not in accordance with electrical regulations could lead to death, personal injury, or property damage.



# SAFETY INSTRUCTIONS

- This appliance is designed to be used by adults, do not allow children to play with the appliance or let them hang over the charger.
  - Do not put fingers into the socket.
  - This unit is not suitable for use in dangerous places where there is high amounts of dust, dangerous gas or in an explosive and flammable environment.
  - In order to ensure the electrical safety of the unit, the product body shell must be fixed to the correct position with fasteners that come with the product and the seals used to ensure the IP rating is maintained.
  - The unit's inlet position (front face) must be tightly sealed to be waterproof and dustproof to ensure the products IP rating.
  - Do not use this unit other than its intended purpose.
  - Do not plug in a damaged charging lead.
  - Disconnect the charging lead from the vehicle and charging unit prior to driving off.
  - Ensure the charging lead is not left in the charger when not in use. If the charging lead is left in the charger the end cap of the charging lead must be fitted to prevent the ingress of water.
  - Do not plug-in or un-plug the appliance with wet hands to prevent electrical shock.
  - Do not use a power washer to clean or wash the car charger.
- It is recommended not to use in a location that can be reached by rain, suggest increase rain protection measures.
- Do not install in areas of high-risk chance of impact by vehicles or a high risk of trip hazard.

**Important:** Under no circumstances will compliance with the information in this manual relieve the user of his/her responsibility to comply with all applicable codes or safety standards. If you have any queries, contact us at the address or telephone number below.

# USER INSTRUCTIONS

## PRODUCT DATA

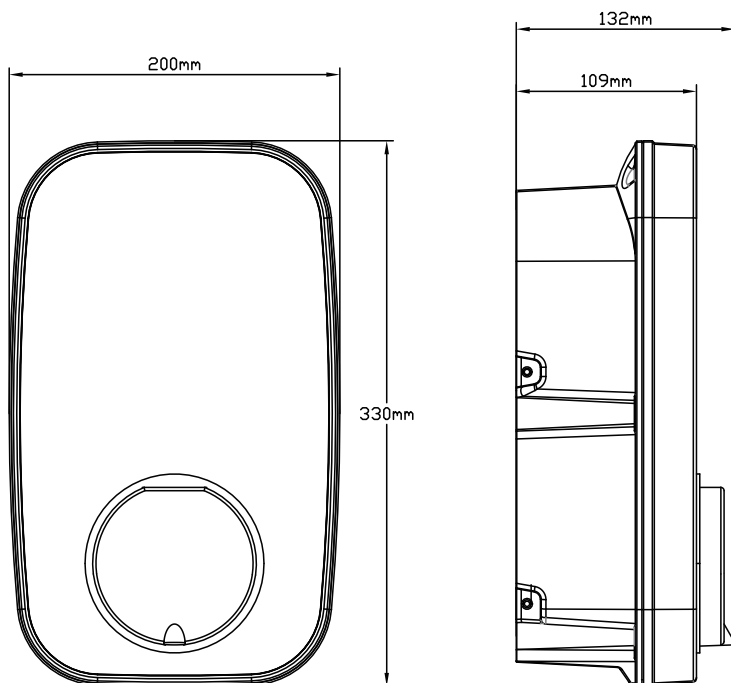
Model	EVC1S-32
Description	Socket EV Charger
Dimensions	200mm x 330mm x 109mm (W x H x D)
Net Weight	1.9KG
Enclosure Material	ABS+PC, Flammability Rating V - 0
Operating Temperature	-25°C to +50°C
Protection	IP65 - Enclosure, IP54 - Socket
Altitude	up to 2000m

## ELECTRICAL DATA

Rated Output	up to 7.4kW
Rated Current	up to 32A max
Adjusting output	10A,13A,16A,32A
Input Voltage	AC220V~240V 50/60Hz
Over Current Protection	32A-Recommended 35.5A
	16A-Recommended 20A
	13A-Recommended 20A
	10A-Recommended 16A
Residual Current Device	AC30mA+DC6mA
Charging Socket	IEC 62196 (Type 2)
adaptive cable	Type2 to Type1 & Type2 to Type2

# USER INSTRUCTIONS

## PRODUCT DIMENSIONS



# USER INSTRUCTIONS

## INDICATOR LIGHT

### **Important:**

1. Charging: Insert the cable into the electrical vehicle first and then into the charger.
2. To STOP charging: unplug the cable from the electrical vehicle, and then from the charger.

**WARNING:** It is not recommended to turn off the power to the charger during charging.

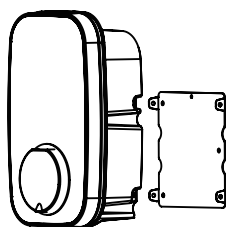
Light Display Status	Product Status
Blue, green and red flashing alternately	Product over-on self-check
Blue light glowing	Standby
Blue light flashing	Connection confirmation
Green light glowing	Charging
Red light glowing	Over temperature protection

# INSTALLATION INSTRUCTIONS

## UNPACKING

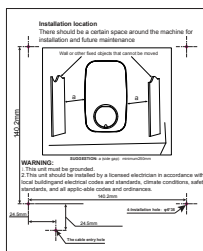
1. Scratch or remove the sealing tape and take out the unit
2. Follow the **ATTACHMENT** to check all items and to see if there are any omissions.
3. Check the unit is correct and whether it matches with order model.
4. Check whether the unit has defects or is damaged due to defectiveness or transportation.
5. Make sure all packaging is disposed of responsibly and in accordance with the current regulations in your region.

## ATTACHMENT

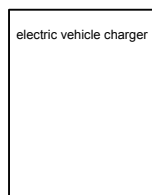


1 x EV Charger & 1 x Fixing bracket

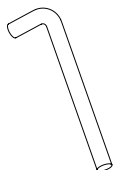
NOTE: It is integrated from factory, and separated when installed.



1 x Installation template



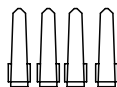
1 x Manual



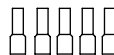
1 x Elbow wrench



4 x Screw  
ST4.2\*32



4 x Wall Plugs  
M6\*30



5 x Wiring cap



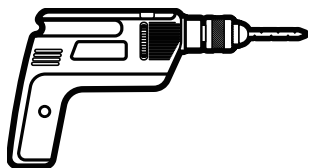
1 x Sealing rubber



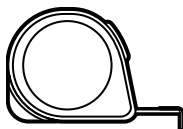
1 x Cable Gland PG19

# INSTALLATION INSTRUCTIONS

## TOOLS/MATERIALS REQUIRED (NOT INCLUDE)



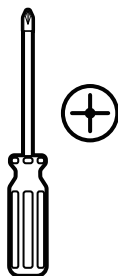
Electric drill



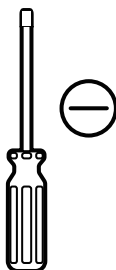
Measuring tape



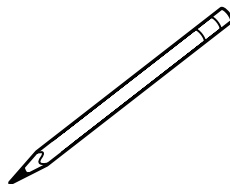
Safety gloves



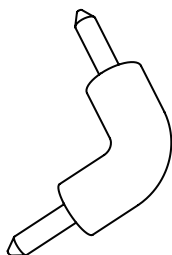
Phillips screwdriver



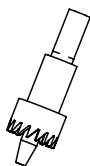
Slotted screwdriver



Pencil



Electric elbow tool



Hole Saws

Mode 1:  $\Phi 24\text{mm}$  (Bottom hole)

Mode 2:  $\Phi 18\text{mm}$  (Back hole)

# INSTALLATION INSTRUCTIONS

## **BEFORE INSTALLATION**

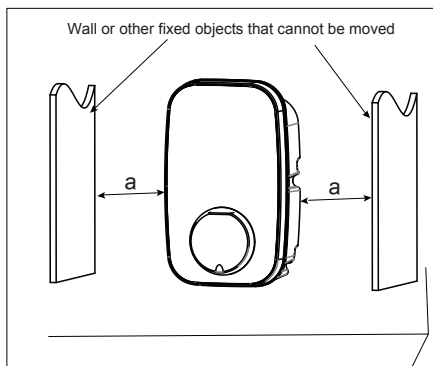
1. Installer or end user must read and understand all the content covered in this manual before installing or using this unit.
2. Choose a suitable installation location according to the installation conditions stated in the warning.
3. Make sure that the installation location complies with current laws and regulations.
4. Confirm that there is a suitable input voltage power supply at the installation site (consistent with the nominal power supply of the product).
5. Make sure the supplied fixings are suitable for the mounting location. If not suitable, alternatives must be obtained locally before proceeding with the installation.

## **INSTALLATION LOCATION**

There should be a certain space around the machine for installation and future maintenance.

### **SUGGESTION:**

a (side gap): minimum 250mm.



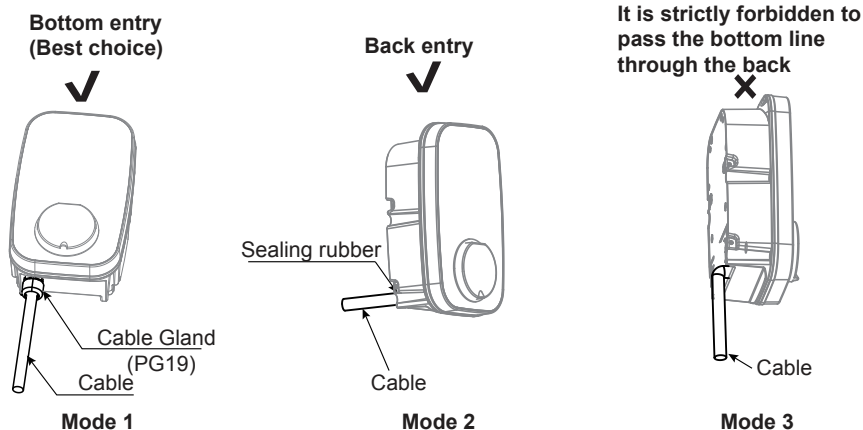
## **WARNING**

- ▲ Make sure that the power source is turned off before installing the unit.
- ▲ Manufacturers and distributors are not responsible for any loss or related responsibilities caused by any incorrect installation.
- ▲ The installer shall be responsible for the loss and damage of the product, system or property caused by improper installation.

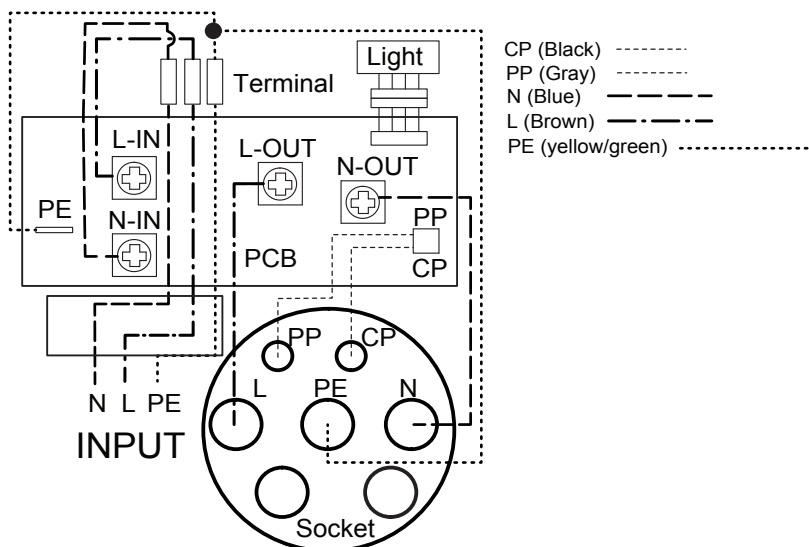
# INSTALLATION INSTRUCTIONS

## Important:

Before installing the unit, it necessary to confirm the way of the product's cable entry. Mode 3 cable entry is strictly prohibited.



## CONNECT ELECTRICAL WIRING



Type A or Type B according to local regulations. When residual current detection is present RCCB Type A could be sufficient.



# INSTALLATION INSTRUCTIONS

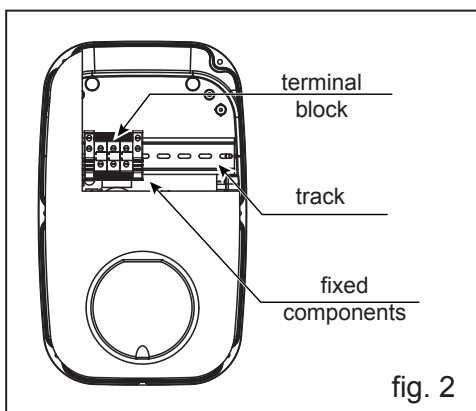
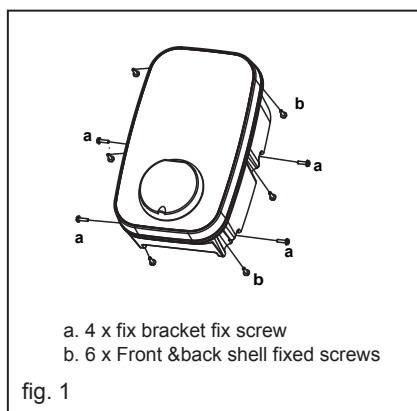
## INSTALLATION

1. Take the unit and remove the 4 screws on its fixing bracket (The unit is integrated with the fixing bracket and needs to be disassembled first). Keep the screws and fixing bracket for subsequent use;
2. Remove the 6 fixing screws on the front shell and the rear shell, save the screws for subsequent use;

Note: 1 reference fig.1 for steps 1 and 2.

3. Open the front shell carefully. The front shell is connected to the unit body through a cable. Be careful not to damage or break the cable.

**Caution:** After opening the front shell, visually inspect the inside. If the wiring terminal block or the fixed component falls off the track, it can be installed back to the track by itself (reference fig. 2)



4. **Inlet wire mode 1:** use the installation template to mark the fixed bracket installation hole position.

**Inlet wire mode 2:** use the installation template to mark the position of the fixing bracket installation hole and the cable entry hole.

**Note 1:** Inlet wire mode 2 which need to pay attention to the correct direction of the installation template.

**Note 2:** Make sure that the installation template itself is level when the position is marked.

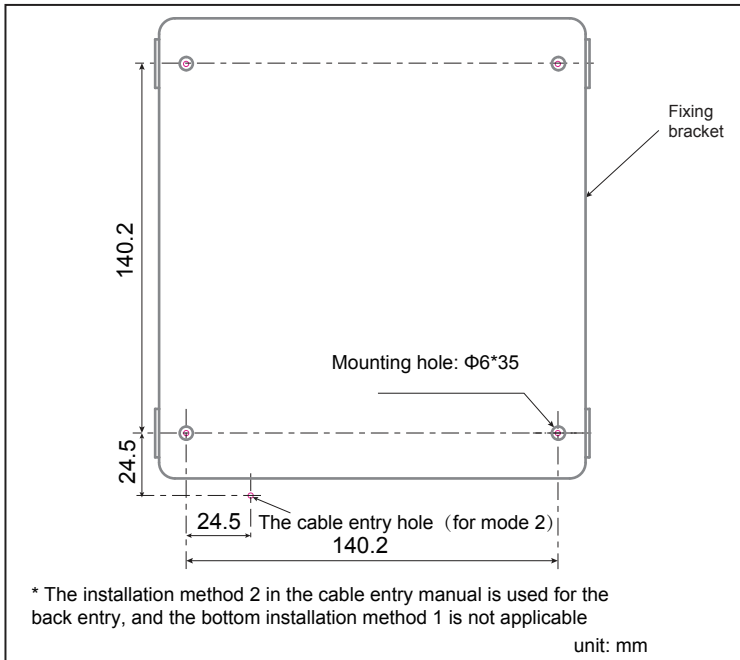
**Note 3:** Refer to Installation template

# INSTALLATION INSTRUCTIONS

5. Punch holes according to the punching information prompted by the installation template, and ensure that the punch positions are accurate.

(1). Fixed bracket mounting hole has a diameter of 6mm and a depth of about 35mm.

(2). Inlet wire mode 2, diameter of the cable entry hole needs to be defined according to the actual cable selection.

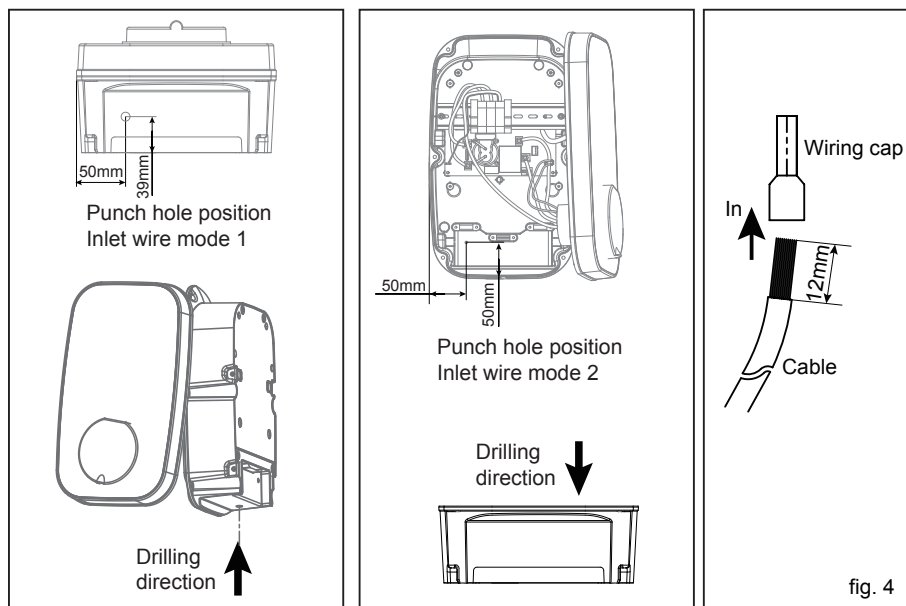


6. Fixing bracket installation hole inner - insert wall plugs, and use attachment screws(ST4.2\*32) fixing fixed bracket to the mounting surface and ensure the screws are fastened well.

**Note:** If the screws are not fastened well, the fixing bracket may become loose and may interfere with the installation of the housing.

7. According to the size and position given below, open the cable hole on the shell.

# INSTALLATION INSTRUCTIONS



**NOTE 1:** Inlet wire mode1, open hole size must be accurate, and the hole diameter is 24mm.

**NOTE 2:** Inlet wire mode 2, open hole size must be accurate, and the hole diameter is 18mm

**WARNING:** Remove burrs or capes around the hole caused by the opening to prevent affecting the seal level of the seal.

**WARNING:** Do not damage hand、body and internal components, especially internal wiring,

8. Clean and remove all the debris that has fallen into the shell due to the punching.

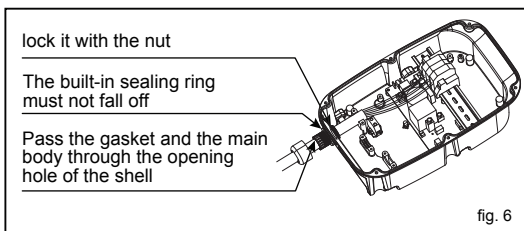
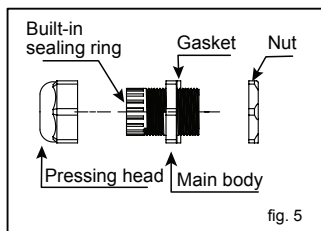
9. Inlet wire.

## MODE 1

a1. Split the cable gland into three parts as shown in Fig. 5.

a2. Pass the gasket and the main body through the opening hole of the shell and lock it with a nut, as shown in Fig. 6.

# INSTALLATION INSTRUCTIONS



a3. Insert the pressing head into the cable, and then thread the cable into the main body that cannot be pulled off, as shown in Fig. 7.

a4. Trim and cut the cable to the proper length, lock the pressing head to secure the cable.

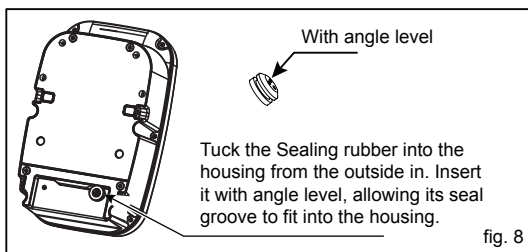
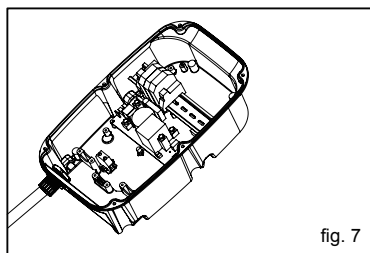
a5 refer to this article connect electrical wiring to connect the cable to the terminal block.

**NOTE:** connecting wiring reference fig. 4

**WARNING:** To ensure the rated IP protection level of the product, must use the cable gland in the accessories.

a6. Confirm and remove the debris inside the housing caused by punching and wiring.

a7. Ensure that all cables are connected correctly and securely, and are not loose or damaged.



a8. Screws lock the front and rear shells tightly.

**Caution:** Need to use the screws removed from the original position.

Before installing the front shell, it must be ensured that the sealing strip in the front shell groove has not fallen off and is in the right position. Ensure that all seals performed on the unit can reach the IP rating.

a9. Screw the unit to the fixed bracket.

**Caution:** Use the screws removed from the original position.

**Note:** a8, a9 refer to fig. 1, reverse operation.

# INSTALLATION INSTRUCTIONS

## MODE 2

b1. Insert the sealing rubber into the housing, as shown in Fig 8, insert the bare wire into the sealing rubber, one hole corresponds to one bare wire, after all the wires are inserted, leave enough length of the cable to connect to the terminal block.

**NOTE:** To ensure the rated IP protection level of the product, must use the sealing rubber in the accessories.

b2. Screw fastening the entire rear shell to the fixing bracket.

**Caution:** Use the screws removed from the original position.

b3. Refer to this article connect electrical wiring to connect the cables to the terminal block.

**NOTE:** connecting wiring refer to fig. 4

b4. Seal the opening on the back to achieve the unit's IP rating.

**Warning:** sealing is very important. This involves the safety of the product and must be paid attention.

b5. Screws lock the front and rear shells tightly.

**Caution:** Use the screws removed from the original position.

Before installing the front shell, it must be ensured that the sealing strip in the front shell groove has not fallen off and is in the right position.

Make sure that all seals performed on the unit can reach the IP rating.

**Note:** if there is no suitable electric tool, the elbow wrench provided in the accessories can be used to tighten the screws of the front and rear shells.

**IMPORTANT NOTE:** It is the responsibility of the installing engineer to satisfy themselves, that all cable terminations throughout this product are secure and tight and have not become loose, strained, or disconnected during transit and/or installation.

**After the front and rear shells are installed, check whether there is a loose gap between the front and rear shells. Make sure that there is no loose gap.**

# INSTALLATION INSTRUCTIONS

## SET THE CHARGER POWER

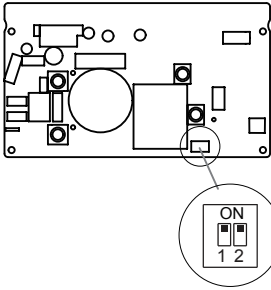




You need to set the corresponding position of the current DIP switch according to the thickness of the incoming wire and the rated current of the air switch (factory setting 32A).

The thick wire can cover the current corresponding to the thin wire downward, and the breaker switch with large current can cover the small wire downward or a lower power is required, refer to the steps below.

**Caution:** The following operations must be powered off.

1. Locate the position of the two-position DIP switch on the power supply board, like picture.
2. Setting the switch to the desired position:

**WARNING:** Electrical Power Switches must only be set by a qualified electrical installer. Incorrect setting may lead to equipment damage and / or personal injury. The current rating must not exceed the supply rating.

	DIP switch position				
	Current(A)	32	16	13	10
	Min. wire size (copper)	6mm <sup>2</sup> or 10AWG	2.5mm <sup>2</sup> or 13AWG	2mm <sup>2</sup> or 14AWG	1.5mm <sup>2</sup> or 15AWG
	Circuit breaker (Amps)	40	20	20	16

# MAINTENANCE

## INSPECTION

1. **This unit must be grounded (Earthed).**
2. Switch ON the power to the unit and test in accordance with the current Electrical Wiring Regulations.

**NOTE:** Make sure this product has been installed in compliance with the current Electrical Wiring Regulations.

3. Make sure you are satisfied that the installation is complete and is in a safe condition.

### **WARNING: Electrical Power**

**The charger enclosure does NOT need to be opened for routine maintenance tasks.**

1. Regularly clean the external surfaces of the equipment with a damp cloth. In order to avoid damaging the surface smoothness, do not clean the internal parts with soluble substances and alcohol.
2. Regularly inspect the exterior of the equipment for visual damage, if damage affects safety, isolate the equipment and prevent its use until appropriate repairs have been completed.
3. Once a year, the charger and switchgear (if installed) should be electrically inspected by an appropriately qualified electrician in accordance with the current legislation for the installation location. A record of the tests and results must be kept.

## TROUBLESHOOTING

Red light flashing	one fast, two slow	Other faults
	two fast, one slow	Over current protection
	three fast, one slow	Leakage power protection
	three fast, two slow	Undervoltage protection
	four fast, one slow	Overvoltage protection
	six fast, two slow	Adhesion protection
	seven fast, one slow	Ground error

### **Product Disposal**

In accordance with European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in national law, used electrical devices must be collected separately and recycled in an environmentally responsible manner.

Ensure you return your used device to your dealer or obtain information regarding a local, authorised collection and disposal system. Failure to comply with this EU Directive may result in a negative impact on the environment.

