# **ELECTRIC VEHICLE CHARGING BOX**

User Manual



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# Preface

This product is designed and manufactured according to IEC61851 and SAEJ1772 international standards.

### Use limitations of the Electric Vehicle Charging box

This EV charging box is designed for use in the following conditions:

Sea level < 2000m

Surrounding Temperature -40  $^{\circ}$ C ~ 45  $^{\circ}$ C

Relative humidity of < 85%.

More severe conditions require special instructions when ordering.

### **Precautions and dangers**

Note: please follow the safe use instructions and legal notes.

The EV Charging Box must always be installed according to the legal requirements in the country of installation.

### Danger: voltage hazard

This product can cause serious injury if you come into contact with its internal parts during work. Furthermore, please disconnect the power supply after use.

### Repair:

Do not try to repair the product. In case of problems please contact the customer service.

### Warning: opening the device without permission may cause danger

Opening the device without permission may cause harm to the user or cause significant damage to itself or the surroundings.

### Note: unauthorized modification of the device will result in the loss of manufacturer's warranty

No unauthorized modification of the device is allowed, any attempt to do so and the manufacturer's warranty will be revoked.

# **Safety Precautions**

- 1. Do not put inflammable, explosives, combustible materials, chemicals, combustible steam and other dangerous articles near the charging pile.
- 2. Keep the charging connector head clean and dry. In case of dirt, wipe it with a clean dry cloth. It is strictly prohibited to touch the core of the charging connector core with your hand while it is charging.
- 3. It is strictly prohibited to use the EV Charging Box if there is visible damage, cracks, abrasions or exposed metal in the connector or charging cable. In case of such, please contact the After Sales Service.
- 4. Do not attempt to dismantle, repair or modify the EV Charging Box. If in need for repair or modification, please contact the After Sales Service. Improper operation may cause damage, water leakage, power leakage or other situations which can lead to personal injury or product failure.
- 5. In case of rain and thunder, be cautions when charging.
- 6. Children are not allowed to approach or use the EV Charging Box during the charging process in order to avoid injury.
- 7. Do not attempt to charge the vehicle when moving. The vehicle must be at a complete stand still during the entire charging process.

# 1.Product Introduction

### 1.1 Product introduction

This product is a single-phase or three-phase EV Charging Box, solely used for ac charging of electric vehicles. The equipment adopts industrial design principles. The protection level of the EV Charging Box reaches IP55, with good dustproof and waterproof functions, and can be operated and maintained safely outdoors. This series Electric Vehicle Charging Box come in two version: the cable version and the socket version.

Cable



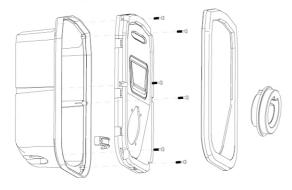


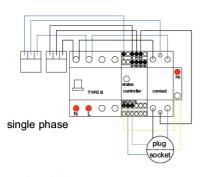
Socket

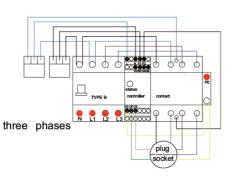
Туре	E5T1132/ E5T2132	E5T2332	E5T2232	E5T2432
AC power	1P+N+PE	3P+N+PE	1P+N+PE	3P+N+PE
Power supply Voltage	AC230~±10%	AC400~±10%	AC230~±10%	AC400~±10%
Rated current		10-3	32A	
Frequency		50-6	60Hz	
Cable length	5m			
Sockets/plugs	type1/type2	type2	type2	type2
Weight	4.4kg	5.6kg	2.65kg	2.8kg
IP grade		IP:	55	
Environment temperature		-40℃	~45℃	
Humidity	no condensation			
Cooling way	natural cooling			
RFID	optional			

# 2.Mechanical And Electrical Installation

## 2.1 Internal Structure Drawing

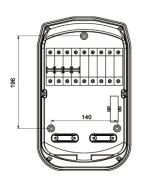






### 2.2 Installation

1). Overall dimension and installation size (unit: mm)







2). Make 3×35mm sink holes of installation hole size in the wall, insert the wall plug, and then screw in M5X30 screws through the installation holes inside the EV Charging Box. The power line is connected with a Type B Residual current circuit breaker, the single-phase EV Charging Box is connected with N and L, and the three-phase EV Charging Box is connected to N ,L1, L2 and L3. Ground wire (PE wire) is connected to the yellow and green terminals.

### 3). Recommended cable section:

Α	10	16	20	25	32
mm²	2.5	2.5	4	4	6

### 4). Current option and setting by DIP switch

WARNING:Installation and AMP settings are only to the carried out by a trained and authorized electrical installer.

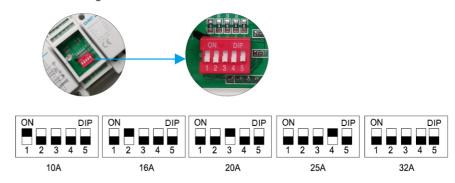
The current of the device is set to 32Amp as default factory setting

However, the rating can be adjusted to 10, 16, 20, 25, 32A via built-in DIP switch of protocol controller as user request.

DIP switch setting for RFID version:



DIP switch setting for tethered cable and free/socket version:



# 3. Charging Process

### 3.1 Check before operation

Before operation, please carefully check and ensure the following items:

The installation position of the EV Charging Box should be convenient for operation and maintenance. The EV Charging Box shall be properly installed using the mounting bracket included in the accessories.

No external objects or parts are left on top of the EV Charging Box.

## 3.2 Power on the equipment

A. Confirm that all the above pre-operation inspection items meet the requirements.

B. Switch on the power supply inlet circuit breaker.

C. After the EV Charging Box is connected to the power supply, allow for 7 seconds of startup self-test time, and the indicator light will be displayed switching between red, blue and green.

D. Standard version: After the self-test is completed, the indicators blue light flashes for cable version, the indicators blue steady light for free/socket version and the EV Charging Box is ready for use and you can connect to you Electric Vehicle.

E. RFID version: after the self-test is completed, the indicators blue stable. It will be valid within 5 minutes if you do not connect the car. Otherwise, you need to swipe the card again.

5 cards as standard.

Modes	Usage(Swipe)	Action	LED Indication	Status
On	Once	Startup	Green flicker	Charging
Timing (2 minutes against startup)	Startup + One extra	Set to charge 1 hour	Blue once + Green once	Charging for 1 hour
	Startup + Two extra	Set to charge 2 hours	Blue once + Green twice	Charging for 2 hours
	Startup + Three extra	Set to charge 3 hours	Blue once + Green triplex	Charging for 3 hours
off	One Plus	Stop	Blue Stable	Standby

F. After connecting your EV Charging box to you Electric Vehicle, please refer to the table below for the status of the charging process.

Cable Version			
LED	Display	Activity	
		Product not on	
No Power	No Light	No Power	
		The EV Charging Box has malfunctioned	
<ul><li>Blue</li></ul>	Light Flashing	To be connected	
<ul><li>Blue</li></ul>	<ul><li>Blue Stable</li></ul>	Connection OK – 1 sec stable blue before the charging process begins.	
		$Upon\ completion\ of\ the\ charging\ process\ the\ light\ returns\ to\ stable\ blue.$	
<ul><li>Green</li></ul>	Stable	Charging	
• Red	Stable	Your Electric vehicles require heat dissipation, stop charging	
• Red	Light Flashing	Failure, not charging	

Socket Version			
LED	Display	Activity	
		Product not on	
No Power	No Light	No power	
		The EV Charging Box has malfunctioned	
<ul><li>Blue</li></ul>	Stable	To be connected	
<ul><li>Blue</li></ul>	Light Flashing	Connection OK	
<ul><li>Green</li></ul>	Stable	Charging	
<ul><li>Green</li></ul>	Light Flashing	Charging completed	
• Red	Stable	Electric vehicles require heat dissipation, stop charging	
● Red	Light Flashing	Failure, not charging	

RFID Version			
LED Display		Activity	
		Product not on	
No Power		No power	
		The EV Charging Box has malfunctioned	
<ul><li>Blue</li></ul>	Stable	To be connected	
<ul><li>Blue</li></ul>	Light Flashing	Connection OK	
<ul><li>Green</li></ul>	Light Flashing	Charging	
<ul><li>Green</li></ul>	Stable	Charging completed	
<ul><li>Red</li></ul>	Stable	Electric vehicles require heat dissipation, stop charging	
<ul><li>Red</li></ul>	Light Flashing	Failure, not charging	

# 4.Warranty

- 4.1 The warranty period of this product is 27 months after the date of purchase. During the warranty period, if handled properly and according to manual, if the product becomes defect please contact our After Sales Service for assistance.
- 4.2 During the warranty period, a certain maintenance fee will be charged for damage caused by the following reasons:
- A. Damage caused by wrong use of the product and unauthorized repair and modification.
- B. Damage caused by abnormal fire, flood or other natural disasters and secondary disasters.
- C. Damage caused by dropping the unit or damage caused by transportation after the purchase.
- D. Damage caused by failure to operate according to the user manual provided by our company.
- 4.3 For After sales service, please call:
- reserves the right to interpret this agreement.