



TS-EDC Series Electric Vehicle Floor-standing DC Charging Station

User Manual

Ver 1.0.0

Taisheng Energy Technology Co., Ltd.

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Instruction Manual

Thank you for using our company's TS-EDC series electric vehicle floor-standing DC charging piles. Our products will bring you better charging services and safer charging guarantees.

Scope of application

This manual is applicable to the use of TS-EDC series electric vehicle floor-standing DC charging piles.

In order to facilitate your proficient operation and use of this product and enable this set of products to better serve you, please read this manual carefully and install, test and operate this product in accordance with the provisions of the manual. If you find that the actual product is different from the product described in this manual during use, please refer to the actual product.

This manual is compiled and published by Taisheng Energy Technology Co., Ltd., which reserves the final right of interpretation for the relevant products.

Due to the continuous upgrading of the product, the content of this manual may be slightly different from the actual product, and the upgrade of the manual may not be notified to you in time. We apologize for this! Please pay attention



to the discrepancies between the actual product and the description in this manual.

For more product information, please visit the official website: [Teison Energy Technology Co., Ltd.](#)

Safety Tips

- This safety notice is applicable to all operations of the TS-EDC series electric vehicle floor-standing DC charging pile. Before installing and debugging the charger, you should read this instruction manual carefully. The instruction manual contains important information that is conducive to the normal operation of the equipment and avoids incorrect operation.
- This equipment contains dangerous high voltage. Failure to comply with the "Warning" provisions or to operate in accordance with the requirements of this instruction manual may result in significant property damage, serious personal injury or endangerment of life safety.
- The following "Warnings", "Notes" and "Tips" are measures taken to prevent damage to the equipment and its parallel-connected components, and are also provided for your safety.
- Please read these "Warnings", "Notes" and "Tips" carefully, as they will not

only help to extend the service life of the charger, but also provide you with property and personal safety protection.



warn

- Only certified professionals who are familiar with electrical regulations and professionally engaged in electrical work are allowed to install and maintain this equipment.
- This device is a high-voltage device. Do not perform maintenance work when it is powered on. After cutting off the high-voltage power supply of the device, you must perform safety measures such as power testing and grounding to ensure that the device is power-free before you can perform maintenance on the device.
- When the equipment system is running, some parts carry high voltage. It is strictly forbidden to directly contact the internal components or indirectly contact them through wet objects.
- This product is dustproof and waterproof, but if you find water or moisture on the pile, please turn off the power immediately. When operating in a humid environment, strictly prevent moisture from entering the device.
- It is strictly forbidden to carry out outdoor installation and commissioning of equipment during thunderstorms.



Notice

- This device should only be used for the purpose specified by the manufacturer. Unauthorized modifications and the use of spare parts not sold or recommended by the manufacturer of this device may result in fire, electric shock or other injuries.
- The equipment can only be repaired by Taisheng Energy's after-sales

department or certified and authorized personnel. These personnel should be fully familiar with the warnings and correct operating procedures in this instruction manual.

- Any defective component must be replaced with an identical component.



hint

- Please place this manual in a conspicuous place near the equipment to ensure that operators can easily read it.
- Before installing and debugging the charging pile, please be sure to carefully read the safety rules and warnings, as well as all warning signs posted on the equipment. If you find that the warning sign is detached or damaged, please replace it in time.

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1.Overview

1.1. Product Introduction

TS-EDC series electric vehicle DC charging piles (hereinafter referred to as charging piles) are designed in accordance with UL 2202 and other American standard charging piles; they are suitable for installation in community parking lots, park parking lots and public parking lots, and can also be installed in various large, medium and small electric vehicle charging stations. The charging piles can be configured according to user needs to ensure that users are provided with a safe, reliable and intelligent charging experience.



Figure 1.1. TS-EDC series floor-standing double-gun DC charging pile (reference picture)

1.2. Performance characteristics

(1) Multiple payment methods: Taisheng Energy POS payment system supports payment methods such as Visa, Mastercard, Apple Pay, Google Pay, Samsung Pay, etc., and also supports customization to meet various payment needs of users.

(2) Appearance customization: The appearance color and LOGO of the device can be customized free of charge to meet the user's brand promotion needs.

(3) Convenient human-computer interaction: The equipment is highly intelligent, with a 10-inch equipment operation screen and the touch screen is sensitive and accurate .

(4) Wide voltage range: Constant power output voltage range is 150-1000V continuous without breakpoints, covering all sizes of vehicles on the market.

(5) High-level protection: Protection level Type 3R, with excellent waterproof, dustproof and explosion-proof functions, and can operate stably under ambient temperature conditions of $-30^{\circ}\text{C}\sim 50^{\circ}\text{C}$; expand the adaptability of the equipment.

(6) Intelligent cooling: The fan speed is adaptive, which greatly improves the noise pollution.

(7) Intelligent operation and maintenance: Teison's self-developed charging operation platform can realize site

management, equipment management, order management, data statistics, system settings, remote operation and maintenance and other operations with one click. It is developed based on the OCPP1.6 protocol and is also compatible with various third-party platform connections.

(8) Intelligent monitoring: The product communicates with the monitoring platform in real time through the CAN bus, LTE4G, and WLAN interfaces, and reports various records in a timely manner to ensure real-time monitoring of the charging piles by the charging operation platform. It also supports local and remote upgrade functions.

(9) All-round protection: It has multiple protection functions such as input, output, component self-check and operation connection protection, input over/under voltage protection, DC output overvoltage/short circuit protection, module overheating/fault protection, insulation protection, charging pile and battery connection inspection, etc. It ensures the safe and reliable operation of the system and effectively prevents accidents.

(10) Convenient expansion: supports expansion of components such as ground locks, monitoring, and speakers.

1.3. Usage Environment

Table 1.1. Equipment working environment

Serial number	project		index	unit	Remark
1	Operating temperature		-30~50	℃	
2	Storage temperature		-40~70	℃	
3	Protection level		Type 3R	-	
4	Relative humidity	Work	$\leq 90\%$	-	No condensation
		store	$\leq 95\%$	-	
5	Altitude		≤ 2000	m	Derating for use above 2000 meters
6	cooling method		Forced air cooling	-	
8	Surrounding medium		The installation site must not have explosive hazardous media, and the surrounding media must not contain harmful gases and conductive media that corrode metals and damage insulation.	-	

Note: When the equipment needs to work in a special environment, please provide specific environmental parameters in advance so that the on-site environmental conditions can be fully considered during product design.

1.4. Technical Parameters

Model	TS-EDC60	TS-EDC80	TS-EDC90	TS-EDC120	TS-EDC150
Electrical properties					
Output Power	60kW	80kW	90kW	120kW	150kW
The output voltage	150-1000V				
Input voltage	400V±10%(L1+L2+L3+PE)				
Input Current	3*76A	3*102A	3*115A	3*152A	3*190A
working frequency	50/60Hz				
Output Characteristics					
efficiency	≥94% (more than half load)				

Power Factor	≥ 0.99
Standby loss	$\leq 0.1\%$
Output voltage regulation accuracy	$\leq \pm 0.5\%$
Output current accuracy	$\leq \pm 1\%$
Harmonic current	$\leq 4\%$
noise	$\leq 65\text{dB}$
Mechanical behavior	
shell material	Galvanized steel
cooling method	Forced air cooling
Gun Line	5M
Human-computer interaction	
Display size	10 inches
Display Material	LCD
brightness	450cd/m ²
Resolution	800*1280
Internet connection	
Internet connection	Ethernet, WLAN, 4G, Bluetooth
OCPP	OCPP1.6 full function

Model	TS-EDC160	TS-EDC180	TS-EDC200	TS-EDC240
Electrical properties				
Output Power	160kW	180kW	200kW	240kW
The output voltage	150-1000V			
Input voltage	400V±10%(L1+L2+L3+PE)			
Input Current	3*203A	3*228A	3*255A	3*305A
working frequency	50/60Hz			
Output Characteristics				
efficiency	≥94% (more than half load)			

Power Factor	≥ 0.99
Standby loss	$\leq 0.1\%$
Output voltage regulation accuracy	$\leq \pm 0.5\%$
Output current accuracy	$\leq \pm 1\%$
Harmonic current	$\leq 4\%$
noise	$\leq 65\text{dB}$
Mechanical behavior	
shell material	Galvanized steel
cooling method	Forced air cooling
Gun Line	5M
Human-computer interaction	
Display size	10 inches
Display Material	LCD
brightness	450cd/m^2
Resolution	800*1280
Internet connection	
Internet connection	Ethernet, WLAN, 4G, Bluetooth
OCP	OCP1.6 full function

1.5. Fuse Introduction

1. Rated voltage: $\leq \text{DC}1000\text{V}$
2. Rated current: $100\sim 500\text{A}$; Protection category: aR;
Breaking capacity: $\text{DC}50\text{kA}$ (time constant $\leq 10\text{ms}$)

● This series of products are square tube fast fuses with small size and high breaking capacity. They are suitable for a wide temperature range and can withstand high strength



Mechanical vibration and shock, wide temperature shock and strong chemical load, suitable for road vehicle industry application, can be used as electric vehicle driving power

Systems, power conversion systems, energy storage and power batteries, energy storage capacitors, frequency converters, chargers, MSDs, wires and other automotive Short circuit and backup protection for devices and equipment.

型号	产品代码	额定电流 A	Pt (A²Sec)		功耗 W
			弧前	总	
MEV-J-C20	MEV-J-C20-100	100	695	4650	24
	MEV-J-C20-125	125	1200	8500	28
	MEV-J-C20-160	160	2300	16000	32
	MEV-J-C20-200	200	4200	28000	37
	MEV-J-C20-250	250	7750	51500	42
	MEV-J-C20-300	300	10900	73000	50
	MEV-J-C20-315	315	10900	73000	50
MEV-J-D20/D23	MEV-J-D20-350	350	10900	73000	50
	MEV-J-D20-400	400	10900	73000	50
	MEV-J-D20-500	500	19500	133000	67

1.6. POS machine introduction (optional)

Taisheng Energy Payment System consists of two major sections:

Software: My Teison APP can complete payment by scanning



the QR code on the display of the charging device. Currently supported payment methods include: Stripe, PayPal, Cybersource, uzcard, TBC;

Hardware: POS machines can complete payment by swiping cards. Currently, Taisheng has developed NAYAX and Wizar POS. NAYAX supports the following payment methods: Visa, Mastercard, Apple Pay, Google Pay, Samsung Pay; Wizar POS supports the following payment methods: Arab BANK;

Choose one of the two methods. If the user's location supports the above payment methods, you can use the Taisheng Energy payment system.

2.Equipment principle and technical indicators

2.1. Electrical principle

TS-EDC charging pile can be configured as single-gun or multi-gun output. Input AC power, enter the charging module through the built-in molded case circuit breaker and high-voltage AC contactor, and convert the AC power into the DC power required by the electric vehicle through the AC/DC conversion of the charging module. It is transmitted to the charging gun through the DC output circuit, and finally connected to the electric vehicle for charging through the



charging gun. The DC output circuit is equipped with a fuse module and an insulation detection module.

The charger is equipped with an emergency stop function. When an abnormal situation occurs, press the emergency stop button to cut off the input and output power of the charger. After troubleshooting, reset the emergency stop button before resuming charging. (**Note: The emergency stop button is only allowed to be pressed in abnormal situations. Do not press the emergency stop button at will in normal charging status!**)

Taisheng Energy's charging equipment meets the requirements of safety and stability; the equipment dynamically adjusts the charging parameters based on the data provided by the electric vehicle battery management system (BMS), quickly executes the corresponding actions, and completes the charging process. The charging pile touch screen can display the main charging parameters, battery parameters, fault information, etc., with obvious status indications and text prompts to prevent personnel from misoperation.

2.2. Security protection

2.2.1. Protection principle

Shell protection

The device shell is made of galvanized steel plate with an



anti-oxidation and anti-corrosion protective layer on the surface. The protection level of the whole device is Type 3R, with good dustproof and waterproof performance.

Device protection

The internal components of the equipment are selected from industrial grade and treated with three protections, with good moisture resistance, salt spray resistance and rust resistance.

Functional protection

The charger is equipped with lightning arrester, insulation detection, fuse, leakage protection circuit breaker, etc., with complete protection functions, including short circuit protection, input overvoltage/undervoltage, input overcurrent, output overvoltage/undervoltage, output overcurrent, output overtemperature, etc. During the charging process, key data such as total charging voltage, total charging current, battery temperature, etc. are monitored and protected in real time.

(1) When input and output are abnormal, all charging modules will automatically start the protection function, the main control board will transmit the shutdown command and stop the output to protect the safety of users and equipment. When the

input and output return to normal, the charging module will automatically resume normal operation.

(2) Set an emergency stop button and press the button in an emergency to forcibly terminate charging.

(3) When the charger temperature is too high or the insulation is damaged, the protection function will take corresponding protection actions based on the collected signals.

(4) The locking device can effectively prevent the charging connector from accidentally falling off during charging. When starting charging, the charger can determine whether the mechanical lock and electronic lock are reliably locked. If the mechanical lock or electronic lock is not reliably locked, charging will not be started before charging and charging will be stopped during charging.

2.2.2. Protection logic

Conservation Project	Protection Logic
Output overvoltage	Real-time detection of working voltage. When the device is in overvoltage state, an alarm will be issued and the output will be stopped.
Output overcurrent	Real-time detection of working current. When the device is in overcurrent state, an alarm will be given and the output will be stopped.

Output undervoltage	Real-time detection of working voltage. When the device is in undervoltage state, an alarm will be issued and the output will be stopped.
Input phase loss	The power module is detected in real time. When it is in a phase-loss state, the device cannot start charging.
Device overheating	The temperature of the gun tip is detected in real time. When it exceeds the preset value, an alarm is given and the output is stopped.
Insulation failure	Real-time detection of insulation status. When insulation failure occurs in the device, an alarm will be given and output will be stopped.
communication fail	The main control board communicates in real time. When a communication failure occurs in the device, an alarm is issued and the output is stopped.
	Communicate with the platform in real time. When the platform communication is disconnected, the device will alarm.
Over frequency fault	Real-time monitoring of grid frequency. When the frequency exceeds the normal value, the equipment will sound an alarm and shut down.
Leakage Current	Real-time detection of equipment current. When leakage current occurs, the equipment will give an alarm and shut down.
Ground Fault	Real-time detection of equipment grounding. When a grounding fault occurs, the equipment will alarm and shut down.
Emergency Stop	Press the emergency stop button, the device will alarm and stop output; emergency stop reset, the device will automatically return to normal standby state

3.Equipment operating instructions

3.1. Start charging

3.1.1. First start

Before starting the equipment for the first time after installation, the following checks should be performed:

- 1) Are there any loose or missing screws in the equipment cabinet ?
- 2) Are there any loose or missing wires in the equipment cabinet ?
- 3) There is damage to the wireless skin in the equipment cabinet;
- 4) Whether the equipment is grounded correctly;
- 5) Whether the molded case circuit breaker and miniature circuit breaker are in the disconnected state;
- 6) Is the emergency stop button in the pop-up state?
- 7) Check whether all charging modules are in good condition and whether there are signs of deformation, damage, etc.

After all items are checked one by one to ensure they are correct, you can prepare to power on ; the power-on steps are as follows:

- 1) Close the main circuit breaker;
- 2) Close the molded case circuit breaker; make sure the circuit breaker lever has been lifted to the highest position. If it

fails to lift, lower the lever and lift it again;

3) Close the miniature circuit breaker; check whether the controller, display screen, and light strip are on; if not all of them are on, turn off the power and check the circuits of the unlit parts. After troubleshooting, repeat the above steps; If the above steps are normal, the power-on verification process is completed.

3.1.2. Normal charging operation

After the device is powered on, you can start charging. Before starting charging, please check whether the device indicator light status meets the following table:

Indicator light name	Indicator Color	Indicator status
Power light	Yellow Light	Long bright
Charging light	Green Light	Off
Fault light	red light	Off

Table 3.1.2.1. Power-on status of indicator lights

Start charging steps:

1) Insert the charging gun into the corresponding port of the electric vehicle and confirm that it is fully inserted. You will hear a crisp "click" sound when it is fully inserted.

2) Click the corresponding icon on the screen to start charging, and select the corresponding start method; if you choose to start by swiping the card, please click the start charging button on the screen and put the RFID card in the card

reader position, and the charging pile will start charging; if you choose to start by APP, please click the start charging button on the APP, and the charging pile will start charging;


3) Start charging and the device starts outputting;


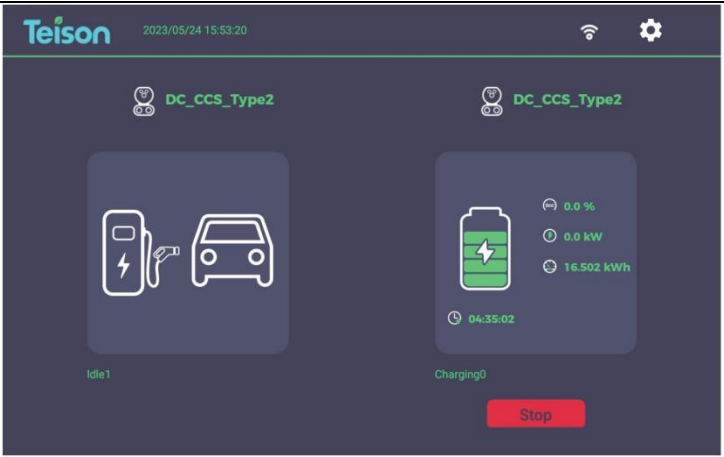
During charging, please check whether the indicator light matches the status in the following table:

Indicator light name	Indicator Color	Indicator status
Power light	Yellow Light	Long bright
Charging light	Green Light	Long bright
Fault light	red light	Off

Table 3.1.2.2. Indicator light charging status

If the red light is on, it means that the equipment is faulty. At this time, you need to turn off the power and check the equipment, eliminate the fault and power it on again. If the fault cannot be eliminated, please contact the manufacturer's technical staff in time for processing.

Example of screen display instructions	
standby mode	

<p>The gun is not charging.</p>	
<p>charging</p>	

3.1.3. Normal shutdown operation

When you need to shut down normally, click the "Stop" button on the screen and select the corresponding end method (such as swiping a card). The green light stops flashing and you can then unplug the charging gun and reset it.

Before unplugging the charging gun, please check whether the indicator light meets the following table:

Indicator light name	Indicator Color	Indicator status
Power light	Yellow Light	Long bright
Charging light	Green Light	Off
Fault light	red light	Off

Note: The charging gun can only be unplugged when the

indicator light meets the instructions in the table. If the indicator light status does not match, please contact the manufacturer's technical staff in time for processing

3.1.4. Abnormal shutdown operation

When the device fails and cannot be shut down normally, or an emergency occurs and the charging pile needs to be shut down quickly, you can press the emergency stop button of the device. At this time, the device will quickly cut off the output and the indicator light status is as follows:

Indicator light name	Indicator Color	Indicator status
Power light	Yellow Light	Off
Charging light	Green Light	Off
Fault light	red light	Long bright

Do not use the emergency stop function under normal conditions to avoid damage to the emergency stop button or other failures that may cause casualties!

3.1.5. Shutdown operation

If you need to shut down the device, please follow the steps below:

- 1) Disconnect the main circuit breaker
- 2) Open the cabinet door and turn off the miniature circuit breaker and molded case circuit breaker in turn.
- 3) Check whether all the indicator lights on the device are

off

4) Close the door

3.2. Screen operation instructions

The equipment has been configured as required before leaving the factory. It is not recommended to modify the configuration without special requirements.

1) After successfully powering on, press the emergency stop button and check whether the display shows the following status. If not, it means that the communication between the screen and the main control board is abnormal. If it is normal, please turn back the emergency stop button to restore the device to normal status.



2) Click the setting icon in the upper right corner of the screen to enter the settings. The default guest mode is to enter without a password (the administrator mode is only for

equipment maintenance and debugging)



3) After entering the settings, users can view and modify general settings, network settings, OCPP settings, device information and records.



4) Enter the general settings, which are divided into system settings, user preferences, charging station configuration and charging connector configuration. System settings include brightness adjustment, full screen display and language

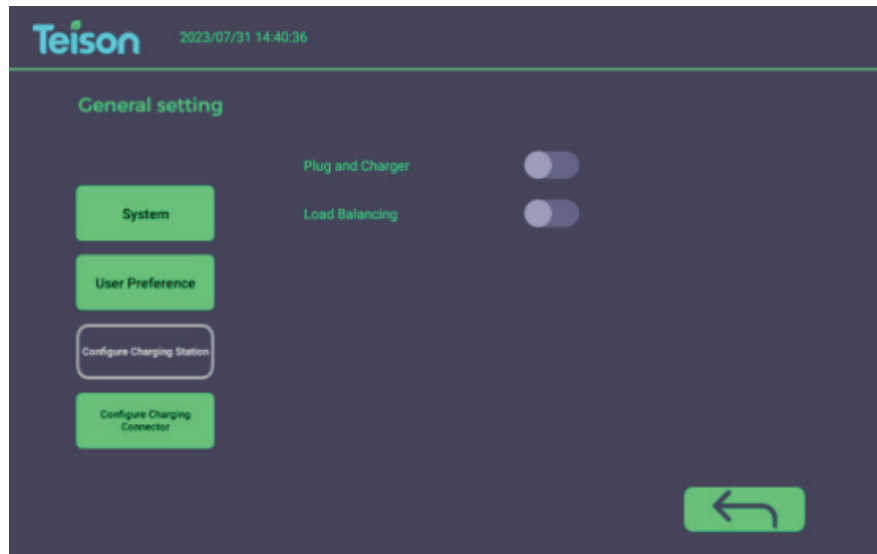
setting configuration, as shown in the figure below.



5) User preferences include password settings and four charging modes (of which POS machine is a non-standard option). When the "anonymous billing" function is enabled, the other charging modes are not available.



6) Charging station configurations include plug-and-play and load balancing (non-standard options).



7) Charging connector configuration allows you to set the maximum power, maximum voltage, minimum voltage, QR code, whether to enable Base64 encoded QR code, and the billing price per kWh.



8) OCPP settings include “OCPP start button”, “OCPP platform ID”, “charging station ID” and whether basic authentication is enabled for the “OCPP start button”.

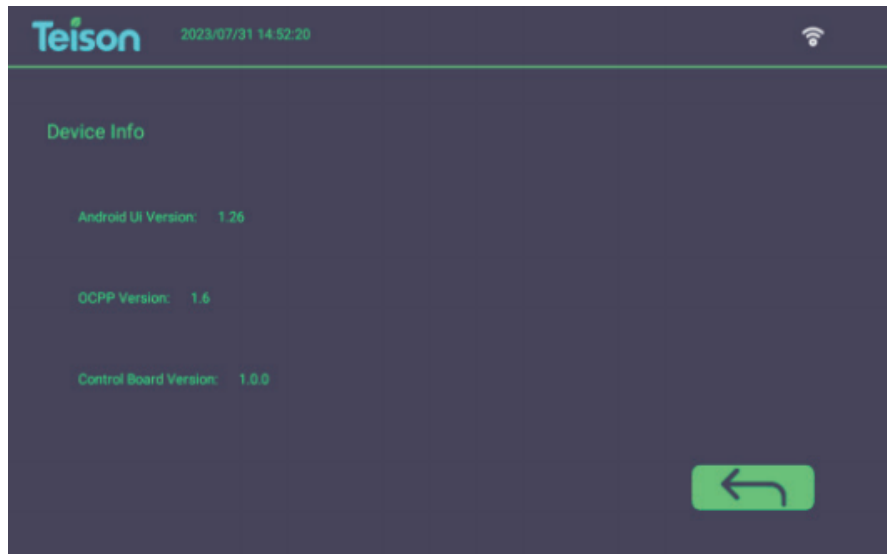


9) After the settings are completed, click the OCPP start button.

Return to the main interface to check if there is a cloud icon.



10) Check the current software version of the device through "Device Information".

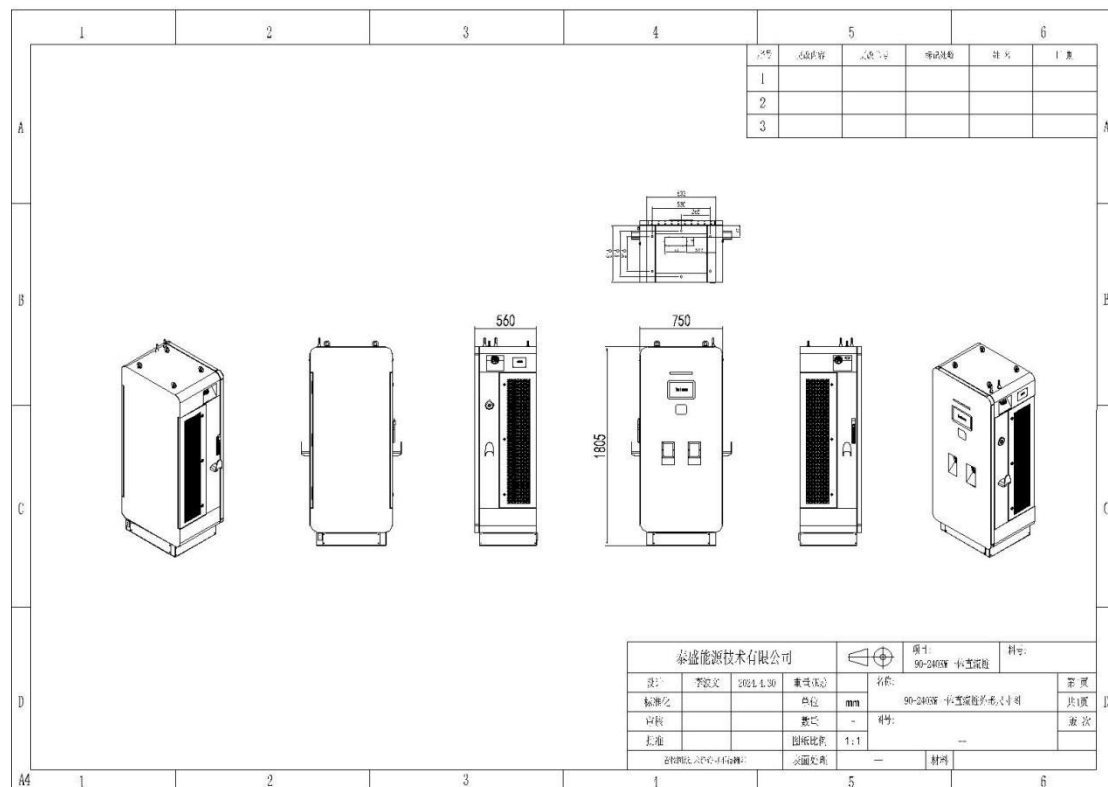


11) "Record Information" allows you to view charging information and logs (may need to contact technical support or obtain through OCPP). Delete Record will delete all charging records.

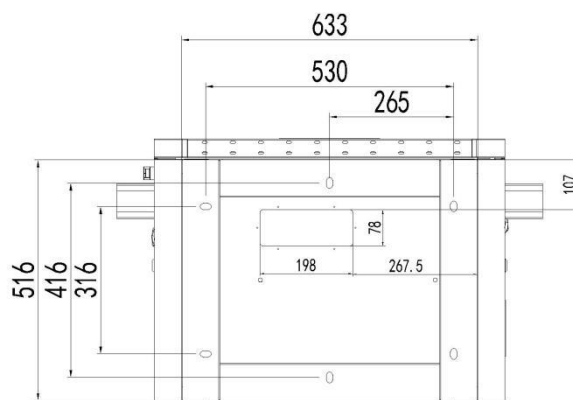


4. Equipment structure and installation

The device appearance dimensions are as follows:



The cable entry holes are as follows:



4.2. Installation Instructions

The torque of the equipment grounding bolt can be referred

螺栓规格	强 度 等 级											
	4.6		5.6 (A4-50)		6.9 (A4-70)		8.8 (A4-80)		10.9		12.9	
	Nm	Ft-tb	Nm	Ft-tb	Nm	Ft-tb	Nm	Ft-tb	Nm	Ft-tb	Nm	Ft-tb
M4	1.0	0.7	1.3	1.0	2.4	1.8	2.8	2.1	3.9	2.9	4.9	3.6
M5	1.8	1.3	2.5	1.8	4.7	3.5	5.6	4.1	7.8	5.8	9.3	6.9
M6	2.8	2.1	3.9	2.9	7.8	5.8	9.8	7.2	13.7	10.1	15.7	11.6
(M7)	4.9	3.6	6.9	5.1	12.8	9.4	15.7	11.6	22.6	16.7	26.5	19.5
M8	7.8	5.8	9.8	7.2	19.6	14.5	24.5	18.1	34.3	25.3	39.2	28.9
M10	14.7	10.8	19.6	14.5	39.2	28.9	44.1	32.5	63.8	47.1	78.5	57.9
M12	24.5	18.1	33.4	24.6	58.0	42.8	78.5	57.9	113.0	83.3	137.0	101.0
(M14)	39.2	28.9	54.0	39.8	108.0	79.7	128.0	94.4	181.0	133.5	216.0	159.3
M16	61.0	45.0	82.0	60.5	167.0	123.2	196.0	144.6	267.0	196.9	320.0	236.0
(M18)	84.0	62.0	114.0	84.1	231.0	170.4	260.0	191.8	366.0	269.9	439.0	323.8
M20	121.0	89.2	163.0	120.2	324.0	239.0	373.0	275.1	525.0	387.2	628.0	463.2
(M22)	164.0	121.0	221.0	163.0	432.0	318.6	500.0	368.8	711.0	524.4	853.0	629.1
M24	208.0	153.4	282.0	208.0	559.0	412.3	638.0	470.6	903.0	666.0	1079.0	795.8
(M27)	314.0	231.6	422.0	311.3	824.0	607.7	961.0	708.8	1354.0	998.7	1638.0	1208.1
M30	422.0	311.3	569.0	419.7	1109.0	818.0	1315.0	969.9	1844.0	1360.1	2217.0	1635.2
(M33)	579.0	427.0	785.0	579.0	1511.0	1114.5	1795.0	1323.9	2531.0	1866.8	3021.0	2228.2

to the following table:

The conductor of the equipment incoming terminal should meet the following requirements:

Serial number	power	AC power supply rated input current	Recommended cable type	Wire diameter	Remark
DC charging pile	30kW	Three-phase 45.6A	600V, -30℃-135℃	8AWG	
	60kW	Three-phase 91.2A	600V, -30℃-135℃	4AWG	
	90kW	Three-phase 136.8A	600V, -30℃-135℃	2AWG	
	120kW	Three-phase 182.3A	600V, -30℃-135℃	1AWG	

	180kW	Three-phase 294A	600V, -30°C-135°C	2/0AWG	
	240kW	Three-phase 364.7A	600V, -30°C-135°C	4/0AWG	

Temperature rating of wire that is intended to be used for connection of the unit	Copper conductors only
60 or 75 °C	"Use either (b) AWG, 60 °C or (c) AWG, 75 °C copper wire"
60 °C	"Use (b) AWG, 60 °C copper wire"

Temperature rating of wire that is intended to be used for connection of the unit	Copper conductors only
75 °C	"Use (c) AWG, 75 °C copper wire"
90 °C	"Use (c) AWG, 90 °C copper wire"

other requirements:

- 1、 The permanent connectors, casing and other metal conductors of the equipment must be well grounded.
- 2、 based on the size of the DC charging pile and the required installation distance between the charging piles.
3. Draw lines on the ground according to the drawings, both horizontally and vertically. The intersection of the two directions is the center placement position of the charging pile base.
4. Move the concrete base to the intersection.



5. Use an impact drill to drill holes on the cement base according to the size of the installation holes ;
6. Drive the expansion screws into the cement base and lay the power cables in advance as required; then lift the charging pile with a crane;
7. Align the charging pile with the expansion screw hole and lower it, install the 0-12 flat washer and spring washer, and then lock it.
8. Connect the corresponding cables correctly and the installation is complete.

Note: Only qualified professionals are allowed to perform the installation and commissioning process!

5. Equipment packaging, transportation and storage

5.1. Packaging

The packaging should take into account the requirements of moisture-proof, dust-proof and shock-proof; all parts are shipped together inside the pile; the pile body is covered with a plastic bag, supported by foam all around, and packaged in a foam carton outside; ensure that the product does not move inside the box to avoid damage during transportation.

The technical documents supplied with the product in the packaging box include:

- Packing List;
- Product factory certificate;
- Product inspection records;
- Instruction Manual;
- Warranty Card.

5.2. Transportation

During transportation, our company's equipment should be kept away from rain, severe vibration, impact, tumbling and inversion; the vertical tilt should not exceed 30 degrees during transportation and loading and unloading.

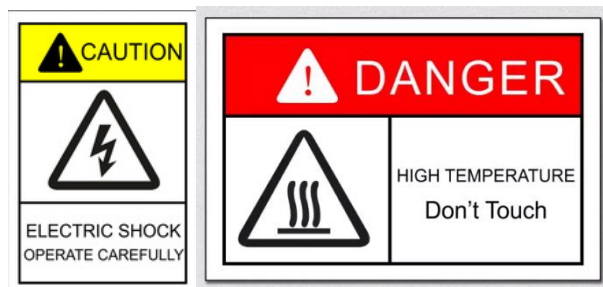
The pile body and internal components of our company's equipment are all treated with rust prevention, but they should still be protected from direct sunlight and rain erosion during transportation.

5.3. Storage

If the product is not used immediately after purchase and needs to be stored for a short or long term, it is recommended to store the equipment in a clean, dry, well-ventilated indoor place at 5°C ~ 40°C, away from high temperature, humidity, dust, metal powder and corrosive environment. Open-air stacking is strictly prohibited.

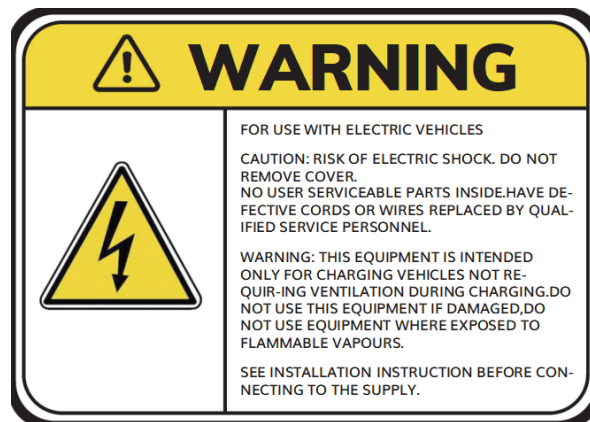
5.4. Warning

5.4.1. Warning labels

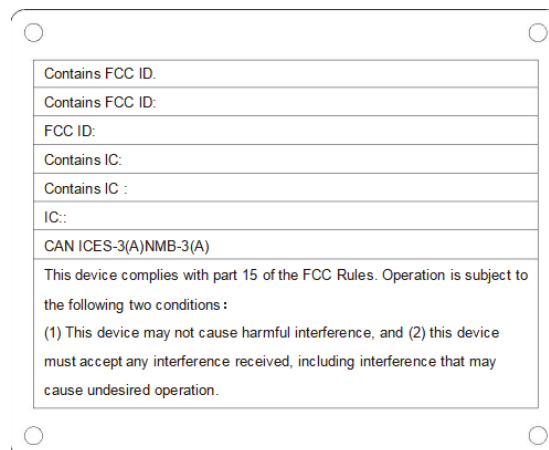


The electrical hazard label is located inside the equipment and affixed to the acrylic partition board; the high-temperature heat label is affixed to the air inlet and outlet of the equipment. The label is eye-catching and obvious, and the label size is not less than 10*10mm. The size of "Danger",

"Warning" and other letters in the label is not less than 3.2*3.2mm



5.4.2. FCC label



5.5. FCC explain

FCC regulatory conformance:

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply



with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter.

IC regulatory conformance:

This device complies with CAN ICES (A)/NMB (A).

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme à la norme CAN ICES (A)/NMB (A).

Cet appareil contient des émetteurs / récepteurs exempt (s) de licence qui sont conformes aux RSS exemptes de licence d'Innovation, Sciences et Développement économique Canada. Son fonctionnement est soumis aux deux conditions suivantes:

(1) Cet appareil ne doit pas provoquer d'interférences.

(2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

RF Exposure

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment



should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d' exposition aux rayonnements de la IC établies pour un environnement non contrôlé. Cet équipement doit être installé et fonctionner à au moins 20cm de distance d' un radiateur ou de votre corps.