# FC series 60-240kw

# **Floor-mounted DC EV charger Product specification**



# Catalogue

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#### 1.Overview

#### 1.1 Introduction

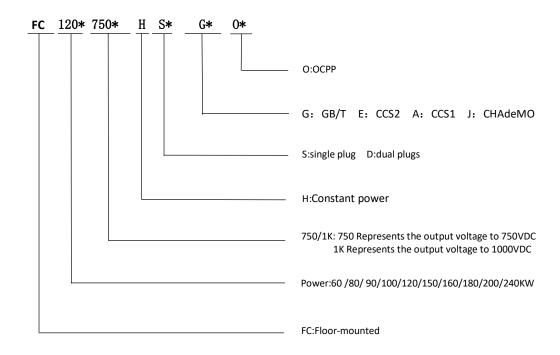


#### Floor-mounted DC EV charger

Specially designed for electric vehicles, and provide friendly human-machine operation interface, APP charging, LCD interaction, charging control, metering and billing, payment, remote communication and security protection in one equipment. This series of products can be widely installed and applied in public operation charging stations, such as industrial parking lots, energy storage charging station, urban centralized charging stations, special vehicle charging stations (public transport, logistics, sanitation vehicles, etc.). The appearance of the charging pile is shown on the left.

The products can compliant with GB/T, CCS1, CCS2 & CHAdeMO and can also be single and double guns, which can be combined freely with different standards to meet the needs of global customers in all aspects. Please contact us if you have any needs.

#### 1.2 Product model explanation:

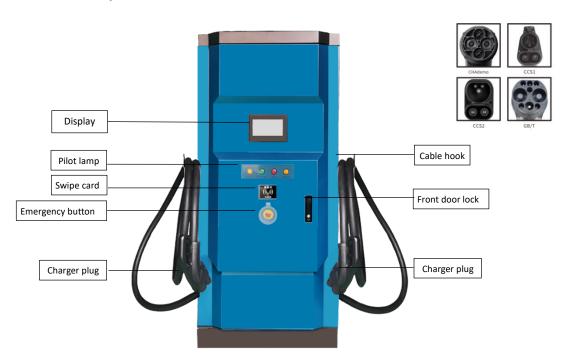


#### 2. Safety instructions

- -Charging operation shall follow the operation instructions provided by our company;
- -Non-professionals are strictly prohibited to open the charging machine cabinet; Do not disassemble or assemble without permission;
- -When stopping midway, manually click the button to stop and then pull out the charging gun;
- -It is strictly forbidden to insert or remove the charging gun directly during the charging process, otherwise it will burn out the charging gun and even the charger;
- -Any operation unrelated to charging is prohibited during the charging process, and other operations can be carried out only when the charging gun is disconnected from the car and the charger button is clicked to stop.
- -Avoid fireworks (open fire) near the charger and pay attention to ventilation;
- -The fuse must be replaced with the same type of product, not with copper, iron wire replacement;
- -There is high voltage in the charger, and any fault should be repaired by professional personnel to avoid danger;
- -The superior circuit breaker and distribution device of the charger shall be selected, installed and operated by professional electrician;
- -In severe weather such as thunderstorms, you are advised to disconnect the power supply. If water accumulates in the charger, contact the personnel of the manufacturer to handle the water before continuing to use the charger.
- -The unit weight of the charging gun cable is large, and the long cable is easy to drag force in the actual charging process, which is not conducive to releasing the twisting force, increasing the risk of cable distortion and bulge, and affecting the service life of the product. Therefore, do not pull or twist the charging cable. The cable of the charging gun must be smoothed and not twisted to force the charging gun holder during use.
- -Do not shake the charging gun from side to side when inserting or removing the charging gun. Insert and remove the charging gun vertically.
- -If any of the following conditions occur, please turn off the power in time and notify professional personnel for repair:
  - Abnormal sound appears inside the charger;
  - Odor or smoke from inside the charger;
  - No display or response on the charger screen;
  - The charger has an unrecoverable fault alarm;

Note: Before powering on and running, ensure that the equipment shell is effectively connected to the earth, otherwise there may be electric shock risk!

#### 3. Appearance and Composition



# **4.Detailed technical parameters**

	ITEM	FC060750	FC0601K	
	Voltage range	AC380V±20%		
Working frequency		45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-100A		
	Input cable length	Non		
	Power	60KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:	12V	
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	0-200A	0-200A	
	Charger mode	Single plug Full power charge/Dual plug	s AB equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work	Humidity range	5~90RH%; (non-condensation)		
environment	Operation altitude	<2000M		
	Operation environment	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm(Excluding head, handle and casters)		
Dimensions	Packing size(mm)	1100 x 900 x 2000mm		
and protection	Packed weight	About 380KG		
	Environment protection	IP54		
Starting mode		Plug and play/Swipe start/Input passwo	•	
Protection func	tion	Scram ; Input over/under voltage ; Output o Overcurrent ; Short circuit ; Leakage ; Lightn	-	
Human-comput	ter interaction	7 inch color touch screen		
Screen language Default English, other languages can be customized		customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode 4G/W		4G/WIFI/Ethernet		
Installation mode Floor-n		Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GB/T 27930		
Charger standa	rd	CCS: EN61851、EN62196、ISO15118、DIN70121		
		CHAdeMO: CHAdeMO		

ITEM		FC080750	FC0801K	
	Voltage range	AC380V±20%		
	Working frequency	45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-134A		
	Input cable length	Non		
	Power	80KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:	12V	
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	0-250A	0-200A	
	Charger mode	Single plug Full power charge/Dual plug	s AB equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50℃; 25℃ (type)		
The work	Humidity range	5~90RH%; (non-condensation)		
environment	Operation altitude	<2000M		
	Operation environment	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm (Excluding head, handle and casters)		
Dimensions and	Packing size(mm)	1100 x 900 x 2000mm		
protection	Packed weight	About 380KG		
	Environment protection	IP54		
Starting mode		Plug and play/Swipe start/Input password start/VIN code		
Protection func	tion	Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;		
Human-computer interaction 7 inch color touch screen		7 inch color touch screen		
Screen language		Default English, other languages can be customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mode		Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GI	B/T 27930	
Charger standa	rd	CCS: EN61851、EN62196、ISO15118	、DIN70121	
		CHAdeMO: CHAdeMO		

	ITEM	FC090750	FC0901K	
	Voltage range	AC380V±20%		
Working frequency		45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-174A		
	Input cable length	Non		
	Power	90KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:	12V	
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	0-250A	0-200A	
	Charger mode	Single plug Full power charge/Dual plug	s AB charging in turn	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work	Humidity range	5~90RH%; (non-condensation)		
environment	Operation altitude	<2000M		
	Operation environment	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm(Excluding head, h	nandle and casters)	
Dimensions	Packing size(mm)	1100 x 900 x 2000mm		
and protection	Packed weight	About 380KG		
	Environment protection	IP54		
Starting mode		Plug and play/Swipe start/Input password start/VIN code		
Protection func	tion	Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;		
Human-comput	ter interaction	7 inch color touch screen		
Screen language		Default English, other languages can be customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mode		Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GB/T 27930		
Charger standa	rd	CCS: EN61851 EN62196 ISO15118 DIN70121		
		CHAdeMO: CHAdeMO		

ITEM		FC100750	FC1001K	
	Voltage range	AC380V±20%		
	Working frequency	45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-174A		
	Input cable length	Non		
	Power	<b>100</b> KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:	12V	
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	0-250A	0-200A	
	Charger mode	Single plug Full power charge/Dual plug	s AB charging in turn	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50℃; 25℃ (type)		
The work	Humidity range	5~90RH%; (non-condensation)		
environment	Operation altitude	<2000M		
	Operation environment	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm (Excluding head, handle and casters)		
Dimensions and	Packing size(mm)	1100 x 900 x 2000mm		
protection	Packed weight	About 380KG		
	Environment protection	IP54		
Starting mode		Plug and play/Swipe start/Input password start/VIN code		
Protection func	tion	Scram ; Input over/under voltage ; Output overvoltage ; Overtemperature ; Overcurrent ; Short circuit ; Leakage ; Lightning ; Battery reverse; Insulation monitoring ;		
Human-computer interaction 7 inch color touch screen		7 inch color touch screen		
Screen language		Default English, other languages can be customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mode		Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GI	B/T 27930	
Charger standa	rd	CCS: EN61851、EN62196、ISO15118	、DIN70121	
		CHAdeMO: CHAdeMO		

	ITEM	FC120750	FC1201K	
	Voltage range	AC380V±20%		
Working frequency 45-65HZ				
INPUT	The power factor	≥0.99		
	Input current	0-200A		
	Input cable length	Non		
	Power	120KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeM	0:12V	
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	GB/T:0-250A CCS CHAdeMO:0-200	A	
	Charger mode	Single plug Full power charge/Dual p	lugs AB equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work environme	Humidity range	5~90RH%; (non-condensation)		
nt	The altitude	2000M		
	Temperature range	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm (Excluding hea	d, handle and casters )	
Dimension s and	Packing size(mm)	1100 x 900 x 2000mm		
protection	Packing/weight	About 380KG		
	IP	IP54		
Starting mod	le	Plug and play/Swipe start/Input pass	word start/VIN code	
Protection fu	ınction	Scram; Input over/under voltage; Output Overcurrent; Short circuit; Leakage; Lig monitoring;		
Human-com	puter interaction	7 inch color touch screen		
Screen language Default English, other languages can be customized		be customized		
Charging mode		Plug and play、 OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mode		Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、	GB/T 27930	
Charger stan	dard	CCS: EN61851、EN62196、ISO15118、DIN70121		
		CHAdeMO: CHAdeMO		

	ITEM	FC150750	FC1501K	
	Voltage range	AC380V±20%		
	Working frequency	45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-230A		
	Input cable length	Non		
	Power	150KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:1	2V	
	Voltage range	200-750Vdc	200-1000Vdc	
ОИТРИТ	Output current	GB/T:0-250A CCS CHAdeMO:0-200A		
	Charger mode	Single plug full power/Dual plugs AB cha	rging in turn	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work Humidity range 5~90RH%; (non-condensation)				
environm ent	The altitude	2000M		
	Temperature range	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm (Excluding head, h	andle and casters)	
Dimensio ns and	Packing size(mm)	1100 x 900 x 2000mm		
protectio n	Packing/weight	About 380KG		
	IP	IP54		
Starting mo	ode	Plug and play/Swipe start/Input passwor	rd start/VIN code	
Protection	function	Scram; Input over/under voltage; Output ov Overcurrent; Short circuit; Leakage; Lightni monitoring;	· · · · · · · · · · · · · · · · · · ·	
Human-cor	mputer interaction	7 inch color touch screen		
Screen language Default English, other languages can be customized		customized		
Charging mode Plug and play、OCPP 1.6				
Networking mode 4G/WIFI/Ethernet				
Installation mode Floor-mounted		Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GB	V/T 27930	
Charger sta	andard	CCS: EN61851 \ EN62196 \ ISO15118 \	DIN70121	
		CHAdeMO: CHAdeMO		

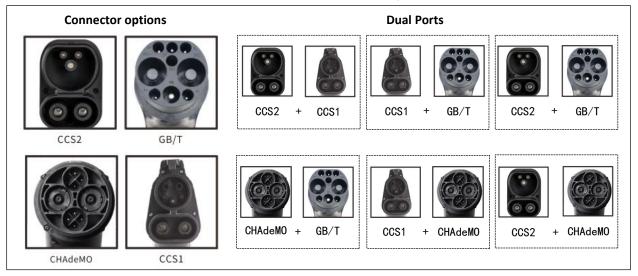
	ITEM	FC160750	FC1601K	
	Voltage range	AC380V±20%		
	Working frequency	45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-268A		
	Input cable length	Non		
	Power	160KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:1	2V	
	Voltage range	200-750Vdc	200-1000Vdc	
ОИТРИТ	Output current	GB/T:0-250A CCS CHAdeMO:0-200A		
	Charger mode	Single plug full power/Dual plugs AB cha	rging equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work Humidity range 5~90RH%; (non-condensation)				
environm ent	The altitude	2000M		
	Temperature range	Indoor/outdoor		
5	Machine size(mm)	750x 530 x 1609mm (Excluding head, h	andle and casters)	
Dimensio ns and	Packing size(mm)	1100 x 900 x 2000mm		
protectio n	Packing/weight	About 380KG		
	IP	IP54		
Starting mo	ode	Plug and play/Swipe start/Input passwor	rd start/VIN code	
Protection	function	Scram; Input over/under voltage; Output ov Overcurrent; Short circuit; Leakage; Lightni monitoring;		
Human-cor	nputer interaction	7 inch color touch screen		
Screen language Default English, other languages can be customized		customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mode		Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GB/T 27930		
Charger sta	indard	CCS: EN61851、EN62196、ISO15118、	DIN70121	
		CHAdeMO: CHAdeMO		

	ITEM	FC180750	FC1801K	
	Voltage range	AC380V±20%		
Working frequency 45-65HZ				
INPUT	The power factor	≥0.99		
	Input current	0-285A		
	Input cable length	Non		
	Power	180KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeN	10:12V	
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	GB/T:0-250A CCS CHAdeMO:0-200	DA .	
	Charger mode	Single plug full power / Dual plugs A	B equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work environme	Humidity range	5~90RH%; (non-condensation)		
nt	The altitude	2000M		
	Temperature range	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm (Excluding hea	ad, handle and casters)	
Dimension s and	Packing size(mm)	1100 x 900 x 2000mm		
protection	Packing/weight	About 380KG		
	IP	IP54		
Starting mod	le	Plug and play/Swipe start/Input pas	sword start/VIN code	
Protection fu	inction	Scram; Input over/under voltage; Outp Overcurrent; Short circuit; Leakage; Li <sub>i</sub> monitoring;	• • •	
Human-com	puter interaction			
Screen language Default English, other languages can be customized		n be customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation n	node	Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234	GB/T 27930	
Charger stan	dard	CCS: EN61851、EN62196、ISO15118、DIN70121		
		CHAdeMO: CHAdeMO		

	ITEM	FC200750	FC2001K	
	Voltage range	AC380V±20%		
Working frequency		45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-335A		
	Input cable length	Non		
	Power	200KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeN	лO:12V	
	Voltage range	200-750Vdc	200-1000Vdc	
ОИТРИТ	Output current	GB/T:0-250A CCS CHAdeMO:0-20	DA .	
	Charger mode	Single plug full power / Dual plugs A	B charging in turn	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work	Humidity range	5~90RH%; (non-condensation)		
environme nt	The altitude	2000M		
	Temperature range	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm (Excluding he	ad, handle and casters )	
Dimension	Packing size(mm)	1100 x 900 x 2000mm		
s and protection	Packing/weight	About 380KG		
	IP	IP54		
Starting mod	le	Plug and play/Swipe start/Input pas	sword start/VIN code	
Protection fu	Scram; Input over/under voltage; Output overvoltage; Overtemperature;  Protection function  Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;			
Human-com	puter interaction	7 inch color touch screen		
Screen langu	een language Default English, other languages can be customized		n be customized	
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mode		Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234	GB/T 27930	
Charger stan	dard	CCS: EN61851、EN62196、ISO15118、DIN70121		
		CHAdeMO: CHAdeMO		

	ITEM	FC240750	FC2401K	
	Voltage range	AC380V±20%		
Working frequency		45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-400A		
	Input cable length	Non		
	Power	240KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeN	лO:12V	
	Voltage range	200-750Vdc	200-1000Vdc	
ОИТРИТ	Output current	GB/T:0-250A CCS CHAdeMO:0-200	DA .	
	Charger mode	Single plug full power/Dual plugs Al	B equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50℃; 25℃ (type)		
The work	Humidity range	5~90RH%; (non-condensation)		
environme nt	The altitude	2000M		
	Temperature range	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm (Excluding hea	ad, handle and casters )	
Dimension s and	Packing size(mm)	1100 x 900 x 2000mm		
protection	Packing/weight	About 400KG		
	IP	IP54		
Starting mod	le	Plug and play/Swipe start/Input pas	sword start/VIN code	
Protection fu	unction	Scram; Input over/under voltage; Outp Overcurrent; Short circuit; Leakage; Li monitoring;		
Human-com	puter interaction	7 inch color touch screen		
Screen langu	een language Default English, other languages can be customized		n be customized	
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mode		Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234	GB/T 27930	
Charger stan	dard	CCS: EN61851、EN62196、ISO15118、DIN70121		
		CHAdeMO: CHAdeMO		

#### Combination mode of different ports



#### 5. Operation instruction

#### 5.1 Charging station installation

The charging equipment has high voltage and high current inside, in order to ensure personal safety, should always comply with the relevant regulations:

- (1) Only personnel who have received charging training and have full knowledge of DC charger can install this equipment. Safety precautions and local safety regulations should always be observed during installation;
- (2) Do not operate and maintain charger inside in thunderstorms or humid weather to prevent electric shock;
- (3) If operating inside the charger, ensure that the device is not charged;
- (4) The cabinet of the charger is equipped with a door lock, and the person in charge of the charger keeps key;
- 5.2 Installation preparation
- (1) Unpack and check

When inspecting the goods, unpack and take out the packing list. Check the correctness and integrity of the equipment against the packing list and check whether the goods are damaged.

No.	Name	QTY	Remark
1	DC charger station	1	
2	Inspection report (Certificate of conformity)	1	The contents listed in this
3	Specification	1	packing list refer to the equipment and information
4	IC Card	2	included in the packing box
5	Кеу	1	

#### (2) Prepare cable

The selection of cables should comply with the relevant specifications of the electrical industry.

YJV type cables are recommended for input cables, and the cables should be at least >70 ° C temperature resistant.

Determine the cable according to the following table.

Product mode  Cable Postion Specification  AC three phases A Plastic-case circuit breaker L1 ≥25mm  AC three phases B Plastic-case circuit breaker L2 ≥25mm  AC three phases C Plastic-case circuit breaker L3 ≥25mm  AC input N Plastic-case circuit breaker N  AC PE Wire bar  AC three phases A Plastic-case circuit breaker L1 ≥35mm  AC three phases B Plastic-case circuit breaker L1 ≥35mm  AC three phases B Plastic-case circuit breaker L2 ≥35mm  AC three phases C Plastic-case circuit breaker L3 ≥35mm  AC three phases C Plastic-case circuit breaker L3 ≥35mm  AC three phases C Plastic-case circuit breaker L3 ≥35mm  AC three phases C Plastic-case circuit breaker L3 ≥35mm  AC three phases C Plastic-case circuit breaker L3 ≥35mm  AC pE  Vire bar  AC three phases A Plastic-case circuit breaker L1 ≥50mm  AC three phases B Plastic-case circuit breaker L1 ≥50mm	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
AC three phases B Plastic-case circuit breaker L2 ≥25mm  AC three phases C Plastic-case circuit breaker L3 ≥25mm  AC input N Plastic-case circuit breaker N ≥16mm  AC PE Wire bar ≥16mm  AC three phases A Plastic-case circuit breaker L1 ≥35mm  AC three phases B Plastic-case circuit breaker L2 ≥35mm  AC three phases C Plastic-case circuit breaker L2 ≥35mm  AC input N Plastic-case circuit breaker L3 ≥35mm  AC pe Wire bar ≥16mm  AC PE Wire bar ≥16mm  AC PE Plastic-case circuit breaker N ≥16mm  AC PE Plastic-case circuit breaker N ≥16mm  AC PE Plastic-case circuit breaker L1 ≥50mm	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
AC three phases C Plastic-case circuit breaker L3 ≥25mm  AC input N Plastic-case circuit breaker N ≥16mm  AC PE Wire bar ≥16mm  AC three phases A Plastic-case circuit breaker L1 ≥35mm  AC three phases B Plastic-case circuit breaker L2 ≥35mm  AC three phases C Plastic-case circuit breaker L3 ≥35mm  AC input N Plastic-case circuit breaker L3 ≥35mm  AC PE Wire bar ≥16mm  AC PE Wire bar ≥16mm  AC three phases A Plastic-case circuit breaker N ≥16mm  AC PE Wire bar ≥16mm	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
AC input N Plastic-case circuit breaker N ≥16mm  AC PE Wire bar ≥16mm  AC three phases A Plastic-case circuit breaker L1 ≥35mm  AC three phases B Plastic-case circuit breaker L2 ≥35mm  AC three phases C Plastic-case circuit breaker L3 ≥35mm  AC input N Plastic-case circuit breaker N ≥16mm  AC PE Wire bar ≥16mm  AC three phases A Plastic-case circuit breaker L1 ≥50mm	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
AC PE  Wire bar  AC three phases A  Plastic-case circuit breaker L1  ≥35mm  AC three phases B  Plastic-case circuit breaker L2  ≥35mm  AC three phases C  Plastic-case circuit breaker L3  ≥35mm  AC input N  Plastic-case circuit breaker N  AC input N  Plastic-case circuit breaker N  AC PE  Wire bar  AC three phases A  Plastic-case circuit breaker L1  ≥50mm	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
AC three phases A Plastic-case circuit breaker L1 ≥35mm  AC three phases B Plastic-case circuit breaker L2 ≥35mm  AC three phases C Plastic-case circuit breaker L3 ≥35mm  AC input N Plastic-case circuit breaker N ≥16mm  AC PE Wire bar ≥16mm  AC three phases A Plastic-case circuit breaker L1 ≥50mm	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
AC three phases B Plastic-case circuit breaker L2 ≥35mm  AC three phases C Plastic-case circuit breaker L3 ≥35mm  AC input N Plastic-case circuit breaker N ≥16mm  AC PE Wire bar ≥16mm  AC three phases A Plastic-case circuit breaker L1 ≥50mm	2 2 2 2 2
80kw 90kw  AC three phases C  Plastic-case circuit breaker L3  ≥35mm  AC input N  Plastic-case circuit breaker N  AC PE  Wire bar  AC three phases A  Plastic-case circuit breaker L1  ≥50mm	2
90kw  AC three phases C  Plastic-case circuit breaker L3  ≥35mm  AC input N  Plastic-case circuit breaker N  AC PE  Wire bar  AC three phases A  Plastic-case circuit breaker L1  ≥50mm	2
AC PE Wire bar ≥16mm  AC three phases A Plastic-case circuit breaker L1 ≥50mm	2
AC three phases A Plastic-case circuit breaker L1 ≥50mm	
	2
AC three phases B Plastic-case circuit breaker L2 ≥50mm	
	2
100kw 120kw AC three phases C Plastic-case circuit breaker L3 ≥50mm	2
AC input N Plastic-case circuit breaker N ≥25mm	2
AC PE Wire bar ≥25mm	2
AC three phases A Plastic-case circuit breaker L1 ≥70mm	2
150kw AC three phases B Plastic-case circuit breaker L2 ≥70mm	2
160kw 180kw  AC three phases C Plastic-case circuit breaker L3 ≥70mm	2
AC input N Plastic-case circuit breaker N ≥35mm	2
AC PE Wire bar ≥35mm	2
AC three phases A Plastic-case circuit breaker L1 ≥95mm	2
AC three phases B Plastic-case circuit breaker L2 ≥95mm	2
200kw 240kw AC three phases C Plastic-case circuit breaker L3 ≥95mm	2
AC input N Plastic-case circuit breaker N ≥50mm	2
AC PE Wire bar ≥50mm	2

The cable selection in the table is for reference only, and should be determined by the contractor with power construction qualification according to the actual situation, laying length, laying environment and other factors

#### (3) Prepare tools

The following table lists the tools required for installing the charger. Before using the tools, take insulation and ESD preventive measures.

Tool list		
Adjustable wrench	Sleeve	
Steel tape ruler	Screwdriver (Cross), (one word)	
Electrician's knife	Spring washer, flat washer	
Cable cutters	Hydraulic crimping pliers	
Power cable strip	Digital multimeter	
Percussion drill	Six M12*120 expansion screws	

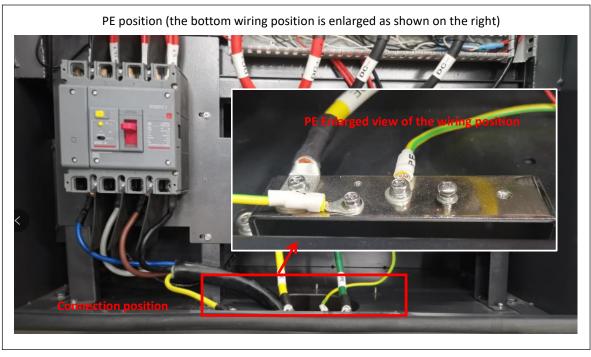
#### (4) Cement base

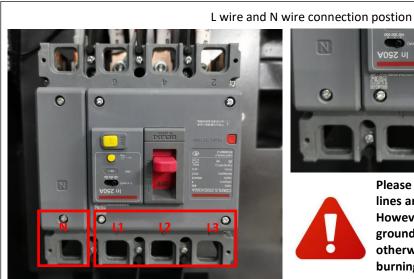
Dimensions of the base are shown in the appendix

- 5.3 Install the cabinet
- (1) Cement base: Construction of cement base according to the size drawing of the base (see the attached drawing for details);
- (2) When the cement base is constructed, it is necessary to consider that after the charging pile is installed, there is no obstacle on the front, the back is 100mm away from the obstacle, and the left and right sides are 1000mm away from the obstacle;
- (3) Open the wooden case: remove the top cover and the surrounding sealing plate;
- (4) Move the charger to the cement base with a forklift and adjust the position so that the fixing hole of the charger is aligned with the embedded stud of the cement base;
- (5) Fine-tune the charging pile so that it stands upright in the middle of the cement base;
- (6) Connect the cable at the bottom of the device.

#### 6. Electrical installation

- 6.1Connect grounding and input cables
- -Open the cabinet door; Route the ground cable through the hole on the cabinet bottom, and secure one end of the cable to the ground copper bar.
- -Connect the input cable and set all switches in the off position before electrical connection. Installation of input cables can only be performed by qualified personnel. Do not reverse the input (N) and (PE); otherwise, the charging device will be damaged.





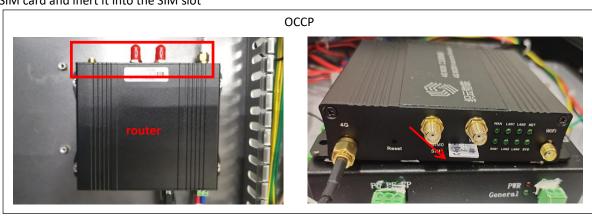




Please note that the three fire lines are not in phase sequence However, the neutral line and the ground line must not be reversed, otherwise there will be the risk of burning the equipment!!

# 6.2 SIM card install

-Check the signal strength of mobile/telecom/Unicom operators at the installation site, select a suitable operator SIM card and inert it into the SIM slot



#### 7.Check after installation

After the charger is installed, check the installation as follows:

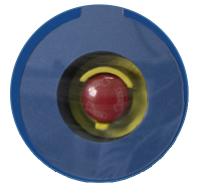
- 7.1External inspection
- -Check whether the cabinet is installed horizontally, vertically, and securely.
- -Check whether all bolts are tightened (especially pay attention to the electrical connection part), whether the flat washer and spring washer are complete, whether the installation is reversed, etc.;
- -Check the equipment for unwanted materials and remove all excess materials;
- -Check whether the cabinet is damaged or has lost paint. If the paint falls off, the part of the paint should be immediately repainted with anti-rust paint to prevent corrosion;
- -Clean the cabinet;
- -Check whether the opening and closing of the cabinet door are flexible, and whether the door lock is normal;
- -Check whether the charging gun head can be easily inserted and removed;
- -Check whether the air inlet filters at the lower sides of the cabinet are normal
- 7.2 Electrical inspection
- Check whether all circuit breakers and cable specifications of the charger are correct;
- Check that all cable connections are firm and reliable;
- Check AC input and power distribution: check whether the color of AC cables is standard, whether the original wiring of the device is tight, and whether the safety labels of the AC power distribution part are complete;
- Check whether the SPD circuit breaker is reliably closed and other switches are in the off position.
- Check whether the wiring is neat and the cable bundling complies with the process specifications.

#### 8. Power on









In case of emergency or other uncontrollable failure, you can press the emergency button at the bottom of the charger screen to immediately shut down the device.

# Plug and charge the charging procedure



1.Enter the welcome screen



2.Prompt credit card



3.Swipe your IC card to enter



4. Automatic pre-charge check



5.Charging



6.Swipe card finish charging

#### 9. Routine maintenance table

Check the content	Check the method	Maintenance cycle
General operating status and environment of the system	<ol> <li>Observe whether the components, circuit and device structure of the charger are damaged or deformed;</li> <li>Listen to whether there is any abnormal sound when the charger is running;</li> <li>Check whether the data display on the touch screen is normal.</li> <li>Check whether the switch, contactor, circuit breaker, and fan are normal.</li> <li>Check whether the heat of the charger shell is normal;</li> <li>Observe whether the inlet and outlet air is normal;</li> <li>Check the humidity and dust around the charger.</li> <li>Attention! Intake ventilation must be checked. If the module is not cooled effectively, it will fail due to overheating.</li> </ol>	Once every six months

System clean	Check the cleanliness of circuit boards and components;     Check the temperature and dust of the internal charging module. Remove the module and clean it if necessary.	Once every six months to once a year (depending on the dust content of the environment)
Power circuit connection	Check whether the power cable and control cable are damaged, especially whether the skin in contact with the metal surface is cut;     Check whether the insulation bandage of the power cable wiring terminal is off.	Six months after the first commissioning, and then once every six months to a year
Cooling fan maintenance and replacement	<ol> <li>Check whether there are cracks in fan blades;</li> <li>Listen to whether there is abnormal vibration sound when the fan is running;</li> <li>Replace the fan in time if it is abnormal.</li> </ol>	Once a year
Circuit breaker maintenance	Check the corrosion of all metal components regularly (every six months);     Annual inspection of contactor to ensure good mechanical operation.	Once every six months to a year
Safety features	Check the function of emergency stop button and stop button;     Simulated shutdown.	Once every six months to a year

#### 10.Precautions for Use

- (1) In the normal charging process, it is strictly forbidden to plug or remove the charging gun with electricity;
- (2) To end charging, you must first press the "Start/Stop" button, pull the gun, and then disconnect the charger to disconnect the mains;
- (3) Do not pull the locked gun out of the socket by brute force to avoid conductive materials such as metal foreign bodies entering the device.
- (4) Non-professionals do not open the charger shell to avoid damage to the charger;
- (5) Pay attention to the BMS power supply voltage of 12V or 24V, and select the corresponding charging model number.
- (6) The charger is equipped with a standard input cable. Users need to connect an external circuit breaker to ensure that the input PE cable is reliably grounded.
- (7) Only when the input power distribution capacity is not less than the rated power of the charger, can the charger be charged at full power.
- (8) Dc charging gun is standard, no need to install it separately;
- (9) Indoor drying is forbidden to be used in rainwater environment;
- (10) If there is a heat source near the charger, please move it as far as possible and take the surrounding space into full consideration to facilitate heat dissipation;
- (11) Avoid steam, dust and metal dust;
- (12) Keep away from flammable, explosive and corrosive gases and liquids;
- (13) Stay away from electromagnetic interference sources.

# 11.The appendix

#### 11.1Quality assurance

During the warranty period, the company will repair or replace new products free of charge. During the warranty period, the company requires customers to show the invoice and date of purchase. At the same time, the trademark on the product should be clearly visible, otherwise the right not to give quality assurance. The unqualified products after replacement shall be handled by

our company. Customer shall allow company reasonable time to repair faulty equipment.

The company reserves the right not to guarantee quality in the following cases:

- •The whole machine and parts have exceeded the free warranty period
- Transportation damage
- •Incorrect installation, modification, or use
- •Outdoor charging in rainy days leads to water inflow damage of charging pile.
- •Extremely harsh operating conditions beyond those specified in this manual
- •Machine failure or damage not caused by installation, repair, alteration or disassembly by our service personnel
- Failure or damage of the machine caused by non-standard use or not confirmed by the company
- •Any beyond the scope of use specified in the relevant national standards
- Damage caused by abnormal natural conditions



Non-company personnel are prohibited to open the charging equipment, such as personal accidents, property accidents, safety accidents caused by this has nothing to do with the company.

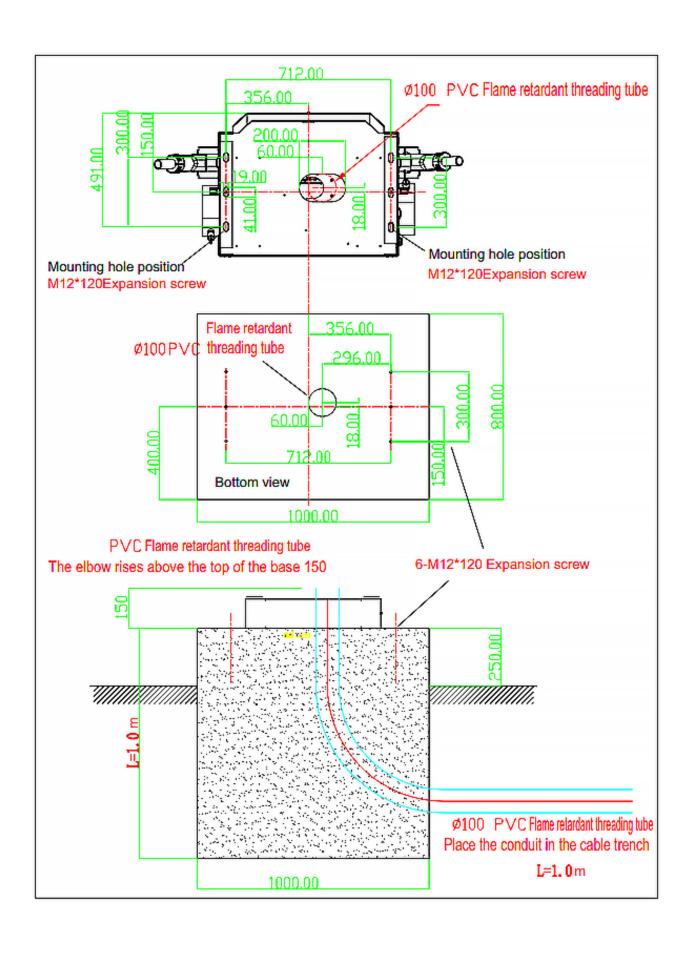
In case of product failure caused by the above situation, if the customer requires maintenance service, the company can provide paid maintenance service after the judgment of the service organization.

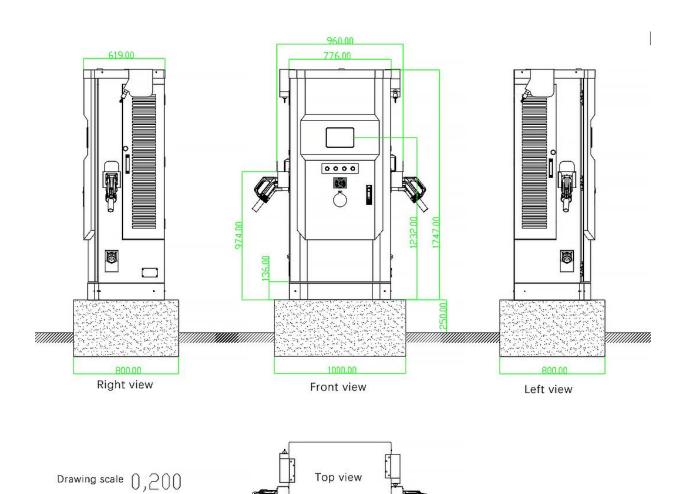
#### 11.2 Precautions

The company does not assume any responsibility for the loss caused by the configuration software products provided with the products.

Any use of any or all of the data in the firmware or software developed by the company for commercial purposes is prohibited.

It is forbidden to decompilate, decrypt or destroy the original program design of the software developed by the company.





# FC series 60-240kw

# **Floor-mounted DC EV charger Product specification**



# Catalogue

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#### 1.Overview

#### 1.1 Introduction

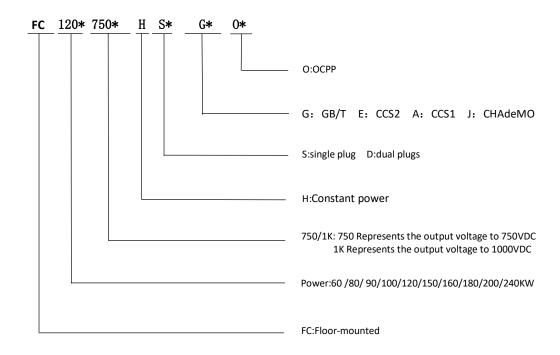


#### Floor-mounted DC EV charger

Specially designed for electric vehicles, and provide friendly human-machine operation interface, APP charging, LCD interaction, charging control, metering and billing, payment, remote communication and security protection in one equipment. This series of products can be widely installed and applied in public operation charging stations, such as industrial parking lots, energy storage charging station, urban centralized charging stations, special vehicle charging stations (public transport, logistics, sanitation vehicles, etc.). The appearance of the charging pile is shown on the left.

The products can compliant with GB/T, CCS1, CCS2 & CHAdeMO and can also be single and double guns, which can be combined freely with different standards to meet the needs of global customers in all aspects. Please contact us if you have any needs.

#### 1.2 Product model explanation:

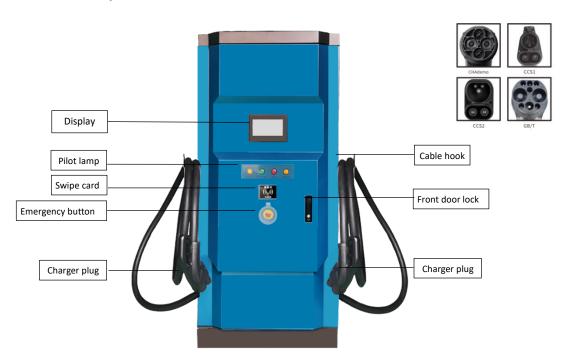


#### 2. Safety instructions

- -Charging operation shall follow the operation instructions provided by our company;
- -Non-professionals are strictly prohibited to open the charging machine cabinet; Do not disassemble or assemble without permission;
- -When stopping midway, manually click the button to stop and then pull out the charging gun;
- -It is strictly forbidden to insert or remove the charging gun directly during the charging process, otherwise it will burn out the charging gun and even the charger;
- -Any operation unrelated to charging is prohibited during the charging process, and other operations can be carried out only when the charging gun is disconnected from the car and the charger button is clicked to stop.
- -Avoid fireworks (open fire) near the charger and pay attention to ventilation;
- -The fuse must be replaced with the same type of product, not with copper, iron wire replacement;
- -There is high voltage in the charger, and any fault should be repaired by professional personnel to avoid danger;
- -The superior circuit breaker and distribution device of the charger shall be selected, installed and operated by professional electrician;
- -In severe weather such as thunderstorms, you are advised to disconnect the power supply. If water accumulates in the charger, contact the personnel of the manufacturer to handle the water before continuing to use the charger.
- -The unit weight of the charging gun cable is large, and the long cable is easy to drag force in the actual charging process, which is not conducive to releasing the twisting force, increasing the risk of cable distortion and bulge, and affecting the service life of the product. Therefore, do not pull or twist the charging cable. The cable of the charging gun must be smoothed and not twisted to force the charging gun holder during use.
- -Do not shake the charging gun from side to side when inserting or removing the charging gun. Insert and remove the charging gun vertically.
- -If any of the following conditions occur, please turn off the power in time and notify professional personnel for repair:
  - Abnormal sound appears inside the charger;
  - Odor or smoke from inside the charger;
  - No display or response on the charger screen;
  - The charger has an unrecoverable fault alarm;

Note: Before powering on and running, ensure that the equipment shell is effectively connected to the earth, otherwise there may be electric shock risk!

#### 3. Appearance and Composition



# **4.Detailed technical parameters**

ITEM		FC060750 FC0601K		
	Voltage range	AC380V±20%		
	Working frequency	45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-100A		
	Input cable length	Non		
Power		60KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V		
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	0-200A	0-200A	
	Charger mode	Single plug Full power charge/Dual plug	s AB equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	erature range -20~50°C; 25°C (type)		
The work	Humidity range	5~90RH%; (non-condensation)		
environment	Operation altitude	<2000M		
	Operation environment	Indoor/outdoor		
Machine size(mm) 750x 530 x 1609mm (Excluding head, handle		nandle and casters )		
Dimensions	Packing size(mm)	1100 x 900 x 2000mm		
and protection Packed weight About 380KG		About 380KG		
Environment protection IP54				
Starting mode		Plug and play/Swipe start/Input password start/VIN code		
Protection func	tion	Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;		
Human-comput	ter interaction	7 inch color touch screen		
Screen languag	e	Default English, other languages can be customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mo	de	4G/WIFI/Ethernet		
Installation mod	de	Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GB	3/T 27930	
Charger standa	rd	CCS: EN61851 \ EN62196 \ ISO15118 \ DIN70121		
		CHAdeMO: CHAdeMO		

ITEM		FC080750 FC0801K			
	Voltage range	AC380V±20%			
	Working frequency	45-65HZ			
INPUT	The power factor	≥0.99	≥0.99		
	Input current	0-134A			
Input cable length		Non			
Power 80KW					
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V			
	Voltage range	200-750Vdc	200-1000Vdc		
OUTPUT	Output current	0-250A	0-200A		
	Charger mode	Single plug Full power charge/Dual plug	s AB equalization		
	Charger plug	Single plug/Dual plugs			
	Cable	Default 5 meters (optional)			
	Temperature range	-20~50℃; 25℃ (type)			
The work	Humidity range	5~90RH%; (non-condensation)			
environment	Operation altitude	<2000M			
	Operation environment	Indoor/outdoor			
Machine size(mm)		750x 530 x 1609mm(Excluding head, handle and casters)			
Dimensions	Packing size(mm)	1100 x 900 x 2000mm			
and protection	Packed weight	About 380KG			
Environment protection		IP54			
Starting mode		Plug and play/Swipe start/Input password start/VIN code			
Protection func	tion	Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;			
Human-comput	ter interaction	7 inch color touch screen			
Screen languag	e	Default English, other languages can be customized			
Charging mode		Plug and play、OCPP 1.6			
Networking mode		4G/WIFI/Ethernet			
Installation mod	de	Floor-mounted			
		GB/T: GB/T 18487 、GB/T 20234、GB/T 27930			
Charger standa	rd	CCS: EN61851 EN62196 ISO15118 DIN70121			
		CHAdeMO: CHAdeMO			

ITEM		FC090750 FC0901K			
	Voltage range	AC380V±20%			
	Working frequency	45-65HZ			
INPUT	The power factor	≥0.99	≥0.99		
	Input current	0-174A			
Input cable length		Non			
	Power	90KW			
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V			
	Voltage range	200-750Vdc	200-1000Vdc		
OUTPUT	Output current	0-250A	0-200A		
	Charger mode	Single plug Full power charge/Dual plug	s AB charging in turn		
	Charger plug	Single plug/Dual plugs			
	Cable	Default 5 meters (optional)			
	Temperature range	-20~50℃; 25℃ (type)			
The work	Humidity range	5~90RH%; (non-condensation)			
environment	Operation altitude	<2000M			
	Operation environment	Indoor/outdoor			
Machine size(mm)		750x 530 x 1609mm (Excluding head, handle and casters)			
Dimensions	Packing size(mm)	1100 x 900 x 2000mm			
and protection	Packed weight	About 380KG			
Environment protection		IP54			
Starting mode		Plug and play/Swipe start/Input password start/VIN code			
Protection func	tion	Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;			
Human-comput	ter interaction	7 inch color touch screen			
Screen language	e	Default English, other languages can be customized			
Charging mode		Plug and play、OCPP 1.6			
Networking mode		4G/WIFI/Ethernet			
Installation mod	de	Floor-mounted			
		GB/T: GB/T 18487 、GB/T 20234、GB/T 27930			
Charger standa	rd	CCS: EN61851、EN62196、ISO15118、DIN70121			
		CHAdeMO: CHAdeMO			

ITEM		FC100750 FC1001K		
	Voltage range	AC380V±20%		
Working frequency		45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-174A		
	Input cable length	Non		
	Power	100KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V		
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	0-250A	0-200A	
	Charger mode	Single plug Full power charge/Dual plug	s AB charging in turn	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	e -20~50°C; 25°C (type)		
The work Humidity range		5~90RH%; (non-condensation)		
environment	Operation altitude	<2000M		
Operation environment		Indoor/outdoor		
Machine size(mm)		750x 530 x 1609mm(Excluding head, h	nandle and casters)	
Dimensions and	Packing size(mm)	1100 x 900 x 2000mm		
protection	Packed weight	About 380KG		
Environment protection		IP54		
Starting mode		Plug and play/Swipe start/Input password start/VIN code		
Protection func	tion	Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;		
Human-comput	ter interaction	7 inch color touch screen		
Screen languag	e	Default English, other languages can be customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mod	de	Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GI	B/T 27930	
Charger standa	rd	CCS: EN61851、EN62196、ISO15118	、DIN70121	
		CHAdeMO: CHAdeMO		

ITEM		FC120750 FC1201K		
	Voltage range	AC380V±20%		
Working frequency		45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-200A		
Input cable length		Non		
	Power	120KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V		
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	GB/T:0-250A CCS CHAdeMO:0-200	A	
	Charger mode	Single plug Full power charge/Dual p	lugs AB equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	ange -20~50°C; 25°C (type)		
The work environme	Humidity range	5~90RH%; (non-condensation)		
nt	The altitude	2000M		
	Temperature range	Indoor/outdoor		
Machine size(mm)		750x 530 x 1609mm (Excluding head, handle and casters)		
Dimension s and	Packing size(mm)	1100 x 900 x 2000mm		
protection	Packing/weight	About 380KG		
	IP	IP54		
Starting mod	le	Plug and play/Swipe start/Input password start/VIN code		
Protection fu	ınction	Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;		
Human-com	puter interaction	7 inch color touch screen		
Screen langu	age	Default English, other languages can be customized		
Charging mo	de	Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation n	node	Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、	GB/T 27930	
Charger stan	dard	CCS: EN61851、EN62196、ISO15118、DIN70121		
		CHAdeMO: CHAdeMO		

	ITEM	FC150750	FC1501K	
	Voltage range	AC380V±20%		
Working frequency		45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-230A		
Input cable length		Non		
	Power	150KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V		
	Voltage range	200-750Vdc	200-1000Vdc	
ОИТРИТ	Output current	GB/T:0-250A CCS CHAdeMO:0-200A		
	Charger mode	Single plug full power/Dual plugs AB cha	rging in turn	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work environm	Humidity range	5~90RH%; (non-condensation)		
ent	The altitude	2000M		
	Temperature range	Indoor/outdoor		
Machine size(mm)		750x 530 x 1609mm (Excluding head, handle and casters)		
Dimensio ns and	Packing size(mm)	1100 x 900 x 2000mm		
protectio n	Packing/weight	About 380KG		
	IP	IP54		
Starting mo	ode	Plug and play/Swipe start/Input passwor	rd start/VIN code	
Protection function  Scram ; Input over/under voltage ; Output overvoltage ; Overtemperat Overcurrent ; Short circuit ; Leakage ; Lightning ; Battery reverse; Insul monitoring ;		· · · · · · · · · · · · · · · · · · ·		
Human-cor	mputer interaction	7 inch color touch screen		
Screen lang	guage	Default English, other languages can be customized		
Charging m	node	Plug and play、OCPP 1.6		
Networking	g mode	4G/WIFI/Ethernet		
Installation	mode	Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GB	V/T 27930	
Charger sta	andard	CCS: EN61851 \ EN62196 \ ISO15118 \ DIN70121		
		CHAdeMO: CHAdeMO		

ITEM		FC160750 FC1601K		
	Voltage range	AC380V±20%		
Working frequency		45-65HZ		
INPUT	The power factor	≥0.99		
	Input current	0-268A		
Input cable length Non				
	Power	160KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V		
	Voltage range	200-750Vdc	200-1000Vdc	
ОИТРИТ	Output current	GB/T:0-250A CCS CHAdeMO:0-200A		
	Charger mode	Single plug full power/Dual plugs AB cha	rging equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work environm	Humidity range	5~90RH%; (non-condensation)		
environm	The altitude	2000M		
	Temperature range	Indoor/outdoor		
Dimensio ns and Packing size(mm)		750x 530 x 1609mm(Excluding head, handle and casters)		
		1100 x 900 x 2000mm		
protectio n	Packing/weight	About 380KG		
IP		IP54		
Starting mo	ode	Plug and play/Swipe start/Input passwor	rd start/VIN code	
Protection	function	Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;		
Human-cor	nputer interaction	7 inch color touch screen		
Screen lang	guage	Default English, other languages can be customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation	mode	Floor-mounted		
		GB/T: GB/T 18487 、GB/T 20234、GB	F/T 27930	
Charger sta	indard	CCS: EN61851、EN62196、ISO15118、DIN70121		
		CHAdeMO: CHAdeMO		

ITEM		FC180750	FC1801K
INPUT	Voltage range	AC380V±20%	
	Working frequency	45-65HZ	
	The power factor	≥0.99	
	Input current	0-285A	
	Input cable length	Non	
OUTPUT	Power	180KW	
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V	
	Voltage range	200-750Vdc	200-1000Vdc
	Output current	GB/T:0-250A CCS CHAdeMO:0-200A	
	Charger mode	Single plug full power / Dual plugs AB equalization	
	Charger plug	Single plug/Dual plugs	
	Cable	Default 5 meters (optional)	
The work environme nt	Temperature range	-20~50℃; 25℃ (type)	
	Humidity range	5~90RH%; (non-condensation)	
	The altitude	2000M	
	Temperature range	Indoor/outdoor	
Dimension s and protection	Machine size(mm)	750x 530 x 1609mm(Excluding head, handle and casters)	
	Packing size(mm)	1100 x 900 x 2000mm	
	Packing/weight	About 380KG	
	IP	IP54	
Starting mode		Plug and play/Swipe start/Input password start/VIN code	
Protection function		Scram ; Input over/under voltage ; Output overvoltage ; Overtemperature ; Overcurrent ; Short circuit ; Leakage ; Lightning ; Battery reverse; Insulation monitoring ;	
Human-computer interaction		7 inch color touch screen	
Screen language		Default English, other languages can be customized	
Charging mode		Plug and play、OCPP 1.6	
Networking mode		4G/WIFI/Ethernet	
Installation mode		Floor-mounted	
Charger standard		GB/T: GB/T 18487 、GB/T 20234、GB/T 27930	
		CCS: EN61851、EN62196、ISO15118、DIN70121	
		CHAdeMO: CHAdeMO	

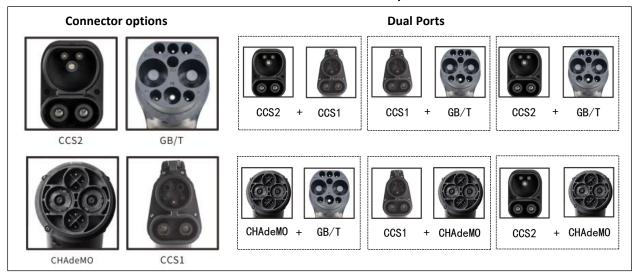
# 200kw series

ITEM		FC200750	FC2001K	
Voltage range		AC380V±20%		
INPUT	Working frequency	45-65HZ		
	The power factor	≥0.99		
	Input current	0-335A		
	Input cable length	Non		
	Power	200KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V		
	Voltage range	200-750Vdc	200-1000Vdc	
ОИТРИТ	Output current	GB/T:0-250A CCS CHAdeMO:0-20	DA .	
	Charger mode	Single plug full power / Dual plugs A	Single plug full power / Dual plugs AB charging in turn	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work environme	Humidity range	5~90RH%; (non-condensation)		
nt	The altitude	2000M		
	Temperature range	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm(Excluding head, handle and casters)		
Dimension s and	Packing size(mm)	1100 x 900 x 2000mm		
protection	Packing/weight	About 380KG		
	IP	IP54		
Starting mod	le	Plug and play/Swipe start/Input password start/VIN code		
Protection fu	unction	Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;		
Human-com	puter interaction	7 inch color touch screen		
Screen langu	age	Default English, other languages can be customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mode		Floor-mounted		
Charger standard		GB/T: GB/T 18487 、GB/T 20234、GB/T 27930		
		CCS: EN61851, EN62196, ISO15118, DIN70121		
		CHAdeMO: CHAdeMO		

# 240kw series

ITEM		FC240750	FC2401K	
Voltage range		AC380V±20%		
INPUT	Working frequency	45-65HZ		
	The power factor	≥0.99		
	Input current	0-400A		
	Input cable length	Non		
	Power	240KW		
	Auxiliary power supply	GB/T:12V/24V CCS1 CCS2 CHAdeMO:12V		
	Voltage range	200-750Vdc	200-1000Vdc	
OUTPUT	Output current	GB/T:0-250A CCS CHAdeMO:0-200	DA .	
	Charger mode	Single plug full power/Dual plugs Al	3 equalization	
	Charger plug	Single plug/Dual plugs		
	Cable	Default 5 meters (optional)		
	Temperature range	-20~50°C; 25°C (type)		
The work environme	Humidity range	5~90RH%; (non-condensation)		
nt	The altitude	2000M		
	Temperature range	Indoor/outdoor		
	Machine size(mm)	750x 530 x 1609mm (Excluding head, handle and casters)		
Dimension s and	Packing size(mm)	1100 x 900 x 2000mm		
protection	Packing/weight	About 400KG		
	IP	IP54		
Starting mod	le	Plug and play/Swipe start/Input password start/VIN code		
Protection function		Scram; Input over/under voltage; Output overvoltage; Overtemperature; Overcurrent; Short circuit; Leakage; Lightning; Battery reverse; Insulation monitoring;		
Human-com	puter interaction	7 inch color touch screen		
Screen langu	age	Default English, other languages can be customized		
Charging mode		Plug and play、OCPP 1.6		
Networking mode		4G/WIFI/Ethernet		
Installation mode		Floor-mounted		
Charger standard		GB/T: GB/T 18487 、GB/T 20234、GB/T 27930		
		CCS: EN61851 \ EN62196 \ ISO15118 \ DIN70121		
		CHAdeMO: CHAdeMO		

### Combination mode of different ports



## 5. Operation instruction

## 5.1 Charging station installation

The charging equipment has high voltage and high current inside, in order to ensure personal safety, should always comply with the relevant regulations:

- (1) Only personnel who have received charging training and have full knowledge of DC charger can install this equipment. Safety precautions and local safety regulations should always be observed during installation;
- (2) Do not operate and maintain charger inside in thunderstorms or humid weather to prevent electric shock;
- (3) If operating inside the charger, ensure that the device is not charged;
- (4) The cabinet of the charger is equipped with a door lock, and the person in charge of the charger keeps key;
- 5.2 Installation preparation
- (1) Unpack and check

When inspecting the goods, unpack and take out the packing list. Check the correctness and integrity of the equipment against the packing list and check whether the goods are damaged.

No.	Name	QTY	Remark	
1	DC charger station	1	The contents listed in this packing list refer to the equipment and information included in the packing box	
2	Inspection report (Certificate of conformity)	1		
3	Specification	1		
4	IC Card	2		
5	Кеу	1		

### (2) Prepare cable

The selection of cables should comply with the relevant specifications of the electrical industry.

YJV type cables are recommended for input cables, and the cables should be at least >70 ° C temperature resistant.

Determine the cable according to the following table.

Does does to see a de	Input cable			
Product mode	Cable	Postion	Specification	
60kw	AC three phases A	Plastic-case circuit breaker L1	≥25mm²	
	AC three phases B	Plastic-case circuit breaker L2	≥25mm²	
	AC three phases C	Plastic-case circuit breaker L3	≥25mm²	
	AC input N	Plastic-case circuit breaker N	≥16mm²	
	AC PE	Wire bar	≥16mm²	
	AC three phases A	Plastic-case circuit breaker L1	≥35mm²	
	AC three phases B	Plastic-case circuit breaker L2	≥35mm²	
80kw 90kw	AC three phases C	Plastic-case circuit breaker L3	≥35mm²	
	AC input N	Plastic-case circuit breaker N	≥16mm²	
	AC PE	Wire bar	≥16mm²	
	AC three phases A	Plastic-case circuit breaker L1	≥50mm²	
	AC three phases B	Plastic-case circuit breaker L2	≥50mm²	
100kw 120kw	AC three phases C	Plastic-case circuit breaker L3	≥50mm²	
-	AC input N	Plastic-case circuit breaker N	≥25mm²	
	AC PE	Wire bar	≥25mm²	
	AC three phases A	Plastic-case circuit breaker L1	≥70mm²	
150kw	AC three phases B	Plastic-case circuit breaker L2	≥70mm²	
160kw 180kw	AC three phases C	Plastic-case circuit breaker L3	≥70mm²	
	AC input N	Plastic-case circuit breaker N	≥35mm²	
	AC PE	Wire bar	≥35mm²	
	AC three phases A	Plastic-case circuit breaker L1	≥95mm²	
	AC three phases B	Plastic-case circuit breaker L2	≥95mm²	
200kw 240kw	AC three phases C	Plastic-case circuit breaker L3	≥95mm²	
	AC input N	Plastic-case circuit breaker N	≥50mm²	
	AC PE	Wire bar	≥50mm²	

The cable selection in the table is for reference only, and should be determined by the contractor with power construction qualification according to the actual situation, laying length, laying environment and other factors

### (3) Prepare tools

The following table lists the tools required for installing the charger. Before using the tools, take insulation and ESD preventive measures.

Tool list			
Adjustable wrench	Sleeve		
Steel tape ruler	Screwdriver (Cross), (one word)		
Electrician's knife	Spring washer, flat washer		
Cable cutters	Hydraulic crimping pliers		
Power cable strip	Digital multimeter		
Percussion drill	Six M12*120 expansion screws		

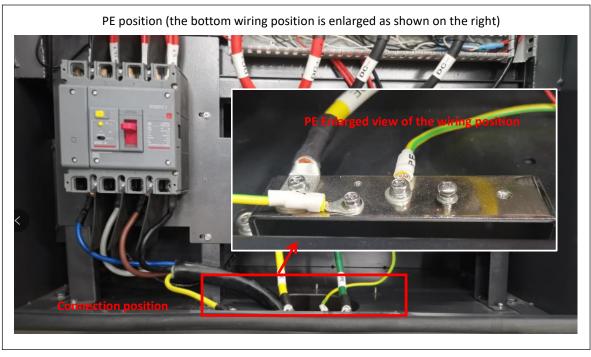
#### (4) Cement base

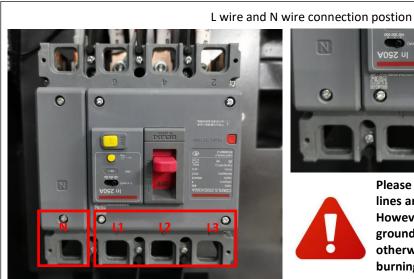
Dimensions of the base are shown in the appendix

- 5.3 Install the cabinet
- (1) Cement base: Construction of cement base according to the size drawing of the base (see the attached drawing for details);
- (2) When the cement base is constructed, it is necessary to consider that after the charging pile is installed, there is no obstacle on the front, the back is 100mm away from the obstacle, and the left and right sides are 1000mm away from the obstacle;
- (3) Open the wooden case: remove the top cover and the surrounding sealing plate;
- (4) Move the charger to the cement base with a forklift and adjust the position so that the fixing hole of the charger is aligned with the embedded stud of the cement base;
- (5) Fine-tune the charging pile so that it stands upright in the middle of the cement base;
- (6) Connect the cable at the bottom of the device.

### 6. Electrical installation

- 6.1Connect grounding and input cables
- -Open the cabinet door; Route the ground cable through the hole on the cabinet bottom, and secure one end of the cable to the ground copper bar.
- -Connect the input cable and set all switches in the off position before electrical connection. Installation of input cables can only be performed by qualified personnel. Do not reverse the input (N) and (PE); otherwise, the charging device will be damaged.





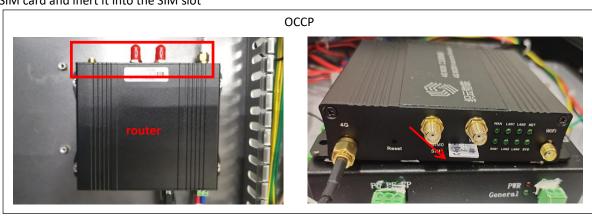




Please note that the three fire lines are not in phase sequence However, the neutral line and the ground line must not be reversed, otherwise there will be the risk of burning the equipment!!

# 6.2 SIM card install

-Check the signal strength of mobile/telecom/Unicom operators at the installation site, select a suitable operator SIM card and inert it into the SIM slot



#### 7.Check after installation

After the charger is installed, check the installation as follows:

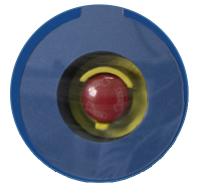
- 7.1External inspection
- -Check whether the cabinet is installed horizontally, vertically, and securely.
- -Check whether all bolts are tightened (especially pay attention to the electrical connection part), whether the flat washer and spring washer are complete, whether the installation is reversed, etc.;
- -Check the equipment for unwanted materials and remove all excess materials;
- -Check whether the cabinet is damaged or has lost paint. If the paint falls off, the part of the paint should be immediately repainted with anti-rust paint to prevent corrosion;
- -Clean the cabinet;
- -Check whether the opening and closing of the cabinet door are flexible, and whether the door lock is normal;
- -Check whether the charging gun head can be easily inserted and removed;
- -Check whether the air inlet filters at the lower sides of the cabinet are normal
- 7.2 Electrical inspection
- Check whether all circuit breakers and cable specifications of the charger are correct;
- Check that all cable connections are firm and reliable;
- Check AC input and power distribution: check whether the color of AC cables is standard, whether the original wiring of the device is tight, and whether the safety labels of the AC power distribution part are complete;
- Check whether the SPD circuit breaker is reliably closed and other switches are in the off position.
- Check whether the wiring is neat and the cable bundling complies with the process specifications.

### 8. Power on









In case of emergency or other uncontrollable failure, you can press the emergency button at the bottom of the charger screen to immediately shut down the device.

# Plug and charge the charging procedure



1.Enter the welcome screen



2.Prompt credit card



3.Swipe your IC card to enter



4. Automatic pre-charge check



5.Charging



6.Swipe card finish charging

## 9. Routine maintenance table

Check the content	Check the method	Maintenance cycle
General operating status and environment of the system	<ol> <li>Observe whether the components, circuit and device structure of the charger are damaged or deformed;</li> <li>Listen to whether there is any abnormal sound when the charger is running;</li> <li>Check whether the data display on the touch screen is normal.</li> <li>Check whether the switch, contactor, circuit breaker, and fan are normal.</li> <li>Check whether the heat of the charger shell is normal;</li> <li>Observe whether the inlet and outlet air is normal;</li> <li>Check the humidity and dust around the charger.</li> <li>Attention! Intake ventilation must be checked. If the module is not cooled effectively, it will fail due to overheating.</li> </ol>	Once every six months

System clean	Check the cleanliness of circuit boards and components;     Check the temperature and dust of the internal charging module. Remove the module and clean it if necessary.	Once every six months to once a year (depending on the dust content of the environment)
Power circuit connection	Check whether the power cable and control cable are damaged, especially whether the skin in contact with the metal surface is cut;     Check whether the insulation bandage of the power cable wiring terminal is off.	Six months after the first commissioning, and then once every six months to a year
Cooling fan maintenance and replacement	<ol> <li>Check whether there are cracks in fan blades;</li> <li>Listen to whether there is abnormal vibration sound when the fan is running;</li> <li>Replace the fan in time if it is abnormal.</li> </ol>	Once a year
Circuit breaker maintenance	Check the corrosion of all metal components regularly (every six months);     Annual inspection of contactor to ensure good mechanical operation.	Once every six months to a year
Safety features	Check the function of emergency stop button and stop button;     Simulated shutdown.	Once every six months to a year

#### 10.Precautions for Use

- (1) In the normal charging process, it is strictly forbidden to plug or remove the charging gun with electricity;
- (2) To end charging, you must first press the "Start/Stop" button, pull the gun, and then disconnect the charger to disconnect the mains;
- (3) Do not pull the locked gun out of the socket by brute force to avoid conductive materials such as metal foreign bodies entering the device.
- (4) Non-professionals do not open the charger shell to avoid damage to the charger;
- (5) Pay attention to the BMS power supply voltage of 12V or 24V, and select the corresponding charging model number.
- (6) The charger is equipped with a standard input cable. Users need to connect an external circuit breaker to ensure that the input PE cable is reliably grounded.
- (7) Only when the input power distribution capacity is not less than the rated power of the charger, can the charger be charged at full power.
- (8) Dc charging gun is standard, no need to install it separately;
- (9) Indoor drying is forbidden to be used in rainwater environment;
- (10) If there is a heat source near the charger, please move it as far as possible and take the surrounding space into full consideration to facilitate heat dissipation;
- (11) Avoid steam, dust and metal dust;
- (12) Keep away from flammable, explosive and corrosive gases and liquids;
- (13) Stay away from electromagnetic interference sources.

# 11.The appendix

### 11.1Quality assurance

During the warranty period, the company will repair or replace new products free of charge. During the warranty period, the company requires customers to show the invoice and date of purchase. At the same time, the trademark on the product should be clearly visible, otherwise the right not to give quality assurance. The unqualified products after replacement shall be handled by

our company. Customer shall allow company reasonable time to repair faulty equipment.

The company reserves the right not to guarantee quality in the following cases:

- •The whole machine and parts have exceeded the free warranty period
- Transportation damage
- •Incorrect installation, modification, or use
- •Outdoor charging in rainy days leads to water inflow damage of charging pile.
- •Extremely harsh operating conditions beyond those specified in this manual
- •Machine failure or damage not caused by installation, repair, alteration or disassembly by our service personnel
- Failure or damage of the machine caused by non-standard use or not confirmed by the company
- •Any beyond the scope of use specified in the relevant national standards
- Damage caused by abnormal natural conditions



Non-company personnel are prohibited to open the charging equipment, such as personal accidents, property accidents, safety accidents caused by this has nothing to do with the company.

In case of product failure caused by the above situation, if the customer requires maintenance service, the company can provide paid maintenance service after the judgment of the service organization.

#### 11.2 Precautions

The company does not assume any responsibility for the loss caused by the configuration software products provided with the products.

Any use of any or all of the data in the firmware or software developed by the company for commercial purposes is prohibited.

It is forbidden to decompilate, decrypt or destroy the original program design of the software developed by the company.

