20KW DC EV charging station

Product model:EG-7505020

https://www.egbatt.com

Chapter 1 Product Overview

- A high-power power module platform with nuclear safety level is adopted, which has higher safety and reliability;
- It adopts a new and efficient three-phase PFC circuit topology, with power factor greater than 0.99 and harmonic distortion rate lower than or equal to 5%.
- High-frequency switching power supply module adopts full-bridge phase-shifting soft switching technology, which has high execution efficiency.
- Advanced digital current sharing technology effectively improves the current sharing accuracy and anti-interference;
- Initiate module dormancy technology and rotation technology to ensure the efficient operation of the system;
- Intelligent charging process control and perfect monitoring and protection of charging process, fool operation;
- There are many kinds of charging methods to choose from, such as regular charging, quantitative charging, fixed amount charging and automatic filling.
- Real-time display of charged amount, charging time, current electricity price,

charging price and other information and operating status;

- Module hot plug technology makes maintenance more convenient;

Chapter II Protection Function

- The input and output of the charger are electrically isolated;
- The output is provided with a device for preventing the battery pack from charging the output filter capacitor of the charger, so as to prevent the output end of the charger from generating instantaneous large current when the battery pack is connected;
- The withstand voltage grade, insulation grade and EMC of the charger meet the relevant provisions of the international GB_T 20234.3-2011 Connecting Device for Conductive Charging of Electric Vehicles; According to the relevant requirements of Q/GDW485-2010 "Technical Requirements for DC Charging Piles for Electric Vehicles" and NB/T 33001-2010 "Technical Requirements for Off-board Conductive Charging Piles for Electric Vehicles", and referring to some functions of "Typical Design of Charging Facilities for Electric Vehicles", the design is carried out. This product fully

meets the construction requirements of electric vehicle charging stations, and has been operated in Shenzhen, Beijing, Shijiazhuang, Chengdu, Guangzhou, Xi 'an, Kunming, Zhanjiang, Zhuhai and other cities for many years.

Chapter III Scope of Application

- DC charging piles are suitable for city-specific charging stations (buses, taxis, official vehicles, sanitation vehicles, logistics vehicles, etc.).
- Urban public charging stations (private cars, commuters, buses)
- Urban residential quarters, shopping plazas, electric power business places and other public places with electric vehicle parking spaces;
- Intercity highway charging station and other occasions that need DC fast charging are especially suitable for rapid deployment under the condition of limited space.

Chapter IV Product Parameters

Rated power	20kW
INPUT	
Voltage	380VAC±20%
Current	0~32A
Frequency	45Hz-65Hz
Power Factor(MAX)	≥0.99 APFC
Current THD	≤5%
OUTPUT	
Voltage	200-750VDC
Current	0~50A
Stabilizing accuracy	≤±0.5%FS（FS Resistor Load）
Steady flow accuracy	≤±1%FS（FS Resistor Load）
Rripple	≤0.2%
Power supply regulation rate	≤±0.1%FS
Protection grades	Indoor IP30
Efficiency	≥96%
Data sampling period of voltage and current	＜100ms
Protect	1. Input over/under voltage protection; 2. Output overcurrent/short circuit protection; 3. Protective measures such as battery anti-reverse connection, overheating, lightning protection, communication interruption, moistureproof, salt fog prevention, mildew prevention and rust protection;

Module communication interface	CAN 2.0B
Controller communication interface	CAN 2.0B
Charging mode	Touch charging of display screen
Cooling mode	Forced cooling of fan
Runtime environment	-20+50℃
Temperature	-30~50℃
Humidity	5%~95%

Chapter V Overall Dimensions

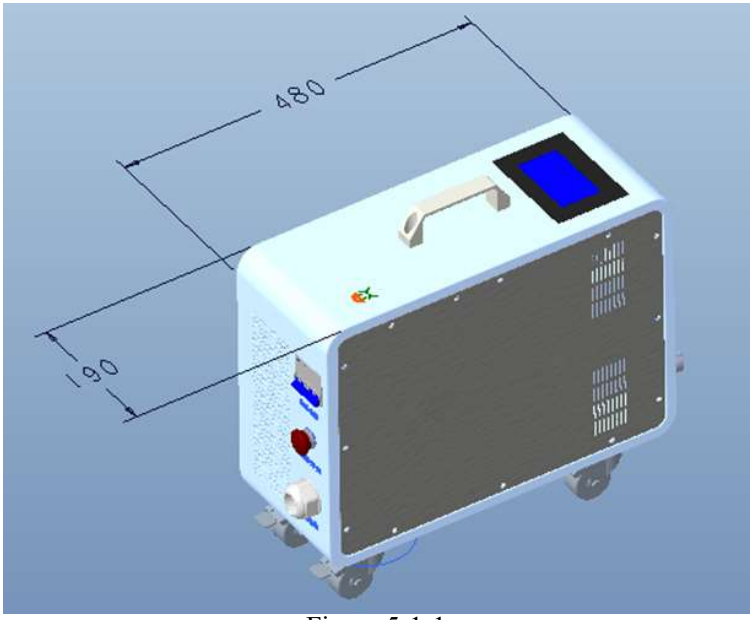

Figure 5-1-1

Chapter VI Storage and Transportation

6.1 Storage and transportation of equipment

During transportation, the charger body should be packed firmly and intact with solid wooden packing boxes, and the loading and unloading direction should be marked. The charger should not be stored and transported upside down. There should be corresponding fastening measures during transportation to avoid strong vibration and bumps from damaging the outer packaging of the equipment. Check whether there is any damage after arrival. If there is any transportation damage, we should negotiate with the transporter and our company to solve it. Immediately after unpacking, check whether the contents in the box are in conformity with the packing list.

Packaged equipment should be stored indoors with relative humidity ≤80% and ambient air temperature-10℃ ~-40℃. The storage place should be dry, clean and ventilated, and can prevent the invasion of various harmful gases. It is strictly forbidden to store it in the same place with corrosive items.

Note: Non-professionals are forbidden to disassemble the equipment components.

Chapter VII Maintenance and Maintenance of Charging Piles

7.1 Maintenance and maintenance

- The machine body is easy to be fixed by anchor bolts to prevent the machine body from tilting and shaking due to external and human factors.
- Shading and rainproof measures should be taken for the charger, and it is recommended to install a rain shelter outdoors.
- Regularly check whether all bolts in the charger are fastened, whether the connecting wires are loose or not, and the connection is not firm.
- Check for short circuit.
- Check whether the emergency stop button is available.
- Pay attention to lightning protection and ensure the effective shielding and reliable grounding of the charger.
- When in use, try to control the output voltage and current of the charger within the nominal range to ensure that the charger works in the state of maximum efficiency.
- When the machine body stops using, the charging output should be stopped first, and then the cable should be wound and put back in place.

Note: During the transportation of the charger, the charger should be packed firmly and the loading and unloading direction should be marked. It is forbidden to store and transport the charger upside down. There should be corresponding fastening measures to avoid strong vibration and bumps from damaging the outer packaging of the equipment.