

20KW 30KW 40KW DC Charger

for Electric Vehicle



1. Product Overview

High-power power module platform of nuclear safety level is adopted, which has higher safety and reliability.

A new high-efficiency three-phase PFC circuit topology is adopted, and the power factor is greater than 0.99 and the harmonic distortion rate is lower than or equal to 5%. The full-bridge phase-shifting soft-switching technology is adopted in the high-frequency switching power supply module, which has high execution efficiency.

Advanced digital current sharing technology effectively improves current sharing accuracy and anti-interference ability, and pioneers module dormancy technology and rotation technology to ensure efficient operation of the system.

Intelligent charging process control and perfect charging process monitoring and protection, simple operation.

Various charging modes to choose, such as timing charging, quantitative charging, fixed amount charging and automatic charging.

Real-time display of charged quantity, charging time, current electricity price, charging price and operation status.

It can reserve RS-485 networking communication interface and provide GPRS networking mode.

Module Hot Plug-in technology to make maintenance more convenient.

Working environment temperature from -20°C to $+55^{\circ}\text{C}$.

2. Protection Function

Electrical isolation between input and output of charger.

The output device prevents the battery pack from charging the output filter capacitor of the charger, and prevents the instantaneous high current from occurring at the output end of the charger when the battery pack is connected. The voltage withstanding grade, insulation grade and EMC of the charger meet the standards.

3. Applicable scenes

It is suitable for all kinds of parking lots in urban public charging stations (private cars, commuters, buses), urban residential districts, shopping plazas, power business places, etc. of city special charging stations (buses, taxis, public service vehicles, sanitation vehicles, logistics vehicles, etc.) It is especially suitable for fast charging situations such as charging stations on intercity expressways where DC is needed, especially in the case of limited sites.

4. Technical Data

Super DC Series EV Fast Charger				
Datasheet	Model No.	EDCB020A	EDCB030A	EDCB040A
Input	Power Supply	3P+N+PE		
	Voltage Range	400VAC±20%		
	Frequency	50/60Hz		
Output	Output Voltage	150-950V DC		
	Maximum Current	36A	55A	75A
	Rated Power	20kW	30kW	40kW
User Interface	Charge Connector	CCS 2 cable		
	Cable Length	5M		
	Enclosure	Galvanized steel		
	LED Indicator	Green/Yellow/Red		
	LCD Display	7" color touch screen		
	RFID Reader	Mifare ISO/IEC 14443 A		
	Start Mode	Plug&Play/RFID card/App		
	Emergency Stop	Yes		
	Interface Language	English/Chinese		
	Auxiliary Power	12Vdc		
Communication	WIFI	Optional		
	Ethernet	Yes		
	3G/4G	Yes		
	OCPP	OCPP 1.6		
Electrical Parameter	Efficiency	≥95%		
	Power Factor	≥0.99 @ 50%~100% loading		
	THD	≤5% @ 50%~100% loading		
	Ripple Factor	≤±0.5%		
Safety	RCD	Type A		
	Ingress Protection	IP54		
	Impact Protection	IK08		
	Certification	CE		
	Certificate Compliance	EN/IEC 61851-1: 2017, EN/IEC 61851-23: 2014		
	Special Protection	Over current protection, Residual current protection, Short circuit protection, Ground protection, Surge protection, Over/Under voltage protection, Over/Under frequency protection, Over/Under temperature protection		
	Warranty	1 years		
Environment	Installation	Wall-mount/Pole-mount		
	Cooling Method	Fan cooling		
	Noise	≤60dB		

	Work Temperature	-30°C to +55°C		
	Work Humidity	5%~95%		
	Work Altitude	<2000m		
Package	Product Dimensions	500*230*650MM(L*W*H)mm		
	Net Weight	/	/	80Kg
	Gross Weight	/	/	90Kg

5. Maintenance of Charger

8.1 Maintenance

- Charger body is easy to be fixed with anchor bolts to prevent it from inclining and dithering due to external and human factors.
- Shading and rainproof measures should be taken for chargers. It is suggested to install shelters outdoors.
- Check regularly whether all bolts in chargers are tightened, whether the connecting wires are loosened or not, or the connection is not firm, etc.
- Check for short circuit.
- Check whether the emergency stop button is available.
- Attention should be paid to lightning protection to ensure effective shielding and reliable grounding of chargers.
- When in use, the output voltage and current of the charger should be controlled within the nominal range to ensure that the charger works in the state of maximum efficiency.
- When the charger stops using, the charging output should be stopped first, then the cable should be wrapped and put back in place.

Note: During the transportation, the chargers should be packed firmly and the direction of loading and unloading should be marked. It is forbidden to store and transport chargers upside down. Corresponding tightening measures should be taken to avoid strong vibration and turbulence damage to the outer packaging of equipment.