

# HF/PFC Quick Charging Cabinet



## ADVANTAGES

1. Three-phase three-wire AC380V input power, internal integrated PFC, avoiding pollution to the electric network.
2. Adopting high-frequency zero-voltage soft switching technique, better operational reliability than hard switching technique, high with 93% above efficiency and maximally avoiding the high-frequency noise pollution while only about 80% efficiency the traditional chargers can meet.
3. Employing module configuration designs, parallel operation with multiple modules, with a powerful fault-tolerance. Without affecting the use of the machine in case of a certain module in fault. Convenient to replace and repair the individual module.
4. Operation facility with the graphically touch screen displays the operation and battery status in details. With CAN Bus for real-time communicating with BMS optimizes and reliable protects the quick charging for LiFe-PO4 power battery. Manual operating mode and manual control voltage, current and charging time setup is appropriate for application without CAN Communication.

## PROTECTION FEATURES

1. Thermal Self-Protection: When the internal temperature of the charger exceeds 80°C, the charging current will reduce automatically. If exceeds 85°C, the charging cabinet will shutdown protectively, there is no current output in this case. When the internal temperature drops to about 80°C, it will resume charging automatically.
2. Short-circuit Protection: When the charging cabinet encounters unexpected short circuit across the output, charging will stop automatically. For security considerations, remove its connection with the external circuit by connecting in series with the fuse. The charging cabinet can re-charge after removing the fault of short circuit and replacing the fuse.
3. High and Low Voltage Protection: When the input AC Voltage is higher or lower than the rated input voltage range, the charging cabinet will shutdown protectively, but resume working after the voltage is normal again.
4. Open-phase Protection: When a certain phase or two phase of three phase AC input voltage disconnects, it may not work normally. Open-phase protection circuit will start after some time delay and will cut off the charging cabinet.
5. When it doesn't charge, it may be automatic locked by protective circuit to avoid further damage. Please contact the manufacturer immediately.

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### SPECIFICATION TABLE

Power	Model	Input Voltage Maximum	Input Current Maximum
8KW	TCCH-420-20	420V	20A
	TCCH-510-17	510V	17A
	TCCH-600-15	600V	15A
	TCCH-680-13	680V	13A
16KW	Two 8KW modules in parallel, a charging cabinet		
24KW	Three 8KW modules in parallel, a charging cabinet		
32KW	Four 8KW modules in parallel, a charging cabinet		
40KW	Five 8KW modules in parallel, a charging cabinet		
48KW	Six 8KW modules in parallel, a charging cabinet		
56KW	Seven 8KW modules in parallel, a charging cabinet		
64KW	Eight 8KW modules in parallel, a charging cabinet		
72KW	Nine 8KW modules in parallel, a charging cabinet		
80KW	Ten 8KW modules in parallel, a charging cabinet		
Larger Power	Multiple modules in parallel, a charging cabinet		

### TECHNICAL TARGET

AC Input Voltage Range	AC380V±20%
AC Input Frequency	45~65 Hz
Input Voltage	See Specification Table
Input Current	See Specification Table
AC Power Factor	≥0.9
Full Load Efficiency	≥93%
Operating Temperature	-30°C~+50°C
Storage Temperature	-40°C~+100°C

### INSTALLATION & SAFETY INSTRUCTIONS

1. The charging cabinet must be installed in the vertical position. A space of 30cm above at the back and 20cm above on the right and left sides of charging cabinet should be open to ensure airflow.
2. Do not put the charging cabinet charger near any heat sources to avoid overheating.
3. Ensure no water enter into the charging cabinet. Do not allow liquids to enter or spill on the case and do not place it where expose to the sun and rain.
4. Make sure the actual input voltage is three phase 380VAC. Do not connect to 110VAC or 220VAC to avoid damage. If there is any doubt about it, please contact manufacturer or consult local power supply authority.
5. The yellow-green line which connect with three phase line is Ground Line but not Neutral Line. For safety and electromagnetic compatibility, the ground line has connected with the casing of the charging cabinet. Please make sure the ground line should be joined together to ground line of the power supply system. Any circuit breaker such as safety fuse, air switch, knife switch, SWT switching etc., connected to this ground line is forbidden. Furthermore, The ground line must use sufficient size cooper wire.
6. To avoid damaging the power cord, do not put anything on it or place it where it will be walked on. If the cord becomes damaged or frayed, replace it immediately.
7. Please use the cable cord with the ability to sustain current. If you are using an extension cord or power strip, make sure that the total of the amperes required by all the equipment on the extension is less than the extension's rating.
8. In order to avoid voltage drop, the output cables must be as short as possible, and the wire guage must be adequate for the output current.
9. Do not try to disassemble the charging cabinet yourself. Opening the cover may expose you to shock or other hazards.
10. If the air switch of the charging cabinet trips, turn off the general supply Immediately and contact the manufacturer.