Product Specification

Name:3.3KW on-board charger

Series No. SMHC3 Series

Add: Tianqu Industrial Park,Dezhou City,Shandong China
Tel(Wechat): 0086-15866867380

Specification for SMHC3 Series 3.3KW Fully Sealed Vehicle Charger

1、Product overview

SMHC3 Series 3.3KW Charger is designed by Dezhou Greatway Industrial Co., Ltd. to supplement electric energy for electric vehicle power battery according to the national standard of charger. This product not only has the advantages of high efficiency, small size, high stability and long service life, but also has the characteristics of IP67 protection grade, safe operation, high reliability and complete protection function under short-term immersion condition. It is an ideal power supply for charging electric vehicles. The charger has built-in thermal induction device, which can work reliably at - 35 -+85 (?) C. It has the function of overheating protection and can work reliably at - 35 (?) -+85 (?) C, and can recover automatically. It ensures that it works in any complex environment without causing failure.

2、Basic parameters

Input voltage range	Input current	Model No	Output rated voltage	Maximum output voltage	Output maximum current	Power factor	efficiency
AC 90~265V	16A	SMHC3-4845A	48V	66VDC	45A	≥0.99 Half load or more	≥93% The full load
		SMHC3-6045A	60V	82.5VDC	45A		
		SMHC3-7240A	72V	99VDC	40A		
		SMHC3-8440A	84V	116VDC	40A		
		SMHC3-9632A	96V	132VDC	32A		
		SMHC3-12025A	120V	165VDC	25A		
		SMHC3-14423A	144V	198VDC	23A		
		SMHC3-31210A	312V	440VDC	10A		

三、电气参数 Electrical parameters

Electrical parameters	Electrical parameters	45-65Hz
	Electrical parameters	≤ 5W
Master output	Electrical parameters	Constant Pressure/Constant Current
	output power	3300W@220VAC
	Constant voltage accuracy	±1%
	Constant current	±1%

	accuracy	
	Ripple voltage coefficient	±5%
Low voltage output	Output mode	Constant voltage
	output voltage	13.8V
	Rated current	5A
	Constant voltage accuracy	±2%
	Maximum current	5.5A±0.5A
	output power	≥ 62.5W
	Ripple voltage coefficient	1%
Communication function	CAN communication	Yes
	baud rate	125Kbps、250Kbps、500Kbps
	Terminal resistance	No

4、Protection function

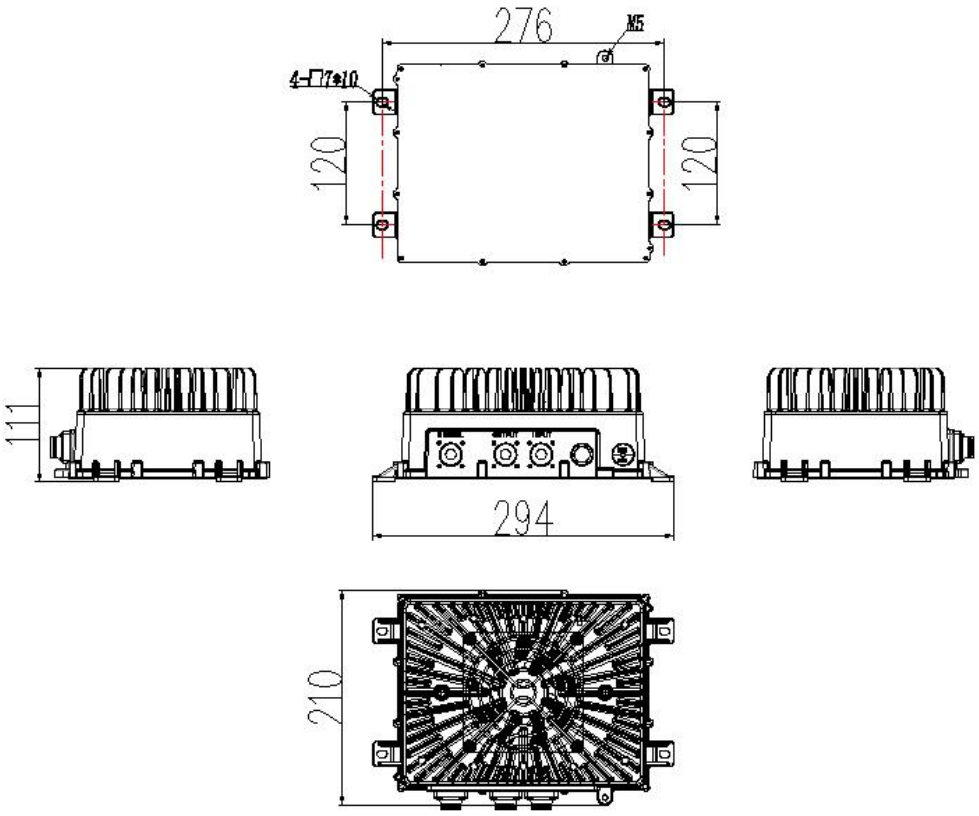
Protection function	Input Overvoltage Protection	AC270±5V
	Input undervoltage protection	AC±150V
	Output Overvoltage Protection	Stop the output when the maximum output voltage exceeds + 1%.
	Output undervoltage protection	When the output voltage is below - 5% of the minimum output voltage, stop the output.
	Output Overcurrent Protection	Stop the output when the maximum output current exceeds + 1%.
	Over temperature protection	Power drops at 85 degrees and stops at 90 degrees.
	Short circuit protection	Stop output
	Battery Back Connection Protection	Stop output
	Earthing protection	≤ 100mΩ
	C A N Communication Protection	Automatically stop output when CAN communication fails

	Power failure protection	Yes

5、Security and other

Security and other	withstand voltage	Input-to-output: 2000VAC≤ 10mA; Input to ground: 2000VAC≤ 12mA Output to ground: 2000VAC≤ 10mA，All are:1min
	Insulation voltage	Input end, output end, signal end to shell≥ 10MΩ ，Test voltage 1000VDC
	Electromagnetic Anti-jamming	Meet GB/T 18487.3-2001 11.3.1
	Electromagnetic disturbance	Meet GB/T 18487.3-2001 11.3.2
	harmonic current	Meet GB 17625.1-2003 6.7.1.1
	Current rise time	≤ 5S，Overshoot≤ 5%
	Close response time	100% to 10%≤ 50mS，100% to 0%≤ 200mS
	Protection level	IP67
	Vibration resistance	10 - 25Hz amplitude 1.2mmj, 25 - 500Hz 30m/s2，8 hours in each direction
	Noise	≤ 60dB Class A
	MTBF	150000H
	work environment	Relative temperature 5%-95% without condensation
	working temperature	-35℃ ~ +85℃
	Storage temperature	-55℃ ~ +100℃

6、Shape and shape dimensions



7、Indicator lamp status definition

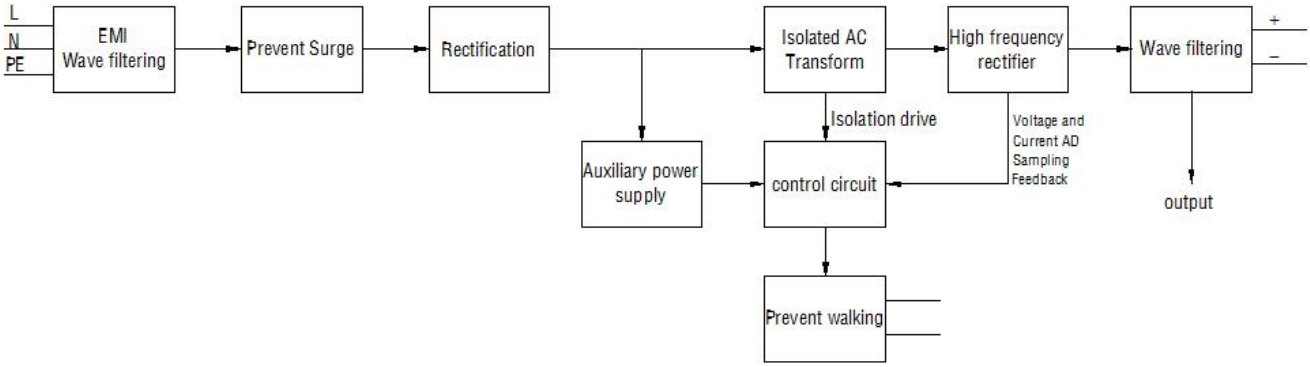
(1) No alarm

1. 1. normal working: The red light flashes in 1s cycle and the green light goes out.
2. Heating working: the green light flashes in 1s cycle and the red light goes out.
3. Waiting state: The green light is always on and the red light is off.

(2) Alarm:

1. Hardware failures or DC12V failures: red, green, _ , _ , _ , _ .
2. Communication failures of PFC and CC&CP from CPU: red, green, red, _ , _, _.
3. DC bus voltage faults: red, green, red, green, _ , _.
4. Low or high AC voltage protection: red, green, red, green, red, _.
5. Battery disconnection failure: red, green, red, green, red, green.
6. Section charging overtime protection: red, _, _, red, _, _.
7. Battery temperature protection: green, red, _, _, _, _.
8. CPU temperature or transformer temperature protection: green, red, green, _, _, _.
9. Output short circuit protection: green, red, green, red, _, _.
10. Transformer primary overcurrent protection: green, red, green, red, green, _.

8. Principle block diagram



9. Control ： CAN Communication or Enable control

10. Product Appearance Requirements

1.)The outer surface should be flat, without obvious scratches, deformations and other defects. The surface coating should be uniform.

2.)Installation of nameplate and sign is correct and firm, and the handwriting is clear.

3.) Parts should be tightened and reliable, and should be free of defects and damage such as rust, burr and crack.

4.)Each product should be marked with a product logo on its obvious part, including parts number, product trademark, product model, production number, manufacturer name, warning instructions, etc.

11、Packing, Transportation and Storage

1.)packaging

There are product name, product spare parts number, product trademark, product model, production number and manufacturer name on the packing box. The technical documents accompanying the product supply in the packing box should include packing list, product qualification certificate and product instruction.

2.)transport

Suitable for vehicle, ship and airplane transportation. Sunscreen, moisture-proof and civilized transportation should be adopted in transportation.

3.) Storage

When the product is not in use, it should be stored in the packing box with a clean, dry and well ventilated environment of 5 ~40 C. It should not be stored with chemicals, acid-base substances, etc. Sunshine, baking, soaking and putting corrosive substances together should be avoided. The storage period of the product is 2 years (from the date of the manufacturer's warehousing). When the storage period expires for 2 years, the product shall still comply with the relevant standards.