

Product Specification

Name:3.3KWoff-board charger

Series No. SMHC3 Series

Specification for SMHC3 Series 3.3KW Fully Sealed Vehicle Charger

1、Product overview

SMHC3 Series 3.3KW Charger is designed by Texas Samet Power Supply Technology 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	Output rated voltage	Maximum output voltage	Output maximum current	Power factor	efficiency
AC 90~265V	16A	48V	66VDC	40A	≥0.99 Half load or more	≥93% The full load
		60V	82.5VDC	40A		
		72V	99VDC	40A		
		84V	116VDC	40A		
		96V	132VDC	32A		
		120V	147VDC	25A		
		144V	198VDC	23A		
		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 accuracy	±1%
	Ripple voltage	±5%

	coefficient	
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
baud rate		125Kbps、250Kbps、500Kbps
Terminal resistance		No

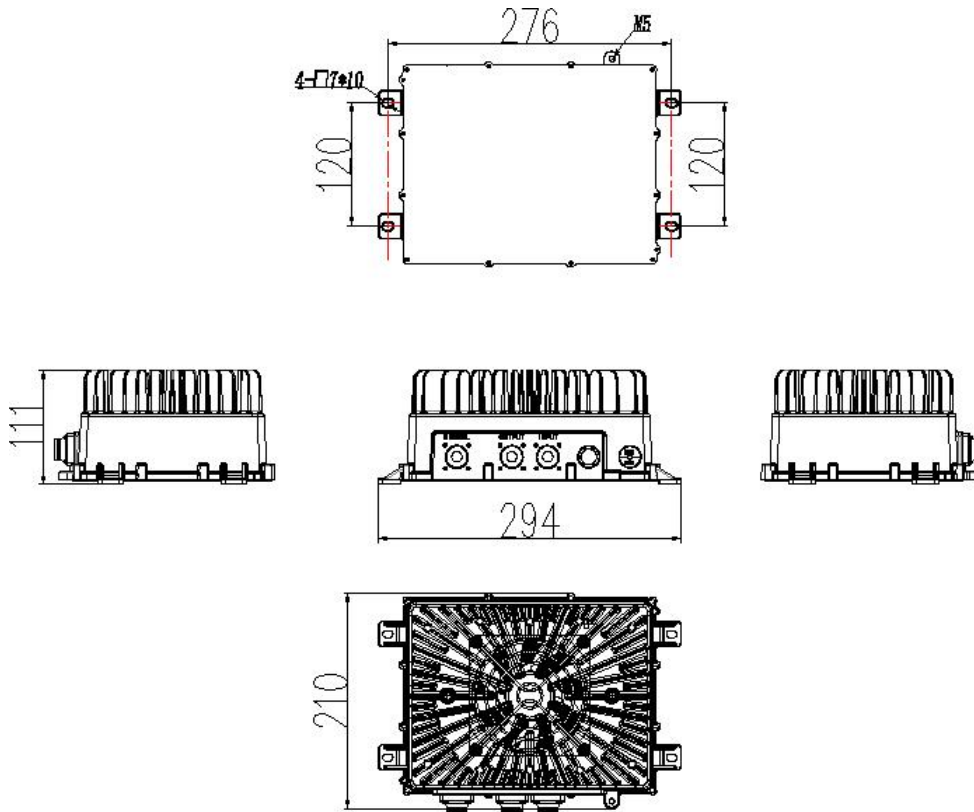
4、Protection function

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
	CAN 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 \leq 10mA; Input to ground: 2000VAC \leq 12mA Output to ground: 2000VAC \leq 10mA, All are:1min
	Insulation voltage	Input end, output end, signal end to shell \geq 10M Ω , 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	\leq 5S, Overshoot \leq 5%
	Close response time	100% to 10% \leq 50mS, 100% to 0% \leq 200mS
	Protection level	IP67
	Vibration resistance	10 - 25Hz amplitude 1.2mmj, 25 - 500Hz 30m/s ² , 8 hours in each direction
	Noise	\leq 60dB Class A
	MTBF	150000H
	work environment	Relative temperature 5%-95% without condensation
	working temperature	-35 $^{\circ}$ C ~ +85 $^{\circ}$ C
Storage temperature	-55 $^{\circ}$ C ~ +100 $^{\circ}$ C	

6、 Shape and shape dimensions



7、 Indicator lamp status definition

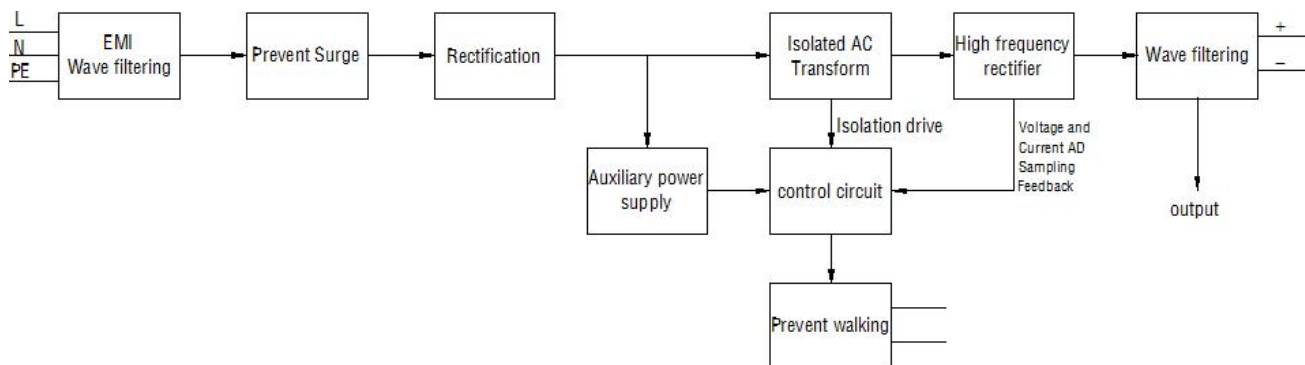
(1) No alarm

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. CAN Communication protocol

Protocol type	Motorola
baud rate	250K
Charger Receiver CAN ID	0x1806E5F4
Charger Output CAN ID	0x18FF50E5
Explain	DEZHOU SMTPOWER CO., LTD. Standard Communication Protocol

Message description:

See CNA Communication Protocol.

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.