

HK-H series 1.8KW battery charger specifications

1. Outline

HK-H series 1.8KW Charger is designed for electric vehicle battery and battery management interface. The product not only has high efficiency, small volume, high stability, long life, etc., higher degree of protection, high reliability, Protection of functional features, is the ideal power source for electric vehicle charging. Charger built-in thermal sensing device having thermal overload protection, automatic recovery. Fully sealed encapsulation process, up to IP67 protection class, you can ensure that in any complex environment without causing malfunction.

2. Product Models

Hardware	Output Voltage Range	Max Output Current	Lead Acid Battery Charger Model	Lithium Battery Charger Model
48V25A	18-68VDC	25A	HK-H-48-25	HK-H-H66-25
72V25A	25-99VDC	25A	HK-H-72-25	HK-H-H99-25
96V16A	34-132VDC	16A	HK-H-96-18	HK-H-H132-16

3. Features

- 1、Up to 95% efficiency
- 2、Strong protection
- 3、Extended temperature operating temperature range
- 4、100% full load burn-in test
- 5、The high degree of protection up to IP67
- 6、Automotive-grade seismic rating
- 7、While charging the battery intelligent temperature compensation, maximizing battery life
- 8、The input voltage range AC85-AC280, for worldwide voltage range.

4. Reliability

Index	Data Definition	Explanation
MTBF	150,000 H	Reliability launched by the device failure rate

5. Product work environment

No.	Items	Technical Specifications
1	Operating temperature	-40°C - +60°C

2	Storage temperature	-40°C - +90°C
3	Relative humidity	5% - 95%
4	Cooling	Air-cooled
5	Altitude	3000m

6. Electrical Characteristics

6.1 Input characteristics

Current and output voltage of each power input

Input voltage	Input current I_N	Maximum output power
110V	$I_N \leq 7A$	800W
220V	$I_N \leq 9A$	1800W

6.2 Output characteristics

test	Ratings	tolerance scope
Output voltage accuracy	1%	/
Output current accuracy	3%	/
The output voltage ripple factor	1.5%	
Maximum DC output power	1600W	/
Maximum efficiency	$\geq 95\%$	/
Power Factor	0.99	/

6.3 Protection Features

- a) a) Output overvoltage protection;
- b) b) Output overcurrent protection;
- c) c) Output short circuit protection;
- d) d) Input undervoltage protection
- e) e) Charger over-temperature protection;
- f) f) Battery over-temperature protection.

6.4 Standby power charger standby power consumption of less than 5W

6.5 Starting current charger starting current is less than 5A

6.6 Input Frequency (Frequency of input voltage fluctuation range)

Minimum	Typical case	Maximum
40Hz	50Hz/60Hz	70Hz

7. Safety features

7.1 Pressure resistance (Table 8 electrical test)

Ground Terminals (housing) Dielectric strength and are electrically connected to each other without a circuit between them. It should be able to withstand the test voltage in the table below 9, Test voltage (50 ~ 60) HzAC voltage between test terminals should not be corona, ionization, arcing or breakdown.

Input the housing	1500V AC	1min	Leakage current $\leq 10\text{mA}$
Input to output	1500V AC	1min	Leakage current $\leq 10\text{mA}$
Output of the housing	500V AC	1min	Leakage current $\leq 10\text{mA}$

7.2 Insulation resistance

Charging machine charging circuit and ground insulation resistance (housing) between the ambient temperature $(23 \pm 2)^\circ\text{C}$ And a relative humidity 80% ~ 90% when, not less than $20\text{M}\Omega$.

7.3 Contact current

When a human or animal contacts with one or more devices or device accessible parts, the current flowing through their bodies should be less than GB/T13870.1-2008 The contact current perception threshold requirement, the current value of the charger contact Table 9.

Contact current category	Alternating current mA	DC current mA
Limit	≤ 0.75	≤ 2

1.1.1 Grounding resistance of less than 0.1Ω . Required grounding conductor yellow / green and white color line

8. Audio Noise (Table 10 Noise)

Noise	Noise
$\leq 65\text{dB}$	distance 1.5m, A weight

9. EMC characteristics

Electromagnetic compatibility charger to meet the GB / T 18487.3-2001 electromagnetic environment in 11.3 test requirements.

10. Lightning Level

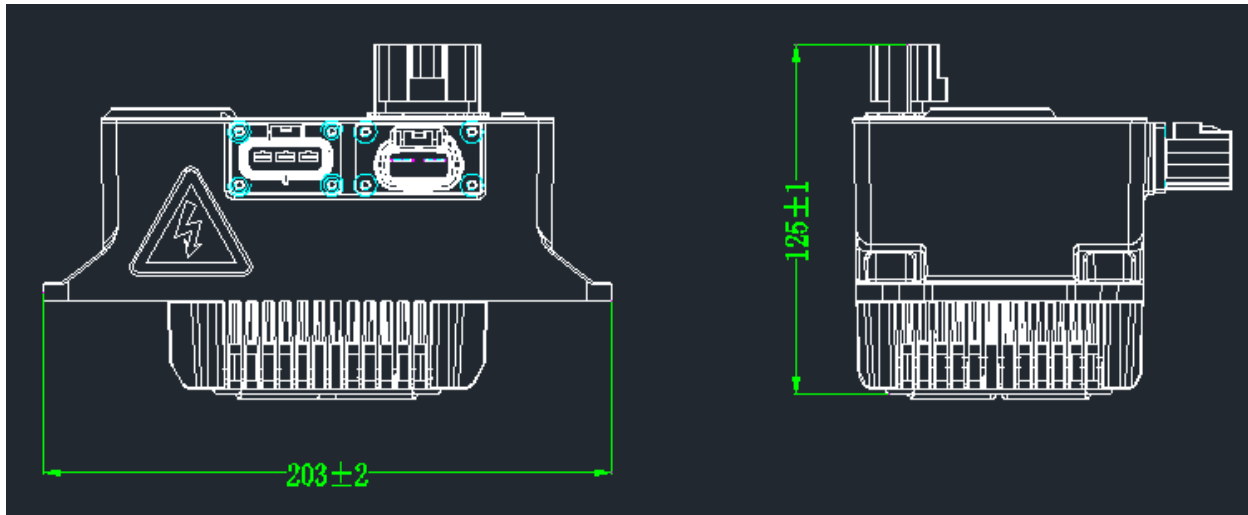
Lightning indicators	standard test
TBD	/

11. Cooling

Cooling fan

12. Product dimensions

External dimensions and installation dimensions:



13. Weight: <2kg

