

24V35A Technical Specification (Confidential)

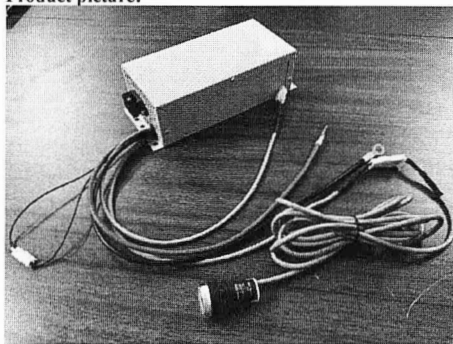
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1 INTRODUCTION

This document specifies the requirements of Battery charger for 24V35A(RB001003.SUS), with fan for cooling. The charger is pre-programmed with charging curve IUIa-Acid for Flooded/Wet traction batteries.

Product picture:



2 DOCUMENT HISTORY

Table 2-1 Document History

Version	Date	Change record	Creator
V1.0	16 April,2020	Initial version	PowerFirst

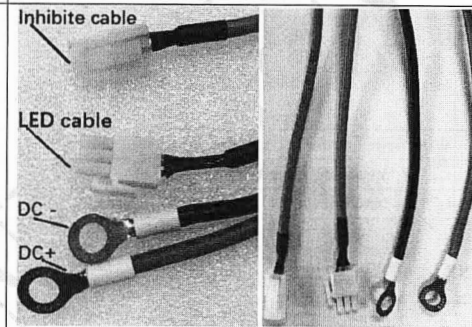
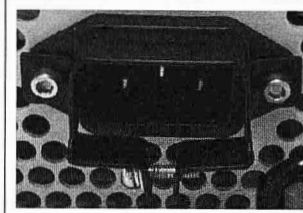
3 SPECIFICATION

Table 3-1 Specification

No	Item	Technical specification	Remark
1	Rated input voltage	200-240 VAC	
2	AC frequency	50Hz	
3	Start charging voltage	Battery voltage ≥ 16 V	
4	Pre-charging stage	If the initial battery voltage ≤ 23 V, the charger will run a deep-discharged-battery-recover stage, charging with 3A~5A current till battery voltage recovers to 23V.	
5	CC Output	32.5-35.0A	
6	Boost charge voltage	29.2 \pm 0.2V	

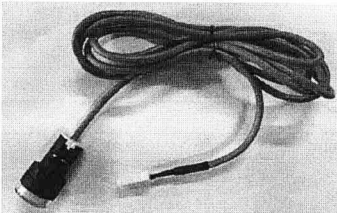
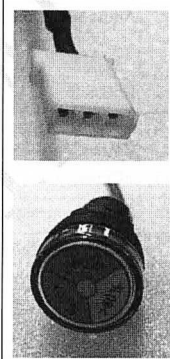
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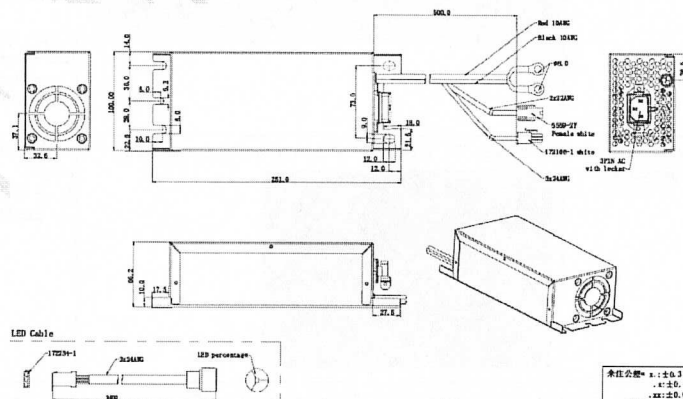
No	Item	Technical specification	Remark
7	Equalization voltage	31.0V \pm 0.5V	
8	Floating voltage	28.6V \pm 0.3V	
9	Charging time	CC+CV < 12 Hours	
10	Short circuit protection	Short circuit protection, should be automatically recovery after remove the condition.	
11	Reverse polarity protection	Reverse polarity protection, should be automatically recovery after remove the condition.	
12	Additional protection	Sparkless protection, AC surge protection, Over temperature protection	
13	IP Grade	IPX0	
14	Power Factor Correction (PFC)	Without PFC	
15	Efficiency	Efficiency $\geq 85\%$ under 230V input	
16	Leakage current	<3.5mA	
17	LVD/EMC/ROHS	N/A	
18	Output definition		<p>1. Inhibit cable: 2*22AWG*500mm Connector: 5559-2Y contact: male 5558 (Normally closed: Forbidding the machine from moving during charging.)</p> <p>2. LED cable: 3*24AWG*500mm Connector: 172166-1 contact: male 770903-1</p> <p>3. DC cables: 10AWG Red + Black Connector: Ring $\Phi 8$mm</p>
19	AC input cable/connector	<p>AC socket: IEC C14 3PIN with iron hoop for protection</p> 	<p>With European AC plug: 3. 3*0.75 mm²*1800mm</p>

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No	Item	Technical specification	Remark
20	LED instruction	<p>2 Leds: Red, Green</p> <p>3-color indication: Red, Green, Yellow(Red+Green)</p> <p>length: 2400mm</p> <p>Charger self-testing: red-green-yellow flashing once by turn</p> <p>Green flashing: self-testing failure</p> <p>Red flashing: defective charger</p> <p>Red On: Starting charging to 80% of battery capacity</p> <p>Yellow On: Charing (80% ~ 100% of battery capacity)</p> <p>Green on: 100% of battery fully charged</p> 	<p>Separate Remote Led cable:</p> <p>Connector: 172166-1 white</p> 
21	Mechanical fixing	With fixing lug for on board application	
22	Dimensions	L251* W100 * H66.2 mm	
23	Weight	1.70kgs (exclude the AC power cord)	

4. PRODUCT OUTLINE



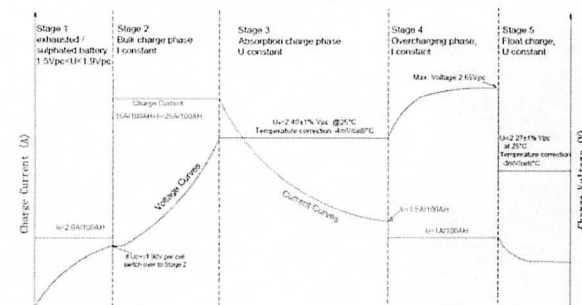
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5. CHARGING PROFILE

- CSPower HLC6-225 Lead Carbon Battery (6V/225Ah). (Blue wire connected)
- Pre-charging: current =5.5A
- CC: 35A
- CV: 28.8V (convention current=3.5A)
- Boost: voltage=31.8V; current=3A
- Float: voltage=27.3V

HTL Serels Recharge with IUIU Characteristic



- CC+CV+Boost, float for WET batteries. (Blue wire disconnected)

CC: 35A

CV: 29.64V

Boost: 32.40V

Float: voltage=27.00V, current=4A

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