

PowerFirst Technology Company Limited

深圳市宇杰达电源科技有限公司

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24V6A Technical Specification (Confidential)

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1 INTRODUCTION

This document specifies the requirements of Battery charger for **Lead-acid batteries**. The charger shall charge a **Lead-acid batteries with CC/CV/Floating profile**.

The baseline is PowerFirst model PF 2406L(without PFC)

Product picture:

The physical product may vary depending on customer's different requirement and product application.



Fan cooling

2 DOCUMENT HISTORY

Table2-1DocumentHistory

Version	Date	Change record	Creator
1.0	16 May,15	Initial version	PowerFirst

3 SPECIFICATION

Table3-1Specification

No.	Item	Technical specification	Remark
1	Rated input voltage	100 -240VAC +/-10%	Universal
2	AC frequency	50-60Hz	
3	CC Output	6A +/-0.5A	I1 @ Figure5-1
4	Boost charge voltage V	28.2V ~ 28.8V (2.35/cell)	U2 @ Figure5-1
5	Floating charge voltage	27.2V ~ 27.6V (2.3/cell)	U3 @ Figure5-1
6	Cooling	With fan	
7	Efficiency	Efficiency >=85% under 230V input Efficiency approx. 85% under 115V input	

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No.	Item	Technical specification	Remark
8	Short circuit protection	Short circuit protection should be automatically recovery after remove the condition	
9	Reverse polarity protection	Reverse polarity protection should be automatically recovery after remove the condition	
10	Additional protection	Sparkless protection, AC surge protection, Overtemperature protection	
11	Operating temp. range	0 °C~40 °C	
12	Storage temp. range	-40 °C ~ 65 °C	
13	Operating humidity range	10% ~90% @ 20 °C	
14	Storage humidity range	10% ~90% @ 20 °C	
15	Environmental protection	IP20	
16	LVD/EMC/ROHS	EN60335-2-29 / EN55014 Class A AS/NZS 60335-2-29 / AS/NZS CISPR 14.1:2010 CONFORMS TO AAMI ES STD 60601-1 / CERTIFIED TO CSA STD C22.2 NO.60601-1 REACH	
17	Output connector	DC Output: Cable: 2*1.0mm ² *1200mm, With XLR 3 pin connector	Measured from case to connector (Extra length extending support if pay extra cost)
18	AC input cable/connector	3x0.75mm ² , Cable length: 1.8M UK AC powercord 	Affix separate AC cable per different market domain, the cable length can be optional
19	LED instruction	Red On = Battery reversed polarity! Yellow Flash = No batteries connected or incorrect battery connected Yellow on = Normal charging Green on = Fully charged, batteries ready for use.	
20	Dimensions	L165 x W95 x H55 mm	
21	Weight	0.82kg (exclude the AC power cord)	Maybe some tolerance

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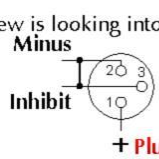
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4. DC Output Connector definition

Output	Pin	Connector	Description
Charge+	1	 <p>View is looking into the plug</p>  <p>Minus Inhibit + Plus</p> <p>XLR Male Connector Pin 1 Positive Pin 2 Negative Pin 3 Inhibit (tied to negative)</p>	PIN 1 B+ PIN 2 B-
Charge-	2		Pin 2 bridge to Pin 3 for inhibit (forbidden the vehicle from moving during charging)

5. Charging Profile

□ IUUa for Generac GEL and AGM batteries @ Figure5-1

