



Global leading quality, More reasonable price.

PowerFirst Technology Company Limited

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24V5A 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 with **CC/CV/Floating profile**. The baseline is PowerFirst model PF 2405SL

Product picture:

The physical product maybe varies depends on customer's different requirement and product application.



With fan cooling

2 DOCUMENT HISTORY

Table 2-1 Document History

| Version | Date | Change record | Creator |
|---------|----------|-----------------|------------|
| 1.0 | 17.11.15 | Initial version | PowerFirst |

3 SPECIFICATION

Table 3-1 Specification

| No | Item | Technical specification | Remark |
|----|--------------------------|--------------------------------------------------------------------------------------|-----------|
| 1 | Rated input voltage | 100 -240 VAC +/-10% | Universal |
| 2 | AC frequency | 50-60Hz | |
| 3 | CC Output | 5A +/-0.5A | |
| 4 | Boost charge voltage V | 28.2V ~ 28.8V (2.4V/cell) | +/- 1% |
| 5 | Floating charge voltage | 27.2V ~ 27.8V (2.3/cell) | +/- 1% |
| 6 | Cooling | With fan | |
| 7 | Efficiency | Efficiency >=85% under 230V input Efficiency approx. 85% under 115V input | |
| 8 | Short circuit protection | Short circuit protection should be automatically recovery after remove the condition | |

深圳市顶尖电源科技有限公司专注成为世界顶尖的充电器生产商.

PowerFirst, a global leader in charger manufacture.

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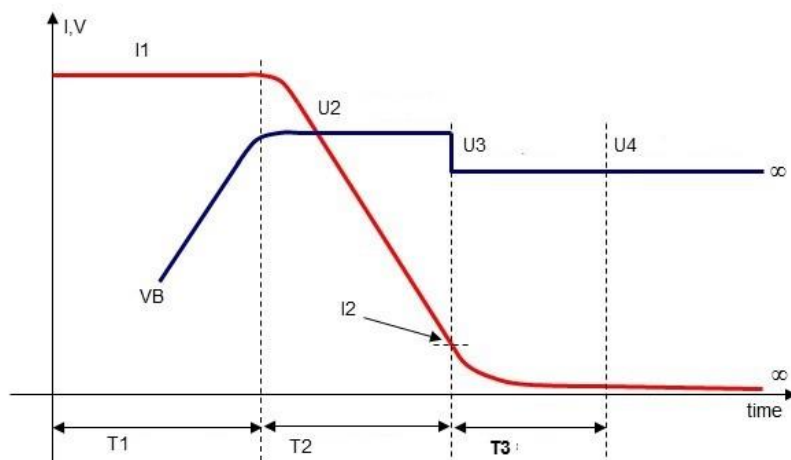
| No | Item | Technical specification | Remark |
|----|------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------|
| 9 | Additional protection | AC surge protection | |
| 10 | Operating temperature | 0°C - 40°C | |
| 11 | Environmental protection | IPX0 | |
| 12 | Safety approval [CE, UL, CB, GS, SAA] | LVD :EN60335-2-29 by TUV SUD EMC :EN55014 by SGS UL1310 and C22.2NO.223 by ETL CB/GS mark/SAA by TUV SUD | |
| 13 | Output connector | DC Output: With XLR 3 pin connector Cable length: 1.2M | Measured from case to connector |
| 14 | AC input cable/connector | IEC C18 plug | 1800mm EU AC cable |
| 15 | LED instruction | Red On = Normal charging Green On = Fully charged & ready for use & standby | |
| 16 | Dimensions | L160 x W86 x H55.5 mm | |
| 17 | Weight | 0.5kg (exclude the AC power cord) | Maybe some tolerance |

4. DC Output Connector definition

| Output Signal | Pin | Connector | Description | Type |
|---------------|-----|---------------------|---------------------------------------------------------------------------------------------------|------|
| Charge + | 1 | XLR 3 pin connector | PIN 1 B+ | |
| Charge - | 2 | | PIN 2 B- Pin 2 bridge to Pin 3 for inhibit (forbidden the vehicle from moving during charging) | |

□ IUUa for Generac GEL and AGM batteries

(CC=5 A \pm 0.5 A; CV= 28.2 V ~ 28.8 V ;Floating voltage=27.2V ~ 27.6V)



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