



PowerFirst Technology Company Limited

深圳市顶尖电源科技有限公司

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Technical Specification for PFC0600 (Confidential)

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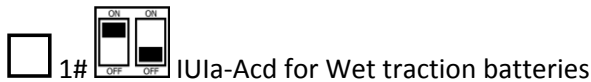
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1 INTRODUCTION

This document specifies the requirements for PFC0600 series, it is a fan-cooling model. Dip-switches are used to select the preset commonly-used charging algorithms and the max DC output currents, the default setting is marked with “■”.



Below product pictures are for reference only, it is based on the standard specification sheet, physical product might have minor change subject to customer’s specific request.



2 DOCUMENT HISTORY

Table 2-1 Document History

Version	Date	Change record	Creator
V.01	10.05.10	Initial version	PowerFirst

3 SPECIFICATION

Table 3-1 Specification

No	Item	Technical specification	Remark
1	Rated input voltage	100 -240 VAC +/-10%	Universal wide range
2	AC frequency	50-60Hz	Universal
3	Peak efficiency	91% @230VAC/24VDC, 89% @120VAC/24VDC	
4	Power factor	>0.98 @ 230VAC, >0.99 @ 120VAC	Advanced Active PFC









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Tel: +86 755 28441619 / Email: marketing@epowerfirst.com Web: www.epowerfirst.com**Technical Specification for PFC0600 (Confidential)**

No	Item	Technical specification	Remark
	Nominal output voltage	24V	12V / 36V / 48V models optional
	Bulk charge (CC)	20A or 18A, switch to CV at 28.8V (2.40vpc)	Constant Current
	Absorption charge (CV)	28.8V (2.40vpc at battery end), switch to float charge when current tapers down to 1A	Constant Voltage
	Float charge	27V (2.25vpc), no time limit	Constant Voltage
	Interlock function	Normally-closed (NC), max. 7A Wires: 2 * 1mm ² * 20cm, Red and Black Connector: customizable	Optional, customizable
	Remote LED extension	Connector customizable	Optional, customizable
	Charge algorithms	<p>1#  IU1a-Acd for Wet traction batteries</p> <p>2#  IU1a-GEL for Gel or AGM</p> <p>3#  IUUa-GEL for Gel or AGM (default)</p> <p>4#  For customized algorithm</p>	<p>Take out the cap near LEDs, Set charging profile by the left pair dip-switches</p> 
	Line loss compensation	Based on 2 meters output cable's length	
	Short circuit protection	Short circuit protection with auto-reset	
	Reverse polarity protection	Reverse polarity protection with auto-reset	
	Additional protection	Sparks protection AC surge protection with auto-reset Over temperature protection with auto-reset	
	DC output power cord (customizable)	Cable: 2 * 2.5mm ² * 1.2m Connector: customizable	
	AC input power cord (customizable)	Cable: 3 * 1.5mm ² * 60cm Connector: IEC320 / C14	
	LED instruction	Red: On = Fault Yellow: On=Charging Green: On=Fully charged	Customizable
	Regulatory compliant	Safety: EN60335-2-29, UL1564, CSA 107.2 Emissions: EN55014 Immunity: EN61000-3-2, EN61000-3-3	



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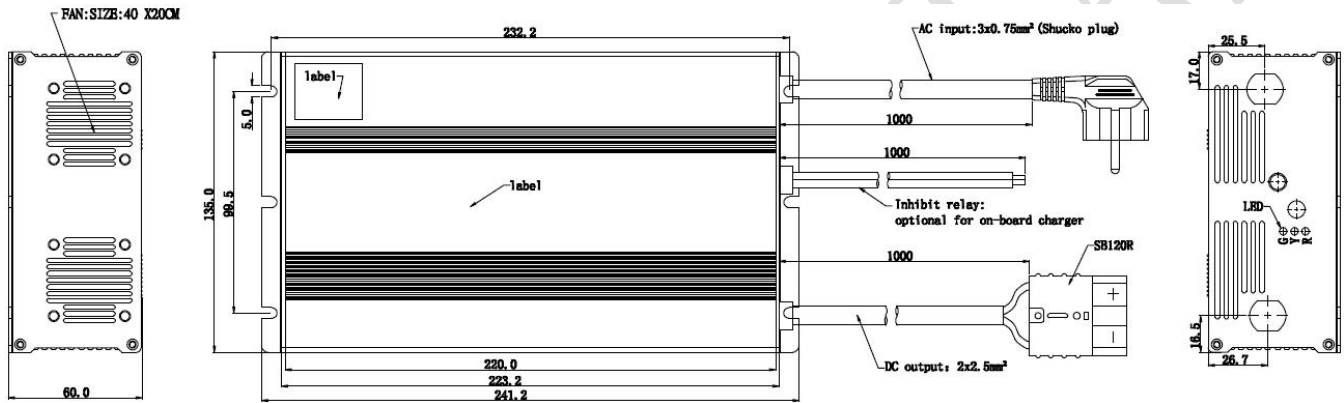
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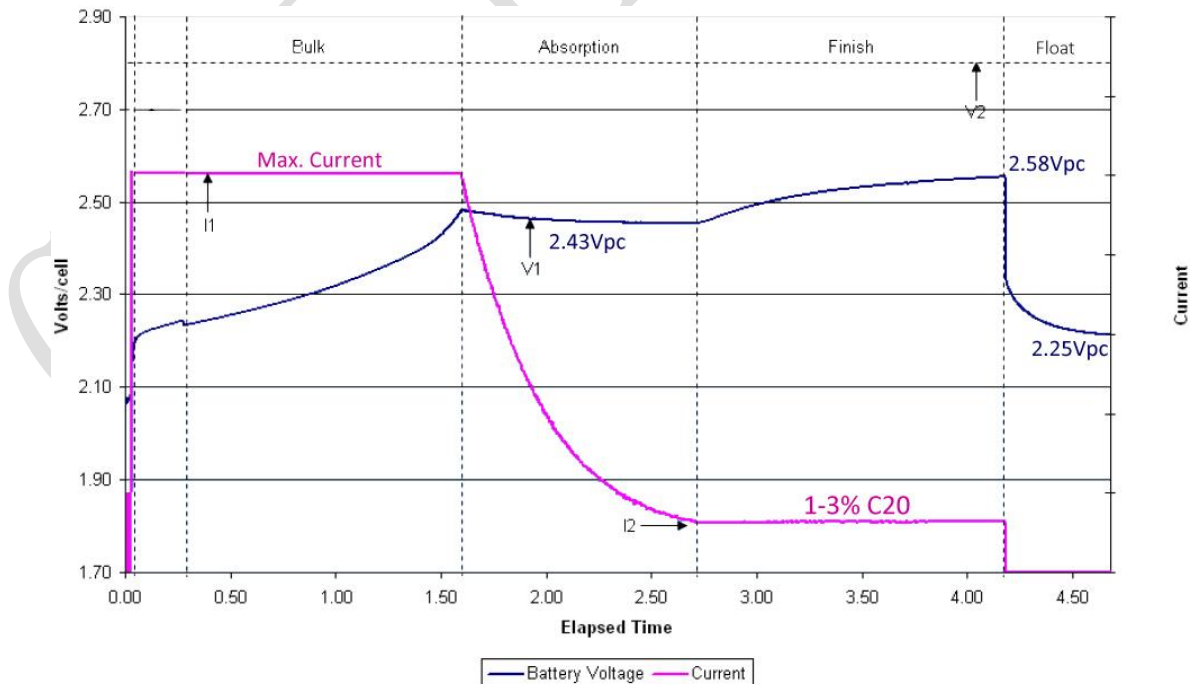
No	Item	Technical specification	Remark
	Enclosure	IP2X	
	Cooling method	Fan-cooling with long-life fans	
	Operating temperature	-10°C to +50°C (14°F to 122°F)	
	Storage temperature	-20°C to +65°C (-4°F to 149°F)	
	Mechanical fixing	On-board as default	Portable as optional
	Dimensions	L223 x W135 x H60 mm	
	Weight	2.5 Kg	Maybe some tolerance
	Color	Black	Customizable

4. PRODUCT OUTLINE DRAWING



5. CHARGING ALGORITHMS

1# IU1a-Acd for Wet traction batteries





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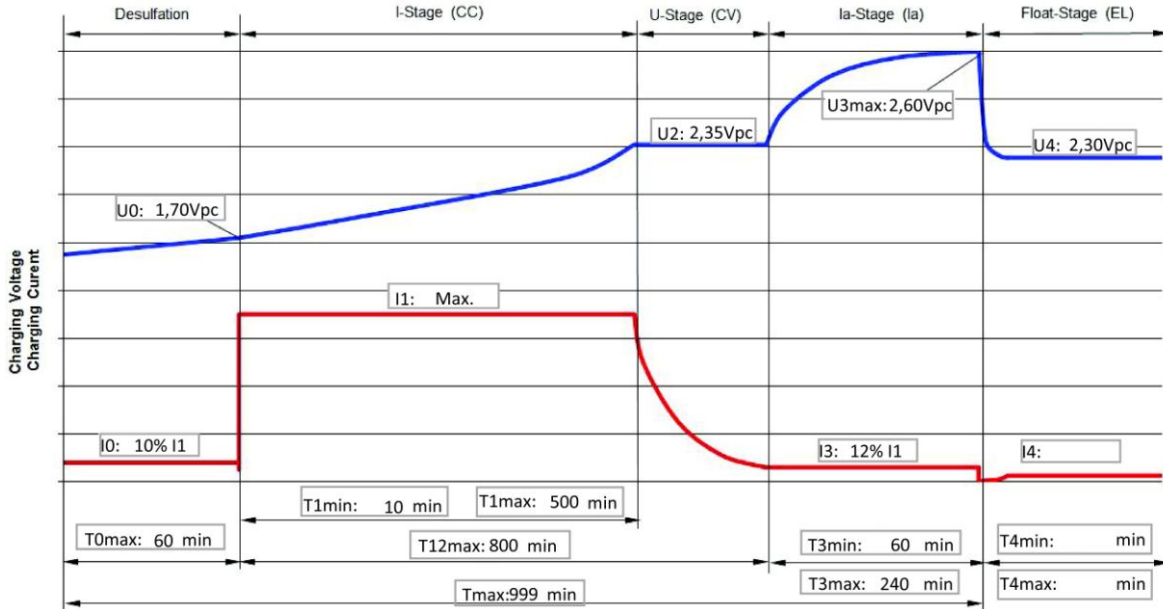
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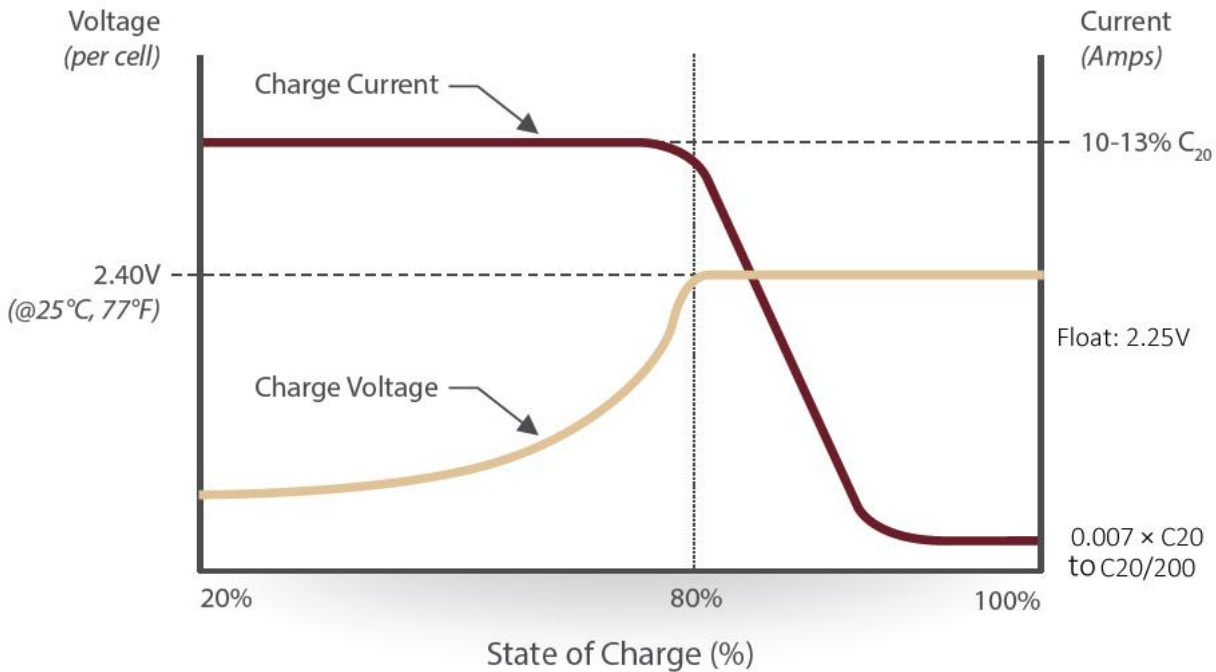
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
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2#  IU1a-GEL for Gel or AGM



3#  IUUa-GEL for Gel or AGM



4#  For customized algorithm