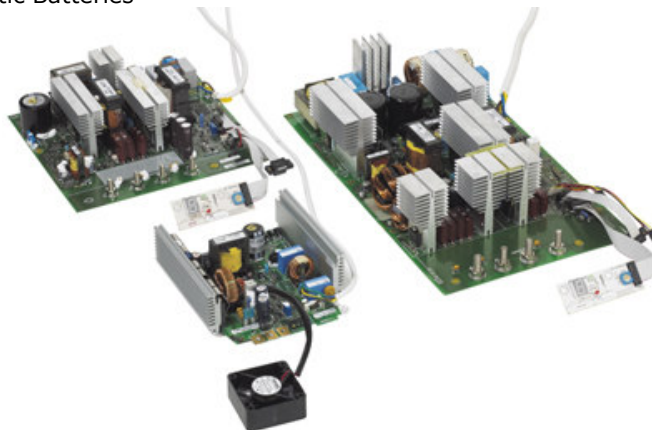


### Special Features

Wide Output Power Range 156 W to 2000 W  
 All models designed to charge both GEL or Electrolytic Batteries  
 PFC (not PS185C)  
 Microcontrolled 3-Phase Battery Charge  
 Output Voltage Digital Adjustment  
 Output Voltage Thermal Compensation  
 Double Output Over Voltage protection  
 Output Reverse Polarity Protection (OR-ing Diodes)  
 Active Output Overload protection (power limiting)  
 Output Fuses  
 2-Steps Over Temperature protection  
 Over Temperature Battery protection  
 Charge Fault  
 Battery Low Alarm  
 Serial Communication System (CAN bus)  
 Digital Display  
 Wide Operating Temperature Range: -20 to +70 °C



### Applications

Industrial Systems, Marine Equipment

### Input Specifications

	RHPS185C	RHPS186A	RHPS186C	RHPS187C	RHPS188A	RHPS188C	RHPS184	RHPS184C
Input Voltage	115 Vac, 230 Vac – Single Phase (103 to 130 Vac, 207 to 260 Vac)			115 Vac, 230 Vac – Single Phase (97 to 280 Vac)			230 Vac – Single Phase (195 to 280 Vac)	
Input Current (Max)	3.4 A	6.3 A	6.3 A	7.5 A	10.7 A	11 A	14.8 A	12 A

Input Frequency 50Hz, 60Hz (47Hz÷63Hz)  
 Input Protection Internal fuse

### Output Specification

	RHPS185C	RHPS186A	RHPS186C	RHPS187C	RHPS188A	RHPS188C	RHPS184	RHPS184C
Output Power	156 W	325 W	312 W	500 W	650 W	700 W	1100 W	2000 W
Output Voltage	12 V	12 V	24 V	12 V	24 V	12 V	12 V	24 V
Voltage Reg	(13.5÷14.35)	(13.5÷14.35)	(27.0÷28.70)	(13.5÷14.35)	(27.0÷28.70)	(13.5÷14.35)	(13.5÷14.35)	(27.0÷28.70)
Ripple	±0.5%							
Output Current	12 A	25 A	12 A	40 A	30 A	60 A	80 A	80 A
Efficiency	>78%	>75%	>82%	>81%	>88%	>82%	>80%	>86%

Each PS is designed to charge both GEL or Electrolytic Batteries with three charging phases: a constant voltage characteristic (Float) up to  $I_{out} < 0.20 \times I_{nom}$ , a constant voltage characteristic (Absorption) up to  $P_{out} < P_{nom}$ , a constant power characteristic ( $P_{out} = P_{nom}$ ) down to approximately 13V/26V and then follow a constant (limited) current characteristic ( $I_{out} = I_{nom}$ ).

### Protections

Input Under Voltage	2-Steps protection: Derating + Shutdown
Output Over Voltage	Double protection: SW + HW
Output Overload	active power limiting
Output Short Circuit	
Output Reverse Polarity	
Over Temperature	Two steps Over Temperature protection (Temperature Derating + Thermal Shutdown)
Battery Over Temperature	only RHPS187, RHPS188

### Features

Soft Start	
Output OR-ing Diodes	
Manual Battery Selection	Gel or Electrolytic
Battery Charger Enabled/Disabled	LED
Remote Signalling Connector	only RHPS186A, RHPS186C
<b>(Only RHPS187C, RHPS188A, RHPS188C, RHPS184, RHPS184C)</b>	
Enable/Disable Switch	
Digital Display to signal	Input Under Voltage, Output Power Limitation (Thermal Derating), Charge Fault (Battery Over Temperature), CAN-Bus Communication Error, Output Over Voltage, Output Over Current, Output Fuse Blown, Over Fan Fault Temperature,
Serial Communication System	(CAN bus) to manage: Remote ON-OFF, Power Good Signal, AC Fault Alarm, Current Sharing / Redundancy (only RHPS184, RHPS184C), Output Voltage Digital Adjustment, Output Voltage Thermal Compensation, Charging Phase Signalling, Battery Selection, Battery Low Alarm.

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### Environmental

Operating Temperature:	-20 to +70 °C (Output Power Derating between 50 and 70 °C)
Storage Temperature:	-40 to +85 °C
Relative Humidity:	5 to 95% non-condensing
Cooling:	Internal Fans (fan speed controlled by microcontroller – Thermal Adjustment) (not PS185C, PS186A, PS186C)

### Safety

Safety Standards:	Design in compliance with EN60335-1, EN60335-2-29, UL458, UL1236
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### EMC Compliance

Conducted & Radiated	EN55022
Immunity	EN55022
Harmonic Distortion	EN61000-3-2
Electrostatic Discharge	EN61000-4-2
Radiated RFI	EN61000-4-3
Fast Transients/Bursts	EN61000-4-4
Input Line Surges	EN61000-4-5
Conducted RFI	EN61000-4-6
Voltage Dips	EN61000-4-11

### Physical Specification

Case	Open frame
Dimensions (HxWxD)	H ranging from 60 to 88 mm (2.4 to 3.5 in) W ranging from 150 to 228 mm (5.9 to 9.0 in) D ranging from 165 to 386 mm (6.5 to 15.2 in)
Weight	ranging from 1 to 3.6 kg (2.2 to 7.9 lb)

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