

# Power Supply 27,4VDC/10A

## Features

- AC/DC switch mode power supply 27,4VDC/10A (250W)
- Input 230/115VAC
- Built-in output serial diode
- Temperature-compensated battery charging voltage
- Design to meet EN-54 and confirms to CE-standards
- Potential-free fault output relay
- Power ON indicator
- Remote control of battery charger voltage. Direct control from fire alarm panel (0 volt signal)
- Short-circuit proof output
- Plug-in connectors
- Easy-to-install on DIN-rail
- Parallel connection of units

## Application/Description

For use together with Autronica fire alarm panels as an additional power supply. Two or more power supplies can be parallel connected.

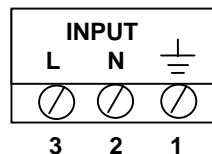
## Outputs and Inputs

The power supply provides the following outputs and inputs:

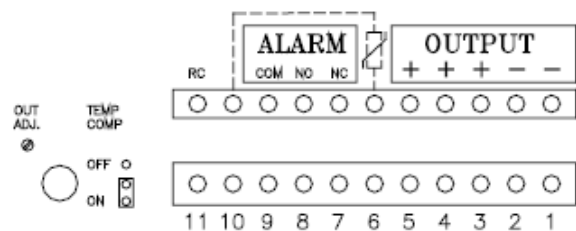
- Output for 27,4VDC/10A (20°C)
- Fault relay output
- Input 94-132VAC or 184-264VAC (selectable by switch)
- Control input for battery test (RC)
- 0-voltage input signal will lower the charging voltage to approximately 21,5VDC.
- Input for connection of external thermistor for temperature control of externally mounted batteries.



## Connection Mains



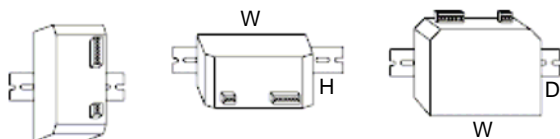
## Output Connector



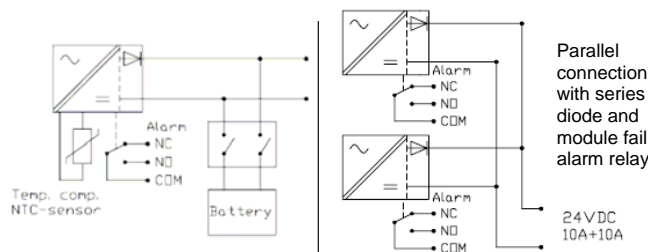
- 1-5: output +/-27,4VDC/10A
- 6/10: thermistor (NTC)
- 7-9: fault relay output
- 11: Remote control of battery charging voltage (0V control)

Part number	Description
116-4550-012.2410	Power Supply 27,4VDC/10A

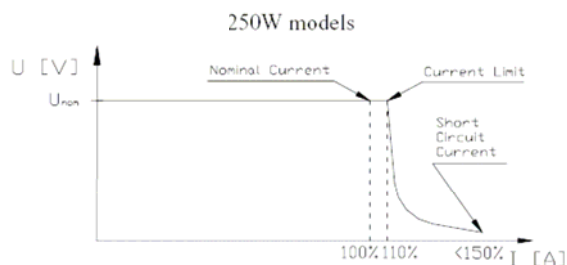
### DIN-rail Mounting



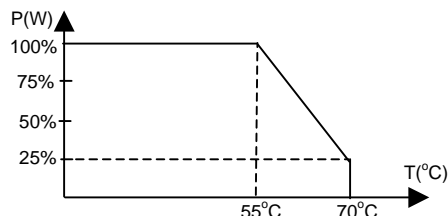
### Connections Battery Charger



### Current Limitation Curves



### Power Derating Curve



### Technical specifications

Mechanical	
Dimensions (mm) (WxHxD)	173 x 75 x 122 Can be installed both horizontally and vertically (3 different installation choices)
Weight	1,3kg
Enclosure	Steel / aluminium enclosure IP20
Weight	1,3kg
Connectors	Removable 2.5 mm <sup>2</sup> screw terminals
Environmental	
Storage temperature	-40°C...+85°C
Operation temperature	-40°C...+70°C, full power up to +55°C
Cooling	Natural convection
Humidity	85% RH IEC68-2-30, coated PCBs in R-versions
Shock and vibration	ETS 300 019-2-4, class 4M5, Vibration, sin, IEC60068-2-6, 2gn 9-200m/s <sup>2</sup> , Vibration, broad-band random, IEC60068-2-64

Input	
Frequency	45-65Hz
Input voltage	94-132VAC or 184-264VAC selectable by switch
Input current 100% load, 230VAC	1,9A
Input current 100% load, 115VAC	4,5A
Efficiency typical (230V 100%)	>89%
Isolation	Input/ground 1500 VAC RMS 50Hz, 1min Input/output 3000 VAC RMS 50Hz, 1 min
Inrush current (25°C <sup>o</sup> ), 230VAC	<35A <5ms
Inrush current (25°C <sup>o</sup> ), 115VAC	<17A <10ms
Input fuse	T6.3A, High breaking
Output	
Output voltage, chargers (50% load)	27.4VDC
Output adjustment (typical)	21...29VDC
Ripple voltage (20Hz...300kHz, 25°C)	<10mVrms
Current limit	<11A (see current limitation curves)
Short circuit current	<14A (see current limitation curves)
Hold-up time (230V, 100% load)	>20ms
Ripple (20Hz-300kHz)	>10mVrms
Alarms and indications	
Output OK	Green LED
Power Fail relay alarm	Pot. free relay contacts. Activated at AC fail and module fail cases. Relay contact rating: 24VDC/0.3A or 30VAC/0.5A
Undervoltage alarm threshold level	19V ±1V
Output overvoltage protection level	31V
Battery test control	Float charge voltage can be reduced by external 0VDC control (RC). The charge voltage is lowered to 21,5V and the external measurement circuit can control the battery/batteryconnection.
Temperature compensation (chargers)	By external NTC resistor 2.2 kohm
Standards / Approvals	
Safety	EN 60950-1 (ed. 1), UL508
EMC emissions EN61000-6-3	EN 55022 class B conducted emissions EN 55022 class B radiated emissions EN61000-3-2 harmonics EN61000-3-3 Flickering
EMC Immunity EN61000-6-2	EN 61000-4-2 Electrostatic Discharge EN 61000-4-3 Radiated Immunity EN 61000-4-4 Fast Transients EN 61000-4-5 Surge EN 61000-4-6 Conducted Immunity EN 61000-4-8 Power frequency magnetic field immunity EN 61000-4-11 Voltage dips and interruptions, immunity
Approvals	CE-marking, UL508 cUL listing, EN60950-1 safety report IEC60945:2002
Manufacturer type code	PCA5485P-3

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