# 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

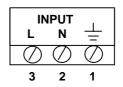
For use together with Autronica fire alarm panels as an additional power supply. Two or more power supplies can be parallel connected.

#### **Outputs and Inputs**

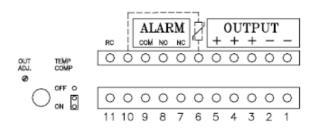
The power supply provides the following outputs and inputs:

- 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**



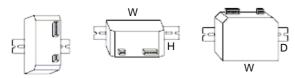
1-5: output +/-27,4VDC/10A 6/10: thermistor (NTC) 7-9: fault relay output

11: Remote control of battery charging voltage (0V control)

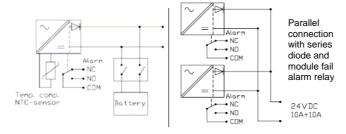
Part number	Description
116-4550-012.2410	Power Supply 27,4VDC/10A



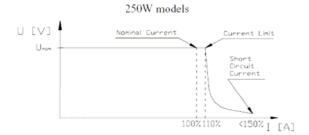
# **DIN-rail Mounting**



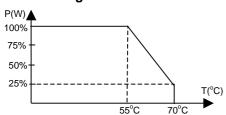
### **Connections Battery Charger**



## **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 +55C	
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/s2, Vibration, broad-band random, IEC60068-2-64	

Frequency	Input		
Input voltage	•	45-65Hz	
Input current 100% load, 230VAC	Input voltage		
Input current 100% load, 230VAC   Input current 100% load, 115VAC   Input current 100% load, 115VAC   Input current 100% load, 115VAC   S89%   Input/ground 1500 VAC RMS 50Hz, 1 min Input/output 3000 VAC RMS 50Hz, 1 min I	,		
Injust	230VAC	1,9A	
Input/ground 1500 VAC RMS 50Hz, 1 min Input/output 3000 VAC RMS 50Hz, 1 min Input/output 3000 VAC RMS 50Hz, 1 min Input/output 3000 VAC RMS 50Hz, 1 min S35A <5ms   230VAC Inrush current (25C°), 215VAC Input fuse T6.3A, High breaking    Output (150°), 27.4VDC (50°), 27.4VDC (50°% load)    Output adjustment (typical)   Ciphic voltage (2129VDC (20Hz300KHz, 25°C)    Current limit	115VAC	4,5A	
Inrush current (25C°), 235A <5ms 230VAC Inrush current (25C°), 415 VAC Inrush current (25C°), 115 VAC Input fuse T6.3A, High breaking  Output  Output voltage, chargers (50% load) Output adjustment (typical) 2129VDC (30Hz300kHz, 25°C) 410mVrms (20Hz300kHz, 25°C) Current limit 41A (see current limitation curves) Industry time (230V, 100% load) Industry time (230V, 100% load)  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  Output overvoltage protection level  Battery test control Float charge voltage can be reduced by external OVDC control (RC). The charge voltage is lowered to 21,5V and the external measurement circuit can control the battery/batteryconnection.  Temperature compensation (chargers)  Standards / Approvals  Safety EN 60950-1 (ed. 1), UL508  EMC emissions EN 55022 class B conducted emissions EN 61000-3-2 harmonics EN 61000-3-2 harmonics EN 61000-4-3 Radiated Immunity EN 61000-4-3 Radiated Immunity EN 61000-4-4 Surge EN 61000-4-4 Surge EN 61000-4-5 Surge EN 61000-4-5 Surge EN 61000-4-5 Surge EN 61000-4-5 Surge EN 61000-4-4 Float Curl Will Surge CE-marking, UL508 CUL listing, EN 61000-4-1 VICS09 Listing, EN 61000-4-1 VICS09 Listing, EN 61000-5: Unitsting, EN 6950-5:	Efficiency typical (230V 100%)		
Inrush current (25C°), 230VAC Inrush current (25C°), 115VAC Input tuse T6.3A, High breaking  Output  Output voltage, chargers (50% load) Curput adjustment (typical) Ripple voltage (20Hz300kHz, 25°C) Current limit Short circuit current Hold-up time (230V, 100% load) Ripple (20Hz-300kHz)  Alarms and indications  Output OK Power Fail relay alarm  Output OK Green LED 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  Battery test control  Float charge voltage is lowered to 21,5V and the external measurement circuit can control the battery/batteryconnection.  Temperature compensation (chargers)  Standards / Approvals  EMC emissions EN61000-6-3  EMC Immunity EN61000-6-2  EMC Immunity EN61000-6-2  EMC Immunity EN61000-6-2  EMC Immunity EN61000-6-2  EMC Immunity EN61000-4-3 Plickering EN 61000-4-5 Surge EN 61000-4-5 Power frequency magnetic field immunity EN 61000-4-8 Power frequency magnetic field immunity EN 61000-4-1 Radiated Immunity EN 61000-4-1 Radiat	Isolation	1min	
230WAC	Jaruah aurrant (25.00)	min	
Input fuse T6.3A, High breaking  Output  Output voltage, chargers (50% load)  Output adjustment (typical) 2129VDC Ripple voltage (20Hz300kHz, 25°C)  Current limit < 14A (see current limitation curves) Short circuit current < 14A (see current limitation curves) Indu-up time (230V, 100% load)  Ripple (20Hz-300kHz) >10mVrms  Alarms and indications  Output OK Green LED 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  Output overvoltage protection level  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/battleryconnection.  Temperature compensation (chargers)  Standards / Approvals  Safety EN 60950-1 (ed. 1), UL508  EMC emissions EN61000-6-3  EMC Immunity EN 61000-4-2 Electrostatic Discharge EN 61000-4-3 Radiated Immunity EN 61000-4-3 Radiated Immunity EN 61000-4-4 Power frequency magnetic field immunity EN 61000-4-8 Power frequency magnetic field immunity EN 61000-4-11 Voltage dips and interruptions, immunity  CE-marking, UL508 CUL listing, EN60950-1 safety report IEC60945:2002	230VAC		
Output voltage, chargers (50% load) Output adjustment (typical) Ripple voltage (20Hz300kHz, 25°C) Current limit Short circuit current Hold-up time (230V, 100% load) Ripple (20Hz-300kHz) Alarms and indications Output OK Power Fail relay alarm Output OK Power Fail relay alarm Output overvoltage protection level Battery test control  Temperature compensation (chargers)  Standards / Approvals  EMC emissions EN61000-6-3  EMC Immunity EN 61000-6-2  EMC Immunity EN 61000-4-3 Radiated Immunity EN 61000-4-3 Radiated Immunity EN 61000-4-8 Power frequency magnetic field immunity EN 61000-4-1 Notage dips and interruptions, immunity EN 61000-4-1 Notage dips and interruptions, immunity EN 61000-4-1 Reference ENG0950-1 safety report IEC60945:2002	115VAC		
Output voltage, chargers (50% load)  Output adjustment (typical) Ripple voltage (20Hz300kHz, 25°C)  Current limit		16.3A, High breaking	
(50% load) Output adjustment (typical) Ripple voltage (20Hz300kHz, 25°C) Current limit Short circuit current Hold-up time (230V, 100% load) Ripple (20Hz-300kHz)  Alarms and indications Output OK Power Fail relay alarm Output oK Power Fail relay alarm Output oyervoltage alarm threshold level Output overvoltage protection level Battery test control Battery test control  Temperature compensation (chargers)  Standards / Approvals  Safety EMC emissions EMC Immunity EMC I	•		
Ripple voltage (20Hz300kHz, 25°C)	(50% load)		
(20Hz300kHz, 25°C)  Current limit			
Current limit   Current		<10mVrms	
Short circuit current		<11A (see current limitation curves)	
Hold-up time (230V, 100% load)   >20ms   >20ms			
Content   Cont			
Alarms and indications  Output OK 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 Output overvoltage protection level 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)  Standards / Approvals  Safety EN 60950-1 (ed. 1), UL508  EMC emissions EN61000-6-3  EMC Immunity EN61000-3-3 Flickering  EMC Immunity EN61000-4-4 Fast Transients EN 61000-4-5 Surge EN 61000-4-5 Surge EN 61000-4-8 Power frequency magnetic field immunity EN 61000-4-11 Voltage dips and interruptions, immunity EN 61000-4-1 afety report IEC60945:2002	load)		
Output OK 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 Output overvoltage protection level 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)  Standards / Approvals  Safety EN 60950-1 (ed. 1), UL508  EMC emissions EN61000-6-3  EMC Immunity EN61000-3-2 harmonics EN61000-3-2 harmonics EN61000-3-3 Flickering  EMC Immunity EN 61000-4-4 Radiated Immunity EN 61000-4-5 Surge EN 61000-4-5 Surge EN 61000-4-6 Conducted Immunity EN 61000-4-7 Round Immunity EN 61000-4-8 Power frequency magnetic field immunity EN 61000-4-1 Voltage dips and interruptions, immunity EN 60950-1 safety report IEC60945:2002	Ripple (20Hz-300kHz)	>10mVrms	
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 Output overvoltage protection level 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)  Standards / Approvals  Safety EN 60950-1 (ed. 1), UL508  ENC 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 EN 61000-4-3 Radiated Immunity EN 61000-4-5 Surge EN 61000-4-5 Surge EN 61000-4-6 Conducted Immunity EN 61000-4-8 Power frequency magnetic field immunity EN 61000-4-1 Voltage dips and interruptions, immunity  Approvals  CE-marking, UL508 cUL listing, EN60950-1 safety report IEC60945:2002			
Activated at AC fail and module fail cases. Relay contact rating: 24VDC/0.3A or 30VAC/0.5A  Undervoltage alarm threshold level  Output overvoltage protection level  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)  Standards / Approvals  Safety  EN 60950-1 (ed. 1), UL508  ENC emissions EN61000-6-3  EN 55022 class B conducted emissions EN61000-3-2 harmonics EN61000-3-2 harmonics EN61000-3-3 Flickering  EMC Immunity EN 61000-4-3 Radiated Immunity EN 61000-4-5 Surge EN 61000-4-5 Surge EN 61000-4-6 Conducted Immunity EN 61000-4-8 Power frequency magnetic field immunity EN 61000-4-1 Voltage dips and interruptions, immunity  CE-marking, UL508 cUL listing, EN60950-1 safety report IEC60945:2002			
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)   Extended to the pattery/batteryconnection	Power Fall relay alarm	Activated at AC fail and module fail cases. Relay contact rating: 24VDC/0.3A or	
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		19V ±1V	
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)  Standards / Approvals  Safety  EN 60950-1 (ed. 1), UL508  ENC emissions  EN61000-6-3  EN 55022 class B conducted emissions  EN 55022 class B radiated emissions  EN 61000-3-2 harmonics  EN61000-3-3 Flickering  EN 61000-4-3 Radiated Immunity  EN 61000-4-5 Surge  EN 61000-4-5 Surge  EN 61000-4-8 Power frequency magnetic field immunity  EN 61000-4-1 Voltage dips and interruptions, immunity  Approvals  CE-marking, UL508 cUL listing,  EN60950-1 safety report IEC60945:2002		31V	
Chargers   Standards / Approvals	Battery test control	by external OVDC control (RC). The charge voltage is lowered to 21,5V and the external measurement circuit can control the battery/batteryconnection.	
Safety  EMC emissions EN61000-6-3  EMC Immunity EN61000-6-2  EMC Immunity EN61000-6-2  EMC Immunity EN61000-4-2  EMC Immunity EN61000-4-2  EMC Immunity EN61000-4-2  EMC Immunity EN61000-4-2  EMC Immunity EN61000-4-5  EMC Immunity EN61000-4-8  EMC Immunity EN61000-4-8  EMC Immunity EN61000-4-8  EMC Immunity EN61000-4-9  EMC Immunity EN61000-4-8  EMC Immunity EN61000-4-9  EMC Immunity EN61000-4-1  EMC Immunity EN61000-4-1  EMC Immunity EN61000-4-1  EMC Immunity EN61000-4-1  EMC Immunity EM61000-4-1  EM61000-4-1  EMC Immunity EM61000-4-1  EMC Immunity EM61000-4-1  EM61000-4		By external NTC resistor 2.2 kohm	
EMC emissions EN61000-6-3 EN 55022 class B conducted emissions EN 55022 class B radiated emissions EN 55022 class B radiated emissions EN 61000-3-2 harmonics EN61000-3-3 Flickering EMC Immunity EN 61000-4-2 Electrostatic Discharge EN 61000-4-3 Radiated Immunity EN 61000-4-5 Surge 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			
EMC emissions EN61000-6-3 EN 55022 class B conducted emissions EN 55022 class B radiated emissions EN 55022 class B radiated emissions EN 61000-3-2 harmonics EN61000-3-3 Flickering EMC Immunity EN 61000-4-2 Electrostatic Discharge EN 61000-4-3 Radiated Immunity EN 61000-4-5 Surge 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	Safety		
EN 55022 class B radiated emissions EN61000-3-2 harmonics EN61000-3-3 Flickering  EMC Immunity 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	EMC emissions	EN 55022 class B conducted	
EN61000-6-2  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	EN61000-6-3	EN 55022 class B radiated emissions EN61000-3-2 harmonics	
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	EMC Immunity		
EN60950-1 safety report IEC60945:2002	_	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	
Manufacturer type code PCA5485P-3	Approvals	CE-marking, UL508 cUL listing, EN60950-1 safety report	
	Manufacturer type code	PCA5485P-3	

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