

Auxiliary 24V 4A PSU

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ISO 9001: 2008

International Standards
Certifications
QAC/R64/0012

Product Overview:

The **Pertronic Auxiliary 24V 4A PSU** incorporates a 4 Amp Switch-Mode Power Supply with voltage monitoring and battery test facilities.

Two 12 Volt, 38Ahr sealed lead acid batteries may be fitted in the **PSU** cabinet.

Up to 10 Amps may be supplied by the batteries and regulator to a load connected to the **PSU**.

A microprocessor monitors the battery voltage, and performs timing functions for the 24-Hour Auto test.

Three indicator LEDs are mounted on the door of the **PSU**:

- ▶ The green **Mains ON** LED illuminates when the Mains supply is present
- ▶ The yellow **AutoTest** LED illuminates when the **PSU** performs the 24-Hour AutoTest
- ▶ The yellow **Battery Fault** LED pulses to indicate faults associated with the system

Change-over relay contacts provide non-latching fault indication to external equipment.

The Fault relay is normally energised when the **PSU** has no fault conditions, and releases to indicate a fault. Release of the Fault relay is delayed for a period determined by the type of fault. Momentary operation of the on-board RESET switch clears any latched Fault indications and starts the 24-Hour Test Timer. The battery test commences 23 hours after reset, then every 24 hours subsequently.

Pushing the on-board RESET switch for at least 2 seconds starts the 1-hour battery test immediately, with the **AutoTest** LED ON. Subsequent 1-Hour test occurs 24 hours from this time. Pushing the RESET switch for about half a second cancels the 1-hour battery test. The next battery test starts 23 hours from this time. This is a useful check to see if the batteries are connected correctly.



Specifications:

Electrical: - AC	AC Input: 200-260Vac, 0.8A maximum @50Hz±1%	Power Supply Charger Current: 3A Continuous 4A Peak - 24 hours maximum duration	Maximum Output Current: (with battery) 10A (NZ)
	Turn-on Time 120ms at 230Vac 25°C	Input Protection Internal 1A slow blow fuse	Inrush Current Limited by internal thermistor
- DC	Output Voltage - Nominal 27.4Vdc @20°C	Temperature Coefficient 0.145%/°C set for battery charging	
Battery:	Battery Type: 2 x 12V, ≤38Ah Sealed Lead-Acid (GelCell)	Automatic Battery Test: Automated 60 minute load test every 24 hours	
Controls:	Switches Reset / Timer initialisation switch	Front Panel Indicators Mains ON LED - Green Auto-Test LED - Yellow Battery Fault LED - Yellow	
Defect Relay:	Contacts Normally energised. NO/NC contacts available	Contact Rating 1A @ 24Vdc	
Environmental:	Operating Temperature Range 0°C to 40°C		Humidity 10 to 95% RH (non-condensing)
Mechanical:	Dimensions (H x W x D mm) 550 x 350 x 190	Weight (excluding batteries) 8.35kg	Material 1.2mm mild steel
			Colour powder-coated beige

Switch Mode 4A PSU Tested To:

AS/NZS 3100:1997

Mounting:

The power supply is designed to be wall-mounted. It should be mounted in a clean dry area, which provides natural convection between the unit and the wall and ensure the cooling slots are not restricted in any way.

Connections:

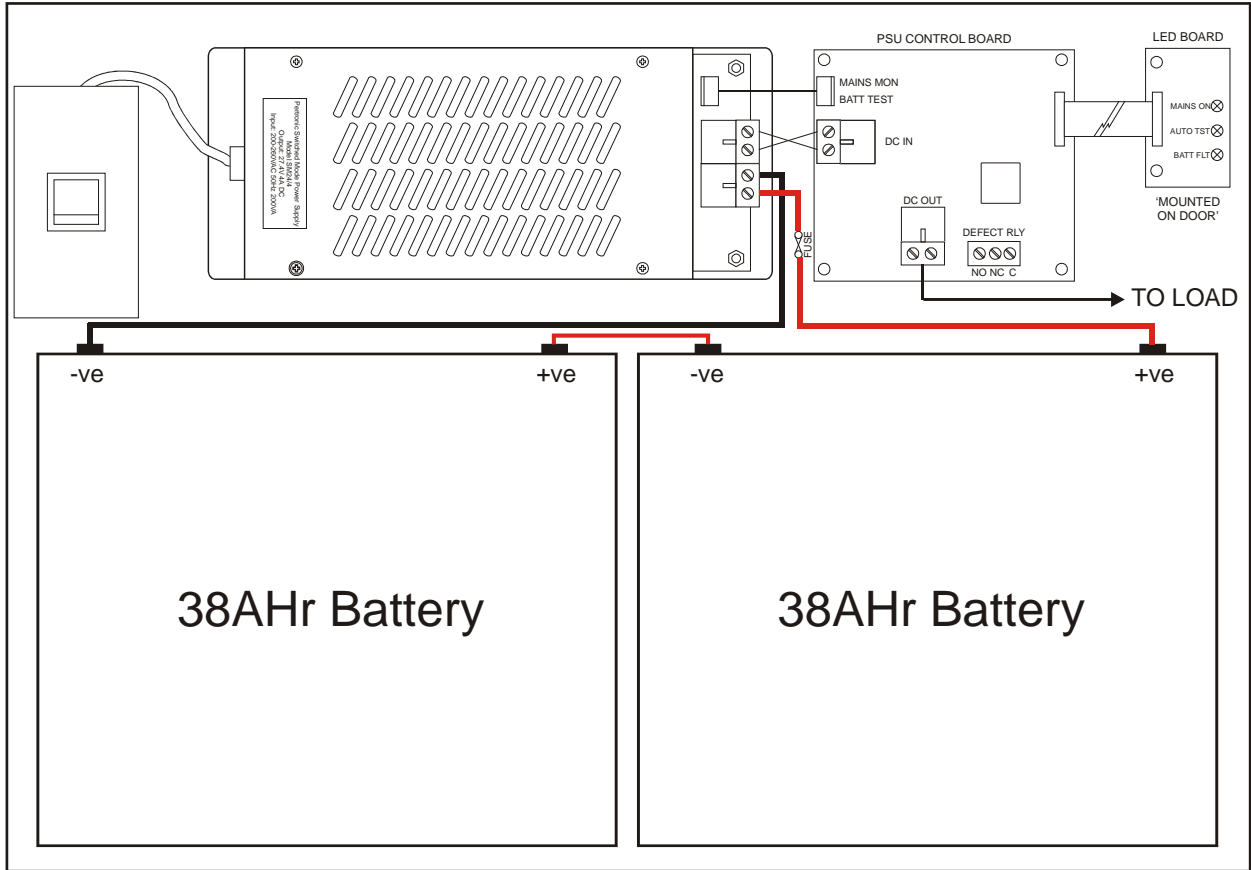
The PSU is fitted with a termination block with an integral three-pole switch for Mains wiring connection.

The Load Output (DC OUT) uses a 2 way terminal block on the bottom of the Monitor Board.

Care must be taken to prevent reverse polarity connections between the power supply and load.

The Fault relay provides clean NC-C-NO contacts rated 1A @ 24V.

System Wiring:



Auxiliary 24V-4A Power Supply Unit 20070814

Battery Dimensions: Typical – dimensions from Haze Battery

Battery Model	Amp/Hours	Dimensions: W x H x D mm : Kg	Terminals	Max I _{charge}
HZY12-12	12	150 x 97 x 98 (103) : 4.0Kg	D-T2	2.4A
HZY12-18	18	181 x 76 x 167 : 5.9Kg	C-M5	4.5A
HZY12-26	26	166 x 176 x 126 : 8.8Kg	C-M5	6.5A
HZY12-33	33	195 x 130 x 160 : 10.9Kg	B-M6	8A
HZY12-44	44	197 x 165 x 170 : 14.0Kg	C-M6	11A

Ordering Information:

Product Code	Description
AUX24/4PSU	24V, 4A Monitored PSU in BATBOX 38
24/4SWMP	OffLine PSU : 24V, 4A (3A Continuous) Switch Mode PSU
24VCB	24 Volt Control Timer for Power Supplies
BATBOX38	Battery Box: 350 x 550 x 190 (W x H x D mm) - maximum Battery size: 38Ah

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