

# APS 6A AC/DC Power Supply

## General Description

The unit provides simultaneous ac and capacitor smoothed dc outputs up to a maximum combined current of 6 amps. The output voltages are selected by a front panel mounted key switch. The outputs are monitored by a coloured led - under short circuit conditions the led changes colour from green to red. All outputs are fully floating and may be clamped to earth, if required, by linking to the green terminal. The unit is designed to operate from a 220/240V 50/60Hz mains supply.

## Using the Unit

When switched on, the green output monitor led will glow. The output voltage required may be selected by turning the key which may be removed to lock the setting. If a short circuit occurs or a current greater than 6 amps is drawn, the safety cut-out will operate - the output monitor led will turn red, a buzzer will sound and the output voltage will be switched off. To reset, switch off the mains rocker switch, wait about 5 seconds and then switch on again.

The ac and dc output voltages marked on the selector are nominal and will depend on the amount of current being drawn - this is particularly so in the case of the dc due to the capacitor smoothing. The capacitor smoothing on the dc outputs mean that it is suitable for basic electronics work (e.g. transistors etc.)

## Mains Fuses

Should the output indicator not glow when the mains is switched on, then the rear panel and mains plug fuses should be checked. Replacement back panel fuse is 2A, 20mm quick blow. The mains plug fuse should be replaced with a 5A fuse. **Under no circumstances fit a 13A fuse.**

## Electrical Safety Testing

The unit is classified as Class 1 for the purposes of safety testing. Suitable earth test points are the green terminal and any of the eight lid securing screws. For further details on safety testing, please refer to Health and Safety Executive leaflet GS23 (ISBN 0 11 883567 X).

## Specification

### Input

Supply voltage	230V a.c.
Supply frequency	50Hz
Maximum power	100W
Panel fuse rating	2A quick blow
Mains plug fuse rating	3A

### Output

Voltage	1-13V unregulated smoothed d.c. 2-12V a.c.
Maximum output current	6A

## Electromagnetic Compatibility

The use of this apparatus outside the classroom, laboratory, study area or similar such place invalidates the conformity with the protection requirements of the Electromagnetic Compatibility Directive (89/336/EEC) and could lead to prosecution.