

5A 2-12V AC/DC Power Supply

General Description

The unit delivers AC or full wave rectified DC from 2 to 12 volts in 2V steps at up to 5 amps. The maximum output voltage may be limited to 6V by use of the key switch. The output is short circuit protected by a push button thermal cut-out.

The Unit in Use

The unit is switched on using the mains rocker switch which illuminates when on. Should the switch fail to illuminate, check that mains power is present at the socket and that the mains plug fuse (3A or 5A) is intact. Voltage selection is achieved by turning the rotary switch.

AC and DC may be used simultaneously up to a total loading of 5A. The output voltages are nominal and will depend on the load being driven. DC voltages will be about 1 volt lower than the corresponding AC voltage. It is recommended that a voltmeter be used to determine the precise voltage. The output terminals will accept standard 4mm plugs or crocodile clips. If the terminal is unscrewed, then connections may be made through the transverse hole using bared wire or 2mm plugs.

Fault Finding

The cut-out pops out. A short circuit has occurred. Remove the fault and press the cut-out back. Please note the cut-out can take up to 15 seconds to internally reset. Although the button may stay in, the unit will not operate until the cut-out has internally re-set.

Safety Testing

The unit is rated as a Class 1 (earthed) appliance. To perform an Earth Bond test using a suitable PAT, the recommended test points are any of the eight screw heads at the sides of the case. 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
Mains plug fuse rating	3A

Output

Voltage	2-12V unregulated d.c. and a.c. in 2V steps
Maximum output current	5A

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.