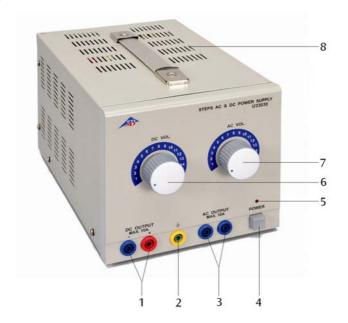
# 3B SCIENTIFIC® PHYSICS



## **AC/DC Power Supply 1/2/3/... 15 V, 10 A U33030**

### **Instruction sheet**

01/10 ALF



- 1 DC voltage output
- 2 Earthing socket
- 3 AC voltage output
- 4 Mains on/off switch
- 5 Power on display (LED)
- 6 Voltage regulator for DC
- Voltage regulator for AC
- 3 Ventilation slots

### 1. Safety instructions

The AC/DC Power Supply 1/ 2/ 3/ ... 15 V, 10 A conforms to all safety regulations for electrical measuring, control, monitoring and laboratory equipment, as specified under DIN EN 61010, Section 1, and the equipment has been designed to meet protection class I. It is intended for operation in a dry environment, suitable for the operation of electrical equipment and systems.

Safe operation of the equipment is guaranteed, provided it is used correctly. However, there is no guarantee of safety if the equipment is used in an improper or careless manner.

If it may be assumed for any reason that non-hazardous operation will not be possible (e.g. visible damage), the equipment should be switched off immediately and secured against any unintended use.

In schools and other educational institutions, the operation of the power supply unit must be supervised by qualified personnel.

 Before using the power supply unit for the first time, confirm that the specifications printed on the rear side of the housing are compatible with the local mains voltage.

- Before using the power supply unit for the first time, check the housing and the mains lead for any damage. In the event of any malfunction/operational defect or visible damage, switch off the unit immediately and secure it against unintended use.
- The instrument may only be connected to the mains via a socket that has an earth connection
- Before making any connections, check the experiment leads for damaged insulation and exposed wires.
- Replace a faulty fuse only with one matching the specifications stated at the rear of the housing.
- Disconnect the equipment from the mains before replacing a fuse.
- Never short the fuse or the fuse holder.
- Never cover the ventilation slots in the housing. This is necessary in order to ensure sufficient circulation of air required for cooling the internal components of the equipment.
- The equipment may only be opened/repaired by qualified and trained personnel.

#### 2. Description

The AC/DC Power Supply 1/ 2/ 3/ ... 15 V, 10 A provides AC and DC voltages up to 15 V with a current up to 15 A.

The AC and DC output voltages are adjustable in 1 V steps and are tapped from the corresponding output sockets. The DC voltages are stabilised. The AC and DC outputs are electrically isolated from each other, and have short-circuit protection.

The U33030-115 AC/DC power supply is for operation with a mains voltage of 115 V ( $\pm$ 10%), and the U33030-230 unit is for operation with a mains voltage of 230 V ( $\pm$ 10%).

#### 3. Technical data

Mains voltage: see rear of housing

DC output: 1/ 2/ 3/ 4/ 5/ 6/ 7/ 8/ 9/

10/ 11/ 12/ 13/ 14/ 15 V,

max. 10 A

AC output: 1/ 2/ 3/ 4/ 5/ 6/ 7/ 8/ 9/

10/ 11/ 12/ 13/ 14/ 15 V,

max. 10 A

Max. output power: 150 VA

Primary fuse: see rear of housing
Terminals: 4 mm safety sockets
Dimensions: 170x160x250 mm³ ap-

prox.

Weight: 6.3 kg approx.

#### 4. Operation

#### 4.1 General information

- Before switching on the power supply, turn the current regulators fully to the left.
- Connect the power supply to the experimental setup.
- Do not switch the power supply on until the experiment has been fully assembled.
- Changes to the experimental setup must only be made with the power supply switched off.
- Before switching off the power supply, turn the voltage regulators fully to the left again.

#### 4.2 Obtaining an AC voltage

- Connect the load to the AC output sockets (3).
- Switch on the power supply and adjust the voltage to the desired value by turning the voltage regulator (7).

#### 4.3 Obtaining a DC voltage

- Connect the load to the AC output sockets (1).
- Switch on the power supply and adjust the voltage to the desired value by turning the voltage regulator (6).

#### 4.4 Changing the fuse

- Turn off the power switch and unplug the mains plug.
- Unscrew the fuse holder on the rear side of the housing with a screwdriver.
- Replace the fuse and reinsert the holder in its socket.