

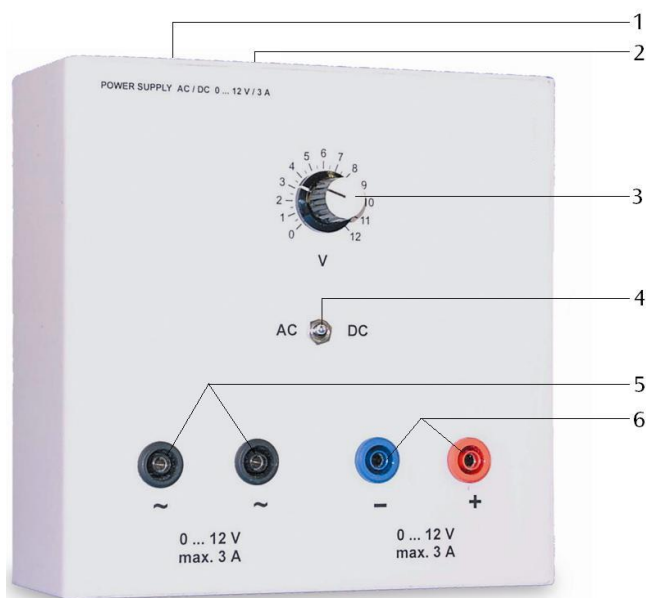
## AC/DC Power Supply, 0 – 12 V, 3 A, stab. (115 V, 50/60 Hz) AC/DC Power Supply, 0 – 12 V, 3 A, stab. (230 V, 50/60 Hz)

1001006 (115 V, 50/60 Hz)

1001007 (230 V, 50/60 Hz)

### Instruction sheet

06/15 SP/ALF



- 1 Mains switch
- 2 Fuse holder
- 3 Voltage control
- 4 AC/DC voltage selector switch
- 5 AC output sockets
- 6 DC output sockets

### 1. Safety instructions

The AC/DC power supply conforms to the safety regulations for electrical measuring, control, monitoring and laboratory equipment, as specified under DIN EN 61010, section 1, and is designed to be classified as protection class I equipment. It is intended for operation in a dry environment as this is 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 is deemed that the equipment can no longer be operated without risk (e.g. visible damage has occurred), the equipment should be switched off immediately and secured against any unintended use.

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



**Caution:** the low-voltage output of the power supply is not surge-proof if exposed to external voltages of more than 100 V with respect to earth.

- When using the equipment in conjunction with other power supplies, e.g. for operating electron tubes, be careful that no voltages in excess of 100 V with respect to earth are present at the outputs.
- Before putting the DC power supply unit into operation, confirm that the specifications printed on the rear side of the housing are compatible with the local mains voltage.
- Before putting the DC power supply unit into operation, check the housing for any damage. In the event of any malfunction/operational defect or visible damage, switch off the unit immediately and secure it from unintentional 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 any blown fuses only with new ones that match the specifications stated on 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 air vents and heat sink at the rear of the housing. These are necessary in order to ensure sufficient circulation of air required for cooling the components inside the equipment.
- The equipment may only be opened/repared by qualified and trained personnel.

## 2. Description

The AC/DC power supply provides a continuously adjustable, stabilised AC or DC voltage for student exercises and experiments. Either AC or DC output voltage is selected by means of a toggle switch.

The power supply 1001006 is for operation with a mains voltage of 115 V ( $\pm 10\%$ ), and the unit 1001007 is for operation with a mains voltage of 230 V ( $\pm 10\%$ ).

## 3. Technical data

Mains supply voltage:	see back panel
Output voltages:	0 – 12 V
Output current:	2 – 8 V, 2 A 8 – 10 V, 3 A 10 – 12 V, 4 A
Output resistance:	50 m $\Omega$ approx.
Fuse rating:	4 A
Connections:	4 mm safety sockets
Dimensions:	162x170x68 mm <sup>3</sup> approx.
Mass:	2.9 kg approx.

## 4. Operation

It is recommended to use one of the following instruments to measure the output voltage:

Analogue Multimeter AM50	1003073
or	
Analogue Multimeter AM51	1003074

### Caution:

The AC and DC outputs cannot be used at the same time.

## 4.1 Obtaining an AC voltage

- Connect the unit to the mains supply. Turn the voltage control knob fully to the left.
- Connect the load to the AC output sockets.
- Set the toggle switch to AC.
- Press the mains switch; the mains indicator light shows green.
- Set the required voltage using the voltage control; if necessary, connect a voltmeter in parallel with the load.

## 4.2 Obtaining a DC voltage

- Connect the unit to the mains supply. Turn the voltage control knob fully to the left.
- Connect the load to the DC output sockets.
- Set the toggle switch to DC.
- Press the mains switch; the mains indicator light shows green.
- Set the required voltage using the voltage control; if necessary, connect a voltmeter in parallel with the load.

## 4.3 Changing the fuse

- Before changing the fuse, unplug the unit from the mains.
- Using a screwdriver (or similar tool), unscrew and lift out the fuse holder.
- Replace the fuse with a new one with the same specifications.
- Screw the fuse holder back into place.

## 5. Care and maintenance

- Before cleaning the equipment, disconnect it from its power supply.
- Use a soft, damp cloth to clean it.

## 6. Disposal

- The packaging should be disposed of at local recycling points.
- Should you need to dispose of the equipment itself, never throw it away in normal domestic waste. Local regulations for the disposal of electrical equipment will apply.

