

## Transformer with Rectifier, 2 ... 14 V, 5 A (115 V, 50/60 Hz) Transformer with Rectifier, 2 ... 14 V, 5 A (230 V, 50/60 Hz)

1003557 (115 V, 50/60 Hz)  
1003558 (230 V, 50/60 Hz)

### Instruction sheet

06/15 SP/ALF



- 1 Mains switch
- 2 Reset switch for thermal safety cutout
- 3 Voltage control
- 4 DC output sockets
- 5 AC output sockets

### 1. Safety instructions

The transformer with rectifier 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 outputs of the power supply are not surge-proof if exposed to external voltages of more than 2000 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 2000 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 dam-

age. 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.
- 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 transformer with rectifier provides AC and DC voltages that can be varied from 2 V to 14 V in steps of 2 V. The outputs are insulated from the mains supply line. The built-in bridge rectifier with downstream charging capacitor provides smoothed DC voltages. The voltage outputs are protected by a thermal safety cutout.

The transformer 1003557 is for operation with a mains voltage of 115 V ( $\pm 10\%$ ), and the unit 1003558 is for operation with a mains voltage of 230 V ( $\pm 10\%$ ).

## 3. Technical data

Mains supply voltage:	see rear panel
Output voltages:	2 V AC/DC 4 V AC/DC 6 V AC/DC 8 V AC/DC 10 V AC/DC 12 V AC/DC 14 V AC/DC
Output current:	max. 5 A
Connections:	4 mm safety sockets
Dimensions:	260x 140x 130 mm <sup>3</sup> approx.
Mass:	3.1 kg approx

## 4. Operation

### 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.
- Connect the load to the AC output sockets.
- Set the voltage control to give the required voltage; if necessary connect a voltmeter in parallel with the load.
- Push the mains switch to the up position; the mains indicator light shows green.

## 4.2 Obtaining a DC voltage

- Connect the unit to the mains supply.
- Connect the load to the DC output sockets.
- Set the voltage control to give the required voltage; if necessary connect a voltmeter in parallel with the load.
- Push the mains switch to the up position; the mains indicator light shows green.

## 5. Safety instructions

### Overcurrent cutout switch:

If the overcurrent cutout switch has tripped:

- Disconnect the mains plug.
- Determine the cause of the overcurrent and eliminate it.
- Re-connect the unit to the mains supply.
- Press the overcurrent cutout switch.

## 6. Care and maintenance

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

## 7. 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.

