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### Operating instructions

 The unit complies with the corresponding

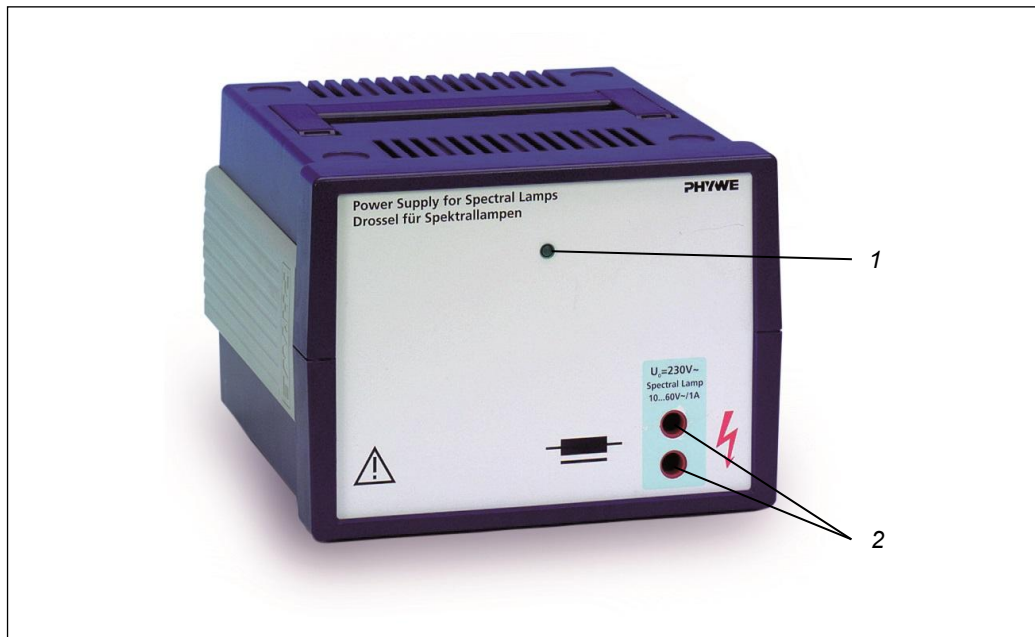


Fig. 1: Power supply for spectral lamps 13662-90...99

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- Do not cover the ventilation slots.
- Take care that no liquids or objects enter in through the ventilation slots.
- Only use the instrument in dry rooms in which there is no risk of explosion.
- Do not start up this instrument should there be visible signs of damage to it or to the line cord.
- Only use the instrument for the purpose for which it was designed.

### 2 PURPOSE AND DESCRIPTION

The power supply is used for the cadmium spectral lamp 09050-20.

A pair of 4 mm sockets on the front side is used to connect a socket suited for spectral lamps. To ignite the spectral lamp, the power supply provides a no load voltage  $U_0 = 230 \text{ VAC}$ , which decreases to the corresponding operating voltage  $U_B = 10...60 \text{ VAC}$  once the lamp is ignited.

For safety reasons, both output sockets are designed as switching sockets, so that the voltage only is available at the output once both plugs have been pushed into the sockets. This excludes all risks for the persons carrying out experiments. The unit is accommodated in an impact resistant plastic housing. A retractable carrying handle is recessed into the top cover of the unit. The same component is recessed into the bottom panel and can be folded out to enable the unit to be used in a sloped position. Four rubber feet ensure that the unit stands firm and they also enable it to be stacked with units of a similar design, the rubber feet being located in the cup-shaped depressions on the lower unit to stop the upper unit slipping. When units are stacked, the sloped position is only permissible for the topmost unit.

The unit is connected to the AC mains using the mains lead that is supplied with it. The lead is inserted into the equipment connection plug at the back of the unit. Please ensure



#### Attention!

- Carefully read these operating instructions before operating this instrument. This is necessary to avoid damage to it, as well as for user-safety.
- Check that your mains supply and mains frequency voltage corresponds to that given on the type plate fixed to the instrument.
- Install the instrument so that the on/off switch and the mains connecting plug are easily accessible.

that the mains voltage matches the operating voltage details on the nameplate on the unit.

The mains switch to start operating the unit is situated in the immediate vicinity of the equipment connection plug at the back of the unit.

The following functional and operating elements (see Fig. 1) are to be found on the front plate of the instrument:

1. *On/off indicating lamp*
2. *Output*

Pair of 4 mm sockets for lamp voltage supply

**Changing the fuse:** to change a blown fuse, the fuse holder underneath the main plug must be opened using a screw-driver.

**To change the fuse, the main plug must be disconnected from the grid.**

### 3 NOTES ON OPERATION

This high-quality instrument fulfills all of the technical requirements that are compiled in current EC guidelines. The characteristics of this product qualify it for the CE mark. This instrument is only to be put into operation under specialist supervision in a controlled electromagnetic environment in research, educational and training facilities (schools, universities, institutes and laboratories).

This means that in such an environment, no mobile phones etc. are to be used in the immediate vicinity. The individual connecting leads are each not to be longer than 2 m.

### 4 TECHNICAL SPECIFICATIONS

(typical for 25 °C)

Operating temperature range	5–40 °C
Relative humidity	< 80 %
Output voltage	
No load voltage	230 V~
Operating voltage depending on model (see Operating instructions of spectral lamps)	10...60 V~
Nominal current limited to	1 A

#### Mains supply

The instrument corresponds to protection class I. It is only to be connected to a socket with an earth lead connection.

Connecting voltage (+6 % / –10 %)	see type plate*
Mains frequency	see type plate*
Mains fuse (5 mm x 20 mm)	see type plate
Housing dimensions (mm)	230 x 236 x 168 (W, D, H)
Weight	approx. 4,4 kg

\* Voltage and frequency (see type plate) depending on local power grid

xxxxx-91 = 115 V/60 Hz

xxxxx-92 = 115 V/50 Hz

xxxxx-94 = 230 V/60 Hz

xxxxx-97 = 230 V/50 Hz

Special voltages and fixed frequencies on request.

### 5 PARTS SUPPLIED

- Power supply for spectral lamps 13662-90...99
- Operating instructions

### 6 ACCESSORIES

- Cadmium lamp for Zeeman effect

09050-20

### 7 WARRANTY

We give a warranty of 24 months for units supplied by us inside the EU, and a warranty of 12 months outside the EU. The following is excluded from the warranty: Damage that is due to non-compliance with the operating instructions, improper use, or natural wear.

The manufacturer can only be held liable for the function and safety-relevant properties of the unit, if the maintenance, service, and modifications of the unit are performed by the manufacturer or by an institution that is expressly authorised by the manufacturer.

### 8 WASTE DISPOSAL

The packaging mainly consists of environmentally-friendly materials that should be returned to the local recycling stations.



Do not dispose of this product with normal household waste. If this unit needs to be disposed of, please return it to the address that is stated below for proper disposal.

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