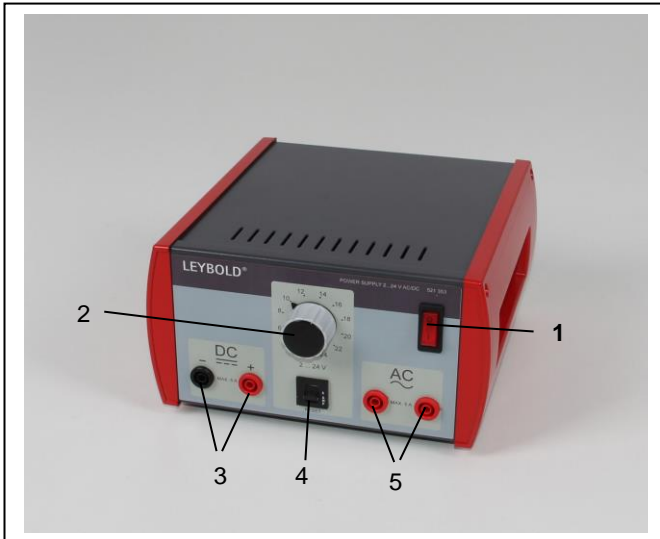


04/18-W13-CHR



### Safety Note

The device complies with the safety requirements for electrical measuring, control and laboratory equipment in accordance with DIN EN 61010 part 1, and it is constructed in compliance with safety class I. The device is intended for use in dry rooms that are suited for the operation of electrical equipment and devices.

If the device is used as prescribed, its safe operation is guaranteed. However, safety is not guaranteed if the device is improperly used or carelessly handled. If it has to be assumed that safe operation is no longer possible (e.g. in the case of visible damage), shut the device down immediately.

- When putting the device into operation for the first time, check whether the value for the mains voltage indicated on the rating plate (back of housing) agrees with the local value.
- Before putting the device into operation, examine the housing for damage. In case of malfunction or visible damage shut the device down and make sure that it is not used inadvertently.
- Connect the device only to socket-outlets with grounded neutral wire.
- Before connecting check connecting leads for defective insulation and bare wires.
- Replace a defective fuse only with a fuse that corresponds to the original value (see fuse plate on the back of the housing).
- Never short the fuse or the fuse holder.
- Always keep the ventilation slots free in order to ensure sufficient air circulation for the cooling of internal components.

Allow only skilled persons to open the device.

The two outlets (DC and AC) must not be connected to each other.

## Instruction Sheet 521 353

Variable transformer 2...24 V / 5 A

- 1 ON/OFF switch (with operation indicator lamp)
- 2 Regulator for AC/DC voltage (in steps of 2 V)
- 3 DC output
- 4 Circuit breaker (Fuse 4 AT)
- 5 AC output

### 1. Description

Power supply unit for electrical and simple electronic experiments. Output voltage adjustable in steps; overload protected with circuit breakers. All outputs galvanically isolated from the mains, floating. Particularly suited for student experiments at all age levels thanks to safe separation in accordance with BG/GUV-SI 8040 (conforms to german RiSU).

### 2. Technical Data

Output voltages	2-24 V AC and DC, in steps of 2 V
DC voltage	bridge rectification
Load capacity	5 A, aggregated
Connector	two 4 mm connector pairs for AC and DC
DC and AC part may be used simultaneously, but are not galvanically isolated	
Electrical isolation	Isolating transformer in accordance with DIN EN 61558-2-6, (compliant to german RiSU)
Input voltage	230 V, 50/60 Hz or 115 V, according to rating plate
Fuse	T 4 A at 230 V T 8 A at 115 V
Dimensions	203 mm x 225 mm x 117 mm
Weight	2.8 kg

### 3. Scope of Delivery

Power supply, connecting cord.

#### 4. Operating Principle

The variable transformer delivers from 2 to 24 V DC and AC voltage and a current of up to 5 A. The voltage can be selected in increments of 2 V.

The variable transformer is provided with separate outputs for DC and AC. The two outputs can be used simultaneously. The outputs are protected against overload by a thermal fuse.

The DC output supplies a full-wave rectified voltage without filtering.

#### 5. Operation

Connect the power supply to the mains with the grounded power cord provided.

Set the voltage selector to the desired value.

Connect the experimental setup to the desired output(s).

Turn the unit on. The On/Off button will light up when the device is powered.

The voltage can be adjusted while the unit is on.

#### 6. Trouble shooting

The DC and AC outputs are both protected against overload by a thermally activated circuit breaker. If this trips during an experiment, or if there is no voltage on the outputs when the device is turned on: Press the Reset button on the front panel. This resets the circuit breaker. It may of course be necessary to reduce the voltage or reduce the connected load to avoid that the circuit breaker trips again. If there still is no voltage at the outputs, check the fuse on the back of the housing and replace it if necessary. Replace a defective fuse only with a fuse that corresponds to the original value (see fuse plate on the back of the housing).