

# ET 256.01

## Laboratory power supply



### Learning objectives/experiments

- in conjunction with ET 256:
  - ▶ operation of a compression refrigeration system with direct current
  - ▶ influence of current and voltage on the operating behaviour of the refrigerating plant
  - ▶ control/regulation of a solar-current refrigeration system with different electrical power supply

### Specification

- [1] laboratory power supply for ET 256
- [2] adjustable current and voltage
- [3] front side with digital displays and control elements
- [4] safety output sockets
- [5] overheat protection
- [6] remote control by optional software from the manufacturer via USB

### Technical data

Adjustment range

- current: 0...6A
- voltage: 0...42V

Rated power: 100W

Operating temperature: 0...50°C

120V, 60Hz, 1 phase  
 230V, 50Hz, 1 phase  
 230V, 60Hz, 1 phase  
 LxWxH: 174x90x263mm  
 Weight: approx. 2kg

### Description

- laboratory power supply for the operation of ET 256
- provision of direct current as a replacement for photovoltaic modules
- specific variation of current and voltage

With the ET 256.01 laboratory power supply major experiments from the range of experiments possible with ET 256 can be carried out. ET 256.01 replaces the photovoltaic modules from ET 250.

Current and voltage can be set individually. Measuring points on typical current-voltage characteristics of photovoltaic modules can be simulated.

Measurement results from ET 250 at different illuminances can be found in the accompanying instructional materials for ET 256 and can be used as a guide for series of experiments with ET 256.01.

The laboratory power supply is operated by control elements on the front side. The cable connections to ET 256 are established via safety output sockets. The laboratory power supply has overheat protection.

The manufacturer of the laboratory power supply also optionally provides software for remote control via the USB connection on the front.

### Scope of delivery

- 1 experimental unit
- 1 connecting cable
- 1 manual