

## TRAINING SUITECASE FOR THE FUNDAMENTALS OF ELECTRICITY



Discover the basics of electricity easily and quickly with this simple and intuitive suitcase. This compact didactic solution is ideal for initiating your students in a clear and fast way!



Case with ergonomic handle.  
Dimensions 534 x 374 x 190mm.  
Supply by power cord 230V-2P + E.

This case allows the creation of simple electrical circuits by inserting the components directly on the face. It is supplied with resistors, capacities and inductors of different values in safety insulation boxes. Learn the differences between series and parallel wiring of generator and other components. Discover the specificities of direct and alternating currents. Learn the use of measuring devices (supplied), and how to choose and test fuses (supplied).

Safe wiring on  $\varnothing 4\text{mm}$  terminals. Security cords and the main power cord are provided. Component identification and other technical information are screen-printed on the faces.

ref. VAL-ELEC

DELIVERED WIRED AND SET

TEACHING RESSOURCES STUDENTS / TEACHER

### COMPOSITION OF THE TRAINING CASE

#### On the top side

- 3 voltmeters 0-30Vdc (direct current only)
- 3 ammeters 0-10Adc (direct current only)

#### On the underside

- 1 variable continuous power supply 0-30Vdc
- 3 fixed AC power supplies 6Vac, 12Vac and 24Vac
- 1 standard power outlet
- 2 NO switches
- 4 lamps 30V AC / DC
- 1 x 9V battery holder
- 2 AA battery holders
- 1 Bipolar fuse holder
- 2 glass fuse holder

### EDUCATIONAL OBJECTIVES

- Discover how an electrical circuit works
- Learn the fundamental laws of electricity
- Handle components such as resistance, capacitance and inductance.
- Use measuring devices
- Carry out measurements of electrical quantities
- Discover the role and operation of a fuse

### Proposed practical works

- Realization of electrical circuits
- Implementation of Ohm's Law
- Calculation of equivalent resistances
- Choice of measuring gauge
- Measurement of voltages and currents
- Comparison of measured and calculated results
- Fuse validity check
- Calculation of a gauge and choice of fuse type

### SUPPLIED ACCESSORIES

- 5 plug-in resistors (100 $\Omega$ , 150 $\Omega$ , 220 $\Omega$ , 330 $\Omega$ , 500 $\Omega$ )
- 5 plug-in capacitors (1 $\mu\text{F}$ , 10 $\mu\text{F}$ , 47 $\mu\text{F}$ , 100 $\mu\text{F}$ , 1000 $\mu\text{F}$ )
- 5 plug-in inductors (47 $\mu\text{H}$ , 100 $\mu\text{H}$ , 150  $\mu\text{H}$ , 220  $\mu\text{H}$ , 470  $\mu\text{H}$ )
- 1 manual multimeter
- 1 clamp ammeter
- 1 set of safety cords
- 4 LR6 1.5V batteries
- 1 6LR61 9V battery

