



## AC Voltage Test Set T 22/1

Compact and lightweight High-Voltage test system  
up to 75 kV<sub>rms</sub> AC 50 Hz

### Benefits

- ▶ Compact and lightweight
- ▶ Continuous testing with AC voltages up to 75 kV<sub>rms</sub> at 1 kVA
- ▶ Expandable with a second transformer for testing up to 150 kV<sub>rms</sub>
- ▶ Built-in overload protection
- ▶ DC testing up to 80 kV with optional rectifier



### Description

The AC Voltage Test Set T 22/1 is a portable test set consisting of two separate units: the control unit and the high-voltage unit. This division enables the operator to use the test set on site without transport aids. The test set can be equipped with a rectifier attachment for DC voltage testing up to 80 kV.

#### The AC Voltage Test Set T 22/1 is used for:

- ▶ AC voltage testing of low capacity test objects (e. g. metal-enclosed high voltage switchgear as per VDE 0670)
- ▶ DC voltage testing of cables, cable fittings, installations and equipment up to 80 kV using a rectifier attachment

#### Technical Features

- ▶ Continuous testing with AC voltages up to 75 kV at 1 kVA
- ▶ Set composed of function blocks:
  - T 22/124 control unit
  - T 22/12 SF6 gas transformer
- ▶ Built-in overload protection
- ▶ DC Voltage testing with rectifier attachment

#### Operating Method

A high-voltage transformer insulated with insulating gas (SF 6) produces a high voltage of 75 kV<sub>rms</sub>. This voltage is infinitely variable from 0 ... 75 kV using a regulating transformer.

In the basic version for AC voltage testing, the output voltage is calculated and indicated by measurement of the primary voltage of the high-voltage transformer and conversion using the turn factor (M 402 measuring unit). DC voltage is produced using a rectifier attachment. Voltage measurement is then done using a separate measuring resistor and the M 401 measuring unit.

### Technical Data

Output voltage	0 ... 75 kV <sub>rms</sub> , with 2 transformers symmetrically to earth max. 150 kV <sub>rms</sub>
Operating cycle	1 kVA; unlimited 2 kVA; 20 min. 4 kVA; 1 min.
Short-circuit current	max. 50 mA (1 min.)
Nominal current	13 mA
Test load	ca. 1000 pF max. 30 min.
DC voltage testing	max. 80 kV at 4 mA nominal current (with optional T 22/121 rectifier attachment)
Power supply	220/240 V ± 10 %; 50/60 Hz
Dimensions	Control unit T 22/124 551 x 255 x 380 mm (19"-housing) (approx. 21¼"x10"x15") SF <sub>6</sub> gas transformer T 22/12 diameter 420 mm (approx. 16½") height 560 mm (approx. 22")
Weight	Control unit T 22/124 approx. 19 kg (42 lbs) SF <sub>6</sub> gas transformer T22/12 approx. 29 kg (64 lbs)

#### Scope of delivery

- ▶ Control unit
- ▶ Transformer
- ▶ LV and HV cable set

#### Option

- ▶ 80 kV DC voltage testing