



## AC Voltage Test Set T 22/1

### 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 SF<sub>6</sub> gas transformer
- Built-in overload protection
- DC Voltage testing with rectifier attachment.

### Operating Method

A high-voltage transformer insulated with insulating gas (SF<sub>6</sub>) produces a high voltage of 75 kV<sub>rms</sub>. This voltage is infinitely variable from 0 to 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 22/121rectifier 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. 21¾"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)

### Option

- 80 kV DC voltage testing

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