# High-voltage test system T 22/1 High voltage testing up to 75 kV<sub>RMS</sub> AC / 80 kV DC





- Compact and light
- 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 High-voltage test system 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 Test Set T 22/1 is used for:

- AC voltage testing of low capacity test objects (e. g. metal-enclosed high voltage switchgears)
- DC voltage testing of cable systems and equipment up to 80 kV using a rectifier attachment

The light and compact high-voltage transformer, insulated with insulating gas (SF 6), produces a high voltage of 75 kV $_{rms}$ . The voltage is continuously adjustable from 0-75 kV using a regulating transformer.

In the basic version for AC voltage testing, the output voltage is calculated and indicated by measuring the primary voltage of the high-voltage transformer and converted using the turn factor (M 402 measuring unit).

Alternatively, the voltage can be measured on high-voltage potential cables by using a measuring resistor and the M 402/1 unit.

DC voltage can be generated using the optional rectifier attachment. The voltage is then measured by using a separate measuring resistor and the M 401 measuring unit.

# **TECHNICAL DATA\***

### T 22/1

 $\begin{array}{ll} \textbf{Power consumption P_N} & 1 \text{ kVA} \\ \textbf{Power consumption} & 4 \text{ kVA} \\ \end{array}$ 

short-time  $P_{\kappa}$  (1 min)

 Input voltage
 230 V / 50 ... 60 Hz

 Output voltage
 0 ... 75 kV<sub>RMS</sub> (basic version)

0 ... 150 kV<sub>RMS</sub> (upgrade version 150 kV<sub>RMS</sub>) 0 ... 80 kV<sub>DC</sub> (upgrade version 80 kV<sub>DC</sub>)

Measuring range 0 ... 80 kV<sub>RMs</sub> (basic version, multiply by factor two for upgrade version 150 kVrms)

0 ... 60 kV / 0 ... 120 kV<sub>DC</sub> (upgrade version 80 kV<sub>DC</sub>)

 $\begin{array}{lll} \textbf{Precision} & 2.5 \ \% \\ \textbf{Output current} & 0 \ ... \ 13 \ \text{mA} \\ \end{array}$ 

50 mA maximum (1 min)

Measuring range 0 ... 20 A<sub>RMS</sub> (basic version),

 $0 \dots 200~\mu A$  /  $0 \dots 2~mA$  /  $0 \dots 20~mA$  DC

(upgrade version 80 kV<sub>DC</sub>)

0 ... 60 mA<sub>RMS</sub> (option current measure-

ment HV potential)

# Control unit T 22/124

Weight 19 kg

**Dimensions (W x H x D)** 551 x 255 x 380 mm

### Transformer T 22/12

**Weight** 29 kg **Dimensions (Ø x H)** 420 x 560 mm

# **FEATURES**

- Continuous testing with AC voltages up to 75 kV at 1 kVA
- Separate control and HV-unit
- Built-in overload protection
- DC Voltage testing with optional rectifier attachment

# **SCOPE OF DELIVERY**

- Control Unit
- Transformer
- Set of cables T 22/1 incl. bag
- Filling device
- Secondary current measurement

ORDERING INFORMATION	
Product	Order no.
T 22/1 High voltage test set	892502151-S
Option:	
Upgrade to 80 kV <sub>DC</sub>	892504480
Upgrade to 150 kV <sub>RMS</sub>	892502152
Voltage measurement on HV-potential	899000409
Earthing stick 100 kV	810327
Transport case (offshore)	90015989



<sup>\*</sup> We reserve the right to make technical changes.