

MultiSafe TT 36

Telescope voltage tester for catenary lines up to 36 kV AC/DC



Variable locking
for test heights
up to 6 m or 8 m



Colour change of the display at voltage



With the MultiSafe TT 36, voltages up to 36 kV against ground can be tested safely and quickly. In addition to the voltage level, the frequency is displayed on the two-line display.

- For test heights up to 6,2 m or 8,2 m variable height adjustment
- Precise indication of voltages up to 36 kV AC and DC
- Highest degree of safety provided by moulded protective resistor in the GRP-tube, surge voltage strength > 250 kV

Application

The MultiSafe TT 36 is a two-pole voltage tester for alternating and direct voltages up to 36 kV against ground. It is particularly suitable for quickly and reliably determining the voltages between the overhead line and the rail of railway systems and voltages in switchgears.



Test at a 36 kV compensation system

Three display-systems

- LEDs red for voltage, green for standby and absence of voltage
- Display for voltage value, frequency as well as voltage type and polarity
- Acoustic signal for voltage $> U_t$



Test at a rail overhead line

Design

High-quality elements guarantee function and safety under extreme conditions:

- Telescope tube with variable height adjustment 6,2 m / 8,2 m test height
- Moulded resistor decade made of GRP-tube
- Dust- and waterproof display part made of ABS with unbreakable display cover
- Twin insulated line with universal clamp for secure grounding

Safety

- Surge voltage strength > 250 kV due to moulded protective resistors
- Integrated self-test to test the protective resistors, function and connection to earth
- Redundant test system with continuous self-monitoring for indicating the absence of voltage



MultiSafe TT 36UK

Earthing to grounding cable or fixed ballpoint with universal clamp.

Alternative:

Grounding with magnet or rail foot clamp

Accessories

Accessories are not included in scope of delivery

- Bag with ring bolt and shoulder belt
- Wall holder
- Robust case

Technical data

Two-pole high voltage tester
MultiSafe TT 36

Nominal voltage range

AC / DC 50 ... 36000 V

Display range

40 ... 36000 V AC / DC

Display

1. red LEDs for voltage $> U_t$
green LED for standby / absence of voltage
2. two-line LCD with backlight for indication of voltage, frequency, type of voltage and battery status
3. acoustic signal $> U_t$

Indicator group

I and III

Max. interference voltage U_t (change green / red)

1200 V

Measurement ranges / Accuracy

40 ... 1000 V AC/DC $\pm 5\% + 10$ digits resolution 1 V
1,00 ... 3,00 kV AC/DC $\pm 5\% + 10$ digits resolution 10 V
10 ... 36 kV AC/DC $\pm 5\% + 10$ digits resolution 100 V
automatic range switching

Frequency range

0 ... 200 Hz

Input resistance

52 M Ω

Current peak value

$< 0,9$ mA at 36000 V

On-time

15 min
at maximum nominal voltage

Self-test

Testing function, grounding and protective resistors

Surge voltage strength

> 250 kV (test report available)

Construction

For indoor and outdoor installations
IP 65, device can be used in moist environments

Operating temperature

$-15^{\circ}\text{C} \dots +55^{\circ}\text{C}$

Power supply

6 x AA 1,5 V
multi-stage battery indicator

Design

- Two-pole voltage tester with connection to ground by clamp or magnet
- 4-piece telescope high voltage test probe, made of double-walled GRP-tube with moulded resistor decade approx. 52 M Ω
- Display part made of impact resistant, dustproof plastic casing IP 65 with unbreakable display cover
- 1,8 m PUR high voltage cable with clamp or magnet

Standards

EN/IEC 61243-2 high voltage tester
EN/IEC 60071 surge voltage strength
further applied standards:
EN/IEC 61010 and EN 50110-1 (VDE 0105-1)
(further details see risk analysis)

Test label

Date of the next examination on the sticker
Repeated inspection at least every 6 years

Dimensions / Weight

1740 x 120 x 110 mm
run-out length up to 5,2 m / 7,2 m (TT36-8m)
test height up to 6,2 m / 8,2 m (TT36-8m)
device incl. line and magnet 2,8 kg
device incl. clamp for railfoot 3,1kg
TT36K-8m 4,2 kg

| Type | Article No. | Earth contact / line | Telescope | Self-test | LC display for voltage and frequency | For indoor installations | For outdoor installations |
|-------------------------------|-------------|----------------------|-----------|-----------|--------------------------------------|--------------------------|---------------------------|
| TT 36M 50-36 000 V | 89329 | magnet | 6 m | ■ | ■ | ■ | ■ |
| TT 36K 50-36 000 V | 89309 | railfoot clamp | | ■ | ■ | ■ | ■ |
| TT 36UK 50-36 000 V | 89351 | universal clamp | | ■ | ■ | ■ | ■ |
| TT 36UK-40L 50-36 000 V | 89348 | universal clamp | | ■ | ■ | ■ | ■ |
| TT 36K-8m 50-36 000 V | 89310 | railfoot clamp | 8 m | ■ | ■ | ■ | ■ |
| TT 36UK-8m-40L 50-36 000 V | 89349 | universal clamp | | ■ | ■ | ■ | ■ |