

# •ME AUDIT•

## Application

ME Audit is a set of equipment applied for accuracy testing and verification of instrument voltage transformers ranging from 6 to 330 kV and current transformers up to 5 kA (or up to 30 kA). The set can be prepared either for laboratory or field conditions.

Rated currents:

**PCTI-100/5(1):** 5; 10; 15; 20; 25; 30; 40; 50; 60; 75; 80; 100 A

**PCTI-5000/5(1):** 150; 200; 250; 300; 400; 500; 600; 750; 800; 1000; 1200; 1500; 2000; 3000; 4000; 5000 A.

Standard rated voltages:

6/√3; 6; 10/√3; 15; 35/√3; 35; 110/√3; 220/√3; 330/√3 kV

(other ranges can be made to order).

## Scope of Supply



1 Vehicle



2 CT Test Set (accuracy class 0.05) for testing current transformers of accuracy classes up to 0.2S



3 VT Test Set (accuracy class 0.05) for testing voltage transformers of accuracy classes up to 0.2

## Test Set for testing current transformers of accuracy classes up to 0.2S rated from 5 to 5000 A

Accuracy class of the Reference Transformer: 0.05

### Application

Accuracy testing and verification of CTs in accordance with the certified test procedures.

### Comparator



Energomonitor 3.3T1-C-TP complete with CTCS 1 A or 5 A

or



Energomonitor 3.1KM-P

Portable current transformers of reference class:

- PCTI-100/5 or PCTI-100/5(1), 5–100 A
  - PCTI-5000/5 or PCTI-5000/5(1), 100–5000 A.
- Accuracy class 0.05.



Adjustable Current Source IT5000 (up to 6000 A)

## Test Set for testing instrument current transformers (6 to 30 kA) by the indirect method

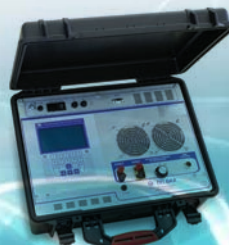
### Application

Accuracy testing and verification of CTs in accordance with the certified test procedures.

VCC Converter (converts Voltage/ Current curve of the CT under test) is applied for determining ratio and angle errors of instrument current transformers (complete with Delta-T software) by the indirect method



Software EmCalibrTrans for data management and generation of test reports



# High-Voltage Portable Transformer Test Sets

## Single-phase HVTS-1

## Three-phase HVTS-3-10, HVTS-3-35

Accuracy classes 0.1; 0.05

### Application

On-site testing and verification of instrument voltage (potential) transformers of accuracy classes up to 0.2  
Single-phase (rated at 110, 220, 330 kV)      Single- and three-phase (rated at 6, 10, 35 kV)

### Scope of Supply

**1. Comparator Energomonitor 3.1KM-P or Energomonitor 3.3T1 complete with VTCS (commutator)**

**2. Reference device: Reference Capacitive High-Voltage Transducer of CHVT series**

CHVT-110 (-220, -330)

CHVT-10-2 or CHVT-35-2 with UIN-D amplifiers

### 3. High-Voltage source

For VTs rated up to 100/ $\sqrt{3}$  kV:

Mobile HV Source UIV-100/7.5M (generated power 7.5 kVA),  
Console Unit and Voltage Regulation Unit included

For VTs rated up to 220/ $\sqrt{3}$  kV:

Mobile HV Source UIV-150/18M (generated power 18 kVA),  
Console Unit and Voltage Regulation Unit included

For 330 kV VTs:

the adjacent primary phase of the VT under test  
is used as a HV source (MI 3314-2011)

**Option 1:** 3-phase set of dry-type VTs (TN-10 or TN-35)

**Option 2:** 3-phase set of IOG-type (SF<sub>6</sub> filled) VTs

3-phase variable-ratio transformer

3-phase Console Unit (PU-10 or PU-35)

### 4. Burden boxes

100/ $\sqrt{3}$  V, 80 VA; 100/ $\sqrt{3}$  V, 200 VA

100/ $\sqrt{3}$  V, 80 VA (200 VA); 100 V, 80 VA (200 VA)

### 5. Set of cables (power, control, measurement, grounding, corona-free etc.)

### 6. Personal computer, printer, software

### 7. Test procedures

MI 3314-2011; MI 3050-2007

MI 3239-2009; MI 3050-2007



Patent N 67285

**HVTS-1-110**  
for testing VTs 110 kV

**HVTS-1-220**  
for testing VTs  
110, 220 kV

**HVTS-1-330**  
for testing VTs  
110, 220, 330 kV



Patent N 67285

**HVTS-3-10**  
for testing VTs  
6, 10 kV

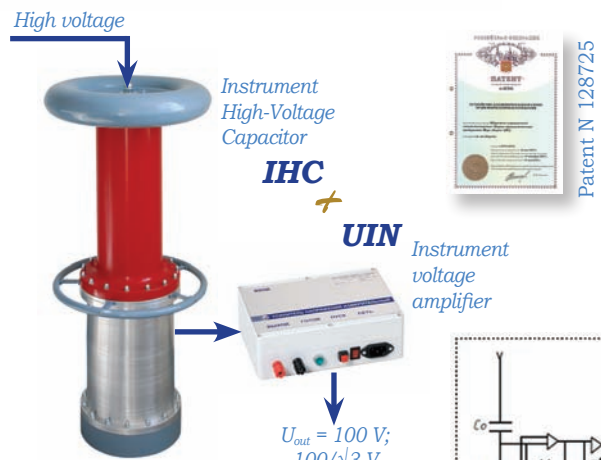
**HVTS-3-35**  
for testing VTs  
15, 35 kV

## High-Voltage Capacitive Measuring Transducer of CHVT series

Accuracy class 0.1 (0.05 supplied to order)

### Application

- Used to measure the high voltage applied to its high-voltage input by converting it into the low voltage with a certified scaling factor
- As a reference measuring instrument, is applied for testing of instrument-class VTs 6–330 kV of up to 0.2 accuracy class.



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Model	Rated voltage, kV	Height, mm	Weight, kg
CHVT-10	6, 10	350	4
CHVT-35	15, 35	450	8
CHVT-110	110	650	25
CHVT-220	110, 220	950	35
CHVT-330	220, 330	1100	45