

•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/ $\sqrt{3}$; 6; 10/ $\sqrt{3}$; 15; 35/ $\sqrt{3}$; 35; 110/ $\sqrt{3}$; 220/ $\sqrt{3}$; 330/ $\sqrt{3}$ 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

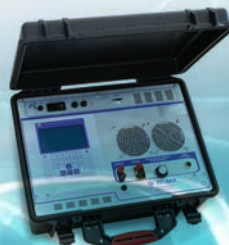
Application

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 (SF₆ 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)

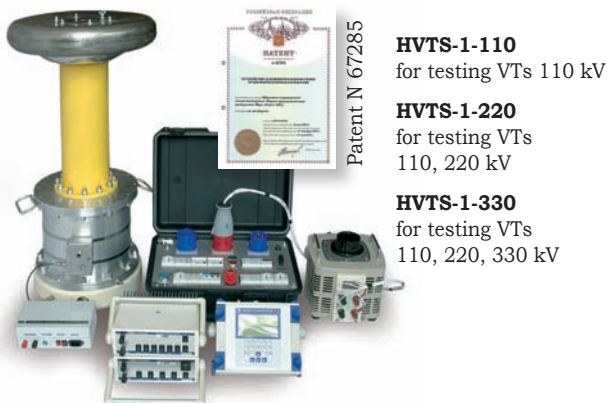
5. Set of cables (power, control, measurement, grounding, corona-free etc.)

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

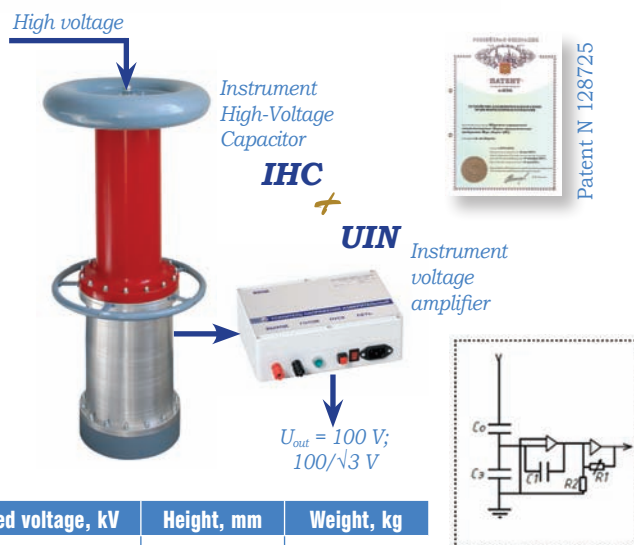
HVTS-3-35
for testing VTs
15, 35 kV

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.



Patent N 128725

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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