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INSTRUMENTS FOR POWER INDUSTRY

Making energy visible

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CALIBRATION SETUP FOR ELECTRONIC VOLTAGE TRANSFORMERS

MarsTest-EVT

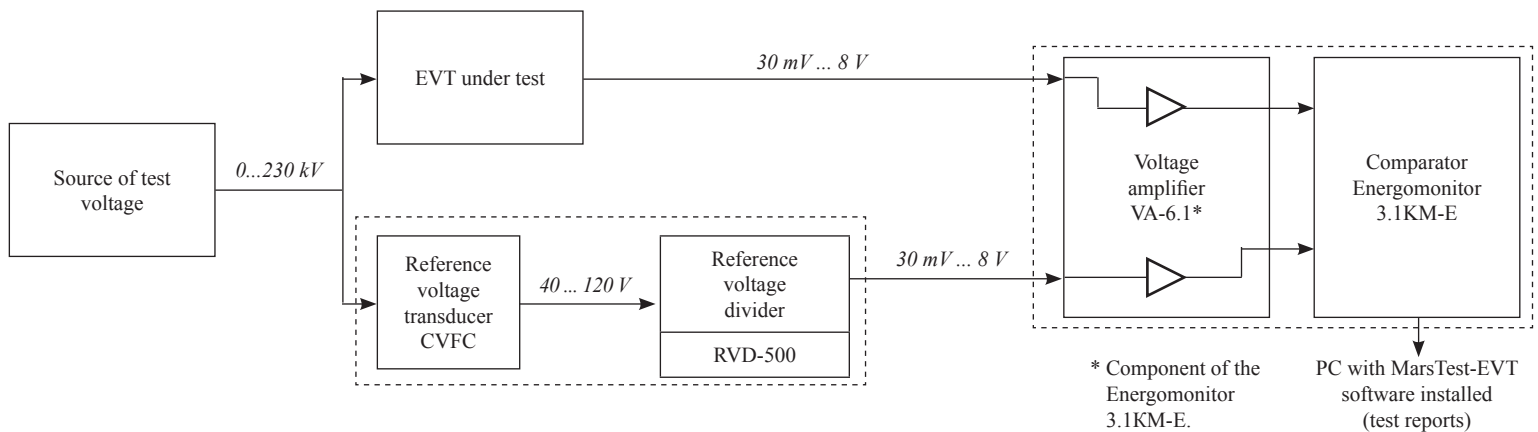
Purpose

It is a laboratory test set for accuracy testing and calibration of instrument voltage transformers with a non-conventional analogue output (EVTs) rated from 6 to 330 kV (applicable for EVT's specified by IEC 60044-7 or EVT+ECT combined transformers).

Sphere of application

Calibration/testing laboratories operated by manufacturers of non-conventional electronic transformers, certification bodies etc.

Calibration system for electronic voltage transformers



Technical and accuracy specifications

| Parameter | Range | Limits for permissible intrinsic measurement error |
|--|---------------------|--|
| Rated primary voltage, kV | 3...330/ $\sqrt{3}$ | — |
| Rated secondary voltage, mV | 30 ... 8000 | — |
| Amplitude error (voltage scaling factor error) δ_{Ku} , % | — | ± 0.056 |
| Angle error (phase shift error) $\Delta_{\phi u}$, min | — | ± 3.35 |

Errors introduced by system components

| Error | Voltage transducer CVFC | Voltage divider RVD-500 | Comparator Energomonitor 3.1KM-E with VA-6.1 | Test set MarsTest-EVT |
|------------------------|-------------------------|-------------------------|--|-----------------------|
| Amplitude (voltage), % | ± 0.05 | ± 0.01 | ± 0.005 | ± 0.056 |
| Angle, min | ± 3 | ± 0.5 | ± 0.2 | ± 3.35 |