

KVTS-V2

Knopp Voltage Transformer Testing System



The Knopp Voltage Transformer Testing System is designed to measure the accuracy of instrument transformers having 120 volt secondaries and up to 14,400 volt primaries (special order for up to 36,000 volt primaries is available). The system includes a control console which contains the control circuitry, ANSI standard burdens, and the Knopp Automatic Transformer Comparator. The Knopp precision and loading transformer set is also included (see picture below) and is connected to the console via an included cable.

Some of the features of the KVTS are:

- High Accuracy Voltage Transformer Comparator (Type KATC-V2) which provides minimal measurement time and detailed statistics during testing.
- The comparator is compatible with TESCO's software such as TDM (TESCO Device Manager) and Meter Manager.
- The 2J4 Transformer set has the ability to be self checked which allows the accuracy to be easily verified and tracked without the use of an external standard.
- The comparator senses unusual error conditions such as wrong ratio or polarity and then automatically removes power from the KVTS loading circuitry to protect the KVTS, precision transformer, and the transformer-under-test.
- Variac interlock feature ensures that both coarse and fine controls of test voltage be at zero before power can be applied to the loading circuitry.
- Backwards compatibility is provided through an RS -232 port for PC or Printer connection.
- 2J4 transformer set includes a high precision multi -range voltage transformer and a heavy duty supply transformer plus the T-bar assembly and wheeled base.
- Interconnection cable between the control console and the transformer test set is included and compatible with both 2J4 and 2J6 transformer sets.
- All ANSI burdens including W, X, M, Y, Z and ZZ are built in and selectable as well as an external connection for user defined burdens.



Knopp

Knopp Catalog No.

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Operation:

The desired ANSI burden is selected by a rotary switch on the console. The appropriate ratio is selected at the precision/loading transformer set by the T-Bar locations. After the operator connects the transformer-under -test and ramps up the test voltage, the Hold button should be pressed on the Comparator to make a timed average measurement. These results will be held on screen until the release is pressed allowing the unit to be turned down, and off for safe recording. The results can then be documented, sent over RS232 or collected via TDM software

Specifications:

Dimensions:

61.5" (156.5 cm) High; 24" (61 cm) Wide; 37" (94cm) Deep for the KVTS console. The 2J4 Transformer set is 36" (91.5 cm) High; 25" (63.5 cm) Wide; 20" (50.8 cm) (Deep)

Weight:

350 lbs. (159.7 kg) (console) and 300 lbs. (transformer test set)

Input Power:

120 VAC, 60 Hz; single phase; 20 amperes maximum

System Accuracy:

Within $\pm 0.025\%$ on ratio and ± 2 minutes on phase angle at 1.2 accuracy class or less.

2J4 Set Primary Ranges: 120 / 240 / 288 / 300 / 480 / 600 / 2,400 / 4,200 / 4,800 / 7,200 / 8,400 / 12,000 / 14,400 volts. (Consult factory on other ranges)

2J6 Set Primary Ranges:

14,400 / 21,000 / 24,000 / 36,000 volts (Consult factory on other ranges)

Burdens:

ANSI W, X, M, Y, Z, and ZZ; switch selectable. Provisions are made for use of an external burden.

Connecting Cable:

15 feet long (between transformer set and console).