

⇒ Highlights

- Accuracy class 0.05 for differential measurement
- Optimized for minimum residual capacitive current from the input to output circuits
- Operation without external power supply
- Selectable 1:1, 1:2, 1:0.5 transfer ratio
- Built-in short circuit protection
- Easy user-friendly mounting enable simple extension of any existing single-phase meter test equipment to closed I-P link testing capability

⇒ Description

The **Distributed Multi Secondary Voltage Transformer D-MSVT™** is a voltage uncoupling system for elimination of interaction of simultaneously tested single-phase electricity meters having interconnected current and voltage circuits (closed I-P links). The accuracy is specified as maximum deviation of voltage output of any unit in the batch. Any output voltage can be used as reference for voltage measurement for the whole batch. The D-MSVT 1110B is the basic unit of the Distributed Multi Secondary Voltage Transformer D-MSVT™ system. The unit is equipped with over-current protection fuse. The unit is designed to work with two nominal voltages (115 V and 230 V). The transformers can be used for voltage doubling and halving with specified accuracy. The transformers are optimized for minimum capacitive leakage current from input side to the isolated output device. This feature maintains accuracy of meter testing at low-currents.

The D-MSVT 1110B is constructed as universally applicable standalone unit with easy implementation into any existing test bench system. The unit has negligible additional power loss therefore no power increase is needed for test system upgrade to closed link test capability.

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Basic Unit of the Distributed Multi Secondary Voltage Transformer D-MSVT™ system

⇒ Technical Specification

	Basic Unit of Distributed Multi Secondary Voltage Transformer D-MSVT™ system D-MSVT 1110B
Working Voltage	High range: 230 V ± 20% Low range: 115 V ± 20%
Frequency Range	45 ... 65 Hz
Output / Input Voltage Ratio	1:1, 1:2, 1:0.5
Max. Output Power	15 VA
Max. Output Voltage	300 V
Max. Output Current	50 mA @ 230 V range 100 mA @ 115 V range
Max. Amplitude Error (Primary/Secondary)	0.2 % @ 5VA
Max. Phase Error (Primary/Secondary)	0.12 ° @ 5W
Max. Amplitude Difference	0.05 % @ 2 VA difference
Max. Phase Difference	0.03 ° @ 2 VA difference
Max. Input / Output Capacitance	700 pF
Protection	Short Circuit
Power Supply	None (Passive Device)
Dimensions (<i>W x D x H</i>)	200 x 145 x 80 mm
Weight (<i>approx.</i>)	5 kg