



## CURRENT AND VOLTAGE TRANSFORMERS DL GTU103.1-S

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### Introduction:

In electrical power supply systems, currents and voltages are constantly measured and monitored to ensure that they remain within certain limits. In general, the current and voltage values are so high that they cannot be measured directly.

Special transformers have to be used to reduce these values to a level that can be measured safely and economically. These values are needed in order to provide information on the health of the system, to calculate the amount of power supplied to a customer and to rapidly switch off sections of a network in case of a fault event to avoid its propagation that could result in the collapse of the entire power supply system.



Experiments:

DL GTU103.1-S

## Current transformer

- Single phase current transformer operation
- Single phase current transformer load test
- Three-phase current transformer
- Three-phase current transformer summing circuit - zero-phase sequence of a three phase system.
- Summation current transformer

## Voltage transformer

- Single-phase voltage transformer – Transformation ratio and influence of load.
- Three-phase voltage transformers and fault to ground.
- Two single-pole voltage transformers.



## List of modules

### DL GTU103.1-S

DL 1013T1MR	Motorized variable three-phase power supply	1
DL 2109T29	Three-phase power meter	1
DL 2108T02	Power circuit breaker	1
DL 2109T21	Single-phase current transformer	1
DL 2109T22	Three-phase current transformer	1
DL 2109T25	Summation current transformer	1
DL 2109D30	Digital Power meter	1
DL 1017R	Resistive load	1
DL 2108T10	CT load	1
DL 2108T11	VT load	1
DL 2109T23	Single-phase voltage transformer	1
DL 2109T24	Three-phase voltage transformer	1
DL HUBRS485F	Communication MODBUS	1
DL SCADA-WEB	SCADA Software	1
DL PCGRID	All-in-One Computer	1
DL 2600TTI	Three-phase isolation transformer	1
TLGTU103.X	Cables	1
DL 1196	Holder for leads	1
DL T12090_SK	120x90 working bench	1
DL T06090	60x90 working bench	1
DL A120-3M-LED	Three-level work frame with LED light	1