



GDBR-P Transformer Power Analyzer



Product Description

GDBR-P Transformer Load, No-load and Capacity Tester is a multi-function measuring instrument, which is equivalent to two kinds of test instruments: Transformer Capacity Tester + Transformer Characteristic Parameter Tester. It can accurately measure a series of power frequency parameters such as capacity, type, no-load current, no-load loss, short-circuit (load) loss, and impedance voltage of various transformers.

It has many advantages such as small size, light weight, high measurement accuracy, good stability and simple operation. It can completely replace the method of measuring transformer loss and capacity by using multi-meter method in the past.

The wiring is simpler, the test and recording are more convenient, so that the work efficiency has been greatly improved.

Features

- Accurately measure the capacity of various distribution transformers, which is convenient and accurate.
- Measure transformer No-load current, No-load loss, short circuit voltage, short circuit loss and capacity.
- Auto range switching, wide allowable measuring voltage and current range and simple wiring.
- Three meters testing methods.
- When making three phase transformer no-load, load test, the instrument will judge if the wiring is correct automatically, and shows three phase voltage, current vector diagram.
- Finish load test under 1000kVA below distribution transformer full current for single machine. Finish 3150kVA below distribution transformer load test under 1/3 rated current (Under 1/3 rated current, the instrument can be converted to load loss parameters under rated current.)
- All test results are corrected automatically. The instrument automatic correction as follows, waveform correction, temperature correction, non rated voltage correction and non rated current correction to make the test results more accurate.
- 320*240 high brightness LCD screen, with brightness adjustment. Touch buttons make the operation more convenient.

- The instrument can preset 40 sets of test sample parameters by the user, and these parameters can be deleted and added at any time as needed, which is very convenient to use.
- Real-time clock, recording test date automatically, suitable for storage and management of test results.
- Built-in panel-type thermal printer, fast print test results.
- Power down store and browse data (test object set, measurement results, test time) functions. Store up to 500 groups test results, data transmission online to PC.
- Allows extended range measurement for external voltage transformer and current transformer. Measure test object of any parameters.

Specifications

1. Test items

- RMS of three phase voltage: U_{ab}, U_{bc}, U_{ca} .
- Average value of three phase AC voltage: U_{ab}, U_{bc}, U_{ca} .
- RMS of three phase current: I_a, I_b, I_c .
- Percentage of No-load loss and No-load current: $P_o, I_o\%$.
- Load loss, impedance voltage percentage, short circuit impedance: $P_t, e_k t, Z_t$.
- Load loss, impedance voltage percentage and short circuit impedance at any specified temperature.
- Transformer actual capacity and judged capacity.

2. Environment conditions

- Temperature: -5°C-40°C;
- Relative humidity: <95% (25°C);
- Altitude: <2500m;
- External interference: no special strong vibration, no special electromagnetic field;
- External power supply: 220VAC±10%, 45Hz~55Hz;

3. Measurement range

- Capacity:

10kV Oil-immersed, dry type transformer: 30kVA ~ 2500kVA;

35kV Oil-immersed transformer: 50kVA ~ 31500kVA;

20kV Dry type transformer: 50kVA ~ 2500kVA;

35kV Dry type transformer: 50kVA~2000kVA;

- Voltage: 0 ~ 450V (phase voltage), 0 ~ 800V (line voltage), auto switching range;
- Current: 0 ~ 100A, auto switching range;
- Frequency: 45Hz~65Hz;

4. Measurement accuracy

- Voltage: 20~100V, ±0.2%FS; 100~450V, ±(0.2%+3 digit);
- Current: 0.5~10A, ±0.2%FS; 10~100A, ±(0.2%+3 digit);
- Power: ±0.5% (CosΦ>0.1), ±1.0% (0.02<CosΦ<0.1)

5. Insulation strength

- The insulation resistance of the voltage and current input terminals to the enclosure is ≥100MΩ.
- The withstand voltage test between power input terminal and the enclosure is 2kV(RMS) for 1 minutes.