

GDRB-B Transformer Winding Impedance Tester



Product description

Power transformer winding deformation tester (frequency response method)

According to the measurement of the characteristic parameters of the internal winding of the transformer, the internal fault frequency response analysis (FRA) method developed by developed countries in the world is adopted, which can accurately judge the internal fault of the transformer.

The transformer winding deformation tester consists of a notebook computer and a single-chip microcomputer to form a high-precision measurement system. The structure is tight, the operation is simple, and the test analysis function is relatively

complete. It can be operated by itself according to the instruction manual or after short-term training.

Characteristics

- 1. Acquisition and control using high-speed, highly integrated microprocessor.
- 2. Communication USB interface used between a laptop and instrument.
- 3. Wireless WIFI interface (optional) used between the laptop computer and instrument.
- 4. Hardware adopts dedicated DDS digital high-speed scanning technology (USA), which can accurately diagnose the faults like winding distorted, bulged, shift, tilt, inter-turn short-circuit deformation and inter-phase contact short-circuit.
- 5. High-speed dual-channel 16-bit A/D sampling (in field test, move tap changer, and the wave curve shows obvious change).
- 6. Signal output amplitude is adjusted by software, and the peak value of amplitude is \pm 10V.
- 7. The computer will automatically analyze the test results and generate electronic documents (Word)
- 8. The instrument has dual measurement features: linear frequency scanning measurement and segment frequency scanning measurement, compatible with measurement mode of two technical groups in China
- 9. The amplitude-frequency characteristics are in line with the national technical specifications on amplitude-frequency characteristics tester. X-coordinate (frequency) has linear indexing and logarithmic indexing, so you can print out the curve with linear indexing and logarithmic indexing. The user can choose either according to actual needs.
- 10. Automatic test data analysis system,

Compare between A, B, C -phases in winding similarity comparison, and the analysis results are:

- ① excellent consistency
- 2 good consistency

- ③ poor consistency
- 4 rather poor consistency

Compare winding deformation by calling the original data and comparing it with the current data of the same phase, namely A-A, B-B, C-C, and the analysis results are:

- 1 normal winding
- 2 mild deformation
- ③ moderate deformation
- everely deformation
- 11. Word electronic document can be automatically generated for saving and printing.
- 12. The instrument can fully meet the technical requirements of electricity standard DL/T911-2004 "Transformer winding deformation frequency response analysis".

parameters

Scan mode:

1. Linear scanning distribution

Scanning measurement range: (10Hz) - (10MHz) 40000 scanning point, resolution 0.25kHz, 0.5kHz and 1kHz

2. Segment frequency scanning measurement distribution Frequency scanning measurement range: (0.5kHz) - (1MHz), 2000 scanning points;

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(0.5kHz) - (10kHz)
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(10kHz) - (100kHz)

(100kHz) - (500kHz)

(500kHz) - (1000kHz)

Other technical parameters:

1. Amplitude measurement range: (-120dB) to (+20 dB)

2. Amplitude measurement accuracy: 0.1dB

3. Scanning frequency accuracy: 0.005%

4. Signal input impedance: $1M\Omega$

5. Signal output impedance: 50Ω

6. Signal output amplitude: ± 20V

7. Test repetition percent: 99.9%

8. Measuring instruments dimensions (LxWxH) 350X300X140 (mm)

9. Instrument's aluminum box size (LxWxH) 390X310X340 (mm)

10. Overall weight: 13Kg