



GDCR8100B Transformer Iron Core Ground Current Tester



General Information

GDCR8100B Transformer Iron Core Ground Current Tester is specially designed and manufactured for testing the ground current and leakage current of transformer core in power system on-site. The power transformer is an important electrical equipment in the power system. The transformer core in normal operation is single-point grounded. If two or more points are grounded at the same time, a current circuit will be formed between the core and the earth, the maximum current can be up to dozens of amperes, will cause the iron core partial overheating or even burned. This instrument can find the potential faults of transformer as soon as possible, and is the main tool to ensure the safe operation and normal maintenance

of transformer. The instrument has anti-interference ability and can be used in the environment of strong magnetic field near the transformer. It is mainly used for testing the leakage current of iron core and clamps of electrical equipment such as transformer and reactor in substation and power plant. It can also be used in electric power, communication, meteorology, railway, oil field, construction, metrological service, scientific research and education institutions, and lines current and leakage current test in industrial and mining enterprises.

Features

- High speed microprocessor, 3.5 inch color touch LCD screen, intelligent touch operation, convenient and fast. Real-time display of the measured current and waveform; FFT transformation, digital filtering and other technologies are used to make the test data more accurate. With alarm threshold setting and alarm indication; With date clock and setting function; Automatic shutdown function; It has the function of setting serial number of test object; With USB port, can store data into the computer, the instrument can store data and waveform 200 groups.
- The current clamp iron core adopts permalloy, adopts magnetic shielding technology, the external magnetic field has little influence, the anti-interference ability is strong, ensures the year round uninterrupted measurement of high precision, high stability, high reliability. The inner diameter of clamp is 80*80mm, cables or ground lines below $\phi 80\text{mm}$ can be clamped, or 96*4mm ground line of flat steel, portable pliers design, no need to disconnect the line under test, non-contact measurement, safe and fast.
- Monitoring software has on-line real-time monitoring and historical query function, dynamic display, waveform indication; With alarm value setting

and alarm indication; With historical data reading, consulting, storage and printing functions.

Specification

Function	Iron core ground current test, AC leakage current test, current online test
Power supply	DC 9V alkaline dry battery LR6 1.5V 6pcs
Test method	Clamp-on CT
Size of clamp opening	80*80mm (ϕ 80mm cable or 96*4mm ground line of flat steel can be clamped)
Current range	AC 0.00mA~100A
Resolution	AC 0.00mA~9.99mA; resolution: 0.01mA
	AC 10.0mA~99.9mA; resolution: 0.1mA
	AC 100mA~999mA; resolution: 1mA
	AC 1.0A~100.0A; resolution: 0.1A
Accuracy	$\pm(0.5\%+5\text{dgt})$
Frequency range	10~1000Hz
Display mode	3.5-inch color touch LCD screen (320 dot *240 dot)

Operation mode	Intelligent touch operation, push button operation
Size of main unit	198*100*45mm
Size of current clamp	194*145*40mm
Weight	Main unit: 450g(with battery); current clamp: 780g
LCD	Display area: 71*53mm
Disturbance of electric field	External electric field 100A. It is about 10mA when coming closer by 10mm,
Sampling rate	1 times/s
Data storage	200groups (No data loss when there is power failure or battery replacement)
Data & time setting	Available
Serial No. of test object	Available
Auto shut-down	Available. Auto shut-down after powering on for 5 minutes (default). This function can be canceled.
Touch screen calibration	Available
USB port	Available. Data can be exported to PC via USB port.

Alarm setting	Setting range of alarm threshold: 10mA~99.99A
Alarm indication	When the measured value exceeds alarm threshold, LCD screen flashes and buzzer rings.
Line voltage	<AC 600V
Over-flow	“OL” symbol appears when there is over-range.
Battery voltage	Low battery symbol appears to remind the replacement of battery when battery voltage drops to $7.2V \pm 0.1V$, which does not affect the accuracy of measured value.
Rated current	Max. 180mA
Length of lead wire	2m
Use condition	-10°C~40°C, <80%RH
Storage condition	-10°C~60°C, <70%RH
Insulation strength	AC 2kV/rms (Between screw and shell)
Safety regulation compliance	IEC1010-1, IEC1010-2-032, pollution degree 2, CAT III 600V, IEC61326(EMC standard)