



GDKC-12B High Voltage Circuit Breaker Tester



I. Product Description

High voltage circuit breaker is one of the most important control equipment in the power system. GDKC-12B is used to test the dynamic characteristics of high voltage circuit breaker. It is easy to operate, with high accuracy.

II. Features

- Time: the open/close time, in phase synchronization, phase-to-phase synchronization of 12 contacts.
- Closing resistor: pre-switching time, pre-switching waveform and resistance of the closing resistor of 6 channels.
- Re-closure: close-open, open-close, open-close-open time for each contact.
- Bounce: close bounce time, times, process and waveform of each contacts.
- Velocity: velocity at contact open or close, maximum speed, time-travel characteristic curve; first open, first close and second open velocity of re-closure.
- Travel: total travel, open travel, over travel, travel overshoot, bounce amplitude.
- Current: open/close current, current waveform diagram of the open/close coil.
- Operation voltage: built-in DC30~300V/20A digital, adjustable power source of breaker, automatically complete LV action test of circuit breaker and measure action voltage value of circuit breaker.
- IPC for the host.
- It is suitable to test the mechanism parameters of all types of SF6 circuit breaker, GIS combination electric equipment, vacuum circuit breaker, oil circuit breaker.
- Strong anti-interfere ability. It also can easily test and accurately measure even inter-bus is live in 500kV substation.
- With universal velocity sensor(optional), linear velocity sensor, rotary sensor, easy to install.

- Only one time action to obtain all data and corresponding waveform of breaker mechanism test.
- Storage test data of 1000 groups, built-in real-time clock, which is convenient to save test date and time.
- LCD screen display, with contrast adjustment and power-off memory.
- Built-in printer, to get all data and diagram at any time quickly.
- With the circuit breaker data analysis management software. It can be communicated with PC. The test results are directly stored in the hard disk, and able to output to various types of needle type, laser or inkjet printers for printing test reports, to make the field test to computerization.
- Using U disk to save and transfer data directly.
- The corresponding analysis software is compiled according to the definition of opening, closing velocity. It is suitable for speed measurement for any types of switch.

III. Specifications

Usage Environment

Input Power: 230V±10%, 60Hz±10% Air Pressure: 86-106kpa

Temperature: -10-40°C Humidity: ≤80%RH

Safety Performance

Insulation Resistance>2MΩ

Dielectric Strength: Shell can withstand power frequency voltage 1.5kV at 1 minute without flash-over and arcing.

The Basic Parameters

a. Time: Range 25000.0ms resolution 0.01ms

Error 0.01ms ± 2digit within 250ms

0.1ms ± 2digit within 2500ms

1ms±2 digit within 25000ms

b. Closing resistor: Range: 10K Ω resolution: 1 Ω

c. Velocity: Range 20.00m/s resolution 0.01m/s

Error $\pm 0.1\text{m/s} \pm 1\text{digit}$ within 0-2m/s

$\pm 0.2\text{m/s} \pm 1\text{digit}$ above 2m/s

d. Travel:

Types	Range	Resolution	Error
Vacuum breaker	50.0mm	0.1mm	0.1 \pm 1mm
SF6 circuit breaker	300.0mm	1mm	
Oil circuit breaker	600.0mm		

e. Current: range 20.00A resolution 0.01A

f. Output power: DC0-300V digital adjustable / 20A(instantaneous working), resolution 1V.

g. PC interface: RS232 port, USB port.

h. Dimensions: 360mm (L)* 280mm (W)* 300mm (H)

i. Weight: 9kg