

## T-209

#### HIGH VOLTAGE CIRCUIT BREAKER ANALYZER

T-209 circuit breaker analyzer is used for performing electrical and mechanical characteristic of high voltage, medium voltage circuit breaker, switch and contactor.

The T-209 CB test set design offers powerful technology that assists the user to achieve efficient and reliable circuit breaker testing, All inputs and outputs on the instrument are designed to withstand the challenging environment in high-voltage substations and industrial environments. Galvanically isolated inputs and outputs makes it possible to perform all relevant measurements in one test, eliminating the need for new setup and re-connections. The model T-209 circuit breaker tester can test the vacuum circuit breaker, sf6, oil circuit breaker, GIS and etc. the test parameters include, close or open time, delta time, bounce time, bounce cycles, multi-operation, stroke, gap, over-travel, overshoot, rebound and the speed, with the ability of test results and graph display.

## **Application**

- 1. Power plant;
- 2. Universities;
- 3. Research institutes;
- 4. Electrical laboratory;
- 5. Switch manufacturers;
- 6. Switch cabinet factory;
- 7. Electrical testing center;
- 8. Circuit breaker manufacturers;
- 9. Power engineering commissioning company;
- 10. Electricity power bureau & power company;
- 11. Electrical Department of industrial and mining enterprises;

#### **Function & Features**

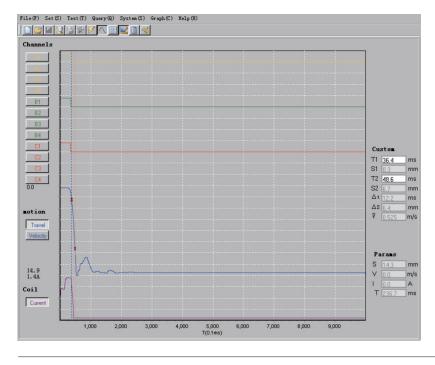
- 1. Transducer: with one analog transducer test ability;
- 2. Standard: with the standard of DL/T846.3-2004 (P.R.C.);
- 3. Immunity: withstand the 550KV electrostatic environment;





- 4. Power: with internal dc power, the voltage ranges from 15v to 250v;
- 5. Trigger: with four triggers to start the recording ,channels state, voltage, current and transducer;
- 6. HMI: via keypad and a large transflective LCD display;
- 7. Speed: supply series of speed definition with editable and un-editable selection;
- 8. Recording: with twelve channels, coil current and transducer;
- 9. Print: with internal installed 58mm wide thermal printer;
- 10. Communication: with RS232 and USB communication interface;
- 11. Memory: with a SD card of 2GB, the maximum storage ability is 100 test results;
- 12. USB FLASH: USB and RS232 interface for data communication with the PC;
- 13. Help: the instrument has internal help topic;
- 14. Measure the circuit breaker time parameters (close, open, asynchronous, bounce) of 12 main contacts;
- 15. Measure the co-operate time between 6 main- and 6 auxiliary contacts;
- 16. Use a digital rotary transducer for measuring angle;
- 17. Operate Close, Open, O-C-O, O-C, C-O control sequences;
- 18. Test the mechanical characteristic operated by CB manually;
- 19. Built-in DC control output, can used for action voltage testing;
- 20. Built-in DC output for motor driving;
- 21. Measure the motor current curve while motor driving;
- 22. Built-in DC/AC current sensor for measuring close and open control current;

#### **PC SOFTWARE**





## **Parameters**

Electrical parameters		
Power supply		Single phase AC 220V±10% or 110V±10%, 50/60HzAC
Immunity		withstand the 550KV electrostatic environment
Test channels		12 channels with 25V, the current is 50mA
Transducer		one analog transducer
TIME	Recording time length	0∼9.9s
	Time accuracy	±0.1%reading ± 2 LSB
	Resolution	0.1ms
Motion	Ranges	0∼1000mm
	Accuracy	±1% reading ±1LSB
	Resolution	0.1mm
Velocity	Ranges	0~20.00m/s
	Accuracy	±1%reading ±1LSB
	Resolution	0.01m/s
DC POWER	Ranges	15~260V
	Max current	20A
	Accuracy	±1%reading ±1LSB
	Load change	≤1%
TRIGGER	Voltage	15~260V
	Current	0.1-20A
	Transducer	the transducer states changes
	Channels	channels states changed
Memory		SD card of 2GB, the maximum storage ability is 100 test results.
LCD		5.7"black and white LCD display (320 x 240 pixels)
Communication		RS232 and USB communication interface
Printer		internal installed 58mm wide thermal printer.
Rotary Transducer		Yes
Linear Transducer		Yes
PC software		Yes, Optional
Standard		DL/T846.3-2004, IEC61010-1, IEC61326-1
Mechanical parameters		
Dimension (L×W×H) (mm)		380x262x120
Weight (kg)		6
Environmental conditions		
Operating temperature		-10°C to 50°C
Storage temperature		-20°C to 70°C
Relative humidity		≤95%RH



# **Accessory**

