RDGC-8C High Voltage Switch Characteristics Comprehensive Tester

Mechanical characteristic parameter is one of the important parameters to judge circuit breaker performance. RDGC-8C high voltage switch characteristics comprehensive tester (high voltage switch mechanical characteristics tester) is based on the latest "High voltage AC Circuit breaker" GB1984-2014 as the design blueprint, referring to the People's Republic of China's power industry standard "General Technical Conditions for High voltage Test Equipment" Part 3, DL/T846.3-2017 as the design basis, It provides convenience for dynamic analysis of various types of circuit breakers, and can accurately measure the mechanical dynamic characteristics of high-voltage circuit breakers of various voltage levels such as less oil, more oil, vacuum and SF6. The high high voltage switch characteristics comprehensive tester is responsible for the dual tasks of control and protection in the power system and its performance is directly related to the safe operation of the power system. Mechanical characteristic parameter is one of the important parameters to judge circuit breaker performance.

✧ Product features

（1）The high voltage switch characteristics comprehensive tester is an embedded industrial computer, the motherboard is based on CortexTM-A8, main frequency 1GHZ, flash memory 1GB, boot speed only 16 seconds. 9 inch color screen, windows operating system, user-friendly intuitive operation interface, touch screen, support for Chinese and English input, easy to use field operators.

(2) High-speed thermal printer is convenient for on-site printing of test data.

(3) Integrated operation power supply in the machine, no need for on-site secondary power supply, easy to use. It can provide DC6 ~ 270V adjustable power supply, current 20A. The operating voltage value of the dividing and closing coils can be set arbitrarily, and the low voltage operating test of the circuit breaker can be done.

(4) Equipped with linear sensor, rotary sensor, universal sensor, laser sensor (optional) and

support, special fixed multi-function joint, installation is very convenient, simple.

(5) Applicable to all models of SF6 switch, GIS electrical combination, vacuum switch, oil switch produced at home and abroad.

(6) switch action once, get all the data and graphics, test data and graphics on the same screen display, speed can be calculated, no need to test again.

(7) The host can store 30,000 sets of test data (expandable memory card), and has an in-machine real-time clock for easy archiving.

(8) Equipped with 2 USB interface, you can connect the mouse to operate the instrument, you can directly save the data to the U disk, uploaded to the computer for analysis, save. RS232 interface online operation (optional), WIFI operation optional.

(9) It can measure 12 metal contact fractures, 6 main and 6 auxiliary fractures, 3/6 closing resistance, 1 dynamic resistance, 1 road speed and 3 road speed optional) measurement.

(10) The tub is equipped with a built-in envelope for analysis and comparison using the value of a single switch test, as well as switching vibration frequency analysis.

(11) Internal anti-interference circuit can meet the reliable use of 500KV substation.

✧ Product specifications and technical parameters

1. Time measurement:

- 12 natural opening (closing) time
- Different periods in the opening (closing) phase
- The difference between different phases of switching (closing) (1 ~ 99ms)
- Closing (opening) bounce time (bounce number)
- Different testing range: 1ms ~ 99ms, resolution: 0.01ms;
- Internal trigger test range: 1ms ~ 999ms, resolution: 0.01ms,
- 1000ms ~ 9999ms, resolution: 0.1ms, 10000ms ~ 200000ms resolution: 1ms.
- External trigger test range: 0.01ms ~ 200s
- Accuracy within 1000ms: 0.05%±0.1ms

2. Closing resistance measurement:

- 6 natural opening (closing) time
- Different periods in the opening (closing) phase

- Switching (closing) phase is different
- Closing resistance input time, resistance value

3. Measuring range: 30 ~ 10KΩ, resolution 0.1Ω, accuracy: ≤1%±2 words

4.Dynamic resistance measurement: current output 200A, measurement range: 0-50mΩ, accuracy: ≤0.5%±0.5uΩ.

5. Speed measurement: just-minute (just-combined) speed

The average speed of a specified time period (travel or Angle)

6. Speed measuring range: 0.1mm sensor 0.01 ~ 15.00m/s

345° Angle sensor 0.01 ~ 20.00m/s

Laser sensor: 0.01 ~ 15.00m/s (optional)

7. Stroke measurement: stroke of moving contact (stroke) (optional for 3-way stroke measurement)

- Contact stroke (opening distance)
- Over travel
- Over stroke or rebound stroke

8. Measuring range:

- linear sensor: 50mm,
- measuring range: 0-50mm,
- resolution :0.1mm.
- Rotary sensor: 345 dareus,
- measuring range: 0-1000mm,
- resolution :0.08 dareus.
- The sensor has an invalid area of 15 degrees. The effective area of the sensor can be seen in the instrument when it is installed. The value displayed is about 160-200 degrees.
- Acceleration sensor measurement range: 0-300mm,
- resolution :0.1mm. (optional)

9. Coil current measurement range: maximum current 30A, resolution: 0.01A.

10. coil resistance measurement range: 0 ~ 2000Ω, resolution: 0.01Ω.

11. Instrument power supply: AC220V ± 10%; 50 HZ plus or minus 10%.

12. DC power output :DC6～270V continuous adjustable, DC24V≤15A (short time), DC220V≤ 20A(short time).

13. External trigger voltage: AC/DC10-300V, current ≤120A

14. Measuring range of isolation switch:

Voltage output: DC6 ~ 270V (adjustable);

⑵ Power output time: 0.01-20 seconds (can be set);

(3) The maximum acquisition time of fracture signal is 200s

(4) Break close measurement, opening time, three-phase different periods, bounce time and number

15. Host volume: 400×380×285mm

16. Operating environment: -20℃~+50℃

17. Relative humidity: ≤90%