HZ-5200 Circuit Resistance Instrument

Operation Manual

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I. Introduction

HZ-5200 Circuit resistance instrument is a carefully developed high precision, digital switch detection instrument by the IEC standard and PRC's Latest electric power execution standard DL/T845.4-2004 Regulations. The Instrument adopt High frequency high power Constant current switching power supply technology to detect the Micro ohm contact resistance. The Instrument is widely used for Varieties of the switches and Contact resistance of switches and electrical appliances, Circuit resistance and Power cables, contact resistance of welding seam detection.

The measurement data is accurate and correct, high stability and satisfy the requirements of Power, power supply department on-site high-voltage switch repair And high voltage switch factory circuit resistance test. The output current and measurement resistance simultaneously output to the 65K true color LCD Display. Testing results can be stored in the U-flash disk. Power down storage can meet the data query at any time

II. Specification

1. Measuring the large current, fully meet the National standard requirements of measurements Contact resistance related.

2. Output high voltage, measurement range is wide.

3. The test current comes from the high precision current constant current power supply, without manual adjustment, the test is fast and accurate.

4. Four terminal connection methods are adopted to effectively eliminate the influence of the test line resistance on the test results.

5. 320X240 dot matrix ultra small pixel dot 65K true color LCD.

6. Instrument with a calendar clock and power down memory, can store the test data at any time

7. The instrument is equipped with a micro printer, RS232 and USB interface,
and computer communication, U disk storage

8. Intelligent power management technology, equipment is always working in the minimum power, effectively saving energy

### III. Technical Index.

Current measurement: 50A, 100A, 150A, 200A

Range:
- 0~100mΩ (50A)
- 0~50mΩ (100A)
- 0~20mΩ (150A)
- 0~20mΩ (200A)

Resolution: 0.1μΩ At Min.

Precision: ±（0.5%±2）

Power consumption: 1000W

Working method: Continuous measurement.

Power supply: Base on your request

RH less than 90%, no dew

Size: 355*275*147mm

Weight: 9.05kG

### IV. Instrument operation function:

1. Power switch: Press T to supply power, press O to cut off power supply
2. Power input terminal, adopt AC 220V power supply
3. I+、I-: Current output terminal, supply the constant current to the tested object by special testing wire.
4. V+、V-: Input voltage terminal for tested object.

V. Operation Menu

Start menu display as follow:

Press circular keys to move cursor on current selection, host parameters, timing, data query, the cursor moving in the current selection, host parameters, data query to press the select key can enter the selected menu and enter the next menu, and cursor at time items press time selection key can be at 10 seconds, 30 seconds, 1 minute, 5 minutes, 10 minutes, continuous circulating moving, cursor at the current selection items press the key to select current measurement, any time press the start button can enter the measurement state.
VI. Test

Note: All the connection should be reliable connected with the tested object, if the contact surface oxidation, firstly should remove the contact surface oxide.

1. wiring methods: as shown in Figure 2, special test line the color red to red, black to black, the thicker current line connected with corresponding I+, I - terminal screws tightly, the thinner power line inserted into the socket V+, V-, two clamped tested on the product ends.

2. measure: complete the connection as Graph 2, turn on the power switch, choose the testing time for testing, the instrument will automatically charging, constant current and measuring resistance.

3. Operation Steps:
   1) According to the requirements to complete the connection of instrument and the tested object.
      2) Connect AC220V AC power, turn on the power switch, screen as above mentioned boot interface, after selecting the appropriate measurement time, then press the start button to enter the measurement process.
   3) Enter “start-up” key to open tester when choice measurement time, screen display “Being impulse”, and display the tester output current. After current reach index value and steadying, the screen displaying “Being testing”, after several seconds, displaying measured resistance value and current value.
   4) if user want keep the testing value during testing, enter “select” to start printing data. The tester stop testing after finishing measurement time and screen stop flash, and so point out how printing and storing to U disc
   5) Enter “reset “or finishing test, output current of tester change to “0”. The user should turn off power after finishing measurement, and then removing lead wire to preparing the
next test item.

**VII. Safety precautions**

1. Handlers should having common sense of electrical equipment or tester
2. Enter “reset” after finishing measurement, and turn off power. Attention: strictly forbid dismantle all wires live wire
3. Enter “reset” to replacing when the tester breaking.
4. The tester must be served by professional person, prohibit make it by yourself.
5. The tester only for measurement Circuit resistance, prohibit measurement inductive circuit resistance.

**VIII. Complete set**

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<th>Quantity</th>
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<tbody>
<tr>
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<tr>
<td>Testing wire</td>
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<td>Fuse</td>
<td>2pcs</td>
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<td>Operation menu</td>
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**IX. Guarantee and After Sales Service**

After service: 1 years of warranty and lifetime maintenance and supporting technology. Please contact our company on time if the tester breakdown, so we'll arrange the fastest disposing way.