

**ZXCZ-30A Grounding Lines  
Group DC Resistance Tester**



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## I Product Description

The ZXCZ-30A Grounding Lines Group DC Resistance Tester is developed according to the "Precautionary Test Regulations for Electrical Safety Tools" and is used to assess whether the contact between the grounding wire nose and the bus bar and the multi-strand copper flexible wire is good.

This instrument adopts DC voltage-current ratio method, which is composed of low-voltage large-current constant current source and measurement system. The constant current source uses advanced switching power supply technology, which has the characteristics of anti-interference and strong stability. The measurement part adopts an intuitive high-brightness digital meter, which is accurate and reliable, and the circuit selection switching operation is flexible and simple.

## II Product Features

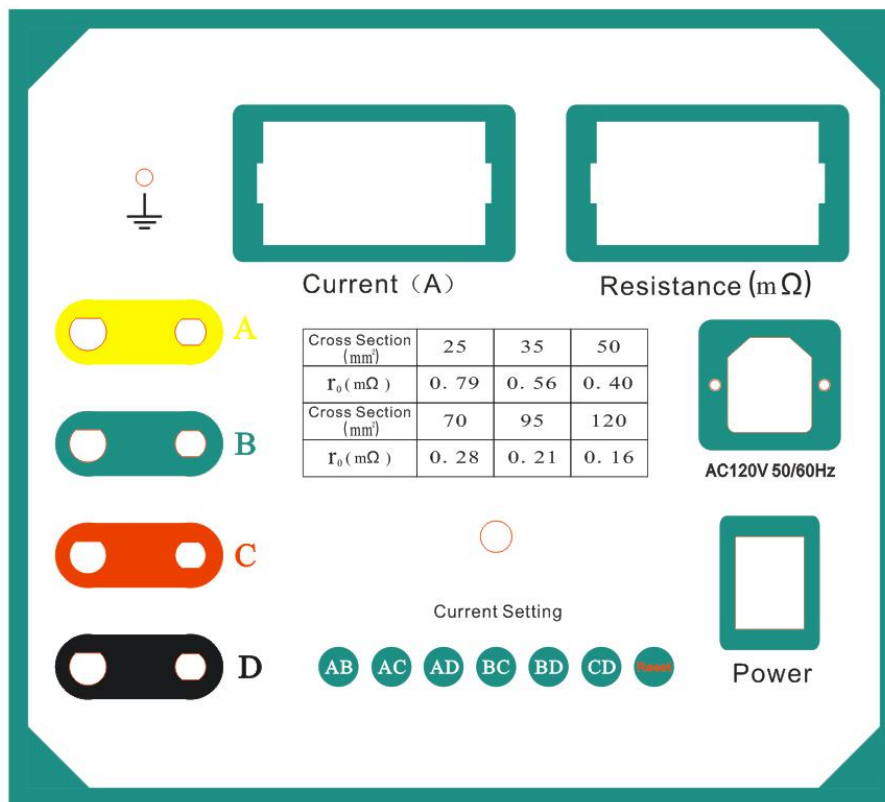
1. Easy operation and intuitive criteria;
2. Strong anti-interference ability and good stability;
3. High brightness digital display, resistance value display, current display;
4. Flexible circuit switching, with six gears "AB, AC, AD, BC, BD, CD", the resistance between any circuits can be measured without removing the test clip during the test, which is convenient for measurement;
5. Special chuck, no need to manually change the test clamp during the test, easy to install and dismount.

## III Technical Parameters

1. Input power:  $\sim 220V \pm 10\%$ , 50Hz
2. Maximum input power: 200W
3. Constant current output current: 30A (can be fine-tuned)
4. Digital resistance meter: Range: 0  $\sim$  199.9m $\Omega$  Accuracy:  $\pm 0.5\%$
5. Working mode: intermittent

## IV Instructions

### 1. Panel introduction



### 2. Test preparation

Open the cover of the instrument box, and plug in the "power cord" when the "power switch" is off; connect the "test cord"; press the "reset key" and prepare a pen and paper to record the test data.

### 3. Test procedure

- 1) Mark "A, B, C, D" on the four ends of the ground wire.
- 2) Measure and record the lead length  $L_i$  between each wire terminal of the ground wire: LAB, LAC, LAD, LBC, LBD, LCD.
- 3) Confirm that the power switch is turned off, and connect the test lead to the instrument. The four clips of the test lead are clamped on the four terminals "A, B, C, D".
- 4) Close the "power switch", respectively press the "AB, AC, AD, BC, BD, CD" six circuit selection switches, after the resistance meter data is stable, record each resistance value  $R_i$ : RAB, RAC, RAD, RBC, RBD, RCD. The

conduction time of each circuit should be less than 1 minute.

- 5) After measuring each data, turn off the power switch and remove the test line.
- 6) Calculate the resistance value per meter length of each loop of the ground wire:  $r = R_i / L_i$
- 7) Compare the size of  $r$  with the  $r_0$  in the following table:  $r < r_0$ , it is qualified, otherwise it is unqualified.
- 8) After the test, unplug the power cord and close the instrument cover.

The test method of split phase ground wire is the same as above

Section (mm <sup>2</sup> )	$r_0$ (mΩ)
25	0.79
35	0.56
50	0.40
70	0.28
95	0.21
120	0.16

#### V Packing List

1. Host 1 set
2. Test line 4 pieces
3. Test clip 4 pieces
4. Power cable 1 piece
5. Ground wire 1 piece
6. Insurance 2 piece
7. Instructions 1 copy
8. Test report 1 copy
9. Certificate / warranty card 1 copy