

Dear Client,

Thank you for Purchasing our HJ-TG3 Standard voltage transformer. Please read the manual in detail prior to first use, which will help you operate the equipment skillfully.



Our aim is to continually improve and perfect the company's products, so there may be slight differences between your purchase equipment and its instruction manual. You can find the changes in the appendix. Sorry for the inconvenience. If you have further questions, welcome to contact with our service department.



The input/output terminals and the test column may bring voltage, when you plug in/pull out test line or power outlet, they will cause electric spark. PLEASE CAUTION RISK OF ELECTRIC SHOCK! To avoid risk of electric shock, be sure to follow the operating instructions!

**Company Address:**

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◆ **SERIES COMMITMENT**

All products of our company carry one year limited warranty from the date of shipment. If any such product proves defective during this warranty period we will maintain it for free. Meanwhile we implement lifetime service. Except otherwise agreed by contract.

## ◆ SAFETY REQUIREMENTS

Please read the following safety precautions carefully to avoid personal injury and to prevent the product or any other attached products being damaged. In order to avoid possible danger, this product can only be used within the scope of the provision.

*Only qualified technician can carry out maintenance or repair work.*

**--To avoid fire hazard or personal injury:**

### **Use Proper Power Cord**

Only use the power wire supplied by the product or meet the specifications of this product.

### **Connect and Disconnect Correctly**

When the test wire is connected to the charged terminal, please do not connect or disconnect the test wire at will.

### **Grounding**

The product is grounded through the power cord; besides, the ground pole of the shell must be grounded. To prevent electric shock, the grounding conductor must be connected to earth ground. Before making connections to the input or output terminals

of the product, please do check that the product is properly grounded.

### **Pay Attention to the Ratings of All Terminals**

To prevent the fire hazard or electric shock, please be care of all ratings and labels/marks of this product. Before connecting, please read the instruction manual to acquire information about the ratings.

### **Do Not Operate without Covers**

Do not operate this product when covers or panels removed.

### **Use Proper Fuse**

Only use the fuse with type and rating specified for the product.

### **Avoid Touching Bare Wire and Charged Conductor**

Do not touch the bare connection points and parts of energized equipment.

### **Do Not Operate with Suspicious Faults**

If you encounter operating faults/suspect there is damage to this product, do not continue. Please contact with our maintenance staff.

**Transformer must be grounded before connecting power.**

**The two handles of transformer must be horizontally placed before connecting power.**

**Do Not Operate in Wet/Damp Conditions.**

**Do Not Operate in Explosive Atmospheres.**

## Ensure Product Surfaces Clean and Dry

### —Security Terms

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Warning: indicates that death or severe personal injury may result if proper precautions are not taken

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Caution: indicates that property damage may result if proper precautions are not taken.



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## I. Main feature

500, 1000, 2000,  $4000/\sqrt{3}$  V, 0.05 level voltage transformers are high voltage grade, high accuracy voltage transformer, can achieve, check 500,1000, 2000,  $4000 / \sqrt{3}$  V, 0.2 level voltage transformer.

Using no air gap, no docking every winding core, good magnetic performance, high accuracy, good performance, large error margin.

Using advanced winding core technology, the core is made of the whole oriented strip silicon steel sheet, and by vacuum antipyretic treatment, there is no air gap in the core, has good magnetic performance. Precision transformer is designed according to the laboratory and field calibration conditions.

The transformer can be used in the laboratory immediately, and it is more suitable for use in the field.

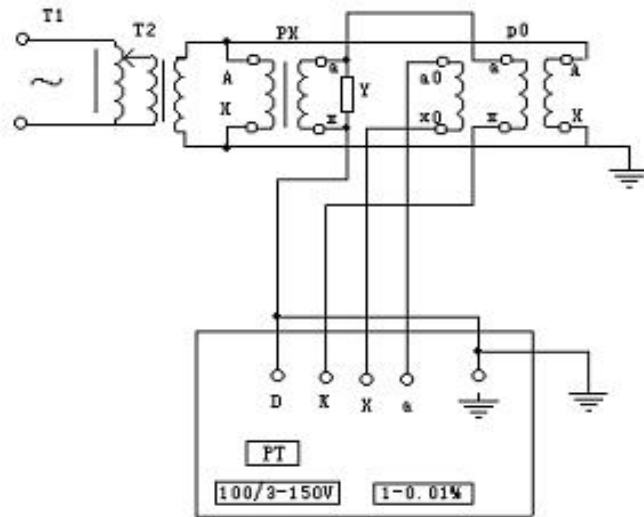
## II. Technique parameters

1. Rated voltage ratio:  $(500/\sqrt{3})$  V/  $(100/\sqrt{3})$  V,  $(1000/\sqrt{3})$  V/  $(100/\sqrt{3})$  V,  $(2000/\sqrt{3})$  V/  $(100/\sqrt{3})$  V;  $(4000/\sqrt{3})$  V/  $(100/\sqrt{3})$  V
2. Accuracy: 0.05
3. The test voltage of primary winding induction withstand voltage is 1.2 UN, 1 minute, secondary winding to ground, power frequency withstand voltage is 2kV, 1 minute
4. Rate frequency: 50Hz

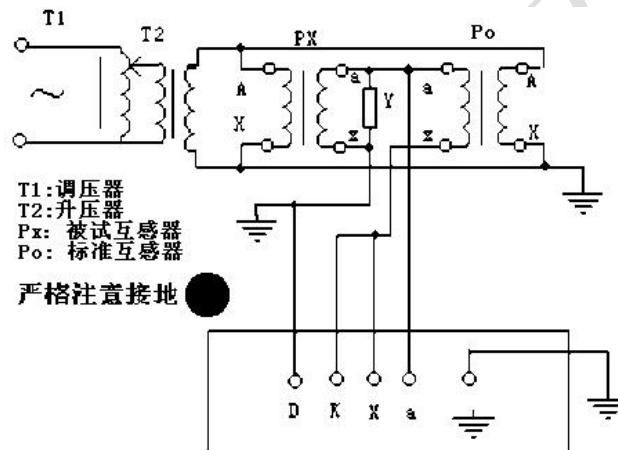
## III. Wiring diagram

Verify the circuit diagram:

1. Correct voltage transformer wiring diagram for double-stage voltage transformer



## 2. Voltage transformer calibration voltage transformer wiring diagram



电压互感器校电压互感器

T1: voltage regulator

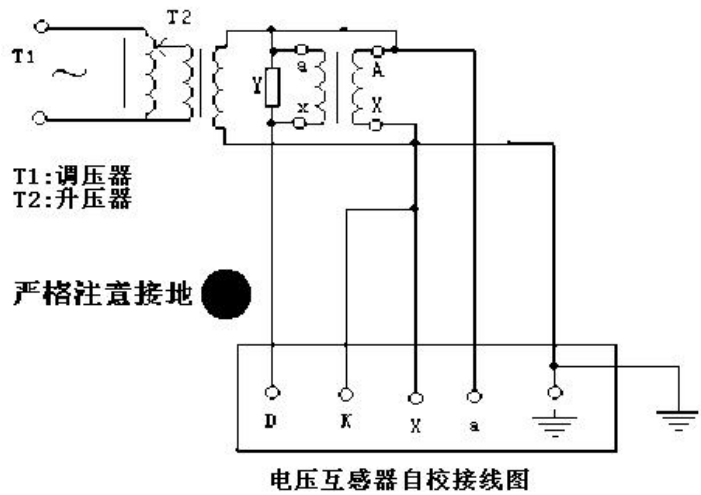
T2: voltage generator

Px: tested transformer

Po: standard transformer

**Note: Please pay attention to strict grounding !**

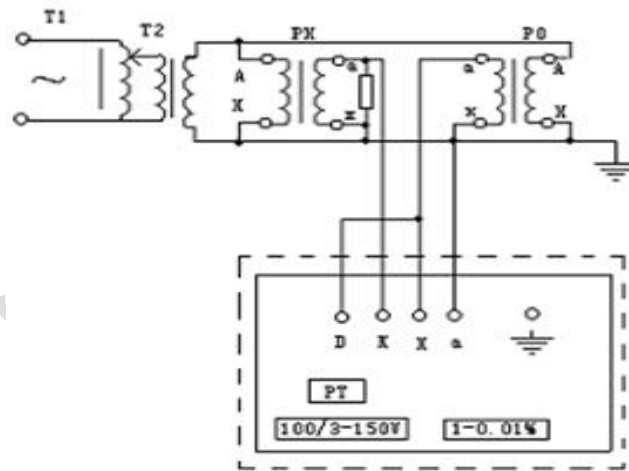
## 3. Self-calibration wiring diagram of the voltage transformer



T1: voltage regulator  
T2: voltage generator

Note: Please pay attention to strict grounding !

4. Voltage transformer calibration voltage transformer wiring diagram



**IV. After sale service**

Users who purchase this instrument shall enjoy the following after-sales service:

1. Within three months from the date of sale, if there is any quality problem, our company will replace the new instrument for free, but the user can not dismantle the machine by himself.
2. The quality problems of the instrument shall be repaired by our company within one year.
3. If the instrument has been used for more than one year, our company



is responsible for long-term maintenance and appropriate material fees.

4. If the instrument is faulty, please ask the full-time maintenance personnel or send it back to the company for repair. Do not open the instrument by yourself, otherwise our company will not be responsible for the self-damage.

## V. Packing List

No	Name	QTY	Unit	verify
1	Name	1	PC	
2	Manual	1	PC	
3	Test	1	PC	
4	Certificate	1	PC	