Huazheng®

HZ-109S2
Primary Current Injection Tester

Huazheng Electric Manufacturing (Baoding) Co., Ltd

Dear user:

Thank you for choosing HZ-109S2 Primary Current Injection Tester.

We hope that this instrument can make your work easier and more enjoyable, so that you can get the feeling of office automation in the test and analysis work.

Before using the instrument, please read this manual, and operate and maintain the instrument according to the manual to prolong its service life. "Just a light press, the test will be completed automatically" is the operating characteristics of this instrument.

If you are satisfied with this instrument, please tell your colleagues; if you are not satisfied with this instrument, please call (0312) 6775656 to tell you to serve you at all times-Baoding Huazheng Electric Manufacturing Co., Ltd., our company will definitely make you satisfied !

Contents

Safety Precautions

1. In order to ensure the safe operation of test, the instrument should be grounded reliably before the test.

2. The power supply voltage should be set as 240V±10%. Do not input 380V power supply into the instrument, or the instrument will be severely damaged.

3. Connecting or disconnecting the test wire is strictly prohibited when the test is conducting.

4. For the test set, the cable cross-section of input power should be greater than 2mm2, and the cable cross-section of high current output connection should be greater than 70mm2, and the cable length of the output connection should be kept as short as possible.

5. Use paralleling output wherever possible, if only the demand of output current is met.

6. Avoid continuous output in a long time.

I. Overview

Adopted technology of ARM chip controlling output and toroidal transformer with high-capacity and equipped with LCD display meter, the HZ-109S2 Primary Current Injection Tester could simultaneously display primary current, secondary current and turn ratio. The product possesses the characteristics of nice appearance, large output capacity, small size, light weight and so on with external aluminum alloy case and PC panel. It is mainly suited for CT turn ratio and contact resistance tests of power system and other occasions needed high current test.

II. The Main Performance Index

2.1 Input Power Supply: AC：220V·50A,50Hz.

2.2 Output Current: AC：2000A·6V or 1000A·12V.

2.3 LCD Screen Digital Display: Simultaneous display of primary current and secondary current as well as the turn ratio;

The Range of Primary Current: 0~2200A, Resolution：0.1A;

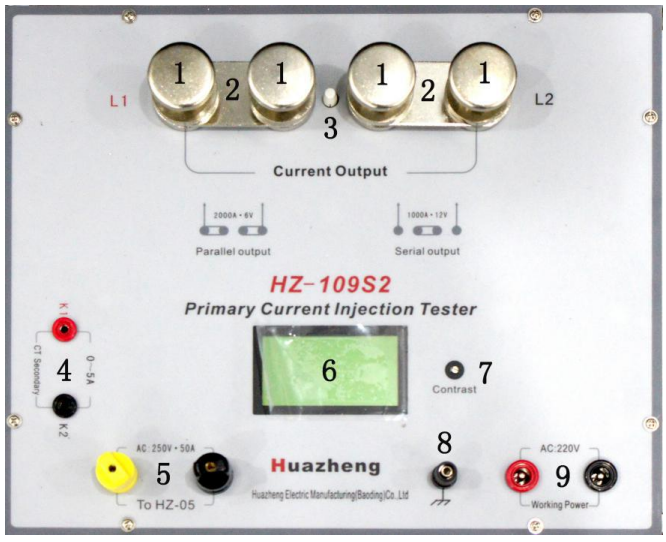
The Range of Secondary Current: 0～6A; Resolution：0.001A.

2.4 Precision: TRUE RMS ±0.5%.

2.5 Usage Environment: Temperature -10~40℃,

Relative humidity <80%.

III. Instruction Of Panel And Function



3.1 The Terminal of high current output.

3.2 Series or parallel pressure plate.

3.3 Series or Parallel Button: it presents series connection when the second pressure plate are put in the middle (that is the button is pressed).

3.4 The input terminal of secondary current measurement.

3.5 Regulator input terminal, 0~250V·50A.

3.6 LCD screen (displays primary and secondary current values and turn ratio).

3.7 Contrast control of LCD.

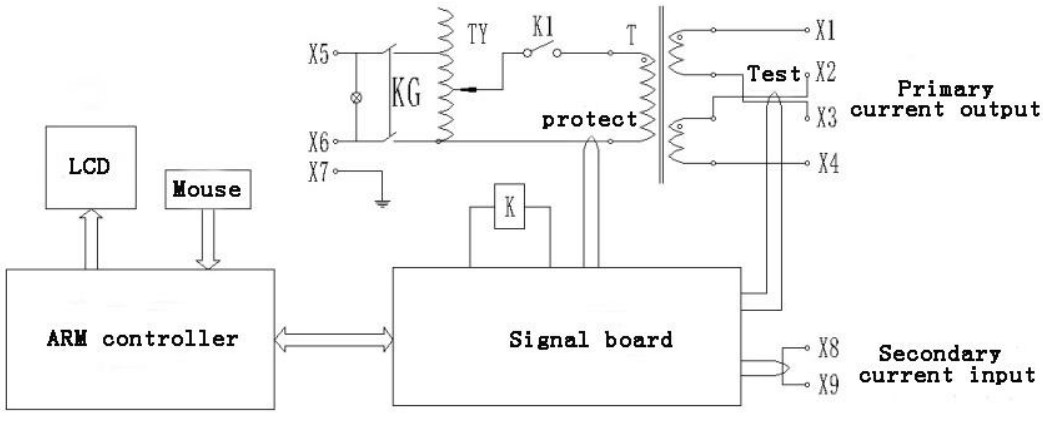
3.8 Ground Terminal: to ensure safe operation, please ground the wiring terminal.

3.9 Power input terminal: AC: 220V working power supply (liquid crystal panel and fan power supply), thus inputting red and black terminals.

IV. Principle Of Operation

The circuit is shown as the following figure. Input from X5X6, AC: 240V power flows through the main switch KG, adjusted by voltage regulator TY, risen by amplifier, and then outputs large current via current transformer from X1X4. The two paralleling coils will output 2000A current, meanwhile, the maximum no-load voltage is 6V; the two series coils will output 1000A current, meanwhile, the maximum no-load voltage is 12V.

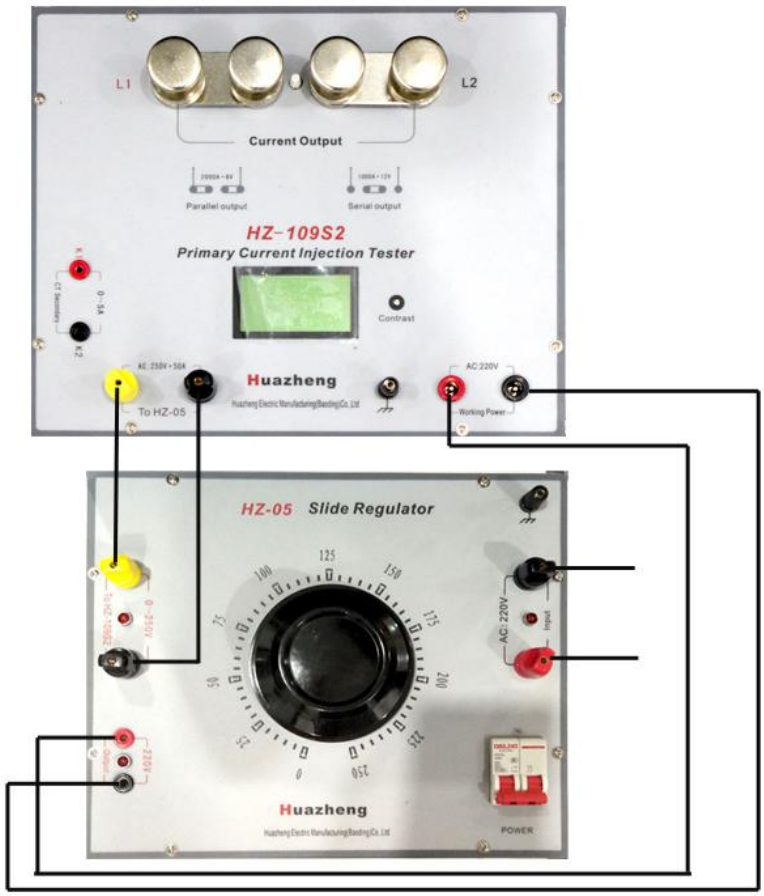
ARM controller deals with data display of mouse and signal panel, the output of stopwatch (connection positions or electric potential) and control.



V. Usage

Use the company's dedicated power input line, dedicated output high current line,

secondary circuit line and grounding wire, etc., first reset the voltage regulator to zero, then plug in 220V power supply.(if power supply socket is far away and power panel needs to be used, the wire section should be no less than 4.0mm^2; otherwise, the output power will be affected).At this time, the green input indicator on the voltage regulator panel is on, and the LCD screen of the main machine is on. The screen displays "welcome to use the HZ-109S2 Primary Current Injection Tester", which enters the interface of use.



Use interface as shown

Turn Ratio：0.000/5	
I1： 0.0 A	I2： 0.000A
360°	

Adjust the regulator knob, the red output indicator on the regulator panel will slowly light up, the high current terminal will have current output, and the primary current meter will display the output current value.At this point, if the secondary current is then input, the secondary current value is shown in the table, the secondary current value and the phase (judging polarity) between the first and the second is shown in the table, and the change ratio of the measured transformer (0.000/5) is also shown in the table.Return the regulator to zero after use.

VI.Packing List

No.	Item	Qty
1	Main engine	1
2	Regulator	1
3	High current test line	4
4	Double core sheathed wire	2
5	Regulator connection cable (1 yellow 1 black)	2
6	Power line(1 red 1 black)	2
7	Ground lead	2
8	Small clip (1 red 2 black)	3
9	Insert(2 red 1 black)	3