

HZBB-10H Transformer turns ratio tester



Dear user:

Thank you for choosing HZBB-10H Transformer turns ratio testers.

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 !

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1.Overview

1.1Applications

In the production process of semi-finished and finished power transformer products, the transformers are required to be tested in the turns ratio or the voltage ratio before the newly installed transformers are put into operation and according to the preventive test regulations enforced by the Ministry of Electric Power. Traditional turns ratio bridges are cumbersome in that their readings are not explicit and involve necessary conversion. Besides, only a single phase can be tested in one time, so that the work efficiency is low. The turns ratio tester series overcomes the shortcomings of traditional turns ratio bridge testers. The screen adopts a large color LCD screen with Chinese menu prompts, which is simple and explicit to operate. The tester can test turns ratios of three phases at one time, characterized by fast testing, high accuracy and complete protection function. The turns ratio tester series is provided with two power modes: external AC220V power source and internal battery for easy testing by users.

1.2Performance Features

1. The interface adopts intelligent touch mode for easy and convenient operation. The circuit uses the new generation all-digital solutions to ensure long-term stability of the instrument.

2. Power supply by the internal battery is optional, which allows testing without external AC power source.

3. The testing is fast. The turns ratios of three phases can be tested by just one connection that takes only 10 seconds.

4. Transformers of CT, PT, CVT and Zshaped connection can be tested.

5. It is suitable for turns ratio measurement from distribution transformers to 1,000KV transformers, current transformers (CT), voltage transformers (PT) and Z-connected transformers.

6.A variety of short-circuit measurement methods are built in for easier failure diagnosis.

7. With uninterrupted clock and date display, 50 sets of data can be saved in the instrument, and the data will not lose in case of power failure.

8. With the large-screen color LCD display, data is clear and easy to read and printable by a thermal printer. RS485 communication interface and USB flash drive memory interface are provided.

9. The instrument is equipped with protection functions against high and low voltage reverse connection, transformer short circuit, turn-to-turn short circuit, and misconnection with 380V power source.

2.Special Tips

2.1Power source aspect

The instrument is provided with two power modes, namely the external input power source of AC220V±10% 50/60HZ±1HZ, and the internal power source of a lithium battery. When the external power source is connected to, the instrument selects the AC power mode for testing. When the external power source is not connected to, the instrument works with the internal battery.

2.2Safety aspect

1) Be sure to read this Manual carefully before using the instrument.

2) Operators of the instrument are required of general knowledge of using electrical equipment or instruments.

3) For the safety of the instrument and the operator, the instrument should be grounded reliably in use. It is best to connect the ground lead first when testing a device, and remove the ground lead in the last when the work is completed.

4) As the output voltage of the instrument is high, take care to prevent electric shock.

5) This instrument can be used both indoors and outdoors, but should be avoided in harsh environments such as rain and corrosive gases.

6)Repair, maintenance and adjustment of the instrument should be performed by professionals.

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2.3 Operation aspect

1) The connection between the instrument panel and the test lead should be tight and not loose.

2) For connection, yellow, green, red, and black test clamps should correspond to A, B, C, and O of the transformer respectively. High and low voltage cables should not be reversed in connection.

3) For single-phase measurement, yellow and black clamps should be used. Do not use the wrong ones. The test clamps not used should be suspended in the air.

4) After connection is completed, check to see if there is a connection error. If any abnormality occurs in the process of testing, immediately turn off the power source and check the connection.

3. Technical Features

Display Digits	5 digits					
Output Voltage	160V (AC power supply)		10V (AC power supply)		Automatic (DC power supply)	
Measuring Range	0.9-10000		0.9-500		0.9-5000	
Accuracy	<2000	±0.1%	≤150	±0.1%	<1000	±0.1%
	2000-10000	±0.3%	150-500	±0.3%	1000-5000	±0.3%
Minimum Resolution	0.0001					
Working Power Source	AC220V±10%, 50/60Hz±1Hz				Lithium battery (optional)	
Storage of	50 sets					

Test Data	
Working Temperature	-20℃~40℃
Relative Humidity	≤80%, free from condensate
Volume	360mm in length×280mm in width× 160mm in height
Net Weight	6kg

4.Attached Accessories

Name	Quantity	Remark
instrument	One	
Test cable	One set	long, two for yellow, green, red and black separately
Three-core power lead	One	250V/10A
Ground lead	One	2m
Operation Manual	One	
Certificate of conformity/warranty card	One	
Fuse	Two	1A
Printing paper	One roll	Thermosensitive
Packing list	One	
Charger	One set	(Optional)