

## T-203H

### THREE PHASE HANDHELD TRANSFORMER TURNS RATIO METER

T-203H three phase power transformer turns ratio meter adopts three-phase power supply output voltage, the test speed Instrument to adopt advanced technology for A/D, wide range range; High speed ARM as the core digital processor, test quickly; English menu display, Elaborate and handheld design, makes the T-203H TTR meter superior and powerful with small size and light weight. The TTR meter uses a programmable signal source technology. It is especially suitable for special transformers such as Z-type transformers, rectifier transformers, Scott or anti-Scott transformers, etc. The T-203H TTR tester adopts the new algorithm developed by our company to measure the ratio of three-phase transformer and ensure the measurement accuracy without adjusting the balance of the three-phase power supply. Therefore, the transformer turns ratio and wiring method can be measured in one minute.

### Application

1. Power plant;
2. Universities;
3. Research institutes;
4. Electrical testing center;
5. ISO17025 Electrical laboratory;
6. Railway electrical department;
7. Transformer manufacturers;
8. Voltage transformer factory;
9. Electricity power bureau & power company;
10. Power engineering commissioning company;
11. Electrical Department of industrial and mining enterprises;



### Features

1. It can conduct single-phase measurement and three-phase winding automatic test;
  2. Input single power, internal digital combination standard sine wave test source output;
  3. Three phase turns ratio value, phase angle value, error, tapping position, tapping value can be measured for once.
  4. It also can identify connecting group number automatically;
  5. Phase angle measurement function: measure the phase angle between high voltage side and low voltage side;
- Measure the turns ratio and phase angle of “Non integral point” transformer;

6. With small size and light weight, it is easy to carry;
7. With functions of turns ratio measurement and voltage TTR measurement;
8. With 5.6 inch color LCD, the effect of data & figure display is visualized and fine;
9. With built-in high capacity chargeable lithium battery. Test can be conducted without any power supply on site, and once the battery is charged fully, it can make measurement for more than 500 times continuously;
10. With tapping test function: TTR and TTR error in the position of each tapping switch can be gauged quickly. Just input rated TTR once, instead of input over and over again, TTR error in tapping position can be calculated;
11. With blind test function: There is no need to choose connecting method and group. When measuring Y/ $\Delta$ ,  $\Delta$ /Y transformer, no external short-circuit is needed, connecting method can be shifted automatically according to the chosen testing contents;

## Parameters

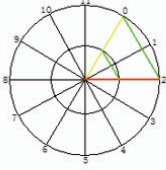
Electrical parameters		
Power supply		7.2V Lithium-ion rechargeable battery
Test power		AC 15V
Data storage		500 groups
TTR measurement accuracy	Range1	0.8-3000: 0.05%±2words;
	Range2	3000-10000: 0.1%±2words;
Display precision		5 Bits, resolution ratio: 0.0001
Phase range		0.00°-360.00°
Phase resolution		0.01°
Phase angle accuracy		0.1°
Vector diagram		Yes
Voltage accuracy on HV side		0.05%
Voltage accuracy on LV side		0.1%
LCD		5.6" color LCD display
Key		30 pcs
Test Cable		10m
Calipers		4pcs (big), 4pcs (small)
Communication port		RS232 , USB
Printer		Yes, Optional
Degree of protection		IP52
Standard		IEEE C57.152-2013, IEC 60076-1:2011, AS/NZS 60076.1:2014,

### Mechanical parameters

Dimension (L×W×H) (mm)	260x160x60
Weight (kg)	1.6, 4.5(with printer)

### Environmental conditions

Operating temperature	-10°C to 50°C
Storage temperature	-20°C to 70°C
Relative humidity	≤85%RH

Voltage ratio tester				NO:141357 Ver5.0000		14-12-04 10:08:13		90%	
	Uab	Ubc	Uca	Current tapping:					
High	0.000V	0.000V	0.000V	Current tapping:02					
Low	0.000V	0.000V	0.000V	vectorgraph:					
Phase	0.00°	0.00°	0.00°						
Tx ratio:	AB	BC	CA						
Tapping	25.000	25.000	25.000						
Ratio	25.000	25.000	25.000						
Error	00.00%	00.00%	00.00%						
Group:	AB	BC	CA						
Phase	0.00°	0.00°	0.00°						
Group	0	0	0						
Test count:57									
Test status:Test is over									
Press [Save] [Return]									

Voltage ratio tester				NO:141357 Ver5.0000		14-12-04 10:08:13		90%	
Sum:007 No:001 2017-03-04 16:22:55									
Serial Num:123456 Number of tapping:03									
Equal tapping level: 5.0% Rated turn ratio:23.753									
Result : AB BC CA									
Tapping 23.753 23.753 23.753									
Ratio 23.6209 23.6526 23.8092									
Error -0.554% -0.421% +0.239%									
Angle -0.07° -0.07° -0.07°									
Group 0 0 0									
Press [F2]to USB, [F3] to Delete									

## Accessories

