

GF106

CT PT TESTER

GF106 CT tester is a current transformer test equipment specially designed for current transformer characteristic test and with additional PT test functions for reference test. GF106 current transformer test equipment is mainly used for field testing, it can finish the measurements (M) and protection (P) class CT, PT and TYP class CT. GF106 CT test equipment can also guessed CT ratio test equipment because of the additional functions including ratio and phase angle differential tests (the measurement points in the IEC60044 & IEC61869 standard), FS and inductance, steady-state parameters, peak error and transient parameters, etc. Adopt 5.6 inch LCD, self-equipped mini type printer supporting field printing; supporting to use USB flash disk to download data, with simple and convenient operation.

Features

1. Portability: weight <8kg;
2. In-built PT test functions;
3. CT ratio error test accuracy 0.05%;
4. The device can store 3000 groups of test data;
5. With it thermal printer, printing test results on site;
6. Parameters such as knee point current and voltage;
7. Parameters such as 10% error curve, 5% error curve;
8. Test CT according to IEC60044-1/6, IEC61869-2, ANSI C57.13;
9. Auto test CT 1%, 5%, 20%, 100%, 120% ratio and phase error;
10. Steady and transient state characteristic tests of various types of CT/PT;
11. No external other auxiliary equipment, stand-alone to complete all test items;
12. The testing data can be transferred to PC by USB disk and produce test report;
13. The use of advanced power technology, the test knee point reaches up to 45kV;
14. CT easy to test, all the tests are using the same wire connection except burden test;



Application

1. University;
2. Power plant;
3. Oil, Gas company;
4. Electrical laboratory;
5. Railway electric company;
6. Metrological service center;
7. Electricity power bureau & power company;
8. National Metrology and testing department;
9. Power engineering commissioning company;
10. Electrical Department of industrial and mining enterprises;
11. Current transformer and voltage transformer manufacturers;

Parameters

Electrical parameters

Accuracy		0.05%, 0.1%
Power supply		AC 220V±10% or AC 110V±10%, 50/60Hz
Excitation output voltage		0-220Vrms
Excitation output current		0-5Arms (20A peak-value)
Automatic frequency variation range		0.1-60Hz
Equivalent excitation voltage		≤5000V
Accuracy		≤0.1%
Secondary winding DC resistance measurement	Range	0.1-300Ω
	Accuracy	≤0.1%
Secondary actual load measurement	Range	0.1VA-1000VA
	Accuracy	≤0.1%
CT/PT phase error measurement	Accuracy	±3min
	Resolution	0.01min
CT ratio error measurement	Range	1-30000
	Accuracy	≤0.05%
PT ratio error measurement	Range	1-10000
	Accuracy	≤0.05%
LCD display		5.6' inch backlight LCD
Cable Length		Primary 5m; Secondary 5m; others customized
Communication port		USB
PC control software		Yes, Optional
Printer		Yes, Thermal printer

Standards

Reference standards	GB1207-2006, GB1208-2006, GB16847-1997 IEC60044-1, IEC60044-6, IEC61869-1,2,3, ANSI/IEEE C57.13
Safety standards	GB 4793.1-2007
EMC	EMC standard 89/336/EEC
	FCC Subpart B of Part 15 Class A
	IEC 1000-4-2/3/4/6

Mechanical parameters

Overall dimension (L x W x H) (mm)	410 x 250 x 300
Weight (kg)	≤8

Environmental conditions

Operating Temperature	-10°C to 50°C
Storage Temperature	-40°C to 70°C
Relative humidity	≤95%, on-condensing
Altitude	≤2000m

Main functions

I. Current Transformer (CT)	II. Voltage Transformer (PT)
1. Excitation curve	1. Excitation characteristic test
2. CT ratio test	2. PT ratio test
3. Polarity	3. Polarity
4. 5% and 10% error curve	4. Ratio error, phase error
5. Current Injecting(Optional)	5. Degauss
6. Degauss	6. Calculation of knee point value
7. Ratio error, phase error	7. Actual secondary load (PT connected burden)
8. Automatic calculation of excitation knee point value	8. Resistance test
9. Actual secondary load (Current loop burden) test	
10. Resistance test	
11. Secondary winding time constant (Ts)	
12. Remanence coefficient (Kr)	
13. Transient dimensioning factor (Ktd)	
14. Peak instantaneous error (Er)	
15. Magnetizing inductance (LU)	