GF1060C

CURRENT TRANSFORMER AND VOLTAGE TRANSFORMER COMPARATOR

The GF1060C CT and VT comparator is a multifunctional, high-precision current and voltage transformer comparator. It is used to compare the secondary current signal or secondary voltage of a device under test or the digital information of a non-conventional transformer with the reference signal of a standard transformer. It is suitable for testing conventional electronic and non-conventional digital current & voltage measuring transformers.

Application

1. Electrical laboratory;
2. Metrological service center;
3. ISO17025 electrical laboratory;
4. Electricity power bureau & power company;
5. National Metrology and testing department;
6. Power engineering commissioning company;
7. Current transformer and voltage transformer factory;
8. Electrical Department of industrial and mining enterprises;

Features

1. Using traditional transformer calibration equipment to achieve value transmission;
2. Using a 24 bit AD chip and 512 times oversampling to maximize bandwidth expansion and improve accuracy;
3. Adopting multi gear automatic switching and FIR filter to improve dynamic range and reduce signal-to-noise ratio;
4. Customize the testing plan through programming and automatically determine whether the test data is qualified.
5. Real time display of waveform, frequency, amplitude, phase and other data, facilitating comprehensive analysis of transformer performance;
6. Built in industrial computer with 8-inch color touch screen, easy and convenient operation;
7. Equipped with powerful operating software;
8. Statistically analyze the average value, variation, extremum, and multiple errors of ratio difference and phase difference, which can be used to analyze transformers conduct comprehensive verification of stability and linearity;
9. Can perform multiple harmonic analysis and verify the accuracy of each harmonic of the transformer;
10. Can record and replay the entire testing process;
11. Equipped with impedance compensation error function.

Standard

1. IEC61850-9-2;
2. ANSI/IEEE C57.13;
3. IEC60044-1, IEC60044-2,IEC60044-6;
4. GB1207-2006, GB1208-2006, GB16847-1997;
5. IEC61869-1,IEC61869-2,IEC61869-8,IEC61869-10,IEC61869-14

Parameters

Electrical parameters	
Accuracy	0.05%, 0.02%
Power supply	AC 220V±10% or AC 110V±10% 50/60 Hz
Input Range	
Voltage range	100V/√3V, 100V, 110V/√3V, 110V, 120V/√3V, 120V, 150V, 220V (max 265V AC)
Current range	0.2A, 1A, 5A, 10A (max 12A AC)
Small signal 500mV range	0-500mV AC
Small signal 8.5V range	0-8.5V AC
Verification of traditional current transformers	
Accuracy class	0.05 (Ratio error≤0.05%, Phase error≤2')
Standard current measurement range	1%~120%In, 0.05%RD (In=1A, In=5A)
Tested current measurement range	1%~120%In, 0.05%RD (In=1A, In=5A)
Verification of electronic current transformers	
Standard current measurement range	1%~120%In，0.05%RD (In=1A or In=5A）
Tested small signal input voltage range	1%~120%In，0～8.5V (Un=333mV, 1V)
Verification of traditional voltage transformers	
Accuracy class	0.05 (Ratio error≤0.05%, Phase error≤2')
Standard voltage measurement range	10%~120%In, 0.05%RD (Un =100/√3V,100V)
Tested voltage measurement range	10%~120%In, 0.05%RD (Un =100/√3V,100V)
Verification of electronic voltage transformers	
Standard voltage measurement range	10%~120%In，0.05%RD (Un =100/√3V,100V)
Tested small signal input voltage range	1%~120%In，0～8.5V (Un =8.5V)
Tested small signal input voltage range	5%~120%In，0～8.5V (Un =500mV)
Harmonic Output	
Accuracy	Ratio error: 0.1%Uh or 0.1%Ih (Uh is the effective value of the fundamental wave) Phase error: 10' (2-21st)
LCD	8 inch touch TFT color LCD
Operating key	support mouse and keyboard(USB port)
Communication port	USB, RS232, 10/100M Lan

Standards	
Reference standards	GB1207-2006, GB1208-2006, GB16847-1997 IEC60044-1, IEC60044-2,IEC60044-6, IEC61869-1,IEC61869-2,IEC61869-8,IEC61869-10,IEC61869-14, IEC61850-9-2, 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 200 x 340
Weight (kg)	8.5
Environmental conditions	
Relative humidity	Relative humidity 5%-95% not condensing
Operating temperature	0°C to +50°C
Storage temperature	-20°C to +70°C