GF302C

THREE PHASE PORTABLE PANEL METER CALIBRATOR

This model GF302C panel meter calibrator is according to nation verification regulation JJG124-2005 "ammeter, voltmeter, power meter and resistance meter calibration regulations and the relevant countries standard requirements and design three-phase 0.05 class meter source integration calibration device". The core technology of this calibrator is with digital signal processor (DSP) and 16 high-speed digital converter, which is composed of high precision wideband power amplifier; The signal source use the DSP and 16 high-speed A/D converters, which can control the sine wave, distortion wave signal source; this model GF302C power meter test equipment has high precision, stable and reliable, and easy to operate flexible, and other characteristics; it is used for electrical measurement in electric power system, is the ideal calibration equipment.

Application

1. Universities;
2. Power plant;
3. Research institutes;
4. Electrical testing center;
5. Panel meter manufacturer;
6. Power meter manufacturers;
7. Digital meter manufacturers;
8. Pointer meter manufacturers;
9. Railway electrical department;
10. ISO17025 Electrical laboratory;
11. Electricity power bureau & power company;
12. Power engineering commissioning company;
13. Electrical Department of industrial and mining enterprises;

Features

1. Built-in electric measurement of verification procedure indicating meter, automatic or semi-automatic for verification, saving 1000 groups data;
2. It can check all kinds of electric measurement of instrument including: AC/DC voltmeter & ammeter, frequency meter, phase angle meter, single/three-phase AC active & reactive power meter, synchronous meter, etc;

3. 6.4 inch big screen color display;
4. Power factor setting from -1 to 0 to 1;
5. Programmable and save test scheme;
6. Portable designed, Operation simply, convenient;
7. Wide range from 0 to 1000V and 0 to 24A AC/DC;
8. High precision linear power amplifier technology;
9. With USB port and PC connection for data management.
10. It is calibrated in the software and don't need to open the case, stable and reliable;
11. Voltage short circuit, current open and power amplifier overheating protection function;
12. Automatically failure detection function, shows fault part, convenience for users to check line;
13. It can as a voltage source, a current source and power source for high precision and high stability standard resource;

Parameters

Electrical parameters	
Accuracy class	0.05%, 0.1%
Power supply	Single phase AC 220V±10% or 110V±10%, 50/60 Hz
Communication Port	USB, RS232
AC voltage output	
Range(U1,U2,U3)	50 V, 100 V, 200 V, 400 V, 800 V
Adjusting range	(0-120) % RG
Adjust fineness	0.005% RG
Accuracy	0.05% RG
Stability	0.01%/1min
Load capacity	25 VA
Output distortion degree	≤0.3% (linear load)
AC current output	
Range(I1,I2,I3)	0.5A, 1A, 2.5A, 5A, 10A, 20A
Adjusting range	(0-120) % RG
Adjust fineness	0.005% RG
Accuracy	0.05% RG
Stability	0.01%/1min
Load capacity	25 VA
Output distortion degree	≤0.3% (linear load)

Electrical parameters - continued	
DC voltage output	
Range	75mV, 75 V, 150 V, 300 V, 500 V, 1000 V
Adjusting range	(0-120) % RG
Adjust fineness	0.005% RG, 0.01% RG, 0.1% RG, 1% RG, 10% RG
Accuracy	0.05% RG
Stability	0.01%/1min
Load capacity	25 VA
DC current output	
Range	0.5A, 1A, 2.5A, 5A, 10A, 20A
Adjusting range	(0-120)% RG
Adjust fineness	0.005% RG, 0.01% RG, 0.1% RG, 1% RG, 10% RG
Accuracy	0.05% RG
Stability	0.01%/1min
Load capacity	25 VA
AC power output	
Accuracy	0.05% RG
Stability	0.01%/1min
Frequency	
Frequency range	45-65 Hz
Resolution	0.001 Hz
Accuracy	0.002 Hz
Power factor output	
Adjusting range	-1 to 0 to +1
Adjust fineness	0.0001
Accuracy	0.0005
Phase angle	
Scope	0°-359.99°
Resolution	0.01°
Accuracy	0.05°
Voltage/Current harmonic output	
Times	2^{nd}-31^{th}
Content	0-40%
Phase	0°-359.999°
Configuration error	(10% RD + 0.1%), RD refers to the configuration value of harmonic contents
Standard	
Standard	Q/GDW 1899-2013, DL/T1119-2009, JJG124-2005; JJF1587-2016; IEC61010, IEC 61000, IEC 61326

Electrical parameters - continued	
Safety	
Isolation protection	IEC 61010-1:2001
Measurement Category	300 V CAT III, 600 V CAT II
Degree of protection	IP20
Declaration of conformity	CE, CNAS certified
Mechanical parameters	
Dimensions (W×D×H) (mm)	460x430x185
Weight (kg)	18
Environmental conditions	
Working temperature	0°C to 40°C
Storage conditions	-30°C to 60°C
Relative humidity	≤85%

(1) RG means range, the same as below;
(2) RD means the setted harmonic content, harmonic can be a single output, also multiple output.

Accessory