

GF303B

Three Phase Phantom Load Electric Portable Power Source

GF303B three phase portable power source is a powerful and portable three phase current and voltage source. All test values are generated absolutely synthetically with a high degree of accuracy and stability. It is high precision three phase energy meter calibration phantom load power source. GF303B uses the advanced synchronous sampling technology and electronic power amplifier components. The test equipment can generate sine-wave voltage/current and phantom power to drive energy meter testing. It is suitable for all the power engineering service company, electric power company distribution network automation departments, is also suitable for petrochemical, coal mine, railway and steel industry etc, to power automation departments use in the laboratory or on site.

Application

1. Universities;
2. Energy meter R & D;
3. Energy meter factory;
4. Electrical testing center;
5. AMI Research institutes;
6. National Metrology center;
7. Panel meter manufacturers;
8. Power meter manufacturers;
9. Digital meter manufacturers;
10. Pointer meter manufacturers;
11. Railway electrical department;
12. ISO17025 Electrical laboratory;
13. Measurement and control device factory;
14. Electricity power bureau & power company;
15. Power engineering commissioning company;
16. Manufacturer of reactive power compensation device;
17. Electrical Department of industrial and mining enterprises;



Features

1. Lightweight portable: the integrated module, weighing 6.8 kg;
2. Output fastest (10 ms): by high performance 32bit CPU, the frequency of 1.2G;
3. Stable fastest (1s): hardware PID, the output of the standard power source without delay, fast response;
4. With the strongest load, load regulation rate fast, single phase with resistance sex load 15 VA; with pure capacitive load (0.33 uf);

5. Harmonic supreme: standard source can output 2-63 times higher harmonic;
6. Stability is the best, stability for 0.01% / min; English or Chinese menu display;
7. Two kinds of frequency output: but at the same time points in different frequency voltage output, and amplitude can adjust arbitrarily output;
8. Powerful Software, the operation is simple, convenient, three steps can complete verification;
9. Debugging far more communication protocols, as many as 20 types, covering domestic all factories statute;
10. The fastest verification;
11. As a three phase voltage source, also as a three phase current source;
12. Voltage output range from 0 to 300V, current from 0 to 6A;
13. Testing point optional 1.0, 0.5C, 0.8C, 0.5L, 0.8L etc;
14. Phase shift can be setting output by user;
15. Meeting ISO17025 electrical laboratory standard;

Parameters

Electrical parameters	
Accuracy class	0.05%, 0.1%
Power supply	Single phase AC 85V-265V, 50/60 Hz
Communication Port	RS232, USB
AC Voltage output	
Range (U1, U2, U3 phase)	0-300V
Adjustment resolution	0.01%, 0.1%, 1%, 10%,
Accuracy	0.05% RG
Stability	0.01% RG / 1 min
Distortion degree	Better than 0.1% (not capacitive load)
Load Capacity	15VA
Full load regulation rate	0.02% RG
Full load regulation time	Less than 1mS
Temperature drift	16 PPM/°C
Long-term stability	60 PPM/year
AC Current output	
Range (I1, I2, I3 phase)	0-6A
Adjustment resolution	0.01%, 0.1%, 1%, 10%,
Accuracy	0.05% RG
Stability	0.01% RG/1min
Distortion degree	Better than 0.1% (not capacitive load)
Load capacity	15VA
Full load regulation rate	0.02% RG
Full load regulation time	Less than 1mS
Temperature drift	16 PPM/°C
Long-term stability	60 PPM/year

Electrical parameters - continued
Power output

Active power accuracy	0.05%
Reactive power accuracy	0.1%
Stability	0.01% RG/1min

Phase

Range	0°-359.99°
Adjustment resolution	0.01°, 0.1°, 1°, 10°
Accuracy	0.05°

Power factor

Adjusting range	-1 ~ 0 ~ +1
Resolution	0.0001
Accuracy	0.0005

Frequency

Range	40-65 Hz
Adjustment resolution	0.001 Hz, 0.01 Hz, 0.1 Hz, 1Hz
Accuracy	0.002 Hz
Temperature drift	0.5 PPM/°C
Long-term stability	4 PPM/year

Harmonic content (compared with fundamental wave)

Voltage	≤40%
Current	≤40%
Phase	0°-360°

Harmonic

Harmonic times	2-50
Adjustment resolution	0.1% (compared with fundamental wave)

Functions

Communication Port	RS232
Programmable controlled	Yes
Harmonic	Yes
Wiring mode	3P4W, 3P3W, 1P2W
Key	40pcs
LCD	6 inch blue LCD
PC control software	Optional

Standard

Standard	IEC 62053-21,22, 23; IEC 60736; ANSI C12.20-2002; JIG 597-2005; JIG596-2012; JIG 1085-2013; JIF 68-2019; DL/T 826-2002; DL/T 1478-2015; DL/T 448-2016; JIG 51-1999;
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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 (WxDxH) (mm)	300x400x120
Weight (kg)	6.8

Environmental conditions

Working temperature	0°C to 50°C
Storage conditions	-30°C to 60°C
Relative humidity	≤85%