

GF303P

Emc Test And Measurement Equipment Standard Power Source

GF303P is designed as the AC power source for EMC (electromagnetic compatibility) test. Adopts advanced technology to be anti-interference. Good stability, high degree of automation, easy to carry. Electrical measurement in Power system, thermal, remote, scheduling and so on Inspection for high precision AC standard source power institute and company, Supply standard input for EMC test for Metrology Institute, Electric Power Academy of Sciences standard power source in EMC lab EMC test to inspect meter accuracy Also can work with other instrument in EMC lab like surge generator, group of pulse generator, frequency drop generator, electrostatic generator etc.

Features

1. Range automatic switching;
2. With RS232 interface, it can connect with PC;
3. The 32 bit MPU + DSP + FPGA, powerful agile;
4. Meeting ISO17025 electrical laboratory standard;
5. Frequency value adjustable from U1U2 and U3 phase;
6. Software self-calibration, simple operation, stable and reliable;
7. Hardware PID, fast response, load change will not cause output fluctuations;
8. With PC software, it can control AC standard power source output via programmed;
9. The large screen 320 x 240 liquid crystal display (LCD), English interface, simple operation;
10. Voltage and current output range wide, big power, high stability, waveform distortion small;
11. Voltage, current and phase shift, power factor, frequency etc will set up and take load regulation;
12. Perfect over-current, over-voltage, overheating, short circuit, open circuit, overload protection, automatic fault detection;
13. It can be set up 2~31 times harmonics amplitude and phase, and it can be added to the fundamental wave in every harmonic output;
14. Strong loading ability, and it can take capacity, sensibility, impedance load or composite type load, and the load regulation RG is higher than 0.01%;
15. The use of special technology and process, the power supply output anti-interference ability, suitable for various electromagnetic compatible immunity test;
16. Power frequency per cycle is as high as 30000 points of waveform kneading, signal output without filtering, waveform output precision, harmonic output precision, harmonic distortion small;



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;

Parameters

Electrical parameters	
Power supply	AC 220V±10%, frequency 50/60 Hz
AC voltage output	
Range (U1, U2, U3 phase)	0-380 V; range switch automatically
Adjust fineness	0.01% RG
Accuracy	0.1% RG
Stability	0.03% RG/200s
Distortion degree	<0.1% (not capacitive load)
Output power	300VA
Full load regulation rate	0.01% RG
Full load regulation time	Less than 1mS
Long-term stability	±60 PPM/year
AC current output	
Range (I1, I2, I3 phase)	0-10A; range switch automatically
Adjust fineness	0.01% RG
Accuracy	0.1% RG
Stability	0.03% RG/200s
Distortion degree	<0.1% (not capacitive load)
Output power	300VA
Full load regulation rate	0.01% RG
Full load regulation time	Less than 1mS
Long-term stability	± 60 PPM/year

Electrical parameters - continued
Phase angle

Adjusting range	0°-359.99°
Resolution	0.001°
Accuracy	0.1°

Frequency

Adjusting range	40-65 Hz
Resolution	0.002 Hz
Accuracy	0.005 Hz
Temperature drift	±0.5 PPM/°C
Long-term stability	±4 PPM/year

Power factor

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

Harmonic accuracy

Harmonic times	2-31 st
Harmonic phase	0-359.99°
Harmonic phase accuracy	<0.01°
Harmonic set accuracy	0.1% (relative to the base wave ratings)

With capacitive load capacity

0-120 V	1uF
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Functions

Communication Port	RS232
Programmable controlled	Yes
Harmonic	Yes
Wiring mode	3P4W, 3P3W, 1P2W
Key	24pcs
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; JJF 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)	500x600x180
Weight (kg)	About 50

Environmental conditions

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