GDYB-S20 Three Phase Energy Meter Test System

Product Description

GDYB series Three Equal Potential Multi-function Electric Energy Meter Test System is well-developed third generation electronic programmable three phase electric energy meter multifunctional test system according to the latest national standards and regulations. Adopts insulated 0.01% high precision 1:1 current transformer technology, to achieve test of voltage inner connected shunt three phase meter; It is suitable for testing of various three phase electric energy meter of 0.2% and below (includes sinusoidal reactive power meter). It has good appearance, complete functions and excellent performance .

System Reference Standard

- 《GB/T 11150-2001 Electric energy meter test system》

- 《JJG 307-2006 AC electric energy meter (watt-hour meter) calibration procedures》
- 《JJG 596-1999 Electronic energy meter calibration procedures》
- 《JJG 597-2005 AC electric energy meter calibration system》
- 《JJG 596-1999 Electronic energy meter》
- 《DL/T 614-1997 Multi-functional electric energy meter》
- 《DL/T 614-2007 Multi-functional electric energy meter》
- 《Q/HSB 01-2007 Electric energy meter test system》

Technical Condition

- Environmental condition

Operating environmental temperature: 23℃±2℃;

Operating environmental humidity: 45%~75%;

- Power supply

Single phase: AC220V±33V; Frequency: 50±2.5Hz

Technical Specification

- Type No.: GDYB-S20 Three Phase Electric Energy Meter Test System;
- System accuracy: 0.05%; 0.1%;

Standard meter accuracy: 0.05% Three phase multi-functional standard meter;

- Voltage & Current measuring range:

Output voltage step: 57.7V/100V/220V/380V;

Output current step: 0.005A, 0.025A, 0.1A, 0.25A, 0.5A, 1A, 2.5A, 5A, 10A, 25A, 50A, 100A;

Minimum Output current: 1mA; accuracy: ≤5%;

- Output load capacity (20 meters)

Voltage output: 800VA;

Current output: 2500VA;

- Voltage & current adjustment

Adjustable range: (0%~120%) x measuring range;

Adjustable fineness: 10%, 1%, 0.1%, 0.01%;

- Phase adjustment:

Adjustable range: 0°~360°;

Adjustable fineness: 10°, 1°, 0.1°, 0.01°;

- Frequency adjustment:

Adjustable range: 45Hz~65Hz;

Adjustable fineness: 1Hz, 0.1Hz, 0.01Hz;

- Output power stability: ≤0.05%/120S;
- Output voltage & current distortion:

Voltage: ≤0.5%;

Current: ≤0.5%;

- Harmonic settings:

Harmonic number: 2~21 times;

Harmonic content: current 2~21 times ≤40% (relative to fundamental wave);

voltage 2~21 times ≤40% (relative to fundamental wave);

- Harmonic phase: 0°~359.99°;
- Monitoring instrument:

Standard meter display accuracy: Voltage: 0.01%;

Current: 0.01%;

Power: 0.01%;

Phase: 0.01;

Frequency: 0.01;

- Insulated 1:1 current transformer parameter:

Accuracy: 0.01%;

Output power: 60VA;

Current measuring range: 1mA~120A (1:1);

- Main performance index

a) Accuracy: 0.01% (COS∮=0.5C…1…0.5L);

b) Rated frequency: 50Hz/60Hz±5%;

c) Primary current: 3×0.001-120A;

d) Secondary current: 3×0.001-120A;

e) Output load (each phase):

0.5W (output range: 0.001-1A);

0.7V divided by current value (output range: 1-120A);

f) Output load voltage: Max. 0.5V (output current Max. 120A);

Current transformer dimension: 265 x 200 x 240 mm (L x W x H);

- Weight: 12kg;
- Dimension:

Control source: 610 x 800 x 1920mm (L x W x H);

Meter rack: 2350 x 750 x 1850mm (L x W x H);