HZQW-10KVA/50KV

PD Free High Voltage Testing System

Technical Solution

1. System Configuration:

1. PD Free Testing Transformer HZQW-10KVA/50KV
2. Controller HZXC-10KVA/220V
3. Isolating Transformer 10KVA/200V
4. Coupling Capacitor 50KV
5. Protective Resistor 50KV/8K

Technical Specifications:

1、Inflatable Type Testing Transformer：

Model：HZQW-10KVA/50kV 1set

PD Free test transformer. Special structure and precision technology are adopted to control the magnitude of partial discharge within a small range.High precision in appearance process.Applicable to field and laboratory.Convenient to use.

Technical Specifications:

Rated Capacity：10KVA Input Voltage：200V

Output Voltage：0—50KV PDAmount≤5PC

Output Current：200mA Accuracy：AC 1.5%

Power distortion: < 3% Insulation Dielectric：SF6 Gas

Dimension： O.D.：350mm，H. 0.8M Weight：55Kg

2. HZXC-10KVA/220V Controller

1. Capacitance：10KVA
2. Input Voltage：220V
3. Input Current：45.4A
4. Output Voltage：0-250V adjustable
5. Working Environment：Temperature：0℃～40℃
6. Relative Humidity：<85%
7. Dimension：560×440×300mm
8. Weight：50Kg

3. Isolating Transformer ： 10KVA，1 set

The main structure is the isolation transformer and the wave separation device, which can effectively eliminate all kinds of interference and interference in the power supply.

Input Voltage ： 220V ±10%　　Output Voltage：220V±10%

Rated Capacity：10KVA　　No Load Loss≤5%

Impedance Voltage≤5%　　Weight：30Kg

Attenuation： 10KHZ-100KHZ≥ 20db

100KHZ-30MKZ≥ 50db

Dimension：L 450mm* W 400mm* H 550mm

4. Coupling Capacitor 1set

H. 800mm， Weight 15Kg

1 apical ring Capacitance：500PF

PDAmount≤5PC Voltage： 50kV

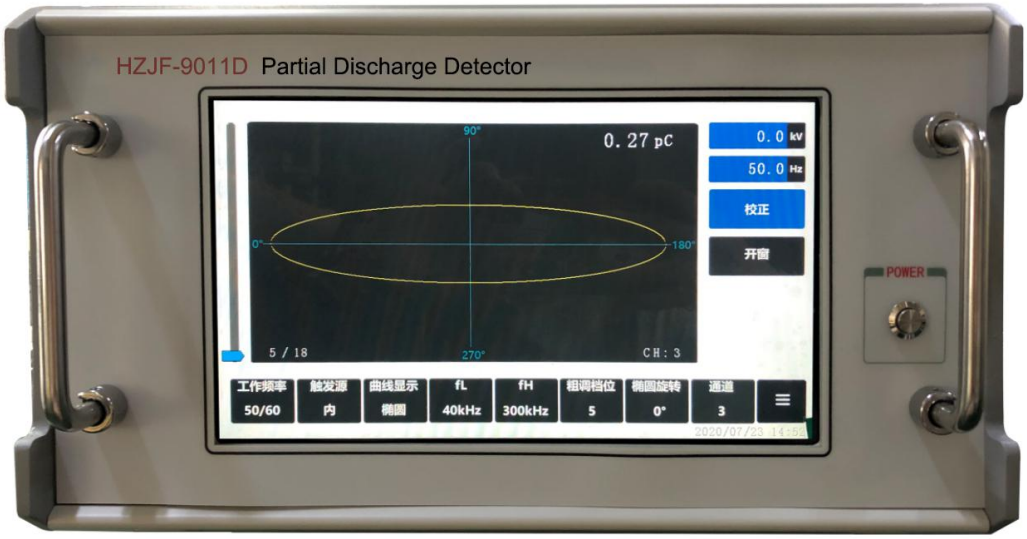
5、50KV/8K Protective Resistor

Dimension：Diameter 50mm* Length 500mm

Weight：3kg

Equipped with test connection line, shielding cover, shielding line, etc

6. HZJF-9011D PARTIAL DISCHARGE DETECTOR



2、Main Technical Indicators

1. The equivalent capacitance ranges from 6pF to 250 μ F

2. Number of channels: single channel

3. Measurement range: 0.1pc-10000nc

4. Detection sensitivity and allowable current (see Table 1)

NO.	Tuning Capacitance Range	Sensitivity (PC) (Unbalanced Circuit)	Effective Value Of Allowable Current	
			Unbalanced Circuit	Balance Circuit
1	0 ~ 25 ~ 100pF	0.02	30mA	0.25A
2	25 ~ 100 ~ 400pF	0.04	50mA	0.5A
3	100 ~ 400 ~ 1500pF	0.06	120mA	1A
4	400 ~ 1500 ~ 6000pF	0.1	0.25A	2A
5	1500 ~ 6000 ~ 25000pF	0.2	0.5A	4A
6	0.006 ~ 0.025 ~ 0.1μF	0.3	1A	8A
7	0.025 ~ 0.1 ~ 0.4μF	0.5	2A	15A
8	0.1 ~ 0.4 ~ 1.5μF	1	4A	30A
9	0.4 ~ 1.5 ~ 6.0μF	1.5	8A	60A
10	1.5 ~ 6.0 ~ 25μF	2.5	15A	120A
11	6.0 ~ 25 ~ 60μF	5	25A	200A
12	25 ~ 60 ~ 250μF	10	50A	300A
7R	Resistance	0.5	2A	15A

Table 1. Detection sensitivity and allowable current value of input unit

5. Elliptic scan time base

(1) Frequency 50/60, 100, 150, 200, 400Hz

(2) Rotation: 30 ° as the first gear, and can rotate 120 °

(3) Working method: ellipse sine wave straight line

6. Display unit

10.1 inch capacitive touch screen is used.

7. Amplifier

(1) 3dB low frequency fl:10, 20, 40KHz optional

(2) 3dB high frequency fh:80, 200, 300kHz optional

(3) Gain adjustment, rough adjustment 6, inter gear gain difference 20 ± 1dB, fine adjustment range >20db

(4) Asymmetry of positive and negative pulse response ＜ 1dB

8. Time window

(1) Window width: adjustable, 5 ° ~ 170 ° at 50Hz

(2) Window position: each window can rotate 0 ° ~ 170 °

(3) Two time windows can be opened separately or simultaneously.

9. Peak pulse display

The touch screen displays 1 decimal place (10pc or more), 2 decimal places (less than 10pc), error: ± 3% (in full scale)

10. Test voltage display

(1) Range 150kV

(2) Input impedance: >1m Ω

(3) Display: touch screen display, display 1 decimal place

(4) Error: ± 1%

11. Test frequency display

Error: less than ± 1%

12. Zero standard system

Zero sign is consistent with all ellipse scanning frequencies

13. Structure

(1) Dimensions: 370mm (width), 460mm (depth), 215mm (height)

(2) Weight: about 12.5kg