



GDYT-30/100 Automatic Partial Discharge Test System 30kVA/100kV



General Information

GDYT-30/100 Partial Discharge Test System is mainly used for testing frequency voltage insulation level of various insulation materials, insulation structure and electrical products, also as partial discharge frequency testing power supply for testing object such as transformer, mutual inductor and lightning arresters. It is widely used in electrical manufacturing, power operation departments, research institutes and universities.

The system includes:

1. Automatic Hipot Test Control Table GDYT-30/100

2. PD-free Gas type transformer YDQW-30/100
3. Coupling capacitor TAWF-100kV
4. Protective resistor GR100kV
5. Isolation filter LBQ-30kVA
6. Partial discharge detector

Features

- 7 inch color LCD screen, with PLC automation control.
- HV Voltage, LV voltage, LC current measured at the same time, with high precision sensor and high performance collection chip
- Automatic mode and manual mode for option.
- Display HV voltage, LV voltage, LV current, time and withstanding result.
- Over-voltage and over-current protection. Output voltage, HV current upper limit, LV current upper limit and timing can be set.
- Zero-starting function. Test can be proceed after the voltage is back to zero.
- Store up to 8000pcs data in 3months. It has USB port to upload data to USB disk.
- When setting voltage is arrived, it will timing automatically. After timing, voltage will be back to zero.
- When the LV current is over setting value, the voltage will be cut off automatically and it will be back to zero. When the HV current is over setting value, the test object will be cut off and test can be proceed continuously.
- With anti-interference ability, suitable for electromagnetic environment.
- With wheels for both control unit and HV unit, easy to move.

System specification

System specification	
Power supply	380V±10%, 60HZ
Rated capacity	30kVA
Output voltage	100kV
Output current	300mA
Short-circuit impedance	<18%
Operation time	30mins@100% rated voltage and current. Continuous working@ 2/3 rated voltage and current.
Wave form distortion rate	<3% when voltage regulator input voltage distortion rate <3%.
PD value	≤5pC @ 100% rated voltage
Control unit	
Power	AC380V±10%, 60Hz
Capacity	30kVA

Output voltage	AC 0-430V
Rated output current	75A
HV voltmeter range	0-100kV
Timing range	0-999s
Voltage and current accuracy	$\leq 1.5\%(\text{F.S}) \pm 2 \text{ digits}$
Environment temperature	-20°C to 50°C
PD-free Gas testing transformer (HV unit)	
Rated capacity	30kVA
Input voltage	0-400V
Input current	AC 0-75A
Output voltage	AC 0-100kV
Output current	AC 300mA
Voltage accuracy	AC 1.5%
PC value on rated voltage	$\leq 5 \text{ pc}$

Voltage distortion factor	<3%
Insulation dielectric	SF6 gas
Coupling capacitor	
Rated frequency	60Hz
Standard capacitance	600pF±10%
Rated voltage	100kV
Voltage ratio	1000/1
Dielectric loss	<0.5%
Measurement accuracy	1%
Permitted operation time	Same with testing transformer
PD value	≤5pc on 100% of rated voltage, ≤3pc on 80% of rated voltage.
Protective resistor	
Rated frequency	60Hz
Rated voltage	100kV

Resistance	7kΩ
Rated current	0.3A
Permitted operation time	Same with testing transformer
Isolation filter LBQ-30kVA	
Rated capacity	30kVA
Rated voltage	400V
Rated current	75A
Frequency	60Hz
Attenuation	40kHz-100kHz ≥40dB 100kHz-1.5Mhz ≥60dB
Permitted operation time	Same with testing transformer
With L-C filter loop circuit, and built-in filter compensation device.	