



GDTF(L)-225/25 PD-free AC Series Resonant Test System



Product Description

The system is specially designed for PD-free AC withstand voltage test for electric generator, capacitance of single phase to ground is 0.4-1.2 μ F, test voltage is no more than 24kV.

Working Environment

- Environmental temperature: -10°C to 50°C
- Related humidity: \leq 90% RH

- Altitude: $\leq 1\text{km}$

Technical Data & Functions

- Rated capacity: 225kVA
- Input power supply: Single phase 380V; 50Hz
- Rated voltage: 25kV
- Rated current: 9A
- Working Frequency: Power frequency 50Hz
- Output voltage Waveform distortion rate: $\leq 0.5\%$
- Working time: continuous working of 15min under rated load.
- Temperature rise: $\leq 65\text{K}$ after continuous working of 15min under rated load
- Quality factor: $Q \geq 10$
- Accuracy: 1.5% (RMS)
- Protective function: over-current, over-voltage and flashover protections for test object.
- Partial discharge amount: $\leq 5\text{PC}$

Test Power Supply, L and Cx Relationship Table

Capacitance range of test object (Cx)	Adjustable range of reactor (L)
0.4~1.2uF	8H~26H

Note: Cx is capacitance of test object.

PD-free AC power frequency withstand voltage test: adopts series resonant test device to make AC withstand voltage test and dielectric loss test for generator.

Reactor selection

Reactor	Rated capacitance (kVA)	Rated Voltage (kV)	Rated Current (A)	Capacitance range (uF)	Inductance range (H)
Adjustable reactor or 1 set	225kVA	25kV	9A	0.4~1.2	8~26H

System Configuration

1. PD-free Excitation Transformer GDJL-27kVA/3kV/0.4kV (1 set)
2. PD-free Isolation Transformer GDGL-27kVA/380V/380kV (1 set)
3. PD-free Resonance Control Unit GDTF-27kVA/380V (Including voltage regulator) (1 set)
4. PD-free Adjustable Reactor GDDK-225kVA/25kV (1 set)
5. PD-free Capacitive Voltage Divider GDFR-30kV (1 set)