

HF-TC-603

Transformer Dielectric Loss Tester



This Transformer Dielectric Loss Tester outputs adjustable AC high voltage to measure tan delta and capacitance, identifying insulation dampness, aging and contamination for transformers and HV bushings with strong field anti-interference performance.

Key features

- Supports self-excited testing for CVT. Complete one-time wiring to simultaneously measure capacitance and tanδ of C1 and C2.
- Comes with external applied voltage measurement and external standard capacitor (CN) measurement functions.
- Multi-channel synchronous measurement function, capable of testing dielectric loss values of four test objects at the same time.
- Adopts variable frequency technology to eliminate on-site 50Hz power frequency interference, delivering reliable test data even under severe electromagnetic interference conditions.
- Built-in overcurrent protection to prevent instrument damage when the test sample suffers short circuit or breakdown.

Technical specifications

Parameter	Value
1	Operating Conditions Ambient Temperature: -15°C ~ 40°C Relative Humidity RH < 80%
2	Anti-interference Principle Variable Frequency Method -
3	Power Supply AC 220V±10% Compatible with generator power supply
4	High Voltage Output Output Range: 0.5kV ~ 10kV, step 0.1kV Accuracy: 2% Max Current: 200mA Capacity: 2000VA -
5	Self-Excitation Power Supply AC 0V~50V / 40A Single frequency: adjustable freely from 45.0Hz to 65.0Hz Dual frequency options: 45.0Hz/55.0Hz 47.5Hz/52.5Hz 55.0Hz/65.0Hz 57.5Hz/62.5Hz
6	Resolution tanδ: 0.001% Cx: 0.001pF
7	Measurement Accuracy Δtanδ: ±(1.0% of reading + 0.040%) ΔCx: ±(1.0% of reading + 1.00pF) -
8	Measuring Range tanδ No upper limit
Cx General Range	15pF < Cx < 300nF
Cx @10kV	Total Cx = Cx1+Cx2+Cx3+Cx4 < 60nF
Cx @5kV	Total Cx = Cx1+Cx2+Cx3+Cx4 < 150nF
Cx @1kV	Total Cx = Cx1+Cx2+Cx3+Cx4 < 300nF
CVT Test Mode	Total Cx = Cx1+Cx2+Cx3+Cx4 < 300nF
9	Overall Dimensions Main Unit (mm): 400×290×330 Accessory Case (mm): 450×330×150 -
10	Storage Capacity Stores up to 200 test records, supports USB flash disk data export -
11	Weight Main Unit: 25.75kg Full Accessory Case: 33.44kg -

Compliance and documents

Applicable standards	[TO BE CONFIRMED] standard applied to this model
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Calibration certificate	[TO BE CONFIRMED]
Optional accessories	[TO BE CONFIRMED]

Warranty and support

12-month warranty on every exported instrument. English operation manual and remote video guidance at commissioning. T/T, L/C at sight and deposit terms for bulk orders; sea, air or rail shipping.