PE-SCGF-100/50
SF6 Gas Filled Standard Capacitor 100pF / 100kV

Insulated Standard Capacitors are indispensable in every modern high-voltage laboratory and test field where it occupies a wide range of important functions.

The SF6 insulated standard capacitor is used as Capacitance standard in measuring bridge circuits to measure the Dielectric Dissipation Factor (Tan-δ) of all types including cables, capacitors, bushings, instrument transformers and power transformers. Further-more, it can be used as high-voltage capacitor for voltage divider circuits for high-voltage transformer test.

The SCGF series standard capacitors can also be used as the high-voltage section of a capacitive divider. This allows high accurate voltage measurements e.g. such as those required for loss measurements on power transformer. Power Electronical’s standard capacitor’s insulation is of the highest accuracy and reliability. The result reflect a true advantage in high voltage measurements especially at high humidity levels.

The SF6 insulated Standard Capacitor is also used in conjunction with our Capacitance and Tan Delta measuring bridges (e.g. PE-ACDF-1, and PE-MCDF-6 ) as a comparison standard for exact measurements of the Capacitance and Tan-D of HV equipment like cables, transformers, bushings, capacitors, etc. The capacitor is provided with a top electrode which allows partial discharge free interconnections to the other elements of the HV circuit.

The SF6 insulated standard capacitor is designed for indoor service and is portable. The standard capacitors of the SCGF series are used for:
* Exact measurements of the capacitance and tan delta
* Exact measurements of AC voltages (AC divider)
* Applications involving Partial Discharge measurements (requiring PD-free coupling capacitors)

Specifications

- Rated Voltage = 100kV
- Test Voltage = 120kV
- Capacitance = 100 pF ± 1%
- Tan Delta = < 5 x 10⁻⁶ (0.00001 or 0.001%)
- Frequency Drift = < 1 x 10⁻⁶ (0.00001 or 0.001%)
- PD level = < 5pC
- Gas Pressure = 350 ± 50 kPa
- Operating Temp = minus 5 deg C to +45 deg C
- Humidity = < 75% RH
- Temp Coefficient = 3 x 10⁻⁵ / deg C
- Pressure Coefficient = 2.2 x 10⁻² / kPa

Standard Accessories

Standard Capacitor with top electrode – 1 no,
Dimensions – 1100mm (H) X 450mm (dia) with base. Weight – 30kgs (approx)
Mobile base frame – 1 no
Test Report – 1 no

Note – Power Electronical reserves the right to change product specifications for continual improvement. Please order a fresh copy of specs from contact@powerelectronical.com before placing new orders. Jurisdiction limits within territory of Republic of India only.

Our other Products are –
- Automatic Cap & Tan Delta test system 10kV / 12kV
- Manual C&DF test system 12kV
- Auto Oil Breakdown Voltage Tester 80kV / 100kV
- Motorised Oil BDV set 0-100kV
- Automatic Oil Resistivity & DF test system
- Insulation Testers (10M to 15T, 2% accuracy)
- High Voltage Breakdown testers (10kV-50kV)
- SF6 Gas filled Standard Capacitors (upto 1000kV)