# 9230/30/9-PD

## Coupling capacitor 30 kV for partial discharge measurement

*Datasheet*



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Current and voltage – our passion

Designed by Tettex

# General Description

The coupling capacitor type 9230/30/9-PD includes a high voltage capacitor, a high voltage filter and a measuring impedance in a compact design. It is optimized for measuring partial discharges together with the PD detector DDX 9121b.

A half-T filter incorporated with the high voltage electrode not only attenuates any interference from the power supply, but also increases the sensitivity of the PD measuring circuit. The filter is protected from overvoltage by a mechanical spark-gap.

| Features | Advantages |
|---|---|
| ▪ HV filter<br>▪ Coupling capacitor<br>▪ Measuring impedance AKV 9310 | ☑ All in one solution including the coupling capacitor, the HV filter, and the measuring impedance ready to plug into PD detector and start the measurement. |
| ▪ High stability in capacitance values<br>▪ Guaranteed optimal frequency bandwidth<br>▪ PD free (< 1 pC) | ☑ Highest accuracy results – large measurement frequency bandwidth, high stability in capacitance values with frequency and temperature guarantee a consistent and reliable measurement. |
| ▪ High capacitance (9 nF) | ☑ High capacitance provides better sensitivity (Signal to Noise Ratio) while measuring on test objects with large capacitance. |

# Applications

- Distribution transformers (LV/MV)
- Instrument transformers (LV/MV)
- Rotating machines
- Switchgears (LV/MV)
- Surge arresters (LV/MV)
- Bushings (LV/MV)
- Components testing
- Research and development

# Scope of Supply

- Coupling capacitor with embedded HV filter and measuring impedance
- Test certificate
- Operating manual

# Technical Data

| Signal generation | |
|---|---|
| Voltage | 30 kV |
| Capacitance | 9 nF +/-5 % |
| PD level | < 1 pC |
| Max. current | 8 A (continuous) |
| Filter typical attenuation (with 1 nF load) | 30 dB (40 – 1000 kHz) |

| Environmental | |
|---|---|
| Operating temperature | 0 °C … +50 °C |
| Storage temperature | -20 °C … +70 °C |
| Humidity | 5 ... 90% r.h., non-condensing |

| Mechanical | |
|---|---|
| Dimensions (W x D x H) | 550 x 550 x 690 mm (21.7 x 21.7 x 27.2 in) |
| Weight | 31 kg (68.4 lb) |

| Accessories | |
|---|---|
| BNCTwin/20 | BNC twin cable (2 x BNC) 50 Ohm, 20 m |
| BNCTwin/40 | BNC twin cable (2 x BNC) 50 Ohm, 40 m |

# Global Presence

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