9241

High voltage divider for partial discharge or AC/DC measurement

Datasheet

HAEFELY

Current and voltage – our passion

Designed by Tettex

General Description

The divider is sturdy and rugged and for indoor operation. The insulator is a reinforced epoxy fiberglass tube filled with oil. It consists of a capacitor in parallel with a resistor.

Decouples partial discharge signals from a device under test (DUT) when used with an optional measuring impedance (AKV) or with PD detector DDX 9160/9161 with integrated internal AKV.

Measures AC/DC voltages in the industrial frequency range (when used with an optional secondary unit (SEK)).

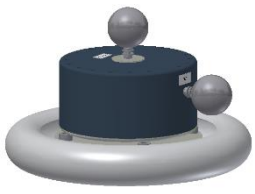
Attenuates interferences coming from the HV side and improving signal to noise ratio (SNR) of the PD measuring circuit (together with an optional HV filter).

The standard design includes a base frame with swivel castors for mobility, a termination box with a BNC connector including surge protection, and an appropriate upper toroid.

Features	Advantages
▪ Base frame with heavy duty swivel casters ▪ Modular design ▪ Measuring impedance for PD measurement (optional) ▪ Secondary Unit for AC/DC measurement (optional)	☑ Save room in the HV laboratory – with our compact all-in-one solution, high voltage capacitor, measuring impedance (optional), secondary unit (optional) high voltage filter (optional) in one single unit, the number of necessary devices for performing a test is drastically reduced.
▪ HV filter (optional)	☑ Increase your sensitivity – with the optional HV filter, interferences from the HV power supply are sufficiently suppressed and signal to noise ratio of the test circuit is improved.
▪ High stability in capacitance values ▪ Guaranteed optimal frequency bandwidth ▪ PD free (see PD specification in Technical Data section)	☑ Highest accuracy results – large measurement frequency bandwidth, high stability in capacitance values with frequency and temperature guarantee a consistent and reliable measurement.

High voltage filter (optional)

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



Applications

- Instrument transformers
- Switchgears (MV/HV/GIS)
- Bushings
- Cables
- Components testing
- Research and development

Scope of Supply

- High voltage divider with base frame and wheels
- Test certificate
- Operating manual

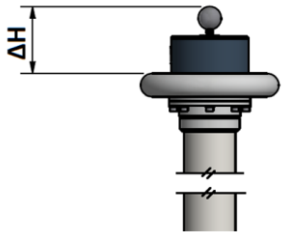
Technical Data

High voltage divider						
Type	Voltage (kVac/kVdc)	Capacitance (nF)	Resistance (GΩ)	Height H (mm)	Width W (mm)	Weight (kg)
9241/100/1	100/150	1	0.5	1079	600	34.8

PD specification	
AC-PD	< 1 pC
DC-PD	No pulses above 10 pC and less than 10 pulses above 1 pC in 10 minutes sliding window

High voltage filter (optional)					
High Voltage filter	Max. current (A)	Inductance (mH)	Typical attenuation (1 nF load; 40 – 1000 kHz) (dB)	Height increasing[1)] ΔH (mm)	Weight increasing[1)] (kg)
9241/HVFIL-3A (≤ 100 kV)	3	110	30	145	5.2

[1)] This height and weight must be added to the 9230 capacitors to calculate the total device weight and height with HV filter.



HV filter detail - 9241/100/1

Environmental	
Operating temperature	-5 °C … +45 °C
Storage temperature	-20 °C … +50 °C
Humidity	5 ... 90% r.h., non-condensing

Options	
9241/AKV9360-DC	Measuring impedance for DDX 9160 or DDX 9161
9241/AKV9360-SEK	Combined measuring impedance and secondary (voltage) unit for DDX 9160 or DDX 9161
9241/SEK463	Secondary (voltage) unit for AC/DC measurement
9241/HVFIL-3A	High voltage filter 3 A

Global Presence

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