



9230

High Voltage capacitors for
Partial Discharge or AC
measurement

Datasheet



HAEFELY

Current and voltage – our passion

Designed by



General Description

The capacitors are of sturdy and rugged and are for indoor operation. Insulation is reinforced epoxy fiberglass tube filled with oil.

Decouples partial discharge signals from device under test (DUT) when used with an optional measuring impedance (AKV/AQS).

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

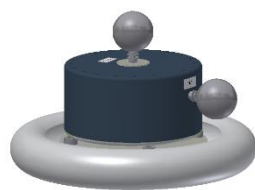
Attenuates interferences coming from the HV side and improving signal to noise ratio (SNR) of the PD measuring circuit (together with an optional HV filter).

The standard design includes a base frame with swivel castors for mobility and an appropriate upper toroid.

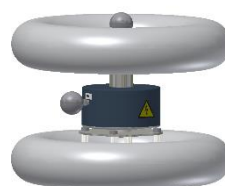
Features	Advantages
<ul style="list-style-type: none"> ▪ Base frame with heavy duty swivel casters ▪ Modular design ▪ Measuring impedance for PD measurement (optional) ▪ Secondary Unit for AC measurement (optional) 	<ul style="list-style-type: none"> ☑ Save room in the HV laboratory – with our compact 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 are drastically reduced.
<ul style="list-style-type: none"> ▪ HV filter (optional) 	<ul style="list-style-type: none"> ☑ 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.
<ul style="list-style-type: none"> ▪ High stability in capacitance values ▪ Guaranteed optimal frequency bandwidth ▪ PD free (< 1 pC) 	<ul style="list-style-type: none"> ☑ 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.



Up to 100 kV



200 kV

Applications

- Power and distribution transformers
- Instrument transformers
- Rotating machines
- Switchgears (MV/HV/GIS)
- Surge arresters
- Bushings
- Cables
- Components testing
- Research and development

Scope of Supply

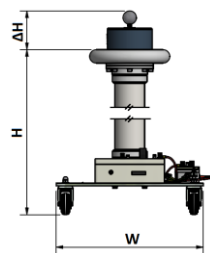
- High voltage coupling capacitor with base frame and wheels
- Test certificate
- Operating manual

Technical Data

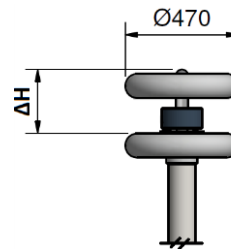
High voltage capacitors						
Type	Voltage (kV)	Capacity (nF)	PD Level at U_n (pC)	Height H (mm)	Width W (mm)	Weight (kg)
9230/25/1	25	1	≤ 1	650	550	21.6
9230/50/1	50	1	≤ 1	650	550	21.6
9230/100/1	100	1	≤ 1	950	550	25.6
9230/100/10	100	10	≤ 1	1520	550	34.0
9230/200/1	200	1	≤ 1	1520	550	35.0

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)
9230/HVFIL-3A (≤ 100 kV)	3	110	30	145	5.2
9230/HVFIL-3A (200 kV)	3	110	30	265	7.6

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



9230/25/1 to 9230/100/1



HV filter detail - 9230/200/1

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

Options	
9230/AKV9310T	Measuring impedance for DDX 9121b
9230/AQS9110a	Measuring impedance for DDX 9101
9230/SEK-AC	Secondary unit for AC measurement
9230/HVFIL-3A	High voltage filter 3 A

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

Europe

HAEFELY AG
Birsstrasse 300
4052 Basel
Switzerland

☎ + 41 61 373 4111
✉ sales@haefely.com

China

HAEFELY AG Representative Office
8-1-602, Fortune Street, No. 67
Chaoyang Road, Beijing 100025
China

☎ + 86 10 8578 8099
✉ sales@haefely.com.cn

This document has been drawn up with the utmost care. We cannot, however, guarantee that it is entirely complete, correct or up to date.
©Copyright HAEFELY/ Subject to change without notice

V2022.02



HAEFELY

Current and voltage – our passion



HIGH VOLTAGE



INSTRUMENTS



EMC

precision.

swiss made.