

Data Sheet no. 6.11/1

Coupling Capacitors for PD Measurement

Application

The standard PD measuring circuits (e.g. Fig. 1) according to IEC 60270 require a coupling capacitor (C_K) in parallel to the test object. It is recommended that the capacitance of the coupling capacitor should be in the same order as that of the test object, but not less than 10% of the test object capacitance.

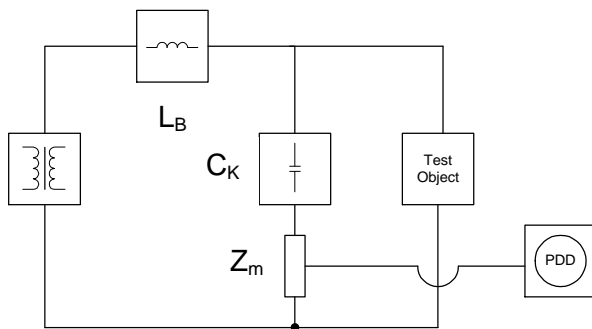


Fig. 1: PD measuring circuit

The coupling capacitor is grounded via the measuring impedance (Z_m), which converts the PD current pulse into a voltage signal. This is measured by the PD detector (PDD).

Realisation

All AC capacitors of the HIGHVOLT type WC (**Data Sheet 1.31**) are PD free and can be used for coupling capacitors (C_K). For the completion of PD measurement, measuring impedances (Z_m) of the types CIL and CIT (**Data Sheet 6.31**) or types LDM (**Data Sheet 6.42**) can be used. Attention is drawn to measuring impedances which allow PD and voltage measurement at the same time (see the same Data Sheets). In that case the coupling capacitor is a voltage divider at the same time.

For further information please contact

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