Quadrupoles

CIL4M



A typical test setup for partial discharge (PD) measurements contains the device under test connected to a high voltage source and a coupling capacitor connected in parallel. A CIL quadrupole (sometimes called measuring impedance) serves to separate the high frequency current of the partial discharge signals from the power frequency current of the capacitor and can be placed in series with either the coupling capacitor or in series with the test object. CIL/V quadrupoles contain a capacitor that is acting as a voltage divider together with the high voltage coupling capacitor. These CIL/V quadrupoles output a low-voltage copy of the applied high-voltage wave for synchronizing the PD detector and for monitoring the quality of the applied high-voltage wave. Optionally, these quadrupoles for voltage measurement can be supplied with a rotary switch to select different built-in divider capacitors or to switch to DC mode. When connected to the measurement tap of transformer bushings, the selectable capacitors expand the applicable voltage range.

Technical Data

Coupling capacitance

range: 600 pF to 2.5 nF

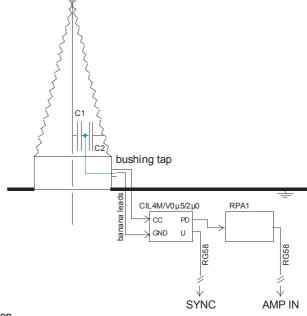
Max. current: 400 mA¹
Inputs: Banana

Output(s): BNC (RG58, 50 Ω)

Size (W x D x H): 64 x 58 x 34 cm,

64 x 98 x 34 cm, or 80 x 125 x 57 cm (excl. connectors)

Weight: ~ 260, 440, or 970 g



limited by the coil, actual value depends on the divider ration chosen