

Data Sheet 6.51/2

PD Measuring Impedance, Type CPL 542 / 543

The HIGHVOLT partial discharge (PD) measuring circuit according to IEC 60270:2000 consists of the test object, the coupling capacitor and the measuring impedance which is placed at the earth side of the coupling capacitor or the test object. Depending on the current through the coupling capacitor or the test object, several measuring impedances of the type CPL 542 (up to 0.5 A and up to 2.0 A) and CPL 543 (up to 5.0 A) are available. In addition, each measuring impedance is equipped with a voltage output to synchronize the PD measuring system to the high voltage.

Table 1: General parameters

Dimensions (approx.) (L x W x H)	mm	150 x 100 x 60
Input connectors		2x Banana
Output connectors		2x BNC for PD and voltage signal

Table 2: Technical parameters

Type	Max. current	Frequency range (PD output)	Low voltage capacitance	Max. output voltage (rms)
	A	kHz	µF	V
CPL 542-0.5A	0.5	20 ... 6000	30	50
CPL 542-2.0A	2	20 ... 6000	120	50
CPL 543-5.0A	5	20 ... 6000	272	50



Figure 1: PD measuring impedance, type CPL 542