

# Data Sheet high performance inductive PD sensors



## HFCT 30mm

Techimp HFCT is an inductive sensor for partial discharge measurements. It is suitable for on/off line PD tests on many electrical systems (cables, transformers, rotating machine, etc..). It has to be applied to the ground connection of the system to be tested.

A BNC termination is available to connect the HFCT to the Techimp PD detection /analyzer unit through a coaxial cable. The arrow indicates the output voltage ( $V_{out}$ ) direction in comparison with the input current ( $I_{in}$ ) direction: when the sensor is installed with the arrow directed to ground junction, the detected voltage signal ( $V_{out}$ ) has the same phase as the input current ( $I_{in}$ ).

#### **BENEFITS**

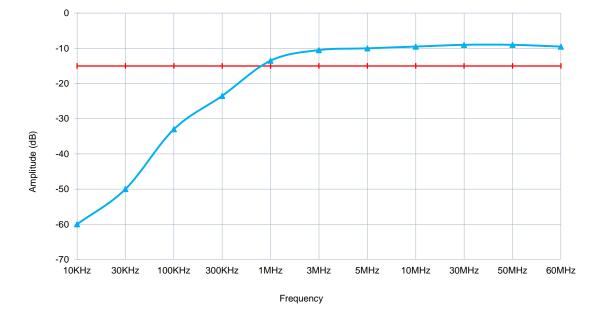
- Maintenance free
- High sensitivity and reliability
- Robust and easy to use
- Safety

#### **SPECIFICATIONS**

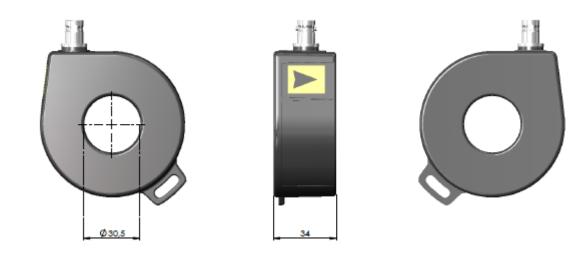
Bandwidth Max Sensitivity (V<sub>out</sub> / I<sub>in</sub> at 42 MHz, 50 Ω load) Load Impedance Vout (no load connected) @ 50Hz Vout (no load connected) @ PD frequency Hole dimension Electric insulation Operating temperature 1 MHz ÷ 60MHz 17 mV/mA 50 Ω 0,6Vpp @ 100A 0,4Vpp @ 100pC Φ 30 mm 25kVpeak (for 1 hour) -20°C +70 C



### FREQUENCY RESPONSE



#### **MECHANICAL SPECIFICATION**





Several different sensors are available, fully compatible with Techimp Global Diagnostic platform. They can be freely combined at customer needs provided they can be applied for the specific application.



