# **HSENS-CC** Capacitive Coupler Partial Discharge Sensor



- Compact Size, Highly Sensitive, Capacitive Coupler for PD Testing and Monitoring
- High Dielectric, Rugged, and Reliable design
- Built-in overvoltage (transient) protection
- Available for wide range of voltage levels 6kV to 45kV
- 1pC PD Sensitivity (ASTM D1868 and IEC 60270)
- Suitable for extreme environment, Hazardous (ATEX) applications
- PD Free Sensor: No PD signals because of Sensor

Capacitive Couplers with wide range of nominal voltage ratings are designed for Partial Discharge (PD) Testing and PD Monitoring as per IEC60270. The sensors are designed for different capacitance levels from 2nF to 80pF meeting requirements of various customers.

HSENS-CC is a Capacitive Coupler specially designed for capturing High Frequency Partial Discharge (PD) signals. The compact size and high dielectric properties of sensor makes it ideal for installation at busbar and within terminal boxes.

The sensor can be installed vertically and horizontally depending on the space limitations. The HSENS-CC sensors come with built-in overvoltage protection with different output connections (BNC/TNC). The sensors can be connected to any HF (High Frequency) PD monitoring system regardless of manufacturers.

Compact sized, Highly dielectric and accurate Partial Discharge sensor for temporary and permanent monitoring of Generators, Motors, Switchgears and Transformers.

### **Applications**

- Continuous Online Partial Discharge Monitoring
- Periodic Partial Discharge Testing and Measurements
- High Voltage Testing during Commissioning
- Generator and Motor PD Testing and Monitoring
- MV Switchgear and Isolated Phase Bus PD Testing and Monitoring
- Transformer PD Testing and Dry Type Transformer PD Monitoring

#### **Benefits**



- Higher sensitivity 1pC increases accuracy of PD detection
- Allow PD testing and Monitoring without the need for outage
- Easy installable, and High Dielectric strength, Safest Sensors
- Shielded Sensor, Noise Immunity
- Built in overvoltage protection keeps the PDM electronics safer
- Suitable for indoor and outdoor installations
- Wider Nominal Voltage and Capacitance levels for different Applications

## **Technical Specifications**

Capacitance	1nF, 1.2nF, 1.5nF, 2nF, 500pF, 80pF (Custom designed - Optional)
PD Sensitivity	1pC
Line Voltage Rating	6kV, 11kV, 16kV, 30kV, 45kV
Line Voltage Frequency	50Hz - 60Hz
Capacitor Type	Mica and Ceramic
Body Material	Epoxy Resin
Output Connection Type	TNC-Type connector; Customized option available
Vibration Testing	Suitable for Generator, Motor and Transformer applications
Withstand Voltages	20kV, 35kV, 70kV, 120kV
Ambient (Operating Temperature)	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
Operating Humidity	95% humidity at 50 °C
Dimensions (in mm)	As per Line Voltage rating; from 125(W) x 95(D) x 90(H) to 250(W) x 165(D) x 450(H)
Weight	As per Line Voltage rating; from 0.5Kg. to 5.5Kg
Install Position	Installed on the study cast aluminum enclosure and connected to the Busbar
Signal Cable	Very low attenuation Coax cable, RG58

## **Ordering Code**



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