

## MCT 085

### High-frequency current transformer for partial discharge measurements on medium-voltage power cables

The MCT 085 high-frequency current transformer (HFCT) is specifically designed for offline or online partial discharge (PD) measurement on medium-voltage (MV) cables.

The MCT 085 has a ferrite core with a diameter of > 28.5 mm (> 1.12 inches), which allows it to be placed around the grounding braid of the MV cable.

The MCT 085 has a very high sensitivity in a wide frequency range and therefore a very good signal-to-noise-ratio. The MCT 085 can observe PD activity in both the MV cable and an attached MV device.

The measuring signal of the MCT 085 is transmitted to the measuring device via a 10 meter (32.80 feet) long coaxial cable. The MCT 085 HFCT can be used as permanently installed accessory with with our MPD 800 PD measurement and analysis system as well as our MONTESTO 200 portable temporary PD monitoring system.

#### Key features

- > Designed for offline or online PD measurement on medium-voltage (MV) cables.
- > Multiple mounting options also allow for permanent installation.
- > High sensitivity in a wide frequency range for a very good signal-to-noise-ratio.
- > Intended for use with MPD 800 and MONTESTO 200 systems.

#### Technical specifications

- > Frequency range (typical): 65 kHz ... 30 MHz
- > Transfer impedance at 300 kHz and 50  $\Omega$  load impedance (typical): 18.6 mV/mA
- > Outer dimensions (width x height x depth):  
85 mm x 85 mm x 35 mm /  
3.34 inches x 3.34 inches x 1.38 inches
- > Inner dimensions (hole):  $\varnothing$  > 28.5 mm ( $\varnothing$  > 1.12 inches)
- > Connector for coaxial measuring cable:  
10 m cable with TNC
- > Temperature range -20 °C...70 °C / -4 °F...158 °F



OMICRON is an international company that works passionately on ideas for making electric power systems safe and reliable. Our pioneering solutions are designed to meet our industry's current and future challenges. We always go the extra mile to empower our customers: we react to their needs, provide extraordinary local support, and share our expertise.

Within the OMICRON group, we research and develop innovative technologies for all fields in electric power systems. When it comes to electrical testing for medium- and high-voltage equipment, protection testing, digital substation testing solutions, and cybersecurity solutions, customers all over the world trust in the accuracy, speed, and quality of our user-friendly solutions.

Founded in 1984, OMICRON draws on their decades of profound expertise in the field of electric power engineering. A dedicated team of more than 900 employees provides solutions with 24/7 support at 25 locations worldwide and serves customers in more than 160 countries

For more information, additional literature, and detailed contact information of our worldwide offices please visit our website.

[www.omicronenergy.com](http://www.omicronenergy.com)

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