

Partial Discharge Testing on Generators and Motors

Summary: Get an introduction to the basics of partial discharge and to the setup for conventional and unconventional measurements. Learn how to make full use of its software tools for detecting, measuring and documenting partial discharge in primary assets.

Products: MPD-Family

Prerequisites: Knowledge of electrical engineering

Duration: 2.5 days

Language: English

Code: C.0174.BCX



Objectives

- > Gaining a better insight into the theory and origin of partial discharge
- > Understanding both conventional and unconventional measurement principles
- > Performing time-efficient measurements for comprehensive insulation diagnostics on different assets
- > Interpreting the measurement results to draw conclusions on the insulation for condition-based maintenance planning



Content

- > Basics, origin and different types of partial discharge
- > Theory about HV breakdown in different insulation systems
- > Measurements in time domain and frequency domain (FFT)
- > Conventional measurement methods as per IEC 60270:2013
- > Measurements with high-frequency current transformers (HFCT) and UHF range
- > Applicable standards for PD measurements on different assets
- > Offline and online measurement on different assets
- > Performing measurement using 3PARD and 3FREQ methods
- > Noise suppression techniques for handling of high interference levels (software & hardware approaches)
- > Assessment and interpretation of PD patterns for different assets
- > Practical measurement examples about calibration, 3PARD, 3FREQ on different assets
- > Analyzing case studies of most common defects in different assets



Products

- > MPD 500/600 and accessories
- > OMS 605
- > MPD software with Basic and Advanced package



Audience

Technical staff involved in the planning or assessment of the condition monitoring of Generators and Motors