

Partial Discharge Testing on Power Transformers, Generators and Motors with the MPD 500/600

Summary: Become familiar with both the principles of partial discharges and their measurement with the MPD test set. Learn how to identify fault types and fault locations to assess the condition of your assets. Get to know advanced testing techniques in hands-on sessions on special training equipment.

Products: MPD-Family

Prerequisites: Knowledge of electrical engineering

Duration: 2.5 days

Language: English

Code: C.0064.BBA



Objectives

- > Measuring partial discharge on high voltage devices with the MPD 500/600
- > Performing measurements to determine the insulation condition and identify fault types and fault location
- > Evaluating aging and deterioration processes in primary assets by partial discharge measurements
- > Monitoring the quality of the production process by performing measurements on assembled parts
- > Applying partial discharge technology to design or redesign devices exposed to high voltage



Content

- > Understanding the physics behind partial discharges
- > Getting to know the MPD system and understand how partial discharges are measured
- > Connecting the MPD to high voltage devices, such as power transformers, generators, motors
- > Performing partial discharge tests according to IEC 60270 and the IEC standard of the test object
- > Performing real partial discharge hands-on sessions
- > Interpreting partial discharge test results
- > Getting to know PRPD, 3PARD and 3CFRD/3FREQ diagrams to discriminate noise
- > Classifying partial discharge types and determine the risk for the test objects
- > Synchronous and multichannel partial discharge testing for optimized test results
- > Performing measurements in frequency and time domains
- > Handling interferences (unit gating, amplitude gating, dynamic gating)
- > Getting to know the software of the MPD 500/600 for efficient measurements



Products

- > PRPD/fingerprints, 3PARD, 3FREQ, Q(V), trend analysis, RIV, gating of interferences
- > PDL 650 (acoustic partial discharge locator)
- > MPD 500/600 and accessories



Audience

Technical staff from electric utilities, railway and service companies as well as manufacturers involved in partial discharge testing