

Power Transformer Diagnostics with TESTRANO – time-optimized & safe through single test setup and three-phase injection

Solutions: TESTRANO

Summary: After an introduction into the maintenance of transformers, you will expand your knowledge in theory and practice with the TESTRANO 600 means of turns ratio, winding resistance and capacitance or power/dissipation factor measurements. Practical measurements will enable you to gain immediate testing experience.

Duration: 2 days

Language: English

Code: C.0059.BBD



Objectives

- > Overview of the structure of the transformer insulation, the bushings and the tap-changer
- > Analysis of the condition of power transformers to fully exploit the lifetime of your asset
- > Carry out time-optimized tests and diagnostics in the substation, test facility or workshop
- > Fast, simpler and safer tests for the condition assessment of your power transformer



Content



- > Different negative influences on the expected lifetime of a transformer



- > Overview of frequent defects in transformer components and their fault patterns



- > Introduction to the construction of the transformer insulation, the bushings and the tap-changer



- > Overview of common conventional measurement methods such as turns ratio, winding resistance, short-circuit impedance and demagnetization of the transformer



- > Theoretical background to capacity and loss factor measurements on transformers and bushings



- > Automatic test solutions for single-phase or three-phase measurements using the Primary Test Manager (PTM) software



- > Evaluation of the measurement results by means of practical examples



- > Assessment of diagnostic measurements and recognize possible defects and influences



- > Analysis of case studies including frequent defects

Products



- > TESTRANO 600



- > Primary Test Manager (PTM)



Audience

Technical staff from utilities or companies working mainly in commissioning or maintenance testing of power transformers