

## Power System Protection Testing with the OMICRON Test Universe

**Summary:** Learn how to efficiently test overcurrent, distance and transformer differential relays with the OMICRON Test Universe. Get familiar with the test procedure in hands-on and theoretical sessions. Check back with the trainer on the relay model and profit from bringing your own protection relay to class.

**Prerequisites:** Basic knowledge of power system protection

**Duration:** 3 days

**Language:** English

**Code:** C.0047.AAE



### Objectives

- > Performing commissioning, trouble-shooting and periodic tests of protection relays
- > Testing overcurrent, distance and transformer differential relays with the OMICRON Test Universe
- > Creating and modifying automated test plans and customized test reports
- > Using the OMICRON Test Universe from scratch



### Content

- > Quick current and voltage output for easy wiring tests
- > Configuration of the test object parameters and the test hardware
- > Creating test plans which adapt automatically to newly entered relay settings
- > Creating a flexible test plan for overcurrent relays including testing pick-up values and trip times
- > Hands-on testing of the overcurrent protection function
- > Creating a flexible test plan for distance relays including testing the trip times and zone reaches as well as switch on to fault (manual close) and auto-reclosing
- > Hands-on testing of distance relays
- > Creating a flexible test plan for transformer differential relays including testing the stability during external faults, the tripping characteristic, the trip times and the harmonic restraints
- > Hands-on testing of transformer differential relays



### Products

- > Control Center, QuickCMC, Ramping, Pulse Ramping, Overcurrent, Advanced Distance, State Sequencer, Autoreclosure, Advanced Differential
- > CMC-Family



### Audience

Technical staff from electric utilities, service companies and manufacturers involved in protection testing