## Power System Protection Testing with the OMICRON Test Universe

Summary: Learn how to efficiently test overcurrent, distance and transformer differential relays from scratch with the OMICRON Test Universe. Get familiar with the test procedure in hands-on and theoretical sessions.
Products: CMC-Family
Prerequisites: Basic knowledge of power system protection
Duration: 3 days Language: English Code: C.0047.AAF

## 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

