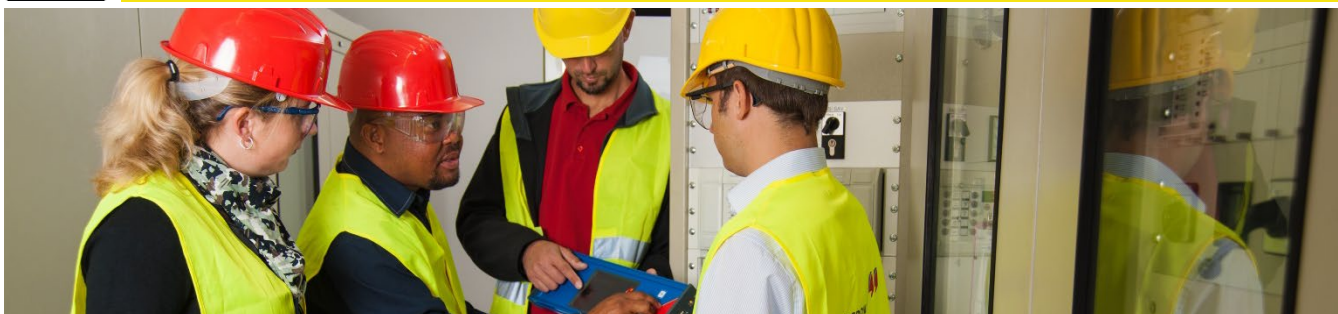







## Power System Protection Testing with the OMICRON Test Universe



 3 days

 English

 Cprs15en

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. Work with special test set-ups that simulate the substation in the classroom.

### 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

### Solutions

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

### Audience

Technical staff from utilities, transmission and distribution networks, railway grids, service companies and manufacturers involved in protection testing

### Prerequisites

Basic knowledge of power system protection, or ideally attendance of the course Cprs51en