



## Circuit breaker diagnostics with CIBANO 500

 1 day

 English

 Ccbr03en

Get to know the CIBANO 500 and the measurement principles for circuit breakers. Learn how to perform efficient circuit breaker tests in hands-on and theoretical sessions. Simplify your tests with the PTM (Primary Test Manager)

### Objectives

- ▶ Perform commissioning, troubleshooting and periodic tests of different types of circuit breakers
- ▶ Carry out all relevant circuit breaker tests with one single test setup by using optional accessories
- ▶ Perform straightforward assessment circuit breaker parameters with reference results

### Content

- ▶ Typical reasons for failure of circuit breakers
- ▶ Reasons for maintenance and testing of different MV and HV circuit breakers
- ▶ Overview about different types of MV and HV (live-tank, dead-tank and GIS) breakers and its components
- ▶ Comparison of conventional vs. time-efficient circuit breaker testing with CIBANO 500
- ▶ Typical tests on MV and HV circuit breakers such as static contact and dynamic resistance measurement (DRM), timing tests for main/auxiliary contacts and pre-insertion resistors, minimum pick-up tests, coil and motor current, contact travel (motion) of main contacts
- ▶ Safely perform timing tests on Gas Insulated Switchgears (GIS) with both-sides grounded using Current Sensor Measurement (CSM) method
- ▶ Automatic test execution of comprehensive circuit breaker tests with CIBANO 500 and Primary Test Manager (PTM)
- ▶ Evaluation of the measurement results by means of practical examples
- ▶ Analyzing case studies of most common defects on various circuit breakers

### Solutions

CIBANO 500  
CB MC2, CB TN3 and accessories  
Primary Test Manager (PTM)

### Audience

Technical staff involved in circuit breaker testing in utilities, transmission, distribution and generation networks, railway grids, service companies and manufacturers.

### Prerequisites

Knowledge of electrical engineering