



SynchroTeq[®] II

Circuit Breaker Synchronous Control

SynchroTeq II accurately controls the timing of circuit breaker opening and closing to minimize the resulting current and voltage transients. It is marketed under licence by Snemo.

Successful synchronous control

SynchroTeq II is a modular system designed for synchronous control of circuit breakers. It monitors critical signals, predicts interrupting device response and determines the optimum point on the voltage wave to operate the circuit breaker, thus reducing or eliminating the effects of transients.

SynchroTeq II monitors and records inrush current, re-ignition current and voltage on each phase after each attempt at synchronous control operation, confirming whether the operation has succeeded or failed by comparing the values recorded with predefined thresholds.

Optimal circuit breaker operation requires compensating for variations in key parameters (temperature, pressure, auxiliary voltage, etc.). SynchroTeq II's timing algorithm thus includes a compensation function that ensures optimal performance over a wide range of operating conditions.

Other features:

- > Sequential event recording (SER): The user can confirm and analyze synchronous control operations in the circuit breaker from data recorded by SynchroTeq II.
- > Waveform recording (oscillography): SynchroTeq II records waveforms for the last four synchronous control operations so that users can conduct post-mortem analyses.
- > User-friendly interface: The user interface provides easy access to all system parameters and to operation results (displayed in tables or graphs).
- > Self-monitoring: SynchroTeq II monitors its internal operations and the circuit breaker's state. If it detects that the unit is non-functional or has failed to complete a synchronous control operation, SynchroTeq II locks itself in a disabled state to prevent other synchronous control attempts and must be re-enabled before any further attempts are possible.

Efficient, cost-saving solution

SynchroTeq II avoids the use of switching resistors, thus eliminating auxiliary chamber maintenance costs. It also improves power quality and reduces stress on breaker contacts.

For routine circuit breaker operation, successful synchronous control minimizes inrush currents during closing and reignition during opening.

For more information please contact:

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