

SPRECON[®]-E-EREG

Arc Suppression Coil Controller

sprecher
automation

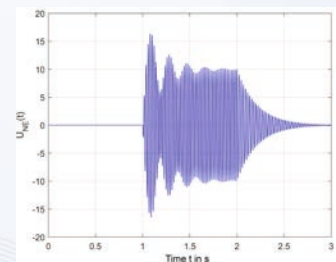
Neutral point treatment is one of the key factors in the design of distribution networks to ensure a safe and reliable power supply. The main benefit of compensating the fault is to maintain the power supply during the statistically most frequent fault case, i.e. single-phase faults or earth faults. The arc suppression coil (Petersen coil) is set preventively in healthy networks in order to reduce damage at the fault location in the event of an earth fault.

FUNCTIONS OF A MODERN CONTROLLER

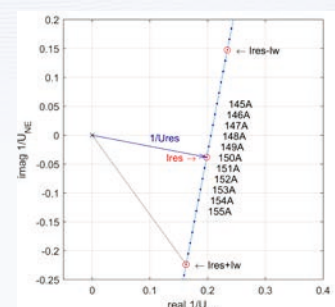
- Reduction of number and duration of coil movements
- Quick detuning detection
- Determination of network parameters in symmetrical networks with very low zero sequence voltage
- Regulation based on detuning and/or maximum continuous zero sequence voltage
- Improved triggering and tuning through enhanced method (patented DiSpi method)
- Calculation of actual detuning, without crossing the resonance point
- Multi-stage current injection with automatic phase selection
- Connecting and disconnecting an external resistor

By integrating into the SPRECON platform, Sprecher Automation can realise further advantages for its use:

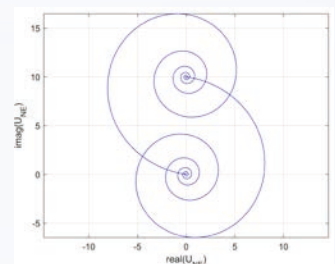
- Comprehensive security concept that meets the high demands of critical infrastructure (e.g. RBAC, Syslog or digital certificates)
- Enhanced analytical capabilities (from statistical metrics to detailed records in COMTRADE format)
- Full digital integration of the controllers into the station control technology in order to control the regulators remotely (e.g. manual coil movement from the control room), operate them (via a web interface), and process all measurement data flexibly via the station control technology



On/Off oscillation – Time signal



Inverse locus curve in general position



On/Off oscillation – Complex level

