

1 STANDARDS

- 1.1 DIN VDE 0141
- 1.2 DIN VDE 0101
- 1.3 DIN VDE 0228
- 1.4 EN 50522
- 1.5 EN 61936

2 TYPE OF SYSTEM GROUNDING

- 2.1 ISOLATED SYSTEM
- 2.2 RESONANT EARTHED SYSTEM
- 2.3 LOW OHMIC EARTHED SYSTEM

3 MEASUREMENTS

- 3.1 ZERO SEQUENCE IMPEDANCE
- 3.2 INDUCTIVE INTERFERENCE
- 3.3 EARTHING IMPEDANCE

4 DIMENSIONING

- 4.1 EARTHING TRANSFORMER
- 4.2 RESISTOR, REACTOR
- 4.3 GROUNDING SYSTEM

5 EARTH FAULT PROTECTION

- 5.1 UNIDIRECTIONAL PROTECTION
- 5.2 WATTMETRIC METHOD
- 5.3 RESIDUAL CURRENT RISING
- 5.4 TRANSIENT METHOD
- 5.5 HARMONIC METHOD
- 5.6 PULS-MODULATION
- 5.7 CT CONNECTION AND INFLUENCE
- 5.8 DIRECTIONAL ZERO SEQUENCE TIME PROTECTION
- 5.9 DISTANCE AND DIFFERENTIAL PROTECTION

6 EXCHANGE OF EXPERIENCES

- 6.1 BEHAVIOUR OF EARTH FAULTS
- 6.2 CRITICAL CONDITIONS
- 6.3 PROJECT EXAMPLES

The knowledge of GSC power engineering is based on successfully completed projects concerning conception and design, calculation and commissioning. In this manner the participants will receive well-founded theoretical basics and backgrounds as well as practical experiences.