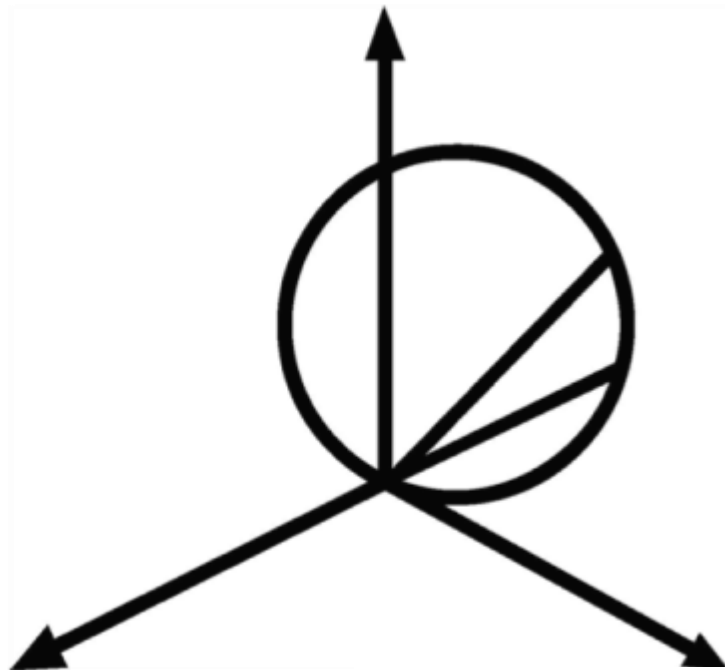


Swedish Neutral Seminar 2013

Arc Suppression Coil
1 day



Swedish Neutral AB

Seminar Neutral Treatment – Arc Suppression Coil

An Arc Suppression Coil is a device that is connected to the transformer neutral to limit the capacitive earth fault current flowing when an earth fault occurs in a high or medium voltage network. This method of system grounding is called resonance grounding. Resonance grounding has been used in Central and Eastern Europe as well as in the Scandinavian countries for many decades. The Arc Suppression Coil was invented in 1917 by Waldemar Petersen and is therefore also referred to as a Petersen Coil. The Petersen coil chokes the fault current below the level of self-extinction for overhead networks (< 35A). By this action all transient faults in overhead networks can be cleared without feeder tripping. The basic principle of the Arc Suppression Coil has remained unchanged since 1917 and its excellent properties have been mirrored by low outage rates in the networks where it has been used.

The Arc Suppression Coil in combination with automatic tuning and earth fault location provides the best earth fault protection traditional neutral treatment has to offer.

Swedish Neutrals seminar “Arc Suppression Coil” offers a concise introduction to the well-established and superior traditional resonance grounding concept.

Target Audience

Utilities distributing electricity in a high voltage network.

Industries maintaining their own high voltage network.

Goal of the Seminar

To gain good basic understanding of resonant earthing, the different types of Arc Suppression Coils and the tuning of the Arc Suppression Coil.

Venue

The SN Seminar Neutral Treatment – Arc Suppression Coil & Earth Fault Protection is held in Swedish Neutrals facilities in Stockholm – Kungsängen, Sweden.

Contact information

Please send your enquiry to mail@swedishneutral.se

Program Materials

Each participant will receive:

- GFN User Manual
- Seminar Power Points & materials
- Copy of NMTerm for personal use

Content of the Seminar

Day 1

- **Introduction Neutral Treatment**
 - Grounding concepts of the world
 - Resonant Earthing

- **Arc Suppression Coil**
 - Why is the ASC needed?
 - How to specify the size of the ASC
 - The different available ASC designs
 - U0-Injector
 - Neutral Earthing Resistor
 - Installing the ASC in the substation
 - When is a Grounding Transformer needed?
 - Commissioning the ASC

- **Automatic Tuning of the Arc Suppression Coil**
 - Why is an Automatic Tuning Device (ATD) needed?
 - Important settings of the ATD
 - Using the terminal software of the ATD (NMTerm)