

NEUTRAL POINT THREE-PHASE COILS (NEUTRAL POINT COILS)



Neutral point coils (zig-zag coupling) are used to earth a neutral via high impedance..

The neutral point three-phase coils are located in the HVB/HVA source stations and connected to the MV network. Neutral point three-phase coils allow:

- The creation of an artificial neutral point
- The introduction of a defined impedance between this neutral point and the earth, in order to limit the current during phase-earth faults on the network.

Main characteristics

- Isolation voltage from 7.2 kV to 36 kV.
- Hermetic structure, in a mineral oil bath, for an exterior installation.
- Frame supporting a crystal-oriented iron-silicon sheet single-phase magnetic circuit.
- Copper coils.
- Insulation made of class H metal aramid fibres.
- ONAN cooling mode.
- Lifting by the 2 rings located on the cover.

Advantages

- Operating reliability: Exceptional mechanical resistance in terms of electro-dynamic force due to coils bonded with epoxide resin*.
(*Qualification tests defined by the EDF HM-24/94/021 B specification dated 17/07/95, conducted in the Renardières Electrical Engineering Laboratory).
- Endurance of inductances against thermal shocks caused by repeated neutral currents during operation (solid insulation with a thermal index > 180°)

Uses

- Rural environment
- Peri-urban environment
- Urban environment