

# SINGLE PHASE DRY-TYPE FREQUENCY INJECTION TRANSFORMERS



Dry type frequency injection transformer installed in the HVB/HVA source stations in the building, enabling the injection of remote control signals.

#### Mail characteristics:

An injection unit comprises 3 transformers, positioned side-by-side, inside, in a well ventilated room (ambient temperature between - 5°C et + 40°C), free of dust and condensation.

- Transformers for interior installation.
- Crystal-oriented iron-silicon sheet magnetic circuit
- Coils with copper or aluminium conductor strips.
- Insulation made of class H metal aramid fibres.
- AN cooling mode.
- Lifting by the 2 rings located on the top of the device.
- Power throughput 40 MVA: MV network voltage of 15 or 20 kV Three-phase short-circuit current at 50 Hz of 12.5 kA
- Power throughput 70 MVA: MV network voltage of 15 or 20 kV Three-phase short-circuit current at 50 Hz of 22 kA
- Injection frequency 175/188Hz
- The size and the design of the connection ranges of these devices permits interchangeability with injection transformers belonging to the previous technical levels without needing to modify the existing installation.

#### **Advantages**

## This robust and reliable equipment offers excellent performance:

- Ability to withstand thermal shocks\* (sudden load variation).
- Very good resistance to humidity and dust accumulation\*.
- Excellent electric arc and fire performance\*.
  \*Validation conducted in an independent laboratory through the most stringent tests specified in standard NF C 52-726, used to classify C2, E2 an F1 technology. Qualification tests defined by the EDF HM-24/94/021 B specification dated 17/07/95, conducted in the Renardières Electrical Engineering Laboratory.

## In terms of equipment:

• Vibration-resistant contacts used to isolate the transformer from the floor and to reduce the noise level during the transmission of 175 or 188 Hz signals (after winding the device and without disassembling the rollers).

• Partitioning kit comprising M1 fire resistant isolating panels, to ensure the required dielectric distances between the devices during excessive confinement (optional).

## Uses

- Peri-urban environment
- Urban environment