WE TRANSFORM
ENERGY INTO
SUSTAINABLE GROWTH

MAGNETRON

TECHNICAL SHEET
CLASS F DRY TYPE TRANSFORMERS

CARBON NEUTRAL

UN GLOBAL COMPACT

TECHNICAL SHEET:
CLASS F DRY TYPE TRANSFORMERS

Application:

Oil-filled transformers have traditionally been the most commonly used option in electrical grids, but a number of issues in relation to the environment, fire hazards, control of leaks and general maintenance,
have led to the evolution and increased use of dry-type transformers in areas such as shopping malls, public buildings, hospitals, tunnels, banks, ships, mining, subways (metro), oil platforms and, in general, sites that are generally open to the public.
Dry-type transformers are encapsulated in an epoxy resin and can be used even at high humidity and pollution levels, eliminating the risk of fire and emission of harmful and toxic substances. They are fully manufactured with flame-retardant and self-extinguishing insulating materials.

Scope of the offer:

Manufactured in compliance with applicable NTC and IEC standards and/or individual customer specifications.

Ratings (kVA):
Three-phase 15 kVA to 30.000 kVA

Basic Insulation level:
Three-phase: Up to BIL 145 kV

Dry-type resin-encapsulated transformers are confined in cells that protect them from weather-related phenomena, with the type of IP1 protection requested by the customer.
This transformer is designed to operate under adverse conditions. The reliability of the equipment is shown below:

E2, environmental class: the transformer will be subjected to considerable condensation or to intense pollution or a combination of both.

C2, climate class: Outdoors installation. The transformer is designed to operate, be transported and stored at temperatures as low as -25°C

F1, behavior in case of fire: Transformers subject to fire hazards require reduced flammability. The fire must self-extinguish within a given period, to be agreed between the manufacturer and the customer. Emissions of toxic substances and opaque smoke must be minimized. The combustion materials and products must be free from halogen compounds and contribute only minimal amounts of thermal energy to an external fire.

Typical construction mode:

Coils:

- Dry-type transformers are built with circular windings
- The insulation system of epoxy-resin encapsulated transformers is designed using 155° Class materials, guaranteeing optimal resistance to load variations and ambient temperature changes.

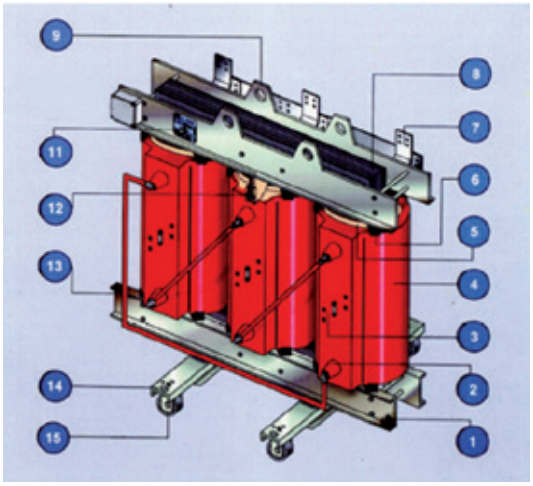
Cores:

- Materials: Grain-oriented silicon electrical steel sheet with insulating coating on both sides and with high magnetic permeability.
- The cut and composition is of the 45 degree type, with step-lapped joints, keeping losses and audible noises low.

Cells:

- Designed to be included within the cabinets or cells of high-voltage substations, to be provided in accordance with the customer's requirements.

Accessories and protection devices:



	DESCRIPCION
1	Grounding terminals
2	Medium-voltage insulator
3	Medium-voltage regulation
4	Medium-voltage winding
5	Low-voltage winding
7	Confinements
8	Low voltage busbars
9	Magnetic core
11	Nameplate
12	Thermal temperature control sensors
13	Yoke clamp
14	Moving lugs
15	Omni-directional orthogonal wheels

Optional accessories

- Centralized sensor box
- Installation for connection to socket outlets
- Connection for socket
- Protection cabinet
- Axial forced ventilation
- Shock absorber set
- Thermometer with contacts

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GENERATING WEALTH WITH *SOCIAL CONSCIENCE*

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