

DRY TYPE TRANSFORMER



BENEFITS DRY-TYPE: SAFE AND ENVIRONMENTAL FRIENDLY TRANSFORMERS

- High resistance to short circuits.
- Climatic areas with extremely low ambient temperatures (down to -50° C).
- Special and tailored design, installed altitude ≥ 4500 m.
- Hot-dip galvanized screws.
- Low and High-temperature-resistant insulation.
- Thin insulation structure, cold and thermal shock for crack resistance.
- customized transformers can meet a variety of high altitude requirements.
- Maintenance-free fastening body structure, keep reliable in the long-distance transport and operation.
- Environmentally friendly thanks to non-flammable and self-extinguishing materials. Free from the emission of toxic gases, low noise and with low electromagnetic pollution.
- Partial discharge is $< 10\text{pC}$, Low partial discharge ensures long service life.
- Excellent heat dissipation for enhanced cooling efficiency.
- Dry-type transformers are specially designed for use in high humidity and harsh environmental conditions.
- Superior reliability reduced thermal and mechanical stress.



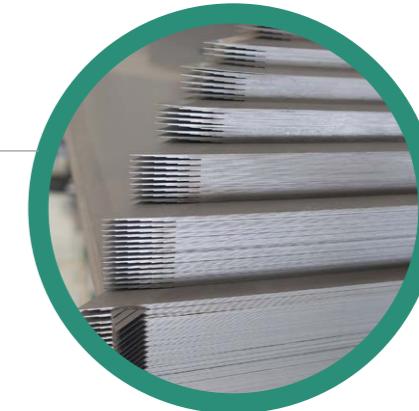
TECHNICAL CHARACTERISTICS

Main Specification

Transformer Type	Cast resin
Rated capacity	Up to 25MVA
Rated voltage	Up to 36kV
Frequency	50 or 60Hz
Phase	Single phase or three phase
Winding material	Copper, Aluminum
Insulation class	F, H
Vector group	Dyn11, Dyn5, YNd1d1 etc.
Cooling	AN, AF, ANAN, ANAF, AFWF
Protection Enclosure	IP00 to IP54
Climate	C3, C4, C5
Environmental	E2, E3, E4
Fire behaviour	F1
Standard	IEC, AS, EN, IEEE/ANSI, GOST
Altitude	Max 4500m



PRODUCT FEATURES



Iron Core:

The three-limb iron core is made of oblique cut Grain-oriented, seven-step silicon steel laminations insulated on both sides, guaranteeing low losses and low noise. These values are even improved by laser treatment. It is protected on the surface with a flash-proof varnish in order to prevent the sheet from corrosion and to reduce the noise.



Clamping frame:

It is processed by CNC cutting, bending and then one-time punch forming, the hole's size is accurate and the appearance looks delicate.



Dry Type Transformer Winding

The winding coil is made of oxygen-free copper, class H for main insulation materials and coil is insulated by NOMEK paper of DUPONT brand, LV winding is isolated by copper foils. All these make the heat-resistant up to 220 C, with excellent overload capacity and low loss, but high efficiency.

Resin guarantees the best dielectric performance, short-circuit resistance, and long-term reliability, customized up to 25mva transformer winding. Designed with HV/LV foil winding and round wire winding.



High voltage coil

This is vacuum-cast with epoxy resin with excellent mechanical and electrical performances using conductors with excellent conductivity to be outstanding in short circuit strength and insulation performance.



Low voltage foil coil

The standard low-voltage winding twine by copper foil (or aluminum foil) with interleaved DMD which bear less dielectric stress. The assembled coils are then oven-cured to form uniformly bonded solid cylinders that are anti-moisture. Such winding has excellent dynamic stability under shortcircuit condition.



PROJECTS

Country: Australia

Double split dry type transformer for solar farm

High efficiency and energy saving: The structure of the double-split transformer can reduce losses during power transmission and improve power transmission efficiency.

Limit short-circuit current: When one branch of the split winding is short-circuited, the short-circuit current will pass through the semi-through impedance, which helps protect system equipment from the impact of short-circuit current.



Country: Spain

Dry type transformer for University

Safety, environmental protection, high efficiency and energy saving, easy maintenance, low noise, compact structure, moisture-proof and dustproof, strong overload capacity, dry design without insulation oil, completely eliminate oil leakage, fire risk, in line with campus fire safety standards.



Country: Russia