Power Transformer



S51 Thermal Power Generation Transformer 161kV 728MVA



S52 Furnace Transformer 6.6kV 8MVA



S53 Thermal Power Generation Transformer 345kV 505MVA



S54 Shunt Reactor 345kV 100MVAR



S55 Power Transformer 154kV 38MVA



S56 Power Transformer 115kV 112MVA



S61 Power Transformer 120kV 47MVA



S62 Thermal power generation transformer 345kV 340MVA



S63 Power Transformer 22kV 15MVA



S64 Power Transformer 110kV 100MVA



S65 Power Transformer 345kV 500MVA



S66 Furnace Transformer 11KV 25MVA

345kV-1000MVA of Transformers; 345kV-100MVAR of Shunt Reactors; 33kV-70MVA for various of arc Furnace Transformers

Model: DORADO
KEYWORD:oil-immersed power transformer, dry-type power transformer, power transformer for power transmission, power transformer for industrial application, high voltage power transformer.

1. Power transformer needs a customized design. The manufacturing period typically ranges from 1 to 24 months, depending on the specification, material preparation, testing conditions, and approval of permissions.
2 The windings of our power transformers are designed for surge proof. By utilizing the voltage oscillation analysis program, the voltage oscillation is calculated in the windings which a simulated surge is applied. An appropriate insulation arrangement is adopted for the windings according to the results of simulation to ensure its ability of surge-proof.
3 For heating the interior (core and winding assembly) rapidly and evenly, we utilizes the most advanced vapor-phase drying oven to make the insulation materials be dried thoroughly without sacrificing its performance.
4 Avoiding the local overheating by leakage flux, some appropriate preventive means are adopted, for example, equipping a magnetic shield on the tank, according to the magnitude of leakage flux calculation by analysis software.
5 The ampere-turns distribution between primary and secondary windings is designed as balanced as possible according to the detailed short-circuit stress calculation by analysis software. Special attention is paid for the selection of materials and the pre-compressing process of the windings to provide sufficient strength of windings against the short-circuit electromagnetic mechanical force.

Notheast Propulsion Trading Company

Distribution Transformer



Power Transformer



Life, Work, Entertainment Together

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Distribution Transformer



Type 92 Silicon Steel Sheet Oil-Immersed Transformer



Sealed Pole-Mounted Distribution Transformer



Pavilion-type Distribution Transformer



Type 93 Amorphous Steel Oil-Immersed Transformer



Type 94 Harmonic Reduction Transformer



Type 95 Environmentally Friendly and Energy-Saving Amorphous Vegetable Oil Transformer



Type 96N1 Amorphous Gas-Insulated Transformer



Type 97 H-class insulated dry-type transformer



Type 98 Silicon steel sheet resin type dry-type transformer



Type 99 Amorphous Steel Resin Type Dry-Type Transformer

92 Silicon Steel Sheet Oil-Immersed Transformer

Voltage: 36kV (inclusive) and below
Capacity: 3kVA~8000kVA
Features:
1. Lap-type wound core
2. Sheet conductor coils
3. High-temperature resistant insulation material
4. Corrugated heat sink
5. Corrugated air-cooled structure (patented corrugated sheet air-cooled outer casing, No. 176002)

93 Amorphous Steel Oil-immersed Transformers

Voltage: 36kV (inclusive) and below
Capacity: 5kVA~6000kVA
Features:
1. Ultra-high efficiency
(1) Iron loss is 20%~30% of that of traditional silicon steel sheets
(2) Optimized coil design reduces copper loss
(3) Finance return in 3~4 years, with continued benefits after the balance lifespan
2. Environmental benefits
(1) Reduced losses ◦ Reduce SO2, CO2 and NOx emissions
(2) Mitigates acid rain and the greenhouse effect, resulting in a better environment
3. Excellent harmonic voltage resistance

94 Anti-Harmonic Distribution Transformer

This transformer is designed to address the harmonics generated by nonlinear loads such as variable voltage frequency converters (VVVF), inverters, and pulse width modulation (PWM) devices widely used in renewable energy systems.
It features excellent insulation design and superior withstand capability against abnormal surges in the system. It provides renewable energy system customers with a high-efficiency and high-quality transformer option.

95 Environmentally Friendly Energy-Saving Amorphous Steel Vegetable Oil Transformer

1. Reduced Electricity Costs: The amorphous core vegetable oil transformer reduces load loss by 20%~30% compared to traditional silicon steel transformers, significantly saving on electricity costs.
2. High Fire Safety: Vegetable oil has a high flash point of 360 degrees Celsius, compared to mineral oil's 165 degrees Celsius, providing superior fire resistance and insulation, thus greatly increasing product safety.
3. Environmentally Friendly: The insulating oil is made from edible-grade vegetable oil, which is non-toxic, pollution-free, and completely biodegradable.
4. Low Noise and Long Lifespan: The amorphous core uses unique clamps for fixation, minimizing operating noise. The vegetable oil extends the lifespan of the insulating paper, thus increasing the transformer's lifespan.

96 Amorphous Steel Gas-Insulated Transformer

Features:
1. Energy Saving: Utilizes patented amorphous steel three-legged core manufacturing technology, reducing iron loss to approximately 20%~30% of traditional silicon steel sheets.
2. Safety: SF6 is a non-flammable gas with fire and explosion-proof properties. Equipped with alarm contacts for protective gas pressure gauges, density switches, and thermometers, providing comprehensive protection.
3. Low Noise: The core is housed within a sealed SF6 gas enclosure, resulting in lower noise levels than typical dry-type transformers.
4. Excellent Insulation: The high-voltage conductor sheath and low-voltage interlayer insulation use Class E (120°C) heat-resistant PET material, offering excellent insulation properties in SF6 gas.

97H1 Silicon Steel Sheet Standard Series:

Voltage: Below 600V
Capacity: 3kVA~500kVA
Features: Silicon steel sheet core, economical and safe

97H2 Amorphous High-Efficiency Series:

Voltage: Below 600V
Capacity: 3kVA~500kVA
Features: Amorphous core, energy-saving and harmonic-resistant

97H3 Fully Resin-Filled Low-Noise Series:

Voltage: Below 600V
Capacity: 3kVA~100kVA
Features: Resin-sealed, explosion-proof, low-noise

98 Silicon Steel Sheet Resin Type Dry-Type Transformer

Production Range: Standard Series
Voltage: Below 36kV
Capacity: 3kVA~10MVA
Silicon Steel Sheet Core Features: The surface is specially coated with heat-resistant resin to prevent moisture and corrosion.
After the core is stacked, it is bound with fiberglass straps, increasing the overall core strength and resulting in low loss, low no-load (excitation) current, and low noise characteristics.
The core is fixed with high-strength clamps and screws, providing excellent vibration resistance and mechanical strength.
High Voltage Coil Features: The coil adopts a cylindrical design and is vacuum-infused and heat-cured with epoxy resin. The coil is reinforced with resin and fiberglass, providing high strength against short-circuit mechanical forces and excellent resistance to cracking. It also offers better dust and moisture resistance than traditional H-class dry-type transformers (heat resistance grades F and H are available). When larger capacity transformers require more heat dissipation area, the coils feature single or multiple air channels. This minimizes the temperature difference between the inside and outside of the coil, eliminating thermal stress. Besides being less prone to cracking, this also provides short-term overload capacity. Compared to coils of the same capacity without air channels, they are smaller and lighter.
Low-voltage coil characteristics: For low-voltage and high-current applications, foil conductors are used. A new type of pre-impregnated resin insulation material (PREPREG) is used between the layers. After the coil is heated and hardened, the resin and foil are tightly bonded to form a robust steel body. The upper and lower ends are further sealed with resin, providing strong resistance to instantaneous short-circuit mechanical forces and preventing moisture intrusion. Therefore, power can be restored at any time after a power outage has occurred. (Heat resistance grades F and H are available.)

99. Amorphous Steel Resin Type Dry-Type Transformer

Production Range:
Voltage: Below 36kV
Capacity: 10kVA~7500kVA
Features:
1. Low loss and high efficiency - energy saving and environmentally friendly
2. Patented core manufacturing process - small size and low noise
3. Optimal insulation characteristics - safe
4. Non-combustible insulation materials - disaster prevention
5. Amorphous steel core - strong harmonic resistance
6. Resin-reinforced coils - excellent short-circuit strength
7. Low operating temperature - strong overload capacity