

## 10KV Epoxy Resin Cast Dry-Type Transformer

### 1. Product overview

The epoxy resin cast dry-type transformer is made of high-quality materials. The iron core uses advanced production-oriented cold-rolled silicon steel sheets with a 45° fully inclined step joint. The surface of the iron core is coated with a special resin to prevent moisture and rust, effectively reducing no-load loss, no-load current, and iron core noise. At the same time, the scientific and reasonable design and casting process make the partial discharge of the product small and the noise low. The product features high reliability, a long service life, and energy efficiency. According to different usage environments, enclosures of different protection grades can be configured or no enclosure can be configured. It is suitable for important and special environmental places such as commercial centers, factories, hotels, hospitals, schools, railways, airports, tunnels, subways, underground power stations, laboratories, stations, docks, etc.



### 2. Functional features

- 1.Safe, difficult to ignite, fireproof, and free of pollution. It is maintenance-free, easy to install, and has a low comprehensive operation cost.
- 2.It has a remarkable energy-saving effect, a strong environmental protection effect, saves urban construction land, and has a low comprehensive usage cost.
- 3.It has good moisture-proof performance, can operate normally under 100% humidity, and can be put into operation without pre-drying after being out of service.
- 4.It has strong heat dissipation capacity and can operate at 150% of the rated load under forced air cooling conditions.
- 5.It is equipped with a complete temperature protection and control system, providing a reliable guarantee for the safe operation of the transformer.
- 6.It has high reliability. According to the operation research on the products that have been put into operation, the reliability index of the products has reached the international advanced level.

### 3. Main performance parameters

SC(B)12-30~2500/10 系列树脂浇注配电变压器技术参数													
额定容量 KVA	电压组合 (KV)			联接组标号	空载损耗W	负载损耗W	短路阻抗%	空载电流%	声级LpA(dB)				
	高压(KV)	分接(%)	低压(KV)										
30	6	±5	0.4	Yyn0 Dyn11	150	710	4	2.1	52				
50					215	1000		2.1	52				
80					295	1380		1.6	53				
100					320	1570		1.6	53				
125					375	1850		1.4	56				
160					430	2130		1.4	56				
200					495	2530		1.2	56				
250					575	2760		1.2	56				
315					6.6	±2×2.5		0.4	Yyn0 Dyn11	705	3470	1.0	58
400					10					785	3990	1.0	58
500					10.5					930	4880	1.0	60
630					11					1070	5880	1.0	60
630					1040		5960			6	0.8	60	
800					1215		6960				0.8	62	
1000					1415	8130	0.8	62					
1250					1670	9690	0.8	63					
1600					1960	11730	0.8	64					
2000					2440	14450	0.7	64					
2500	2880	17170	0.7	68									

## Advanced Production Equipment

GNEE Steel Group owns a full set of shearing, packaging, vacuum casting, vacuum impregnation, and testing stations that represent the high level of the industry. These top-notch production and testing equipment guarantee the creation of first-class products. The company continuously improves its design methods, achieving the most advanced computer-aided design to meticulously craft perfect products.



## Production Environment

The workshop of GNEE Steel Group has strict process management and a closed management system. Regular purification and dust removal tests are conducted to meet the necessary requirements for producing high and low voltage transmission products. It has also passed ISO9001 quality certification and third-party inspection certification for international bidding.



## Autonomous Raw Material Supply

The iron cores and electromagnetic wires used in our company's products are all produced independently, which allows better control over the quality and delivery time of raw materials while reducing product costs.



## Raw Material Production Environment



## INTIMATE COMMUNICATION

Pre-sale, during-sale, and after-sale, we are with you every step of the way.

As long as you get in touch with us, we will communicate with you sincerely. Pre-sale, we will provide you with relevant product information; if you have special requirements, we can develop according to your needs and propose solutions under mutual recognition; during-sale, we will keep in touch with you throughout the process and inform you of the production progress, strictly following all the requirements in the contract; after-sale, our comprehensive "three guarantees" service system will ensure that you use our products with comfort, confidence, and satisfaction.

### Inspection, Training, Guidance - All Free Of Charge.

As long as you are interested in our products and get in touch with us, we will take the initiative to contact you and arrange free inspections and factory experiences. We can also dispatch technical personnel to provide you with a free customized overall solution. Before the implementation of the solution, we will offer free training for your technical staff to inform them of the relevant knowledge about installation, commissioning, and maintenance of the product. During the equipment installation process, we will also provide you with free installation guidance. As long as it is your requirement, it is our mission; we will provide you with perfect services throughout the entire process.

## Power Supply System Solutions Equipment Provider

### Real Estate Development

In real estate development, container substations are widely used. In addition to short construction periods, low investment, small land occupation, and a new and beautiful appearance, the greatest advantage of this transformer is that it is installed in a moisture-proof, anti-corrosion, dust-proof, fire-proof, theft-proof, heat-insulating, fully enclosed, and mobile steel structure box. It integrates electromechanical equipment and runs fully enclosed, ensuring safety and long-term usability.



## Industrial Enterprises

The fully sealed oil-immersed power transformer has the advantages of low loss, low noise, and high efficiency, which can achieve good energy-saving effects and reduce pollution. Compared with ordinary oil-immersed transformers, fully sealed transformers eliminate the need for an oil reservoir, and the changes in oil volume are automatically compensated by the elasticity of the corrugated oil tank's corrugated plates. The transformer is isolated from the air, preventing and slowing down the aging of oil and insulation, enhancing operational reliability, and requiring no maintenance during normal operation. Epoxy resin cast dry-type transformers can be used as updated replacement products for oil-immersed distribution transformers and are the best-performing products among various two-type transformers. They are particularly suitable for urban grids, high-rise buildings, business centers, theaters, hospitals, hotels, tunnels, subways, underground stations, laboratories, stations, docks, airports, combined substations, and other important places.



## Oil Fields and Mines

High-efficiency energy-saving adjustable capacity transformers are designed based on the working characteristics of oil field pumping units. When the pumping unit starts, the transformer's output voltage is the rated input voltage of the motor, ensuring that the pumping unit has sufficient starting torque. After the pumping unit starts and enters the normal state, the control system will detect the size of the effective power consumed by the motor through sensors and feed it back to the microcomputer intelligent control system. Through calculations, it automatically adjusts the output voltage and capacity of the transformer, then detects, records, and compares the effective power consumed by the motor on the pumping unit, eventually finding the operating point where the consumption of effective power is minimal, achieving the purpose of energy saving. In terms of structural design, strong anti-theft measures have been taken, effectively preventing the theft of high-efficiency energy-saving transformers. At the same time, during the

energy-saving operation of the pumping unit, according to the set anti-electricity theft time method, the output voltage fluctuates, making it impossible for home appliances to function even if the electricity is stolen back. Therefore, the transformer has high-performance anti-theft functions.

