

# 10KV Dry-type Three-phase Double-winding Non-excitation Tap-changing

## Distribution Transformer

### 1. Product overview

The dry-type transformer adopts audio-visual high-temperature insulating materials. It has characteristics such as good no-load energy consumption, safety and reliability, etc., ensuring a stable power output. It is mainly used for the wiring of electrical circuits, electrical equipment, and electromechanical equipment, providing stable power output quality for the power support of various electrical and mechanical equipment.



### 2. Functional features

- (1) The dry-type transformer uses higher-grade silicon steel sheets, resulting in lower losses.
- (2) Thanks to the innovation in the production process, the noise level is lower during normal operation of the equipment.
- (3) It has a high insulation class and stable and reliable performance.
- (4) It can provide continuous, stable, and high-quality voltage transformation services.
- (5) It has high working efficiency, can provide efficient power output, and ensures the safe operation of the power supply.
- (6) It has good heat dissipation performance and excellent performance reliability during long-term operation.

### 3. Main performance parameters

SCB14-10KV 干式三相双绕组无励磁调压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 ±2×2.5	0.4	Yyn0 Dyn11	130	640	4	2.1	52
50					185	900		2.1	52
80					250	1240		1.6	53
100					270	1415		1.6	53
125					320	1665		1.4	56
160					365	1915		1.4	56
200					420	2275		1.2	56
250					490	2485		1.2	56
315					600	3125		1.0	58
400					665	3590		1.0	58
500					790	4390		1.0	60
630					910	5290	1.0	60	
630					885	5365	6	0.8	60
800					1035	6265		0.8	62
1000					1205	7315		0.8	62
1250					1420	8720		0.8	63
1600					1665	10555		0.8	64
2000					2075	13005		0.7	64
2500					2450	15445		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.

