SHENHENG POWER EQUIPMENT CO., LTD.

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Shenheng Wechat Official Account

Shenheng E-catalog

Enabling Intelligent Power

POWER TRANSFORMER
PRODUCT SERIES

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www.shenheng-power.com

Shared Wisdom 'S'
Achieving Future Patterns

Shared Wisdom 'S'

Achieving Future Patterns

Our vision

Excellence in Technology,
Perfection in Power

Our mission

Building Green Power, Empowering
the Digital World

Our values

Future-Oriented Insight/High Ambition & Long-Term Vision/
Customer First/Innovation Through Change/Inclusive Collaboration/
Pragmatic Execution & Continuous Progress

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CHSH®

DEVELOPMENT HISTORY

2026

Shenheng Power will continue to move forward.....

2025

Shenheng Power focused on green development and was awarded the title of Wenzhou Green Factory. It introduced high-end production equipment such as a fully automated intelligent sheet metal production line, an intelligent ring main unit automation flexible production system, an intelligent pole-mounted circuit breaker automation flexible production system, an intelligent secondary wiring harness processing production system, and a fully automated copper bar production system, injecting new strength into the company's intelligent production transformation.

2024

Shenheng Power established a municipal-level industrial design center in Wenzhou and further expanded its factory area, with the expanded area reaching 54,000 square meters

2023

Shenheng Power established a municipal-level enterprise technology center in Wenzhou and a provincial-level research and development center in Zhejiang Province. It was also honored as a national-level "Specialized, Fine, Unique, and Innovative Small Giant Enterprise". At the same time, the company actively expanded its production scale, adding 2,000 square meters of space and a sheet metal production line, and also established a 1,600 square meter warehousing center on Wei 10 Road

2022

Shenheng Power established a municipal-level R&D center in Wenzhou and added a semi-automated production line for ring main units. At the same time, it was awarded the honor of provincial-level specialized, refined, unique, and innovative small and medium-sized enterprise

2021

Shenheng Power added a new production region covering 3,000 square meters at No. 261 Central Avenue, which will serve as Assembly Workshop No. 2

2018

Shenheng Power adjusted its business strategy, achieving a 120% increase in production capacity. A new production area of 12,000 square meters was added to the factory on Wei 18 Road, and new transformer production lines, circuit breaker production lines, and current transformer production lines were introduced. The company vigorously promoted the development of a complete production supply chain for supporting products,

In the same year, Shenheng Power established the Yueqing City-level R&D center.

2016

Shenheng Power adjusted its market operation direction and shifted to the State Grid market. The company implemented standardized management, standardized and certified products, and comprehensively improved the quality level of inspection products

2017

Shenheng Power obtained the national-level certification as a technology-based small and medium-sized enterprise

2015

Shenheng Power relocated to No. 261, Central Avenue, Yueqing Economic Development Zone due to the expansion of production capacity and production region

2014

the company experienced rapid development and implemented standardized management for product production, achieving CCC certification

2012

Shenheng Power was established in Liushi Town, Yueqing City,Zhejiang province,China

Innovation is the genetic code of Shenheng Power.

We explore the unknown.

Gather global wisdom and delve deeply into core technologies;

From material breakthroughs to algorithm iterations, we build a technological lighthouse with originality.

Refine the blueprint into a product that changes the world.

"Keeping Our Feet on the Ground, We Strive for Stability and Long-term Success."

Seizing the Opportunities of Our Time, Illuminating the Vast Cosmos

Shenheng Power Equipment Co., Ltd. was established in 2012 with a registered capital of 232 million yuan. It currently has over 300 employees and an operating area of 70,000 square meters. Shenheng Power is a technology-based enterprise that mainly focuses on complete sets of power transmission and distribution equipment and integrates R&D, manufacturing, sales and service. The company is located in the Economic Development Zone of Yueqing City, Zhejiang Province. Relying on its strong manufacturing capabilities, the company has established three clearly defined core product arrays: In the field of complete sets of equipment, we comprehensively cover standardized primary and secondary integrated ring main units and various types of environmentally friendly gas and solid insulated cabinets, refined high-voltage armored withdrawable and low-voltage withdrawable (MNS/GCS) switch cabinets, and extend to photovoltaic pre-assembled and intelligent landscape substations. In the field of transformers, the focus is on deeply developing high-efficiency oil-immersed/dry-type transformers, amorphous alloy and three-dimensional wound core distribution transformers. In the field of circuit breakers, we focus on the in-depth integration of primary and secondary intelligent pole-mounted circuit breakers, solid-encapsulated pole-mounted circuit breakers, and environmentally friendly gas-insulated circuit breakers. The three major sectors develop in a coordinated manner to fully meet the construction needs of modern smart grids.

2012
The company was established in 2012

70000
The company's business area is 70,000 square meters

5,1600
Sales of 516 million yuan in 2024

300
The number of employees in the company

Guided by international development, supported by a professional R&D team and technical support, and guaranteed by a complete quality management system, the company provides one-stop product matching solutions for complete power transmission and distribution systems, offering users safe, reliable and high-performance products. For a long time, the company has been providing high-quality complete sets of power transmission and distribution equipment and electrical control devices for various industries such as metallurgy, power plants, power grids, petrochemicals, mining, industrial manufacturing, rail transit, data centers, business buildings, residential buildings and renewable energy.

The strategic business philosophy of Shenheng Power - "Share Wisdom S, Shape the Future pattern!" In the international era of rapid technological development and a continuous emergence of talents, we adhere to the corporate mission of "keeping pace with the world and achieving win-win results with customers", uphold the management philosophy of "pioneering, pragmatic, standardized and innovative", advocate a "boundaryless" talent view, optimize the talent resource pattern, and showcase the value of our employees. Facing the opportunities of economic globalization in the new century, all the staff of Shenheng will uphold the spirit of continuous exploration and innovation, and write a new chapter in serving the country's power construction.

We adhere to the corporate policy of "humble learning, pragmatism, innovation and win-win", aiming to create an international brand. We are willing to sincerely cooperate with domestic and foreign partners for common development and make unremitting efforts to bring China's power transmission and distribution equipment products into the world's advanced ranks!

Advancing Technology for Good, Driving Sustainable Development.

The quality of every Shenheng electric Power product lies in the precise manufacturing of each process and the strict control of each round of inspection, dedicated to bringing you the most superior product experience.

Shenheng Power Equipment Development applies the most advanced automated production equipment, adheres to the core concept of "professional manufacturing, dedicated service", relies on high-tech talents, introduces advanced foreign production equipment, and with exquisite production techniques, rigorous process flows, sophisticated testing equipment, rich on-site installation and commissioning experience in engineering, a meticulous production attitude, and strict process quality control The product is highly favored by users.

Accelerating Ecosystem Prosperity, Energizing Industrial Vitality

Shenheng Power Equipment takes complete sets of power transmission and distribution equipment as its core business, integrating R&D, manufacturing, sales and service. Its main products cover a wide range of series such as box-type substations, high-voltage switchgear sets, high-voltage cable distribution boxes, low-voltage switchgear sets and high and low voltage components. We adhere to the concept of "realizing smart power consumption", constantly innovate and reform, and optimize our production and manufacturing mode.

This enables our production system to possess functions such as innovation, quality, flexibility, inheritance, self-improvement, and environmental protection, creating highly efficient and high-quality production lines.

CHSH®

Crafting Dreams with Mastery, Moving Forward with Honor

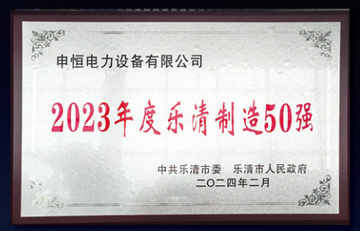
Honor bears witness to history, and monuments engrave hardships.

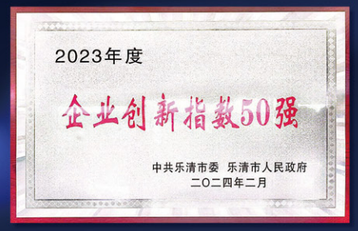
Looking back on the years that have passed and our growth, the people of Shen Heng are deeply grateful. Without the nurturing policy support and leadership care, Shenheng Electric Power would not have been able to grow.

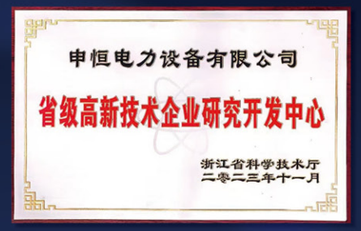
Honor represents the recognition of the achievements of Shenheng people by society, and also witnesses the inexhaustible enterprising spirit, dedication and creative spirit of Shenheng people. This will also be the source of strength for Shenheng people to continue to create brilliance.

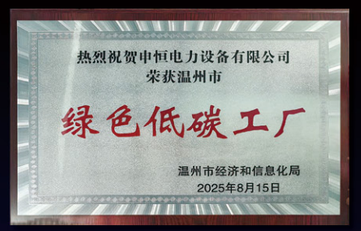
Qualification Certificate

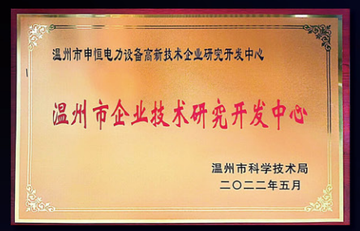
Honorary Certificate

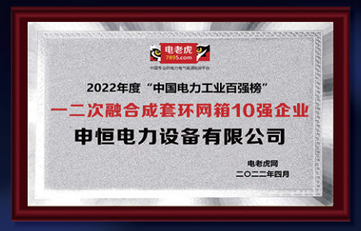












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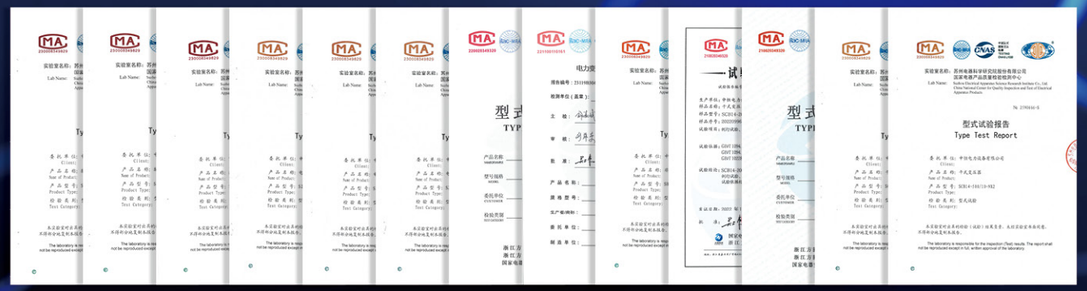
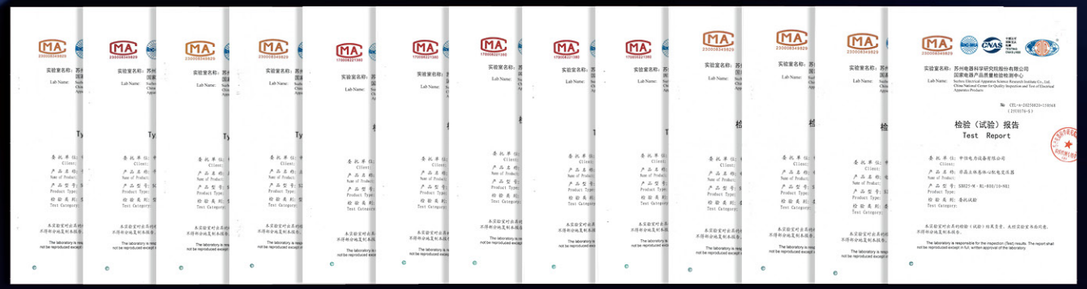
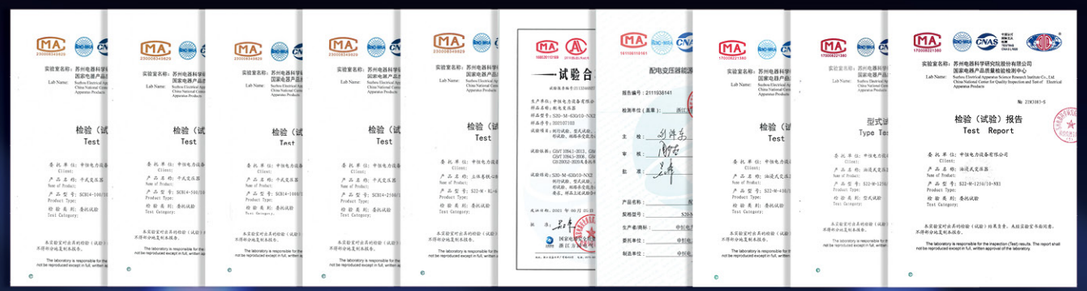
Inspection Report Certificate



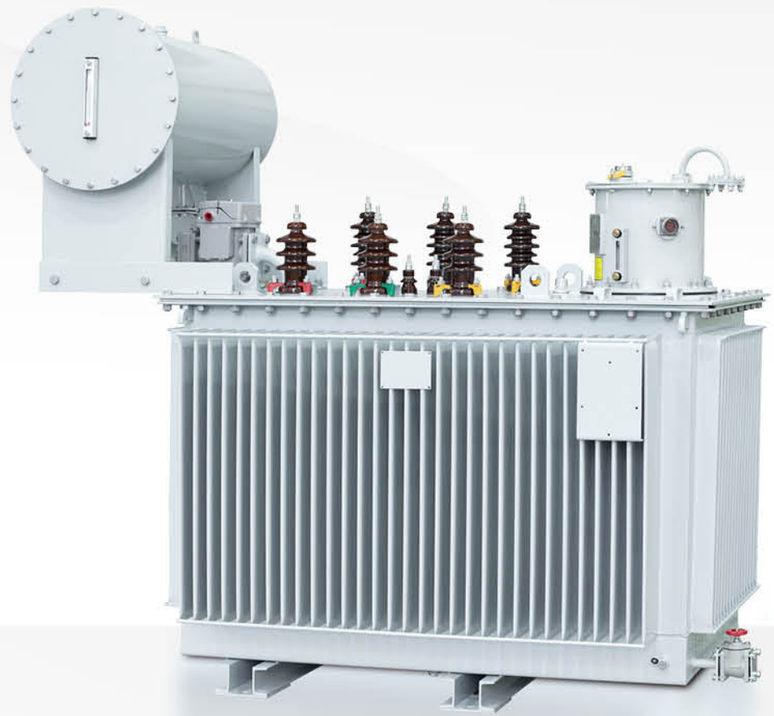




PRECISION MANUFACTURING

SVR

Oil-Immersed Line Voltage Regulator



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Product Review

The oil-immersed line voltage regulator (SVR) is a high-voltage oil-immersed on-load automatic voltage regulation device, specially designed for 6 kV, 10 kV and 35 kV distribution lines. Its core function is to monitor real-time changes in line voltage and automatically adjust the transformer ratio. It stabilizes the output voltage within a wide range of -20% to +20%, thereby effectively solving voltage instability issues caused by long transmission lines, large load fluctuations or the integration of distributed power sources.

It is applicable to the outgoing line side of substations where the main transformer has no voltage regulation capability, as well as to lines with low voltage in the middle and rear sections of rural and urban power grids. It serves as a key technical solution to improve power supply quality, reduce line losses, and ensure qualified voltage for end-users.

Model Meaning

SVR	-	□	□	-	□
Oil-immersed Line voltage regulator		Rated Capacity (kVA)	Rated Voltage (kV)		Gear

Production Function

- automatic voltage regulation:

  It samples the line voltage in real time via the built-in intelligent controller, automatically switches the tap positions of the on-load tap-changer, and realizes uninterrupted voltage regulation with an adjustment accuracy of ±1%
- Bidirectional current identification

  It supports the access scenarios of distributed power sources such as small hydropower and photovoltaic power, and can identify forward and reverse power flows to ensure the correct implementation of voltage regulation strategies.
- Remote monitoring and communication:

  It is standard-equipped with RS485/Modbus protocol and can be optionally equipped with GPRS/4G module. It supports remote parameter setting, operation status monitoring and fault diagnosis, and is compatible with cloud platform access.
- Re-protection mechanism

  It is equipped with protection functions such as overvoltage, undervoltage, overcurrent, limit, and action time limit. The controller automatically locks in abnormal conditions to ensure the safe operation of the equipment.

Basic structure and principle

- Composition:

  It consists of an autotransformer, a three-phase on-load tap-changer and an intelligent controller. The autotransformer realizes voltage compensation by adjusting the transformation ratio via the tap-changer, with a common voltage regulation range of ±20%.
- working principle

  The controller monitors the line voltage in real time, drives the tap changer to adjust the transformation ratio, and keeps the output voltage stable within the set range (such as ±2% of the rated value).

SVR
Oil-Immersed Line Voltage Regulator

Technical Parameters and Performance

- Capacity range: Covering 500- 24,000 KVA. Common models include SVR-400KVA, SVR-1600KVA, SVR-5000KVA, etc.
- Voltage regulation accuracy: Output voltage deviation ≤ ±0.5%, and the number of tap positions is mostly 7 or 9.
- Environmental adaptability: Oil-immersed self-cooling structure, protection grade IP44, suitable for environments ranging from -25℃ to +40℃.

Product Feature

- Energy conservation and loss reduction: It can reduce line losses by 15% to 25%
- Intelligent control: Supports RS485/GPRS remote communication and features overvoltage, undervoltage and overcurrent protection functions.
- Reliability: The mechanical life of the tap changer is over 500,000 times, and the electrical life is over 50,000 times.

Application Scene

- Rural Power Grid: Solves the problem of low voltage caused by long power supply distances (e.g., over 50 km) and large load fluctuations.
- Industrial Sector: Applied in scenarios with high requirements for power quality, such as mining areas, oilfields, and tunnels.Distributed Power Integration: Stabilizes voltage fluctuations in regions with small hydropower grid connection.

SVR series 10kV high-voltage online feed voltage regulating and stabilizing transformer

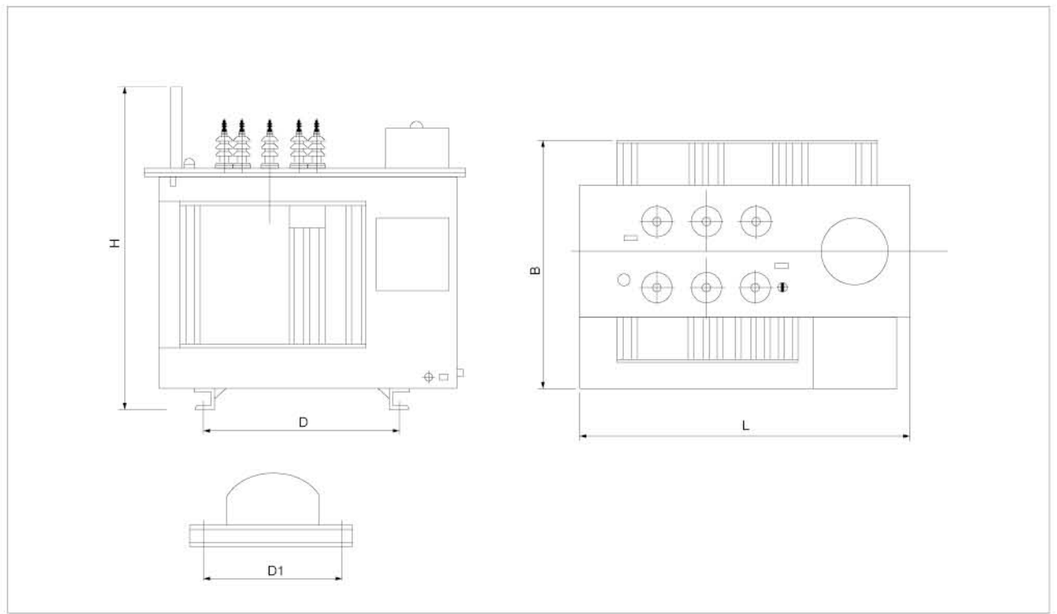
Capacity (kVar)	Voltage combination and tapping range (kV)			Vector Group	No-load loss (W)	Full load loss (W)	No load current %	Impendance (%)	Weight (kg)			Size (mm) (L× W × H)	Installation size (D/D1)
	Input (kV)	HV tapping range %	output (kV)						Active parts	oil	total		
630	7.0~10.5	1~7 or 1~9	10.0 10.5	Ya0	400	2500	1	2	600	280	1100	1200×1000×1210	550/550
800					500	2800	0.9		670	310	1210	1250×1000×1250	550/550
1000					600	3500	0.9		770	330	1320	1280×1050×1290	550/550
1250					700	4000	0.8		880	350	1500	1320×1070×1320	660/660
1600					800	5000	0.8		1000	400	1650	1400×1100×1380	660/660
2000					960	6000	0.6		1150	450	1950	1460×1160×1410	660/660
2500					1200	7000	0.6		1380	550	2320	1520×1250×1470	660/660
3150					1400	10000	0.6		1650	610	2640	1630×1250×1500	820/820
4000					1700	12000	0.5		1840	940	3300	1870×1350×1530	820/820
5000					1950	14500	0.5		2160	1100	4180	1900×1450×1620	820/820
6300					2500	16000	0.4		2600	1550	5300	1980×1450×1950	820/820

SVR
Oil-Immersed Line Voltage Regulator

SVR series 10kV high-voltage online feed voltage regulating and stabilizing transformer

Capacity (kVar)	Voltage combination and tapping range (kV)			Vector Group	No-load loss (W)	Full load loss (W)	No load current %	Impendance (%)	Weight (kg)			Size (mm) (L× W × H)	Installation size (D/D1)
	Input (kV)	HV tapping range %	output (kV)						Active parts	oil	total		
2000	28-35 28-36.75	1-7 或 1-9	35	Ya0	1250	7000	0.5	3	1670	870	3160	2300×1100×1850	820/820
2500					1500	8500	0.5		1850	930	3370	2400×1100×1960	820/820
3150					1700	10000	0.5		2040	960	3680	2460×1250×2000	820/820
4000					2000	12000	0.5		2300	1000	4020	2650×1500×2050	1070/1070
5000					2400	15000	0.5		2720	1060	4580	2700×1680×2100	1070/1070
6300					3000	19000	0.5		3050	1100	5150	2750×1750×2150	1070/1070
8000					3200	21000	0.4		3340	1290	5580	2820×1900×2220	1070/1070
10000					3800	24000	0.4		3730	1520	6750	2910×2160×2310	1070/1070
12500					4500	29000	0.35		4170	1930	8180	3220×2250×2620	1070/1070
16000					5400	34000	0.35		5150	2200	9360	3340×2300×2680	1475/1475
20000					6600	38000	0.35		5850	2420	10400	3550×2360×2750	1475/1475

Outline and installation dimension drawing (mm)



S20-MRL/S22-MRL

10kV Three-Phase Oil-Immersed Distribution Transformer with 3D Wound Core

S20-MRL/S22-MRL

10kV Three-Phase Oil-Immersed Distribution Transformer with 3D Wound Core

CHSH®

Product Review

The S20-MRL/S22-MRL three-phase oil-immersed triangular wound core distribution transformer is a new high-efficiency power transformer, designed for voltage conversion and electric energy regulation in power systems. Adopting advanced triangular wound core technology compared with traditional wound core transformers, it enables a more uniform distribution of magnetic flux density in the core component, reduces core loss, and improves the operating efficiency of the transformer. It is widely applied in power, metallurgy, petrochemical, transportation and other major industries, serving as an indispensable core component in modern power equipment.

In terms of design, it integrates multiple advantages such as high efficiency, low loss and long service life, boasting strong market competitiveness. Adopting high-quality materials and strict process control, it ensures the stability and reliability of the equipment during long-term high-load operation.

Model Meaning

S	□	-	M	-	RL	-	□	/	□
Three phase	loss level model		sealed		Three-dimensional wound core structure		Rated capatict (kVA)		System nominal voltage (kV)

Production Function

- Low-loss Design

  The transformer adopts an optimized core design, which significantly reduces core loss and copper loss, thereby improving the overall energy efficiency. This low-loss feature not only enhances the efficiency of power transmission, but also cuts down energy consumption, saving operational costs for users and complying with the energy conservation and emission reduction requirements of modern power systems.

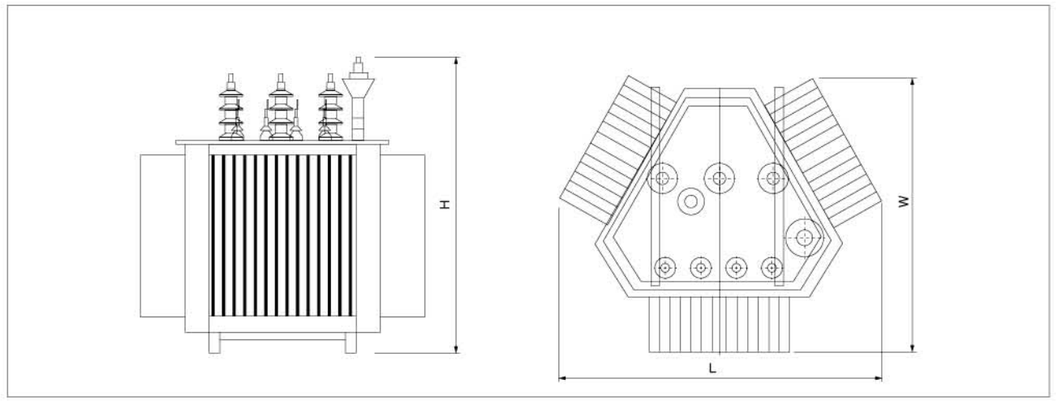
- High Load Operation Capacity

  The transformer can maintain stable power output even under high-load conditions, ensuring the continuity and reliability of power supply. This feature makes it especially suitable for industrial and commercial applications with long-term operation and large load fluctuations, capable of effectively meeting various power demands.

- Premium Materials

  High-strength materials are adopted to greatly improve the compression resistance and durability of the equipment. The application of such premium materials not only extends the service life of the transformer, but also enhances its reliability in harsh environments, ensuring normal operation under all working conditions.

Outline and installation dimension drawing (mm)



S20-MRL /S22-MRL

10kV Three-Phase Oil-Immersed Distribution Transformer with 3D Wound Core

Technical Parameters of S20-M • RL-30~2500/10kV Three-Phase Two-Winding Oil-Immersed Off-Circuit Tap-Changing Distribution Transformer

Capacity (kVar)	Voltage combination and tapping range (kV)			Vector Group	No-load loss (W)	Full load loss (W)	No load current %	Impendance (%)	Weight (kg)			Size (mm) (L× W × H)	Installation size (D/D1)
	Input (kV)	HV tapping range %	output (kV)						Active parts	oil	total		
30	6 6.3 10 10.5	±5%, ±2×2.5%	0.4	Yyn0 Dyn11	70	505/480	4	0.5	230	110	460	760×720×1000	400×400
50					90	730/695		0.5	290	100	470	760×730×1120	400×660
63					100	870/830		0.5	300	120	570	990×770×1130	400×660
80					115	1050/1000		0.5	380	130	690	1010×790×1170	400×660
100					135	1265/1200		0.45	460	135	720	1000×900×1200	400×660
125					150	1510/1440		0.45	440	150	770	1030×830×1240	400×660
160					180	1850/1760		0.4	600	160	960	1100×860×1270	550×550
200					215	2185/2080		0.4	730	190	1100	1170×1020×1270	550×820
250					260	2560/2440		0.35	910	230	1430	1310×1070×1370	550×820
315					305	3065/2920		0.35	1030	240	1570	1330×1110×1460	660×660
400					370	3615/3440		0.35	1125	280	1670	1370×1190×1470	550×820
500					430	4330/4120		0.3	1300	310	1940	1420×1230×1640	660×660
630					510	4960	4.5	0.25	1570	370	2320	1510×1330×1740	660×660
800					630	6000		0.18	1740	410	2650	1650×1420×1770	660×850
1000					745	8240		0.17	1910	480	2960	1870×1500×1930	660×850
1250					870	9600		0.17	2410	560	3650	1960×1560×1990	660×850
1600					1050	11600		0.15	2820	660	4180	2040×1620×2090	660×850
2000					1225	14640	5	0.15	3250	760	4840	2140×1680×2200	820×1070
2500					1440	16960		0.15	3830	860	5610	2250×1790×2310	1070×1070

S20-MRL /S22-MRL

10kV Three-Phase Oil-Immersed Distribution Transformer with 3D Wound Core

Technical Parameters of S22-M • RL-30~2500/10kV Three-Phase Two-Winding Oil-Immersed Off-Circuit Tap-Changer Distribution Transformer

Capacity (kVar)	Voltage combination and tapping range (kV)			Vector Group	No-load loss (W)	Full load loss (W)	No load current %	Impendance (%)	Weight (kg)			Size (mm) (L× W × H)	Installation size (D/D1)
	Input (kV)	HV tapping range %	output (kV)						Active parts	oil	total		
30	6 6.3 10 10.5	±5%, ±2×2.5%	0.4	Yyn0 Dyn11	65	455/430	4	0.5	290	120	550	800×760×1050	400×400
50					80	655/625		0.5	360	110	560	800×776×1180	400×660
63					90	785/745		0.5	380	130	680	1040×810×1190	400×660
80					105	945/900		0.5	480	140	830	1060×830×1230	400×660
100					120	1140/1080		0.45	580	140	860	1050×950×1260	400×660
125					135	1360/1295		0.45	550	160	920	1080×870×1300	400×660
160					160	1665/1585		0.4	750	170	1150	1160×900×1330	550×550
200					190	1970/1870		0.4	910	200	1320	1230×1070×1330	550×820
250					230	2300/2195		0.35	1140	240	1720	1380×1120×1440	550×820
315					270	2760/2630		0.35	1290	250	1880	1400×1170×1530	660×660
400					330	3250/3095		0.35	1310	300	1840	1470×1330×1620	550×820
500					385	3900/3710		0.3	1510	330	2130	1520×1380×1800	660×660
630					460	4460	4.5	0.25	1820	400	2550	1620×1490×1910	660×660
800					560	5400		0.18	2020	440	2920	1770×1590×1950	660×850
1000					665	7415		0.17	2220	520	3260	2000×1680×2120	660×850
1250					780	8640		0.17	2800	600	4020	2100×1750×2190	660×850
1600					940	10440		0.15	3270	710	4600	2180×1810×2300	660×850
2000					1085	13180	5	0.15	3770	820	5320	2290×1880×2420	820×1070
2500					1280	15270		0.15	4440	930	6170	2410×2000×2540	1070×1070

SBH25-M/SBH21-M

10kV Three-Phase Oil-Immersed Distribution Transformer with Amorphous Alloy Core

Product Overview

The SBH25-M / SBH21-M series transformers are 10kV three-phase oil-immersed amorphous alloy core distribution transformers complying with national energy efficiency standards. Their cores adopt ultra-low-loss amorphous alloy strips, with no-load loss reduced by approximately 60%-80% compared with traditional silicon steel transformers, making them key equipment for power grid energy-saving renovation.

This series features a fully sealed structure (Model M) with a protection grade of IP23 or above, suitable for pole-mounted outdoor installation and distribution transformer area deployment. Rated capacities cover specifications such as 21kVA and 25kVA. The high-voltage side is compatible with 10kV distribution power grids, while the low-voltage side outputs 0.4kV. It adopts the Dyn11 connection group to suppress harmonics.

Manufactured in strict accordance with GB/T 25446 and GB 20052 standards, the product ensures short-circuit withstand capability and insulation performance, while significantly lowering the full-life-cycle operating cost. It is widely applied in high-standard distribution scenarios including urban & rural power grid renovation, photovoltaic grid connection, and commercial buildings.

Model Meaning

S	B	H	25	-	M	-	□	/	□
Three phase	Copper foil	Amorphous alloy	Loss level code		Sealed type		Rated capacity (kVA)		System nominal voltage (kV)

Technical Parameters

Capacity (kVar)	Voltage combination and tapping range (kV)			Vector Group	SBH25-M		SBH21-M		No load current	Impendance
	Input (kV)	HV tapping range %	output (kV)		No load loss	Full load loss	No load loss	Full load loss		
30	6 6.3 6.6 10 10.5 11	±2×2.5 ±5	0.4	Dyn11 Yyn0 Yzn11	25	510/480	33	535/510	1.5	4
50					35	735/700	43	780/745	1.2	
63					40	880/840	50	930/890	1.1	
80					50	1060/1010	60	1120/1070	1.0	
100					60	1270/1215	75	1350/1285	0.9	
125					70	1530/1450	85	1615/1540	0.8	
160					80	1870/1780	100	1975/1880	0.6	
200					95	2210/2100	120	2330/2225	0.6	
250					110	2590/2470	140	2735/2610	0.6	
315					135	3100/2950	170	3275/3120	0.5	
400				Dyn11 Yyn0	160	3660/3480	200	3865/3675	0.5	
500					190	4380/4170	240	4625/4400	0.5	
630					250	5020	320	5300	0.3	4.5
800					300	6075	380	6415	0.3	
1000					360	8340	450	8800	0.3	
1250					425	9720	530	10260	0.2	
1600					500	11745	630	12400	0.2	
2000					550	14000	710	14800	0.2	5
2500					670	15450	860	16300	0.2	

Remark :

For transformers with a rated capacity of 500KVA or less, the load loss values above the diagonal line in the table apply to Dyn11 or Yzn11 connection groups, and the load loss values below the diagonal line apply to Yn0 connection groups.

According to user needs, can provide other transformer for high subsection range.

According to user needs, can provide low voltage of 0.69 kV transformer

If the user need, also can choose other loss value

S13、S20、S22

10kV and 20kV Oil-immersed power distribution transformers

S13、S20、S22

10kV and 20kV Oil-immersed power distribution transformers

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Product Overview

The S13, S20 and S22 series of fully sealed oil-immersed transformers are suitable for power systems with an AC frequency of 50Hz and a rated working voltage of 20kV or less. They are used as distribution transformers in enterprises such as petroleum, metallurgy, chemical engineering, textile and light industry, as well as in places with large amounts of dust.

Model Meaning

S	□	-	M	□	/	
Three phase	Design serial number		Fully sealed	Rated power (kVA)		High-voltage side voltage level

Prodcut Feature

- Core

  The core is made of high-permeability grain-oriented cold-rolled silicon steel sheet. It adopts a new-type structure with fully mitered lap stacked core. The core limb features a multi-step stepped circular cross-section, and the yoke has an equal cross-section to the core limb.

- Winding

  The windings are designed with corrugated oil ducts, adopting a non-varnish impregnation process and fastened with binding tapes. All windings are concentric coils. The high-voltage winding is equipped with taps corresponding to the required tap voltages, which are connected to the tap changer. The tap changer is mounted on the tank cover, and tap voltage adjustment can only be performed after power disconnection.

- Safety Protection Devices

  Transformers with a capacity of 30~2000 kVA are fitted with a pressure relief valve.

  A gas relay with alarm and trip terminals can be installed according to user requirements.

- Oil Temperature Measuring Device

  All transformers are equipped with a socket for a glass thermometer, which is installed on the top of the oil tank and extends into the oil at a depth of 120±10 mm.Transformers with a capacity of 1000~2000 kVA are fitted with an outdoor-type signal thermometer.

- Transformer Tank

  The transformer tank is constructed with corrugated walls, and its surface is treated with powder coating for firm paint adhesion. The corrugated heat sinks provide both cooling and "breathing" functions; their elasticity compensates for volume changes of transformer oil caused by temperature fluctuations.As a result, the fully sealed transformer eliminates the need for an oil conservator, reducing the overall height of the unit.

  Vacuum oil filling is applied during transformer encapsulation to completely remove moisture inside the transformer. The transformer oil is isolated from air contact, effectively preventing oxygen and moisture ingress that would degrade insulation performance and accelerate oil aging. Therefore, regular oil sample testing is not required.

working condition

- Environmental Conditions

  Suitable for areas with an altitude not exceeding 1,000 meters, a maximum ambient temperature of +40 ℃ , and a minimum ambient temperature of -25℃ or -5℃ .

- Power Supply Conditions

  The rated frequency of the connected power grid is 50Hz. The fluctuation range of the power supply voltage shall not exceed ±5% of the rated voltage, and the waveform distortion rate shall meet the harmonic management requirements of the power system.

- Installation Site

  Can be installed outdoors or indoors in well-ventilated places. For outdoor installation, direct sunlight, corrosive gases or dust accumulation shall be avoided; for indoor installation, sufficient heat dissipation space and safety distance shall be ensured.

- Load Requirements

  The transformer is allowed to operate continuously for a long time under rated capacity and has a certain short-time overload capacity. When the harmonic content of the load current is excessively high, the temperature rise impact shall be evaluated.

- Special Environments

  If used in special environments such as thunderstorm-prone areas, high humidity, heavy pollution, chemical corrosion or seismic zones, prior notification shall be given and an enhanced protection scheme shall be provided.

S13、S20、S22

10kV and 20kV Oil-immersed power distribution transformers

Technical Parameters

S13-M type 10kV oil-immersed three-phase double-winding non-excitation voltage regulating distribution transformer

Rated Capacity (kVA)	High voltage (kV)	High voltage tapping range (%)	Low voltage (kV)	S13-M			No load current (%)	Short-circuit impedance %
				electrical strip steel				
				No load loss kW	Full load loss kW			
					Dyn11/Yzn11	Yyn0		
30	6 6.3 10 10.5	±2×2.5 ±5	0.4	80	630	710	1.20	4.0
50				100	910	100	1.04	
63				110	1090	1380	0.96	
80				130	1310	1380	0.96	
100				150	1580	1570	0.88	
125				170	1890	1850	0.88	
160				200	2310	2130	0.80	
200				240	2730	2530	0.80	
250				290	3200	2760	0.72	
315				340	3830	3470	0.72	
400				410	4520	3990	0.64	
500				480	5410	4880	0.64	
630				570	6200		0.48	4.5
800				700	7500		0.48	
1000				830	10300		0.48	
1250				970	12000		0.40	
1600				1170	14500		0.40	
2000				1360	18300		0.32	5
2500				1600	21200		0.32	

Note: Dimensions are for reference only. The actual drawings and dimensions provided shall prevail.

S13、S20、S22

10kV and 20kV Oil-immersed power distribution transformers

Technical Parameters

Technical parameters of S20-M type 10kV oil-immersed three-phase double-winding non-excitation voltage regulating distribution transformer

Rated Capacity (kVA)	High voltage (kV)	High voltage tapping range (%)	Low voltage (kV)	S20-M			No load current (%)	Short-circuit impedance %
				electrical strip steel				
				No load loss kW	Full load loss kW			
					Dyn11/Yzn11	Yyn0		
30	6 6.3 10 10.5	±2×2.5 ±5	0.4	70	505	480	1.20	4.0
50				90	730	695	1.04	
63				100	870	830	0.96	
80				115	1050	1000	0.96	
100				135	1265	1200	0.88	
125				150	1510	1440	0.88	
160				180	1850	1760	0.80	
200				215	2185	2080	0.80	
250				260	2560	2440	0.72	
315				305	3065	2920	0.72	
400				370	3615	3440	0.64	
500				430	4330	4120	0.64	
630				510	4960		0.48	4.5
800				630	6000		0.48	
1000				745	8240		0.48	
1250				870	9600		0.40	
1600				1050	11600		0.40	
2000				1225	14640		0.32	5
2500				1440	14840		0.32	

Note: Dimensions are for reference only. The actual drawings and dimensions provided shall prevail.

S13、S20、S22

10kV and 20kV Oil-immersed power distribution transformers

Technical Parameters

S22-M type 10kV oil-immersed three-phase double-winding non-excitation voltage regulating distribution transformer

Rated Capacity (kVA)	High voltage (kV)	High voltage tapping range (%)	Low voltage (kV)	S22-M			No load current (%)	Short-circuit impedance %
				electrical strip steel				
				No load loss kW	Full load loss kW			
					Dyn11/Yzn11	Yyn0		
30	6 6.3 10 10.5	±2×2.5 ±5	0.4	65	455	430	1.20	4.0
50				80	655	625	1.04	
63				90	785	745	0.96	
80				105	945	900	0. 96	
100				120	1140	1080	0.88	
125				135	1360	1295	0.88	
160				160	1665	1585	0.80	
200				190	1970	1870	0.80	
250				230	2300	2195	0.72	
315				270	2760	2630	0.72	
400				330	3250	3095	0.64	
500				385	3900	3710	0.64	
630				460	4460		0. 48	4.5
800				560	5400		0.48	
1000				665	7415		0.48	
1250				780	8640		0.40	
1600				940	10440		0.40	
2000				1085	13180		0. 32	5
2500				1280	13360		0. 32	

Note: Dimensions are for reference only. The actual drawings and dimensions provided shall prevail.

S13、S20、S22

10kV and 20kV Oil-immersed power distribution transformers

Technical Parameters

S13-M type 20kV oil-immersed three-phase double-winding non-excitation voltage regulating distribution transformer

Rated Capacity (kVA)	High voltage (kV)	High voltage tapping range (%)	Low voltage (kV)	Vector Group	S13		No load current (%)	Short-circuit impedance %
					No load loss kW	Full load loss kW		
30	20	±2×2.5 ±5	0.4	Dyn11 Yzn11 Yyn0	80	660/630	1.70	5.5
50					100	960/910	1.60	
63					120	1140/1090	1.50	
80					140	1370/1300	1.40	
100					160	1640/1570	1.30	
125					190	1980/1880	1.20	
160					230	2410/2300	1.10	
200					270	2850/2720	1.00	
250					320	3340/3180	0.96	
315					380	4000/3810	0.88	
400					460	4720/4490	0.80	
500					540	5640/5380	0.80	
630					650	6480	0.72	6.0
800					780	7840	0.64	
1000					920	10700	0.56	
1250					1100	12500	0.56	
1600					1330	15100	0.48	
2000					1560	19100	0.48	
2500					1870	22200	0.40	

Note:

- Diagonal lines in the table above apply to load loss Dyn11 connection group.
- Diagonal lines at the bottom of the load loss values apply to Yyn0 join groups.
- Other capacity of the product performance parameters, shall be determined between the user and the manufacturer.

S13、S20、S22

10kV and 20kV Oil-immersed power distribution transformers

Technical Parameters

Technical parameters of S20-M type 20kV oil-immersed three-phase double-winding non-excitation voltage regulating distribution transformer

Rated Capacity (kVA)	High voltage (kV)	High voltage tapping range (%)	Low voltage (kV)	Vector Group	S20		No load current (%)	Short-circuit impedance %
					No load loss kW	Full load loss kW		
30	20	±2×2.5 ±5	0.4	Dyn11 Yzn11 Yyn0	70	528/504	1.70	5.5
50					90	768/728	1.60	
63					110	912/872	1.50	
80					125	1096/1040	1.40	
100					145	1312/1256	1.30	
125					170	1584/1504	1.20	
160					205	1928/1840	1.10	
200					245	2280/2176	1.00	
250					290	2672/2544	0.96	
315					340	3200/3048	0.88	
400					415	3776/3592	0.80	
500					485	4512/4304	0.80	
630					585	5184	0.72	6.0
800					700	6272	0.64	
1000					830	8560	0.56	
1250					990	10000	0.56	
1600					1200	12080	0.48	
2000					1405	15280	0.48	
2500					1680	17760	0.40	

Note: Dimensions are for reference only. The actual drawings and dimensions provided shall prevail.

S13、S20、S22

10kV and 20kV Oil-immersed power distribution transformers

Technical Parameters

Technical parameters of S22-M type 20kV oil-immersed three-phase double-winding non-excitation voltage regulating distribution transformer

Rated Capacity (kVA)	High voltage (kV)	High voltage tapping range (%)	Low voltage (kV)	Vector Group	S22		No load current (%)	Short-circuit impedance %
					No load loss kW	Full load loss kW		
30	20	±2×2.5 ±5	0.4	Dyn11 Yzn11 Yyn0	65	460/440	1.70	5.5
50					80	670/635	1.60	
63					95	800/765	1.50	
80					110	960/910	1.40	
100					130	1150/1100	1.60	
125					150	1385/1315	1.50	
160					185	1690/1610	1.10	
200					215	1995/1905	1.00	
250					255	2340/2225	0.96	
315					305	2800/2665	0.88	
400					370	3305/3145	0.80	
500					430	3950/3765	0.80	
630					520	4535	0.72	6.0
800					625	5490	0.64	
1000					735	7490	0.56	
1250					880	8750	0.56	
1600					1065	10570	0.48	
2000					1250	13370	0.48	
2500					1495	15540	0.40	

Note: Dimensions are for reference only. The actual drawings and dimensions provided shall prevail.

SBH15、SBH21、SBH25

10kV and 20kV Oil-immersed amorphous alloy transformers

SBH15、SBH21、SBH25

10kV and 20kV Oil-immersed amorphous alloy transformers

Product Overview

A transformer converts grid voltage to the level required by systems or loads, enabling the transmission and distribution of electric energy. This transformer can replace traditional silicon steel sheet core transformers and is widely used in outdoor power distribution systems.

Mass grid application of this product achieves remarkable energy-saving effects and reduces atmospheric pollution. It is particularly suitable for areas with insufficient power supply, large load fluctuations, and difficult routine maintenance.

Featuring a fully sealed structure, the insulation oil and dielectric materials are protected from atmospheric contamination, allowing reliable operation in humid environments. It is an ideal power distribution equipment for urban and rural power distribution networks.

Model Meaning

S	B	H	□	-	M	-	□	/	□
Three-phase	Low-voltage foil winding	Amorphous alloy core	Performance level code		Sealed type		Rated power		Voltage level (kV)

Product Feature

- Ultra-high Energy Efficiency

  Featuring an amorphous alloy core, its no-load loss is approximately 60%-80% lower than that of conventional silicon steel sheet transformers. It is especially suitable for scenarios with large load rate fluctuations, long-term light-load or no-load operation, delivering remarkable economic benefits throughout its entire service life.
- High Reliability

  Adopts a fully sealed oil tank structure (usually corrugated tank), eliminating contact between insulating oil and air, preventing oil degradation, enabling maintenance-free operation and extending service life
- Environmental & Safe

  Amorphous alloy is an eco-friendly material with low energy consumption in production. The transformer oil is usually high-performance mineral oil or degradable natural ester insulating oil, meeting environmental protection requirements.
- Sturdy and Durable:

  Compact structural design with high mechanical strength. The protection class generally reaches IP54 or higher, effectively resisting dust, moisture and erosion from harsh outdoor environments.
- Low Noise Operation:

  The magnetostrictive effect of the amorphous alloy core is much lower than that of silicon steel sheets, resulting in lower noise during transformer operation. This makes it more suitable for noise-sensitive areas such as residential areas, hospitals and schools
- Intelligent adapter:

  integrated oil temperature monitoring, pressure release valve, on-line monitoring and protection devices, such as gas relay for intelligent condition monitoring and fault early warning of the distribution network to provide support.

Environmental Conditions

- The ambient temperature range for normal operation is -25℃ to +40℃ , with the maximum daily average temperature not exceeding +30℃ .
- Altitude: ≤ 1000 m.Under common outdoor environmental conditions such as humidity, salt spray, pollution and wind load, its fully sealed oil tank and anti-corrosion coating ensure long-term stable operation.
- However, installation in special locations with flammable, explosive, severe chemical corrosion or intense vibration shall be avoided.

SBH15、SBH21、SBH25

10kV and 20kV Oil-immersed amorphous alloy transformers

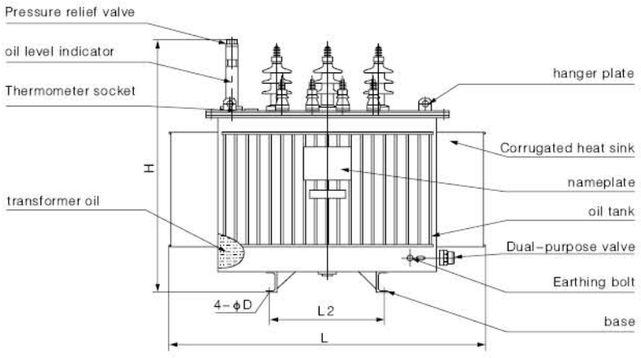
10kV and 20kV oil-immersed amorphous alloy core distribution transformers (passed short-circuit test)

Due to the fact that amorphous alloy cores cannot withstand mechanical forces and the mechanical strength of rectangular coils is relatively weak, passing short-circuit tests on amorphous alloy transformers has become a technical challenge in the transformer field. Our company has successfully overcome this difficulty by applying mature technical experience and independently designed and developed the SBH15-M-2500/10 distribution transformer. The short-circuit test of our company's amorphous alloy transformers was successfully passed at the National Transformer Quality Supervision and Inspection Center in Shenyang. This marks that the design and manufacturing technology of our company's amorphous alloy transformers is at the international leading level.

Product insulation level

Voltage level (kV)	the maximum effective voltage value of the equipment (kV)	The effective value of the rated short-time power frequency withstand voltage (kV/min)	The full-wave peak value of the rated lightning impulse withstand voltage (kV)
≤ 1	≤ 1	5	--
6	6.9	25	75
10	11.5	35	95
20	23	55	125

Product outline drawing



SHENHENG POWER

SBH15、SBH21、SBH25

10kV and 20kV Oil-immersed amorphous alloy transformers

Technical Parameters

10kV, 20kV, SBH15 oil-immersed amorphous alloy transformers

Rated Capacity (kVA)	Electrical steel strip S13			Amorphous alloy SH15			Short-circuit impedance %
	No load loss W	Full load loss W		No load loss W	Full load loss W		
		Dynll/Yznl	Yyn0		Dynll/Yznl	Yyn0	
30	80	630	600	33	630	600	4.0
50	100	910	870	43	910	870	
63	110	1090	1040	50	1090	1040	
80	130	1310	1250	60	1310	1250	
100	150	1580	1500	75	1580	1500	
125	170	1890	1800	85	1890	1800	
160	200	2.310	2200	100	2310	2200	
200	240	2730	2600	120	2730	2600	
250	290	3200	3050	140	3200	3050	
315	340	3830	3650	170	3830	3650	
400	410	4520	4300	200	4520	4300	
500	480	5410	5150	240	5410	5150	
630	570	6200		320	6200		4.5
800	700	7500		380	7500		
1000	830	10300		450	10300		
1250	970	12000		530	12000		
1600	1170	14500		630	14500		
2000	1360	18300		720	18300		5.0
2500	1600	21200		865	21200		

Note: The dimensions are for reference only. The actual provided drawings and dimensions shall prevail

SBH15、SBH21、SBH25

10kV and 20kV Oil-immersed amorphous alloy transformers

Technical Parameters

Technical parameters of 10kV, 20kV, SBH21 oil-immersed amorphous alloy transformers

Rated Capacity (kVA)	Electrical steel strip S21			Amorphous alloy SH21			Short-circuit impedance %
	No load loss W	Full load loss W		No load loss W	Full load loss W		
		DynII/YznI	Yyn0		DynII/YznI	Yyn0	
30	70	505	480	33	535	510	4.0
50	90	730	695	43	780	745	
63	100	870	830	50	930	890	
80	115	1050	1000	60	1120	1070	
100	135	1265	1200	75	1350	1285	
125	150	1510	1440	85	1615	1540	
160	180	1850	1760	100	1975	1880	
200	215	2185	2.080	120	2330	2225	
250	260	2560	2.440	140	2735	2610	
315	305	3065	2920	170	3275	3120	
400	370	3615	3440	200	3865	3675	
500	430	4330	4120	240	4625	4400	
630	510	4960		320	5300		4.5
800	630	6000		380	6415		
1000	745	8240		450	8.800		
1250	370	9600		530	10260		
1600	1050	11600		630	12400		
2000	1225	14640		710	14800		5.0
2500	1440	14840		860	16300		

Note: The dimensions are for reference only. The actual provided drawings and dimensions shall prevail

SBH15、SBH21、SBH25

10kV and 20kV Oil-immersed amorphous alloy transformers

Technical Parameters

Technical parameters of 10kV, 20kV, SBH25 oil-immersed amorphous alloy transformers

Rated Capacity (kVA)	Electrical steel strip S25			Amorphous alloy SH25			Short-circuit impedance %
	No load loss W	Full load loss W		No load loss W	Full load loss W		
		DynII/YznI	Yyn0		DynII/YznI	Yyn0	
30	65	455	430	25	510	480	4.0
50	80	655	625	35	735	700	
63	90	785	745	40	880	840	
80	105	945	900	50	1060	1010	
100	120	1140	1080	60	1270	1215	
125	135	1360	1295	70	1530	1450	
160	160	1665	1585	80	1870	1780	
200	190	1970	1870	95	2210	2100	
250	230	2300	2195	110	2590	2470	
315	270	2760	2630	135	3100	2950	
400	330	3250	3095	160	3660	3480	
500	385	3900	3710	190	4380	4170	
630	460	4460		250	5020		4.5
800	560	5400		300	6075		
1000	665	7415		360	8340		
1250	780	8640		425	9720		
1600	940	10440		500	11745		
2000	1085	13180		550	14000		5.0
2500	1280	13360		670	15450		

Note: The dimensions are for reference only. The actual provided drawings and dimensions shall prevail

S18、S20、S22

35kV Oil-immersed power transformer

Shared Wisdom 'S'
Achieving Future Patterns

S18、S20、S22

35kV Oil-immersed power transformer

CHSH®

Product Overview

This series of products is relatively advanced in design and has undergone significant improvements and enhancements in materials, structure and craftsmanship. The high and low pressure clamps are tightened with steel tension bands or upper beams and side beams to form a solid frame structure, enhancing the core clamping force and the ability to withstand transportation shock. It has strong short-circuit resistance, an attractive appearance selection, reliable operation, low loss and low noise, reaching the advanced level of similar foreign products.

Model Meaning

S	□	□	□	-	□	/	□
Three phase	Z "for on-load voltage regulating" F "for the air-cooled self-cooling no code	Non-field excitation changer	Performance level code		Rated power		Voltage level (kV)

Technical Parameters of S18 Series 35kV Oil-Immersed Power Transformer (50kVA~2500kVA) Three-Phase Double-Winding Off-Circuit Tap-Changing Distribution Transformer

Rated capacity (kVA)	High Voltage (kV)	High voltage tapping range (%)	Low voltage (kV)	Vector Group	S18		No load current (%)	Short-circuit impedance %
					No load loss (kW)	Full load loss (kW)		
50	35	±2×2.5 ±5	0.4	Dyn11 Yyn0	130	1140/1080	1.00	6.5
100					185	1910/1810	0.88	
125					215	2250/2150	0.88	
160					225	2680/2550	0.80	
200					270	3150/3000	0.80	
250					320	3750/3570	0. 76	
315					385	4510/4300	0.76	
400					465	5450/5200	0.68	
500					545	6560/6250	0.68	
630					665	7470	0.52	
800					785	8930	0.52	
1000					920	10900	0.52	
1250					1120	13200	0. 48	
1600					1350	15800	0.48	
2000					1590	19700	0.44	
2500					1890	23200	0.44	

Technical Parameters of S20 Series 35kV Oil-Immersed Power Transformer (50-2500kVA)

Rated capacity (kVA)	High Voltage (kV)	High voltage tapping range (%)	Low voltage (kV)	Vector Group	S20		No load current (%)	Short-circuit impedance %
					No load loss kW	Full load loss kW		
50	35	±2×2.5 ±5	0.4	Dyn11 Yyn0	105	1085/1025	1.00	6.5
100					150	1815/1720	0.88	
125					170	2140/2045	0.88	
160					180	2545/2425	0.80	
200					215	2995/2850	0.80	
250					255	3565/3390	0.76	
315					310	4285/4085	0.76	
400					370	5180/4940	0.68	
500					435	6230/5940	0.68	
630					530	7100	0.52	
800					630	8485	0.52	
1000					735	10355	0.52	
1250					895	12540	0.48	
1600					1080	15010	0.48	
2000					1270	18715	0.44	
2500					1510	22040	0.44	

Note:

1. according to the requirements of transformer for high subsection scope for plus or minus 2 x 2.5%.
2. the capacity of other product performance parameters, shall be determined between the user and the manufacturer.
3, size is for reference only, the actual drawings and size shall prevail.

Technical Parameters of S22 Series 35kV Oil-Immersed Power Transformers(50kVA~2500kVA Three-Phase Double-Winding Off-Circuit Tap-Changing Distribution Transformers)

Rated capacity (kVA)	High Voltage (kV)	High voltage tapping range (%)	Low voltage (kV)	Vector Group	S20		No load current (%)	Short-circuit impedance %
					No load loss kW	Full load loss kW		
50	35	±2×2.5 ±5	0.4	Dyn11 Yyn0	90	1085/1025	1.00	6.5
100					130	1815/1720	0.88	
125					150	2140/2045	0.88	
160					160	2545/2425	0.80	
200					190	2995/2850	0.80	
250					225	3565/3390	0.76	
315					270	4285/4085	0. 76	
400					325	5180/4940	0.68	
500					380	6230/5940	0.68	
630					465	7100	0.52	
800					550	8485	0.52	
1000					645	10355	0.52	
1250					785	12540	0.48	
1600					945	15010	0. 48	
2000					1115	18715	0.44	
2500					1325	22040	0.44	

S18、S20、S22
35kV oil-immersed power transformer

35kV 油浸式三相双绕组无励磁调压电力变压器技术参数

Rated capacity (kVA)	1 level		2 level		3 level		Short-circuit impedance %
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	
3150	1.7	20.7	2.0	20.7	2.4	21.9	7
4000	2.0	24.6	2.3	24.6	2.9	25.9	
5000	2.4	28.2	2.8	28.2	3.5	29.7	
6300	2.9	31.5	3.4	31.5	4.2	33.3	8
8000	4.0	34.6	4.7	34.6	2.8	36.5	
10000	4.8	40.8	5.7	40.8	7.0	43.0	
12500	5.5	48.4	6.5	48.4	8.0	51.1	
16000	6.7	59.2	7.9	59.2	9.7	62.5	
20000	7.9	71.6	9.4	71.6	11.5	75.5	
25000	9.4	84.6	11.1	84.6	13.6	89.3	10
31500	11.1	100.8	13.1	100.8	16.2	106.4	

Energy efficiency grade of 35kV oil-immersed three-phase double-winding on-load tap-changing power transformer

Rated capacity (kVA)	1 level		2 level		3 level		Short-circuit impedance %
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	
3150	1.8	22.2	2.1	22.2	2.6	23.5	7
4000	2.1	26.2	2.5	26.2	3.1	27.6	
5000	2.6	30.8	3.0	30.8	3.7	32.5	
6300	3.1	33.0	3.7	33.0	4.5	34.9	7.5
8000	4.3	36.5	5.1	36.5	6.3	38.6	
10000	5.1	43.2	6.0	43.2	7.4	45.6	
12500	6.0	51.1	7.1	51.1	8.7	54.0	8
16000	7.2	63.3	8.5	63.3	10.5	66.8	
20000	8.5	74.4	10.1	74.4	12.4	78.6	
25000	10.1	88.0	11.9	88.0	14.6	92.9	10
31500	12.0	104.4	14.2	104.4	17.4	110.2	

66kV

Oil-immersed power transformer

66kV
Oil-immersed power transformer

CHSH®

Product Overview

The 66kV oil-immersed power transformer is a core power transmission and transformation equipment in medium and high voltage power grids, mainly used for power reception, voltage transformation and distribution in 66-kilovolt voltage level transmission lines, regional substations and large industrial users. Its core and windings are all immersed in insulating oil, and insulation and heat dissipation are achieved through oil circulation. It features high insulation strength, strong overload capacity, reliable operation and long service life.

Model Meaning

S	□	□	□	-	□	/	66
Three phase	Z "for on-load voltage regulating" F "for the air-cooled self-cooling no code	Non-field excitation changer	Performance level code		Rated power		Voltage level (kV)

Technical Parameters of 66kV Oil-Immersed Three-Phase Double-Winding Off-Circuit Tap-Changing Power Transformer

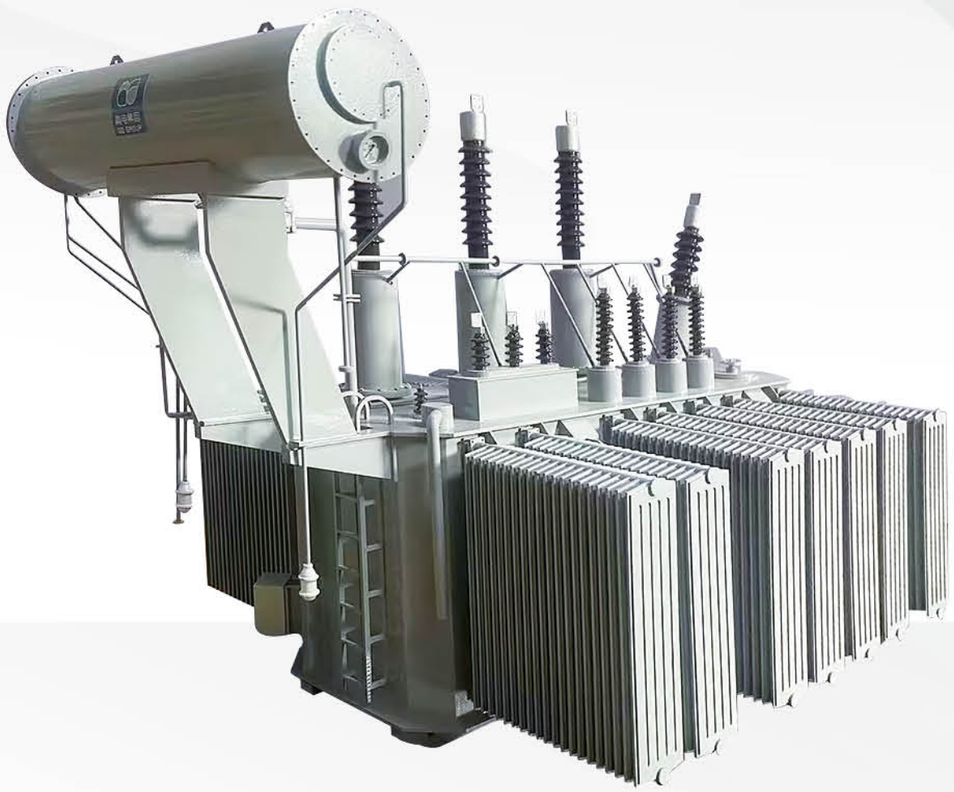
Rated capacity kVA	1 级		2 级		3 级		hort-circuit impedance %
	空载损耗 kW	负载损耗 (75℃)kW	空载损耗 kW	负载损耗 (75℃)kW	空载损耗 kW	负载损耗 (75℃)kW	
3150	2.2	20.7	2.6	20.7	3.2	21.9	8
4000	2.6	24.6	3.1	24.6	3.8	25.9	
5000	3.1	27.6	3.7	27.6	4.9	29.2	
6300	4.0	30.8	4.7	30.8	5.8	32.5	
8000	4.9	36.5	5.8	36.5	7.1	38.5	
10000	5.8	43.0	6.8	43.0	8.4	45.4	
12500	6.8	51.1	8.1	51.1	9.9	54.0	
16000	8.3	62.8	9.8	62.8	12.0	66.3	
20000	9.7	76.1	11.4	76.1	14.1	80.4	9
25000	11.4	90.0	13.5	90.0	16.6	95.0	
31500	13.5	108.0	16.0	108.0	19.7	114.0	
40000	16.2	126.9	19.1	126.9	23.5	134.0	
50000	19.4	150.3	22.9	150.3	28.2	158.7	
63000	22.9	178.2	27.0	178.2	33.3	188.1	

Energy Efficiency Grade of 66kV Oil-Immersed Three-Phase Double-Winding On-Load Tap-Changing Power Transformer

Rated capacity kVA	1 level		2 level		3 level		hort-circuit impedance %
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	
6300	4.4	30.8	5.2	30.8	6.4	32.5	
8000	5.3	36.5	6.2	36.5	7.7	38.5	
10000	6.2	43.0	7.3	43.0	9.0	45.4	
12500	7.4	51.1	8.7	51.1	10.7	54.0	
16000	8.9	62.8	10.5	62.8	12.9	66.3	
20000	10.6	76.1	12.5	76.1	15.4	80.4	9
25000	12.5	90.0	14.8	90.0	18.2	95.0	
31500	14.8	108.0	17.5	108.0	21.5	114.0	
40000	17.7	126.9	20.9	126.9	25.8	134.0	
50000	20.9	150.3	24.7	150.3	30.4	158.7	
63000	24.7	178.2	29.2	178.2	35.9	188.1	

110kV

Oil-immersed power transformer



110kV
Oil-immersed power transformer

CHSH®

Product Overview

Ultra-high voltage transformers adopt Toshiba's analysis software from Japan, combined with the Company's exclusive calculation and verification procedures, to conduct comprehensive optimized design and validation for key components including the iron core, windings, active part, leads and oil tank, ensuring reliable product performance.

Supported by advanced processing equipment, carefully selected premium materials and efficient manufacturing processes, the transformers feature compact size, light weight, low loss, low partial discharge and low noise. They deliver superior quality, energy efficiency and environmental friendliness, with easy installation and maintenance, stable operational reliability and effectively reduced operating costs throughout the service life.

Technical parameters of 110kV oil-immersed three-phase double-winding non-excitation voltage regulating power transformer

Rated capacity kVA	1 level		2 level		3 level		Short-circuit impedance %
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	
6300	4.1	32	1.8	32	5.9	33	
8000	4.9	38	5.8	38	7.1	40	
10000	5.8	45	6.8	45	8.4	48	
12500	6.8	53	8.1	53	9.9	56	
16000	8.3	65.7	9.8	65.7	12.0	69	
20000	9.7	79	11.4	79	14.1	84	10.5
25000	11.4	94	13.5	94	16.6	99	
31500	13.5	111	16.0	111	19.7	117	
40000	16.2	133	19.1	133	23.5	141	
50000	19.4	158	22.9	158	28.2	166	
63000	22.9	187	27.0	187	33.3	198	

110kV
Oil-immersed power transformer

Technical parameters of 110kV oil-immersed three-phase three-winding unexcited voltage regulating transformer

Rated capacity kVA	1 level		2 level		3 level		Short-circuit impedance %	
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	Step up	Step down
6300	4.9	40	5.8	40	7.1	42	high-medium 17.5~18.5 high-low10.5 medium-low 6.5	high-medium 10.5 High-low 17.5~18.5 medium-low 6.5
8000	5.8	48	6.9	48	8.5	50		
10000	6.9	56	8.2	56	10.1	59		
12500	8.1	67	9.6	67	11.8	70		
16000	9.8	81	11.6	81	14.3	86		
20000	11.6	95	13.7	95	16.9	101		
25000	13.5	113	16.0	113	19.7	120		
31500	16.2	134	19.1	134	23.5	142	high-medium 17.5~18.5 high-low10.5 medium-low 6.5	high-medium 10.5 High-low 17.5~18.5 medium-low 6.5
40000	19.1	161	22.6	161	27.8	170		
50000	22.9	192	27.0	192	33.3	202		
63000	27.1	230	32.0	230	39.4	243		

110kV
Oil-immersed power transformer

Technical parameters of 110kV Oil-immersed three-phase double-winding on-load tap-changing power transformer

Rated capacity kVA	1 level		2 level		3 level		Short-circuit impedance %
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	
6300	4.4	32	5.2	32	6.4	33	10.5
8000	5.3	38	6.2	38	7.7	40	
10000	6.2	45	7.3	45	9.0	48	
12500	7.4	53	8.7	53	10.7	56	
16000	8.9	66	10.5	66	12.9	69	
20000	10.6	79	12.5	79	15.4	84	
25000	12.3	94	14.8	94	18.2	99	
31500	14.9	111	17.6	111	21.6	117	
40000	17.8	140	21.0	140	25.8	148	
50000	21.0	175	24.8	175	30.6	184	
63000	25.0	209	29.5	209	36.3	220	

220kV

Oil-immersed power transformer

Product Overview

The 220kV oil-immersed power transformer is manufactured in accordance with the International Electrotechnical Commission standard IEC60076 and the National Standard GB1094 of the People's Republic of China. This series of products feature excellent impact resistance, high mechanical strength, strong short-circuit resistance, low partial discharge, low noise, low loss, good sealing performance and low maintenance. They can be used as main transformers in power plants, substations and for power transmission and transformation in urban and rural power grids.

Structural Features

- It is connected into a steel structure, thereby achieving smaller no-load loss and lower noise.
- Depending on the transformer capacity, the windings adopt cylindrical, helical, continuous and other structural designs, which effectively optimize the impulse voltage distribution. Transposed conductors or composite conductors are applied to reduce additional winding losses. Electric field distribution and winding impulse characteristics are simulated and calculated via computer modeling, ensuring excellent electrical performance and high impulse strength of the windings. Meanwhile, effective process measures are implemented to guarantee safe and reliable operation.
- The transformer body compression structure adopts a complete round insulating pressure plate. The assembly process of the set adopts the overall assembly of windings, thereby enhancing the reliability of the product.
- The oil tank adopts a flat top structure, and the tank wall is welded with folded plate reinforcing iron, which enhances the mechanical strength of the oil tank and reduces the stray loss of the transformer.

  The transformer is equipped with magnetic shielding on the inner wall of the oil tank
- To prevent the transformer body from shifting during transportation, a positioning device is installed on the transformer body in the oil tank. A sealed oil storage tank is adopted to isolate the transformer oil from the atmosphere, preventing it from getting damp and aging. A pointer-type oil level gauge is installed at the end. According to the weight of the transformer oil, a pressure relief valve is installed on the top of the oil tank to ensure the safe operation of the product.

Energy efficiency grade of 220kV oil-immersed three-phase double-winding on-load tap-changing power transformer without excitation

Rated capacity kVA	1 level		2 level		3 level		Short-circuit impedance %
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	
31500	15	115	18	115	22	122	12~14
40000	18	134	21	134	26	142	
50000	21	161	25	161	31	170	
63000	25	188	30	188	37	199	
75000	29	213	34	213	42	225	
90000	34	246	40	216	49	259	
120000	41	304	49	304	60	321	
150000	49	360	58	360	71	380	
160000	51	378	60	378	74	399	
180000	56	413	66	413	82	436	
240000	70	484	83	481	102	511	
300000	83	577	98	577	121	609	
360000	95	662	112	662	138	698	
370000	97	675	114	675	141	713	
400000	103	716	122	716	150	755	
420000	106	742	125	742	154	783	

220kV
Oil-immersed power transformer

Energy Efficiency Grade of 220kV Oil-Immersed Three-Phase Two-Winding On-Load Tap-Changing Power Transformer

Rated capacity kVA		1 level		2 level		3 level		Short-circuit impedance %
		No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	
31500		17	115	20	115	24	122	12~14
40000		20	134	23	134	29	142	
50000		24	161	28	161	34	170	
63000		28	188	33	188	40	199	
90000		35	246	42	246	51	259	
120000		43	304	51	304	63	321	
150000		51	360	60	360	74	380	
180000		59	413	70	413	86	436	
120000		45	303	53	303	65	320	
150000	Low voltage 66kV、69kV	53	355	62	355	77	374	
180000		62	406	73	406	90	428	
240000		77	504	91	504	112	532	

Energy Efficiency Grade of 220kV Oil-Immersed Three-Phase Three-Winding On-Load Tap-Changing Power Transformer

Rated capacity kVA	1 level		2 level		3 level		Short-circuit impedance %
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	
31500	19	138	23	138	28	145	high-medium 12~14 high-low22~24 medium-low 7~9
40000	23	165	27	165	33	174	
50000	26	194	31	194	38	205	
63000	31	231	36	231	45	244	
90000	40	300	47	300	58	316	
120000	51	369	60	369	74	390	
150000	59	438	70	138	86	463	
180000	68	538	81	538	99	568	
240000	85	667	100	667	123	704	

220kV
Oil-immersed power transformer

Energy efficiency grade of 220kV oil-immersed three-phase three-winding on-load tap-changing power transformer without excitation

Rated capacity kVA	1 level		2 level		3 级		Short-circuit impedance %	
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	Step up	Step down
31500	18	138	21	138	26	145	High-medium 22~24 high-low 12~14 medium-low 7~9	High-medium 22~24 high-low 12~14 medium-low 7~99
40000	21	165	25	165	30	174		
50000	24	194	29	194	35	205		
63000	29	231	34	231	42	244		
90000	37	300	44	300	54	316		
120000	46	369	55	369	68	390		
150000	55	438	65	438	80	463		
180000	62	500	73	500	90	527		
210000	72	616	91	616	112	650		
300000	91	726	108	726	133	767		

220kV OilImmersed ThreePhase TwoWinding Power Transformer with 66kV Low Voltage & OffCircuit Tap Changer – Energy Efficiency Grade

Rated capacity kVA	1 level		2 level		3 level		Short-circuit impedance %
	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	No load loss kW	Full load loss (75℃)kW	
31500	17	129	20	129	24	136	12~14
40000	20	150	23	150	29	159	
50000	23	180	27	180	34	190	
63000	28	211	33	211	40	222	
90000	36	275	43	275	53	391	
120000	45	330	53	330	65	349	
150000	53	387	63	387	78	409	
180000	61	438	72	488	88	463	
240000	75	543	88	543	109	573	

DH15-M.R

Single-phase column- mounted transformer

DH15-M.R
Single-phase column- mounted transformer

CHSH®

Product Overview

It works based on the principle of electromagnetic induction. When highvoltage electric energy passes through the highvoltage winding, the generated magnetic field produces magnetic flux in the iron core. This magnetic flux further induces electromotive force in the lowvoltage winding, thereby converting highvoltage electric energy into lowvoltage electric energy.

Specifically, after a polemounted transformer is connected to the power supply, the incoming current generates magnetic flux in the windings. This magnetic flux passes through the internal and external magnetic circuits of the windings and ultimately forms magnetic linkage. Since the magnetic linkage inside the winding is produced by current, it is referred to as selfinduced magnetic linkage or inductive magnetic linkage. When the two windings of a transformer have different numbers of turns, the voltage in the transformer changes. This occurs because the magnetic flux generates different voltages inside and outside windings with varying turns.

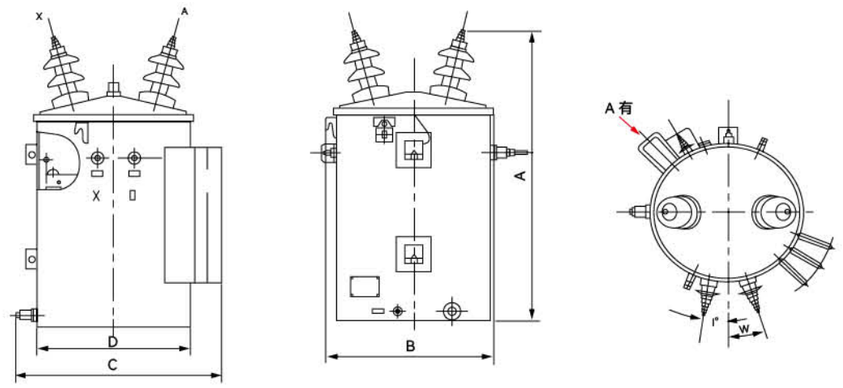
Model Meaning

D	□	□	M.R	-	□	/	□
Single phase	H the gold alloy iron core, conventional iron core is blank	Design number: 9 11 15 16	M fully sealed oil-immersed type, R coil core		Rated capacity		voltage level (kV)

Product Feature

The structure of a single-phase pole-mounted transformer mainly includes high-voltage coils, low-voltage coils, cores and oil tanks, etc. There are two types of cores: cylindrical and rectangular. Among them, the cylindrical core has a relatively simple structure. The transformer is installed as a whole on the columns of the power line, which is convenient for maintenance and operation.

Product Structure



DH15-M.R

Single-phase column- mounted transformer

Parameters of D11-M.R Series Single-Phase Pole-Mounted Distribution Transformer (Conventional Silicon Steel Iron Core)

Model	Rated Capacity (kVA)	Voltage Combination (V)			LossW	
		High voltage	Tapping range	Low voltage	No load loss	Full load loss
D11-3	3	33000 30000 17321 11547 13800 7967 7620 6350 Or other	±2×2.5% Or other	120 220 240 250 Or other	9	45
D11-5	5				19	75
D11-10	10				36	120
D11-15	15				50	195
D11-25	25				80	290
D11-37.5	37.5				105	360
D11-50	50				135	500
D11-75	75				190	650
D11-100	100				210	850
DH11-167	167				350	1410
D11-250	250				500	2000
D11-333	160				650	2500

DH15-M.R

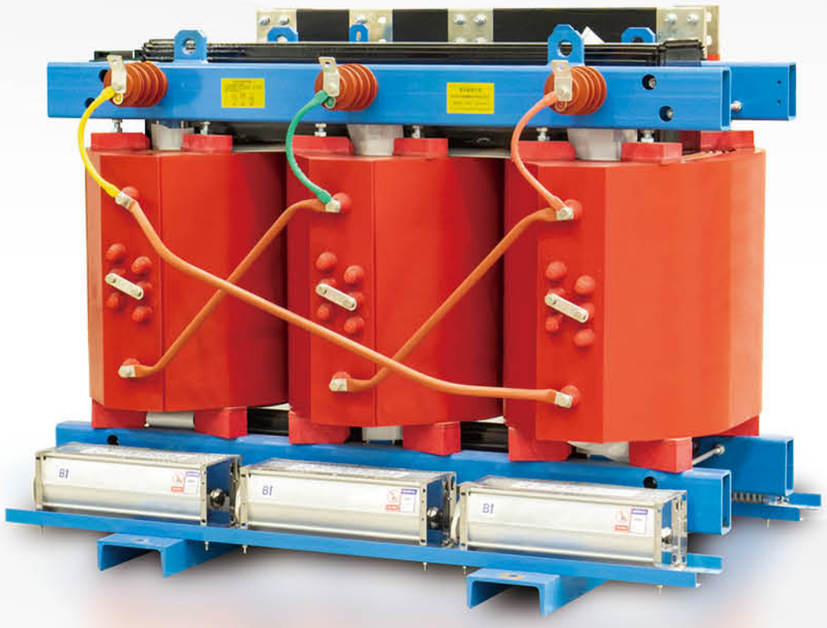
Single-phase column- mounted transformer

Parameters of DH15-M.R Series Single-phase Pole-mounted Power Transformer (Non-gold Alloy core)

Model	Rated Capacity (kVA)	Voltage Combination (V)			LossW	
		High voltage	Tapping range	Low voltage	No load loss	Full load loss
DH15-3	3	33000 30000 17321 11547 13800 7967 7620 6350 Or other	±2×2.5% or ±5%	220 230 440 460 Or other	12	120
DH15-5	5				15	145
DH15-10	10				18	260
DH15-16	16				22	365
DH15-20	20				25	430
DH15-30	30				30	625
DH15-40	40				35	775
DH15-50	50				40	950
DH15-63	63				50	1135
DH15-80	80				60	1400
DH15-100	100				70	1650
DH15-125	125				85	1950
DH15-160	160				100	2365

SCB12、SCB14、SCB18

10kV Epoxy Resin Cast Dry-Type Power Transformer



Product Overview

SCB12, SCB14 and SCB18 series 10kV epoxy resin cast drytype power transformers serve as upgraded alternatives to oilimmersed distribution transformers. They feature optimal performance among all drytype transformers and are particularly suitable for critical applications such as urban power grids, highrise buildings, business centers, theaters, hospitals, hotels, tunnels, subways, stations, ports, airports, underground power stations, laboratories and compact substations.

Model Meaning

S	C	B	□	-	□	/	□
Three phase	Resin Insulatio	Low-voltage foil winding	Performance level code		Rated power		Voltage level (kV)

Temperature control, temperature display

The temperature control system consists of a temperature controller and PTC temperature sensing elements installed at the hottest spots of the product, i.e., the upper ends of the low-voltage windings, to realize temperature measurement and control of the transformer. If the winding temperature becomes excessively high due to overload operation or faults, the temperature controller will send out an alarm signal and automatically trigger tripping when the temperature exceeds the safe threshold. When forced air cooling is adopted, the temperature controller controls the activation or switching of cooling fans according to the winding temperature.

The temperature display system directly indicates the hot-spot temperature of windings during transformer operation and can be used in conjunction with the temperature control system.

Both the temperature control and temperature display systems can be mounted at a certain distance from the main transformer unit. The maximum lead lengths for the temperature sensing elements are specified as follows:Temperature control system: < 20 mTemperature display system: < 10 m (two-wire system) / < 100 m (two-wire system with compensating cables)

Product Feature

Our factory manufactures 10 kV SCH15, SCH17 and SCH19 series power transformers, which are among the earliest domestically approved lownoise, lowloss epoxy resin cast drytype transformers with official model certificates. Thanks to advanced design, premium materials, scientific formulations, strict manufacturing processes and highstandard testing, the products feature the following advantages:

- The highvoltage windings are wound with copper wires, while the lowvoltage windings adopt copper wires or copper foils. The windings are wrapped and filled with fiberglass mats, then cast with nonfilled epoxy resin under vacuum. After curing, they form a rigid integrated cylindrical structure with high mechanical strength, low partial discharge and high reliability.
- The transformers are flameretardant, explosionproof and environmentally friendly. Insulating materials such as fiberglass possess selfextinguishing properties; no electric arcs will occur under shortcircuit conditions, and the resin will not release toxic or harmful gases at high temperatures. The windings are moistureproof, and the core clamps are coated with special anticorrosion protection, enabling stable operation under 100 % relative humidity and other harsh environments. No drying treatment is required after intermittent operation.
- High resistance to short circuits and lightning impulse.
- The inner and outer resin layers of the windings are thin, ensuring excellent heat dissipation. Natural air cooling (AN) is adopted as the standard cooling method. A forced air cooling system (AF) can be equipped for transformers of any protection grade to enhance shorttime overload capability and ensure safe operation.
- Low power loss, remarkable energysaving effect, economical operation and maintenancefree performance.
- Compact size, light weight, small floor area and low installation cost. No oil spill containment pits, firefighting facilities or standby power supplies are required.
- Free from fire and explosion risks, the transformers can be dispersedly installed at load centers close to power consumption points, thereby reducing cable investment and saving high costs for lowvoltage distribution facilities.

Technical parameters of SCB12 epoxy resin cast dry-type power transformer

Rated Capacity (kVA)	Electrical steel strip SCB12				Short-circuit impedance %
	No load loss W	Full load loss W			
		B(100℃)	F(120℃)	H(145℃)	
30	150	670	710	760	4.0
50	215	940	1000	1070	
80	295	1290	1380	1480	
100	320	1480	1570	1690	
125	375	1740	1850	1980	
160	430	2000	2130	2280	
200	495	2370	2530	2710	
250	575	2590	2760	2960	
315	705	3270	3470	3730	
400	785	3750	3390	4280	
500	930	4590	4880	5230	
630	1070	5530	5880	6390	
630	1040	5610	5960	6400	6.0
800	1215	6550	6960	7460	
1000	1415	7650	8130	8760	
1250	1670	9100	9690	10370	
1600	1960	11050	11730	12580	
2000	2440	13600	14450	15560	
2500	2880	16150	17170	18460	

Technical parameters of SCB14 Epoxy Resin Cast dry-type power transformer

Rated Capacity (kVA)	Electrical steel strip SCB14				Short-circuit impedance %
	No load loss	Full load loss W			
		B(100℃)	F(120℃)	H(145℃)	
30	130	605	640	685	4.0
50	185	845	900	965	
80	250	1160	1240	1330	
100	270	1330	1415	1520	
125	320	1565	1665	1780	
160	365	1800	1915	2050	
200	420	2135	2275	2440	
250	490	2330	2485	2665	
315	600	2945	3125	3365	
400	665	3375	3590	3850	
500	790	4130	4390	4705	
630	910	4975	5290	5660	
630	885	5050	5365	5760	6.0
800	1035	5895	6265	6715	
1000	1205	6885	7315	7885	
1250	1420	8790	8720	9335	
1600	1665	9945	10555	11320	
2000	2075	12240	13005	14005	
2500	2450	14535	15445	16605	

SCB12、SCB14、SCB18
10kV Epoxy Resin Cast Dry-Type
Power Transformer

Technical Parameters of SCB18 Epoxy Resin Cast DryType Power Transformer

Rated Capacity (kVA)	Electrical steel strip SCB18				Short-circuit impedance %
	No load loss W	Full load loss W			
		B(100℃)	F(120℃)	H(145℃)	
30	105	605	645	685	4.0
50	155	845	900	965	
80	210	1160	1240	1330	
100	230	1360	1415	1520	
125	270	1565	1655	1780	
160	310	1800	1915	2050	
200	360	2135	2275	2440	
250	415	2330	2485	2665	
315	510	2945	3125	3355	
400	570	3375	3590	3850	
500	670	4130	4390	4705	
630	775	4975	5290	5660	
630	750	5050	5365	5760	6.0
800	875	5895	6365	6715	
1000	1020	6885	7315	7885	
1250	1205	8190	8720	9335	
1600	1415	9945	10555	11320	
2000	1760	12240	13005	14005	
2500	2080	14535	15445	16605	

注：尺寸仅供参考，以实际提供的图纸和尺寸为准。

SC(B)12、SC(B)14、SC(B)18

35kV Epoxy Resin Cast Dry-type Power Transformer

Product Overview

This series of products directly step down 35 kV grid power to 400 V distribution power or 10 kV transmission power for end users. Thanks to their outstanding advantages, they are widely adopted in an increasing number of engineering projects.

Main advantages:

It reduces floor space occupation and the construction of multi-stage power transformation projects,delivering remarkable social benefits.

It cuts down project investment and improves economic efficiency.

It eliminates the 10 kV power transmission and transformation link, resulting in a significant reduction in operation and maintenance costs.

With 35 kV power supplied directly to the power consumption centers, the reliability of power supply is effectively enhanced.

Model Meaning

S	C	B	□	-	□	/	□
Three phase	Resin Insulation	Low-voltage foil winding	Performance level		Rated capacity		Voltage level (kV)

Technical parameters of 35kV SC(B)12 Epoxy Resin Cast dry-type power transformer

Rated Capacity (kVA)	No lad loss No kW	Full load loss kW			Short-circuit impedance %
		B (100℃)	F (120℃)	H (145℃)	
1000	1.7	9.8	10.4	11.2	6.0~14.0
1250	2.0	11.9	12.7	13.5	
1600	2.3	14.5	15.4	16.5	
2000	2.7	17.1	18.2	19.4	
2500	3.2	20.5	21.8	23.3	
3000	3.9	22.6	24.0	25.6	
3500	4.3	23.1	24.5	26.1	
4000	5.0	27.7	29.4	31.3	
4500	5.4	30.4	32.3	34.5	
5000	6.0	32.8	34.9	37.3	
6300	7.1	38.4	40.6	43.6	
8000	8.5	46.3	49.2	52.6	
10000	10.2	54.5	52.9	61.9	

Technical Parameters of 35kV SC(B)14 Epoxy Resin Cast Dry-Type Power Transformer

Rated Capacity (kVA)	No lad loss No kW	Full load loss kW			Short-circuit impedance %
		B (100℃)	F (120℃)	H (145℃)	
1000	1.6	8.8	9.4	10.1	
1250	1.8	10.7	11.4	12.2	
1600	2.1	13.1	13.9	14.9	
2000	2.5	15.4	16.4	17.5	
2500	2.9	18.5	19.6	21.0	
3000	3.5	20.3	21.6	23.1	
3500	3.9	20.7	22.1	23.5	6.0~14.0
4000	4.5	24.9	26.5	28.2	
4500	4.9	27.4	29.1	31.1	
5000	5.4	29.6	31.4	33.6	
6300	6.4	34.6	36.7	39.2	
8000	7.6	41.7	44.3	47.3	
10000	9.1	49.0	52.1	55.7	

SC(B)12、SC(B)14、SC(B)18
35kV Epoxy Resin Cast Dry-type
Power Transformer

Technical Parameters of 35kV SC(B)18 Epoxy Resin Cast Dry-Type Power Transformer

Rated Capacity (kVA)	No lad loss No kW	Full load loss kW			Short-circuit impedance %
		B (100℃)	F (120℃)	H (145℃)	
1000	1.4	8.8	9.4	10.1	
1250	1.6	10.7	11.4	12.2	
1600	1.9	13.1	13.9	14.9	
2000	2.2	15.4	16.4	17.5	
2500	2.6	38.5	19.6	21.0	
3000	3.2	20.3	21.6	23.1	
3500	3.5	20.7	22.1	23.5	
4000	4.1	24.9	26.5	28.2	6.0~14.0
4500	4.4	27.4	29.4	31.1	
5000	4.8	29.6	31.4	33.6	
6300	5.7	34.6	36.7	39.2	
8000	6.9	41.7	44.3	47.3	
10000	8.2	49.0	52.1	55.7	
12500	14.1	-	64.6	-	
16000	17.3	-	76.0	-	

SCBH15、SCBH17、SCBH19

10kV Amorphous Alloy Dry-type Power Transformer

SCBH15、SCBH17、SCBH19
10kV Amorphous Alloy Dry-type
Power Transformer

CHSH®

Product Overview

Our company adopts mature technologies to develop and design the SCBH15, SCBH17, SCBH19 series amorphous alloy drytype power transformers. Featuring superior performance, safety, reliability and environmental friendliness, they can be installed deep inside load centers to meet the development needs of modern densely populated cities with highdensity power loads.

With greatly reduced noload loss and load loss, these transformers represent the cuttingedge technology among today's drytype transformers worldwide.

The products boast advantages such as flame retardancy, selfextinguishing performance, moisture resistance, crack resistance and maintenancefree operation. They are widely applied in highrise buildings, commercial centers, subways, airports, stations, industrial and mining enterprises, and power plants. They are especially suitable for installation in locations with strict fire prevention requirements, such as flammable and explosive hazardous areas.

Model Meaning

S	C	B	H	□	-	□	/	□
Three phase	resin insulation	Low-voltage foil winding	Amorphous alloy	Performance level code		Rated power		Voltage level (kV)

Technical parameters of 10kV SCBH15 amorphous alloy dry-type power transformer

Rated Capacity (kVA)	High Voltage (kV)	High-voltage tapping range (%)	Low Voltage (kV)	Vector Group	Amorphous Alloy (Model 17)				No load current %	Short circuit impedance (%)
					No Load loss W	Full Load loss W				
						B(100℃)	F(120℃)	H(145℃)		
30	6 6.3 6.6 10 10.5 11	±2×2.5±5	0.4	Dyn11 Yyn0	70	670	710	760	2.00	4.0
50					90	940	1000	1070	2.00	
80					120	1290	1380	1480	1.50	
100					130	1480	1570	1690	1.50	
125					150	1740	1850	1980	1.30	
160					170	2000	2130	2280	1.30	
200					200	2370	2530	2710	1.10	
250					230	2590	2760	2960	0.90	
315					280	3270	3470	3730	0.80	
400					310	3750	3990	4280	0.80	
500					360	4590	4880	5230	0.80	
630					420	5530	5880	6290	0.70	
630					410	5610	5960	6400	0.70	6.0
800					480	6550	6960	7460	0.70	
1000					550	7650	8130	860	0.70	
1250					650	9100	9690	10370	0.70	
1600					760	11050	11730	12580	0.70	
2000					1000	13600	14450	15560	0.70	
2500					1200	16150	17170	18450	0.70	

Technical Parameters of 10kV SCBH17 Amorphous Alloy Dry-Type Power Transformer

Rated Capacity (kVA)	High Voltage (kV)	High-voltage tapping range (%)	Low Voltage (kV)	Vector Group	Amorphous Alloy (Model 17)				No load current %	Short circuit impedance (%)
					No Load loss W	Full Load loss W				
						B(100℃)	F(120℃)	H(145℃)		
30	6 6.3 6.6 10 10.5 11	±2× 2.5 ±5	0.4	Dyn11 Yyn0	60	605	640	685	2.00	4.0
50					75	845	900	965	2.00	
80					100	1160	1240	1330	1.50	
100					110	1330	1415	1520	1.50	
125					130	1565	1665	1780	1.30	
160					145	1800	1915	2050	1.30	
200					170	2135	2275	2440	1.10	
250					195	2330	2485	2665	0.90	
315					235	2945	3125	3355	0.80	
400					265	3375	3590	3850	0.80	
500					305	4130	4390	4705	0.80	
630					360	4975	5290	5660	0.70	
630					350	5050	5365	5760	0.70	6.0
800					410	5895	6265	6715	0.70	
1000					470	6885	7315	7885	0.70	
1250					550	8190	8720	9335	0.70	
1600					645	9945	10555	11320	0.70	
2000					850	12240	13005	14005	0.70	
2500					1020	14535	15445	16605	0.70	

SCBH15、SCBH17、SCBH19
10kV Amorphous Alloy Dry-type
Power Transformer

Technical parameters of 10kV SCBH19 Amorphous Alloy dry-type power transformer

Rated Capacity (kVA)	High Voltage (kV)	High-voltage tapping range (%)	Low Voltage (kV)	Vector Group	Amorphous Alloy (Model 19)				No load current %	Short circuit impedance (%)
					No Load loss W	Full Load loss W				
						B(100℃)	F(120℃)	H(145℃)		
30	6 6.3 6.6 10 10.5 11	±2× 2.5 ±5	0.4	Dyn11 Yyn0	50	605	640	685	2.00	4.0
50					60	845	900	965	2.00	
80					85	1160	1240	1330	1.50	
100					90	1330	1415	1520	1.50	
125					105	1565	1665	1780	1.30	
160					120	1800	1915	2050	1.30	
200					140	2135	2275	2440	1.10	
250					160	2330	2485	2665	0. 90	
315					195	2945	3125	3355	0.80	
400					215	3375	3590	3850	0.80	
500					250	4130	4390	4705	0.80	
630					295	4975	5290	5660	0. 70	
630					290	5050	5365	5760	0. 70	6.0
800					335	5895	6265	6715	0. 70	
1000					385	6885	7315	7885	0. 70	
1250					455	8190	8720	9335	0. 70	
1600					530	9945	10555	11320	0. 70	
2000					700	12240	13005	14005	0. 70	
2500					840	14535	15445	16605	0. 70	