

Manufacturing

Equipment



Foil Winding Machine

The equipment adopts an advanced servo motor control system, enabling precise adjustment of foil feeding speed, tension, and winding diameter, ensuring consistency and accuracy of coil dimensions. The fully automatic foil winding machine can automatically complete a series of processes including cutting, welding, positioning, and winding, reducing manual intervention and improving production efficiency.



High-Voltage Winding Machine

An advanced machine designed for the production of high-voltage coils, equipped with a high-precision control system that ensures optimal electrical performance and mechanical strength of the coils under high-voltage conditions. It is especially suitable for applications requiring high voltage levels and stringent manufacturing processes.



Resin vacuum casting system

After the finished coil is pre-dried, it is transferred to the pouring cabin of the epoxy resin vacuum casting equipment for vacuum drying to remove moisture and gas in the insulation. At the same time, materials such as epoxy resin and hardener are continuously degassed in an independent material preparation tank. After the processing process, the computer injects various chemical materials into the mold according to the set ratio through the precision metering system. After pouring, it is cured at high temperature in an oven, and finally made into a strong solid coil.



Dry-Type Transformer Coil Curing Equipment

The dry-type transformer coil curing equipment is a specialized system designed for the curing of transformer coils. It ensures the epoxy resin fully hardens within the coil by precisely controlling temperature and time parameters, thereby guaranteeing excellent mechanical strength and electrical insulation performance.

Equipment



Transformer Laser Cutting Equipment

The laser cutting equipment is mainly used in the manufacturing process of dry-type transformers for high-precision cutting of insulation materials, copper foil, and magnetic core materials. Compared to traditional cutting methods, laser cutting offers advantages such as high precision, smooth cut surfaces, high efficiency, and no contact wear, making it especially suitable for machining parts with complex shapes and high-precision requirements.



Transformer Core Cutting Equipment

It is mainly used to cut silicon steel sheets into the required shapes and dimensions for subsequent processing into transformer cores. The equipment enables high-precision and efficient cutting, ensuring the quality and consistency of core materials, thereby enhancing the overall performance of the transformer.



Transformer Core Automatic Stacking Equipment

It is mainly used for the automated production of dry-type transformer cores. The equipment can automatically arrange and stack pre-cut silicon steel sheets into complete core structures according to preset programs, significantly improving production efficiency and lamination accuracy, reducing manual operation errors, and ensuring consistent and stable core quality.



Quality Testing Center

All transformers undergo 100% routine testing to ensure the overall reliability of the products. The production process strictly implements the "three-inspection" system (self-inspection, mutual inspection, and specialized inspection) and complies with product standards.

Quality Control

Transformer Testing Center



The company is equipped with 35kV and 110kV transformer test stations, capable of performing a wide range of testing items such as short-circuit impedance measurement, no-load loss testing, load loss testing, insulation resistance testing, and withstand voltage testing. With high-precision testing instruments, it can also carry out complex tests including

partial discharge testing, temperature rise testing, and lightning impulse testing, ensuring the efficient and stable operation of high-voltage transformers in the power grid.

Advanced Equipment



Vacuum oil filling equipment



Drying equipment



Partial discharge test laboratory

| Test Item | Test Type | Test Item | Test Type |
|--|--------------|--------------------------------|--------------|
| Winding resistance measurements | Routine test | Induced-voltage test | Routine test |
| Ratio and phase-relation tests | Routine test | Partial discharge measurements | Routine test |
| No-load loss and excitation current measurements | Routine test | Sound level measurements | Type test |
| Load loss and impedance measurements | Routine test | Lightning impulse test | Type test |
| Insulation resistance measurements | Routine test | Temperature rise test | Type test |
| Applied-voltage test | Routine test | Short-circuit withstand test | Special test |

International Certification

ASTA,CE,and CNAS Certifications

intertek
Total Quality Assured.

ASTA CERTIFICATE OF COMPLETE TYPE TESTS

Project No: SHA539069 **Certificate No:** ASTA-TYPE-0001313

Applicant: JIANGSU RYAN ELECTRICAL STOCK CO., LTD.
No.229, Huanghai West Road, Hai'an City, Jiangsu Province, CHINA

Apparatus: A three phase, 2000 kVA, (10000±2x2.5%) / 400 V (U_n), 50 Hz, Category I, AN, Dyn11, non-enclosed dry-type transformer. The high voltage winding has 5 taps and the principal tap is tap 3, link position 3-4. The transformer was fitted with a de-energized tap changer.

Manufactured By: JIANGSU RYAN ELECTRICAL STOCK CO., LTD.
No.229, Huanghai West Road, Hai'an City, Jiangsu Province, CHINA

Test Report No: B210290

Designation: SCB18-2000/10-NX1

The apparatus which is representative of the designation, supplied drawings and photographs has been evaluated in accordance with:

IEC 60076-11:2018 Clauses 14.2.1 to 14.2.7, 14.3.1, 14.3.2, 14.4.2 and 14.4.3
and the STL Guide to IEC 60076 issue 7.0, 18 February 2021, where applicable

The results are shown in the record of tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated on the ratings page(s) of this Certificate. This Certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.



0010



 17th August 2021

Certification Engineer

Certification Officer

Date

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ASTA TYPE TEST CERTIFICATE OF COMPLETE TYPE TESTS

Project No: SHA733936 **Certificate No:** ASTA-TYPE-0001979

Applicant: JIANGSU RYAN ELECTRICAL STOCK CO., LTD.
No.229, Huanghai West Road, Hai'an City, Jiangsu Province, CHINA

Apparatus: A three phase, 1000 kVA, (10000±2x2.5%) / 400 V (U_n), 50 Hz, Category I, AN, Dyn11, non-enclosed dry-type transformer. The high voltage winding has 5 taps and the principal tap is tap 3, link position 3-4. The transformer was fitted with a de-energized tap changer.

Manufactured By: JIANGSU RYAN ELECTRICAL STOCK CO., LTD.
No.229, Huanghai West Road, Hai'an City, Jiangsu Province, CHINA


Test Report No: B220215

Designation: SCB18-1000/10-NX1



The apparatus which is representative of the designation, supplied drawings and photographs has been evaluated in accordance with:

IEC 60076-11:2004 Clauses 15 to 28
and the STL Guide to IEC 60076 issue 5.0, June 2018, where applicable

The results are shown in the record of tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated on the ratings page(s) of this Certificate. This Certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.



0010



 22nd August 2022

Certification Engineer

Certification Officer

Date

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CERTIFICATE

ATTESTATION CERTIFICATE OF ELECTROMAGNETIC COMPATIBILITY AND LOW VOLTAGE DIRECTIVES

Technical file of the company mentioned below has been observed and audit has been completed successfully.

2014/35/EU Electromagnetic Compatibility Directive and 2014/30/EU Low Voltage Directives have been taken as references for these processes

Company Name: Jiangsu Ryan Electrical Stock Co., Ltd.

Company Address: NO.229, Huanghai West Road, Hai'an City, Jiangsu Province, China

Related Directives and Annex: 2014/35/EU Low Voltage Directive
2014/30/EU Electromagnetic Compatibility Directive

Related Standards: EN 60076-11:2018, IEC 60076-11:2018

Product Name: Dry Type Power Transformer

Report No and Date: TCF-RE220419LE

Product Brand/Model/Type: SC, SCB, SC(L), SC(U), SG, SGB, SG(U), ZSCB, CSD, PSCD, PSGD, CS(W)/FD

Certificate Number: M.2022.206.C73048

Initial Assessment Date: 25.04.2022

Registration Date: 26.04.2022

Reissue Date/No: -

Expiry Date: 25.04.2027


 UDEM International Certification
 Auditing Training Centre Industry and Trade Inc. Co.




The validity of the certificate can be checked through www.udem.com.tr. The CE mark shown on the right can only be used under the responsibility of the manufacturer with the completion of EC Declaration of Conformity for all relevant Directives. This certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co. in whose it must be returned upon request. The above named firm must keep a copy of this certificate for 10 years from the registration of certificate. The certificate only covers the product listed above and UDEM must be notified in case of any changes on the products.

Address: Muhtakem Mahallesi 2073 Sokak (Daki B3 Sokak) No:10 Cankaya - Ankara - TURKEY
Phone: +90 312 443 83 50 Fax: +90 312 443 83 78
E-mail: info@udemtd.com.tr www.udem.com.tr




China National Accreditation Service for Conformity Assessment LABORATORY ACCREDITATION CERTIFICATE (Registration No. CNAS L23189)

Testing Center of Jiangsu Ryan Electric Co., Ltd.
(Legal Entity: Jiangsu Ryan Electric Co., Ltd.)
Plant 1, No.229, Huanghai West Road, Hai'an, Nantong, Jiangsu, China

is accredited in accordance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence to undertake the service described in the schedule attached to this certificate.

The scope of accreditation is detailed in the attached schedule bearing the same registration number as above. The schedule forms an integral part of this certificate.

Effective Date: 2025-05-20
Expiry Date: 2031-05-19

Signed on behalf of China National Accreditation Service for Conformity Assessment 

China National Accreditation Service for Conformity Assessment (CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CACA) to operate the national accreditation schemes for conformity assessment. CNAS is a signatory of the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC-MRA) and the Asia Pacific Accreditation Cooperation Mutual Recognition Arrangement (APAC-MRA). The validity of the certificate can be checked on CNAS website at <http://www.cnas.org.cn/english/fidnscoredbody/index.shtml>.

International Certification

UL Certification

CERTIFICATE OF COMPLIANCE

Certificate Number ^{1,1}UL-CA-2228369-0^{1,1}
Report Reference ^{1,1}E528255-20220722^{1,1}
Date 2-Aug-2022

Issued to: JIANGSU RYAN ELECTRICAL STOCK CO LTD
 229 Huanghai West Road Haian, Jiangsu 226600
 China

This is to certify that representative samples of XPLH7 - Transformers, Distribution, Liquid-filled Type, Over 750 Volts Certified for Canada
 See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.



Standard(s) for Safety: CSA C2-1-06, 1st Ed., Issue Date: 2006-03-01, Revision Date: 2007-02-01, CSA C227.4-06, 2nd Ed., Issue Date: 2006-03-01, Revision Date: 2007-08-01

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.
 UL-US-2228369-0
 E528255-20220722

Brands International, Director North American Certification Program
 UL LLC
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CERTIFICATE OF COMPLIANCE

Certificate Number ^{1,1}UL-CA-2228369-0^{1,1}
Report Reference ^{1,1}E528255-20220722^{1,1}
Date 2-Aug-2022

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

| Model | Category Description |
|---|---|
| ZGSL-H-XXXXYY-YYYZZZ series, where "XXXX" = 30-3750 which represents the rated power 30-3750 KVA, "YY-YYY" = 26,000-36,000 which represents the rated Hv voltage 26 KV-36 KV, step with 1 V, "ZZZ" = 0001-1200 which represents the rated Lv voltage 1 V-1.2 KV, step with 1 V. (X or Y or Z may be blank). | Transformers, Distribution, Liquid-Filled, Pad-Mounted Type |

Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.



Standard(s) for Safety: CSA C2-1-06, 1st Ed., Issue Date: 2006-03-01, Revision Date: 2007-02-01, CSA C227.4-06, 2nd Ed., Issue Date: 2006-03-01, Revision Date: 2007-08-01

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information

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CERTIFICATE OF COMPLIANCE

Certificate Number ^{1,1}UL-US-2228937-0^{1,1}
Report Reference ^{1,1}E528255-20220722^{1,1}
Date 2-Aug-2022

Issued to: JIANGSU RYAN ELECTRICAL STOCK CO LTD
 229 Huanghai West Road Haian, Jiangsu 226600
 China

This is to certify that representative samples of XPLH - Transformers, Distribution, Liquid-filled Type, Over 600 Volts
 See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.


Standard(s) for Safety: IEEE C57.12.00, 1st Ed., Issue Date: 2015-12-05, IEEE C57.12.28, 1st Ed., Issue Date: 2014-05-16

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

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 UL-US-2228937-0
 E528255-20220722

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CERTIFICATE OF COMPLIANCE

Certificate Number ^{1,1}UL-US-2228937-0^{1,1}
Report Reference ^{1,1}E528255-20220722^{1,1}
Date 2-Aug-2022

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

| Model | Category Description |
|---|---|
| ZGSL-H-XXXXYY-YYYZZZ series, where "XXXX" = 30-3750 which represents the rated power 30-3750 KVA, "YY-YYY" = 26,000-36,000 which represents the rated Hv voltage 26 KV-36 KV, step with 1 V, "ZZZ" = 0001-1200 which represents the rated Lv voltage 1 V-1.2 KV, step with 1 V. (X or Y or Z may be blank). | Transformers, Distribution, Liquid-Filled, Pad-Mounted Type |

Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.



Standard(s) for Safety: IEEE C57.12.00, 1st Ed., Issue Date: 2015-12-05, IEEE C57.12.28, 1st Ed., Issue Date: 2014-05-16

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information

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Look for the UL Certification Mark on the product.
 UL-US-2228937-0
 E528255-20220722

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 UL LLC
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Type Test Report




实验室名称: 苏州电器科学研究院股份有限公司
国家电器产品质量检验检测中心
Lab Name: Suzhou Electrical Apparatus Science Research Institute Co., Ltd.
China National Center for Quality Inspection and Test of Electrical Apparatus Products

№ 24N0519-S

型式试验报告 Type Test Report

委托单位: 江苏瑞恩电气有限公司
Client: Jiangsu Ryan Electric Co., Ltd.
产品名称: 干式电力变压器
Name of Product: Dry-type power transformer
产品型号: SCB18-2500/20
Product Type: SCB18-2500/20
检验类别: 型式试验
Test Category: Type test

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实验室名称: 苏州电器科学研究院股份有限公司
国家电器产品质量检验检测中心
Lab Name: Suzhou Electrical Apparatus Science Research Institute Co., Ltd.
China National Center for Quality Inspection and Test of Electrical Apparatus Products

№ 23N0620-S

型式试验报告 Type Test Report

委托单位: 江苏瑞恩电气有限公司
Client: Jiangsu Ryan Electric Co., Ltd.
产品名称: 干式电力变压器
Name of Product: Dry-type Power Transformer
产品型号: SCB18-4000/35~NX1
Product Type: SCB18-4000/35~NX1
检验类别: 型式试验
Test Category: Type test

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实验室名称: 苏州电器科学研究院股份有限公司
国家电器产品质量检验检测中心
Lab Name: Suzhou Electrical Apparatus Science Research Institute Co., Ltd.
China National Center for Quality Inspection and Test of Electrical Apparatus Products

№ 25N0374-S

型式试验报告 Type Test Report

委托单位: 江苏瑞恩电气有限公司
Client: Jiangsu Ryan Electric Co., Ltd.
产品名称: 干式电力变压器
Name of Product: Dry-type power transformer
产品型号: SC18-20000/35/10.5
Product Type: SC18-20000/35/10.5
检验类别: 型式试验
Test Category: Type test

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实验室名称: 苏州电器科学研究院股份有限公司
国家电器产品质量检验检测中心
Lab Name: Suzhou Electrical Apparatus Science Research Institute Co., Ltd.
China National Center for Quality Inspection and Test of Electrical Apparatus Products

№ 25N0496-S

型式试验报告 Type Test Report

委托单位: 江苏瑞恩电气有限公司
Client: Jiangsu Ryan Electric Co., Ltd.
产品名称: 干式电力变压器
Name of Product: Dry-type Power Transformer
产品型号: SCB14-9650/37~NX2
Product Type: SCB14-9650/37~NX2
检验类别: 型式试验
Test Category: Type test

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实验室名称: 苏州电器科学研究院股份有限公司
国家电器产品质量检验检测中心
Lab Name: Suzhou Electrical Apparatus Science Research Institute Co., Ltd.
China National Center for Quality Inspection and Test of Electrical Apparatus Products

№ 25M0882-S

型式试验报告 Type Test Report

委托单位: 江苏瑞恩电气有限公司
Client: Jiangsu Ryan Electric Co., Ltd.
产品名称: 电力变压器
Name of Product: Power transformer
产品型号: SZ22-31500/35~NX1
Product Type: SZ22-31500/35~NX1
检验类别: 型式试验
Test Category: Type test

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实验室名称: 苏州电器科学研究院股份有限公司
国家电器产品质量检验检测中心
Lab Name: Suzhou Electrical Apparatus Science Research Institute Co., Ltd.
China National Center for Quality Inspection and Test of Electrical Apparatus Products

№ 23N0294-S

检验(试验)报告 Test Report

委托单位: 江苏瑞恩电气有限公司
Client: Jiangsu Ryan Electric Co., Ltd.
产品名称: 干式电力变压器
Name of Product: 干式电力变压器
产品型号: SCB11-3600/37
Product Type: SCB11-3600/37
检验类别: 委托试验
Test Category: Type test

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Dry Type Transformer

110kV

Dry-Type Power Transformer

The company has successfully developed a 110kV three-phase epoxy resin cast insulation dry-type power transformer and led the development of related standards, demonstrating strong technological innovation capabilities. 110kV three-phase dry-type power transformers are widely accepted by users not only for their excellent fire and disaster prevention performance, but also for their resistance, high reliability, small size, and maintenance free advantages. Primarily used in urban centers and underground substations, high-rise and large public buildings, rail transit systems, environmentally sensitive areas, locations with explosion-proof and high fire-protection requirements, as well as data centers and high-end industrial parks.

Product Features



Add an umbrella skirt to inlet/outlet terminals.



Use a segmented stepped structure for wire turns.



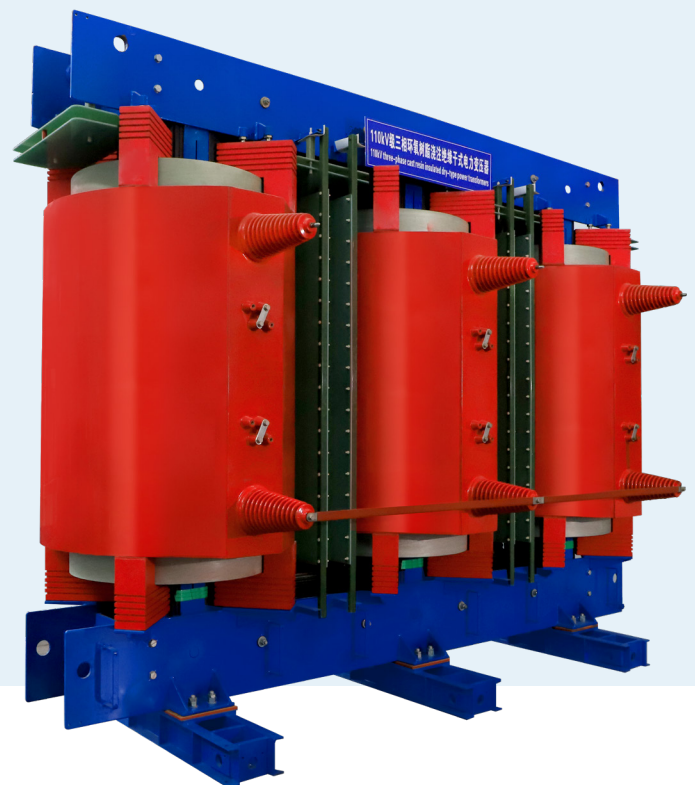
Partition tapping range to reduce leads.



Apply resin casting with fillers.



Adopt a three-phase integrated design.



Dry Type Transformer

Double-Split Dry-Type Transformer

Photovoltaic power generation, as a clean energy source, has rapidly developed worldwide. The SC(B) three-winding double-split epoxy resin cast dry-type transformer is designed to meet the increasing power supply demands of solar energy systems.

Building on our expertise in 10kV and 35kV dry-type transformers, we have independently developed this series by integrating advanced domestic and international technologies with local market needs. This transformer offers a compact size, lightweight design, and easy installation, making it an ideal solution for photovoltaic applications. Mainly used in power distribution systems of large industrial enterprises, auxiliary power systems of power plants, and traction power supply systems of rail transit.

Technical Characteristics



Designed to suit local environmental conditions, including temperature and dust protection.



Matches the inverter's rated power.



Equipped with a temperature sensor, providing signals to the inverter.



Wiring complies with system requirements.



Secondary winding voltage aligns with the inverter's output voltage.



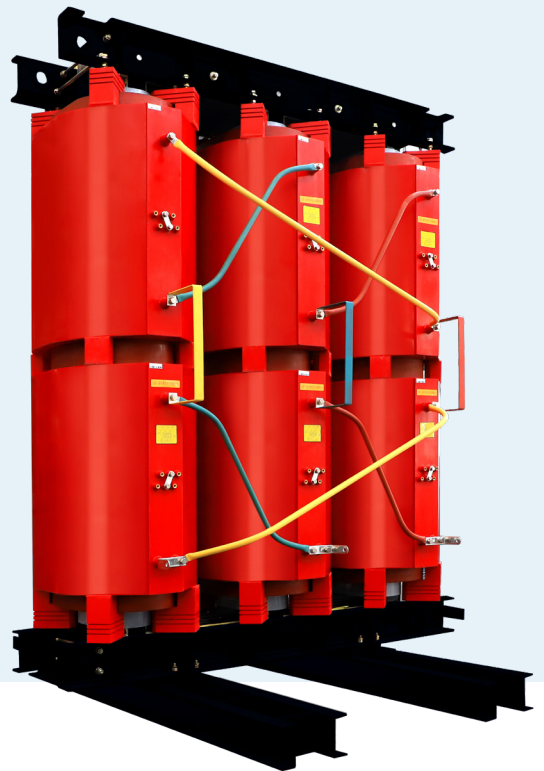
Primary winding voltage matches the grid connection voltage, with an adjustment range of at least $\pm 2 \times 2.5\%$.



Each inverter has a dedicated secondary winding for current isolation.



Short-circuit voltage (Uk) and splitting coefficient meet system requirements.



Dry Type Transformer

SC(B) Series

Epoxy Resin Cast Dry-Type Distribution Transformer

SC(B) series dry-type transformers offer high performance and low loss, making them an optimal choice among dry-type transformers. Designed for reliability and safety, they are ideal for critical applications such as urban power grids, high-rise buildings, commercial centers, theaters, hospitals, hotels, tunnels, subways, stations, docks, airports, underground substations, laboratories, and compact substations.

Product Features



High-Quality Windings: High-voltage windings use copper wire, while low-voltage windings use copper wire or copper foil. Vacuum-filled with epoxy resin and reinforced with glass fiber mesh, ensuring high mechanical strength, minimal partial discharge, and superior reliability.



Flame-Retardant & Eco-Friendly: Explosion-proof, self-extinguishing insulation materials prevent arc formation during short circuits. Under high heat, no toxic or harmful gases are emitted.



Moisture-Resistant & Durable: The coil is moisture-resistant, and a special anti-corrosion coating on the iron core clamp allows operation in 100% relative humidity without dehumidification.



Efficient Cooling: Thin resin layers on both sides of the coil enhance heat dissipation. Standard cooling is natural air (AN), with optional forced air cooling (AF) for improved overload capacity.



Strong Electrical Performance: High resistance to short circuits and strong lightning impulse withstand capability.



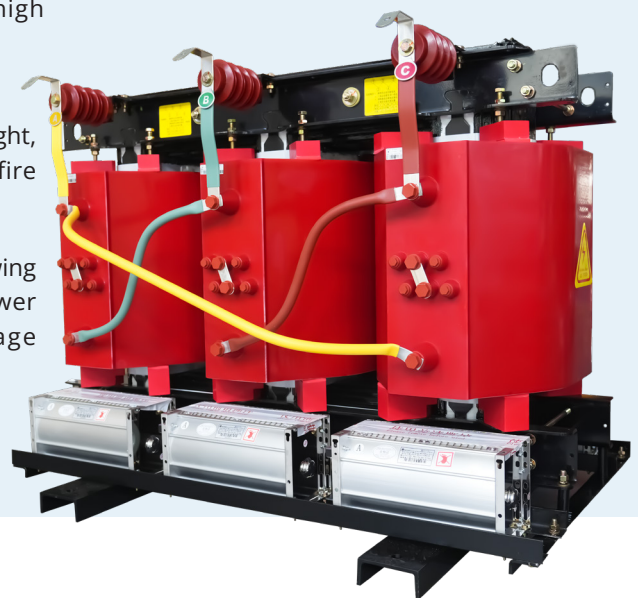
Energy-Saving & Low Maintenance: Low loss, high efficiency, and maintenance-free operation.



Compact & Cost-Effective: Small footprint, lightweight, and eliminates the need for oil drainage tanks, fire suppression systems, and backup power sources.



Flexible Installation: No fire or explosion risk, allowing installation closer to load centers to reduce power line costs and minimize expensive low-voltage infrastructure.



Dry Type Transformer

SG (B) Series

Vacuum Impregnated Isolation Transformers

Vacuum-pressure impregnated isolation transformers offer numerous advantages, including safety, reliability, energy efficiency, fire resistance, explosion protection, no emission of harmful gases, environmental friendliness, and easy maintenance. They feature an advanced design, rational structure, and attractive appearance. All key performance parameters exceed Chinese national standards, and they maintain excellent electrical and mechanical performance throughout their entire service life.

These transformers are especially suitable for environments with stringent fire safety requirements, significant load fluctuations, or high levels of contamination and humidity—such as data centers, renewable energy facilities, high-rise buildings, airports, railway stations, ports, subway systems, hospitals, power plants, metallurgical plants, shopping malls, densely populated residential areas, as well as petrochemical plants, nuclear power stations, and nuclear submarines.

Product Features



Nomex®-Insulated Coil Technology

Advanced Insulation: High and low-voltage coils are insulated with Nomex®, repeatedly impregnated using VPI vacuum pressurization and sealed with high-strength insulation for durability.



High-Temperature Resistance: Nomex® insulation ensures reliable performance above 200°C, enhancing mechanical strength and heat dissipation.

Enhanced Reliability: Continuous insulation structure prevents high interlayer voltage issues, improving thermal stability and mechanical durability.



Eco-Friendly & Recyclable: Steel and iron components are easily recyclable, while Nomex® paper burns without releasing toxic substances, ensuring environmental sustainability.



Dry Type Transformer

SC (B) H, SG (B) H Series Amorphous Alloy Distribution Transformers

Amorphous alloy dry-type transformers offer high efficiency, safety, and eco-friendliness, making them ideal for modern urban high-density load applications. With significantly reduced no-load and load losses, these transformers ensure energy savings and reliability.

Key Applications:

High-rise buildings, commercial centers, subways, airports, and stations

Industrial and mining enterprises, power plants

Fire-sensitive areas, including flammable and explosive environments

Product Features



Amorphous Alloy Core: Utilizes amorphous alloy strips with a rectangular cross-section in either a three-phase five-column or three-phase three-column structure, reducing no-load loss by 75% compared to standard dry-type transformers, ensuring significant energy savings.



Advanced Coil Design:

Low-voltage coil: Copper foil winding.

High-voltage coil: Epoxy resin vacuum cast or Nomex® insulation, featuring a continuous structure.

Impregnated with H-grade solvent-free varnish, cured through VPI vacuum pressurization, providing high mechanical strength, excellent heat dissipation, and superior short-circuit resistance.



Minimal partial discharge with a high insulation level for extended lifespan.



Flame retardant, explosion-proof, and environmentally friendly with a high fire safety rating.



Low loss, high efficiency, simple installation, and maintenance free.



Excellent crack resistance and three-proofing capabilities (moisture, dust, and corrosion protection).



Eco-friendly: Fully recyclable at end-of-life with zero environmental pollution.



Strong overload capacity: Can operate safely at 120% load for extended periods.



Wind Turbine Nacelle Transformer

Dry-type transformers for wind power generation are the global mainstream solution for large-capacity offshore and onshore wind turbines, trusted by customers worldwide. In China, an increasing number of high-capacity projects now adopt these proven solutions, integrating transformers directly into the nacelle or tower.

These transformers undergo rigorous testing, including vibration, shock, and endurance simulations, as well as electromagnetic field analysis and operational trials. The entire manufacturing process complies with APQP4Wind (Advanced Product Quality Planning for Wind), ensuring full traceability of quality data for every unit and delivering unmatched reliability.

Product Features



Extreme Environment Resilience: Engineered for harsh offshore conditions, including high salt-fog corrosion and wide temperature fluctuations, while ensuring stable performance under variable wind loads. Innovations in coil insulation, casting technology, barrier design, and mechanical structure yield a compact yet robust solution with enhanced dielectric strength, reduced insulation gaps, and superior crack resistance.



Compact & Lightweight: Designed for easy installation in confined nacelle spaces, reducing overall weight and structural demands on the turbine.



High Fault Tolerance: Special winding structures and manufacturing processes provide exceptional mechanical strength, enabling resilience to high short-circuit currents and lightning strikes.



Efficient Cooling: Air or self-cooling ensures optimal thermal management, maintaining stable performance, high overload capacity, and vibration resistance.



Three-Proof Performance: Superior moisture, dust, and corrosion resistance with no risk of cracking.



Eco-Friendly: Oil-free design meets modern environmental standards and supports end-of-life recycling.



High Efficiency: Low losses, maintenance-free operation, and cost-effective performance.



Enhanced Safety: Flame-retardant, explosion-proof solid insulation materials with high fire ratings ensure nacelle safety.



Oil Immersed Transformer

66kV-110kV

Oil Immersed Power Transformer

66kV~110kV oil-immersed power transformers feature low loss, high efficiency, compact size, low partial discharge, low noise, and strong short-circuit resistance. All performance indicators meet the advanced level of similar domestic products. These transformers significantly reduce power grid losses and operating costs, providing notable economic benefits. They are suitable for power plants, substations, new energy wind and solar power stations, large factories, mines, and petrochemical enterprises.

Product Features



The high-voltage winding adopts a multi-layer cylindrical or continuous structure, which improves the impact distribution of the winding. The low-voltage winding with a capacity in the range of 6300~80000 kVA adopts a cylindrical or cake structure, with high mechanical strength, balanced ampere turn distribution, and strong short-circuit resistance of the product.



Stability & Fastening: A positioning mechanism prevents displacement during transport, while locking nuts secure fasteners for long-term stability.



Core & Material: The iron core is made of high-quality cold-rolled grain-oriented silicon steel sheets with a fully oblique seam stacking method.



Surface Treatment: The product undergoes degreasing, rust removal, sandblasting, and coating for durability in harsh environments.

Compact & Maintenance-Free: Small in size, space-saving, and ideal for long-term, maintenance-free operation.



Oil Immersed Transformer

35kV Series Oil Immersed On Load Voltage Regulating Power Transformer

The 35kV series on-load tap changer power transformer is designed using CAD technology, featuring an advanced design, reasonable structure, and high-quality materials. All performance indicators comply with GB/T1094 "Power Transformers," GB/T6451 "Technical Parameters and Requirements for Three-Phase Oil-Immersed Power Transformers," and GB20050-2020 "Energy Efficiency Limits and Grades for Power Transformers." It is widely used in urban and rural industrial and agricultural power grids, contributing significantly to energy conservation and environmental protection.

Product Features



Iron Core Construction:

Made of high-quality cold-rolled silicon steel sheets.

Processed using advanced domestic transverse cutting lines with burrs less than 0.02mm.

Features full oblique joints, no punching.

Double H adhesive is used to bond the core columns, ensuring a compact and flat structure.

Reduces no-load loss and current.



Transformer Coil:

Uses high-purity oxygen-free copper to minimize copper consumption.

Coil pads and support bars are rounded for a uniform electric field and increased reliability.

Internal winding support is strengthened to prevent deformation and improve stability.



Frame Structure:

Plate-type clamping pieces and side beams form a robust frame.

The core and tank are rigidly positioned on all six sides to withstand impacts during transport.



Tank Design:

Made of integrated steel plates with a corrugated structure, reducing welding seams.

Increases mechanical strength and cooling efficiency by expanding heat dissipation area.

Corrugated walls reduce noise by preventing planar sound wave reflection.

Oil Storage System:

Capsule oil storage tanks slow down transformer oil aging.

Pointer-type oil level gauge prevents false oil level readings.

Gas relay with a gas collection device simplifies maintenance and operation.



Oil Immersed Transformer

S (B) H-M Series Sealed Amorphous Alloy Iron Core Distribution Transformer

This type is a fully oil-filled, sealed type, following the same principles as sealed power transformers. The amorphous alloy core consists of iron, nickel, cobalt, silicon, boron, and carbon. It is an isotropic soft magnetic material with low magnetization power and no structural defects that hinder domain wall movement. The core is extremely thin, with a thickness of only 0.027mm, resulting in a filling coefficient of 0.75-0.8. Its resistivity is 3-6 times higher than that of silicon steel, and its hardness is five times greater. Amorphous alloy materials are highly sensitive to stress. The S (B) H-M series transformers achieve a 70% reduction in no-load loss compared to the GB/T6541 standard value. Suitable for public transformers in urban distribution networks, industrial parks, and large enterprises.

Product Features



Amorphous Alloy Core:

Amorphous alloys lack a crystal structure and are isotropic soft magnetic materials. They have low magnetization power, excellent heat resistance, and soft magnetism. Transformers with amorphous alloy cores have low no-load losses, enhancing energy efficiency.



Core Structure:

The iron core features a coiled structure with three-phase five-column and three-phase three-column designs.

The core has a rectangular cross-section for optimized performance.

Coil Construction:

The high-voltage coil is wound with enamel-coated wire.

The low-voltage coil uses oxygen-free copper.

Wire or copper foil winding improves short-circuit resistance.



Wiring and Grid Compatibility:

Flexible and wide wiring methods allow strong adaptability to varying power grids.



Oil Injection and Insulation:

Vacuum oil injection eliminates bubbles in the coil, ensuring stable insulation performance. The oil tank features a fully insulated structure with corrugated sheets for cooling.

The design accommodates volume expansion and compression of transformer oil, isolates it from the atmosphere, and slows down oil deterioration and moisture absorption.

Reliability and Maintenance:

The transformer operates reliably without the need for maintenance, enhancing overall operational stability.



Oil Immersed Transformer

10kV

Oil Immersed Distribution Transformer

This product features a fully sealed corrugated oil tank structure, preventing the transformer oil from coming into contact with the surrounding air. As a result, the oil does not absorb external moisture, maintaining its insulation strength. Additionally, the sealed design prevents oxygen from entering the tank, reducing insulation material aging, extending the product's service life, and enhancing overall efficiency and reliability. Can be widely applied in urban and rural distribution networks, industrial and manufacturing sectors, agricultural and water conservancy facilities, and other fields.

Product Features



Long Service Life

The fully sealed oil tank prevents contact between transformer oil and air, reducing aging and extending service life.

The tank and edges can be connected by bolts or welding for durability.



High Operational Reliability

Enhanced sealing components improve reliability.

Advanced craftsmanship ensures a secure and long-lasting seal.



Compact Design

The S-M series uses a corrugated plate radiator, eliminating the need for a separate oil storage tank.

The corrugated oil tank design enhances aesthetics and reduces footprint.



Pad Mounted Transformer

Single Phase Pad Mounted Transformer

Single-phase pad-mounted transformer features a compact design, lightweight construction, and easy installation. With high reliability, it is widely used for urban, rural, and industrial loads.

Product Features



Compact and Cost-Effective Design
Efficient coil and iron core design with ground installation.
Small size, lightweight, and minimal space requirements.
Reduces infrastructure investment.



Flexible Power Supply
Operates in single-phase mode or as three single-phase units in a three-phase configuration.
Suitable for direct load supply or integration into a ring network system.



High Reliability and Low Maintenance
Fully sealed structure ensures strong overload capacity and continuous operation.
Simple maintenance requirements.



Reduced Line Losses and Improved Efficiency
Shortens low-voltage distribution lines, minimizing power losses.
Reducing the power supply radius decreases line losses by over 60%.



Pad Mounted Transformer

ZGS series combination substation (Pad Mounted Transformer)

The pad-mounted transformer is a widely used product in power distribution systems. Unlike the European Box-type, it is not merely a combination of a transformer and high/low switchgear but a comprehensive electrical unit developed from the transformer.

Its key feature is the integration of the high-voltage load switch and ring network switch into the same oil tank as the transformer, significantly reducing volume and lowering costs. Additionally, it utilizes dual fuses for protection, which are highly sensitive to both current and temperature, enhancing protection sensitivity and reliability.

With a fully enclosed and insulated design, pad-mounted transformers allow for quick installation and require no long-term maintenance.

Product Features



Energy-Saving & Maintenance-Free
Lower losses than national standards.
Stable operation with no maintenance required for 20 years.
Easy & Flexible Operation
Cable head with isolation switch function.
Supports 200A load operation.



Strong Overload Capacity
Handles 2x overload for 2 hours and 1.6x overload for 7 hours without reducing lifespan.



Superior Component Integration
Uses Eaton box transformer spare parts and cable heads for optimal performance.
Supports fully shielded, insulated elbow-type lightning arresters without requiring extra space.



High Voltage Quality & Lightning Protection
Dyn11 connection with three-phase five-column structure.
Stable voltage, no neutral drift, low noise, and excellent lightning protection.



Durable & Leak-Proof Enclosure
Withstands 49 kPa without leakage or deformation and 105 kPa without bursting.



Corrosion-Resistant for Harsh Environments
Special paint treatment resists storms, snow, and high pollution levels.



European Box-Type Transformer Substation

YB Series Prefabricated Substation (European Box Transformer)

European box-type transformers feature a compact structure, small footprint, high safety, and easy installation. These products can be placed closer to the load center and relocated as needed, making them ideal for construction sites, residential areas, high-rise buildings, airports, railways, subways, highways, oil fields, and ports. Eaton integrates its proven power distribution technology into these transformer boxes, combining ring main units, transformers, and low-voltage components for enhanced performance and reliability.

Product Features



Full-range protection: Cuts off short circuits and load currents, ensuring transformer safety.
Flexible power supply: Supports ring network, dual power, terminal, and high-voltage metering.



Cost-effective & space-saving: Requires less investment, one-third the size of traditional substations, and installs within a week.



Safety-first design: Fully enclosed, reliably grounded shell, and protective mesh to prevent accidental entry.



Efficient heat dissipation: Chimney-effect ventilation meets GB/T 17467-2010 standards.



Customizable casings: Options include cold-rolled steel, aluminum-zinc, stainless steel, and GRC to suit different environments.



Flexible configurations: Can be arranged in herringbone integrated, herringbone with a low-voltage operation corridor, and more.



HYB New Energy Prefabricated Substation

HYB New Energy Prefabricated Substation

HYB New Energy Prefabricated Substation is a combination of a transformer and distribution equipment, consisting of a high-voltage room, low-voltage room, and transformer room. Isolation measures are implemented between each section, with the high-voltage and low-voltage rooms positioned on opposite sides of the transformer.

The substation operates by transferring electrical energy from the high-voltage side to the low-voltage side through electromagnetic induction for user consumption. Inside the transformer room, key components such as transformers, temperature controllers, insulation sleeves, and fuses ensure efficient operation.

HYB New Energy Prefabricated Substations are widely used in industrial parks, urban commercial areas, residential zones, and public facilities, offering reliable and efficient power distribution.

Product Features



Optimized for Photovoltaic Power Plants: Combines the strengths of American and European designs with enhanced adaptability.



Compact & Cost-Effective: Eliminates the transformer room, reducing size, weight, and copper usage, lowering costs and investment.



Modular & Reliable: Isolated compartments prevent high-voltage interference, ensuring operational safety.



Easy Maintenance: Independent compartments for high-voltage components allow single-unit maintenance without full system shutdown.



Energy-Efficient & Low Noise: Uses high-efficiency materials and advanced manufacturing for long-term, maintenance-free operation.



American Energy Storage and Boost Integrated Machine

American Energy Storage Converter Boost Integrated Machine

The American-style energy storage converter boost integrated machine temporarily stores renewable energy, such as solar and wind power, in a battery system. When needed, it converts and outputs energy through an energy storage converter inverter to a three-phase AC boost transformer, effectively addressing the instability and intermittency of wind and photovoltaic energy.

This all-in-one system includes an energy storage converter (PCS), a busbar bridge, a low-voltage room (communication + power distribution), an oil-immersed transformer (with an oil-immersed load switch and fuse), a high-voltage cable room, and an integrated housing. Widely used in new energy integration, grid services, commercial & industrial energy savings, and microgrids, serving as a key equipment for building modern resilient power grids and achieving energy transition.

Product Features



The integrated design of the energy storage PCS and boost converter simplifies installation, operation, and maintenance. It supports a wide DC working voltage range, with a maximum of 1500V for full-load operation.



Advanced battery management: Works with EMS and BMS for multi-level system protection.



Fast power dispatch & black start: Supports off-grid operation with strong grid adaptability. Versatile functionality: Equipped with PQ, VF, SVG, and high/low voltage ride-through capabilities.



Optimized design: Facilitates transport, installation, and unified control with online fault diagnosis.



High-efficiency inverter: Uses three-level topology with 99% efficiency, forced air cooling, and 110% long-term overload capacity, operating without derating at 50°C.



Flexible energy storage applications: Ideal for peak shaving, frequency regulation, and new energy grid integration.



European Energy Storage and Boosting Integrated Machine

European Energy Storage And Boosting Integrated Machine

This product integrates energy storage inverters, step-up transformers, high-voltage ring main units, low-voltage distribution boxes, and other equipment into one container, featuring easy transportation, installation, operation, and maintenance. The PCS and step-up transformer capacities can be flexibly selected according to customer needs, offering a plug-and-play design that saves time and improves efficiency. The equipment includes dry-type transformers, PCS, high- and low-voltage switchgear, and supports voltage levels from 6kV to 35kV, with a capacity range of up to 0.5MW to 3.75MW. Widely used in new energy accommodation, commercial and industrial energy efficiency, grid support, and microgrid applications, especially suitable for energy storage projects with medium- and high-voltage grid connection.

Product Features



High Integration: Reduces on-site construction complexity and simplifies deployment, operation, and maintenance.



Flexible PCS Power Configuration: Can be tailored to meet various needs, with support for both local and remote monitoring.



IP54 Protection: Ensures reliable operation in complex outdoor environments.



Built-in Step-Up Transformer: Supports voltage levels up to 35kV, making it versatile for different grid requirements.



Integrated Design ("Reverse" and "Change"): Facilitates easy transportation, installation, and operation with unified control scheduling and online fault diagnosis.



Energy Storage Inverter Efficiency: Delivers up to 99% efficiency, 110% long-term overload capacity, and operates without capacity reduction at 50°C.



Versatile Application Scenarios: Ideal for peak shaving, frequency regulation, and auxiliary support for new energy grid connections. Supports off-grid operations and "black start" capabilities.



Prefabricated Integrated Substation

Prefabricated Integrated Substation

Modular and Mobile Substation (MITS) is a highly flexible, modular substation solution expertly designed to meet your specific requirements. This prefabricated substation is assembled within a self-supporting transformer skid or trailer, creating a transportable design that enables rapid power-up. Factory pre-assembled, wired, and tested, this turnkey power substation solution reduces costs, saves time, minimizes space requirements, and lowers labor demands. It is suitable for applications in photovoltaic/wind power plants, industrial parks, urban distribution network upgrades, data centers, rail transit, and other locations.

Product Features



Faster commissioning and deployment: The MITS system can be commissioned 50% faster thanks to its turnkey solution—fully assembled in the factory, with all internal connections terminated and tested, significantly reducing on-site work time.



Future scalability: Unlike traditional construction methods, prefabricated electrical components feature a flexible and scalable design, allowing additional units to be connected to meet evolving requirements.



Prefabricated Integrated Substation



Smaller footprint: A standard MITS requires over 71% less space than a conventional substation—averaging just 516 square feet compared to 1,768 square feet for traditional substations.



Lower labor costs: MITS reduces labor requirements for construction, installation, and commissioning by 33%, with a schedule of just 30 days compared to 109 days for conventional solutions.



Simpler project management: You only need to work with a single point of contact—the MITS project management team handles all the details and centrally coordinates multiple vendors, eliminating the hassle of managing communications with multiple parties.



More environmentally friendly: The modular, integrated, and transportable substation is equipped with an onboard spill containment system that prevents leaks from seeping into the soil, whereas in traditional substations, spilled materials can infiltrate the ground during a leak.



Accelerated Asset Depreciation: According to IRS Publication 946, prefabricated components can be depreciated faster than traditional brick-and-mortar structures in the United States. Prefabricated components are eligible for depreciation over 7 years, while equipment installed within a facility is depreciated over 39 years.



IP54 protection rating ensures normal operation in complex outdoor environments.



Huabian New Energy Integrated System

Huabian New Energy Integrated System

The Huabian New Energy Integrated System is an efficient and reliable all-in-one solution specifically designed to meet the demands of today's new energy market. The unit integrates advanced power conversion technology, energy storage systems, and intelligent control systems, making it suitable for a wide range of new energy applications, such as photovoltaic power stations, wind farms, and distributed energy systems.

Product Features



High-Efficiency Power Conversion: Utilizes high-efficiency IGBT modules and other advanced technologies to ensure power conversion efficiency exceeds 99%.



Modular Design: Supports flexible configuration and scalability, allowing users to select and combine different power modules according to their specific requirements.



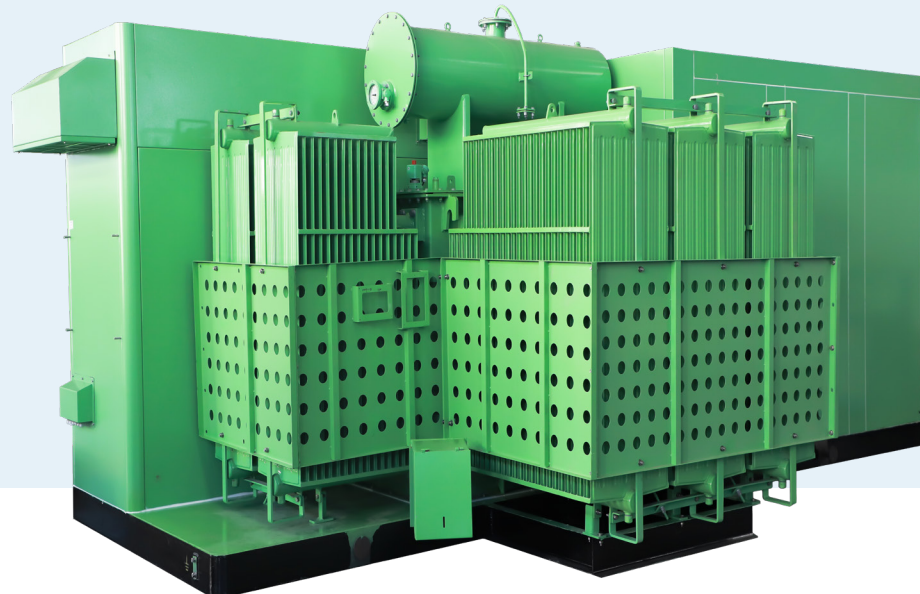
Intelligent Management System: Equipped with an intelligent Battery Management System (BMS) and remote monitoring capabilities, enabling real-time monitoring and management of the entire system.



Safe and Reliable: Subjected to rigorous environmental testing, the system can operate stably under extreme conditions, ensuring long-term reliability.



Easy to Install and Maintain: The integrated design simplifies on-site installation and reduces the need for routine maintenance.



KYN61-40.5/1250-31.5 AC High-Voltage Indoor Metal-Enclosed Switchgear with Withdrawable Metal Clad Design

The KYN61-40.5 armored withdrawable AC metal-enclosed switchgear (hereinafter referred to as "switchgear") is an indoor complete power distribution assembly for three-phase AC 50 Hz, with a rated voltage of 40.5 kV. It is used in power plants, substations, industrial and mining enterprises for receiving and distributing electrical energy, providing functions such as circuit control, protection, and monitoring. It can also be used in locations requiring frequent operation. This switchgear complies with standards including GB/T 3906, GB/T 1984, and GB/T 1985.

Product Features



Fully Enclosed Metal-Clad Structure: Features a fully enclosed metal enclosure that provides excellent protection, ensuring internal components are shielded from external environmental influences.



Flexibility and Scalability: Supports multiple configuration options, allowing flexible selection of circuit breaker types, transformer specifications, and other components according to user requirements. Easy to expand, enabling convenient addition of new functional modules or upgrades to the existing system.



Intelligent Management: Can be integrated with intelligent monitoring systems to enable real-time monitoring of switch status and electrical parameters, as well as fault early warning, significantly improving operation and maintenance efficiency.



Environmental Protection and Energy Efficiency: High-efficiency materials and advanced technologies are selected to reduce operational losses and minimize environmental pollution.



Switchgear Cabinet

KYN28-12/1250-31.5 AC Indoor Metal-Clad Withdrawable Switchgear

The KYN28A-12 armored withdrawable AC metal-enclosed switchgear (hereinafter referred to as "switchgear") is a new-generation product independently developed by our company based on the absorption of advanced domestic and international manufacturing technologies. It can replace various outdated metal-enclosed switchgear models, such as KYN1-12, JYN2-12, and other series.

The product offers the following distinct advantages:

The enclosure is entirely assembled with bolts, providing high mechanical strength and effectively ensuring neatness and aesthetic appeal. The cabinet door features a sprayed polymer coating, offering strong resistance to impact and corrosion. The product enclosure achieves an IP4X level of protection (can be customized to steel plate upon customer request).

This switchgear is compatible with the VD4 vacuum circuit breaker produced by ABB, the C3 series fixed-type load break switch, and can also be equipped with various domestically produced vacuum circuit breakers (such as VS1, VH1, VK, ZN28), serving as a reliable alternative to similar foreign products. Regardless of the circuit breaker selected, the air insulation clearance for bare conductors is guaranteed to exceed 125 mm, and composite insulation exceeds 60 mm. All circuit breakers feature the unique advantages of long service life, minimal maintenance, and compact size. Suitable for applications in industrial facilities, energy and infrastructure, public buildings and commercial facilities, urban distribution networks, and similar environments.

Product Features



Withdrawable truck-mounted design: Allows the truck-mounted unit to be maintained and inspected without interrupting power supply, enhancing operational safety and convenience.



Intelligent Management: Can be integrated with intelligent monitoring systems to enable real-time monitoring of switch status and electrical parameters, as well as fault early warning, significantly improving operation and maintenance efficiency.



Environmental Protection and Energy Efficiency: The design complies with international environmental standards, helping to enhance the enterprise's green image.



HXGN-12 12kV AC High-Voltage Metal-Enclosed Switchgear for Ring Main Unit

The HXGN-12 ring main unit switchgear is suitable for ring network power supply or dual-radiant power supply systems with three-phase AC 50 Hz and rated voltage of 12 kV. It serves as a control and protection device for electrical energy, and is used for terminal power distribution. It can also be installed in prefabricated (container-type) substations. The HXGN-12(E) model is equipped with a straight-through load switch, while the HXGN-12(FR) model is fitted with a combination appliance of vacuum load switch and fuse. The product complies with the requirements of standards such as GB/T 3804 and GB/T 3906. Suitable for applications in urban distribution networks, residential communities and commercial buildings, industrial and park power distribution systems, infrastructure projects, as well as new energy and distributed energy integration sites.

Product Features



Compact Design: Features a compact structure with small footprint, making it suitable for installation in confined spaces.



Safety and Reliability: The equipment is equipped with a comprehensive five-interlock protection system (preventing: incorrect opening or closing of circuit breakers; operating disconnect switches under load; installing grounding wires or closing earthing switches while energized; powering up with grounding wires or earthing switches in place; and entering live compartments by mistake), ensuring the safety of personnel and equipment.



Easy Maintenance: Reduces the workload of daily maintenance, with a rational internal layout that facilitates inspection and replacement of components.



Intelligent Management: Supports remote monitoring and diagnostic functions, enabling timely detection and resolution of potential issues.



Environmental Protection and Energy Efficiency: High-efficiency materials and advanced technologies are selected to reduce operational losses and minimize environmental pollution.



Switchgear Cabinet

HXGN15-12 12kV AC High-Voltage Metal-Enclosed Switchgear for Ring Main Unit (SF6)

The HXGN15-12 type unitized, modular sulfur hexafluoride (SF6) ring main unit is a new-generation metal-enclosed switchgear that uses SF6 switches as the main switch, with the entire cabinet adopting air insulation. It is suitable for power distribution automation and features compactness, expandability, simple structure, flexible operation, reliable interlocking, and easy installation. This switchgear can provide satisfactory technical solutions for various application scenarios and diverse customer requirements. The integration of sensor technology and the latest protective relays, combined with advanced technical performance and lightweight, flexible assembly options, further enhances its overall capabilities. Suitable for applications in urban ring-main distribution networks, residential communities and high-rise buildings, commercial and public facilities, industrial parks and small-to-medium-sized factories, infrastructure projects, as well as new energy and distributed energy integration sites.

Product Features



High Dielectric Insulation: Utilizes SF6 gas as the insulating medium, offering excellent electrical insulation and arc-quenching performance. This allows for a more compact equipment design, enabling higher voltage ratings within a smaller footprint, making it ideal for installation in confined spaces.



Safety and Reliability: The equipment has passed rigorous fire resistance and impact tests, ensuring stable operation even under harsh conditions.



Flexibility and Scalability: Supports multiple configuration options, allowing flexible selection of circuit breaker types, transformer specifications, and other components according to user requirements.



Intelligent Management: Can be integrated with intelligent monitoring systems to enable real-time monitoring of switch status and electrical parameters, as well as fault early warning, significantly improving operation and maintenance efficiency.



Easy Maintenance: Long maintenance intervals reduce the workload of daily upkeep, while the rational internal layout facilitates inspection and replacement of components.



MNS Type Low-Voltage Withdrawable Switchgear

This series of low-voltage withdrawable switchgear is a modular, factory-assembled, and combinational cabinet type. It is suitable for power plants, substations, petrochemical plants, metallurgical rolling mills, transportation and energy facilities, light industry, textile factories, residential communities, and high-rise buildings, serving as power distribution equipment for energy conversion, distribution, and control in AC 50–60 Hz, rated operating voltage up to 660 V or below. This equipment complies with national standards GB/T 7251.1, "Low-voltage switchgear and control gear assemblies – Part 1: General rules," and GB/T 7251.12, "Low-voltage switchgear and control gear assemblies – Part 2: Power switchgear and control gear assemblies."

Product Features



Standardized Modules: The MNS switchgear adopts a modular design, allowing flexible combination and expansion according to user requirements, adapting to various electrical configuration needs.



Easy to Maintain: The modular design allows each functional unit to be independently withdrawn for maintenance and inspection, reducing downtime.

Convenient Operation: All functional units (such as circuit breakers, contactors, etc.) are mounted on withdrawable trolleys, enabling quick replacement and repair.



High Safety: During maintenance, the trolley can be fully withdrawn to a safe position, eliminating the risk of live working.

IP Protection Rating: Typically achieves IP40 or higher, effectively preventing the ingress of dust and foreign objects, thereby enhancing equipment reliability and service life.

Metal Enclosure: The fully enclosed metal casing provides excellent mechanical protection and electromagnetic shielding.



Rigorous Testing Standards: The equipment has passed a series of strict safety and performance tests, ensuring stable operation under various working conditions.

Integrated Intelligent Monitoring System: Supports real-time monitoring of switch status and electrical parameters, as well as early fault warning, significantly improving operation and maintenance efficiency.



Distribution Cabinet

GGD Type AC Low-Voltage Distribution Cabinet

The GGD-type AC low-voltage distribution cabinet is suitable for power users such as power plants, substations, and industrial/mining enterprises in AC 50 Hz distribution systems with a rated operating voltage of 380 V and a rated operating current up to 3150 A. It is used for power conversion, distribution, and control of equipment for motive power, lighting, and other electrical loads.

Designed in response to requirements from the former Ministry of Energy, extensive feedback from power users, and input from engineering design departments, the GGD-type AC low-voltage distribution cabinet embodies the principles of safety, economy, rationality, and reliability. This new-generation low-voltage distribution cabinet features high short-circuit breaking capacity, excellent dynamic and thermal stability, flexible electrical configurations, convenient modular assembly, strong standardization and practicality, an innovative structure, and a high degree of protection. It serves as an ideal replacement for older generations of low-voltage switchgear assemblies.

The GGD-type AC low-voltage distribution cabinet complies with international and national standards, including IEC 61439-17 "Low-voltage switchgear and controlgear assemblies" and GB 7251.1 "Low-voltage switchgear and controlgear assemblies."

Product Features



Frame Structure: The cabinet frame is assembled using locally welded 8MF cold-rolled steel sections, with the entire frame galvanized, providing excellent mechanical strength and corrosion resistance.



Fixed Installation: Compared to withdrawable designs, the GGD-type distribution cabinet typically adopts a fixed installation method, offering a simpler structure and lower cost.



Compartment Design: The interior features a rational compartmentalization, separating the busbar chamber, electrical component chamber, and cable chamber, thereby enhancing safety.



Natural Ventilation Cooling: Ventilation openings are provided at the top and bottom of the cabinet, allowing heat dissipation through natural convection, ensuring stable operation of the equipment under high-load conditions.



High Cost-Effectiveness: Compared to other high-end models, the GGD-type distribution cabinet offers higher cost-performance value, making it suitable for applications with limited budgets that still require reliable performance.



Five Major Application Scenarios for Transformers

HLJA
 云南建投 YCN
 SDIG
 SIBIG
 中国交建
 HAECO
 山东高速 SOHS
 吉林路桥有限公司
 嘉祥南湖机场

Infrastructure

ByteDance 字节跳动
 Microsoft
 OVU
 中国联通
 中国移动 China Mobile
 中国电信 CHINA TELECOM
 Chayora 朝亚
 江天数据
 中国铁路

Data Center

VINGROUP
 万科
 RAFFLES
 万达集团 WANDA GROUP
 华利地产
 ICC
 长沙国际会展中心
 平遥国际摄影展会展中心
 蓝色药谷

Commercial Buildings

沙钢集团 SHAGANG GROUP
 中化 LUXI
 合盛硅业 HOSHINE SILICON
 Asia Silicon
 sinarmas
 美国比特市矿场项目
 SEPCCO 山东电建
 喀麦隆克里比深水港项目

Industrial Manufacturing

ET Solar
 启源芯动力 QIYUAN GREEN POWER
 中广核 CGN
 CATL 宁德时代
 中国电建 POWERCHINA
 BYD
 ENVISION 远景能源
 GEELY 吉利控股集团
 SIP

New Energy