



KUOYU ELECTRIC

PRODUCT
SELECTION GUIDE

Product Type Selection Manual

High and Low Voltage Complete Electrical Equipment Sets
Professional Manufacturer



Hebei Keyu Electric Equipment Co., Ltd.
HEBEI KUOYU ELECTRIC EQUIPMENT CO.,LTD.

Address: No.188 Cangxing Street, Yuhua District, Shijiazhuang City, Hebei Province

Phone: 0311-86107980



Scan and view the electronic sample

△ This advertising material is printed by Hebei Keyu Electric Equipment Co., Ltd. and is intended solely to provide information regarding this product series. Kuoyu Electric may improve the content of this manual due to technological advancements or the adoption of newer manufacturing processes, or make necessary corrections to printing errors or inaccurate information contained herein.
恕不另行通知。商家订货时请随时联系本公司，以证实相关信息。
We reserve the right to make technical changes or modify the contents of this document without prior notice. All the agreed particulars shall prevail. All Rights Reserved.

采用环保纸印刷
Use of environmentally friendly printing paper

Hebei Keyu Electric Equipment Co., Ltd.
HEBEI KUOYU ELECTRIC EQUIPMENT CO.,LTD.

Technical &Services

Adhere to the philosophy of innovation and continuous change.
With advanced technology, high-quality products, and reliable services
Creating value for global customers

With societal advancement, we will strive even harder to provide customers with reliable, stable products and comprehensive professional services. Our goal is to become a high-tech enterprise trusted by users, equipped with robust R&D capabilities, and committed to maintaining a pragmatic, innovative, and enterprising spirit.

CULTURE
Corporate Culture



CORE VALUE
core value

Customers first, rep-
utation foremost

MISSION/VISION
Mission/Vision

Build a business with dilig-
ence and treat others with
sincerity

DEVELOP
idea of develo-
pment

Pioneering innovation
and striving for excellence

TALENT CONCEPT
Talent Philosophy

The capable rise; the average yield; the
mediocre fall The capable rise; the
average yield; the mediocre fall.

MANAGE
operation philosophy

Create value and
assume responsibil-
ity

SMART FACTORY

Building an Intelligent Electrical Factory

2017
SINCE
The Company Was Founded in 2017

7000
AREA
The Company Occupies an Area of 7,000 Square Meters.

ISO9001
SYSTEM CERTIFICATION
Certified Under the ISO 9001 Quality Management System

enterprise profile

Enterprise brief
introduction

Hebei Kuoyu Electrical Equipment Co., Ltd. is located in Shijiazhuang, abbreviated as "Shi", formerly known as Shimen, it is the capital city of Hebei Province and one of the key central cities in China's Beijing-Tianjin-Hebei region approved by the State Council. Shijiazhuang is situated in North China, central-southern Hebei Province, and the Bohai Bay Economic Zone. It serves as Hebei Province's political, economic, technological, financial, cultural, and information hub; the headquarters of the Central Military Command; a city approved by the State Council to implement coastal opening-up policies and financial openness; a major commercial distribution center and key port in northern China; one of the nation's prominent trade and exhibition centers; the permanent venue for the China International Digital Economy Expo; and a component of the China (Hebei) Pilot Free Trade Zone. Established in 2017, the company occupies a site of 7,000 square meters and is a promising enterprise in the power distribution industry. It holds comprehensive production qualifications for both high and low voltage systems and obtained ISO 9001 Quality Management System certification in 2017. In 2020, it was awarded numerous honors including the "China 3.15 Integrity Brand", "Hebei Provincial Famous Brand", "Hebei Provincial Outstanding Product", and "National Qualified Assessment Quality

Trustworthy Product". The company specializes in manufacturing high-voltage and low-voltage distribution cabinets as well as distribution box installations for domestic and international markets.

To Be Prepared for Production.

With years of expertise in electrical equipment manufacturing and electrical engineering, our company ensures rigorous control throughout the entire process—from raw material procurement and design planning to assembly production and final product inspection—by professional technical personnel, guaranteeing that our products fully meet customers' quality requirements.

Respecting and serving our customers is the foundation of our existence. "Receiving your blueprint and delivering a product that meets your expectations" remains our unwavering commitment. Over the years of development, the company has continuously upgraded its production equipment. The sheet metal workshop is now equipped with advanced machinery including fully automated laser cutting machines, sheet metal bending machines, and sheet metal angle grinding machines; the integrated manufacturing workshop features state-of-the-art laser marking systems and testing facilities. These investments ensure that Kuoyu's products consistently lead the industry.

The company is customer value-oriented and committed to providing customers with even better services.

High-quality power distribution system services. Our products are widely used in the military sector.

In power distribution systems across various sectors such as transportation, healthcare, educational services, industrial manufacturing, government poverty alleviation programs, commercial buildings, and civil buildings. We uphold the corporate values of "Integrity, Pioneering, Innovation, Practicality" and consistently deliver exceptional technology, high-quality products, and superior services to satisfy our clients. We pledge that we are not only a professional electrical supplier but also the best electrical service provider.

Guided by the principles of "Quality First, Integrity as the Foundation, Customer-Centricity", we leverage advanced manufacturing equipment and robust technical capabilities to deliver premium products and exceptional services in this era of rapid economic development. We sincerely look forward to collaborating closely with partners across all sectors and are committed to building a brighter future together!

Hebei Kuoyu Electric Equipment Co., Ltd. is located in Shijiazhuang. Shijiazhuang is referred to as "Shi", formerly known as Shimen. It is the capital of Hebei Province and one of the important central cities in the Beijing-Tianjin-Hebei region of China approved by the State Council. Shijiazhuang is located in North China, Hebei. It is the political, economic, technological, financial, cultural and information center of Hebei Province, the central and southern part of the province and the Bohai Bay Rim Economic Zone. It is a commodity distribution center and a major commercial port in the north one of the national commercial and exhibition center cities, the permanent venue of the China International Digital Economy Expo, and the China Hebei Bayu Trade Plot Zone. Founded in 2017, the company covers an area of 7,000 square meters and belongs to the Chayang enterprise in the power distribution industry. The company has a full set of high and low pressure production qualifications. In 2017, it has passed the ISO9001 quality management system certification. In 2020, it won the honors of "China 3.15 Integrity Brand", "Hebei Famous Brand", "Hebei Excellent Product", "National Conformity Assessment Quality Trustworthy Product" and

other honors. It is a professional manufacturer engaged in the production of high and low voltage distribution cabinets and distribution box equipment at home and abroad. The company has been focusing on electrical equipment manufacturing and electrical engineering for many years. From raw material purchase, design scheme, assembly and production to finished product acceptance, it is strictly controlled by professional and technical personnel to ensure that our products absolutely meet the quality requirements of customers. Respecting customers and serving customers is our foundation. Take over the blueprint in your hands and deliver the products you are satisfied with. It is our eternal pursuit. After several years of development, the company's production equipment has been constantly updated. Now the sheet metal workshop has advanced equipment such as automatic laser cutting machine, sheet metal bending machine, sheet metal angle grinder, etc.; the complete set of workshop has the most advanced laser marking equipment and experimental equipment in the industry. Guarantee Kuoyu's products have always been at the forefront of the industry.

Guided by customer value, the company is committed to providing customers with better power distribution system services. Products are widely used in power distribution systems in the military, transportation, medical and pharmaceutical, educational services, industrial manufacturing, government poverty alleviation, commercial buildings, civil buildings and other fields. We adhere to the corporate values of integrity, pioneering, innovation, and pragmatism, and always impress a customer in Shi Nian with our superb technology, excellent products and high-quality service. We promise: we are not only a professional electrical supplier, but also the best electrical service provider.

In line with the principle of "Quality First, Integrity as the Foundation, Customer First", relying on advanced process equipment and strong technical strength, and relying on the existing era of great economic development, we wholeheartedly provide users with high-quality products and excellent services. We sincerely hope to cooperate with friends from all walks of life, and Kuoyu is willing to join hands with you to create a better future!

Production Purpose

We only produce high-quality products—if that's possible, we can make some money. If we need to pay some compensation, we must still ensure the quality of our products.



MODERN PRODUCTION WORKSHOP

Modern Production Workshop

Quality assurance serves as the fundamental pillar sustaining the entire enterprise's development. In our work, we have always maintained meticulous standards, which are deeply ingrained in our subconscious. Years of quality management experience, combined with the standardized implementation of the ISO9001 system, ensures that quality is perfectly upheld at every production stage and workstation.





DUSTY FRONT END

The Advanced Ones Take the Lead and Remain at the Forefront of the Industry.



The company consistently employs a scientific management system and marketing network to align with international standards. Guided by five core innovation strategies—"conceptual innovation as the driver, strategic innovation as the foundation, organizational innovation as the safeguard, technological innovation as the tool, and market innovation as the objective"—it leads the enterprise toward sustainable development.

We are committed to continuously improving customer satisfaction by improving quality and services, and establishing and maintaining a mutually beneficial partnership with our customers.

CONTENTS

Product Summary

01	Box-type Substation Series	01-04
	YB□-12 High and low voltage prefabricated substations (European type)	01
	ZGS□-12 Unitized Substation (American Type)	03
02	Transformer Series	05-08
	SCB11 Dry-Type Transformer	05
	S11 Oil-immersed distribution transformer	07
03	High-voltage Switchgear Series	09-14
	KYN28-12 armored, removable metal enclosed switchgear	09
	HXGN15-12 Unitized AC Metal-Enclosed Ring Network Switchgear	11
	XGN□-12 Solid Insulated Ring Cabinet	13

04	Low-voltage Switchgear Series	15-24
	GGJ Low-Voltage Intelligent Reactive Power Compensation Device	15
	GGD AC Low-Voltage Distribution Cabinet	17
	GCS (GCK) Low-Voltage Draw-out Switchgear	19
	MNS Low-Voltage Extractable Switchgear	21
	GGD AC Photovoltaic Grid-Connection Cabinet	23
05	Cable Branch Box Series	25-28
	DFW-12 High-Voltage Cable Tap Box	25
	DFWK-12 Outdoor Box-type Switchgear Station	27
06	Power Distribution Box Series	29-34
	PZ30 Distribution Box	29
	Mobile outdoor construction box	31
	Intelligent Photovoltaic Grid Connection Box	33

High-Voltage and Low-Voltage Pre-Assembled Substations (European Type)

OUTDOOR PREFABRICATED SUBSTATION



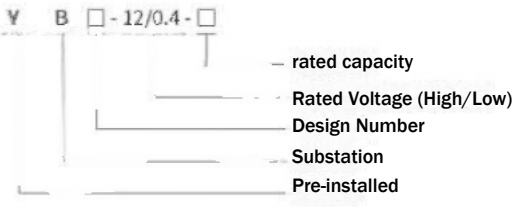
YB□-12 High-and low-voltage prefabricated substations (European type) are widely used in urban power grid upgrades, residential communities, high-rise buildings, industrial and mining facilities, hotels, shopping malls, airports, railways, oil fields, ports, highways, as well as temporary electrical installations in both indoor and outdoor settings.

YB□ -12

High-voltage and low-voltage pre-assembled substations (European type)



Model Name Explanation



Service Condition

- The altitude does not exceed 2000 m;
- Environmental temperature: -25 °C to +40 °C;
- Relative humidity: at 25 °C, the daily average should not exceed 95%, and the monthly average should not exceed 90%.
- Installation environment: locations free from fire or explosion hazards, conductive dust, corrosive chemical gases, and severe vibrations. If these conditions are not met, users may negotiate with our company.

functional characteristics

- High-voltage switchgear, distribution transformers, low-voltage switchgear, energy metering equipment, and reactive power compensation devices are combined according to specific configurations, resulting in highly integrated systems.
- It features comprehensive high-and low-voltage protection, ensures safe and reliable operation, and requires simple maintenance.
- It requires minimal space, low investment, short production cycle, and easy mobility.
- The wiring solutions are flexible and diverse;
- Unique structure: The distinctive honeycomb-shaped double-layer (composite panel) housing offers robust durability, excellent thermal insulation and heat dissipation, superior ventilation, aesthetic appeal, and high protection ratings. Available housing materials include stainless steel-titanium alloy, aluminum alloy, cold-rolled sheet, and color-coated steel plate.
- Available in various configurations: standard, villa-style, compact, and more;
- The high-voltage ring main unit can be equipped with a Network Automation Terminal (FTU)to reliably detect short circuits and single-phase ground faults, featuring "four remote" functions that facilitate distribution network automation upgrades.

transformer

Intelligent integrated substations employ low-loss, oil-immersed, fully sealed S9, S10, and S11 series transformers; alternatively, environmentally friendly dry-type transformers with resin insulation or NOMEX paper insulation may be selected. Some units are equipped with trolleys for easy installation and removal of the transformers.

high-pressure side

Smart integrated substations typically employ load switch-fuse combination protection systems for high voltage applications. When a fuse in one phase blows, the three-phase circuit trips synchronously. Load switches are available in various types—including pneumatic, vacuum, and sulfur hexafluoride models—and can be equipped with electric operating mechanisms to enable automation upgrades. The fuses used are high-voltage current-limiting fuses with impactors, featuring reliable operation and high breaking capacity; key technical parameters are listed in the table below. For transformers exceeding 800 KVA, vacuum circuit breakers such as ZN12, ZN28, and VS1 may be selected.

low-pressure side

The main switch on the low-voltage side employs a universal or intelligent circuit breaker with selective protection; the outgoing switches utilize advanced molded-case switches featuring compact size and short arc duration, capable of supporting up to 30 circuits. The intelligent automatic reactive power compensation system offers both contactor-based and contactless switching modes for user selection.

ZGS□-12

Combination Substation (American Style)

PREFABRICATED SUBSTATION



Developed by integrating advanced international technologies with domestic practical requirements, this product features compact size, easy installation and maintenance, low noise levels, minimal energy loss, anti-theft capabilities, strong overload resistance, and comprehensive protection. It is suitable for various applications including new residential communities, green belts, parks, station hotels, construction sites, and airports.

YB25-12/0.4 modular box-type substation (American style), suitable for 10 kV ring network power supply, dual-power supply systems, or terminal power supply systems, serving as a substation unit with metering, compensation control, and protection functions.

This product complies with the following standards:

GB/T 17467-1998 "Pre-assembled substations for high and low voltage applications"

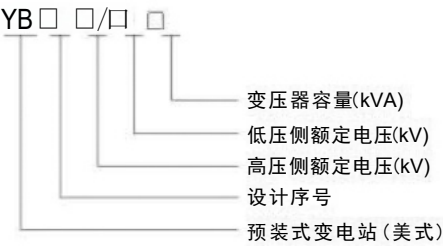
DL/T537-93 "Technical Requirements for the Order of 6–35 kV Box-Type Substations"

ZGS□-12

Combination Substation (American Style)



Model Name Explanation



service condition

- The altitude does not exceed 1000 m;
- Environmental temperature: -35 °C to +40 °C;
- Relative humidity: daily average not exceeding 95%, monthly average not exceeding 90%;
- Installation location: a place free from fire and explosion hazards, chemical corrosive gases, and with adequate ventilation; the floor inclination shall not exceed 3°.

functional characteristics

- Fully insulated, completely sealed, requiring minimal maintenance, and ensuring reliable personal safety.
- With a compact structure, its volume is only 1/3 to 1/5 that of a comparable European variant, and it features a low height.
- A compartmentalized structure can be adopted to prevent contamination of oil within the transformer tank.
- The high-voltage side features dual-fuse protection covering the entire voltage range, significantly reducing costs.
- It can be used either in a ring network or at terminals, with cable connectors capable of emergency insertion and removal under 200 A load current.
- The housing is constructed from honeycomb double-layer composite panels, providing both thermal insulation and heat dissipation capabilities.
- An electronic phase-loss protector is installed on the low-voltage side, which can rapidly trip the main inlet switch when abnormal voltage occurs in the system.
- High-voltage oil-immersed load switches or SF6 load switches can be upgraded electronically, laying the foundation for distribution network automation.
- Use oil-immersed S9 or the more advanced S11 series transformers.

technical parameter

Project	Unit	Parameter
Rated voltage	kV	10/0.4 (High/Low Pressure)
Maximum operating voltage	kV	12 (High-voltage side)
Rated frequency	Hz	50
Rated capacity	KVA	50–1600
1-minute power frequency withstand voltage	kV	35
Lightning impulse voltage	kV	75
Cooling-down method		Oil-immersed self-cooling
Breaking current of high-voltage backup fuse	kA	50
Breaking current of an insert-type fuse	kA	2. 5
Ambient temperature	℃	–35~+40
The coil allows for temperature rise.	℃	65
No-load voltage regulation		±5% or ±2 × 2.5%
Noise grade	db	50
Levels of protection		IP43

SCB11

Dry Type Transformer

DRY-TYPE TRANSFORMER



This product series is designed to directly convert power supplies from 20KV and 35KV grids into 400V distribution voltages or 10KV transmission voltages for end-users. Due to its significant advantages, it has been adopted in an increasing number of engineering projects. The main benefits include:

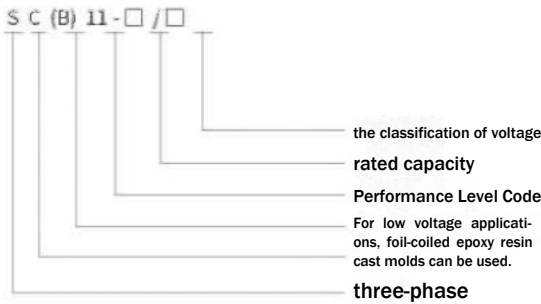
- 1. Reducing land occupation and the construction of multi-level substation projects yields significant social benefits.
- 2. Save on engineering costs and improve economic efficiency.
- 3. By eliminating the 10 kV transmission and transformation stages, operational and maintenance costs are significantly reduced.
- 4. Using high-voltage, low-current transmission instead of low-voltage, high-current transmission reduces line losses and lowers operational costs.

The 5.35 kV and 20 kV power supplies are directly connected to the electrical center, significantly enhancing power supply reliability.

SCB11 Dry Type Transformer



Model Name Explanation



Product Features

The SC(B)11 series 20KV and 35KV non-excited voltage-regulated dry-type transformers produced by our company are low-loss products that comply with the requirements of national standards GB6450, GB/T10228 and IEC726, and feature the following characteristics:

- 1. High performance with low loss – the next-generation product in the Type 9 series.
- 2. High-quality silicon steel sheets are selected, while the magnetic flux density is significantly reduced to minimize the magnetostriction effect during operation, thereby effectively lowering noise levels.
- 3. The optimized high-voltage coil structure improves the distribution of inter-layer voltage and capacitance, significantly enhancing the product's ability to withstand atmospheric overvoltages and operational overvoltages. It also optimizes electric field distribution, further reducing partial discharge levels.
- 4. The system features a configurable temperature control system and air-cooling unit, which automatically activates the fan cooling mechanism when load exceeds capacity, significantly enhancing the equipment's overload tolerance.

technical parameter

Rated capacity (KVA)	Connection Group Number	Voltage Combination (KV)			No-load current (%)	Load loss (W) under different insulation heat resistance ratings			No load Loss (W)	Short-circuit impedance (%)
		High voltage (KV)	High-voltage tap range (%)	Low pressure (KV)		B (100℃)	F (120℃)	H (145℃)		
50	Yyn0 Dyn11	22	±5 2×2.5	0.4	2.2	1160	1230	1320	340	6.0
100					2.0	1880	1990	2130	540	
160					1.6	2340	2470	2660	675	
200					1.6	2800	2940	3140	740	
250					1.4	3260	3420	3710	840	
315					1.4	3890	4080	4370	970	
400					1.2	4650	4840	5180	1150	
500					1.2	5510	5790	6170	1350	
630					1.0	6530	6840	7360	1530	
800					1.0	7810	8260	8830	1750	
1000					0.8	9230	9780	10450	2070	
1250					0.8	10920	11540	12350	2380	
1600					0.8	13090	13870	14860	2790	
2000					0.6	15480	16380	17570	3240	
2500					0.6	18380	19380	20710	3870	
2000					0.6	16910	17860	19000	3240	8.0
2500					0.6	20230	21280	22700	3870	

S11

Oil-Immersed Distribution Transformer

OIL-IMMERSED DISTRIBUTION TRANSFORMER



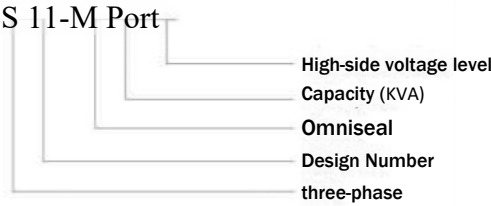
The S11 series fully sealed oil-immersed transformers are designed for power systems operating at 50 Hz AC with a rated working voltage of 20 kV or below, serving as distribution transformers for enterprises in the petroleum, metallurgy, chemical, textile, and light industry sectors, as well as for applications in environments with high dust concentrations.

S11

Oil-Immersed Distribution Transformer



Model Name Explanation



Product Features

● iron core

The core is manufactured from cold-rolled silicon steel sheets with highly magnetically aligned grains. It represents a novel design featuring a fully inclined-seam stacked core structure, where the core columns exhibit multi-level stepped circular cross-sections, while both the yoke and core share identical cross-sectional profiles.

● Winding

The windings employ corrugated oil channels, require no painting process, and are secured with compression straps. All windings are concentric coils: the high-voltage winding features terminals corresponding to specified tap voltage requirements, which are connected to a tap changer mounted on the box cover; tap voltage adjustment can only be performed after power is disconnected.

●Safety Protection Device

Transformers with capacities of 30–2000 KVA are equipped with pressure relief valves;

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

●Oil temperature measurement device

All transformers are equipped with a glass thermometer holder mounted at the top of the oil tank, extending 120 ± 10 mm into the oil.

1000–2000 KVA transformers are equipped with outdoor signal thermometers;

●Transformer Oil Tank

The transformer oil tank features corrugated walls, with its surface coated with dust-proof material.

The coating application ensures a durable paint film. The corrugated heat sink not only provides cooling functionality but also exhibits a "breathing" capability, as its elasticity compensates for volume changes in transformer oil caused by temperature fluctuations. Consequently, fully sealed transformers eliminate the need for an oil reservoir, thereby reducing the overall height of the unit.

During packaging, transformers undergo vacuum oil filling, which completely eliminates moisture from the transformer and prevents the transformer oil from coming into contact with air. This effectively prevents oxygen and moisture from entering the transformer, thereby avoiding potential degradation of insulation performance and oil aging; therefore, periodic oil sample tests are conducted.

technical parameter

Rated Cap- acity (kVA)	Voltage combination and tap range			Connection Group Number	No-load loss (W)	Load losses (W)	No-load current (%)	Short-circuit impedance (9%)
	High voltage (kV)	High-voltage tap range (%)	Low pressure (kV)					
30	11 10.5 10 6.3 6	±5 ±2×2.5%	0.4 0.69	Yyn0 Dyn11	100	630/600	2.3	4
50					130	910/870	2.0	4
63					150	1090/1040	1.9	4
80					180	1310/1250	1.9	4
100					200	1580/1500	1.8	4
125					240	1890/1800	1.7	4
160					280	2310/2200	1.6	4
200					340	2730/2600	1.5	4
250					400	3200/3050	1.4	4
315					480	3830/3650	1.4	4
400					570	4520/4300	1.3	4
500					680	5410/5150	1.2	4
630					810	6200	1.1	4.5
800					960	7500	1.0	4.5
1000					1150	10300	1.0	4.5
1250					1360	12000	0.9	4.5
1600					1640	14500	0.8	4.5
2000					1960	19800	0.8	5
2500					2310	23000	0.7	5

KYN28-12

Armored, Removable Metal-Enclosed Switchgear
METAL ENCLOSED SWITCHGEAR



The KYN28-12 is an indoor AC armored withdrawable metal-enclosed switchgear. It is designed for three-phase AC power systems with a rated voltage of 12 kV and a rated frequency of 50 Hz, used for receiving and distributing electrical energy as well as controlling, protecting, and monitoring circuits.

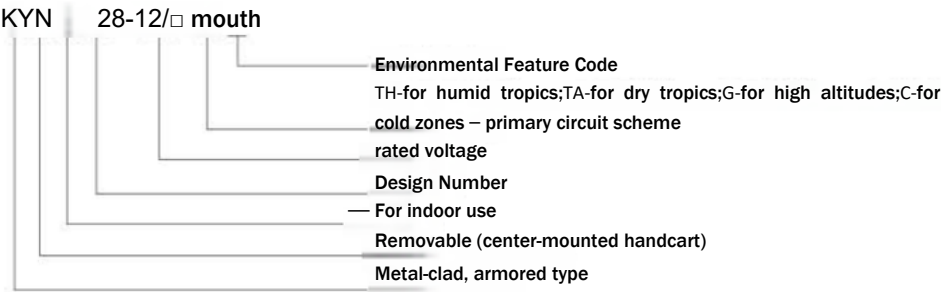
This product complies with the following standards:GB 3906 "AC Metal-Enclosed Switchgear for 3–35 kV";GB/T 11022 "Common Technical Requirements for High-Voltage Switchgear and Control Equipment";IEC 60298 "AC Metal-Enclosed Switchgear and Control Equipment with Rated Voltage from 1 kV Up to 52 kV"; and DL/T 404 "Technical Specifications for Indoor AC High-Voltage Switchgear.

KYN28-12

Armored, Removable Metal-Enclosed Switchgear



Model Name Explanation



service condition

- Environmental temperature: maximum +40 °C, minimum-15 °C (under special processes, may reach-45 °C).
- Environmental humidity: daily average <95%; monthly average ≤90%.
- Altitude: below 1000 m;
- Seismic resistance; seismic intensity not exceeding 8 degrees;
- The surrounding air should be free from corrosive or flammable gases, water vapor, and other significant pollutants.
- Free from severe contamination and frequent intense vibrations; the design withstands harsh conditions meeting Class 1 requirements.
- When used under normal environmental conditions exceeding those specified in GB 3906, it shall be agreed upon by the user and the manufacturer.

Note:① The electric heater should be turned on when the relative humidity exceeds 70%.② For locations at an altitude exceeding 1000 m, follow the provisions of JB/Z102-71.

technical parameter

Table 1					
Project		Unit	Parameter		
Rated voltage		kV	3, 6, 7. 2, 12		
Rated frequency		Hz	50		
Circuit breaker rated current		A	630、1250、1600、2000、2500、3150		
Switchgear rated current		A	630、1250、1600、2000、2500、3150		
Rated dynamic stability current (4 seconds)		KA	16、20、25、31. 5、40、50		
Rated stable current (peak)		KA	40、50、63、80、100、125		
Rated short-circuit breaking current		kA	16、20、25、31. 5、40、50		
Rated short-circuit closing current (peak)		KA	40、50、63、80、100、125		
Rated insulation level	1-minute power frequency withstand voltage	KV	24	32	42
	Lightning strike withstand voltage		40	60	75
Levels of protection			The IP protection rating of the enclosure is IP4X; it features an isolation chamber, and the door of the circuit breaker room has an IP2X rating when open.		

HXGN15-12[SF6]

Unitized AC Metal-Enclosed Ring Network Switchgear
RING NETWORK SWITCHGEAR



The HXGN15-12 unitized AC metal-enclosed ring main switchgear (hereinafter referred to as the ring main unit) is a new-generation high-voltage electrical product independently designed and developed by us by incorporating advanced foreign technologies and meeting the requirements of domestic rural power systems and urban grid upgrades.All technical performance parameters comply with IEC 62271-200:2003 and GB 3906 standards.

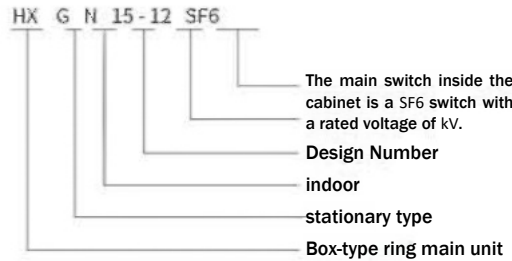
The main switch, operating mechanism, and components of the ring main unit utilize either original parts from ABB or domestically assembled SFL-12/24 type switchgear with imported parts. Additionally, upon customer request, it can be equipped with original ABB HAD/US type SF6 circuit breakers or VD4-S type vacuum circuit breakers. The operation modes include manual and electric types.

The cabinet is manufactured using CNC machining and riveted together, achieving an IP3X protection rating with reliable mechanical interlocks and error-proofing features. This product stands out for its compact size, lightweight design, aesthetically pleasing appearance, user-friendly operation, long service life, high performance specifications, pollution-free operation, and minimal maintenance requirements.

The HXGN15-12 unitized AC metal-enclosed ring main switchgear is designed for power networks operating at 50 Hz and 12 kV, serving as a device for energy reception and distribution. The main switch inside the cabinet is a SF6 switch.

HXGN15-12(SF6) Unitized AC metal-enclosed ring network switchgear

Model Name Explanation



service condition

- Environmental temperature: Upper limit +40 °C, Lower limit-25 °C;
- Altitude: No more than 2000 m;
- Relative Temperature: Daily average not exceeding 95%; Monthly average not exceeding 90%.
- Environmental conditions: The surrounding air is not significantly contaminated by corrosive gases, flammable gases, water vapor, or similar substances.
- No frequent severe vibrations.

Technical Parameter

Project	Unit	Parameter
Rated voltage	kV	12
Rated frequency	Hz	50
Main busbar's rated current / Maximum rated current of the fuse	A	630, 125
Rated short-time withstand current for the main circuit and grounding circuit	kA/S	20, 3
Rated peak withstand current for both the main circuit and the grounding circuit	kA	50
Rated short-circuit closing current for the main circuit and grounding circuit	kA	50
Number of times the load switch has been operated to make a complete cut-off at full capacity	Next	100
Fusing relay breaking current	kA	31. 5, 40
Rated closed-loop breaking current	A	630
Rated transfer current	A	1600
Mechanical life	Next	2000
1-minute power-frequency withstand voltage (peak value) relative to ground/insulated break point	kV	42, 48
Lightning impulse withstand voltage (peak): between phases, to ground/isolation break points	kV	75, 85
Secondary circuit withstand voltage at power frequency for 1 minute	KV	2
Levels of protection		IP3X

XGN□-12 Solid-

Insulated Ring Main Unit SOLID CABINET

XGN-12 solid-insulated ring main unit switchgear is a new generation of environmentally friendly solid-insulated ring main units independently developed by our company. It consists of three functional units: the V unit (circuit breaker unit),C unit (load switch unit), and F unit (combined electrical unit). Each unit can be used independently or expanded flexibly. Its structure includes an intelligent control cabinet, operating mechanism, and primary section. The cabinet can be equipped with microcomputer-based protection (controller); the mechanism features a dedicated spring-operated mechanism; and the primary section employs APG automatic gel molding technology to completely encapsulate the isolator switch and arc extinguishing chamber within epoxy resin, along with specialized connectors and busbar phases. The arc extinguishing chamber utilizes dedicated copper-chromium contact materials,R-type longitudinal magnetic field contacts, and a fully integrated primary sealing process, significantly improving its short-circuit breaking capacity, stability, service life, temperature rise, and insulation performance compared to previous models (which employed copper-aluminum contact materials, cup-shaped longitudinal magnetic field contacts, and incomplete primary sealing processes). The operating mechanism adopts a monolithic spring-operated design integrated with the switch, combining the isolator switch and main switch into a single unit for easy interlocking. With fewer components, it eliminates unnecessary transmission links, ensures high reliability, and allows optional electric operation based on user requirements.

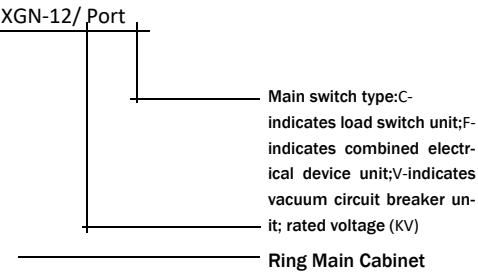
Fixed insulated fully enclosed switchgear: A modular unit composed of single or combined conductive circuits—including isolating switches, grounding switches, main busbars, and branch busbars—using solid insulating materials as the primary dielectric medium. These circuits are encapsulated within a solid insulating medium to form one or multiple functional modules that can be reconfigured or expanded, featuring complete insulation and sealing performance.

The three-position mechanism features a center-crossing spring design, capable of handling both switching and closing load currents, and supports both manual and electric operation.

XGN□-12 Solid Insulation Ring Cabinet



Model Name Explanation



Classified by functional units in the system as: incoming cabinet, outgoing cabinet, busbar junction cabinet, metering cabinet,PT cabinet, lifting cabinet, etc., each identified by a wiring scheme number. They are classified by the type of main switching components into: load switchgear, combined electrical cabinets with load switches and fuses, circuit breaker cabinets, and isolating switch cabinets, which are denoted as F (fuse combination equipment),V (circuit breaker), and C (load switch), respectively.

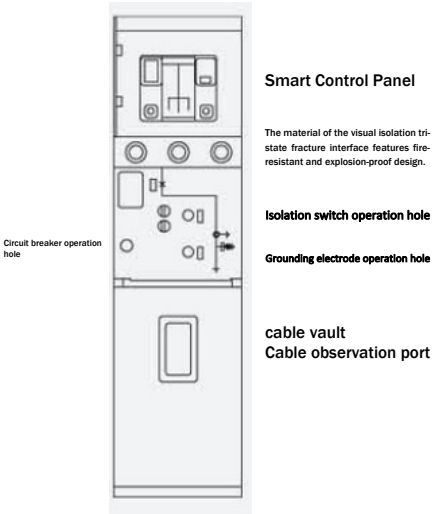
Ambient Condition

- Altitude: ≤5000 m;
- Environmental temperature: -45°C to +65°C; daily average not exceeding +45°C.
- Relative air temperature: daily average not exceeding 95%, monthly average not exceeding 90%.
- Environments not significantly contaminated by corrosive or flammable gases;
- Applicable in environments free from fire or explosion hazards and without frequent severe vibrations.

Note: For different environmental conditions or other special requirements, please negotiate with the manufacturer to obtain products designed for specific applications.

quoted standard

- GB311.1-1997 "Insulation Coordination for Substation and Transmission Equipment";
- IEC 62271-1-2007 "High-voltage switchgear and control equipment – Part 1: General requirements";
- IEC 62007-1-2003 "AC Metal Enclosed Switchgear and Control Equipment for 1–52 kV";
- GB3906-2006 "AC Metal-Enclosed Switchgear and Control Equipment for 3.6–40.5 kV";
- GB3309-1989 "Mechanical Tests for High-Voltage Switchgear at Ambient Temperature";
- GB16926-2009 "High-voltage AC vacuum load switch – fuse combination device";
- GB/T 11022-2011 "Common Technical Requirements for Standards of High-Voltage Switchgear and Control Equipment";
- GB1984-2014 "High-voltage AC Circuit Breakers";
- GB1985-2004 "High-voltage AC isolating switches and grounding switches";
- GB3804-2004 "3.6 kV–40.5 kV High-voltage AC Load Switches";
- DL/T 403-2000 "Technical Requirements for Order of 12–40.5 kV Indoor High-Voltage Vacuum Circuit Breakers";
- DL/T 404-2007 "3.6–40.5 kV AC Metal-Enclosed Switchgear and Control Equipment";
- Q/GDW730-2012 "Technical Specifications for 12 kV Solid Insulated Ring Main Units";
- 1016006-0010-A0 "General Technical Specifications for 12 kV Solid Insulated Ring Main Units of State Grid Corporation of China".



In addition to the integrated analog display showing the closing and opening positions of the panels, the visual observation window on the front of the cabinet

provides clear insight into the states of the internal isolating switches (when closed or open) and the grounding contacts.KUOYUELECTRIC |

GGJ

Low-Voltage Reactive Power Intelligent Compensation Device

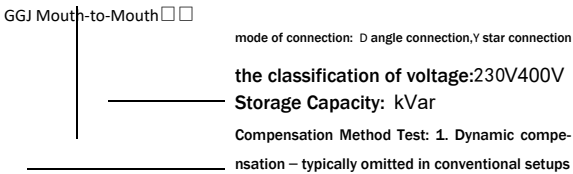
INTELLIGENT COMPENSATION DEVICE



This device effectively improves the power factor of electrical loads, reduces line losses, enhances the transformer's actual load capacity, and delivers significant energy-saving benefits. By incorporating specialized reactors into the system, it effectively prevents harmonic amplification and absorbs most harmonic currents, ensuring that both the total harmonic distortion limit and individual harmonic current content limits comply with national standards, thereby achieving harmonic mitigation objectives. In contrast, using conventional contactors to switch capacitor banks results in high surge currents, prolonged compensation times, elevated maintenance costs, and short service life. Therefore, we recommend prioritizing dynamic reactive power compensation devices in applications such as low-voltage grids at substations, production workshops, and civil buildings in industrial and mining enterprises—particularly suitable for transmission and distribution systems characterized by frequently varying loads and unstable reactive power.

This product complies with the following standards:GB/T 15576-2008 "Low-voltage complete reactive power compensation equipment" and IEC 60439 "Low-voltage complete switchgear and control equipment".

Model Name Explanation



ambient condition

- Environmental temperature: -5°C to +40 °C;
- Relative environmental humidity: no more than 90% (at 20 °C);
- Altitude: no more than 2000 m;
- The surrounding environment poses no explosion hazard, contains no gases capable of damaging or corroding metals, and has no conductive dust. The installation site should be free from severe vibrations and exposure to rain or snow erosion.

technical parameter

Project	Unit	Parameter
System voltage	V	Below AC450
Switching Time	mS	t≤20
Inflow surge	In	<25
Rated frequency	Hz	50±50%
Sampling Current	A	0~5
Device Power Consumption	w	≤15
Sensitivity	mA	100

GGD

AC Low Voltage Power Switch Box

INTELLIGENT COMPENSATION DEVICE



The GGD type AC low-voltage distribution cabinet is designed for power distribution systems in power plants, substations, industrial facilities, and other electrical applications operating at 50 Hz AC, with a rated working voltage of 380 V and a rated working current up to 3150 A. It serves for energy conversion, distribution, and control of power supply, lighting, and distribution equipment.

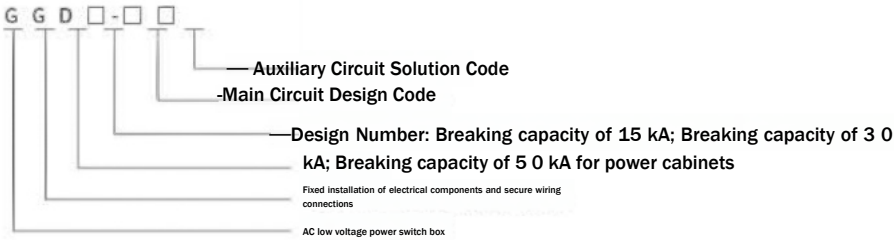
The GGD type AC low-voltage distribution cabinet is a new-generation low-voltage distribution cabinet designed in accordance with the requirements of the competent authorities of the Ministry of Energy, power users, and design departments, adhering to the principles of safety, economy, rationality, and reliability. This product features high breaking capacity, excellent dynamic thermal stability, flexible electrical configurations, easy assembly, series compatibility, strong practicality, innovative structure, and high protection ratings, making it suitable as a replacement for conventional low-voltage switchgear systems. The GGD type AC low-voltage distribution cabinet complies with standards such as IEC 439 "Low-voltage switchgear and control equipment" and GB 7251 "Low-voltage switchgear".

GGD

AC Low Voltage Power Switch Box



Model Name Explanation



service condition

- The ambient air temperature shall not exceed +40°C or fall below-5°C, and the average temperature over 24 hours shall not exceed +35°C.
- For indoor installation and use, the altitude of the location must not exceed 2000 m.
- The relative humidity of the surrounding air shall not exceed 50% at the highest temperature of +40°C; higher relative humidity levels (e.g., 90% at +20°C) are permissible at lower temperatures, taking into account the potential for condensation occurrence due to temperature fluctuations.
- During installation, the device's tilt relative to the vertical plane shall not exceed 5°.
- The equipment shall be installed in locations free from severe vibrations or impacts, and in environments where electrical components are not susceptible to corrosion.
- If users have special requirements, they may negotiate with the manufacturer for resolution.

behaviour of electricity

Basic Electrical Parameters

Model	Rated voltage (V)	Rated current (A)		Rated short circuit Drop-out current (kA)	Rated short-time withstand current (1s) (kA)	Rated Peak Withstood Current (kA)
GGD1	380	A	1000	15	15	30
GGD1	380	B	600 (630)	15	15	30
GGD1	380	C	400	15	15	30
GGD2	380	A	1500 (1600)	30	30	63
GGD2	380	B	1000	30	30	63
GGD2	380	C	600	30	30	63
GGD3	380	A	3150	50	50	105
GGD3	380	B	2500	50	50	105
GGD3	380	C	2000	50	50	105

GCSCGCK]

Low-Voltage Withdrawable Switchgear

LOW VOLTAGE SWITCH BOX



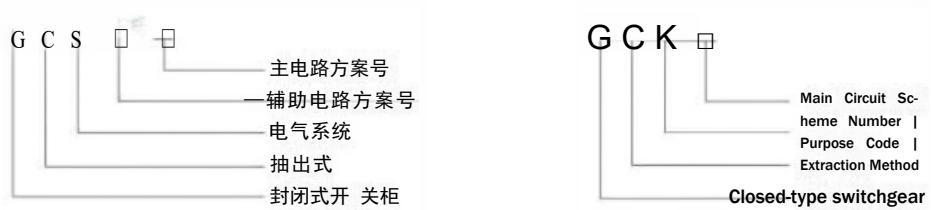
The GCS low-voltage withdrawable switchgear is designed for power distribution systems in industries such as power plants, petroleum, chemical, metallurgical, textile, and high-rise buildings. It serves as a comprehensive low-voltage distribution system for power generation and supply facilities with highly automated environments requiring computer interfaces, particularly in large power plants and petrochemical plants. This equipment operates under three-phase AC conditions at frequencies of 50 (or 60)Hz, with rated working voltages of 380 V(400 V), or 660 V, and rated currents up to 4000 A, suitable for distribution, centralized motor control, and reactive power compensation applications.

GCS(GCK)

Low-Voltage Withdrawable Switchgear



Model Name Explanation



performance index

The design of the device complies with the following standards: IEC 439-Low-voltage switchgear and control equipment; GB 7251 Low-voltage switchgear; ZBK 360001 Low-voltage withdrawable switchgear.

essential parameter

Project		Parameter	
Main circuit rated voltage (V)		AC 380 (400), (660)	
Auxiliary Circuit Rated Voltage (V)		Communication 220,380 (400)	DC 110/220
Rated frequency (Hz)		50 (60)	
Rated insulation voltage (V)		660 (1000)	
Rated current (A)	Horizontal busbars, Vertical Busbars (MCC)	≤4000、1000	
Busbar rated short-time withstand current (kA/s)		50, 80	
Busbar rated peak withstand current (kA/0.1s)		105, 176	
Power frequency test voltage (V/min)	Main Circuit, Auxiliary Circuit	2500、1760	
Busbar	Three-phase four-wire system; Three-phase five-wire system	A, B, C, PEN、A, B, C, PE, N	
Levels of protection		IP30, IP40	

primary structure

- The main frame employs 8MF open-section steel sections, each featuring mounting holes with diameters of 20 mm, 100 mm, and 9.2 mm on both sides for easy internal installation.
- The main frame offers two assembly configurations: a fully assembled structure or a partially welded structure (for side frames and beams), available for user selection.
- The various functional rooms of the device are mutually isolated, with compartments divided into functional unit rooms, busbar rooms, and cable rooms. Each room performs relatively independent functions.
- The horizontal main busbar adopts a rear-mounted configuration behind the cabinet to enhance its resistance to electrodynamic forces, serving as a fundamental measure that ensures the main circuit of the equipment possesses high short-circuit strength capability.
- The cable compartment design ensures easy access for cables to be installed and removed from both top and bottom positions.
- Dimensions of the universal cabinet unit (see table below)

Gao (mm)	2200									
Wide (mm)	400		600		800			1000		
Deep (mm)	800	1000	800	1000	600	800	1000	600	800	1000

MNS

Low-Voltage Withdrawable Switchgear

LOW VOLTAGE SWITCH BOX



The MNS system is a product developed using manufacturing technology introduced by our company from Swiss ABB. It представляет an assembled low-voltage switchgear unit for factories, with technical standards compliant with GB7251.1, IEC 439-1, VDE 0660 Part 500, BS 5486 Part 1, UTE 63-410. As a marine-grade product, it also meets the LLOYD'S REGISTER maritime standards.

The MNS system's low-voltage switchgear incorporates both fixed-structure and drawer-type configurations, with material options including steel plate structures and plastic structures. The latter achieves technical standards comparable to those of the 1990s internationally.

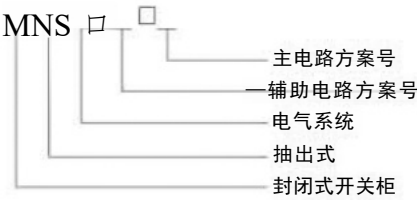
The MNS system is capable of meeting diverse power supply and distribution requirements, and can be widely applied in power distribution systems for various industrial and mining applications, including terrestrial facilities, power plants, nuclear power stations, marine installations, and oil platforms.

MNS

Low-Voltage Withdrawable Switchgear



Model Name Explanation



Product Features

- Compact design: Fits multiple functional units into a small space.
- The structure offers high versatility and flexible assembly. The C profile with a module size of 25 mm meets the requirements of various structural configurations, protection ratings, and operating environments.
- It adopts a standard module design, allowing individual components to form standardized units for protection, operation, conversion, control, regulation, measurement, and indication, which users can freely assemble as needed. With over 200 assembly components, it enables the construction of cabinet structures with various configurations and the creation of fixed partitions or drawer units.
- Safety: Extensive use of high-strength flame-retardant engineering plastic components significantly enhances protective safety performance.
- High technical performance: Key parameters meet contemporary international standards.
- Space-saving design: With a high degree of standardization, it significantly reduces the space required for storing and transporting prefabricated components.
- Easy to assemble: No special tools required.

Essential Parameter

behaviour of electricity

- Rated insulation voltage: 690 V/AC;
- Rated operating voltage: 400 V/AC;
- Rated impact withstand voltage: 8 kV;
- Rated frequency: 50–60 Hz;
- Maximum operating current of the main busbar: 6300A;
- Main busbar's short-term current tolerance: 100 kA;
- Main busbar's peak current tolerance: 220kA;
- Maximum operating current of distribution bus (vertical bus): 1200 A (2000 A);
- Short-term peak current of distribution bus (vertical bus): 176 kA;
- Protection rating: IP30–IP54.

Service Condition

- The ambient air temperature shall not exceed +40 °C or fall below -5 °C, and the 24-hour average temperature shall not exceed +35 °C.
- The surrounding air should be clean, with relative humidity not exceeding 50% at the highest temperature of +40 °C. Higher relative humidity levels are permissible at lower temperatures (e.g., 90% at +25 °C), but potential moderate condensation due to temperature fluctuations must be considered.
- For indoor use, at an altitude not exceeding 2000 m;
- In locations without significant shaking or impact vibrations;
- Pollution Level: Level 3;
- Seismic intensity: Level 8;
- The temperature during transportation and storage of switchgear ranges from -25 °C to 55 °C, with temperatures potentially reaching +70 °C within a short period (not exceeding 24 hours).
- If the aforementioned usage conditions cannot be met, the user and the manufacturer shall negotiate a solution.

GGD

AC Photovoltaic Grid-Connected Cabinet

AC PHOTOVOLTAIC GRID-CONNECTED CABINET



The AC Grid-Connected Photovoltaic Cabinet is a critical component for string-based photovoltaic power generation systems, serving as the interface between string inverters, grid connection points, and step-up transformers. It features circuit breaker inputs for power ingress, knife switch outputs, and a two-stage lightning protection system after busbar consolidation. With a maximum rated voltage of AC 690 V and rated current up to 2000 A, it meets an IP30 protection rating, fully complying with indoor installation requirements while providing waterproofing, dustproofing, UV resistance, and salt spray corrosion protection. This product eliminates the need for separate connections between string inverters and AC combiner boxes, boasts a streamlined internal design with organized wiring, high reliability, and adaptability to harsh environments, and can be customized according to user specifications.

GGD

AC Photovoltaic Grid-Connected Cabinet



Product Overview

This product complies with the technical requirements of relevant national standards including the "Photovoltaic Power Generation Design Specifications," "Technical Regulations for Distributed Power Sources Connected to the Grid," and "Low-Voltage Switchgear and Control Equipment," and is designed for low-voltage side connection switch cabinets (also known as low-voltage grid-connected cabinets) in distributed and ground-mounted photovoltaic power generation systems.

Product Features

- Based on an integrated design concept, it provides grid connection protection functionality and reserves two installation positions for electricity meters.
 - The transparent window can be sealed with lead and requires a specialized key to open, ensuring professional management and preventing electricity theft.
 - All components are sourced from domestic and international brands, possess relevant product certifications, and are configured strictly in accordance with the functional requirements of the power supply authority.
- Equipped with an automatic reclosing protector, it provides protection against overvoltage, undervoltage, voltage loss, overload, and short circuits, ensuring excellent power supply reliability.
- The housing is manufactured from metal materials such as cold-rolled steel plates.
 - An optional anti-islanding and integrated microcomputer protection device is available.

Technical Parameter

model	GGD
Number of input channels for the inverter	2-8
Number of Output Ports	1
Rated AC voltage	400V
rated frequency	50HZ
Maximum rated output current	1600A
Electricity Meter Connection	Direct Access/Meaning Ac-
Box Material	cess Metal
levels of protection	IP30
Impact Protection Level	IK10
Box Dimensions	Optionally: lower inlet, lower
Inverter Connection Method	outlet; lower inlet, upper outl-
Power Grid Connection Method	et; or lower inlet, upper outlet.
operative norm	Standard: GB/T 7251.12 (2000
above sea level	m – load reduction applies for
working temperature	depths above 2000 m).
Working Humidity	-20 ℃ to+60℃ 99%
way to install	Vertical installation with anti-
Optional Features	island protection and
	microcomputer-based protec-
	tion systems.

Project:	parameter
Rated Vo-	400V
ltage; Ra-	1600A
ted Current	
Standard Features Optional	Overload and short-circuit protection; voltage loss trip protection; clearly
Features	defined isolation points; lightning protection and islanding prevention
	protection

DFW-12

High-Voltage Cable Tap Box

HIGH VOLTAGE CABLE JUNCTION BOX

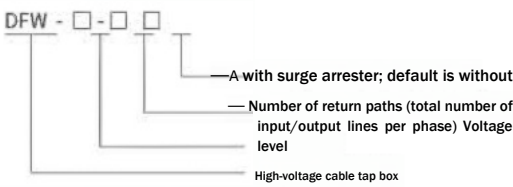


The high-voltage cable tap box has become widely adopted in power distribution network systems as a critical cable installation component in recent years. Its key features include bidirectional access doors and the use of wall penetrating sleeves to connect busbars, offering significant advantages such as compact size, clear cable arrangement, and elimination of long-span crossings required for three-core cables.The cable connectors employed comply with DIN 47636 standards,typically featuring bolted connections rated at 630 A.

DFW-12

High-Voltage Cable Tap Box

Model Name Explanation



service condition

- Environmental temperature: Maximum temperature: +40°C; Minimum temperature: -30°C
- Wind speed: approximately 34 m/s (not exceeding 700 Pa);
- Humidity: The average daily relative humidity shall not exceed 95%, and the average monthly relative humidity shall not exceed 95%.
- Earthquake resistance: horizontal acceleration shall not exceed 0.4 m/s², and vertical acceleration shall not exceed 0.15 m/s²;
- Installation location slope:no more than 3°;
- Installation Environment: The surrounding air shall not be significantly contaminated by corrosive or flammable gases, water vapor, etc., and the installation site shall be free from severe vibrations.Note:If ordering this product exceeds the aforementioned conditions,please consult with our company.

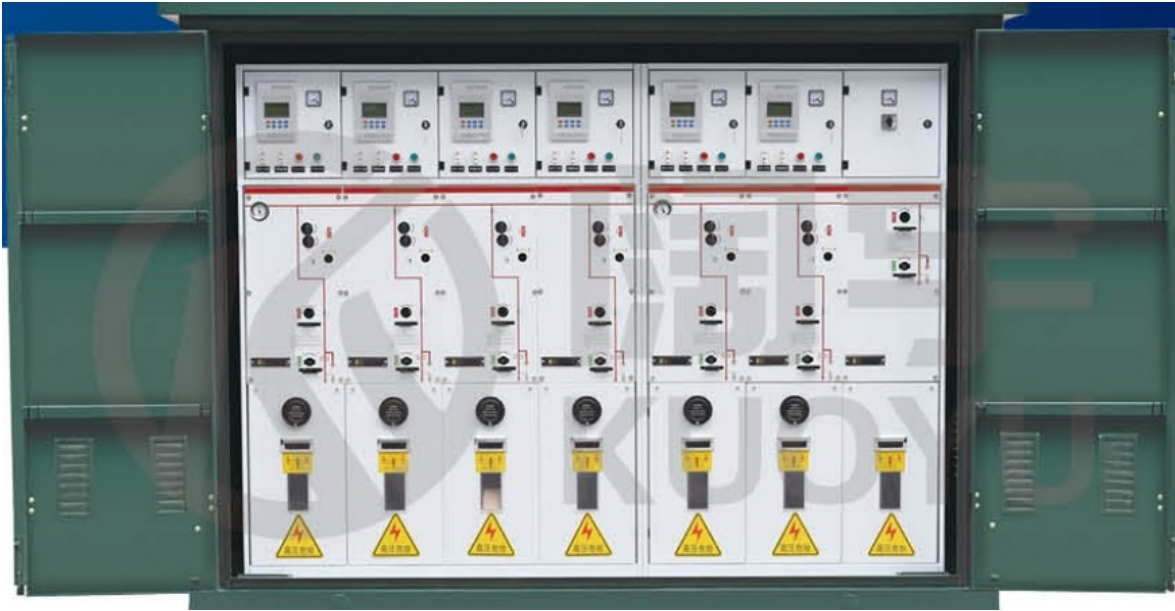
technical parameter

Project	Parameter
Rated voltage	12KV
Rated current	630A
Dynamic current	50kA/0. 3s
Thermal stability current	20kA/3s
1-minute power frequency withstand voltage test	42KV
15-minute DC voltage withstand test	52KV
Lightning impulse withstand voltage	105KV
Case Protection Level	IP33

DFWK-12

Outdoor Box-Type Switchgear Station

OUTDOOR BOX-TYPE OPENING AND CLOSING



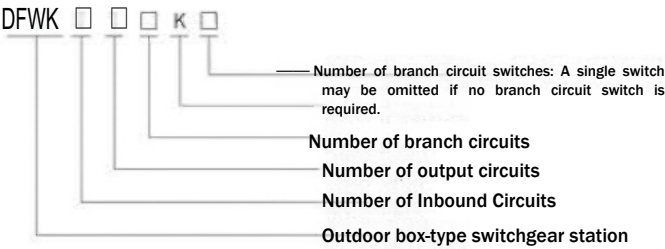
Equipped with prefabricated live-touchable silicone rubber cable terminals, it features full sealing and insulation, requires no maintenance, ensures reliable personal safety, boasts a compact structure and sleek design, and utilizes a double-layer stainless steel housing with a service life exceeding twenty years. It enables regional power outage maintenance without affecting the main grid operation, minimizing downtime impact. The system can be configured with one or multiple SF6 load switches. Offering flexible wiring options, it supports up to eight branch circuits. Additional components such as surge arresters, short-circuit fault indicators, and current-limiting fuses are available to meet diverse user requirements.

DFWK-12

Outdoor Box-Type Switchgear Station



Model Name Explanation



functional characteristics

- Equipped with prefabricated live-touchable silicone rubber cable terminals featuring full sealing, complete insulation, and maintenance-free operation, ensuring reliable personal safety.
- With a compact structure and sleek, aesthetically pleasing design, the product features a double-layer stainless steel housing with a service life exceeding twenty years.
- Without affecting the main grid operation, carry out regional power outage maintenance to minimize the affected area.
- It can be equipped with one or more SF6 load switches. The wiring configuration is highly flexible, supporting up to 8 branch circuits.
- Optional components such as surge arresters, short-circuit fault indicators, and current-limiting fuses meet various user requirements.

technical parameter

Project	Unit	Parameter
Rated voltage	kV	12
Rated current	A	630
Power frequency withstand voltage (phase-to-ground)	V/min	42
Lightning impulse voltage	kV	75
Rated breaking current	A	630
Rated short-circuit opening/closing current (peak value)	kA	50
Rated short-time withstand current	kA/S	25/4
Rated peak withstand current	kA	50
Rated breaking capacitive current	A	45
Rated breaking inductance current	A	16
Number of cuts at full load	Next	>100
Number of mechanical operations for opening and closing the switch	Next	2000

PZ30

Distribution Box

DISTRIBUTION BOX



Designed for circuits with a frequency of 50 Hz and a rated operating voltage below 500 V. Under special requirements, it achieves a protection rating of IP55.The housing features knock-out holes at both the top and bottom, with pre-drilled mounting openings for multi-circuit cables, offering a maximum rated current of 630 A. Ideal for metering control boxes in industrial plants, mines, hotels, and residential buildings.

PZ30

Distribution Box



Product Specifications (Mm)

Name	Specifications	Gao	Wide	Deep
PZ30-A Dimensions of the concealed large box unit	6#	200	188	90
	8#	200	224	90
	10#	260	260	90
	12#	260	296	90
	15#	260	350	90
	18#	260	404	90
	20#	260	440	90
	24#	450	296	90
	30#	450	350	90
	36#	450	404	90

Name	Specifications	Gao	Wide	Deep
PZ30-B Dimensions of the large box with its exterior finish:	6#	230	200	90
	8#	230	240	90
	10#	280	280	90
	12#	280	310	90
	15#	280	370	90
	18#	280	420	90
	20#	280	460	90
	24#	470	310	90
	30#	470	370	90
	36#	470	420	90
	40#	470	460	90
	45#	630	370	90
	54#	630	420	90

Mobile Outdoor Construction Box

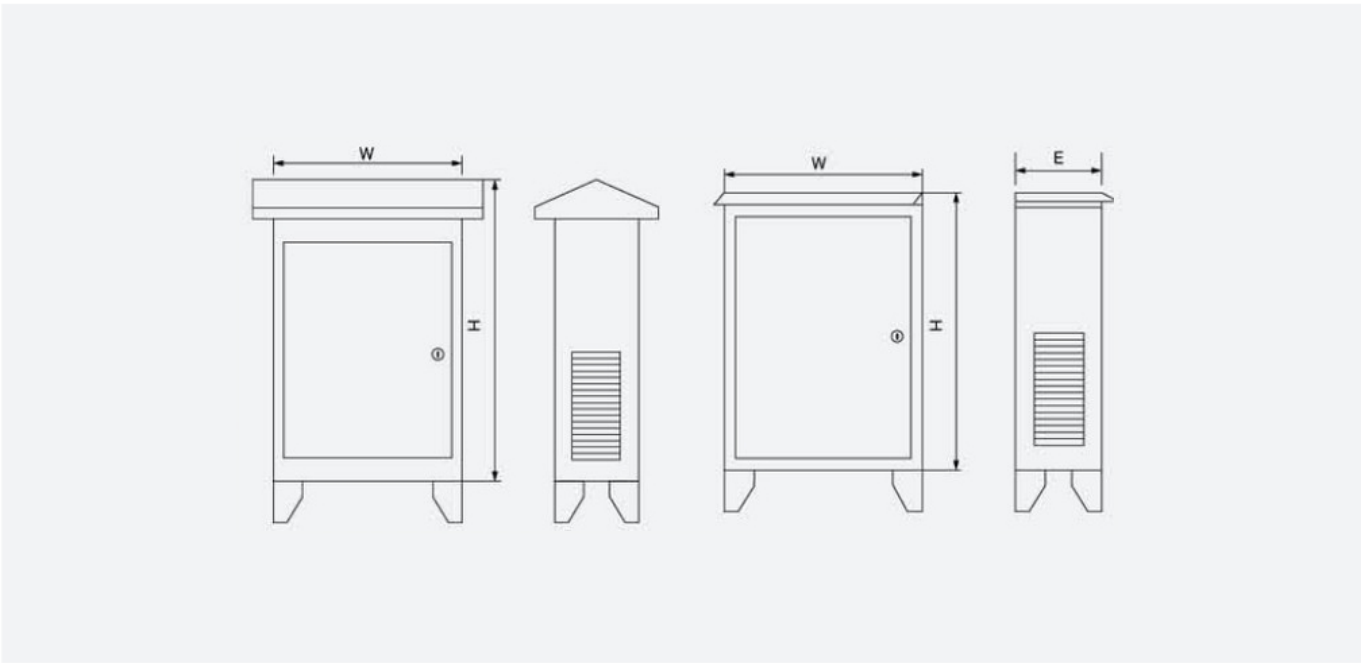
MOBILE OUTDOOR SITE BOX



The mobile outdoor construction box is a rain-resistant, outdoor-type power distribution unit designed for protective operations at construction sites. It features easy mobility, an aesthetically pleasing design, and customizable dimensions, with the housing constructed from cold-rolled steel plate.

Mobile outdoor construction box

outline overall and installing dimensions



Model	Outline dimension （mm）			Number of boxes
	Wide （W）	Gao （H）	Deep （E）	
Roof outdoor construction kit box	300	450	170	6
	400	550	180	4
	500	650	180	3
	600	850	200	2
	800	1050	250	1
Flat-top outdoor construction box	250	300	160	16
	300	400	170	10
	400	500	180	5
	500	600	180	4
	600	800	200	2
	1000	800	250	1

Intelligent Photovoltaic Grid Connection Box

SMART PHOTOVOLTAIC GRID BOX



The Intelligent Photovoltaic Grid Connection Box is designed for distributed photovoltaic power generation systems, serving as a critical power control and protection device that interfaces between inverter AC outputs and grid connection points/load devices. It features lightning protection, circuit breaker protection, energy measurement, billing, and control management functions. This product offers broad applicability, an aesthetically pleasing design, convenient system wiring, flexible configuration, a simple internal structure, well-organized wiring layout, and easy maintenance. All electrical components—including specialized bidirectional energy meters, dedicated circuit breakers, and lightning arresters—are manufactured by renowned domestic and international brands, ensuring high reliability and extended service life. The box boasts a high protection rating of IP65, matching that of string inverters, effectively preventing dust, water ingress, and foreign object entry to eliminate potential hazards, thereby meeting stringent outdoor installation requirements. Designed for wall-mounted installation with dedicated screws and bolts, it ensures simple, secure, and reliable mounting in various harsh environments. In addition to standard materials and dimensions, the unit can be customized according to specific user specifications.

Intelligent Photovoltaic Grid Connection Box

Product Features

- The product adopts an integrated design concept, offering grid connection protection and energy metering capabilities.
- The product layout is well-designed with a compact structure and clearly defined functional zones; the electricity meter features a transparent window for easy inspection.
- The product requires a specialized key for opening to ensure professional management, and the electricity meter is equipped with a lead-sealing mechanism to meet grid requirements.
- The AC input supports photovoltaic string inverters with a maximum power rating of 130 kW.
- Suitable for residential and commercial/dustrial distributed photovoltaic power generation systems.

application area

According to the "Notice of the General Office of the National Energy Administration on Submitting Pilot Plans for County-Wide (City/District-Level) Distributed Photovoltaic Development," the National Energy Administration has for the first time explicitly specified the installation ratios for the "county-wide promotion of distributed photovoltaics": no less than 50% for Party and government agencies; no less than 40% for public buildings such as schools, hospitals, and village committees; no less than 30% for industrial and commercial facilities; and no less than 20% for rural areas. To ensure the smooth and efficient implementation of this initiative, enterprises are required to provide comprehensive, end-to-end product solutions suitable for all application scenarios, including modules, mounting structures, and grid-connected distribution boxes.

technical parameter

Model	KY-BWX-05	KY-BWX-10	KY-BWX-15	KY-BWX-30	KY-BWX-40	KY-BWX-50	KY-BWX-60	KY-BWX-90	KY-BWX-110	KY-BWX-130
Essential parameter										
Number of input channels for the inverter	1									
Number of Output Ports	1									
Rated AC voltage	220V/230V/240			400V						
Maximum rated input current	32A	63A	32A	63A	80A	100A	125A	160A	200A	250A
Rated frequency	50Hz									
Electricity Meter Connection	Direct Access, Secondary Access				Direct Access/Secondary Access			Secondary Access		
外壳 Body										
Box Material	Metal									
Levels of protection	IP40、IP50、IP65									
Impact Protection Level	TK10									
Box Dimensions	Custom made									
Inverter Connection Port	M40 (Φ 32. 7~38mm)									
Power Grid Connection Port	M40 (Φ 32. 7~38mm)									
Disconnecting switch										
Rated voltage (AC)	230V		400V							
Rated current (AC)	63A	100A	100A			200A		400A		
Type	Knife switch									
Operative norm	GB/T 14048. 3-2007									
Litterae credentiales	CQC									
Photovoltaic Automatic Reconnection										
Circuit Breaker Type	2P		4P							
Rated voltage (AC)	230V		400V							
Maximum current (AC)	63A		80A			125A		250A		
Overvoltage protection value (phase voltage)	≥270V						253~300V _v			
Undervoltage protection value (phase voltage)	≤185V						154~187V			
Rated frequency	50Hz									
Operative norm	GB/T 14048. 2、GB/T 10963. 1									
Litterae credentiales	CQC									
AC Surge Protector	CCC									
Maximum Operating Voltage (AC)	230V		400V							
Maximum Discharge Current (AC)	40KA									
Operative norm	GB/T 18802. 1									
Litterae credentiales	CE									

Professional Manufacturer

Professional Manufacturer



Part of the company's
performance

Part of the company's
performance

project name
Shijiazhuang Subway
Hebei Provincial Second People's Hospital
Comprehensive Warehouse in the Airport Bonded Zone of Shijiazhuang Airport, located at China Construction Second Engineering Division's Shijiazhuang Yuhua No.1 Rongchuang Center
Shijiazhuang Senior University; Hebei Province Home of Artists

