

## High Voltage Series



## Low Voltage Series



## Energy Storage Station and Box Transformer Series



## Box-type Switching Station and Cable Branch box



## State Grid Standardized Low-Voltage Integrated Distribution Box



## Primary and Secondary Integrated Equipment



# PRODUCT SELECTION MANUAL


Professional manufacturer of power  
transmission and distribution products



ZHEJIANG NANYOUNG POWER TRANSMISSION  
AND DISTRIBUTION EQUIPMENT CO., LTD.  
浙江南洋输配电设备有限公司

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 This manual is printed by Zhejiang Nanyong Transmission and Distribution Equipment Co., Ltd., and  
is only used to explain certain product-related qualification information.

 Printed on eco-friendly paper



Website



Electronic Sample



Tik Tok

*Demands change but  
efforts remain unchanged*





# About NANYOUNG

Professional manufacturer of power transmission and distribution products

Zhejiang Nanyoung Power Transmission and Distribution Equipment Co., Ltd. was established in 2005 with a registered capital of RMB 100.88 million. It is a high-quality supplier for State Grid and Southern Grid, and a national high-tech enterprise. The company is located on the coast of the East China Sea in Zhejiang, adjacent to the famous national 5A-level Yandang Mountain Scenic Area, close to National Highway 104 and Ningbo-Taizhou-Wenzhou Expressways. It has exceptionally convenient transportation conditions such as railways, highways, and civil aviation.

The company covers an area of 10,000 square meters, 26,000 square meters gross floor area. The company currently has more than 100 employees, including more than 16 professionals with various technical and economic titles (including 2 senior titles and 7 intermediate and above titles). The company has more than 30 invention and utility model patents, and the company integrates production, development, sales, and service. Specialized in the production of: 35KV-0.4KV complete equipment, primary and secondary fusion (standardized) ring network boxes, primary and secondary fusion environmental protection cabinets, SF6 ring network boxes, European/American/Chinese box transformers, solid ring network cabinets, cable distribution box, high and low voltage complete equipment, 35KV gas-filled cabinet, gas-filled cabinet vacuum circuit breaker, load switch, 32-pole circuit breaker, PZ30/PZ40/JXF small three-box, standardized low-voltage switch cabinet SLVA, standardized JP cabinet, 35KV10KV photovoltaic energy storage prefabricated cabin, new energy storage and other products. The company's production and manufacturing strictly follow the three major system standards: quality management, environmental management, and occupational health and safety management. Meanwhile, effectively implements them to make its products reach the leading level in the industry. In order to meet customers' needs, the company vigorously imports intelligent technologies and equipment, such as the OTC arc welding robot system, Anhui Wanyi leak detector, Swiss Bystronic laser cutting machine, and multiple sets of multi-functional turret punch presses.

The company is committed to the principle of "leading technology, excellent service, honest operation, continuous improvement, upholding the philosophy of 'customer first, service foremost, and guided by customer and market needs. Through establishing long-term, stable cooperative, and mutually beneficial customer relationships, the company aims to achieve customer satisfaction and loyalty, facilitating the mutual development of both customers and the company.

The company has established a performance improvement system centered on Lean Production (TPS), with an excellent performance management model. Currently, the company has received numerous honors, including being rated as an AAA credit enterprise by the Agricultural Bank of China for six consecutive years, recognized as an AAA credit enterprise in corporate credit evaluation, a model enterprise in management by China Machinery industry, an excellent demonstration unit in Zhejiang Province's manufacturing industry, a reputable and quality-compliant enterprise in Zhejiang Province, an AA-level "Contract-Honoring and Credit-Worthy" enterprise in Zhejiang Province, a high-tech enterprise, an innovative small and medium-sized enterprise in Zhejiang Province, and a specialized and innovative small and medium-sized enterprise in Zhejiang Province. The company also serves as an executive vice president unit of the Xi'an High voltage Electrical Research Institute, the China Electrical Equipment Industry Association, and the China Private science and Technology Entrepreneurs Association; a council member unit of Zhejiang Province's power transmission and distribution industry, vice president unit of the Wenzhou Salesperson Association; vice president unit of the Yueqing power transmission and distribution industry, and a practical training base for electrical equipment installation and maintenance at Wenzhou Talent Technical School. The company collaborates on product operations with multiple domestic power supply bureaus and city bureaus, its products are sold extensively both domestically and internationally and are widely used in industries such as chemicals, transportation, real estate, photovoltaics, airports, engineering power, and pharmaceuticals.

Facing the future, Nanyoung Power Transmission and Distribution continuously pursues excellence, innovates and advances, "hand in hand" with customers, employees, and society, striving to become a well-known enterprise with a standardized business model, scientific management, and international brand.



PREMIUM QUALITY EMBODIES NOT ONLY EXCEPTIONAL PROFESSIONALISM, BUT ALSO UNWAVERING REASSURANCE.

Intelligent production equipment, scientific production processes, a strict quality system, and a rigorous raw material procurement system have effectively secured Nanyoung's sustained leading position in the industry in terms of product quality. At Nanyoung, we are committed to delivering cost-effective, comprehensive and high-quality products, as well as a safe, energy-saving and eco-friendly electricity consumption environment for you. Given that Nanyoung's products fully adhere to national quality, energy-saving, safety and environmental standards, certain products even outperform their European counterparts in quality.



MANUFACTURING

Professional manufacturer of power transmission and distribution products



# NY-SGJP

LOW VOLTAGE INTEGRATED DISTRIBUTION BOX

[www.nanyoungpower.com](http://www.nanyoungpower.com)

# NY-SGJP

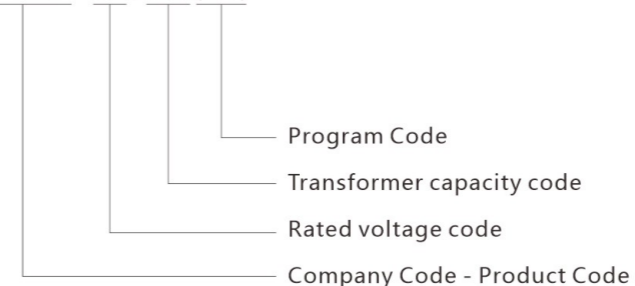
LOW VOLTAGE INTEGRATED DISTRIBUTION BOX

## Overview

The NY-SGJP series low-voltage integrated distribution box is defined by multiple capacity options and combination modes, which standardizes and structures the internal functions and zones of the cabinet. This enhances the product's overall reliability and provides convenience for design, installation, on-site operation and upgrading.

## Model And Meaning

NY-SGJP - 0.4 / 400 (1-1)



## Product Features

**Safe and Reliable:** All solutions undergo meticulous calculation simulations or rigorous testing to ensure safety and reliability;

**Convenient and Flexible:** A user-friendly design selection tool that simplifies product selection, production, assembly, and delivery;

**Elegant Design:** Available in stainless steel or SMC housing materials, offering a refined and sophisticated appearance that balances practicality and aesthetics.



Option 1

Option 3

Option 2

## SGJP

STANDARDIZED LOW VOLTAGE INTEGRATED DISTRIBUTION BOX

### Overview

The SGJP series low-voltage integrated distribution box is defined by multiple capacity options and combination modes, which standardizes and structures the internal functions and zones of the cabinet. This enhances the product's overall reliability and provides convenience for design, installation, on-site operation and upgrading.

### Product Features

- Safe and reliable: All solutions are carefully calculated, simulated, or rigorously tested to ensure safety and reliability;
- Convenient and flexible: A convenient design selection tool that enables easy product selection, production, assembly, and delivery;
- Elegant appearance: Available in stainless steel and SMC shell materials, the exquisite and elegant appearance balances practicality and aesthetics.

## SGJP

STANDARDIZED LOW VOLTAGE INTEGRATED DISTRIBUTION BOX

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# SLVA

STANDARDIZED LOW VOLTAGE SWITCHGEAR

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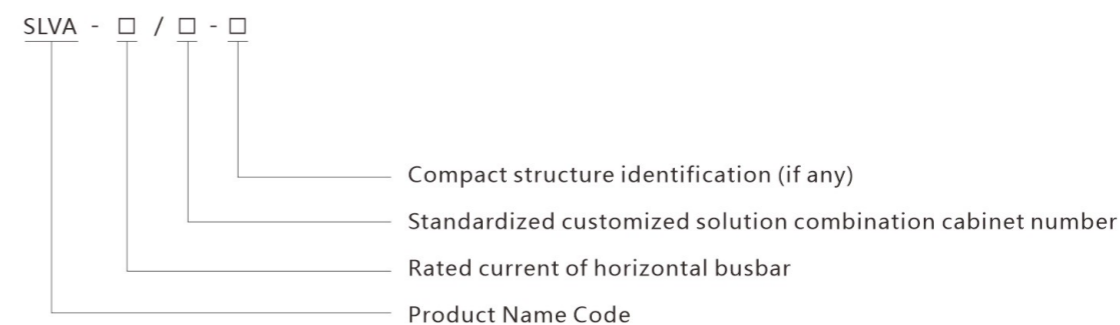
# SLVA

STANDARDIZED LOW VOLTAGE SWITCHGEAR

## Overview

Standardized low-voltage switchgear is a complete set of low-voltage switchgear designed according to standardized requirements, suitable for 0.4kV voltage systems. The product model, abbreviated as SLVA low-voltage switchgear, adopts the capital letter combination of standardized low-voltage assemblies. SLVA low-voltage switches standardize and unify the structural scheme, primary interface, secondary interface, civil engineering interface, and main component parameters of low-voltage switchgear. Implement unified functional configuration and cabinet integration to meet interchangeability requirements. Make on-site personnel safer and more efficient in construction wiring and operation, and reserve interfaces for future intelligent management of power distribution networks.

## Model And Meaning



## Operating Environment And Conditions

The normal operating system and environmental conditions of SLVA low-voltage switchgear should meet the requirements of GB/T7251.1-2013, section 7.1 and the following table. For humid operating environments; Configure anti condensation and dehumidification devices according to user needs.



# YB□-12

HIGH AND LOW VOLTAGE PREFABRICATED SUBSTATION

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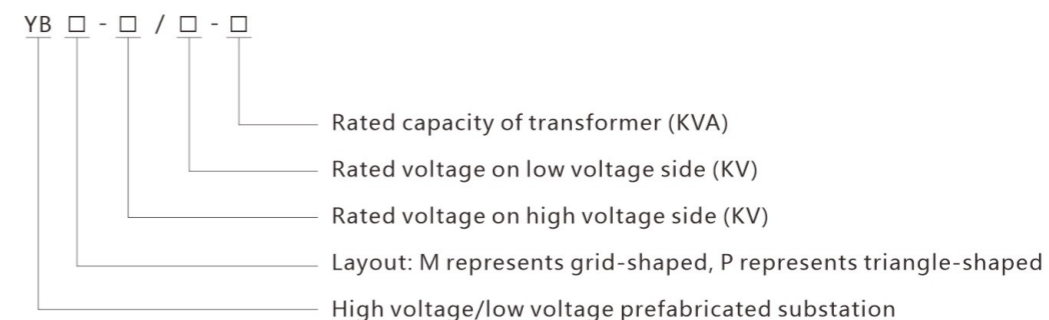
# YB□-12

HIGH AND LOW VOLTAGE PREFABRICATED SUBSTATION

## Overview

This product fully complies with the GB17467 standard for high and low voltage prefabricated substations. Suitable for urban public power distribution, street light distribution, industrial and mining enterprises, urban buildings, residential communities, oil field docks, hotels, parks, and construction sites, etc., it can achieve ring network or terminal power supply mode.

## Model And Meaning



## Operating Environment And Conditions

- Altitude: ≤ 1000m;
- Environmental temperature: -25 ° C~+40 ° C;
- Temperature: The highest monthly average temperature is +30 ° C, and the highest annual average temperature is +20 ° C;
- Relative humidity: daily average not exceeding 95%, monthly average not exceeding 90%;
- Seismic resistance level: horizontal acceleration of 0.4m/s<sup>2</sup>, vertical acceleration of 0.15m/s<sup>2</sup>;
- The installation location has no severe impact, no serious pollution or chemical corrosion, and no conductive dust explosion hazard. When it cannot meet the requirements of normal use conditions, please consult with our company to resolve the issue.



# ZGS11-12

COMBINED SUBSTATION

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# ZGS11-12

COMBINED SUBSTATION

## Overview

This product has the characteristics of small size, easy installation and maintenance, low noise, low loss, anti-theft, strong overload capacity, and full protection. Suitable for new residential areas, green belts, parks, stations, hotels, construction sites, airports, and other places.

The ZGS11-12 series combination American prefabricated substation is suitable for 10kV ring network power supply, dual power supply or terminal power supply systems, as a substation, metering, compensation control and protection device. This product complies with the following standards: GB/T17467-1998 "High Voltage and Low Voltage Prefabricated Substations" DL/T537-93 "Technical Conditions for Ordering 6-35kV Box type Substations".

## Model And Meaning

ZGS □ - 12/0.4 (□) □ / □

- Rated capacity of transformer (KVA)
- Types of operating mechanisms for high-voltage switchgear  
T-bullet operating mechanism; S-manual mechanism
- Types of Main Switches Equipped in High-Voltage Switchgear  
F-load switch; F · R-load switch + fuse
- Rated voltage
- Design Number
- Combined substation

## Operating Environment And Conditions

- Altitude not exceeding 1000m;
- Environmental temperature: -35 ° C~+40 ° C;
- Relative humidity: daily average not exceeding 95%, monthly average not exceeding 90%;
- Free of fire and explosion hazards, chemical corrosive gases, with good ventilation, and a floor inclination angle not exceeding 3 degrees.

# YB□-40.5/1.14-10000

35kV CHINESE TYPE SUBSTATION

## Overview

The Chinese type transformer is different from both American and European style transformers, highlighting its strengths while avoiding its weaknesses. The unique R-method high-voltage connection, pioneering in the industry and possessing independent intellectual property rights in China, fully demonstrates the extraordinary features of Chinese type transformer: safety, reliability, convenience, and environmental protection. At present, it has been widely used in 35kV power transformation and distribution fields such as photovoltaics and wind power.

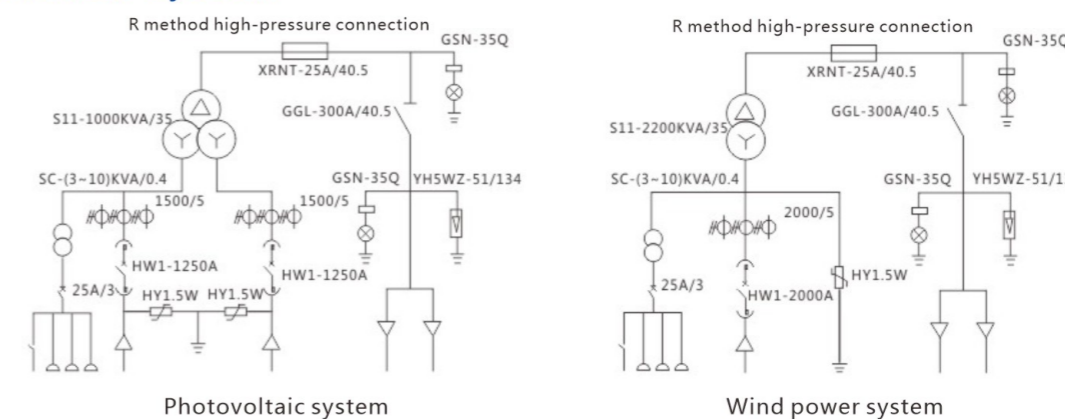
## Product Features

- No need to refuel eliminate American type substation troubles!
- The system does not require a power outage, and power generation is not affected
- Transformers are not exposed to direct sunlight, resulting in higher power generation efficiency
- Oil quality is not contaminated, guaranteed for 20 years
- Operation and maintenance are convenient and safe, with no impact from harsh weather conditions
- Full thermal insulation protection, natural ventilation and heat dissipation

## Main Technical Parameters

Model	YB□-1000/35	YB□-1500/35	YB□-2000/35
Total Power (KW)	1000	1500	2000
AC Input	(270V+270V)photovoltaic	690V(wind power)	690V(wind power)
AC Boost	35kV-38.5kV	35kV-38.5kV	35kV-38.5kV
High-voltage Switchgear	GGR-25A/40.5	GGR-35A/40.5	GGR-50A/40.5
Energy-saving Transformer	S11-1000kVA/35	S11-1600kVA/35	S11-2200kVA/35
Box-type Substation Measurement and Control	RS485	RS485	RS485
Dimensions (length X width X height)	3600×2430×2900	4300×3000×2900	4300×3000×2900
Weight (KG)	6000	7000	8000

## Electrical System



# YB□-40.5/1.14-10000

35kV CHINESE TYPE SUBSTATION

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# YBW-12/0.8-4000

NEW ENERGY INTEGRATED PHOTOVOLTAIC PREFABRICATED BOX-TYPE SUBSTATION

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# YBW-12/0.8-4000

NEW ENERGY INTEGRATED PHOTOVOLTAIC PREFABRICATED BOX-TYPE SUBSTATION

## Overview

YBW-12/0.8-4000 New Energy Integrated Photovoltaic Prefabricated Box-type Substation, European-style All-in-One Substation.

The European-style all-in-one substation includes an oil-immersed transformer, high-voltage compartments, a communication and power cabinet, inverter compartments. The inverter compartments are placed on both sides of the transformer respectively, and the communication and power cabinet is adjacent to the high-voltage compartment. The overall structure is "mesh" shaped, with containers used as the fireproof and thermal insulation shell of the inverter compartments. The inverters in the inverter compartments are arranged in a mirror image, and a lower wellhead is set between the inverter aisles. The inverters output cables from the side, connecting to the low-voltage bushings on one side of the transformer through copper bars and flexible connections. Radiators are installed on the left and right sides of the transformer, along with a transformer instrument box. It adopts an oil-immersed load switch with plug-in fuses. The high-voltage fuse box, high-voltage bushings and surge arresters of the transformer are located in the high-voltage compartment, where the high-voltage bushings and cables are isolated from the fuses by a partition. The remote control and monitoring room of the communication and power cabinet is equipped with remote control and monitoring terminal equipment, auxiliary transformer, UPS, monitoring terminal and other devices. The secondary wires in the power cabinet are laid through the conduit between the high and low voltage compartments to connect with the inverter compartment. The transformer adopts natural air cooling (ONAN) as the heat dissipation method.

## Main Technical Parameters

Project	Unit	High-voltage electrical appliances	Transformer	Low-voltage electrical appliances
Rated voltage	kV	6/10	6/0.4 10/0.4	0.4
Rated capacity	kVA		50~1600	
Rated current	A	200、400、630		100~3200
Rated short-circuit breaking current	A	Load switch 400-630		15~63kA
	kA	The combination switch depends on the fuse		
Rated short-time withstand current	kA	16, 20(4s)		15(1s)
				30(1s)
Rated peak withstand current	kA	31.5, 50		30
				63
Power frequency withstand voltage (1min)	kV	Relatively and alternately 32/42	25/35(oil)	≤0.3,2
		Isolation fracture 36/48	20/28(dry)	>0.3,2.5
Lightning impulse withstand voltage (peak value)	kV	Relative and alternating 60/75	60/75	
		Isolation fracture 70/85		
Box protection level			IP32	
Noise level	db		55	
Execution standard		GB/T 17467 《High voltage/low voltage prefabricated substation》		
		DL/T537 《Technical Conditions for Ordering 6-35kV Box-Type Substations》		



# NYYZC

NEW ENERGY INTEGRATED PHOTOVOLTAIC PREFABRICATED CABIN

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# NYYZC

NEW ENERGY INTEGRATED PHOTOVOLTAIC PREFABRICATED CABIN

## Overview

NYYZC New Energy Integrated Photovoltaic Prefabricated Cabin, European style.

The layout of the European all-in-one machine is similar to that of a conventional European transformer. The entire machine is made of a container shell, which includes a transformer room, a high-voltage room, a communication power cabinet room, and an inverter room. The rooms are separated by partitions or corrugated boards, and the inverter and high and low voltage rooms are distributed on both sides of the transformer room, forming a grid shaped structure as a whole. The inverter is arranged in a mirror configuration, with lower shaft openings set between the inverter aisles. The side of the inverter is connected to the low-voltage bushing on one side of the transformer through copper bars and flexible connections. The conventional transformer adopts dry-type transformer, matched with vacuum load switch and fuse combination device. The vacuum load switch and fuse combination device is connected to the transformer room through high-voltage cable, and the communication power cabinet is similar to the American integrated machine. The heat dissipation method of transformers usually adopts natural air cooling or forced air cooling.

The container shell is equipped with ventilation louvers, fan outlets, and fans for the internal and external air circulation of the entire box transformer. The inverter room is equipped with fire emergency lights, fire detectors, explosion-proof lighting, and fire extinguishers.

## Operating Environment And Conditions

1. Altitude:  $\leq 3000$  meters;
2. Ambient temperature:  $-45^{\circ}\text{C} \sim +45^{\circ}\text{C}$ ;
3. Environmental humidity: The daily average relative humidity should not exceed 60%, and the monthly average should not exceed 90%; A place without fire, explosion hazard, chemical corrosion, and severe vibration.

## Main Technical Parameters

Project	Configuration Details	Instructions	Remarks
Chassis assembly	Beam	4mm ; (Quantity depends on the length of the box)	SPA-H material
	Edge beam/longitudinal beam	16/18/20 # channel steel or 160 * 80 * 4 rectangular pipe	Q235B material
	Baseplate	3mm/5mm flat plate	Q235B material
Front wall assembly	Front wall pillar	6mm bent piece (structure identical to container column)	SPA-H material
	Pillar	Rectangular tube 60 * 3 (same as container top beam)	Q235B material
	Sill beam	16 # channel steel	Q235B material
	Front wall panel	1.6/2mm, figuer-eight side panel (same as the front wall panel of the container)	SPA-H material
Rear wall assembly	Rear wall pillar	6mm bent piece, (with the same structure as the rear column of the container)	SPA-H material
	Rear wall top beam	Rectangular tube or equivalent structural component	Q235B material
	Rear wall bottom beam	16 # channel steel or equivalent structural components	Q235B material
Container door panel assembly	Rear door frame	Frame 100 * 50 rectangular tube; Bend 3mm up and down	Q235B material
	Rear door panel	2mm, 36 (3 wave board)	SPA-H material
	Rear door seal	EPDM waterproof sealing strip	
	Door lock	Lock rod, galvanized container lock rod	
Left/Right Side Assembly	Left roof beam	Rectangular tube 60/80 * 3 (same as container top beam)	Q235B material
	Side panel	Container side corrugated board 1.6mm, 36 (5 corrugated boards)	SPA-H material
Box top assembly	Box top plate	Container roof, 2mm, 5 waves	SPA-H material
	Strengthening beam	Rectangular tube 60 * 3	Q235B material



# ZGS□-F/10

10KV SERIES BOX-TYPE SUBSTATION FOR AMERICAN WIND POWER GENERATION

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# ZGS□-F/10

10KV SERIES BOX-TYPE SUBSTATION FOR AMERICAN WIND POWER GENERATION

## Overview

The ZGS□-F/10 series American wind power box type substation (hereinafter referred to as the box type substation) has a triangle shaped structure, and is closely connected to high and low voltage equipment. The substation is exposed to the air on three sides, with good heat dissipation conditions, and can be separated from the high and low voltage equipment shell for easy maintenance.

The substation adopts S11 series oil immersed transformers with sheet oil tanks, no oil pillows, fully enclosed, high and low voltage bushings, tap changers, oil level indicators, pressure relief valves, oil relief valves, etc. All are installed on the end plate of the high-pressure chamber, with a reasonable position and easy observation and operation.

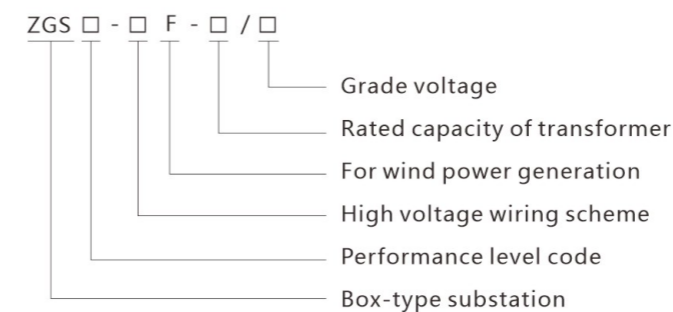
The high voltage compartment and low voltage compartment are separated by steel plates. The high voltage compartment, low voltage compartment, and transformer are relatively independent while maintaining a complete box transformer as a whole. The structure is compact, the volume is small, and the weight is light. Install distribution switch equipment on the high and low voltage sides.

## Operating Environment And Conditions

1. Cooling conditions: Air self cooling
2. Usage environment: The outdoor temperature should not exceed 40 °C, not be lower than -45 °C, the altitude should not exceed 1000m, the monthly average temperature should not exceed 30 °C, the annual average temperature should not exceed 20 °C, and at 25 °C, the relative humidity of the air should not exceed 95%, and the monthly average should not exceed 90%.
3. The horizontal acceleration shall not exceed 0.3g, and the vertical acceleration shall not exceed 0.15g.
4. The installation environment should be free of obvious pollution, explosive, corrosive gases, and dust. The installation site should be free of severe vibration and impact, and it is required to be installed on a cement platform or other flat and solid platform.

Note: Any other issues beyond the technical specifications shall be handled through negotiation between the user and our company.

## Model And Meaning





# ZGS□-F/35

35KV SERIES BOX-TYPE SUBSTATION FOR AMERICAN WIND POWER GENERATION

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## ZGS□-F/35

35KV SERIES BOX-TYPE SUBSTATION FOR AMERICAN WIND POWER GENERATION

### Overview

ZGS□-F/35 series American style wind turbine box type substation (hereinafter referred to as box type substation) is a specialized equipment that increases the voltage of 0.6-0.69kV generated by wind turbines to 35kV and connects it to the grid for output. Different from traditional box type substations, the high-voltage load switch, fuse, high-voltage components, transformer body, and non excited tap changer are sealed in the same oil chamber, with a compact structure. Flexible installation of switchgear on the low voltage side.

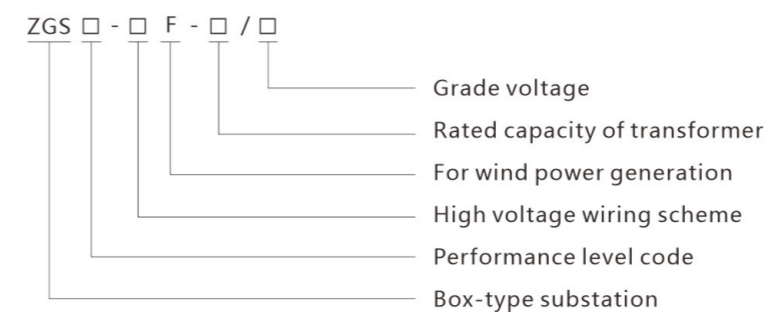
This product is applied to various wind power generation sites and is an ideal supporting product for wind power generation systems.

### Operating Environment And Conditions

1. Cooling conditions: Air self cooling
2. Usage environment: The outdoor temperature should not exceed 40 °C, not be lower than -45 °C, the altitude should not exceed 1000m, the monthly average temperature should not exceed 30 °C, the annual average temperature should not exceed 20 °C, and at 25 °C, the relative humidity of the air should not exceed 95%, and the monthly average should not exceed 90%.
3. The horizontal acceleration shall not exceed 0.3g, and the vertical acceleration shall not exceed 0.15g.
4. The installation environment should be free of obvious pollution, explosive, corrosive gases, and dust. The installation site should be free of severe vibration and impact, and it is required to be installed on a cement platform or other flat and solid platform.

Note: Any other issues beyond the technical specifications shall be handled through negotiation between the user and our company.

### Model And Meaning





# YBF□-40.5/0.69-□

COMPACT WIND TURBINE BOX-TYPE SUBSTATION

/ [www.nanyoungpower.com](http://www.nanyoungpower.com)

# YBF□-40.5/0.69-□

COMPACT WIND TURBINE BOX-TYPE SUBSTATION

## Overview

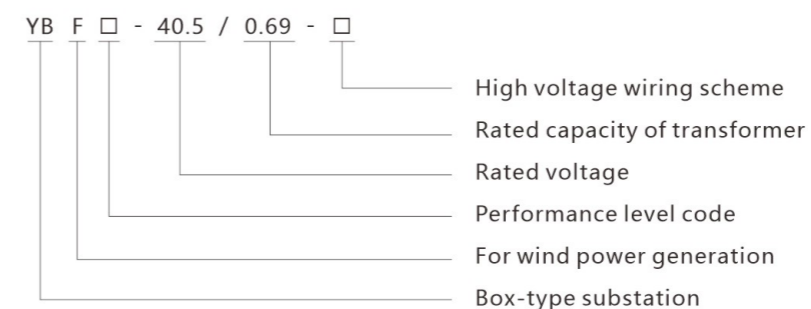
YBF □ 40.5/0.69 series compact wind turbine box type substation (hereinafter referred to as compact box transformer) is a specialized equipment that increases the voltage of 0.6-0.69kV generated by wind turbines to 35kV and outputs it to the grid.

## Operating Environment And Conditions

1. Cooling conditions: Air self cooling
2. Usage environment: The outdoor temperature should not exceed 40 °C, not be lower than -45 °C, the altitude should not exceed 1000m, the monthly average temperature should not exceed 30 °C, the annual average temperature should not exceed 20 °C, and at 25 °C, the relative humidity of the air should not exceed 95%, and the monthly average should not exceed 90%.
3. The horizontal acceleration shall not exceed 0.3g, and the vertical acceleration shall not exceed 0.15g.
4. The installation environment should be free of obvious pollution, explosive, corrosive gases, and dust. The installation site should be free of severe vibration and impact, and it is required to be installed on a cement platform or other flat and solid platform.

Note: Any other issues beyond the technical specifications shall be handled through negotiation between the user and our company.

## Model And Meaning



## Product Features

- Small size, compact structure, and easy installation;
- Can be used for ring networks and terminals, with convenient conversion;
- Low loss, low noise, superior performance;
- The box adopts anti-theft structure;
- Low temperature rise and strong overload capacity.



# NYYZC-IPCII/B

MODULAR PREFABRICATED SUBSTATION (BOOSTER STATION)

/ [www.nanyoungpower.com](http://www.nanyoungpower.com)

# NYYZC-IPCII/B

MODULAR PREFABRICATED SUBSTATION (BOOSTER STATION)

## Overview

Provide a fully modular assembly solution for substations, reducing the footprint by 30% and shortening the system design, installation, and commissioning cycle by 70%;

Adopting all metal prefabricated cabins and equipped with intelligent environmental control systems, it can be applied to complex climate and geographical environments such as high temperature, high humidity, and sandstorms;

Support cloud platform access, provide remote health diagnosis, fault analysis, maintenance guidance and other functions, realize unmanned operation of substations and full lifecycle management of equipment;

## Application Field

Step up stations in new energy fields such as wind power, photovoltaic power, offshore wind power, and distributed photovoltaic power

10kv~40.5kv substation in the power grid

Large scale industrial and mining enterprises' self use substations

## Comparison Between Modular Intelligent Prefabricated Cabins And Traditional Substations

Project	Conventional outdoor substation	Pre-fabricated container substation
Floor area	About 3,000 square meters	About 2,000 square meters
Construction period	About 3-4 months	The entire site is pre installed as a whole, with all equipment prefabricated in the factory and installed on-site. The construction period is short, 1-2 months
Cable usage	Equipment is arranged in a scattered manner, with a large amount of primary and secondary cables used	Equipment is highly integrated and arranged, reducing electrical distance and saving about 30% of cables
Environmental Requirements	High environmental requirements and harsh environments such as sandstorms pose significant risks to equipment	Adopting a fully metal cabin design, with an IP54 protection level and equipped with a comprehensive HVAC system, it can prevent sandstorms, condensation, and enhance equipment reliability
Construction and management costs	There are many buildings and high construction costs; The equipment is provided by different manufacturers, resulting in high coordination and management costs	Prefabricated design, cancellation of buildings throughout the site, low construction costs, and low management costs
Operation and Maintenance Cost	High Operation and maintenance costs	Closed design, not affected by external conditions, low operation and maintenance costs

# NYYZC-IPCII/CS

WIND-SOLAR ENERGY STORAGE CONVERTER AND BOOSTER INTEGRATED CABIN

## Overview

The integrated cabin for wind solar energy storage and boost integrates the box type inverter station and the box type boost station into one, which can complete the photovoltaic DC input to three-phase high-voltage AC output in one box. It optimizes the system structure, removes functional duplication, has a more reasonable structure, more complete functions, and a smaller size. All equipment is factory constructed and debugged, and the cables and cable trenches between the original box type inverter station and the box type boost station are saved, saving a lot of equipment and construction costs for the owners and creating more economic benefits. This type of transformer can be called "box transformer with inverter function", which is divided into 35kV; European style integrated photovoltaic power station and 35kV American style integrated photovoltaic power station.

## 35kV European-style Wind-solar-storage Integrated Booster Cabin

The voltage level of the split transformer is 35kV, and it integrates an inverter module and a boost module to directly invert and boost the DC power generated by the photovoltaic modules to 35kV voltage level, and then integrate it into the photovoltaic boost box transformer of the power grid. The box is arranged in a "grid" shaped structure, divided into high-voltage room, transformer room, and inverter room, integrating the latest design concepts of civil power. The overall structure is compact, the functions are complete, the box has strong anti-corrosion ability, good environmental adaptability, and simple on-site installation. Only prefabricated foundations are needed, greatly improving on-site work efficiency.

## Product Features

- Integrated ceiling, overall aesthetics, high-grade product.
- Integrated air duct, large ventilation volume, safer and more efficient inverter operation.
- Integrated box and cabinet, the modules of the box transformer are integrated with the box body, and the appearance is of high grade.
- Space optimization, fully utilizing the space inside the box for easy maintenance and repair.



# NYYZC-IPCII/CS

WIND-SOLAR ENERGY STORAGE CONVERTER AND BOOSTER INTEGRATED CABIN

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# NYYZC-IPCII/A

CENTRALIZED INVERTER INTEGRATED CABIN

## Overview

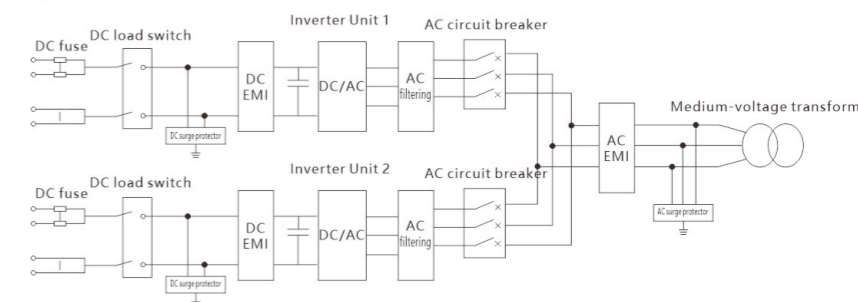
The photovoltaic inverter boost integrated machine integrates outdoor photovoltaic inverters, boost substations (Chinese style box transformers, European style box transformers, American style box transformers), high-voltage switchgear, low-voltage auxiliary power supply, communication and monitoring equipment to form an integrated device. It has an independent self power supply system, temperature and humidity control system, disaster alarm system (smoke detector), fire protection system (fire extinguisher), lighting system, and has power supply and network access capabilities for video surveillance and other systems.

The entire set of equipment is installed on the common base of the all-in-one machine. The main circuit is connected by a busbar, and components such as sleeves that cannot withstand high stress need to be transitioned with soft connections. The product has a standard power dispatch interface, providing a one-stop solution for the inverter unit from the DC output link of photovoltaic cell modules to the grid connection link.

## Main Parameters

Name	Parameter
Maximum DC input power (@ cos Φ=1)	2792kW
Maximum DC input voltage	1500V
MPPT voltage range	875V~1500V
The minimum DC input voltage	875V
Maximum input current	3191A
MPPT circuits	two
Number of DC input circuits	16~22
Rated AC output power	2500kW
Maximum AC output power	2750kW
Maximum output current	45A
Rated grid voltage	35kV
Rated grid frequency	50Hz
Allowed Grid Frequency Range	45~55Hz
Total harmonic distortion rate at rated power	< 3%
DC current component	<0.5% (rated output current)
Adjustable range of power factor	0.8 lead~0.8 lag

## Circuit Diagram



# NYYZC-IPCII/A

CENTRALIZED INVERTER INTEGRATED CABIN

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# BWG

PHOTOVOLTAIC GRID-CONNECTED CABINET

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# BWG

PHOTOVOLTAIC GRID-CONNECTED CABINET

## Overview

This product is mainly used in high-power photovoltaic grid connected power generation systems, connected in series between grid inverters (or AC combiner boxes) and the grid. The product has a series of protections such as grid low voltage, grid overvoltage, input lightning protection, system overcurrent, and grid isolation. The multifunctional meter display and fault status indication make the system operation status clear at a glance.

## Grid-connected Switch

Residual current protector	1. When the power grid is cut off or the bias voltage is greater than 20%, it will automatically trip; 2. When the power grid returns to normal, it will automatically close; 3. Manual operation and automatic operation can be switched;
Plastic shell reclosing	1. When the power grid is cut off or the bias voltage is greater than 20%, it will automatically trip (the 0~10s delay trip time can be adjusted); 2. When the power grid returns to normal, it will automatically close; 3. Manual operation and automatic operation can be switched;

## Technical Specifications

Common string inverter power	5kw, 10kw, 15kw, 20kw, 25kw, 30kw, 40kw, 50kw, 60kw
Number of input circuits for inverters	Circuits 1-8 (recommended to be equipped with an AC combiner box)
Number of grid connected output circuits	1 circuit
Grid connection requirements	Three phase grid connection
Grid connected voltage	380Vac

## Protection Function

short circuit protection	Have
Lightning protection	Have (nominal current: In: 20KA, I <sub>max</sub> : 40KA, up ≤ 4KA)
Isolation protection (visual break point)	Have (knife switch/hand pull isolation switch)
Ovrevoltage and Undervoltage Protection	Have
Automatic reclosing	Have
Manual opening and closing of the panel	Have
Optional features	1. Online power quality monitoring device; 2. Anti islanding protection device; 3. Fault disconnect device;



# BWV

PHOTOVOLTAIC GRID-CONNECTED BOX

/ www.nanyoungpower.com

# BWV

PHOTOVOLTAIC GRID-CONNECTED BOX

## Overview

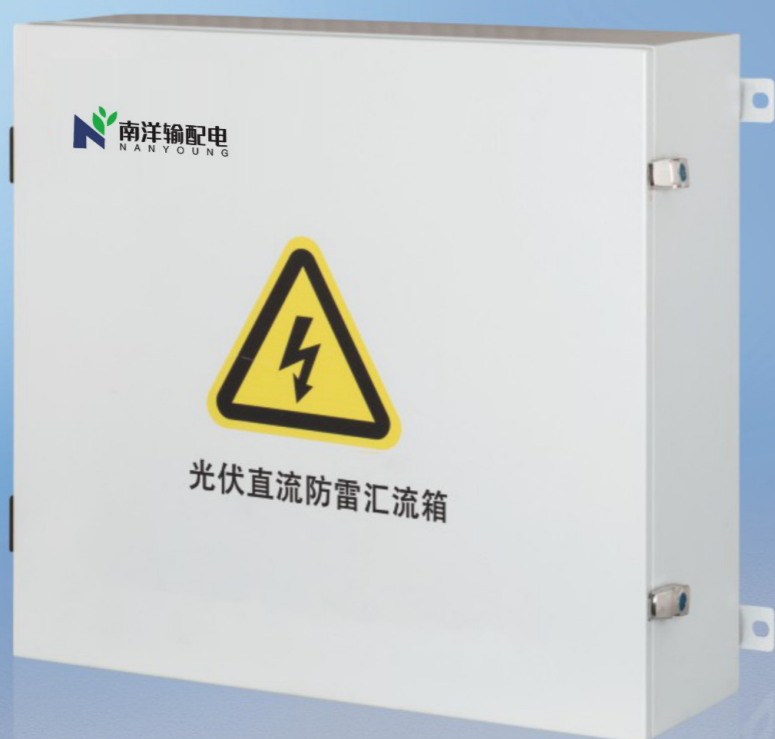
BWV photovoltaic grid-connected box is an important power protection part suitable for photovoltaic string type power generation systems, which connects the string type inverter with the power grid system. The circuit protection part adopts photovoltaic grid connected circuit breakers and pull ring isolation switches, and adopts level 2 lightning protection. The protection level is IP65, which meets the requirements of outdoor installation and is waterproof, dustproof, UV resistant, salt spray corrosion-resistant, etc. The internal structure of this product is simple and clear, with neat and reasonable wiring. High reliability and easy maintenance. Outdoor wall mounted installation can adapt to various harsh environments. In addition to standard materials and sizes, customization can be made according to user requirements.

## Features

- Highly reliable
- Select photovoltaic dedicated grid connected circuit breakers;
  - Choose a photovoltaic specific pull ring isolating switch for safer operation.
- Strong adaptability
- IP65 protection level, waterproof, dustproof, and UV resistant;
  - Strict high and low temperature testing, suitable for a wide range of regions;
  - Easy installation, simplified system wiring, convenient wiring;
  - The box is made of metal materials such as cold-rolled steel plates.

## Main Parameters

Product Model	BWV-3000	BWV-5000	BWV-10000
Maximum input voltage	275	275	460
Single-channel input current	15	25	20
Rated working voltage Un	220	220	380
Voltage protection level Up	<1.8kV		
Nominal current-carrying capacity In	20kA		
Maximum current capacity Ima	40kA		
Response time	25ns		
Temperature and humidity	Working temperature: -40 ° C~+85 ° C, humidity 95%, without condensation and corrosive gases		
Altitude	≤2500m		
Surge protection	SUPI-40 2P 20-40kA	SUPI-40 2P 20-40kA	SUPI-40 4P 20-40kA
Box material	Stainless steel spray coating		
Box protection level	IP65		
Protection level of cable joints	IP66		



# BWX

PHOTOVOLTAIC DC LIGHTNING-PROTECTED COMBINER BOX

/ [www.nanyoungpower.com](http://www.nanyoungpower.com)

# BWX

PHOTOVOLTAIC DC LIGHTNING-PROTECTED COMBINER BOX

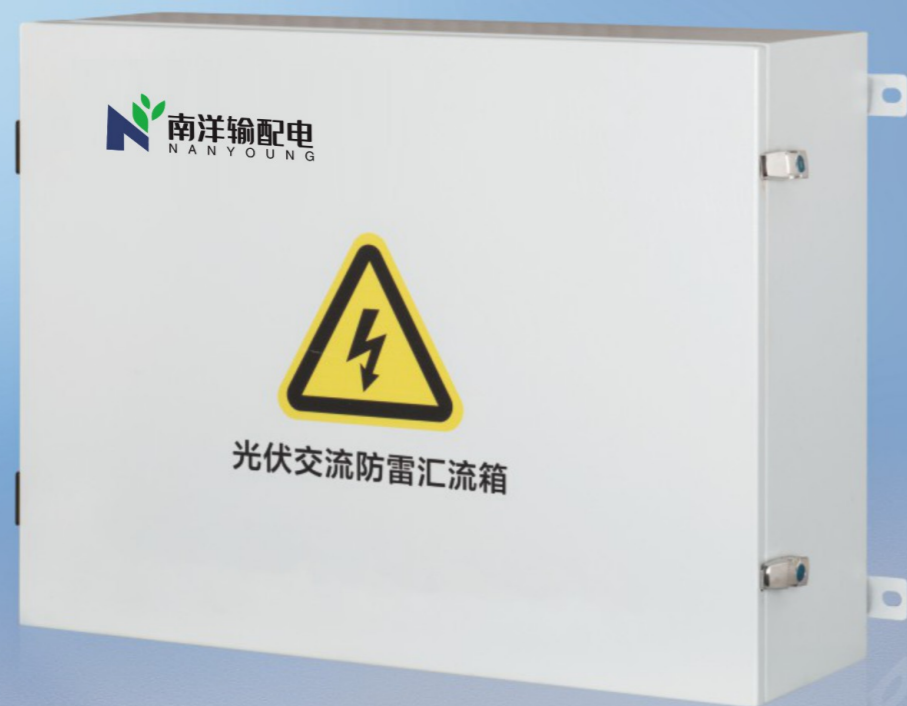
## Overview

The BWX series photovoltaic DC combiner box combines the DC inputs of up to 24 photovoltaic cell module strings into one or multiple outputs, each with a fuse, and the outputs are equipped with lightning arresters and circuit breakers, greatly simplifying the input wiring of DC distribution cabinets and inverters. Provide lightning protection, short-circuit protection, and grounding protection. The combiner box is divided into two types: intelligent and non intelligent. The intelligent lightning protection combiner box is equipped with a combiner monitoring unit inside, which can monitor the input current of each photovoltaic cell string, summarize the output voltage, temperature inside the box, and the status of lightning protection devices, circuit breakers, etc.

The internal layout of the device is simple and clear, with neat and reasonable wiring. High reliability and easy maintenance. Outdoor wall mounted installation can adapt to various harsh environments. Except for related core components, other components can be customized according to user requirements.

## Main Parameters

Product Model	BWX24	BWX16	BWX12	BWX8
Number of input channels	17~24	13~16	8~12	Below 8
Maximum input voltage	1000vdc			
Single-channel input current	0~20a			
Maximum output current	250A	160A/200A	100A/125A/160A	Below 100
Input waterproof terminal size	PG9/PG11/MC4			
Output waterproof terminal size	PG21~PG32	PG19~PG25	PG16~PG21	PG13.5~PG19
Monitoring module	Detect each current, bus voltage, circuit breaker status, mold inhibitor status, and box temperature (optional)			
Communication method/protocol	RS485 bus/standard MODBUS-RTU protocol			
Reverse polarity protection	Configure modular packaging anti reverse diode (optional)			
Temperature and humidity	Working temperature: -40~+85 °C, humidity 95%, without condensation and corrosive gases			
Altitude	≤4000m			
Monitoring module power consumption	Working hours ≤ 8W			
Auxiliary power supply	Auxiliary power supply: AC85V~265V/DC24V (± 10%)/DC200V~1000V			
Box material	Hot dip galvanized steel sheet/stainless steel sheet/cold-rolled steel sheet/engineering plastic			
Protection level	IP65			
Volume (width x height x depth)	850*500*200mm	850*500*150mm	720*500*180mm	630*500*180mm
Weight	10~35kg			



# BWX

PHOTOVOLTAIC AC LIGHTNING-PROTECTED COMBINER BOX

/ [www.nanyoungpower.com](http://www.nanyoungpower.com)

# BWX

PHOTOVOLTAIC AC LIGHTNING-PROTECTED COMBINER BOX

## Overview

The BWX series photovoltaic AC combiner box is an important component suitable for photovoltaic string type power generation systems, which connects string inverters with AC distribution cabinets or step-up transformers. The incoming line of this combiner box adopts circuit breakers for input, and the output adopts circuit breakers or load isolation switches. After busbar convergence, it adopts level 2 lightning protection. The maximum rated voltage of the system is AC690V, and the protection level is IP65, which meets the requirements of outdoor installation and is waterproof, dustproof, UV resistant, salt spray corrosion-resistant, etc. This product greatly simplifies the wiring between string inverters and AC distribution cabinets or step-up transformers. The internal structure of this product is simple and clear, and the wiring is neat and reasonable. High reliability and easy maintenance. Outdoor wall mounted installation can adapt to various harsh environments. In addition to standard materials and sizes, customization can be made according to user requirements.

## Features

- The protection level of the AC combiner box reaches IP65, which is a wall mounted sealed cabinet that can meet the requirements of outdoor installation;
- Meet the requirement of simultaneously connecting multiple string inverters, with each incoming line protected by a thermal magnetic circuit breaker, and rated voltage up to AC690V;
- The use of a dedicated High-voltage lightning arrester can meet the overvoltage and lightning protection between three phases, with a working voltage of AC480V or above;
- All busbars inside the box are connected using electroplated or passivated busbars to reduce internal resistance and connection points;
- Output via circuit breakers, load isolation switches, or fuses.

## Main Parameters

Product Model	BWX4	BWX6	BWX8
Number of input channels	1~4	5~6	7~8
Maximum input voltage	AC690		
Single-channel input current	0~1000A		
Maximum output current	250A	400A	630A
Rated working voltage Un	480VAC		
Voltage protection level Up	≤3.2kV		
Nominal current capacity (In/20 μs)	20kV (optional according to customer requirements)		
Maximum current capacity I <sub>max</sub> (8/20 μs)	40kV (optional according to customer requirements)		
Response time	<25ns		
Temperature	Working temperature: -40~+85 °C, humidity 95%, no condensation, no corrosive gas environment		
Altitude	<4000m		
Box material	Hot dip galvanized steel sheet/stainless steel sheet/cold-rolled steel sheet/engineering plastics		
Box protection level	IP65		
Protection level of cable joints	IP66		
Volume (width x height x depth)	800*600*200mm	800*800*200mm	800*1000*200mm



# NY-CTES

INDUSTRIAL AND COMMERCIAL ENERGY STORAGE SYSTEM

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# NY-CTES

INDUSTRIAL AND COMMERCIAL ENERGY STORAGE SYSTEM

## Overview

The NY-CTES series of industrial and commercial energy storage systems integrates iron phosphate batteries, battery management systems (BMS), energy storage inverters (PCS), local monitoring systems (EMS), air conditioning, fire protection, power distribution, and other equipment into outdoor energy storage cabinets. With a modular design, it creates low-carbon and high-yield solutions for different application scenarios, making the source of each kilowatt hour of electricity greener and the destination of each kilowatt hour of electricity more valuable, thus building a new zero carbon ecosystem.

## Main Parameters

Project	Outdoor - Body Cabinet		
Battery capacity	62kWh	113kWh	200kWh
Rated power	30kW	60kW	100kW
Local monitoring	Possess		
Working temperature range	-20~60°C		
Fire protection method	Heptafluoropropane+ fire detection tube		
Cooling method	Industrial wall mounted air conditioner		
Communication method	Modbus-TCP Modbus-RTU		
Protection level	IP55		
Corrosion protection level	C3/C4/C5(optional)		
Relative humidity	0-95%		
Cabinet dimensions	1000*2000*1100mm	1450*2200*1100mm	1275*2200*1300mm
Isolation transformer	Optional		
Altitude	3000m		
Project	DC-side parameters		
Voltage platform	1000V		
Rated voltage	350V	800V	800V
Voltage range	200-900v	680-1000V	650-900V
Maximum charging and discharging current	100A	88A	145A
	AC-side parameters		
Rated power	30kW	60kW	100kW
Rated output voltage	230/400, 3P 4W+ PE		
Maximum output current	43A	86A	145A
Rated input frequency	50Hz		
Model	NY-CTES 2A180		NY-CTES 5A180F
Specifications	38.4V 148Ah		64V 240Ah
Size	315x820x171.5mm		515*928*160.5mm
Weight	55kg+1		115kg
Quantity	11 unit	20 unit	13 unit



# NY-GGB

CONTAINERIZED ENERGY STORAGE SYSTEM

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# NY-GGB

CONTAINERIZED ENERGY STORAGE SYSTEM

## Overview

This system adopts an electrical integration design, which encapsulates and optimizes all devices outside the battery system for the user as a whole, achieving "plug and play" functionality. By presetting and optimizing the design, the requirements for customization are reduced, and the security risks caused by local installation differences and management risks are minimized.

## Operating Environment And Conditions

Product Specifications	20-foot container
Power	50-500kW
Capacity	Customized according to customer needs
Protection level	IP54
Operating Temperature	-30°C~55°C
Altitude	3000 meters
Size	2438×2591×6058
Cooling system	Industrial air conditioning/forced cold air
Fire protection system	Gas fire protection
Fire resistance test	2 hours
Wind load number	6kN/m <sup>3</sup>
Seismic resistance class	Level 10
Coating layer	Zinc rich primer+fluorocarbon topcoat ≥ 100 μ m

Product Specifications	40-foot container
Power	100-1000kW
Capacity	Customized according to customer needs
Protection level	IP54
Operating Temperature	-30°C~55°C
Altitude	3000 meters
Size	2438×2591×12191
Cooling system	Industrial air conditioning/forced cold air
Fire protection system	Gas fire protection
Fire resistance test	2 hours
Wind load number	6kN/m <sup>3</sup>
Seismic resistance class	Level 10
Coating layer	Zinc rich primer+fluorocarbon topcoat ≥ 100 μ m



# NY-IES001

## ENERGY STORAGE COMBINER CABINET

### Overview

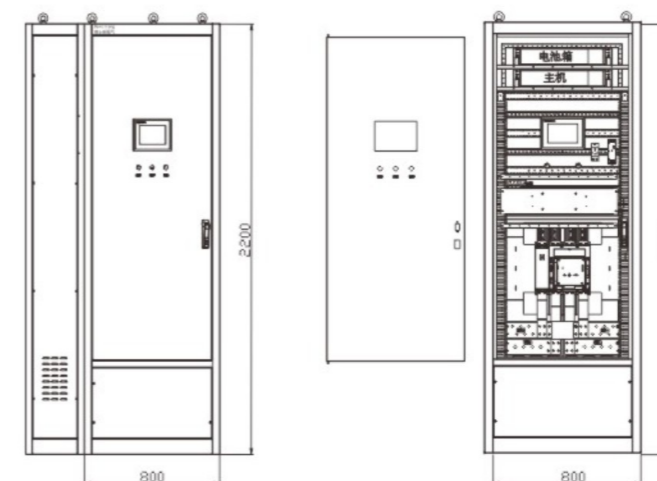
The NY-IES001 series energy storage combiner cabinet is one of the main equipment of the box type energy storage system. Its function is to connect and converge various battery clusters in parallel and output them to the PCS, and cooperate with the system monitoring device to monitor their output voltage, current, and insulation conditions. With the help of the switching power supply, it can meet the power supply of key components in the system. Upload data or status information to the Battery Stack Management System (BMS) through Ethernet communication, and receive commands from the management system to control the opening and closing of the DC combiner switch.

### Product Features

The combiner cabinet mainly solves the problem of insufficient space and lack of effective insulation measures and safety protection components in traditional high-voltage boxes, which pose great safety hazards. It includes a box body with a cabinet door on one side, a primary management unit on the cabinet door, a supporting insulation board inside the box body, a power-off protector above, a secondary management unit below the power-off protector, a switch, a circuit breaker group, and a relay group below the secondary management unit. The lower part of the box body is equipped with a combiner connection unit, and the positive pole of the access port is connected to a fuse, the negative pole is connected to a shunt, and the fuse and shunt are jointly connected to the circuit breaker before connecting to the outlet. The traditional high-voltage box and combiner cabinet are merged into a new type of combiner cabinet, which greatly increases the insulation distance and ensures safety performance; Replace the DC contactor with a circuit breaker and install insulation support plates inside the box to ensure its safety performance. Collecting high-order harmonics with high frequencies to achieve filtering effect, while compensating for reactive power and reducing voltage distortion. Adopting a microcomputer integrated automatic protection device to track system changes in real time, ensuring safe and reliable operation of the equipment.

- Hot dip galvanized + sprayed material, rust and corrosion resistant, acid and alkali resistant environment.
- 1500V main control management unit, supporting 32 clusters in parallel.
- Visual operation monitoring industrial screen.
- Rigorous design of electrical clearance and creepage distance.
- Supports 485 CAN, Ethernet and other multi-channel communication.
- Short circuit protection for DC main circuit.
- Surge protection (SPD).
- Measurement of current and voltage.
- Detection of electric shock status of moving parts.

### Overall Dimension Drawing



# NY-IES001

## ENERGY STORAGE COMBINER CABINET

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# NYACS

## AC CHARGING PILE

### Overview

This series of product is AC charging pile, mainly used for AC slow charging of electric vehicles. It features automatic charging, status display, charging protection, and other functions. Adopting industrial design principles, the equipment is equipped with an original anti-tipping function to ensure safe operation. With an overall protection level of IP54, it offers excellent dustproof and waterproof performance, enabling safe operation and maintenance outdoors.

### Main Parameters

Name	Parameter				
Appearance structure	Name	Single-phase AC pile	Single-phase AC pile	Three phase AC pile	Three phase AC pile
	Product Model	NYACS-007220		NYACS-042380	
	Product Type	Swipe card version with screen			
	Shell material	Cold rolled plate+electrostatic spray coating body, black tempered glass panel			
	Device dimensions	220*100*360mm(W*D*H)			
	Installation method	Wall-mounted	Floor-standing	Wall-mounted	Floor-standing
	Routing method	Bottom-in-bottom-out			
	Cable length	5M			
Electrical specifications	Input voltage	AC220V±20%		AC380V±20%	
	Input frequency	50+3Hz			
	Maximum power	7KW		42KW	
	Output voltage	AC220V±20%		AC380V±20%	
	Output current	32A		63A	
	Calculation Accuracy	Level 1			
	Standby power consumption	5W		8W	
Functional design	Color touch screen	Have			
	Card swiping function	Have			
	Emergency stop button	Have			
	Communication function	2G/4G Ethernet			
Safety design	Protection type	Overvoltage protection, undervoltage protection, overload grounding protection, over-temperature protection, low-temperature protection lightning protection, overturn protection protection, short circuit protection, leakage protection			
Environmental indicators	Applicable scenarios	Indoor/Outdoor			
	Operating Temperature	-30°C ~ +60°C			
	Operating Humidity	5%~95% no condensation			
	Working altitude	<2000m			
	Protection level	IP54			
	Cooling method	Natural cooling			
	Safety Standard	GB/T 20234、GB/T 18487、NB/T 33008、NB/T 33002			
	MTBF	100000 hours			
Special protection	UV resistant design				

**NYACS**  
AC CHARGING PILE

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# NYVCS

## DC CHARGING PILE

### Main Parameters

Product Name	NYVCS DC charging station
AC input	AC380V±15%
DC output voltage	200-750VDC
Constant power voltage range	300-750VDC
Overall output power	80kW
Maximum overall output current	250A
Maximum current per channel	250A
Output modes	1 gun
Power allocation mode	Single gun full power 80KW
Protection level	IP54
Overall dimensions	Overall dimensions: 700 * 400 * 1800

### Performance Parameters

Category	Project	Parameter
AC input	Input standard	Three phase five wire (A+B+C+N+PE)
	Input voltage range	AC380V±15%
	Input frequency	50±1Hz
DC output	Voltage regulation accuracy	≤+0.5%
	Current stability accuracy	≤±1%
	Output Voltage Ripple	Peak coefficient ≤ 0.5%, effective value ≤ 0.5%
Performance& Functionality	Power factor	≥0.99
	Efficiency	≥95%
	Standby power consumption	≤ 0.03% rated output power
	Unequal current distribution	≤±3%
	Protection	Input overvoltage protection, output overvoltage protection, short circuit protection, overcurrent protection, over temperature protection, lightning protection
Environmental conditions	Working environment temperature	-20 ° C~ +50 ° C, derating work above 50 ° C
	Relative humidity	5%~95% (no condensation)
	Altitude	≤ 2000m, work above 2000m requires derated operation

**NYVCS**  
DC CHARGING PILE

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# NY6-12IV、C、PT1/630-25、BD-163

PRIMARY AND SECONDARY INTEGRATED COMPLETE RING MAIN UNIT  
SUBSTATION TERMINAL

## Overview

NY6-12 (V, C, PT)/630-25, BD-163 Primary and Secondary Integrated Complete Ring Main Unit Substation Terminal is an intelligent complete set of equipment launched in response to the requirements of the national power grid standard "Technical Standards for Distribution Primary and Secondary Complete Equipment". It integrates advanced technologies such as electromagnetic voltage, current transformers, energy metering modules, and high-speed fault transient waveforms.

It consists of loop in and out units, feeder units, busbar equipment (PT) units, centralized DTUs, and connecting cables. It can collect active power, reactive power, power factor, frequency, zero sequence current, and zero sequence voltage, and has functions such as line loss measurement, energy measurement, line voltage identification, voltage limit exceeding, load limit exceeding alarm transmission, short-circuit fault detection and processing, single-phase grounding fault detection and processing. It supports the transmission of short-circuit/grounding fault events to meet the requirements of distribution network automation.

## Main Function

On the basis of traditional DTU functions, a metering level distribution line loss acquisition function has been added, optimizing the judgment and positioning function of small current grounding faults, increasing the sampling frequency, and making the waveform of fault recording closer to the real waveform.

### Line loss collection function

Using a distribution line loss acquisition module to achieve interval energy acquisition function, real-time measurement of electrical energy data on the line, including calculation of positive and negative active power and reactive power in four quadrants, thus realizing bidirectional metering function and supporting positioning function.

### Small current grounding fault diagnosis and location function

By analyzing and collecting data from phase current transformers and zero sequence current transformers, the control unit uses various algorithms to distinguish these characteristic quantities and accurately locate the area where the fault occurs. Fault recording function By sampling 128 points per cycle and fully recording the waveforms of each channel for the first 4 cycles and the last 8 cycles before and after the fault, as well as remote signaling information such as location, it is sent to the main station for analysis of the cause of the fault and supports cyclic storage of 64 fault waveforms.

## Product Features

- Adapting to the requirements of feeder automation, the controller is based on the line voltage as the criterion;
- By coordinating delayed closing with substation protection, on-site fault handling can be achieved without the need for batteries, communication, or the main station, and complete feeder automation terminal functions can be realized;
- The possibility of system instability caused by the abandonment of maintenance components such as batteries in the design;
- Clear and easy to operate functions of the distribution network automation system;
- Adopting frequently operated load switches/circuit breakers to meet the economic operation requirements of distribution network automation;
- Using SF6 pole mounted circuit breakers or vacuum circuit breakers to achieve SF6 arc extinguishing or insulation;
- Three phase supply box layout, cable casting or compression outlet, fully sealed mechanism, military grade aviation interface, overall fully sealed technology guarantee, making the product weather resistant, anti condensation performance good, and maintenance free for at least 15 years;
- Reliable sealing performance, IP67 protection level, mature shell sealing technology, one-time molding technology using tooling molds, high mechanical strength, and good air tightness of the box body;
- Built in isolation fracture and vacuum arc extinguishing chamber series asynchronous linkage, with good switch opening and closing ability and strong safety;
- Featuring maintenance free characteristics, the main circuit, secondary circuit, and operating mechanism of the load switch/pole mounted circuit breaker are all sealed in SF6 gas, unaffected by external environmental factors, with stable performance, reliability, and maintenance free.

# NY6-12IV、C、PT1/630-25、BD-163

PRIMARY AND SECONDARY INTEGRATED COMPLETE RING MAIN UNIT SUBSTATION TERMINAL

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# ZW32-12

INTELLIGENT DISTRIBUTION POLE-MOUNTED CIRCUIT BREAKER (P&S INTEGRATED)

## Overview

ZW32-12/630-20 Intelligent Distribution Pole-Mounted Circuit Breaker (P&S Integrated) is an outdoor distribution equipment with a rated voltage of 12kV and three-phase AC 50Hz. This product implements the concept of complete set design, with the circuit breaker body deeply connected to a set of high-precision and wide range voltage/current sensors.

This product supports application requirements such as distribution automation line loss management, on-site feeder automation, and small current single-phase grounding fault handling. It is an outdoor integrated product that meets the requirements of "distribution intelligence, complete integration, functional modularization, and flexible interchange" for the integration of primary and secondary equipment.

This product is installed at the sectionalizing points, contact points, branch lines, and user outgoing lines of 10kV overhead lines to achieve distribution automation functions.

## Main Parameters

Name		Unit	Parameter
Rated voltage		kV	12
Rated current		A	630
Rated frequency		Hz	50
Rated insulation level	Main circuit 1-minute power frequency withstand voltage	Alternating and facing the ground fracture	42
		fracture	48
	Lightning impulse withstand voltage (peak value)	Alternating and facing the ground fracture	75
		fracture	85
1-minute power frequency withstand voltage of secondary circuit			2
Rated short-circuit breaking current (effective value)		kV	20、25
DC component of rated short-circuit breaking current		%	51
DC time constant for rated short-circuit breaking current		ms	45
Rated short-circuit closing current (peak)		kA	50、63
Rated short-time withstand current (effective value)		kA	20、25
Rated peak withstand current		kA	50、63
Rated short-circuit breaking current breaking times		Time	30
Rated short-circuit duration		s	4
mechanical life		Time	≥10000

Note: If the altitude increases, the electrical parameters should be corrected according to the response altitude coefficient.



# ZW32-12

INTELLIGENT DISTRIBUTION POLE-MOUNTED CIRCUIT BREAKER (P&S INTEGRATED)

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## XGW□-12

BOX-TYPE SWITCHING STATION

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# XGW□-12

BOX-TYPE SWITCHING STATION

## Overview

This box-type switching station does not require civil construction and occupies a small area. Its configuration is very flexible and the power supply method is more reliable. The construction, installation, and commissioning time are greatly reduced, and the overall cost is lowered.

## Model And Meaning

XGW - 12 /630A □ □ □

Cable joint type: M-Live touchable, if not marked, it is live untouchable

B-with lightning arrester

Number of outgoing lines and incoming lines

Switch type: K is a load switch, D is a circuit breaker

Rated voltage

Box-type switching station

## Technical Standards For Product Load

This product meets the latest national standards, industry standards, and IEC standards. After consultation and agreement with the user, other higher performance standards can be used.

The relevant provisions contained in the following standards constitute the provisions of this technical specification by reference. All standards will be revised, and this technical specification should comply with the requirements of the latest versions of the following standards.

GB16926-2009 AC High Voltage Load Switches - Fuse Combination Electrical Appliances

GB 3804-2004 3.6kV~40.5kV High Voltage AC Load Switches

GB 3906-2006 3.6kV~40.5kV AC Metal Enclosed Switchgear and Control Equipment

GB/T 11022-2011 Common Technical Requirements for High Voltage Switchgear and Control Equipment Standards

GB 4208-2008 Degrees of Protection Provided by Enclosures (IP Code)

IEC 420 High Voltage AC Load Switches - Combination of Fuses

IEC 298 AC metal enclosed switchgear and control equipment for voltages above 1kV and below 52kV

GB 1984-2014 High Voltage AC Circuit Breakers



## DFW-12

OUTDOOR HIGH VOLTAGE CABLE DISTRIBUTION BOX

[www.nanyoungpower.com](http://www.nanyoungpower.com)

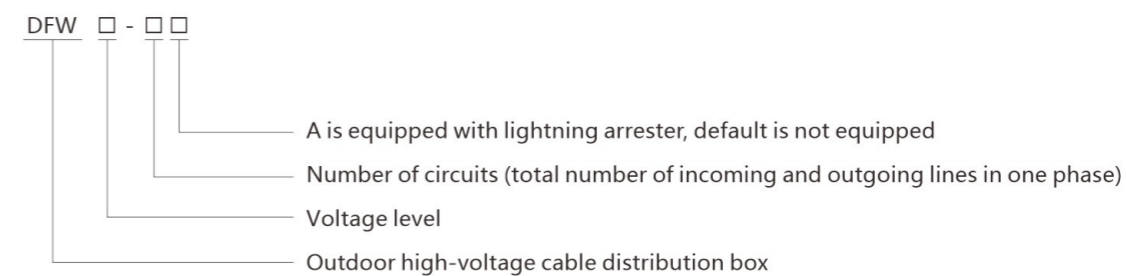
## DFW-12

OUTDOOR HIGH VOLTAGE CABLE DISTRIBUTION BOX

### Overview

Outdoor high-voltage cable distribution box is a cable engineering equipment widely used in power distribution network systems in recent years. Its main features are bidirectional opening of doors, use of docking sleeves as connecting busbars, and significant advantages such as small length, clear cable arrangement, and no need for large-span crossing of three core cables. The cable connectors used comply with DIN47636 standard. Generally, bolt fixed cable joints with a rated current of 630A are used.

### Model And Meaning



### Main Parameters

Rated voltage	12kV
Rated current	630A
Dynamic stable current	50kA/0.3s
Thermal stable current	20kA/3s
1-minute power frequency withstand voltage	42kV
15 minute DC withstand voltage	52kV
Lightning impulse withstand voltage	105kV
Box protection level	IP33



# KYN61-40.5

ARMORED DRAWOUT AC METAL-ENCLOSED SWITCHGEAR

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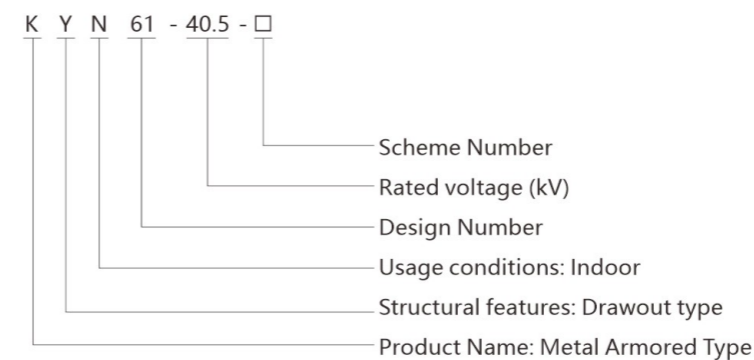
# KYN61-40.5

ARMORED DRAWOUT AC METAL-ENCLOSED SWITCHGEAR

## Overview

The KYN61-40.5 (Z) Armored Drawout AC Metal-Enclosed Switchgear (hereinafter referred to as the switchgear) is an indoor complete set of distribution equipment with a three-phase current of 50Hz and a rated voltage of 40.5kV. As a power plant, substation, and industrial and mining enterprise that receives and distributes electrical energy, it plays a role in controlling, protecting, and monitoring circuits, and can also be used in places with frequent operations. This switchgear complies with standards such as GB3906-2006, GB/T11022-1999, and DL/T 404-2007.

## Model And Meaning



## Operating Environment And Conditions

- Environmental temperature: upper limit +40 °C, and the average value measured within 24 hours does not exceed 35 °C, lower limit -10 °C;
- Altitude: not exceeding 1000m above sea level;
- Relative humidity: daily average not exceeding 95%, monthly average not exceeding 90%;
- Seismic intensity: not exceeding 8 degrees;
- Water vapor pressure: daily average not exceeding 2.2kPa, monthly average not exceeding 1.8kPa;
- Surrounding environment: A place without fire, explosion hazards, severe pollution, chemical corrosion, and severe vibration.



# KYN28-12

HIGH-VOLTAGE AC METAL-ENCLOSED SWITCHGEAR

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# KYN28-12

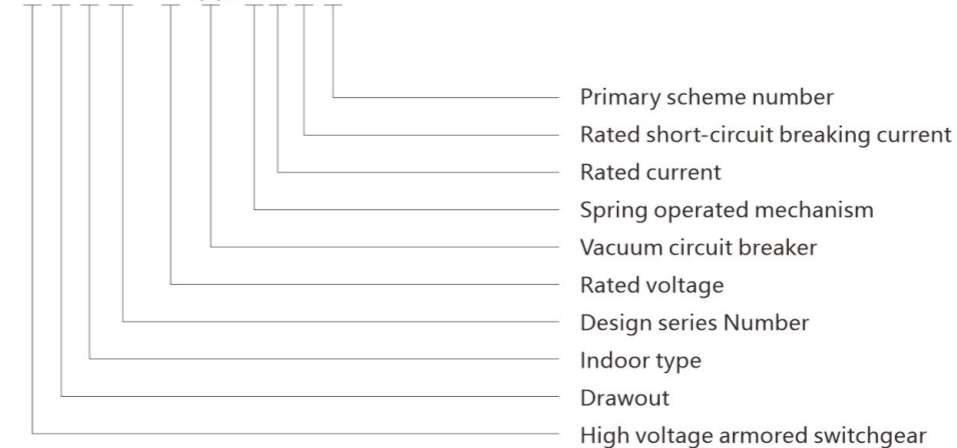
HIGH-VOLTAGE AC METAL-ENCLOSED SWITCHGEAR

## Overview

KYN28-12 high-voltage AC metal enclosed switchgear is suitable for 3.6-12kV three-phase AC 50Hz power grid, used for receiving and distributing electrical energy, and for controlling, monitoring and protecting circuits. Can be used for single busbar, single busbar segmented systems, or dual busbar systems. The switchgear meets the requirements of standards such as IEC298 "AC Metal Enclosed Switchgear and Control Equipment with Rated Voltage above 1kV and Below 52kV", IEC694 "Common Terms for High Voltage Switchgear and Control Equipment", GB3906-2006 "3.6kV~40.5kV AC Metal Enclosed Switchgear and Control Equipment" in China, and DIN.VDE0670 "AC Switchgear with Rated Voltage above 1kV" in Germany. And it has complete and reliable anti misoperation functions.

## Model And Meaning

K Y N 28 - 12 (Z) / T □ □ □



## Product Features

KYN28-12 high-voltage AC metal enclosed switchgear (hereinafter referred to as switchgear) is a new product designed and developed by our company based on absorbing advanced manufacturing technologies at home and abroad. It can replace various old types of metal enclosed switchgear, such as KYN1-12, JYN2-12 and other series products. Its products have the following obvious advantages:

- The outer shell of the product is completely assembled with bolts, which has high mechanical strength and effectively ensures the neatness and beauty of the product. The cabinet door is coated with spray paint, which has strong impact resistance and corrosion resistance. The product casing has a protection level of IP4X. (Can be changed to iron plate according to customer needs).
- This product's switch can be equipped with ABB's VD4 vacuum circuit breaker, C3 series fixed load switch, and can also be configured with various domestic series vacuum circuit breakers (such as VS1, VH1, VK, ZN28) to replace similar foreign products.
- Regardless of the type of circuit breaker selected, the air insulation distance of the bare conductor can be guaranteed to be greater than 125mm, and the composite insulation can be greater than 60mm. These circuit breakers have unique advantages such as long life, low maintenance, and small size



## XGN66-12

FIXED ENCLOSED SWITCHGEAR

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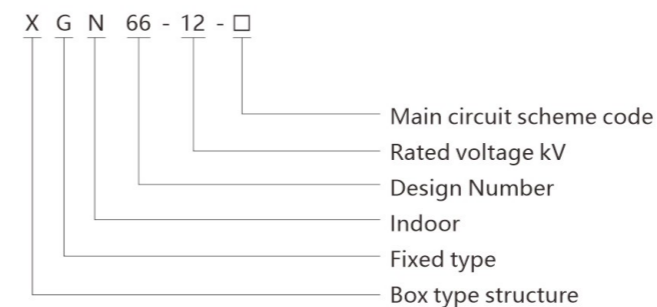
# XGN66-12

FIXED ENCLOSED SWITCHGEAR

## Overview

XGN66-12 fixed enclosed switchgear (hereinafter referred to as switchgear) is suitable for use as a device for receiving and distributing electrical energy in 3.6-12kV three-phase AC 50Hz systems, and is suitable for frequent operation places and switchgear retrofit with oil switches. The busbar system consists of a single busbar system and a single busbar segmented system.

## Model And Meaning



## Execution Standard

GB 3906-2006 "3.6 kV~40.5kV AC Metal Enclosed Switchgear and Control Equipment"

IEC 60298-1990 "AC metal enclosed switchgear and control gear for rated voltages from 1 kV to 52 kV"

GB/T 11022-2011 Common Technical Requirements for High Voltage Switchgear and Control Equipment Standards

## Operating Environment And Conditions

- Environmental temperature: maximum +40 ° C, minimum -15 ° C;
- Altitude: not exceeding 1000m;
- Relative humidity: daily average not exceeding 95%, monthly average not exceeding 90%;
- The earthquake intensity shall not exceed magnitude 8;
- A place without fire, explosion hazard, serious pollution, chemical corrosion, and severe vibration.



# HXGN17-12

BOX-TYPE FIXED METAL-ENCLOSED SWITCHGEAR

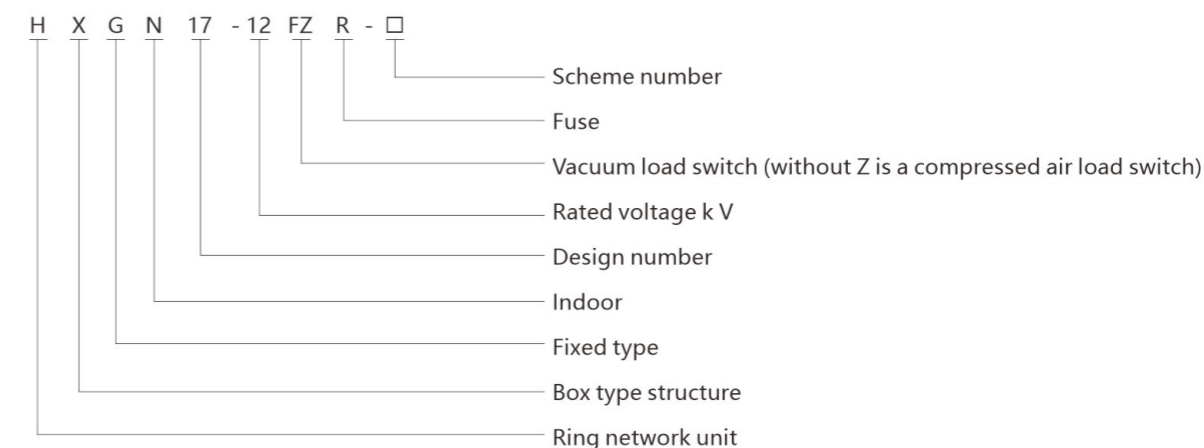
## Overview

HXGN17-12 box type fixed metal enclosed switchgear (referred to as ring main unit), rated voltage 12kV, rated frequency 50Hz AC high voltage complete set

Equipment devices are mainly used for three-phase AC ring networks, terminal distribution networks, and industrial electrical equipment, to receive, distribute electrical energy, and provide protection. They are also suitable for installation in box type substations.

Complies with GB3906 "3.6~40.5 AC Metal Enclosed Switchgear and Control Equipment" and meets the requirements of the international standard IEC298 "AC Metal Enclosed Switchgear and Control Equipment". And it has the "five prevention" interlocking function.

## Model And Meaning



## Operating Environment And Conditions

- The upper limit of ambient temperature is +40 °C, and the lower limit is -25 °C;
- Altitude not exceeding 1000m;
- The daily average relative temperature should not exceed 95%, and the monthly average should not exceed 90%;
- Places without fire, explosion hazards, and severe vibrations;
- The surrounding air is free from significant pollution such as corrosive or flammable gases, water vapor, and conductive dust.

# HXGN17-12

BOX-TYPE FIXED METAL-ENCLOSED SWITCHGEAR

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# HXGN15-12

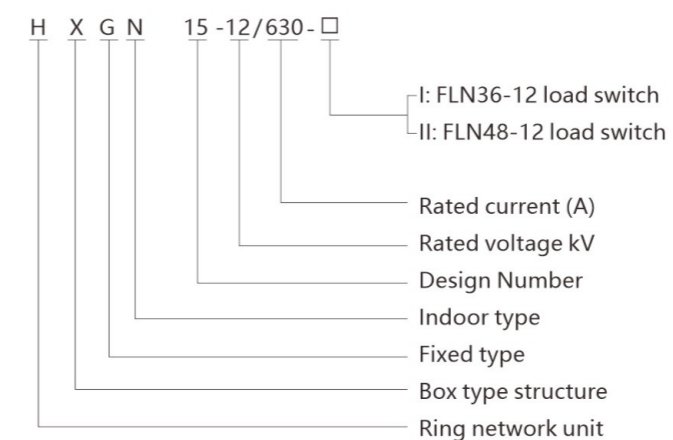
HIGH-VOLTAGE RING MAIN UNIT

## Overview

The HXGN15-12 High-Voltage Ring Main Unit is suitable for AC 50HZ, 12kV power systems. Widely used in industrial and civilian cable ring networks and power supply terminals.

Especially suitable for small secondary substations, switch stations, urban residential area power distribution, industrial and mining enterprises, shopping malls, airports, subways, wind power generation, hospitals, sports venues, railways and other places.

## Model And Meaning



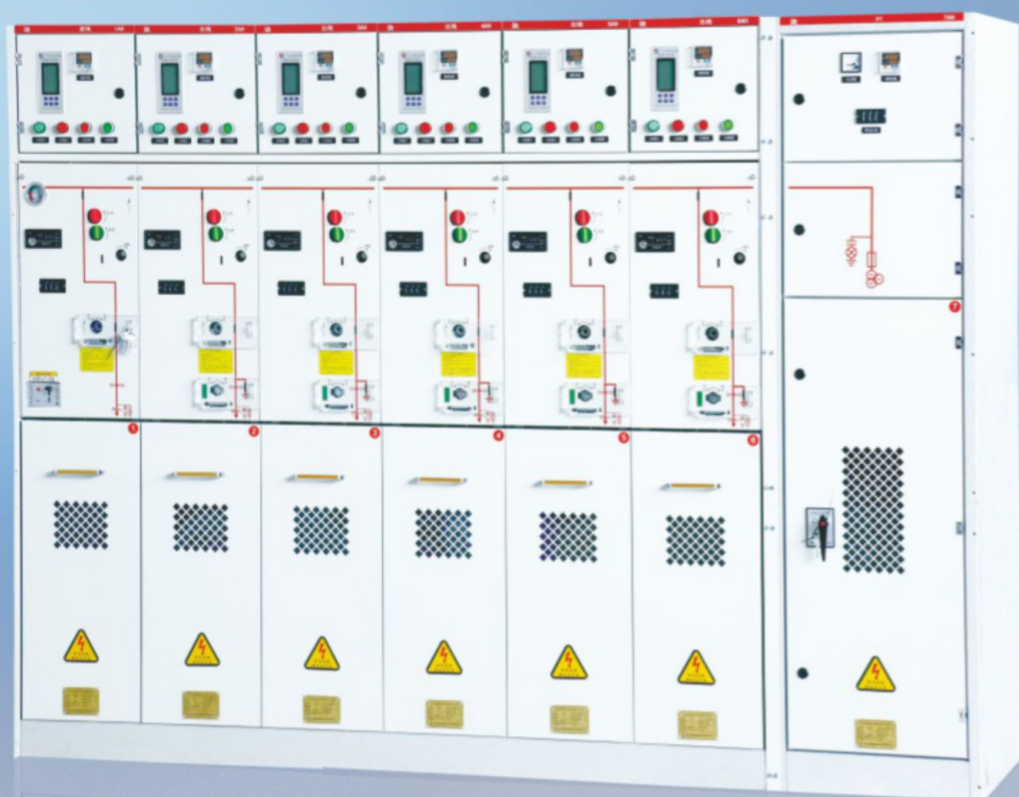
## Operating Environment And Conditions

- Altitude: ≤ 1000m (if there are special requirements, they can be specified when ordering ;
- Environmental temperature: -35 ° C+45 ° C, maximum daily average temperature difference ≤ 25 ° C;
- The average daily relative humidity shall not exceed 95%, and the average monthly relative humidity shall not exceed 90%;
- Seismic resistance: 8 degrees;
- Places with severe vibrations and impacts, as well as no fire, chemical corrosion, or explosion hazards.

# HXGN15-12

HIGH-VOLTAGE RING MAIN UNIT

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# NY6-12

SF6 GAS INSULATED RING MAIN UNIT

## Overview

The NY6-12 SF6 Gas Insulated Ring Main Unit independently developed by Nanyoung Power Transmission and Distribution Equipment Co., Ltd. has passed the type test of the National High Voltage Electrical Testing Center. The product is widely used in 12KV/6.3KV distribution systems and is the preferred switch product for various urban and rural users' power transformation and distribution systems.

The switchgear adopts a modular unit mode, which can be combined according to different purposes. There are two main types of fixed unit combinations and expandable units, which meet the flexible use needs of various substations for compact switchgear.

The NY6-12 SF6 Gas Insulated Ring Main Unit is a completely sealed system, with its charged components and switches enclosed in a stainless steel body. The entire switch device is not affected by external environmental conditions, ensuring operational reliability and personal safety. By selecting expandable busbars, any combination can be achieved to achieve modularity. The expansion of busbar safety insulation and shielding ensures reliability and safety. NY6-12 SF6 gas fully insulated ring network switchgear can also provide TV based automation solutions, forming the concept of intelligent switches and greatly reducing on-site installation and commissioning workload.

NY6-12 SF6 Gas Insulated Ring Main Unit is divided into non expandable standard configuration and expandable standard configuration. Due to its modularity and self scalability, it has extremely special flexibility.

NY6-12 SF6 Gas Insulated Ring Main Unit shall comply with GB standards and operate under indoor conditions (20 °C) for no less than 30 years in accordance with relevant national regulations.

## Performance Indicator

- Sf6 gas pressure Gauge pressure of 1.4bar at 20 °C
- Normal operating environment conditions
  - Annual gas leakage rate 0.5% per year
  - Maximum temperature 40°C
  - Protection level IP67
  - Minimum temperature -40°C
  - Thickness of stainless steel in the air chamber 3.0mm
  - Maximum average relative humidity ≤95%
  - Altitude ≤2000m
- Busbar
  - Busbar inside the switchgear 400mm<sup>2</sup>Cu
  - Switchgear earthing busbar 150mm<sup>2</sup>Cu
- Meet the standard
  - GB/T11022 GB3906 GB1985
  - Gb16926 GB3804 GB1984
  - Gb3309 GB50171
  - IEC60056 IEC60129 IEC60265
  - IEC60298 IEC60420 IEC60694
- Color
  - Front panel of switchgear RAL7012
  - Side plate and cable compartment front cover RAL7035

# NY6-12

SF6 GAS INSULATED RING MAIN UNIT

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# NYS-12

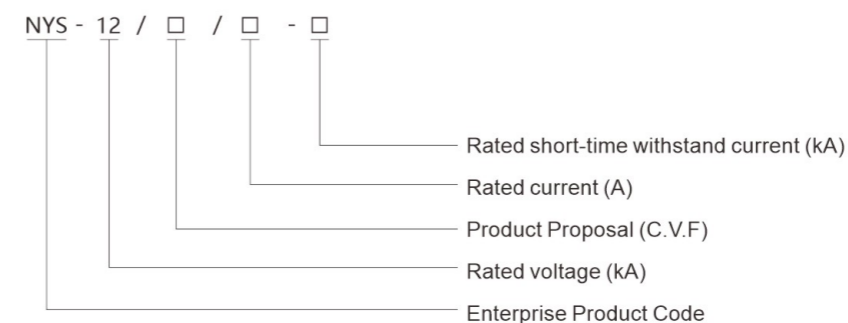
SOLID INSULATED RING MAIN UNIT

## Overview

The NYS-12 solid insulated ring main unit switchgear is a new generation of environmentally friendly composite insulated ring main unit independently developed by our company. It is a fully sealed power supply unit, with all live parts and switches sealed in an epoxy resin shell, and no SF6 gas inside the shell. The entire switch device is not affected by external environment, ensuring operational reliability and personal safety, and achieving maintenance free operation.

Solid Insulated Ring Main Unit is composed of three types of switches, namely, V unit (circuit breaker unit), C unit (load switch unit) and F unit (combined electrical apparatus unit). Each unit can be used independently or expanded freely. Its structure is divided into intelligent control instrument room, operating mechanism and primary part. The instrument room can be equipped with microcomputer protection (controller). The primary part adopts APG automatic gel process to completely seal the disconnecter and arc extinguishing chamber in epoxy resin, and there are special joints connected to the bus. The arc extinguishing chamber adopts specialized copper chromium contact material, R-type longitudinal magnetic field contact, and complete one-time sealing process. The ability and stability of the arc extinguishing chamber to break short-circuit current, electrical life, temperature rise, and insulation level have been significantly improved compared to previous arc extinguishing chambers (copper aluminum contact material, cup-shaped longitudinal magnetic field contact structure, and incomplete one-time sealing process). The operating mechanism adopts a spring operated mechanism that is integrated with the switch, that is, the isolation switch and the main switch spring operated mechanism are integrated as a whole, which can easily achieve interlocking, and the mechanism has fewer parts, reducing unnecessary transmission links, high reliability, and can be electrically operated according to user needs.

## Model And Meaning



## Operating Environment And Conditions

- Suitable for indoor or outdoor use;
  - Surrounding air temperature: indoor -10 °C~+25 °C, outdoor -60 °C~+60 °C;
  - Relative humidity of the air: daily average not exceeding 95%, monthly average not exceeding 90%;
  - Altitude not exceeding 3000m;
  - The surrounding air should not be significantly polluted by dust, water vapor, salt spray, corrosive gases, or flammable gases;
  - Outdoor type can be used in harsh environmental conditions;
  - There is no severe vibration at the installation location, and the seismic intensity does not exceed 8 degrees;
- When the above operating environment and conditions cannot meet the usage requirements, it shall be negotiated between the user and the manufacturer.

# NYS-12

SOLID INSULATED RING MAIN UNIT

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# NYHB-12

ENVIRONMENTALLY FRIENDLY AC METAL ENCLOSED SWITCHGEAR

## Overview

The NYHB-12 environmentally friendly gas insulated metal enclosed switchgear is composed of functional modules with small volume and compact structure:

**Stainless steel enclosed gas box:** It can be equipped with load switches, circuit breakers, isolation switches, and grounding switches inside;

**Cable room:** connected to the power grid or transformer through an interface;

**Operating mechanism box:** It can be equipped with load switches, circuit breakers, isolation switches, and grounding switch operating mechanisms;

**Low voltage chamber:** Install indicator instruments and comprehensive protection devices;

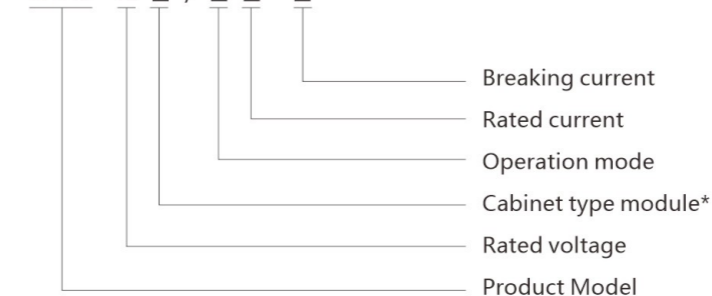
**Fuse compartment:** combined with load switch;

**Busbar compartment:** expandable busbar;

Meet the requirements of the "five prevention interlocking" in the power industry.

## Model And Meaning

NYHB - 12 □ / □ □ - □



Note:

\*The NYHB-12 series universal cabinet modules include:

C - Load switch module

V - Vacuum Circuit Breaker Module

F - Load switch fuse combination electrical module

## Significant Features

- Fully insulated and sealed, suitable for altitudes not exceeding 4000 meters;
- Through clever design, the isolation fracture is clearly visible;
- A full range of solutions to meet the needs of different users;
- Three position switch, making operation more reliable and safe, and both switches can be quickly opened and closed;
- Standardization and generalization, the top main busbar connection is simple, convenient, reliable, and can be flexibly combined and expanded;
- All cabinets use standard and unified cable plug and unplug terminals;
- The cable room has sufficient height and space for easy installation;
- Fully sealed gas box filled with low-pressure dry gas to achieve high-performance and highly reliable insulation.

# NYHB-12

ENVIRONMENTALLY FRIENDLY AC METAL ENCLOSED SWITCHGEAR

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# MNS

## LOW-VOLTAGE SWITCHGEAR

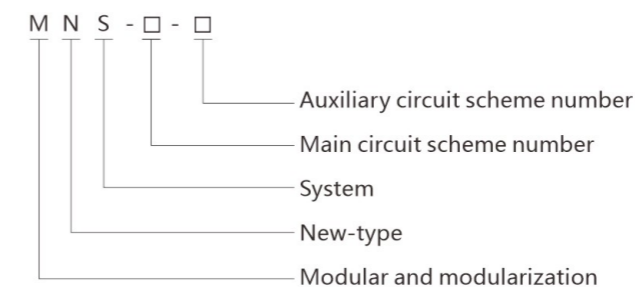
### Overview

This series of low-voltage withdrawable switchgear is a combination cabinet type assembled by the factory using standard modules (FBA).

This series of low-voltage withdrawable switchgear is suitable for power plants, substations, petrochemicals, metallurgical steel rolling, transportation energy, light industry and textile enterprises, residential areas, high-rise buildings and other places. It is used for the conversion, distribution and control of electrical energy in power systems with AC 50-60HZ and rated working voltage of AC 660V and below.

This device complies with the national professional standards GB 7251.1 "Low voltage switchgear" and JB/T 9961 "Low voltage withdrawable switchgear", as well as the international professional standard IEC 439-1.

### Model And Meaning



### Operating Environment And Conditions

- The ambient air temperature is not higher than +40 °C, not lower than -5 °C, and its average temperature within 24 hours is not higher than +35 °C;
- Atmospheric conditions: The air is clean, and the relative humidity does not exceed 50% at a maximum temperature of +40 °C. Higher relative humidity is allowed at lower temperatures, such as 90% at +20 °C, However, temperature changes should be taken into account, as condensation may occasionally occur;
- Altitude not exceeding 2000m;
- This device is suitable for transportation and storage at temperatures ranging from -25 °C to +55 °C, and can reach +70 °C in a short period of time (not exceeding 24 hours). At these extreme temperatures, the device should not suffer any irreparable damage and should be able to function normally under normal conditions;
- If the above usage conditions cannot be met, they should be resolved through negotiation between the user and the manufacturer;
- When this device is used on offshore oil drilling platforms and nuclear power plants, a separate technical agreement should be signed.

**MNS**  
LOW-VOLTAGE SWITCHGEAR

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# GCS

LOW-VOLTAGE SWITCHGEAR

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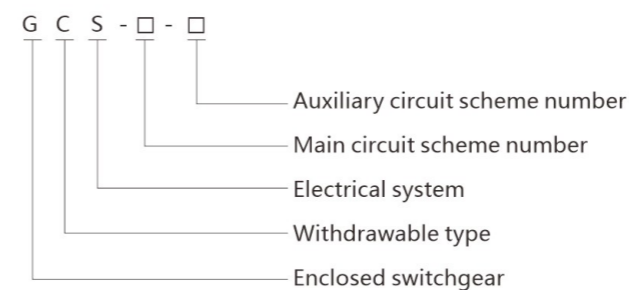
# GCS

LOW-VOLTAGE SWITCHGEAR

## Overview

GCS devices are suitable for power distribution systems in industries such as power plants, petroleum, chemical, metallurgical, textile, and high-rise buildings. In places with high automation levels such as large power plants and petrochemical systems that require computer interfaces, this low-voltage complete distribution device is used for power distribution, motor centralized control, and reactive power compensation in power generation and supply systems with a three-phase AC frequency of 50 (60) Hz, rated operating voltage of 380V (400V), (660V), and rated current of 4000A or below.

## Model And Meaning



## Main Parameters

Rated voltage of main circuit (V)		AC 380 (400), (660)
Rated voltage of auxiliary circuit (V)		AC 220, 380 (400) DC 110, 220
Rated frequency (Hz)		50(60)
Rated insulation voltage (V)		660(1000)
Rated current (A)	Horizontal busbar	≤4000
	Vertical busbar (MCC)	1000
Rated short-time withstand current of busbar (kA, 1 s)		50,80
Rated peak withstand current of busbar (kA/0.1s)		105, 176
Power frequency test voltage (V/1 min)	Main circuit	2500
	Auxiliary circuit	1760
Busbar	Three-phase four-wire system	A.B.C.PE.N
	Three-phase five-wire system	A.B.C.PE.N
Protection level		IP30.IP40



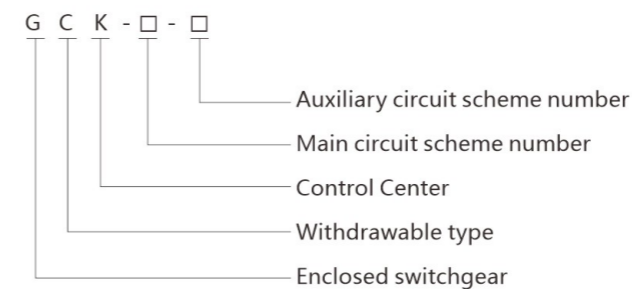
# GCK

## LOW-VOLTAGE SWITCHGEAR

### Overview

The GCK low-voltage switchgear consists of two parts: the power distribution center (PC) cabinet and the motor control center (MCC). It is suitable for power users such as power plants, substations, and industrial and mining enterprises as an AC 50Hz distribution system with a maximum working voltage of 660V and a maximum working current of 3150A. It is used for power distribution, motor control, and lighting distribution equipment to convert and distribute electrical energy.

### Model And Meaning



### Operating Environment And Conditions

- Altitude not exceeding 2000m;
- The ambient air temperature shall not exceed +40 °C, and the average temperature within 24 hours shall not exceed +35 °C. The ambient air temperature shall not be lower than -50 °C
- Atmospheric conditions: The air is clean, and the relative humidity does not exceed 50% at a temperature of +40 °C. Higher relative humidity is allowed at lower temperatures, such as 90% at +20 °C
- A place without fire, explosion hazard, serious pollution, chemical corrosion, and severe vibration;
- Tilt no more than 5 degrees from the vertical plane;
- This product is suitable for transportation and storage at temperatures ranging from -25 °C to +55 °C, and within a short period of time (not exceeding 24 hours), it should not exceed +70 °C;
- If the above usage conditions cannot be met, the user should raise the issue with our company at the time of ordering and negotiate a solution.

**GCK**  
LOW-VOLTAGE SWITCHGEAR

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# GGD

## LOW-VOLTAGE SWITCHGEAR

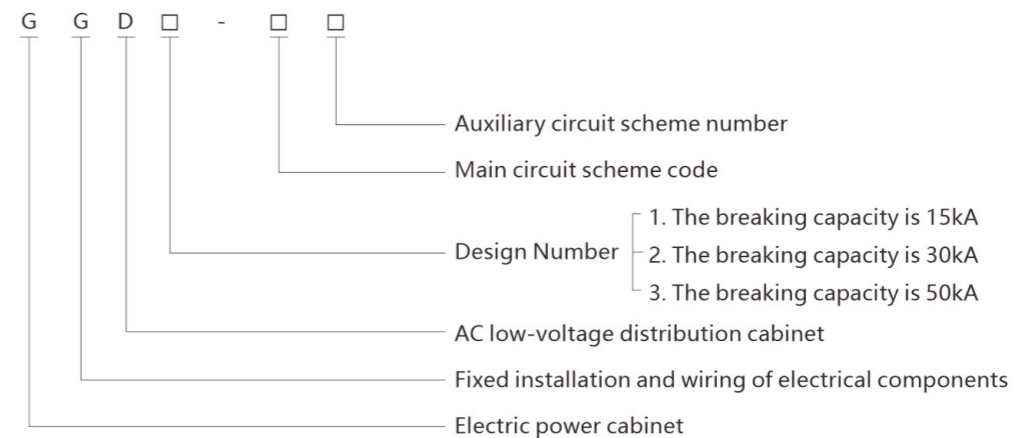
### Overview

GGD low-voltage switchgear is suitable for AC 50Hz, rated working voltage 380V, and rated working current up to 3150A distribution systems for power plants, substations, factories, mines, and other power users. It is used for power conversion, distribution, and control of electrical energy for power, lighting, and distribution equipment.

The GGD low-voltage switchgear is a new type of low-voltage distribution cabinet designed based on the requirements of the superior authorities of the Ministry of Energy, power users, and design departments, in accordance with the principles of safety, economy, rationality, and reliability. The product has the characteristics of high breaking capacity, good dynamic and thermal stability, flexible electrical scheme, convenient combination, series, strong practicality, novel structure, and high protection level. It can be used as a replacement product for low-voltage switchgear.

The GGD low-voltage switchgear cabinet complies with standards such as IEC 439 "Low voltage switchgear and control equipment" and GB 7251 "Low voltage switchgear".

### Model And Meaning



### Operating Environment And Conditions

- The ambient air temperature shall not exceed +40 °C, not be lower than -5 °C, and the average temperature within 24 hours shall not exceed +35 °C;
- Indoor installation and use, the altitude of the usage location shall not exceed 2000m;
- The relative humidity of the surrounding air should not exceed 50% at a maximum temperature of +40 °C, and larger relative temperatures should be allowed at lower temperatures (such as 90% at +20 °C), taking into account the influence of temperature changes may occasionally produce condensation effects;
- The inclination angle between the equipment installation and the vertical plane shall not exceed 5 °;
- The equipment should be installed in places without severe vibration and impact, as well as in places where electrical components are not susceptible to corrosion;
- If users have special requirements, they can negotiate with the manufacturer to resolve them.

**GGD**  
LOW-VOLTAGE SWITCHGEAR

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**GGJ**

LOW VOLTAGE REACTIVE POWER COMPENSATION DEVICE

/ [www.nanyoungpower.com](http://www.nanyoungpower.com)

# GGJ

## LOW VOLTAGE REACTIVE POWER COMPENSATION DEVICE

### Overview

Due to its ability to effectively improve the power factor of electrical loads, reduce line losses, and enhance the actual load capacity of transformers, this device has significant energy-saving effects. At the same time, the use of specific reactors in the system can also effectively prevent harmonic amplification and absorb most harmonic currents, making the total harmonic distortion rate limit and the limit of each harmonic current content comply with national standards, achieving the goal of harmonic control. If ordinary contactors are used to switch capacitor banks, it will result in large surge currents, slow compensation time, high maintenance costs, and short service life. Therefore, we recommend that users prioritize the use of dynamic reactive power compensation devices in the following situations. For example, low-voltage power grids in industrial and mining enterprises' substations, production workshops, and civil buildings are particularly suitable for transmission and distribution systems with constantly changing loads and unstable reactive power.

This product complies with standards such as GB/T15576-2008 "Low Voltage Reactive Power Compensation Equipment" and IEC60439 "Low Voltage Switchgear and Control Equipment".

### Model And Meaning



### Operating Environment And Conditions

- Environmental temperature: -5 °C~+40 °C;
- Relative humidity of the environment: not exceeding 90% (20 °C);
- Altitude: not exceeding 2000m;
- There is no explosion hazard in the surrounding medium, no gas that can damage or corrode the metal, no conductive dust, the installation site is not prone to severe vibration, and there is no rain or snow erosion.



## XL-21 POWER CABINET

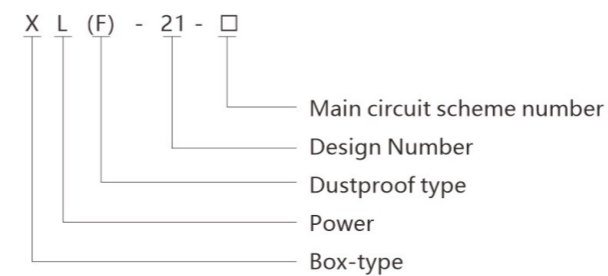
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# XL-21 POWER CABINET

## Overview

XL-21 power cabinet is widely used in power plants and industrial and mining enterprises, for power or lighting distribution in three-phase three wire, three-phase four wire, three-phase five wire and other distribution systems with AC voltage below 500V. It is installed indoors against the wall, operated in front of the screen, and maintained in front of the screen; The box is a fully enclosed structure, assembled from C or 8MF profiles. The box adopts a new type of rotary load isolation switch, which can be operated with load. The front door is equipped with voltage and current indicator instruments, as well as main control components such as signal lights, buttons, and conversion switches. This distribution box adopts newly designed components, which are compact in structure, aesthetically pleasing in appearance, and easy to maintain. Multiple wiring schemes are available for users to choose from.

## Model And Meaning



## Operating Environment And Conditions

- Environmental temperature: -5 °C~+40 °C, and the average temperature within 24 hours does not exceed+35 °C;
- Altitude: not exceeding 2000m;
- Relative humidity: not exceeding 50% when the ambient air temperature is+40 °C; At lower temperatures, there can be higher relative humidity (e.g. 90% at+20 °C), moderate condensation is allowed due to temperature changes;
- The inclination angle between the equipment installation and the vertical plane should not exceed 5 degrees;
- The equipment should be installed in a place without severe vibration, impact, and corrosion;

Note: If the above conditions are exceeded, you can negotiate with our company.



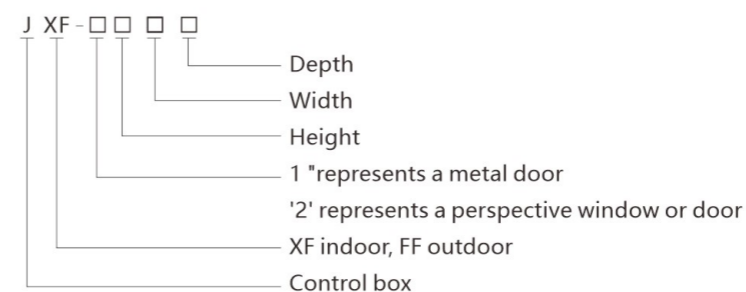
## JXF

### CONTROL BOX SERIES

#### Overview

JXF wall mounted low-voltage power control box is suitable for three-phase three wire, three-phase four wire, and three-phase five wire systems with a load current of no more than 250A at 50Hz · 500V and below. It controls the distribution system, provides leakage protection, and provides overload, short circuit, phase loss protection and various controls for motors. This box has a reasonable design, small size, beautiful appearance, safe and reliable use, and is widely used in metallurgy, petrochemicals, medical and health, aviation, residential areas, shopping malls, schools, and urban renovation.

#### Model And Meaning



#### Meets The Standards

- This product complies with IEC 60439-1:1992 "Low voltage switchgear and control equipment - Part 1: Type testing and partial type testing equipment".
- Explosion-proof area, and the medium contains no gases or conductive dust that can sufficiently corrode metals or damage insulation.

#### Operating Environment And Conditions

- Altitude not exceeding 2000m;
- The ambient air temperature shall not exceed +40 °C and shall not be lower than -25 °C;
- At 20 °C, the monthly average relative humidity of the air should not exceed 40%;
- Places without severe vibration and impact;
- There are no explosive hazardous areas, and there are no gases or conductive dust in the medium that can corrode metals or damage insulation.

**JXF**  
CONTROL BOX SERIES

/ [www.nanyoungpower.com](http://www.nanyoungpower.com)



# PZ30

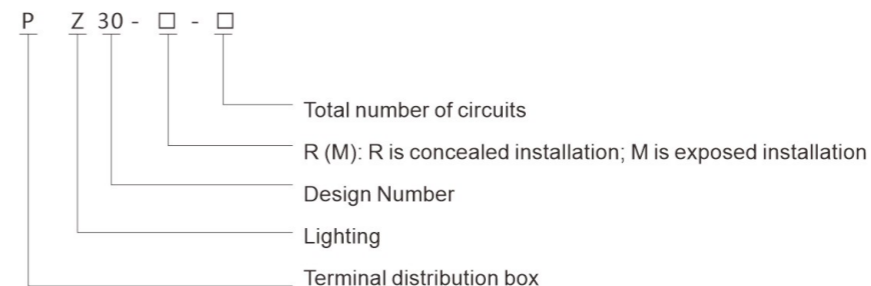
LIGHTING DISTRIBUTION BOX

## Overview

The PZ30 series lighting distribution box is widely used in high-rise buildings, hotels, hospitals, restaurants, stations, ports, airports, computer rooms, laboratories, schools, industrial and mining enterprises, and civil buildings. It is used for lighting in three-phase systems with AC frequency of 50-60Hz, rated voltage up to 400V, and single-phase systems with voltage of 230V, with a total current of 100A or less. It can also be used for overload, short circuit, and leakage protection energy metering in small capacity power lines. It can also be used as infrequent on-off lighting lines and daily household appliances under normal conditions; Used for small capacity electric motors.

The product complies with the standard GB7251.3 "Low voltage switchgear and control equipment, Part 3: Special requirements for distribution boards for low voltage switchgear and control equipment that non professionals can enter the site".

## Model And Meaning



## Normal Working Conditions

- Altitude not exceeding 2000m;
- Environmental temperature: -5 °C~ +40 °C, with an average value not exceeding +35 ° C within 24 hours;
- +At 20 °C, the monthly average relative temperature of the atmosphere should not exceed 90%;
- Atmospheric conditions: The relative humidity of the air at the installation site shall not exceed 50% when the highest ambient temperature is +40 °C, and the maximum relative humidity for the month is when the average lowest humidity is +25 °C90%.
- Places without severe vibration and impact;
- Explosion-proof area, and the medium contains no gases or conductive dust that can sufficiently corrode metals or damage insulation.

# PZ30

LIGHTING DISTRIBUTION BOX

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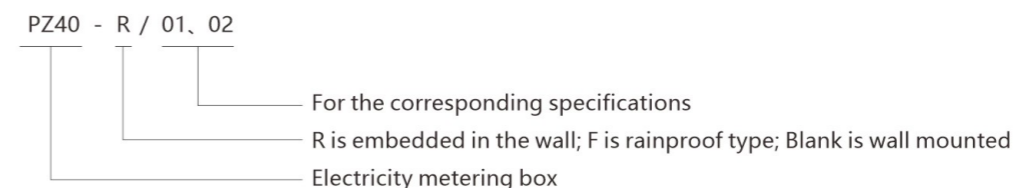
## PZ40

ELECTRIC METER BOX(METERING BOX)SERIES

### Usage Characteristics

The PZ40 modular terminal combination electrical device (PZ40 distribution box) is suitable for single-phase three wire or three-phase five wire end circuits with an AC frequency of 50Hz, a rated working voltage of 220V or 380V, and a rated current not exceeding 100A. It is used to control and distribute electrical equipment, protect against overload, short circuit, leakage, and undervoltage of the line, and can be widely used in modern hotels, commercial, industrial and mining enterprises, and residential buildings.

### Model And Meaning



### Normal Working Conditions

- Temperature: The ambient air temperature does not exceed +40 ° C, and not lower than -5°C;
- Humidity: When the maximum temperature is +40 ° C, the relative humidity of the air does not exceed 50%; Higher relative humidity is allowed at lower temperatures  
For example, reaching 90% at +20 °C;
- Altitude: The altitude of the installation site shall not exceed 2000m;
- Installation category: Category II;
- Pollution level: Level 3.

### Product Features

The main structural components of terminal combination electrical appliances include transparent covers, upper covers, boxes, installation rails, conductive bars, wiring, double line covers, and electrical switch components. All internal electrical switch components are made of 9mm width modular electrical components, installed on top hat shaped tracks, and can be combined as needed for quick and convenient disassembly and assembly. The switch component handle is exposed, and the live and other parts are covered inside the upper cover. Opening the door makes it easy to operate, ensuring safe and reliable use. The box is equipped with inlet and outlet holes on the top, bottom, left, right, and back for easy wiring.

## PZ40

ELECTRIC METER BOX (METERING BOX) SERIES

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