National standard power distribution equipment customization experts





华式箱变 Chinese box-type substation

PRODUCT DETAILS 产品详情

- Combined transformers for wind power generation
- Composite transformer for photovoltaic power generation



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Chinese box-type substation



新能源产品 New energy products

[CHINESE TYPE BOX TYPE SUBSTATION]

01 Product introduction

Chinese transformer (Chinese type box transformer) is an improved structure of the American box transformer, which is respectively set up transformer room, high voltage switch room, low voltage switch room, high voltage switch room has an independent load switch or vacuum circuit breaker. Compared with the American box transformer, China transformer increases the ground switch and lightning arrester, and there is a mechanical interlock between the ground switch and the main switch, which can ensure the absolute safety of the person during the maintenance of the box transformer. Huachan can be regarded as a modified or upgraded version of Meachan.

generation field, as a photovoltaic special combined box transformer, the photovoltaic power generation booster substation is manufactured and assembled in the factory in advance, including booster transformer, high-voltage vacuum load switch-fuse combination electrical appliances, low-voltage switches, internal wiring (cables, busbars, etc.), power transformer and other auxiliary equipment, configured in a common housing. And through the type test, it has the advantages of strong complete set, easy installation, short construction period, low operating cost, high structural strength, strong anti-corrosion performance, etc., and is fully suitable for the environment with harsh natural conditions, such as beaches, grasslands, wilderness and other operating environments.



Advantages and application scenarios :

(1) The design of the Chinese box is flexible, and the design can be configured according to different use scanarios, reducing the installation and use risks.

(2) With high operating efficiency, especially in the case of large current and high power, excellent performance.

(3) Compact structure, safe and reliable, energy saving, suitable for power distribution projects away from residential areas, wind power generation projects, single box transformer capacity of large wind power and photovoltaic projects.

(4) In the photovoltaic power field, the Chinese box transformer collects the electric energy generated by the photovoltaic, and raises the voltage to the voltage level suitable for the grid through the booster transformer, so as to realize the integration and transmission of electric energy.



[COMPOSITE TRANSFORMER FOR PHOTOVOLTAIC POWER GENERATION]

01 Product introduction

ZGS-Z.G Combined transformer for photovoltaic power generation is a new type of box substation that integrates photovoltaic power generation AC-DC system, inverter, low-loss transformer and other control systems. It combines AC-DC control system, inverter, booster system, control system and so on more organically. To achieve simplified configuration, high reliability and flexibility, safe and convenient operation and maintenance, and has the advantages of environmental protection and energy saving, compact structure, fully meet the needs of photovoltaic power station access to the grid, is the ideal supporting equipment for photovoltaic power generation system.



02 Type description 03 Scene application ZGSD-Z.G(F)-D/D Rated voltage class (KV) Transformer rated capacity (KVA) Photovoltaic power generation (wind nower generation) Tarminal box Performance level code Three phase Comparise transformer Comparise transformer



[COMBINED TRANSFORMER FOR WIND POWER]





01 Product introduction

ZGS-Z.F. The role of the combined transformer for whild power is to match the electrical energy of the alternating current converter head generated by the wind generator with the electrical energy of the grid in order to transmit the electrical energy to the grid. The voltage generated by wind turbines is usually low, and the voltage requirements of the grid are high, so the wind power trans-

through the transformer to ensure the stable transmission of electric energy.

Through the internal control cabinet to control the size of the current to adjust the output power of the wind turbine to adapt to different wind speed and load requirements, so as to achieve the best power generation efficiency. At the same time, it also has the protection and monitoring function, which can monitor the operating status and power output of the wind turbine, discover the fault in time and take the corresponding protective measures to ensure the safe operation of the wind power generation system.



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[COMBINED TRANSFORMER FOR 35KV PHOTOVOLTAIC POWER GENERATION (CHINESE BOX-TYPE SUBSTATION)]

01 Product introduction

The product through the inverter or grid-connected cabinet will be low-voltage electric energy into high-voltage 35kV electric energy, through the metering device into the power grid line, with distribution monitoring and control function, through the communication interface. WIFI or GPRS module can be remotely controlled, view the equipment operating status and real-time voltage, current, active power, reactive power, power factor, power generation and other data. Its outdoor rain performance is high, beautiful appearance, the box adopts prefabricated cabin or all metal spray plastic shell, according to the structure can be divided into Hua-change and Ou-change, both technology has been mature, long service life. Suitable for 35kV photovoltaic, wind power grid connected scenarios.



01 Type description

ed:

 Cooperate with centralized 35kV high voltage SVG compensation to improve and stabilize power quality and improve transformer output efficiency;

(2) The photovoltaic box has its own power distribution monitoring function, through the communication interface, WIFI or GPRS module can be remotely controlled to view the operating status of the equipment and real-time voltage, current, active power, reactive power, power factor, electricity consumption and other data;

(3) The high-voltage side can use intelligent circuit breakers to protect grid-connected high-line lines and transformers, with instantaneous, time-limited, quick-break, zero sequence, inrush current, overvoltage, undervoltage protection, and at the same time with accident memory, call closing, power opening, fault blocking and other functions; Load switch with fuse protection can also be



(4) Three-winding photovoltaic, wind power special transformer, low-voltage double-circuit power generation lines are connected in parallel to the low-voltage side of the transformer, with 220V voltage winding, to provide power to the secondary equipment inside the box;

(5) According to user needs, high voltage indoor or outdoor metering devices can be selected to meet the needs of different schemes of photovoltaic grid-connected power generation charging;
(6) The box is changed to natural ventilation, forced cooling and anti-condensation device to ensure the safe, stable and reliable operation of the equipment in the box

(7) The outer door of the box is equipped with anti-misoperation and five anti-functions of the inner cabinet to ensure the safety of electricity;

(8) The low-voltage distribution unit uses parallel double-circuit universal circuit breaker to enter the line, accurately and quickly protect transformers and high-voltage equipment;

(9) The box has a multi-directional door, small size, and comes with a bottom lifting device, which is convenient for transportation, maintenance and repair.