

BYHV-S200M100

BYHV-S500M200

PHOTOVOLTAIC ENERGY STORAGE CONTROL CABINET SPECIFICATIONS

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Product Introduction

The photovoltaic energy storage control cabinet adopts the design concept of "coordinated control of photovoltaic energy storage", deeply integrates the core equipment of photovoltaic and energy storage system, and integrates the core components such as STS static switch, Multiple 50kW DC/ DC MPPT module, AC contactor, electric meter and transformer, AC/DC circuit breaker, etc., and highly integrates the functions of photovoltaic access, energy storage management, energy conversion and distribution protection, thus forming the energy dispatching core of photovoltaic, energy storage and power grid. The cabinet has compact structure, efficient energy management, safety protection and flexible expansion ability; Adapt to photovoltaic power stations, automobile charging stations, industrial and commercial energy storage, microgrid and other scenarios; Support rapid deployment and flexible expansion to meet the requirements of efficient energy management and safe and reliable operation of photovoltaic energy storage systems.

Application Scenario

This product is specially designed for high-reliability energy scenes, which can cooperate with photovoltaic energy storage system composed of energy storage products, and is suitable for all kinds of scenes that need efficient energy management and stable power supply; Provide intelligent power security solutions for microgrid, charging pile cluster and remote power shortage areas.

Product Features

Safe and reliable

IP54 protection level design, emergency stop protection, short circuit and overload protection and other multiple safety mechanisms ensure the safe and stable operation of equipment and power system.

Coordinated handover

Equipped with STS static transfer switch and MPPT module, it realizes multi-source switching of photovoltaic-energy storage-power grid, supports grid-connected and off-grid switching, and the automatic switching time is less than 20ms, and supports direct photovoltaic access.

Flexible configuration

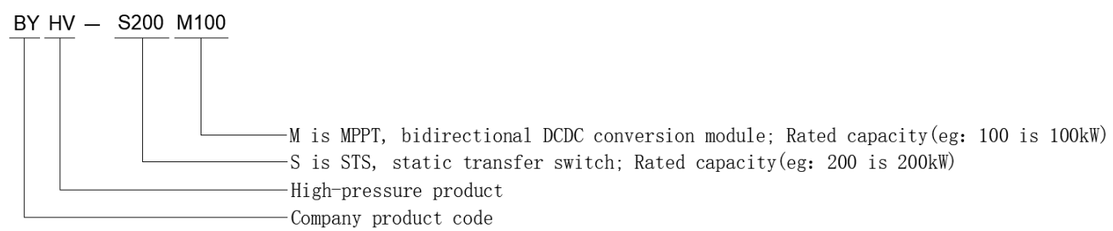
Components in the cabinet, such as AC contactors and circuit breakers, can be flexibly configured according to actual requirements, so as to meet the requirements of electrical systems in different scenarios and meet diverse application requirements.

Stable and easy to maintain

STS switching+bypass mode can not only supply power to the load stably, but also ensure that the system is completely disconnected from other parts during maintenance or inspection, which is easy for device replacement and maintenance.

ENERGY STORAGE

Specifications and Model Description



Product Introduction

Product Type	**BYHV**-S200M100	**BYHV**-S500M200
STS electrical characteristics		
Power	200kW	500kW
Rated Voltage	400V	
Operating Voltage Range	400V±10%	
Maximum Current	318A	794A
Rated Frequency	50/60Hz	
Overload Capacity	110%	
Grid-connected & Off-grid Switching Time	<20ms	
Grid-connected & Off-grid Switching Mode	Automatic(STS)	
efficiency	>99.5%	

Product Introduction

Product Type	**BYHV**-S200M100	**BYHV**-S500M200
MPPT electrical parameters		
Power	2×50kW	4×50kW
High Voltage Side Voltage	Range 300~1000V	
High Voltage Side Current	Maximum 80A	
Low Voltage Side Voltage	0~900V	
Low Voltage Side Current	Maximum 100A	
Peak Efficiency	Greater than 99%	
Work Pattern	Constant voltage, Bidirectional constant voltage, Constant current, Constant power, Boost Mppt, Buck Mppt	
Voltage Stability	Static: ±10%; Dynamic: ±50%	
Current Stability	Static: ±1A; Dynamic: ±3A	
Auxiliary Function	0V start	
Communication Port	RS485 / Modbus RTU	
System Parameter		
Product model	BYHV-S200M100	BYHV-S500M200
Ac Access Mode	3P+N+PE	
Incoming And Outgoing Line Mode	Lower incoming line and lower outgoing line	
The Protection Grade	IP54	
Anticorrosion Grade	C3	
Operating Ambient Temperature	-29℃~50℃(>45℃ for derating)	
Humidity	0%RH~95%RH, No condensation	
Altitude	4000m(>2000m for derating)	
Heat Dissipation Mode	Air Blast Cooling	
Protection Function	Have(Short circuit protection, overload protection, etc)	
Emergency stop device	Have	
Metering device	Have	
Overall Dimensions (WHD)	850mm*1891mm*900mm	
Weight	450KG	495KG

Installation Requirements

1. The installation environment should be dry, well-ventilated, free from corrosive substances, free from electromagnetic interference, and with a temperature between -29°C and 50°C.
2. The equipment should be placed on a stable surface and should maintain a certain distance from surrounding objects for heat dissipation.
3. The equipment should have reliable grounding and comply with relevant safety standards.
4. Follow the steps in the product manual or installation manual for installation and wiring.

Maintenance And Care

1. Regularly inspect the operating status of the equipment and perform necessary maintenance, including checking the tightness of terminal connections, the condition of cable equipment connections, and insulation performance.The equipment should be placed on a stable surface and should maintain a certain distance from surrounding objects for heat dissipation.
2. Periodically clean and maintain exhaust vents, such as air conditioning, ensuring cleaning fluids do not enter the equipment.

After-sale Service

1. We provide comprehensive after-sales service, including equipment installation, commissioning, and maintenance.The battery components should be replaced regularly to ensure the normal operation of the equipment.
2. During the equipment warranty period, we will provide free repairs or replacements. After the warranty period, we offer paid repair and maintenance services.
3. After equipment installation, we provide free safety inspections and safety training.

Precautions

1. Before installing the equipment, place it in a dry and well-ventilated environment, avoiding prolonged exposure to humid conditions.
2. Do not place flammable or explosive materials on the equipment.
3. Prohibit illegal operations and modifications on the equipment. If parameter changes are required, please contact the manufacturer or dealer.