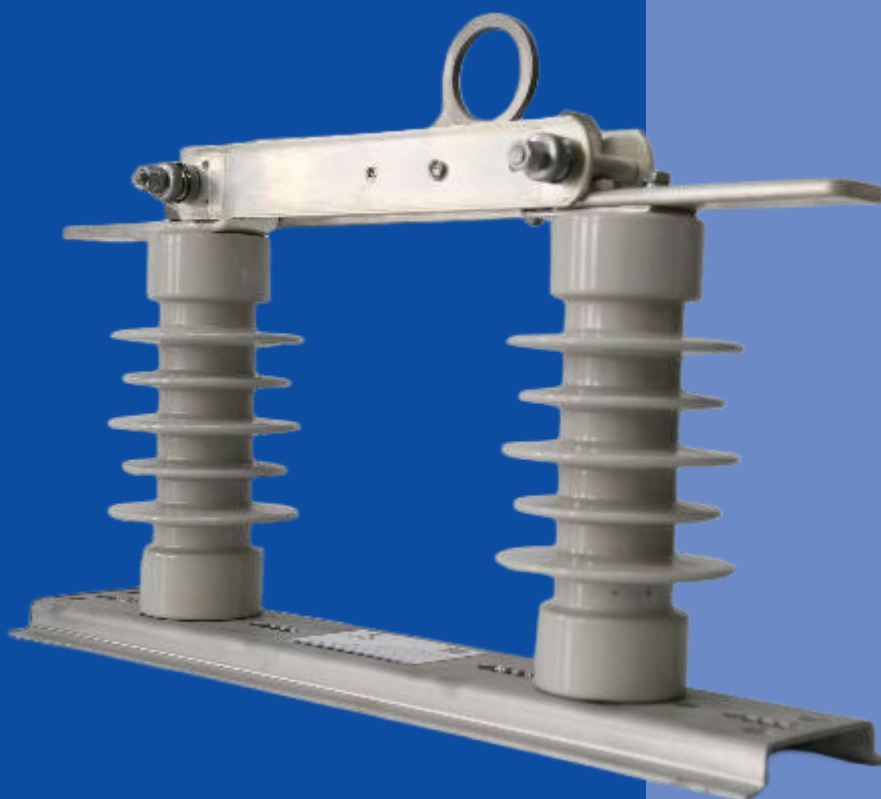


# Double Column AC High Voltage Disconnect Switches

-12kV ~40.5kV



- Metal-enclosed switchgear
- High-quality stainless steel shell
- Eco-friendly gas insulation

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**7 Stars** 七星电气

## Catalog

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## 1. Company Profile

Quanzhou Tianchi Electric Import and Export Trade Co., Ltd. is a subsidiary of Quanzhou Seven Star Electric Co., Ltd. to develop overseas markets and serve overseas customers more professionally. The company is located in Seven Stars Industrial Park, Jiangnan High-tech Development Zone, Licheng District, Quanzhou, FUJIAN. The company adheres to the business philosophy of "innovation, pragmatism, and win-win" and the service concept of "people-oriented" provide comprehensive and high-quality products for domestic and foreign enterprises.

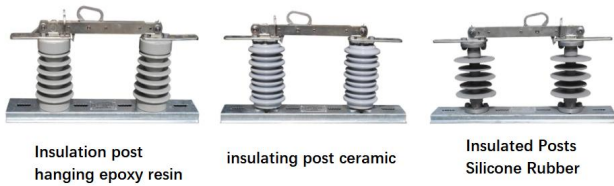
Seven Stars Electric was established in 1995. It is a national high-tech enterprise dedicated to the research and development and production of power insulation products and high-voltage power transmission and distribution products. In 2012, it was restructured from a state-owned enterprise to a joint-stock enterprise. Jointly invested in the establishment of a subsidiary Quanzhou Seven Stars Electric Co., Ltd. The company's main products include Ring Main Units, smart grid software and hardware production and development (primary and secondary fusion column switches, intelligent station buildings, electric power clairvoyance, etc.), cable branch boxes, low-voltage complete sets of equipment, cable connectors, cold shrinkable cable accessories, insulators, lightning arresters, etc. The company's registered capital is 130 million yuan, fixed assets are 200 million yuan, and the company has more than 600 employees. In 2021, it will achieve a turnover of 810 million yuan and a tax revenue of nearly 30 million yuan. The annual output value in 2022 is expected to exceed 1 billion yuan. The company's products have Sold to Vietnam, Philippines, Brazil, South Africa, Singapore, Malaysia and other countries.

The company has three production bases with a total of more than 60,000 square meters of production plants, including high-voltage insulation workshops, sheet metal processing

workshops, power distribution switch workshops, and power electronics workshops; Fully equipped laboratories for low temperature and electromagnetic compatibility; a complete R&D, production and testing system for power insulation and high-voltage transmission and distribution products with a voltage level of 500kV and below has been formed. Among them, the German CNC punching machine, laser cutting machine, CNC bending machine, shearing machine and other sheet metal processing equipment imported from the power distribution product line, as well as Panasonic robot welding, helium (nitrogen) leak detection, pressure testing and other equipment. In addition to producing core components such as switches and operating mechanisms, it also assembles indoor and outdoor Ring Main Units, high and low voltage complete sets of equipment and other products; has the ability to assemble Ring Main Units, branch boxes, integrated distribution boxes, low-voltage branch boxes, and low-voltage reactive power compensation boxes. 100,000 The production capacity of the unit; the insulation product production line is 10-35kV cable accessories production line, which can produce 100,000 sets per year.



## 2.Product Overview



Double Column Series Outdoor Column Mounted Disconnect Switches (hereinafter referred to as Disconnect Switches) are hook-and-bar operated disconnect switches with self-locking devices for the gate knives. This series of disconnect switches is suitable for isolation of 12kV ~40.5kV overhead lines, opening and closing operations without load, and the main function is to isolate the voltage during maintenance of the equipment or lines to ensure operational safety. Used in conjunction with circuit breakers or load switches and to provide a safe visible break in the line.

## 3.Standards and Applications

2.1 This product is a three-phase AC frequency 50Hz outdoor high-voltage power transmission equipment, which is used to disconnect or connect high-voltage lines without load, so as to change the connection of high-voltage lines, change the mode of operation, as well as implement safe electrical isolation of high-voltage electrical equipment such as busbars and circuit breakers for maintenance.

2.2 This product complies with the following standards. IEC62271 1102 ((AC high voltage disconnecting and earthing switches))

GB/T 11022 — 1999 《Shared technical requirements for high-voltage switchgear and control equipment standards》)

GB 1985-2004 ((High-voltage AC disconnecting and earthing switches))

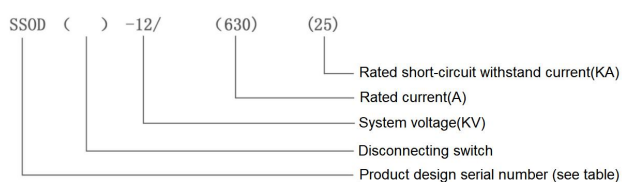
GB/T 5582-1993 High-voltage power equipment, external insulation filth level

GB/T 311.22002 insulation fit part 2: high voltage power transmission and transformation equipment insulation with the use of guidelines.

## 4.Conditions of Use

- Ambient air temperature: -40°C +55°C
- Wind pressure: no more than 700Pa (equivalent to wind speed 35m/S)
- Altitude: the altitude does not exceed 2000m,

## 5.product code



## 6.Product Model

single double column	insulation medium	Hardware	Model No.
double column	porcelain on bottle	Hot dip galvanized	SSOD-12/630-25
		Stainless steel	SSOD-12/630-25
	Silicone Rubber	Hot dip galvanized	SSOD-12/630-25
		Stainless steel	SSOD-12/630-25
	epoxy resin	Hot dip galvanized	SSOD-12/630-25
		Stainless steel	SSO0D-12/630-25

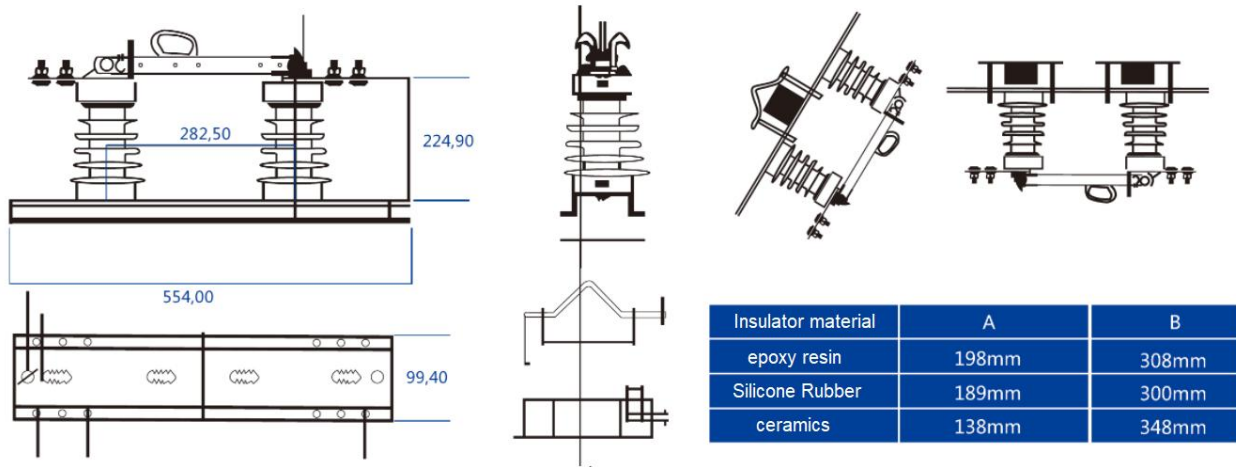
## 7.Isolation switch series

Insulator material		Epoxy Resin	Ceramics	Silicone Rubber
Rated voltage (KV)		12		
Rated current (A)		200、400、630		
Rated Frequency(HZ)		50		
Rated lightning impulse withstand voltage (KV)	grounding	95		
	Fracture	110		
Rated power frequency withstand voltage (KV)	grounding	50		
	Fracture	60		
Isolation break distance		300mm		
Rated short-time withstand current and duration (KA/S)		25KA/4S		
Rated peak withstand current		40KA、50KA		
Mechanical life		2000次(times)		
Insulator creepage distance		410mm	410mm	520mm

## 8.Product Structure Features

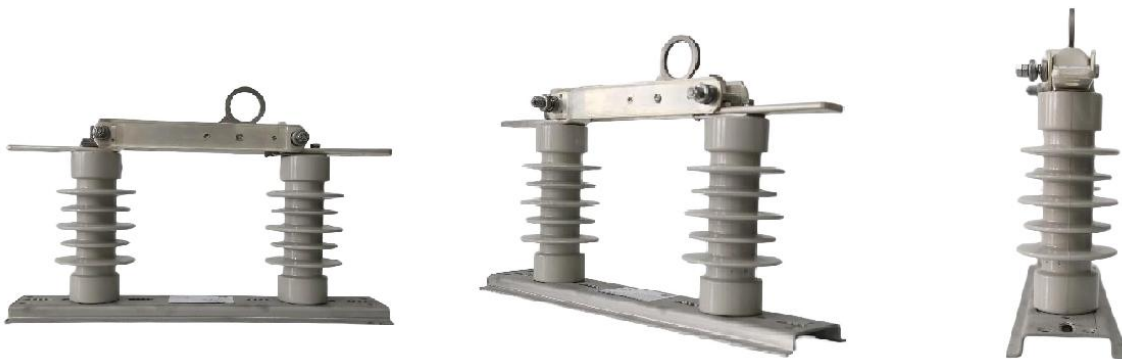
- 3.1. Simple structure, easy to install and use.
- 3.2. The base is made of stainless steel plate or hot-dip galvanized steel plate, which ensures reliable operation and anti-corrosion performance: Square diameter bolts are used to match the square holes on the base plate, which is convenient for actual installation.
- 3.3. Pillar insulators epoxy resin insulators, with water-repellent, self-cleaning, UV-resistant, not subject to weather and aging performance: silicone rubber insulators, not only minimize the weight of the product, at the same time with good hydrophobic properties; ceramic insulators, with anti-aging properties.
- 3.4. main circuit design: the use of symmetrical double static contact design, the product has a dual circuit conduction, and at the same time fastening the rotary The part is in the position of non-dominant electric circuit, which ensures low temperature rise under normal operation. The components of the main conductive circuit, such as moving and static contacts, knife gate piece adopts copper silver-plating process, which effectively enhances the conductivity of the product.
- 3.5 Terminal: the use of standard two-hole wiring copper row, copper hole size and hole spacing in line with the domestic common practice, to facilitate user installation.
- 3.6 Knife gate limit device: can enhance the stability of knife gate operation, with 900 or 1600 two limit mode. The default factory mode is 900, if you need 1600" limit or no limit can be adjusted.
- 3.7 Operation ring: The lever design of the ring and the rotating locking pin is easy to operate and improve the ice-breaking ability.

## 9. Product shape and installation size

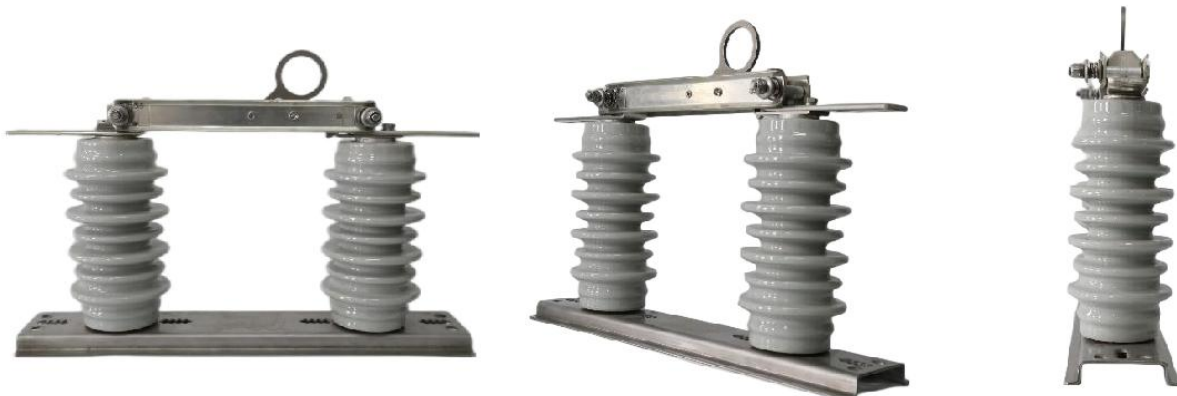


## 10. Isolation switch product pictures (partial)

### 10.1. 15kV Outdoor AC Disconnect Switch Model 630All (Epoxy Resin, Stainless Steel)



### 10.2. 15Kv Outdoor AC Isolating Switch Type 630All (Porcelain Bottle, Stainless Steel)



**15Kv Outdoor AC Isolating Switch Type 630All (Silicone Rubber, Stainless Steel)**

