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No prior notice is required for any changes.
The information presented in this document is a general description of the options available and is not intended to be applicable to all situations. Therefore, the technical options requested by the customer shall be identified in the contract.



Outdoor Pole-mounted Circuit Breaker Series Products

Green and environmentally friendly concept for a clean future

Zhejiang Juhonkia Electric Company Limited

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Leading Innovation

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企业简介 ABOUT US

Established in January 2014, Zhejiang Juhonkia Electric Company Limited is a mixed-ownership high-tech enterprise focusing on 220kV and below primary and secondary power transformation and distribution equipment and specializing in the research and development, production and sales of intelligent electrical switchgear assemblies and its components. We are share-held and invested by Zhejiang Economic Construction Investment Co., Ltd. which is a wholly-owned enterprise of Zhejiang Communications Investment Group Co., Ltd., one of the world's Top 500 enterprises.

We have a registered capital of 72,368,194 yuan, building area of 30,000 square meters for plant, and more than 200 employees, including more than 40 middle and senior technical engineers. We have passed the certification of the quality, environment, occupational health and safety, intellectual property management system, energy management system, informatization and industrialization integration management system, green supply chain system, after-sales service system etc. We have obtained the Grade IV installation, repair and test licenses for electric power, general aviation license, and independent right to engage in import and export. We have been rated as a national high and new technology enterprise, an enterprise that uses special and sophisticated technologies, a star of the growth of micro and small enterprises of Zhejiang Province, the most growing enterprise of Hangzhou, a model collective of Hangzhou, an enterprise observing contract and keeping promise of Zhejiang Province, an enterprise of credit demonstration management of Zhejiang Province, and an enterprise of patent demonstration of Hangzhou.

We have a provincial-level enterprise research institute, a provincial-level intelligent power distribution R&D center, Hangzhou enterprise technology center, municipal-level innovation studio and other innovation and R&D institutions, and established long term cooperation with Zhejiang University, Hangzhou Dianzi University, Wuhan University, China Electric Power Research Institute, Zhejiang Huadian Instrument Testing Research Institute, etc. At present, we have 13 software copyrights, 81 patents; 14 products passing certification of the provincial-level industrial new products, 19 products winning the third prize of the Machinery Industry Science and Technology of Zhejiang Province, 4 products winning the second prize of the Industry Association of Zhejiang Province, 2 products winning the Outstanding Industrial Products Award of Zhejiang Province.

We are a large-scale manufacturer producing 72.5kV and below switchgear, with complete varieties in China. Over the years, we have gained much experience in electrical research and development and smart manufacturing. We mainly produce 12kV to 72.5kV SF6 gas insulated switchgear, 12kV to 72.5kV environmental gas-insulated switchgear, integrated prefabricated substations, primary and secondary combination pole-mounted circuit breakers, primary and secondary combination ring main units etc. Among them, 10 categories of products including ring main box, ring main unit, switchgears, HV cable branch boxes, prefabricated substations, pole-mounted circuit breakers, pole-mounted load switches, integrated distribution boxes (JP cabinets), primary and secondary combination ring main units, primary and secondary combination pole-mounted circuit breakers have passed the State Grid qualification. And 10kV pole-mounted vacuum circuit- breaker automatic combined equipment, 10kV SF6 fully insulated circuit-breaker automatic combined equipment, 10kV SF6 fully insulated load switch automatic switchgear have passed the pre-qualification of China Southern Power Grid.

"We have always one ring main unit ideal for you!" JUHONKIA always engages the segment fields of ring main units, and keeps developing new products of ring main units. The series products of ring main unit have realized the full coverage of voltage level and different insulation medium products. We are one of the first batch of enterprises in China to finish simultaneously the R&D, manufacturing, network access testing and bulk supply of standardized and customized SF6 gas insulated, solid insulated, environmental gas insulated, atmospheric air-insulated ring main units and primary and secondary combination ring main units. We have excellent equipment and our products are designed with stable and reliable quality, which are highly recognized by multinational famous brands of electrical products such as ABB and Siemens, and we are authorized to cooperate in ring main units.

With our business philosophy of "Intelligent Manufacturing of High-quality Products only', we seek tirelessly improvement, strive for the best and grow rapidly. During our development, we warmly welcome friends from all kinds of fields to visit JUHONKIA, and we are looking forward to work with you to seek common development, and create a better future!

A national high and new technology enterprise　A bid-wining supplier of State Grid and China Southern Power Grid

A national high and new technology enterprise

An enterprise that uses special and sophisticated technologies of Zhejiang Province

An enterprise of credit demonstration management of Zhejiang Province

An enterprise of patent demonstration of Hangzhou

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CORPORATE PRESENCE









Office environment | Garden in air

Employees training | Competition

SMART MANUFACTURING



Outdoor circuit breaker intelligent production line



Intelligent ring main unit production line



Fully automatic ring main unit welding production line



CNC busbar punching and shearing machine



CNC laser cutting machine



CNC punch press



CNC bending machine



Fully-automatic wire harness processing equipment



Prefabricated substation workshop

DETECTION EQUIPMENT



Lightning strike test area



Discharge test area



Ring main unit detection area

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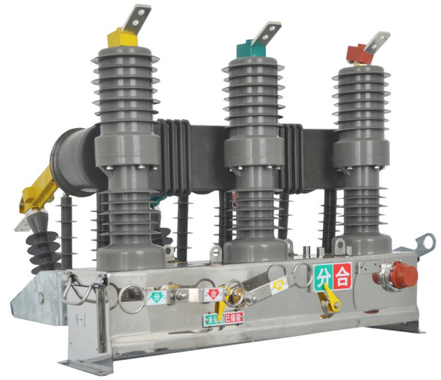
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ISO9001 ISO14001 ISO45001

Our company has passed the certifications of ISO9001 quality management system, ISO14001 environmental management system and ISO45001 occupational health and safety management system.

ZW32-12/24 Outdoor HV AC Vacuum Circuit Breaker



Overview

The ZW32-12/24 outdoor HV AC vacuum circuit breaker is an outdoor HV switchgear with a rated voltage of 12/24kV and three-phase AC 50Hz. It is mainly used to break and close the load current and short-circuit current of the power system. It is suitable for substations and power system 10/20kV distribution networks, and is especially suitable for use in seriously polluted environments and places with frequent operations.

Product model and meaning

Z W 32 - □ / □ - □ Outdoor HV AC vacuum circuit breaker

- Rated short-circuit breaking current (kA)
- Rated current (A)
- Rated voltage (kV)
- Design S/N
- Usage environment (W-outdoor)
- Vacuum circuit breaker (Z-vacuum)

Implementation standard

GB 1984	High-voltage alternating-current circuit-breakers
GB/T 11022	Common specifications for high-voltage switchgear and controlgear standards
DL/T 403	HV vacuum circuit-breaker for rated voltage 12 kV to 40.5 kV

Normal usage environment

- Ambient air temperature: -40°C~+70°C;
- Altitude: no more than 2000m;
- Installation location: a location free from flammable, explosive, chemically corrosive substances and frequent severe vibrations;
- Safety pollution level: level IV;
- Wind pressure: no more than 700Pa (equivalent to wind speed 35m/s)

Main technical parameters

S/N	Item	Unit	Parameter	
1	Rated voltage	kV	12	24
2	1min power frequency withstand voltage (phase to phase, phase to ground/between contacts)		42/48	65/79
3	Lightning impulse withstand voltage (phase to phase, phase to ground/between contacts)		75/85	125/145
4	Rated current	A	630, 1250	1250
5	Rated frequency	Hz	50	
6	Rated short-circuit breaking current	kA	20, 25	25
7	Rated short-circuit closing current (peak)		50, 63	63
8	Rated peak withstand current		50, 63	63
9	Rated short-time withstand current		20, 25	25
10	Rated short-time withstand duration	S	4	
11	Rated operating cycle		O-0.3s-CO-180s-CO	
12	Rated short-circuit current breaking times	Time (s)	30	
13	Mechanical life	Time (s)	10000	
14	Rated operating voltage of auxiliary circuit	V	DC24	

Note: When the altitude of the place where the product is used is higher than 2000m, the insulation withstand voltage should be corrected accordingly.

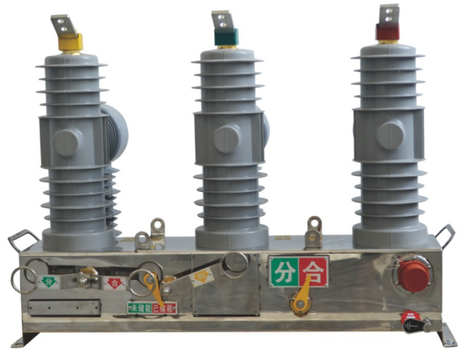
Structural features

- The product adopts a three-pillar structure. The vacuum arc extinguishing chamber is connected to the operating mechanism through an insulating tie rod, and the performance is stable and reliable;
- The pole is cast using epoxy resin and silicone rubber APG process, which has good anti-condensation performance and mechanical strength;
- Adopts high-performance spring operating mechanism, long mechanical life, and has both electric and manual energy storage and opening and closing operation functions;
- The main body chassis is made of 3mm thick high-quality stainless steel plate, which has high strength and strong corrosion resistance;
- Can be equipped with current transformers of various variable ratios for metering or measurement and protection;
- Optional integrated isolation disconnector;
- It has the advantages of miniaturization, novel appearance, light weight and easy installation;
- Can be equipped with control terminal interface for power distribution automation.

Precautions for ordering

- Before signing the contract, both the supplier and the buyer should confirm the product technical parameters and technical solutions;
- The scope and quantity of spare parts and auxiliary equipment required by the user should be specified in the technical agreement or supply contract;
- If the user requires the manufacturer to provide technical training or installation services, this should be clearly stated in the contract;
- General tools and materials used for installation and maintenance shall be prepared by the user.

ZW32-12 Primary and Secondary Combination Pole-Mounted Circuit Breaker Assemblies





Overview

The ZW32-12 primary and secondary combination pole-mounted circuit breaker assemblies is an outdoor HV switchgear with a rated voltage of 12kV and a three-phase AC 50Hz. It is composed of a pole-mounted circuit breaker body, a feeder line terminal (FTU) and a voltage transformer connected to each other through cables. It can realize the functions of “centralized feeder line automation and local feeder line automation”, has a complete set of functions of segmentation, interconnection and demarcation circuit breakers, and can collect three-phase current, zero sequence current, line voltage, zero sequence voltage, active power, reactive power, electrical energy collection and other functions. It is mainly used to break and close the load current and short-circuit current of the power system. It is suitable for substations and power system 10kV distribution networks, and is especially suitable for use in seriously polluted environments and places with frequent operations. It is also the preferred product for urban and rural power distribution automation.

Product model and meaning

Z W 32 - □ / □ - □ Primary and secondary combination pole-mounted circuit breaker assemblies

- Rated short-circuit breaking current (kA)
- Rated current (A)
- Rated voltage (kV)
- Design S/N
- Usage environment (W-outdoor)
- Vacuum circuit breaker (Z-vacuum)

Implementation standard

GB 1984	High-voltage alternating-current circuit-breakers
GB/T 11022	Common specifications for high-voltage switchgear and controlgear standards
DL/T 403	HV vacuum circuit-breaker for rated voltage 12 kV to 40.5 kV
DL/T 721	Remote terminal unit of distribution automation system

Normal usage environment

- Ambient air temperature: -40°C~+70°C;
- Altitude: no more than 2000m;
- Installation location: a location free from flammable, explosive, chemically corrosive substances and frequent severe vibrations;
- Safety pollution level: level IV;
- Wind pressure: no more than 700Pa (equivalent to wind speed 35m/s)

Main technical parameters

S/N	Item	Unit	Parameter
1	Rated voltage	kV	12
2	1min power frequency withstand voltage (phase to phase, phase to ground/between contacts)		42/48
3	Lightning impulse withstand voltage (phase to phase, phase to ground/between contacts)		75/85
4	Rated current	A	630
5	Rated frequency	Hz	50
6	Rated short-circuit breaking current	kA	20, 25
7	Rated short-circuit closing current (peak)		50, 63
8	Rated peak withstand current		50, 63
9	Rated short-time withstand current		20, 25
10	Rated short-time withstand duration	S	4
11	Rated operating cycle		O-0.3s-CO-180s-CO
12	Rated short-circuit current breaking times	Time (s)	30
13	Mechanical life	Time (s)	10000
14	Rated operating voltage of auxiliary circuit	V	DC24

Note: When the altitude of the place where the product is used is higher than 2000m, the insulation withstand voltage should be corrected accordingly.

Main component parameters

S/N	Type	Sensor form	Phase current	Zero sequence current	Phase voltage	Zero sequence voltage	Voltage transformer
1	Electromagnetic type	Placed outside the pole	600A/1A	100A/1A	/	(10kV/√3)/(6.5/3)	10/0.1/0.22kV
2	Electronic type		600A/1V	20A/0.2V	(10kV/√3)/(3.25/√3V)		10/0.22kV

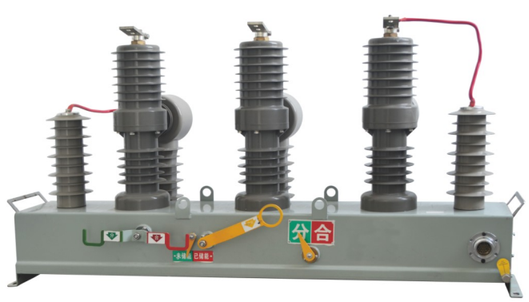
Structural features

- Using industry-leading electronic zero sequence voltage sensors, as well as high-precision zero sequence current and phase current sensors, it has the characteristics of wide measurement range, high measurement accuracy and high reliability;
- Can be used for line segmentation, interconnection, branching, user demarcation and other occasions.
- The product adopts a three-pillar structure. The vacuum arc extinguishing chamber is connected to the operating mechanism through an insulating tie rod, and the performance is stable and reliable;
- The pole is cast using epoxy resin and silicone rubber APG process, which has good anti-condensation performance and mechanical strength;
- Adopts high-performance spring operating mechanism, long mechanical life, and has both electric and manual energy storage and opening and closing operation functions;
- The main body chassis is made of 3mm thick high-quality stainless steel plate, which has high strength and strong corrosion resistance;
- Optional integrated isolation disconnector;
- It has the advantages of miniaturization, novel appearance, light weight and easy installation;

Precautions for ordering

- Before signing the contract, both the supplier and the buyer should confirm the product technical parameters and technical solutions;
- The scope and quantity of spare parts and auxiliary equipment required by the user should be specified in the technical agreement or supply contract;
- If the user requires the manufacturer to provide technical training or installation services, this should be clearly stated in the contract;
- General tools and materials used for installation and maintenance shall be prepared by the user.

ZW32-12 Primary and Secondary Combination Pole-Mounted Circuit Breaker Assemblies (external capacitor)





Overview

The ZW32-12 primary and secondary combination pole-mounted circuit breaker (external capacitor for power-taking) is an outdoor HV switchgear with a rated voltage of 12kV and a three-phase AC 50Hz. It is composed of a pole-mounted circuit breaker body, a feeder line terminal (FTU) and a power supply of capacitor power-taking connected to each other through cables. The circuit breaker and FTU can realize the functions of “centralized feeder line automation and local feeder line automation”, has a complete set of functions of segmentation, interconnection and demarcation circuit breakers. It is mainly used to break and close the load current and short-circuit current of the power system. It is suitable for substations and power system 10kV distribution networks, and is especially suitable for use in seriously polluted environments and places with frequent operations. It is also the preferred product for urban and rural power distribution automation.

Product model and meaning

Z W 32 - □ / □ - □ Primary and secondary combination pole-mounted circuit breaker assemblies (external capacitor)

- Rated short-circuit breaking current (kA)
- Rated current (A)
- Rated voltage (kV)
- Design S/N
- Usage environment (W-outdoor)
- Vacuum circuit breaker (Z-vacuum)

Implementation standard

GB 1984	High-voltage alternating-current circuit-breakers
GB/T 11022	Common specifications for high-voltage switchgear and controlgear standards
DL/T 403	HV vacuum circuit-breaker for rated voltage 12 kV to 40.5 kV
DL/T 721	Remote terminal unit of distribution automation system

Normal usage environment

- Ambient air temperature: -40°C ~+70°C;
- Altitude: no more than 2000m;
- Installation location: a location free from flammable, explosive, chemically corrosive substances and frequent severe vibrations;
- Safety pollution level: level IV;
- Wind pressure: no more than 700Pa (equivalent to wind speed 35m/s)

Main technical parameters

S/N	Item	Unit	Parameter
1	Rated voltage	kV	12
2	1min power frequency withstand voltage (phase to phase, phase to ground/between contacts)		42/48
3	Lightning impulse withstand voltage (phase to phase, phase to ground/between contacts)		75/85
4	Rated current	A	630
5	Rated frequency	Hz	50
6	Rated short-circuit breaking current	kA	20, 25
7	Rated short-circuit closing current (peak)		50, 63
8	Rated peak withstand current		50, 63
9	Rated short-time withstand current		20, 25
10	Rated short-time withstand duration	S	4
11	Rated operating cycle		O-0.3s-CO-180s-CO
12	Rated short-circuit current breaking times	Time (s)	30
13	Mechanical life	Time (s)	10000
14	Rated operating voltage of auxiliary circuit	V	DC24

Note: When the altitude of the place where the product is used is higher than 2000m, the insulation withstand voltage should be corrected accordingly.

Main component parameters

S/N	Type	Sensor form	Phase current	Zero sequence current	Phase voltage	Zero sequence voltage	Voltage transformer
1	Electromagnetic type	Placed outside the pole	600A/1A	100A/1A	/	(10kV/√3)/ (6.5/3)	(10kV/√3)/ DC27V
2	Electronic type		600A/1V	20A/0.2V	(10kV/√3)/ (3.25/√3V)		

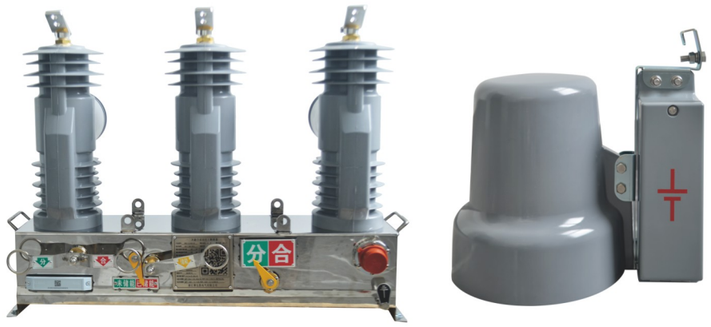
Structural features

- Built-in high-precision electronic type sensor: It has the characteristics of wide measurement range, good linearity, strong anti-interference ability, high measurement accuracy, small size and high reliability;
- External capacitor power-taking module: solves the problems of ferromagnetic resonance of electromagnetic type PT and easy damage by lightning strikes;
- The pole is cast using epoxy resin and silicone rubber APG process, which has good anti-condensation performance and mechanical strength;
- Can be used for line segmentation, interconnection, branching, user demarcation and other occasions.
- Adopts high-performance spring operating mechanism, long mechanical life, and has both electric and manual energy storage and opening and closing operation functions;
- The main body chassis is made of 3mm thick high-quality stainless steel plate, which has high strength and strong corrosion resistance;
- Optional integrated isolation disconnector;

Precautions for ordering

- Before signing the contract, both the supplier and the buyer should confirm the product technical parameters and technical solutions;
- The scope and quantity of spare parts and auxiliary equipment required by the user should be specified in the technical agreement or supply contract;
- If the user requires the manufacturer to provide technical training or installation services, this should be clearly stated in the contract;
- General tools and materials used for installation and maintenance shall be prepared by the user.

ZW32-12 Primary and Secondary Deep Combination Pole-Mounted Circuit Breaker Assemblies (electronic CT)



Overview

The ZW32-12 primary and secondary deep combination pole-mounted circuit breaker assemblies (electronic type) is an outdoor HV switchgear with a rated voltage of 12kV and a three-phase AC 50Hz. It is composed of a pole-mounted circuit breaker body, a feeder line terminal (FTU) and a voltage transformer connected to each other through cables. The solid-insulation-embedded pole has built-in current sensors and voltage sensors. The circuit breaker and FTU can realize the functions of “centralized feeder line automation and local feeder line automation”, has a complete set of functions of segmentation, interconnection and demarcation circuit breakers, and can collect three-phase current, zero sequence current, three-phase voltage, zero sequence voltage, active power, reactive power, electrical energy collection and other functions. It is mainly used to break and close the load current and short-circuit current of the power system. It is suitable for substations and power system 10kV distribution networks, and is especially suitable for use in seriously polluted environments and places with frequent operations. It is also the preferred product for urban and rural power distribution automation.

Product model and meaning

Z W 32 - □ / □ - □ Primary and secondary deep combination pole-mounted circuit breaker assemblies (electronic type)

- Rated short-circuit breaking current (kA)
- Rated current (A)
- Rated voltage (kV)
- Design S/N
- Usage environment (W-outdoor)
- Vacuum circuit breaker (Z-vacuum)

Implementation standard

GB 1984	High-voltage alternating-current circuit-breakers
GB/T 11022	Common specifications for high-voltage switchgear and controlgear standards
DL/T 403	HV vacuum circuit-breaker for rated voltage 12 kV to 40.5 kV
DL/T 721	Remote terminal unit of distribution automation system

Normal usage environment

- Ambient air temperature: -40°C ~+70°C;
- Altitude: no more than 2000m;
- Installation location: a location free from flammable, explosive, chemically corrosive substances and frequent severe vibrations;
- Safety pollution level: level IV;
- Wind pressure: no more than 700Pa (equivalent to wind speed 35m/s)

Main technical parameters

S/N	Item	Unit	Parameter
1	Rated voltage	kV	12
2	1min power frequency withstand voltage (phase to phase, phase to ground/between contacts)		42/48
3	Lightning impulse withstand voltage (phase to phase, phase to ground/between contacts)		75/85
4	Rated current	A	630
5	Rated frequency	Hz	50
6	Rated short-circuit breaking current	kA	20, 25
7	Rated short-circuit closing current (peak)		50, 63
8	Rated peak withstand current		50, 63
9	Rated short-time withstand current		20, 25
10	Rated short-time withstand duration	S	4
11	Rated operating cycle		O-0.3s-CO-180s-CO
12	Rated short-circuit current breaking times	Time (s)	30
13	Mechanical life	Time (s)	10000
14	Rated operating voltage of auxiliary circuit	V	DC24

Note: When the altitude of the place where the product is used is higher than 2000m, the insulation withstand voltage should be corrected accordingly.

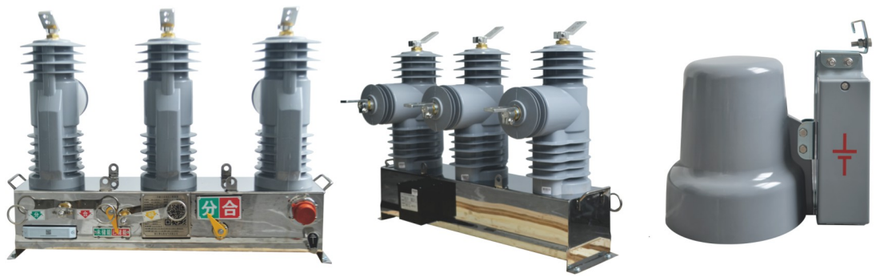
Structural features

- Built-in high-precision electronic type sensor: It has the characteristics of wide measurement range, good linearity, strong anti-interference ability, high measurement accuracy, small size and high reliability;
- Integrated solid insulation: The current and voltage sensors and some insulating support components are solid insulated with epoxy resin through the APG process to form an organic whole, and are encapsulated with silicone rubber, having good anti-condensation performance and mechanical strength;
- Can be used for line segmentation, interconnection, branching, user demarcation and other occasions.
- Adopts high-performance spring operating mechanism, long mechanical life, and has both electric and manual energy storage and opening and closing operation functions;
- The main body chassis is made of 3mm thick high-quality stainless steel plate, which has high strength and strong corrosion resistance;
- Optional integrated isolation disconnector;

Precautions for ordering

- Before signing the contract, both the supplier and the buyer should confirm the product technical parameters and technical solutions;
- The scope and quantity of spare parts and auxiliary equipment required by the user should be specified in the technical agreement or supply contract;
- If the user requires the manufacturer to provide technical training or installation services, this should be clearly stated in the contract;
- General tools and materials used for installation and maintenance shall be prepared by the user.

ZW32-12 Primary and Secondary Deep Combination Pole-Mounted Circuit Breaker Assemblies (digital CT)



Overview

The ZW32-12 primary and secondary deep combination pole-mounted circuit breaker assemblies (digital type) is an outdoor HV switchgear with a rated voltage of 12kV and a three-phase AC 50Hz. It is composed of a pole-mounted circuit breaker body, a feeder line terminal (FTU), a digital unit module and a voltage transformer connected to each other through cables. The solid-insulation-embedded pole has built-in current sensors and voltage sensors. The circuit breaker and FTU can realize the functions of “centralized feeder line automation and local feeder line automation”, has a complete set of functions of segmentation, interconnection and demarcation circuit breakers, and can collect three-phase current, zero sequence current, three-phase voltage, zero sequence voltage, active power, reactive power, electrical energy collection and other functions. It is mainly used to break and close the load current and short-circuit current of the power system. It is suitable for substations and power system 10kV distribution networks, and is especially suitable for use in seriously polluted environments and places with frequent operations. It is also the preferred product for urban and rural power distribution automation.

Product model and meaning

Z W 32 - □ / □ - □ Primary and secondary deep combination pole-mounted circuit breaker assemblies (digital type)

- Rated short-circuit breaking current (kA)
- Rated current (A)
- Rated voltage (kV)
- Design S/N
- Usage environment (W-outdoor)
- Vacuum circuit breaker (Z-vacuum)

Implementation standard

GB 1984	High-voltage alternating-current circuit-breakers
GB/T 11022	Common specifications for high-voltage switchgear and controlgear standards
DL/T 403	HV vacuum circuit-breaker for rated voltage 12 kV to 40.5 kV
DL/T 721	Remote terminal unit of distribution automation system

Normal usage environment

- Ambient air temperature: -40°C ~+70°C;
- Altitude: no more than 2000m;
- Installation location: a location free from flammable, explosive, chemically corrosive substances and frequent severe vibrations;
- Safety pollution level: level IV;
- Wind pressure: no more than 700Pa (equivalent to wind speed 35m/s)

Main technical parameters

S/N	Item	Unit	Parameter
1	Rated voltage	kV	12
2	1min power frequency withstand voltage (phase to phase, phase to ground/between contacts)		42/48
3	Lightning impulse withstand voltage (phase to phase, phase to ground/between contacts)		75/85
4	Rated current	A	630
5	Rated frequency	Hz	50
6	Rated short-circuit breaking current	kA	20, 25
7	Rated short-circuit closing current (peak)		50, 63
8	Rated peak withstand current		50, 63
9	Rated short-time withstand current		20, 25
10	Rated short-time withstand duration	S	4
11	Rated operating cycle		O-0.3s-CO-180s-CO
12	Rated short-circuit current breaking times	Time (s)	30
13	Mechanical life	Time (s)	10000
14	Rated operating voltage of auxiliary circuit	V	DC24

Note: When the altitude of the place where the product is used is higher than 2000m, the insulation withstand voltage should be corrected accordingly.

Structural features

- Built-in high-precision electronic type sensor: It has the characteristics of wide measurement range, good linearity, strong anti-interference ability, high measurement accuracy, small size and high reliability;
- Highly reliable transmission: Digital signal transmission has stronger anti-interference ability and higher signal sampling accuracy.
- Integrated solid insulation: The current and voltage sensors and some insulating support components are solid insulated with epoxy resin through the APG process to form an organic whole, and are encapsulated with silicone rubber, having good anti-condensation performance and mechanical strength;
- Can be used for line segmentation, interconnection, branching, user demarcation and other occasions.
- Adopts high-performance spring operating mechanism, long mechanical life, and has both electric and manual energy storage and opening and closing operation functions;
- The main body chassis is made of 3mm thick high-quality stainless steel plate, which has high strength and strong corrosion resistance;
- Optional integrated isolation disconnector;

Precautions for ordering

- Before signing the contract, both the supplier and the buyer should confirm the product technical parameters and technical solutions;
- The scope and quantity of spare parts and auxiliary equipment required by the user should be specified in the technical agreement or supply contract;
- If the user requires the manufacturer to provide technical training or installation services, this should be clearly stated in the contract;
- General tools and materials used for installation and maintenance shall be prepared by the user.

JRHZW□-12 Primary and Secondary Deep Combination Pole-Mounted Circuit Breaker Assemblies (built-in capacitor)





Overview

The JRHZW□-12 primary and secondary deep combination pole-mounted circuit breaker assemblies (built-in power-taking) is an outdoor HV switchgear with a rated voltage of 12kV and a three-phase AC 50Hz. It is composed of a pole-mounted circuit breaker body and a feeder line terminal (FTU) connected to each other through cables. The solid-insulation-embedded pole deeply combines current sensors, voltage sensors and capacitor power-taking module. The circuit breaker and FTU can realize the functions of “centralized feeder line automation and local feeder line automation”, has a complete set of functions of segmentation, interconnection and demarcation circuit breakers, and can collect three-phase current, zero sequence current, incoming and outgoing line voltage, zero sequence voltage, active power, reactive power, electrical energy collection and other functions. It is mainly used to break and close the load current and short-circuit current of the power system. It is suitable for substations and power system 10kV distribution networks, and is especially suitable for use in seriously polluted environments and places with frequent operations. It is also the preferred product for urban and rural power distribution automation.

Product model and meaning

JRH Z W □ - □ / T □ - □

- Primary and secondary deep combination pole-mounted circuit breaker assemblies (built-in power-taking)
- Rated short-circuit breaking current (kA)
- Rated current (A)
- Operating mechanism (T-spring)
- Rated voltage (kV)
- Design S/N
- Usage environment (W-outdoor)
- Vacuum circuit breaker (Z-vacuum)
- Deep combination

Implementation standard

GB 1984	High-voltage alternating-current circuit-breakers
GB/T 11022	Common specifications for high-voltage switchgear and controlgear standards
DL/T 403	HV vacuum circuit-breaker for rated voltage 12 kV to 40.5 kV
DL/T 721	Remote terminal unit of distribution automation system

Normal usage environment

- Ambient air temperature: -40°C ~+70°C;
- Altitude: no more than 2000m;
- Installation location: a location free from flammable, explosive, chemically corrosive substances and frequent severe vibrations;
- Safety pollution level: level IV;
- Wind pressure: no more than 700Pa (equivalent to wind speed 35m/s)

Main technical parameters

S/N	Item	Unit	Parameter
1	Rated voltage	kV	12
2	1min power frequency withstand voltage (phase to phase, phase to ground/between contacts)		42/48
3	Lightning impulse withstand voltage (phase to phase, phase to ground/between contacts)		75/85
4	Rated current	A	630
5	Rated frequency	Hz	50
6	Rated short-circuit breaking current	kA	20, 25
7	Rated short-circuit closing current (peak)		50, 63
8	Rated peak withstand current		50, 63
9	Rated short-time withstand current		20, 25
10	Rated short-time withstand duration	S	4
11	Rated operating cycle		O-0.3s-CO-180s-CO
12	Rated short-circuit current breaking times	Time (s)	30
13	Mechanical life	Time (s)	10000
14	Rated operating voltage of auxiliary circuit	V	DC24

Note: When the altitude of the place where the product is used is higher than 2000m, the insulation withstand voltage should be corrected accordingly.

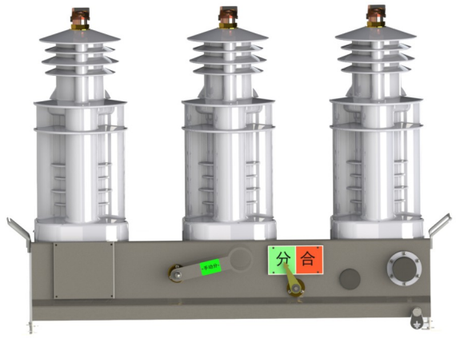
Structural features

- Built-in high-precision electronic type sensor: It has the characteristics of wide measurement range, good linearity, strong anti-interference ability, high measurement accuracy, small size and high reliability;
- Integrated solid insulation: The vacuum arc extinguisher chamber, current and voltage sensor, capacitor power-taking module, main conductive circuit and some insulating support components are solid insulated with epoxy resin through the APG process to form an organic whole, and are encapsulated with silicone rubber, having good anti-condensation performance and mechanical strength;
- Built-in capacitor power-taking module: solves the problems of ferromagnetic resonance of electromagnetic type PT and easy damage by lightning strikes;
- Low power consumption design: The feeder line terminal adopts ultra-low power consumption design, and the average power consumption of the whole machine is less than 1.2W (4G/Ethernet interconnection mode);
- Both sides voltage sampling: equipped with both sides voltage sampling on the power supply side and load side;
- Can be used for line segmentation, interconnection, branching, user demarcation and other occasions;
- Adopts high-performance spring operating mechanism, long mechanical life, and has both electric and manual energy storage and opening and closing operation functions;
- The main body chassis is made of 3mm thick high-quality stainless steel plate, which has high strength and strong corrosion resistance;

Precautions for ordering

- Before signing the contract, both the supplier and the buyer should confirm the product technical parameters and technical solutions;
- The scope and quantity of spare parts and auxiliary equipment required by the user should be specified in the technical agreement or supply contract;
- If the user requires the manufacturer to provide technical training or installation services, this should be clearly stated in the contract;
- General tools and materials used for installation and maintenance shall be prepared by the user.

JRHZW□-12 Primary and Secondary Combination Magnetic Controlled Circuit Breaker Assemblies





Overview

The JRHZW-12 primary and secondary combination magnetic controlled circuit breaker assemblies is an outdoor HV switchgear with a rated voltage of 12kV and a three-phase AC 50Hz. It is composed of a pole-mounted circuit breaker body, a feeder line terminal (FTU), a voltage transformer or a power supply of capacitor power-taking connected to each other through cables. The circuit breaker and FTU can realize the functions of “centralized feeder line automation and local feeder line automation”, has a complete set of functions of segmentation, interconnection and demarcation circuit breakers, and can collect three-phase current, zero sequence current, three-phase voltage, zero sequence voltage, active power, reactive power, electrical energy collection and other functions. It is mainly used to break and close the load current and short-circuit current of the 10kV distribution network in substations and power systems. It is more suitable for places that require rapid breaking.

Product model and meaning

JRH Z W □ - □ / Y □ - □ Primary and secondary combination magnetic controlled circuit breaker assemblies

- Rated short-circuit breaking current (kA)
- Rated current (A)
- Operating mechanism (Y-permanent magnet)
- Rated voltage (kV)
- Design S/N
- Usage environment (W-outdoor)
- Vacuum circuit breaker (Z-vacuum)
- Combination type

Implementation standard

GB 1984	High-voltage alternating-current circuit-breakers
GB/T 11022	Common specifications for high-voltage switchgear and controlgear standards
DL/T 403	HV vacuum circuit-breaker for rated voltage 12 kV to 40.5 kV
DL/T 721	Remote terminal unit of distribution automation system

Normal usage environment

- Ambient air temperature: -40°C ~+70°C;
- Altitude: no more than 2000m;
- Installation location: a location free from flammable, explosive, chemically corrosive substances and frequent severe vibrations;
- Safety pollution level: level IV;
- Wind pressure: no more than 700Pa (equivalent to wind speed 35m/s)

Main technical parameters

S/N	Item	Unit	Parameter
1	Rated voltage	kV	12
2	1min power frequency withstand voltage (phase to phase, phase to ground/between contacts)		42/48
3	Lightning impulse withstand voltage (phase to phase, phase to ground/between contacts)		75/85
4	Rated current	A	630
5	Rated frequency	Hz	50
6	Rated short-circuit breaking current	kA	20
7	Rated short-circuit closing current (peak)		50
8	Rated peak withstand current		50
9	Rated short-time withstand current		20
10	Rated short-time withstand duration	S	4
11	Rated operating cycle		O-0.3s-CO-180s-CO
12	Rated short-circuit current breaking times	Time (s)	30
13	Mechanical life	Time (s)	10000
14	Rated operating voltage of auxiliary circuit	V	DC24
15	Operating mechanism opening time	ms	≤10
16	Closing current peak value	A	≤25
17	Opening current	A	≤3

Note: When the altitude of the place where the product is used is higher than 2000m, the insulation withstand voltage should be corrected accordingly.

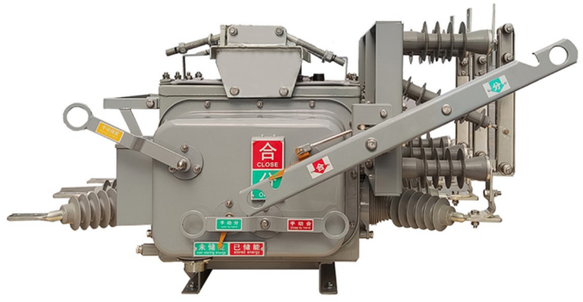
Structural features

- Simple structure: three-phase direct-acting structure, each phase monostable independent permanent magnet mechanism;
- The performance of permanent magnet materials is stable and reliable, and the demagnetization temperature is >175°C;
- Ultra-low power consumption: capacitor energy storage power <20W, closing peak current ≤25A, opening peak current ≤3A;
- Fast and stable action: inherent opening time <10ms, closing time <30ms, discrete deviation of opening and closing time <1ms;
- Long life cycle: The mechanism has a service life of more than 20,000 times.
- Built-in high-precision electronic type sensor: It has the characteristics of wide measurement range, good linearity, strong anti-interference ability, high measurement accuracy, small size and high reliability;
- Can be used for line segmentation, interconnection, branching, user demarcation and other occasions.
- The circuit breaker can be electrically closed and opened, and can be manually opened when the controller loses power;
- Optional integrated isolation disconnector;

Precautions for ordering

- Before signing the contract, both the supplier and the buyer should confirm the product technical parameters and technical solutions;
- The scope and quantity of spare parts and auxiliary equipment required by the user should be specified in the technical agreement or supply contract;
- If the user requires the manufacturer to provide technical training or installation services, this should be clearly stated in the contract;
- General tools and materials used for installation and maintenance shall be prepared by the user.

ZW20-12 Outdoor HV AC Vacuum Circuit Breaker



Overview

The ZW20-12 outdoor HV AC vacuum circuit breaker is an outdoor HV switchgear with a rated voltage of 12kV and three-phase AC 50Hz. This circuit breaker is a maintenance-free product with excellent electrical and mechanical properties, making the ZW20 outdoor vacuum circuit breaker widely used. It is mainly used to break and close the load current and short-circuit current of the 10kV power system. It is suitable for protection and control in substations as well as industrial and mining enterprise power distribution systems. It is also suitable for places with frequent power grid operations. This product is matched with the controller to meet the requirements of the power distribution automation system.

Product model and meaning

Z W 20 - □ / □ - □ Outdoor HV AC vacuum circuit breaker

- Rated short-circuit breaking current (kA)
- Rated current (A)
- Rated voltage (kV)
- Design S/N
- Usage environment (W-outdoor)
- Vacuum circuit breaker (Z-vacuum)

Implementation standard

GB 1984	High-voltage alternating-current circuit-breakers
GB/T 11022	Common specifications for high-voltage switchgear and controlgear standards
DL/T 403	HV vacuum circuit-breaker for rated voltage 12 kV to 40.5 kV

Normal usage environment

- Ambient air temperature: -40°C ~+70°C;
- Altitude: no more than 1000m;
- Installation location: It should be a location free from flammable, explosive, chemically corrosive substances and frequent severe vibrations;
- Safety pollution level: level IV;
- Wind pressure: no more than 700Pa (equivalent to wind speed 35m/s)

Main technical parameters

S/N	Item	Unit	Parameter
1	Rated voltage	kV	12
2	1min power frequency withstand voltage (phase to phase, phase to ground/between contacts)		42/48
3	Lightning impulse withstand voltage (phase to phase, phase to ground/between contacts)		75/85
4	Rated current	A	630, 1250
5	Rated frequency	Hz	50
6	Rated short-circuit breaking current	kA	20, 25
7	Rated short-circuit closing current (peak)		50, 63
8	Rated peak withstand current		50, 63
9	Rated short-time withstand current		20, 25
10	Rated short-time withstand duration	S	4
11	Rated operating cycle		O-0.3s-CO-180s-CO
12	Rated short-circuit current breaking times	Time (s)	30
13	Mechanical life	Time (s)	10000
14	Rated operating voltage of auxiliary circuit	V	DC24

Note: When the altitude of the place where the product is used is higher than 1000m, the insulation withstand voltage should be corrected accordingly.

Structural features

- Reliable sealing performance: It has mature sealing shell technology and IP67 grade of protection. The shell is processed by mold stretching and one-time molding process. It is easy to seal the box, has high air tightness and high mechanical strength;
- Excellent breaking performance: breaking short-circuit current 25kA up to 30 times;
- Flexible installation method: can be mounted on a pole or installed on a seat;
- Maintenance-free features: The circuit breaker's main circuit, secondary components and operating mechanism are all sealed in SF6 gas (zero gauge pressure) and are not affected by the external environment. The performance is stable and reliable, and the maintenance-free incoming and outgoing lines have excellent insulation performance;
- Excellent insulation performance: The incoming and outgoing line bushings are cast using epoxy resin and silicone rubber APG process, with a phase spacing of 280m.
- Optional integrated isolation disconnector;

Precautions for ordering

- Before signing the contract, both the supplier and the buyer should confirm the product technical parameters and technical solutions;
- The scope and quantity of spare parts and auxiliary equipment required by the user should be specified in the technical agreement or supply contract;
- If the user requires the manufacturer to provide technical training or installation services, this should be clearly stated in the contract;
- General tools and materials used for installation and maintenance shall be prepared by the user.