PROFESSIONAL MANUFACTURER OF HIGH AND LOW VOLTAGE PRODUCTS



## **MV Circuit Breaker**

# **ZW8-12** Outdoor Vacuum Circuit Breaker

- c ZW8-12/□ outdoor MV vacuum circuit breaker is mainly used for AC 50Hz, voltage 10~12KV three phase power system, used for breaking and closing the load current. It has overload and short circuit protection function. It can equipped with surge current time delay protector and the lightning arrester or isolating switch namely breaker and isolating switch combination etc. according to user needs.
- c Can be equipped with power electronicsPT for short distance remote control can be equipped with dual power supply automatic switching device Can be equipped with intelligentautomatic recloser can be equipped with prepayment metering automation system
- Standard: IEC 62271-100

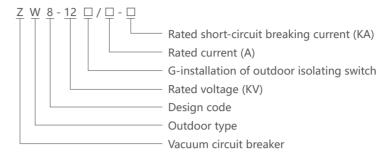
General



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## Selection



## **Operating conditions**

- 1. Ambient temperature: upper limit +40°C, lower limit -30°C;
- 2. Altitude ≤ 2000 meters
- 3. Pressure: not more than 700Pa (corresponding to the wind speed 34m/s);
- 4. Earthquake intensity: do not exceed 8 degree;
- 5. Pollution grade: III class;
- 6. Maximum daily temperature variety less than 25°C.



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#### **Technical data**

Item		Unit	Parameter	
Voltage, current parameters				
Rated voltage		kV	12	
Rated short time power frequency withstand voltage (1min)		kV	42	
Rated lightning impulse withstand voltage (peak)		kV	75	
Rated frequency		Hz	50/60	
Rated current		A	630	1250
Rated short-circuit breaking current		kA	20	
Rated short-time withstand current (RMS)		kA	20	
Rated peak withstand current		kA	50	
Rated short-circuit closing current		kA	50	
Rated single / back-to-back capacitor bank breaking current		А	630/400	
Rated short-circuit current duration		S	4	
Rated short-circuit current breaking times		Times	50	
The main galvanic loop resistance		μΩ	≤120(200 isolation)	
Rated operational voltage			≌220	
Mechanical life		Times	10000	
The overcurrent regulating ☆		A	1~10	
Quick-break current ☆		A	6~20	
The delay time ☆		ms	40~850	
Remote control distance ☆		m	> 30	
Reclose time ☆		Times	0~3	
Rated operating sequence ☆			O-0.3s-CO-180s-CO	
CT *	Ratio	A	□/5	
	Capacity	VA	15	
The output voltage X		A	AC220	
The output capacity ※		W	600	
The overcurrent regulating X		А	1~10	
The delay time X		ms	40~850	
Remote control distance X		m	30	

#### Nlote

### **MV Circuit Breaker**

## **ZW8-12** Outdoor Vacuum Circuit Breaker

#### **Structure characteristic**

#### >>ZW8-12/T type outdoor high voltage vacuum circuit breaker

ZW8-12/T type outdoor high voltage vacuum circuit breaker is ZW8-12 series commom type. ZW8-12/T equipped with spring operating mechanism, with function of break and close the load current, over load current and short circuit current, etc.

Circuit breaker equipped with disconnector can be composed of combined circuit breaker which has obvious fracture (hereinafter referred to as the "combination of circuit breaker"). The isolating switch adopts silicon rubber insulation jacket, the jacket has the characteristics of anti-wind, rain, snow, sand, dirt corrosion, can effectively prevent the isolation switch frozen and oxidation.

The breaker can be equipped with the lightning arrester, the arrester according to user requirements can be installed in the inlet, either outlet side:

The circuit breaker can be equipped with inrush current controller, which can equipped it with eliminate inrush current and over current function;

The circuit breaker can be installed 2~3 pieces of measuring transformer.

#### >>ZW8-12/C type outdoor high voltage vacuum circuit breaker

ZW8-12/C type outdoor high voltage vacuum circuit breaker has all the functions of the basic type circuit breaker, equipped with recloser controller to comprise of recloser intelligent circuit breaker. The basic type and recloser controller equipped is suitable for easy taking power supply occasions. PT and recloser controller equipped is suitable for occasions without power supply. Intelligent circuit breaker is suitable for power supply system of radial power supply and ring power supply system, help system to eliminate the transient fault, automatic recovery of power supply, also can isolate the permanent fault, realize distribution automation. Intelligent circuit breaker with 1~3 Times reclosing function, and parameters can be set;

Intelligent circuit breaker with close inrush current control, over current protection and short circuit fast breaking three composite protection function, and parameters can be continuous tuning;

Intelligent circuit breaker has the function of small current grounding protection, and the parameters can be continuously tuning; Intelligent circuit breaker can realize the wired remote control, also can be wireless remote control under the rod.

#### >>ZW8-12/PT type outdoor high voltage vacuum circuit breaker

ZW8-12/PT type outdoor high voltage vacuum circuit breaker has all the functions of the basic type circuit breaker, this circuit breaker is equipped with voltage transformer. Voltage transformer take power from the high voltage side of the line, according to the need to provide 220V, 110V, 100V voltage for itself or other control device;

The circuit breaker (small hydropower type) can be used to monitor the line voltage, when over-voltage or under voltage, the controller automatically disconnect the circuit breaker, and can be widely used for small hydropower and main grid grid connected branch, realize the automatic isolation of fault and network monitoring;

The circuit breaker (measurement type) can output 0.2 level accuracy voltage, current signal, is the ideal choice for rural substation, outside the station point switch and simple measurement switch.

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#### >>ZW8-12/ electron PT type outdoor high voltage vacuum circuit breaker

ZW8-12/electron PT outdoor high-voltage vacuum circuit breaker has all the functions of the basic circuit breaker. The circuit breaker equipped with electronic PT takes power from CT to charge the battery, and can perform multiple energy storage and opening and closing operations in the case of voltage loss, and can provide working voltage for external equipment; it has strict surge current control, over-current protection and short-circuit quick-break triple composite protection, and the protection parameters can be set by the user; not only can realize wired remote control, but also wireless remote control under the lever.

## **Overall and mounting dimensions (mm)**

Figure 1 ZW8-12/T shape and size of installation

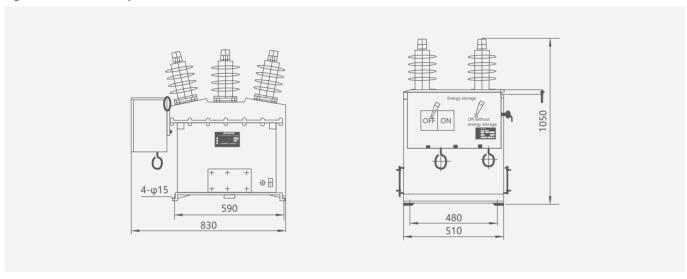
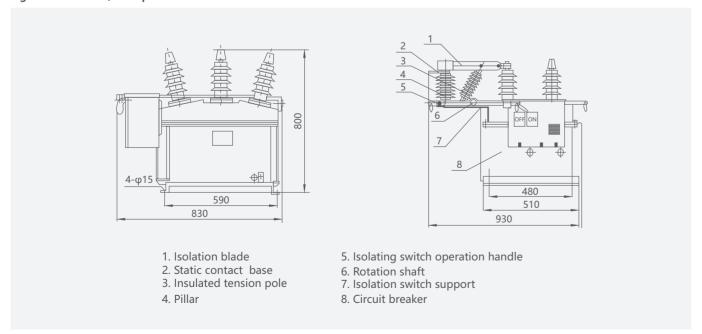


Figure 2 ZW8-12G/T shape and size of installation



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# **ZW8-12** Outdoor Vacuum Circuit Breaker

Figure 3 ZW8-12/C, ZW28-12/PT type shape and size of installation

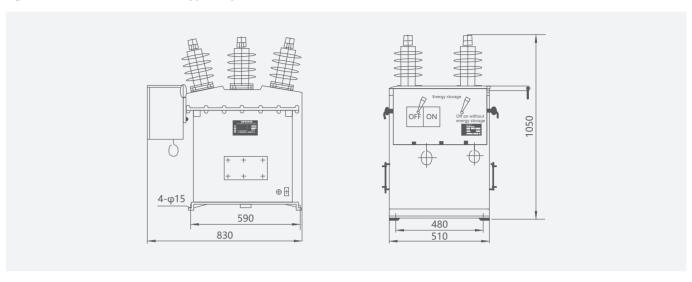
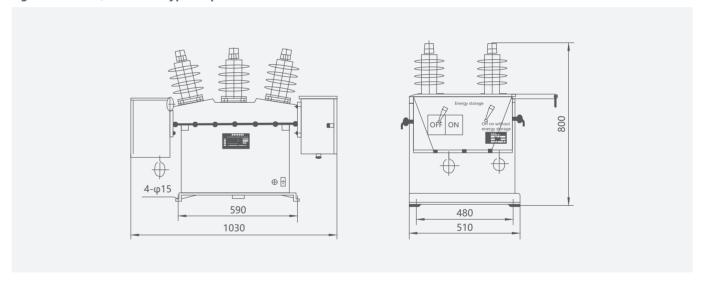


Figure 4 ZW8-12/electric PT type shape and size of installation



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