

## ZW43-12 Outdoor AC Vacuum Circuit Breaker

### Summary

ZW43-12 model outdoor AC vacuum circuit breaker is used to make and break load current, overload current and short-circuit current in 12kV, 50/60Hz power system. It is applicable for substations, industry and mining, urban and rural electricity power networks, especially applicable in occasions with frequent operation and automatic power distribution network. It accords with the standard of IEC62271-100 & GB1984: AC high voltage circuit breaker, IEC60694 & GB/T11022: HV general technical requirement of switch and control apparatus.

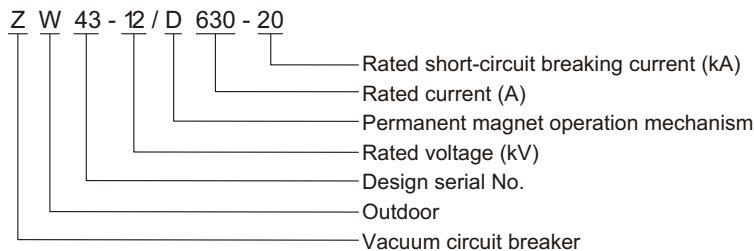


Permanent Magnet(epoxy resin)

### Ambient condition

1. Altitude:  $\leq 2000\text{mm}$ ;
2. Ambient temperature:  $-40^{\circ}\text{C}\sim+45^{\circ}\text{C}$ ;
3. Earthquake intensity:  $\leq 8$  degree;
4. Ice thickness: 10mm;
5. Wind speed:  $\leq 34\text{m/s}$  (air pressure  $\leq 700\text{Pa}$ ).

### Model



### Product feature

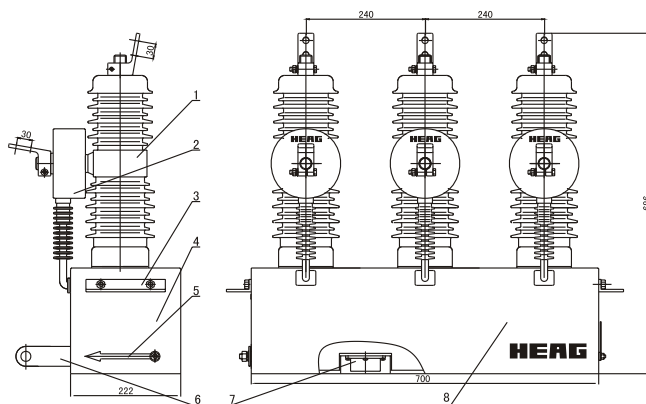
1. Mini vacuum arc extinguish  
High reliability; small volume; long life time; fixed inside the epoxide resin.
2. Epoxide resin sealing  
Anti-ozone, anti-ultraviolet; It is firm, light and convenience for transport.
3. Permanent magnet mechanism  
Small volume, reliable performance, non-maintenance.
4. Manual breaking  
Improve the reliability, It can operate under the urgent condition.
5. Direction tester  
It is mounted on the linkage axial to check the opening and closing direction.
6. Switch case  
Aluminium-alloy material, anti-rust steel and armor plate.

### Mechanical specification

No.	Item	Unit	Data
1	Rated voltage	kV	12
2	Rated frequency	Hz	50/60
3	Rated current	A	630
4	Rated short-circuit breaking current	kA	20
5	Rated peak withstand current(peak)	kA	50

No.	Item	Unit	Data
6	4s rated short-time withstand current	kA	20
7	Rated short-circuit making current (peak)	kA	50
8	Mechanical duration	Times	30000
9	Breaking time of rated short-circuit breaking current	Times	30
10	1min P.F withstand voltage-dry(phase to phase, to earth; across open contacts)	kV	42/49
11	1min P.F withstand voltage-wet	kV	34
12	Lightning impulse withstand voltage peak(phase to phase, to earth; across open contacts)	kV	75/85
13	Net weight	kg	70
14	Abrasions thickness of contacts	mm	3

## Product structure



1. Solidly sealed poles
2. Current transformer
3. Lift mounting board
4. Enclosure
5. On/off indicator
6. Handle
7. Aerial socket
8. Permanent magnet mechanism(inside enclosure)



Silicon rubber(stainless-steel)



Combined apparatus with disconnect switch

### Basic equipments:

1. Current transformer protection poles 2 pieces.
2. Permanent magnet operation power supply.

### Optional equipments:

1. Current transformer, metering and protection poles 2 pieces for each,75/5.
2. Outer voltage transformer 2 pieces(for control power supply and metering).
3. Reclosing controller and series FTU and RTU.
4. Disconnect blade.