

## ZW27-12 Outdoor Vacuum Circuit Breaker

### Summary

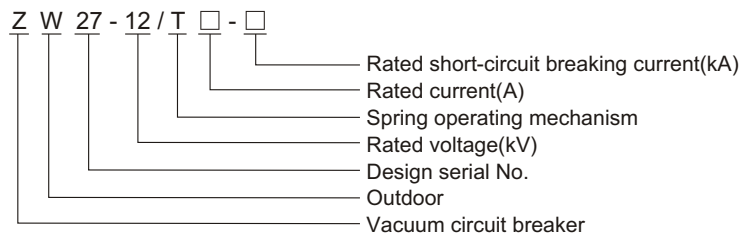
ZW27-12 model outdoor AC vacuum circuit breaker is used to make and break load current, overbad current and short-circuit current in 12kV, 50/60Hz power system. It is applicable for substations, industry and mining, urban and rural electricity power networks, especially for occasions with frequent operation and automatic power distribution network. It accords with the standards of IEC62271-100 & GB1984: AC high voltage circuit breaker, IEC60694 & GB/T11022: HV General technical requirement of switch and control apparatus.



### Ambient condition

1. Altitude:  $\leq 1000\text{m}$ ;
2. Ambient temperature:  $-25^{\circ}\text{C} \sim +40^{\circ}\text{C}$ ;
3. Relative humidity: monthly average  $\leq 90\%$ , daily average  $\leq 95\%$ ;
4. Earthquake intensity: 8 degree.

### Model



### Product feature

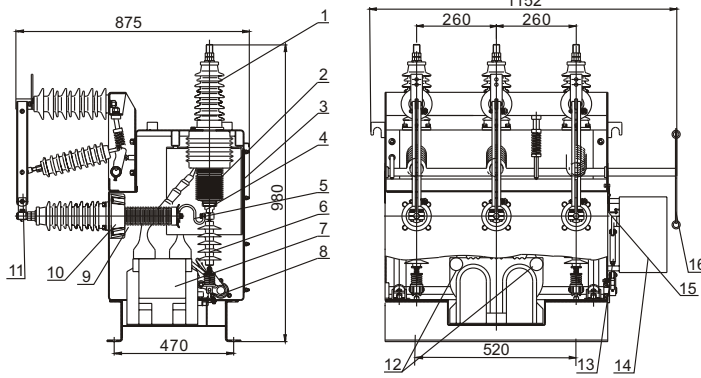
1. Vacuum arc extinguish.
2. Air-silicon rubber, plastic composite insulate.
3. CT can be matched inside the switch to supply power and voltage sampling.
4. Distribution interface can be remained in advance.

### Technical specification

No .	Item	Unit	Data
1	Rated voltage	kV	12
2	1min P.F withstand voltage-dry	kV	42/48
3	1min P.F withstand voltage-wet(phase to earth, outer insulate)	kV	34
4	Lightning impulse withstand voltage peak	kV	75/85
5	Rated current	A	630/1250
6	Rated power frequency	Hz	50/60
7	Rated short-circuit breaking current	kA	12.5,16,20,25
8	Rated operating sequence		O-0.3s-CO-180s-CO
9	Rated short-circuit breaking time	Times	30
10	Rated short-circuit making current (peak)	kA	31.5,40,50,63
11	Rated withstand current (peak)	kA	31.5,40,50,63
12	Rated short-time withstand current	kA	12.5,16,20,25
13	Rated short-circuit duration	s	4
14	Mechanical life	Times	10000

Note: the insulating level should rectify accordingly when the altitude higher than 1000 m.  
(This product had passed the test under altitude 4500m)

## Product feature



1. Insulating bushing combined apparatus
2. Vacuum arc-extinguish chamber
3. Case
4. Electric nip
5. Flexible connection
6. Insulate bar
7. PT
8. Rotating axis
9. Incoming bushing
10. CT
11. Disconnect switch
12. PT primary fuse
13. Driving mechanism
14. Operating mechanism
15. Linkage mechanism
16. Disconnect operating handle



Silicon rubber bushing



Combined apparatus



Porcelain bushing



Outer PT, inner CT

### Basic equipments:

1. Current transformer protection poles 2 pieces, surge arrester device.
2. Motor spring mechanism AC220V.
3. Outer insulate: porcelain.

### Optional equipments:

1. Current transformer, metering and protection poles 3 pieces for each, 75/5 or higher.
2. 50/5 or lower current transformer 2 pieces, outer PT.
3. Inner voltage transformer 2 pieces (for control power supply and metering).
4. Motor spring mechanism AC/DC220/110/48/24V.
5. Reclosing controller and series FTU and RTU.
6. Disconnect blade.