

## ZW20A-12/17.5/24 Outdoor AC Vacuum Circuit Breaker

### Summary

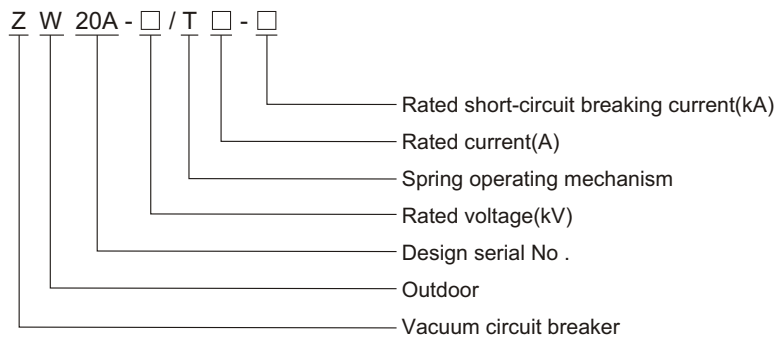
ZW20A-12/17.5/24 model outdoor AC vacuum circuit breaker is used to make and break load current, overload current and short-circuit current in 12/17.5/24kV, 50/60Hz power system. It is applicable for substations, industry and mining, urban and rural electricity power networks, especially applicable in occasions with frequent operation and automatic power distribution network. It accords with the 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:  $-40^{\circ}\text{C} \sim +40^{\circ}\text{C}$ ;
3. Wind speed:  $\leq 34\text{m/s}$ ;
4. Applicable occasions should be free from inflammables, explosives, corrosives.

### Model



### Product feature

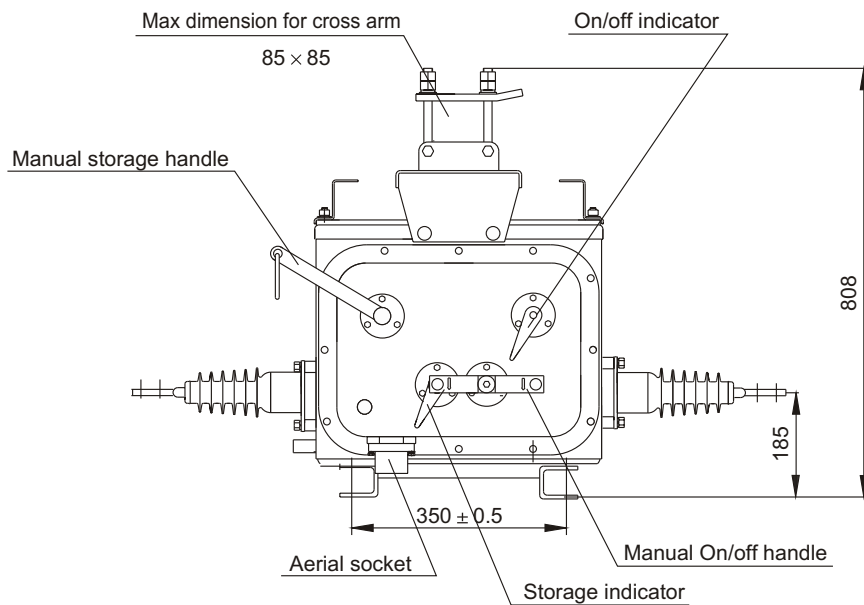
1. Ideal apparatus in urban and rural electricity network reform  
Remote function: remote control, remote metering, remote communication and remote adjustment.
2. Flexible operating  
Both power storage and CO operation are motor and manual operated, remote and local operation are both available.
3. Excellent breaking capability  
Break short-circuit current up to 25kA.
4. Small operation power and high dependability  
The small motor-driving spring operation mechanism with new design is of lowest operation power (about 30W).
5. Multiple installation  
Pole mounted and pad mounted.
6. Reliable sealing  
The mature sealing technology assures reliable sealing performance.
7. Particular incoming and outgoing method  
Silicon rubber bushing to make enough insulate distance.
8. Safe operation  
Anti-explosive device mounted on the top of box prevents heated gas and matters from spattering out when inner fault occurs.

## Technical specification

No.	Item	Unit	Data
1	Rated voltage	kV	12/17.5/24
2	Rated power frequency	Hz	50, 60
3	Rated current	A	630, 800, 1000
4	Rated short-circuit breaking current	kA	12.5, 16, 20, 25
5	Rated withstand current(peak)	kA	31.5, 40, 50, 63
6	Rated short-time withstand current(4s)	kA	12.5, 16, 20, 25
7	Rated short-circuit making current(peak)	kA	31.5, 40, 50, 63
8	Mechanical life	Times	10000
9	Rated short-circuit breaking time	Times	30
10	1min P.F withstand voltage-dry(phase to phase, to earth; across open contacts)	kV	42/49, 42/48, 60
11	Lightning impulse withstand voltage peak(phase to phase, to earth; across open contacts)	kV	75/85, 95/110, 125/145
12	P.F withstand voltage for secondary loop	kV	2
13	Net weight	kg	140, 180
14	SF6 rated gage pressure	Mpa	"0"

Note: the insulation level should be rectified accordingly when the altitude is higher than 1000 m.

## Product structure



### Basic equipments:

1. Current transformer protection poles 2 pieces.
2. Spring mechanism AC220V.
3. Surge arrester device.

### Optional equipments:

1. Current transformer, metering poles 3 pieces 200/5 or higher.
2. Outer voltage transformer 2 pieces (for control power supply and metering).
3. Motor spring mechanism AC/DC220/110/48/24V.
4. Reclosing controller and series FTU and RTU.

