

ZW37-40.5 Outdoor Vacuum Circuit Breaker Auto-recloser

Summary

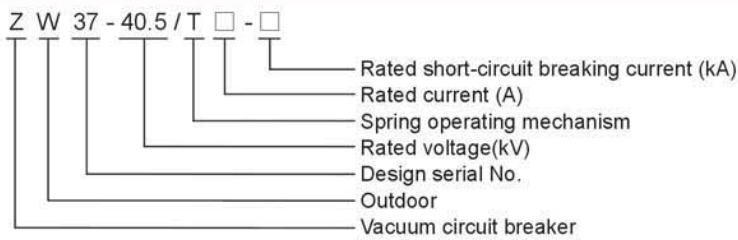
ZW37-40.5 model outdoor vacuum circuit breaker is high voltage switch of rated voltage 40.5kV and three-phase. It applies to make and break load current, overload current and short-circuit current in power system. The applicable occasions includes substations, industry and mining, urban and rural electricity power networks, functioning as electric protection and control apparatus; it is especially applicable in occasions with frequent operation and automatic power distribution network. This product have qualified in type test executed in Beijing electric power research institute and conforms with related IEC 62271-100 standards.



Ambient condition

1. Altitude: $\leq 1000\text{mm}$;
2. Ambient temperature: $-35^{\circ}\text{C}\sim+40^{\circ}\text{C}$;
3. Wind speed: $\leq 34\text{m/s}$;
4. Earthquake intensity: 8 degree;
5. Relative humidity: monthly average $\leq 90\%$, daily average $\leq 95\%$;
6. Ice thickness: 20mm;
7. Ambient pollution: IV;
8. Applicable occasions should free from inflammables, explosives, corrosives and severe vibrations.

Model



Product feature

1. General structure: The epoxy bushing supporting porcelain insulator is consists of epoxy bushing, vacuum arc extinguish chamber, supporting porcelain insulator, insulating bar and connecting bar, three supporting porcelain insulators are mounted on the same mechanism-box. The moving terminal of arc extinguish chamber are linked with output shaft by insulating bar.
2. The enclosure of vacuum arc extinguish chamber is epoxy resin, sealed by foreign advanced technology. Anti-moist, anti-ageing, withstand high temperature in outdoor, free charging oil and gas.
3. Convenience for adjustment and maintenance, the moving terminal of arc extinguish chamber are linked with output shaft by insulating bar.
4. The mechanism and connection rod are mounted in a waterproof box, a heater can be used to avoid damp.
5. Current transformer can be chosen by customer.
6. New structure, small volume, light weight(whole weight:700kg)
7. It can be used in automatic distribution network and self-service substation by assembling control terminal interface.

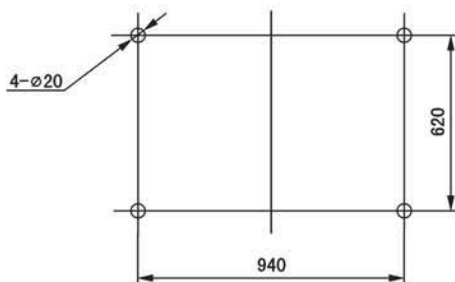
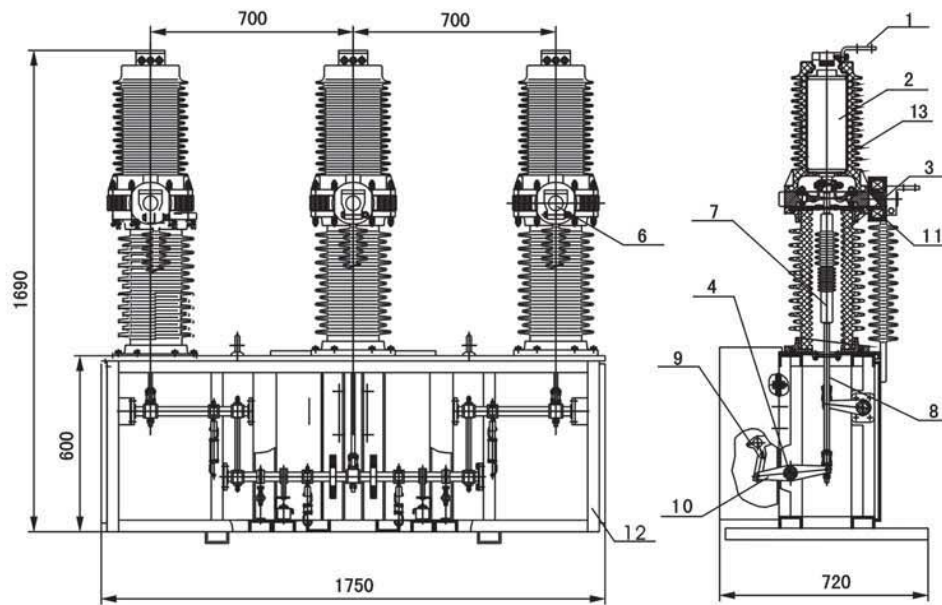
Technical specification

No.	Item	Unit	Data
1	Rated voltage	kV	40.5
2	Rated current	A	630. 1250. 1600. 2000
3	Rated short-circuit breaking current	kA	20 25 31.5
4	Rated short-circuit making current	kA	50 63 80
5	Rated short-time withstand current	kA	20 25 31.5
6	Rated peak withstand current	kA	50 63 80
7	Rated short-circuit duration current	s	4
8	Rated insulate level	kV	1min P.F withstand voltage
	Lightning impulse withstand voltage(peak)		95
			185/215

No.	Item	Unit	Data
9	Rated operate sequence		O-0.3s-CO-180s-CO
10	Rated short-circuit breaking current breaking times	Times	20
11	Mechanical life	Times	10000
12	Rated operation voltage	V	220(DC,AC)

Note: the insulating level should rectify accordingly when the altitude higher than 1000 m.

Product structure



ZW37-40.5 Outline dimension and installation drawing

- 1. Outgoing copper bar
- 2. Vacuum arc-extinguish chamber
- 3. Post insulator
- 4. Main shaft
- 5. Open spring
- 6. Bottom outgoing pad
- 7. Insulate bar
- 8. Long draw bar
- 9. Operation mechanism
- 10. Crutch arm
- 11. Rogowski coil
- 12. Frame
- 13. Solid sealed-in pole

Basic equipments:

- 1. Motor spring operating mechanism DC220V.

Optional equipments:

- 1. Inner and outer current transformer, metering protection poles 2-6 pieces for each, 50-2000/5.
- 2. Outer voltage transformer 1-2 pieces.
- 3. Reclosing controller and series FTU and RTU.

