# HEAG ® 华仪

## **ZWSP-12/17.5/24 Outdoor Single Phase Vacuum Circuit Breaker**

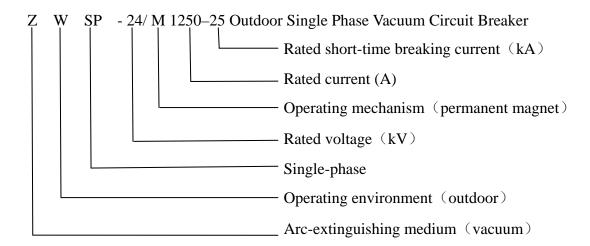
## Summary

ZWSP-12/17.5/24 outdoor single phase vacuum circuit breaker is outdoor HV switch with rated voltage of 12/17.5/24kV and 50Hz/60Hz single phase AC. It consists of circuit breaker body and permanent magnetic mechanism controller, mainly used for making and breaking the load current and short-circuit current of the power system. Apply to substation, 24kV power distribution network power system and the site with severe polluted and frequent operation, especially suitable for the predominantly single-phase power supply circuit.

### **Ambient Condition**

- 1 Environmental air temperature:  $-40^{\circ}\text{C} \sim +40^{\circ}\text{C}$ ;
- 2 Ambient humidity: monthly mean relative humidity  $\leq$  90%, daily mean relative humidity  $\leq$  95%;
- 3 Wind pressure not exceeding 700Pa (wind speed =34m/s);
- 4 Altitude  $\leq 1000$ m;
- 5 The earthquake intensity is not exceeding 8 degree.
- 6 Installation site: without fire risk, explosion hazard, heavy pollution, chemical corrosion and violent vibration;

#### Model





### **Technical Parameters**

No	Item			Unit	Data
1	Rated voltage				12/17.5/24
2	Rated insulation	1min P.F. Withstand	Dry test (phase to phase, phase to ground/ fracture)	kV	65/79
	level		impulse withstand voltage phase, phase to ground/		125/145
3	Rated current			A	1250
4	Rated frequency			Hz	50
5	Rated short circuit breaking current				25
6	Rated withstand current (peak)				63
7	Rated short-time withstand current			kA	25
8	Rated short circuit making current (peak)				63
9	Rated short-time withstand time			S	4
10	Rated operating seq.				O-0.3s-CO-180s-CO
11	Time of rated short circuit breaking current			time	30
12	Mechanical life			time	30000
13	Rated Operating voltage			V	220

#### Main Feature

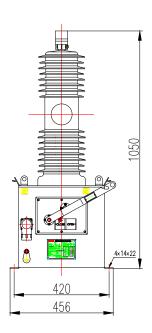
- 1. The product adopts single-phase structure, vacuum arcing chamber through the insulating rod connected to the operating mechanism, performance stable and reliable;
- 2. The components like vacuum arcing chamber and main electric circuit and the insulation support are pouring into an organic whole by APG process with epoxy resin, and adopt the silicone rubber coating, it has good anti- condensation property and mechanical strength;
- 3. Adopt high-performance bistable permanent magnetic operating mechanism, with simple structure, mechanical and long electrical life;
- 4. Ontology chassis using 3 mm thick high quality stainless steel plate, with high strength, strong corrosion resistance;
- 5. The intelligent permanent magnetic has control functions of quick-break protection, over-current protection, reclosing protection, equipped with RS485 / RS232 communication interface, and can realize optical fiber and wireless remote monitoring and fault information transmission.
- 5. The product can be equipped with a variety change than current transformer with different ratio flexibly, used for protection, measurement and metering.

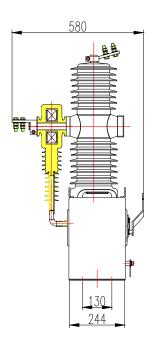
Through the voltage transformer or solar panels to supply operation power for circuit breaker; Small volume, light weight, simply and reliably, new structure.

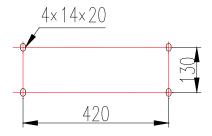
6. Match control terminal interface, used in distribution network automation and unattended

substation.

# Outline Drawing







Mounting Dimension of CB