

ZW7-40.5 Series

Outdoor High Voltage Vacuum Circuit Breaker (Recloser)

ZW7-40.5 outdoor HV vacuum circuit breaker is a 3-phase AC 50Hz 40.5kV outdoor switch equipment.

- ◆ Installation way: foundation installation;
- ◆ Operating mechanism: spring operating mechanism and electromagnetic operating mechanism;
- ◆ Pole material: silicone rubber, ceramic;
- ◆ Application: outdoor 33kV substation, power plant.
- ◆ Current transformer: internal installation, external installation.



※ Product Standards

- ◆ IEC62271-100 High Voltage Switchgear and Controlgear Part 100: AC Circuit-breakers
- ◆ GB1984 High Voltage AC Circuit-breakers
- ◆ GB/T11022 Common Specifications for High-voltage Switchgear and Controlgear Standards
- ◆ JB/T 3855 High Voltage AC Vacuum Circuit-breakers
- ◆ DL/T402 Specification of High-voltage AC Circuit-breakers

※ Environmental Conditions

- ◆ Ambient temperature: $-40^{\circ}\text{C}\sim+40^{\circ}\text{C}$;
- ◆ Altitude: $\leq 1000\text{m}$;
- ◆ Maximum wind speed is 10km/h , minimum wind speed for the rated level (132/230kv) is 3.2km/h ;
- ◆ Earthquake intensity: ≤ 8 level;
- ◆ Minimum nominal creepage distance: 31mm/kV ;
- ◆ Air pollution degree: Class IV.

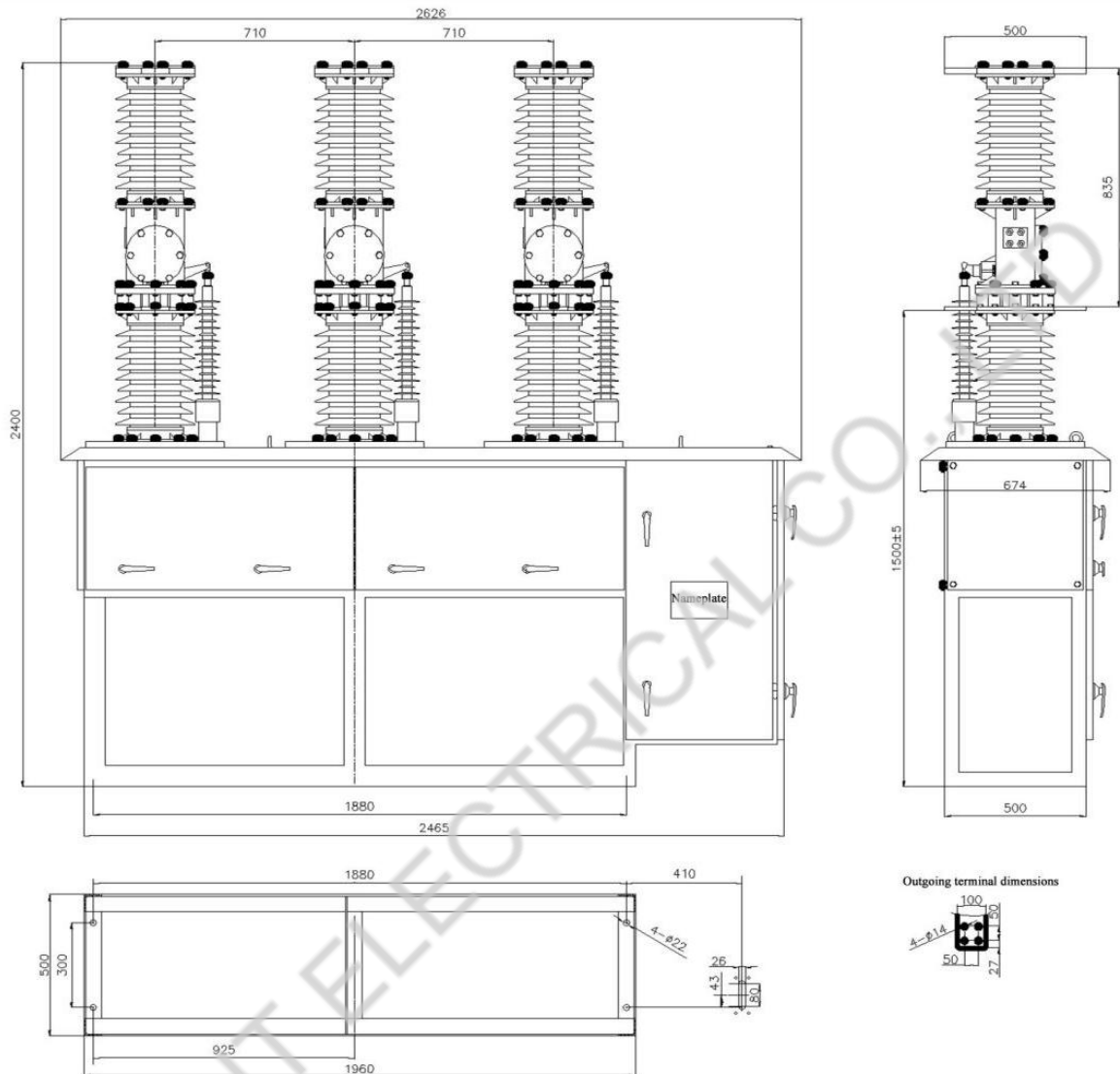
※ Main Technical Parameters

No	Item	Unit	Value
1	Rated voltage	kV	40.5
2	Rated insulation level	1min power frequency Dry test (fracture, inter-phase, to earth) Wet test (to earth, external insulation)	95
			85
			Lightning impulse withstand voltage (peak) 185
3	Rated current	A	1250, 1600, 2000, 2500
4	Rated short circuit breaking current	kA	20, 25, 31.5

No	Item		Unit	Value
5	Rated short circuit making current (peak)		kA	50, 63, 80
6	Rated peak withstand current		kA	50, 63, 80
7	Rated short time withstand current		kA	20, 25, 31.5
8	Rated operating sequence			O-0.3S-CO-1 80S-CO
9	Rated short circuit breaking current breaking number		times	20
10	Rated short circuit duration		s	4
11	Breaking time		s	≤0.09
12	Mechanical life		times	10000
13	Vacuum	Newly manufactured interrupter	Pa	≤1.33x10 ⁻³
	interrupter	During 20-year storage time		<6.6x10 ⁻²
14	Circuit breaker net weight		kg	800
15	Clearance between open contacts		mm	22±2
16	Contact travel		mm	4±1
17	Average opening speed		m/s	1.4~1.7
18	Average closing speed		m/s	0.4~0.7
19	Contact closing bounce time		ms	≤3
20	Inter-phase opening and closing synchronism		ms	≤2
21	Closing time		ms	50≤t≤200
22	Opening time		ms	30≤t≤60
23	Each phase main circuit DC resistance (not include CT internal resistance)		μΩ	≤100
24	Dynamic and fixed contact cumulative thickness allowed to wear		mm	3
25	Rated contact pressure		N	2500±200

※ General Structure Drawing and Installation Size (unit: mm)

◆ Side-mechanism type



◆ Mid-mechanism type

