

VS1-24 Plateau Type Indoor High-voltage Vacuum Circuit Breaker



Mostly purpose

VS1-24 indoor high-voltage vacuum circuit breaker is an AC three-phase 50HZ indoor high-voltage switching equipment with rated voltage of 24KV, mainly applied for protection and control in power distribution system of power plant, electric substation and industrial and mining enterprise, It is especially applied for breaking of important load and place requiring frequent operation.

The manufacture of circuit breaker complies with GB1984-2003 "AC High-Voltage Circuit Breaker", JB3855-1966 "Technical Conditions for Ordering 3.6-40.5KV Indoor Vacuum Circuit Breaker" of national standard and relative IEC standards. It Has reliable interlocking function.

The operating mechanism of circuit breaker is spring energy storage type, which is either available for AC/DC energy storage operation or manual operation.

The circuit breaker can also be equipped with permanent magnetic operating mechanism of long service life, its mechanical life can get to 100000 times, which is suitable for place with extremely frequent operation.

The assembled structure design makes the circuit breaker can not only be used as a fixed unit but also as mid-cabinet unit when it is equipped with chassis.

Normal working environment

1. Altitude: $\leq 2000\text{m}$, It should be custom-made for $>2000\text{m}$.
2. Ambient temperature: Max. $+40\text{ }^{\circ}\text{C}$, Min. $-25\text{ }^{\circ}\text{C}$
3. Relative Humidity: Daily average value should be less than 95%, monthly average value should be less than 90%
4. The earthquake intensity: less than 8 degree.
5. The place where it is used is free from fire, explosion, chemical corrosion and intense vibration.

Technic Parameter

Item	Unit	Parameter
Rated voltage	KV	24
Nominal Frequency	HZ	50
Nominal Current	A	630 1250 1600
Rated short circuit breaking current	KA	20 25 31.5
Switch Current of Nominal short-circuit (peak value)	KA	50 63 80
Substantial time of Nominal short-circuit	S	4
Breaking current frequency under rated short circuit	次	20
Rated operating sequence		0-0.3s-CO-180s-CO
Nominal Durable Voltage for Thunder and Lightning Impact (fracture)	KV	125
1min Rated power frequency with-stand voltage (fracture)	KV	65
Switch-on time	ms	≤ 100
Switch-off time	ms	≤ 50
Mechanical life	次	20000
Rated energy storage and opening voltage	V	$\cong 220/110$
breaking time	ms	≤ 65
energy storage time	s	≤ 10

Mechanical characteristic adjustment parameter

Item	Unit	Parameter
Contact opening	mm	15 ± 1
Contact Overtravel	mm	3.5 ± 0.5
Switch off speed	m/s	0.9-1.2
Switch on speed	m/s	0.5-0.8
Contact closing bounce time	ms	≤ 2
rated contact pressure	N	20KA($2000 \leq 200$) 25KA(2400 ± 200) 31.4KA(3100 ± 200)
Three-phase switching on or off non-synchronicity	ms	≤ 2

Externality & Build in Dimension

