



# VS1/C-12 Series Indoor High Voltage Vacuum Circuit Breaker With Lateral Operating Mechanism

### **General Description**

VS1/C-12 type Side installation indoor high voltage vacuum circuit breaker used spring to storage energy. The operating mechanism can be operated by two ways: by manual and electromotive operation. The characteristics is according with GB1984-2003 High Voltage AC Circuit Breaker, JB3855-1996 3.6-4.5KV Indoor AC High Voltage AC Circuit Breaker and IEC standard 62271-100:2001 High Voltage AC Circuit Breaker.

### Applying ambient conditions

- 1.Ambient temperature: -25℃ ~+40℃; 2.Relative humidity: the average humidity of a day should be no more than 95%; the average humidity of a month should be no more than 90%;
- 3.Saturated vapor pressure: the average pressure of a day should be no more than 2. 2kPa, the average humidity of a month should be no more than 1.8kPa;
  4.Earthquake intensity: not exceed 8 degrees;
  5.Height above sea level: ≤1000m(not including special requirements);

- 6.Environmental conditions: It should be used in the places without fire, explosion, serious filth, chemical erosion and violent VSLration.

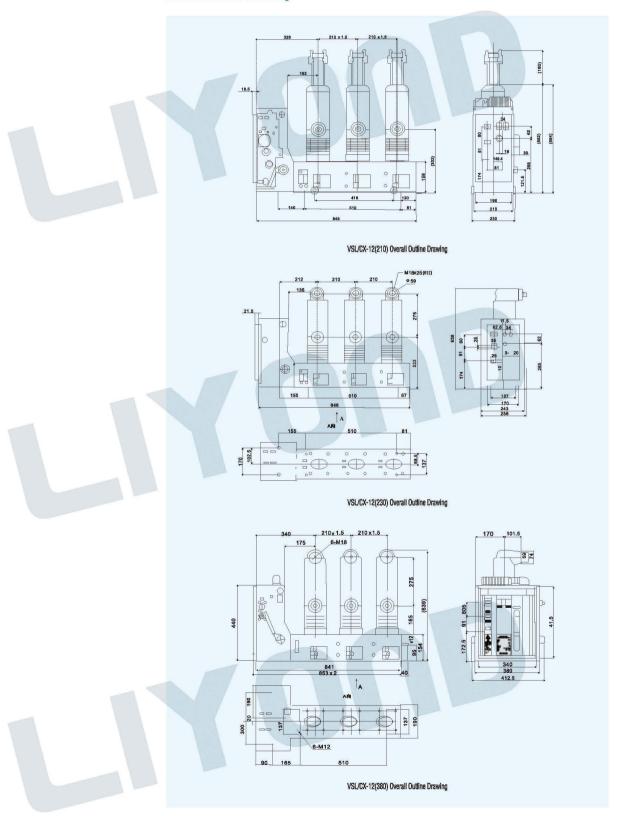
#### Typical wiring diagram of the second principle

S.N	٧	Name		Unit	Data	
1	M	Rated voltage		kV	12	
2		Rated frequency		HZ	50/60	
		1 min power frequency withstand voltage Rated insulation level		KV	42	
3		Rated Lightning Impulse voltage tolerance	KV	75		
4		Rated current		Α	630	1250
					20	20
5		Rated short circuit breaking current		KA	25	25
						31.5
					50	50
6	Rated short-circuit making current (peak)		KA	63	60	
						80
7		Rated heat-stable time		S	4	
8		Rated operating sequence			0-0.3s-C0-180s-C0	
9		Mech	Cycle	30000		



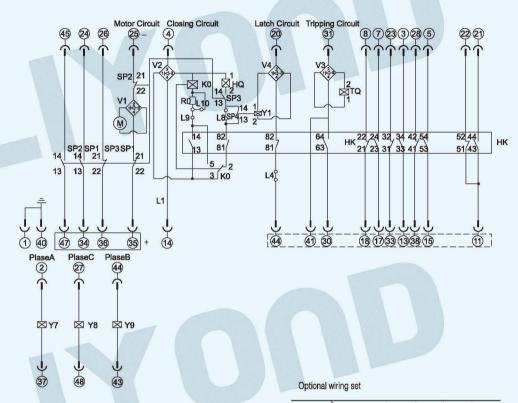


## **Overall Outline Drawing**





### Typical secondary wiring diagram for fixed type vacuum circuit breaker



- Note:

  1. "f" means disconnect; "v" means connect.

  2. Switchgear status: off, without energy storage; the truck is in the scale.
- 3. When the operation source is D.C, the polarity within dashed box is equivalent.
- 4. When the user choose 46 air pug, 47 wire size should be changed to 32, 48 to 42, 49 to 10.

SP5:: limit switch SP1~SP4: micro switch (used to switch the energy storage spring) HK: auxiliary switch (used to switch the operation of closing and

v1-v4: bridge rectifier (canceled when it's DC)
Y1: closing coil (optional)
KO: anti-jump relay (optional)

Y7~Y8: indirect over current trip (optional)

L1~L11: wire jumper HQ: closing coil TQ: tripping coil M: storage motor

Configur		a-b L1	d-c L4	i-j L6	I-k L9
With	With interlock	√	√	√	√
anti- jump	No interlock	1	1	1	1
No anti-	With interlock	1	1	1	√
jump	No interlock	1	1	1	1

#### Operating power source

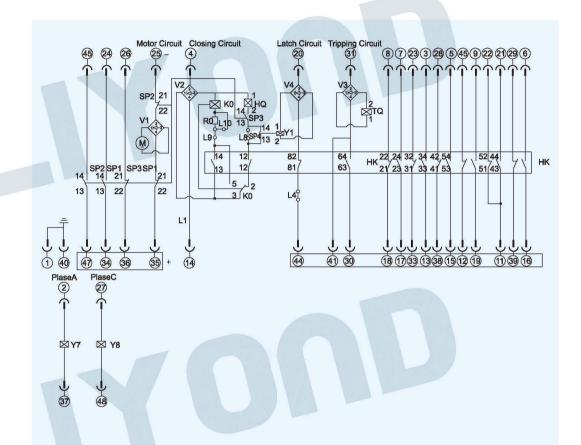
Operatingpower Source Jumper	1-m L10
AC/DC220V	1
AC/DC110V	1

VSL/C (210) Vacuum Circuit Breaker Internal Secondary Wiring Schematic Diagram





### Typical secondary wiring diagram for fixed type vacuum circuit breaker



- 1. Switchgear status: off, without energy storage; the truck is in
- 1. Switchgoal scales on, without energy stolage, are access in test position.
  2. When the operation source is D.C, the polarity within dashed box is equivalent.
  3. When the user choose 46 air pug, 47 wire size should be
- changed to 32, 48 to 42, 49 to 10.

SP5:: limit switch SP1~SP4: micro switch (used to switch the energy storage spring) HK: auxiliary switch (used to switch the operation of closing and

opening)
V1--V4 : bridge rectifier (canceled when it's DC)
Y1 : closing coil (optional)

KO: anti-jump relay (optional)

Y7~Y8: indirect over current trip (optional) L1~L11: wire jumper

HQ: closing coil TQ: tripping coil
M: storage motor

#### Optional wiring set

Configuration Jumper	Jumper status	A9-A10	
With anti-	With interlock	1	
jump	No interlock	√	
No anti- jump	Disconnect HK13、HK14		

#### Operating power source

Operatingpower Source Jumper	1-m L10
AC/DC220V	1
AC/DC110V	٧

Lateral Type Vacuum Circuit Breaker Internal Secondary Wiring Schematic Diagram