

# ***VSC Series Lateral VCB***

*---Similar as ABB VD4*

*---Alstom, Areva.....*



## ***Indoor Vacuum Circuit Breaker***

**12kV, 17.5kV, 24kV available to 36kV**

## ***Technical Manual***

***Rockwill Electric Co., Ltd.***

## ++++General

VSC medium-voltage indoor vacuum circuit breaker is applicable for three-phase AC power system of rated voltage up to 7.2kV~24kV and frequency 50/60HZ, widely used in many fields such as power plant, transformer substation, petrol chemical industry, metallurgy, manufacturing industry, airport, residential area, etc., to control and protect the electric equipment, especially, It is used for the occasion that needs infrequent operation at rated current or multi-breaking short circuit current, may be mounted in the indoor air insulating switchgear like type KYN28 or KYN96, ABB type ZS series, etc. This circuit breaker is standards as GB1984-2003 AC high voltage circuit breaker, JB3855 3.6-40.5Kv indoor AC High voltage circuit breaker, DL/T403 Specification of 12-40.5Kv indoor High voltage vacuum circuit breaker for order as well as IEC60694.

This circuit breaker is made with mature APG technology. The application of VSC terminal buffer guarantees the indoor terminal is ever more reliable in nay operation environment. VSC can fully meet the requirement of GB, DL, IEC, DIN, VDE as well as standards of other advanced industrial countries.

## ++++Service environment

- a) Air temperature: Maximum temperature: +40℃; Minimum temperature:-25℃
- b) Humidity: Monthly average humidity 95%; Daily average humidity 90% .
- c) Altitude above sea level: Maximum installation altitude: 2500m
- d) Ambient air not apparently polluted by corrosive and flammable gas, vapor etc.
- e) No frequent violent shake

## ++++ Main technical specifications

No	Item		Unit	Parameter	
1	Rated voltage		kV	12	24
2	Rated frequency		Hz	50/60	
3	Rated current		A	630/800/1250/1600	
4	1min Power frequency withstand voltage	wet	kV	38	50
		dry	kV	48	60
5	Lightning impulse withstand voltage		kV	75	125/150
6	Rated short circuit breaking current (peak)		kA	63/80/100	
7	Rated active load and close circuit breaking current		A	63	50
8	Rated short breaking current		kA	20/25/31.5kA	
9	Rated short circuit making current (peak)		kA	63/80/100	
10	Rated cable(line) charging breaking current		A	50 and 10	
11	Cable charge breaking current in earthing fault		A	20	20
12	Rated withstand current (peak)		kA	63/80/100	
13	Short time withstand current (4s)		kA	31.5	
14	Mechanism life		times	10000	

**Note:** For short circuit breaking current & rated current is optional by clients.

## ++++Field for application



*Lateral type Indoor VSC*



*For XGN series Metal clad switchgear*

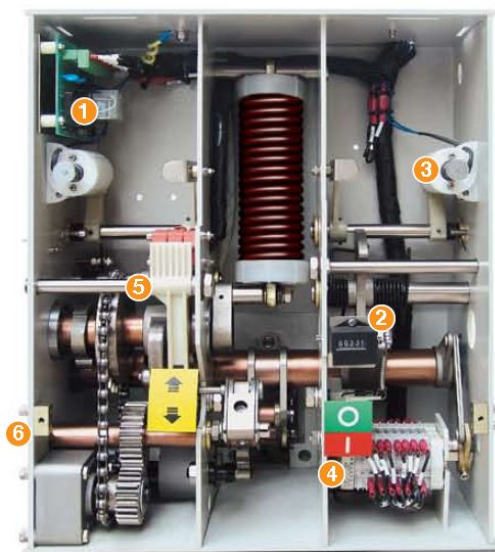


*For Ring main units*



*Outdoor transformer substation box*

## ++++Structure & characteristic

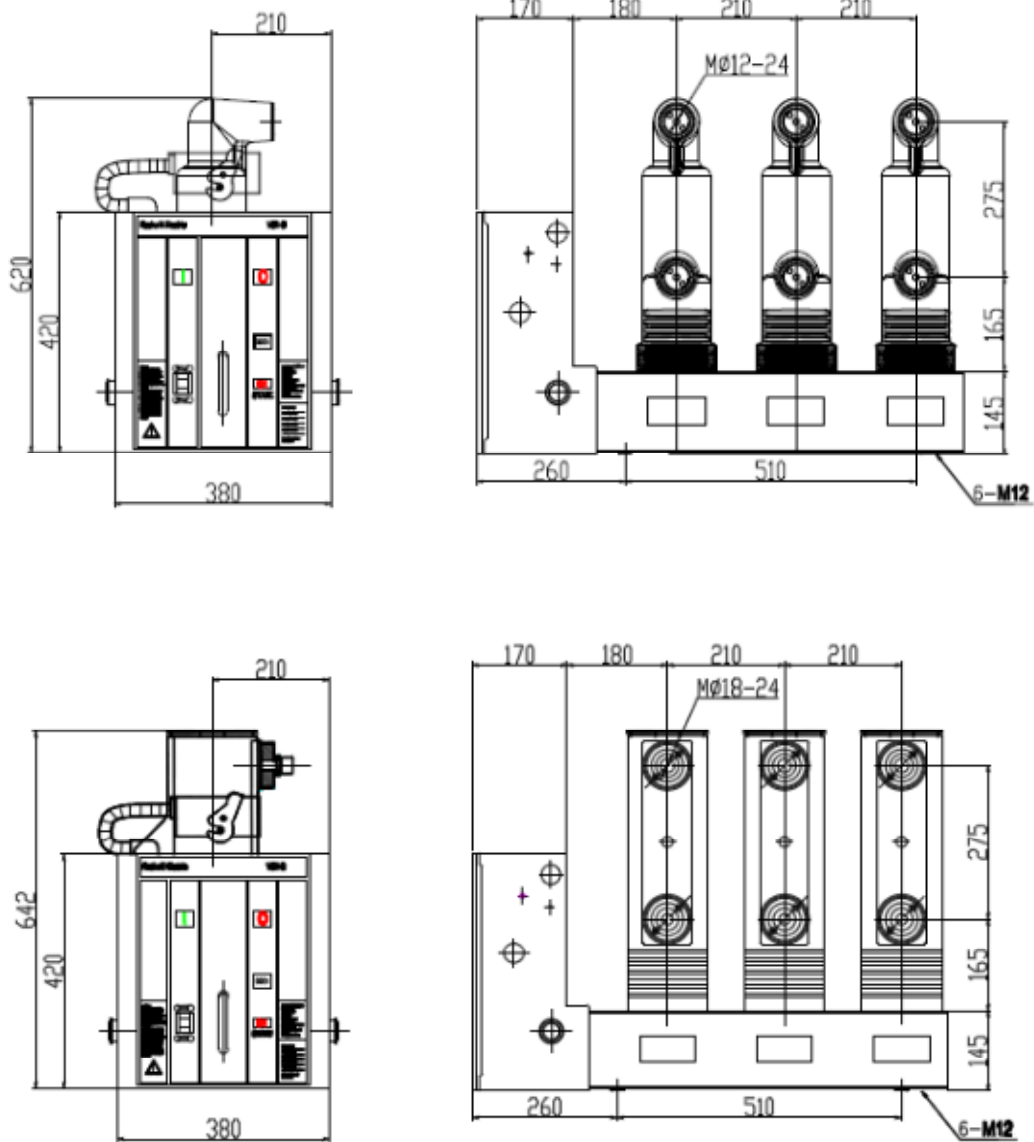


- 1) Wiring board for income line secondary
- 2) Counter
- 3) Closing coil
- 4) Auxiliary switch 8NO,8NC is optional
- 5) Charging chain
- 6) Motor

*Simple, reliable, High endurance spring mechanism.*

## ++++Installation sizes& outline dimensions

\*\*\* 12kV, 17.5kV Indoor Vacuum Circuit Breaker (Lateral Fixed Type)

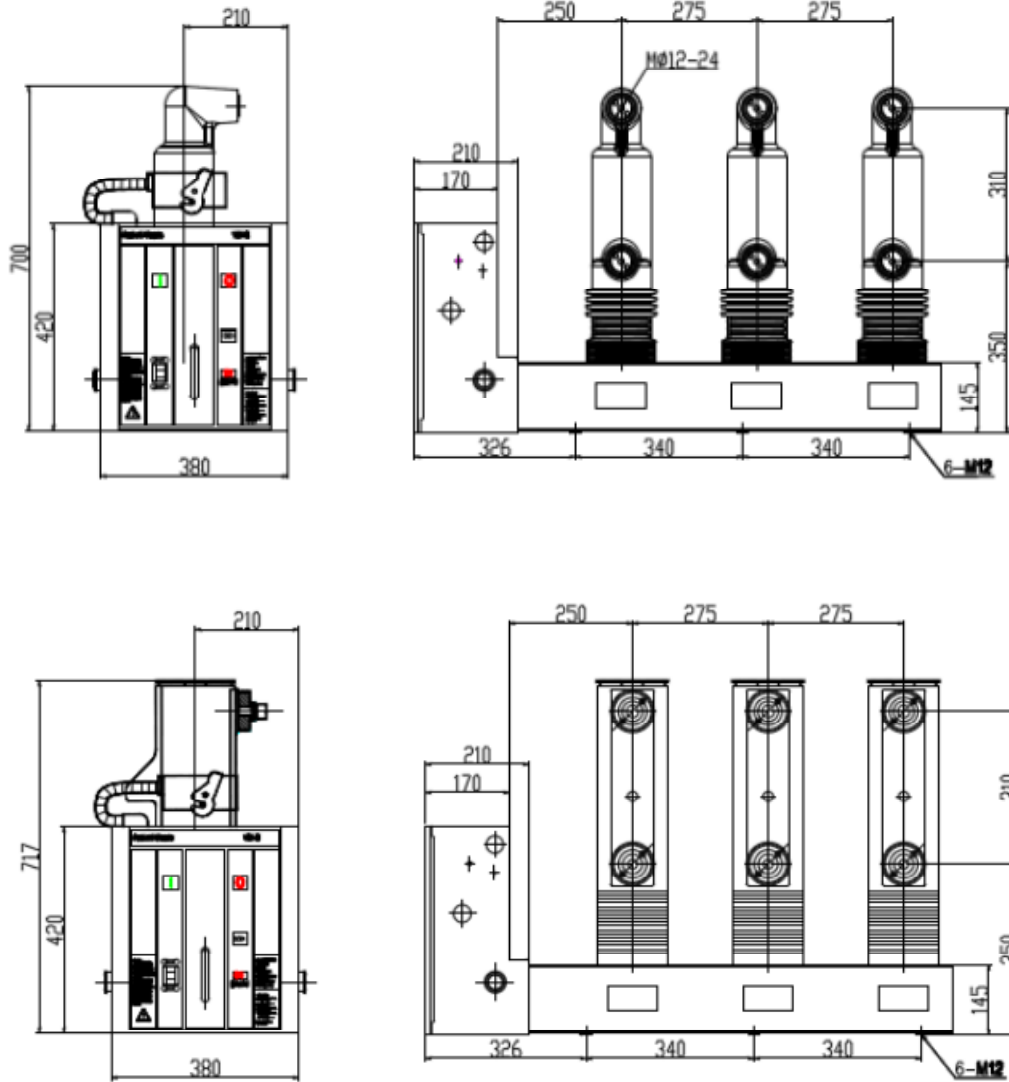


### Notice:

- 1) Above sizes at rated current under 1600A, breaking current 31.5kA;
- 2) Insulated medium is optional;
- 3) Secondary wiring arrangement is optional;
- 4) Rated current and breaking current is optional;
- 5) Special order for sizes adjection is optional;

## ++++Installation sizes& outline dimensions

\*\*\*24kV Indoor Vacuum Circuit Breaker (Lateral Fixed Type)



### Notice:

- 1) Above sizes at rated current under 1600A, breaking current 31.5kA;
- 2) Insulated medium is optional;
- 3) Secondary wiring arrangement is optional;
- 4) Rated current and breaking current is optional;
- 5) Special order for sizes adjuession is optional;

# **++++Ordering Instructions**

## **\*\*\*\*Ordering instructions:**

### **1. Belowing terms should be marked while ordering:**

*Model number, product name and quantity.*

*Model of operating mechanism ( opening&closing coil voltage, trip coil voltage).*

*Provide the rated voltage specification if motorization operating is required.*

*For rated voltage and current and breaking current is optional. Pls give data..*

*Other special requirements.*

### **2. Documents with product from manufacturer:**

*Certificate of qualification.*

*Wiring diagrams, Installation drawings.*

*Packing list.*

*Other technical documents.*

## **Rockwill Electric Co.,Ltd.**

***Tel: 0086-577-27869966,27869968***

***Fax: 0086-577-27869967***

***Http: //www.rockwill.cn***

***E-mail: rockwill.sale@gmail.com***

***Add: No 1,Fazhan Road, Wengyang Industrial***

***Zone, Yueqing, Zhejiang, China, 325604***