

1 概述 CHARACTERISTICS

VS1-12型户内高压真空断路器，系三相交流50Hz额定电压为12kV电力系统的户内开关设备，作为电网设备、工矿企业动力设备的保护和控制单元。适用于要求在额定工作电流下的频繁操作，或多次开断短路电流的场所。

该断路器采用操动机构与断路器本体一体式设计，既可作为固定安装单元，也可配有专用推进机构，组成手车单元作用。

VS1-12 type indoor high-voltage vacuum circuit breaker is an indoor switchgear for three-phase AC 50Hz rated voltage of 12kV power system, as a protection and control unit for power equipment of grid equipment and industrial and mining enterprises. It is suitable for frequent operation under rated working current or for breaking short-circuit current for many times.

The circuit breaker adopts the integrated design of operating mechanism and circuit breaker body, which can be used as fixed installation unit or equipped with special propulsion mechanism to form the role of trolley unit.

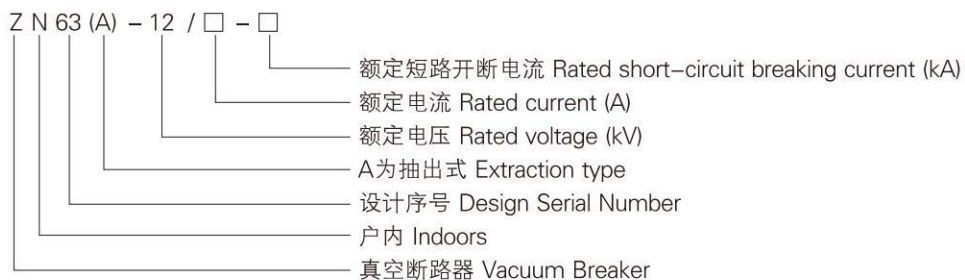


VS1-12 手车式
VS1-12 hand truck type



VS1-12 固定式
VS1-12 Fixed

2 型号及其含义 MODEL DESCRIPTION

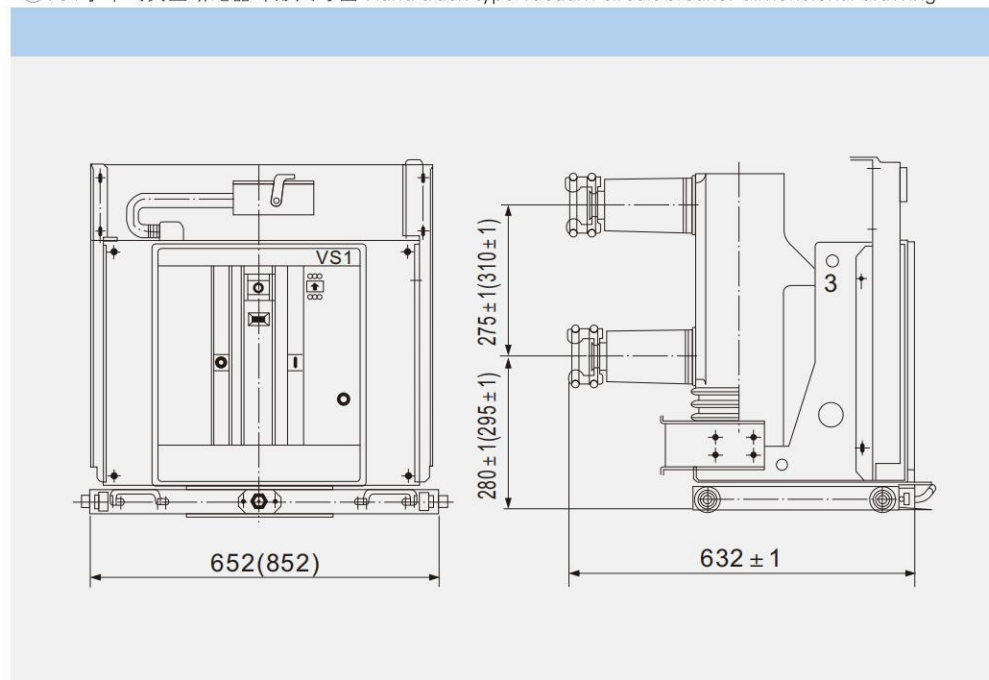


3 主要技术参数 MAIN TECHNICAL PARAMETERS

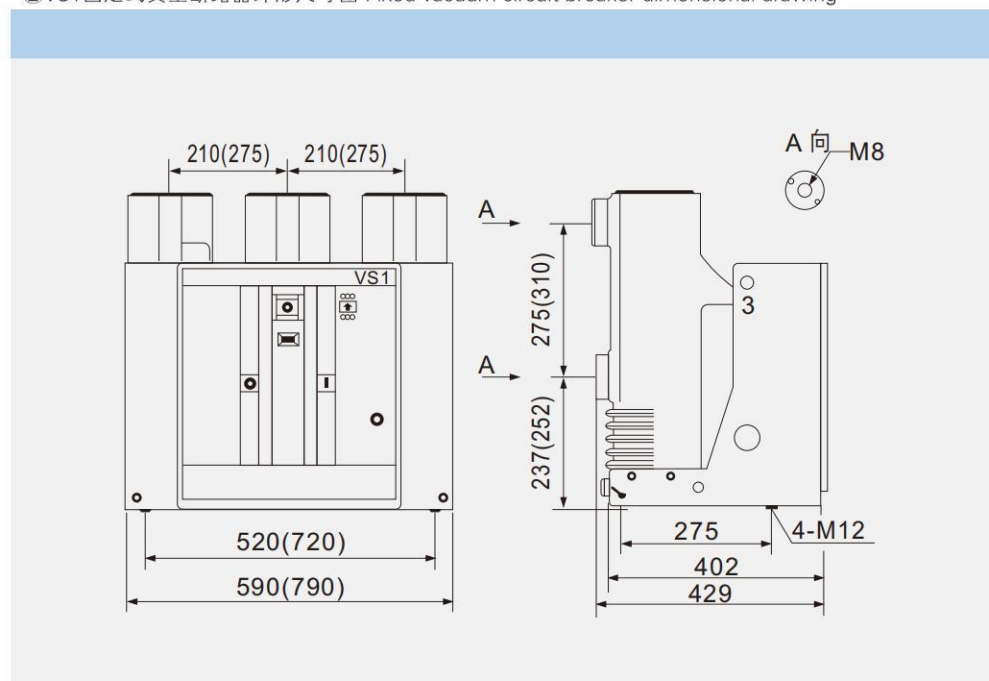
序号 No.	项目 Projects	单位 Unit	数据 Data		
1	额定电压 Rated voltage	kV	12		
2	最高工作电压 Maximum working voltage	kV	12		
3	额定电流 Rated current	A	630,1000 1250	1250,1600 2000,2500	1250,1600 2000,3150
4	额定短路开断电流 Rated short-circuit breaking current	kA	20/25	31.5	40
5	额定短路关合电流 Rated short-circuit closing current	kA	50/63	80	100
6	额定峰值耐受电流 Rated peak withstand current	kA	50/63	80	100
7	4S额定短时耐受电流 4S rated short-time withstand current	kA	20	31.5	40
8	额定绝缘水平 工频耐压(额定开断前后) Work frequency withstand voltage (before and after rated opening and closing)	kV	42(断口 Breaks 48)		
	Rated insulation level 冲击耐压(额定开断前后) Impact withstand voltage (before and after rated opening)	kV	75(断口 Breaks 85)		
9	额定操作须序 Rated operating sequence		分-0.3 S-合分-180 S-合分		
10	机械寿命 Mechanical life	次 Times	10000		
11	额定短路开断电流开断次数 Rated short-circuit breaking current breaking times	次 Times	50		
12	操动机构额定合闸电压(直流) Rated closing voltage of operating mechanism (DC)	V	110, 220		
13	操动机构额定分闸电压(直流) Rated breaking voltage of operating mechanism (DC)	V	110, 220		
14	触头开距 Contact opening distance	mm	11 ± 1		
15	超行程(触头弹簧压缩长度) Overtravel (contact spring compression length)	mm	3.5 ± 0.5		
16	三相分、合闸不同期性 Three-phase splitting and closing is not simultaneous	ms	≤ 2		
17	触头合闸弹跳时间 Contact closing bounce time	ms	≤ 2		
18	平均分闸速度 Average gate breaking speed	ms	0.9~1.2		
19	平均合闸速度 Average closing speed	ms	0.5~0.8		
20	分闸时间 Breaking time	ms	≤ 50		
21	合闸时间 Closing time	ms	≤ 100		
22	各相主回路电阻 Main circuit resistance of each phase	μΩ	630A ≤ 65; 1250A ≤ 60		
23	动触头允许磨损累积厚度 Allowable wear accumulation thickness of static and dynamic head	mm	3		

4 外形尺寸 OUTLINE DIMENSION DRAWING

①VS1手车式真空断路器外形尺寸图 Hand truck type vacuum circuit breaker dimensional drawing



②VS1固定式真空断路器外形尺寸图 Fixed vacuum circuit breaker dimensional drawing



注：括号内为额定电流 > 1600A
 Note: The rated current in parentheses is > 1600A

1 概述 CHARACTERISTICS



VS1-12 侧装式
VS1-12 Side-mounted

VS1(VBM7)-12型侧装式真空断路器系户内高压开关设备，适用于额定电压12千伏、频率50Hz的三相电力系统中，作为保护和控制电器使用，由于真空断路器的特殊优越性，尤其适用于需要额定电流下的频繁操作，或多次开断短路电流的场所。

VS1(VBM7)-12型侧装式真空断路器采用固定式安装，主要用于固定式开关柜，该断路器既可单独使用，又可用于环网供电、箱式变或各种非标供电系统。

VS1(VBM7)-12 type side-mounted vacuum circuit breaker is an indoor high-voltage switchgear, suitable for three-phase power system with rated voltage of 12 kV and frequency of 50Hz, used as a protection and control appliance.

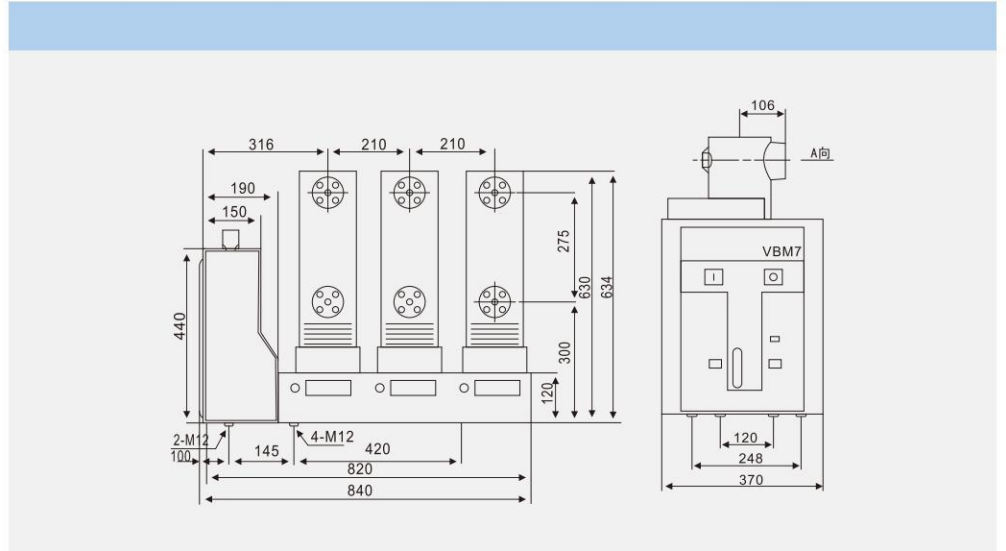
VS1(VBM7)-12 type side-mounted vacuum circuit breaker is fixed installation, mainly used in fixed switchgear, the breaker can be used both alone and in ring network power supply, box-type change or various non-standard power supply systems.

2 主要技术参数 MAIN TECHNICAL PARAMETERS

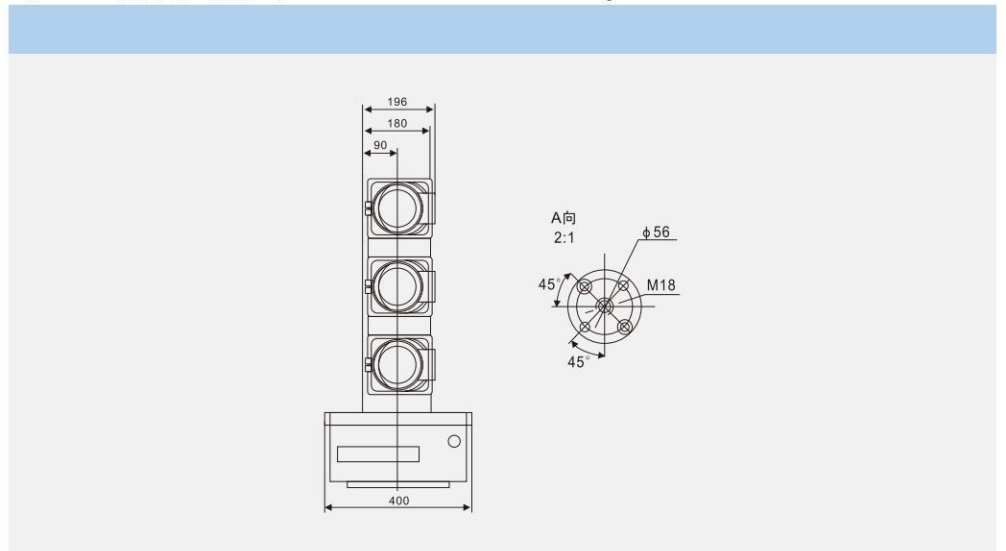
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	Rated insulation level	冲击耐压(额定开断前后) Impact withstand voltage (before and after rated opening)	75(断口 Breaks 85)
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11	额定短路开断电流开断次数 Rated short-circuit breaking current breaking times	次Times	50
12	操动机构额定合闸电压(直流)Rated closing voltage of operating mechanism (DC)	V	110, 220
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18	平均分闸速度 Average gate breaking speed	ms	0.9~1.2
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3 外形尺寸 OUTLINE DIMENSION DRAWING

①VS1-12侧装式外形及安装尺寸 VS1-12 side-mounted profile and mounting dimensions



②VS1-12侧装式安装孔尺寸 VS1-12 side-mounted mounting hole size



4、订货须知 Ordering Instructions

- 1、断路器名称、型号以及订购数量；
 - 2、断路器的额定电流及额定短路开断电流；
 - 3、所配操作机构的型号、名称、操作电压及脱扣器型式；
 - 4、运转车及其它备品，备件的数量；
 - 5、用户若有其他特殊要求，订货时协商。
- 1, the name and model of the circuit breaker and the quantity ordered;
 - 2, the rated current and rated short-circuit breaking current of the circuit breaker;
 - 3, the type, name, operating voltage and type of decoupler of the operating mechanism;
 - 4, the operation of the car and other spare parts, the number of spare parts;
 - 5, If the user has other special requirements, consult when ordering.