

产品特点 Features

VS1-24型户内高压真空断路器，系三相交流50Hz额定电压为24kV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。

VS1-24 indoor HV vacuum circuit breaker, three-phase AC 50Hz rated voltage indoor switchgear 24kV power system, grid equipment, industrial and mining enterprises, power equipment, protection and control unit. Require frequent operation at rated current, or repeatedly breaking the short circuit current place.

The circuit breaker actuator and the circuit breaker body-in-one design, either as a fixed installation unit can be equipped with a special advance mechanism, the composition of the role of the withdrawable unit.

型号含义 Type meaning



使用环境 Using environment

- 周围空气温度：上限40℃，下限-30℃
- 海拔：≤1000m(若需增高海拔，则额定绝缘水平相应提高)
- 振幅：地震烈度8度
- 空气相对湿度日平均值不大于95%，月平均值不大于90%
- 无火灾、爆炸危险、严重污染、化学腐蚀及剧烈震动的场所
- Ambient temperature: lower than 40 °C, higher than -30 °C
- Altitude: ≤ 1000m (For higher altitude, is a corresponding increase in the rated insulation level)
- Amplitude: 8 degree earthquake intensity
- Air relative humidity daily average not greater than 95%, on average less than 90%
- No fire, explosion hazard, serious pollution, chemical corrosion and violent vibration of the place

技术参数 Technology parameter

序号 NO.	名称 Name	单位 Unit	数据 Data			
1	额定电压 Rated voltage	kV	24			
2	额定短时工频耐受电压 Rated short time power frequency withstand voltage	kV	65/79(相间, 对地/断口) phase to phase, to ground/fracture			
3	额定雷电冲击耐受电压(峰值) Rated lightning impulse withstand voltage (peak value)	kV	125/145(相间, 对地/断口) phase to phase, to ground/fracture			
4	额定频率 Rated frequency	Hz	50			
5	额定电流 Rated current	A	630 1250	630 1250 1600 2000 2500 3150	1600 2000 2500 3150	1600 2000 2500 3150
6	额定短路开断电流 Rated short-circuit breaking current	kA	20/25	31.5	40	
7	额定短时耐受电压 Rated short-time withstand voltage	kA	20/25	31.5	40	
8	额定短路持续时间 Rated short-circuit current	s	4			
9	额定峰值耐受电流 Rated peak withstand current	kA	50/63	80	100	
10	额定短路关合电流 Rated short-circuit making current	kA	50/63	80	100	
11	二次回路工频耐受电压 Secondary loop power frequency withstand voltage	V	200			
12	额定单个背对背电容柜开断电流 Rated single / back-to-back capacitor bank breaking current	A	630/400(40kA为800/400)			
13	额定电容器组关合涌流 Rated capacitor bank closing surge	KV	12.5(频率 frequency \leq 1000Hz)			
14	机械寿命 Mechanical life	次 Time	20000			
15	额定电流开断次数(电寿命) Rated current breaking times (electrical life)	次 Time	20000			
16	额定短路电流开断次数 Rated short-circuit breaking current times	次 Time	50(40kA \leq 30)			
17	动、静触头允许磨损失积厚度 Dynamic and static contact allows the wear and tear accumulated thickness	mm	3			
18	储能时间 Energy storage time	s	\leq 10			
19	触头开距 Contact distance	mm	16 \pm 1			
20	超行程 Overtravel	mm	3.5 \pm 0.5			
21	触头合闸弹跳时间 Contact closing bounce time	ms	\leq 2(40kA \leq 3)			
22	三相分、合闸不同期性 Three-phase opening/closing is not synchronized	ms	\leq 2			
23	平均开闸速度(触头分开-8mm) Average opening speed (contact separation-8mm)	m/s	1.5 \pm 0.2			
24	平均合闸速度(触头闭合-8mm) The average closing speed (contacts closed-8mm)	m/s	0.8 \pm 0.2			
25	主导电回路电阻 The main circuit resistance	$\mu\Omega$	\leq (630A) \leq 45(1250A) \leq 35(1600-2000A) \leq 25(2500以上 above)			
26	额定操作顺序 Rated operating sequence		off分-0.3s-on/off合分180s-合分on/off			

外形尺寸及安装图 Outline and installation dimensions

