

# SCHVB32-12W/Z

户外智能真空断路器  
Outdoor intelligent vacuum circuit breaker



## 适用范围

### Application

12kV 架空配电线路 T 接支线路或末端用户内部发生故障时，因其进线开关保护动作时限与变电站出线开关保护时限配合无法合理整定时，将会造成变电站出线开关跳闸。如果故障性质是永久性的，变电站重合将不成功，则一个中压用户界内的局部事故将使整条 12kV 配电线路停电。如若在 T 接处或用户端（责任分界点）安装一台户外分界断路器，经过判断确认用户界内发生故障（过流、短路、单相接地等故障），自动将故障隔离，则可以确保非故障区用户正常用电。SCHVB32-12W/F 户外分界断路器在 12kV 馈电架空线路上的应用可避免无故障线路的连带性事故停电、缩小故障停电范围、缩短用户停电时间、保护主网的安全运行。并具备故障检测功能，保护控制功能和通讯功能，可实现自动切除单相接地故障和自动隔离相间短路故障。安装点适用于 12kV 配电线路用户进线的责任分界点处，也可以适用于符合要求的分支线连接处。

12kV overhead power distribution line by line or at the end of a T user internal is at fault, because its into line switch time limit and substation protection operation qualification switch protection with the timing is not reasonable time limit, will cause the transformer substation outlet switch trip. If a fault nature is permanent, the substation coincidence will not succeed, it is a medium voltage users in local accident will make the whole 12kV power article distribution circuit. If the T abrasive-cloth adhered or client (responsibility the boundary) installed a outdoor boundary circuit breaker, after judge identify users in fault (flow, short circuit, such as one-phase ground fault), automatic fault isolation, can ensure that the fault zone users normal power. SCHVB32-12W/F outdoor boundary circuit breaker in 12 kV feeding on the application can avoid aerial without the joint line of power, power fault accident narrow scope, shorten the time, protect power users of the main safety operation. And has the function of fault detection, protect control function and communication function, can realize the automatic resection phase-to-ground fault and automatic isolation alternate with short circuit faults. Installation points suitable for 12kV power distribution lines into the responsibility of the user in the boundary line, can be applied to meet the requirements of the joint branch line.

## 使用环境

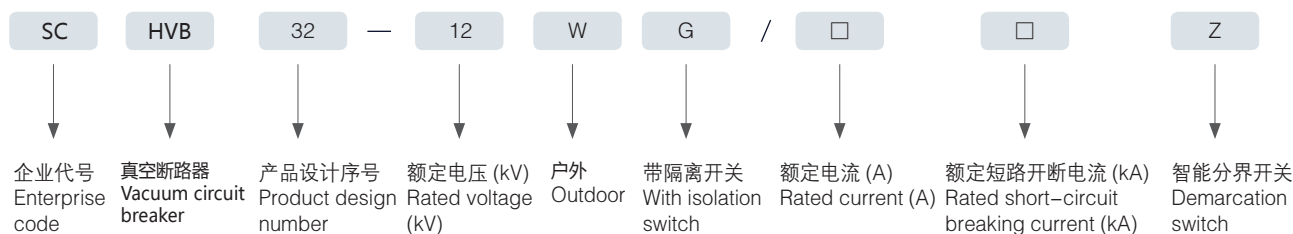
### The use of environmental conditions

- 环境温度：不高于 +40 °C，不低于 -40 °C；
  - 空气相对湿度：日平均值不大于 95%，月平均值不大于 90%；
  - 海拔高度不超过 2000 米；
  - 风压不超过 700Pa( 相当于风速 34m/s)；
  - 地震烈度不超过 8 级；
  - 无火灾、爆炸、严重污秽、化学腐蚀以及剧烈震动的场所。
- 客户如有其它特殊要求，可在订货时提出，我公司可给予最大满足。

- Environmental temperature: no higher than +40°C ,no less than -40 °C ;
  - Air relative humidity: day average no greater than 95%, on average less than 90%;
  - The altitude does not exceed 2000 m;
  - Wind pressure not more than 700 Pa (equivalent to wind speed 34 m/s);
  - Seismic intensity not more than eight level;
  - No fire, explosion, serious filthy, chemical corrosion and violent vibration of places.
- If the customers have other special requirements, can be in order to put forward, our company can offer most satisfied.

## 断路器型号、名称及含义

### Type of circuit breaker, the name and meaning



## 产品特点

### Features

- 装有真空灭弧室的柱上真空断路器开断性能稳定可靠，具有无燃烧和爆炸危险、安全、免维护、体积小、重量轻和使用寿命长等特点；
  - 断路器采用全封闭结构，密封性能好，有助于提高防潮、防凝露性能；
  - 断路器可装设二相或三相 CT，输出二相或三相电流供三段式保护或智能控制器进行信息分析；
  - 断路器的合、分闸可手动或电动操作，亦可遥控操作。
  - 操作机构密封在开关箱体内部，可以有效避免开关因长期处于户外环境下而引起机构锈蚀。
  - 操作机构新颖、简单、动作可靠、体积小、机械寿命可达 1 万次。
- Equipped with vacuum arcing chamber of the column in vacuum circuit breaker (performance is stable and reliable, and has no combustion and explosion danger, safety, free of maintenance, small volume, light weight and long service life etc;
  - Circuit breaker using fully closed structure, sealed performance is good, help to improve the moistureproof, prevent condensation performance;
  - Circuit breaker can be installed two phase or three-phase CT, output two phase or three obtained three intelligent controller for protection or information analysis;
  - The conjunction of circuit breaker, break-brake manual or electric operated, also remote operation.
  - Operators in the switch cabinet sealed inside, can avoid effectively switch from long outdoors environment and cause institutions rust.
  - Operator novel, simple, reliable operation, small volume, mechanical life can reach 10000 times.

## 主要技术参数

### Mainly technical parameters

#### 断路器的主要机械参数 The main mechanical parameters of the circuit breaker

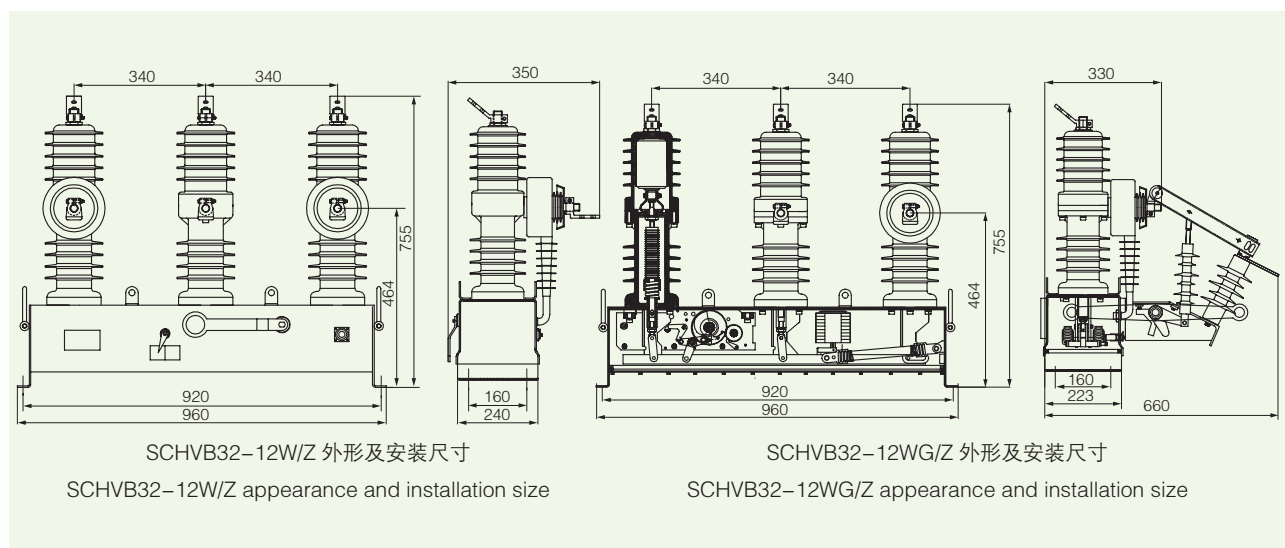
序号 No.	参数名称 Parameter name	单位 Unit	数值 Number of values
1	触头开距 Contact opens the distance	mm	9 ± 1
2	触头超行程 Contact ultra-travel	mm	2.5 ± 1
3	分闸速度 Opening speed	m/s	1.1 ± 0.3
4	合闸速度 Closing speed	m/s	0.6 ± 0.2
5	触头合闸弹跳时间 Contact closing bounce time	ms	≤ 2
6	相间中心距离 White center distance	mm	340 ± 2
7	三相分合闸不同期性 Three-phase of opening and closing of	ms	≤ 2
8	各相导电回路电阻 Each phase conductive loop resistance	μΩ	<80(带隔离刀 150) < 80 (with isolation knife 150)
9	重量 Weight	kg	约 70 About70

## 断路器的主要技术参数 The main technical parameters of

序号 No.	项目 Item	单位 Unit	数值 Number of values	
1	额定电压 Rated voltage	kV	12	
2	额定电流 Rated current	A	630、1250	
3	额定频率 Rated frequency	Hz	50	
4	工频耐压 (1min) Power frequency withstand voltage (1min)	kV	干试 (相间、对地 / 断口) Dry test ( white/ fracture )	
			湿试 (对地、外绝缘) Wet again(on the ground outside the insulation)	
5	雷电冲击耐受电流 (峰值)(相间、对地 / 断口) Lightning impulse withstand current (peak) ( white/fracture )	kV	75/85	
6	额定短路开断电流 Rated short-circuit breaking current	kA	20	25
7	额定短路关合电流 (峰值) Rated short-circuit current (peak)	kA	50	63
8	额定峰值耐受电流 Rated peak withstand current	kA	50	63
9	4S 短时耐受电流 4S short-time withstand current	kA	20	25
10	额定操作循环 Rated operating cycle		分 - 0.3s - 合分 - 180s - 合分 Sub-0.3s-Hop sub-180s-Hop sub-	
11	额定短路电流开断次数 Rated short-circuit current breaking time	次 Times	30	
12	机械寿命 Mechanical life	次 Times	10000	
13	二次回路 1min 工频耐压 Secondary circuit 1min power frequency withstand voltage	kV	2	

## 外形及安装尺寸

### General structure drawing and installation size



## 订货需知

### Ordering

- 产品型号、名称及参数；
  - 断路器操作方式：手动、电动及电源参数；
  - 电流互感器的数量、参数；
  - 数量及交货期；
  - 备品、备件名称、数量。
- Product model, name and parameters;
  - Circuit breaker operating mode: manual and electric power supply, power parameters;
  - Current transformer, the number of parameters;
  - Number and date of delivery;
  - Spare parts, spare parts name, quantity.