

SCHVB28-12W/Z

户外智能真空负荷开关
Outdoor intelligent vacuum load switch



适用范围

Application

SCHVB28-12W/Z(FFK) 型用户分界真空负荷开关(简称分界开关)使用于户外柱上安装场合,具有手动和电动操作功能。开关本体采用引进日本东芝公司 VSP5-12 技术,本开关为免维护负荷开关。采用真空灭弧和 SF6 气体作对地及相间绝缘介质。

本产品符合:GB3804《高压交流负荷开关》及 GBT11022《高压开关设备和控制设备标准的共用技术要求》。

SCHVB28-12W/Z 型分界真空负荷开关(FZW28-12 开关本体与 FDR-01 控制器)具备故障检测功能,保护控制功能和通讯功能,安装于 10kV 架空线路上,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 10kV 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。

SCHVB28-12W/Z (FFK) type user dividing vacuum load switch (referred to as the demarcation switch) used in outdoor column installed occasions, has manual and electric operation function. The switch body is introduced by Toshiba Co of Japan VSP5-12 technology, the switch is a maintenance-free load switch. Vacuum interrupter and SF6 gas on ground and interphase insulating medium.

This product conforms to GB3804 AC high voltage load switch: "GBT11022" and "high voltage switchgear and controlgear standards common technical requirements".

SCHVB28-12W/Z type dividing vacuum load switch (FZW28-12 switch and FDR-01 controller) with fault detection function, protection and control functions and communication functions, installed in the 10kV overhead transmission line, can realize the automatic removal of single-phase grounding fault and automatic isolation of interphase short circuit fault. Mounting points for 10kV distribution line user line responsibility demarcation point, also can be applied to meet the requirements of the branch line junction.

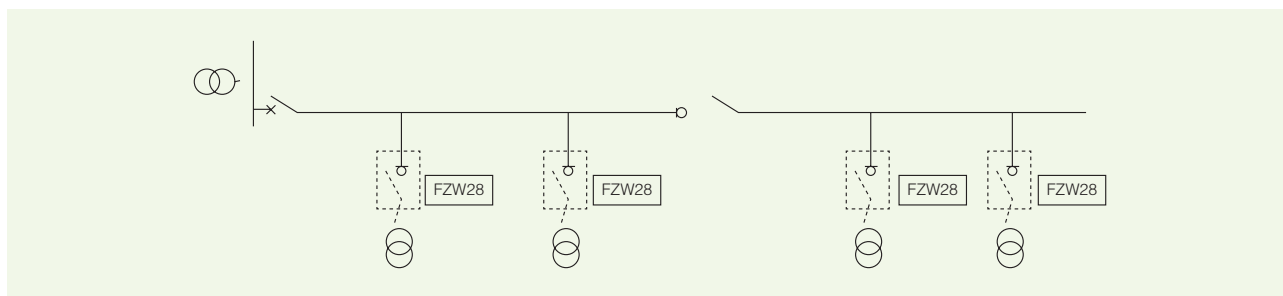
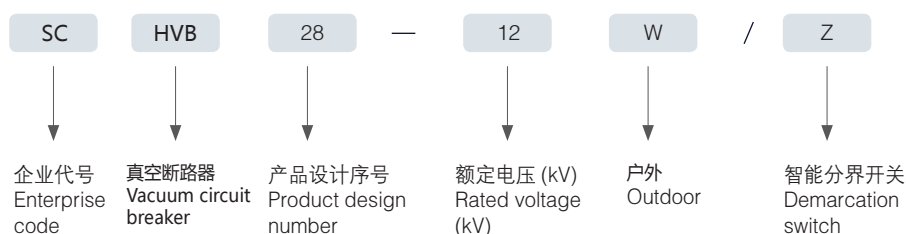
使用环境

The use of environmental conditions

- 周围空气温度上限不超过 40℃, 不限不超过 -45℃;
 - 风速不大于 35m/s;
 - 海拔不高于 1000m, 地震烈度不超过 8 度;
 - 环境湿度: 月平均相对湿度不大于 90%; 日平均相对湿度不大于 95%;
 - 覆冰厚度不超过 10mm;
 - 安装场所应为无易燃、易爆、化学腐蚀及经常性剧烈振动的场所;
 - 中性点接地方式: 中性点不接地、中性点经消弧线圈接地、中性点经小电阻接地。
-
- The ambient air temperature limit no more than 40℃, no more than -45℃;
 - Wind speed is not more than 35 m/s;
 - The elevation not higher than 1000m, the earthquake intensity not more than 8 degrees;
 - Environment humidity: month average relative humidity is not more than 90%; The average daily relative humidity is not more than 95%;
 - Cladding ice thickness not more than 10mm;
 - Installation place should be no inflammable, explosive, chemical corrosion and recurrent severe vibration place;
 - Neutral-point earthing ways: non-ground neutral, neutral the coil of arc extinction, neutral grounding the small resistance grounded.

断路器型号、名称及含义

Type of circuit breaker, the name and meaning



基本功能

Basic functions

自动闭锁相间短路故障

Automatic atresia alternate with short circuit faults

用户支线发生相间短路故障时，分界开关在变电站断路器或重合器保护跳闸后立即分闸并闭锁，变电站重合后，馈线上的其他分支用户迅速恢复供电。

Users short-circuit fault feeder happen alternate with, the dividing line switch in substation circuit breaker or overlapping protection tripping device immediately after break-brake and closure, the substation coincidence, the other branch feeder user quickly restored power supply.

快速定位故障点

Quickly locate fault point

用户支线事故造成分界开关保护动作后，责任用户停电，由其主动报送事故信息，电力公司派员到现场可通过掌上电脑或通讯模块排查事故原因。

User line accidents caused by boundary switch protection, responsibility of user power cut, by its active submit accident information, power company sent to the scene by palm computer or communication module investigation the cause of the accident.

自动切除单相接地故障

Automatic removal of the single-phase grounding fault

用户支线发生单相接地故障时，分界开关自动分闸；变电站及馈线上的其他分支用户感受不到故障的发生。

Subscriber line when the single-phase grounding fault happens, demarcation switch automatic gates; substation and feeder on the other branch of the user does not experience failure.

产品特点

Features

- 可检测毫安级的线路零序电流及 25 倍额定值的相间短路电流，测控准确、动作灵敏；
 - 同一规格产品可适用于不同中性点接地运行方式的电力配电系统；
 - 真空灭弧，SF6 外绝缘，内置隔离刀与灭弧室异步联动，开关分合能力强，安全性好；
 - Latch 式弹簧操作机构，拉杆式手动合闸，手动或电动脱扣分闸，操作简洁方便；
 - 工作电源（电压互感器）可以内置，成套设备整体免维护性高；
 - 所有部件全密封，耐候性强，抗凝露性能好；
 - 全航空插头电气连接，安装投运快捷、方便、正确、可靠；
 - 一般选择无通信方式运行，也可根据需要配置通信模块及灵活选择有线或无线通信方式进行集中数据管理。
-
- Can detect the milliamperes line of zero sequence current and 25 times the alternate with short circuit current rating, and its accurate, action quick;
 - The same specification products can be used in different neutral grounding operation pattern of the electric power distribution system;
 - Vacuum arcing, SF6 outer insulation, built-in isolation dao and arcing chamber asynchronous linkAge, switch points and ability, good safety;
 - Latch type spring operation mechanism, pole type manual close brake, manual or electric points off sluice, simple operation is convenient;
 - Work power (voltage transformer) can built-in, complete sets of equipment maintenance overall from high;
 - All parts of full seal, uv resistance, resistance to gel properties is good;
 - All the air plug electrical connections, and installation are put into operation quick, convenient, accurate, reliable;
 - Generally choose not to have communication mode can run according to need to configure communication module and flexible wired or wireless communication mode choice for centralized data management.

主要技术参数

Mainly technical parameters

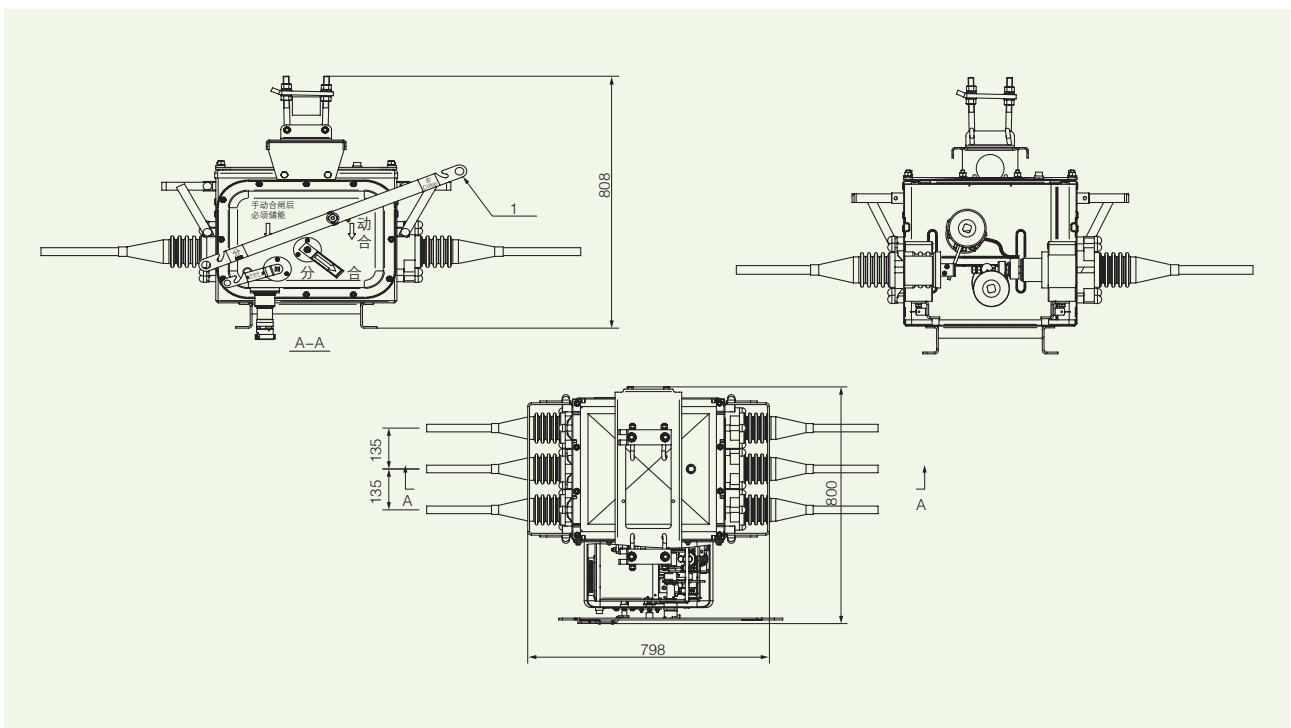
负荷开关主要技术参数 Load switch main technical parameters

序号 No.	名称 Name	数据 Data	
1	操作方法 Method of operation	手动或自动（电磁） Manual or automatic (electromagnetic)	
2	额定值 Rated value	额定电压 Rated voltage	12kV
		额定电流 Rated current	630A
		额定短时耐受电流 (4S) Rated short-time withstand current (4S)	12.5 16 20
		额定关合短路电流（峰值） Rated closing short-circuit current (peak)	31.5 40 50
		额定频率 Rated frequency	50Hz
		操作电压 Operating voltage	AC220V(80%~110%)
3	工频耐压 (1min) Power frequency withstand voltage (1min)	对地 On the ground	42kV
		相间 Alternate with	42kV
		断口 Fracture	48kV
		二次对地 Two of	2kV

序号 No.	名称 Name	数据 Data	
4	冲击耐压 (峰值) Impulse withstand voltage (peak)	对地 On the ground	75kV
		相间 Alternate with	75kV
		断口 Fracture	84kV
5	净重 Net weight	185kg	
6	SF6 气体额定表压 SF6 gas rated pressure	0 表压浓度为 93% 以上 0 psig concentration was above 93%	
7	操作手柄手动力的测定 Operating handle power determination	100~400N	
8	主回路电阻 Main loop resistance	$\leq 500 \mu \Omega$	
9	(一) 合闸操作 (one) closing operation	184~220V	1 合闸时间 120~180ms(220V) 400ms 以下 (184V) 2 弹跳时间不大于 10 ms 3 吸合电流 (峰值)17A 以下 4 保持电流不大于 0.45A 1 time off 120~180 ms (220 V) 400 ms the following (184 V) 2 bounce time is not over 10 ms 3 absorb and current (peak) and A following 4 maintain current is not more than 0.45 A
		最低合闸电压 The minimum switching voltage	120~160V
	(二) 分闸操作 (two) tripping operation	184~220V	1 分闸时间 1.5s 以下 2 不同期时间 30ms 以下 1 time gate The following 1.5s 2 different period of time under 30ms
		最低保持吸合电压 Minimum maintain suck and voltage	65~85V
10	隔离断口与真空弧室合分操作时间差 Isolating fracture and the vacuum arc-extinguishing chamber and operation time difference	10 ± 2 ms	
11	气密试验 (检漏) Tightness test (leak)	0.2 Mpa 表压无漏气 0.2 Mpa gauge without gas leakAge	
12	真空灭弧室触头开距 Vacuum interrupter contact distance	7~9 mm	
13	真空灭弧室触头超距 Vacuum interrupters contact distance	3~3.5 mm	
14	隔离断口开距 Isolating distance	25~30 mm	
15	隔离断口超距 Isolating distance	6~13 mm	

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.