

PGS Series

Outdoor High Voltage SF6

Load Break Switch

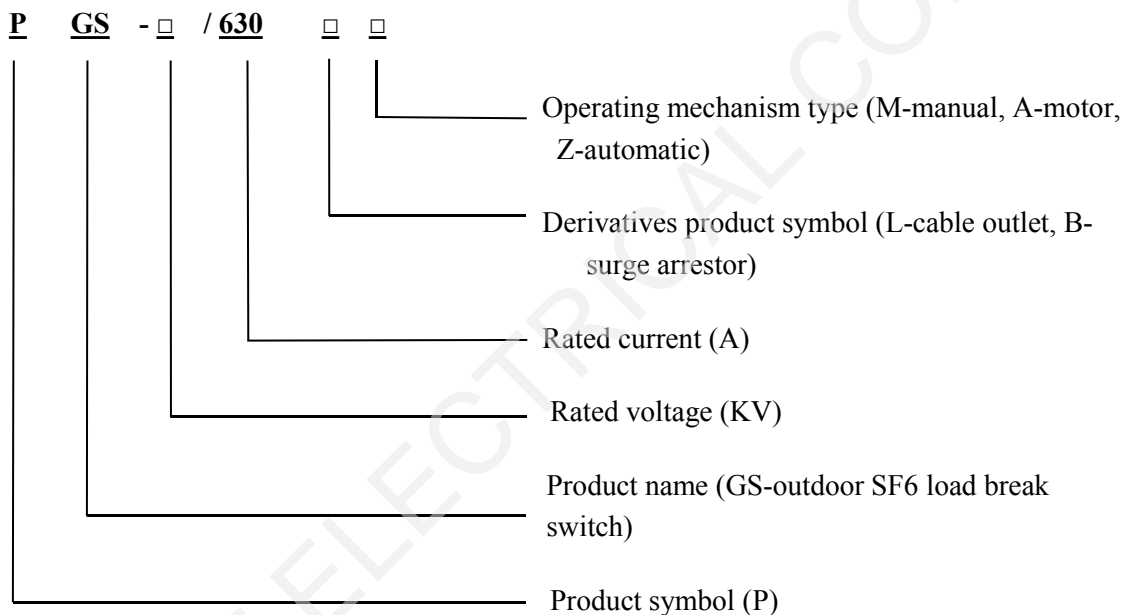
PGS-630A pole mounted load break switch is used for breaking rated voltage 12/24/40.5kV, rated current 630A, 50/60Hz power distribution system, closing load current and over load current of power system, it could separate automatically track sections of power distribution which faults occur. The switch is matched with electronic controller which is with the latest technology. The switch has manual, motor, remote operation modes. The electronic controller would be installed inside the stainless steel box, so it could be used in various climate conditions. Besides that, the wire/wireless modem installed inside control box could achieve remote monitoring and controlling. It's easy and convenient for installation the switch on pole, and that could reduce the execution cost.



※ Environmental Conditions

- ◆ Air temperature: $-40^{\circ}\text{C}\sim+50^{\circ}\text{C}$;
- ◆ Relative humidity: 110%
- ◆ Altitude $\leq 3000\text{m}$.
- ◆ Wind pressure $\leq 700\text{pa}$ (equivalent to wind speed 34m/s).
- ◆ Seismic intensity: 8 degree.
- ◆ Installation site: No fire disaster, explosion danger, chemical corrosion and frequent strenuous vibration places).
- ◆ Pollution grade: III class, IV class.

※ Type descriptions



※ MPP types



◆ Porcelain bushing-molded cable outlet



◆ Rubber split bushing-molded cable outlet



◆ Integrative rubber bushing-wiring terminal outlet



◆ with surge arrester



◆ Porcelain bushing-wiring terminal outlet

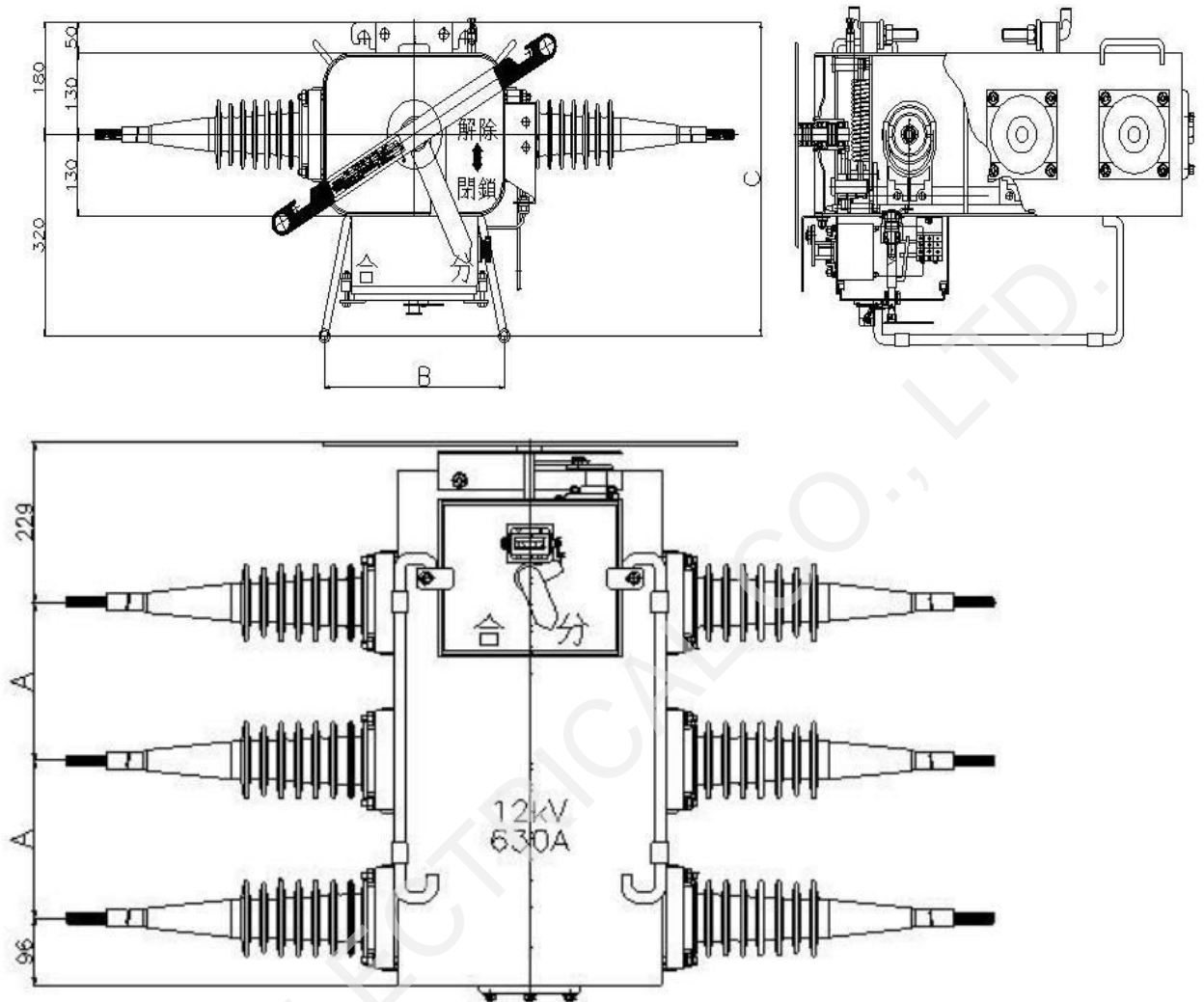


※ Technical Parameter

Products Type	PGS-12	PGS-24	PGS-40.5
Basic Ratings			
Maximum system voltage	15KV	25.8KV	40.5KV
Rated continuous current	630A	630A	630A
Rated frequency	50/60Hz	50/60Hz	50/60Hz
Short time withstand current	20KA/4s	25KA/1s	20KA/1s
Making and Breaking Capacity			
Mainly active load current	630A	630A	630A
Number of load-break operations	400times	400times	400times
Short-circuit making current (peak)	50KA	50KA	50KA
Number of making operations	5 times	5 times	5 times
Cable charging current	25A	25A	25A
Line charging current	1.5A	1.5A	2A

Closed loop circuit current	630A	630A	630A
Rated no-load transformer breaking current	22A	22A	22A
Power Frequency Withstand Current Test			
10s(wet test),phase- phase-earth, across open contacts	45KV	50KV	70KV
1min(dry test), earth, phase to earth	50KV	60KV	95KV
1min(dry test), across open contacts	50KV	60KV	110KV
Impulse Withstand Current Test(1.2 x 50 μs)			
Phase-to-phase, phase-to-earth	85KV	150KV	195KV
Across open contacts	95KV	150KV	215KV
Other Ratings & Specifications			
Internal arc test	20kA /0.1 s	20kA /0.1 s	20kA /0.1 s
Arc extinction medium	SF ₆ Gas	SF ₆ Gas	SF ₆ Gas
Insulation medium	SF ₆ Gas	SF ₆ Gas	SF ₆ Gas
Creepage distance (porcelain)	550mm	840mm	1055mm
Creepage distance (silicon)	610mm	900mm	1250mm
IP level	54	54	54
Operation Performance			
Closing/opening time	<1sec	<1sec	<1sec
Mechanical operations (guaranteed)	10000times	10000times	10000times
Operating temperature (*manual type)	-25(-40)~ 70°C	-25(-40)~ 70°C	-25(-40)~ 70°C
Gas Pressure			
Rated working pressure (kg/cm ² G, at 20°C)	0.7	1.0	1.0
Explosion-protection equipment action pressure (kg/cm ² G)	4~6	4~6	4~6
Minimum working pressure (kg/cm ² G)	0.05	0.0	0.0
Gas leakage rate (cc/ s)	≤1%	≤1%	≤1%

※ Overall Dimensions



Dimension(mm)			Installation Dimension(mm)	Packing size(mm)	Creep distance of bushing(mm)	
	A	B	C	Length × Width	Length×Width×high	
10KV	225	435	500	500×390	1100×900×700	556
24KV	300	435	500	500×390	1300×1100×700	840
40.5KV	350	435	500	700×390	1400×1200×700	1250