

GW4-72.5/126/145D(W)Outdoor HV Disconnect Switch

Summary

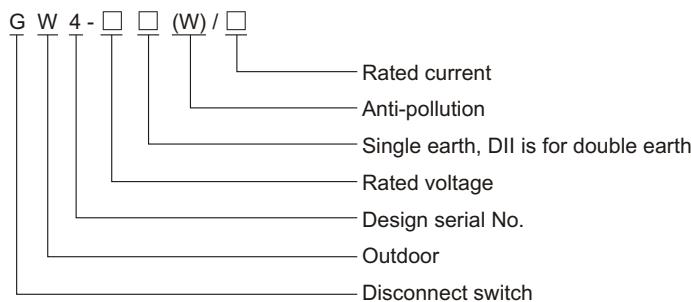
GW4-72.5/126/145 outdoor high voltage disconnect switch is used to open and close high voltage circuit in rated voltage 72.5/126/145kV, AC 50/60Hz system, the anti-pollution type is especially suitable for serious pollution area. It accords with standards of IEC62271-102: High voltage AC disconnect switch.



Ambient condition

1. Altitude: ≤3000m;
2. Ambient temperature: -25°C~+40°C;
3. Wind speed: ≤35m/s;
4. Earthquake intensity: ≤8 degree;
5. Ice thickness: ≤10mm;
6. Anti-pollution type is especially suitable for serious pollution area;
7. Applicable occasions should be free from inflammable, explosives and severe vibration.

Model



Technical specifications

Item		Unit	Data		
Rated Voltage		kV	72.5	126	145
Rated Current		A	630	1250	1600 2000
Rated Peak withstand Current		kA	63	80	100
4S short-time withstand Current			25	31.5	40
Rated short-time withstand Time		s	3 or 4		
Rated power frequency		Hz	50 or 60		
1min power frequency withstand voltage	phase to earth	kV	160	230	275
	across open contacts		200	230+70	315
Lightning impulse withstand voltage(peak)	phase to earth		350	550	650
	across open contacts		410	550+100	750
Main loop resistor	630A	uΩ	≤200	≤225	≤250
	1250A		≤125	≤150	≤175
	1600A		≤80	≤120	≤125
	2000A		≤80	≤120	≤125
Main blade open contacts			≥900	≥1200	≥1500
Single phase weight			250	300	350
Mechanical steady operating times			2000		
Operating mechanism type	main blade		CJ6B or CS17		
	earth blade		CS17		

Item	Unit	CJ6B motor	CS17 manual		
Main axes output angle	°	90	90		
Rated output angle	N.m	500			
Motor power	W	370			
Motor power supply voltage	V	AC380, DC125-132			
Motor rated current/ start current	A	1.3/4			
Motor rotate speed	r/min	1440			
Control voltage	V	AC220, DC220V			
Anti-pollution degree		IP54	IP54		
Mechanical life	Times	10000	10000		
Contact of auxiliary switch	pare	10NO+10NC	4NO+4NC, 8NO+8NC		
Opening/closing time	s	5 ± 1			
Weight	kg	90	without earth	single earth	double earth switch
			15	20	30

Operating mechanism

GW4 disconnect switch with CS17 manual operating mechanism is made of frame, auxiliary switch and handle, weight is about 15kg.

GW4 disconnect switch with CJ6B motor operating mechanism is made of stainless steel cubicle, mechanism and secondary control part auxiliary switch and handle, it have features of low noise, steady driving, easy operating, free maintenance.

Disconnect switch has motorized control mechanism. It is technically designed for the Disconnect Switch

Mechanism box can match with DSW4 electromagnetism lock to make sure anti-failure operating.

GW4 disconnect switch has a variable motor speed (RPM).

Structure feature

Disconnect switch is made of pedestal, post insulator and electric part. The pedestal of bearing adopts two whole sealing structure of frame oil sealed. There is mechanical interlock device between the main blade and the earthing blade to ensure operation follows the prescribed procedure (main open-earth close-earth open-main close). During operation mechanism operation, it drives the post insulator move 90°, the other post insulator move 90° through the cross rod to make sure opening and closing exactly.

Disconnect Switch Features:

1. Advanced driving instruction

1.1 Driving part adopt composite axis cover of self-lubricate, no need to add lubricating oil. Axis pin and axis is made of stainless steel or alum bronze and have features of high precision and antirust.

1.2 Framework seal structure for axis base, it's sealed both for upper and underside, molybdenum for lubricant grease, no volatilization, and non-maintenance.

1.3 O/C position-limited reliable.

1.4 It adopt adjustable hoop connection for mechanism output axis with switch driving axis, no need jointing and easy connection.

2. Well anti-rust performance.

2.1 Different parts have different anti-rust method, hot-galvanized, hot extrusive zinc or painting.

2.2 Standard equipment is made of stainless steel or hot-galvanized, stainless steel for below M10 fixing equipment, hot-galvanized for other parts.

3. Credible main electric system

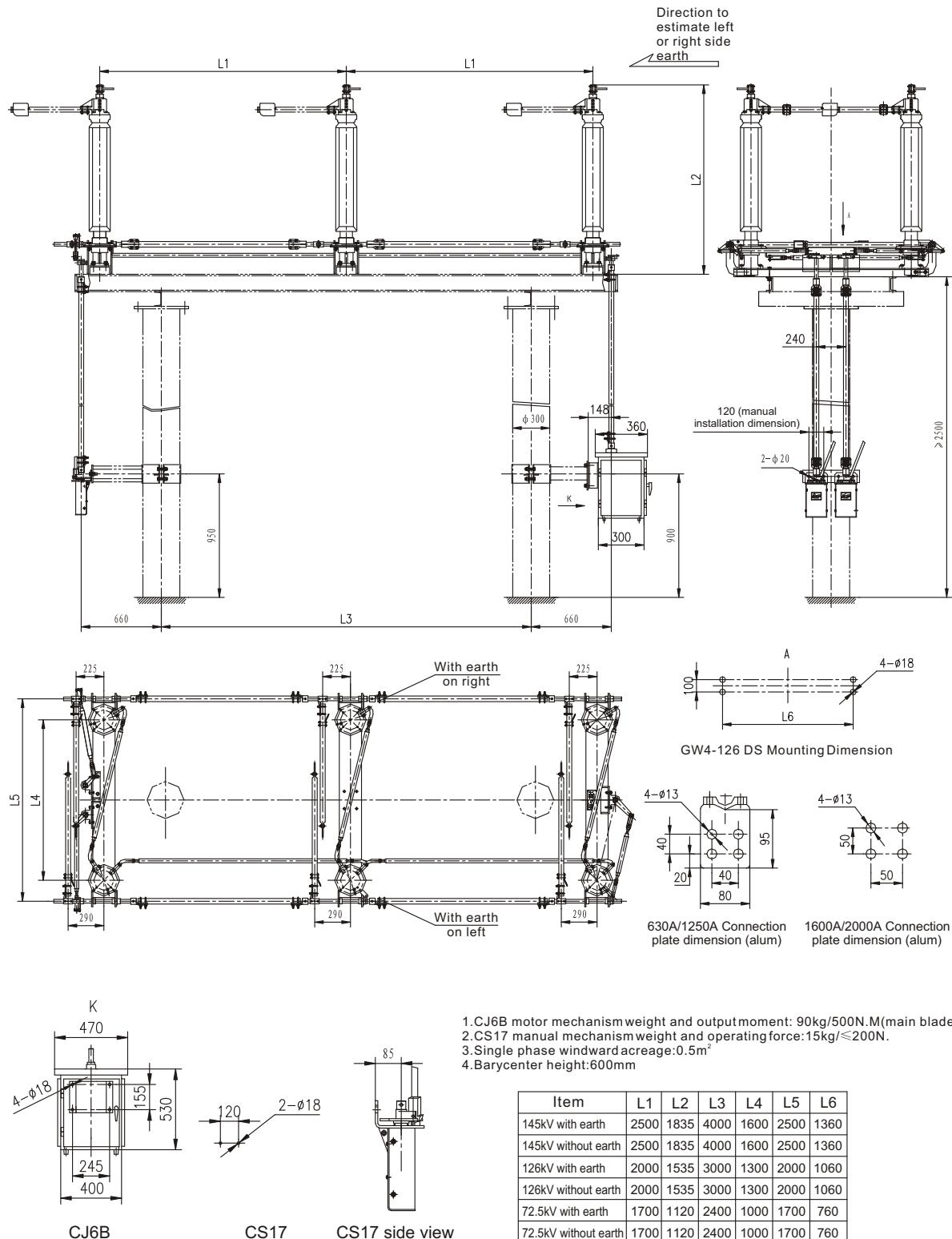
3.1 Contact finger silver-gilt thickness ≥30um, hardness ≥120 Vickers.

3.2 Electric loop almost adopt fixing connection and can improve electric stability and reliability.

3.3 Self force type contact, it's made of chrome, it make use of flexibility of contact finger and electric power to make contact electric loop all the time and avoid over-heater.

4. Automatic operation can be operated remote or local.

GW4 Frame dimension



Drawing 1 GW4-126 / 1600 / 145 / 2000 ^{72.5 / 1250}
 (main blade with CJ6B mechanism, earth blade with CS17 mechanism)