

GWR□-12/24/40.5-100 Outdoor AC High Voltage Disconnect Switch (Fuse)

Summary

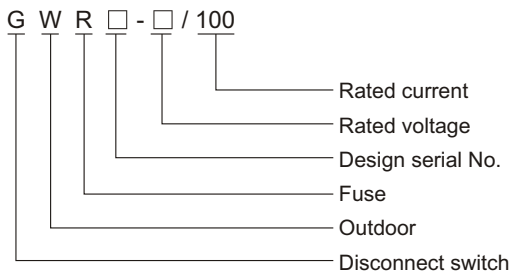
GWR□-12/24/40.5-100 outdoor AC. high voltage fused type disconnect switch (disconnect switch for short) is used in electric power system with rated frequency 50/60Hz, rated voltage 12/24/40.5kV. Its main for making or breaking circuit under line supplying voltage in outdoor high voltage distribution system equipments. Thereof anti-pollution type disconnect switch is especially used in serious polluted area. It accords with standards of IEC62271-103: High voltage switches.



Ambient condition

1. Altitude: $\leq 1000\text{m}$;
2. Ambient temperature: $+50^{\circ}\text{C} \sim -30^{\circ}\text{C}$;
3. Wind speed: $\leq 35\text{m/s}$;
4. Earthquake intensity: ≤ 8 degree;
5. Air pollution: IV;
6. Ice thickness: $\leq 10\text{mm}$;
7. Applicable occasions of normal type switch should free from chemistry aggradation, dust and other volatile & caustic thing.

Model



Structure feature

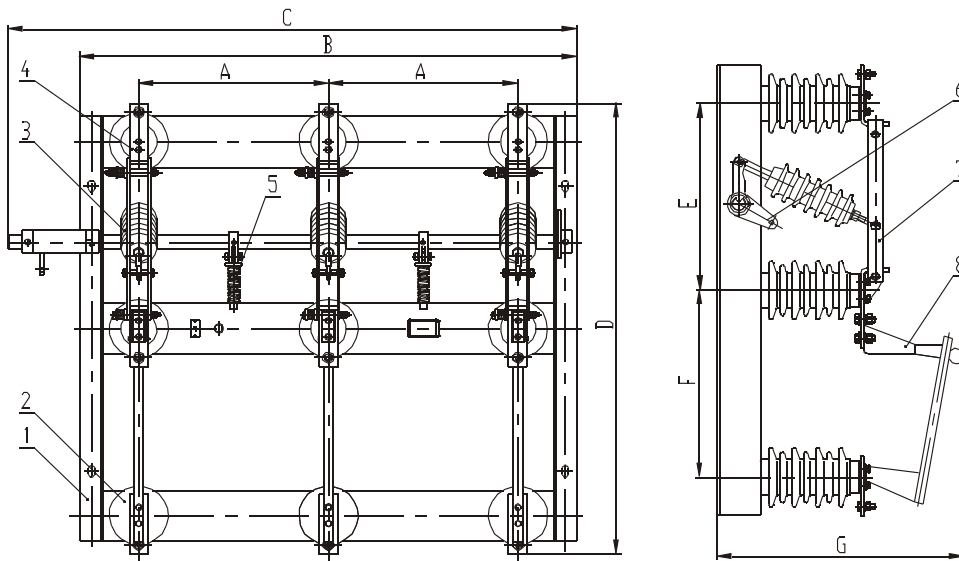
Disconnect switch is composed of fuse components, frame and operating insulator, fixed contact, contact blade and linkage spring mechanism.

1. Cutout fuse assemble: mainly combine with upper, down movable and fixed contact, arc extinguish bushing, insulator and mount support parts, during normal work, the fuse linking the moving joint of the arc extinguish bushing with movable contactor, the arc extinguish bushing is at closed position under the pressure of the fixed contactor.
2. Frame: Base is bended from steel sheet, axis with pulling arm cross through frame center. Holes drilled on base are used for fixing post insulator.
3. Post and operating insulator: anti-erode post insulator.
4. Fixed contactor: contact blade made of red copper plate, fixed on post insulator and extended level plane end as for connecting wire and upside of curve connected both side reliable with contacting blade.
5. Contact blade: it's made of two rectangle section red copper plates, both ends of contact blade attached with spiral spring to adjust contacting pressure.
6. Switch could be operated combined with CS□ mechanism vertical mounting on outdoor double electric poles.

Technical specification

No.	Item	Unit	Data	
1	Rated voltage	kV	12/24	40.5
2	Rated current	A	100	100
3	Rated frequency	Hz	50/60	50/60
4	Maximum breaking current	kA	5	5
5	Main circuit resistance	$\mu\Omega$	≤ 150	≤ 150
6	1min. PF withstand voltage (dry)	phase to phase/earth across open contacts	42/48, 75	95/115
7	1min. PF withstand voltage (wet)		30, 60	85
8	Lightning impulse withstand voltage		95/110, 145	185/215
9	Mechanical life	disconnect switch	2000	2000
		fuse cutout	300	300

Outline dimension



Type	Main outline dimension (mm)						
	A	B	C	D	E	F	G
GWR□-12/100	400	1050	1200	1073	400	490	667
GWR□-24/100	450	1060	1300	1173	450	543	550
GWR□-40.5/100	500	1300	1450	1433	550	640	909

1.Frame 2.Post insulator 3.Porcelain insulator 4.Contact
5.Spring 6.Rotate shaft corner arm 7.Disconnect blade 8.Cutout fuse

Drawing 1 GWR□-12,24,40.5/100 Outline dimension