

XGN(W)74-12 HV Switchgear Metal-clad AC Ring Main Unit

Summary

XGN(W)74-12 Series metal enclosed compact switchgear unit module. Each unit has its independent function. It can be extendible to each side, and supplied in different configurations suitable for actually requirement.

XGN(W)74-12 Series metal enclosed compact switchgear is completely SF6 system with a stainless steel tank containing Main Switch(LBS or VCB), Earthing Switch, Fuse insulation and busbar. A sealed steel tank with constant atmospheric conditions ensures a high level of reliability as well as personnel safety and a virtually maintenance-free system.

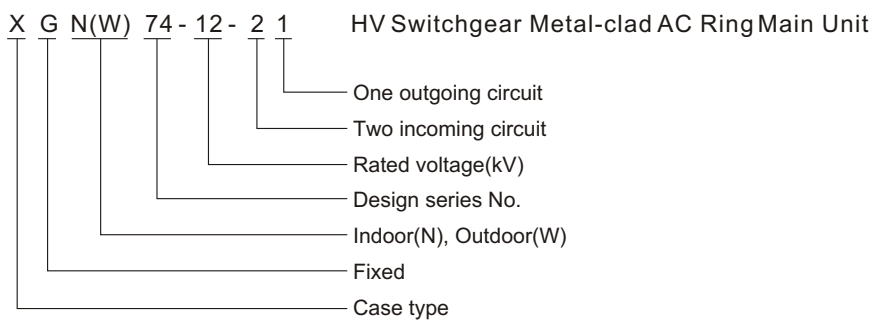
XGN(W)74-12 Series metal enclosed compact switchgear, Main Switch is SF6 Load Break Switch(VCB). The switchgear have different merits due to its clear configurations, flexibility, safety interlock, extendible. The switchgear suitable for rated frequency 50/60Hz, rated voltage 12kV distribution network. It is designed for use in the following applications: compact secondary substations, small industries, wind power plants, hotel, shopping centers, office buildings, business centers, lighting mining applications, airport, hospitals, tunnels and underground railway etc. IEC62271-201 & IEC62271-304.



Ambient condition

1. Ambient temperature: +40°C~-25°C;
2. Wind speed: ≤34m/s;
3. Altitude: ≤1000m;
4. Earthquake intensity: 8 degree;
5. Ambient temperature: Monthly average≤90%;daily average≤95%;
6. Applicable occasions should free from inflammables, explosives corrosives and servere vibration;
7. Pollution degree:IV

Model



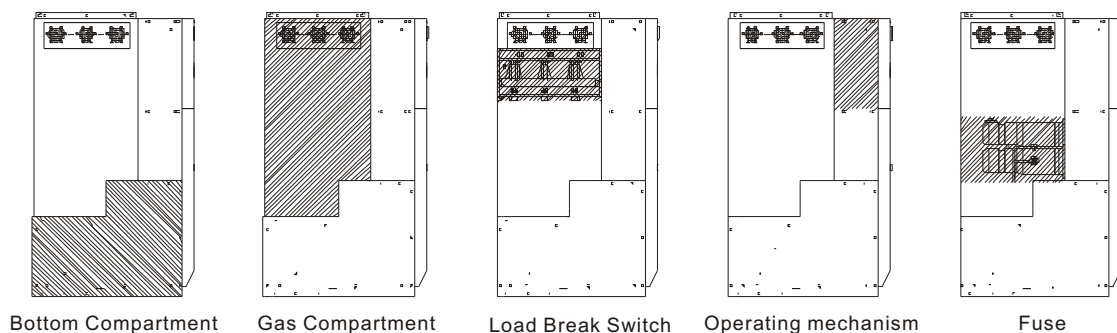
Technical specification

No.	Item	Unit	Data
1	Rated voltage	kV	12
2	Rated frequency	Hz	50
3	Rated current(LBS/ Combination Apparatus)	A	630/100
4	1min P.F withstand voltage	Phase to phase, Phase to earth	42
		Disconnect gap	49

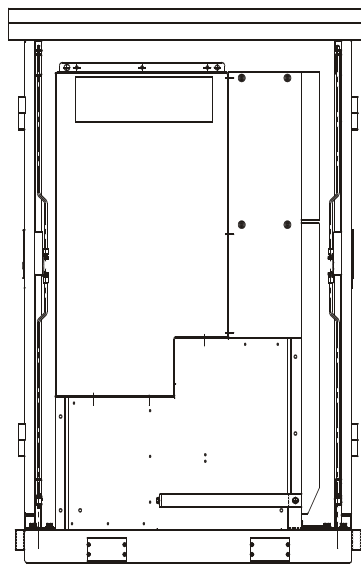
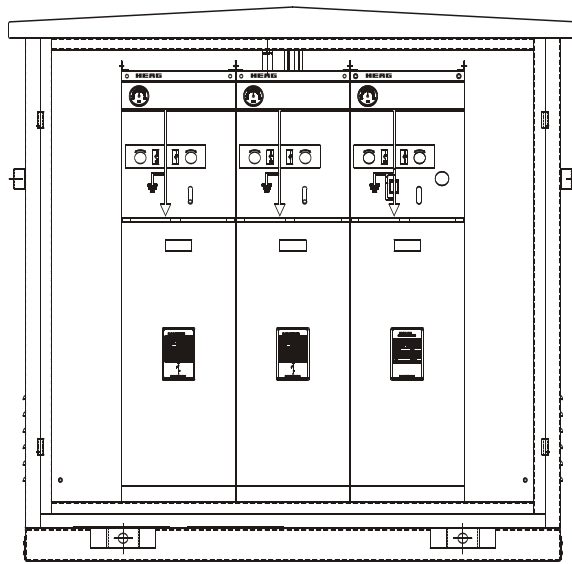
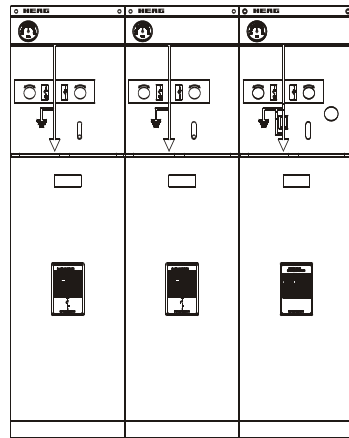
No.	Item		Unit	Data	
5	Lightning impulse withstand voltage	Phase to phase, Phase to earth	kV	75	
		Between gaps		85	
6	Rated short-time withstand current	LBS 4s	kA	20	
		ES 2s			
7	Rated peak withstand current	LBS	kA	50	
		ES			
		Earthing connection circuit		40	
8	Rated short-circuit making current(peak)	LBS	kA	50	Making 3 times
		ES			Making 2 times
9	LBS rated active load breaking current.		A	630	Breaking 100 times
10	LBS rated closing ring breaking current.			630	Breaking 20 times
11	LBS 5% rated active load breaking current.			31.5	Breaking 20 times
12	LBS rated cable charging breaking current.			10	Breaking 10 times
13	Combination Apparatus rated short circuit breaking current.		kA	31.5	
14	Combination Apparatus rated transfer current.		A	1500	
15	Rated line charging breaking current			1	Breaking 10 times
16	Earthing fault current breaking			30	Breaking 10 times
17	Line and cable charging current breaking under earthing fault condition			17.3	Breaking 10 times
18	Mechanical life	LBS	Times	5000	
		ES		2000	
19	SF6 Gas rated press(20°C, Gage pressure)		MPa	0.03	
20	SF6 Gas leakage ratio		Annual	≤1%	
21	Opening, Closing devices and auxiliary circuit rated voltage (Ua)		V	DC110, DC220, AC220	
22	Operating mechanism			Spring (Manual/Motor)	
23	Outline dimension(WxDxH)		mm	1740×1100×1600	
24	Gross weight		kg	1100	

General configuration

XGN(W)74-12 series consisting of bottom compartment, gas compartment, operating mechanism, interlock mechanism and LV control compartment. Each compartment disconnected by copper plate. Gas compartment have pressure release device. Lower compartment have pressure release guide in order to avoid accident. Degree of protection is IP3X.



Drawing 1 Compartment and main element equipment installation location in gas box



XGW74-12 Outdoor Ring Main Unit Structure Drawing