

Table 3 Main mechanical parameters of the circuit breaker and actuator

With Spring operation mechanism

Item	Unit	Data			
Rated power of storage motor	W	110			
Rated voltage of storage motor	V	≈110、220 (85~110%)			
Power storage time	S	≤12			
Rated voltage of opening/closing coil	V	≈110	≈220	≈110	≈220
Rated current of opening/closing coil	A	3.6	2.6	2.3	1.4
Rated voltage of auxiliary switch	A	10(≈220V)、2(=220V T≥20ms)			
Distance of open contact	mm	10~12			
Super travel of contact	mm	3.5~5			
Tripping time of closing time	ms	2			
Interval of three pole on-off	ms	2			
Average closing speed	m/s	1.0 ± 0.2			
Average opening speed	m/s	0.6 ± 0.2			
Main loop resistance	μΩ	≤60/35/25*			
Pressure on closing contact	N	3000 ± 100/5000 ± 200/6000 ± 400**			
Distance between the center pole	mm	270 ± 2			

Permanent magnetic

Item	Unit	Data	
External control voltage	V	≈110(1 ± 20%)	≈220(1 ± 20%)
External control current	A	< 2	
Control signal voltage	V	≈220(1 ± 20%)	
Control signal current	A	< 0.1	

\*Corresponding to rated current 1600/3150/4000A

\*\*Corresponding to breaking current 31.5/40/50kA

Table 4 Main technical parameters of GN58-12D Isolation switch

Item	Unit	Data	
Rated voltage	kV	12	
P.F. withstand voltage (Phase to phase, phase to earth)	kV	42	
P.F. withstand voltage (Across open contacts)	kV	49	
Lightning impulse withstand voltage(Phase to phase, phase to earth)	kV	75	
Lightning impulse withstand voltage(Across open contacts)	kV	85	
Rated frequency	Hz	50	
Rated current	A	630、1250、1600、2000、2500、3150、4000、5000(Air-cooled)	
Rated short-time withstand voltage	kA	25、31.5、40、50	
Rated peak withstand voltage	kA	82、104、130	
Rated short circuit duration (50kA)	s	4 (2)	
Rated short-circuit making current of earthing switch (Peak)	kA	80	

Table 5 Main technical parameter of CT

Item	Unit	Data	
Rated voltage	kV	12	
Rated single current	A	5~5000	
Rated secondary current	A	1、5	
Accuracy Class		0.2s/0.5/10P10(0.2s/10P15)	
Minimum rated output capacity	VA	10/10/15(15/15)	

## XGN66A-12 AC Fixed Type Metal-clad Switchgear

### Summary

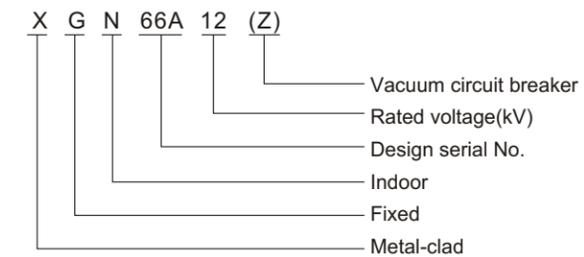
XGN66A-12 applies to 3.6~12kV three phase AC 50Hz system to receive and distribute power energy, suitable for sites with frequent operation and used to improve switchgear with oil switch. It can be arranged for single bus system and single bus sectionalizing system. The panel accords with IEC62271-200 AC Metal-enclosed Switchgear and Control Equipment above 1kV and below 52kV AC, GB3906 3~3.5kV AC Metal-enclosed Switchgear. It is novel in appearance and small in volume, and also has prevention function of mal-operation. The main switch inside the panel is VHY1-12, VS1-12 /ZN73-12 model VCB produced by Huayi Group, GN30-12, GN19-12 model disconnect switch and JN15-12 model earthing switch are used in panel.



### Ambient condition

1. Ambient temperature: -10°C~+40°C;
2. Altitude: ≤1000m;
3. Relative humidity: daily average ≤95%, monthly average ≤90%;
4. Earthquake intensity: ≤8 degree;
5. Applicable occasions should be free from inflammable, explosives and severe vibration.

### Model



### Technical specification

No.	Item	Unit	Data
1	Rated voltage	kV	3.6~12
2	Rated current	A	630,1250
3	Rated short circuit breaking current	kA	20, 25, 31.5
4	Rated short circuit making current(peak)	kA	50, 63, 80
5	Rated short time withstand current(4s virtual value)	kA	20,25,31.5
6	Rated peak withstand current(peak)	kA	50,63,80
7	1min. PF Withstand voltage	kV	42/48
8	Lightning impulse withstand voltage	kV	75/85
9	Auxiliary loop 1min. PF withstand voltage	kV	2
10	Protection degree		IP3X
11	Outline dimension(cable outgoing, W×D×H)	mm	900(840)×1200×2400

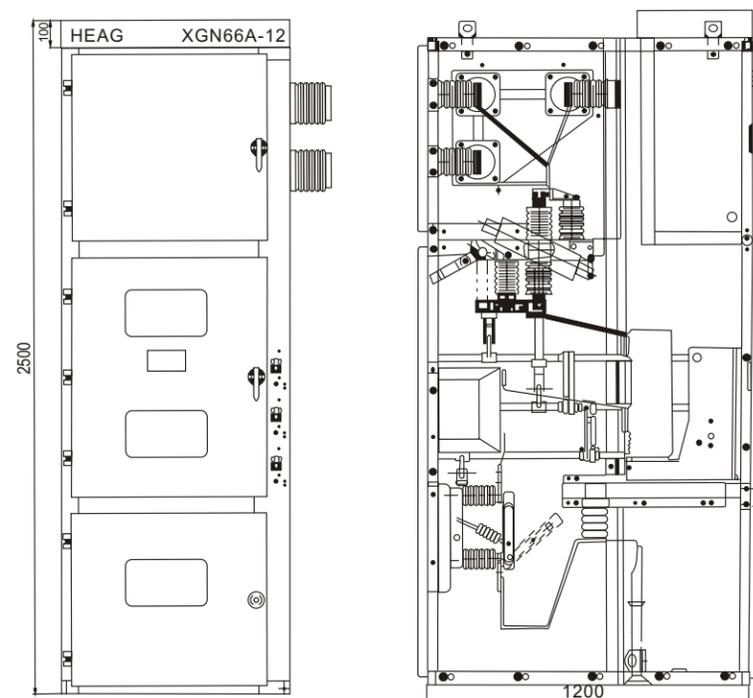
Main technical parameters for VHY1-12/VS1-12/ZN73-12 type VCB

No.	Item	Unit	Data
1	Rated voltage	kV	12
2	Rated current	A	630, 1250
3	Rated short circuit breaking current	kA	20, 25, 31.5
4	Rated short circuit making current(peak)	kA	50, 63, 80
5	Rated short time withstand current(4s virtual value)	kA	20, 25, 31.5
6	Rated peak withstand current(peak)	kA	50, 63, 80
7	Mechanical endurance	Times	10000
8	Rated short circuit breaking current breaking time	Times	50
9	Rated operation sequence		O-0.3s-CO-180s-CO

Product structure

The panel is case fixed type, whose body is made of aluminium-zinc plated steel sheet after multi-bending. Its rear-upper part is main bus compartment, and a pressure releasing device locates on the top. The front-upper part is low voltage compartment, secondary bus can be connected by cables from the bottom, or a bronze tube or stick can be installed on the top. Busbar compartment can keep electric connection with the middle/lower part of the cubicle through GN 30 model rotating disconnect switch. The VCB is installed in the middle of cubicle, earthing switch and disconnect switch of the outgoing cable side are installed in the lower part of panel. CT, PT and lightning arrester can be installed in the rear of panel, primary cable can go out from the back-lower part of panel. Earthing busbar installed on the bottom of panel are through all cubicles. Disconnect switch and earthing switch will be operated on the front-right part of panel.

Outline dimension



Drawing 1 Schematic Drawing

XGN36-12 (DXG-12) AC Fixed Type Metal-clad Switchgear

Summary

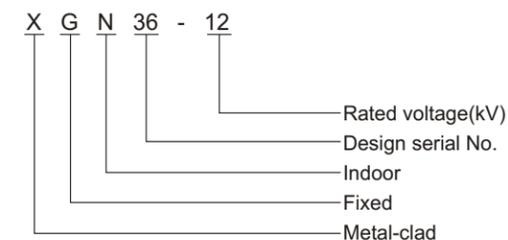
XGN36-12(DXG-12) switchgear is a new miniaturization power network equipment which introduced advanced technology and combine with our company real condition. With excellence of high grade, complete parameter, low price, few maintenance. It applies to 3.6~12kV three phase AC 50/60Hz single busbar or busbar sectional system for receiving and distribution power energy. It can widely used for electric power, metallurgy, petrification and urban construction.



Ambient condition

1. Ambient temperature: -10°C~+40°C;
2. Altitude: ≤1000m;
3. Relative humidity: daily average ≤ 95%, monthly average ≤ 90%;
4. Earthquake intensity: ≤8 degree;
5. Applicable occasions should be free from inflammable, explosives and severe vibration.

Model



Structure feature

1. The panel is novel and complete function, not only with fixed panel isolate live busbar feature, but also convenient for maintenance, easily to exchange circuit breaker, thereby assure of maintaining safely and conveniently, meanwhile, choose primary plug in contact.
2. Main switch is miniaturization vacuum circuit breaker(introduce advanced technology). Choose large creeping distance porcelain enclosure vacuum arc extinction chamber, adopt air insulation. It suitable for rural network reconstruction and industrial enterprise specially, equipped with miniaturization disconnect switch, double functions for main knife switch and earthing switch, gear drive type.
3. Panel is combination type, without welding, without deformation, miniaturization volume. With reliable "five protection" in terlock function, compulsive mechanical interlock on rear and front door.

Technical specification

No.	Item	Unit	Parameter
1	Rated voltage	kV	12
2	Rated current	A	400, 630, 1250, 1600, 2000, 3150
3	Rated peak withstand current	kA	31.5, 40, 50, 63, 80, 100
4	Rated short time withstand current(4s)	kA	12.5, 16, 20, 25, 31.5, 40
5	Rated short time current breaking time	Times	50
6	Mechanical life	Times	20000
7	Rated short time duration	s	4
8	Rated breaking current	kA	12.5, 16, 20, 25, 31.5, 40