

ISO9001:2000 Quality System Certification



AGN-12/24 (XGN15-12) type serial products  
SF6 Ring main unit



## General Description

AGN-12/24 unit type SF6 ring main unit with SF6 load switch as the main switch and air-insulation for whole cabinet is suitable for electric distribution automatization and compact also expandable metal close switchgear. It characters in its simple structure, flexible operation, reliable interlocking and convenient installation etc., which can provide the satisfactory technical projects both for different application occasions and users. With the adoption of sensor technology and the protection relay up to date, plus the advanced technology and flexible assembly project, AGN-12/24 unit type SF6 ring main unit can completely meet the requirement of continuously variable market. It can take self-produced AFL-12/24D load switch or SFG type SF6 load switch by **ABB**; also according to user's demand can be assembled with the internationally top-ranking BP series vacuum circuit breaker with permanent magnetic mechanism made by **RZVA** or HD4 type SF6 circuit breaker made by **ABB** or with our VDM6-12/24 type vacuum circuit breaker with permanent magnetic mechanism. Operational methods for the main switch inside ring main unit can be either manual or electric power driven. And It can meet the requirement of "Four Controls" when matched with FTU, RTU. This product is in conformity with the standards of GB3804、3906.11022、IEC298、265、129、694、420、56、529、932.

## Specification

No.	Item	Unit	Parameters		
1	Rated voltage	kV	12	24	
2	Rated current	A	630 / 1250 *		
3	Rated frequency	Hz	50 / 60		
4	1min Power frequency withstand voltage	Common value	kV	42	50
		Across insulate distance	kV	48	60
5	Lightning impulse withstand voltage	Common value	kV	75	125
		Across insulate distance	kV	85	145
6	Rated short time withstand current	Main loop	kA	25 / 2s	20/2s
		Earth loop	kA	20 / 2s	16/2s
7	Rated withstand current ( peak)	kA	63	50	
8	Rated transfer current	A	1700	1000	
9	Rated active load and close circuit breaking current	A	630		
10	Rated cable charge breaking current	A	50 and 10		
11	Unloaded transformer breaking current	A	20		
12	Cable charge breaking current in earthing malfunction	A	100	80	
13	Rated short circuit breaking current	kA	20 * *		
14	Rated short circuit making current	kA	63	50	
15	Protection degree		IP3X		
16	Load break switch life	Times	5000		
17	Earth switch life	Times	2000		

\* \* with fuse combination \* rated current of fuse combination decided by the fuse current

### Classical Combination

The main switch components can be selected for the installation to AGN-12 series ring main unit according to the users' demand. The choices for the main switch are **AFL-12/24D type**, **AFL (A)-12/24D type**, **ABB SFG-12 type load switch**, **VDM6**, **BP series permanent magnetic vacuum circuit breaker**, **ABB HD4 type SF6 circuit breaker**.



### Service Conditions

- Altitude  $\leq$  2500 meters;
- Ambient temperature:  $-35^{\circ}\text{C}$ ~ $+40^{\circ}\text{C}$ , the max. temperature difference  $\leq$   $25^{\circ}\text{C}$ ;
- Average value of daily relative humidity  $\leq$  95%;
- Average value of monthly relative humidity  $\leq$  90%;
- Anti-earthquake capacity: earthquake intensity  $\leq$  8 degree.

### Test Report

