

SWITCHGEAR CASING

HXGN15-12

High voltage
Switchgear case



Description

HXGN15A-12(F·R) box-type fixed AC metal enclosed ring network switchgear is a new type of switchgear designed for the transformation and construction of urban power grids. The ring network cabinet is equipped with vacuum load switch and spring operating mechanism, which can be operated either manually or electrically. The grounding switch and isolating switch are equipped with manual operating mechanism. The ring network cabinet has strong complete set, small volume, no combustion and explosion danger, and has reliable five-defense functions.

Characteristics

The ring network cabinet is assembled with 8MF profile, and the modulus hole E = 20mm is installed on the whole frame. FZN21-12D type load switch or FZRN21-12D type fuse combination electrical appliance is equipped in the ring network cabinet. This type of electrical appliance has disconnecting switch, vacuum load switch, grounding half-opening, and both disconnecting switch and grounding switch have obvious fracture. Isolation switch, vacuum load switch, grounding switch and cabinet door have perfect and reliable mechanical linkage and interlocking devices, which can effectively prevent misoperation and ensure safe maintenance.

It can be operated manually and electrically.

The door of the measuring cabinet and the instrument door are provided with lead sealing pins.

Technical parameter

No.	Name	Unit	Parameter
1	Rated voltage	kV	12
2	Rated current		630
	Load switchgear		125
	Combined electrical cabinet		
3	Rated short-circuit breaking current	kA	31.5
4	Rated active load breaking current	A	630
5	Rated short-time withstand current	kA	20
6	Rated peak value withstand current	kA	50
7	Rated power frequency withstand voltage Between phase, to ground/fracture	kV	42/48
8	Lightning impulse withstand voltage Between phase, to ground/fracture	kV	75/85
9	Mechanical life	cycles	10000
10	Rated handover current	A	3150
11	Operation mode		Manual or motor type
12	Protection grade		IP2X

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Technical parameter and performance requirement

No.	Name			Unit	Load switch unit	Combined electrical unit	Circuit breaker unit
1	Rated voltage			kV	12	12	12
2	Rated frequency			Hz	50	50	50
3	Rated current			A	630	125 (depends on the fuse current)	630
4	Rated insulation level	1min power frequency withstand voltage	Between phase, to ground	kV	42	42	42
			Fracture		48	48	48
			Control and auxiliary circuit		2	2	2
		Lightning impulse withstand voltage	Between phase, to ground		75	75	75
			Fracture		85	85	85
5	Rated short-time withstand current			kA/s	20、25/4	——	20、25/4
6	Rated peak value withstand current			kA	50、63	——	50、63
7	Rated short-circuit closing current			kA	50、63	Limited to the HV fuse	50、63
8	Rated short-circuit breaking current			kA	——	Limited to the HV fuse	20、25
9	Rated transfer current			A	——	1700	——
10	Rated active load breaking current			A	630	——	——
11	Rated closed loop breaking current			A	630	——	630
12	Mechanical life	Load switch/circuit breaker		cycles	10000	10000	20000
		Disconnecter/grounding switch			3000	3000	3000
13	Circuit resistance			μΩ	≤150	——	≤150
14	Rated inflation pressure (gauge pressure at 20℃)			Mpa	0.04	0.04	0.04
15	Gas annual relative leakage rate			Year	≤0.01%	≤0.01%	≤0.01%
16	Protection grade	Cabinet body			IP4X	IP4X	IP4X
		Gas box			IP67	IP67	IP67
17	Burning arc test			kA/s	25/0.5	25/0.5	25/0.5
18	Compartment (IP code)			/	IP2XC		
	Gas box (IP code)			/	IP67		
	Cabinet body (IP code)			/	IP41		
	Cabinet body (IK code)			/	IP10		
19	Insulation gas			/	Sf6		