

Product Overview and Features

AHN-12

AHN-12 environmentally friendly medium voltage ring network switchgear is a new type of green metal-enclosed switchgear, the materials used in the manufacture of the product are all non-toxic and harmless substances, the use of nitrogen or dry air as an insulating medium reduces the emission of greenhouse effect gases to achieve the purpose of environmental protection, and will not discharge any poisonous and harmful substances in use, and the materials can be recycled again after the life cycle, which determines the use of the Environmental protection. The environmentally friendly gas insulated ring network cabinet is suitable for industrial and civil cable ring network and distribution network terminal project.

Model Meaning

A H N - □ - 12 / □ - □

- Rated short-time withstand current(kA)
- Rated current(A)
- Rated voltage(kV)
- Ring unit type
- Indoor type
- Environmentally friendly
- Enterprise code

Areas of application and environments of use

As the acceptance and distribution of electric energy, it is especially suitable for power distribution in urban residential areas, small secondary substations, open and close houses, cable branch boxes, box-type substations, industrial and mining enterprises, shopping malls, airports, subways, wind power generation, stadiums, railroads, tunnels and other places to use.

Ambient temperature: upper limit +55C, lower limit -40C.
Altitude: no more than 3000m;
Relative humidity: daily average value ≤95%, monthly average value ≤90%.
Water vapor pressure: daily average value ≤2.2kPa; monthly average value ≤1.8kPa.
Workplace: the surrounding air is not obviously subject to dust, smoke, corrosive and/or combustible gases, vapors or salt spray pollution; no fire house explosion, serious filth, serious chemical corrosion and severe vibration.
The amplitude of electromagnetic interference induced in the secondary system ≤ 1.6kV.
Note: Altitude greater than 3000m or special use conditions require customized product solutions.

Main technical parameters

Name	Unit	Load switch	Circuit breaker
Ring Network Cabinet Technical Parameters			
Rated Voltage	KV	12	12
Rated current	A	630	630
Rated Frequency	Hz	50	50
Rated short-circuit breaking current	KA	25	25
Rated closing current (peak)	KA	63	63
Rated short-time frequency withstand voltage (phase-to-phase, relative ground/outlet)	KV	42/48	42/48
Rated lightning impulse withstand voltage (phase-to-phase, relative ground/outlet)	KV	75/85	75/85
Rated operation program		O-0.3S-CO-180S-CO	/
Rated short-time withstand current/duration	KA/S	25/4s	25/4s
Rated peak withstand current	KA	63	63
Rated active load breaking current1 Rated closed loop breaking current	A	/	630
Rated cable charging breaking current (CC2)	A	25	25
5% rated active load current	A	/	31.5
Main circuit resistance	μQ	≤140	≤140
Mechanical life (circuit breaker, load switch/isolation/earthing)	次	20000/5000/3000	10000/5000/3000
Insulation Gas		Nitrogen or dry air	Nitrogen or dry air
Annual air leakage rate	%/year	≤0.01	≤0.01
Rated filling pressure (abs20°C)	Mpa	0.02	0.02
Protection class (cabinet/gas box)		IP41/IP67	IP41/IP67
Dimension(WxDxH)	mm	420x850x2000	420x850x2000
Switching Mechanical Characteristics			
Rated Current	A	630	630
Rated short-circuit breaking current	KA	25	25
Contact opening distance	mm	9±1	9±1
Contact overtravel	mm	3.5±0.5	2.5±0.5
Rated contact pressure	N	1640±160	740±160
Contact closing bounce time	ms	≤2ms	≤2ms
Closing and breaking non-simultaneity	ms	≤2ms	≤2ms
Average opening speed	m/s	1.1±0.2	1.1±0.2
Average closing speed	m/s	0.6±0.2	0.6±0.2
Closing time	ms	≤80	≤80
Breaking time	ms	≤50	≤50