

# SF6-INSULATED RING MAIN UNIT



## Product Overview

The XGN series SF6 gas-insulated ring main unit is a medium-voltage distribution network switchgear featuring SF6 gas insulation and an all-metal enclosed structure. It boasts advantages such as compact structure, stable performance, and strong environmental adaptability, making it particularly suitable for harsh environments such as high altitude, high temperature and humidity, corrosion, etc.

This product is widely applied in power supply systems including distribution stations at load centers (e.g., urban residential quarters, large shopping malls, industrial enterprises) and prefabricated substations.

Primarily used for connection and section control of distribution lines, the product integrates multiple functions including short-circuit protection, overload protection, real-time monitoring of switch operation status, fault isolation, and self-healing. It enables the shift from manual inspection to intelligent operation and maintenance, which significantly reduces the operation and maintenance workload and ensures the safe and stable operation of the distribution network.

## Product Features

### ▶ Safe and Reliable

High-voltage live components are enclosed in a SF6 gas tank, with an enclosure protection rating of IP67, ensuring strong environmental adaptability. The metal housing is reliably grounded, which guarantees the safety of operating and maintenance personnel.

### ▶ Compact structure

Leveraging the excellent insulating properties of sulfur SF6, the product features a compact structure, with the minimum width of its cabinet body reaching as small as 325mm.

### ▶ Maintenance-free

With an hermetically sealed structural design, the switch has a mechanical service life of over 10,000 operations. During its service cycle, it requires minimal maintenance or even can achieve maintenance-free operation.

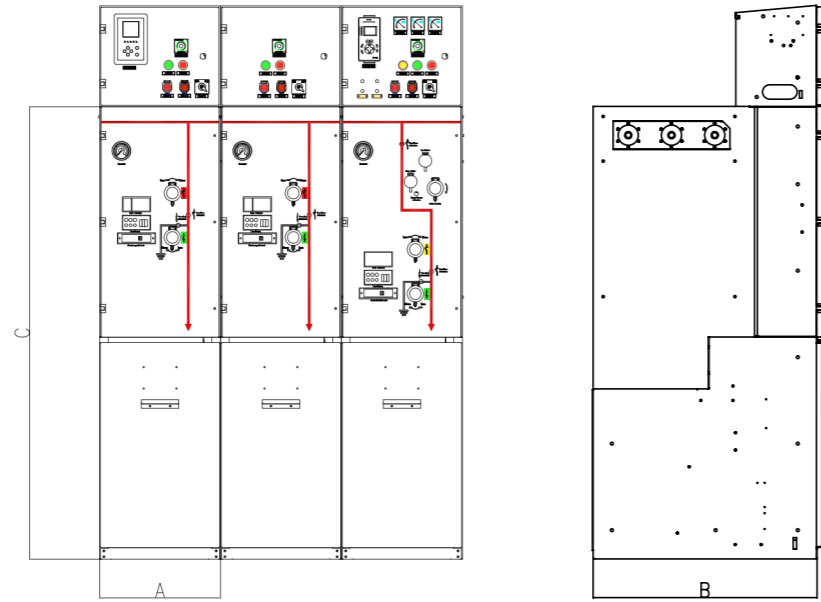
### ▶ Efficient and Intelligent

By configuring online monitoring devices for temperature, partial discharge, temperature-humidity, water immersion, and other parameters, real-time monitoring of the operating status of equipment and lines can be achieved. Additionally, with the configuration of a distribution automation terminal, fault early warning, automatic fault isolation, and restoration of non-faulty areas can be realized.

## Technical Parameters

No	Item	Unit	Parameters		
1	Rated voltage	kV	12	24	36
2	Rated frequency	Hz	50		
3	Rated current	A	630		
4	1 min Power frequency withstand voltage	kV	42/48	65/79	95/118
	Lightning impulse withstand voltage		75/85	125/145	185/215
5	Rated Short-Circuit Breaking Current	kA	20	20	20
6	Active Load Breaking Current and Closed-Loop Breaking Current (Load Switch)	A	630	630	630
7	Transfer Current (switch—fuse combinations)	A	1700	1200	800
8	Rated Short-Circuit Making Current	kA	50	50	50
9	Rated withstand current (peak)	kA	50	50	50
10	Rated Short-Time Withstand Current (4s)	kA	20	20	20
11	Mechanical Life	times	10000	10000	10000
12	Ingress Protection		IP4X		

**Overall Dimensions**



	A(mm)	B(mm)	C(mm)
12/24kV	420	780	1570
36kV	500	880	1900

**Typical Applications**

