Product Overview

XGN66-12 (Z) type fixed enclosed switchgear (hereinafter referred to as switchgear) is a complete set of high-voltage electrical products produced by our company, which meets the requirements of the national standard GB3906 "3-35kV AC Metal Enclosed Switchgear", the Ministry of Electric Power DLT404 "Technical Conditions for Ordering Indoor AC High Voltage Switchgear", and also meets the international standard IEC60298 "AC above 1kV and below 52kV Requirements for Metal Enclosed Switchgear and Control Equipment

This product has absorbed excellent foreign technology and is small in size, only 50% of the volume of a regular switchgear; Circuit breakers have the advantages of high reliability, good performance, and reliable and simple five prevention interlocking mechanisms The switchgear is an indoor complete set of equipment with 3.6, 7.2, 12kV three-phase AC 50Hz single busbar segmented, used for receiving and distributing electrical energy. And it has functions such as controlling, protecting, and monitoring circuits, and can be used in various types of power plants, substations, industrial and mining enterprises, high-rise buildings, etc. It can also be combined with ring main units and applied in switch stations

产品型号说明

X G N 66 - 12 - □

① ② ③ ④ ⑤ ⑥

①	箱式结构
②	固定式
③	户内
④	设计序号
⑤	额定电压 kV
⑥	主回路方案代号

Structural Features

The cabinet is made of high-quality angle steel welded together

The circuit breaker room is located in the lower part of the cabinet, making installation, debugging, and maintenance convenient; Equipped with ZN63A (VS1-12) circuit breaker as standard, and equipped with pressure release channel to ensure personal safety

Adopting advanced and reliable rotary isolation switches, it can safely enter the circuit breaker room for maintenance when the main busbar is live

The full cabinet protection level is IP2X

- Equipped with a reliable mandatory mechanical locking device, it can easily and effectively meet the "five prevention" requirements
- Have a reliable grounding system

The door is equipped with an observation window, which can clearly observe the working status of the components inside the cabinet

The operating mechanism adopts JSXGN locking mechanism for XGN2-12 cabinet, which is simple, reliable, convenient and practical

The incoming and outgoing cables are located below the front of the cabinet bottom, making it convenient for users to connect

Normal usage environmental conditions

The altitude shall not exceed 1000m

Environmental temperature: -25 ℃~+40 ℃, with an average temperature not exceeding+35 ℃ within 24 hours

The horizontal inclination shall not exceed 3 °

The seismic intensity shall not exceed 8 degrees

- No places with severe vibration, impact, or explosion hazards

主要技术参数

序号	项目	单位	技术参数
1	额定电压	kV	3.6、7.2、12
2	额定工频耐受电压	kV	对地、相同：42; 断口： 45
3	额定雷电冲击耐受电压	kV	对地、相同：75; 断口： 85
4	额定频率	Hz	50
5	额定电流	A	630、1250
6	额定短路开断电流（峰值）	kA	20、 25、 31.5
7	额定短路关合电流（峰值）	kA	50、 63、 80
8	额定动稳定电流（峰值）	kA	50、 63、 80
9	雷电热稳定电流 4S（有效值）	kA	20、 25、 31.5
10	防护等级		IP2X
11	外形尺寸（宽 X 深 X 高）	mm	900 x 1000x2300
12	重量	kg	600

开关柜外形尺寸

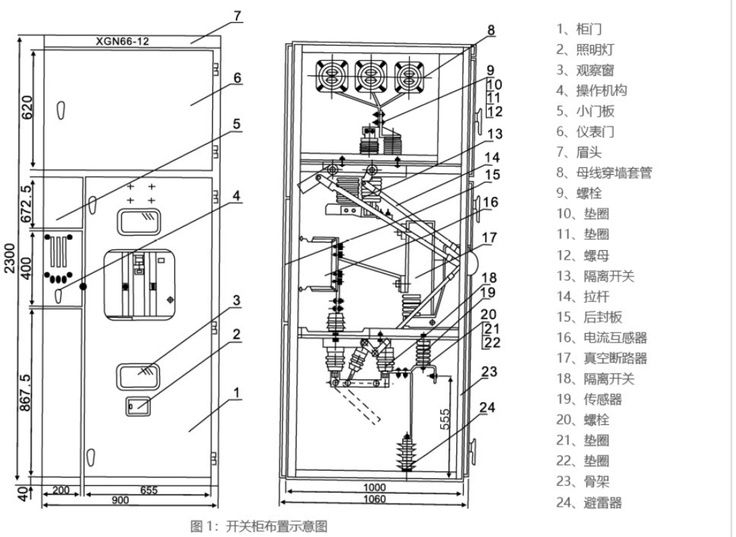


图 1：开关柜布置示意图

Maintenance and Overhaul

Users should regularly maintain and inspect the switchgear, including:

Clean up dust from all parts, especially the accumulated dust on the surface of insulation components

Check the moving parts of the machinery, regularly add lubricating grease to keep them flexible and reliable in operation

Check whether the electrical contact parts are in good contact, whether there is overheating, and whether the grounding circuit is conductive:

Regularly check whether the fasteners are tightened

Users should generally conduct troubleshooting with the assistance of professionals. For minor adjustments and faults, users should refer to this manual and the respective manuals for the main components for self maintenance

Install

Refer to the following diagram for the installation foundation. The protrusion of the foundation steel should be within 1-3mm, and the unevenness should not exceed 1.5mm per meter. The overall length should not exceed 5mm

Place the switchgear in order on the foundation, adjust the installation position, and then fix it with M12 bolts or spot welding method. Tighten the cabinets with M8 bolts

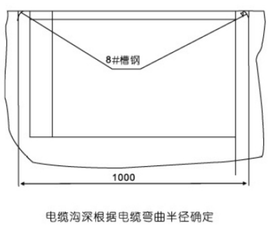
Remove the cover plate and install the main busbar and primary power supply. The terminal contact surface should be cleaned and coated with neutral Vaseline. After installation, seal the cable hole

Connect the indirect grounding busbar of the cabinet, so that it is integrated along the direction of the switchgear arrangement. Check whether there are any omissions in the working grounding and protective grounding, whether the grounding circuit is connected and conductive. The working grounding resistance should not exceed 1000 μ Ω, and the protective grounding resistance should not exceed 4 Ω

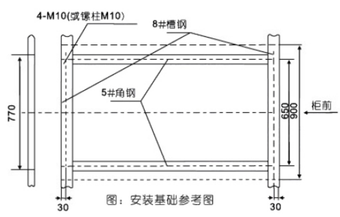
Install secondary cables, which are introduced from the bottom of the cabinet and enter the low-voltage chamber along the measuring wall, and are then tapped onto the terminal block; Alternatively, the low-voltage chamber can be introduced from the secondary busbar on the top of the cabinet, and the cable holes can be sealed after installation

Clean the dust and debris inside the cabinet

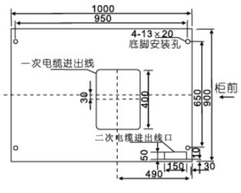
开关柜外形尺寸



电缆沟深根据电缆弯曲半径确定



图：安装基础参考图



图：底板布置图