

# XGN2-12

## 箱型固定式交流金属封闭开关设备

Box Irremovable-type AC Metal-enclosed Switchgear



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### 概述 General

XGN2-12 箱型固定式交流金属封闭开关设备 (简称开关柜), 用于额定电压为 3.6-12kV、三相交流 50Hz, 额定电流 630-3150A 的电力系统中作为接受与分配电能之用, 特别适用于频繁操作的场合, 其母线系统为单母线, 可派生出单母线带旁路和双母线系统。

本开关柜符合国家标准 GB3906《3-35kV 交流金属封闭开关设备》及国际标准 IEC298 的要求, 并且具有完善的防误操作功能。本开关柜的主开关采用 ZN28A-12 系列、ZN28-12 系列等真空断路器, 隔离开关采用 GN30-12 旋转式隔离开关、GN22-12 大电流隔离开关和 GN30-12 旋转式大电流隔离开关系列产品。

XGN2-12 Box Irremovable-type AC Metal-enclosed Switchgear (switchgear for short) is used in electric system of rated voltage 3.6-12kV three-phase AC 50Hz and rated current 630-3150A to receive and distribute power, especially used in frequent operating conditions. The busbar system is single busbar, but it can be derived into single busbar with bypass and double busbar system.

The switchgear meets the national standard GB3906 "3-35 kV AC Metal-enclosed Switchgear" and the requirement of international standard IEC298, and has perfect function of error prevention. The switchgear mainly adopts ZN28A-12, ZN28-12 and so forth vacuum circuit breakers. Isolation switch adopts GN30-12 rotary isolator, GN22-12 large current isolation switch and GN30-12 rotary large current isolation switch.

### 型号含义 Type Designation

X G N 2-12 □ □ □ / □ - □

- 额定短路开断电流 kA  
Rated Short-circuit Breaking Current kA
- 额定电流 A Rated Current A
- 操动机构类型 (D 电磁, T 弹簧)  
Operating Mechanism Type (D for Electromagnetism; T for Spring)
- 主回路方案代号 Primary Loop Code
- 断路器类型 Circuit Breaker Type
- 额定电压 kV Rated Voltage kV
- 设计序号 Design No.
- 户内 Indoor Type
- 固定式 Irremovable Type
- 箱式结构 Box Type

### 正常使用条件 Working Conditions

- ◆环境温度: 上限 +40℃, 下限 -10℃。  
Ambient temperature: -10~+40℃
- ◆海拔高度不超过 1000m( 超过 1000m 时可与我公司协商 )。  
Altitude: ≤ 1000m (Altitude over 1000m can be negotiated with the company)
- ◆相对湿度: 日平均值小大于 95%, 月平均值不大于 90%。  
Humidity: daily average ≤ 95%, monthly average ≤ 90%
- ◆地震烈度不超过 8 级。  
Earthquake intensity: ≤ magnitude 8
- ◆没有火灾、爆炸危险、严重污秽、化学腐蚀及剧烈震动的场合。  
It is applicable in the place without fire disaster, explosion hazard, serious pollution, chemical corrosion and violent vibration.

## 结构特点 Structure Features

XGN2-12 开关柜为金属封闭箱式结构，柜体骨架由角钢焊接而成，柜内分为断路器室、母线室、电缆室、继电器室等。室与室之间用钢板隔开。

断路器室在柜体前下部，断路器的转动由拉杆与操动机构连接，断路器上接线端子与上隔离开关连接，断路器下接线端子与电流互感器连接，电流互感器与下隔离开关的母排连接，断路器室还设有压力释放通道，若内部电弧发生时，气体可通过排气通道将压力释放。

母线室在柜体后上部，为了减小柜体高度，母线呈品形排列，以 3750N 抗弯强度的瓷质绝缘子支持，母线与上隔离开关母排连接，相邻两母线室之间可隔离。

电缆室在柜体下部的后方，电缆室内支持绝缘子可设有电压监视装置，电缆固定在支架上，对于主接线为联络方案时，本室则为联络小室。继电器室在柜体上部前方，室内安装板可安装各种继电器等，室内有端子排支架，门上可安装指示仪表、信号元件等二次元件，顶部还可布置二次小母线。

断路器的操动机构装在下面左边位置，其上方为隔离开关的操作及联锁机构。开关柜为双面维护，前面检修继电器室的二次元件，维护操动机构，机械联锁及传动部分，检修断路器。后面维修主母线和电缆终端，在断路器室和电缆室均有照明灯。前门的下方设有与柜宽方向平行的接地铜母线，其截面为  $4 \times 40 \text{mm}^2$ 。

机械联锁：为了防止带负荷分合隔离开关，防止误分误合断路器，防止误入带电间隔；防止带电合接地开关；防止带接地刀合闸，开关柜采用相应的机械联锁，机械联锁的动作原理如下：

### ◆ 停电操作（运行—检修）

开关柜处于工作位置，即上下隔离开关、断路器处于合闸状态，前后门已锁好，并处于带电运行之中，这时的小手柄处于工作位置。先将断路器分闸后，再将小手柄扳到“分断闭锁”位置，这时断路器不能合闸，将操作手柄插入下隔离的操作孔内从上往下拉，拉到下隔离分闸位置，再将手柄拿下，再插入上隔离操作孔内，从上往下拉，拉到上隔离分闸位置。再将操作手柄拿下，插入接地开关操作孔内，从下向上推，使接地开关处于合闸位置，这时可将小手柄扳到“检修”位置。可先打开前门，取出后门边钥匙打开后门，停电操作完毕，检修人员对断路器室及电缆室进行维护和检修。

### ◆ 送电操作（检修—运行）

若已检修完毕，需要送电，其操作程序如下：将后门关闭，钥匙取出后关前门，将小手柄从“检修”位置扳到“分断闭锁”位置，这时前门被锁定，断路器不能合闸，用操作手柄插入接地开关操作孔内，从上向下拉，使接地开关处于分闸位置，将操作手柄拿下，再插入上隔离的操作孔内，从下向上推，使上隔离处于合闸位置，将操作手柄拿下，插入下隔离的操作孔内，从下向上推使下隔离处于合闸位置，取出操作手柄，将小手柄扳至工作位置，这时可将断路器合闸。

## 安装、调整与维修 Installation, Adjustment and Maintenance

### ◆ 真空断路器在分闸时产生的动载荷，向上、向下约为 7840N，此数据提供设计基础时估算基础应力。

安装程序及注意事项：

- 将开关柜按排列顺序放置在基础上，调整好成组开关柜的直线度，垂直度、水平度，然后用 M12 螺栓或是点焊方法将开关柜紧固在基础槽钢上。
- 用  $M12 \times 30$  螺栓进行柜间连结。
- 安装主母线，打开母线室顶盖板进行安装，安装好后紧固顶盖板，连接母线时接触面应平整、无污物，有污物时应除净，涂中性凡士林。
- 安装一次电缆，电缆头制作完后，将电缆头固定在支架上，电缆与母线接触面应平整，接触面上涂中性凡士林后即可连接，并予以紧固，电缆施工完后应将电缆室与电缆沟封隔。
- 连接柜间接地母线，使之沿开关柜排列方向连成一体，检查工作接地和保护接地是否有遗漏，接地回路是否连续导通，工作接地电阻应不大于  $1000 \mu\Omega$ ，保护接地电阻不大于  $4\Omega$ 。
- 安装二次回路电缆，电缆由机构左侧底穿入，顺侧壁进入继电器室，分接到相应的端子排上，施工时，应注意电缆号、端子号，不要漏穿或穿错，二次电缆施工完后，注意勿忘封盖电缆孔。



### 结构特点 Structure Features

XGN2-12 switchgear is metal-enclosed box-type structure. The framework of the cabinet is welded by Angle steel. And the cabinet can be divided into circuit breaker compartment, busbar compartment, cable compartment, relay instruments compartment and so forth. Each compartment is separated by steel plates.

Circuit breaker compartment is at the bottom of the front cabinet. The rotation of the circuit breaker is connected with operating mechanism by a pull rod. The upper terminals on the circuit breaker are attached to the upper isolation busbar, while the lower terminals on the circuit breaker are attached to current transformer, and the current transformer connects to lower isolation busbar. The circuit breaker compartment is also equipped with pressure release tunnel. If there is any ark, the gas can be released through the tunnel.

Busbar compartment is located in the upper part of the back cabinet. In order to reduce the height of cabinet, the arrangement of the busbar shapes like a Busbar connects to upper isolation switch busbar. Thanks to support of porcelain insulator with 3750N bending strength, adjacent busbar compartments can be isolated.

Cable compartment is at the bottom of the back cabinet. The supported insulator inside the cable compartment can be equipped with voltage monitoring device. Cables are fixed on the bracket. When the main wiring scheme takes as the connection plan, this compartment becomes the small compartment for connection. Relay instruments compartment is on the upper part of front cabinet. Indoor installation plates can be installed with all kinds of relays. Terminal row is inside the door where indicator instruments, signal components and such secondary components can be installed. Secondary small busbar can be arranged at the top of the compartment.

Circuit breaker operation mechanism is installed below the left position, and above it are isolation switch and its interlock mechanism. Switchgear can be maintained at both sides——in front, maintain the secondary components of the relay instruments compartment, operation mechanism, mechanical interlock and drive parts, and circuit breaker; at the back, maintain main busbar and cable terminals. Both circuit breaker compartment and cable compartment are lighting. Down to the bottom of the front door is equipped with grounding copper busbar which is parallel to the width of the cabinet and the cross section is 4X40mm<sup>2</sup>.

Mechanical interlocking: in order to prevent closing and breaking the isolating switch when it is loading, prevent false closing and breaking of the circuit breaker, avoid straying into charged compartments, prevent to close the charged grounding switch, and prevent to close with grounding knife. The switchgear adopts the corresponding mechanical interlocking, and its action principle is as follows:

#### ◆ Power-off Operation (Operation-Maintenance)

Switchgear is in the working position, that is to say the upper and lower isolation switches and the circuit breaker are in the closing state, and the front door has locked, so the switchgear is charged and now the small handle is also in the working position. When the circuit breaker is breaking and then the small handle could be turned into "breaking and interlock" position, and now the circuit breaker can not be closed. Insert the operating handle into the operation hole of the lower isolation switch and pull it down to the breaking position of the lower isolation switch, and then take down the handle and insert it into the operation hole of the upper isolation switch, then pull it down to the breaking position of the upper isolation switch. Take down the handle again, and insert it into the operation hole of the grounding switch and push it up to the closing position of the grounding switch. Now the small handle can be turned into "maintenance" position. First, open the front door, and take down the key to the back door to open the back door, and finish the power-off operation, so the staff can enter into the circuit breaker compartment and cable compartment to maintain.

#### ◆ Power-on Operation (Maintenance-Operation)

If staff has already finished maintenance, the switchgear needs to be charged again, and its operating procedures are as follows: close the back door, and take down the key, then close the front door and turn the small handle from "maintenance" position into "breaking and interlock" position, and now the front door has been locked, so the circuit breaker can not be closed. Insert the operation handle into the operation hole of the grounding switch and pull it down to the breaking position of the grounding switch. Take down the operation handle, and insert it into the operation hole of the upper isolation switch and push it up to the closing position of the upper isolation switch. Take down the operation handle again, and insert it into the operation hole of the lower isolation switch and push it up to the closing position of the lower isolation switch. Take down the operation handle and turn the small handle back to working position, and now the circuit breaker can be closed.

### 安装、调整与维修 Installation, Adjustment and Maintenance

- When the vacuum circuit breaker is in breaking position, the dynamic load will arouse, and the power upward and downward is about 7840N, and such data is provided to estimate the foundation stress for basic design.

Installation procedures and matters needing attention:

- Place the switchgear according to the order on the basis, and adjust the straightness, verticality and levelness of the group cabinets, then use M12 bolt or spot welding method to tighten the switchgear in basic channel steel.
- Connect the cabinets with M12X30 bolt.
- Install the busbar: open the roof cover plate of the busbar compartment to install and then tighten the top cover plate. The interface should be leveled off and without dirt when connecting the busbar. If there is any dirt, neutral Vaseline should be used to clean out.
- Install the primary cable: after the production of the cable heads, fix them on the bracket. The interface should be leveled off and can be connected when it covers neutral Vaseline, and then fasten them and seal the cable compartment and cable duct.
- Install the grounding busbar between the cabinets: line the busbar up with the direction of the switchgear. Check whether the working grounding and protecting grounding is complete and whether the grounding loop is continuously conductive. The working grounding resistance should be not more than 1000 mΩ, and the protecting grounding resistance is not more than 4Ω.
- Install the secondary loop cable through the left bottom along the wall into the relay instruments compartment, and connects to the terminal bars respectively. Pay attention to the cable number and terminal number and don't make mistakes by corresponding the wrong number or missing any of them. After the installation of the secondary cable, do not forget to seal the cable hole.



## 维护与检修 Inspection and Maintenance

### ◆ 开关投入运行后，监视和维护工作如下：

When the switchgear starts to operate, inspection and maintenance work are as follows:

- a、观察主母线和电气连接处母线，如发现母线过热变色应进行检修。  
a、Observe the busbar and the busbar connected to electrical components. Maintain them if they change the color for overheating.
- b、观察照明、控制、信号电源是否正常供电。  
b、Observe whether the lighting, control, signal power is normal power supply.
- c、记录断路器的动作次数。  
c、Record operation times of circuit breaker.

## 检修 Maintenance

### ◆ 开关柜检修，有故障检修和定期检修，故障检修是防止故障运行和防止事故扩大，在发现故障出现或断电即将出现时，立即对故障部位进行检修，及时排除故障。定期检修，按运行规定按时进行，检修内容如下：

There are two kinds of maintenance of the switchgear: corrective maintenance and preventive maintenance. Corrective maintenance is to prevent the failure operation and prevent accident expanding. When power failure occurs or is about to appear, maintaining the trouble location immediately. Preventive maintenance maintains at a regular time and its maintenance contents are as follows:

- a、清扫各部位尘土，特别是绝缘表面的尘土。  
a、Clean the dust of each part, especially the dust on the insulation surface.
- b、检修程序锁和机械连锁，运作保持灵活可靠，程序正确。  
b、Maintain whether the program lock and mechanical interlock operates flexibly, reliably and correctly.
- c、按断路器、隔离开关、操动机构等电器的规定进行检修、调试。  
c、Maintain and adjust according to the regulation of the circuit breaker, disconnecting switch and operating mechanism.
- d、检查电器接触部位，接触情况是否良好，检测接地回路，保持连续导通。  
d、Check whether the electrical contact position is good and whether the grounding loop keeps continuous conduction.
- e、紧固螺钉。  
e、Fasten screws.

## 随机文件包括 Attached Documents

- ◆ 产品合格证。  
Product Qualification Certificate
- ◆ 安装使用说明书。  
Operation Instruction
- ◆ 二次施工接线图。  
Secondary Connection Diagram
- ◆ 装箱单。  
Packing List

## 易损件、附件及备件 Expendable Parts , Accessories and Spare Parts

- ◆ 应有断路器等电器的易损件。  
The product should include expendable parts for circuit breaker etc.
- ◆ 开关柜的易损件、由用户与制造厂协商确记。  
The expendable parts are decided by the user and the manufacturer.
- ◆ 开关柜的附件，备件用户从制造厂订购。  
The accessories and spare parts need to be purchased from the manufacturer.

## 产品的验收及保管 Acceptance Inspection

- ◆ 产品运输过程中，只准直立放置不得倒置、倾翻、翻滚、溜放。  
During the transportation, the switchgear shall stand and not upside down, tilting, rolling and falling.
- ◆ 按产品装箱单、对整机、附件等进行验收。  
Accept the whole set and accessories according to the packing list.
- ◆ 保管。  
Keeping.
- ◆ 产品在安装前，应以原包装存放在库房中，如不能入库房，应防止雨淋，防止受潮；不得随意拆卸电器元件及零部件。  
Before installation, the switchgear should be kept with the original packaging in warehouse. If it can not be kept in the warehouse, should prevent it from rain and damp. Shall not disassemble the electric components and accessories arbitrarily.

## 订货须知 Ordering Information

- ◆ 主接线方案编号及单线系统图，排列图。  
Primary wiring scheme number and single wiring diagram and ranging chart.
- ◆ 二次回路接线原理图，端子排列图，如端子无排列图时按制造厂提供。  
Secondary circuit wiring diagram and terminal ranging diagram (if it is not provided, it will be manufactured according the manufacturer).
- ◆ 开关柜内的电器元件的型号、规格、数量。  
Model, specification and quantity of electrical components.
- ◆ 主母线、支母线的材质、规格，否则按制造厂规定供应。  
Material and specification of main and branch busbar (if it is not provided, it will be manufactured according the manufacturer).
- ◆ 开关柜使用在特殊环境条件，应在订货时提出。  
Environmental conditions for using the switchgear shall be declared when ordering.
- ◆ 需要附件，备件时，应提出其种类和数量。  
Types and quantity of the accessories and spare parts if needed.

## 开关柜的技术数据 Specifications

项目 Item	单位 Unit			技术参数 Data			
额定电压 Rated Voltage	kV			3.6,7.2,12			
额定电流 Rated Current	A	630	1000	1250	2000	2500	3150
额定短路开断电流 Rated Short-circuit Breaking Current	kA	20			31.5	40	
额定短时耐受电流 Rated Short-time Withstands Current	kA	20			31.5	40	
额定峰值耐受电流 Rated Peak Withstands Current	kA	50			80	100	
额定短路关合电流 Rated Short-circuit Closing Current	kA	50			80	100	
额定短时耐受电流持续时间 Duration of Rated Short-time Withstand Current	s	4					
防护等级 Protection Degree	IP2X						
母线系统 Busbar System	单母线、单母线带旁路、双母线 single busbar、single busbar with bypass、double busbar						
操作方式 Operating Type	电磁式、弹簧储能式 Electromagnetism type、Spring Stored Energy type						
外形尺寸 宽 × 深 × 高 Dimension width X depth X height	mm	1100X1200X2650(1250A 以下)					
重量 Weight	kg	1000					

## ZN28A-12真空断路器及操作机构技术参数 Specifications of ZN28A-12 Vacuum Circuit Breaker

名称 Item			单位 Unit	ZN28A-12/630-20 1000-20		ZN28A-12/1250-31.5 2000-31.5		ZN28A-12/2500-40 3150-40		
额定电压 Rated Voltage			kV			12				
额定频率 Rated Frequency			Hz			50				
额定电流 Rated Current			A	630	1000	1250	2000	2500	3150	
额定短路开断电流 Rated Short-circuit Breaking Current			kA	20		31.5		40		
额定短路关合电流 Rated Short-circuit Closing Current			kA	50		80		100		
额定短时耐受电流 Rated Short-time Withstands Current			kA	20		31.5		40		
额定峰值耐受电流 Rated Peak Withstands Current			kA	50		80		100		
额定短时耐受电流持续时间 Duration of Rated Short-time Withstands Current			s			4				
机械寿命 Mechanical Life			次			10000				
额定短路开断电流开断次数 Times of Rated Short-circuit Breaking Current			次			30 (50)				
燃弧时间 Arc Time			ms			≤ 20				
配 电 机 构 Distribution Mechanism	直 流 电 磁 DC Electromagnetism	型 号 Type			CD10 I		CD10 II		CD10 III	
		工 作 电 压 Working Voltage	合 闸 线 圈 Closing Coil			110,220				
			分 闸 线 圈 Breaking Coil			24,48,110 ,220				
		工 作 电 流 Working Current	合 闸 Closing	110	V	196	240	294		
				220	V	98	120	147		
			分 闸 Breaking	24	V	37				
				48	V	18.5				
				110	V	5				
				220	V	2.5				
	弹 簧 储 能 Spring Stored Energy	型 号 Type			CT8-I CT8-II					
		工作电压 Working Voltage	储能电机 Stored Energy Motor			≈ 110, ≈ 220, ≈ 380				
			分励脱扣 Shunt Release			~110,~ 220,~ 380,-48				
			失压脱扣 Under-voltage Release			~110(1000),~220,~380				
		储能时间 Stored Energy Time	s	≥ 6						
		过流脱扣 Overcurrent Release	A	5						
合闸时间 Closing Time			s	直流电磁 >0.20 弹簧储能 >0.15 DC Electromagnetism>0.20; Spring Stored Energy>0.15						
合闸时间 Closing Time			s	≥ 0.06						

## CD17 机构主要技术数据 Specification of CD17 Mechanism

规格 Type		合闸线圈 Closing Coil		分闸线圈 Breaking Coil		匹配真空断路器额定 Rated Short-circuit Breaking Current of Matched Vacuum Circuit Breaker
		电流 (A) Current (A)	电阻 (Ω) Resistance (Ω)	电流 (A) Current (A)	电阻 (Ω) Resistance (Ω)	短路开断电流 (kA) Short-circuit Breaking Current(kA)
CD17-I	-220V	55	4 ± 0.24	1.5	146 ± 8	20
CD17-II	-220V	71	3.1 ± 0.2	1.5	146 ± 8	31.5
	-110V	142	0.77 ± 0.05	3.0	36.5 ± 2	
CD17-III	-220V	128	1.72 ± 0.1	1.5	146 ± 8	40
	-110V	256	0.43 ± 0.03	3.0	36.5 ± 2	



### CD17机构主要技术数据 Specifications of CD17 Mechanism

额定工作电压 (V) Rated Working Voltage(V)		~110	~220	~380	~48	~110	~220
额定工作电流 (A) Rated Working Current (A)	分	2.8	1.6			2.3	1.2
	合	1.3	0.8			1.3	0.55
额定电功率 (W) Rated Power(W)	分	308	352			255	264
		143	176			143	121
20℃时线圈电阻值 (Ω) Coil Resistance at 20℃ (Ω)	分	12 + 0.6	48 ± 2.4			48 ± 2.4	190 ± 10
	合	22 ± 1	85 ± 4			85 ± 4	398 ± 20
正常工作电压范围 Range of Normal Working Voltage		合闸:85%~10% 额定工作电压 Closing: 85%~10% Rated Working Voltage 分闸:65%~120% 额定工作电压, 小于 30% 的额定工作电压时不得分闸 Breaking: 65%~120% Rated Working Voltage (It can not break under 30% Rated Working Voltage)					
匹配真空断路器额定 短路开断电流 (KA) Rated Short-circuit Breaking Current of Matched Vacuum Circuit Breaker	CT19-I	20					
	CT19-II	31.5					
	CT19-III	40					

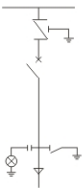
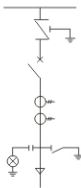
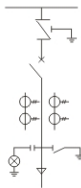
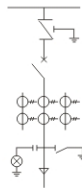

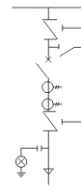
### 隔离开关的技术参数 Specifications of Isolation Switch

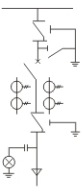
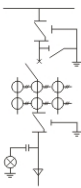
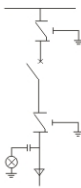

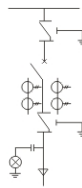
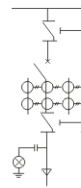
名称 Item	单位 Unit	GN30-12/400 GN30-12D/400	GN30 12/630 GN30 12D/630	GN30-12/1250 GN30-12D/1250
额定电压 (最高工作电压) Rated Voltage (Highest Working Voltage)	kV		12	
额定电流 Rated Current	A	400	630	1250
短时耐受电流 (4s) Short-time Withstands Current (4s)	kA	12.5	20	31.5
额定峰值耐受电流 (峰值) Rated Peak Withstands Current (Peak Value)	kA	31.5	50	80
雷电冲击耐压 Lightning Impulse Withstand Voltage	相对地、相间 Phase to Earth、Phase to Phase	kV	75	
	断口间 Fracture to Fracture	kV	82	
1min 工频耐压 Power Frequency Withstand Voltage for 1min	相对地、相间 Phase to Earth、Phase to Phase	kV	42	
	断口间 Fracture to Fracture	kV	48	

### 隔离开关的技术参数 Specifications of Isolation Switch

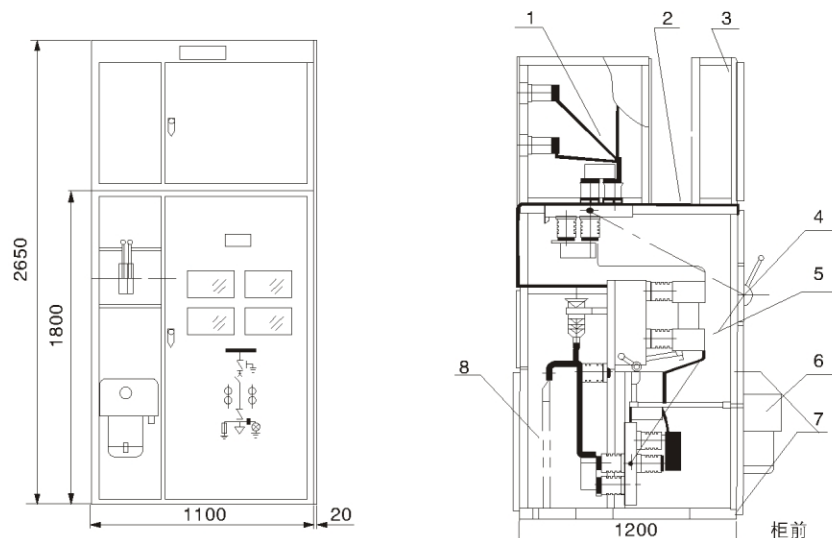
名称 Item	单位 Unit	GN22-12/2000	GN22-12/3150
额定电压 (最高工作电压) Rated Voltage (Highest Working Voltage)	kV		12
额定电流 Rated Current	A	2000	3150
短时耐受电流 (4s) Short-time Withstands Current (4s)	kA	40	50
额定峰值耐受电流 (峰值) Rated Peak Withstands Current (Peak Value)	kA	100	125
雷电冲击耐压 Lightning Impulse Withstand Voltage	相对地、相间 Phase to Earth; Phase to Phase	kV	75
	断口间 Fracture to Fracture	kV	85
1min 工频耐压 Power Frequency Withstand Voltage for 1min	相对地、相间 Phase to Earth; Phase to Phase	kV	42
	断口间 Fracture to Fracture	kV	53

## 主电路方案图 Primary Wiring Scheme

方案号 Scheme Number		01	02	03	04	05	06
主电路方案图 Primary Wiring Scheme							
主要 电 器 元 件 Main Electric Component	旋转式隔离开关 GN30-10D Rotating Type Isolation Switch GN30-10D					1	1
	电流互感器 LZJC-10, LZZJ-10 Current Transformer LZJC-10, LZZJ-10		1	2	3		1
	真空断路器 Vacuum Circuit Breaker	1	1	1	1	1	1
	操动机构 CD10、CD17 或 CT8、CT19 Operation Mechanism CD10, CD17 or CT8, CT19	1	1		1	1	1
	旋转式隔离开关 GN30-10 Rotating Type Isolation Switch GN30-10	1	1		1	1	1
	接地开关 JN4-10 Grounding Switch JN4-10	1	1		1	1	1
	带电显示装置 DXN6-10 Charged Display Device DXN6-10	1	1			1	1
额定电流 (A) Rated Current (A)		630、1000					
用途 Application		电缆进出线 Outlet and Inlet of Cable					

方案号 Scheme Number		07	08	09	10	11	12
主电路方案图 Primary Wiring Scheme							
主要 电 器 元 件 Main Electric Component	旋转式隔离开关 GN30-10D Rotating Type Isolation Switch GN30-10D	1	1				
	电流互感器 LZJC-10, LZZJ-10 Current Transformer LZJC-10, LZZJ-10	2	3		1	2	3
	真空断路器 Vacuum Circuit Breaker	1	1	1	1	1	1
	操动机构 CD10、CD17 或 CT8、CT19 Operation Mechanism CD10, CD17 or CT8, CT19	1	1	1	1	1	1
	旋转式隔离开关 GN30-10 Rotating Type Isolation Switch GN30-10	1	1	1	2		2
	带电显示装置 DXN6-10 Charged Display Device DXN6-10	1	1	1	1		1
额定电流 (A) Rated Current (A)		630、1000					
用途 Application		电缆进出线 Outlet and Inlet of Cable					

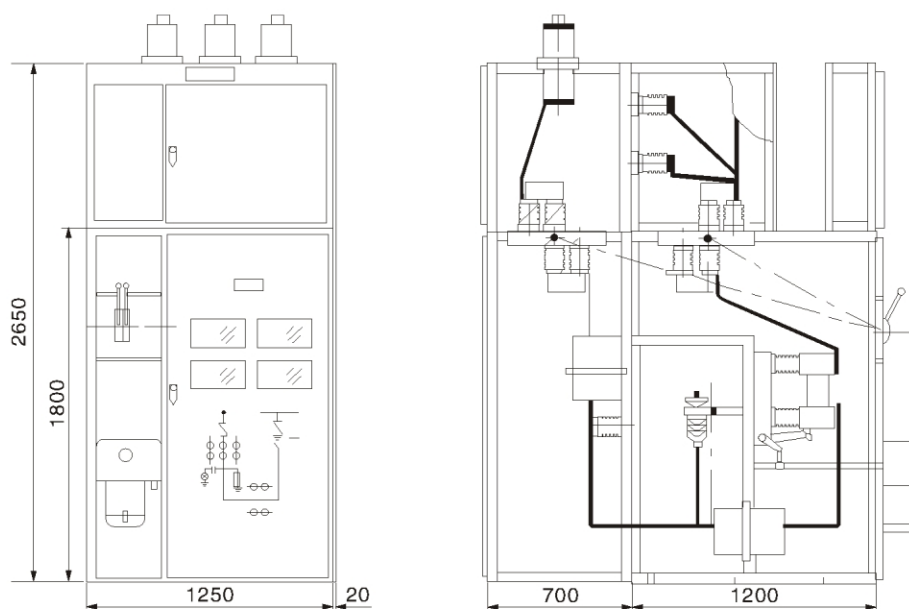
### XGN2-12-07D 外形图 XGN2-12-07D Outline Drawin



- 1、母线室  
Busbar Compartment
- 2、压力释放通道  
Pressure Release Tunnel
- 3、仪表室  
Relay Instruments Compartment
- 4、手力操作及连锁机构  
Manual Operating and Interlocking Mechanism

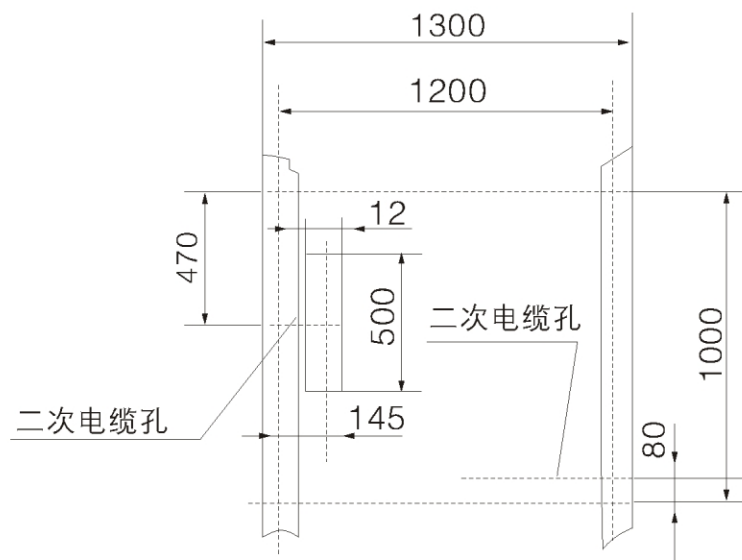
- 5、主开关室  
Main Switch Compartment
- 6、电磁或弹簧机构  
Electromagnetism or Spring Mechanism
- 7、接地母线  
Grounding Busbar
- 8、电缆室  
Cable Compartment

### XGN2-12(Z)-72 外形图(大电流架空进线柜) XGN2-12(Z)-72 Outline Drawing(Large Current -in Cabinet)





## XGN2-12 型安装尺寸图 XGN2-12 Installation Dimension Drawing



## XGN2-12 型基础示意图 XGN2-12 Sketch Map

