

XGHY4-18 Fixed AC Metal-clad Switchgear

Summary

The switchgear applies to 12-18kV three phase AC 50Hz power grid, applies to install on generator and boosting transformer or generator and transformer of power workshop, used for the protection and control of the generator facilities. The switchgear conforms to GB1985-2004 《HV AC Disconnecter and Earthing switch》, GB 3906-2006 《3.6kV-40.5kV AC Metal-clad enclosed Switchgear and Controlgear》, GB 4208-2008 《enclosure Protection Grade (IP code)》, GB/T 11022 《standard common specification of Switchgear and Controlgear》, GBT 14824-2008 《HV AC generator Circuit Breaker》, etc. And have perfect and reliable prevent wrong operation function.



Ambient Condition

1 Environmental air temperature: $-25^{\circ}\text{C} \sim +40^{\circ}\text{C}$; and the average value measured in 24h is not more than 35°C ;

2 Altitude $\leq 1000\text{m}$;

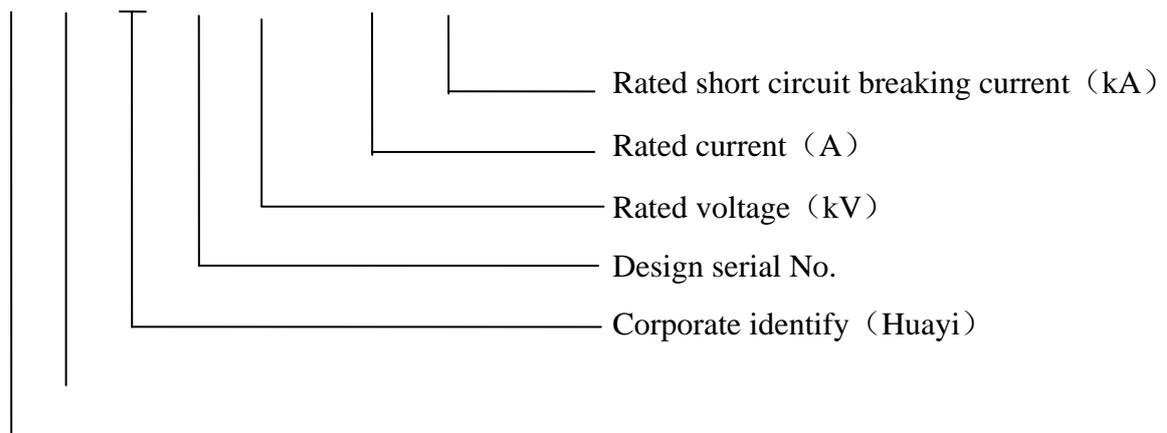
3 Humidity condition:

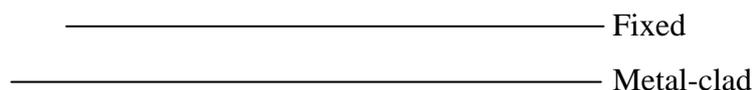
- ◆ the average value of relative humidity measured in 24h is not more than 95%;
- ◆ the average value of water vapor pressure measured in 24h is not more than 2.2kPa
- ◆ monthly average value $\leq 90\%$;
- ◆ the average monthly water vapor pressure is not more than 1.8kPa;

4 Installation site: without fire risk, explosion hazard, heavy pollution, chemical corrosion and violent vibration. Vertical bank is not more than 5° .

Model

X G HY 4 - 18 / 6300 - 63





Technical Parameters

No.	Item		Unit	Data
1	Rated voltage		kV	18
2	Rated current		A	6300A
3	Rated frequency		Hz	50
4	Rated peak withstand current		kA	176
5	Rated short-time withstand current		kA	63
6	Duration of rated short circuit withstand current		s	2
7	Rated short circuit breaking current		kA	63
8	Rated short circuit making current		kA	176
9	Rated insulation level	1min P.F. Withstand	kV	phase to phase, phase to ground / isolating fracture: 53/63
		lightning impulse withstand voltage		phase to phase, phase to ground / isolating fracture: 100/115
10	Rated current of auxiliary switch		A	AC:10 DC:5
11	Rated operation sequence			CO-30min-CO
12	Energy storage time		S	15
13	Rated load making time		time	50
14	Rated out-of pahase breaking current		kA	31.5
15	Mechanical life		time	4000

Main Feature

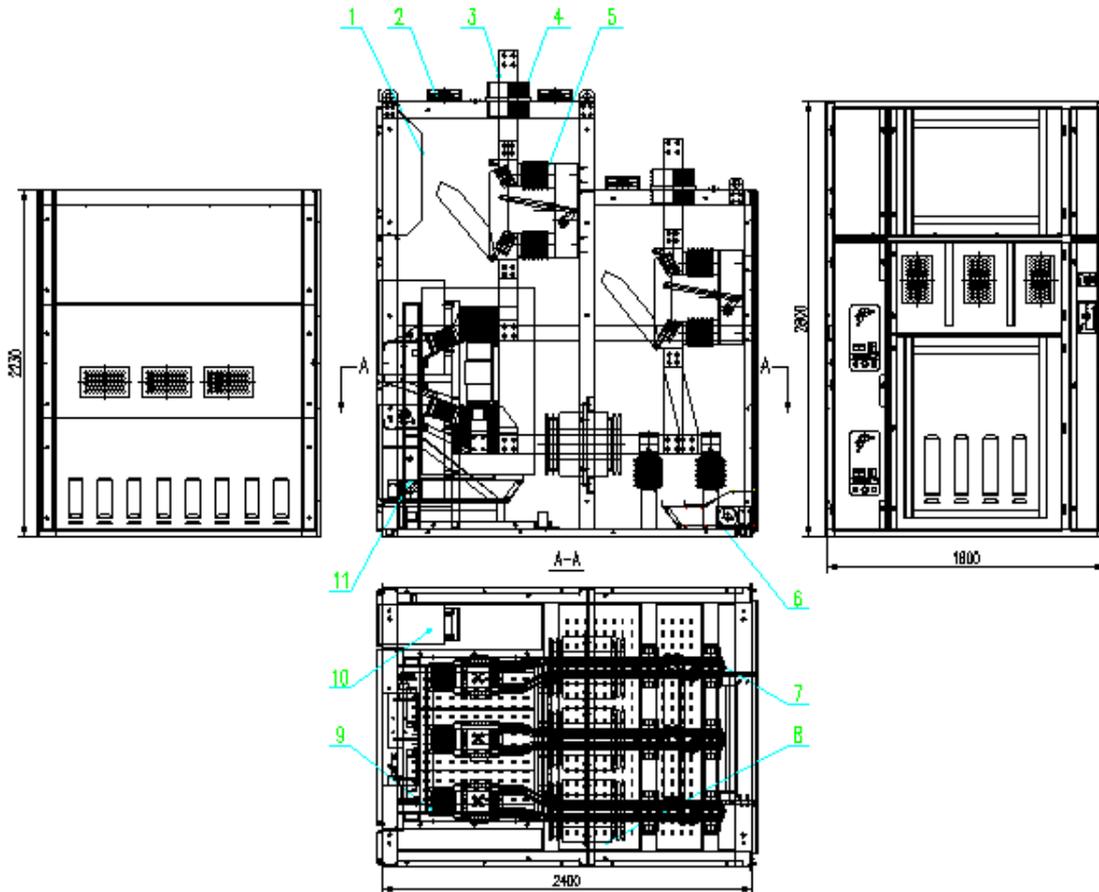
1. The internal frame is welded together by steel channels, the enclosure is completely formed by Al-Zn coated steel plate after multiple bending processed by CNC machine, and then is assembled with bolts, which has strong mechanical strength and effectively assure the neatness and good appearance. The door is painted by plastic powder and has strong anti-impact and corrosion proof ability. The protection grade of enclosure is IP3X.

2.ZN105-18/T6300-63 generator circuit breaker, other circuit breakers with similar structure also can be configured. The circuit breaker has the advantages of long life, high reliability, less

maintenance and small size.

3. Can realize operation after closing the door. The normal operation of the switch cabinet, including the circuit breaker switch on and off, and the position of the isolating switch, can be carried out under the condition of high voltage compartment door is closed.

Basic Structure



Structure of the Switchgear

- (1) Meter cabinet septum (2) Axial flow fan (3) Busbar assembly (4) Busbar bushing
- (5) Disconnecter (6) Cross-flow fan of the back cabinet (7) Insulator
- (8) Current transformer (9) Generator circuit breaker
- (10) Operating mechanism of disconnector (11) Cross-flow fan of the cabinet