

HIGH AND LOW VOLTAGE SWITCHGEAR SERIES

XGW-12/24/36

Compact Switchgear Station



Overview

The primary and secondary fusion ring cage is an intelligent complete set of equipment introduced in response to the latest national grid standard "Technical Standard for primary and secondary complete sets of equipment for Power distribution", which integrates electromagnetic voltage, current transformer, energy metering module, high-speed fault transient filter and other advanced technologies. It consists of loop in loop out unit, feeder unit, bus equipment (PT) unit, centralized DTU and connecting cable. It can collect active power, reactive power, power factor, frequency, zero sequence current and zero sequence voltage, with line loss measurement, electric energy measurement functions, as well as line voltage identification, voltage over limit, load over limit alarm sending, short circuit fault detection and processing. The single-phase grounding fault detection and handling function supports the transmission of short-circuit or grounding fault events to meet the automation requirements of the distribution network.

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Model meaning

X	G	W	-	12/24/36	-	□
↓	↓	↓		↓		↓
Box-type	Stationary	Outdoors		Rated voltage (kV)		Rated current (kA)

Conditions of use

- Altitude: 1000m and below;
- Ambient temperature: -10 °C ~ +40°C ;
- Relative humidity: daily average is not more than 95%, monthly average is not more than 90%;
- Place of use: there should be no conductive dust and corrosive, flammable and explosive dangerous goods that are harmful to metal and insulation;

Main technical parameters

Item	Units	Argument
Rated voltage	kV	12/24/36
Rated current	A	630
Rated power frequency 1min withstand voltage (relative)	kV	42
Peak rated lightning impulse withstand voltage	kV	75
Rated short-circuit withstand current and duration	kA/s	25/4
Rated peak withstand current	kA	63
Class of protection		IP43

Main feature

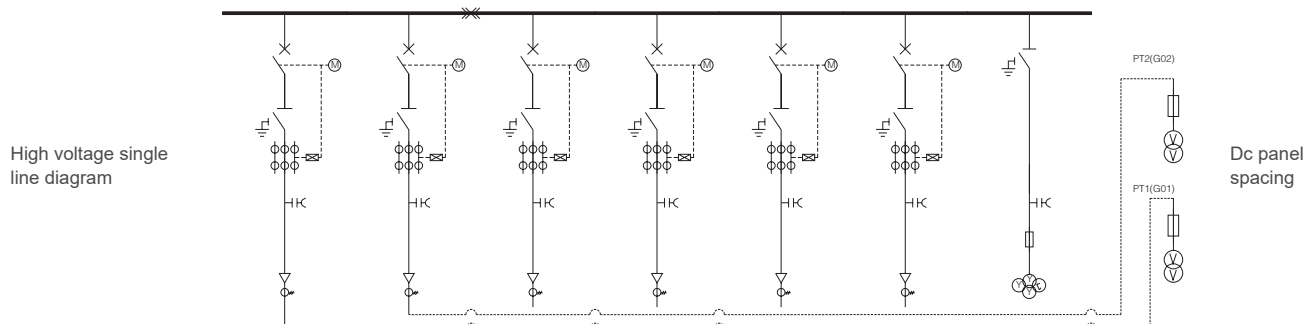
- On the basis of the traditional DTU function, the metering level distribution line loss collection function is added, the judgment and location function of small current grounding fault is optimized, and the sampling frequency is increased, so that the fault waveform is closer to the real waveform.
- To meet the requirements of feeder automation, the controller takes line voltage as the criterion, realizes local fault processing through delayed closing and substation protection, does not need batteries, does not rely on communication and main station, and can achieve complete feeder automation function on the spot;
- Clear distribution network automation system function distribution, easy to operate;
- The use of frequent operation load switches/circuit breakers to meet the requirements of distribution network automation and economic operation;
- Built-in isolation fracture and vacuum interrupter series asynchronous linkage, switching ability is strong, high safety;
- Three-phase common box layout, porcelain sheath cable casting line, full sealing mechanism, military-grade aviation plug, the whole full sealing technology to ensure strong weather resistance, good condensation resistance, 15 years maintenance-free;

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Typical scheme of XGW-12/24/36 series primary and secondary fusion ring cage

Ring cage	V	V	V	V	V	V	Gpt	PT	Dc panel
External dimension (W * D * H)	380*770* (1500+500)	380*770* (1500+500)	380*770* (1500+500)	380*770* (1500+500)	380*770* (1500+500)	380*770* (1500+500)	380*770* (1500+500)	520*820* (1500+500)	600*600* 1600
Ring cage number:	G01	G02	G03	G04	G05	G06	G07	G08	G09



use	Inlet and outlet cable cabinet	Inlet and outlet cable cabinet	Inlet and outlet cable cabinet	Inlet and outlet cable cabinet	Inlet and outlet cable cabinet	Inlet and outlet cable cabinet	Bus PT cabinet	Enter the PT cabinet	
Circuit breaker HB ZN □ - 12/630	1	1	1	1	1	1			
Isolation switch HB GL-12/630	1	1	1	1	1	1	1		
Load switch HB FLN □ -12/630									
Ground switch	1	1	1	1	1	1	1		
Operating mechanism	DC48V	DC48V	DC48V	DC48V	DC48V	DC48V	Manual operation		
Busbar connector	12kV/630A								
Insulating plug									
Barometer with contact									
Intelligent dehumidifier	LXK-LN01 A piece	LXK-LN01 A piece	LXK-LN01 1 piece	LXK-LN01 1 piece	LXK-LN01 1 piece	LXK-LN01 1 piece	LXK-LN01 1 piece	LXK-LN01 1 piece	
Live display	GSN-Q DC48V	GSN-Q DC48V	GSN-T	GSN-T	GSN-T	GSN-T	GSN-T		
Electromagnetic lock								DSNIII-F-Y DC48V 2 piece	
Ground and short circuit fault indicator									
Integrated current transformer	Measurement 500/5A 0.5 10VA protection 600/5A 10P20 10VA1 station								
Through-core current transformer									
Zero sequence current transformer	150/5A 10P10 5VA 1piece	150/5A 10P10 5VA 1piece	150/5A 10P10 5VA 1piece	150/5A 10P10 5VA 1piece	150/5A 10P10 5VA 1piece	150/5A 10P10 5VA 1piece			
amperemeter									
Intelligent instrument	HB-101 1piece	HB-101 1piece	HB-101 1piece	HB-101 1piece	HB-101 1piece	HB-101 1piece	HB-101 1piece	HB-101 2piece	
Relay unit	HB300 DC48V	HB300 DC48V	HB300 DC48V	HB300 DC48V	HB300 DC48V	HB300 DC48V			
Intelligent communication management machine								Communication management machine (with encryption module) 1 set	
Dc power supply								DC48V/65AH	
Voltage transformer								10/√3/0.1/√3 0.1/ √3/0.1/√3 0.2/ 0.5/3P 30/30/50VA 1sets 10/0.1/0.22kV 0.5/3P 30/1000VA 2 sets	
High voltage fuse								1A 3 branches	1A 6 branches
voltmeter									
Voltage change-over switch									
PT insulation monitoring device									
Lightning arrester									
Front cable connector	Specifications to be determined						CB35mm ² 1 set		
Rear plug the cable connector	CC35mm ² 1 set	CC35mm ² 1 set							
PT elbow head							3×35mm ² 1 set	3×35mm ² 2 set	
Remark	Conventional protection, voltage and current type								

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