

Product Overview and Features

ZGS13-H-/10 series

Series of American box-type substation, its structure for the "品" type structure, substation and high and low voltage equipment are closely linked to each other as a whole, in which the substation is exposed in the air on three sides, good heat dissipation conditions, and can be separated from the high and low voltage equipment shells, easy to maintain.

The substation adopts piece-type oil tank, no oil pillow, fully enclosed S11 series oil-immersed transformer, high-voltage casing, tap changer, oil level indication, pressure release valve, oil drain valve, etc. are installed in the high-voltage cabin on the end plate of the body, low-voltage casing is installed in the low-voltage cabin on the end plate of the body in a reasonable position, easy to observe and operate.

High-voltage compartment, low-voltage compartment is separated by steel plate, high-voltage compartment, low-voltage compartment, transformer is relatively independent, but also maintains a complete box variable as a whole, compact structure, small volume, light weight. Distribution switchgear is installed on the high and low voltage sides.

Model Meaning

ZGS - 13 - H - □ / □

- Voltage level
- Transformer rated capacity
- Ring network type
- Design number
- Combined transformers

Areas of application and environments of use

It is widely used in various public places such as urban power grid renovation, residential neighborhoods, as well as indoor and outdoor places such as factories, mines, hotels, airports, railroads, wharves, highways and so on.

1、Cooling conditions: air self-cooling

2、Use environment:

Outdoor ambient temperature is not higher than 40℃, not lower than -25℃, the altitude does not exceed 1000m,

The average monthly temperature does not exceed 35℃, the average annual temperature does not exceed 20℃.

In 25 ℃, the air compared to the humidity does not exceed 95%, the monthly average does not exceed 90%.

Horizontal acceleration is not more than 0.4m/s2, vertical acceleration is not more than 0.2m/s2.

The installation environment should be free from obvious dirt, explosive, corrosive gas and dust, and the installation place should be free from violent vibration and shock, and it is required to be installed on the cement platform or other flat and solid platform.

Main technical parameters

Name		Unit	Standard parameter values	
Pre-assembled substations				
Rated voltage	High voltage side	kV	12	
	Low voltage side	kV	0.4.	
Transformer rated capacity		kVA	100, 125, 1 60,200,250 31 5,400, 500,630, 800, 1000	
Pressure regulation without load			±2x2.5%	
Connection method			△/Yn11	
Rated insulation level	Lightning impulse withstand voltage (full wave, peak)	kV	75	
	Industrial frequency withstand voltage 1min	kV	35	
Low-voltage side frequency and voltage phase to phase and phase to ground (1min)	Main circuit	kV	2.5	
	Control and metering circuits	kV	2.0	
Noise level		dB	50	
Protection class			Ip34	
Cooling method				
Load switch			Four-station	Two-station
Lightning surge withstand voltage (peak, full wave)	Ground-to-ground, interphase	kV	75	75
	Isolation InterrupGround-to-ground, interphase	kV	85	85
1min frequency withstand voltage	Ground-to-ground, interphase	kV	42	42
	Isolation InterrupGround-to-ground, interphase	kV	48	48
Rated current		A	630	1 00
Rated short-circuit closing current (peak)		kA	31.5	16
Rated short-time withstand current		kA	12.5	6.3
Rated short circuit duration		S	2	2
Rated peak withstand current .		kA	31.5.	16
Mechanical life		次	2000	2000
Transition time between main disconnections 0 in the case of division and closure		ms	16~22/15~20	11~15

Fuse		
Capacity(kVA)	Backup protection fuse rated current (A)/opening k (A)	Insertion fuse rated current(A)
100	40/40	10
125	50/40	15
1 60	63/40	25
200	80/40	25
250	80/40	25
315	80/40	25
400	1 00/40	40
500	1 00/40	40
630	125/40	65
800	1 75/40	65
1000	200/40	100