

Technical Parameters

No.	Item	Unit	Data
1	Rated voltage	kV	12
2	Rated current RK loop (T loop depends on fuse)	A	630(200)
3	Rated frequency	Hz	50
4	Rated short-time making current of RK loop (T loop)	kA	50(25)
5	Rated peak withstand current	kA	50
6	Rated short-time withstand current/time	kA /s	20/3
7	1min P.F withstand voltage (peak) phase to phase, phase to earth, vacuum fracture/isolation fracture	kV	42/48
8	Lightning impulse withstand voltage (peak) phase to phase, phase to earth, vacuum fracture/isolation fracture	kV	75/85
9	Rated short-time withstand current/time of earthing switch	kA/s	20/3
10	Rated short-time withstand current/time of earthing loop	kA/s	16/2

No.	Item	Unit	Data
1	Rated capacity	kVA	10~125
2	Rated voltage combination	kV	$10 \pm 2 * 2.5\% / 0.4$
3	Rated current	A	depend on the transformer capacity
4	Rated frequency	Hz	50
5	No-load loss	kW	depend on the transformer capacity
6	Load loss	kW	depend on the transformer capacity
7	Connection symbol		Dyn11
8	Impedance voltage		U _k =4%
9	1min P.F withstand voltage (HV/LV)	kV	35/3
10	Lightning impulse withstand voltage (full wave)	kV	75
11	Sound level	dB	≤55

No.	Item	Unit	Data
1	Rated voltage	kV	0.4
2	Rated frequency	Hz	50
3	Lightning impulse withstand voltage phase to ground	kV	7.4
4	P.F withstand voltage/time	kV /s	Main loop: 2.5/60
		kV /s	Subsidiary loop: 2/60

No.	Item	Unit	Data
1	Protection Grade		IP54
2	Outline dimension	mm	depend on primary circuit scheme

Main Structure

1. Reliable mechanical "five prevention" realizes the interlock between the load switch, grounding switch and front door, thus ensuring the personal safety.
2. The inlet and outlet lines are connected by live touching cable heads, and the lightning arrester is arranged on the incoming line, so as to ensure the personal safety of the operators.
3. The compact substation mainly include: SF6 gas insulated ring main unit, transformer, LV switchgear, UPS power supply, RTU set.
4. The compact substation adopts double-layer, sealed and anti-corrosion structure, effective moistureproof, dustproof, anti condensation, to ensure the stable operation of components in the box.
5. The whole compact substation adopts European style, divided into a high pressure chamber, a transformer chamber and low pressure chamber. High pressure chamber and transformer chamber are reliable physical isolation, arrange maintenance corridor in the middle of the low voltage cabinet, compact structure and small volume.
6. Install terminal boxes on the sides of the two low voltage cabinets for easy repair, test and maintenance.
7. The compact substation is equipped with a perfect ventilation system. On the one hand, it has an open natural air duct, and on the other hand, it has forced ventilation to control the temperature of the transformer room.
8. The compact substation is equipped with moisture drive system, when humidity exceeds the standard, automatically start the heating plate.
9. Each compartment has a smoke alarm system, and the signal is uploaded to the master station to prevent the accident expanding.
10. The compact substation is equipped with open door alarm system, and upload the signal, you can monitor the abnormal information on the scene, reach unattended operation

Electric Scheme

