

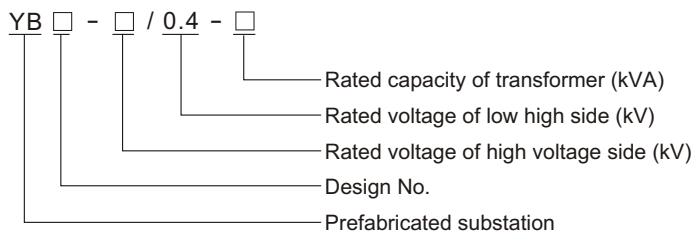
YB□ American Type Substation

Summary

The YB□ prefabricated substation is an important unit of the power supply network. It has the features of controlling, protecting, power transforming and power distributing for high voltage. The high voltage load break switch and fuse are put into the transformer oil. So it has two kind structures that are: single and sharing substation with transformer. There are the oil thermometer, pressure gauge, pressure release valve, oil drain valve monitors in the fully sealing oil box. The way of power supply is ring main unit mode, terminal mode and bi-power mode. For the fact of the domestic power supply network, our company produces the insert type dry fuse, if the fuse fused, it won't affect to the transformer oil. There are three kind of YB□ substation: standard model, strengthen model, integrated model.



Model



Ambient condition

1. Ambient temperature: -10°C~+40°C;
2. Attitude: ≤1000m;
3. Wind speed: 34m/s(Wind pressure: ≤700Pa);
4. Humidity: Daily average ≤95%, monthly average≤90%;
5. Shake-proof: Level acceleration≤0.4m/s, and the vertical acceleration≤0.15m/s;
6. Gradient of installation place: ≤3 degree;
7. Occasions without fiercely shake and corrosiveness, as well as without flaming and explosive matter;
8. If you have other requirement not on the list, warmly welcome to contact us.

Product feature

1. Compact structure, the volume is the same as 1/3~1/5 of European substation;
2. Fully sealing and fully insulated, needn't insulated gap;
3. The wiring management can be used in the ring main unit and terminal;
4. Low wastage, noise and temperature rise;
5. It has the strong capability of anti over load, short circuit and impulse;
6. Conforms to the various requirements of low voltage outgoing;
7. There are two kinds of cable, 200A elbow plug and 600A "T" the stationary electric cable, which can match to the fully sealing device;
8. Zinc oxides arresters, 200A electric with load insert which can be used as disconnecting switch.

Technical specification

1. Performance parameter of load break switch

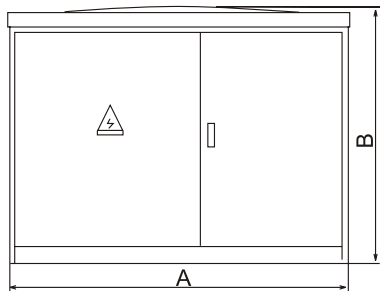
Rated current (A)	Rated voltage (kV)	Impulse withstand voltage (kV)	Power frequency withstand voltage (1min.kV)	Rated short time withstand voltage (kA/s)	Short circuit closing current (kA)	Rated peak withstand voltage (kA)	Load operation times	Mechanical operation times
315	12	75	42	12.5/2	31.5	31.5	100	2000
630	12	75	42	16/4	40	40	100	3000

2. 12kV prefabricate substation S9, S10, S11 series oil transformer performance level

No.	Rated capacity (kV)	Rated voltage		Voltage adjustment scope (%)	Connecting group No.	No load current (%)		Consumption (W)			Assistance voltage	Noise (dB)	Temperature rising							
		High voltage (kV)	Low voltage (kV)			No load		Load												
						S9	S10/S11	S9	S10	S11				S9	S10/S11					
1	30	6	0.4	±5	Yyn0	2.2	2.0		130			600	4	55	Top oil temperature 60°C winding 65°					
2	50					2.0	1.8		170			870								
3	63					1.9	1.5		200			1040								
4	80					1.7	1.2		250			1250								
5	100					1.6	1.1		290			1500								
6	125					1.5	1.0	340	270			1800								
7	160					1.4	1.0	400	310			2200								
8	200					1.4	0.8	480	375			2600								
9	250					6.3	(0.69)	(±2×25)	Dyn11	1.2	0.8	560				455	400	3050	3000	4.5
10	315									1.1	0.7	670				540	475	3650	3600	
11	400	10	(0.69)	(±2×25)	Dyn11	1.0	0.7	800	650	570	4300	4200								
12	500					1.0	0.6	960	775	680	5100	5000								
13	630					0.9	0.6	1200	920	800	6200	6000								
14	800					0.8	0.6	1400	1120	980	7500	7400								
15	1000					0.7	0.5	1700	1320	1150	10300	9860								
16	1250					0.6	0.5	1950	1560	1360	12800	12000								
17	1600					0.6	0.5	2400	1880	1640	14500	14000								

Note: a. The high voltage tap scope of transformer is $\pm 2 \times 2.5\%$
 b. The low voltage of transformer is 0.69kV.

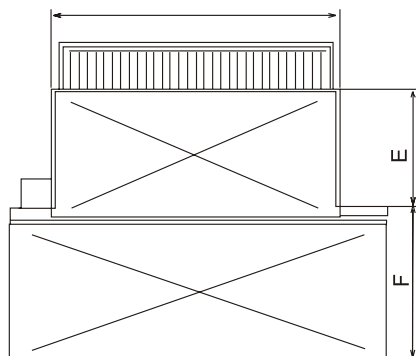
Outline Dimension



Standard type / integrated type front view

YB□ Standard type outline dimension

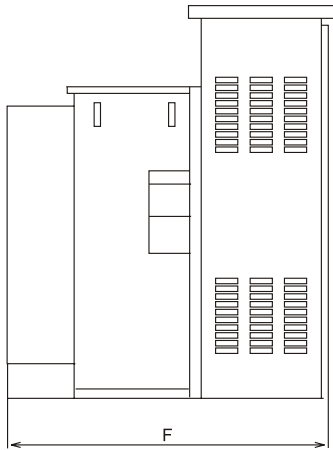
Standard	Capacity(kVA)	A	B	C	D	E	F	G
	100-250	1900	1650	1250	650/800	600	1410/1560	1450
315	1900	1650	1350	650/800	650	1460/1610	1450	
400-500	1900	1750	1450	650/800	650	1490/1640	1550	
630	1900	1750	1550	650/800	700	1580/1730	1550	
800	1900	1850	1550	650/800	700	1640/1790	1650	
100	1900	1850	1650	650/800	700	1640/1790	1650	



Standard type / strength type look down view

YB□ Strength type outline dimension

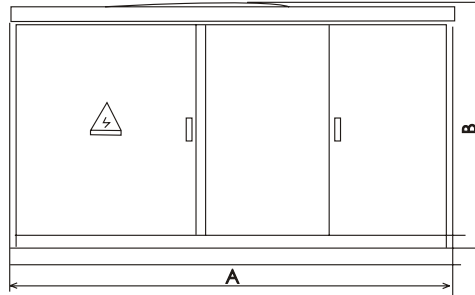
Strength	Capacity(kVA)	A	B	C	D	E	F	G
	100-250	2400	1650	1250	800	600	1560	1450
315	2400	1650	1350	800	650	1610	1450	
400-500	2400	1750	1450	800	650	1640	1550	
630	2400	1750	1550	800	700	1730	1550	
800	2400	1850	1550	800	700	1790	1650	
100	2400	1850	1650	800	700	1790	1650	



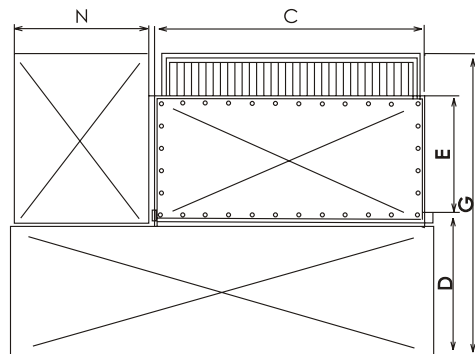
Standard type / strength type side view

YB□ Integrated type outline dimension

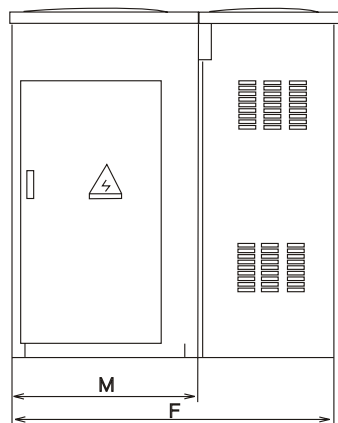
	Capacity(kVA)	A	B	C	D	E	F	G	M	N
Strength	100-250	2400	1750	1250	800	600	1750	1560	950	550
	315	2400	1750	1350	800	650	1750	1610	950	550
	400-500	2400	1850	1450	800	650	1750	1640	950	550
	630	2400	1850	1550	800	650	1750	1720	950	550
	800	2400	1950	1550	800	650	1750	1790	950	550
	100	2400	1950	1650	800	700	1750	1840	950	550



Strength type front view



Integrated type planform



Integrated type side view