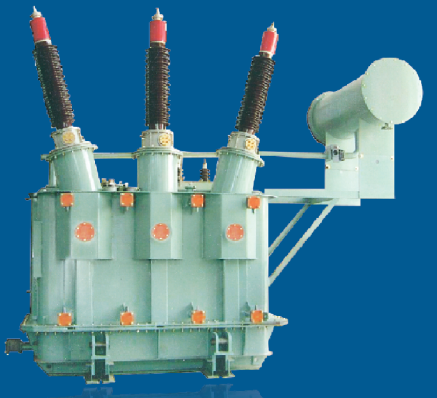
A

POWER TRANSFORMER



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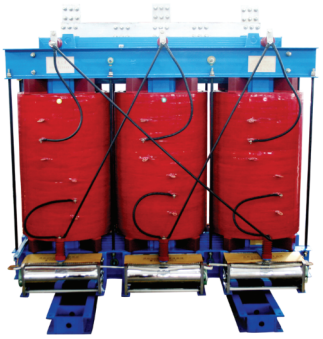
KEMA KEUR Rohs CB CE ISO9001 ISO14001 OHSAS18001

SC(B)9,SCR9,SC(B)10, SCR10 SERIES DRY TYPE TRANSFORMER



GENERAL

SC(B9),SCR9,SC(B)10,SCR10 Resin casting dry type power transformer produced by our company is a new generation of product with low loss and noise. Product complies with standards: IEC726, GB6450 and GB/T10228-1997 S.

The product owns advantage such as low loss and noise, small size, less weight, moistureproof, anti-dirty, crack-proof, withstanding impulse, fireproof, overload capability, smaller partial discharge (less than 10 PC).

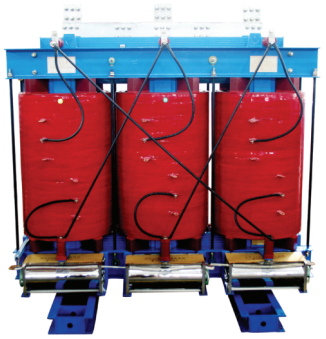
It has reasonable structure and convenient operation& maintenance. When the BWK series temperature controlling system is provided for dry type transformer, it has more functions including alarming caused by faults and abnormal temperature, automatic tripping and automatic starting (stopping) fans to ensure its safe operation.

It is applicable to transmission and distribution system, hotel, restaurant, high building, commercial center, stadium, petrochemical factory, metro, station, airport, drilling form in the sea and so on, particular to the places of load center, or the places where require fireproofing specially.

OPERATION CONDITION

1. Max ambient temperature: +40℃
2. Min ambient termperature:-5℃(the lowest storage temperature:-30℃)
3. daily mean temperature: < 30℃ annual mean temperature < 20℃
4. We have the ability to supply you the transformer according to your requirements.

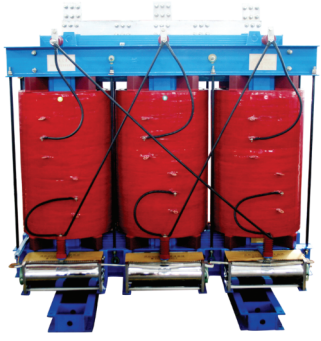
SC(B)9,SCR9,SC(B)10, SCR10 SERIES DRY TYPE TRANSFORMER

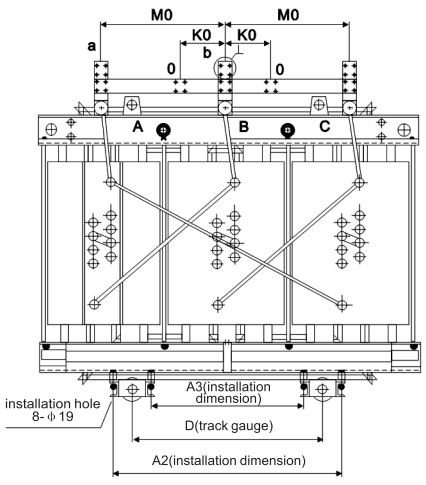


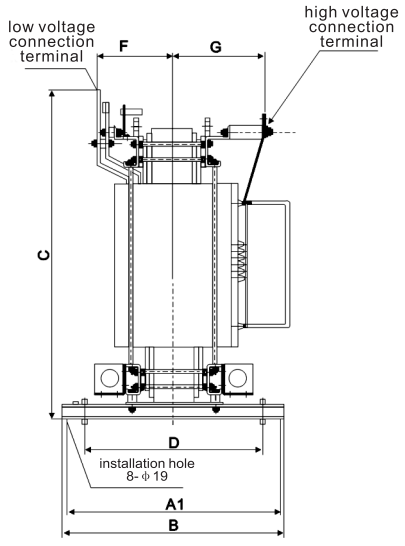
Rated Capacity (kVA)	Voltage combination		Low Voltage	Vector Group	No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Insulation Evel	Track Gauge (mm)	Noise (dB)	Weight (Kg)
	High voltage (kV)	Tapping Range										
30	6; 6.3; 6.6; 10; 10.5; 11;	±2×2.5%; or±5%	0.4	Yyn0 or Dyn11	210	615	1.2	4	F/F	500×500	42	315
50					290	900	1.2				42	360
80					390	1200	1.1				42	415
100					430	1450	1.1				42	580
125					500	1610	1.0				44	785
160					580	1900	1.0				44	820
200					665	2280	0.9				45	970
250					780	2490	0.9				45	1090
315					970	3140	0.8			660×660	46	1250
400					1100	3600	0.8			820×820	46	1590
500					1300	4510	0.8				46	1740
630					1400	5430	0.8				47	2110
630					1360	5510	0.6	6		820×820	47	2020
800					1540	6430	0.6				49	2300
1000					1870	7500	0.5				49	2830
1250					2240	8960	0.5			1070×1070	49	3350
1600					2540	10850	0.5				50	3970
2000					3330	13360	0.4				50	4800
2500					4000	15800	0.4				52	5400
315	35; 38.5	±2×2.5%; or±5%	0.4	Yyn0 or Dyn11	1140	3640	1.3	6		500×500	47	1570
400					1330	4680	1.3				47	1810
500					1565	5750	1.3			660×660	48	2130
630					1800	6700	1.2				48	2450
800					2110	7940	1.2				49	3060
1000					2345	9130	1.2				49	3720
1250					2740	11060	1.1			820×820	49	4120
1600					3130	13440	1.1				51	5270
2000					3675	15810	0.9				51	5990
2500					4300	18930	0.9				53	6870
800	35; 38.5	±2×2.5%; or±5%	3.15; 6; 6.3; 10; 10.5; 11;	Yd11	2175	8165	1.2	6		820×820	49	3360
1000					2580	9500	1.2				49	4090
1250					3030	11210	1.1			1070×1070	49	4330
1600					3565	13435	1.1				51	5800
2000					4110	15810	1.0	7			51	6590
2500					4690	18930	1.0				53	7550
3150					5865	21300	0.9	8			57	8900
4000					6805	25610	0.9				57	9520
5000					8130	30360	0.7				57	12840
6300					9620	35480	0.7				59	13860
8000				Yd11 or Ynd11	10500	39340	0.6	9			59	16100
10000					12510	48245	0.6				61	2118
12500					14860	58070	0.5				61	25600
16000					18000	71760	0.5				61	35700

SC(B)9,SCR9,SC(B)10, SCR10 SERIES DRY TYPE TRANSFORMER

SC9,SCB9, SCR9 SERIES EPOXY RESIN TYPE POWER TRANSFORMER







10kV CLASS SCR9、SC9、SCB9 SERIES OUTLINE INSTALLATION DIMENSION

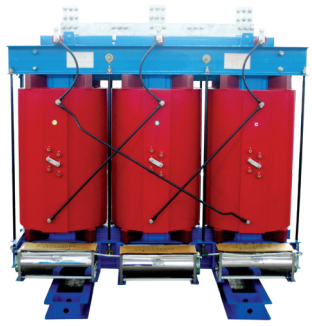
Rated Capacity (kVA)		30	50	80	100	125	160	200	250	315	400	500	630	630	800	1000	1250	1600	2000	2500
UK(%)		4													6					
External dimensions	A	800	830	830	920	1050	1090	1150	1180	1230	1360	1360	1410	1470	1510	1600	1680	1740	1900	2010
	B	350	500	500	500	660	660	660	660	770	960	960	960	960	960	960	1255	1255	1255	1255
	C	780	930	980	1025	1085	1085	1090	1190	1127	1229	1307	1375	1316	1419	1480	1615	1764	1851	1955
	D	300	450	450	450	550	550	550	550	660	820	820	820	820	820	820	1070	1070	1070	1070
	E	710	860	910	940	1015	1005	1020	1064	1096	1098	1175	1215	1163	1223	1283	1381	1534	1611	1735
	F	255	257	259	262	275	268	279	284	286	289	298	302	304	315	323	330	341	357	397
	G	274	276	282	289	304	294	308	318	334	337	346	352	354	358	380	380	384	398	401
	M0	270	280	280	300	345	330	355	375	390	425	435	450	470	485	515	540	560	605	650
	K	100	100	150	150	150	150	150	150	150	160	160	160	160	180	180	260	260	260	325
	A3	550	550	550	550	550	550	550	550	660	657	657	657	657	657	657	859	859	859	859
	A2	550	550	550	550	550	550	550	550	660	983	983	983	983	983	983	1281	1281	1281	1281
	A1	300	450	450	450	550	550	550	550	660	910	910	910	910	910	910	1025	1025	1025	1025
low voltage terminal		Figure one					Figure two δ =4 A=40			Figure two δ =5 A=50		Figure two δ =8 A=60			Figure three δ =8 A=80 ϕ d= ϕ 14 B=40 a=15	Figure three δ =10 A=80 ϕ d= ϕ 14 B=40 a=20	Figure three δ =8 A=10 ϕ d= ϕ 18 B=50 a=25	Figure three δ =10 A=10 ϕ d= ϕ 14 B=40 a=15	Figure four A=120 ϕ d= ϕ 18 a=40 a1=2	Figure four A=180 ϕ d= ϕ 18 a=60 a1=3

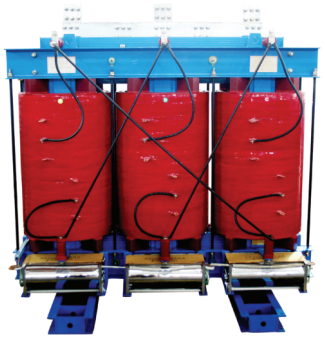
中国·人民电器集团
PEOPLE ELE.APPLIANCE GROUP CHINA

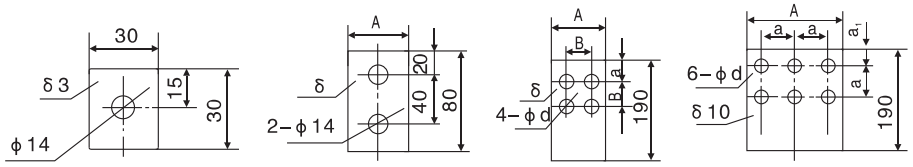
POWER TRANSFORMER

SC(B)9,SCR9,SC(B)10, SCR10 SERIES DRY TYPE TRANSFORMER

SC9,SCB9, SCR9 SERIES EPOXY RESIN TYPE POWER TRANSFORMER

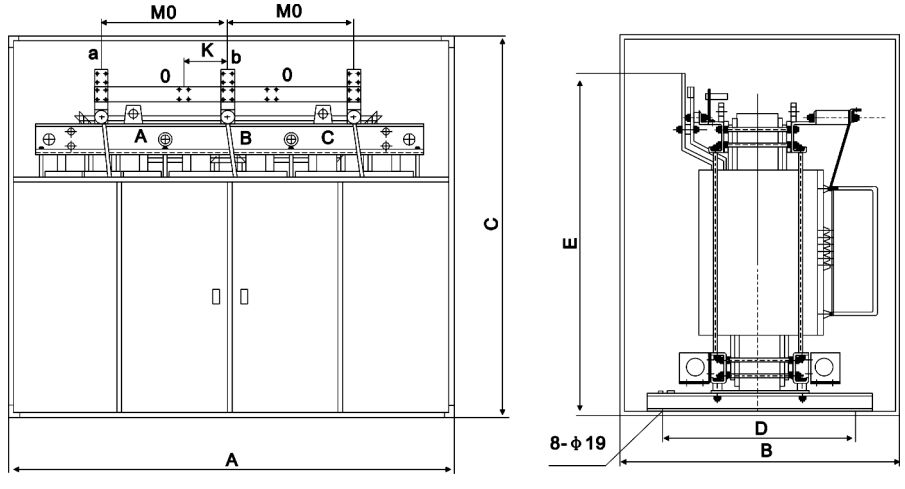




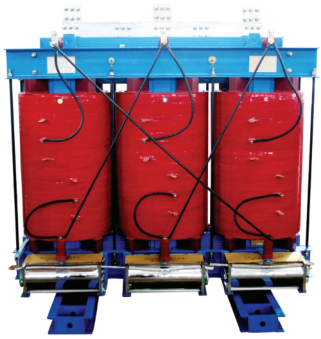


OUTLINE DIMENSION OF 10KV SCR9、SC9、SCR9 SERIES POWER TRANSFORMER WITH SHELL

Rated Capacity (kVA)	UK(%)	A	B	C	D	E	K	M0
100	4	1250	950	1280	550	1025	150	300
125		1350	950	1330	550	1075	150	330
160		1400	950	1390	550	1085	150	345
200		1430	950	1400	550	1090	150	355
250		1490	950	1420	550	1190	150	375
315		1530	950	1470	550	1200	150	390
400		1650	1070	1525	660	1229	160	425
500		1680	1250	1595	820	1307	160	435
630		1710	1250	1875	820	1375	160	450
630		1770	1250	1635	820	1316	160	470
800	6	1810	1250	1715	820	1419	180	485
1000		1900	1500	1875	820	1480	180	515
1250		2000	1500	1910	1070	1615	260	540
1600		2060	1500	2050	1070	1764	260	560
2000		2200	1500	2130	1070	1851	260	605
2500		2350	1500	2260	1070	1955	325	650

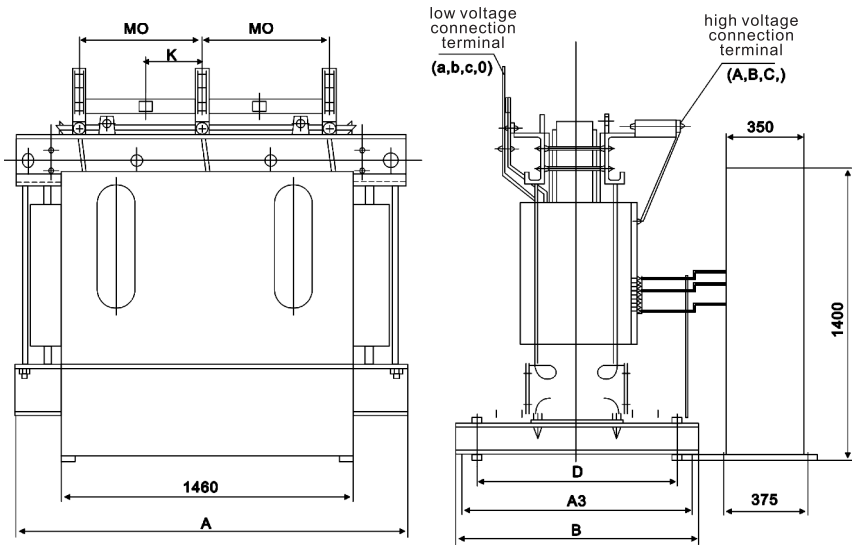


SC(B)9,SCR9,SC(B)10, SCR10 SERIES DRY TYPE TRANSFORMER



TECHNICAL SPECIFICATION FOR 10KV ON-LOAD VOLTAGE REGULATING EPOXY RESIN POWER TRANSFORMER

Rated Capacity (kVA)	Voltage combination		Low Voltage	Vector Group	No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Insulation Evel	Track Gauge (mm)	Noise (dB)
	High voltage (kV)	Tapping Range									
315	6; 6.3; 6.6; 10; 10.5; 11;	±4×2.5%;	0.4	Yyn0 or Dyn11	935	3155	0.8	4	H level or F level	660×660	45
400					1040	3705	0.8			820×820	46
500					1230	4500	0.8				46
630					1405	5360	0.8				47
630					1360	5470	0.6	6			47
800					1540	6465	0.6				48
1000					1870	7645	0.5				48
1250					2220	9205	0.5			1070×1070	49
1600					2540	10900	0.5				49
2000					3330	13400	0.4				50
2500					4000	15810	0.4				50



10KV SCRZ9、SCZ9、SCBZ9 SERIES OUTLINE DIMENSION DRAWING

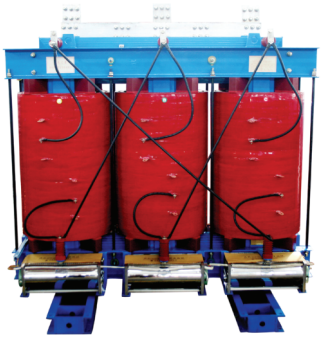
Rated capacity(kVA)	315	400	500	630	630	800	1000	1250	1600	2000	2500
UK(%)	4				6						
Size B	1685	1715	1875	1875	1875	1875	1875	1875	2170	2170	2170

Note：the balance dimension is same as non-load voltage regulating dry type transformer

SC(B)9,SCR9,SC(B)10, SCR10 SERIES DRY TYPE TRANSFORMER

TECHNICAL SPECIFICATION FOR 35KV SCB SERIES NO-LOAD VOLTAGE REGULATING DRY TYPE POWER TRANSFORMER

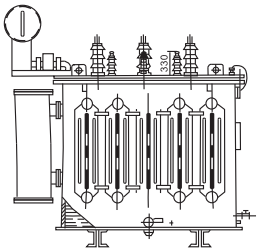
Rated Capacity (kVA)	Voltage combination		Low Voltage	Vector Group	No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Insulation Evel	Track Gauge (mm)	Noise (dB)
	High voltage (kV)	Tapping Range									
315	35 38.5	±2×2.5%; or±5%	0.4	Yyn0 or Dyn11	1300	4410	2.0	6	F level	820×820	47
400					1530	5670				820×820	47
500					1800	6975				820×820	48
630					2070	8130	1.8			820×820	48
800					2430	9630				820×820	49
1000					2700	11070				820×820	50
1250					3150	13410	1.5			1070×1070	50
1600					3600	16290				1070×1070	51
2000					4230	19170	1.4			1070×1070	53
2500					4950	22950				1070×1070	54

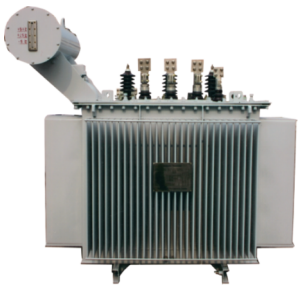


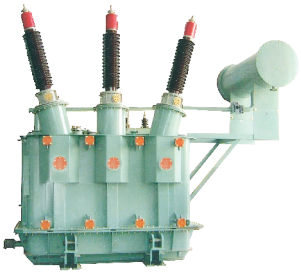
TECHNICAL SPECIFICATION FOR 10KV SCR10、SC10、SCB10 SERIES EPOXY RESIN POWER TRANSFORMER

Rated Capacity (kVA)	Voltage combination		Low Voltage	Vector Group	No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Insulation Evel	Track Gauge (mm)	Noise (dB)
	High voltage (kV)	Tapping Range									
30	6; 6.3; 6.6; 10; 10.5; 11;	±2×2.5%; or±5%	0.4	Yyn0 or Dyn11	190	560	1.0	4	F/F	500×500	40
50					270	850	1.0				40
80					360	1100	0.9				40
100					400	1370	0.8				41
125					460	1530	0.75				41
160					530	1855	0.75				43
200					605	2100	0.7				43
250					705	2045	0.7				44
315					870	3030	0.6			660×660	44
400					970	3480	0.6			820×820	45
500					1150	4260	0.6				45
630					1315	5130	0.5				46
630					1270	5205	0.5	6		820×820	47
800					1485	6070	0.5				47
1000					1730	7095	0.4				48
1250					2045	8460	0.4			1070×1070	48
1600					2100	10240	0.4				49
2000					2860	12620	0.3				50
2500					3460	14995	0.3				50

S9,S9-M SERIES THREE PHASE OIL-IMMERSED POWER TRANSFORMER







GENERAL

Different from normal type, S9,S9-M series three phase oil-immersed transformer is cooled by the corrugated plate of tank without conservator. It is applicable to 10kV-110KV, 50Hz power transmission and distribution system for power supply and lighting in industrial and agricultural field.

FEATURE

1.Energy saved :

Compared with old type S7, no-load loss decreases 10.25% averagely and on load current decreases 37.9%, which means 18.39% operation cost is reduced.

2.Long-term reliable service life:

Fully enclosed transformer tank and rim shall be bolted together or welded firmly. Isolation between oil and air keeps insulation away from moisture, which lowers insulation aging and mproves service life.

3.Free from untanking:

Free from untanking before operation, so its cost is saved.

4.Free from maintenance

5.Low noise:

Impacted structure in design, new material and new technology adopted and low noise.

6. Small size and artistic appearance:

Owing to the corrugated plate used for radiation, oil volume is changed by adjustment and compensation through expansion and shrinkage of corrugated plate when the temperature of oil is changed. Corrugated tank is small size in good looking.

TYPE DESIGNATION

S Z 9 - M - □ □

- Voltage ratio
- Rated capacity
- Sealed type
- Design serial No.
- On-load tap changer(without Z non-load tapchanger)
- Three phase oil-immersed type power transformer

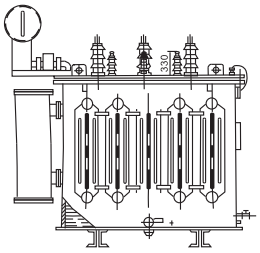
OPERATION CONDITION

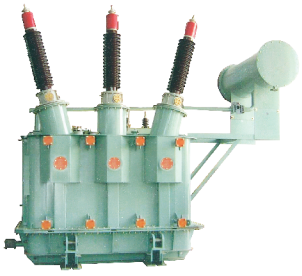
1 Max ambient temperature: +40℃

2.Min ambient termperature:-30℃(outdoor type)

3.daily mean temperature:<30℃ annual mean temperature<20℃

S9,S9-M SERIES THREE PHASE OIL-IMMERSED POWER TRANSFORMER





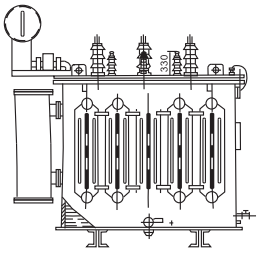
TECHNICAL SPECIFICATION FOR 10KV SA S9-M NO-LOAD VOLTAGE REGULATING OIL-IMMERSED TYPE POWER TRANSFORMER(Table 1)

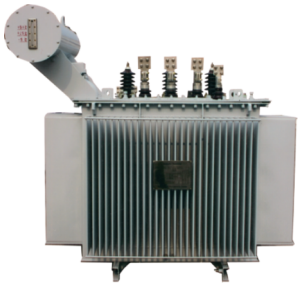
Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
10	6; 6.3; 6.6; 10; 10.5; 11;	±2×2.5%; or ±5%	0.4	Yyn0 or Dyn11	70	300	2.4	4.0	75	50	175	400×400	680×450×910
20					100	500	2.3		115	65	235	400×400	720×580×960
30					130	600	2.1		150	70	300	400×400	770×600×1000
50					170	870	2.0		215	95	405	400×400	840×610×1030
63					200	1040	1.9		240	100	445	400×450	845×630×1050
80					250	1250	1.8		285	110	505	400×400	890×640×1070
100					290	1500	1.6		330	115	570	400×450	1060×620×1140
125					340	1800	1.5		375	135	650	400×550	1120×630×1180
160					400	2200	1.4		465	150	735	550×550	1200×645×1170
200					480	2600	1.3		525	160	895	550×550	1250×660×1210
250					560	3050	1.2		655	200	1075	550×650	1320×740×1270
315					670	3650	1.1		730	235	1240	550×650	1345×760×1305
400					800	4300	1.0		860	265	1375	550×650	1395×780×1360
500					960	5150	1.0	4.5	1060	340	1705	660×750	1520×840×1390
630					1200	6200	0.9		1225	350	2015	660×750	1535×850×1455
800					1400	7500	0.8		1430	440	2405	820×850	1650×950×1540
1000					1700	10300	0.7		1555	470	2500	820×850	1820×1100×1580
1250					1950	12000	0.6		1820	620	3170	820×850	1840×1120×1605
1600					2400	14500	0.6		2220	640	4600	820×900	1930×1160×1780
2000					2900	17500	0.6		3095	975	5600	820×900	1980×1180×1950

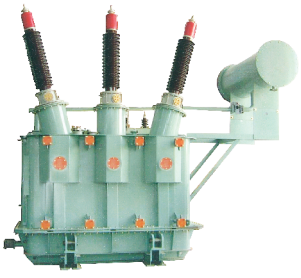
TECHNICAL SPECIFIC ATION FOR 35KV S9 , S9-M SERIES DUAL WINDING NO-LOAD VOLTAGE REGULATING OIL-IMMERSED TYPE POWER TRANSFORMER(Table 2)

Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
50	35;	±2×2.5%; or ±5%		Yyn0 or Dyn11	0.24	1.08	2.0	6.5	280	280	780	660×660	1135×925×1730
63					0.27	1.4	1.8		325	300	855	660×660	1150×935×1835
80					0.32	1.6	1.8		410	350	960	660×660	1180×1030×1850
100					0.345	1.71	1.6		460	390	1110	660×660	1210×1080×1885
125					0.39	2.02	1.6		530	430	1300	660×660	1245×1090×1950
160					0.43	2.4	1.6		630	520	1660	660×660	1300×1100×2040
200					0.5	2.8	1.6		770	520	1720	660×660	1340×1120×2040
250					0.59	3.34	1.6		940	600	200	660×660	1420×1150×2090
315					0.7	4.02	1.5		980	690	2070	660×660	1710×1180×2170
400					0.84	4.86	1.5		1260	700	2430	820×820	1870×1110×2300
500					0.99	5.86	1.4		1600	970	3340	820×820	2380×1260×2420
630					1.2	7	1.4		1770	1040	3560	820×820	2480×1100×2450
800					1.42	8.4	1.3		2360	1160	4520	820×820	2560×1250×2820
1000					1.5	12	1	7.0	2400	1280	4950	820×820	2580×1250×2820
1250					1.8	14	0.9		2650	1350	5580	1070×1070	2600×1300×2820
1600					2.1	17	0.85		3150	1460	6330	1070×1070	2620×1330× 300
2000					2.6	19	0.75		3400	1490	6400	1070×1070	2700×1420×3060
2500					3.1	21	0.75		3700	1520	6700	1070×1070	2800×1520×3140

S9,S9-M SERIES THREE PHASE OIL-IMMERSED POWER TRANSFORMER







TECHNICAL SPECIFICATION FOR 10KV S9, S9-M SERIES NO-LOAD VOLTAGE REGULATING OIL-IMMERSED TYPE POWER TRANSFORMER(Table 3)

Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
630	6; 6.3; 10; 10.5; 11;	±2×2.5%; or ±5%	3; 3.15; 6.3;	Yd11	1200	6200	1.4	4.5	1430	410	3185	660 × 750	1690× 965 ×1440
800					1400	7500	1.3	5.5	1640	665	3090	820 × 820	1885×1160×2125
1000					1700	10300	1.2		1900	700	3300	820 × 820	1925×1240×2710
1250					1950	12000	1.2		2180	870	4150	820 × 820	2010×1540×2180
1600					2400	14500	1.1		2720	900	4860	820 × 820	2100×1760×2305
2000					2900	17500	0.9		3000	940	5230	1070×1070	2120×1860×2315
2500					3430	20200	0.9		3435	1120	5755	1070×1070	2140×2056×2365
3150					4140	23700	0.8		4000	1550	7200	1070×1070	2470×2770×2555
4000	10; 10.5; 11;		3.15; 6.3;		4980	28100	0.7		4790	1620	8500	1070×1070	2720×2480×2860
5000					6020	32300	0.7		5740	1730	9515	1070×1070	2810×2560×2920
6300					7050	36000	0.6		7410	2050	11610	1070×1070	2850×2930×3010

TECHNICAL SPECIFICATION FOR 35KV, S9 SERIES NO-LOAD VOLTAGE REGULATING OIL-IMMERSED TYPE POWER TRANSFORMER(TABLE 4)

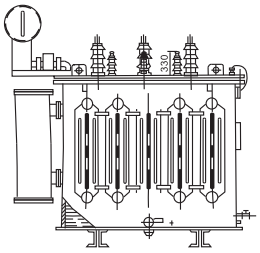
Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
800	35; 38.5;	±2×2.5%; or ±5%	3.15; 6.3; 10.5;	Yd11	1300	9000	9000	6.5	1935	1020	3995	820 × 820	2435×1240×2300
1000					1500	12000	12000		2140	1055	4125	820 × 820	2482×1380×2320
1250					1800	14000	14000		2290	1085	4200	820 × 820	2532×1520×2350
1600					2100	17000	17000		2475	1175	4290	1070×1070	2582×1710×2440
2000					2600	19000	19000		2790	1295	5380	1070×1070	2632×1884×2537
2500					3100	21000	21000		3295	1425	5920	1070×1070	2691×2105×2597
3150					3800	24500	24500	7.0	4045	1735	7645	1070×1070	2842×2430×2617
4000					4600	29000	29000		4815	1950	8905	1070×1070	2936×2446×2697
5000					5500	33000	33000		6060	2095	10175	1070×1070	2815×1720×3135
6300					6500	37000	37000	7.5	7410	2525	12330	1475×1475	3240×2730×3040
8000			3.3; 3.15; 6.3; 6.6; 10.5; 11;	Yd11 YNd11	8500	42000	42000	7.5	8900	2930	14855	1475×1475	3360×2695×3160
10000					10000	48300	48300		10700	3350	18100	1475×1475	3400×3460×3320
12500					12000	57300	57300	8.0	11840	5066	21505	1475×1475	4000×3896×4000
16000					14500	70000	70000		15260	7411	29800	1475×1475	4300×3250×3820
20000					16000	83000	83000		16030	7800	31500	2040×1475	4360×3600×4100
25000					2000	103000	103000		19200	8900	36800	2040×1475	4420×3800×4180
31500					25400	125000	125000		22100	9800	43000	2040×1475	4680×4100×4270

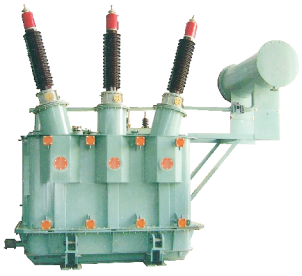
TECHNICAL SPECIFICATION FOR 10KV SZ9-M SERIES DUAL WINDING ON-LOAD VOLTAGE REGULATING OIL-IMMERSED POWER TRANSFORMER(Table 5)

Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
200	6; 6.3; 10;	±4×2.5%; or ±3×2.5%;	0.4	Yyno or Dyn11	480	2600	1.3	4.0	640	180	1100	550 × 550	1400× 850 ×1500
250					560	3050	1.2		770	230	1290	550 × 550	1450× 910 ×1560
315					670	3650	1.1		880	250	1500	550 × 550	1460×1050×1580

S9,S9-M SERIES THREE PHASE OIL-IMMERSED POWER TRANSFORMER

CONTINUED ON TABLE 5





Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
400	6; 6.3; 10;	±4×2.5%; or ±3×2.5%;	0.4	Yyno or Dyn11	800	4300	1.0	4.0	1055	310	1720	550 × 750	1600×1120×1660
500					960	5150	1.0		1235	330	2010	550 × 750	1660×1280×1720
630					1200	6200	0.9	4.5	1520	660	2950	660 × 850	2010×1325×1930
800					1400	7500	0.8		1760	880	3450	660 850	2060 1335 2010
1000					1700	10300	0.7		1935	980	4050	820 850	2050 1340 2070
1250					1950	12000	0.6		2285	980	4250	820 850	2120 1350 2130
1600					2400	14500	0.6	5.5	2720	1080	4500	820 900	2180 1370 2190
2000					2900	17500	0.6		3460	1220	620	820 900	2930 1970 2900

TECHNICAL SPECIFICATION FOR 35KV SZ9 SERIES ON-LOAD VOLTAGE REGULATING OIL-IMMERSED TYPE POWER TRANSFORMER(TABLE 6)

Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
2000	35; 38.5;	±3×2.5	6; 6.3; 10.5; 11;	Yd11	2900	20000	1.0	6.5	3340	1725	5785	1070×1070	3170×1820×2727
2500					3300	22000	1.0		4070	2060	6570	1070×1070	3280×1980×2835
3150					4000	26000	0.9	7.0	4620	2310	7480	1070×1070	3370×2160×3065
4000					4900	30500	0.9		5140	2560	9160	1070×1070	3410×2470×3180
5000					5800	35000	0.85	7.5	5600	2700	11000	1475×1070	3500×2800×
6300				Ynd11	7000	39000	0.8		7330	3190	13000	1475×1475	4010×2960×3730
8000					8900	44000	0.8		8700	3760	16400	1475×1475	4190×2980×3880
10000					10500	51000	0.75		9900	4100	18200	1475×1475	4350×3620×3725
12500					12600	60500	0.75	8.0	11300	4700	21500	1475×1475	4450×4000×3700
16000					15200	69300	0.7		16100	8200	30600	1475×1475	5030×3940×4057
20000					19500	89000	0.7		16800	8300	33400	2040×1475	5060×3980×4108
25000					21000	105000	0.6	8.5	20400	9800	39300	2040×1475	5080×4260×4168
31500					25700	125000	0.6		24300	11000	46000	2040×1475	5300×4300×4377

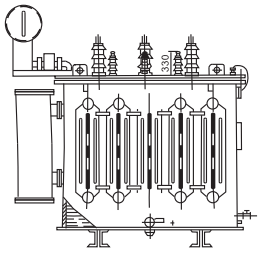
INSULATION LEVEL

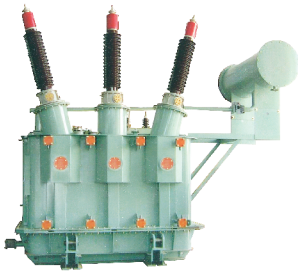
Type	Voltage rank	Rated Short-time power frequency withstand voltage(Effective value)	Rated lightning impulse withstand voltage(Peak value)
S9 S9-M SZ9 SZ9-M	6	25	60
	10	35	75
	35	85	200

TECHNICAL SPECIFICATION FOR 110KV S(F) SERIES 6300~31500KVA NO-LOAD VOLTAGE REGULATING OIL-IMMERSED TYPE POWER TRANSFORMER(TABLE 7)

Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Track Gauge A×B (mm)
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group					
6300	110 121	±2× 2.5%	6.3; 6; 10.5; 11;	Ynd11	9280	36900	1	10.5	1475×1475
8000					11200	45000	0.95		
10000					13200	53100	0.9		
12500					15600	63000	0.85		
16000					18800	77400	0.8		
20000					22000	93600	0.75		
25000					26000	110700	0.7		
31500					30800	133200	0.65		

S9,S9-M SERIES THREE PHASE OIL-IMMERSED POWER TRANSFORMER





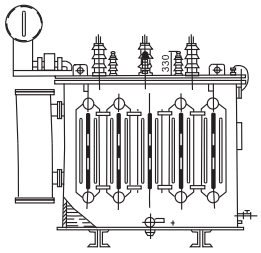
TECHNICAL SPECIFICATION FOR 10KV S11 SERIES NO-LOAD VOLTAGE REGULATING OIL-IMMERSED TYPE POWER TRANSFORMER(Table 8)

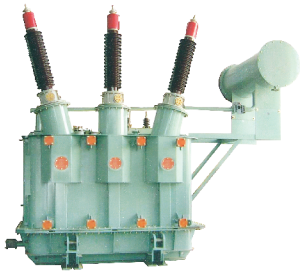
Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
30	6; 6.3; 10; 10.5; 11;	±2×2.5%; or ±5%	0.4	Yyno or Dyn11	100	600	2.1	4.0	150	75	295	400×400	790×600×970
50					130	870	2.0		210	89	390	400×400	810×610×1040
63					150	1040	1.9		255	95	435	400×400	825×670×1060
80					180	1250	1.8		280	120	510	400×450	855×630×1110
100					200	1500	1.6		360	125	565	400×550	1090×620×1160
125					240	1800	1.5		410	135	685	400×550	1140×650×1245
160					290	2200	1.4		480	155	800	550×550	1160×650×1250
200					330	2600	1.3		563	168	900	550×550	1260×710×1250
250					400	3050	1.2		665	200	1100	550×650	1340×740×1320
315					480	3650	1.1		751	230	1260	550×650	1345×760×1320
400					570	4300	1.0		880	235	1360	550×650	1370×770×1380
500					680	5150	1.0		1100	340	1730	660×750	1570×910×1030
630					810	6200	0.9	4.5	1300	380	2095	660×750	1560×880×1510
800					900	7500	0.8		1585	465	2590	820×850	1670×980×1600
1000					1150	10300	0.7		1720	510	2920	820×850	1790×1090×1660
1250					1360	12000	0.6		2075	625	3520	820×850	1810×1070×1765
1600					1640	14500	0.6		2215	640	3705	820×850	1930×1160×1785

TECHNICAL SPECIFICATION FOR 10KV SH15 AMORPHOUS ALLOYS NO-LOAD VOLTAGE REGULATING OIL-IMMERSED TYPE POWER TRANSFORMER(Table 9)

Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
30	6; 6.3; 10; 10.5; 11;	±2×2.5%; or ±5%	0.4	Dyn11	33	600	1.7	4.0	225	100	420	400×400	790×600×970
50					43	870	1.3		305	120	535	400×400	810×610×1040
63					50	1040	1.2		350	130	595	400×400	825×670×1060
80					60	1250	1.1		405	135	660	400×450	855×630×1110
100					75	1500	1.0		430	155	770	400×550	1090×620×1160
125					85	1800	0.9		500	165	860	400×550	1140×650×1245
160					100	2200	0.7		595	185	990	550×550	1160×650×1250
200					120	2600	0.7		675	205	1110	550×550	1260×710×1250
250					140	3050	0.7		810	220	1275	550×650	1340×740×1320
315					170	3650	0.5		945	245	1475	550×650	1345×760×1320
400					200	4300	0.5		1195	280	1835	550×650	1370×770×1380
500					240	5150	0.5		1375	335	2130	660×750	1570×910×1030
630					320	6200	0.3	4.5	1610	470	2605	660×750	1560×880×1510
800					380	7500	0.3		1910	575	3090	820×850	1670×980×1600
1000					450	10300	0.3		2130	670	3570	820×850	1790×1090×1660
1250					530	12000	0.3		2510	710	4140	820×850	1810×1070×1765
1600					630	14500	0.3		3045	820	4950	820×850	1930×1160×1785

S9,S9-M SERIES THREE PHASE OIL-IMMERSED POWER TRANSFORMER

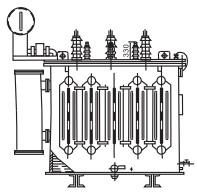


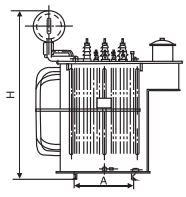


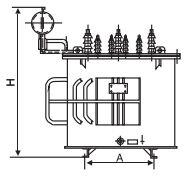
TECHNICAL SPECIFICATION FOR N10KV S11-M・D UNDERGROUND NO-LOAD VOLTAGE REGULATING OIL-IMMERSED TYPE POWER TRANSFORMER(Table 10)

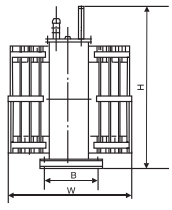
Rated Capacity (kVA)	Voltage combination				No-load loss(W)	Load Loss (W)	No-Load Current (%)	Impedance Voltage (%)	Weight			Track Gauge A×B (mm)	Outline dimension(mm) L×W×H
	High voltage (kV)	Tapping Range	Low Voltage	Vector Group						Insulation oil weight			
400	6; 6.3; 10;	±4×2.5%; or ±3×2.5%;	0.4	Yyno or Dyn11	800	4300	1.0	4.0	1055	310	1720	550×750	1600×1120×1660
500					960	5150	1.0		1235	330	2010	550×750	1660×1280×1720
630					1200	6200	0.9	4.5	1520	660	2950	660×850	2010×1325×1930
800					1400	7500	0.8		1760	880	3450	660×850	2060×1335×2010
1000					1700	10300	0.7		1935	980	4050	820×850	2050×1340×2070
1250					1950	12000	0.6		2285	980	4250	820×850	2120×1350×2130
1600					2400	14500	0.6	5.5	2720	1080	4500	820×900	2180×1370×2190
2000					2900	17500	0.6		3460	1220	620	820×900	2930×1970×2900

TRANSFORMER OUTLINE DIMENSION PLEASE SEE DRAWING

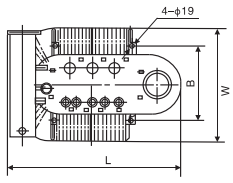




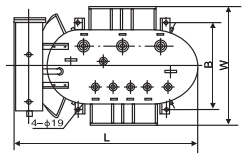




S9-M



SZ-9 SZ9-M



S9

Note:1.The weight, track gauge,outline dimension of SZ9-M,SZ9:10KV level please see table 5;
35KV level please see table 6.
2.The weight, track gauge,outline dimension of S9-M,S9:10KV level please see table 3;
35KV level please see table 4.

ZBW SERIES COMBINATION TRANSFORMER SUBSTATION

GENERAL:

To meet requirement of urban network construction, ZBW series combination substation is designed by our company with its own advantage such as compact, complete unit, reliable and safe, convenient maintenance, artistic appearance and so on. It is applicable for the outdoor administration of power supply such as high building, residential area, stations and wharfs, ports, factory and park.

FEATURE :

1. The frame of substation is made of steel and angle iron galvanized to have the enough mechanical strength.
2. Cold-rolled steel sheet, stainless steel, aluminum alloy sheet or compound colorful sheet is used for the enclosure.
3. Each cubicle is separated by steel sheet to be different shape inside.
4. The illuminating devices are installed inside L.V.&H.V. cubicles and transformer cubicle for supervision and maintenance.
5. The cover is double-layer to prevent the heat from increasing temperature.
6. Natural ventilation is taken for transformer. When the temperature inside the transformer cubicle is higher than the set temperature, the fan installed on the top will start to work and control the temperature.
7. Sealing devices are put on the turning parts to be moisture-proof.
8. Perfect protection and convenient operation, particularly "five-proof"functions on H.V. side ensures the security of maintenance.
9. The product is good-looking and natural in certain environment

OPERATION CONDITION:

Altitude:<1000m
Ambient temperature:-25℃－+40℃
Wind speed：<30m/s
Relative humidity: <90%

TYPE DESIGNATION:

Z B W □–□ / □

- Design serial No.
- Rated capacity
- Rated Voltage
- Outdoor type
- Substation
- Combination type(Cubicle)

中国·人民电器集团
PEOPLE ELE.APPLIANCE GROUP CHINA

CUBICULE TRANSFORMER

ZBW SERIES COMBINATION TRANSFORMER SUBSTATION

MAIN TECHNICAL PARAMETER:

Table 1

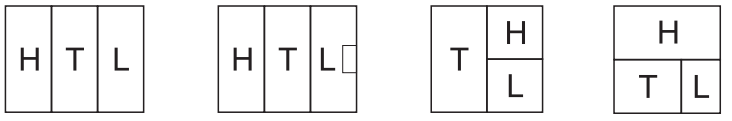
No	Item	Unit	High voltage apparatus	Transformer	Low voltage apparatus
1	Rated voltage Ue	kV	7.2、12	6/0.4、10/0.4	0.4
2	Rated capacity Se	kvA		200~1250	
3	Rated current Le	kvA	200~630		100~3000
4	Rated drop out current	A	switch disconnector 400~630A		15~63
		kA	subject to fuse if the combined appliance is adopted		
5	Rated short time withstand current	kA	20(2S)	200~400kvA	15（1S）
			12.5(4S)	400kvA	30（1S）
6	Rated crest withstand current	kA	31.5、50	200~400kvA	30
				400kvA	63
7	Rated making current	kV	31.5、50		
8	1min power frequency withstand voltage	kV	phase to earth phase to phase42、30	oil—immersed transformer:35/5min	≤300V when 2kV
			across isolating distance 48、34	dry type:28/5 min	300，660V when 2.5kV
9	lightning impulse withstand voltage	kV	phase to earth phase to phase85、75	75	
			phase to earth phase to phase85、75		
10	Noise	dB		oil—immersed transformer:< 55	
				dry type:< 65	
11	Protection class		IP33	IP23	IP33
12	outline dimension	Choose different dimension according to the capacity and type of power transformer			

PLAN LAYOUT AND OUTLINE DIMENSION:

Plan layout please see drawing 1—1，1—2，1—3，1—4.

“type includes” 1—1 and 1—2

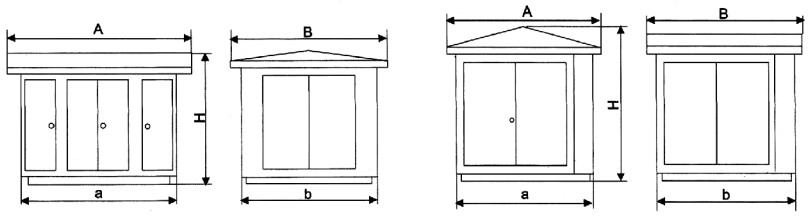
“type includes” 1—3 and 1—4



drawing 1—1 drawing 1—2 drawing 1—3 drawing 1—4

H：high voltage cubicule T—transformer cubicule L：Low voltage cubicule

OUTLINE DIMENSION PLEASE SEE DRAWING 2 , DRAWING 3 AND TABLE 2



ZBW SERIES COMBINATION TRANSFORMER SUBSTATION

Type			A	a	B	b	H	The most suitable site
Three phase		100-630kvA	4140	3750	2590	2290	2320	Mine， oil field
		800-1250kvA	5184	4880	2500	2290	2626	Residential area
		50-400kvA	2500	2300	2400	2200	2320	
Single phase		≤50kvA	2500	2300	1260	1060	2215	Power supply for street lamp
		80-100kvA	2500	2300	1840	1640	2215	

Note：above dimension only for your information during design period, the dimension subject to dimension of objective

ORDERING NOTES :

1. Type of substation
2. Type of transformer
3. H.V/ L.V. wiring mode, type and parameters of chosen components
4. Regarding to enclosure color, if there is no special requirement by customer, it would be dark green.