Product Description

The products implement the National Standard GB1094-2013 Power Transformer and GB / T6451-2015 Three-phase Oil-immersed Power Transformer Technical Parameters and Requirements, and are recommended as the major equipment products for the national urban and rural power grid construction and retrofit by the State Economic and Trade Commission.
S11 series transformer adopts high quality material for copper winding, especially applying the new technology and new material for the coil insulation and active parts, thus the no-load and the load loss are obviously reduced, the performance and structure are more reliable and superior.

Product Features

●Good Economic Performance
The no-load loss for S11 series products decreased 10.3% averagely, no-load current decreased 22.4% based on S9 series.
●Long Service Life
Transformer tank adopts hermetical structure, tank and tank cover can be connected by bolts or welded firmly, the transformer oil won't contact with air, so that extend the service life effectively.
●High Operation Reliability
Improve the relevant sealing parts for the tank, increase the reliability and advance the technical level to ensure the reliability of the seal.
●Small Installation Area
S11-M series transformer tank uses the corrugated plate radiator. When the oil temperature changes, the corrugated plate will proceed thermal expansion, which can replace the role of the oil conservator. the corrugated plate tank has beautiful appearance, less occupied area.

Model and Meaning

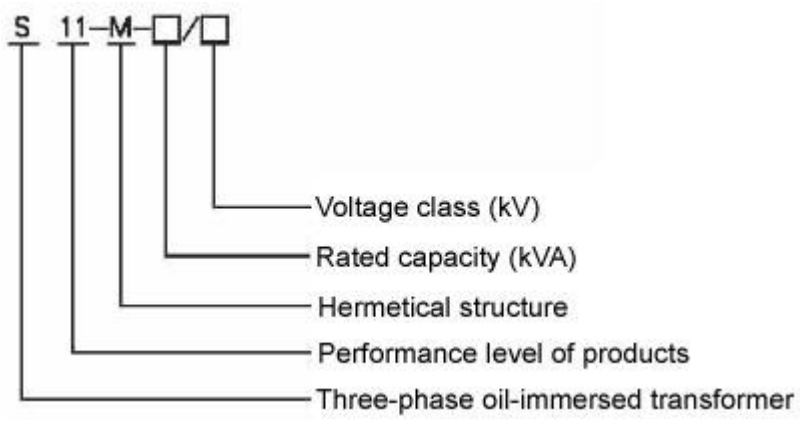

Table 1: 6Kv, 10kV & 30kVA-2500kVA Power Transformer With Off Circuit Tap Changer

Rat	Voltage	Conn	No-	Load	Impe	No-	Len	Wi	Hei	Gauge	Horiz	Act	Oil	Tot

ed Capacity (kVA)	Combination			ection Group Symbol	load Loss R（W）	Loss R（W）75℃	dance Voltage (%)	load Current（%）	gth L（mm）	dth W(mm)	ght H（mm）	ontal*Vertical（mm）	ive parts Weight（Kg）	Weight（Kg）	al Weight（Kg）
	High Voltage (KV)	Tapping Range of High Voltage	Low Voltage (KV)												
30	6 6.3 10 10.5	±5% ±2×2.5%	0.4	Dyn11 Yzn11 Yyn0	100	630/600	4.0	2.8	980	735	1145	400*400	178	78	355
50					130	910/870		2.5	1017	758	1205	450*400	240	92	415
63					150	1090/1040		2.4	1035	785	1285	450*400	285	105	505
80					180	1310/1250		2.2	1065	800	1290	450*400	330	110	540
100					200	1580/1500		2.1	1072	820	1305	450*400	345	116	590
125					240	1890/1800		2.0	1155	1105	1310	450*550	415	135	705
160					280	2310/2200		1.9	1235	850	1535	550*550	485	155	835
200					340	2730/2600		1.8	1282	860	1557	550*550	582	168	965
250					400	3200/3050		1.7	1310	940	1605	550*550	695	210	1135
315					480	3830/3650		1.6	1465	1120	1915	660*650	855	255	1520
400					570	4520/4300		1.5	1440	1165	1725	660*660	950	295	1590
500					680	5410		1.4	151	12	184	660*650	11	32	19

						/5150			0	50	5		50	0	05
630					810	6200		1.3	1650	1140	1920	660*650	1500	435	2015
800					980	7500		1.2	2125	1175	2315	820*820	1910	760	3510
1000					1150	10300	4.5	1.1	2150	1380	2570	820*820	2125	880	3850
1250					1360	12000		1.0	2355	1485	2570	820*820	2605	960	4610
1600					1640	14500		0.9	2385	1750	2630	820*820	3125	1150	5420
2000					1940	18300	5.0	0.4	1940	1400	1700	820*820	2420	780	4200
2500					2290	21200		0.4	2050	1480	1800	820*820	2560	880	4680

Notes:

1.The Dimension and weight will be changed according to the requirements. These two data in the table will be subject to the factory documents.

2.For the transformer of rated capacity up to 500kVA, the value of load loss above the oblique line in the table is applicable to the connection group Dyn11 or Yzn11. The value of load loss under the oblique line is applicable to the connection group Yyn0.

Technical Parameter for S11 Series 20kV Power Transformer With Off Circuit Tap Changer

（KVA）Rated capaci	Voltage Combination			Connection Group Symbol	No-load Loss（W）	Load Loss（W）75℃	No-load Current (%)	Short-circuit Impedance（%）
	High Voltage (KV)	Tapping ranges of High Voltage	Low Voltage(KV)					
30	20	±5% ±2×2.5 %	0.4	Dyn11 Yzn11 Yyn0	100	690/660	2.1	5.5
50					130	1010/960	2.0	
63					150	1200/1150	1.9	
80					180	1440/1370	1.8	
100					200	1730/1650	1.6	

125					240	2080/1980	1.5	
160					290	2540/2420	1.4	
200					340	3000/2860	1.3	
250					400	3520/3350	1.2	
315					480	4210/4010	1.1	
400					570	4970/4730	1.0	
500					680	5940/5660	1.0	
630					810	6820	0.9	
800					980	8250	0.8	
1000					1150	11330	0.7	
1250					1380	13200	0.7	6.0
1600					1660	15950	0.6	
2000					1950	19140	0.6	
2500					2340	22220	0.5	

Notes:

1.The Dimension and weight will be changed according to the requirements. These two data in the table will be subject to the factory documents.

2.For the transformer of rated capacity up to 500kVA, the value of load loss above the oblique line in the table is applicable to the connection group Dyn11 or Yzn11. The value of load loss under the oblique line is applicable to the connection group Yyn0.

3.The performance parameters in the table are also applicable for HV with dual voltage 20 (10)kV three-phase transformer.

Technical Parameter for S11 Series 35kV Power Transformer With Off Circuit Tap Changer

Model	Voltage Combination			Connection Group Symbol	No-load Loss（W）	Load Loss R（W）	Impedance Voltage (%)	No-load Current（	Length L（mm）	Width W（mm）	Height H（mm）	Gauge Horizontal*Vertical（mm）	Active parts Weight	Oil Weight（Kg）	Total Weight（Kg
	High Voltag	Tapping Range	Low Voltag												

	e (kV)	of High Voltage %	e (kV)		75℃			%）					（Kg）		）
50	35 38.5	±2×2.5% ±5%	0.4	Dyn11/ Yyn0	160	1200/1140	6.5	1.3	1195	935	1825	660*660	300	330	860
100					230	2010/1910		1.1	1200	995	1935	660*660	470	383	1130
125					270	2370/2260		1.1	1235	940	1955	660*660	550	465	1335
160					280	2820/2680		1.0	1285	895	1950	660*660	580	485	1475
200					340	3320/3160		1.0	1310	1150	1985	660*660	680	595	1755
250					400	3950/3760		0.95	1450	1090	2010	660*660	860	650	2000
315					480	4750/4530		0.95	1930	1065	2320	820*820	980	765	2290
400					580	5740/5470		0.85	1850	1165	2015	820*820	1170	885	2725
500					680	6910/6580		0.85	2045	1205	2415	820*820	1340	960	3090
630					830	7860		0.65	2085	1240	2515	660*660	1550	895	3810
800					980	9400		0.65	2305	1615	2685	820*820	1990	1030	4510
1000					1150	11500		0.65	2545	1540	2590	1070*1070	2415	1475	5055
1250					1400	13900		0.60	2495	2010	2675	820*820	2480	1405	5290
16					169	1660		0.6	268	210	277	820*820	26	14	54

00					0	0		0	0	0	0		00	90	50
2000					1990	19700		0.55	2790	2180	2860	820*820	2720	1590	5600
2500					2360	23200		0.55	2900	2290	2980	1070*1070	2830	1720	5760

Notes:

1.The Dimension and weight will be changed according to the requirements. These two data in the table will be subject to the factory documents.

2.For the transformer of rated capacity up to 500KVA, the value of load loss above the oblique line in the table is applicable to the connection group Dyn11. The value of load loss under the oblique line is applicable to the connection group Yyn0.

S11 Series 35kV 630kVA-31500kVA Three-phase Dual Winding Power Transformer With Off Circuit Tap Changer

Model	Voltage Combination			Connection Group Symbol	No-load Loss（W）	Load Loss R（W）	No-load Current（%）	Short circuit impedance (%)	Length L（mm）	Width W（mm）	Height H（mm）	Gauge Horizontal *Vertical（mm）	Active parts Weight（Kg）	Oil Weight（Kg）	Total Weight（Kg）
	High Voltage (kV)	Tapping Range of High Voltage%	Low Voltage (kV)												
630	35	±2×2.5%±5%	3.15 6.3 10.5	Yd11	830	7860	0.65	6.5	2400	1700	2210	820*820	2210	900	3250
800					980	9400	0.65		2500	1850	2390	820*820	2350	1030	3500
1000					1150	1150	0.65		2700	1950	2510	820*820	2490	1180	3860
1250					1400	1390	0.55		2900	2050	2630	820*820	2600	1350	4350
1600					1690	1660	0.45		3050	2130	2750	820*820	2810	1580	4855
2000					2170	1830	0.45		3105	2195	2805	1070*1070	2800	1800	5300
2500					2560	1960	0.45		3150	2535	2980	1070*1070	3525	2060	7665
3150	35-38.5	±2×2.5%±5%	3.15 6.3		3040	2300	0.45	7.0	3920	2725	2840	1070*1070	3995	2205	8565
40					361	273	0.4		331	291	307	1070*107	482	256	101

00			10.5		0	0	5		0	5	0	0	5	0	15
5000					4320	3130	0.45		3480	3020	3145	1070*1070	5700	2635	11305
6300					5240	3500	0.45		3590	2905	3210	1475*1475	7120	3240	13510
8000	35-38.5	±2×2.5%	3.15 3.3 6.3 6.6 10.5	YNd11	7200	3840	0.35	8.0	4070	3050	3595	1475*1475	8875	3840	16690
10000					8700	4530	0.35		4106	2795	3655	2000*1475	10305	3600	17690
12500					1000	5380	0.30		4570	3010	3840	1475*1475	12830	4310	20990
16000					1210	6580	0.30		5235	3295	4615	2000*1475	16010	6650	27660
20000					1440	7950	0.30		5360	3415	4660	2000*1475	18820	7600	32170
25000					1700	9400	0.25	10.0	5830	3810	4860	2000*1475	22360	9800	42600
31500					2020	112000	0.25		6290	4290	5260	2000*1475	25110	12010	49960

Note: 1: For the transformer of low voltage 10.5kV, the connection group symbol is applicable to Dyn11.
Note: 2: For the transformer of rated capacity 3150kVA or above, the -5% tapping position is for maximum current tap.
Note: 3: When the annual average load rate for the transformer is between 35% to 45%, the loss value in the table can obtain the highest operational efficiency.