

110kV 油浸式电力变压器

110kV电力变压器铁芯采用优质硅钢片，多级阶梯叠积而成。具有低损耗、低噪声、抗短路能力强等特点。已广泛应用于各变电所、发电厂，受到用户的一致好评。SZ11-63000/110变压器通过国家全套型式试验及突发短路试验，SZ11-31500/110变压器通过国际著名电器实验室荷兰KEMA认证，并通过国家机械部、电力部的联合新产品鉴定。

The core of 110kV power transformers is made of high-quality silicon-steel sheets, and laminated by steps. It is advantageous in low loss, low noise, and high short-circuit withstand capacity, etc. Now it is widely used in power station, power plant, and gets high praise from them. SZ11-63000/110 transformers have passed a complete set of National tests and the short-circuit withstand capacity test. SZ11-31500/110 have passed the KEMA from Holland, the world's leading electrical laboratory, and also passed new product identification by both Ministry of Machinery Industry and Ministry of Electric Power.



110kV双绕组无励磁调压电力变压器

110kV Double-winding Power Transformers with Off-circuit Tap Changer

额定容量 Rated capacity (kVA)	电压组合 Voltage ratio (kV)			联结组 Connection Symbol	空载损耗 No-load loss (kW)	空载电流 No-load current (%)	负载损耗 Full-load loss (kW)	短路阻抗 Impedance (%)
	高压 HV	高压分接范围 HV Tapping Range	低压 LV					
6300	110 121	±2×2.5%	6.3 6.6 10.5 11	YNd11	9.3	0.6	36	10.5
8000					11.2	0.6	45	
10000					13.2	0.55	53	
12500					15.6	0.55	63	
16000					18.8	0.5	77	
20000					22	0.5	93	
25000					26	0.45	110	
31500					30.8	0.45	133	
40000					36.8	0.4	156	
50000					44	0.4	194	
63000			52		0.35	234		
75000			59		0.35	278		
90000			68		0.3	320	12~14	
120000			84.8		0.3	397		
150000			100.2		0.3	472		
180000			112.5		0.25	532		

110kV双绕组有载调压电力变压器

110kV Double-winding Power Transformers with On-load Tap-changer

额定容量 Rated capacity (kVA)	电压组合 Voltage ratio (kV)			联结组 Connection Symbol	空载损耗 No-load loss (kW)	空载电流 No-load current (%)	负载损耗 Full-load loss (kW)	短路阻抗 Impedance (%)
	高压 HV	高压分接范围 HV Tapping Range	低压 LV					
6300	110 121	±8×1.25%	6.3 6.6 10.5 11	YNd11	10	0.6	36	10.5
8000					12	0.6	45	
10000					14.2	0.55	53	
12500					16.8	0.55	63	
16000					20.2	0.5	77	
20000					24	0.5	93	
25000					28.4	0.45	110	
31500					33.8	0.45	133	
40000					40.4	0.4	156	
50000					47.8	0.4	194	
63000					56.8	0.35	234	
75000					63.4	0.35	278	
90000					73.1	0.3	320	
120000					91.2	0.3	397	

110kV三绕组无励磁调压电力变压器

110kV Three-winding Power Transformers with Off-circuit Tap Changer

额定容量 Rated capacity (kVA)	电压组合 Voltage ratio (kV)			联结组 Connection Symbol	空载损耗 No-load loss (kW)	空载电流 No-load current (%)	负载损耗 Full-load loss (kW)	短路阻抗 Impedance (%)	
	高压 HV	中压 MV	低压 LV					降压 step-down	升压 step-up
6300	110 121	35 37 38.5 ±2×2.5% 或 ±5%	6.3 6.6 10.5 11	YNyn0d11	11.2	0.6	47	高-中	高-中
8000					13.3	0.6	56	H-M	H-M
10000					15.8	0.55	66	10.5	17~18
12500					18.4	0.55	78	高-低	高-低
16000					22.4	0.5	95		
20000					26.4	0.5	112	H-L	H-L
25000					30.8	0.45	133	17~18	10.5
31500					36.8	0.45	157	中-低	中-低
40000					43.6	0.4	189		
50000					52	0.4	225		
63000					61.6	0.35	270	M-L	M-L
									6.5

110kV 油浸式电力变压器



110kV三绕组有载调压电力变压器

110kV Three-winding Power Transformers with On-load Tap-changer

额定容量 Rated capacity (kVA)	电压组合 Voltage ratio (kV)			联结组 Connection Symbol	空载损耗 No-load loss (kW)	空载电流 No-load current (%)	负载损耗 Full-load loss (kW)	短路阻抗 Impedance (%)	
	高压 HV	中压 MV	低压 LV					降压 step-down	升压 step-up
6300	110 ±8×1.25%	35 37 38.5 ±2×2.5% 或 ±5%	6.3 6.6 10.5 11	YNyn0d11	12	0.6	47	高-中 10.5	高-中 17~18
8000					14.4	0.6	56		
10000					17.1	0.55	66		
12500					20.2	0.55	78		
16000					24.2	0.5	95	高-低 17~18	高-低 10.5
20000					28.6	0.5	112		
25000					33.8	0.45	133		
31500					40.2	0.45	157	中-低 6.5	中-低 6.5
40000					48.2	0.4	189		
50000					56.9	0.4	225		
63000	67.7	0.35	270						

66kV双绕组无励磁调压电力变压器

66kV Double-winding Power Transformers with Off-circuit Tap Changer

额定容量 Rated capacity (kVA)	电压组合 Voltage ratio (kV)			联结组 Connection Symbol	空载损耗 No-load loss (kW)	空载电流 No-load current (%)	负载损耗 Full-load loss (kW)	短路阻抗 Impedance (%)
	高压 HV	高压分接范围 HV Tapping Range	低压 LV					
6300	110 121	±2×2.5%	6.3 6.6 10.5 11	YNd11	9.2	0.6	36.0	9
8000					11.2	0.6	42.7	
10000					13.2	0.55	50.4	
12500					15.6	0.55	59.8	
16000					18.8	0.5	73.5	
20000					22.0	0.5	89.1	
25000					26.0	0.45	105.3	
31500					30.8	0.45	126.9	
40000					36.8	0.4	148.9	
50000					44.0	0.4	184.5	
63000	52.0	0.35	222.3					



主要特点与技术参数: Main functions and characters

- 钟罩式油箱，箱壁采用一次成型折弯瓦楞结构，增强了油箱的机械强度，外形美观大方；
- 铁芯结构独特，采用D型铁轭，45°斜接缝；
- 铁芯与油箱全方位定位，可保证运输中抗冲击；
- 绕组设计合理，线圈采用内外撑条结构，各线圈之间、线圈与铁芯之间采用高强度硬纸筒增强了线圈抗短路冲击的能力；
- 工艺上采用了冷压焊技术，线圈相套工艺、硬纸筒加工等多项先进工艺。
- 根据用户需求，可提供表格所列其它电压组合、损耗值、联接组别和容量之产品。

- The bell type tank and the corrugated shell increases the strength of tank with beautiful appearance.
- The core is with D shape yoke with 45° miter joint.
- The core and tank are well fixed and well protected during transportation.
- Reasonable winding layout method, supported by the interior and exterior strips. High-tension cardboard cylinders between coils increase the short-circuit withstand capacity.
- Advanced workmanship is used, such as crimp welding technology, phase-assembly technology for winding, and cardboard process, etc.
- To meet the client's needs, we can provide products of other voltage ratios, Vector Groups, and rated capacities, as listed in the table.

66kV双绕组有载调压电力变压器

66kV Double-winding Power Transformers with On-load Tap-changer

额定容量 Rated capacity (kVA)	电压组合 Voltage ratio (kV)			联结组 Connection Symbol	空载损耗 No-load loss (kW)	空载电流 No-load current (%)	负载损耗 Full-load loss (kW)	短路阻抗 Impedance (%)
	高压 HV	高压分接范围 HV Tapping Range	低压 LV					
6300	63 66 69	±8×1.25%	6.3 6.6 10.5 11	YNd11	10	0.6	36.0	9
8000					12	0.6	42.7	
10000					14.2	0.55	50.4	
12500					16.8	0.55	69.8	
16000					20.2	0.5	73.5	
20000					24	0.5	89.1	
25000					28.4	0.45	105.3	
31500					33.7	0.45	126.9	
40000					40.3	0.4	148.9	
50000					47.6	0.4	184.9	
63000	56.2	0.35	222.3					

注：上述表格中变压器损耗值均为“9”型产品。

Note: The loss values in the above forms are just for Type S9 transformers.

