

TRANSFORMERS PRODUCT SELECTION

Stock Code:061257Z



变压器产品选型手册

TRANSFORMERS
PRODUCT SELECTION



No.2,Yuan Feng Road,E&T Zone,Datong,China



0352-8060300



www.xc-power.com



宣臣电气股份有限公司
XUANCHEN ELECTRIC CO.,LTD

About Us



Xuan Chen Electric(XCE) founded in 2005,the stock code:061257Z, has been recognised as a leading and professional manufacturer of energy industry. We manufacture quality Oil immersed transformer,Dry-type transformers,Compact Substations and Switchgear.

XCE is located in the Datong near to Beijing.The XCE plant covers an area of 55,000 square feet, five production workshops.Building on more than 20 years of excellence, XCE' s 100+ employees are committed to driving innovations and enabling a more sustainable and resource-efficient future.



Production Equipment 生产设备 +



精良的设备是提高产量、质量的可靠保证。公司自建厂伊始奉行“以人为本，以德为先、以质立业、以信名企”的企业精神和“顾客绝对满意”的经营理念，以对社会和用户负责的态度，靠高素质人才、雄厚的技术、精良的设备、齐全的品种和严格的管理，不断推出具有国内领先水平的高低压电气产品。

Sophisticated equipment is a reliable guarantee to improve output and quality. Since the establishment of the factory, the company has been pursuing the enterprise spirit of "people first, virtue first, quality based business, and trust based enterprise" and the business philosophy of "absolute customer satisfaction". With a responsible attitude to society and users, the company has been continuously introducing high and low voltage electrical products with a domestic leading level by virtue of high-quality talents, strong technology, excellent equipment, complete varieties and strict management.





目录
Directory

1 油浸式电力变压器 Oil immersed power transformer

S11-M 系列油浸式电力变压器 01-04

S11-M series oil immersed power transformer

S13-M 系列油浸式电力变压器 05-08

S13-M series oil immersed power transformer

S11-35kV 系列油浸式电力变压器 09-13

S11-35kV series oil immersed power transformer

2 干式电力变压器 Dry-type power transformer

SC(B)11 系列环氧树脂干式变压器 14-17

SC(B)11 series epoxy resin dry-type transformer

SC(B)13 系列环氧树脂干式变压器 18-21

SC(B)13 series epoxy resin dry-type transformer



S11-M 系列油浸式电力变压器

S11-M Series Oil Immersed Power Transformer

产品简介 Product introduction

公司生产的 S11-M 系列三相油浸式变压器采用全充油、密封型波纹油箱，油箱壳体以自身弹性适应油的膨胀性能，并满足散热要求。器身采用了新型绝缘结构，提高了抗短路能力；铁心由高质量冷轧硅钢片制成；高、低压绕组均选用无氧铜导线，并采用多层圆筒式结构；所有紧固件均采用特殊防松处理。

产品具有高效率，低损耗的特点，可节省大量的电耗和运行费用，社会效益显著，已广泛应用于发电厂、变电所、工矿企业、港口、机场等场所。

The S11-M series three-phase oil immersed transformer produced by the company adopts full oil filled and sealed corrugated oil tank. The oil tank shell adapts to the oil expansion performance with its own elasticity and meets the heat dissipation requirements.

The body adopts a new insulation structure to improve the short-circuit resistance; the core is made of high-quality cold-rolled silicon steel sheet; the high-voltage and low-voltage windings are made of oxygen free copper wires and adopt multi-layer cylindrical structure; all fasteners adopt special anti-loosening treatment.

The product has the characteristics of high efficiency and low loss, can save a lot of power consumption and operating costs, and has significant social benefits. It has been widely used in power plants, substations, industrial and mining enterprises, ports, airports and other places.

型号 Model Meaning



执行标准 Standards

GB/T 1094.1-2013 电力变压器 第 1 部分: 总则 (Power transformers - Part 1: General)

GB/T 1094.2-2013 电力变压器 第 2 部分: 液浸式变压器的温升 (Power transformers - Part 2: Temperature rise for liquid-immersed transformers)

GB/T 1094.3-2017 电力变压器 第 3 部分: 绝缘水平、绝缘试验和外绝缘空气间隙 (Power transformers - Part 3: Insulation levels, dielectric tests and external clearances in air)

GB/T 1094.5-2008 电力变压器 第 5 部分: 承受短路的能力 (Power transformers - Part 5: Ability to withstand short circuit)

GB/T 1094.10-2003 电力变压器 第 10 部分: 声级测定 (Power transformers--Part 10: Determination of sound levels)

IEC60076-1:2011 Power transformers - Part 1: General

IEC60076-2:2011 Power transformers - Part 2: Temperature rise for liquid-immersed transformers

IEC 60076-3:2013+AMD1:2018 Power transformers - Part 3: Insulation levels, dielectric tests and external clearances in air

IEC 60076-5:2006 Power transformers - Part 5: Ability to withstand short circuit

IEC 60076-10:2016 Power transformers - Part 10: Determination of sound levels

正常使用条件 Normal Environment conditions

- | | |
|---|---|
| 1. 环境温度: 最高气温: +40°C
最低气温: -25°C
最热月平均温度: +30°C
最热年平均温度: +20°C | 1. Ambient Temperature: No more than +40°C
No less than -25°C
The monthly average temperature is no more than +30°C
The yearly average temperature is no more than +20°C |
| 2. 海拔不超过 1000m; | 2. Altitude: No more than 1000m. |
| 3. 电源电压的波形近似于正弦波; | 3. The power supply voltage's wave is similar to sine wave. |
| 4. 三相电源电压应大致对称; | 4. Three-phase power supply voltage is approximately symmetrical. |
| 5. 负载电流总谐波含量不超过额定电流的 5%; | 5. The total harmonic content of load current shall not exceed 5% of rated current; |
| 6. 使用地点: 户内或户外。 | 6. Installation Site: Indoor or outdoor. |

产品特点 Product characteristic

1. 铁心采用优质高性能、高导磁的硅钢片制作, 空载损耗低。
2. 高压绕组采用层式结构。低压绕组 500kVA 及以下为层式, 630kVA 及以上产品采用新型螺旋式。机械强度高, 安匝分布平衡, 产品抗短路能力强。
3. 器身追加了定位结构, 使之在运输过程中不产生位移, 同时所有紧固件加装扣紧螺母, 确保产品在长期运行过程中紧固件不松动。
4. 本产品为全密封结构, 变压器在封装时采用真空注油工艺, 完全去除了变压器中的潮气, 保证了变压器油与外界空气的隔绝, 防止了油的老化, 提高了变压器的运行可靠性。产品配置有压力释放阀、信号温度计、气体继电器等, 确保了变压器的安全运行。
5. 油箱采用波纹油箱。这种油箱工艺简单, 机械强度高, 焊接效果好, 不易渗漏。且因油的流动性强, 使得产品的散热能力得到提高。
6. 该产品外形美观, 体积小, 占地面积少, 是理想的免维护产品。

1. The iron core is made of silicon steel sheet with high quality, high performance and high magnetic conductivity, with low no-load loss.
2. High voltage winding adopts layer structure. Low voltage winding 500KVA and below is layer type, 630kVA and above products adopt new spiral type. High mechanical strength, balanced ampere turn distribution, strong short circuit resistance.
3. The positioning structure is added to the body to avoid displacement during transportation. At the same time, all fasteners are equipped with fastening nuts to ensure that the fasteners are not loose during long-term operation.
4. This product is a fully sealed structure. The vacuum oil filling process is adopted when the transformer is packaged, which completely removes the moisture in the transformer, ensures the isolation of the transformer oil from the outside air, prevents the aging of the oil, and improves the operation reliability of the transformer. The product is equipped with pressure relief valve, signal thermometer, gas relay and so on to ensure the safe operation of the transformer.
5. Corrugated oil tank is adopted. This kind of oil tank has the advantages of simple process, high mechanical strength, good welding effect and no leakage. And because of the strong fluidity of the oil, the heat dissipation capacity of the product is improved.
6. The product is beautiful in appearance, small in volume and small in floor area. It is an ideal maintenance free product.



S11-M 技术参数 Technical Parameter

额定容量 Rated capacity (kVA)	电压组合 Voltage combination			连接组 标号 connected group label	空载损耗 No-load dissipation (w)	负载损耗 Load dissipation (W)75°C	空载电流 No-load current (%)	阻抗电压 (%) Impedance voltage	外形尺寸 (长 x 宽 x 高) Exterior size(LxWxH) 安装 Install 4-Φ18			总量 Total Weight (kg)
	高压 (kV) High voltage(kV)	分接范围 Tapping range	低压 (kV) Low voltage						长 L	宽 W	高 H	
30	6 6.3 6.6 10 10.5 11	±5 ±2x2.5	0.4	Dyn11 Yyn0 Yzn11	100	630/600	1.5	4.0	690	510	920	275
50					130	910/870	1.3		730	510	960	340
63					150	1090/1040	1.2		750	550	1000	385
80					180	1310/1250	1.2		790	620	1020	450
100					200	1580/1500	1.1		790	700	1040	520
125					240	1890/1800	1.1		840	800	1070	625
160					280	2310/2200	1.0		1070	670	1130	695
200					340	2730/2600	1.0		1140	750	1140	795
250					400	3200/3050	0.9		1200	800	1190	955
315					480	3830/3650	0.9		1300	860	1210	1085
400				570	4520/4300	0.8	1380	900	1240	1290		
500				680	5410/5100	0.8	1450	950	1300	1590		
630				810	6200	0.6	1500	970	1360	1850		
800				980	7500	0.6	1660	1140	1400	2210		
1000				1150	10300	0.6	1690	1190	1530	2570		
1250				1360	12000	0.5	1760	1230	1600	3115		
1600				1640	14500	0.5	1800	1250	1660	3520		
2000				1940	18300	0.4	1930	1360	1700	4060		
2500				2290	21200	0.4	2080	1360	1750	5105		

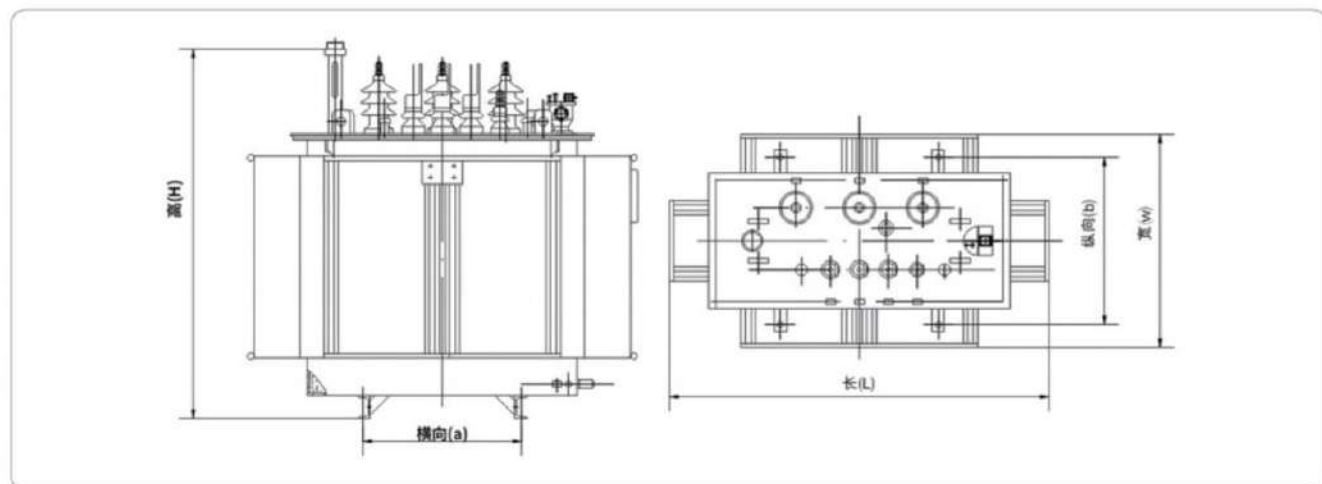
注1: 对于额定容量为 500kVA 及以下的变压器, 表中斜线上方的负载损耗值适用于 Dyn11 或 Yzn11 联结组, 斜线下方的负载损耗值适用于 Yyn0 联结组。

注2: 当变压器年平均负载率介于 35%-40% 之间时, 采用表中的损耗值可获得最高运行效率。

Note 1: for transformers with rated capacity of 500kVA and below, the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group, and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

Note 2: when the average annual load rate of the transformer is between 35% and 40%, the maximum operating efficiency can be obtained by using the loss value in the table.

外形尺寸 Dimensions



注: 提供的外形尺寸和重量仅供设计选型时参考, 最终尺寸和重量以我公司产品图纸为准。

Notes: The dimensions and weights provided are only for reference in design and selection. The final size and weight are subject to our product drawings.



S13-M 系列油浸式电力变压器

S13-M Series Oil Immersed Power Transformer

产品简介 Product introduction

公司生产的 S13-M 系列三相油浸式变压器采用全充油、密封型波纹油箱, 油箱壳体以自身弹性适应油的膨胀性能, 并满足散热要求。器身采用了新型绝缘结构, 提高了抗短路能力; 铁心由高质量冷轧硅钢片制成; 高、低压绕组均选用无氧铜导线, 并采用多层圆筒式结构; 所有紧固件均采用特殊防松处理。

产品具有高效率, 低损耗的特点, 可节省大量的电耗和运行费用, 社会效益显著, 已广泛应用于发电厂、变电所、工矿企业、港口、机场等场所。

The S13-M series three-phase oil immersed transformer produced by the company adopts full oil filled and sealed corrugated oil tank. The oil tank shell adapts to the oil expansion performance with its own elasticity and meets the heat dissipation requirements.

The body adopts a new insulation structure to improve the short-circuit resistance; the core is made of high-quality cold-rolled silicon steel sheet; the high-voltage and low-voltage windings are made of oxygen free copper wires and adopt multi-layer cylindrical structure; all fasteners adopt special anti-loosening treatment.

The product has the characteristics of high efficiency and low loss, can save a lot of power consumption and operating costs, and has significant social benefits. It has been widely used in power plants, substations, industrial and mining enterprises, ports, airports and other places.

型号 Model Meaning



执行标准 Standards

GB/T 1094.1-2013 电力变压器 第 1 部分: 总则 (Power transformers - Part 1: General)

GB/T 1094.2-2013 电力变压器 第 2 部分: 液浸式变压器的温升 (Power transformers - Part 2: Temperature rise for liquid-immersed transformers)

GB/T 1094.3-2017 电力变压器 第 3 部分: 绝缘水平、绝缘试验和外绝缘空气间隙 (Power transformers - Part 3: Insulation levels, dielectric tests and external clearances in air)

GB/T 1094.5-2008 电力变压器 第 5 部分: 承受短路的能力 (Power transformers - Part 5: Ability to withstand short circuit)

GB/T 1094.10-2003 电力变压器 第 10 部分: 声级测定 (Power transformers--Part 10: Determination of sound levels)

IEC60076-1:2011 Power transformers - Part 1: General

IEC60076-2:2011 Power transformers - Part 2: Temperature rise for liquid-immersed transformers

IEC 60076-3:2013+AMD1:2018 Power transformers - Part 3: Insulation levels, dielectric tests and external clearances in air

IEC 60076-5:2006 Power transformers - Part 5: Ability to withstand short circuit

IEC 60076-10:2016 Power transformers - Part 10: Determination of sound levels

正常使用条件 Normal Environment conditions

- | | |
|---|---|
| 1. 环境温度: 最高气温: +40°C
最低气温: -25°C
最热月平均温度: +30°C
最热年平均温度: +20°C | 1. Ambient Temperature: No more than +40°C
No less than -25°C
The monthly average temperature is no more than +30°C
The yearly average temperature is no more than +20°C |
| 2. 海拔不超过 1000m; | 2. Altitude: No more than 1000m. |
| 3. 电源电压的波形近似于正弦波; | 3. The power supply voltage's wave is similar to sine wave. |
| 4. 三相电源电压应大致对称; | 4. Three-phase power supply voltage is approximately symmetrical. |
| 5. 负载电流总谐波含量不超过额定电流的 5%; | 5. The total harmonic content of load current shall not exceed 5% of rated current; |
| 6. 使用地点: 户内或户外。 | 6. Installation Site: Indoor or outdoor. |

产品特点 Product characteristic

1. 铁心采用优质高性能、高导磁的硅钢片制作, 空载损耗低。
2. 高压绕组采用层式结构。低压绕组 500kVA 及以下为层式, 630kVA 及以上产品采用新型螺旋式。机械强度高, 安匝分布平衡, 产品抗短路能力强。
3. 器身追加了定位结构, 使之在运输过程中不产生位移, 同时所有紧固件加装扣紧螺母, 确保产品在长期运行过程中紧固件不松动。
4. 本产品为全密封结构, 变压器在封装时采用真空注油工艺, 完全去除了变压器中的潮气, 保证了变压器油与外界空气的隔绝, 防止了油的老化, 提高了变压器的运行可靠性。产品配置有压力释放阀、信号温度计、气体继电器等, 确保了变压器的安全运行。
5. 油箱采用波纹油箱。这种油箱工艺简单, 机械强度高, 焊接效果好, 不易渗漏。且因油的流动性强, 使得产品的散热能力得到提高。
6. 该产品外形美观, 体积小, 占地面积少, 是理想的免维护产品。

1. The iron core is made of silicon steel sheet with high quality, high performance and high magnetic conductivity, with low no-load loss.
2. High voltage winding adopts layer structure. Low voltage winding 500KVA and below is layer type, 630kVA and above products adopt new spiral type. High mechanical strength, balanced ampere turn distribution, strong short circuit resistance.
3. The positioning structure is added to the body to avoid displacement during transportation. At the same time, all fasteners are equipped with fastening nuts to ensure that the fasteners are not loose during long-term operation.
4. This product is a fully sealed structure. The vacuum oil filling process is adopted when the transformer is packaged, which completely removes the moisture in the transformer, ensures the isolation of the transformer oil from the outside air, prevents the aging of the oil, and improves the operation reliability of the transformer. The product is equipped with pressure relief valve, signal thermometer, gas relay and so on to ensure the safe operation of the transformer.
5. Corrugated oil tank is adopted. This kind of oil tank has the advantages of simple process, high mechanical strength, good welding effect and no leakage. And because of the strong fluidity of the oil, the heat dissipation capacity of the product is improved.
6. The product is beautiful in appearance, small in volume and small in floor area. It is an ideal maintenance free product.

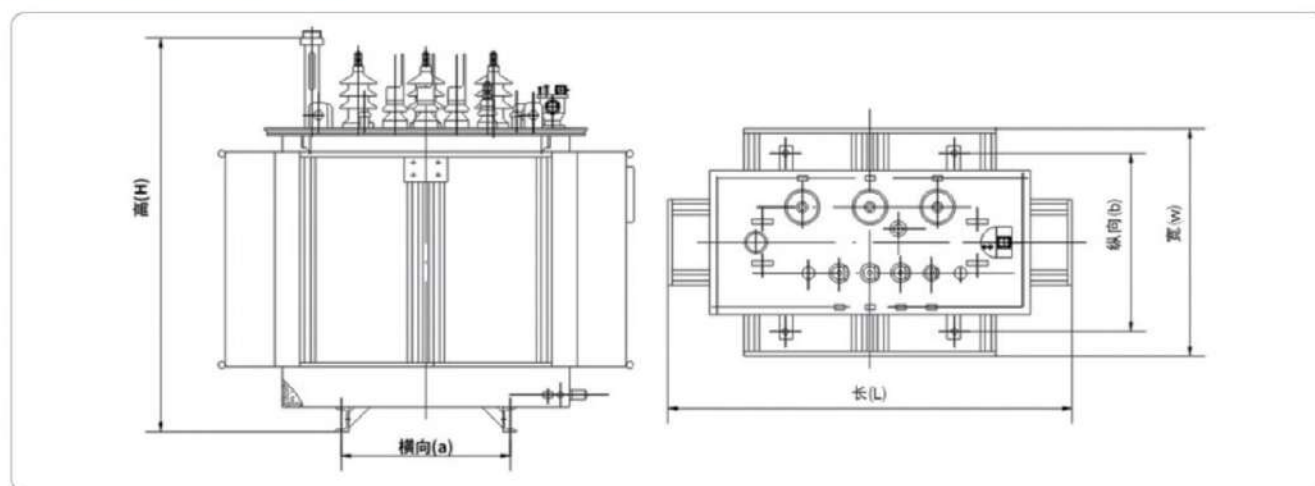


S13-M 技术参数 Technical Parameter

额定容量 Rated capacity (kVA)	电压组合 Voltage combination			连接组 标号 connected group label	空载损耗 No-load dissipation (w)	负载损耗 Load dissipation (W)145°C	空载电流 No-load current (%)	阻抗电压 (%) Impedance voltage	外形尺寸 (长 x 宽 x 高) Exterior size(LxWxH) 安装 Install 4-Φ18			总量 Total Weight (kg)			
	高压 (kV) High voltage(kV)	分接范围 Tapping range	低压 (kV) Low voltage						长 L	宽 W	高 H				
30	6	±5 ±2x2.5	0.4	Dyn11 Yyn0 Yzn11	80	630/600	1.5	4.0	695	490	860	260			
50					100	910/870	1.3		725	520	955	365			
63					110	1090/1040	1.2		750	535	970	415			
80					130	1310/1250	1.2		770	565	985	465			
100					150	1580/1500	1.2		800	595	1000	545			
125					170	1890/1800	1.1		815	670	1010	585			
160					200	2310/2200	1.1		1015	645	1055	695			
200					240	2730/2600	1.0		1020	650	1115	810			
250					290	3200/3050	1.0		1140	730	1120	930			
315				340	3830/3650	0.9	1195	785	1175	1075					
400				410	4520/4300	0.9	1265	855	1195	1255					
500				480	5410/5100	0.8	1325	915	1240	1435					
630				6.3	±5 ±2x2.5	0.4	Dyn11 Yyn0	570	6200	0.8	4.5	1465	960	1295	1880
800								700	7500	0.6		1515	995	1340	2145
1000								830	10300	0.6		1605	1095	1460	2455
1250								970	12000	0.5		1685	1145	1485	2840
1600								1170	14500	0.5		1775	1225	1580	3310
2000								1550	18300	0.4		1855	1265	1600	3960
2500	1830	21200	0.4					1885	1305	1780		4980			

注1: 对于额定容量为 500kVA 及以下的变压器, 表中斜线上方的负载损耗值适用于 Dyn11 或 Yzn11 联结组, 斜线下方的负载损耗值适用于 Yyn0 联结组。
注2: 当变压器年平均负载率介于 35%-40% 之间时, 采用表中的损耗值可获得最高运行效率。
Note 1: for transformers with rated capacity of 500kVA and below, the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group, and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.
Note 2: when the average annual load rate of the transformer is between 35% and 40%, the maximum operating efficiency can be obtained by using the loss value in the table.

外形尺寸 Dimensions



注: 提供的外形尺寸和重量仅供设计选型时参考, 最终尺寸和重量以我公司产品图纸为准。
Notes: The dimensions and weights provided are only for reference in design and selection. The final size and weight are subject to our product drawings.



S11-35kV 系列油浸式电力变压器

S11-35kV Series Oil Immersed Power Transformer

产品简介 Product introduction

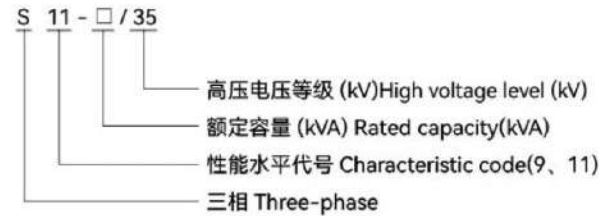
公司生产的 S11-35kV 系列油浸式变压器适用于三相交流 50/60Hz, 额定电压 35kV 的配电网, 起着高压输电、低压供电的重要作用。产品具有高效率、低损耗的特点, 可节省大量的电耗和运行费用, 社会效益显著, 已被广泛应用于发电厂、变电所、工矿企业、港口、机场等场所。

通过配装有载调压分接开关, 该产品可以实现不停电的情况下进行手动或者自动电压调节的功能, 有利于稳定电网在各负载中心的电压, 以提高供电质量。

S11 - 35kV series oil immersed transformer produced by the company is suitable for three-phase AC 50 / 60Hz, rated voltage 35kV distribution grid, and plays an important role in high-voltage transmission and low-voltage power supply. Products with high efficiency, low loss characteristics, can save a lot of power consumption and operating costs, social benefits, has been widely used in power plants, substations, industrial and mining enterprises, ports, airports and other places.

With on load tap changer, the product can realize the function of manual or automatic voltage regulation without power failure, which is conducive to stabilizing the voltage of power grid in each load center and improving the quality of power supply.

型号 Model Meaning



执行标准 Standards

GB/T 1094.1-2013 电力变压器 第 1 部分: 总则 (Power transformers - Part 1: General)

GB/T 1094.2-2013 电力变压器 第 2 部分: 液浸式变压器的温升 (Power transformers - Part 2: Temperature rise for liquid-immersed transformers)

GB/T 1094.3-2017 电力变压器 第 3 部分: 绝缘水平、绝缘试验和外绝缘空气间隙 (Power transformers - Part 3: Insulation levels, dielectric tests and external clearances in air)

GB/T 1094.5-2008 电力变压器 第 5 部分: 承受短路的能力 (Power transformers - Part 5: Ability to withstand short circuit)

GB/T 1094.10-2003 电力变压器 第 10 部分: 声级测定 (Power transformers - Part 10: Determination of sound levels)

IEC 60076-1:2011 Power transformers - Part 1: General

IEC 60076-2:2011 Power transformers - Part 2: Temperature rise for liquid-immersed transformers

IEC 60076-3:2013+AMD1:2018 Power transformers - Part 3: Insulation levels, dielectric tests and external clearances in air

IEC 60076-5:2006 Power transformers - Part 5: Ability to withstand short circuit

IEC 60076-10:2016 Power transformers - Part 10: Determination of sound levels

正常使用条件 Normal Environment conditions

- | | |
|---|---|
| 1. 环境温度: 最高气温: +40°C
最低气温: -25°C
最热月平均温度: +30°C
最热年平均温度: +20°C | 1. Ambient Temperature: No more than +40°C
No less than -25°C
The monthly average temperature is no more than +30°C
The yearly average temperature is no more than +20°C |
| 2. 海拔不超过 1000m; | 2. Altitude: No more than 1000m. |
| 3. 电源电压的波形近似于正弦波; | 3. The power supply voltage's wave is similar to sine wave. |
| 4. 三相电源电压应大致对称; | 4. Three-phase power supply voltage is approximately symmetrical. |
| 5. 负载电流总谐波含量不超过额定电流的 5%; | 5. The total harmonic content of load current shall not exceed 5% of rated current; |
| 6. 使用地点: 户内或户外。 | 6. Installation Site: Indoor or outdoor. |

产品特点 Product features

1. 铁心选用高导磁晶粒取向冷轧硅钢片制作, 空载损耗低。
2. 三相绕组均为同心式线圈, 采用瓦楞油道, 不浸漆工艺, 紧缩带绑扎。机械强度高, 安匝分布平衡, 产品抗短路能力强。
3. 器身追加了定位结构, 使之在运输过程中不产生位移, 同时所有紧固件加装扣紧螺母, 确保产品在长期运行过程中紧固件不松动。
4. 本产品为全密封结构, 变压器在封装时采用真空注油工艺, 完全去除了变压器中的潮气, 保证了变压器油与外界空气的隔绝, 防止了油的老化, 提高了变压器的运行可靠性。所有容量段的变压器均装有压力释放阀, 并可根据用户需求可安装具有报警和跳闸功能的气体继电器, 确保了变压器的安全运行。
5. 油箱采用波纹油箱。这种油箱工艺简单, 机械强度高, 焊接效果好, 不易渗漏。且因油的流动性强, 使得产品的散热能力得到提高。
6. 该产品外形美观, 体积小, 占地面积少, 是理想的免维护产品。

1. The core is made of cold-rolled silicon steel sheet with high magnetic conductivity and grain orientation, with low no-load loss.
2. The three-phase winding is concentric coil, corrugated oil duct, no paint dipping process and tight band binding are adopted. High mechanical strength, balanced ampere turn distribution, strong short circuit resistance.
3. The positioning structure is added to the body to avoid displacement during transportation. At the same time, all fasteners are equipped with fastening nuts to ensure that the fasteners are not loose during long-term operation.
4. This product is a fully sealed structure. The vacuum oil filling process is adopted when the transformer is packaged, which completely removes the moisture in the transformer, ensures the isolation of the transformer oil from the outside air, prevents the aging of the oil, and improves the operation reliability of the transformer. All transformers of capacity section are equipped with pressure relief valve, and gas relay with alarm and trip function can be installed according to user's demand, which ensures the safe operation of transformer.
5. Corrugated oil tank is adopted. This kind of oil tank has the advantages of simple process, high mechanical strength, good welding effect and no leakage. And because of the strong fluidity of the oil, the heat dissipation capacity of the product is improved.
6. The product is beautiful in appearance, small in volume and small in floor area. It is an ideal maintenance free product.



S11-35kV 技术参数 Technical Parameter

S11-35kV 无励磁调压变压器技术参数 Technical parameters of non excitation voltage regulating transformer

额定容量 Rated capacity (kVA)	电压组合 Voltage combination			连接组 标号 connected group label	空载损耗 No-load dissipation (w)	负载损耗 Load dissipation (W)145°C	空载电流 No-load current (%)	阻抗电压 (%) Impedance voltage
	高压 (kV) High voltage(kV)	分接范围 Tapping range	低压 (kV) Low voltage					
50	35 38.5	±2×2.5 ±5	0.4	Dyn11 Yyn0	160	1200/1140	1.3	6.5
100					230	2010/1910	1.1	
125					270	2370/2260	1.1	
160					280	2820/2680	1.0	
200					310	3320/3160	1.0	
250					400	3950/3760	0.95	
315					480	4750/4530	0.95	
400					580	5740/5470	0.85	
500					680	6910/6580	0.85	
630					830	7860	0.65	
800					980	9400	0.65	
1000					1150	11500	0.65	
1250					1400	13900	0.60	
1600					1690	16600	0.60	
2000					1990	19700	0.55	
2500					2360	23200	0.55	

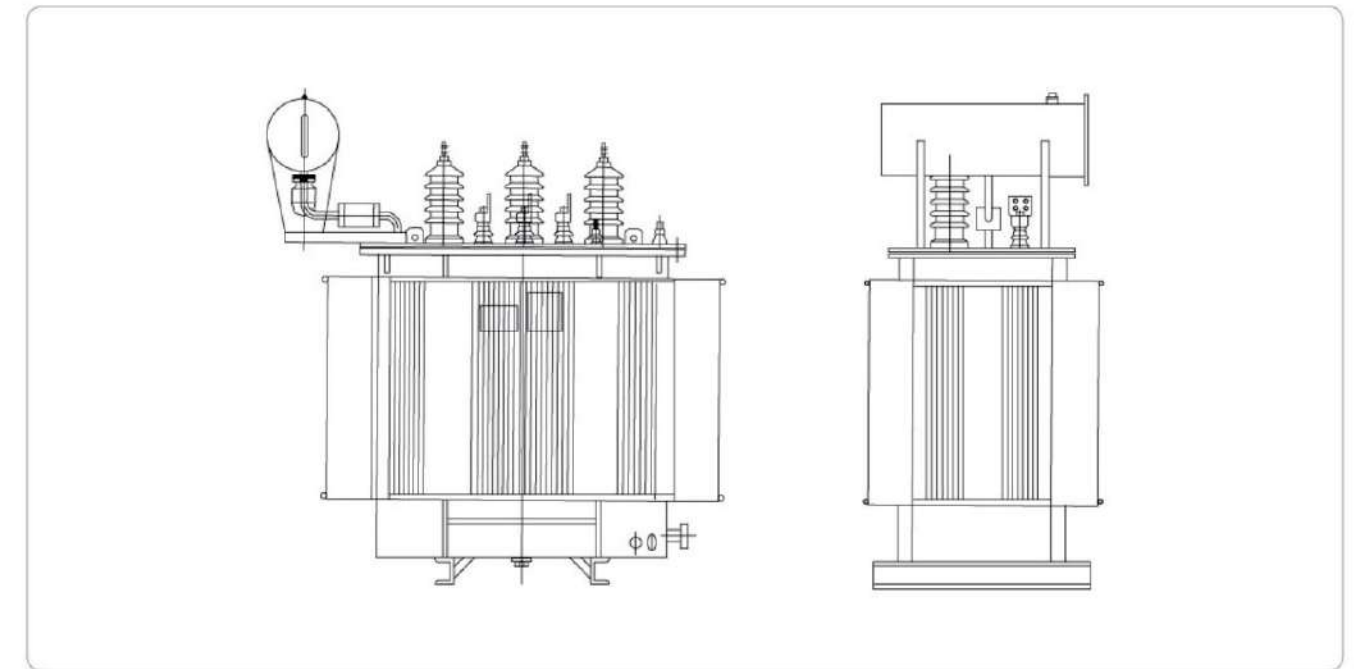
S11-35kV 无励磁调压变压器技术参数 Technical parameters of non excitation voltage regulating transformer

额定容量 Rated capacity (kVA)	电压组合 Voltage combination			连接组 标号 connected group label	空载损耗 No-load dissipation (w)	负载损耗 Load dissipation (W)145°C	空载电流 No-load current (%)	阻抗电压 (%) Impedance voltage
	高压 (kV) High voltage(kV)	分接范围 Tapping range	低压 (kV) Low voltage					
630	35	±2×2.5 ±5	3.15 6.3 10.5	Yd11	830	7860	0.65	6.5
800					980	9400	0.65	
1000					1150	11500	0.65	
1250					1400	13900	0.55	
1600					1690	16600	0.45	
2000					2170	18300	0.45	
2500	35~38.5	±2×2.5 ±5	3.15 6.3 10.5	Yd11	2560	19600	0.45	7.0
3150					3040	23000	0.45	
4000					3610	27300	0.45	
5000					4320	31300	0.45	
6300					5240	35000	0.45	
8000					7200	38100	0.35	
10000	35~38.5	±2×2.5	3.15 3.3 6.3 6.6 10.5	YNd11	8700	45300	0.35	8.0
12500					10000	53800	0.3	
16000					12100	65800	0.3	
20000					14400	79500	0.3	
25000					17000	94000	0.25	
31500					20200	112000	0.25	

S11-35kV 有载调压变压器技术参数 Technical parameters of on load tap changer

额定容量 Rated capacity (kVA)	电压组合 Voltage combination			连接组 标号 connected group label	空载损耗 No-load dissipation (w)	负载损耗 Load dissipation (W)145°C	空载电流 No-load current (%)	阻抗电压 (%) Impedance voltage
	高压 (kV) High voltage(kV)	分接范围 Tapping range	低压 (kV) Low voltage					
2000	35	±3×2.5	6.3 10.5	Yd11	2300	19200	0.50	6.5
2500					2720	20600	0.50	
3150					3230	24700	0.50	
4000	35~38.5	±3×2.5	6.3 10.5	Yd11	3870	29100	0.50	7.0
5000					4640	34200	0.50	
6300					5630	36700	0.50	
8000					7870	40600	0.40	
10000	35~38.5	±3×2.5	6.3 6.6 10.5	YNd11	9280	48000	0.40	8.0
12500					10900	56800	0.35	
16000					13100	70300	0.35	
20000					15500	82100	0.35	
25000					18300	97800	0.30	
31500					21800	116000	0.30	

外形图 Outline drawing





SC(B)11 系列环氧树脂干式变压器

SC(B)11 Series Epoxy Resin Dry Type Transformer

产品简介 Product introduction

SC(B)11 系列环氧树脂干式变压器由于线圈被环氧树脂封装，所以难燃，防火，防爆，免维护，无污染，体积小，可直接安装在负荷中心。同时，科学合理的设计和浇注工艺，使产品局部放电量更小，噪声更低，散热能力更强，在强迫风冷条件下可以在 125% 额定负载下长期运行，并配有智能温控仪，具有故障报警，超温报警，超温跳闸以及黑闸子功能，并通过 RS485 串行接口与计算机相连，可以集中监视和控制。

由于该产品具有的以上特点，因此被广泛应用于输变电系统，如宾馆、饭店、机场、高层建筑、商业中心、住宅小区等重要场所，以及地铁、冶炼厂、轮船、海洋钻井及平台等环境恶劣场所。

SC(B)11 系列环氧树脂干式变压器

SC(B)11 Series Epoxy Resin Dry Type Transformer

SC(B)11 series epoxy resin dry-type transformer is flame-retardant, fire-proof, explosion-proof, maintenance free, pollution-free, small in size, because of the winding is encapsulated, and can be directly installed in the load center. At the same time, the scientific and reasonable design and casting process make the product have less partial discharge, lower noise and stronger heat dissipation capacity. Under the condition of forced air cooling, it can operate for a long time under 125% rated load. It is equipped with intelligent temperature controller, which has the functions of fault alarm, overtemperature alarm, overtemperature trip and black box. It is connected with the computer through RS485 serial interface and can be monitored centrally and control.

Because of the above characteristics, the product is widely used in power transmission system, such as hotels, restaurants, airports, high-rise buildings, commercial centers, residential areas and other important places, as well as subway, smelter, ship, offshore drilling and platform and other places with bad environment.

型号 Model Meaning



执行标准 Standards

- GB/T 1094.1-2013 电力变压器 第 1 部分：总则 (Power transformers - Part 1: General)
- GB/T 1094.11-2007 电力变压器 第 11 部分：干式变压器 (Power transformers - Part 11: Dry-type transformers)
- GB/T 10228-2015 干式电力变压器技术参数和要求 (Specification and technical requirements for dry-type power transformers)
- IEC60076-1:2011 Power transformers - Part 1: General
- IEC60076-11:2018 Power transformers - Part 11: Dry-type transformers

正常使用条件 Normal Environment conditions

1. 环境温度：最高气温：+40°C
最低气温：-25°C
最热月平均温度：+30°C
最热年平均温度：+20°C
 2. 海拔不超过 1000m;
 3. 电源电压的波形近似于正弦波；
 4. 三相电源电压应大致对称；
 5. 周围空气的相对湿度应低于 93%。线圈表面不应出现水滴；
 6. 使用地点：户内或户外。
1. Ambient Temperature: No more than +40°C
No less than -25°C
The monthly average temperature is no more than +30°C
The yearly average temperature is no more than +20°C
 2. Altitude: No more than 1000m.
 3. The power supply voltage's wave is similar to sine wave.
 4. Three-phase power supply voltage is approximately symmetrical.
 5. The relative humidity of the surrounding air should be less than 93%. There should be no water droplets on the coil surface.
 6. Installation Site: Indoor or outdoor.

产品特点 Product features

1. 高压绕组采用漆包铜线或膜包铜线，低压绕组用铜箔绕制。高压绕组用玻璃纤维毡填充。在真空状态下用不加填料的环氧树脂浇注，固化后形成坚固的整体，机械强度高，局部放电小，可靠性高。
 2. 阻燃、防爆、不污染环境、环保。可安装在负荷中心。
 3. 铁心材料采用优质冷轧取向硅钢片，全斜接缝叠片式结构。
 4. 线圈不吸潮，铁心、夹件经过特殊工艺处理，可在相对湿度高和其它恶劣环境中运行。间断运行无须去潮处理。
 5. 抗短路、雷电冲击水平高，过载能力大。
 6. 线圈内外侧树脂绝缘层薄，散热性能好。
 7. 损耗低，节电效果好，运行经济，可免维护。
 8. 体积小、重量轻、占地空间小、安装方便。
1. The high voltage winding is made of enameled copper wire or film wrapped copper wire, and the low voltage winding is made of copper foil. The high voltage winding is filled with glass fiber felt. In the vacuum state, the epoxy resin without filler is used for pouring, which forms a solid whole after curing, with high mechanical strength, small partial discharge and high reliability.
 2. Flame retardant, explosion-proof, no environmental pollution, environmental protection. It can be installed in the load center.
 3. The core material is made of high quality cold-rolled oriented silicon steel sheet with full inclined seam laminated structure.
 4. The coil does not absorb moisture, and the core and clamp are treated by special process, which can operate in high relative humidity and other harsh environment. Intermittent operation without dehumidification treatment.
 5. High resistance to short circuit, lightning impulse and overload.
 6. Thin resin insulation layer inside and outside the coil, good heat dissipation performance.
 7. Low loss, good power saving effect, economical operation and maintenance free.
 8. Small volume, light weight, small floor space and convenient installation.

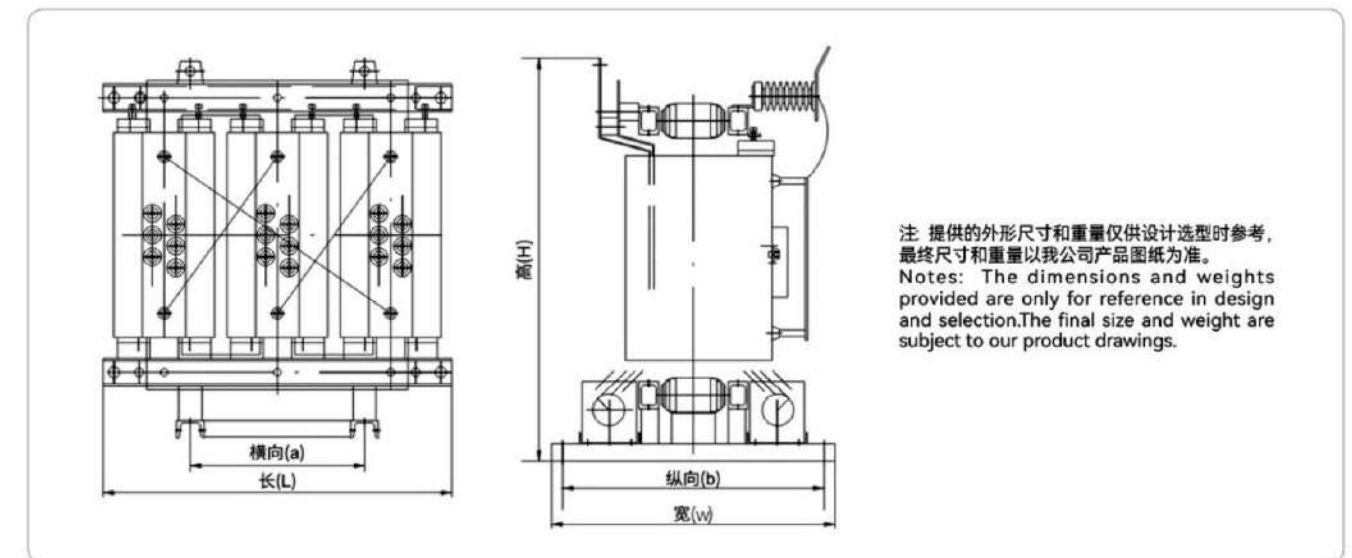


SC(B)11-30-2500/10kV 技术参数 Technical Parameter

尺寸单位: (mm)

额定容量 Rated capacity (kVA)	电压组合 Voltage combination			连接组 标号 connected group label	空载损耗 No-load dissipation (w)	负载损耗 Load dissipation (W)			空载电流 No-load current (%)	阻抗电压 (%) Impedance voltage	外形尺寸 (长 x 宽 x 高) Exterior size(LxWxH) 安装 Install 4-Φ18	总量 Total Weight (kg)				
	高压 (kV) High voltage(kV)	分接范围 Tapping range	低压 (kV) Low voltage			130°C (B)	155°C (F)	180°C (H)								
						100°C	120°C	145°C								
30	6	±2.5 ±5	0.4	Dyn11	170	670	710	760	2.3	4.0	650×550×750	270				
50					240	940	1000	1070	2.2		700×550×750	340				
80					330	1290	1380	1480	1.7		750×660×800	460				
100					360	1480	1570	1690	1.7		750×660×800	530				
125					420	1740	1850	1980	1.5		860×720×810	605				
160					480	2000	2130	2280	1.5		860×720×850	730				
200					550	2370	2530	2710	1.3		880×720×900	825				
250					640	2590	2760	2960	1.3		920×760×920	1010				
315		790			3270	3470	3730	1.1	960×760×920		1165					
400		880			3750	3990	4280	1.1	1000×760×1010		1490					
500		6.3			±2×2.5 ±5	0.4	Dyn11	1040	4590		4880	5230	1.1	6.0	1050×810×1080	1650
630		1200						5530	5880		6290	0.9	1200×810×950		1915	
630		1170						5610	5960		6400	0.9	1200×810×950		1915	
800		1360						6550	6960		7460	0.9	1250×860×1020		2305	
1000		1590						7650	8130		8760	0.9	1300×960×1110		2690	
1250		1880						9100	9690		10300	0.9	1480×970×1200		3225	
1600	2200	11000	11700	12500				0.9	1500×1020×1235	3805						
2000	2740	13600	14400	15500				0.7	1500×1050×1350	4435						
2500	3240	16100	17100	18400	0.7			1620×1150×1450	5300							
1600	2200	12200	12900	13900	0.9			1500×1020×1235	3805							
2000	2740	15000	159000	17100	0.7			1500×1050×1350	4435							
2500	3240	17700	18800	20200	0.7			1620×1150×1450	5300							

外形尺寸 Dimensions





SC(B)13 系列环氧树脂干式变压器

SC(B)13 Series Epoxy Resin Dry Type Transformer

产品简介 Product introduction

SC(B)13 系列环氧树脂干式变压器由于线圈被环氧树脂封装，所以难燃，防火，防爆，免维护，无污染，体积小，可直接安装在负荷中心。同时，科学合理的设计和浇注工艺，使产品局部放电量更小，噪声更低，散热能力更强，在强迫风冷条件下可以在 125% 额定负载下长期运行，并配有智能温控仪，具有故障报警，超温报警，超温跳闸以及黑闸子功能，并通过 RS485 串行接口与计算机相连，可以集中监视和控制。

由于该产品具有的以上特点，因此被广泛应用于输变电系统，如宾馆、饭店、机场、高层建筑、商业中心、住宅小区等重要场所，以及地铁、冶炼厂、轮船、海洋钻井及平台等环境恶劣场所。

SC(B)13 系列环氧树脂干式变压器

SC(B)13 Series Epoxy Resin Dry Type Transformer

SC(B)13 series epoxy resin dry-type transformer is flame-retardant, fire-proof, explosion-proof, maintenance free, pollution-free, small in size, because of the winding is encapsulated, and can be directly installed in the load center. At the same time, the scientific and reasonable design and casting process make the product have less partial discharge, lower noise and stronger heat dissipation capacity. Under the condition of forced air cooling, it can operate for a long time under 125% rated load. It is equipped with intelligent temperature controller, which has the functions of fault alarm, overtemperature alarm, overtemperature trip and black box. It is connected with the computer through RS485 serial interface and can be monitored centrally and control.

Because of the above characteristics, the product is widely used in power transmission system, such as hotels, restaurants, airports, high-rise buildings, commercial centers, residential areas and other important places, as well as subway, smelter, ship, offshore drilling and platform and other places with bad environment.

型号 Model Meaning



执行标准 Standards

- GB/T 1094.1-2013 电力变压器 第 1 部分：总则 (Power transformers - Part 1: General)
- GB/T 1094.11-2007 电力变压器 第 11 部分：干式变压器 (Power transformers - Part 11: Dry-type transformers)
- GB/T 10228-2015 干式电力变压器技术参数和要求 (Specification and technical requirements for dry-type power transformers)
- IEC60076-1:2011 Power transformers - Part 1: General
- IEC60076-11:2018 Power transformers - Part 11: Dry-type transformers

正常使用条件 Normal Environment conditions

1. 环境温度：最高气温：+40°C
最低气温：-25°C
最热月平均温度：+30°C
最热年平均温度：+20°C
 2. 海拔不超过 1000m;
 3. 电源电压的波形近似于正弦波;
 4. 三相电源电压应大致对称;
 5. 周围空气的相对湿度应低于 93%。线圈表面不应出现水滴;
 6. 使用地点：户内或户外。
1. Ambient Temperature: No more than +40°C
No less than -25°C
The monthly average temperature is no more than +30°C
The yearly average temperature is no more than +20°C
 2. Altitude: No more than 1000m.
 3. The power supply voltage's wave is similar to sine wave.
 4. Three-phase power supply voltage is approximately symmetrical.
 5. The relative humidity of the surrounding air should be less than 93%. There should be no water droplets on the coil surface.
 6. Installation Site: Indoor or outdoor.

产品特点 Product features

1. 高压绕组采用漆包铜线或膜包铜线，低压绕组用铜箔绕制。高压绕组用玻璃纤维毡填充。在真空状态下用不加填料的环氧树脂浇注，固化后形成坚固的整体，机械强度高，局部放电小，可靠性高。
2. 阻燃、防爆、不污染环境、环保。可安装在负荷中心。
3. 铁心材料采用优质冷轧取向硅钢片，全斜接缝叠片式结构。
4. 线圈不吸潮，铁心、夹件经过特殊工艺处理，可在相对湿度高和其它恶劣环境中运行。间断运行无须去潮处理。
5. 抗短路、雷电冲击水平高，过载能力大。
6. 线圈内外侧树脂绝缘层薄，散热性能好。
7. 损耗低，节电效果好，运行经济，可免维护。
8. 体积小、重量轻、占地空间小、安装方便。

1. The high voltage winding is made of enameled copper wire or film wrapped copper wire, and the low voltage winding is made of copper foil. The high voltage winding is filled with glass fiber felt. In the vacuum state, the epoxy resin without filler is used for pouring, which forms a solid whole after curing, with high mechanical strength, small partial discharge and high reliability.
2. Flame retardant, explosion-proof, no environmental pollution, environmental protection. It can be installed in the load center.
3. The core material is made of high quality cold-rolled oriented silicon steel sheet with full inclined seam laminated structure.
4. The coil does not absorb moisture, and the core and clamp are treated by special process, which can operate in high relative humidity and other harsh environment. Intermittent operation without dehumidification treatment.
5. High resistance to short circuit, lightning impulse and overload.
6. Thin resin insulation layer inside and outside the coil, good heat dissipation performance.
7. Low loss, good power saving effect, economical operation and maintenance free.
8. Small volume, light weight, small floor space and convenient installation.



SC(B)13-30-2500/10kV 技术参数 Technical Parameter

尺寸单位: (mm)

额定容量 Rated capacity (kVA)	电压组合 Voltage combination			连接组 标号 connected group label	空载损耗 No-load dissipation (w)	负载损耗 Load dissipation (W)			空载电流 No-load current (%)	阻抗电压 (%) Impedance voltage	外形尺寸 (长×宽×高) Exterior size(LxWxH) 安装 Install 4-Φ18	总量 Total Weight (kg)
	高压 (kV) High voltage	分接范围 Tapping range	低压 (kV) Low voltage			130°C (B)	155°C (F)	180°C (H)				
						100°C	120°C	145°C				
30	6 6.3 6.6 10 10.5 11	± 2.5 ± 5	0.4	Dyn11	135	605	640	685	2.3	4.0	650 × 550 × 750	270
50					195	845	900	965	2.2		700 × 550 × 750	340
80					265	1160	1240	1330	1.7		750 × 660 × 800	460
100					290	1330	1410	1520	1.7		750 × 660 × 800	560
125					340	1560	1660	1780	1.5		860 × 720 × 810	630
160					385	1800	1910	2050	1.5		860 × 720 × 850	770
200					445	2130	2270	2440	1.3		880 × 720 × 900	875
250					515	2330	2480	2660	1.3		920 × 760 × 920	1055
315					635	2940	3120	3350	1.1		960 × 760 × 920	1190
400					705	3370	3590	3850	1.1		1000 × 760 × 1010	1500
500		835			4130	4390	4700	1.1	1050 × 810 × 1080	1700		
630		965			4970	5290	5660	0.9	1200 × 810 × 950	1985		
630		935			5050	5360	5760	0.9	1200 × 810 × 950	1985		
800		1090			5890	6260	6710	0.9	1250 × 860 × 1020	2360		
1000		1270			6880	7310	7880	0.9	1300 × 960 × 1110	2775		
1250		1500			8190	8720	9330	0.9	1480 × 970 × 1200	3310		
1600		1760			9940	10500	11300	0.9	1500 × 1020 × 1235	3940		
2000		2190			12200	13000	14000	0.7	1500 × 1050 × 1350	4595		
2500		2590			14500	15400	16600	0.7	1620 × 1150 × 1450	5495		
1600		1760			11000	11600	12500	0.9	1500 × 1020 × 1235	3940		
2000	2190	13500	14300	15400	0.7	1500 × 1050 × 1350	4595					
2500	2590	15900	17000	18200	0.7	1620 × 1150 × 1450	5495					

外形尺寸 Dimensions

