

改品憩想券停遍知江蒂慷穿宪的语有限系司堕时,可觴因植术级或采用新的生产工艺而改进本手册相关内容

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JIANGSU HENGBIAN ELECTRIC POWER EQUIPMENT CO.,LTD.

Tel:+86-15385044444



以质量求生存 · 以信誉求发展

变压器产品选型手册

JIANGSU HENGBIAN ELECTRIC POWER EQUIPMENT CO.,LTD.



江苏恒变

以质量求生存 · 以信誉求发展



安全可靠 电力质量 生态修复 工业生产

DETAILS OF DECISION QUALITY

细节，决定品质

创优质品牌铸一流服务

以一流品质获取市场信任、以优质服务赢得客户满意、以持续改进寻求企业发展、以卓越管理树立企业品牌、反省与启思保护环境。预防污染；节省资源，减少浪费，全员参与，持续改善；遵守法规，造福社会，争取每一个客户不容易，失去每一个客户很简单，市场竞争不同情弱者。

Details determine quality

Create a high-quality brand and provide first-class service

Our company has been trying to gain market trust with first-class quality,to win customer's satisfaction with excellent service,to seek development with continuous improvement,to establish corporate brand with excellent management,to protect the environment and prevent pollution through reflection and innovation.At the same time,every member of our company continuously participates and tries to prevent pollution,save resources,reduce waste,adhere to regulations,benefit society.It's not easy to gain each customer,but it's simple to lose one;market competition does not sympathize with the weak.



江苏恒变

以质量求生存 · 以信誉求发展



安全可靠 风力发电 生态环保 工业生产

江苏恒变电力设备有限公司，是集研发、设计、生产、销售、服务于一体的高新技术企业，公司技术力量雄厚生产检测设备先进，是专业生产电力变压器、箱式变电站、固体绝缘开关设备、成套设备等系列产品的现代化企业。

公司先后通过了ISO9001 国际质量体系认证，CQC认证，电力变压器检测报告，高低压成套检测报告，国家高压输配电型式试验，建立了现代化的企业管理制度和完善的保障体系。

公司始终坚持“以人为本，持续发展”的经营理念，特别是近年以来先后引进和自行培养一批高学历、高素质、高能力的科技管理人员。组建了技术中心，具备了独立自主设计、开发国内领先国际一流产品的能力。严格的原材料和产品质量检验以及优质的售前售后服务，有效的保证了产品质量，为客户提供高品质的产品，树立了客户对恒变品牌的信心。公司产品广泛应用于输变电系列，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、冶炼电厂、轮船、海洋钻井平台等环境恶劣场所，深受市场好评！

Jiangsu Hengbian Power Equipment Co.,Ltd.is a high-tech enterprise that integrates research and development,design,production,sales and services with strong technical strength and advanced production and testing equipment.It specializes in the production of power transformer,prefabricated substation,insulation switchgear,complete set of equioment and so on.

The company has successively passed ISO9001 international quality system certification, CQC certification,power transformer inspection reports, **high and low voltage complete set inspection reports**,and national high-voltage **transmission and distribution type tests**. It has established a modern enterprise management system and a complete quality assurance system.

The company always adheres to the business philosophy of "people-oriented,sustainable development."Especially in recent years,it has introduced and independently cultivated a group of personnels with high academic **qualifications and advanced skills in technology and management**.It has set up a technology center with the capability to independently design and develop industry-leading-level products in both domestic and world markets.The strict **raw material and product quality** inspections,as well as high-quality pre-sales and after-sales services,effectively ensure product quality and provide customers with high-quality products,which establishes customer's confidence in the Hengbian brand.The company's **products**,receiving high market praise,are widely used in power transmission and transformation series,such as hotels,airports,high-rise buildings,commercial centers, **residential areas,and other important places,as well as subways**, smelting power plant, ships,offshore drilling platforms,and other places with harsh environments.

江苏恒变电力设备有限公司

About Us
企业简介



江苏恒变

以质量求生存 · 以信誉求发展

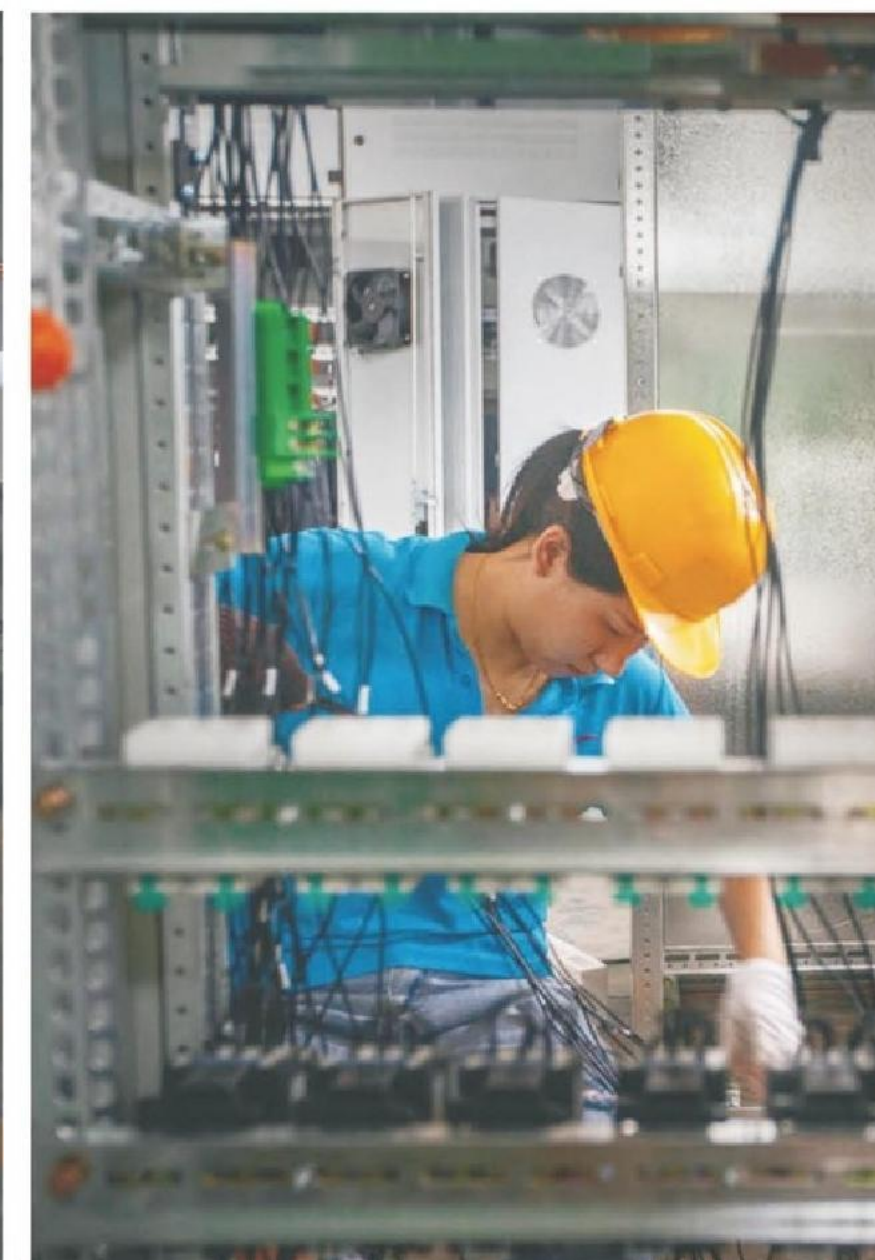


恒变不断引进现代一流的生产装备和制造工艺，并注重对产品研发的投入和科技人才的培养，现已经拥有了一套完善的产品研发和制造的核心技术。在高品质、精研发目标的坚持下，结合恒变人的智慧和勤劳，不断为全球客户提供高质量、高性能的产品，在强手如林的电器制造领域里，闯出一片更为广阔的天地！

公司的品质部门配备了多台精密检测仪器，制订现场的品质标准以精确严谨的专业态度，做到从原材料到成品的全方面品质控制。每项作业流程都经过严格的管制。确保100%合格，树立“恒变电力设备”品质标杆；在坚持科技创新，加大自主研发的同时，秉承“诚信、务实、团结、创新”理念，持续改进产品质量、过程管理和售后服务体系，不断提高产品的性价比和市场竞争力。

Hengbian continuously introduces first-class modern production equipment and manufacturing techniques, and places emphasis on product R&D investment and the cultivation of technological talents. The company now possesses a complete set of core technologies for the research and development as well as the manufacturing of the products. With the commitment to high quality and precise R&D goals, together with the wisdom and diligence of Hengbian's people, the company continuously provides high-quality, high-performance products to global customers, **and thus carves out a broader space in the competitive field of electrical manufacturing!**

The company is equipped with sophisticated testing instruments and establishes high quality standards with professional attitude, **ensuring all-round quality control from the purchase of the raw materials to the process of finished products.** Each operational process is strictly controlled to **ensure** the quality of each product. By setting high standards in electrical equipment, emphasizing technological innovation, increasing independent research development, and adhering to the principles of "integrity, pragmatism, unity and innovation," the company continuously improves the product quality level, process management and after-sales service systems, thereby enhancing product price performance ratio and market competitiveness.



Our Workshop 生产车间



江苏恒变

以质量求生存 · 以信誉求发展



安全可靠 风力发电 生态环保 工业生产



公司每位员工应自觉维护企业荣誉，严守国家法律法规和企业共享规章制度，以“求实，高效，团结，创新”的企业精神为准则，以实现“质量为本、求实创新、追求卓越、工铸民族品牌”的企业方针为己任，形成具有本公司特色的企业文化和品牌形象。

Every employee of the company should consciously uphold the honor of the enterprise, strictly adhere to the national laws and regulations as well as those of the company. With the spirit of "pragmatism, efficiency, unity, and innovation" as a guideline, and with the mission of achieving the corporate policy of "quality-oriented, pragmatic innovation, pursuit of excellence, and forging a national brand," the company aims to develop a unique corporate culture and brand image.



Qualifications 企业资质



产品认证证书
中国节能认证

2022年
委托人
地址
产品名称
证书编号
发证日期



0230761



公司每位员工应自觉维护企业荣誉，严守国家法律法规和企业共享规章制度，以“求实，高效，团结，创新”的企业精神为准则，以实现“质量为本、求实创新、追求卓越、工铸民族品牌”的企业方针为己任，形成具有本公司特色的企业文化和品牌形象。

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Qualifications
企业资质



江苏恒变

以质量求生存 · 以信誉求发展



安全可靠 风力发电 生态环保 工业生产

NEIC®



160021253110



中国认可
国际互认
检测
TESTING
CNAS L0107

No XG18071199



(2016) 国认监认字4181号

检 验 报 告

TEST REPORT

样品名称：干式变压器

型 号：SCB13-2500/10

委托单位：江苏恒变电力设备有限公司

试验类别：型式试验



国家高低压电器质量监督检验中心

National High-low Voltage Electrical Apparatus Quality Supervision and Inspection Center

甘 肃 电 器 科 学 研 究 院

Gansu Electric Apparatus Research Institute

NEIC®



160021253110



中国认可
国际互认
检测
TESTING
CNAS L0107

No XG18071198



(2016) 国认监认字4181号

检 验 报 告

TEST REPORT

样品名称：油浸式电力变压器

型 号：S13-M-1600/10

委托单位：江苏恒变电力设备有限公司

试验类别：型式试验



国家高低压电器质量监督检验中心

National High-low Voltage Electrical Apparatus Quality Supervision and Inspection Center

甘 肃 电 器 科 学 研 究 院

Gansu Electric Apparatus Research Institute





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2015002873Z



中国合格
国家认证
检测
TESTING
CNAS L0153



No.DY170137A

检验报告

Test Report

产品名称 电力变压器

型号规格 S13-M-400/10

委托单位 江苏恒变电力设备有限公司

检验类别 委托(例行试验、型式试验、特殊试验)



国家中低压输配电设备质量监督检验中心

China National Quality Supervision and Testing Center for Medium and Low Voltage Transmission and Distribution Products

2017



2015002873Z



中国合格
国家认证
检测
TESTING
CNAS L0153



No.DY170275

检验报告

Test Report

产品名称 干式电力变压器

型号规格 SCB11-315/10

委托单位 江苏恒变电力设备有限公司

检验类别 委托(例行试验、型式试验、特殊试验)



国家中低压输配电设备质量监督检验中心

China National Quality Supervision and Testing Center for Medium and Low Voltage Transmission and Distribution Products

2017年02月 21 日





江苏恒变

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实验室名称：国家电器产品质量监督检验中心
Lab Name: China National Center for Quality Supervision
and Test of Electrical Apparatus Products

No 20M1584-S

型式试验报告 Type Test Report

委托单位：江苏恒变电力设备有限公司
Client:

产品名称：电力变压器

Name of Product:

产品型号：SZ13-20000/35/10.5

Product Type:

检验类别：委托试验

Test Category:

本实验室对出具的检验(试验)结果负责，未经实验室书面同意，
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The laboratory is responsible for the inspection(Test)results.The report shall
not be reproduced except in full,written approval of the laboratory.

DQJC

国家电器产品质量监督检验中心

检 验 报 告

No:20M1584-S

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委托单位	江苏恒变电力设备有限公司	检验类别	委托试验
生产单位	江苏恒变电力设备有限公司	到样日期	2020年09月14日
产品名称	电力变压器	产品型号	SZ13-20003510.5
生产单位地址	徐州经济技术开发区 徐海路118号	原编号或生产日期	HB202009656
检验日期	2020年09月21日至 2020年10月28日	送样数量	1台
检验项目	例行试验 型式试验(含绕组热点温升计算) 三相变压器零序阻抗测量 空载电流谐波测量 短路承受能力试验	检验依据	GB/T1094.1—2013 GB/T 1094.2—2013 GB/T 1094.3—2017 GB/T 1094.5—2008 GB/T 1094.10—2003 GB/T6451—2015 GB/T 7595—2017 JB/T 10088—2016 委托书要求
检验结论	电力变压器(型号：SZ13-20000/35/10.5)例行试验、型式试验(含绕组热点温升计算)、三相变压器零序阻抗测量、空载电流谐波测量、短路承受能力试验的试验结果符合检验依据标准和委托书要求，样品上述试验合格。 签发日期：2020年10月2 注：本结论仅对送试样品负责。		
备注			

编制：刘焯 校对：刘永平 审核：刘海 批准：朱如华
SJJJ-YB001

(11)





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检测
TESTING
CNAS L0107



No XG20041298

检 验 报 告

TEST REPORT

样品名称：组合式变电站

型 号：ZGS13-630/10

委托单位：江苏恒变电力设备有限公司

试验类别：型式试验



国家高低压电器质量监督检验中心

National High-low Voltage Electrical Apparatus Quality Supervision and Inspection Center

甘 肃 电 器 科 学 研 究 院

Gansu Electric Apparatus Research Institute



中国认可
国际互认
检测
TESTING
CNAS L0116



型式试验报告

TYPE TEST REPORT

产品名称 油浸式电力变压器
NAME OF SAMPLE

型号规格 S22-M-1250/10-NX1
MODEL

委托单位 江苏恒变电力设备有限公司
CUSTOMER

检验类别 型式试验
TEST CATEGORY

浙江方圆检测集团股份有限公司
浙江方圆电气设备检测有限公司
国家电器安全质量检验检测中心(浙江)





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以质量求生存 · 以信誉求发展



中国认可
国际互认
检测
TESTING
CNAS L0116



型式试验报告 TYPE TEST REPORT

产品名称 干式变压器
NAMECESAMRE

型号规格 SCB18-2000/10-NX1
MODEL

委托单位 江苏恒变电力设备有限公司
CUSTOME

检验类别 型式试验
TESTCATEGORY



浙江方圆检测集团股份有限公司
浙江方圆电气设备检测有限公司
国家电器安全质量检验检测中心(浙江)



ilac MRA



变压器能源效率检验报告

产品名称 干式变压器
NAMECESAMHE

型号规格 SCB18-2000/10-NX1
MODEL

委托单位 江苏恒变电力设备有限公司
CUSTOME

检验类别 委托检验
TEST CATEGORY

浙江方圆检测集团股份有限公司
浙江方圆电气设备检测有限公司
国家电器安全质量检验检测中心(浙江)





江苏恒变

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安全可靠 风力发电 生态环保 工业生产

鞋时一相不平

供应商关系管理/项目能力核查/信息时间/供应商核查结果时间

我的待办

核查结果查询

采购项目管理

核查结果编号

任务名称

核查名称

合同管理

核查结果状态

有效期

备注

供应商关系管理

供应商能力核查

退回信息查看

核查结果管理

核查结果信息维护

反馈管理

反馈单查询

信息查询

供应商资质信息管理

供应商资质信息管理

序号	操作	核查结果编号	核查名称	任务名称	核查结果生效日期	核查结果有效期限至
1	不可下载	2020070603559617	10kV变压器校核结果模板(省公司)	配网设备10kV变压器供应商能力核查	202008-31	202109-30
2	不可下载	2020071603559617	箱式变电站校核结果模板(省公司)	2020年箱式变电站供应商能力核查	202008-31	2021-06-30
3	不可下载	2020070603559617	10kV变压器校核结果模板(省公司)	2021年10kV变压器供应商能力核查	2021-06-30	2022-07-31
4	不可下载	2022052303559617	10kV变压器校核结果模板(省公司)	2022年10kV变压器供应商能力核查	2022-05-31	2023-06-30

江苏恒变电力设备有限公司(加盖公章)10kV变压器(总部委托省公司组织实施)资质业绩凭证单



江苏恒变电力设备有限公司(组织机构代码/统一社会信用代码: 91320301072793636X) 于 2022年05月23日11时13分07秒, 在国网电子商务平台生成此资质业绩凭证, 并将其用于投标, 提供招标方评审使用。

● 资质业绩凭证单说明如下:

资质业绩凭证单是指在供应商资质库中生成, 并用于投标的一种电子凭证。

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供应商可至资质业绩凭证管理页面, 通过查看快照方式查看凭证对应的具体资质业绩信息。

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江苏恒变

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安全可靠 风力发电 生态环保 工业生产

JIANGSU HENGBIAN ELECTRIC POWER EQUIPMENT CO.,LTD.



S11 油浸式电力变压器
Oil-immersed power transformers

01-04



S13-M 全密封油浸式变压器
Fully Sealed oil-Immersed Transformer

05-08



SC(B)10-11-13-14-18 干式浇注变压器
Dry cast transformer

09- 19



S11-M-ZT 有载调容变压器
On load regulating transformer

20-22



YB□-12 预装式变电站
Pre-installed substation

23-26



ZGS13-10kv 组合式变电站
Modular Substation

27-30



Contents 产品目录



江苏恒变

以质量求生存 · 以信誉求发展



S11 油浸式电力变压器 Oil-Immersed Power Transformer

优质的材料 High- Quality Materials

选用电阻率更低的无氧铜线，并经过系列附加的表面处理，更光滑，无毛刺尖角，使变压器的负载损耗更低，电气性能更为可靠。

选用优质的硅钢片，随着性能水平的提升，采用单位损耗更低的硅钢片，使变压器空载损耗更低。

选用优质层压木绝缘件，绝不开裂，即使在短路电流作用下，也纹丝不动。

选用经过深层过滤的变压器油，更低的含水，含气、含杂质水平，变压器工作更加可靠。

选用优质橡胶密封材料，有效防老化，杜绝渗漏。

所有原材料经过质检，所有原材料厂家均经过国家标准ISO9000 的严格审查。

Uses oxygen-free copper wire with a lower resistivity,which undergoes additional surface treatments to make it smoother and free of burrs,reducing transformer load loss and improving electrical performance.

High-quality silicon steel sheets are selected,which,with improved performance levels,have lower unit loss,reducing no-load loss of the transformer.

High-quality laminated wood insulation components are used,which never crack and remain intact even under short-circuit currents.

Deeply filtered transformer oil is used,with lower levels of water,gas,and impurities,making the transformer's operation more reliable.

High-quality rubber sealing materials are selected to effectively prevent aging and eliminate leakage.



S11 油浸式电力变压器

S11 Oil-Immersed Power Transformer

All raw materials undergo quality inspection,and all material suppliers have been rigorously reviewed according to national standards ISO9000.

技术先进性能好 Advanced Technology and Superior Performance

S11系列产品在S9系列的基础上，空载损耗平均降低了30%;空载电流比S9下降70~85%;

平均温升降低10K，产品使用寿命增加一倍多；

产品运行噪音平均降低2~4分贝。

The S11series products,compared to the S9 series,**have an** average reduction of 30%in no-load loss;the no-load current decreases by70-85%compared to that of s9;

The average temperature rise is reduced by 10K,doubling the product's service life;

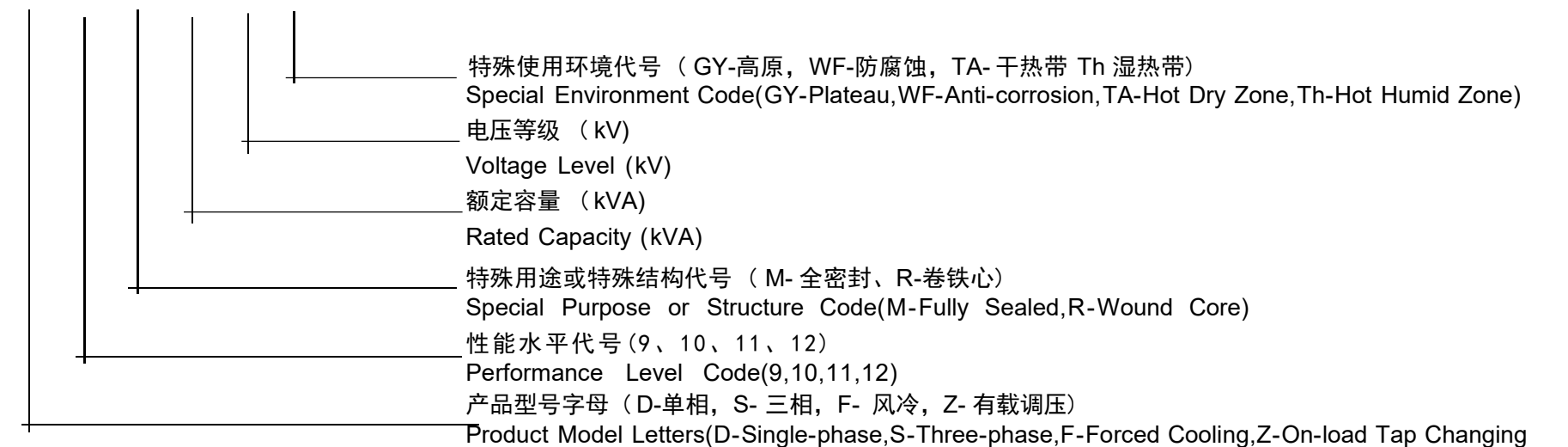
The operating noise of the product is reduced by 2-4 decibels on average.

全密封 (M)Fully Sealed (M)

选 S11(M) 一 中的 M 表示油箱采用全密封结构，全密封式配电变压器与普通油浸式变压器相比，取消了储油柜，油箱的波翅代替油管作为冷却散热元件，波纹油箱由优质冷轧薄板在专用生产线上制造，波翅可以随变压器油体积的涨缩而涨缩，从而使变压器与大气隔绝，防止和减缓油劣化和绝缘受潮，增强运行可靠性，正常运行免维护。

The "M" in the S11(M) indicates that the oil tank adopts a fully sealed structure. Compared to ordinary oil-immersed transformers, fully sealed distribution transformers eliminate the oil conservator. The corrugated fins replace oil pipes as cooling and heat dissipation elements. The corugated oil tank is made from high-quality cold-rolled sheets on a dedicated production line. The fins expand and contract with the transformer oil volume, isolating the transformer from the atmosphere, preventing and slowing down oil deterioration and insulation moisture, enhancing operational reliability, and eliminating the need for maintenance during normal operation.

变压器型号含义 Transformer Model Explanation



变压器正常使用条件 Normal Operating Conditions for the Transformer

海拔高度不超过1000m;

环境温度：最高气温+40℃;最热月平均气温+30℃;最高年平均气温+20℃;户外最低气温-25℃。

Altitude:Not exceeding 1000m

Ambient Temperature:Maximum +40℃,Maximum average temperature in the hottest month +30℃,Maximum annual average temperature +20℃,Minimum outdoor temperature-25℃

变压器特殊使用条件Special Operating Conditions for the Transformer

海拔高度超过1000m;

环境温度：最高气温+40℃;最低气温-45℃;

订货时详细说明

Altitude:Exceeding 1000m

Ambient Temperature:Maximum+40℃,Minimum-45℃;detailed description required when ordering.

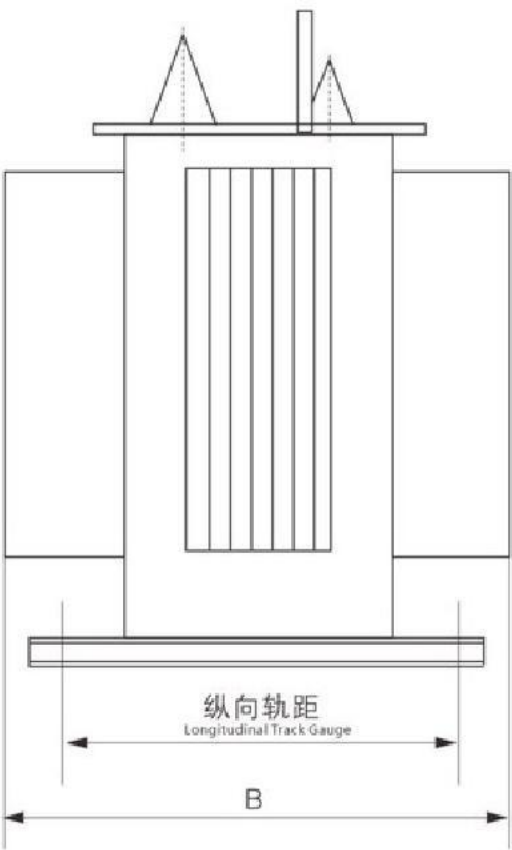
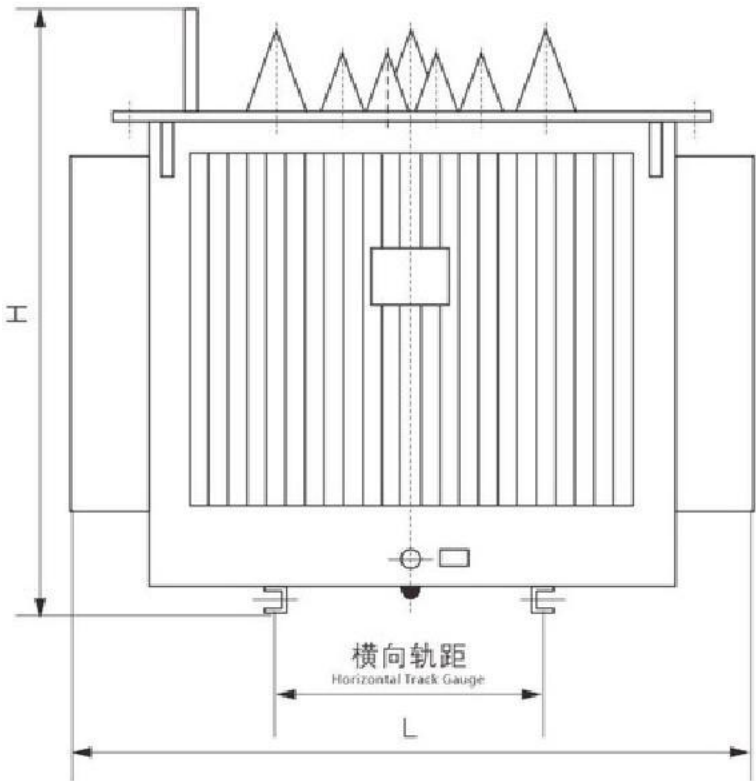


S11油浸式电力变压器
S11 Oil-Immersed Power Transformer

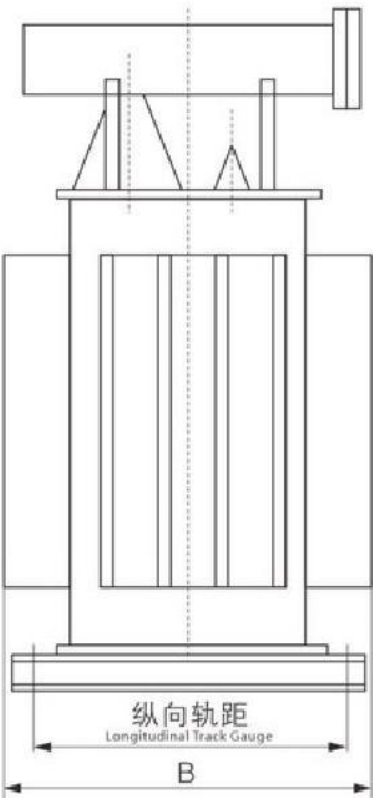
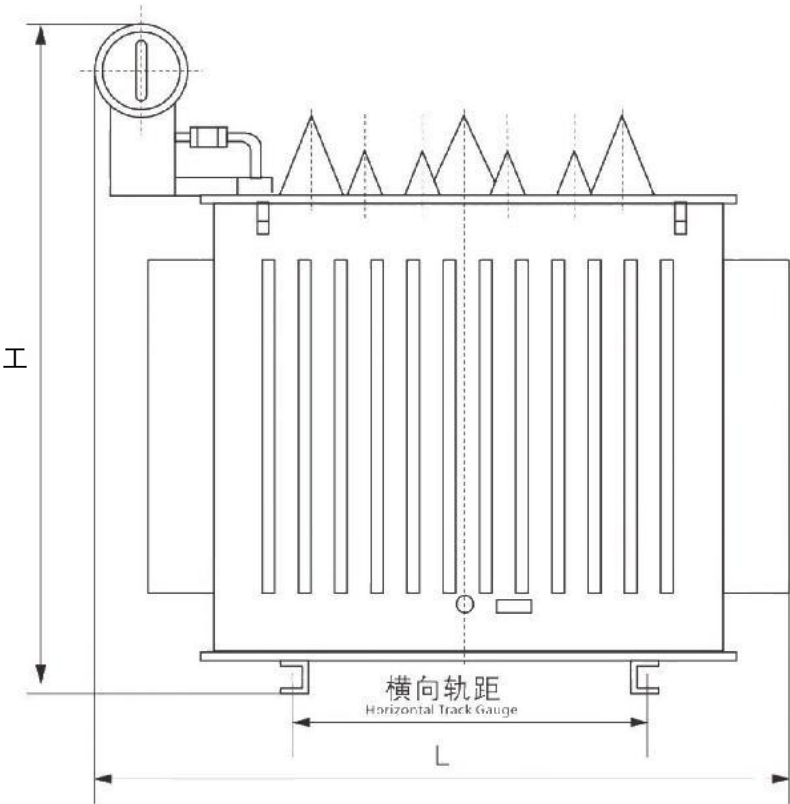
变压器符合标准 Standards Compliance

GB 1094.1-1996	GB 1094.2-1996	JB/T 10088-2004
GB 1094.3-2003	GB 1094.5-2003	GB/T 10237-1988
GB/T 6451-1999	GB/T 7595-1987	JB/T 3837-1998

外形尺寸及安装尺寸 Dimensions and Installation Dimensions



全密封变压器 Fully Sealed Transformer



非全密封变压器 Non- Fully Sealed Transformer



S11油浸式电力变压器
S11 Oil-Immersed Power Transformer

10 kV 级 S11-M 系列油浸式配电变压器技术参数
Technical Parameters of 10kV Class S11-M Series Oil-Immersed Distribution Transformer

				W) Loss (		
30	11 10.5 10 6.3 6	0.4	Yy115 或 or Dyn11	0.10	0.60	2.1
50				0.13	0.87	2.0
63				0.15	1.04	1.9
80				0.18	1.25	1.8
100				0.20	1.50	1.6
125				0.24	1.80	1.5
160				0.28	2.20	1.4
200				0.34	2.60	1.3
250				0.40	3.05	1.2
315				0.48	3.65	1.1
400				0.57	4.30	1.0
500				0.68	5.15	1.0
630				0.81	6.20	0.9
800				0.98	7.50	0.8
1000				1.15	10.30	0.7
1250				1.36	12.00	0.6
1600				1.64	14.50	0.6
2000				1.94	18.30	0.6
2500				2.29	21.20	0.6

注：高压分接范围：±5%或±2×2.5%；频率：50Hz；
由于产品的不断更新，表中外形尺寸与产品重量会有一些变化，请以订货时提供的外形尺寸图为准。

Note:High-voltage tap range:+5%or+2x2.5%;Frequency:50Hz.Due to continuous product updates,the dimensions and weight in the table may vary;please refer to the outline drawing provided at the time of order.



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S13 移开式户内金属封闭开关设备 Fully Sealed Oil-Immersed Transformer

产品概述 Product Overview

随着我国经济建设的不断发展，人民生活水平的提高、用电负荷增加、变压器设备增多，带来能源消耗大而且噪声增大，严重污染城市环境，为此世界各国都在呼吁并着手降低能耗、改善城市环境。S13-M 型系列三相配电变压器比当前城网建设用的 S9、S11 型相比，空载损耗分别平均下降50%和30%，噪声水平下降5~8db。

Huntries worldwide are advocating and taking steps to reduce energy consumption and improve urban environments.The S13-M series three-phase distribution transformer,compared to the S9 and S11 models currently used in urban network construction, reduces no-load loss by an average of 50%and 30%,respectively,and decreases noise levels by 5-8dB.

使用范围 Application Scope

S13-M 型配电变压器适用于三相50HZ、10KV 电压等级配电系统，供工农业配电、动力和照明使用。特别对城市降低噪声，改善环境质量和降低电力运行成本有利。



S13 移开式户内金属封闭开关设备 S13 Fully Sealed Oil-Immersed Transformer

The S13-M distribution transformer is suitable for three-phase 50Hz,10kV voltage-level distribution systems,and is used for industrial and agricultural distribution,power,and lighting.It is particularly beneficial for reducing noise in urban areas,improving environmental quality,and lowering power operation costs.

型号及其含义 Model and Its Meaning

S 13 M □/10

————— 高压侧电压等级 (kV)High Voltage Side Voltage Level (kV)
————— 额定容量 (kVA)Rated Capacity(kVA)
————— 全密封 Fully Sealed
————— 损耗水平代号 Fully Sealed
————— 三相 Three-Phase

变压器正常使用条件 Normal Operating Conditions for the Transformer

海拔高度不超过1000m环境温度: Altitude:Not exceeding 1000m
最高气温+40℃; Ambient Temperature:Maximum +40℃
最热月平均气温+30℃; Hottest Month Average Temperature:+30℃
最高年平均气温+20℃; Maximum Annual Average Temperature:+20℃
户外最低气温-25℃。 Minimum Outdoor Temperature:-25℃

变压器特殊使用条件 Special Operating Conditions for the Transformer

海拔高度不超过1000m 环境温度: Altitude: Not exceeding 1000m
最高气温+40℃;Ambient Temperature:Maximum+40℃
最低气温-45℃。 Minimum Temperature:-45℃
(订货时详细说明) (Detailed description required when ordering)

变压器产品标准 Transformer Product Standards

GB 1094.1-2013 GB 1094.2-2013 JB/T 10088-2004
GB 1094.3-2016GB 1094.5-2008 JB/T 3837-2010
GB/T6451-2015 GB/T 7595-2008

结构特点Structural Features

总体布局设计主导思想是在总结S9及S11型设计经验基础上，把产品可靠性放在第一位，保证满足产品电气性能、机械强度及散热能力等各方面的要求。

铁心采用23ZH100高导磁性硅钢片叠片式结构。

高低压线圈均采用圆筒式绕制。

器身及总装结构均采用成熟的S9型产品结构。

油箱及散热元件采用矩形波纹油箱，2000kVA 及 2 5 0 0kVA 根据用户要求可选用固定式或可拆式膨胀式片式散热器油箱。组件选用 S9 及S11 型产品的成熟组件。

The overall layout design is primarily guided by the concept of ensuring product reliability,building on the design experience of the S9 and S11 models.The goal is to meet the requirements of electrical performance,mechanical strength,and cooling capacity.

The core is made of 23ZH100 high-permeability silicon steel sheets in a laminated structure.

Both high and low voltage coils are wound in a cylindrical shape.

The internal structure and overall assembly adopt the mature structural design of the S9 model.

The oil tank and cooling components use a rectangular corrugated oil tank.For 2000 kVA and 2500 kVA,users can choose between fixed or detachable expansion-type finned radiator oil tanks according to their needs.Components are selected from the proven components of the S9 and S11 models.

主要技术参数Main Technical Parameters

10 KV级S13-M 系列油浸式配电变压器技术参数Technical Parameters of 10kV Class S13-M Series Oil-Immersed Distribution Transformer

额定容量KVA Rated Capacity (kVA)	电压组合(kV)Voltage Combination (kV)		联接组标号 Connection Group Symbol	空载电流 (%) No-Load Current (%)	短路阻抗 (%) Shart-Circuit Impedance (%)
	高压High Voltage	低压Low Voltage			
30	6 6.3 6.6 10 10.5 11 ±5% 或 o r ±2× 2.5%	0.4	Yyn0	80	4.0
50				100	
63				110	
80				130	
100				150	
125				170	
160				200	
200				240	
250				290	
315				340	
400			Dyn11	410	4.5
500				480	
630				570	
800				700	
1000				830	
1250				970	
1600				1170	
2000				1380	5.0
2500				1680	

外形及安装尺寸Outline and Installation Dimensions

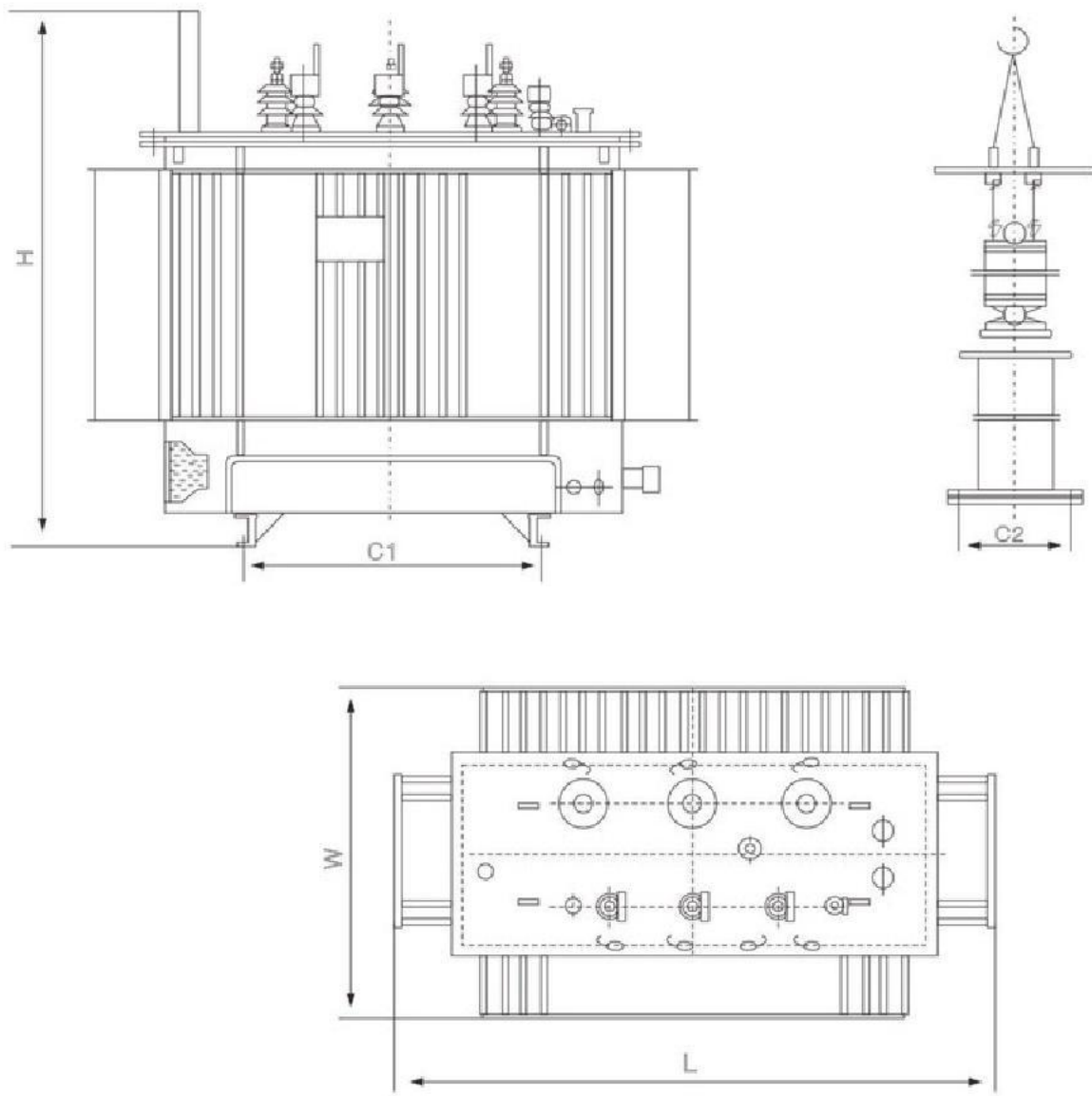


图1 S13-M-30~2000/10变压器外形及安装尺寸
Figure 1:S13-M-30~2000/10 Transformer Outline and Installation Dimensions

订货须知 Ordering Information

订货时应提供产品型号、额定容量、高低压额定电压及高压分接范围、相数、频率、联结组标号。

When placing an order,please provide the product model,rated capacity,rated high and low voltage,high-voltage tap range,phase number,frequency,and connection group symbol.



江苏恒变

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SC(B)10、11 干式浇注变压器

Withdrawable Indoor Metal-Enclosed Switchgear

产品概述 Product Overview

Sc10,SCB10 系列以及 SCB11带填料薄绝缘干式变压器,由于其线圈被环氧树脂包封,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,噪声低,散热能力强,在强迫风冷条件下可以在140%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R8485 串行接口与计算机相连,可以集中监视和控制。由于该系列干式变压器具有以上特点,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、冶炼电厂、轮船、海洋钻井平台等环境恶劣场所。

The SC10,SCB10 series,and SCB11 cast resin dry-type transformers use epoxy resin-encapsulated coils,making them flame-retardant,fire-resistant,explosion-proof,maintenance-free,and pollution-free.They are compact and can be installed directly at load centers.The scientific and rational design and casting process result in lower partial discharge,reduced noise,and strong heat dissipation capabilities.Under forced air cooling conditions,they can operate continuously at 140% of the rated load and are equipped with an intelligent temperature controller.The controller features fault alarms,over-temperature alarms,over-temperature tripping,and blackout functions,and can be connected to a computer via an R8485 serial interface for centralized monitoring and control.Due to these features,this series of dry-type transformers is widely used in power transmission and transformation systems,such as hotels,airports,high-rise buildings,commercial centers,residential areas,as well as in harsh environments like subways,smelting plants,ships,and offshore drilling platforms.



SC(B)10、11 干式浇注变压器
SC(B)10,11 Dry-Type Cast Resin Transformer

变压器型号含义 Transformer Model Explanation



产品标准 Product Standards

GB/T10228-1997、GB6450-1986、JB/T10088-2004、GB4208-1993

额定高压 Rated High Voltage:10(11、10.5、6.6、6.3、6)kV

额定低压Rated Low Voltage:0.4kV

联结组别Connection Group:Dyn11或 OR Yyn0

高压分接范围High Voltage Tap Range:±5%或or±2×2.5%

绝缘水平Insulation Level:LI75AC35/LIOAG5

频率Frequency:50Hz

产品特点Product Features

铁心 Core

铁心选用进口优质冷轧硅钢片,全斜接缝结构,心柱采用F级无纬粘带绑扎,铁心表面采用环氧树脂漆包封,降低了空载损耗、空载流和铁芯噪声,夹件和紧固件经特殊表面处理,使产品外观质量有了进一步提高。

The core is made from imported high-quality cold-rolled silicon steel sheets with an all-oblique joint structure.The core column is bound with F-class non-woven tape,and the core surface is coated with epoxy resin paint,reducing no-load loss,no-load current,and core noise.The clamping pieces and fasteners undergo special surface treatment to further enhance the product's appearance and quality.

高压绕组 High Voltage Winding

高压绕组用带填料环氧树脂真空浇注,极大地减小了局放量,提高了线圈电气强度,绕组内外壁玻璃纤维网格板填充,增强了线圈的机械强度,提高了产品抗突发短路的能力,线圈永不开裂。

The high-voltage winding is cast with epoxy resin with fillers under vacuum,significantly reducing partial discharge and improving coil electrical strength.The inner and outer walls of the winding are filled with fiberglass mesh boards,enhancing mechanical strength and improving the product's resistance to short-circuit impacts.The coil remains crack-free.

低压绕组 Low Voltage Winding

低压绕组采用箔式结构,解决了用线绕时轴向螺旋角问题,使匝更平衡,同时线圈采用轴向冷却风道,增强了散热能力,绕组层间采用了DMD 环氧树脂预浸布,整体固化成形。

The low-voltage winding uses a foil structure to address the axial spiral angle problem associated with wire winding,resulting in a more balanced ampere-turns.The winding also features axial cooling air ducts to enhance heat dissipation.The winding layers use DMD(diamond-mesh dielectric)resin-impregnated cloth,which is fully cured into a solid shape.



SC(B)10、11干式浇注变压器

SC(B)10,11 Dry-Type Cast Resin Transformer

产品主要优点Main Advantages ofthe Product

损耗低、噪音低、局放低；阻燃性树脂、固化成型；
防潮性高、可靠性高、免维护；多功能温度保护控制系统；
高压为多层分段圆筒式结构；方管夹件结构；
低压为带纵向气道箔式结构；温度低、噪声小。
Low loss,low noise,and low partial discharge.
High moisture resistance,high reliability,**and maintenance-free.**
High-voltage winding features a multi-layer segmented cylindrical structure.
Low-voltage winding uses a foil structure with longitudinal air ducts.
Flame-retardant resin with solidified molding.
Multi-functional temperature protection and control system.
Square tube clamping structure.
Low temperature and low noise.

产品概述 Product Overview

线圈在高精度绕线机上绕制，低压绕组采用箔式绕制结构。变压器容量较大时有通风道。绕制完毕后进行真空干燥，整个浇注及固化过程完全按照工艺要求进行操作，所有过程都需有严格的监视，并视情况进行调整。浇注的精密制造过程使线圈无气泡、空穴，使制成的变压器达到优质运行效果。

Coils are wound on high-precision winding machines,with low-voltage windings using a foil-wound structure.For larger transformers,there are ventilation ducts.After winding,the coils undergo vacuum drying.The entire casting and curing process is strictly controlled according to process requirements,with all steps closely monitored and adjusted as needed.The precise casting process ensures that the coils are free from bubbles and voids,resulting in a high-quality operational transformer.

温控系统和风冷系统 Temperature Control System and Air Cooling System

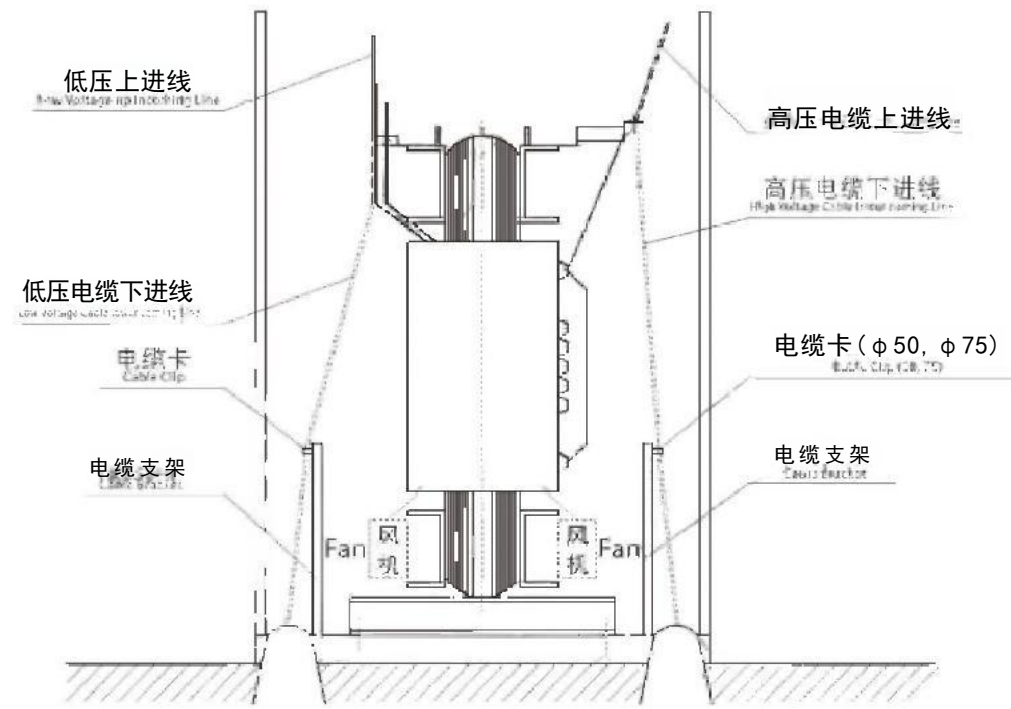
采用横流顶吹式冷却风机，该冷却风机具有噪声小，风压高，外形美观等特点，增强了变压器的过载能力。温度控制采用智能温控仪，提高了变压器运行安全可靠。

Utilizes a cross-flow top-blowing cooling fan that is characterized by low noise,high air pressure, and an attractive appearance,enhancing the transformer's overload capacity.Temperature control is managed by an intelligent temperature controller, improving the safety and reliability of transformer operation.

保护外壳和出线母排 Protection Housing and Busbar Protection

保护外壳对变压器作进一步的安全保护，防护等级有IP20、IP23等，外壳材料有冷轧钢板，不锈钢板等供用户选择。低压出线用标准母线排出线，侧出线 and 顶出线均可，也可为用户设计特殊出线方式。

The protective housing provides additional safety for the transformer,with protection ratings such as IP20 and IP23.Materials for the housing include cold-rolled steel plates and stainless steel plates,



进出线方式示意图
Incoming and Outgoing Line Schematic



SC(B)10、11干式浇注变压器

SC(B)10,11 Dry-Type Cast Resin Transformer

with options available for users.Low-voltage outgoing lines use standard busbars.Side and top outlets are available,and special outlet designs can be customized for users.

变压器出线方式Transformer Outlet Options

可根据不同的接口形式制造常规的出线、标准封闭母线和标准侧出线，也可以根据用户要求设计特殊出线方式。

Standard outlet forms include conventional,standard enclosed busbars,and standard side outlets.Special outlet designs can be customized according to user requirements.

变压器型号含义 Transformer Model Explanation



产品标准 Product Standards

执行标准 Standards:GB/T10228-1997、GB6450-1986;JB/T10088-2004、GB4208-1993

额定高压 Rated High Voltage:10(11,10.5,6.6,6.3,6)kV

绝缘水平Insulation Level:LI75AC35/LIOAC5

高压分接范围 High Voltage Tap Range:±5%或 or ±2×2.5%

联结组别 Connection Group: Dyn11 或 or Yyn0

额定低压 Rated Low Voltage: 0.4kV

频率Frequency:50Hz

10 kV 级 SC(B)10系列树脂绝缘干式变压器技术参数

Technical Parameters of 10kV Class SC(B)10 Series Resin-Insulated Dry-Type Transformer

额定容量 Rated Capacity	电压组合 Voltage Combination		联结方式 Connection type	损耗(kW)No-Load Loss(kW)		空载电流(%) No-Load Current (%)	阻抗电压(%) Impedance Voltage (%)	绝缘等级 Insulation Grade
	高压 High Voltage	低压 Low Voltage		空载 unloaded	负载(120℃) Load (120℃)			
30	6 6.3 6.6 10 10.5 11	0.4	Dyn11 Yyn°	0.190	0.705	2.6	4.0	F/F
50				0.270	0.995	2.2		
63				0.330	1.210	2.2		
80				0.370	1.380	2.2		
100				0.400	1.570	2.0		
125				0.470	1.850	1.8		
160				0.540	2.130	1.8		
200				0.620	2.530	1.6		
250				0.720	2.760	1.6		
315				0.880	3.470	1.4		
400				0.980	3.990	1.4		
500				1.160	4.880	1.4		
630				1.340	5.870	1.2		
630				1.300	5.960	1.2		
800				1.520	6.955	1.2		
1000				1.770	8.130	1.1		
1250				2.090	9.690	1.1		
1600				2.450	11.73	1.1		
2000				3.050	14.45	1.0		
2500				3.600	17.17	1.0		
						6.0		

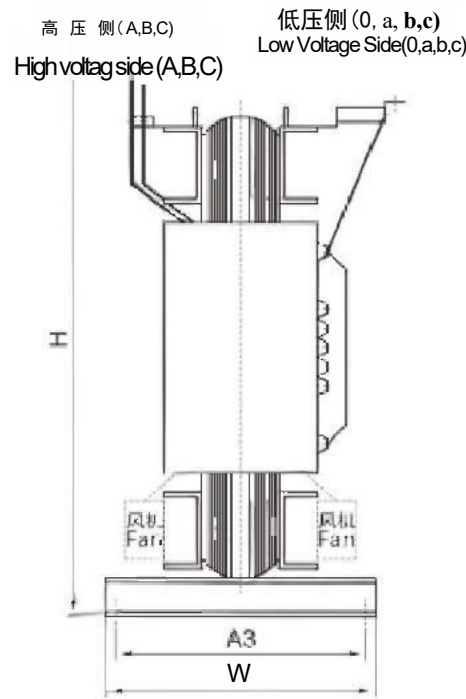
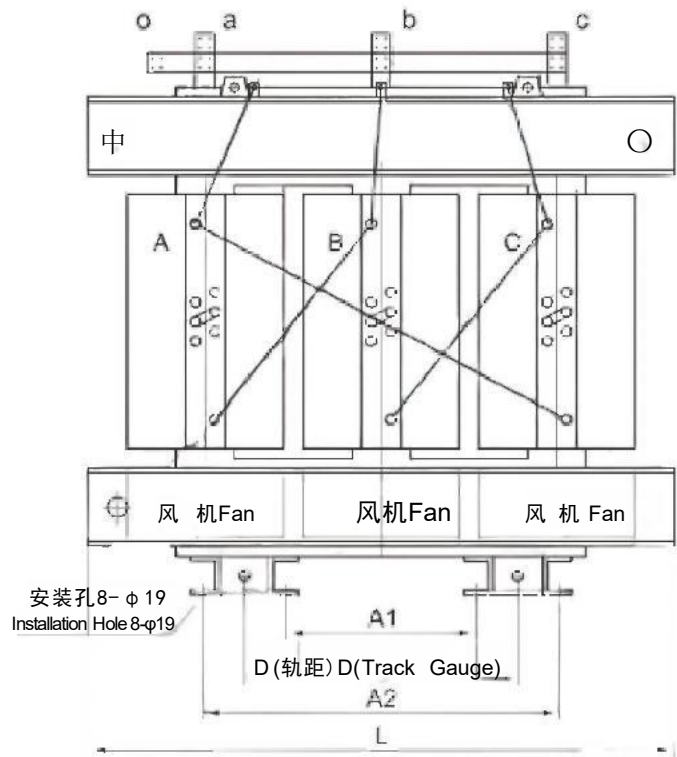


SC(B)10、11干式浇注变压器
SC(B)10,11 Dry-Type Cast Resin Transformer

外形尺寸及安装尺寸Outline Dimensions and Installation Dimensions

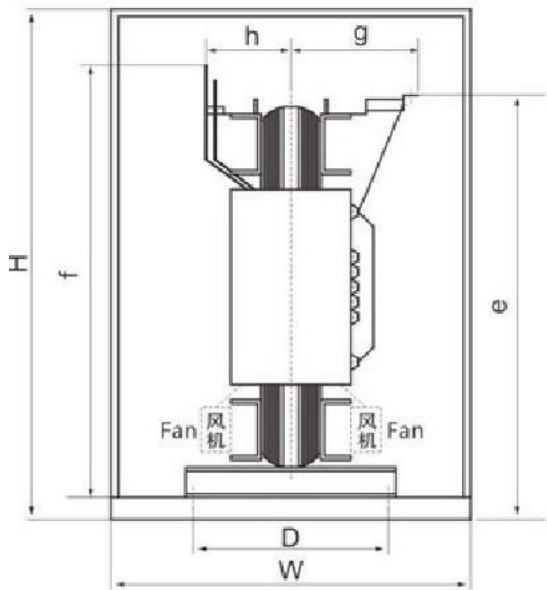
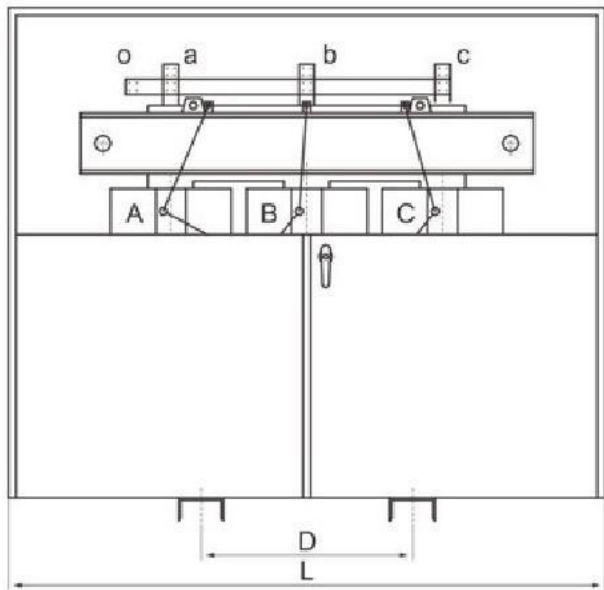
SC(B)-□~□/10-0.4外形尺寸图

SC(B)-□~□/10-0.4 Outline Dimensions Diagram



SC(B)10-□~□/10-0.4带外壳外形尺寸图

SC(B)10-□~□/10-0.4 with Enclosure Outline Dimensions Diagram



SC(B)10、11干式浇注变压器
SC(B)10,11 Dry-Type Cast Resin Transformer

型号含义 Model Explanation



产品标准 Product Standards

执行标准Standard: GB/T10228-2008、GB6450-1986、JB/T10088-2004、GB4208-1993

额定高压Rated High Voltage:10(11,10.5,6.6,6.3,6)kV

额定低压Rated Low Voltage:0.4kV

有载调压范围On-Load Voltage Regulation Range:($\pm 4 \times 2.5\%$) 或or($\pm 3 \times 2.5\%$)

10 kV 级SC(B)10 系列有载调压树脂绝缘干式变压器技术参数

Technical Parameters of 10kV Class SC(B)10 Series On-Load Voltage Regulating Resin-Insulated Dry-Type Transformer

额定容量 Rated Capacity	电压组合 Voltage Combination		联结方式 Connection type	损耗(kW)No-Load Loss (kW)		空载电流(%) No-Load Current (%)	阻抗电压(%) Impedance Voltage(%)	绝缘等级 Insulation Grade
	高压 High Voltage	低压 Low Voltage		空载 unloaded	负载(120℃) Load (120℃)			
200	11 10.5 10 6.3 6	0.4	Dyn11 或 or Yyno	0.690	2.660	1.6	4	F/F
250				0.790	2.900	1.6		
315				0.970	3.610	1.4		
400				1.080	4.240	1.4		
500				1.280	5.150	1.4		
630				1.475	6.270	1.2	6	
800				1.670	7.400	1.2		
1000				1.950	8.760	1.1		
1250				2.300	10.54	1.1		
1600				2.700	12.41	1.1		
2000				3.680	15.22	1.0		
2500				4.400	18.10	1.0		
3150				5.650	23.63	0.8	8	
4000				6.560	28.35	0.8		

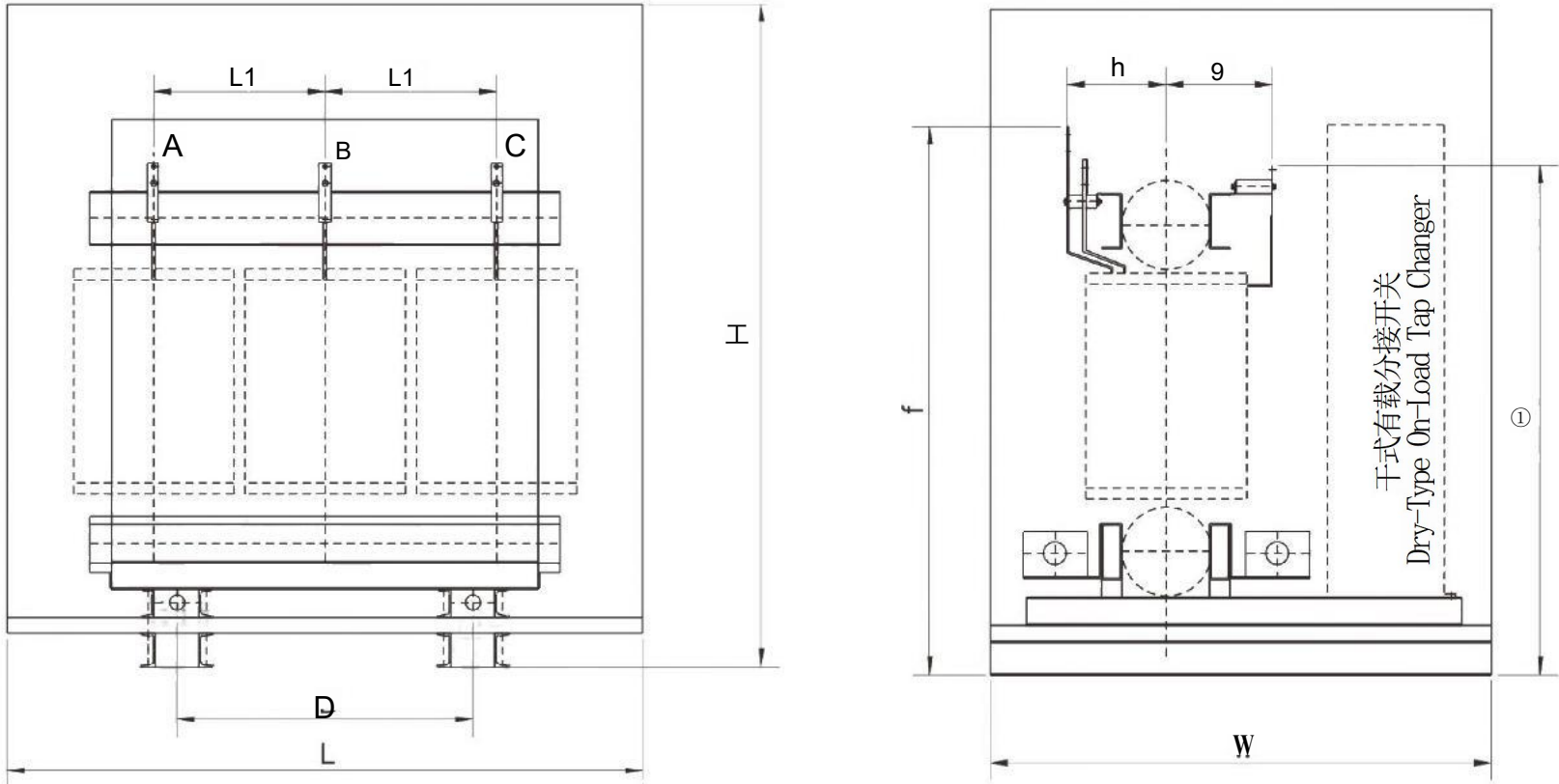


SC(B)10、11 干式浇注变压器
SC(B)10,11 Dry-Type Cast Resin Transformer

外形尺寸及安装尺寸Outline Dimensions and Installation Dimensions

SCZ(B)-□~□/10-0.4外形尺寸图

SCZ(B)-□~□/10-0.4 Outline Dimensions Diagram



型号含义 Model Explanation

S C-(B)-11-[-]

- 额定电压 (高压kV)Rated Voltage(High Voltage kV)
- 额定容量 (kVA)Rated Capacity (kVA)
- 性能水平代号 Performance Level Code
- 低压箔式线圈 Low Voltage Foil-Coil
- 固体成型 (环氧树脂浇注) Solid Molding(Epoxy Resin Casting)
- 三相 Three-Phase

产品标准 Product Standards

执行标准Standards:GB/T10228-1997、GB6450-1986、JB/T10088-2004、GB4208-1993

额定高压Rated High Voltage: 10(11,10.5,6.6,6.3,6)kV

高压分界范围High Voltage Tap Range:=5%或or±2×2.5%

额定低压Rated Low Voltage: 0.4kV

绝缘水平Insulation Level:LI75AC35/LIOAC5

联结组别Connection Group: Dyn11 或or Yyn0

频率Frequency:50Hz



SC(B)10、11干式浇注变压器
SC(B)10,11 Dry-Type Cast Resin Transformer

10kV 级 SC(B)11系列树脂绝缘干式变压器技术参数

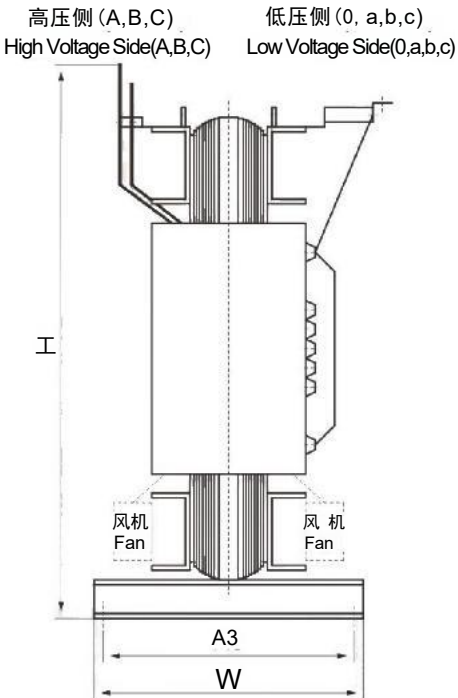
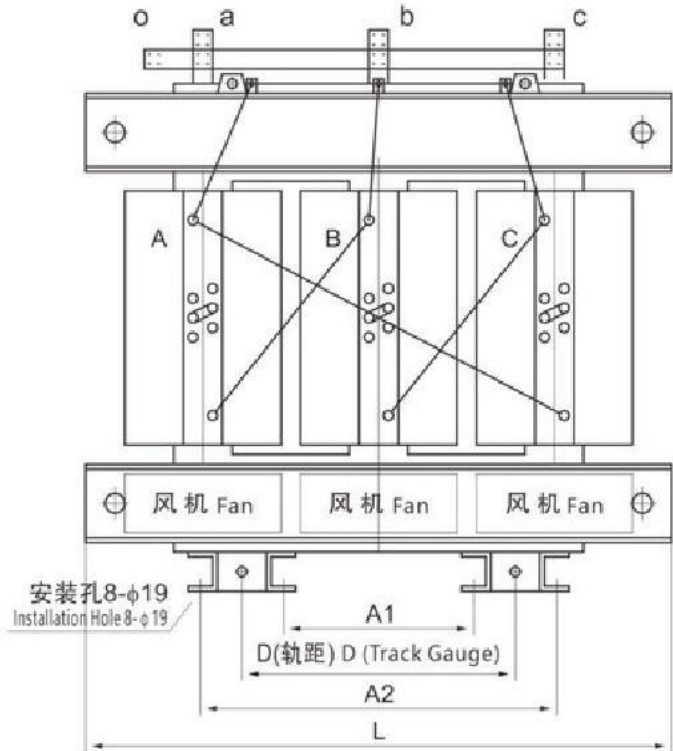
Technical Parameters of 10kV Class SC(B)11 Series Resin-Insulated Dry-Type Transformer

		connection					
				(120℃)			
30	11 10.5 10 6.3 6	0.4	Dyn11 或 Yyno	0.170	0.71	2.6	4
50				0.240	1.00	2.2	
63				0.330	1.21	2.2	
80				0.330	1.38	2.2	
100				0.360	1.57	2.0	
125				0.420	1.85	1.8	
160				0.480	2.13	1.8	
200				0.550	2.53	1.6	
250				0.640	2.76	1.6	
315				0.790	3.47	1.4	
400				0.880	3.99	1.4	
500				1.040	4.88	1.4	
630				1.200	5.88	1.2	6
630				1.170	5.96	1.2	
800				1.360	6.96	1.2	
1000				1.590	8.13	1.1	
1250				1.880	9.69	1.1	8
1600				2.200	11.73	1.1	
2000				2.740	14.45	1.0	
2500				3.240	17.17	1.0	
3150				5.140	22.50	0.8	

外形尺寸及安装尺寸 Outline Dimensions and Installation Dimensions

SC(B)11-□~□/10-0.4外形尺寸图

SCZ(B)11-□~□/10-0.4 Outline Dimensions Diagram

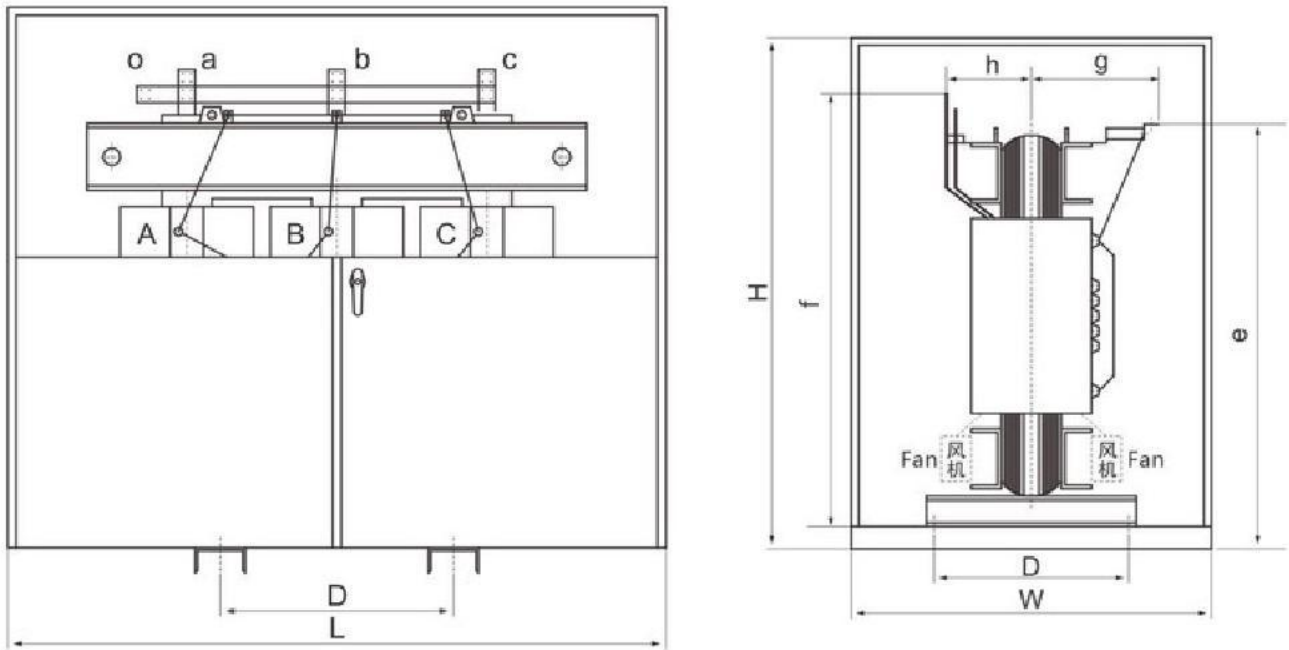




SC(B)10、11干式浇注变压器
SC(B)10,11 Dry-Type Cast Resin Transformer

外形尺寸及安装尺寸Outline Dimensions and Installation Dimensions

SC(B)11-□~□/10-0.4带外壳外形尺寸图
SC(B)11-□~□/10-0.4 with Enclosure Outline Dimensions Diagram



型号含义 Model Explanation



产品标准 Product Standards

执行标准Standard:GB/T10228-2008、GB6450-1986、JB/T10088-2004、GB4208-1993
额定高压Rated High Voltage: 10(11,10.5,6.6,6.3,6)kV
额定低压Rated Low Voltage:0.4kV
有载调压范围On-Load Voltage Regulation Range:(±4×2.5%) 或or(±3×2.5%)



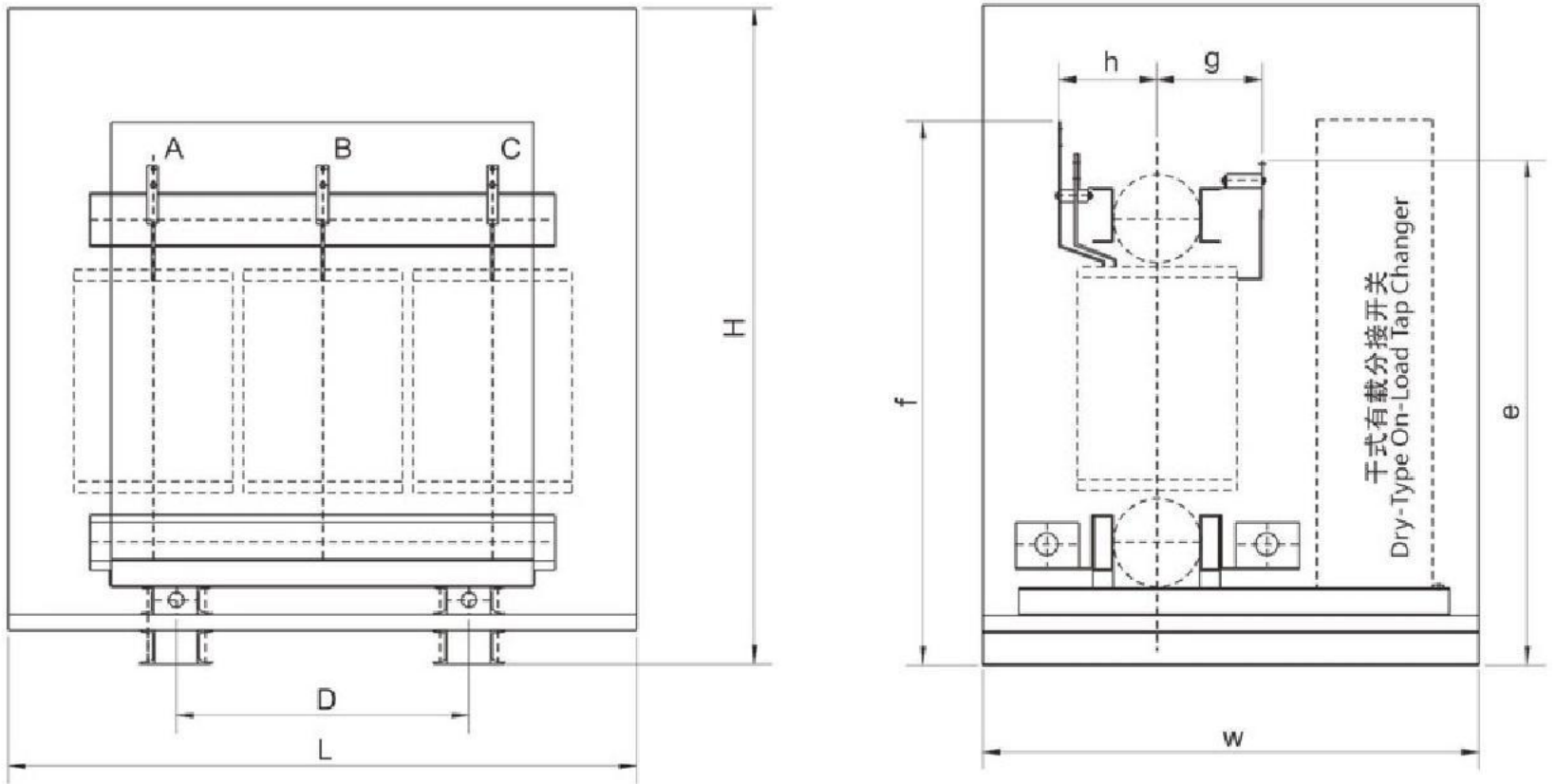
SC(B)10、11干式浇注变压器
SC(B)10,11 Dry-Type Cast Resin Transformer

10 kV 级 SC(B)11系列有载调压树脂绝缘干式变压器技术参数
Technical Parameters of 10kV Class SC(B)11 Series On-Load Voltage Regulating Resin-Insulated Dry-Type Transformer

额定容量 Rated Capacity	电压组合 Voltage Combination		联结方式 Connection type	损耗(kW)No-Load Loss (kW)		空载电流(%) No-Load Current (%)	阻抗电压(%) Impedance Voltage (%)	绝缘等级 Insulation Grade
	高压 High Voltage	低压 Low Voltage		空载 unloaded	负载(120℃) Load(120℃)			
200	11 10.5 10 6.3 6	0.4	Dyn11 或 or Yyno	0.690	2.660	1.6	4	F/F
250				0.790	2.900	1.6		
315				0.970	3.610	1.4		
400				1.080	4.240	1.4		
500				1.280	5.150	1.4		
630				1475	6.270	1.2	6	
800				1.670	7.400	1.2		
1000				1.950	8.760	1.1		
1250				2.300	10.54	1.1		
1600				2.700	12.41	1.1		
2000				3.680	15.22	1.0		
2500				4.400	18.10	1.0		
3150				5.650	23.63	0.8	8	
4000				6.560	28.35	0.8		

外形尺寸及安装尺寸Outline Dimensions and Installation Dimensions

SC(B)11-□~□/10-0.1带外壳外形尺寸图
SCZ(B)11-□~□/10-0.1 Outline Dimensions Diagram





江苏恒变

以质量求生存 · 以信誉求发展



S11-M-ZT 有载调容变压器

S11-M-ZT On-Load Tap Changer Transformer

可靠的结构 Reliable Structure

我公司在传统结构和成熟的技术基础上，做了许多改进，如采用了：
带纵向油道的螺旋式线圈，内部散热更好；
改进了线圈端面的有效支撑，抗短路电流能力更强；
采用了新的吊装结构和器身定位结构，保证在长途运输和运行中更为可靠；
我们还有很多独特可靠的结构，为您服务；
选用更高性能水平的变压器，将具有更高水平的技术含量。

Based on traditional structures and mature technologies,we have made numerous improvements,such as adopting spiral coils with longitudinal oil channels for better internal cooling.Improvements have been made to the effective support of coil end faces,enhancing short-circuit current resistance.New lifting and positioning structures ensure greater reliability during long-distance transportation and operation.We also have many unique and reliable structures to serve you.By selecting transformers with higher performance levels,we ensure a higher level of technological content.

优质的材料 High-Quality Materials

选用电阻率更低的无氧铜线，并经过系列附加的表面处理，更光滑，无毛刺尖角，使变压器的负载损耗更低，电气性能更为可靠：

选用优质的硅钢片，随着性能水平的提升，采用单位损耗更低的硅钢片，使变压器空载损耗更低。

选用优质层压木绝缘件，绝不开裂，即使有短路电流作用下，纹丝不动。

选用经过深层过滤的变压器油，更低的含水、含气、含杂质水平，变压器工作更加可靠。

选用优质橡胶密封材料，有效防老化，杜绝渗漏。

所有原材料经过的质检，有效防老化，杜绝渗漏。

所有原材料经过的质检，所有原材料厂均经过按照国家标准ISO9000的严格审查。

Copper Wire:We use low-resistance oxygen-free copper wire with additional surface treatments for a smoother finish,free of burrs and sharp edges,reducing load losses and improving electrical performance.

Silicon Steel Sheets:We use high-quality silicon steel sheets with lower unit loss,reducing no-load losses.

Laminated Wood Insulation:We use high-quality laminated wood insulation that remains intact without cracking,even under short-circuit currents.

Transformer Oil:We use deeply filtered transformer oil with lower moisture,gas,and impurity levels,enhancing transformer reliability

Rubber Sealing Materials:We use high-quality rubber sealing materials that effectively prevent aging and leakage.

Quality Control:All raw materials undergo quality inspection,and all suppliers are rigorously reviewed according to national standard ISO9000.

技术经济性能好Technical and Economic Performance

该产品可以大幅度降低变压器空载损耗50-60%

减小电网无功损耗20-30%

如果该技术全面应用于农村电网，每年可节约100亿度电；

每年节省标准煤300万吨，相当于减排CO₂500 万吨。

该项目已受到国家电网的高度重视，被纳入国家电力科学研究承接的国家十一五节电计划，编入新农村建设中的电力建设规范。

No-Load Loss Reduction:The product can significantly reduce no-load losses by 50-60%.

Reactive Power Loss Reduction:It reduces reactive power losses in the grid by 20-30%.

Energy Savings:If this technology is widely applied in rural power grids,it can save 10 billion kWh of electricity annually.

Coal Savings:It can save 3million tons of standard coal peryear,equivalent to a reduction of 25 million tons of CO₂emissions.

National Attention:This project has received high attention from the State Grid and has been included in the national"11th Five-Year Plan"forenergy saving and the power construction standards in rural development.

S11-M-ZT 有载调容变压器

On-Load Tap Changer Transformer

产品概述 Product Overview

S11-M-ZT 型有载调容变压器是我公司独立研发的新产品，该产品是一种新技术节能型配电变压器，具有大小两种额定容量且两种额定容量运行方式可以自动转换，它解决了10kV 配电网季节性负荷变化幅度比较大而造成变压器损耗大的问题，克服了无载调容变压器断电手动调节容量而导致的运行维护难题。采用S11-M-ZT 型有载请容相比两台S11 型子母变压器，首先降低了设备购置和安装成本费，而且占地空间缩小，建设周期缩短掣运行维护工作量明显减少。同时S11-M-ZT 型有载调容变压器与S11 型普通变压器相比，变压器空载损耗下降50%以上。除适用于季节性负荷变化幅度比较大的农村电网，还适用于一些昼夜负荷变化显著的城市商业区、开发区、工业区、电台区、油田等。

The S11-M-ZT On-Load Tap Changer Transformer is a new product independently developed by our company.This product is an energy-efficient distribution transformer with advanced technology.It features two rated capacities with automatic switching between them, addressing the issue of significant transformer losses caused by seasonal load variations in 10kV distribution networks.It also overcomes the operational and maintenance challenges of manually adjusting capacity in no-load tap changers.Compared to two S11-type transformer units,the S11-M-ZT On-Load Tap Changer Transformer reduces both equipment purchase and installation costs,minimizes space requirements,and significantly decreases construction time and maintenance workload.Additionally,the S11-M-ZT transformer has over a 50%reduction in no-load losses compared to the S11-type transformer.It is suitable not only for rural power grids with significant seasonal load variations but also for urban commercial areas,development zones,industrial areas,broadcasting stations,and oil fields where load fluctuations are notable.



S11-M-ZT 有载调容变压器

S11-M-ZT On-Load Tap Changer Transformer

全密封 Fully Sealed

选S11(M)R中的M 表示油箱采用全密封结构，全密封式配电变压器与普通油浸式变压器相比，取消了储油柜，油箱的波翅代替油管作为冷却散热元件，波纹油箱由优质冷轧薄板在专用生产线上制造，波翅可以变压器油的涨缩，从而使变压器与大气隔绝，防止和减缓油劣化和绝缘受潮，增强运行可靠性，正常运行免维护。
波纹油箱表面经去油、去锈、磷化处理后用三防漆涂装，适合在冶金、石化、矿山等环境下使用。

Full Sealing:The "M" in S11(M)R indicates that the oil tank uses a fully sealed structure.Compared to ordinary oil-immersed transformers,the fully sealed distribution transformer eliminates the oil storage cabinet.The corrugated oil tank replaces oil pipes with cooling fins.The corrugated tank,made from high-quality cold-rolled thin plates,allows for expansion and contraction of the transformer oil,isolating the transformer from the atmosphere,preventing and slowing down oil degradation and insulation dampness,and enhancing operational reliability.It requires no maintenance during normal operation.

Surface Treatment:The corrugated oil tank is treated with de-oiling,rust removal,and phosphating before being coated with anti-corrosion paint,making it suitable for use in environments such as metallurgy,petrochemicals,and mining.

变压器产品标准 Transformer Product Standards

GB1094.1-1996 GB1094.2-1996 GB1094.3-2003 GB1094.1 GB1094.5-2003

JB/T10088-2004 GB/T 10237-1988 GB-T6451-2008 GB-T 7595-1987

JB/T 3837-1998 JB/T 10778-2007

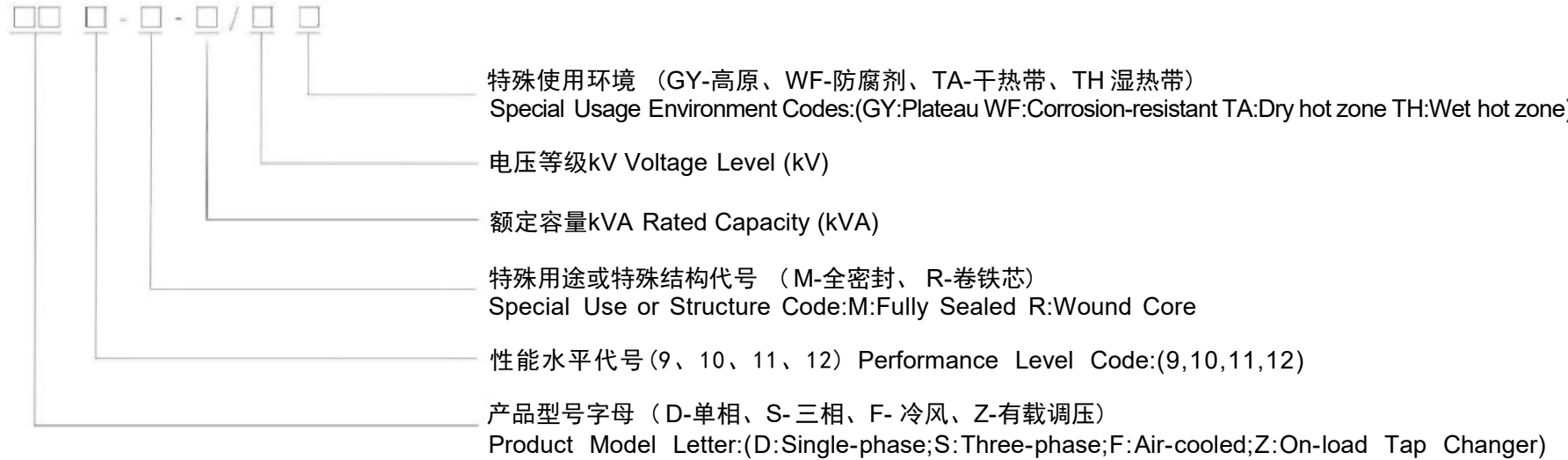
变压器正常使用条件 Normal Operating Conditions

海拔高度不超过1000m;
环境温度：最高气温+40℃；最热月平均气温+30℃；最高年平均气温+20℃；户外最低气温-25℃。
Altitude:Up to 1000 meters
Ambient Temperature:Maximum temperature:+40℃Maximum average temperature of the hottest month:+30CMaximum annual average temperature:+20℃Minimum outdoor temperature:-25℃

变压器特殊使用条件 Special Operating Conditions

海拔高度不超过1000m;
环境温度：最高气温+40℃;最低气温-25℃。
Altitude:Up to 1000 meters
Ambient Temperature:Maximum temperature:+40℃Minimum temperature:-25℃

型号含义 Model Meaning



S11-M-ZT 有载调容变压器

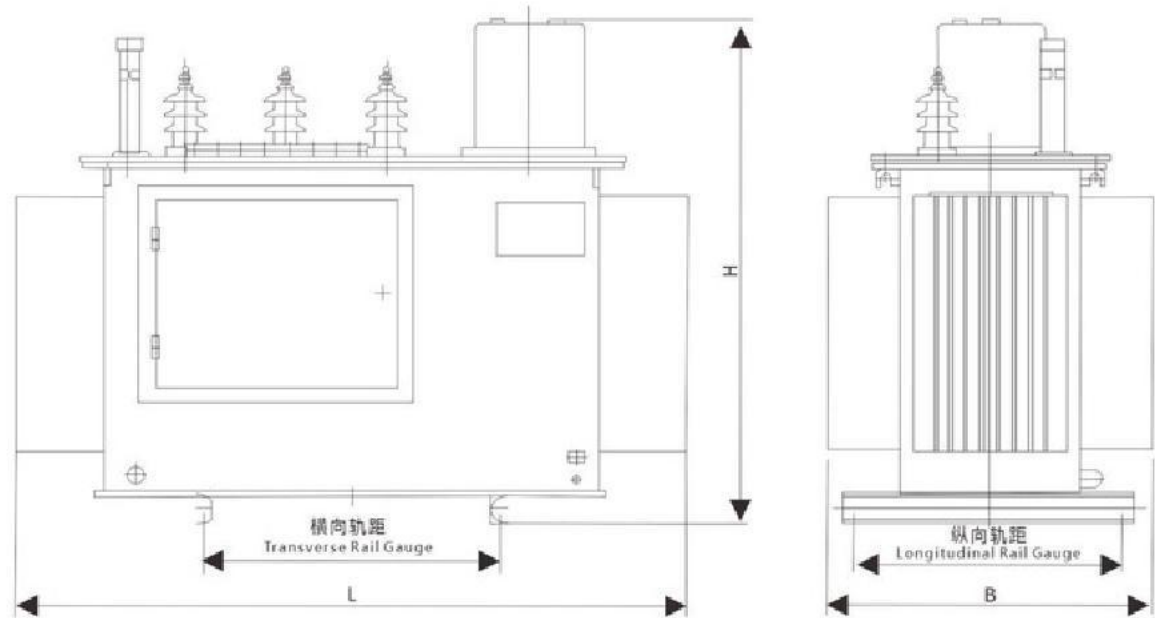
S11-M-ZT On-Load Tap Changer Transformer

S11-M-ZT 有载调容变压器技术参数

S11-M-ZT On-load Tap Changer Transformer Technical Parameters

额定容量 Rated Capacity	电压组合 (kV) Voltage Combination (kV)		联结方式 Connection Type	损耗 (kW) Loss (kW)		空载电 流 (%)	阻抗电 压 (%)	重量 (kg) Weight (kg)			外形尺寸 (mm) (长L×宽B×高H) Dimensions (mm)	轨距 纵向/横向 Rail Gauge
	高压 High Voltage	低压 Low Voltage		空载 No-load Loss	负载 (75℃) Load (75℃)	No-load Current (%)	Impedance Voltage (%)	器身重 Core Weight	油重 Oil Weight	总重 Total Weight	Length (L) x Width (B) x Height (H)	Longitudinal/Transverse
630/200	10 10.5 11	0.4	Yyn0 Dyn11	810 (340)	8030 (3060)	1.3 (1.8)	4.5	1455	600	2600	2040×1150×1470	820×820
500/160				680 (280)	6520 (2600)	1.4 (1.9)		1150	495	2130	1925×1090×1455	820×820
400/125				570 (240)	5480 (213)	1.5 (2)		970	415	1860	1870×1060×1450	820×820
315/100				480 (200)	4540 (1770)	1.6 (2.1)		860	385	1540	1780×1005×1315	820×820
250/80				400 (180)	3780 (1480)	1.7 (2.2)		680	340	1390	1705×980×1270	820×750
200/63				340 (150)	3215 (1230)	1.8 (2.4)		585	310	1235	1685×960×1240	820×750
160/50				280 (130)	2590 (1030)	1.9 (2.5)		505	290	1090	1650×940×1200	820×750
100/30				200 (100)	1580 (630)	2.1 (2.8)		360	240	870	1540×885×1150	820×750

外形尺寸及安装尺寸 Dimensions and Installation Sizes





江苏恒变

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YB□-12 预装式变电站

Prefabricated Substation

产品概述 Product Overview

YB-12型高压/低压预装式变电站是一种将中压开关设备、变压器、低压配电设备组装成一体的成套性产品。它作为城市建筑、生活小区，中小型工厂、矿山油田等用电部门的变配电设备，具有成套性强、体积小结构紧凑、可靠性高、现场安装工作量大、安装调试周期短，以及可移等特点。适当改变其外形和颜色，使之与环境相适应，还可以起到美化环境的作用。是目前声城乡土建变配电站的替代产品和城网建设、改造的新型成套设备。

高压侧一般采用 HXGN 系列环网柜内配（压气式、真空、SF6）负荷开关、熔断器（有要求可用断路器）。低压侧采用最新型的塑壳式自动空气开磁，分断能力高，保护性能好。变压器既可采用油浸式变压器，也可采用干式变压器。外壳有铝合金板、钢板、复合板等多种材料选择。箱内设有降温设施及防凝露设备。

本产品满足国家 GB17467-2020《高压/低压预装式变电站》GB 3906-2006《3.6kV~40.5kV交流金属封闭开关设备和控制设备》GB/T 7251.12-2013《低压成套开关设备和控制设备第2部分：成套开关和控制设备》、等标准的要求。



YB□-1 预装式变电站

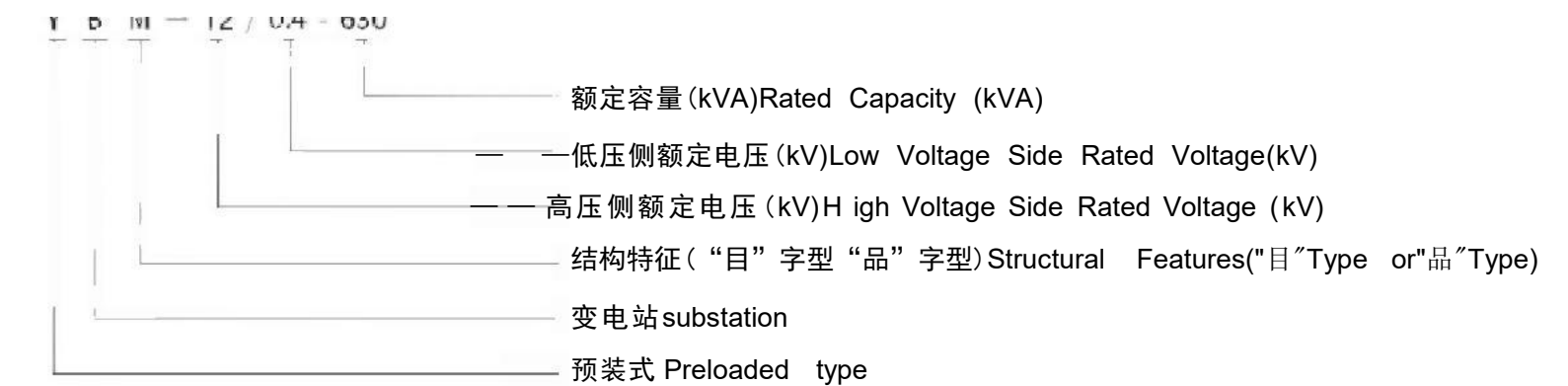
YB□-12 Prefabricated Substation

The YB□-12 high/low voltage prefabricated substation is a complete product that integrates medium voltage switchgear, transformers, and low voltage distribution equipment into a single unit. It is used for power distribution in urban buildings, residential areas, small to medium-sized factories, mines, oil fields, and other power consumption departments. This substation is characterized by its completeness, compact size, high reliability, minimal on-site installation work, short installation and commissioning period, and mobility. It can also be aesthetically adjusted in shape and color to match its environment, contributing to environmental beautification. It is an ideal replacement for traditional civil construction substations and a new type of equipment for urban network construction and renovation.

The high voltage side typically uses HXGN series ring network cabinets with (compressed air, vacuum, SF6) load switches, fuses (circuit breakers can be used if required). The low voltage side uses the latest type of plastic automatic air circuit breakers with high breaking capacity and good protection performance. The transformer can be either an oil-immersed transformer or a dry-type transformer. The shell can be made from various materials such as aluminum alloy panels, steel plates, or composite panels. The box is equipped with cooling facilities and anti-condensation devices.

This product complies with the national standards GB 17467-2020 "High Voltage/Low Voltage Prefabricated Substations," GB 3906-2006 "3.6kV~40.5kV AC Metal-Enclosed Switchgear and Controlgear," GB/T 7251.12-2013 "Low-Voltage Switchgear and Controlgear Assemblies Part 2: Assemblies for Switchgear and Controlgear," and other related standards.

型号及其含义 Model and Meaning



使用条件 Usage Conditions

海拔高度：不超过1000m；

环境温度：-25℃~+40℃；

相对湿度：不大于95%（日平均值）；

地面倾斜度：不超过3°；

风速：不超过35m/s；

无剧烈冲击振动、无严重污染和化学腐蚀介质、无导电尘埃及爆炸危险的户内外场所。

Altitude: Up to 1000 meters

Ambient Temperature: -25℃ to +40℃

Relative Humidity: No more than 95% (daily average)

Ground Tilt: No more than 3°

Wind Speed: No more than 35 meters/second

Environmental Requirements: No severe shock or vibration, no severe pollution or chemical corrosion, no conductive dust or explosion hazards in indoor or outdoor locations.

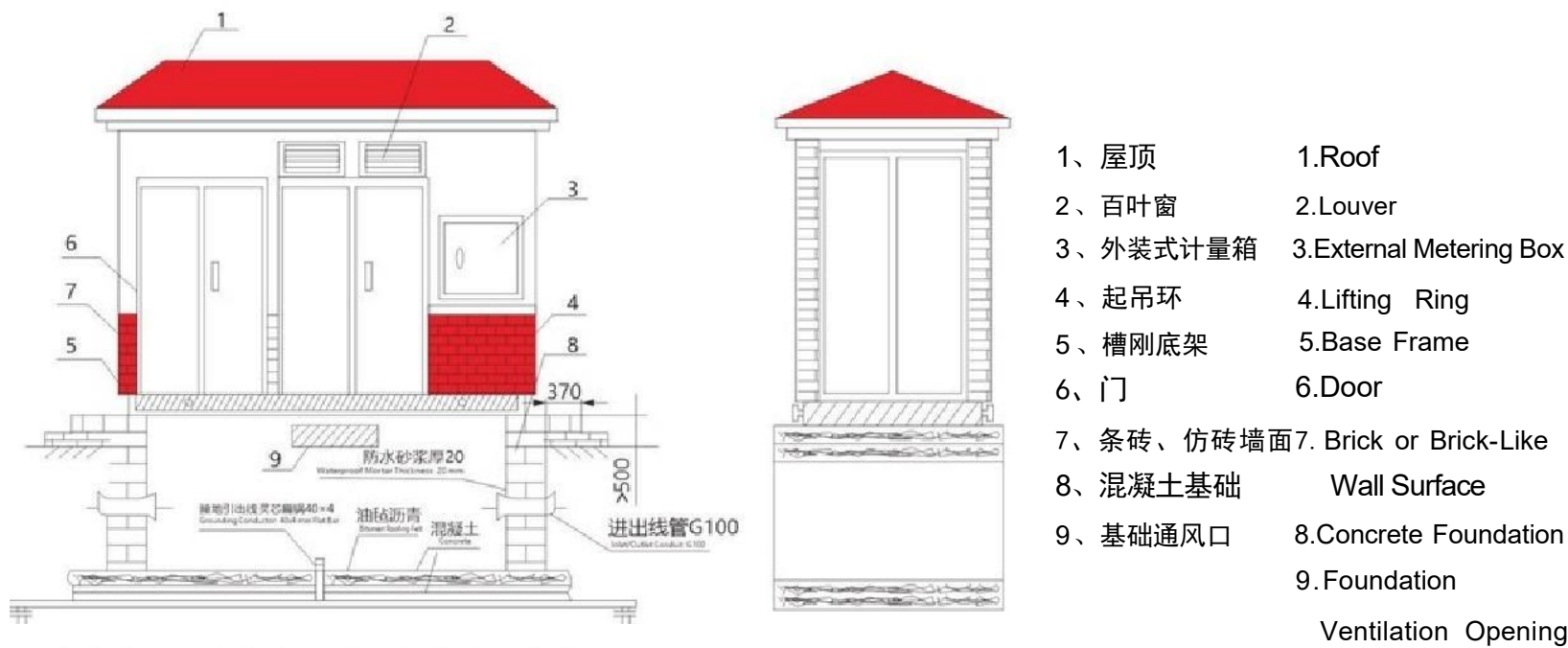


YB□-1 预装式变电站
YB□-12 Prefabricated Substation

技术参数 Technical Parameters

Inuna	名 称 Name	单位Unit	高压单元High Voltage Side			变压器单元Transformer			低压单元Low Voltage Side	
1	额定电压Rated Voltage	kV	6	10	35	6	10	35	0.220.38	0.66
2	最高工作电压Maximum Working Voltage	kV	7.2	12	40.5					
3	额定频率Rated Frequency	Hz	50							
4	额定容量Rated Capacity	kVA				30~2000				
5	额定电流Rated Current	A	400、630、1250						50~4000	
6	1min工频耐压 1-minute Power Frequency Withstanding Voltage	kV	对地和相间42隔离断口48 To earth and between phases 42, isolation break points 48						2.5	
7	(10kV) 雷电冲击耐受电压 Lightning Impulse Withstanding Voltage	kV	对地和相间75隔离断口85 To earth and between phases75, isolation break points 85							
8	(10kV) 额定短路开断电流Rated Short-CircuitBreakingCurrent		31.5							
9	分接范围Tap Changer Range	%				±2×2.5%、±5%				
10	联结组别Connection Group					Yyn0、Dyn11				
11	阻抗电压Impedance Voltage	%				4、4.5、6、8				
12	防护等级(常规产品)Protection Level(Conventional Product)		IP33			IP23			IP33	
13	声功率级Sound Power Level	dB(A)	≤50							

安装尺寸图Installation Dimensions Diagram



订货须知 Ordering Information

用户如订货需提供以下资料：

型号、容量、数量、颜色外形尺寸要求，外壳材料；

变压器的型号、性能、联结组别、分接范围及阻抗要求；

高低压侧一次接线方案、元器件型号、规格和要求；

变压器油（25#、45#、高燃点油）；

电力智能化管理网或物业管理对箱式变电站的入网配置要求；

使用环境要求。

Customers should provide the following information when placing an order:
Model,capacity,quantity,color,and dimensional requirements;Shell material;Transformer model,performance,connection group,tap changer range, and impedance requirements;High and low voltage side primary wiring scheme, component model,specifications,and requirements;Transformer oil (25#,45#,or high flash point oil);Power management network or property management requirements for the substation's network configuration;Environmental requirements for usage



YB□-1 预装式变电站
YB□-12 Prefabricated Substation

部分产品外形图举例 Examples of Product Outlines



YB-01



YB-02



YB-03



YB-04



YB-05



YB-06



YB-07



YB-08



江苏恒变

以质量求生存 · 以信誉求发展



ZGS13-10kV 组合式变电站 Modular Substation

产品概述 Product Overview

ZGS、ZFS 系列组合式变压器是我们的研发人员在吸收国内外产品优点的基础上，结合我国供用电实际情况，开发研制而成。组合式变压器是将变压器器身、高压负荷开关、熔断器及高低压连线放置在全密封的油箱内，用变压器油作为带电部分相间及对地的绝缘介质的一种新型配电设备。

组合式变压器适用于城市公共配电、高层建筑、住宅小区、公园、高速公路等，还适用于油田、工矿企业及施工场所等，是城市电网建设与改造的必需设备。

本产品满足国家JB/T10217-2013《组合式变压器》GB/T 7251.12-2013《低压成套开关设备和控制设备第2部分：成套开关和控制设备》、等标准的要求。

The ZGS and ZFS series combined transformers are developed based on the advantages of domestic and international products, combined with the actual electricity supply and demand conditions in China. The combined transformer integrates the transformer body, high-voltage load switch, fuse, and high and low voltage connections within a fully sealed tank, using transformer oil as the insulating medium for live parts and grounding. This is a new type of distribution equipment.



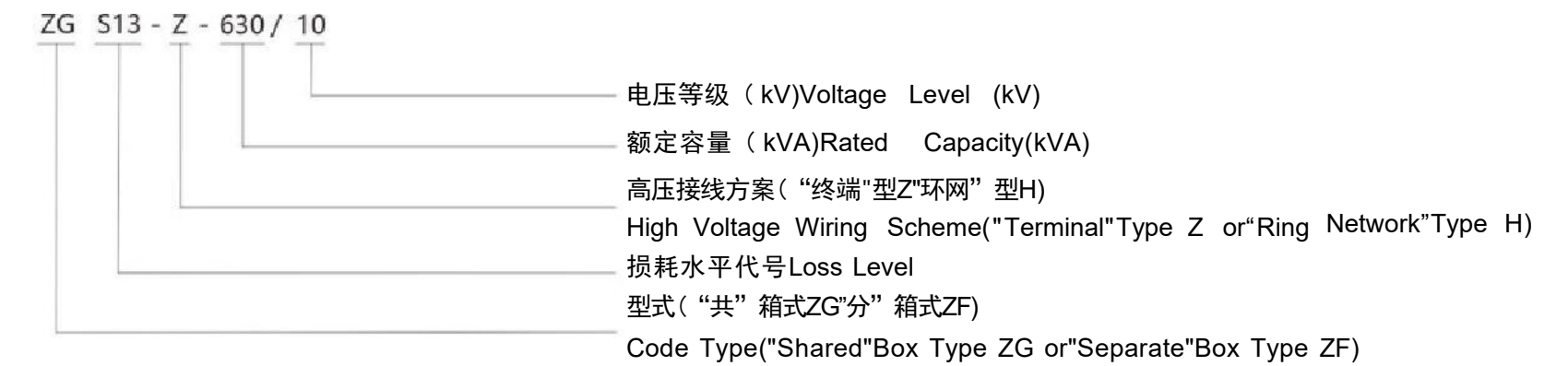
ZGS13-10kV组合式变电站

ZGS13-10kV Combined Transformer Substation

Combined transformers are suitable for urban public distribution, high-rise buildings, residential communities, parks, highways, as well as oil fields, industrial enterprises, and construction sites. They are essential equipment for urban power grid construction and renovation.

This product meets the requirements of national standards such as JB/T10217-2013 "Combined Transformer" and GB/T7251.12-2013 "Low-voltage Switchgear and Controlgear Assemblies -Part 2: Assemblies".

型号及其含义 Model and Meaning



使用条件 Usage Conditions

海拔高度：不超过1000m；

环境温度：-25℃~+40℃；

相对湿度：不大于95%（日平均值）；

地面倾斜度：不超过3°；

风速：不超过35m/s；

无剧烈冲击振动、无严重污染和化学腐蚀介质、无导电尘埃及爆炸危险的户内外场所。

Altitude: Up to 1000m

Ambient Temperature: -25℃ to +40℃

Relative Humidity: No more than 95% (daily average)

Ground Slope: No more than 3°

Wind Speed: No more than 35m/s

No severe shock or vibration, no serious pollution or chemical corrosion, no conductive dust, and no explosive hazards in indoor or outdoor locations.

订货须知 Ordering Information

产品运行场所及特殊性要求；

提供产品订货图样，订货图中应有接线图，并应注明变压器容量，主要元件型号规格，配电分支回路及容量；

需配置电能计量和无功自动补偿装置时，应提供计量电度表及互感器配置要求，注明补偿电容器容量；

注明产品表面处理的要求；

组合式变压器定货时请注明终端型或环网型。

Operating location and specific requirements of the product.

Provide ordering drawings, which should include wiring diagrams, specifying transformer capacity, main component model specifications, distribution branch circuits and capacities.

If energy metering and reactive power compensation devices are required, provide requirements for metering meters and current transformers, and specify the capacity of compensation capacitors.

Specify surface treatment requirements.

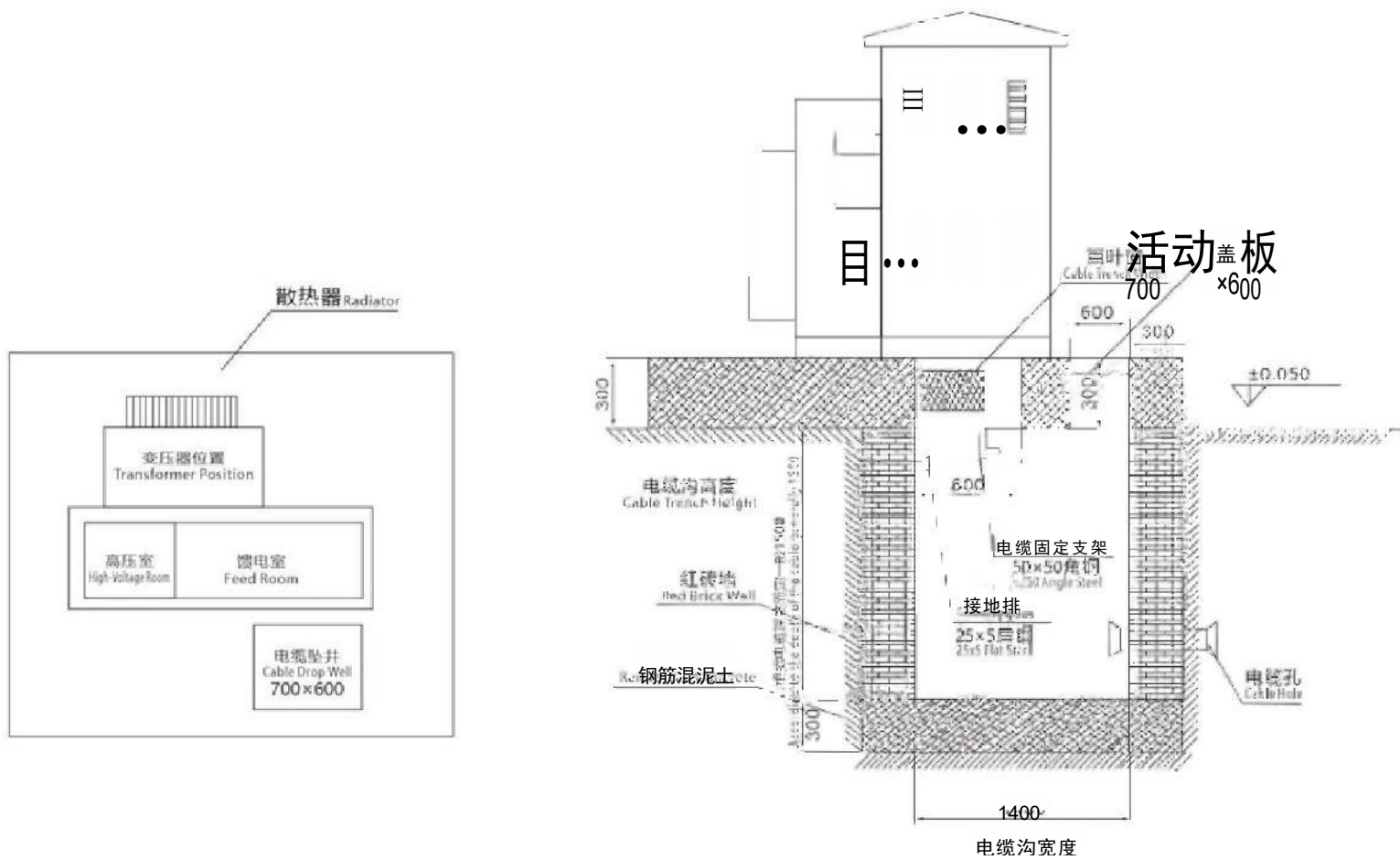
When ordering combination-type transformers, indicate whether it is a terminal type or ring network type.



技术参数 Technical Parameters

序号 Serial Number	名 称 Name	单位Unit	高压侧High Voltage Side	变压器Transformer	低压侧Low Voltage Side
1	额定电压Rated Voltage	kV	10		0.4
2	最高工作电压Maximum Operating Voltage	kV	12		
3	额定频率Rated Frequency	Hz	50		
4	额定容量Rated Capacity	kVA		50~1600	
5	额定电流Rated Current	A	10~630		50~3200
6	1min工频耐压 1Minute Power Frequency Withstand Voltage	kV		35	2.5
7	雷电冲击耐受电压 Lightning Impulse Withstand Voltage	kV		全波: 75截波: 85 Full Wave:75dB, Cutoff Wave:85dB	
8	绝缘油击穿电压值Insulating il Breakdown Voltage	kV		≥35	
9	绕组温升极限Winding Temperature Rise Limit	K		≤65	
10	冷却方式Cooling Method			油浸自冷Oil-ImmersedSelf-Cooling	
11	防护等级Protection Level		IP33	IP65	IP33
12	声功率级Sound Power Level	dB (A)	≤45		

安装尺寸图Installation Dimensions Diagram



部分产品外形图举例 Examples of Product Outlines



ZGS-01



ZGS-02



ZGS-03



ZGS-04



ZGS-05



ZGS-06



ZGS-07



ZGS-08