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江苏亚威变压器

TRANSFORMER SELECTION GUIDE

变压器 | 选型手册

江苏亚威变压器有限公司

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亚威公众号
Yawei official account



电子样本
Electronic samples

江苏亚威变压器有限公司
JIANGSU YAWEI TRANSFORMER CO., LTD.

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成立于
1993
年
Established
in 1993

现有员工
2000+
名
We currently have
over 2000 employees

技术人员
300+
名
More than 300
technical personnel

占地面积
66.7
公顷
Covering an area of
66.7 hectares

建筑面积
40
万
平方米
Building area of 620
million square inches

年销售额
50+
亿元
Annual sales of
around 5 billion yuan

国家
高新技术
企业
National High-tech
Enterprise

国家专精特新
小巨人
企业
National Specialized,
Refined, Unique, and New
Small Giant Enterprise

企业简介 COMPANY PROFILE

亚威集团拥有员工2000多名，其中工程技术人员300多名，公司占地1000多亩，集团公司2024年销售额50亿元左右。其中江苏亚威变压器有限公司年销售额超20亿元。江苏亚威变压器有限公司荣获国家高新技术企业、国家级专精特新“小巨人”企业、江苏省高质量发展科技创新企业、江苏省质量信得过企业、江苏省名牌企业、江苏省质量诚信五星级企业、省级五星级上云企业、南通市重合同守信用先进集体、南通市科学技术进步奖、南通市优秀民营企业、南通市文明单位、南通市民营企业百强、海安市工业成长企业、海安市工业企业二十强、海安十佳高新技术企业、海安市质量标兵企业、海安市市长质量奖等殊荣。

公司拥有强大的生产能力和高效的营销队伍。产品包括500KV、400KV、330KV、220KV以及110KV型超高压变压器、35KV及以下各种干式变压器/油浸式变压器/非晶合金变压器、风光储新能源变压器、预装式变电站；出口系列：单相翻盖美变、三相美变、圆筒变、隔离变、控制变、稳压器等产品；以及各种规格的接地变、消弧线圈、比特币变、预制舱、电抗器、电炉变、整流变、矿用变、船用变等特种变压器。公司所有系列的产品均通过国家变压器质量监督检验中心、中国电力科学研究院武汉分院以及苏州电器科学研究所的例行、型式、特殊试验。企业先后通过ISO9001、ISO14001、ISO45001、SA8000体系认证，江苏省企业计量合格认证，同时10KV、35KV级配电变压器、箱式变电站获得国际电工委员会IEC认证、美国UL认证、德国TUV认证、欧盟CE认证、荷兰KEMA认证以及GOST认证。产品销售覆盖全球市场，如美国、欧洲、加拿大、墨西哥等72个国家及地区。

长期以来，亚威变压器始终不渝地坚持“质量为本，顾客至上”的质量方针，秉承“胸怀大志，热情周到，认真守时，休戚与共”的价值观。对外重视本土文化经营，营造天时地利人和的发展氛围，与电力部门及广大客户保持合作双赢、互利互惠的良好关系；对内积极倡导“以人为本”的管理理念，充分尊重员工的首创精神，坚持务实经营，提高企业员工的凝聚力。公司以优秀的管理保持企业的发展，严格按照ISO9001质量管理体系的标准运行。公司以质量求生存，以信誉求发展，在保持企业稳健经营的前提下，树立了良好的企业形象。

Yawei Group has over 2000 employees, including more than 300 engineering and technical personnel. The company covers an area of more than 1000 acres and has a sales revenue of about 5 billion yuan in 2024. Among them, Jiangsu Yawei Transformer Co. Ltd. has an annual sales revenue of over 2 billion yuan. Jiangsu Yawei Transformer Co., Ltd. has been awarded the titles of National High tech Enterprise, National Specialized and Innovative "Little Giant" Enterprise, Jiangsu Province High quality Development Technology Innovation Enterprise, Jiangsu Province Quality Trustworthy Enterprise, Jiangsu Province Famous Brand Enterprise, Jiangsu Province Quality integrity Five Star Enterprise, Provincial Five Star Cloud Enterprise, Nantong City Advanced Collective for Contract Abiding and Creditworthiness, Nantong City Science and Technology Progress Award, Nantong City Excellent Private Enterprise, Nantong City Civilized Unit, Nantong City Top 100 Private Enterprises, Hai'an City Industrial Growth Enterprise, Hai'an City Top 20 Industrial Enterprises, Hai'an City Top 10 High tech Enterprises, Hai'an City Quality Model Enterprise, and Hai'an City Mayor's Quality Award.

The company has strong production capacity and an efficient marketing team. The products include 500kV, 400kV, 330kV, 220kV, and 110kV ultra-high voltage transformers, various dry-type transformers/oil immersed transformers/amorphous alloy transformers of 35kV and below, new energy transformers, and prefabricated substations, Export series: single-phase transformer, three-phase transformer, cylindrical transformer, isolation transformer, control transformer, voltage regulator and other products, And various specifications of special transformers such as grounding transformers, arc suppression coils, Bitcoin transformers, prefabricated cabins, reactors, electric furnace transformers, rectifier transformers, mining transformers, marine transformers, etc. All series of products of the company have passed the routine, type, and special tests of the National Transformer Quality Supervision and Inspection Center, Wuhan Branch of China Electric Power Research Institute, and Suzhou Electric Science Research institute. The enterprise has successively passed ISO9001, ISO14001, ISO45001, SA8000 system certification, Jiangsu Province Enterprise Metrology Qualification Certification. At the same time, 10kV and 35kV level distribution transformers and box type substations have obtained international Electrotechnical Commission IEC certification, US UL certification, German TUV certification, EU CE certification, Dutch KEMA certification, and GOST certification. Our product sales cover the global market, including 72 countries and regions such as the United States, Europe, Canada, Mexico, etc.

For a long time, Yawei Transformer has unwaveringly adhered to the quality policy of "quality-oriented, customer-oriented", and upheld the values of "ambitious, enthusiastic and thoughtful, diligent and punctual, and sharing weal and woe". Pay attention to local cultural management externally, create a favorable development atmosphere with favorable timing, location, and people, and maintain a good relationship of win-win cooperation and mutual benefit with the power sector and customers, Actively advocating the management concept of "people-oriented" internally, fully respecting the pioneering spirit of employees, adhering to pragmatic management, and improving the cohesion of enterprise employees. The company maintains its development through excellent management and operates strictly in accordance with the ISO9001 quality management system standards. The company strives for survival through quality and development through reputation, and has established a good corporate image while maintaining stable operation.



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资质证书 QUALIFICATION CERTIFICATE

KEMA



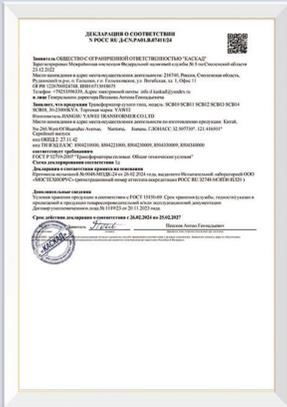
CE



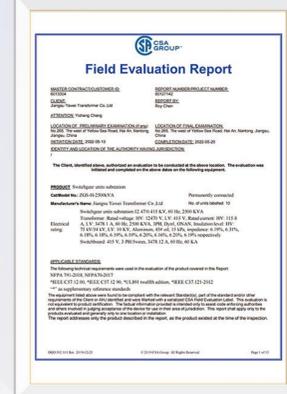
GOST



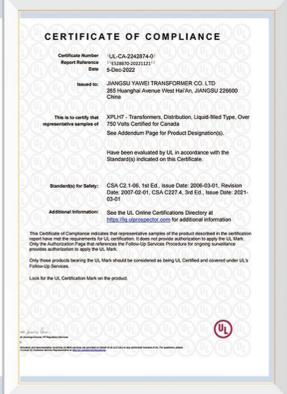
GOST



CSA



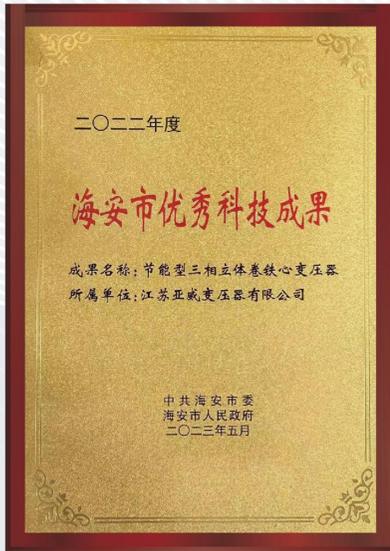
UL



产品认证证书 Product certification certificate

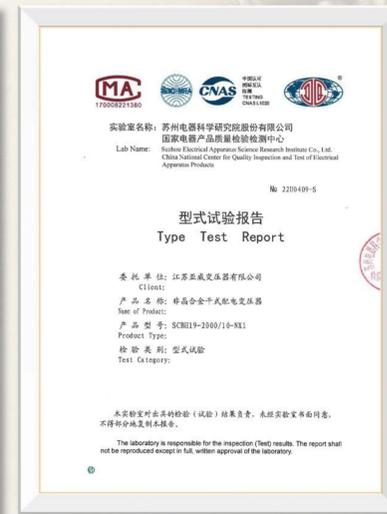
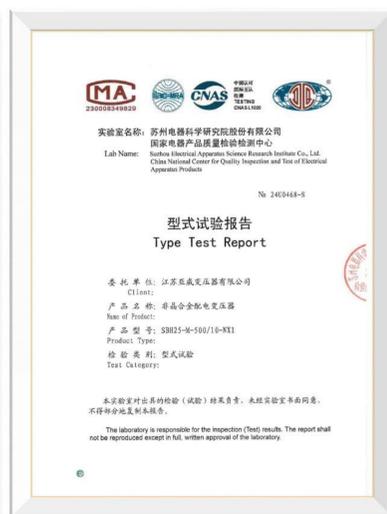
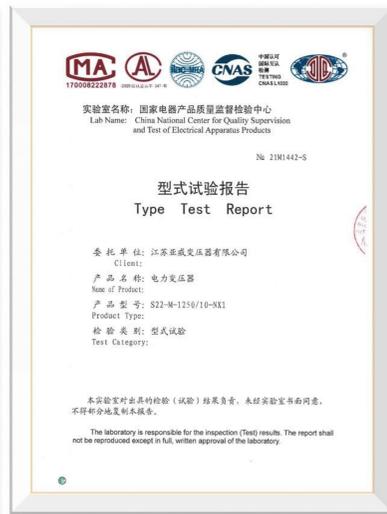
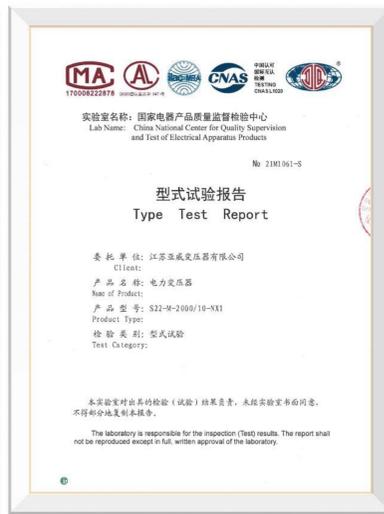
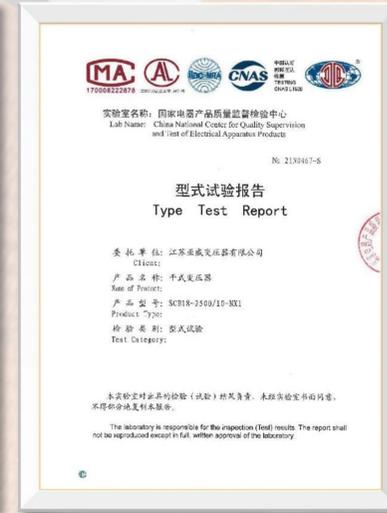
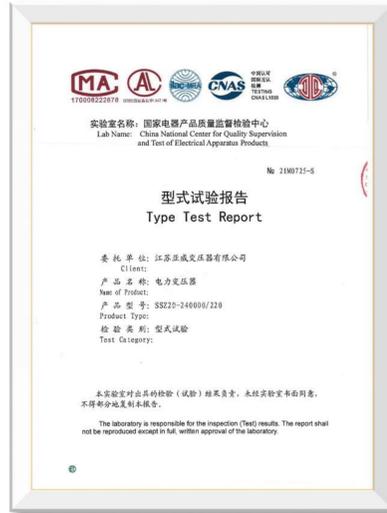


节能产品认证证书 Energy saving Product Certification Certificate



油浸式变压器
Oil immersed transformer

干式变压器
Dry Type Transformer



箱式变压器
Pad mounted



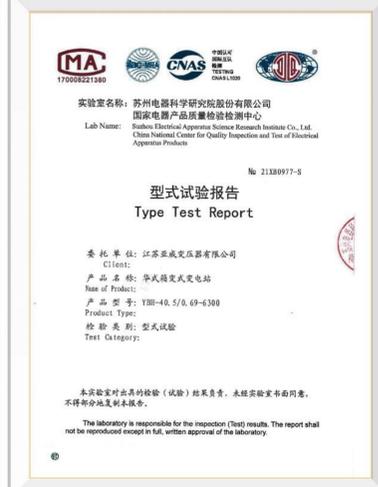
检验检测报告
TEST REPORT

样品名称: 箱式预装式变电站

型号规格: YB□-40.5/0.14-10000/10000VA

委托单位: 江苏亚威变压器有限公司

检验类别: 型式试验



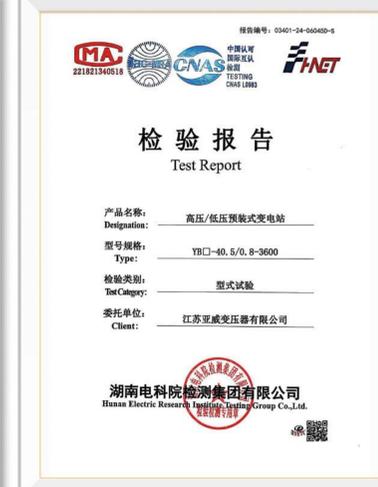
型式试验报告
Type Test Report

委托单位: 江苏亚威变压器有限公司

产品名称: 箱式预装式变电站

产品型号: YB□-40.5/0.69-4300

检验类别: 型式试验



检验报告
Test Report

产品名称: 高压/低压预装式变电站

型号规格: YB□-40.5/0.8-3600

检验类别: 型式试验

委托单位: 江苏亚威变压器有限公司

电流互感器
Current transformer



检验(试验)报告
Test Report

产品名称: 电流互感器

产品型号: LB□-72.5型

检验类别: 委托试验



检验(试验)报告
Test Report

产品名称: 电流互感器

产品型号: LB□-72.5型

检验类别: 委托试验



检验(试验)报告
Test Report

产品名称: 电流互感器

产品型号: LB□-126型

检验类别: 委托试验



检验检测报告
TEST REPORT

样品名称: 高压/低压预装式变电站

型号规格: YB□-40.5/0.4-3150 3350VA

委托单位: 江苏亚威变压器有限公司

检验类别: 型式试验



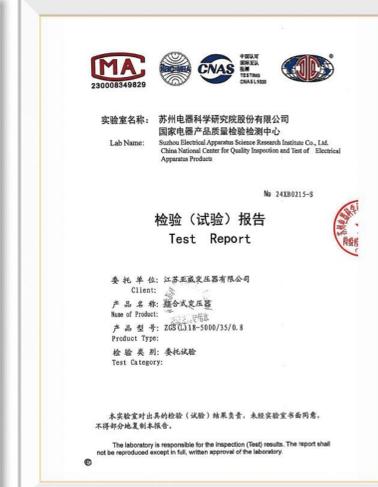
型式试验报告
Type Test Report

委托单位: 江苏亚威变压器有限公司

产品名称: 高压/低压预装式变电站

产品型号: YB□-12/0.4-1250

检验类别: 型式试验



检验(试验)报告
Test Report

产品名称: 组合式变电站

产品型号: Z□□□18-3000/33/0.8

检验类别: 委托试验

矿用变压器
Mining transformer



防爆合格证
CSST Ex 证号: SHExC23.2149U

产品名称: 矿用隔爆移动变电站用干式变压器

防爆标志: Ex d I Mb

主要技术参数: 额定电压: 10/3.6kV 额定容量: 1000kVA

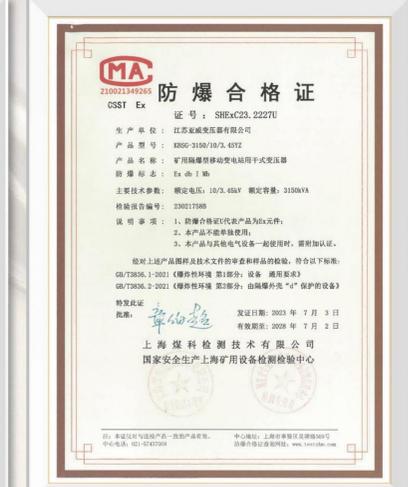


防爆合格证
CSST Ex 证号: SHExC23.2226U

产品名称: 矿用隔爆移动变电站用干式变压器

防爆标志: Ex d I Mb

主要技术参数: 额定电压: 10/3.6kV 额定容量: 550kVA



防爆合格证
CSST Ex 证号: SHExC23.2227U

产品名称: 矿用隔爆移动变电站用干式变压器

防爆标志: Ex d I Mb

主要技术参数: 额定电压: 10/3.6kV 额定容量: 330kVA



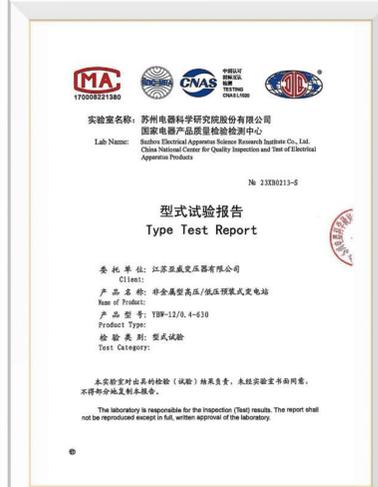
型式试验报告
Type Test Report

委托单位: 江苏亚威变压器有限公司

产品名称: 组合式变电站

产品型号: Z□□□□-430/10

检验类别: 型式试验



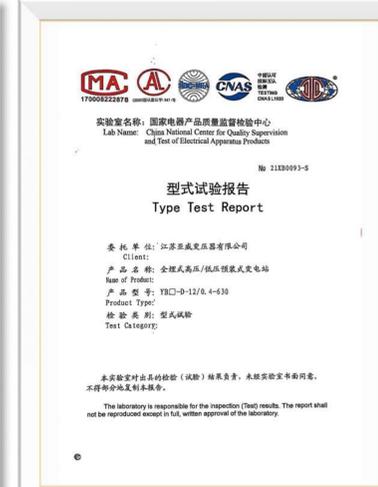
型式试验报告
Type Test Report

委托单位: 江苏亚威变压器有限公司

产品名称: 非金属型高压/低压预装式变电站

产品型号: YB□-12/0.4-430

检验类别: 型式试验



型式试验报告
Type Test Report

委托单位: 江苏亚威变压器有限公司

产品名称: 全塑式高压/低压预装式变电站

产品型号: YB□-0-12/0.4-430

检验类别: 型式试验



防爆合格证
CSST Ex 证号: SHExC23.2145U

产品名称: 矿用隔爆移动变电站用干式变压器

防爆标志: Ex d I Mb

主要技术参数: 额定电压: 10/3.6kV 额定容量: 4000kVA



防爆合格证
CSST Ex 证号: SHExC23.2228U

产品名称: 矿用隔爆移动变电站用干式变压器

防爆标志: Ex d I Mb

主要技术参数: 额定电压: 10/3.6kV 额定容量: 5000kVA



防爆合格证
CSST Ex 证号: SHExC23.2150U

产品名称: 矿用隔爆移动变电站用干式变压器

防爆标志: Ex d I Mb

主要技术参数: 额定电压: 10/3.6kV 额定容量: 6000kVA

专利认证
Patent authentication



产业布局 INDUSTRIAL LAYOUT

亚洲: 中国、菲律宾、柬埔寨、马来西亚、缅甸、印度尼西亚、越南、蒙古、日本、台湾省、孟加拉、斯里兰卡、黎巴嫩、沙特阿拉伯、土耳其、亚美尼亚、伊拉克、伊朗、哈萨克斯坦、吉尔吉斯斯坦、塔吉克斯坦、乌兹别克斯坦
Asia: China, Philippines, Cambodia, Malaysia, Myanmar, Indonesia, Vietnam, Mongolia, Japan, Taiwan Province, Bangladesh, Sri Lanka, Lebanon, Saudi Arabia, Turkey, Armenia, Iraq, Iran, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan

非洲: 埃及、埃塞俄比亚、安哥拉、博茨瓦纳、布隆迪、佛得角共和国、刚果、几内亚、加纳、加蓬、津巴布韦、喀麦隆、肯尼亚、卢旺达、马拉维、毛里求斯、毛里塔尼亚、莫桑比克、南非、尼日利亚、索马里、乍得、中非地区
Africa: Egypt, Ethiopia, Angola, Botswana, Burundi, Cape Verde, Congo, Guinea, Ghana, Gabon, Zimbabwe, Cameroon, Kenya, Rwanda, Malawi, Mauritius, Mauritania, Mozambique, South Africa, Nigeria, Somalia, Chad, Central Africa

北美: 阿鲁巴、巴拿马、多米尼加、哥斯达黎加、洪都拉斯、加勒比地区、加拿大、美国、墨西哥、萨尔瓦多、危地马拉、牙买加
North America: Aruba, Panama, Dominican Republic, Costa Rica, Honduras, Caribbean region, Canada, United States, Mexico, El Salvador, Guatemala, Jamaica

欧洲: 保加利亚、北马其顿、芬兰、挪威、乌克兰、希腊、匈牙利、意大利、英国
Europe: Bulgaria, North Macedonia, Finland, Norway, Ukraine, Greece, Hungary, Italy, United Kingdom

南美: 阿根廷、巴拉圭、厄瓜多尔、哥伦比亚、圭亚那、委内瑞拉、乌拉圭、智利
South America: Argentina, Paraguay, Ecuador, Colombia, Guyana, Venezuela, Uruguay, Chile

中东: 中东地区
Middle East: The Middle East region

大洋洲: 澳大利亚、巴布亚新几内亚、斐济
Oceania: Australia, Papua New Guinea, Fiji

主要业绩 MAIN ACHIEVEMENTS

能源及电力
Energy And Electricity



工业制造
Industrial Manufacturing



食品饮料
Food And Beverage



军防及建筑
Military Defense And Architecture



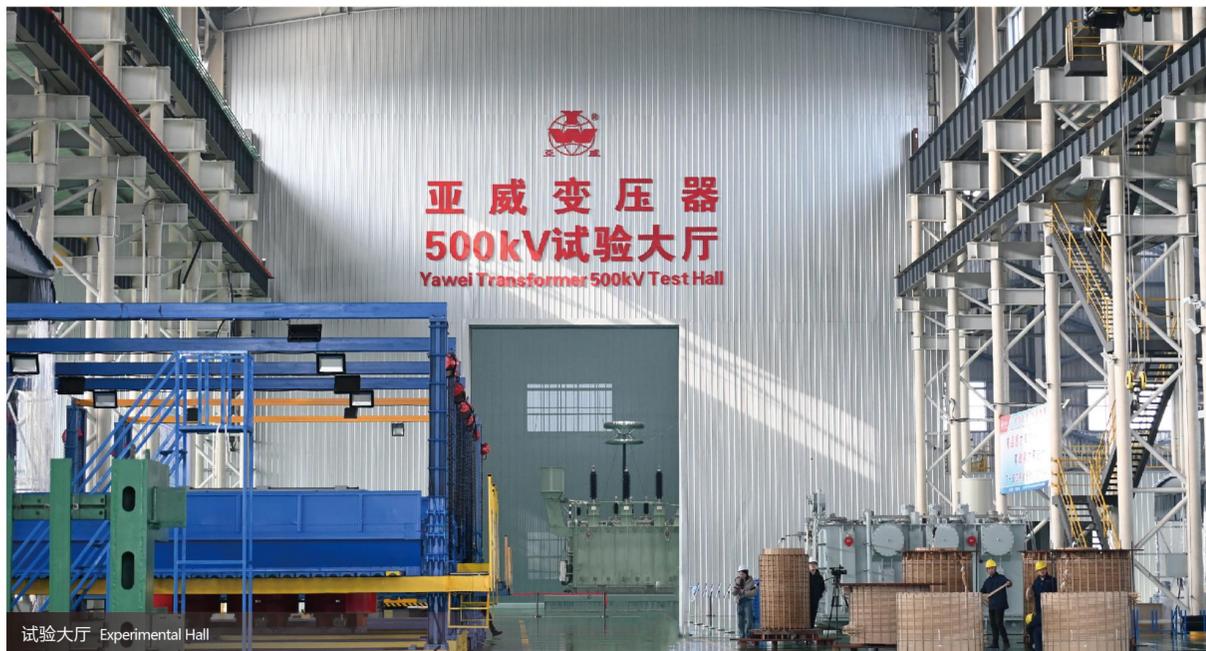
高校及科研机构
Universities And Research Institutions



汽车行业
Automobile Making



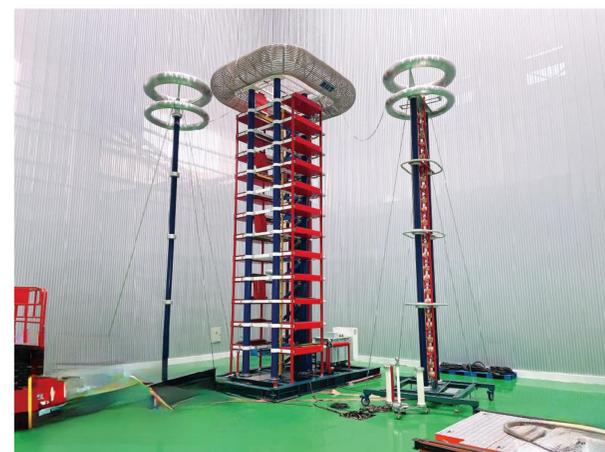
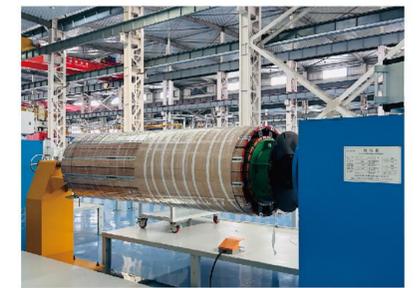
因版面有限仅展示部分合作伙伴。所有排名不分先后



试验大厅 Experimental Hall



绕线机组 Wire winding unit



试验设备 Equipment



智能自动折弯机 Intelligent automatic bending machine



数控冲床 Cnc punch press



智能激光切割机 Intelligent laser cutting machine



焊接机器人 Welding robot



油变车间 Oil transformation workshop



干变车间 Dry transformation workshop



全自动叠片机组 Fully automatic laminating unit



全自动叠片机组 Fully automatic laminating unit

PRODUCT CATALOG

产品目录

科学管理 | scientific management
多元化发展模式 | Diversified development model

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POWER TRANSFORMER

15-23

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500kV ~66kV OIL-IMMERSED POWER TRANSFORMER

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OIL-IMMERSED DISTRIBUTION TRANSFORMER

24-28

35kV ~10kV配电变压器 024
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密封式非晶合金电力变压器 027
S(B)H15(21~25)-M SEALED AMORPHOUS ALLOY POWER TRANSFORMER

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船用变压器 035
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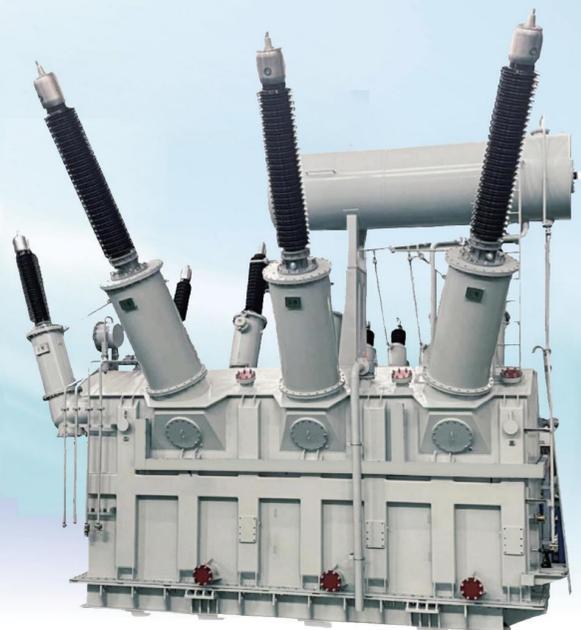
单相美式箱变 051
SINGLE-PHASE PAD-MOUNTED TRANSFORMER

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SINGLE-PHASE POLE-MOUNTED TRANSFORMER

01

POWER TRANSFORMER

电力变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

- 1、超高压变压器，利用日本东芝的分析软件和本公司特有的计算和验证程序，对变压器铁芯、线圈、器身、引线、油箱等部件进行全方位的优化设计及验证，确保产品性能。优越的工艺设备、精心的材料选取、高效的生产制造，使得变压器具有体积小、重量轻、低损耗、低局放、低噪音等特点，产品品质优越、节能环保、安装维护方便，运行可靠并有效地降低了产品运行费用。
 - 2、本公司产品 SSZ20-240000/220 通过国家变压器质量监督检验中心短路承受能力及所有例行型式试验。
 - 3、本产品具有稳定、信赖、经济、环保的特点，适用于发电厂、变电站、大型工矿石化企业等。
1. High-voltage transformer, use Japanese Toshiba analysis software and our company special calculation and validation procedures to the transformer core, winding, structural components, lead, fuel tanks, etc. Parts of the optimal design and carry on the omni-directional validation, ensure product performance. Superior process equipment, elaborate material selection and efficient manufacturing, resulting in a transformer with a small volume, light weight, low loss, low-partial-discharge, low noise characteristics, the product quality is superior, energy conservation and environmental protection, easy installation and maintenance, reliable operation and effectively reduced products running costs.
 2. Our product SSZ20-240000/220 has passed the short-circuit withstand capacity and all routine type tests of the National Transformer Quality Supervision and Inspection Center.
 3. This product is stable, reliable, economical and environmentally friendly, and is suitable for power plants, substations, large industrial and mining petrochemical enterprises, etc.

POWER TRANSFORMER

电力变压器

500kV 油浸式单相双绕组无励磁调压电力变压器

500kV oil-immersed single-phase double-winding unexcited voltage regulating power transformer

额定容量 (MVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range		联结组别 Vector group	空载电流 (%) No Load Current	短路阻抗 (%) Short-circuit impedance	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses													
	高压 HV	分接范围 Tapping range						低压 LV												
100	500/√3 525/√3 535/√3 550/√3	±2×2.5	II0	0.16	14	34	203													
120								13.8、15.75	0.16	39	234									
200								15.75、18、20、24				0.12	63	342						
223								18							0.12	68	371			
240								18、20、24										0.12	72	392
260								18、20												
380					24、27	0.12	102	549												
400									16 或 (or) 18	106	570									
410												108	581							
484														123	657					

500kV 油浸式三相双绕组无励磁调压电力变压器

500kV oil-immersed three-phase double-winding unexcited voltage regulating power transformer

额定容量 (MVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range		联结组别 Vector group	空载电流 (%) No load current	短路阻抗 (%) Short-circuit impedance	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses																	
	高压 HV	分接范围 Tapping range						低压 LV																
120	500 525 550	±2×2.5	YNd11	0.2	14	41	356																	
160								13.8、15.75	0.16	50	441													
240												0.16	69	599										
300															13.8、15.75、18	0.16	80	707						
370																			15.75、18、20	0.12	94	810		
400																							18、20、24	0.12
420					15.75、18、20	0.12	102																	
480								15.75、18、20	0.12	110	954													
600												15.75、18、20、24	0.12	143										
720															18、20、24	0.08	168	1382						
750																			20、22	0.08	173	1422		
780																							22	0.08
860					16 或 (or) 18	190	1575																	
1140								237	1949															
1170										242	1980													

330kV 油浸式三相双绕组无励磁调压电力变压器

330kV oil-immersed three-phase double-winding unexcited voltage regulating power transformer

额定容量 (MVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	短路阻抗 (%) Short-circuit impedance	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
90000	345 363	±2×2.5	10.5 13.8 15.75 18 20	YNd11	0.35 0.35 0.33 0.30 0.27 0.27 0.24 0.24 0.16	14~15	37 47 56 64 80 109 111 118 183	247 306 362 415 515 722 736 780 1212
120000								
150000								
180000								
240000								
360000								
370000								
400000								
720000								

220kV 油浸式三相双绕组无励磁调压电力变压器

220kV oil-immersed three-phase double-winding unexcited voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No Load Current	短路阻抗 (%) Short-circuit impedance	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
31500	220 242	±2×2.5	6.3 6.6 10.5 13.8 10.5 13.8 10.5 13.8	YNd11	0.45 0.45 0.42 0.42 0.38 0.35 0.35 0.32 0.31 0.29 0.26	12~14	15 18 21 25 29 34 41 49 51 56 70	115 134 161 188 213 246 304 360 378 413 484
40000								
50000								
63000								
75000								
90000								
120000								
150000								
160000								
180000								
240000								

330kV 油浸式三相三绕组无励磁调压电力变压器

330kV oil-immersed three-phase three-winding unexcited voltage regulating power transformer

额定容量 (MVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	短路阻抗 (%) Short-circuit impedance	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
90000	330 345	±2×2.5	10.5 13.8 15.75	YNyn0d11	0.37 0.37 0.34 0.34 0.32	高压~中压 HV~MV: 24~26 高压~低压 HV~LV: 14~15 中压~低压 MV~LV: 8~9	42 53 63 72 89	302 374 442 507 629
120000								
150000								
180000								
240000								

220kV 油浸式三相三绕组无励磁调压电力变压器

220kV Oil-immersed three-phase three-winding unexcited voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	短路阻抗 (%) Short-circuit impedance		空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV			升压 Boost	降压 Decompression		
31500	220 230 242	±2×2.5	6.3 6.6 10.5 21 36 37 38.5 10.5, 13.8 21, 36 37, 38.5 10.5 13.8 15.75 21 36 37 38.5	YNyn0d11	0.45 0.4 0.35 0.35 0.31 0.31 0.26 0.26 0.22 0.19	高压~中压 HV~MV: 22~24 高压~低压 HV~LV: 12~14 中压~低压 MV~LV: 7~9	高压~中压 HV~MV: 12~14 高压~低压 HV~LV: 22~24 中压~低压 MV~LV: 7~9	18 21 24 29 37 46 55 62 72 91	138 165 194 231 300 369 438 500 616 726
40000									
50000									
63000									
90000									
120000									
150000									
180000									
240000									
300000									

220kV 油浸式三相双绕组有载调压电力变压器

220kV Oil-immersed three-phase double-winding on-load voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	短路阻抗 (%) Short-circuit impedance	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses					
	高压 HV	分接范围 Tapping range	低压 LV										
31500	220 230	±4×1.25 ±6×1.25 ±8×1.25	6.3 6.6 10.5 21	YNd11	12~14		17	115					
40000							20	134					
50000							24	161					
63000							28	188					
90000							35	246					
120000			43				304						
150000			51				360						
180000			59				413						
120000			低压 LV 66kV 69kV					66 69				45	303
150000												53	355
180000	62	406											
240000	77	504											

220kV 油浸式三相三绕组有载调压电力变压器

220kV Oil-immersed three-phase three-winding on-load voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
31500	220 230	±4×1.25 ±6×1.25 ±8×1.25	6.3 6.6 10.5 21	YNyn0d11	高压~中压 HV~MV: 12~14 高压~低压 HV~LV: 22~24 中压~低压 MV~LV: 7~9		19	138
40000							23	165
50000							26	194
63000							31	231
90000							40	300
120000			51				369	
150000			59				438	
180000			68				538	
240000			85				667	

110kV 油浸式三相双绕组无励磁调压电力变压器

110kV Oil-immersed three-phase double-winding unexcited voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
6300	110 151 121	±2×2.5%	6.3 6.6 10.5	YNd11			4.1	32
8000							4.9	38
10000							5.8	45
12500							6.8	53
16000							8.3	65.7
20000							9.7	79
25000							11.4	94
31500							13.5	111
40000							16.2	133
50000			19.4				158	
63000			22.9				187	
75000			26.0				212	
90000			29.9				245	
120000			37.3				303	
150000			44.1				359	
180000			49.5				411	

110kV 油浸式三相三绕组无励磁调压变压器

110kV Oil-immersed three-phase three-winding unexcited voltage regulator transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	短路阻抗 (%) Short-circuit impedance		空载损耗 (kW) No load Losses	负载损耗 (kW) Load loss
	高压 HV	分接范围 Tapping range	低压 LV			升压 Boost	降压 Decompression		
6300	110 115 121	±2×2.5	36 37 38.5	YNyn0d11			高压~中压 HV~MV: 17.5~18.5 高压~低压 HV~LV: 10.5 高压~中压 HV~MV: 10.5 高压~低压 HV~LV: 17.5~19 中压~低压 MV~LV: 6.5 中压~低压 MV~LV: 6.5	4.9	40
8000								5.8	48
10000								6.9	56
12500								8.1	67
16000								9.8	81
20000								11.6	95
25000								13.5	113
31500								16.2	134
40000								19.1	161
50000								22.9	192
63000								27.1	230

110kV 油浸式三相双绕组有载调压电力变压器

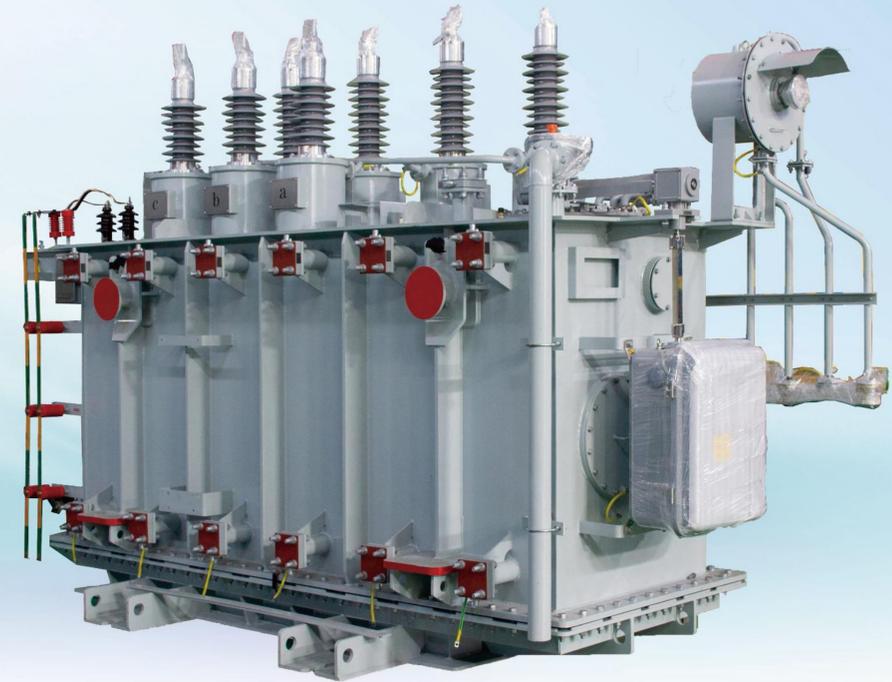
110kV Oil-immersed three-phase double-winding on-load voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
6300	110	±4×1.25 ±6×1.25 ±8×1.25	6.3 6.6 10.5 21	YNd11	0.51	10.5	4.4	32
8000					0.51		5.3	38
10000					0.47		6.2	45
12500					0.47		7.4	53
16000					0.44		8.9	66
20000					0.44		10.6	79
25000					0.41	12.5	94	
31500					0.41	14.9	111	
40000					0.37	17.8	140	
50000					0.37	21.0	175	
63000					0.34	25.0	209	

110kV 油浸式三相三绕组有载调压电力变压器

110kV Oil-immersed three-phase three-winding on-load voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
6300	110	±4×1.25 ±6×1.25 ±8×1.25	6.3 6.6 10.5 11	YNyn0d11	0.61	高压~中压 HV~MV: 10.5 高压~低压 HV~LV: 17.5~19 中压~低压 MV~LV: 6.5	5.3	40
8000					0.61		6.3	48
10000					0.57		7.5	56
12500					0.57		8.9	67
16000					0.54		10.6	81
20000					0.54		12.5	95
25000					0.5		14.9	113
31500					0.5		17.7	134
40000					0.46		21.2	161
50000					0.46		25.0	192
63000					0.42		29.8	230



66kV 油浸式三相双绕组无励磁调压电力变压器

66kV Oil-immersed three-phase double-winding unexcited voltage regulating power transformer

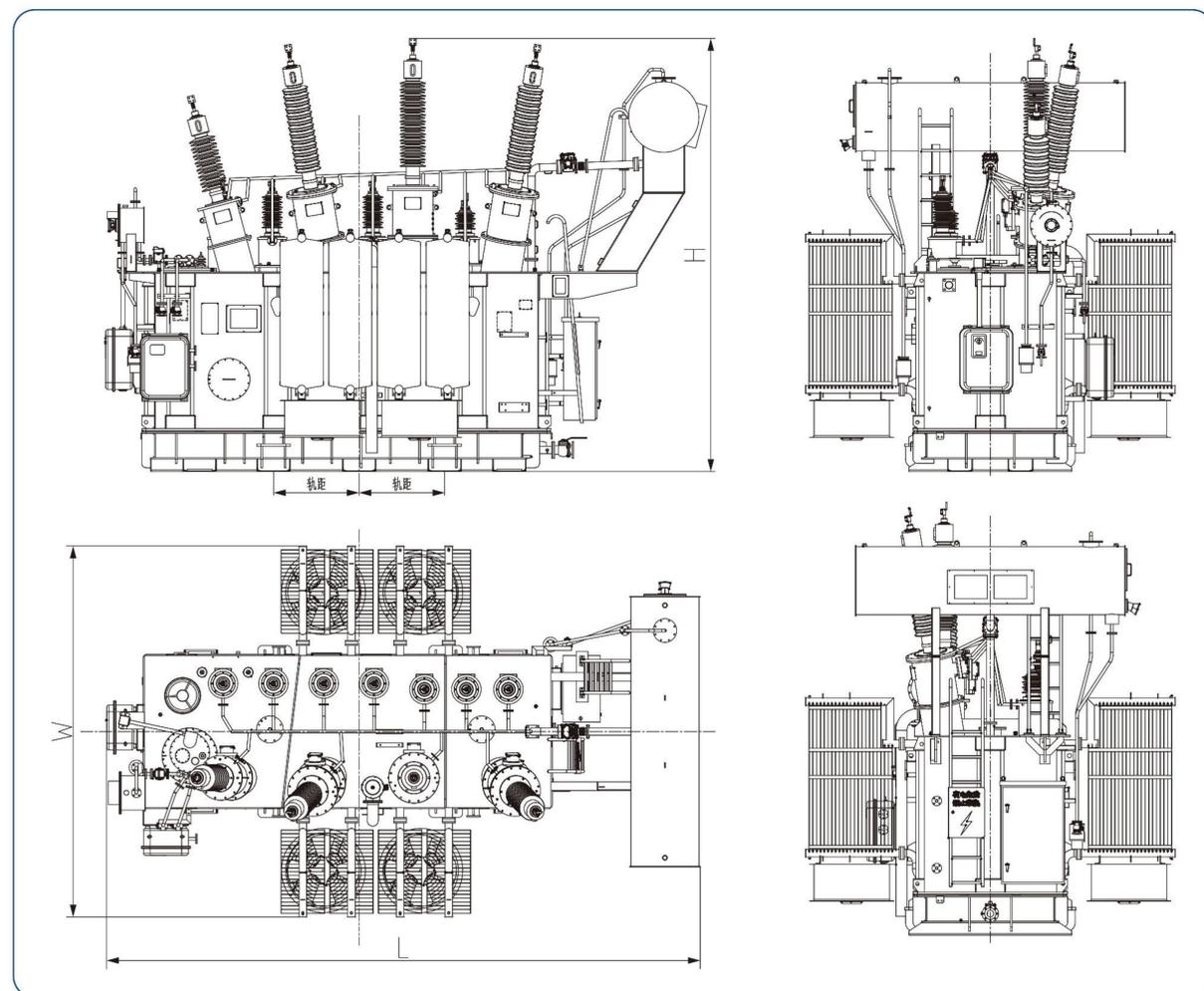
额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No Load Current	阻抗电压 (%) Impedance voltage	空载损耗 (kW)(11) No load Losses	负载损耗 (kW)(11) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
3150	63 66 69	±5	6.3 6.6 10.5	YNd11	0.70	8	2.2	20.7
4000					0.64		2.6	24.6
5000					0.54		3.1	27.6
6300					0.48		4.0	30.8
8000					0.48		4.9	36.5
10000					0.45		5.8	43.0
12500		0.45			6.8	51.1		
16000		0.42			8.3	62.8		
20000		0.42			9.7	76.1		
25000		0.38			11.4	90.0		
31500		0.35			13.5	108.0		
40000		0.35			16.2	126.9		
50000	0.32	19.4	150.3					
63000	0.29	22.9	178.2					

66kV 油浸式三相双绕组有载调压电力变压器

66kV Oil-immersed three-phase double-winding on-load voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No Load Current	阻抗电压 (%) Impedance voltage	空载损耗 (kW)(11) No load Losses	负载损耗 (kW)(11) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
6300				YNd11	0.48	9	4.4	30.8
8000			0.48		5.3		36.5	
10000			0.45		6.2		43.0	
12500			0.45		7.4		51.1	
16000	63	±4×1.25	6.3		0.42		8.9	62.8
20000	66	±6×1.25	6.6		0.42		10.6	76.1
25000	69	±8×1.25	10.5		0.38	12.5	90.0	
31500					0.35	14.8	108.0	
40000					0.35	17.7	126.9	
50000					0.32	20.9	150.3	
63000				0.29	24.7	178.2		

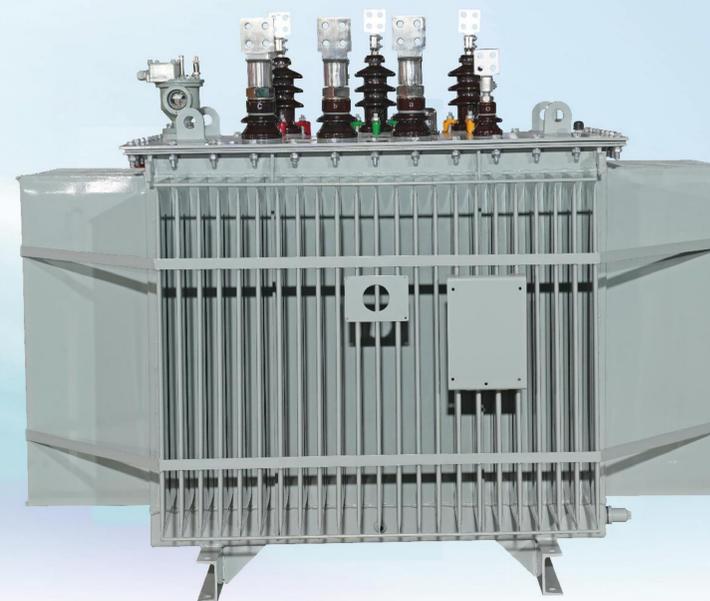
外形安装尺寸参考图 OUTLINE INSTALLATION DIMENSIONS



02

OIL-IMMERSED DISTRIBUTION TRANSFORMER

油浸式配电变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

- 1、经济性能好：空载电流平均下降 60%~80%，空载损耗平均下降 25%~35%。
 - 2、使用寿命长：变压器油箱采用全密封结构，油箱与箱沿可用螺栓连接或焊接，变压器油不与空气接触，延长了使用寿命。
 - 3、运行可靠性高：油箱密封有关零部件进行改进，增加了可靠性，提高工艺水平以保证密封的可靠性。
 - 4、占地面积小：变压器油箱采用波纹板式散热器，当油温变化时波纹板热胀冷缩可取代储油柜的作用，波纹板式油箱外形美观，占地面积小。
1. Good economic performance: The no-load current drops by 60%~80% on average, The no-load loss is reduced by 25%~35% on average.
 2. Long lasting: The transformer oil tank adopts a fully sealed structure. The oil tank and the tank edge can be connected by bolts or welding. The pressure oil does not come into contact with the air, extending the service life.
 3. High operational reliability: The relevant parts of the fuel tank seal have been improved to increase reliability and improve the process level to ensure. Prove the reliability of the seal.
 4. Small footprint: The transformer oil tank adopts a corrugated plate radiator. When the oil temperature changes, the corrugated plate thermal expansion and contraction can replace the role of the oil conservator. The corrugated plate oil tank has a beautiful appearance and a small footprint.

35kV 油浸式三相双绕组无励磁调压电力变压器

35kV oil-immersed three-phase double-winding unexcited voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
3150	35~38.5	±2×2.5	3.15	Yd11	0.36	7.0	1.7	20.7
4000			6.3		0.36		2.0	24.6
5000			10.5		0.36		2.4	28.2
6300			0.36		2.9		31.5	
8000			0.28		4.0		34.6	
10000		±2×2.5	3.15	YNd11	0.28	8.0	4.8	40.8
12500					0.24		5.5	48.4
16000					0.24		6.7	59.2
20000					0.24		7.9	71.6
25000					0.20		9.4	84.6
31500				0.20	10.0	11.1	100.8	

35kV 油浸式三相双绕组有载调压电力变压器

35kV oil-immersed three-phase double-winding on-load regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
3150	35 ~ 38.5	±3×2.5	6.3	Yd11	0.40	7.0	1.8	22.2
4000			10.5		0.40		2.1	26.2
5000			0.40		2.6		30.8	
6300			0.40		3.1		33.0	
8000			0.32		4.3		36.5	
10000		6.3	YNd11	10.5	0.32	7.5或	5.1	43.2
12500					8.0	6.0	51.1	
16000					0.28	7.2	63.3	
20000					0.28	8.5	74.4	
25000					0.24	10.1	88.0	
31500				0.24	10.0	12.0	104.4	

10kV 油浸式三相双绕组无励磁调压配电变压器

10kV oil-immersed three-phase double-winding unexcited voltage regulation distribution transformer energy efficiency class

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No Load Current	阻抗电压 (%) Impedance voltage	空载损耗 (kW)(11) No load Losses	负载损耗 (kW)(11) On load Losses	
	高压 HV	分接范围 Tapping range	低压 LV					Dyn11/Yzn11	Yyn0
30	6	±2×2.5	0.4	Dyn11 Yzn11 Yyn0	1.20	4.0	65	455	430
50					1.04		80	655	625
63					0.96		90	785	745
80					0.96		105	945	900
100					0.88		120	1140	1080
125					0.88		135	1360	1295
160					0.80		160	1665	1585
200					0.80		190	1970	1870
250					0.72		230	2300	2195
315					0.72		270	2760	2630
400					0.64		330	3250	3095
500					0.64		385	3900	3710
630					0.48		460	4460	4460
800					0.48		560	5400	5400
1000					0.48		665	7415	7415
1250	0.40	780	8640	8640					
1600	0.40	940	10440	10440					
2000	0.32	1085	13180	13180					
2500	0.32	1280	15270	15270					

OIL-IMMERSED DISTRIBUTION TRANSFORMER

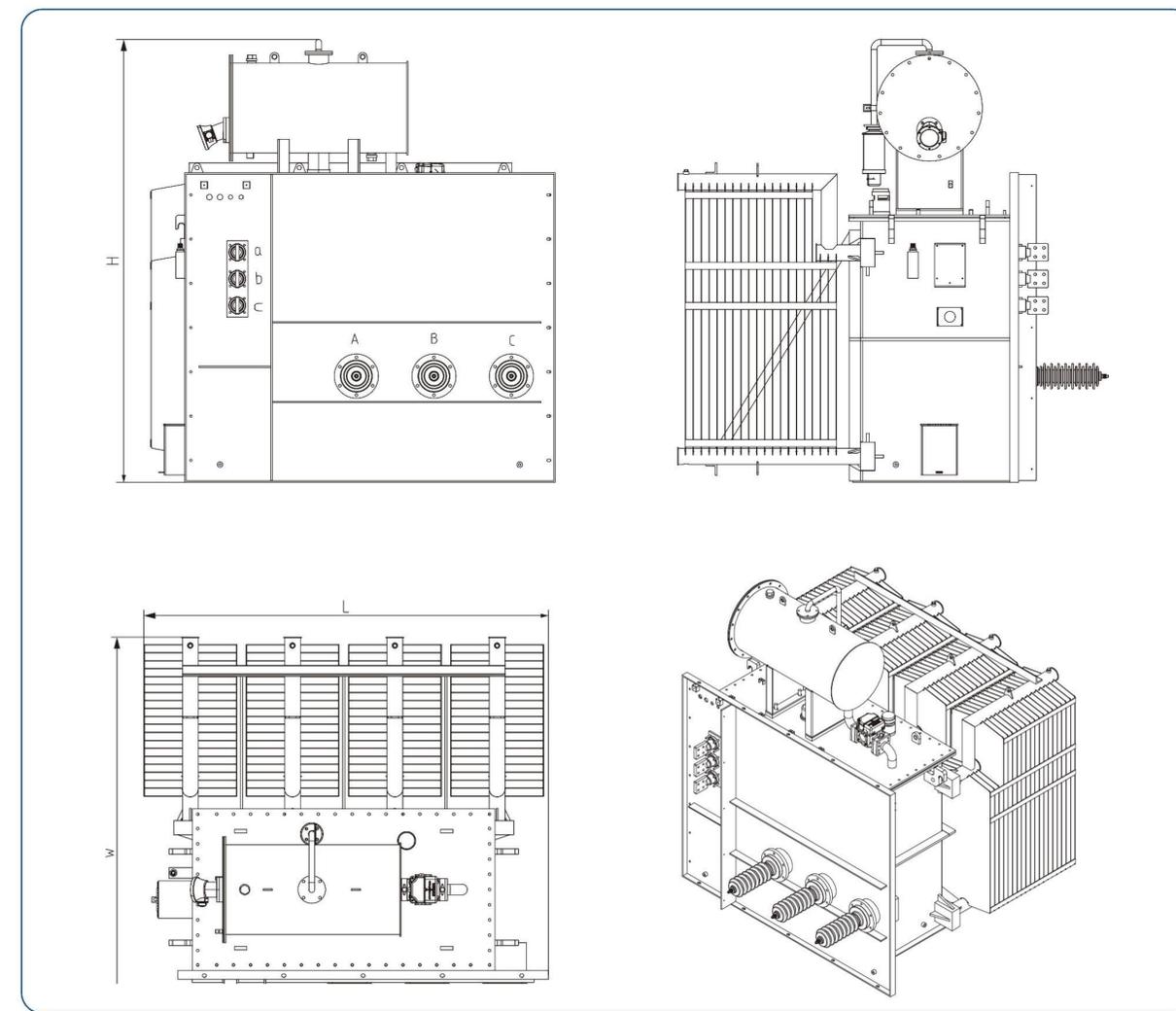
油浸式配电变压器

10kV 油浸式三相双绕组有载调压配电变压器

10kV oil-immersed three-phase double-winding on-load regulating distribution transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load Current	阻抗电压 (%) Impedance voltage	空载损耗 (kW)(11) No load Losses	负载损耗 (kW)(11) On load Losses
	高压 HV	分接范围 Tapping range	低压 LV					
200	6	±4×2.5	0.4	Dyn11 Yyn0	0.80	4.0	0.31	2.90
250					0.72		0.35	3.42
315					0.72		0.43	4.10
400					0.64		0.51	4.95
500					0.64		0.61	5.89
630					0.48	0.77	7.26	
800					0.48	0.90	8.89	
1000					0.48	1.09	10.4	
1250					0.40	1.25	12.3	
1600					0.40	1.54	14.7	
2000	0.32	1.82	18.6					
2500	0.32	2.14	21.6					

外形安装尺寸参考图 OUTLINE INSTALLATION DIMENSIONS



S(B)H15(21~25)-M SEALED AMORPHOUS ALLOY POWER TRANSFORMER

密封式非晶合金电力变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

该产品是全油密封型。原理同密封型电力变压器。非晶合金的基础元素是铁、镍、钴、硼、碳等组成。是一种向同性的软磁材料，磁化功率小，不存在阻碍畴壁移动的结构缺陷。

This product is of fully oil-filled and sealed type. The principle is the same as that of sealed power transformers. The basic elements of amorphous alloys are composed of iron, nickel, cobalt, boron, carbon, etc. It is an isotropic soft magnetic material with low magnetization power and no structural defects that hinder the movement of domain walls.

性能优势 Performance advantage

1. 低损耗：非晶合金材料的磁化性能优于传统硅钢片，空载损耗降低 60%~80%，显著减少电网“待机能耗”。
 2. 高效能：由于损耗降低，减少了发电需求，相应地也减少了二氧化碳等温室气体的排放，具有良好的环保效益，符合节能减排的要求。
 3. 温度稳定性强：非晶合金在宽温度范围内保持稳定磁性能，适应复杂工况。
1. low loss: the magnetization performance of amorphous alloy material is better than that of traditional silicon steel sheet, and the no-load loss is reduced by 60% to 80%, significantly reducing the "standby energy consumption" of the power grid.
 2. high energy efficiency: due to the reduction of loss, reduce the demand for power generation, and correspondingly reduce the emissions of greenhouse gases such as carbon dioxide, with good environmental benefits, in line with the requirements of energy conservation and emission reduction.
 3. strong temperature stability: amorphous alloy in a wide temperature range to maintain stable magnetic properties, adapt to complex conditions.

THREE-DIMENSIONAL CORE

立体卷铁心



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

电力变压器是应用极为广泛的电力基础产品。几十年来，我国和世界各地均长期沿用插片式电力变压器，其性能一直没有得到根本性改善。公司研制的S13-M-RL、S11-M-RL系列立体三角形铁心电力变压器是继插片式、卷铁心电力变压器之后的又一代革命性变压器。是一种结构更合理、性能更优良、节能更显著的新型节能变压器。

随着城乡电网建设与改造以及各项电力工程纷纷上马，如何提高电力变压器的技术含量，更好地贯彻国家节能降耗和环保有关政策，积极推广节能、低耗、环保适用的新产品已经成为摆在我们面前的重要课题。公司研发的立体三角形卷铁心电力变压器是一种使用传统材料，但运行噪音更低、降低损耗和节约材料更出色，完全符合国际和国内低碳经济和节能减排的方针和政策。该产品已纳入国家能效电厂选用的第一批节能产品；国家资源节约和环境保护中央预算投资项目；国家经贸委、原国电公司先后发文推广这一节能产品；沈变所也将三角形铁心变压器作业插片式、平面卷铁心电力变压器的更新换代产品进行推广。

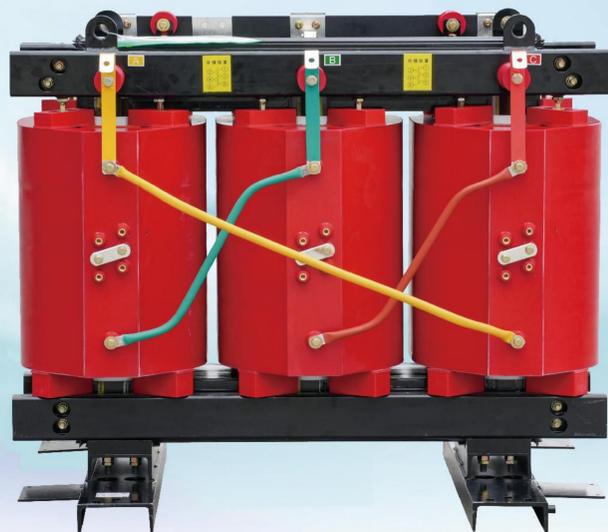
Power transformers are the most widely used basic products for electric power. For decades, China and all over the world have been using plug-in power transformers for a long time, and their performance has not been fundamentally improved. The S13-M-RL and S11-M-RL series three-dimensional triangular core power transformers developed by the company are another generation of revolutionary transformers after the plug-in and coiled core power transformers. It is a new type of energy-saving transformer with more reasonable structure, better performance and more significant energy saving.

With the construction and transformation of urban and rural power grids and various power projects, how to improve the technical content of power transformers, better implement the relevant policies of national energy conservation and environmental protection, and actively promote new products that are energy-saving, low-consumption and environmentally friendly have become important topics in front of us. The three-dimensional triangular coiled core power transformer developed by the company is a kind of traditional material, but the operating noise is lower, the loss is reduced and the material saving is better, which is fully in line with the international and domestic guidelines and policies of low-carbon economy and energy conservation and emission reduction. The product has been included in the first batch of energy-saving products selected by the national energy efficiency power plant; National resource conservation and environmental protection central budget investment projects; The State Economic and Trade Commission and the former Guodian Company have successively issued documents to promote this energy-saving product; The institute will also promote the replacement products of the triangular core transformer operation plug-in type and planar coil core power transformer.

03

DRY-TYPE TRANSFORMER

干式变压器



助力低碳电力为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

- 1、安全，难燃防火，无污染，可直接安装在负荷中心。
 - 2、免维修、安装简便、综合运行成本低。
 - 3、防潮性能好，可在100%湿度下正常运行，停运后不经预干燥即可投入运行。
 - 4、损耗低，局部放电电量低、噪音小、散热能力强，强迫风冷条件下可以150%额定负载运行。
 - 5、配备有完善的温度保护控制系统，为变压器安全运行提供可靠保障。
 - 6、可靠性高，据对已经投入运行的产品的运行研究，产品的可靠性指标已经达到国际水平。
1. Safe, flame retardant, fireproof, pollution-free, can be directly installed in the load center.
 2. Maintenance-free, easy installation, low comprehensive operating cost.
 3. It has excellent moisture-proof performance, can operate normally at 100% humidity, and can be put into operation without pre-drying after shutdown.
 4. Low loss, low partial discharge, low noise, strong heat dissipation capacity, and can run at 150% rated load under forced air cooling.
 5. Equipped with a complete temperature protection control system to provide reliable guarantee for the safe operation of the transformer.
 6. High reliability, according to the operation research of the products that have been put into operation, the reliability index of the products has reached the international level.

产品概述 OVERVIEW

- 1、35kV 干式无励磁调压电力变压器
 - 2、35kV 干式有载调压电力变压器
 - 3、35kV干式三相双绕组无励磁调压新能源发电侧光伏用、风电用、储能用变压器
 - 4、20kV 干式无励磁调压配电变压器
 - 5、10kV 干式三相双绕组无励磁调压配电变压器
 - 6、10kV干式三相双绕组无励磁调压新能源发电侧光伏用、风电用、储能用变压器
1. 35kV dry-type non-excitation voltage regulating power transformer
 2. 35kV dry-type on-load voltage regulating power transformer
 3. 35kV dry-type three-phase double-winding transformer for photovoltaic, wind power and energy storage on the new energy power generation side without excitation voltage regulation
 4. 20kV dry-type non-excitation voltage regulating distribution transformer
 5. 10kV dry-type three-phase double-winding non-excitation voltage regulating distribution transformer
 6. 10kV dry-type three-phase double-winding transformer for photovoltaic, wind power and energy storage on the new energy power generation side

DRY-TYPE TRANSFORMER

干式变压器

35kV 干式无励磁调压电力变压器 35kV dry-type unexcited voltage regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses		
	高压 HV	分接范围 Tapping range	低压 LV					B (100 °C)	F (120°C)	H (145°C)
800	35 36 37 38.5	±2×2.5% ±5	3.15 6 6.3 10 10.5 11	Dyn11 Yd11 Yyn0	0.85	6.0	2.02	8.87	9.4	10.0
1000							2.40	10.3	10.9	11.6
1250							2.81	12.1	12.9	13.8
1600							3.32	14.6	15.4	16.5
2000					3.80	17.2	18.2	19.5		
2500					4.37	20.6	21.8	23.3		
3150					5.42	23.1	24.5	26.2		
4000					6.31	27.7	29.4	31.5		
5000			7.53	32.9	34.9	37.4				
6300			8.91	38.5	40.8	43.7				
8000			10.1	43.4	46.0	49.3				
10000			11.6	52.4	55.5	59.4				
12500			14.1	60.9	64.6	69.1				
16000			17.3	71.7	76.0	81.3				
20000			20.6	80.6	85.5	91.5				
25000			24.3	95.3	101	108				

35kV 干式有载调压电力变压器 35kV dry load regulating power transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load Losses	负载损耗 (kW) On load Losses		
	高压 HV	分接范围 Tapping range	低压 LV					B (100 °C)	F (120°C)	H (145°C)
2000	35 36 37 38.5	±4×2.5%	6 6.3 10 10.5 11	Dyn11 Yd11	0.65	7.0	4.05	17.9	19.0	20.3
2500							4.69	21.3	22.6	24.2
3150							5.67	24.0	25.4	27.2
4000							6.64	28.7	30.4	32.6
5000					7.85	34.0	36.1	38.6		
6300					9.27	39.4	41.8	44.7		
8000					10.6	44.8	47.5	50.8		
10000					12.1	53.9	57.1	61.2		
12500					14.7	62.7	66.5	71.1		
16000					18.1	73.8	78.2	83.7		
20000					21.4	83.0	88.0	94.2		
25000					25.2	98.2	104	111		

20kV 干式无励磁调压配电变压器

20kV dry non-exciting voltage regulating distribution transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (W) No load Losses	负载损耗 (W) On load Losses		
	高压 HV	分接范围 Tapping range	低压 LV					B (100 °C)	F (120°C)	H (145°C)
50	20 22 24	±2.5 ±5	0.4	Yyn0 Dyn11	1.8	6.0	0.305	1.16	1.23	1.31
100					1.6		0.485	1.87	1.99	2.13
160					1.4		0.600	2.33	2.47	2.64
200					1.4		0.655	2.77	2.94	3.14
250					1.2		0.755	3.22	3.42	3.66
315					1.2		0.870	3.85	4.08	4.36
400		1.0			1.03		4.65	4.84	5.18	
500		1.0			1.21		5.46	5.79	6.19	
630		0.90			1.37		6.45	6.84	7.32	
800		0.90			1.57		7.79	8.26	8.84	
1000		0.80			1.86		9.22	9.78	10.4	
1250		0.80			2.14		10.8	11.5	12.3	
1600		0.80			2.51		13.0	13.8	14.8	
2000		0.60			2.91		15.4	16.3	17.5	
2500		0.60			3.48		18.2	19.3	20.7	
2000		0.60			2.91		16.8	17.8	19.1	
2500		0.60			3.48		20.0	21.2	22.7	

10kV 干式三相双绕组无励磁调压配电变压器

10kV dry three-phase double-winding non-excitation regulating distribution transformer

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (W) No load Losses	负载损耗 (W) On load Losses		
	高压 HV	分接范围 Tapping range	低压 LV					B (100 °C)	F (120°C)	H (145°C)
30	6 6.3 6.6 10 500 630 11	±2.5 ±5	0.4	Yyn0 Dyn11	2.0	4.0	105	605	640	685
50					2.0		155	845	900	965
80					1.5		210	1160	1240	1330
100					1.5		230	1330	1415	1520
125					1.3		270	1565	1665	1780
160					1.3		310	1800	1915	2050
200		1.1			360		2135	2275	2440	
250		0.90			415		2330	2485	2665	
315		0.80			510		2945	3125	3355	
400		0.80			570		3375	3590	3850	
500		0.80			670		4130	4390	4705	
630		0.70			775		4975	5290	5660	
630		0.70			750		5050	5365	5760	
800		0.70			875		5895	6265	6715	
1000		0.70			020		6885	7315	7885	
1250		0.70			1205		8190	8720	9335	
1600		0.70			1415		9945	10555	11320	
2000		0.60			1760		12240	13005	14005	
2500	0.60	2080	14535	15445	16605					

DRY-TYPE TRANSFORMER

干式变压器

35kV 干式三相双绕组无励磁调压新能源发电侧光伏用、风电用、储能用变压器

35kV dry three-phase double-winding non-exciting voltage regulation new energy generation side for photovoltaic, wind power, energy storage transformers

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (W) No load Losses	负载损耗 (W) On load losses						
	高压 HV	分接范围 Tapping range	低压 LV					B (100 °C)	F (120°C)	H (145°C)				
1000	35~38.5	±2×2.5 ±5	0.4~1.14	Dyn11 Yd11 Yyn0	0.85	6.0~14.0	1.4	8.8	9.4	10.1				
1250					0.75		1.6	10.7	11.4	12.2				
1600					0.75		1.9	13.1	13.9	14.9				
2000					0.65		2.2	15.4	16.4	17.5				
2500					0.65		2.6	18.5	19.6	21.0				
3000					0.60		3.2	20.3	21.6	23.1				
3150					0.60		3.5	20.7	22.1	23.5				
4000					0.60		4.1	24.9	26.5	28.2				
4500					0.55		4.4	27.4	29.1	31.1				
5000					0.55		4.8	29.6	31.4	33.6				
6300					0.55		5.7	34.6	36.7	39.2				
8000					0.45		6.9	41.7	44.3	47.3				
10000				0.45	8.2		49.0	52.1	55.7					
								Dyn11 Yd11 YNd11						

10kV 干式三相双绕组无励磁调压新能源发电侧光伏用、风电用、储能用变压器

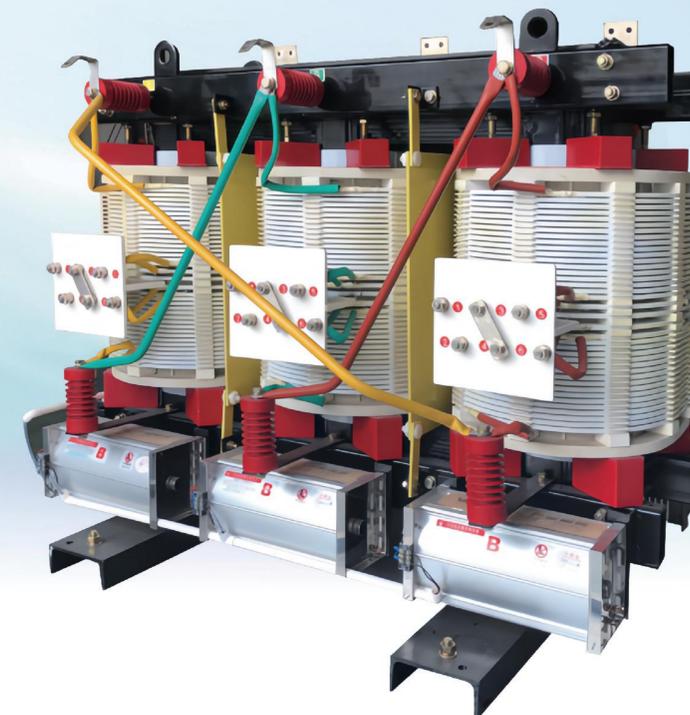
10kV dry three-phase double-winding non-exciting voltage regulation new energy generation side for photovoltaic, wind power, energy storage transformers

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range			联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load Losses	负载损耗 (W) On load losses		
	高压 HV	分接范围 Tapping range	低压 LV					B (100 °C)	F (120°C)	H (145°C)
500	10~12	±5 ±2×2.5%	0.4~1.14	Dyn11 Yyn0	0.80	4.0~10.0	670	4130	4390	4705
630					0.70		775	4975	5290	5660
800					0.70		875	5895	6265	6715
1000					0.70		1020	6885	7315	7885
1250					0.70		1205	8190	8720	9335
1600					0.70		1415	9945	10555	11320
2000					0.60		1760	12240	13005	14005
2500					0.60		2080	14535	15445	16605
3150					0.50		2520	17950	19095	20490

**SC(B)H15(17~19) AMORPHOUS ALLOY
DRY TYPE TRANSFORMER**
非晶合金干式变压器



SG(B)12~18 NON-ENCAPSULATED H-CLASS DRY-TYPE TRANSFORMER
非包封H级干式电力变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

非晶合金干式变压器是节能型干式变压器。非晶合金干式变压器的铁心采用非晶合金材料，这种材料具有低损耗、高电阻率、低矫顽力等特点。本产品具有空载损耗低、无油、阻燃自熄、耐潮、抗裂和免维修等优点。凡是现在使用普通干变的场所都可由非晶干变所取代，可用于高层建筑、商业中心、地铁、机场、车站、工矿企业和发电厂。特别是在一些对能耗要求严格的领域，如数据中心、通信基站等，非晶合金干式变压器更是选用产品。

Amorphous alloy dry-type transformers are energy-saving dry-type transformers. The core of amorphous alloy dry-type transformers is made of amorphous alloy materials, which feature low loss, high resistivity and low coercive force. This product features low no-load loss, oil-free, flame retardant and self-extinguishing, moisture resistance, crack resistance and maintenance-free advantages. All the places that are currently using ordinary dry transformers can be replaced by amorphous dry transformers, which can be used in high-rise buildings, commercial centers, subways, airports, stations, industrial and mining enterprises and power plants. Especially in some fields with strict energy consumption requirements, such as data centers and communication base stations, amorphous alloy dry-type transformers are the preferred products.

产品概述 OVERVIEW

SGB系列非包封H级干式变压器采用(德国) MORA 干式变压器特殊的工艺技术，使产品完全达到防火防水及符合环境保护的要求。它是配电系统的理想产品，被广泛应用在地铁、船舶、矿山、化工、电力企业及人员密集的建筑群等各种对安全防火有特殊要求的场合。

SGB series non-encapsulated H-class dry-type transformer adopts the special process technology of (Germany) MORA dry-type transformer, so that the product can fully meet the requirements of fireproof, waterproof and environmental protection. It is an ideal product for power distribution system, and is widely used in subways, ships, mines, chemical industries, power enterprises and densely populated buildings and other occasions with special requirements for safety and fire protection.

CSD MARINE TRANSFORMER

船用变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

环境条件 ENVIRONMENTAL CONDITION

- | | |
|---|---|
| <ol style="list-style-type: none"> 1、船舶远离陆地; 2、环境温度-25~45°C,工频50~60Hz; 3、空气相对湿度不大于95%; 4、有凝露,盐雾和霉菌的影响; 5、有船舶正常营运时产生的振动和冲击; 6、船舶运行时摇摆角度为22.5°,倾斜角度为15°; 7、使用于船舶,海洋平台及其它场所上的照明、配电、或电网隔离用的变电设备;船舶照明变压器是重要的设备。 8、安全、可靠性能要求高(防护等级) 9、执行标准:CB/T 1001-92; 10、正常两台三相变压器:——互为备用。 | <ol style="list-style-type: none"> 1. The ship is far from land; 2. Ambient temperature -25~45°C, power frequency 50~60Hz; 3. The relative humidity of the air is not more than 95%; 4. There are effects of condensation, salt spray and mold; 5. There is vibration and shock generated during the normal operation of the ship; 6. The rocking angle of the ship is 22.5 ° and the tilt angle is 15 °; 7. Substation equipment used for lighting, power distribution, or grid isolation on ships, offshore platforms and other places; Ship lighting transformers are important equipment. 8. High requirements for safety and reliable performance (protection level) 9. Executive standard: CB/T 1001-92; 10. Normal two three-phase transformers: —— Mutual backup. |
|---|---|

SCB THREE-DIMENSIONAL CORE TRANSFORMER

SCB 立体卷铁心变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品用途 PRODUCT USE

该产品绝缘性能好,机械强度高,耐潮湿,无污染,易安装,基本不需要维护。适用于高层建筑、风力发电、太阳新能源、医院、宾馆、隧道、车站、码头、机场、地铁、石油、化工、试验室、组合电站、购物中心等重要场所。

The product has good insulation performance, high mechanical strength, moisture resistance, no pollution, easy installation, and basically no maintenance. It is suitable for high-rise buildings, wind power generation, solar new energy, hospitals, hotels, tunnels, stations, docks, airports, subways, petroleum, chemical, laboratory, combined power stations, shopping centers and other important places.

使用条件 CONDITIONS OF USE

- | | |
|--|--|
| <ol style="list-style-type: none"> 1、海拔高度
1000米及以下; 2、冷却空气温度
最高气温: 40°C
最热月平均温度: 30°C
最高年平均温度: 20°C
最低气温: -25°C (适用于户外式变压器)
最低气温: -5°C (适用于户内式变压器) 3、湿度
周围空气相对湿度应低于93%,线圈表面不应出现水滴。
如使用条件超出上述要求时,应对运行参数(如输出电流等)进行适当调整并采取适当保护措施以保证产品运行寿命和安全性。 | <ol style="list-style-type: none"> 1. Altitude
1000 meters and below; 2, cool the air temperature
Maximum temperature: 40 °C
The average temperature of the hottest month is 30 °C
Maximum annual average temperature: 20 °C
Minimum temperature: -25 °C (suitable for outdoor transformer)
Minimum temperature: -5 °C (for indoor transformer) 3. Humidity
The relative humidity of the surrounding air should be lower than 93%, and there should be no water droplets on the coil surface.
If the use conditions exceed the above requirements, the operating parameters (such as output current, etc.) should be properly adjusted and appropriate protection measures should be taken to ensure the product operating life and safety and reliability. |
|--|--|

SGB THREE-DIMENSIONAL CORE TRANSFORMER

SGB 立体卷铁心变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

立体卷铁心变压器关键部件是立体卷绕式铁心，整个铁心由三个完全相同的单框拼合而成，呈等边三角形立体排列，每个单框由若干根梯形料带依次连续卷绕而成，卷绕后单框横截面接近半圆形，拼合后横截面呈非常接近整圆形的准多边形。整个磁路中卷绕紧密，无空气隙，硅钢带高磁方向和磁路方向完全一致，磁阻小，三相磁路长短一致，从而使三相平衡，减少变压器三次谐波等，节省材料提高性能降低损耗，降低空载电流，降低运行噪音等这些优点。

The key component of the three-dimensional core transformer is the three-dimensional wound core, the whole core is composed of three identical single frames, which are arranged in an equilateral triangle, each single frame is continuously wound by a plurality of trapezoidal strips in turn, and the cross-section of the single frame is close to a semicircle after winding, and the cross-section is a quasi-polygon that is very close to a whole circle after being assembled. The whole magnetic circuit is tightly wound, there is no air gap, the direction of high permeability and the direction of the magnetic circuit of the silicon steel belt are completely consistent, the reluctance is small, and the length of the three-phase magnetic circuit is consistent, so that the three-phase balance, reduce the third harmonic of the transformer, save materials, improve performance, reduce losses, reduce no-load current, reduce operating noise and other advantages.

04

NEW ENERGY TRANSFORMER

新能源变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

新能源变电站是专为新能源发电系统设计的电力转换和配电设备，主要用于将新能源发电系统产生的低压交流电转换为中压或高压交流电，并将电能馈入国家电网。它广泛应用于石油、化工、钻井平台、城区、农村等10~110kV中小型变(配)电所、厂矿及流动作业用变电所的建设与改造。本产品具有智能化、节能环保、优良电气性能、创新性结构设计等特点。

The new energy substation is a power conversion and distribution equipment specially designed for the new energy power generation system, which is mainly used to convert the low-voltage alternating current generated by the new energy power generation system into medium-voltage or high-voltage alternating current, and feed the electric energy into the national grid. It is widely used in the construction and transformation of 10~110kV small and medium-sized substations (distribution), factories and mines and mobile operations in petroleum, chemical industry, drilling platforms, urban areas, rural areas, etc. This product has the characteristics of intelligence, energy saving and environmental protection, excellent electrical performance, and innovative structural design.

35kV 油浸式三相双绕组无励磁调压新能源发电侧光伏用、风电用、储能用变压器

35kV oil-immersed three-phase double-winding non-exciting voltage regulation new energy generation side for photovoltaic, wind power, energy storage transformers

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range		联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (kW) No load losses	负载损耗 (W) On load losses		
	高压 HV	分接范围 Tapping range						低压 LV	
1000	35~38.5	±2×2.5 ±5	Yd11	0.52	6.0~14.0	0.6	10.4		
1250				0.44		0.8	12.5		
1600				0.36		0.9	14.9		
2000				0.36		1.2	16.5		
2500				0.36		1.4	17.6		
3000				0.36		1.6	20.3		
3150				0.36		1.7	20.7		
4000				0.36		2.0	24.6		
4500				0.36		2.2	27.1		
5000				0.36		2.4	28.2		
5500				0.36		2.6	30.3		
6300				0.36		2.9	31.5		
8000				±2×2.5		YNd11	0.28	4.0	34.6
10000							0.28	4.8	40.8
12500	0.24	5.6	50.7						

10kV 油浸式三相双绕组无励磁调压新能源发电侧光伏用、风电用、储能用变压器

10kV oil-immersed three-phase double-winding non-exciting voltage regulation new energy generation side for photovoltaic, wind power, energy storage transformers

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range		联结组别 Vector group	空载电流 (%) No load current	阻抗电压 (%) Impedance voltage	空载损耗 (W) No load losses	负载损耗 (75°C)(kW) On load losses
	高压 HV	分接范围 Tapping range					
500	10~12	±2×2.5 ±5	Yd11 Dy11	0.64	4.0~8.0	385	3900
630				0.48		460	4460
800				0.48		560	5400
1000				0.48		665	7415
1250				0.4		780	8640
1600				0.32		940	10440
2000				0.32		1085	13180
2500				0.32		1280	15270
3000				0.32		1547	16797
3150				0.32		1606	17978

PREFABRICATED CABIN SUBSTATION

预制舱式变电站



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

预制式模块化变电站通常采用“整站”设备预制的模式，即将高压开关配电装置、变压器、中压开关配电装置、补偿装置、综合自动化系统、交直流电源系统、环境控制系统和舱体进行集成化设计，所有站用设备在工厂内预制安装完毕，调试合格后，分模块运输到现场对接、安装、调试即可投运。

预制式模块化变电站充分发挥“提高建设效率、节省建筑占地、节约运维成本、降低能耗、降低污染”等方面的显著优势，在电力、石油、化工、船舶、通讯、民用建筑、铁路建设领域得到了广泛应用。同时，随着站内电力设备技术的成熟及发展，变电站设备将越来越趋于小型化和高可靠性，将进一步提升预制式模块化变电站的可靠性和适用性，在新基建领域也必将有广阔的应用前景。

Prefabricated modular substation usually adopts the mode of "whole station" equipment prefabrication, that is, high voltage switch distribution device, transformer, medium voltage switch distribution device, compensation device, integrated automation system, AC and DC power supply system, environmental control system and cabin body are integrated design, all station equipment is prefabricated and installed in the factory, and debugging is qualified. Sub-module transport to the site docking, installation, commissioning can be put into operation.

Prefabricated modular substation gives full play to the significant advantages of "improving construction efficiency, saving building land, saving operation and maintenance costs, reducing energy consumption, and reducing pollution", and has been widely used in the fields of power, petroleum, chemical industry, shipbuilding, communications, civil construction, and railway construction. At the same time, with the maturity and development of power equipment technology in the station, substation equipment will become more and more miniaturized and highly reliable, which will further improve the reliability and applicability of prefabricated modular substation, and will have broad application prospects in the field of new infrastructure.

INTEGRATED INVERTER AND STEP-UP CONVERTER

逆变升压一体机



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

逆变升压一体机是一种集成逆变器与升压变压器功能的电力设备，主要用于将直流电转换为高压交流电，以满足电网接入或大功率用电需求。其具备高效转换、集成化设计、智能控制、宽输入电压范围、高可靠性与环保性等核心特性。可应用于可再生能源领域和工业与电力系统等场景。逆变升压一体机作为可再生能源系统的核心设备，凭借高效、集成、智能等优势，在光伏、风电、储能等领域发挥关键作用，未来将向更大容量、更高可靠性及多场景适配方向演进。

The inverter and step-up all-in-one machine is a kind of power equipment that integrates the functions of inverter and step-up transformer, which is mainly used to convert direct current into high-voltage alternating current to meet the power grid access or high-power power demand. It has core characteristics such as high efficiency conversion, integrated design, intelligent control, wide input voltage range, high reliability and environmental protection. It can be applied to the field of renewable energy, industrial and power systems, and other scenarios. As the core equipment of the renewable energy system, the inverter booster machine plays a key role in photovoltaic, wind power, energy storage and other fields with the advantages of high efficiency, integration and intelligence, and will evolve to larger capacity, higher reliability and multi-scenario adaptation in the future.

05

MINE TRANSFORMER

矿用变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

矿用干式变压器是一种专为矿井下等特殊环境设计的电气设备，具有防爆、防火、防潮等特点，能够在恶劣的环境中稳定运行。矿用干式变压器是专门用于矿井下的供电设备，适用于无甲烷、煤尘等爆炸性危险的矿井。其主要用途是为井下中央变电所、井底车场、总进风道和主要进风道等场所提供电力。

Dry-type mine transformer is an electrical equipment specially designed for special environments such as mines, with explosion-proof, fireproof, moisture-proof and other characteristics, and can operate stably in harsh environments. Mine dry-type transformer is specially used for power supply and distribution equipment in mines, suitable for mines without explosive hazards such as methane and coal dust. Its main purpose is to provide power for underground central substation, underground parking lot, main air inlet duct and other places.

使用条件 Conditions of use

本产品以下使用条件和额定容量下持续长期工作。

- 1、海拔不超过 2000m;
- 2、环境温度不高于 +40°C;
- 3、空气相对湿度不超过 95%(+25°C时);
- 4、无强烈颠簸震动和垂直面的倾斜度≤15°的环境;
- 5、无足以腐蚀金属和破坏绝缘的气体及蒸气;
- 6、无滴水的地方。

This product will continue to work for a long time under the following conditions of use and rated capacity.

1. The altitude does not exceed 2000m;
2. The ambient temperature is not higher than +40°C;
3. The relative humidity of the air does not exceed 95% (at +25°C);
4. No strong bump vibration and inclination of the vertical plane ≤ 15° environment;
5. There are no gases and vapors sufficient to corrode metals and destroy insulation;
6. A place without dripping water.

10000V

矿用变压器 Mine transformer

额定容量 (kVA) Rated capacity	空载电流 (%) No load current	短路阻抗 (%) Short-circuit impedance	空载损耗 (W) No load losses	负载损耗 (W) On load losses	
50	2.5	4	350	680	
100	2.5		500	1050	
200	2		850	1800	
315	1.8		1200	2500	
400	1.8		1350	3000	
500	1.5		1600	3500	
630	1.5		1800	4100	
800	1.2		2100	5100	
1000	1.2		4.5	2350	6100
1250	1.0			2800	7400
1600	1.0	5	3450	8500	
2000	0.7		4050	9700	
2500	0.7	5.5	4700	10800	
3150	0.7		5500	12800	
4000	0.7	6	6300	15000	
5000	0.6		7300	17600	
6300	0.6		8500	20000	

6000V

矿用变压器 Mine transformer

额定容量 (kVA) Rated capacity	空载电流 (%) No load current	短路阻抗 (%) Short-circuit impedance	空载损耗 (W) No load losses	负载损耗 (W) On load losses
50	2.5	4	310	550
100	2.5		470	920
200	2		740	1550
315	1.8		990	2150
400	1.8		1170	2600
500	1.5		1350	3100
630	1.5		1620	3680
800	1.0		1850	4500
1000	1.0		2100	5400
1250	1.0		2480	6500
1600	0.8	3000	8000	
2000	0.6	4.5	3400	9500
2500	0.6	5	4050	10600
3150	0.6	5.5	4750	12500
4000	0.6	6	5500	14000
5000	0.5		6400	15800
6300	0.5		7600	18000

BURIED TRANSFORMER

地埋式变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

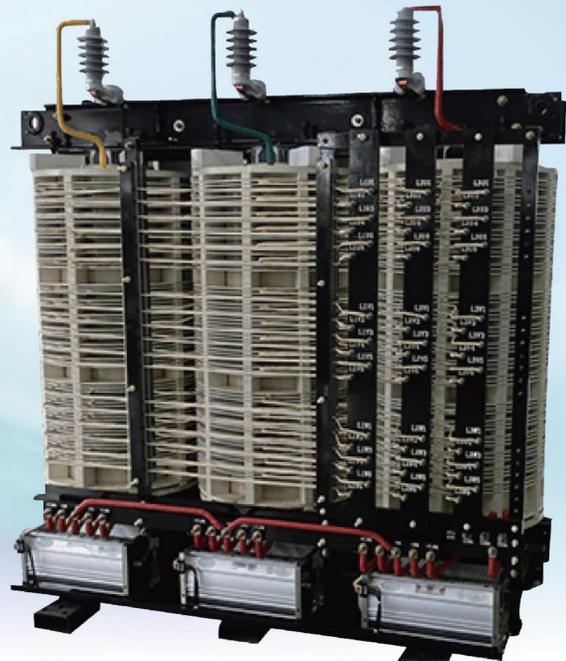
地埋式变压器是一种可安装在地坑内的配电变压器或组合变压器，可实现将变压器、高压负荷开关和保护用熔断器等安装在油箱之中的紧凑组合配电设施。引用标准：JB/T 10544-2006。

地埋式变压器既可用于道路、桥梁、隧道等长距离、小负荷的高压输电系统、架空线入地下工程的组合式变压器及小区供电系统。广泛用于供电可靠性高、对周围环境无影响、三组 50HZ、电压等级 10kV 及以下的地下输配电网络，供城市干道、机场、大桥、隧道、大型绿地、园区等场合动力分配及照明之用。预装地埋式变压器箱式变电站由地埋式变压器、广告灯箱式开关柜和预制式地坑组合而成，是在工厂预先装配、出厂试验合格的成套设备。产品由地表以下和地表以上的两部分设备组成，地表以下部分包括预制式（或现场混凝土浇筑）地坑和地埋式变压器，地表以上部分包括广告灯箱式（或传统）户外开关设备和通风散热通道。产品适合城市各种配电系统，特别是电缆地下化改造等市政建设电力配套工程。

The buried transformer is a distribution transformer or combination transformer that can be installed in the pit, which can realize the compact combined distribution facilities such as transformers, high-voltage load switches and protection fuses installed in the tank. Citation Standard: JB/T 10544-2006. Buried transformer can be used in road, bridge, tunnel and other long distance, small load high-voltage transmission system, overhead line into the underground project combined transformer and community power supply system. It is widely used in underground transmission and distribution networks with high power supply reliability, no impact on the surrounding environment, three groups of 50HZ, voltage level 10kV and below, for urban arterial roads airports, bridges, tunnels, large green spaces, parks and other fields for cooperative power distribution and lighting. The box-type substation, which is a complete set of equipment pre-assembled in factory and qualified in factory test, is composed of the buried transformer, the advertising light box switchgear and the prefabricated pit. The product is composed of two parts of equipment below the surface and above the surface, the below surface part includes prefabricated(or on-site concrete casting) pit and buried transformer, and the above surface part includes advertising light box type (or traditional) outdoor switchgear and ventilation and heat dissipation channels. The products are suitable for all kinds of power distribution systems in cities, especially for cable underground transformation and other municipal construction power supporting projects.

PHASE-SHIFTING RECTIFIER TRANSFORMER

移相整流变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

移相整流变压器是一种专门为中高压变频器提供多相整流电源的装置，特别在当今变频调速技术的成熟发展，急需移相整流变压器的国产化。顺应市场需求，在主导产品非密封干式变压器技术的基础上成功研制出系列多绕组移相整流变压器，并已成功运用于众多工程中。它采用延边三角形移相原理，通过多个不同的移相角二次绕组，可以组成等效相数为9相、12相、15相、18相、24相以及27相等整流变压器。

Phase-shifting rectifier transformer is a device that provides multi-phase rectifier power supply for medium and high voltage frequency converter, especially in the mature development of frequency conversion speed regulation technology, it is urgent to localize phase-shifting rectifier transformer. In line with the market demand, on the basis of the leading product non-encapsulated dry transformer technology, we have successfully developed a series of multi-winding phase-shifting rectifier transformers, and have been successfully applied in many projects. It adopts the principle of extended triangle phase shifting, and through a number of different phase shift angle secondary windings, the equivalent phase number can be composed of 9 phase, 12 phase, 15 phase, 18 phase, 24 phase and 27 equal rectifier transformers.

性能特点 PERFORMANCE CHARACTERISTICS

- | | |
|-------------------------|--|
| 1、机械强度高，承受短路能力强，运行安全可靠； | 1. High mechanical strength, strong short-circuit resistance, and safe and reliable operation; |
| 2、噪音低、体积小、安装简便、免维护； | 2. Low noise, small size, easy installation and maintenance-free; |
| 3、绝缘水平高、局部放电小，产品寿命长； | 3. High insulation level, low partial discharge, and long product service life; |
| 4、耐潮湿、耐热冲击、防火能力强。 | 4. It has strong moisture resistance, heat shock resistance and fire resistance. |

ELECTRIC FURNACE TRANSFORMER

电炉变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

专为各种电炉提供电源的变压器。电阻炉变压器用于机械零件加热、热处理、冶金烧结、有色金属熔炼等的电阻炉和盐浴炉。由于发热体的电阻太小，或者在升温过程中发热体电阻的变化太大，所以需要在炉子和电网之间配备一台电阻变压器，以降低和调节电炉的输入电压。小容量、低电压的电阻炉变压器与盐浴炉变压器多为干式变压器，带箱壳，自然冷却；中等容量（数百至数千伏安）的电阻炉变压器多为油浸自冷式变压器；大容量的则为强迫油循环水冷式变压器。

A transformer designed to provide power for all kinds of electric furnaces. Resistance furnace transformers are used for resistance furnaces and salt bath furnaces for mechanical parts heating, heat treatment, powder metallurgy sintering, non-ferrous metal smelting, etc. Because the resistance of the heating element is too small, or the resistance of the heating element is too large during the heating process, it is necessary to equip a resistance transformer between the furnace and the power grid to reduce and adjust the input voltage of the electric furnace. Most of the small-capacity, low-voltage resistance furnace transformers and salt bath furnace transformers are dry-type transformers, with box shells and natural cooling; Medium-capacity (hundreds to thousands of volt amperes) resistance furnace transformers are mostly oil-immersed self-cooled transformers; The large capacity is a forced oil circulation water-cooled transformer.

GROUNDING TRANSFORMER

接地变压器



OSG/SG THREE-PHASE DRY ISOLATION TRANSFORMER

三相干式隔离变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity



助力低碳电能为智慧电力赋能
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产品概述 OVERVIEW

接地变压器简称接地变，根据填充介质，接地变可分为油式和干式；根据相数，接地变可分为三相接地变和单相接地变。接地变压器的作用是中性点不接地的系统提供一个人为的中性点，便于采用消弧线圈或小电阻的接地方式，以减小配电网发生接地短路故障时的对地电容电流大小，提高配电系统的供电可靠性。

The grounding transformer is referred to as the grounding transformer, and according to the filling medium, the grounding transformer can be divided into oil type and dry type; according to the number of phases, the grounding transformer can be divided into three-phase grounding transformer and single-phase grounding transformer. The function of the grounding transformer is to provide an artificial neutral point for the system with no neutral point, which is convenient for the use of arc suppression coil or small resistance grounding mode, so as to reduce the size of the capacitance current to the ground when the grounding short-circuit fault occurs in the distribution network, and improve the power supply reliability of the distribution system.

产品概述 OVERVIEW

OSG/SG三相干式隔离变压器是本厂在参照国际同类产品，结合我国国情的基础上研制生产的新一代节能型电力变压器，从300VA到1600KVA之间，符合IEC439、GB5226等国际、国家标准，绕组采用脱胎整列绕制方法；变压器进行真空浸漆，使变压器的绝缘等级达到F级或H级，产品性能达到国内外先进水平。OSG/SG系列三相干式隔离变压器广泛适用于交流50Hz至60Hz、电压2000V以下的电路中，广泛用于进口重要设备、精密机床、机械电子设备、医疗设备、整流装置、照明等。

OSG/SG three-phase dry-type isolation transformer is a new generation of energy-saving power transformer developed and produced by our factory on the basis of referring to similar international products and combining China's national conditions, from 300VA to 1600KVA, in line with IEC439, GB5226 and other international and national standards, and the winding adopts the whole winding method; The transformer is vacuum-impregnated, so that the insulation grade of the transformer reaches F or H, and the product performance reaches the advanced level at home and abroad. OSG/SG series three-phase dry-type isolation transformers are widely used in AC 50Hz to 60Hz, voltage below 2000V circuits, widely used in imported important equipment, precision machine tools, mechanical and electronic equipment, medical equipment, rectifier devices, lighting, etc.

06

THREE-PHASE PAD-MOUNTED TRANSFORMER

三相美式箱变

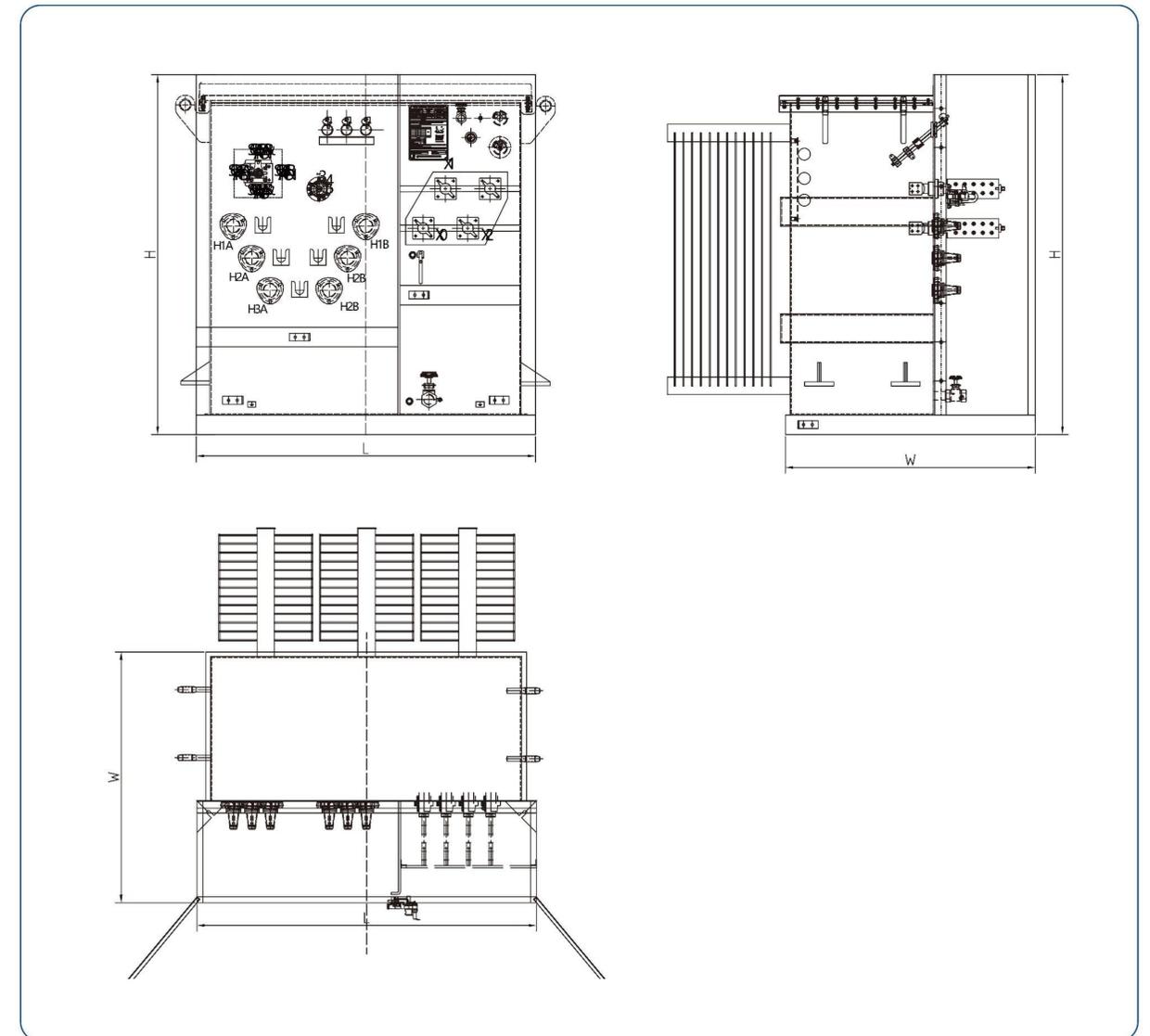


THREE-PHASE PAD-MOUNTED TRANSFORMER

三相美式箱变

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range		效率 Efficiency	
	高压 HV	低压 LV	DOE(2016)	CSA(2023)
75			99.03	98.95
112.5			99.11	99.04
150			99.16	99.09
225		240V	99.23	99.17
300	35kV	480V	99.27	99.21
500	25kV	480Y V	99.35	99.30
750	15kV	277V	99.40	99.35
1000		600Y V	99.43	99.38
1500		347V	99.48	99.44
2000			99.51	99.47
2500			99.53	99.49

外形安装尺寸参考图 OUTLINE INSTALLATION DIMENSIONS



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

三相美式箱变是适用于公用事业、商业或工业应用的紧凑型电力中心，旨在承受多种类型的环境。产品具有紧凑小型化、全绝缘设计、密封性能好、防腐能力强、组合灵活等结构特点。这些变压器可以位于建筑物外部或内部，以提供节能且更安全的解决方案。流体填充变压器有多种配置可供选择，并且可以与多种配件搭配使用，以满足最基本和最复杂的规格。三相美式箱变以其独特的优势在多个领域得到了广泛应用。

Three-phase pad-mounted transformers are compact power centers for utility, commercial, or industrial applications and are designed to withstand many types of environments. The product has the structural characteristics of compact miniaturization, full insulation design, good sealing performance, strong anti-corrosion ability, and flexible combination. These transformers can be located outside or inside a building to provide an energy-efficient and safer solution. Fluid-filled transformers are available in a variety of configurations and can be paired with a wide range of accessories to meet the most basic and complex specifications. With its unique advantages, three-phase pad-mounted transformer has been widely used in many fields.

07

SINGLE-PHASE PAD-MOUNTED TRANSFORMER

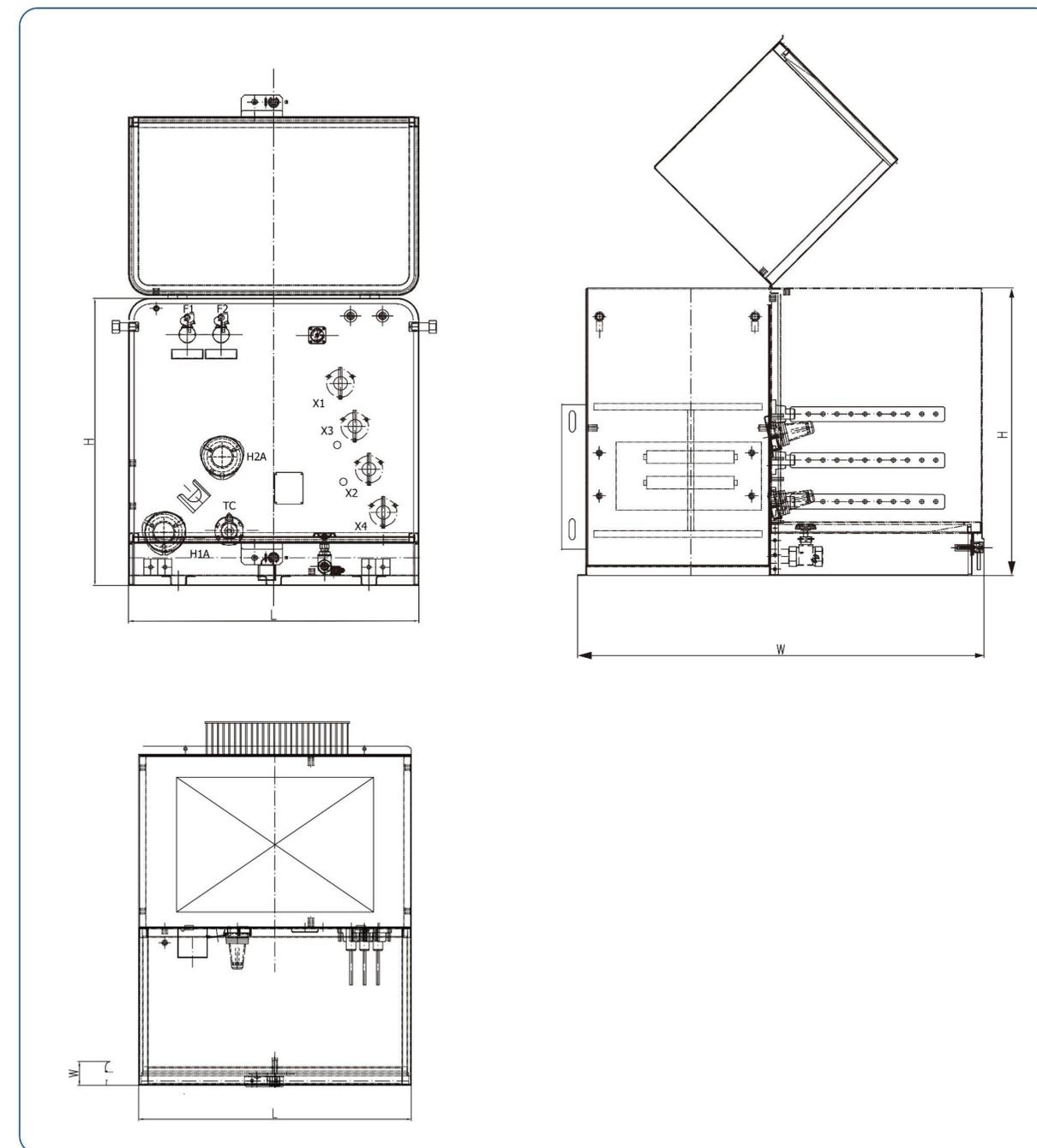
单相美式箱变



SINGLE-PHASE AMERICAN TRANSFORMER

单相美式变压器

外形安装尺寸参考图 OUTLINE INSTALLATION DIMENSIONS



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

单相美式箱变额定容量为 15-250 kVA。单相美式箱变一般用于民用需要单相电源的地方，如家用电器等，其容量相对三相美式箱变要小。

The single-phase pad-mounted transformer is rated at 15-250kVA. Single-phase pad-mounted transformer is generally used in places where single-phase power supply is needed for civil use, such as household appliances, etc., and its capacity is smaller than that of three-phase pad-mounted transformers.

额定容量 (kVA) Rated capacity	额定电压及分接范围 Rated voltage and tapping range		效率 Efficiency	
	高压 HV	低压 LV	DOE(2016)	CSA(2023)
15			98.82	99.73
25			98.95	98.87
37.5	34.5kV/19.92kV 13.8kV/7.9kV	120-240V 240-480V	99.05	98.97
50	13.2kV/7.6kV 12.47kV/7.2kV or others	347V 600V or others	99.11	99.04
75			99.19	99.13
100			99.25	99.19
167			99.33	99.28

08

SINGLE-PHASE POLE-MOUNTED TRANSFORMER

单相柱上式变压器



助力低碳电能为智慧电力赋能
Assist in low-carbon electricity Empowering smart electricity

产品概述 OVERVIEW

亚威供应电力柱上变压器。包括单相和三相柱上变压器。可减少低压配电线路长度，降低线路损耗，提高供电质量。变压器采用高效节能的线圈铁芯结构设计。该变压器的特点是体积小，基建投资少，低压供电半径缩小，低压线路损耗 60% 以上。采用全密封结构，过载能力强，连续运行可靠性高，维护简单。适用于农村电网、偏远山区、分散村庄、农业生产、照明用电，也可用于铁路、城市电网节能改造。我们的变压器采纳技术设计，采用优质材料和元件，质量可靠，运行时间长。

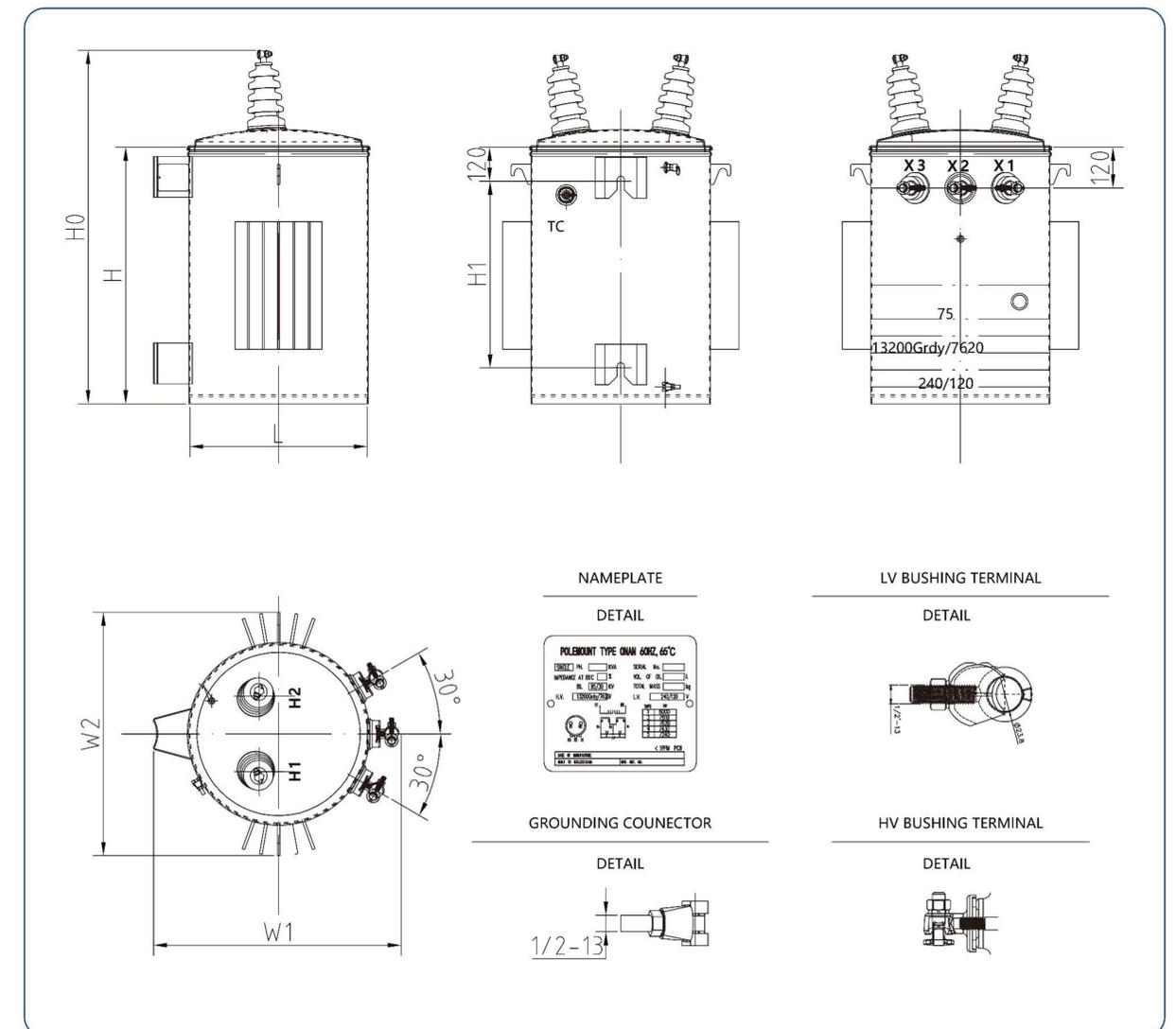
Yawei supplies power pole-mounted transformers, including single-phase and three-phase pole-mounted transformers. It can reduce the length of low-voltage distribution lines, lower line losses and improve power supply quality. The transformer adopts a highly efficient and energy-saving coil core structure design. The characteristics of this transformer are small size, low infrastructure investment, reduced low-voltage power supply radius, and low-voltage line loss of over 60%. It adopts a fully sealed structure, has strong overload capacity, high reliability in continuous operation and simple maintenance. It is applicable to rural power grids, remote mountainous areas, scattered villages, agricultural production, and lighting power consumption. It can also be used for energy-saving renovations of railways and urban power grids. Our transformers are designed with advanced technology, using high-quality materials and components. They are reliable in quality and have a long operating time.

SINGLE-PHASE POLE-MOUNTED TRANSFORMER

单相柱上式变压器

额定容量 (kVA) Rated capacity	高压 HV	低压 LV	效率 Efficiency	
			DOE(2016)	CSA(2023)
5	34.5kV/19.92kV 13.8kV/7.9kV 13.2kV/7.6kV 12.47kV/7.2kV or others	120-240V 240-480V 347V 600V or others	98.58	98.47
10			98.70	98.60
15			98.82	98.73
25			98.95	98.87
37.5			99.05	98.97
50			99.11	99.04
75			99.19	99.13
100			99.25	99.19
167			99.33	99.28

外形安装尺寸参考图 OUTLINE INSTALLATION DIMENSIONS



订货规范 Order specification

选用我们的产品时，请提供下列数据，以便更好的为阁下提供服务：
When choosing our company's products, please provide the following data to better serve you:

需方信息 Demander

需方: Demander	电话: Telephonemethods	传真: Fax
项目技术负责人: Project technical leader	电话: Telephonemethods	邮箱: Mailbox

变压器种类选择 Transformer type selection

<input type="checkbox"/> 干式变压器 { <input type="checkbox"/> SC(B) 环氧树脂 <input type="checkbox"/> SC(B) 非封装 } » Dry transformer { » SC(B) Epoxy resin » SC(B) Non-encapsulated }	<input type="checkbox"/> 油浸式变压器 { <input type="checkbox"/> 全密封 (-M-) <input type="checkbox"/> 带油枕 } » Oil-immersed transformer { » Fully sealed (-M-) » Oil-bearing pillow }
<input type="checkbox"/> 美式箱变 (ZGS) { <input type="checkbox"/> 终端型 (-Z-) <input type="checkbox"/> 环网型 (-H-) } » American Box (ZGS) { » Terminal type (-Z-) » Ring network type (-H-) }	<input type="checkbox"/> 非晶合金变压器 { <input type="checkbox"/> 干变非晶 <input type="checkbox"/> 油变非晶 } » Amorphous alloy transformer { » Dry amorphous » Oil amorphous }
<input type="checkbox"/> 欧式箱变 (YBM) { <input type="checkbox"/> 干变 <input type="checkbox"/> 油变 } » European Box change (YBM) { » Dry change » Oil change }	<input type="checkbox"/> 特种变压器 { 整流变、电炉变、矿用变等 } » Special transformer { Rectifier, Furnace, Mine, Etc. }

变压器基础数据选择 Transformer basic data selection

使用国家 Country of use :	<input type="checkbox"/> 国内 (常规) Domestic (conventional)	<input type="checkbox"/> 国外 Abroad
相数 Phase number:	<input type="checkbox"/> 三相 (S 常规) Three-phase (S conventional)	<input type="checkbox"/> 单相 (D) Monophase <input type="checkbox"/> 其他 Other ()
频率 Frequency:	<input type="checkbox"/> 50Hz (常规) (conventional)	<input type="checkbox"/> 60Hz <input type="checkbox"/> 其他 Other ()
变压器油 Transformer oil:	<input type="checkbox"/> #25 号 (常规) #25 (conventional)	<input type="checkbox"/> #45 号 (最低温度低于零下 25°C) #45 (minimum temperature below -25°C)
额定容量 Rated capacity:	<input type="checkbox"/> ()kVA 使用条件 Conditions of use <input type="checkbox"/> 户外型 Outdoor type <input type="checkbox"/> 户内型 Indoor type	
海拔高度 Altitude:	<input type="checkbox"/> 1000m 以下 (常规) Less than 1000m (conventional) <input type="checkbox"/> 1000-2000m <input type="checkbox"/> 3000m 以上 over	
额定电压 (高压): Rated voltage (High voltage)	<input type="checkbox"/> 6kV <input type="checkbox"/> 10kV <input type="checkbox"/> 20kV <input type="checkbox"/> 35kV <input type="checkbox"/> 66kV <input type="checkbox"/> 110kV <input type="checkbox"/> 220kV <input type="checkbox"/> 其他 Other ()	
额定电压 (低压): Rated voltage (Low pressure)	<input type="checkbox"/> 0.4kV <input type="checkbox"/> 0.66kV <input type="checkbox"/> 10kV <input type="checkbox"/> 10.5kV <input type="checkbox"/> 35kV <input type="checkbox"/> 其他 Other ()	
连接组别: Connected group	<input type="checkbox"/> Dyn11 (常规) (conventional) <input type="checkbox"/> Yyn0 <input type="checkbox"/> YNd11 <input type="checkbox"/> li0 (单相) (Single-phase) <input type="checkbox"/> 其他 Other ()	
阻抗 (%) Impedance (%):	<input type="checkbox"/> 4% <input type="checkbox"/> 4.5% <input type="checkbox"/> 5.5% <input type="checkbox"/> 6% <input type="checkbox"/> 6.5% <input type="checkbox"/> 7.5% <input type="checkbox"/> 8% <input type="checkbox"/> 其他 Other ()	
调压方式: Voltage regulation mode	<input type="checkbox"/> 无励磁调压 (常规) Voltage regulation without excitation (conventional) <input type="checkbox"/> 有载调压 (Z) On-load voltage regulation (Z)	
调压范围: Voltage regulation range	<input type="checkbox"/> ±2*2.5% <input type="checkbox"/> ±5% <input type="checkbox"/> ±3*2.5% <input type="checkbox"/> 其他 Other ()	

变压器附件选择 Transformer accessory selection

<input type="checkbox"/> 风机 <input type="checkbox"/> 温控 { <input type="checkbox"/> 普通 <input type="checkbox"/> 带 485 电脑接口 } » Fan » Temperature control { » Common » With 485 computer interface }	<input type="checkbox"/> 干变外壳 { <input type="checkbox"/> 普通钢板 <input type="checkbox"/> 铝合金 <input type="checkbox"/> 不锈钢 } » Dry case { » Ordinary steel sheet » Aluminum alloy » Stainless steel }
<input type="checkbox"/> 干变外壳防护等级 { <input type="checkbox"/> IP20 (常规) <input type="checkbox"/> IP □□ } » Protection level of dry case { » IP20 (Conventional) » IP □□ }	<input type="checkbox"/> 干变外壳高度要求 { <input type="checkbox"/> 无要求 <input type="checkbox"/> 要求 [] } » Dry case height requirements { » None » Requirements [] }
<input type="checkbox"/> 干变外壳出线方式 { <input type="checkbox"/> 上进上出 <input type="checkbox"/> 上进下出 <input type="checkbox"/> 下进下出 <input type="checkbox"/> 下进上出 <input type="checkbox"/> 下进侧出 { <input type="checkbox"/> 左侧出 <input type="checkbox"/> 右侧出 } } » Cable out mode of the dry variable shell { » Up-and-out » Up-and-down » Down-in/DOWN-out » Down-in/UP-out » Down-in/SIDE-out [» Left » Right-out] }	

备注: 1、(干变规定≤100kVA 以下变压器不含风机, 如需风机, 需增收费用)
2、(油变规定≤630kVA 以下变压器不含温控, 气体继电器, 如有需要, 需增收费用)
Note: 1, (Dry change requirements ≤ 100kVA transformer does not include fans, such as fans, need to be charged
2, (Oil changes ≤ 630kVA transformer does not include temperature control, gas relay, if necessary, need to increase the fee)

其他特殊要求 (以下需增收费用) Other special requirements (additional charges apply below)

干式变压器: Dry transformer	<input type="checkbox"/> 外壳加底板 { <input type="checkbox"/> 普通 <input type="checkbox"/> 全密封 } <input type="checkbox"/> 行程开关 <input type="checkbox"/> 电磁锁 <input type="checkbox"/> 零序互感器 » Shell and bottom plate { » Ordinary » Fully sealed } » Travel switch » Magnetic lock » Zero sequence transformer <input type="checkbox"/> 到低压柜出线铜排 <input type="checkbox"/> 防护网 <input type="checkbox"/> 照明灯 <input type="checkbox"/> 100kVA 及以下需配风机 <input type="checkbox"/> 减震器 » Copper bar to the low voltage cabinet » Protective mesh » Lighting » 100kVA or less Fan » Shock absorber
油浸式配电变压器: Oil-immersed transformer	<input type="checkbox"/> 非低温地区需用 #45 号油 <input type="checkbox"/> 指定品牌有载调压开关 » No. 45 oil for non-low temperature areas » Designated brand on-load voltage regulator <input type="checkbox"/> 400kVA 及以下低压出线 OABC 相需带接线端子 <input type="checkbox"/> 630kVA 及以下需配温控 » 400kVA and below low voltage outlet OABC phase with wiring terminals » 630kVA or below requires temperature control <input type="checkbox"/> 800kVA 及以下低压出线 0 相需带接线端子 <input type="checkbox"/> 630kVA 及以下需配气体继电器 » 800kVA or below Low voltage outlet phase 0 requires wiring terminals » 630kVA and below must be equipped with gas relay

服务承诺

江苏亚威变压器有限公司一贯坚持“以人为本、以科技求发展、以质量争市场、以品牌创效益”的方针，严格奉行“诚实、守信”的经营理念，积极发展品牌兴企的战略，努力打造一流的知名企业，不断进取、与时俱进，为广大客户提供优质的产品和良好的售后服务。

衷心感谢贵单位使用江苏亚威变压器有限公司产品，为使贵单位放心使用本公司产品，江苏亚威变压器有限公司对产品质量的售后服务承诺如下：

- 江苏亚威变压器有限公司售出的产品均为严格按照国标及相关行业标准生产，产品质量实行一年内免费“三包”。
- 江苏亚威变压器有限公司售出产品如因非人为因素导致变压器性能及技术问题，江苏亚威变压器有限公司将无条件更换，并承担相应的经济损失和赔偿。对由于其它原因造成的问题，江苏亚威变压器有限公司将积极协助解决用户困难，以保证产品及时投运，将损失减少到最低限度。
- 对售出的产品，江苏亚威变压器有限公司将积极配合用户做好变压器的现场运行和维护管理。并可根据用户需要，提供成本价的备品备件。
- “质量第一，用户至上”是江苏亚威变压器有限公司的准则，如产品发生质量问题，江苏亚威变压器有限公司将以最短的时间赶到现场。
- 此承诺书以传真件加盖江苏亚威变压器有限公司公章后生效。

江苏亚威变压器有限公司
JIANGSU Yawei TRANSFORMER CO., LTD.

地址：
江苏省海安市黄海大道西 265 号

服务热线：
400-600-7040

Service Commitment

Jiangsu Yawei Transformer Co., Ltd. has always adhered to the policy of "people-oriented, seeking development with technology, competing for market with quality, and creating benefits with brand", strictly adhering to the business philosophy of "honesty and trustworthiness", actively developing the strategy of brand development, striving to build a first-class well-known enterprise, constantly advancing and keeping pace with the times, and providing high-quality products and good after-sales service for our customers.

Sincerely thank you for using Jiangsu Yawei Transformer Co., Ltd.'s products. In order to ensure that your company can use our products with confidence, Jiangsu Yawei Transformer Co., Ltd. promises the following after-sales service for product quality:

- The products sold by Jiangsu Yawei Transformer Co., Ltd. are strictly produced in accordance with national standards and relevant industry standards, and the product quality is guaranteed for free within one year under the "three guarantees" policy.
- If the performance and technical problems of the transformer are caused by non-human factors in the products sold by Jiangsu Yawei Transformer Co., Ltd., Jiangsu Yawei Transformer Co., Ltd. will unconditionally replace them and bear the corresponding economic losses and compensation. For problems caused by other reasons, Jiangsu Yawei Transformer Co., Ltd. will actively assist in solving user difficulties to ensure timely product operation and minimize losses.
- Jiangsu Yawei Transformer Co., Ltd. will actively cooperate with users to ensure the on-site operation and maintenance management of the sold products. And can provide spare parts at cost price according to user needs.
- Quality first, customer first "is the principle of Jiangsu Yawei Transformer Co., Ltd. If there is a quality problem with the product, Jiangsu Yawei Transformer Co., Ltd. will arrive at the scene in the shortest possible time.
- This commitment letter shall come into effect after being faxed and stamped with the official seal of Jiangsu Yawei Transformer Co., Ltd.

江苏亚威变压器有限公司
JIANGSU Yawei TRANSFORMER CO., LTD.

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400-600-7040