

# 20kV配电变压器

20kV Distribution Transformer

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## 20kV配电变压器

### 20kV Distribution transformer

### 产品概述

输配电系统从遥远的发电厂将电能通过调节输送给用户，电能经高压输电线的传输，然后在几级变电站降压后，才能适合用户使用。位于最终电力用户附近的配电变压器最终将电压降到合适值。将电压降低到电气设备工作电压的变压器称为配电变压器，该类变压器作为日常照明和工厂动力用，一般低压为0.4kV及以下。配电变压器容量较小，一般在2500 kVA及以下；一次电压也较低，都在35 kV及以下。不同于普通油浸式变压器，全密封配电变压器取消了储油柜，由波纹油箱本体的翘板作为散热胀缩元件，使变压器油与大气完全隔离。

### Product Overview

Transmission and distribution system transmit electricity power to the end user by adjusting from far away power plants. Through high-voltage power transmission line, and then by few step-down transformer, the power is suitable for user's application. Distribution transformers located in the vicinity of the end user will eventually reduce the voltage to a suitable rating. Distribution transformers are referred to those can reduce the voltage to the electrical equipment's working voltage. Such transformers are used for daily lighting and industrial power. Generally, the low voltage is 0.4kV or below. The capacity of distribution transformer is small, generally 2500 kVA or below. And the primary voltage is 35 kV or below. Hermetically sealed transformer is different from ordinary oil-immersed transformers due to no conservator installed. The corrugated fins on the tank act as radiator, which isolate the transformer oil from atmosphere.

### 产品特点

- 1.采用CAD设计，性能符合IEC60076、GB1094、GB/T6451标准。
- 2.铁心采用冷轧晶粒取向硅钢片，由德国GEORG公司铁心自动生产线应用阶梯接缝工艺制造。
- 3.油箱为波纹油箱，由德国GEORG公司油箱自动生产线加工制造，表面前处理液和涂装粉末均采用国际品牌产品，油箱经自动生产流水线脱脂、酸洗、磷化、电泳前处理后喷粉，再高温固化，变压器外表抗腐蚀能力强。
- 4.线圈采用高强度漆包线(或纸包线)卷绕，安匝分布均匀，绝缘结构合理，具有很强的抗短路能力。
- 5.器身采用免吊芯结构，密封件采用优质丙烯酸酯橡胶，能有效防止光老化、热老化。

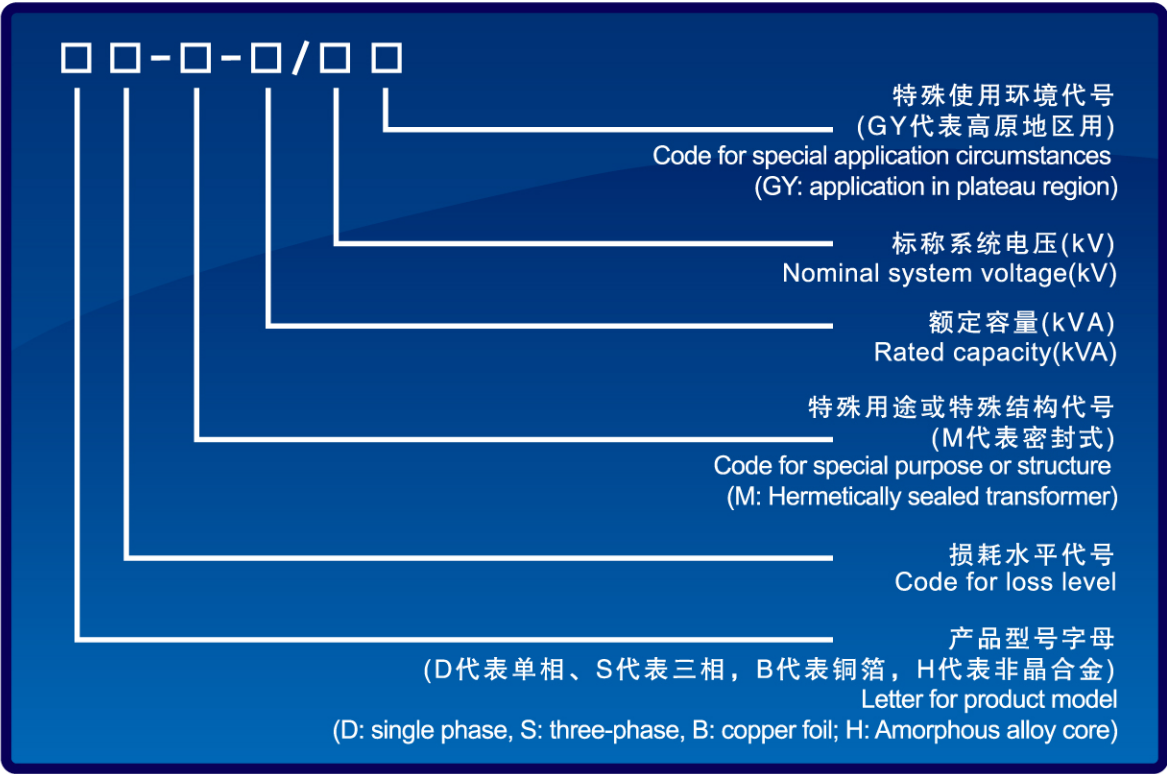
### Product Characteristic

- 1.20kV Distribution transformer is optimally designed by means of CAD. Its performance complies with IEC60076 and Chinese National Standards GB1094 and GB/T6451.
- 2.The core is made of high quality cold-rolled grain-oriented silicon-steel sheet. The lamination sheets are produced by automatic step-lap core lamination line from GEORG, Germany.
- 3.The oil tank is corrugated type and fabricated with automatic tank production line from GEORG, Germany. Pre-treatment liquid and coating powder on the surface made by international top brand suppliers. The tank is degreasing, pickling, phosphating, electrophoresis by automatic production line, then power spray coating and heat-solidify. The surface of transformer is corrosion resistance.
- 4.The winding of Distribution transformer is made of high strength varnished wire or paper-insulated wire, which offers uniform distribution of ampere-turns, reasonable insulation structure so as to offer high ability to short-circuit withstanding capacity of winding.
- 5.The active part applies core free-hanging structure. The gasket is made of high quality acrylate rubber which can inhibit ageing caused by sun and heat.

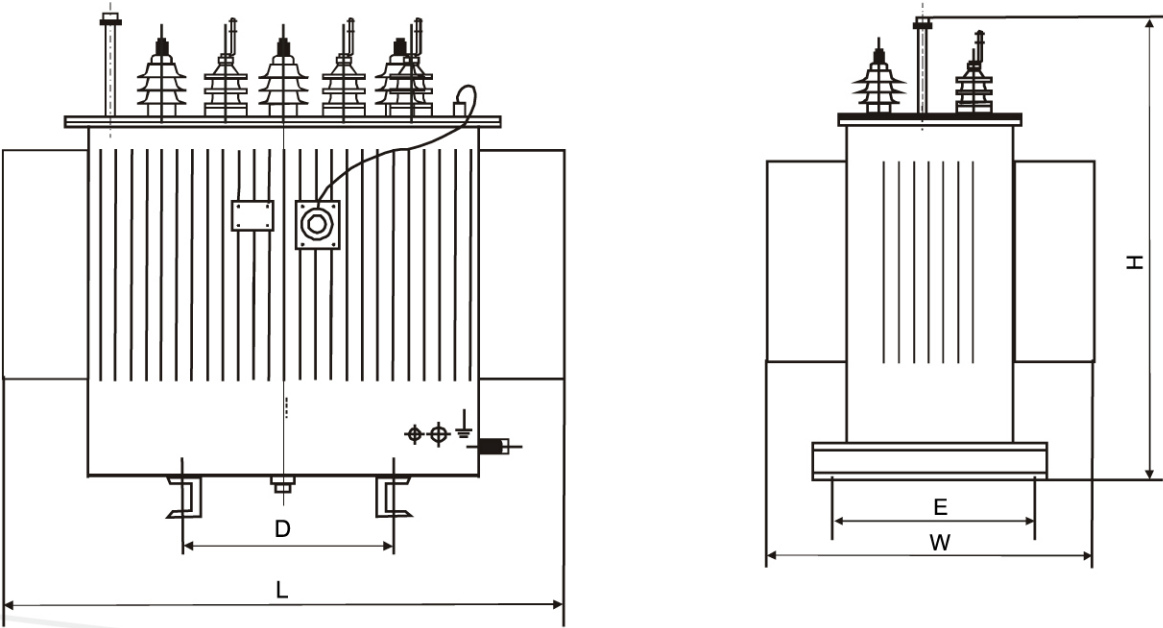




型号说明    Model Coding



外形图    Structural Chart



技术参数    Technical Parameters

以下数据仅供参考，公司保留数据变动的权利  
Technical data are subjected to change without prior notice

型号 Model	容量 (kVA) Capacity	损耗(kW) Loss		空载电流(%) No load current	短路阻抗(%) Short-circuit impedance	重量(kg) Weight		外形尺寸(mm) Dimensions			
		空载 No load	负载 Load			油重 Oil weight	总重 Total weight	长 L	宽 W	高 H	轨距 Rail distance
S11-M-30/20	30	0.09	0.63	2.1	5.5	80	500	700	650	900	400x400
S11-M-50/20	50	0.12	0.91	2.0		100	600	730	690	950	400x400
S11-M-80/20	80	0.17	1.30	1.8		120	700	770	720	1000	400x550
S11-M-100/20	100	0.19	1.57	1.6		150	750	810	760	1050	400x550
S11-M-125/20	125	0.23	1.88	1.5		180	820	860	780	1100	550x550
S11-M-160/20	160	0.27	2.30	1.4		190	855	910	805	1145	550x550
S11-M-200/20	200	0.32	2.72	1.3		200	1050	950	830	1100	550x550
S11-M-250/20	250	0.38	3.18	1.2		225	1090	970	845	1090	550x550
S11-M-315/20	315	0.46	3.81	1.1		260	1280	1000	900	1250	550x550
S11-M-400/20	400	0.54	4.50	1.0		280	1455	1030	925	1395	550x550
S11-M-500/20	500	0.65	5.38	1.0	6	350	1850	1250	940	1550	660x660
S11-M-630/20	630	0.77	6.48	1.0		405	2135	1415	880	1657	660x660
S11-M-800/20	800	0.93	7.84	0.8		450	2550	1600	1000	1700	820x820
S11-M-1000/20	1000	1.09	10.76	0.7		495	2700	1723	1133	1614	820x820
S11-M-1250/20	1250	1.29	12.54	0.7		560	3000	1800	1200	1700	820x820
S11-M-1600/20	1600	1.56	15.15	0.6		580	3400	1860	1290	1730	820x820
S11-M-2000/20	2000	1.85	18.18	0.6		750	4050	1950	1290	1900	820x820
S11-M-2500/20	2500	2.22	21.11	0.5		1100	5500	2190	2450	2500	1070x1070

## 产品应用领域

该产品具有功能齐全、安全性好、维护简单、占地面积小、成套性强，投资少，安装快捷，施工方便，造型美观等特点。广泛地应用于建筑工地、车站、码头、矿山油田等企事业单位及其它临时供电的场所。



## Applications

This product has advantages of multi-function, reliable operation, easy for maintenance, highly integrated, fast installation, elegant features. It's very popular in construction site, stations, docks, mining & oil industries, and other sites requiring temporary power supply.



## 服务承诺

- 1.及时向顾客提供按合同规定的全部技术资料 and 图纸。有义务在必要时邀请顾客参与供方的技术设计审查。
- 2.按顾客要求的时间到现场进行技术服务，指导顾客按供方的技术资料和图纸要求进行安装、调试与整套试运及试生产。
- 3.对于顾客选购的与合同设备有关的配套设备，我方主动提供满足设备接口要求的技术条件和资料。
- 4.严格执行供需双方就有关问题召开会议纪要或签订的协议。
- 5.按合同规定为顾客举办有关设备安装、调试、使用、维护技术的业务培训班。
- 6.加强售前、售中、售后服务，把“24小时服务”、“超前服务”、“全过程服务”、“终身服务”贯彻在产品制造、安装、调试、修理的全过程。
- 7.随时满足顾客对备品备件的要求。

## Service Guarantee

- 1.To provide all technical information and drawings as per contract promptly. QRE is obliged to invite client, if necessary, to attend technical design review.
- 2.To carry out spot technical service as per client's schedule, offer guidance for installation and commissioning according to technical information and drawings.
- 3.For relevant auxiliary equipment procured by customers, QRE will provide related technical information to meet requirement of equipment interface.
- 4.To execute stipulations in MOU or agreement signed by seller and buyer strictly.
- 5.To train staff from client for equipment installation, commissioning, application, maintenance as stipulated in the contract.
- 6.To reinforce pre-sales, mid-sales, after-sales service, to carry out "24-hour service", "service in advance", "overall process service", "lifelong service" in our manufacturing, installation, commissioning and maintenance.
- 7.To meet spare parts' requirement by customers at any time.

■ 尊敬的客户朋友,如果您有服务需求,可以发送Email给我们,或者直接电话与我们联系:  
用户服务中心:0571-82583638, 0571-82583088, 0571-82583928  
传 真: 0571-82583618, 0571-82582309

Dear clients, if there is any enquiry or requirement, please feel free to send email: intl@qre.com.cn  
or make phone call directly to service center:  
+86-571-82583638, 82583088, 82583928  
Fax:+86-571-82583618, 82582309



## 订货需知

选用本公司产品时，请提供以下数据，以便更好地为阁下提供服务。

变压器型号：\_\_\_\_\_

额 定 容 量：\_\_\_\_\_ kVA

相 数：☐ 三相  
☐ 单相

频 率：☐ 50HZ  
☐ 60HZ

额定电压（高压/低压）：\_\_\_\_\_

分 接 范 围：±\_\_\_\_\_ × \_\_\_\_\_ %

绝 缘 水 平：LI \_\_\_\_\_ AC \_\_\_\_\_ /LI \_\_\_\_\_ AC \_\_\_\_\_ kV

联结组标号：☐ Dyn11  
☐ Yyn0  
☐ 其他

短 路 阻 抗：\_\_\_\_\_ %

冷 却 方 式：☐ ONAN  
☐ ONAF

调 压 方 式：☐ 有载调压  
☐ 无励磁调压  
☐ 其他

对产品的其他要求：\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

注：制造厂还可以根据用户提出的特殊要求进行设计制造；  
以上数据仅供用户参考选用，最终数据以订货后提供的  
数据为准。

## Order Instructions

When you choose our company product, please offer following data:

Transformer model: \_\_\_\_\_

Rated capacity: \_\_\_\_\_ kVA

Phase : ☐ Three-phase  
☐ Single-phase

Frequency : ☐ 50HZ  
☐ 60HZ

Rated voltage ( H.V. / L.V. ): \_\_\_\_\_

Tapping range : ± \_\_\_\_\_ × \_\_\_\_\_ %

Insulation level: LI \_\_\_\_\_ AC \_\_\_\_\_ /LI \_\_\_\_\_ AC \_\_\_\_\_ kV

Veotor group: ☐ Dyn11  
☐ Yyn0  
☐ other

Short-circuit Impedance: \_\_\_\_\_ %

Cooling method: ☐ ONAN  
☐ ONAF

Tapping method: ☐ OLTC  
☐ OCTC  
☐ other

Other requirement : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

1.We also can design special products according to  
customer's particular requirements.  
2.The final dimension is subject to outline drawing.