

系列干式变压器

Series Dry-type Power Transformer

吾心求索·通享未来

得益于多年的电气产品研发和制造经验，索通电气为您提供结合了先进技术和卓越工程设计的高压开关设备；系列产品符合智能化、安全性和可靠性要求最严苛的标准。该系列能为公共配电、工业和楼宇领域提供极具成本效益的解决方案，提高竞争力。



SC9、SC10系列
10KV级本体干式变压器



SC(B)9、SC(B)10系列
10KV级本体干式变压器



节能型
Energy Saving



智能化
Intellectualization



易维护
Easy Maintenance



安全性
Safety

SC9/SC10

系列干式变压器 Series Dry-type Power Transformer



型号及含义 Model and meaning



使用环境 Service Environment

- 环境温度：上限+40°C，下限-15°C(特殊工艺下，可达-45°C)；
- 海拔高度不超过2500m(特殊工艺下，可达4000m)；
- 安装环境：安装地点倾斜度<3°，无明显污秽和腐蚀、可燃性气体。
- 注：超出上述正常使用条件时，用户可与制造厂协商确定。
- Ambient air temperature:
Maximum air temperature: +40°C,
Minimum air temperature: -15°C (Under a special process, up to -45 °C);
- Altitude: ≤ 2500m(Under a special process, up to 4000m);
- Installation environment inclination of installation lace<3° ,no obvious dirt and corrosive or flammable gas.
- Notes: If the operating conditions exceed the normal conditions, please contact our technical department.

结构特征 Structural Features

- | | |
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| <ul style="list-style-type: none"> ● 铁芯
由优质冷轧电工硅钢片组成 ● 低压绕组
由整张铜箔线圈组成 ● 高压绕组
由真空绕注的分段式双玻璃丝包线圈组成 ● 低压端子 ● 高压端子 接线方式可变，便于优化安装设计 ● 弹性垫块
防止机械共振，降低噪声 ● 夹件和小车
小车的滚轮能够旋转90°便于纵向或横向移动 ● 填料型树脂绝缘
具有防潮与抗湿热。阻燃和自熄特性 | <ul style="list-style-type: none"> ● Iron core
Made up of high quality cold rolled silicon steel sheet that is for electric engineering ● Low voltage winding
Made up of a whole copper foil coil ● High voltage winding
Made up of sectional type vacuum casting double glass-fiber covered coils ● Low voltage terminal ● High voltage terminal
Variable wiring mode, which is convenient for installation ● Resilient pad
Avoid mechanical resonance, and reduce noise ● Clamp and trolley
The wheel of trolley can rotates to 90°
It is convenient for vertical and horizontal movement. ● Packing type resin insulation
With advantages of damp proof, anti-damp and hot, flame-retardant, and self-extinguish. |
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技术特点 Product Characteristic

环氧树脂浇注干式变压器引进国外先进技术研制而成，产品具有以下特点：

- 局部放电值低

由于线圈在真空状态下浇注，极大地防止线圈内气泡的产生，所以局部放电量完全达到国家的有关标准规定。

- 耐雷电冲击能力强

雷电冲击电压沿绕组的起始分布影响变压器绕组绝缘的损坏程度，箔式绕组起始电压分布接近线性，因此，我公司的变压器具有很好的耐雷电冲击能力。

- 抗短路能力强

低压绕组的铜箔宽度就是电抗高度，低压电流按绕组间的安匝平衡要求匹配，高、低压绕组因短路引起的轴向力几乎为零。

- 抗干裂性能好

我公司变压器采用填料型树脂和全铜箔结构，绝缘材料与铜导体的热膨胀系数最相近，有效防止线圈开裂。公司已进行了各种抗开裂试验，如冷热交变试验，热冲击试验和快速老化试验，试验结果表明我公司的技术尤其能满足低温、高温及温度变化范围大的使用场合，并且能满足长期运行后的抗开裂要求。

- 过负载能力强

若相同容量的变压器负载损耗相等，则铜箔的截面积将相应较放大，体积增大后，填料树脂用量多，因此绕组的热容性大，变压器短时过载能力强。

- 阻燃特性好

采用填料型树脂浇注工艺有利于环境保护，公司变压器具有免维护、防潮、抗湿热、阻燃和自熄特性。在电弧的高温燃烧下，不产生任何有毒气体。公司优异的阻燃特性在燃烧试验中得到证实。

公司产品具有很好的环境适应能力，按欧洲HD464标准，满足环境等级为E2，耐候等级为FC2，阻燃等级为F1，可用于商住区、地铁、电厂、轮船、海洋钻井平台等各种环境及使用条件恶劣的场所。

- 噪声低

我公司变压器采取一些特殊的结构和设计，使得噪声大大降低，其整体噪声水平较国家专业标准中的噪声值低10~13dB(A)以上。

- 损耗低

SCB9系列与国内通常使用的“8”型产生相比，总损耗平均降低10~15%。具有很好的经济效益。

The epoxy resin cast dry type transformer of is made with abroad advanced technology, it includes the following characteristics:

- Low local discharge

As the coil is cast in vacuum state, the air bubble produced in coil can be prevented efficiently, the local discharging value fully accords with relative national standard.

- Strong capability of lightning impact

The lightning impact voltage that affects the insulation of transformer windings along the initial voltage distribution of windings, the foil type windings initial voltage distribution approaches to linear one, therefore, the transformer manufactured by us has good ability to resist the lightning impact.

- Strong ability to resist short-circuit

The width of copper foil of LV windings that is the reactance height, LV current is supplied according to the requirement for ampere turns balance among windings, HV/LV windings axial force caused by short circuit tends to zero.

SC9/SC10

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技术特点 Product Characteristic

- Good performance of anti-drying crack

The transformer manufactured by us is made of packing type resin and designed into the structure of full copper oil, the coefficient of insulation material is the similar to the that of thermal expansion of copper conductor, so the coils can be prevented cracking efficiently. The transformer has been done kinds of anti-crack tests, such as cold/hot alternation test, thermal impact test, rapid aging test, etc, and the test result demonstrates that our technology can meet the requirements of service occasions like low temperature, high temperature and large range of variable temperature, as well as anti-crack after the transformer runs for a long time.

- Strong over-load capability

If the transformers of same capacity whose load consumption is equal, the sectional area of copper foil will be increased correspondingly, and the volume will be extended with the sectional area that requires more packing resin, therefore, both the thermal capacitive property of windings and short-time over load capability of transformer are quite strong.

- Good flame retardancy

The transformer has visible features such as free-maintenance, moisture-proof, anti-damp and hot, flame-retardant, self-extinguishing, etc., besides, its stuffing type resin casting technology is good for environmental protection. When burn by the electric arc at high temperature, it will not product any noxious gas. The superior flame retardancy is proved in the burning test.

The product has good ability to adapt to environment, on the basis of European HD464 standard, it reaches the environment class E2, weather-resistant class FC2, flame-retardant class F1, it can be widely used in fields or locations where service conditions are rather atrocious such as commercial area, under ground, power plant, steamship, offshore drilling platform, etc.

- Low noise

Because of special structure and design, the noise produced by transformer is reduced greatly, compared with the noise value stipulated at national Specialized Standard, its whole noise level is lower than it for more than over 10-13dB(A).

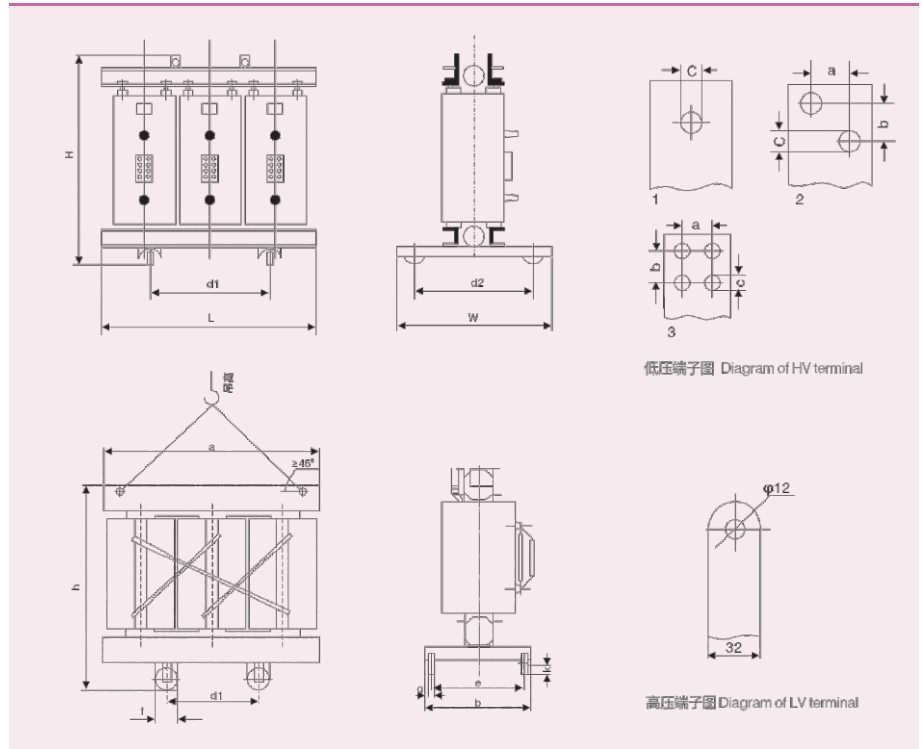
- Low consumption

Compared with "8" character type products, SCB9 series has better economic benefit, its total consumption is reduced for 10~15% in average.

SC(B)10-30-2500/10型环氧树脂浇注干式变压器 Type cast resin dry-type power transformer

额定容量 (kVA) Rated capacity	电压组合 Voltage combination			联结组 标号 Connection symbol	短路阻抗 (%) Short circuit voltage	损耗Loss(kW)		空载 电流(%) No-Load current	重量 Weight (kg)	外形尺寸(mm) 长×宽×高 Dimensions L×B×H	轨距(mm) 纵向×横向 Gauge Vertical × horizontal	保护外壳尺寸(mm) 长×宽×高 Shell Dimensions L×B×H
	高压 H.V (kV)	分接范围 Tapping range	低压 L.V (kV)			空载 No-load	负载 120°C Load					
30	11 10.5 10 6.3 6	±2×2.5%	0.4	Yyno Dyn11	4	0.18	0.71	2.20	275	800x460x739	400x400	1100x900x1100
50						0.25	1.00	2.10	360	840x460x769	400x400	1200x900x1100
80						0.33	1.38	1.80	475	910x460x839	400x400	1200x920x1200
100						0.36	1.57	1.60	570	950x820x896	550x760	1300x1050x1250
125						0.42	1.85	1.50	625	950x820x926	550x760	1300x1050x1250
160						0.49	2.13	1.40	755	1020x880x916	550x760	1300x1250x1300
200						0.58	2.53	1.35	820	1030x880x966	550x820	1300x1250x1300
250						0.66	2.76	1.30	990	1050x880x1011	550x820	1350x1250x1350
315						0.78	3.47	1.20	1085	1050x880x1035	660x820	1400x1270x1400
400						0.98	3.99	1.10	1305	1110x970x1111	550x820	1500x1200x1450
500						1.16	4.88	1.10	1425	1110x970x1141	660x910	1500x1200x1500
630						1.34	5.88	1.00	1590	1280x1120x1096	660x910	1650x1350x1500
800						1.52	6.96	0.90	1900	1320x1170x1176	820x1110	1700x1400x1550
1000						1.77	8.13	0.85	2260	1370x1170x1286	820x1110	1750x1400x1650
1250						2.09	9.69	0.80	2780	1420x1170x1446	820x1110	1800x1400x1800
1600						2.45	11.73	0.75	3355	1440x1140x1607	820x1070	1800x1450x2000
2000						3.05	14.45	0.70	3865	1580x1140x1690	820x1070	1900x1500x2050
2500	3.60	17.17	0.65	4720	1620x1140x1735	1070x1070	2000x1550x2200					

外形及安装尺寸 Outline and installation size



● 小车尺寸 Trolley size

额定容量 (kVA) Rated capacity	50~250	315~800	1000~1600	2000~2500
e	520	660	820	1070
f	125	125	160	200
g	40	40	50	70
k	45	45	55	40

● 低压接线端子尺寸图 Size diagram of LV connecting terminal

额定容量 (kVA) Rated capacity	a	b	c	图号
≤100	-	-	12	1
125~160	-	-	14	1
200~315	26	26	14	2
400~630	35	30	14	2
800	40	40	14	3
1000	50	40	14	3
1250	60	40	14	3
1600	50	40	14	3
2000	50	40	14	3
2500	60	40	14	3