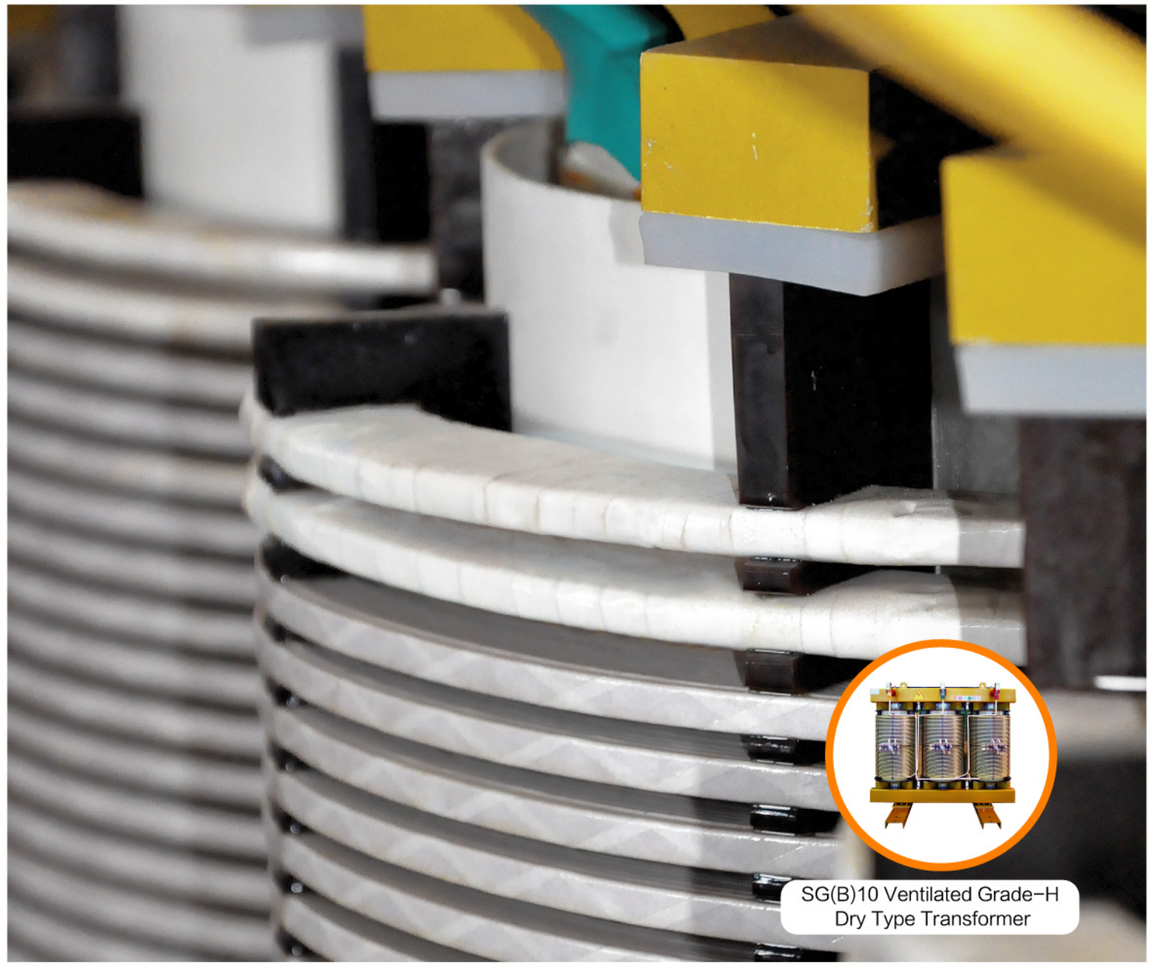
CEEG 中电电气
China Electric Equipment Group
CEEG Headquarter: 6 Shuige Road, Jiangning Economy & Technology Development Zone.
Production Base: 188 Zhongdian Road, Yangzhong City, Jiangsu Province
6 Shuige Road, Jiangning Economy & Technology Development Zone.
Tel:86-25-83275395 Fax:86-25-52095624
Unified National Customer Service Hotline: 800-828-6118 400-828-6118
Welcome to our website: http://www.ceeg.cn

SG(B)10 VENTILATED GRADE-H DRY TYPE TRANSFORMER

Nomex Paper Insulation With High Level On Environmental Protection And Security



www.ceeg.cn

CEEG® 中电电气®

DuPont™ Nomex®

China Electric Equipment Group is authorized by DuPont USA to use their authorized trade mark. Nomex is DuPont and its affiliated company' s register trade mark.

China Electric Equipment Group(CEEG) is the world leading supplier of transmission and distribution and new energy, has been involved in Power Transformer, PV Technology, Insulation Materials and Complete Substation. CEEG consists of 15 holding、wholly-owned subsidiary companies, and possess Nanjing、Yangzhong、Shanghai、Jingdezhen four major industrial bases. We employ about 6,000 employees and more than 300 sales & service sites spread all over the major cities of the whole country.
CEEG has "China's Resounding Brand", "China Top Brand" and other national honors. There are more than 60 famous domestic and foreign experts in which some of them have participated in drafting out national transformer standard. A group of PV scientists still hold the world record of photovoltaic efficiency so far. CEEG provides world-class products and quality services for electricity, electronics, hydropower, nuclear power, wind power, coal mine, telecommunications, construction, petroleum, chemical engineering, aviation, transportation, railage and other industries.
CEEG transformer, made from US DUPONT NOMEX® Paper as a main insulation material, has changed the traditional concept of transformer industry, filled up our domestic blank with their unique safe function and achieved international advanced level. CEEG has an annual output of 30 million KVA of transformer. CEEG established photovoltaic industry from silicon materials, silicon chip, solar cell, solar modules, solar photovoltaic power system including the complete industrial chain.
We developed application of DUPONT Nomex Paper as the core of new transformer technology and three phase three column energy-saving amorphous alloy transformers. Transducer, rectifier frequency transformer, reactor as the representative of efficient power transmission and distribution solutions which means that fewer resources you can get more power, saving a large expenditure. In these ways, CEEG opened the path to a new energy-saving electric era.
In recent years, CEEG involved in the construction of key projects in many countries, such as Beijing Olympic Project, Shanghai World Expo Project, Manned Space Flight Project, the Guangzhou Baiyun Airport, the Beijing South Railway Station, the Nanjing South Railway Station, so as to secure the maximum power and solar energy solutions meet customer needs. From transmission and distribution, power electronic to solar pv industry, CEEG can provide customers with forward-looking solutions. No matter when and where, the group always carry out the core value of "Foresight, Innovation and Responsibility". With these values, CEEG will make the complex power system more efficient, productive and energy-saving.

Navigator

2008

中国驰名商标 China's Resounding Brand

2005

PCCC产品质量认证 PCCC Product's quality certificate

2006

全国用户满意产品 Users-Satisfaction Product of the whole nation

2007

全国售后服务十佳单位 Industry and circuloton unted hand in hand

2003

中国环境标志 China Environment Labeling Products Certificate

2002

AAA 3A资信企业 AAA Grade Credit Company Certificate

2000

ISO9001
质量管理体系认证

ISO14001
环境管理体系认证

OHSAS18001
职业健康安全体系认证

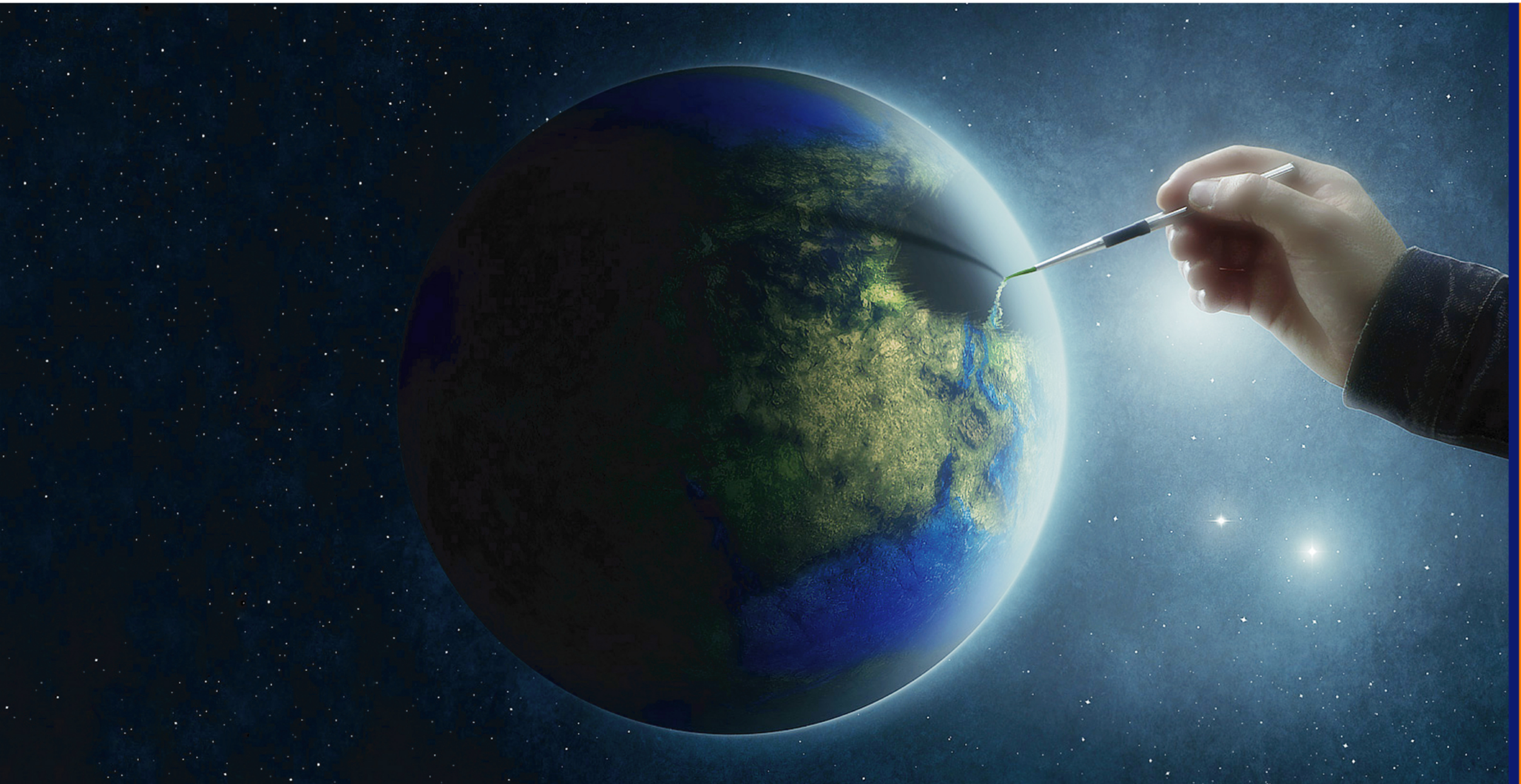
IEC 60076
KEMA认证

IEC 60726
KEMA认证

2005年10月，国务院总理温家宝在中央及省市领导的陪同下莅临中电电气视察，充分肯定了中电电气在科技创新、发展自主知识产权方面所做出的不懈努力。
On october 2005, accompanied by central and province leaders, Prime Minister Wen Jiabao arrived CEEG for inspection, and fully affirmed CEEG's continuous effort on technology innovation and self intellectual property at rights development.

2007年中电电气光伏在美国纳斯达克证交所上市，股票代码“CSUN”。
In 2007, CEEG was listed on the Stock Exchange of NASDAQ. The stock code is CSUN.

远见 责任 创新　Foresight Innovation Responsibility



China Electric Equipment Group

SG(B)10

PARAGON OF CHINA ENERGY CONSERVATION TRANSFORMER

SG10 product won't generate any pollution during the manufacture, transportation,storage and operation process due to adoption of NOMEX Paper insulation Technology by DUPONT, the Product can be decomposed and recovered afterlife, the CEEG therefor award as"China Environment Labeling Products" authorized by SEPA (State Environmental protection Administration.

China's Biggest Production Company For Sg(G) 10 Ventilated Grade-h Dry Type Transformer

The CEEG researched and developed the SG10 open-type Transformer firstly in China in 1999, and achieved a huge success in the market. At present, CEEG established china's biggest 50,000 square metre production plant for the H-Class dry type transformer in Yangzhong.Tens of thousands of SG(B) H-Class dry type transformers are working stabilize through all the projects across the Nation.

Strategic Cooperative Partnership With Dupont

CEEG have sighed contract on strategic cooperative partnership with DUPONT on 2001. With DUPONT's mature technology on transformer, CEEG have taking the lead on SG10 in the industry.
In 2010, after company's 20th -year anniversary, CEEG collaborate with DUPONT on NOMEX Brand License Agreement and aim to be the NO.1 supplier in the World of Transformer uses NOMEX as insulation material.

SG(B)10

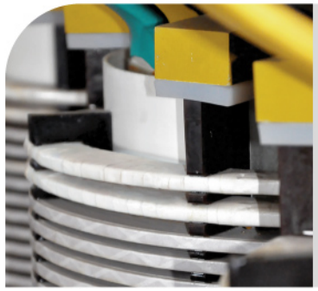
SG(B)10 VENTILATED GRADE-H
DRY TYPE TRANSFORMER

Nomex Paper World-class Level On

Insulation,environmental and security ;
Low sound level,
Overload capacity,
Thermostability,
Dupont ReliatraN® Transformer Technology.

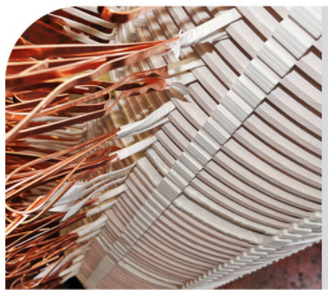
SG(B)10

Features

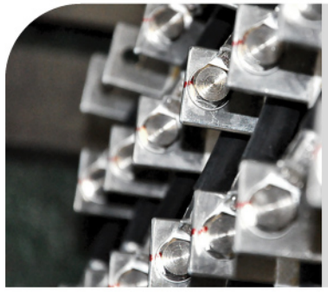


Remarkable electric property and mechanical capacity
SG(B)10 accepted the NOMEX Paper insulation system, to keep its outstanding performance on electric property and mechanical capacity. With low rate of aging, striction and compress resistance, the NOMEX System could be able to maintain the transformer core under everlasting stable condition and bear short circuit.

High-Class security level
SG10 product contains no flammable resin, with no combustion-supporting, no explosion and toxic gas.

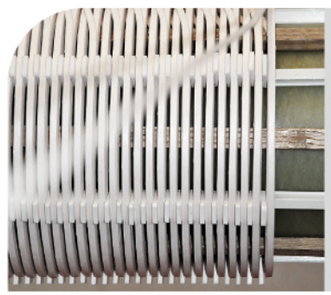


High-Class Reliability
High-Low voltage coil adopted the NOMEX System, dipping H-class impregnating varnish with VPI vacuum pressure system, and solidify under high heat. Product belongs to H-Class(180℃), and C-Class (220℃) for main insulation material, with high-class anti-short circuit capacity. 20% overload is allowed under good ventilation condition.

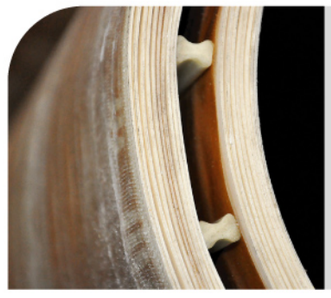


Energy Saving & Environmental protection
Material (copper,steel) recovery afterlife;
Burning without Toxic Chemical Substance for NOMEX Paper;
Degradation of Insulation material, without polluting;
Low no-load loss, energy saving;
Low noise, flexible design.

Steel Corn
The Corn is made with 0.3mm thick high level permeability silicon sheet, with 45°three-class lap joint, no punching or screw. Painting with insulated lacquer on surface.



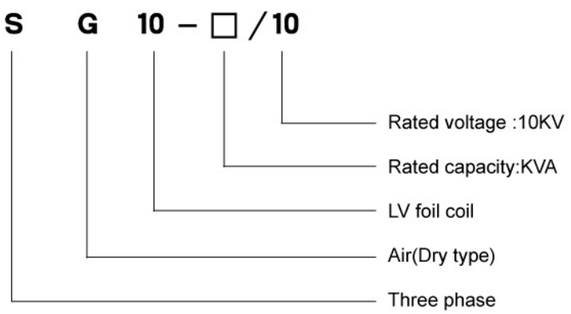
High-tension coil
It accepts the structure with high-class mechanical strength and heat dissipation ,so as to avoid the disadvantages which the multilayer cylinder structure may have.
The coil also have perfect performance on the following aspects:
-Moisture resistance
-thermal-shock resistance
-Recovery afterlife
-environmental protection



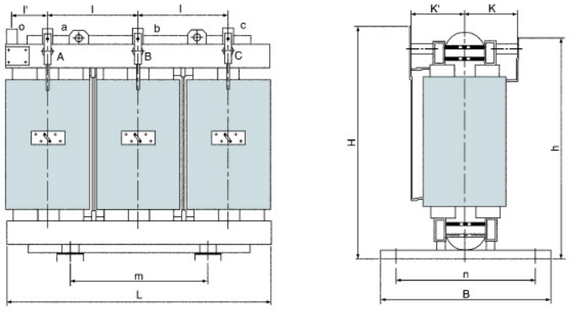
Low-tension coil
It accepts foil or lengthways structure. The SG10's Low-pressure lengthways air flue structure acquired the National Paten: 002219069.

Advanced testing,experiment, temperature control system
Passed the GB1094.11-2007&JB/T501-2006 before Delivery, and partial discharge test;
The temperature control system adopts advanced dry type transformer temperature system, has three-class temperature-testing alarm on setting point.

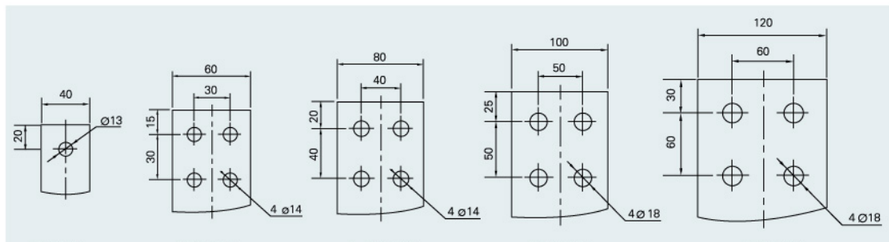
Sg(B)10 Series 10kv Class 100-2500kva Distribution Transformer



Dimension



Low voltage Side Connection Terminal Busbar



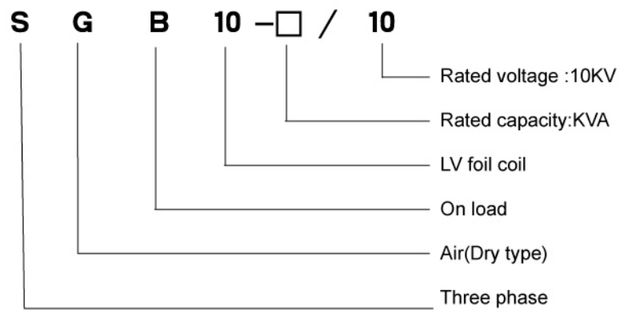
(a)500A 100–315kVA | (b)900A 400–500kVA | (c)1300A 630–800kVA | (d)2000A 1000–1600kVA | (e)4000A 2000–2500kVA

Parameters

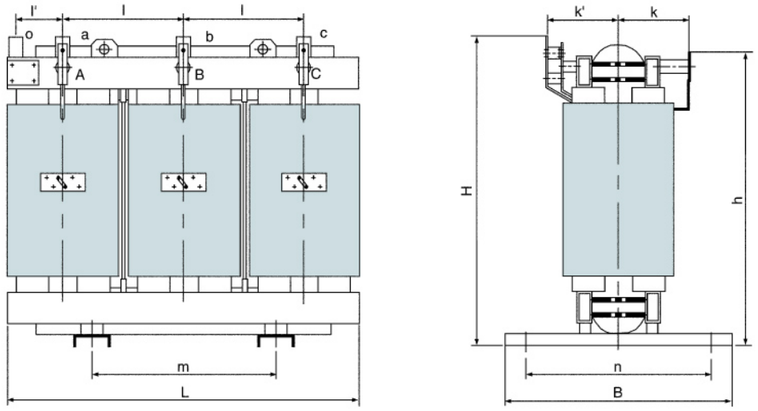
Mode	UK%	No-load Po	loss (75℃)Pk(W)	Io%	LPA (AN)dB	Size (mm)								Wight
						L×B×H	m	n	l	l^1	k	k^1	h	kg
SG10–100/10	4%	380	1105	0.9	42	1150×860×1007	660	660	380	137	286	286	992	600
SG10–160/10	4%	500	1555	0.9	43	1180×860×1140	660	660	400	155	295	295	1135	760
SG10–200/10	4%	570	1960	0.8	43	1180×860×1175	660	660	400	155	296	296	1175	920
SG10–250/10	4%	800	2500	0.8	45	1260×860×1130	660	660	410	150	299.5	299.5	1115	1080
SG10–315/10	4%	1000	3200	0.7	46	1340×860×1185	660	660	415	150	304	304	1170	1230
SG10–400/10	4%	1005	4460	0.7	47	1345×860×1255	820	660	425	155	312	312	1150	1510
SG10–500/10	4%	1170	5200	0.6	48	1360×860×1335	820	660	435	155	313	313	1230	1690
SG10–630/10	4%	1260	7250	0.5	49	1450×860×1350	820	660	473	170	319	319	1400	2070
SG10–630/10	6%	1200	7600	0.5	50	1480×860×1360	820	820	465	165	313	313	1230	1810
SG10–800/10	6%	1530	8540	0.4	51	1520×1020×1435	820	820	485	180	318	318	1297	2020
SG10–1000/10	6%	1790	10150	0.4	51	1615×1020×1550	820	820	505	190	344	344	1519	2465
SG10–1250/10	6%	2080	11990	0.3	52	1640×1020×1660	820	820	520	190	347	347	1542	2850
SG10–1600/10	6%	2500	14100	0.3	53	1745×1150×1800	1070	1070	534	220	354	404	1725	3495
SG10–2000/10	6%	3100	17500	0.25	53	1755×1150×1830	1070	1070	565	187.5	362	412	1707	4150
SG10–2500/10	6%	3800	18610	0.25	54	1825×1150×1990	1070	1070	585	197.5	369.5	419.5	1867	5110

Note: Dimension may vary refers to the specifications and design according to client's request.

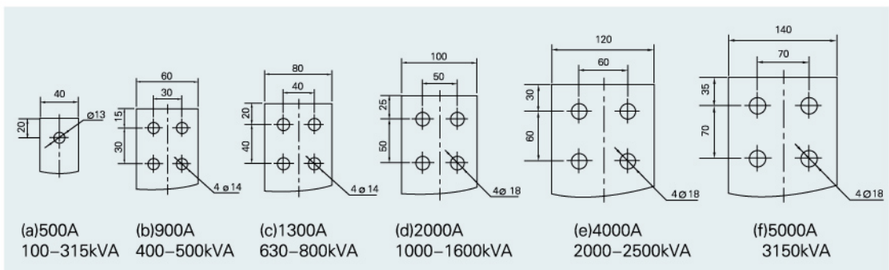
SG(B)10 series 10kv class 315-3150KVA Distribution Transformer



Dimension



Low voltage Side Connection Terminal Busbar



Parameters

Mode	UK%	No-load Po	loss (75℃)Pk(W)	Io%	LPA (AN)dB	Size (mm)								Wight
						L×B×H	m	n	l	l^1	k	k^1	h	kg
SGB10–315/10	4%	1150	3200	0.7	46	1340×860×1190	660	660	415	150	304	304	1170	1230
SGB10–400/10	4%	1170	4460	0.7	47	1345×860×1260	820	660	425	155	312	312	1150	1510
SGB10–500/10	4%	1190	5200	0.6	48	1360×860×1340	820	660	435	130	314	287	1150	1690
SGB10–630/10	4%	1300	7250	0.5	49	1450×860×1350	820	660	470	140	395	343.5	1335	2005
SGB10–630/10	6%	1360	7600	0.5	50	1480×860×1365	820	660	490	145	364	330	1225	2080
SGB10–800/10	6%	1620	8540	0.4	51	1520×1020×1430	820	820	500	150	387.5	349.5	1302	2110
SGB10–1000/10	6%	1930	10150	0.4	51	1615×1020×1550	820	820	515	170	397.5	361	1422	2730
SGB10–1250/10	6%	2300	11990	0.3	52	1640×1020×1660	820	820	530	205	403	367	1537	3000
SGB10–1600/10	6%	2760	14100	0.3	53	1745×1150×1800	1070	1070	560	205	411	379.5	1562	3525
SGB10–2000/10	6%	3870	17500	0.25	53	1755×1150×1830	1070	1070	565	205	365	345	1685	3960
SGB10–2500/10	6%	4060	18610	0.25	54	1825×1150×1990	1070	1070	575	180	365	364	1758	5300
SGB10–3150/10	6%	4960	24150	0.25	55	1865×1270×2197	1070	1070	635	225	454.5	424	1997	6380

Note: Dimension may vary refers to the specifications and design according to client's request.

SG(B)10 series 10kv class 315-3150KVA
Transformer with protective shield

Parameters

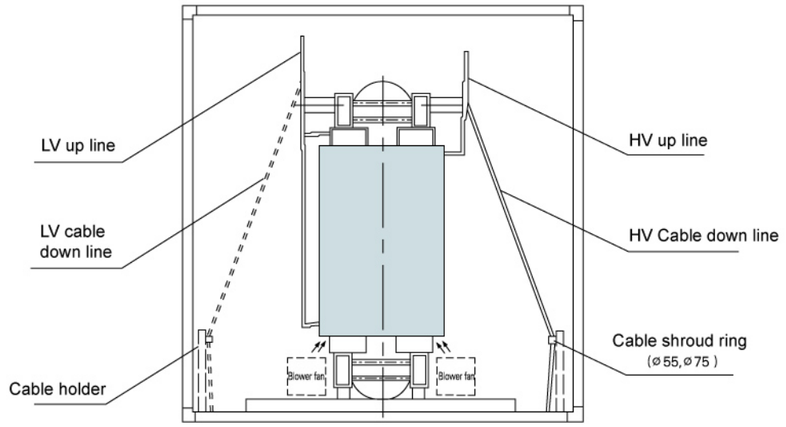
10kv Distribution Transformer shell's dimension

(Ways of outlet: lower inlet and upper outlet &upper inlet and upper outlet& lower inlet and lower outlet &upper inlet and lower outlet)

Mode	UK%	Size (mm)								
		L×B×H	m	n	l	l^1	h	h^1	k	k^1
SG10–100/10	4%	1700×1250×1610	660	660	380	137	1007	992	286	286
SG10–160/10	4%	1700×1250×1610	660	660	400	155	1140	1135	295	295
SG10–200/10	4%	1700×1250×1610	660	660	400	155	1175	1170	296	296
SG10–250/10	4%	1700×1250×1610	660	660	410	150	1130	1115	299.5	299.5
SG(B)10–315/10	4%	1700×1250×1610	660	660	415	150	1185	1170	304.5	304.5
SG(B)10–400/10	4%	1800×1350×1865	820	660	425	155	1255	1210	312	312
SG(B)10–500/10	4%	1800×1350×1865	820	660	435	155	1335	1290	313	313
SG(B)10–630/10	4%	1800×1350×1865	820	660	465	170	1445	1400	319	319
SG(B)10–630/10	6%	1800×1350×1865	820	660	473	165	1300	1230	313	313
SG(B)10–800/10	6%	2000×1350×1965	820	820	485	170	1404	1297	318	318
SG(B)10–1000/10	6%	2000×1350×1965	820	820	505	165	1505	1519	344	344
SG(B)10–1250/10	6%	2000×1350×1965	820	820	520	170	1505	1542	347	347
SG(B)10–1600/10	6%	2200×1500×2200	1070	1070	534	191	1800	1725	354	404
SG(B)10–2000/10	6%	2200×1500×2200	1070	1070	565	187.5	1832	1707	362	412
SG(B)10–2500/10	6%	2300×1500×2470	1070	1070	585	197.5	1994	1867	369.5	419.5
SG(B)10–3150/10	8%	2400×1600×2600	1070	1070	635	225	2197	1997	454.5	424

Note: Dimension may vary refers to the specifications and design according to client's request.

Dimension

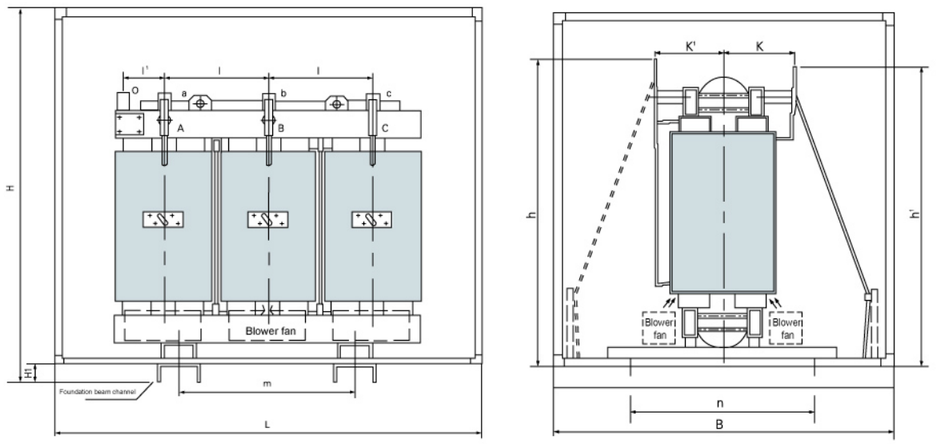


Note: For Capacity≤500KVA ,the U-bar 14# equal with H1=60
Capacity between 630kVA~1250kVA,the U-bar 16# equal with H1=65;
Capacity ≥1000kVA, the U-bar 18# equal with H1=70

stainless steel shell with protection level of IP20-23;
*IP20 shell prevent the solid objects that diameter more than 12mm;
*IP23 shell can also prevent water drop in 60 degrees angle

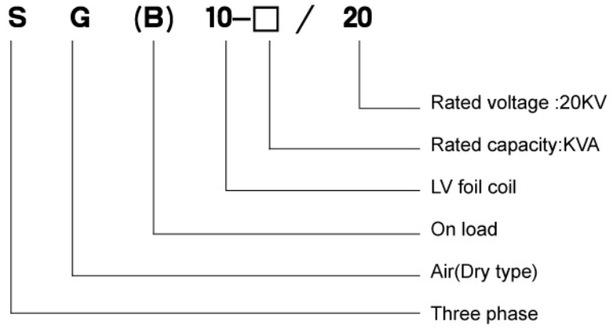
Note: An IP23 casing will make the power transformer's cooling capacity decline, decreasing by 5% for that of small capacity and 10% for that of large capacity.

An IP20 requires high-voltage and low-voltage cable incoming (outgoing) feeder carriage, so wiring becomes more convenient.

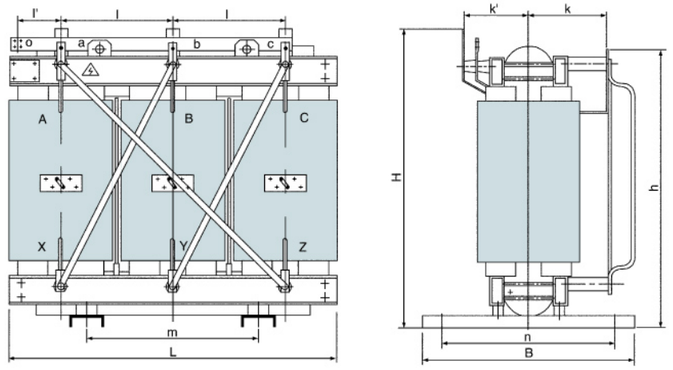


Note: Unless required by customers, there are no blower fans for SG10 series power transformers in general.

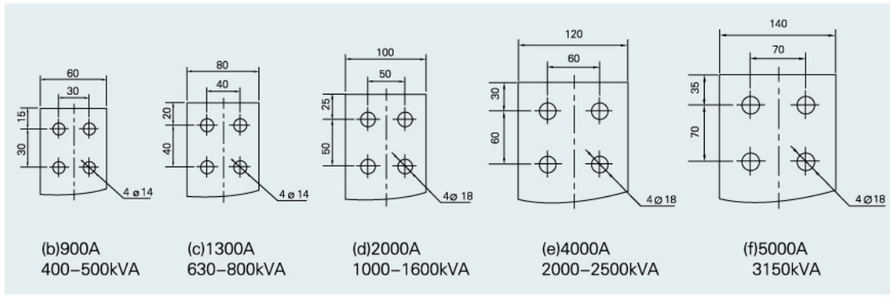
SG(B)10 series 20KV Class 315-315OKVA distribution transformer



Dimension



Low voltage Side Connection Terminal Busbar



Parameters

Mode	UK%	No-load Po	loss (75℃)Pk(W)	Io%	LPA (AN)dB	Size (mm)							Wight
						L×B×H	m	n	l	l^1	k	k^1	h	kg
SGB10–315/20	4%	1580	4020	0.6	50	1525×1020×1500	820	820	495	190	522.5	310.5	1555	1870
SGB10–400/20	4%	1660	4655	0.6	50	1540×1020×1570	820	820	500	190	580	317.5	1588	2130
SGB10–500/20	6%	1700	6230	0.6	50	1655×1020×1590	820	820	540	190	580	317.5	1567	2200
SGB10–630/20	6%	2200	6900	0.6	50	1725×1150×1600	1070	1070	565	130	600	313.5	1562	2530
SGB10–800/20	6%	2460	8400	0.5	52	1810×1150×1730	1070	1070	595	185	600	346.5	1652	3150
SGB10–1000/20	6%	2700	10260	0.5	52	1815×1150×1740	1070	1070	595	185	610	352	1742	3100
SGB10–1250/20	6%	3170	12760	0.4	52	1840×1150×1755	1070	1070	605	210	620	362	1772	3900
SGB10–1600/20	6%	3600	13920	0.4	54	1920×1150×1800	1070	1070	635	205	630	372	1822	4400
SGB10–2000/20	6%	4150	15130	0.3	54	1950×1150×1910	1070	1070	645	255	675	391.5	1842	5120
SGB10–2500/20	6%	4720	18000	0.3	54	1910×1270×2147	1070	1070	655	240	680	413.5	2002	6000
SGB10–3150/20	8%	5000	29000	0.3	56	2020×1270×2330	1070	1070	695	250	630	396	2115	6945

Note: Dimension may vary refers to the specifications and design according to client's request.

SG(B)10 series 10kv class 315-3150KVA
Transformer with protective shield

Parameters

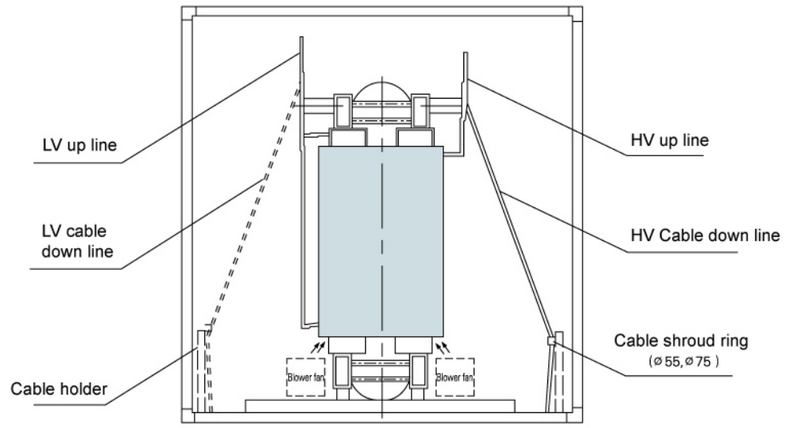
20kv Distribution Transformer shell's dimension

(Ways of outlet: lower inlet and upper outlet &upper inlet and upper outlet& lower inlet and lower outlet &upper inlet and lower outlet)

Mode	UK%	Size (mm)									Wight
		L×B×H	m	n	l	l^1	k	k^1	h	k^1	kg
SGB10–315/20	4%	2000×1400×1950	820	820	495	190	522.5	310.5	1580	1555	345
SGB10–400/20	4%	2000×1400×2000	820	820	500	190	580	317.5	1612	1588	350
SGB10–500/20	6%	2100×1500×2000	820	820	540	190	580	317.5	1607	1567	360
SGB10–630/20	6%	2200×1600×2050	1070	1070	565	130	600	313.5	1627	1562	390
SGB10–800/20	6%	2300×1650×2100	1070	1070	595	185	600	346.5	1752	1652	420
SGB10–1000/20	6%	2300×1650×2200	1070	1070	595	185	610	352	1842	1742	440
SGB10–1250/20	6%	2400×1700×2300	1070	1070	605	210	620	360	1938	1772	480
SGB10–1600/20	6%	2400×1750×2400	1070	1070	635	205	630	372	1967	1822	500
SGB10–2000/20	6%	2500×1750×2450	1070	1070	645	255	675	391.5	1992	1842	510
SGB10–2500/20	6%	2500×1800×2550	1070	1070	655	240	680	413.5	2147	2002	540
SGB10–3150/20	8%	2500×1800×2630	1070	1070	695	245	630	396	2330	2155	640

Note: Dimension may vary refers to the specifications and design according to client's request.

Dimension



stainless steel shell with protection level of IP20-23;

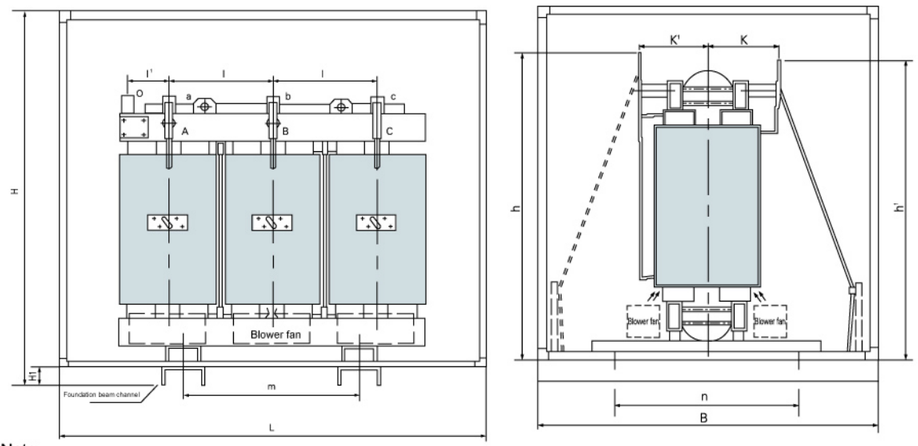
*IP20 shell prevent the solid objects that diameter more than 12mm;

*IP23 shell can also prevent water drop in 60 degrees angle

Note: An IP23 casing will make the power transformer's cooling capacity decline, decreasing by 5% for that of small capacity and 10% for that of large capacity.

An IP20 requires high-voltage and low-voltage cable incoming (outgoing) feeder carriage, so wiring becomes more convenient.

We are ready to provide you with protective enclosures of special requirements or materials.



Note:.

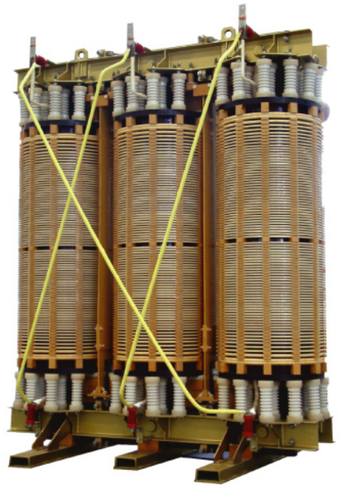
Capacity between 630kVA~1250kVA,the U-bar 16# equal with H1=65;

Capacity ≥1000kVA, the U-bar 18# equal with H1=70.

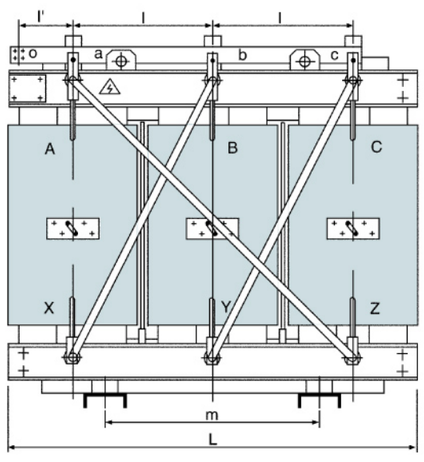
SG(B)10 series 35kv class630-2500KVA Transformer with protective shield

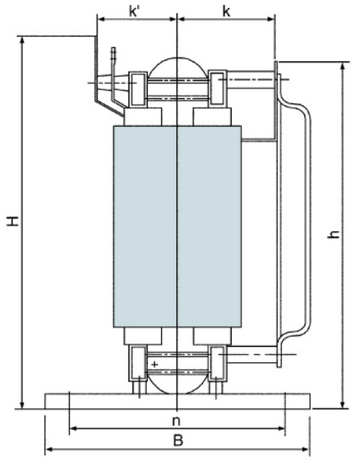
S G (B) 10–□ / 35

- 35 — Rated voltage :35KV
- □ — Rated capacity:KVA
- 10 — LV foil coil
- (B) — On load
- G — Air(Dry type)
- S — Three phase



Dimension



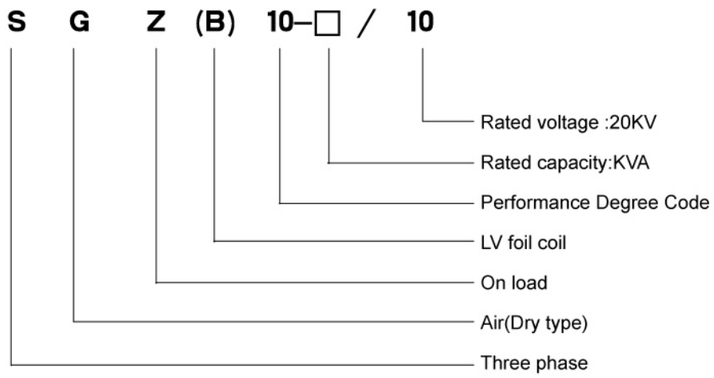


Parameters

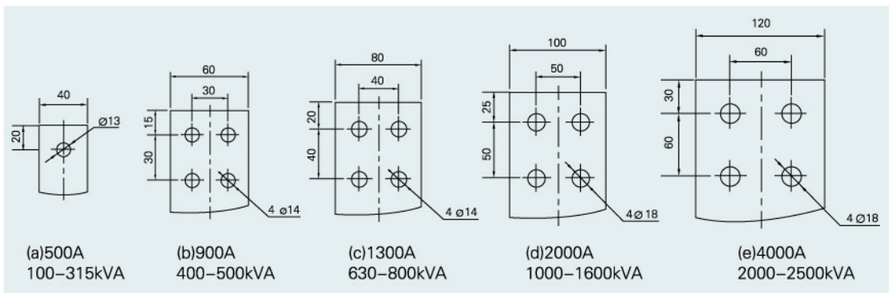
Mode	UK%	No-load Po	loss (75℃)Pk(W)	Io%	LPA (AN)dB	Size (mm)								Wight
						L×B×H	m	n	l	l¹	k	k¹	h	kg
SGB10–630/35	6%	1840	4900	1.4	55	2075×1470×1962	1270	1070	730	190	567.5	383.5	1890	4425
SGB10–800/35	8%	2160	9690	1.4	55	2050×1470×2007	1270	1070	720	220	540	387	1982	4440
SGB10–1000/35	8%	2400	7750	1.4	55	2180×1470×2180	1270	1070	760	240	820	425	2062	5015
SGB10–1250/35	8%	2800	10110	1.2	55	2190×1470×2227	1270	1070	765	270	830	430	2102	5435
SGB10–1600/35	8%	3200	13100	1.2	55	2230×1470×2297	1270	1270	780	280	840.5	440	2172	6065
SGB10–2000/35	8%	3760	15540	1.0	57	2290×1470×2397	1270	1270	800	290	850	450	2262	7200
SGB10–2500/35	8%	4400	18100	1.0	57	2450×1470×2577	1270	1270	855	290	860	456.5	2432	8955

Note: Dimension may vary refers to the specifications and design according to client's request.

SGZ(B)10 series 10kv class250-2500KVA
Transformer with protective shield



Low voltage Side Connection Terminal Busbar

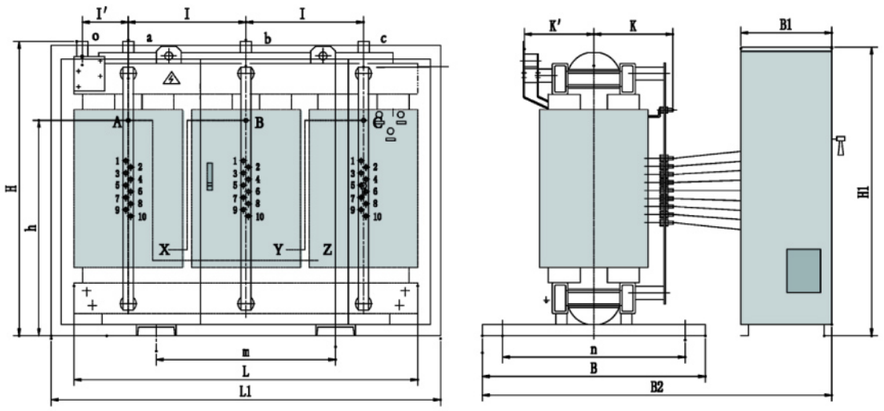


Parameters

Mode	UK%	No-load Po	loss (75℃)Pk(W)	Io%	LPA (AN)dB	Size (mm)									Wight
						L×B×H	m	n	l	l^1	k	k^1	h	B2	kg
SGZB10–250/10	4%	850	2200	0.8	46	1260×860×1115	660	660	430	130	304	277.5	825	1400	1400
SGZB10–315/10	4%	950	3120	0.7	46	1260×860×1150	660	660	435	125	309	282.5	845	1400	1450
SGZB10–400/10	4%	1150	4050	0.7	46	1360×860×1318	820	660	465	120	307	278	945	1400	1965
SGZB10–500/10	4%	1220	5270	0.6	48	1355×860×1365	820	660	465	1400	319.5	296	980	1400	2145
SGZB10–630/10	4%	1360	6320	0.5	49	1355×860×1405	820	660	465	165	345	343.5	1035	1450	2320
SGZB10–630/10	6%	1300	7655	0.5	50	1430×860×1405	820	660	490	170	371	297.5	990	1450	2205
SGZB10–800/10	6%	1630	8405	0.4	51	1475×1020×1467	820	820	505	170	391	327	1035	1550	2635
SGZB10–1000/10	6%	1820	9685	0.4	51	1495×1020×1537	820	820	510	170	400	364.5	1127	1550	2720
SGZB10–1250/10	6%	2130	11705	0.3	52	1550×1020×1612	820	820	530	190	395	325	1227	1550	3225
SGZB10–1600/10	6%	2400	13655	0.3	53	1655×1150×1772	1070	1070	565	205	410	373.5	1292	1680	4115
SGZB10–2000/10	6%	2800	15585	0.25	53	1655×1270×1932	1070	1070	565	225	369	361.5	1360	1760	4365
SGZB10–2500/10	6%	3230	17370	0.25	54	1685×1270×2070	1070	1070	575	240	365	364	1547	1760	5450

Note: 1. Dimension may vary refers to the specifications and design according to client's request.
2. L1XB1XH1 is only for the dimension of on-load switch; for the other exact dimension, please consult with different manufactories.

Dimension

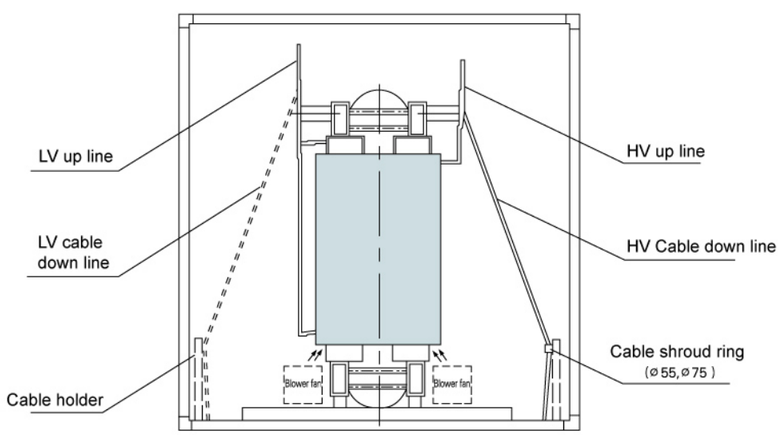


SGZ(B)10 series 10kv class250-2500KVA Transformer with protective shield

10kv Distribution Transformer shell's dimension
(Ways of outlet: lower inlet and upper outlet &upper inlet and upper outlet& lower inlet and lower outlet &upper inlet and lower outlet)

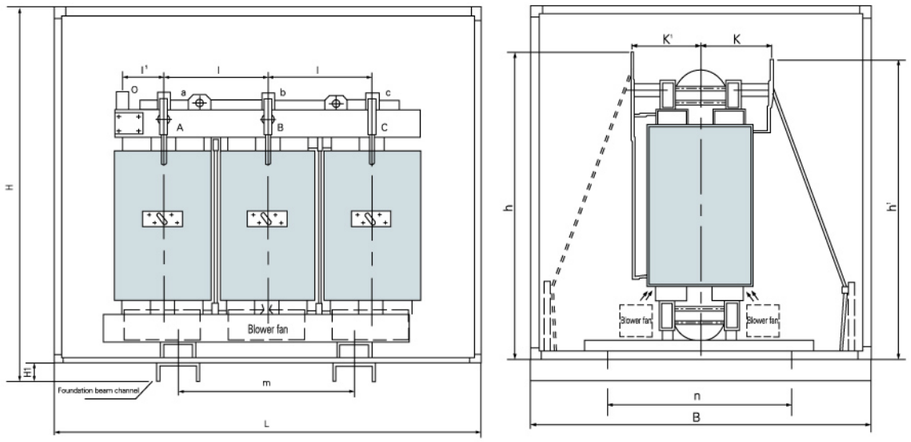
Mode	UK%	Size (mm)									Wight
		L×B×H	m	n	l	l¹	k	k¹	h	B2	kg
SGZB10-250/10	4%	1700×1240×1610	660	660	430	130	303.5	277.5	1115	825	220
SGZB10-315/10	4%	1700×1240×1610	660	660	415	150	304.5	304.5	1163	1170	220
SGZB10-400/10	4%	1800×1240×1660	820	660	465	120	312	312	1318	1150	240
SGZB10-500/10	4%	1800×1240×1760	820	660	465	140	313	313	1365	1230	260
SGZB10-630/10	4%	1900×1340×1865	820	660	460	170	319	319	1355	1400	280
SGZB10-630/10	6%	1900×1340×1865	820	660	490	170	313	313	1405	1230	280
SGZB10-800/10	6%	2000×1380×1865	820	820	505	170	318	318	1467	1297	320
SGZB10-1000/10	6%	2000×1380×1965	820	820	510	170	344	344	1537	1519	340
SGZB10-1250/10	6%	2100×1380×1965	820	820	530	190	347	347	1612	1542	350
SGZB10-1600/10	6%	2200×1410×2270	1070	1070	565	205	354	404	1772	1725	400
SGZB10-2000/10	6%	2200×1450×2270	1070	1070	565	225	362	412	1932	1707	440
SGZB10-2500/10	6%	2300×1450×2370	1070	1070	575	180	369.5	419.5	2010	1867	480

Dimension



stainless steel shell with protection level of IP20-23;
*IP20 shell prevent the solid objects that diameter more than 12mm;
*IP23 shell can also prevent water drop in 60 degrees angle
Note: An IP23 casing will make the power transformer's cooling capacity decline, decreasing by 5% for that of small capacity and 10% for that of large capacity.
An IP20 requires high-voltage and low-voltage cable incoming (outgoing) feeder carriage, so wiring becomes more convenient.

We are ready to provide you with protective enclosures of special requirements or materials.



Note:
For Capacity≤500KVA ,the U-bar 14# equal with H1=60
Capacity between 630kVA~1250kVA,the U-bar 16# equal with H1=65;
Capacity ≥1000kVA, the U-bar 18# equal with H1=70

SGB11-315~2500/10
dry type distribution transformer

Features

Superior performance, product is safety, credibility and environmental protection. Iron core is rolling made of no-crystal alloy material and the no-load losses and on-load losses this product are lower significantly, whose no-load losses is only three quarters of ordinary transformer, as well as it is the most advanced transformer in the world nowadays.
It adopts NOMEX paper insulating system, fire resistance, explosion proof, no pollution and high grade of fireproof;
High intension of mechanism, high capacity of short circuit endurance, safe and reliable running;
Low loss, significant effect of energy saving;
Less noise, small volume, easy installation and maintenance free;
Low partial discharge, high insulating grade and long life of usage;
Great ability of “three protections”, no chap;
Good ability of overload, safe and long operation on 120% on-load

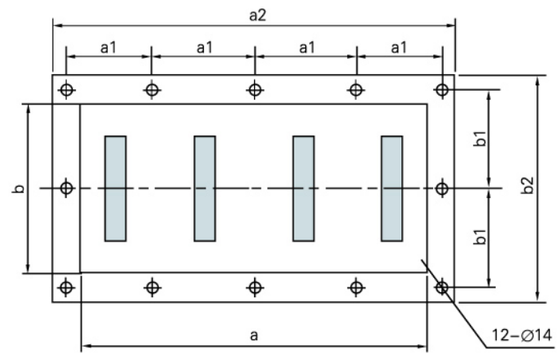
Parameters

(kVA)Capacity	Voltage Grade			Vector Group	Off-Load circuit(%)	Off-Load Loss(kW)	On-Load loss(kW) (75℃)	(%)Impedance(75℃)
	High Voltage(kV)	Low Voltage(kV)	Tapping Range					
315	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.6	770	2858	4
400	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.6	855	3285	4
500	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.6	1015	4015	4
630	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.4	1175	4830	4
630	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.4	1135	4910	6
800	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.4	1330	5720	6
1000	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.2	1545	6720	6
1250	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.2	1825	7960	6
1600	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.2	2145	9660	6
2000	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.0	2905	11940	6
2500	6 6.3 6.6 10 10.5 11	0.4	±5% ±2×2.5%	Yyn0 (Dyn11)	1.0	3500	14160	6

SG10 Series Enclosed Busbar

Providing standard enclosed busbar link with external one;
With shell (IP20) product, we providing the enclosed busbar ; only terminal provided for the (IP00) without shell;

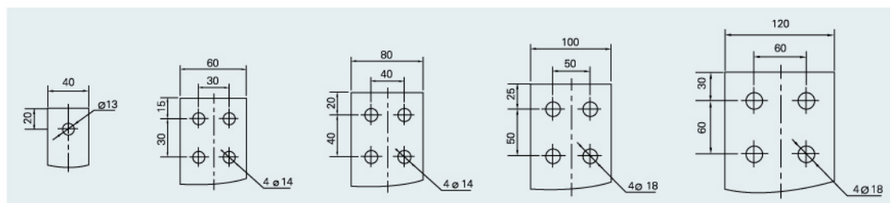
Flange dimension



Outline drawing of enclosed bus-bar product

(kVA)Capacity	a	a1	a2	b	b1	b2
1600–2500	550	150	650	250	150	350
1250	550	150	650	250	150	350
1000	550	150	650	150	100	250
800	550	150	650	150	100	250
≤630kVA	550	150	650	150	100	250

Enclosed bus-bar terminal



(a)500A
100–315kVA

(b)900A
400–500kVA

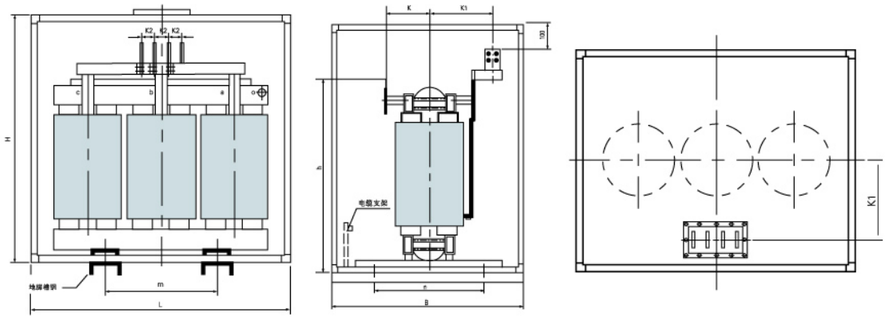
(c)1300A
630–800kVA

(d)2000A
1000–1600kVA

(e)4000A
2000–2500kVA

SG10 Series Standard Enclosed Bus-bar Outlet

Outline drawing of flange



Physical dimension of standard enclosed bus-bar outlet

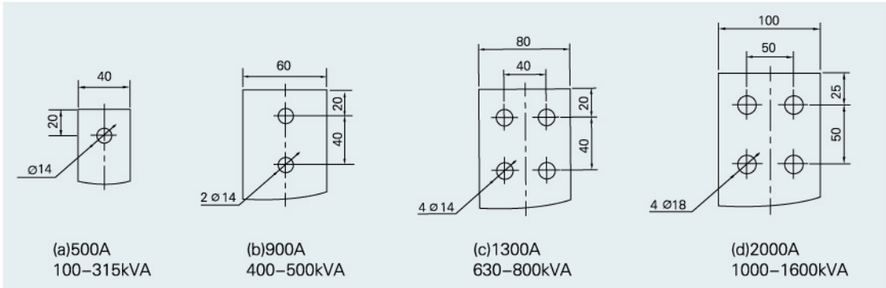
Mode	UK%	Size (mm)							Enclosed bus-bar terminal
		L×B×H	m	n	k	k^1	k^2	h	
SG10–250/10	4%	1600×1200×1460	660	860	299.5	330	100	1130	(a)
SG10–315/10	4%	1700×1200×1700	660	660	304.5	380	100	1185	(a)
SG10–400/10	4%	1700×1250×1660	820	660	312	380	100	1255	(b)
SG10–500/10	4%	1700×1250×1760	820	660	313	380	100	1335	(b)
SG10–630/10	4%	1800×1350×1865	820	660	319	380	150	1445	(c)
SG10–630/10	6%	1800×1350×1865	820	660	313	380	150	1300	(c)
SGB10–800/10	6%	1900×1350×1865	820	820	318	425	150	1404	(c)
SGB10–1000/10	6%	1900×1350×1965	820	820	344	425	150	1505	(d)
SGB10–1250/10	6%	2000×1350×1965	820	820	347	425	150	1505	(d)
SGB10–1600/10	6%	2000×1500×2200	1070	1070	354	515	150	1800	(e)
SGB10–2000/10	6%	2100×1500×2270	1070	1070	362	515	150	1832	(e)
SGB10–2500/10	6%	2200×1500×2470	1070	1070	369.5	515	150	1994	(e)

Remarks:
1. For the power transformer with a capacity ≤500kVA, its foundation channel steel is of 14#, i.e. H1=60;
2. For the power transformer with a capacity ranging between 630kVA and1250kVA, its foundation channel steel is of 16#, i.e. H1=65;
3. For the power transformer with a capacity ≥1600kVA, its foundation channel steel is of 18#, i.e. H1=70.

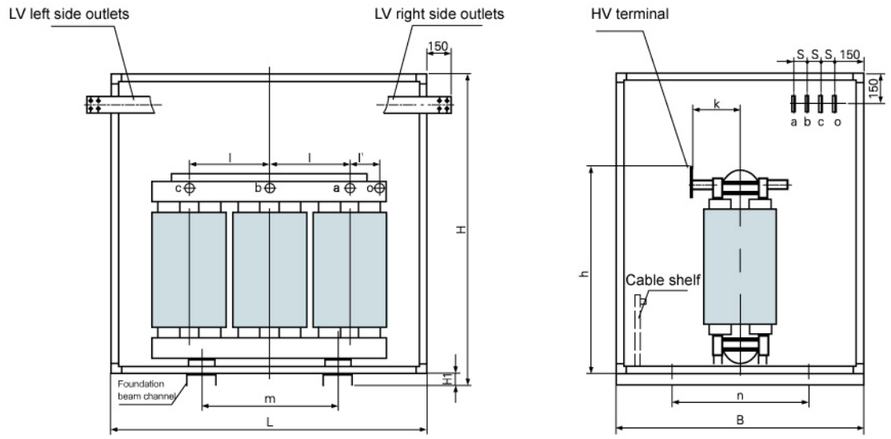
SG(B) Series Low-voltage Standard Horizontal Row Side Outlet

For the convenience of the connection of the terminal of power transformer and low-voltage switch cabinet when they are placed side by side and shortening the delivery time, please select the following standard horizontal row outlet products.

Drawing of side outlet terminals



Outline drawing of standard horizontal side outlets



SG (B) Series Low-Voltage Standard Vertical Row Side Outlet

SG (B) Series Low-Voltage Standard Vertical Row Side Outlet

Mode	UK%	Size (mm)								Enclosed bus-bar terminal
		L×B×H	m	n	l	l[1]	h	k	s	
SG10–250/10	4%	1600×1200×2200	660	660	410	150	1115	299.5	100	(a)
SG10–315/10	4%	1700×1200×2200	660	660	415	150	1170	304.5	100	(a)
SG10–400/10	4%	1700×1250×2200	820	660	425	155	1210	312	100	(b)
SG10–500/10	4%	1700×1250×2200	820	660	435	155	1290	313	100	(b)
SG10–630/10	4%	1800×1350×2200	.820	660	465	170	1400	319	100	(c)
SG10–630/10	6%	1800×1350×2200	820	660	473	165	1230	313	100	(c)
SG10–800/10	6%	1900×1350×2200	820	820	485	170	1297	318	100	(c)
SG10–1000/10	6%	1900×1350×2200	820	820	505	165	1519	344	100	(d)
SG10–1250/10	6%	2000×1350×2200	820	820	520	170	1542	347	100	(d)
SG10–1600/10	6%	2000×1500×2200	1070	1070	534	191	1725	354	100	double parallel(d)
SG10–2000/10	6%	2100×1500×2300	1070	1070	565	187.5	1707	362	120	double parallel(d)
SG10–2500/10	6%	2200×1500×2400	1070	1070	585	197.5	1867	369.5	120	double parallel(d)

Note: Dimension may vary refers to the specifications and design according to client's request.

Remarks:

1. For the power transformer with a capacity ≤200kVA, the outlet is normal and the side outlets are connected with cables by customers;
2. For the power transformer with a capacity ≥1600kVA, double rows of outlets are adopted for a, b, and c with a spacing interval of 10(1600, 2000kVA) or 12(2500kVA).
3. Because the side outlet zero line is located in the place above, for the switch cabinet with zero line leading out from the bottom, its is suggested that the zero line shall still access the switch cabinet from above;
4. It is suggested that the LV terminal be connected to copper bars of the switch cabinet using soft bars;
5. There are cabinet doors for both HV and LV sides of casing;
6. The temperature control unit is installed at the LV side of the casing;
7. For the power transformer with a capacity ≤500kVA, its foundation channel steel is of 14#, i.e. H1=60;
8. For the power transformer with a capacity ranging between 630kVA and1250kVA, its foundation channel steel is of 16#, i.e. H1=65;
9. For the power transformer with a capacity ≥1600kVA, its foundation channel steel is of 18#, i.e. H1=70.

For the convenience of the connection of the terminal s when a power transformer and a switch cabinet are placed side-by-side and shortening the delivery time, please select the standard vertical outlet type.

Physical dimension of standard vertical-row side outlets

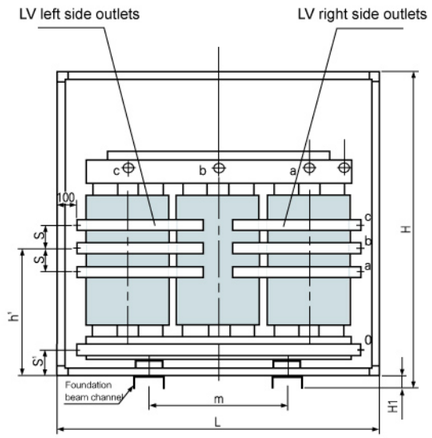
Mode	UK%	Size (mm)									Enclosed bus-bar terminal
		L×B×H	m	n	l	s[1]	h	k	s	h[1]	
SG10–250/10	4%	1600×1200×2200	660	660	410	120	1079	299.5	120	625	(a)
SG10–315/10	4%	1700×1200×2200	660	660	415	120	1170	304.5	120	625	(a)
SG10–400/10	4%	1700×1250×2200	820	660	425	120	1210	312	120	625	(b)
SG10–500/10	4%	1700×1250×2200	820	660	435	125	1290	313	160	625	(b)
SG10–630/10	4%	1800×1350×2200	820	660	465	125	1400	319	160	625	(c)
SG10–630/10	6%	1800×1350×2200	820	660	473	125	1230	313	160	625	(c)
SG10–800/10	6%	1900×1350×2200	820	820	485	135	1297	318	180	1450	(c)
SG10–1000/10	6%	1900×1350×2200	820	820	505	150	1519	244	180	1450	(d)
SG10–1250/10	6%	2000×1350×2200	820	820	520	150	1542	347	200	1450	(d)
SG10–1600/10	6%	2000×1500×2200	1070	1070	534	180	1725	354	200	1450	double parallel(d)
SG10–2000/10	6%	2100×1500×2300	1070	1070	565	180	1707	362	240	1450	double parallel(d)
SG10–2500/10	6%	2200×1500×2400	1070	1070	585	180	1867	369.5	240	1450	double parallel(d)

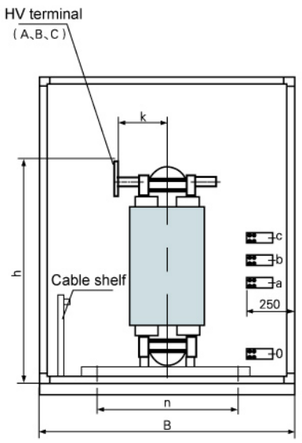
Remarks:

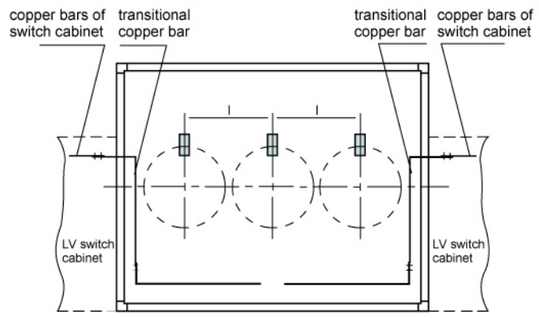
1. For the power transformer with a capacity ≤200kVA, the outlet is normal and the side outlets are connected with cables by customers;
2. When the rated capacity ≥1600kVA, the air clearance of two rows of copper bars is 20;
3. It is suggested that the LV terminal be connected to copper bars of the switch cabinet using soft bars;
4. There are cabinet doors for both HV and LV sides of casing;
5. The temperature control unit is installed at the LV side of the casing;
6. For the power transformer with a capacity ≤500kVA, its foundation channel steel is of 14#, i.e. H1=60;
7. For the power transformer with a capacity ranging between 630kVA and1250kVA, its foundation channel steel is of 16#, i.e. H1=65;
8. For the power transformer with a capacity ≥1600kVA, its foundation channel steel is of 18#, i.e. H1=70.

SG (B) Series Low-Voltage Standard Vertical Row Side Outlet

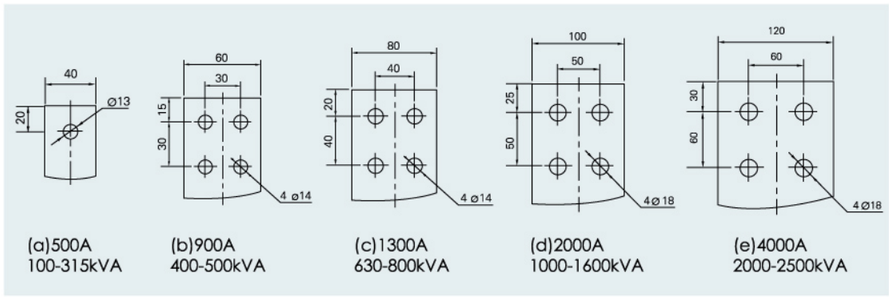
Physical dimension of standard vertical-row side outlets







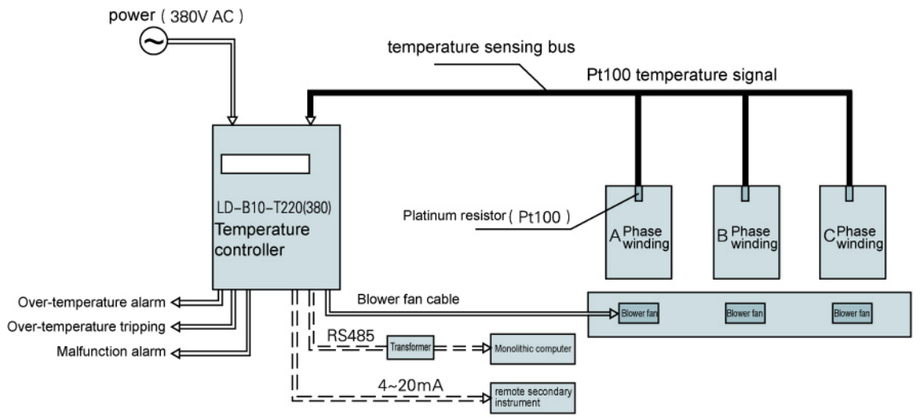
Busbar row of low-voltage connecting terminal



Temperature Control System

Design of integrated temperature control and temperature measurement functions;
Pt100 signal actions are available for over-temperature alarming and tripping operation, which winding maximum temperature 4-20mA analog output or RS485 computer interface are available , which are suitable for modern monitoring;
Simple but practical appearance and performance design, which considers fully users' various demands; flexible and rapid installation;
Products with casing (IP20): directly mounted on the casing panel;
Products without casing (IP00): directly mounted on the right side of the clamping piece, which is located in the LV side of the power transformer.

Temperature Controller's Principle Drawing



Temperature Controller's Role

Circulation display of three-phase winding temperature or lock-on display of the phase winding with the maximum temperature (arbitrary switch available);
Automatic control or manual control of the start-stop of cooling fan (arbitrary switch available);
Output function and overall measurement accuracy detection;
Display, output and long distance transmission of the signals of blower fan start-stop, over-temperature alarming, and over-temperature tripping;
Display, alarming, and output of sensor open-circuit and system malfunction self-checking signals; long distance transmission of blower fan breakdown signals;
Black box which can store all the monitoring parameters before outage for future inquiry;
Independent digital compensation of temperature indicating value for each winding;
Through RS-485 computer interface output, the transmission distance can be within 1200m.

Note:

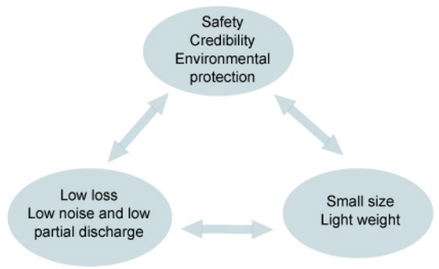
all output contact capacities are 7A/250VAC.
For details of temperature controller, please refer to the operating instruction manual.

Variable Flux Low No-load Loss Double Capacity Power Transformer

Information of Double Capacity Power Transformer

To meet the demands of market, Double Capacity Power Transformer supplies a new operation style which can run as different loads and connections by changing connection methods. This type transformer has very low loss during low on-load by changing flux density. The loss is 25 percent lower than that of ordinary transformers, and even less than the no-load loss of transformer with noncrystalline alloy iron core. Consequently, great economic benefit could be achieved. This invention can be used on transformers with different type of coupling group, voltage grade, method of voltage regulation and capacity.

Advantages

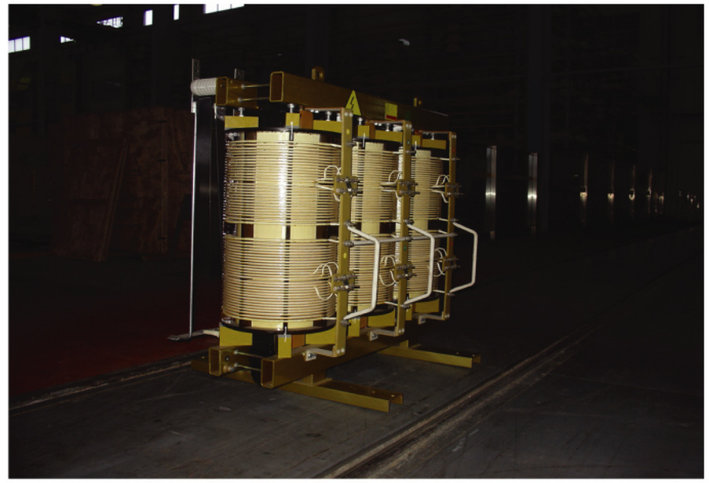


Dimension

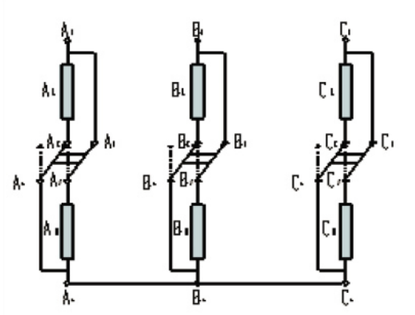
According to different proportions between on-load loss and no-load loss, two capacities ratio of double capacity transformer can be design into proportion 2 to 1. The first and second winding are axial double division structure, which of two parts are symmetry, complete insulation and same electric parameters. There is voltage regulation winding by one side of the transformer.

Connection and Operation Style
Tow parts of the first winding can be connected as structure in series or parallel by reversing switch. Either can the second winding achieve the same results by another reversing switch. The first and second winding of transformer can run in parallel connection with normal load, at this moment the transformer will run in full capacity. It suits for the on-load percent ranging from 0 to 100% the same as normal transformer; when it is low on-load (on-load percent is less than 33%), the first and second winding run in series style and the rated capacity is one quarter of the full capacity.

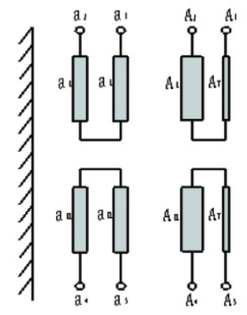
Process of Trial-manufacture
The SGT10—30～2500/10 Series Variable Flux Low No-load Loss Double Capacity Power Transformer is researched and manufactured by R&D center of CEEG. The R&D team is entering on the electromagnetic calculation and structure design and passing the design appraise according to the requirements of ISO9001 quality system on the basis of learning structure, manufacture process and experience from SG10 series product.



Solution of Key Points
For making the loss receded in great extent and meeting 10 model standard , we adopts 30ZH130 high quality high-permeability grain-oriented cold-rolled silicon-steel sheet, 45° all-leaning joints structure without hole-punching for the iron cores, which reduce technics loss.
HV coil conductor adopts NOMEX paper wrapped with no-oxygen copper flat wire as conductor. LV winding adopts high quality copper foil and current density is relatively low. This declines on-load loss effectively.
HV winding structure is comb-type stay continuous coil style; two windings are winded on the same insulating cylinder simultaneously with opposite direction. So the down-lead can not be crisscross and its exterior is pretty when HV runs in series and parallel.
It adopts NOMEX paper wrapped with no-oxygen copper flat wire as the conductor and H grade shaped insulating material as end insulation. Winding has high intension of coil mechanism after complete winding dipping through vacuum pressure、baking and solidified. Intension of coil mechanism is growing; effective of heat radiation is better and capacity of dustproof becomes stronger.
To avoid the problem of central part coil coming out, LV coil is crisscross winding with two coils. It is convenient for LV running in series and parallel. It selects NOMEX insulating material as the insulation, and down-lead copper bar and copper foil are argon arc jointed by professional equipment then they are dipping through vacuum pressure、baking and solidified.
The clamp part is made of square tube in the clamp structure of the equipment. The structure is stainless steel vertical brace pressing nail. The cable connection is 10kV crisscross connection in HV draw-lead.



The Coil hange's indication



The Transformer structure's indication

SG(B)10 series Double Voltage Grade Transformer

Characteristics

Small volume, light weight, reliability, high insulating grade, strong over-load ability and environmental protection. It could delivery single or both outputs at two different voltage grades. All performances have reached advanced national level.

LV coil is foil or coil winding type, and it adopts NOMEX paper as insulation material, with soaking through VPI-vacuum pressure impregnating equipment and high temperature curing machine, through which the mechanical and electrical intensity of the products have been greatly raised.

HV coil is on double windings and the structure is double continuous style; two coils are winded on the same insulating cylinder with same winding direction,. The structure is symmetry with average distribution up and down. The diversion of two different voltage grades will come true by changing the method of HV coil in series and parallel. It adopts NOMEX paper as insulation material, with soaking through VPI-vacuum pressure impregnating equipment and high temperature curing machine, through which the mechanical and electrical intensity of the products have been greatly raised.

Parameters

1. Primary Voltage (kV)：6kVChange10kV、10kVChange20kVEtc.
2. Capacity Range（kVA）：315～2500
3. Vector Group：Dyn11or Yyn0
4. Tapping Range：±2×2.5%、±5% Etc.
5. Impedance Voltage：4%、6%

Introduction for SG10 Series Three-Winding Product

Characteristics

Small volume, light weight, reliability, high insulating grade, strong over-load ability and environmental protection. It could delivery single or both outputs at two different voltage grades. All performances have reached advanced national level.

LV and MV coils are spiral type or layer type structure, and it adopts NOMEX paper as insulation material, with soaking through VPI-vacuum pressure impregnating equipment and high temperature curing machine, through which the mechanical and electrical intensity of the products have been greatly raised.

HV coil is layer type or continuous type structure, and it adopts NOMEX paper as insulation material, with soaking through VPI-vacuum pressure impregnating equipment and high temperature curing machine, through which the mechanical and electrical intensity of the products have been greatly raised.

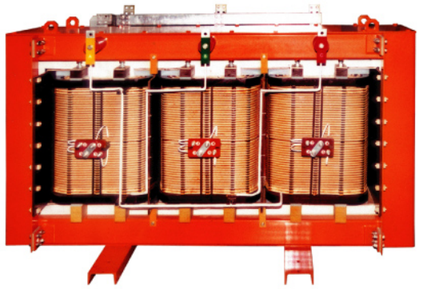
Parameters

1. (kV) Primary Voltage：0.4、3、5、6、10kVEtc.
2. Capacity Range（kVA）：100～4000
3. Vector Group：Dyn11(yn11)orYNd11,d11Etc.
4. Tapping Range：±2×2.5%、±5% Etc.
5. Impedance Voltage：4%、6%.

Remarks: with our strong technical force, we can design other transformers with special requirements and performances for customers.

Dry Type Transformer

(Noncrystal Alloy\ Single Phase\ No-sealed Traction Commutate)



SGBH10 Noncrystal Alloy Dry Type Transformer

Superior performance, product is safety, credibility and environmental protection. Iron core is rolling made of no-crystal alloy material and the no-load losses and on-load losses this product are lower significantly, whose no-load losses is only three quarters of ordinary transformer, as well as it is the most advanced transformer in the world nowadays.

It adopts NOMEX paper insulating system, fire resistance, explosion proof, no pollution and high grade of fireproof;

High intension of mechanism, high capacity of short circuit endurance, safe and reliable running;

Low loss, significant effect of energy saving;

Less noise, small volume, easy installation and maintenance free;

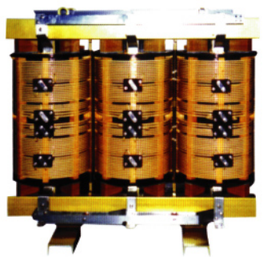
Low partial discharge, high insulating grade and long life of usage;

Great ability of “three protections”, no chap;

Good ability of overload, safe and long operation on 120% on-load

Dry Type Transformer

DG10 Single-Phase Dry type Power Transformer



Going deep into load center directly;
Fire resistance, explosion proof, no pollution and high grade of fireproof.
Low loss, significant energy saving, loss is lower about 40% than that of three phases dry-type transformer with the same capacity
Less noise, small size, lightweight, less room ranging, simple installation and maintenance free
No partial discharge nearly, high insulating grade
Especially low temperature rising design, long life of usage

Grade-H Insulating ZQSGB10 Series No-sealed Dry-type Traction Commutate Transformer

Main body of ZQSGB10 series adopts axial double division structure, as well as 3 phases and 24 pulse wave. It is design into Grade-H heatproof and insulating coil ZQSGB10 series no-sealed dry-type traction commutate transformer. The highest permission running temperature is 140? but the NOMEX paper, Grade-C (heat resisting can reach to 220?) as main insulating material, keeps much design margin. Iron core of Grade-H heatproof and insulating coil ZQSGB10 series no-sealed dry-type traction commutate transformer has great overload ability and can completely meet the requirement of subway and light rail’s change. The iron core adopts Japanese 30ZH120 low losses high quality high-permeability grain-oriented silicon-steel sheet, step corner all-leaning joints. The noise is reduced down to least level with special noise lowering and proofing solution.
HV and LV coils are tight winding as well as raising the intension of mechanism. This product is no-epoxy resin casting and high temperature solidified with dipping through VPI vacuum pressure. It can hold the operation of sudden heating overload, as well as remaining mechanical and electrical intensity.
NOMEX paper with high temperature resistance, rubber or lacquer has strong ability of antifouling after vacuum pressure dipping and high temperature baking drying.

SG (B)10 Non-sealed H Grade Dry Type Transformer confirms with following standards

IEC726-11 International Electrotechnical Commission standards – Dry type power transformers

GB 1094.11-2007 Dry type power transformers

GB/T10228-2008 Dry type power transformers technical parameters and requirements

GB/T17211-1998 Load guide for dry type power transformers

GB4208-1993 Shell protection grade (IP code)

JB/T10088-2004 6-500KV grade transformer sound level

JB/T56009-1998 Dry type power transformer product quality grading

JB/T501-2006 Power Transformer Test Guidelines

Product natural intelligence

Case study of SG10

Comprehensive Training Hall of National Olympic Sports Center in Beijing

Jiuquan Satellite Launch Center

Xiaolangdi Water Control Project

Capital International Airport

Beijing Chang'an Street lighting project

Shanghai F1 Circuit

Other cases

Chinese People's Anti-Japanese War Memorial Hall
Guangzhou New Baiyun Airport
Runyang Yangtze River Highway Bridge
Shougang Corporation
China Shenhua Energy Company Limited
Sinopec
Petrol China
Tang Taiyuan No.2 Thermal Power Plant
Huaneng Luohuang Power Plant
Nanjing Iron and Steel Group
Site of Suzhou World Heritage Expo
Zhaojiashan Power Plant in Luding County, Ganzi State, Sichuan Province
Guangdong Yueyang Power Company Limited----An expansion of 135MWCFB Environmental Unit
City Power Supply Branch of Beijing Power Company, North China Power Grid Co., Ltd.
Pingdingshan Coal Industry (Group) Co., Ltd.
Golmud station 916 of the State Administration of Radio, Film & Television
Beijing Airport in Mechanical and Electrical Equipment Installation Co., Ltd.
Shandong Chiping Power Plant
Visual Arts Institute of China Academy of Fine Arts
Huangling Mining Group Co., Ltd.
Hangzhou Guodian Dali Mechanic & Electric Engineering Co.,Ltd.
Jiangsu Nangang Baoxing Iron Co., Ltd.
Second Artillery Special Equipment Management Department
Chongqing Iron & Steel Co., Ltd.
Siemens (Shanghai) Electric Transmission Equipment Co., Ltd.
Huozhou Coal Group Co., Ltd.
Suzhou East China Power Grid Electric Co., Ltd.
India Ximeng Bang Durgapur 2 * 300MW Coal-fired Power Plant
Shandong Weihai Shipyard
Yangzhou Dayang Shipbuilding Co., Ltd.
Zhengzhou Airport
Beijing City Power Development Corporation
Shenyang National Transformer Testing Center
Medium voltage system installation Co., Ltd of Jiangsu Aviation Industry Group-> Nanjing Bridge
Yanzhou Coal Mining Co., Ltd.
Fudan University
State Environmental Protection Hi-Tech Industrial Park, Suzhou