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鼎岳传媒 Tel:180 5833 8622

SNTOOM®

SNTOOM

Oil-type transformer | Dry-type transformer | Box-type substation | Cable branch box

SNTOOM®
ZHEJIANG SHUNTONG ELECTRIC CO., LTD.
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PRODUCT SELECTION GUIDE

Independent innovation, scientific development, people-oriented

ZHEJIANG SHUNTONG ELECTRIC CO., LTD.

COMPANY PROFILES

Zhejiang Shuntong Electric Co., Ltd. is a large-scale company integrating scientific research, production, management and international trade. The company has production bases in Shanghai and Wenzhou, and its headquarter is located in the upstream industrial zone in Liushi, Yueqing, Zhejiang.

Shuntong Electric specializes in the production of power transmission and distribution equipment, high and low voltage electrical components, and is one of the strong domestic power transmission and distribution equipment production bases. The company's products are underwritten by the People's Insurance Company of China, which is directly committed to providing products and services for the electric power, metallurgy, railway, port, petrochemical, power station, construction and other industries. The products are also exported to more than 20 countries and regions such as Europe, America and the Middle East.

The company takes the development of the electrical industry and the value of improvement as its own responsibility, carries forward the corporate spirit of "co-creation, sharing, and common development", insists on independent innovation, scientific development, and "marketization, branding, technology, and personalization" Develop ideas and strive to build a corporate culture of "people-oriented and dedicated service".

SNTOOM®

PRODUCTION EQUIPMENT

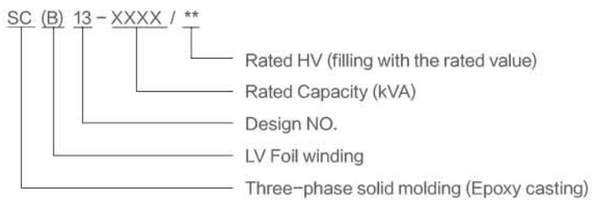
Advanced production equipment, scientific production technology, strict quality system and demanding raw material procurement system ensure that the product quality of Shuntong Electric has always been in the leading position in the industry. We not only guarantee to provide you with excellent cost-effective, complete and high-quality products, but also bring you an energy-saving and environmentally friendly electricity environment, because the products of Shuntong Electric fully meet the national quality, energy saving, safety and environmental protection standards. The quality of some products is even better than that of similar products in Europe.

Strict monitoring is the guarantee of product quality. It is our aim not to let any defects appear, and to prevent quality problems from damaging the Shuntong brand.

We have established a set of reasonable and orderly monitoring procedures. Under the guidance of the idea of "we pursue zero failure", Shuntong will never let a substandard product leave the factory.

We believe this is not only responsible to our customers, but also to ourselves.

Type Meaning



Product standards

GB/T 10228-2008 GB1094.11-2007
Rated HV: 10(10.5,11, 6,6.3, 6.6)kV
Rated LV: 0.4kV
Tap connection range:
Non-exciting regulation(±5%,±2×2.5%)
On-load regulation(±4x2.5%)
Vector group: D yn11or Y yn0
Insulation level : LI75AC35/AC5

6~10kV epoxy resin cast dry-type distribution transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current(%)	Short circuit impedance(%)
	High Voltage (kV)	High-voltage Tap Range(%)	Low Voltage (kV)					
30	6 6.6 6.6 10 10.5 11	±5% ±2×2.5%	0.4	Dyn11	130	710	2.6	4
50					190	1000	2.2	4
80					260	1380	2.2	4
100					280	1570	2	4
125					330	1850	1.8	4
160					380	2130	1.8	4
200					435	2530	1.6	4
250					505	2760	1.6	4
315					615	3470	1.4	4
400					685	3990	1.4	4
500					810	4880	1.4	4
630					940	5880	1.2	4
630					910	5960	1.2	6
800					1065	6960	1.2	6
1000					1240	8130	1.1	6
1250					1460	9690	1.1	6
1600					1715	11730	1.1	6
2000					2135	14450	1.0	6
2500					2520	17170	1.0	6

Note: 1, load loss slash table above apply to join the group Dyn11 load loss slash Yyn0 below values apply to join the group.
2, other capacity product performance parameters, determined by the user in consultation with the manufacturer.

Type Meaning

Product standards

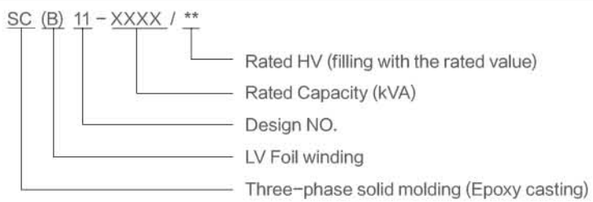
GB/T 10228-2008 GB1094.11-2007
Rated HV: 10(10.5,11, 6,6.3, 6.6)kV
Rated LV: 0.4kV
Tap connection range:
Non-exciting regulation(±5%,±2×2.5%)
On-load regulation(±4x2.5%)
Vector group: D yn11or Y yn0
Insulation level : LI75AC35/AC5

6KV, 10KV class 11 dry type non-excitation voltage regulating distribution transformer

Rated capacity (kVA)	Range of voltage and tap			Vector Group	No-load loss(W)	Load loss (W)	No-load current(%)	Short circuit impedance (%)
	High Voltage (kV)	High-voltage Tap Range(%)	Low Voltage (kV)					
30	6 6.6 6.6 10 10.5 11	±5% ±2×2.5%	0.4	Dyn11	170	710	2.6	4
50					240	1000	2.2	4
80					330	1380	2.2	4
100					360	1570	2	4
125					420	1850	1.8	4
160					490	2130	1.8	4
200					560	2530	1.6	4
250					650	2760	1.6	4
315					790	3470	1.4	4
400					880	3990	1.4	4
500					1045	4880	1.4	4
630					1210	5880	1.2	4
630					1170	5960	1.2	6
800					1370	6960	1.2	6
1000					1590	8130	1.1	6
1250					1880	9690	1.1	6
1600					2205	11730	1.1	6
2000					2745	14450	1.0	6
2500					3240	17170	1.0	6

Note: On-load regulation series transformer regulates the two data items as follows: 1. Weight increase 100kg;
2. Transformation flank a increase 650mm or face b increase 750mm assigned by on-load switch;

Type Meaning



Product standards

GB/T 10228-2008 GB1094.11-2007
Rated HV: 20(22、24)kV
Rated LV: 0.4kV
Tap connection range:
Non-exciting regulation(±5%,±2×2.5%)
On-load regulation(±4x2.5%)
Vector group: D yn11or Y yn0
Insulation level : LI125AC50/AC5

20kV epoxy resin cast dry-type distribution transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss (W)	Load loss (W)	No-load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High Voltage tap range (%)	Low Voltage (kV)					
50	20 24 22	±5% ±2*2.5%	0.4	Dyn11 Yyn0	340	1300	2.2	6
100					540	2100	2	6
160					675	2600	1.8	6
200					740	3100	1.6	6
250					845	3600	1.6	6
315					970	4300	1.4	6
400					1150	5100	1.4	6
500					1350	6100	1.4	6
630					1530	7200	1.2	6
800					1755	8700	1.2	6
1000					2070	10300	1.1	6
1250					2385	12150	1.1	6
1600					2790	14600	1.1	6
2000					3240	17250	1.0	8
2500					3870	20400	1.0	8

Note: 1, load loss slash table above apply to join the group Dyn11 load loss slash Yyn0 below values apply to join the group.
2, other capacity product performance parameters, determined by the user in consultation with the manufacturer.

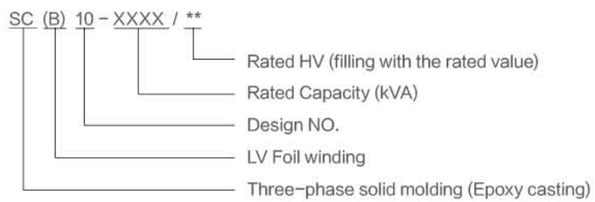
35kv non-excited tap-changing transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current(%)	Short circuit impedance(%)
	High Voltage (kV)	High Voltage tap range (%)	Low Voltage (kV)					
800	35-38.5	±5 ±2×25%	0.4	Dyn11 Yyn0	2000	9900	1.1	6.0
1000					2375	11500	1.1	6.0
1250					2785	13600	1.0	6.0
1600					3280	16300	1.0	6.0
2000					3760	19200	0.9	7.0
2500					4320	23000	0.9	7.0
3150					5360	25800	0.8	8.0
4000					6240	31000	0.8	8.0
5000					7440	36800	0.7	8.0
6300					8800	43000	0.7	8.0
8000					10080	48500	0.6	9.0
10000					11520	58500	0.6	9.0
12500					14000	68000	0.5	9.0
16000					17200	80000	0.5	9.0
20000					20400	90000	0.4	10.0

35kv on-load tap-changing power transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	SC(ZB)9		SC(ZB)11		No-load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High Voltage tap range (%)	Low Voltage (kV)		No-load loss(W)	Load loss (W)	No-load loss(W)	Load loss (W)		
2000	35-38.5	±4×2.5%	6 6.3 10 10.5 11	Dyn11 Yd11	5000	17470	4500	16590	0.8	7.0
2500					5800	20790	5220	19750	0.8	7.0
3150					7000	23410	6300	22240	0.7	7.0
4000					8200	28030	7380	26630	0.7	7.0
5000					9700	33190	8730	31530	0.6	8.0
6300					11500	38430	10350	36510	0.6	8.0
8000					13200	43670	11880	41480	0.5	9.0
10000					15100	52580	13590	49950	0.5	9.0
12500					19300	61130	16470	58080	0.5	9.0
16000					22500	71960	20250	68370	0.5	9.0
20000					26500	80960	23850	76910	0.4	10.0

Type Meaning



Product standards

GB/T 10228-2008 GB1094.11-2007
Rated HV: 10(10.5,11, 6,6.3, 6.6)kV
Rated LV: 0.4kV
Tap connection range:
Non-exciting regulation(±5%,±2×2.5%)
On-load regulation(±4x2.5%)
Vector group: D yn11or Y yn0
Insulation level : LI75AC35/AC5

6~10kV epoxy resin cast dry-type distribution transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current(%)	Short circuit impedance(%)
	High Voltage (kV)	High-voltage Tap Range(%)	Low Voltage (kV)					
30	6 6.3 6.6 10 10.5 11	±5% ±2×2.5%	0.4	Dyn11 Yyn0	190	710	2.6	4
50					270	1000	2.2	4
80					370	1380	2.2	4
100					400	1570	2	4
125					470	1850	1.8	4
160					540	2130	1.8	4
200					620	2530	1.6	4
250					720	2760	1.6	4
315					880	3470	1.4	4
400					980	3990	1.4	4
500					1160	4880	1.4	4
630					1340	5880	1.2	4
630					1300	5960	1.2	6
800					1520	6960	1.2	6
1000					1770	8130	1.1	6
1250					2090	9690	1.1	6
1600					2450	11730	1.1	6
2000					3050	14450	1.0	6
2500					3600	17170	1.0	6

Note: 1, load loss slash table above apply to join the group Dyn11 load loss slash Yyn0 below values apply to join the group.
2, other capacity product performance parameters, determined by the user in consultation with the manufacturer.

Type Meaning

Product standards

GB/T 10228-2008 GB1094.11-2007
Rated HV: 20(22、24)kV
Rated LV: 0.4kV
Tap connection range:
Non-exciting regulation(±5%,±2×2.5%)
On-load regulation(±4x2.5%)
Vector group: D yn11or Y yn0
Insulation level : LI125AC50/AC5

20kV epoxy resin cast dry-type distribution transformer

Rated capacity (kVA)	Voltage Combination and Tap range			Vector Group	No-load loss(W)	Load loss(W)	No-load current(%)	Short circuit impedance(%)
	High Voltage (kV)	High-voltage Tap Range(%)	Low Voltage (kV)					
50	20 22 24	±5 ±2×2.5%	0.4	Dyn11 Yyn0	305	1300	2.2	6
100					485	2100	2	6
160					605	2600	1.8	6
200					665	3100	1.6	6
250					760	3600	1.6	6
315					875	4300	1.4	6
400					1035	5100	1.4	6
500					1215	6100	1.4	6
630					1375	7200	1.2	6
800					1580	8700	1.2	6
1000					1860	10300	1.1	6
1250					2145	12150	1.1	6
1600					2510	14600	1.1	6
2000					2915	17250	1.0	8
2500					3480	20400	1.0	8

35kv non-excited tap-changing transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group Symbol	SCB9 系列		SCB10 系列		No-load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High Voltage tap range (%)	Low Voltage (kV)		No-load loss (W)	Load loss (W)	No-load loss (W)	Load loss (W)		
800	35 38.5	±5 ±2×25%	0.4	Dyn11 Yyn0	2500	9900	2250	9400	0.3	6.0
1000					2970	11500	2673	10930	0.24	6.0
1250					3480	13600	3132	12920	0.22	6.0
1600					4100	16300	3690	15490	0.21	6.0
2000					4700	19200	4230	18240	0.2	7.0
2500					5400	23000	4860	21850	0.19	7.0
3150					6700	25800	6030	24510	0.18	8.0
4000					7800	31000	7020	29450	0.17	8.0
5000					9300	36800	8370	34960	0.16	8.0
6300					11000	43000	9900	40850	0.16	8.0
8000					12600	48500	11340	46080	0.16	9.0
10000					14400	58500	12960	55580	0.15	9.0
12500					17500	68000	15750	64600	0.15	9.0
16000					21500	80000	19350	76000	0.14	9.0
20000					25500	90000	22950	85500	0.13	10.0

Note: 1, load loss slash table above apply to join the group Dyn11 load loss slash Yyn0 below values apply to join the group.
2, other capacity product performance parameters, determined by the user in consultation with the manufacturer.

35kv on-load tap-changing power transformer

Rated capacity (kVA)	Range of voltage and tap			Vector Group	No-load loss(W)	Load loss (W)	No-load current(%)	Short circuit impedance (%)
	High Voltage (kV)	High-voltage Tap Range(%)	Low Voltage (kV)					
2000	35~38.5	±4×2.5	6 6.3 10 10.5 11	Dyn11 Yd1	4250	20000	0.9	7.0
2500					4930	23800	0.9	7.0
3150					5950	26800	0.8	7.0
4000					6970	32100	0.8	7.0
5000					8230	38000	0.7	8.0
6300					9780	44000	0.7	8.0
8000					11220	50000	0.6	9.0
10000					12840	60200	0.6	9.0
12500					15560	70000	0.5	9.0
16000					19130	82400	0.5	9.0
20000					22530	92700	0.4	10.0

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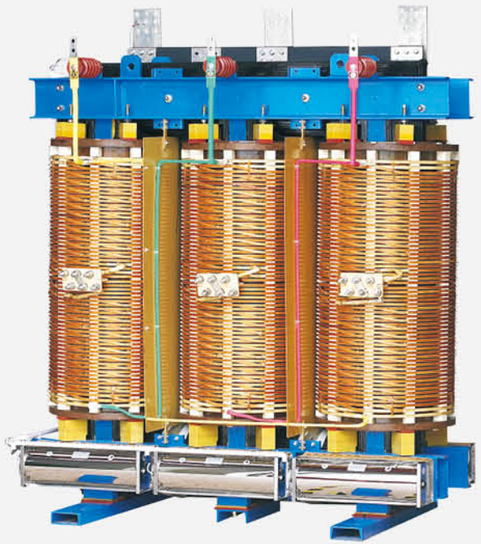
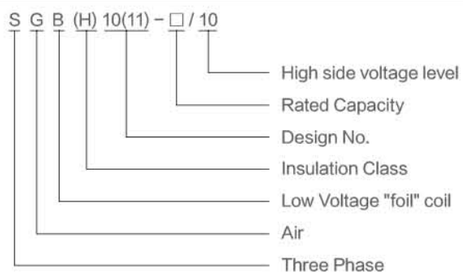
SGB10(11)6~10kV
ECO-FRIENDLY DRY-TYPE TRANSFORMER



Product overview

SGB (H) 10 type H-class insulation dry-type power transformers ability to withstand thermal shock, overload capacity, high flame retardant, fire resistance, low loss, low partial discharge capacity, low noise, no harmful gases, do not pollute the environment , insensitive to humidity, small, no cracking, easy to maintain. Therefore most suitable fire protection requirements high load fluctuation and dirty wet harsh environments. Such as airports, power plants, metallurgical operations, hospitals, high-rise buildings, shopping centers, densely populated areas as well as petrochemical, nuclear power plants, nuclear submarines and other special environment.

Type Meaning



Normal Use Conditions

Altitude: not more than 1000m;

The waveform of the power supply voltage: similar to a sine wave;

Symmetry of multi-phase power supply voltage: The power supply voltage connected to the multi-phase transformer should be approximately symmetrical.

Ambient temperature: highest temperature +40 ℃ ; highest daily average temperature +30 ℃ ; highest annual average temperature +20℃ ; lowest temperature -30℃ (applicable to indoor transformers).

Structure

SGB10(11) series is the use of paper-based DuPont NOMEX insulation systems, during the entire life of the transformer maintains excellent electrical and mechanical properties. NOMEX not aging, resistance to shrinkage and resistance to compression, coupled with an exceptionally strong elasticity, thus ensuring even for several years after the transformer coil remains compact, and can withstand the pressure of a short circuit.

High standards of safety, no flammable resin, no toxic gas, no combustion.

Reducing the size and weight unit kVA

Increase the capacity of the emergency overload

Repair, easy to maintain

Low noise

Humidity, insensitive to dust, pollution

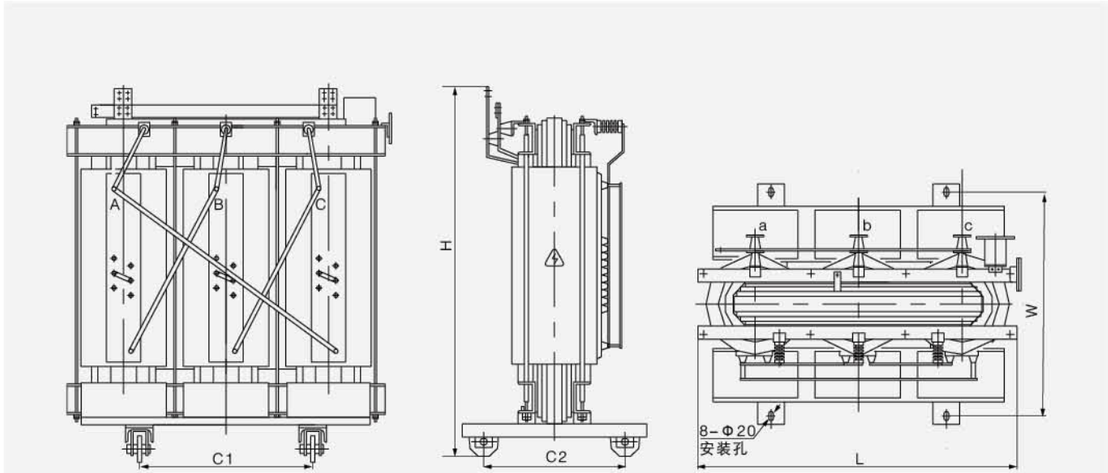
Run no partial discharge and never "crack" may

Design flexibility, customers can request the design of any specification made need.

Main Technical Parameter

Rated capacity (kVA)	Range of voltage and tap			Vector Group	No-load loss(W)	Load loss (W)	No-load current(%)	Short circuit impedance (%)
	High Voltage (kV)	High-voltage Tap Range(%)	Low Voltage (kV)					
80	6.3 6.6 10 10.5 11	±5% ±2×2.5%	0.4	Dyn11 Yd1	370	1750	2.2	4
100					400	2170	2.0	4
125					470	2590	1.8	4
160					545	3100	1.8	4
200					625	3970	1.6	4
250					720	4680	1.6	4
315					880	5610	1.4	4
400					975	6630	1.4	4
500					1160	7950	1.4	4
630					1300	9780	1.2	6
800					1520	11560	1.2	6
1000					1770	13350	1.1	6
1250					2090	15640	1.1	6
1600					2450	18110	1.1	6
2000					3320	21250	1.0	6
2500					4000	24740	1.0	6

Overall and installation dimensions(mm)



Rated capacity (kVA)	Shape and installation dimensions (mm)				
	L	W	H	C1	C2
100	1060	750	880	660	660
160	1140	750	1050	660	660
200	1180	750	1150	660	660
250	1200	750	1200	660	660
315	1240	750	1210	660	660
400	1350	900	1240	660	820
500	1360	900	1320	820	820
630	1440	900	1350	820	820
800	1500	900	1440	820	820
1000	1550	900	1500	820	820
1250	1600	1100	1650	820	820
1600	1700	1100	1750	820	820
2000	1750	1250	1800	1070	1070
2500	1800	1250	1950	1070	1070

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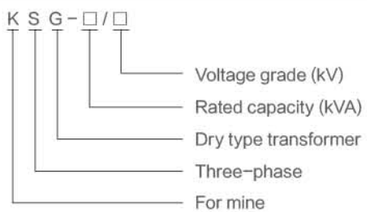
MINE DRY-TYPE TRANSFORMER

Product overview

The KSG series of mine dry-type transformers are dry-type non-explosion-proof products, which are used in metal and non-metal mines where explosion-proof requirements are not required. For example: various mines such as iron ore, copper mine, gold mine, high-speed railway, highway, tunnel, etc.

Transformer KBSG, KBSGZY series of explosion-proof products are suitable for mines with methane mixed gas and coal dust, and explosion hazard, as well as highway and railway tunnels, to provide power for various power equipment and various electrical devices. The product has strong overload capacity, compact structure, low no-load loss and low no-load current. The mine explosion-proof transformer KBSG and the high and low voltage switch form a complete set of mine explosion-proof mobile substation KBSGZY, which has protective functions such as loss of voltage, overload, short circuit, open circuit, leakage, and temperature.

Type Meaning



Main Technical Parameter

Model	Rated voltage		Vector Group	No-load loss(W)	Load loss (120℃) W	No-load current(%)	Short circuit impedance Uz%
	High Voltage (kV)	Low Voltage (kV)					
KSG-100KVA	10KV or 6KV 分接范围 ±2×2.5%	0.4KV or 0.69KV	Dyn11 Dy11 YD11	400	1570	1.8	4
KSG-200KVA				620	2530	1.1	4
KSG-250KVA				720	2760	1.4	4
KSG-315KVA				880	3470	1.2	4
KSG-400KVA				980	3990	1.2	4
KSG-500KVA				1160	4880	1.2	4
KSG-630KVA				1300	5960	1.0	6
KSG-800KVA				1520	6960	1.0	6
KSG-1000KVA				1770	8130	1.0	6
KSG-1250KVA				2090	9690	1.0	6

Note: The load loss value and short-circuit resistance value are the values when the reference temperature of the F-class insulating material is 120℃ .

Model	Rated capacity (kVA)	Dimensions L×W×H×(mm)	Transformer weight(KG)
KSG	100	1750×1500×1500	1400
KSG	200	1750×1500×1500	1450
KSG	250	1750×1500×1500	1500
KSG	315	1750×1500×1500	1800
KSG	400	1750×1500×1600	1950
KSG	500	1750×1500×1600	2100
KSG	630	1750×1500×1750	2300
KSG	800	1750×1500×1750	2500
KSG	1000	1900×1500×1970	3000
KSG	1250	2000×1500×1970	3600

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OIL-IMMERSED DISTRIBUTION TRANSFORMERS

Product overview

S11(13)-M-30~2000/10-type full-sealed oil-immersed transformers for AC 50Hz, rated working voltage of 10kV and below the power system, as petroleum, metallurgy, chemical, textile, light industry and other large enterprises and dust place the distribution transformers.

Type Meaning

S 11(13) - M □ / 10

- 10 — High side power rating (kV)
- □ — Rated capacity (kVA)
- M — Sealed
- 11(13) — Design No.
- S — Three Phase

Normal Use Conditions

- Installation Altitude: not exceed 1000m;
- ambient temperature: -40 ℃ ~ +40 ℃

Iron Core

Core is made of high permeability grain oriented cold-rolled silicon steel. The core of the new core, miter joints convolution type iron core, its legs of circular cross section multi-step, the yoke and the core of constant section.

Winding

Windings corrugated oil passage, not dipping process, tightening belt lashing; concentric coil windings are: high voltage winding has a corresponding tap tap voltage requirements, lead to a tap on the switch, the switch is mounted on the cover, and the need to cut After the power supply before converting voltage tap.

Security devices

30~2000kVA transformer equipped with a pressure release valve;

Can be installed with alarm and trip relays gas terminals according to user needs;

oil temperature measurement device

Headers transformers are equipped with a glass thermometer, tube socket located on the top of the tank, inserted into the oil 120±10mm;

1000~2000kVA transformer type equipped with outdoor thermometer signal;

Transformer tank

Constituted by a corrugated wall transformer tank, the surface dust

Spray, paint firm. Corrugated fins not only has a cooling function, but also changes in the volume of transformer oil "breathe" elasticity, corrugated fins may compensate for temperature caused by lifting. Therefore, there is no conservator sealed transformer, the transformer reduces the overall height;

Transformer vacuum oiling process at the time of packaging, completely removes moisture transformers, transformer oil is not in contact with air. Effectively prevent oxygen and moisture intrusion caused by transformer insulation transformers and transformer oil aging performance possible, so from time to time oil sample test;

S13-M 型 6~10kV Oil-immersed distribution transformers

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High-voltage Tap Range (%)	Low Voltage (kV)					
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5%	0.4		80	630/600	1.8	4
50				Dyn11 Yzn11 Yyn0	100	910/870	1.6	4
63					110	1090/1040	1.6	4
80					130	1310/1250	1.5	4
100					150	1580/1500	1.4	4
125					170	1890/1800	1.4	4
160					200	2310/2200	1.3	4
200					240	2730/2600	1.2	4
250					290	3200/3050	1.2	4
315					340	3830/3650	1.1	4
400					410	4520/4300	1.1	4
500					480	5410/5150	1.0	4
630					570	6200	0.9	4.5
800				Dyn11 Yyn0	700	7500	0.8	4.5
1000					830	10300	0.8	4.5
1250					970	12000	0.7	4.5
1600					1170	14500	0.6	4.5

S13-M 型 20kV Oil-immersed distribution transformers

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High-voltage Tap Range (%)	Low Voltage (kV)					
50	20 22 24	±5 ±2×2.5%	0.4	Dyn11 Yyn0	170	1270/1210	2.00	6.5
100					230	2120/2020	1.80	6.5
125					270	2500/2380	1.70	6.5
160					290	2970/2830	1.60	6.5
200					340	3500/3330	1.50	6.5
250					410	4160/3960	1.40	6.5
315					490	5010/4770	1.40	6.5
400					580	6050/5760	1.30	6.5
500					690	7280/6930	1.20	6.5
630					830	8280	1.10	6.5
800					980	9900	1.00	6.5
1000					1150	12150	1.00	6.5
1250					1410	14670	0.90	6.5
1600					1700	17550	0.80	6.5

Note: 1, slash the top of the table load loss applicable to Dyn11 join groups, load loss slash Yyn0 below values apply to join the group.
2, other capacity product performance parameters, determined by the user in consultation with the manufacturer.

S11-M 型 6~10kV Oil-immersed distribution transformers

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High-voltage Tap Range (%)	Low Voltage (kV)					
30	11 10.5 10 6.3 6	±5 ±2×2.5%	0.4 0.69	Yyn0 Dyn11	100	630/600	2.3	4
50					130	910/870	2.0	4
63					150	1090/1040	1.9	4
80					180	1310/1250	1.9	4
100					200	1580/1500	1.8	4
125					240	1890/1800	1.7	4
160					280	2310/2200	1.6	4
200					340	2730/2600	1.5	4
250					400	3200/3050	1.4	4
315					480	3830/3650	1.4	4
400					570	4520/4300	1.3	4
500					680	5410/5150	1.2	4
630					810	6200	1.1	4.5
800					960	7500	1.0	4.5
1000					1150	10300	1.0	4.5
1250					1360	12000	0.9	4.5
1600					1640	14500	0.8	4.5
2000					1960	19800	0.8	5
2500					2310	23000	0.7	5

50kva~1600kva 3-phase duplex winding non-excited tap-changing distribution transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High Voltage tap range (%)	Low Voltage (kV)					
50	20 22 24	±5% ±2×2.5%	0.4	Dyn11 Yyn0	210	1270/1210	2.00	6.5
100					290	2120/2020	1.80	6.5
125					340	2500/2380	1.70	6.5
160					360	2970/2830	1.60	6.5
200					430	3500/3330	1.50	6.5
250					510	4160/3960	1.40	6.5
315					610	5010/4770	1.40	6.5
400					730	6050/5760	1.30	6.5
500					860	7280/6930	1.20	6.5
630					1040	8280	1.10	6.5
800					1230	9900	1.00	6.5
1000					1440	12150	1.00	6.5
1250					1760	14670	0.90	6.5
1600					2120	17550	0.80	6.5

Note: Rated capacity 500KVA and below transformer, the load loss above the oblique line in the table applies to Dyn11 or Yzn11; the load loss below the oblique line applies to Yyn0.

SNTOOM

S13-35kV

OIL-IMMERSED DISTRIBUTION TRANSFORMERS

Type Meaning

S 13 – □□ – □ / □ □

- Special use environment (WZ– seismic WFZ– anti–corrosion and seismic GY– plateau)
- Voltage level (kV)
- Rated capacity (KVA)
- Special purpose or special structure code (R–rolled iron core M–fully sealed...)
- Performance level code (7 8 9 10 11)
- Product model (ZS–three–phase SZ–on–load voltage regulation SS–three–phase three–coil F–air cooling)

Features

- The product has the characteristics of high efficiency, low loss and low noise;
- Good internal heat dissipation, strong short–circuit resistance and high safety performance;
- Empty and low load loss;
- Reliable operation, long life and maintenance–free.

SNTOOM®

S13 型 35kV Oil-immersed distribution transformers

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No–load loss(W)	Load loss (W)	No–load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High–voltage Tap Range (%)	Low Voltage (kV)					
50	35 38.5	±5% ±2×2.5%	0.4	Dyn11 Yyn0	130	1200/1140	1.30	6.5
100					185	2010/1910	1.10	6.5
125					215	2370/2260	1.10	6.5
160					225	2820/2680	1.00	6.5
200					270	3320/3160	1.00	6.5
250					320	3950/3760	0.95	6.5
315					385	4750/4530	0.95	6.5
400					465	5740/5470	0.85	6.5
500					545	6910/6580	0.85	6.5
630					665	7860	0.65	6.5
800					785	9400	0.65	6.5
1000					920	11500	0.65	6.5
1250					1120	13900	0.60	6.5
1600					1350	16600	0.60	6.5

Note: 1, according to the requirements of high voltage transformer tap range for ± 2×2.5%.
2, other capacity product performance parameters, determined by the user in consultation with the manufacturer.

50kva~1600kva 3-phase duplex winding non-excited tap-changing distribution transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No–load loss(W)	Load loss (W)	No–load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High–voltage Tap Range (%)	Low Voltage (kV)					
50	35 38.5	±5 ±2×2.5%	0.4	Dyn11 Yyn0	130	1200/1140	1.30	6.5
100					185	2010/1910	1.10	6.5
125					215	2370/2260	1.10	6.5
160					225	2820/2680	1.00	6.5
200					270	3320/3160	1.00	6.5
250					320	3950/3760	0.95	6.5
315					385	4750/4530	0.95	6.5
400					465	5740/5470	0.85	6.5
500					545	6910/6580	0.85	6.5
630					665	7860	0.65	6.5
800					785	9400	0.65	6.5
1000					920	11500	0.65	6.5
1250					1120	13900	0.60	6.5
1600					1350	16600	0.60	6.5
2000					1590	19700	0.55	6.5
2500					1890	23200	0.55	6.5

Note 1: Rated capacity 500KVA and below transformer, the load loss above the oblique line in the table applies to Dyn11 or Yzn11; the load loss below the oblique line applies to Yyn0.
Note 2: According to requirements, the transformer can supply HV tap change ±2×2.5%

630kva~31500kva triple phase duplex winding non exciting regulating power transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High-voltage Tap Range (%)	Low Voltage (kV)					
630	35	±5%	3.15 6.3 10.5	Yd11	830	7870	1.10	6.5
800					980	9410	1.00	6.5
1000					1150	11540	1.00	6.5
1250					1410	13940	0.90	6.5
1600					1700	16670	0.80	6.5
2000					2180	18380	0.70	6.5
2500					2560	19670	0.60	6.5
3150	35~38.5	±5%	3.15 6.3 10.5		3040	23090	0.56	7.0
4000					3620	27360	0.56	7.0
5000					4320	31380	0.48	7.0
6300					5250	35060	0.48	7.0
8000	35~38.5	±2×2.5%	3.15 3.3 6.3 6.6 1.05 11	Yd11	7200	38480	0.42	7.5
10000					8700	45320	0.42	7.5
12500					10080	53870	0.40	8.0
16000					12160	65840	0.40	8.0
20000					14400	79520	0.40	8.0
25000					17020	94050	0.32	8.0
31500					20220	112860	0.32	8.0

Note 1: Outline dimension is designed according to requirements.

2000kVA-20000kVA OLTC power transformer

Rated capacity (kVA))	Voltage Combination and Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High-voltage Tap Range (%)	Low Voltage (kV)					
2000	35	±3×2.5	6.3 10.5	Yd11	2300	19240	0.80	6.5
2500					2720	20640	0.80	6.5
3150	35~38.5	±3×2.5	6.3 10.5		3230	24710	0.72	7.0
4000					3870	29160	0.72	7.0
5000					4640	34200	0.68	7.0
6300					5630	36770	0.68	7.5
8000				Ynd11	7870	40610	0.60	7.5
10000					9280	48050	0.60	8.0
12500	35~38.5	±3×2.5	6.3 6.6 10.5 11		10940	56860	0.56	8.0
16000					13170	70320	0.54	8.0
20000					15570	82780	0.54	8.0

SNTOOM

SINGLE PHASE COLUMN TYPE
ON OIL-IMMERSED POWER TRANSFORMER

Product overview

The western developed countries and southeast Asia, north and South America region, single-phase transformer is widely used as a distribution transformer. Scattered in the power supply of distribution network, as a distribution transformer single-phase transformer has the advantages of larger. It can reduce the length of the low-voltage distribution line, reduce line losses, improving the power supply quality, the high efficiency and energy saving roll core structure design, the characteristics of the transformer is used in a column on suspension installations, small volume, infrastructure investment is small, reduce the radius of low voltage power supply, can reduce the low voltage line loss more than 60%. Fully sealed structure is used in transformer overload capability, high reliability of continuous running, simple maintenance, long service life.

Suitable for rural power grids, remote areas, scattered villages, agricultural production, electricity, lighting and power can also be used in railway, urban power grid column type distribution circuit on the reform.

Can run single phase or three single-phase group as a three-phase operation.

Type Meaning

D 11 – □ / □ □

- Special use environment code (GY – high, WF – corrosion Corrosion, TA – dry tropical, TH – humid tropics)
- Voltage level (KV)
- The rated capacity (kVA)
- Performance level code
- Single phase

Product standards

GB1094.1 ~ 2–2013 GB/T 6451–2015

High Voltage rating: 10 (10.5, 11, 6, 6.3, 6.6) kV

Low Voltage rating: 0.22 kV (0.23, 0.24)

Tapping range: non–field excitation changer (5% plus or minus 5%, plus or minus 2 x2.)

Link category: lio or li6

Insulation level: LI75AC35 / AC5

The performance parameters

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No–load loss(W)	Load loss (W)	No–load current (%)	Short circuit impedance (%)
	High Voltage (kV)	High–voltage Tap Range (%)	Low Voltage (kV)					
5	6 6.3 10 10.5 11	±2×2.5 ±5	0.22 0.23 0.24	lio li6	40	215	3.2	3.5
10					45	235	2.8	
15					53	315	2.8	
20					62	405	2.8	
25					70	480	2.8	
30					80	560	2.8	
50					120	855	2.3	
63					135	1020	2.1	
80					160	1260	2.0	
100					190	1485	1.9	
125					220	1755	1.8	
160					260	2050	1.6	

SNTOOM

HIGH OVERLOAD DISTRIBUTION TRANSFORMERS

Product overview

In recent years, with the increasing mobility of the population, the hot season, and distribution transformers in rural areas during the Spring Festival period of severe overload short run problem of rural electricity appears. In order to solve such problem of electricity, the company response to the State Grid Corporation of China in recent years advocated actively develop rural power distribution transformers and high overload capacity application work, we developed a high overload capacity distribution transformers.

High overload capacity integrated rural power distribution transformer station area based on typical load characteristics, high overload distribution transformer overload performance will meet the 1.5 times the rated capacity of six hours, 1.75 times the rated capacity of 3 hours, 2.0 times the rated capacity of one hour of continuous operation stage design requirements, and does not affect the normal life of the transformer. High overload capacity distribution transformer avoids the migration of rural electricity appeared short period of severe overload, reduce operating costs grid, improve the safe operation of

Type Meaning

The type and composition of model for high overload capacity distribution transformers (hereinafter referred to as "high overload Distribution") in accordance with the provisions of the Model JB / T 3837 is as follows:

a three-phase, oil-immersed, self-cooled, two-winding, non-excitation voltage, heat insulation class F loss level code-named "13", the rated capacity of 100kVA sealed kV voltage level with high overload electric model is expressed as: S11-M (F) -100/10GZ.

□□-□()-□/10 GZ

- High overload capacity
- Voltage (kV)
- Rated capacity (kVA)
- Insulation Rating
- Sealed
- Loss level code
- Model letter

Use of the environment

Service condition

Ambient temperature

- Highest air temperature +40℃ ,
- Lowest air temperature -25℃ ,
- Hottest monthly average temperature +30℃
- Hottest yearly average temperature +20℃

The height above the sea level is below 1000m;

The power supply voltage's cave is similar to sine wave

Three-phase power supply voltage is appr oximately symmetrical

Installation without evidence filth.

Service indoor

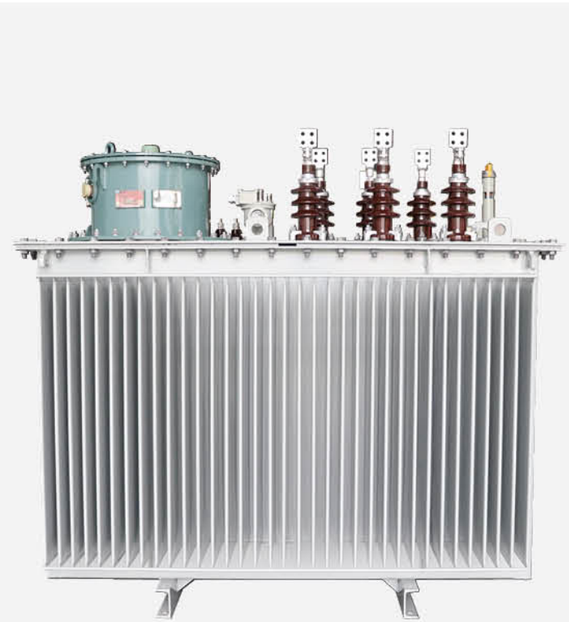
Performance parameters

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No-load loss(W)	Load loss (W)	No-load current(%)	Short circuit impedance(%)
	High Voltage (kV)	High-voltage Tap Range (%)	Low Voltage (kV)					
50	10 10.5 11	±5% ±2×2.5%	0.4	Dyn11 Yyn0	130	910/870	1.1	4
100					200	1580/1500	1	4
200					340	2730/2600	0.9	4

Note: 1, according to the requirements of high voltage transformer tap range for ± 2×2.5%.
2, other capacity product performance parameters, determined by the user in consultation with the manufacturer.

SNTOOM

ON-LOAD VOLTAGE REGULATING TRANSFORMER



Product overview

For a long time, China's rural power grid has a load distribution, seasonal, low average load characteristics, in rural power grid construction and transformation of choice should be consistent with the load characteristics of rural power transformer further reduce the transformer load loss and no-load current to meet current technical sophistication and reliability and the next few years, new clothes and replacement distribution transformers have. And I produced the load transfer capacity of rural power transformer according to this feature is the design of the transformer, fully meet the needs of rural power grids. Load transfer capacity of the transformer reversed through intelligent controller switches to adjust capacity to complete transformer high, low capacity automatic conversion process is a new energy-saving technology distribution transformers.

Use S11-ZT-load tuning capacitor variations compared to the two picture-S11 type transformer, first reduce equipment purchase costs and installation costs, and floor space narrowing, shortening the construction period, operation and maintenance significantly reduce the workload. Meanwhile S11-ZT-type load transfer capacity compared with have S11 type transformer ordinary transformer, the transformer load loss decreased by 50%. Therefore, load transfer capacity of the transformer is the best choice for the future of rural electrification.

Type Meaning

In the composition in the form of transfer capacity transformers models, the rated capacity to resist bit written in parentheses, other models compilation method prescribed JB / T3837, the example shown at right:

S 13– M·ZT – 315(100) / 10

- 10 — System nominal voltage (kV)
- 315(100) — Large (small) rated capacity (kVA)
- ZT — On–load capacity regulation
- M — Fully sealed
- 13 — Performance level code
- S — Three phase

S11-M.ZT type 10kV On-load voltage regulating transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No–load loss(W)	Load loss (W)	No–load current(%)	Short circuit impedance(%)
	High Voltage (kV)	High–voltage Tap Range (%)	Low Voltage (kV)					
160(50)	10 10.5 11	±4×2.5% ±3×2.5% ±2×2.5%	0.4	Dyn11 Yyn0	280(130)	2590(1030)	1.6(0.9)	4(4.0)
200(63)					340(150)	3215(1230)	1.5(0.9)	4(4.0)
250(80)					400(180)	3780(1480)	1.4(0.7)	4(4.0)
315(100)					480(200)	4540(1770)	1.4(0.7)	4(4.0)
400(125)					570(240)	5480(2130)	1.3(0.6)	4(4.0)
500(160)					680(280)	6520(2600)	1.2(0.6)	4(4.0)
630(200)					810(340)	8030(3060)	1.1(0.5)	4.5(4.0)

Note: Additional capacity product performance parameters, determined by the user in consultation with the manufacturer.

S13-M.ZT type 10kV On-load voltage regulating transformer

Rated capacity (kVA)	Voltage Combinationand Tap range			Vector Group	No–load loss(W)	Load loss (W)	No–load current(%)	Short circuit impedance(%)
	High Voltage (kV)	High–voltage Tap Range (%)	Low Voltage (kV)					
160(50)	10 10.5 11	±4×2.5% ±3×2.5% ±2×2.5%	0.4	Dyn11 Yyn0	200(100)	2310 (870)	1.6(0.8)	4(4.0)
200(63)					240(110)	2730 (1040)	1.5(0.7)	4(4.0)
250(80)					292(130)	3200 (1250)	1.4(0.7)	4(4.0)
315(100)					340(150)	3830 (1500)	1.4(0.7)	4(4.0)
400(125)					410(170)	4520 (1800)	1.3(0.6)	4(4.0)
500(160)					480(200)	5410 (2200)	1.2(0.6)	4(4.0)
630(200)					570(240)	6200(2600)	0.8(0.4)	4.5

Note: Additional capacity product performance parameters, determined by the user in consultation with the manufacturer.

SNTOOM

YB □ –12/0.4

OUTDOOR PREFABRICATED SUBSTATION (EUROPEAN)

Product overview

YB□ –12/0.4 Outdoor prefabricated substation (European), Widely used in urban power grids, residential quarters, high–rise building, mining, hotels, shopping malls, airports, railways, oil fields, terminals, highways and electricity facilities and other temporary indoor and outdoor venues.

Type Meaning

YB □ – 12 /0.4 □

- YB — Intelligent Substation Integration
- □ — Design No.
- 12 — Rated voltage (HV / LV)
- 0.4 — Transformer capacity

Conditions of Use

Altitude less than 1000m;

Ambient temperature: –25 ℃ ~+40 ℃ ;

Relative humidity: daily average of not more than 95%, on average less than 90%;

Installation place: no fire, explosion, conductive dust, chemical corrosion and severe vibration gas properties, if the above conditions are exceeded, the user can consult with our company.

Functions and Features

High voltage switchgear, transformers, low voltage switchgear Trinity, complete and strong;

High and low voltage protection improved, safe and reliable operation, easy maintenance;

Small footprint, low investment, short production cycle, easy to move;

Flexible wiring scheme;

Unique structure: a unique double honeycomb structure (composite board) housing firm, insulation and cooling ventilation, beautiful, high degree of protection, housing material stainless steel titanium alloy, aluminum alloy, cold rolled sheet, color steel optional;

Diverse types: general-purpose, villas, compact and other styles;

High-pressure ring network cabinet can be equipped with automated terminal (FTU) short-circuit and reliable single-phase ground fault detection, with "four remote" function, easy distribution automation upgrade.

Load switching technologyparameters

name	unit	FN12-12 Load Switch	FZM12-12 Vacuum load switch
Rated voltage	kV	10	10
Maximum operating voltage	kV	12	12
Rated frequency	Hz	50	50
Rated current	Hz	630	630
Rated breaking load current	A	630	630
Thermal stability current (rms)	kA/S	20/2	20/4
Dynamic stability current	kA	50	50
Short-circuit current (peak)	kA	50	50
Full load breaking times	Times	20	10000
Mechanical life	Times	2000	10000
1min power frequency withstand voltage (phase and ground)	kV	42	42
Lightning impulse voltage (relative and on the ground)	kV	75	75

High-voltage fuse technical parameters

Load switching		Rated voltage(KV)	Breaking current(A)	Breaking current(KA)	Melt the rated current(A)
British model	Domestic Model				
SDL※J	XRNT-12	12	40	31.5	6.3, 10, 16, 20, 25, 31.5, 40
SFL※J	XRNT-12	12	100	31.5	50, 63, 71, 80, 100
SKL※J	XRNT-12	12	125	31.5	125

* Note: The striker is determined by whether or not to install, N is no striker, A to have striker.

No	Release form	Rated currentA	Breaking capacity KA(AC380V)
DW15-630	Thermal – magnetic or electronic type	315, 400, 630	40
DW15-1000	Thermal – magnetic or electronic type	630, 800, 1000	50
DW15-1600	Thermal – magnetic or electronic type	1600	50
DW15-2500	Thermal – magnetic or electronic type	1600, 2000, 2500	60
CW1-2000	Smart	630, 800, 1000, 1250, 16001, 2000	65(80)
CW1-3200	Smart	2000, 2500, 3200	100

Note: (80) is a polymer-off type.

SNTOOM

ZGS □ -12/0.4(F · R)
PREFABRICATED SUBSTATION (AMERICAN)

Product overview

ZGS □ -12/0.4 Prefabricated substation (American), The latest product is the absorption of foreign advanced technology, combined with the actual situation developed, the entire product is small, easy installation and maintenance, low noise, low loss, theft, overload capability, full protection and so on. It applies to new residential, green belts, parks, railway stations hotels, construction sites, airports and other places.

ZB Series Prefabricated Substation (American), applicable to 10kV ring network power supply, dual power supply or terminal power supply system, as a transformer, metering, compensation control and protection devices.

This product meets the following criteria:

GB / T17467-1998 "high voltage and low voltage prefabricated substation"

DL / T537-93 "6-35KV box-type substation orders and technical conditions"

Type Meaning

ZGS □ – 12/0.4 (F · R) – □ / □

- Type:` H: Ring type Z: Terminal type
- Transformer capacity (kVA)
- The low-pressure side rated voltage (kV)
- High side rated voltage (kV)
- Design No.
- Prefabricated Substation (American)

Normal Use Conditions

Altitude: not exceed 1000m;

Ambient temperature: −35 ℃~+40 ℃ ;

Relative humidity: daily average of not more than 95%, on average less than 90%;

Installation place: no fire, explosion, chemical corrosive gas and well−ventilated place, the ground angle of not more than 3°

Functions and Features

Fully insulated, sealed, low maintenance−free, reliable guarantee personal safety;

Compact structure, with the capacity of Europe changed only 1/3−1/5, high and low;

Box−type structure can be divided, to avoid contamination of the transformer oil tank;

High side fuse the full range of dual protection, greatly reduce the cost;

You can use the ring can also be used to end the cable head can plug in an emergency 200A load current;

Honeycomb sandwich box with dual composite panels, compartment temperature and cooling function;

The Low Voltage side of the installation of electronic phase protection, when abnormal voltage is present in the system, you can quickly open the main feed switch;

Oil high side load switch or SF6 load switch, electric upgrade, to achieve distribution automation lay the foundation;

Using oil−immersed S9 or better performance S11 series transformer.

Main Technical Parameter

Name	Unit	Technical Parameters
Rated voltage	kV	10/0.4(High / low)
Maximum operating voltage	kV	12(High side)
Rated frequency	Hz	50
Rated Capacity	kVA	50−1600
1 minute power frequency withstand voltage	kV	35
Lightning impulse voltage	kV	75
Cooling method		ONAN
High−voltage fuse breaking current reserve	kA	50
Plug−in fuse breaking current	kA	2.5
Ambient temperature	℃	−35~+40
Coil allowable temperature rise	℃	65
No−load voltage regulation		±5% or ±2×2.5%
Noise Level	db	50
Protection class		IP43

SNTOOM

DFW−12KV
EUROPEAN CABLE DISTRIBUTION BOXES

Product overview

DFW−12kV European cable distribution boxes,European cable distribution boxes are widely used in power in recent years in the cable distribution network systems engineering equipment, its main feature is a two−way door, use wall bushing as the connection busbar, with a small length of cable arrangement clear, three−core cable does not require the large span crossing and other significant advantages. Their use of cable joint in line with DIN47636 standards. Generally the rated current of 630A bolted connection cable connector.

Type Meaning

DFW □ − □ □

- A lightning arrester for the band with no default
- The number of loops (a total phase into the outlet)
- Voltage level
- Cable distribution boxes

Normal Use Conditions

Ambient temperature: −30℃ ~+40℃;

Winds: Pretty 34m/s (not more than 700Pa);

Relative humidity: daily average relative humidity less than 95%, the monthly average relative humidity less than 95%;

Earthquake: horizontal acceleration is not greater than 0.4m/s2, the vertical acceleration is not greater than 0.15m/s2 installation site gradient: less than 3° ;

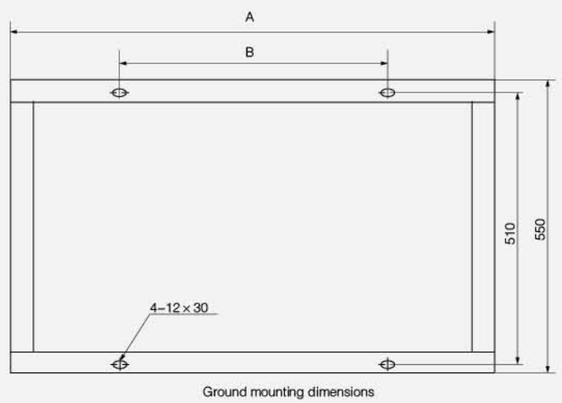
surroundings: the ambient air pollution is not obvious corrosive, flammable gas, vapor, etc, the installation site without severe vibration.

Note: The order of this product outside the above specified conditions, please consult with the company.

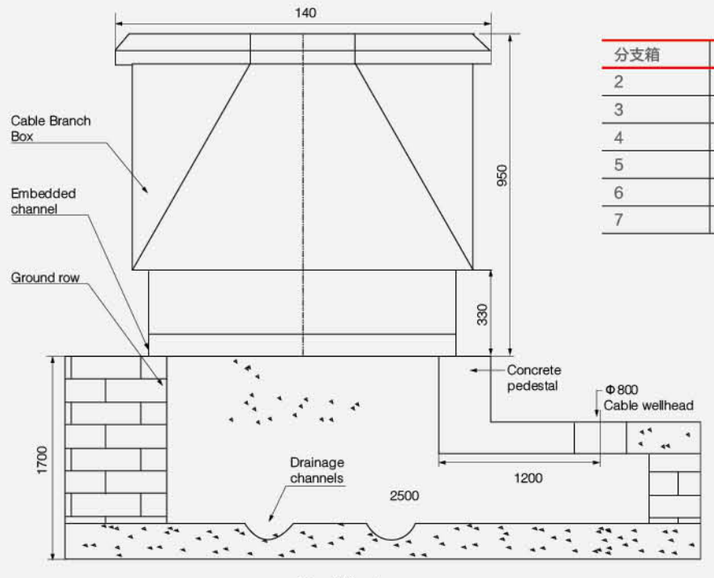
Main Technical Parameter

No.	name	parameter
1	Rated voltage	12kV
2	Rated current	630A
3	Dynamic stability current	50kA/0.3s
4	Thermal stability current	20kA/3s
5	1min power frequency withstand voltage	42kV
6	15 minutes DC voltage	52kV
7	Lightning impulse withstand voltage	105kV
8	Case protection class	IP33

European cable distribution boxes foundation plans



Ground mounting dimensions



分支箱	A	B
2	540	340
3	540	340
4	740	540
5	840	640
6	940	740
7	1040	840

Foundation plans

SNTOOM

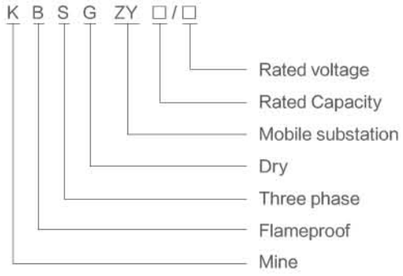
EXPLOSION-PROOF MOBILE SUBSTATION FOR MINE

Features

The mine explosion-proof mobile substation consists of mine explosion-proof dry-type transformers, high-voltage load switches for mine explosion-proof mobile substations or high-voltage vacuum switches for mine explosion-proof mobile substations and cables for mine explosion-proof mobile substations It is composed of a connector, a low-voltage feed switch for mine explosion-proof mobile substation or a low-voltage protection box for mine explosion-proof mobile substation. It has the protection performance of leakage, leakage lockout, overload, short circuit, overvoltage and undervoltage.

KBSGZY series mine explosion-proof mobile substation is a complete set of movable power supply and transformation equipment for underground coal mines. It is not only suitable for the mine environment with mixed gas and coal dust and explosion hazard, but also for insufficient In a gas and vapor environment that corrodes metals and destroys insulation.

Type Meaning



Normal Use Conditions

The installation height does not exceed 1000m above sea level, special environment will be explained separately;

Environment temperature:

- Ambient temperature:The highest temperature +40℃ ;
- Average temperature of the hottest month +30℃ ;
- The highest annual average temperature +20℃ ;
- The lowest temperature is −5℃ .

The relative humidity of the surrounding air does not exceed 95% (at +25℃);

In mines where there is a mixture of methane gas and coal dust, and there is a danger of explosion; In an environment where there is no strong bumps, vibrations, and the inclination of the vertical plane does not exceed 15° ;

There is no gas and steam sufficient to corrode metals and destroy insulation;

Places without dripping water;

The waveform of the power supply voltage is similar to a sine wave;

The three−phase power supply voltage is approximately symmetrical.

(If it exceeds the requirements of these conditions, please specify separately)

Technical parameters of 6KV class KBSGZY series mine explosion-proof mobile substation

Rated Capacity(kVA)	Voltage combination(kV)	Connection method	loss(kW)		No−load current(%)	Impedance voltage(%)	outline dimension (L×B×H)(mm)	Weight(kg)	gauge (mm)
			No load	load(145℃)					
50	High Voltage (6±5%); Low Voltage 0.693/0.4 1.2/0.693 1.2 3.45.	Yy0 (d11)	350	550	2.5	4	3290×950×1160	2350	600
100			520	920	2.5	4	3580×950×1430	2600	
200			820	1550	2	4	3710×950×1445	3050	600 900
250			950	1800	2	4	3820×965×1530	3300	
315			1100	2150	1.8	4	3870×975×1540	3500	
400			1300	2600	1.8	4	3890×995×1550	3600	
500			1500	3100	1.5	4	3910×1050×1570	4100	
630			1800	3680	1.5	4	4085×1080×1450	5360	
800		Yy0 (d11) Dyn11	2050	4500	1.0	4	4085×1080×1510	5680	
1000			2350	5400	1.0	4	4100×1130×1540	6500	
1250			2750	6500	1.0	4	4190×1160×1610	6700	
1600			3350	8000	0.8	4	4190×1200×1750	9230	
2000			3800	9500	0.6	4.5	4570×1220×1790	9930	
2500			4500	10600	0.6	5	4580×1230×1850	13830	
3150			5300	12500	0.6	5.5	4820×1260×1890	17250	
4000			6100	14000	0.6	6	4930×1400×1920	19810	

Technical parameters of 10KV class KBSGZY series mine explosion-proof mobile substation

Rated Capacity(kVA)	Voltage combination(kV)	Connection method	loss(kW)		No−load current(%)	Impedance voltage(%)	outline dimension (L×B×H)(mm)	weight (kg)	gauge (mm)
			No load	load(145℃)					
50	High Voltage (10±5%); Low Voltage 0.693/0.4 1.2/0.693 1.2 3.45.	Yy0 (d11)	390	680	2.5	4	3200×950×1295	2400	600
100			560	1050	2.5	4	3580×950×1430	2800	
200			950	1800	2	4	3990×950×1525	3200	600 900
250			1100	2100	2	4	4020×950×1540	3500	
315			1300	2500	1.8	4	4050×980×1555	3800	
400			1500	3000	1.8	4	4200×1050×1610	4000	
500			1750	3500	1.5	4	4200×1050×1610	4300	
630			2000	4100	1.5	4	4370×1080×1450	5400	
800		Yy0 (d11) Dyn11	2300	5100	1.2	4	4370×1080×1600	5700	
1000			2600	6100	1.2	4.5	4400×1110×1675	6900	
1250			3100	7400	1.0	4.5	4480×1125×1740	7300	
1600			3800	8500	1.0	5	4640×1245×1830	9300	
2000			4500	9700	0.7	5	4665×1250×1900	11900	
2500			5200	10800	0.7	5.5	4870×1390×1900	14930	
3150			6100	12800	0.7	5.5	4880×1390×1990	19350	
4000			7000	15000	0.7	6	5210×1450×1900	21910	

Note: The above data is for reference only, and the external dimensions of the mobile station vary depending on the switch.

Product Standards

GB 8286−2005 GB 3836−2000

GB/T10228−2008 GB1094−11−2007

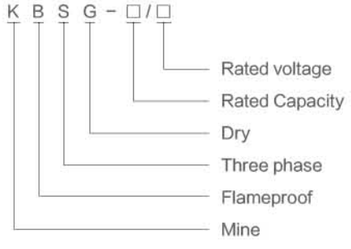
SNTOOM

FLAMEPROOF DRY-TYPE TRANSFORMER FOR MINE

Features

KBSG mine explosion-proof dry-type transformer meets the requirements of GB8286-2005 "Explosion-proof Mobile Substation for Mine". The insulation material has good thermal stability. It adopts H-class or C-class insulation, and the cooling method adopts ANAN. It is suitable for mines, mines, tunnels and other environments with methane mixed gas and coal dust, and explosion hazard, and also suitable for insufficient corrosion of metals And in a gas and vapor environment that destroys insulation. It operates in a three-phase power system with a rated frequency of 50Hz, a primary voltage of 6kV or 10kV, and an ungrounded neutral point, providing power for various power equipment and various electrical devices in the use environment.

Type Meaning



Normal Use Conditions

The installation height does not exceed 1000m above sea level. Special environment will be explained separately;

Environment temperature:

- Ambient temperature:The highest temperature +40℃ ;
- Average temperature of the hottest month +30℃ ;
- The highest annual average temperature +20℃ ;
- The lowest temperature is −5℃ ..

The relative humidity of the surrounding air does not exceed 95% (at +25℃);

In mines where there is a mixture of methane gas and coal dust, and there is a danger of explosion;

In an environment where there is no strong bumps, vibrations, and the inclination of the vertical plane does not exceed 15° ;

There is no gas and steam sufficient to corrode metals and destroy insulation;

Places without dripping water;

The waveform of the power supply voltage is similar to a sine wave;

The three-phase power supply voltage is approximately symmetrical.

(If it exceeds the requirements of these conditions, please specify separately)

Technical parameters of 6KV class KBSG series mine flameproof dry-type transformer

Rated Capacity(kVA)	Voltage combination(kV)	Connection method	loss(kW)		No-load current(%)	Impedance voltage(%)	outline dimension (L×B×H)(mm)	weight (kg)	gauge (mm)
			No load	load(145℃)					
50	High Voltage (6±5%); Low Voltage 0.693/0.4 1.2/0.693 1.2 3.45.	Yy0 (d11)	350	550	2.5	4	2225×950×1160	1350	600
100			520	920	2.5	4	2500×950×1430	1600	
200			820	1550	2	4	2640×950×1445	2050	600 900
250			950	1800	2	4	2750×965×1530	2300	
315			1100	2150	1.8	4	2830×975×1540	2500	
400			1300	2600	1.8	4	2830×995×1550	2650	
500			1500	3100	1.5	4	2850×1050×1570	3100	
630			1800	3680	1.5	4	3020×1080×1450	4310	
800		Yy0 (d11) Dyn11	2050	4500	1.0	4	3020×1080×1510	4650	
1000			2350	5400	1.0	4	3030×1130×1540	5150	
1250			2750	6500	1.0	4	3120×1160×1610	5900	
1600			3350	8000	0.8	4	3120×1200×1750	7250	
2000			3800	9500	0.6	4.5	3225×1220×1790	10820	
2500			4500	10600	0.6	5	3580×1230×1850	13850	
3150			5300	12500	0.6	5.5	3820×1260×1890	18250	
4000			6100	14000	0.6	6	3930×1400×1920	20810	

Technical parameters of 10KV class KBSG series mine flameproof dry-type transformer

Rated Capacity(kVA)	Voltage combination(kV)	Connection method	loss(kW)		No-load current(%)	Impedance voltage(%)	outline dimension (L×B×H)(mm)	weight (kg)	gauge (mm)
			No load	load(145℃)					
50	High Voltage (10±5%); Low Voltage 0.693/0.4 1.2/0.693 1.2 3.45	Yy0 (d11)	390	680	2.5	4	2310×950×1295	1400	600
100			560	1050	2.5	4	2430×950×1430	1800	
200			950	1800	2	4	2730×950×1525	2200	600 900
250			1100	2100	2	4	2760×950×1540	2500	
315			1300	2500	1.8	4	2800×980×1555	2800	
400			1500	3000	1.8	4	2950×1050×1610	3000	
500			1750	3500	1.5	4	2950×1050×1610	3300	
630			2000	4100	1.5	4	3200×1080×1450	4400	
800		Yy0 (d11) Dyn11	2300	5100	1.2	4	3200×1080×1600	4700	
1000			2600	6100	1.2	4.5	3200×1110×1675	5900	
1250			3100	7400	1.0	4.5	3250×1125×1740	6500	
1600			3800	8500	1.0	5	3450×1245×1830	8300	
2000			4500	9700	0.7	5	3665×1250×1900	10900	
2500			5200	10800	0.7	5.5	3780×1390×1900	13930	
3150			6100	12800	0.7	5.5	3880×1390×1900	18350	
4000			7000	15000	0.7	6	4210×1450×1900	20910	

Note: The above data is for reference only. The external dimensions of the mobile substation vary according to the switch.

Product Standards

GB 8286-2005 GB 3836-2000
GB/T10228-2008 GB1094-11-2007

SNTOOM
THREE-PHASE OIL-IMMERSED MINE POWER TRANSFORMER

Features

The Ks9 series of mine transformers, as power distribution equipment in mines, have the characteristics of small size, easy downhole, reasonable structure, low loss, and good heat dissipation performance.

This series of products are made of high-quality grain-oriented, high-quality, high-magnetic-permeability silicon steel sheets stacked. The iron core is a core-type iron core and a fully-inclined-joint laminated iron core. The iron core column has a multi-level circular cross-section to ensure Low voice and low loss. The oil tank has a sturdy structure, and high and low voltage cable junction boxes are welded on both sides of the tank wall for cable wiring. The high voltage coil must have a tap voltage of ±5% of the rated voltage, and the tap switch is used to change the voltage. When changing the voltage, you must first cut off the power supply, and then remove the weather cover of the tap switch on the box wall to change the voltage. The low-voltage side of the transformer allows the "Y" type to be connected to 693V or the "D" type to be connected to 400V for power supply, and the secondary end is directly installed in the cable junction box to lead out six ceramic sleeves for users to modify. The transformer is hoisted using a hanging bracket welded to the wall of the box. The bottom of the transformer box is equipped with a towing skid. There are mounting holes on the towing skid, which can be used to install the mine cart roller when the mine needs it.

Type Meaning

K S 9 - □ / □

- High voltage side voltage level (kV)
- Rated capacity (KVA)
- Design Number
- Three phase
- Mine

Use range

Suitable for oil-immersed mine power transformers with a capacity of 630KVA and below and a voltage of 10KV and below. This type of mine transformer is a general oil-immersed transformer without explosion-proof requirements. It is mainly used as a power source for mine lighting or electric drive during mine power distribution. After the transformers of this series are transported, the relevant disassembled parts can be assembled without the need for hanging inspection, and the acceptance test items can be done.

Follow the standard

Standards followed by this series of transformers:

GB1094.1~2-1996, GB1094.3, 5-2003, GB/T6451-2008, GB12173-2008.

Normal Use Conditions

The altitude does not exceed 1000m above sea level, special environment will be explained separately;

Ambient temperature:

- The highest temperature +40℃ ;
- The highest daily average temperature +25℃ ;
- The highest annual average temperature +20℃ ;
- The minimum outdoor temperature is -20℃ .

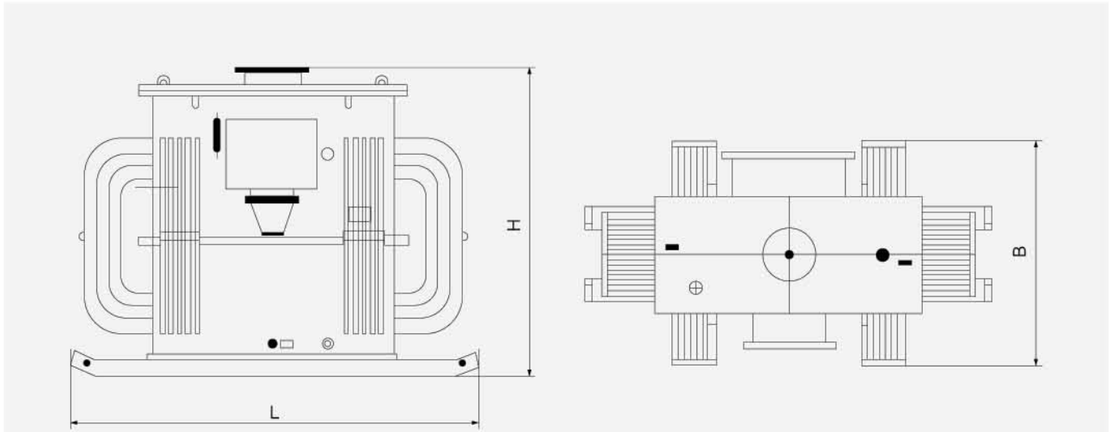
The relative humidity of the surrounding air is not more than 95% (at +25℃);

Install in a place where there is coal dust and gas but no explosion hazard under the mine;

The waveform of the power supply voltage is approximately sine wave;

KS9 series oil-immersed mine transformer

Rated Capacity (kVA)	Voltage combination (kV)	Connection method	loss(kW)		No-load current(%)	Impedance voltage(%)	weight(kg)			outline dimension (L×B×H)(mm)
			No load	load(75℃)			Body weight	Oil weight	Gross weight	
50	High Voltage 10 6 Low Voltage 0.693/0.4	Yy0-d11	0.17	0.87	2.0	4	230	80	390	1200×950×900
80			0.25	1.25	1.8		310	100	530	1300×950×950
100			0.29	1.50	1.6		360	110	600	1300×950×1000
125			0.34	1.80	1.5		425	120	690	1300×950×1000
160			0.40	2.20	1.4		480	140	810	1350×950×1040
200			0.48	2.60	1.3		580	170	955	1400×970×1080
250			0.56	3.05	1.2		670	180	1100	1450×1000×1100
315			0.67	3.65	1.1		775	240	1305	1500×1000×1150
400			0.80	4.30	1.0		940	280	1570	1600×1050×1150
500			0.96	5.10	1.0		1155	300	1790	1650×1050×1200
630			1.20	6.20	0.9	4.5	1310	345	2150	1650×1120×1220



Mining inspection certificate number

product name	Product number	Certificate No	Issuing unit
Oil immersed mine transformer	KS9-100/10	10901137	National Coal Mine Explosion-proof Quality Supervision and Inspection Center
	KS9-250/10	10901137	
	KS9-315/10	10901137	
	KS9-400/10	10901137	
	KS9-500/10	10901137	
	KS9-630/10	10901137	
	KS9-800/10	10901137	
	KS11-100/10	10901089	
	KS11-250/10	10901089	
	KS11-315/10	10901089	
	KS11-400/10	10901089	
	KS11-500/10	10901089	
	KS11-630/10	10901089	
	KS11-800/10	10901089	

ZW20–12F
Outdoor high voltage circuit breaker intelligent demarcation

FZW28–12F
Outdoor high voltage circuit breaker intelligent permanent magnet

ZW32–12M
Outdoor high voltage circuit breaker intelligent permanent magnet

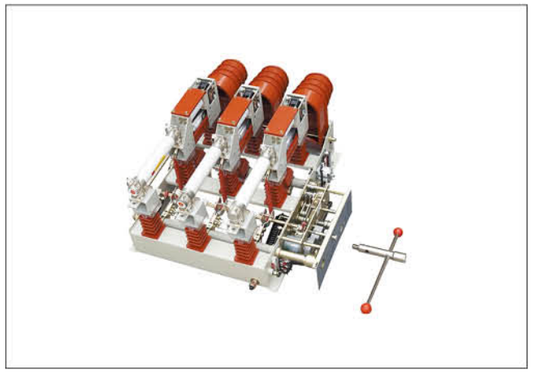
ZW32–12F
Outdoor high voltage circuit breaker intelligent demarcation

VS1–12
Indoor high–voltage vacuum circuit breaker

ZN85–40.5
Indoor high–voltage vacuum circuit breaker

FKN12–12D
Indoor AC high voltage load switch

FZRN25
And vacuum load switch combined electrical apparatus



KYN61–40.5
Armored remove AC metal–enclosed switchgear

KYN28A–12
Armored remove AC metal–enclosed switchgear

GGJ
Intelligent low voltage reactive compensation devices

GGD
Low–voltage switchgear