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POWER
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BETTER LIFE!

CNC ELECTRIC

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CNC ELECTRIC

CNC Web

CATALOGUE

Power Transformer

CNC
ELECTRIC

About CNC

CNC was founded in 1988 specialized in Low-voltage electrical and Power Transmission and Distribution industries. We provide our customers with profitable growth by offering integrated comprehensive electrical solution.

CNC's key value is innovation and quality to ensure clients with safe, reliable products. We set up advanced assembly line, test center, R&D Center and quality control center. We have got the certificates of ISO9001, ISO14001, OHSAS18001 and CE, CB, SEMKO, KEMA, TUV etc.

As a leading manufacturer of electrical products in China, our business covers over 100 countries.

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CONTENTS

Structural Feature

Iron core

The core is made of cold rolled,granular-oriented,low-loss and high magnetic conductive silicon steel sheet,which is of multi-step completely tited structure to reduce the loss and noice.

Winding

Winding adopts entanglement or inner screened continuous type with phase insulation structure to ensure insulating strength.

Structural Feature

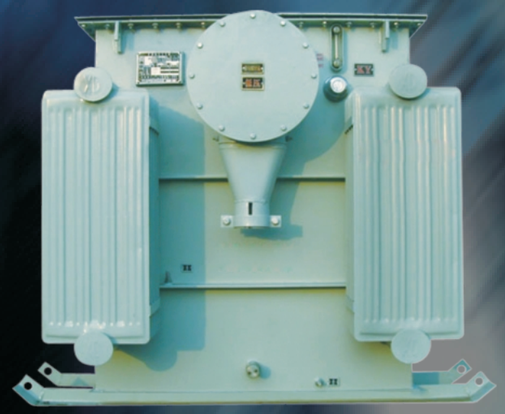
Active-parts assembly

Adoption of whole assembled phase insulation so as to reduce the assembly time and effectively guarantee the dimension and shape of the insulation structure.

Routine test

After assembly, strict pre-factory testing is carried out in accordance with standards, and high-quality and reliable products are provided with superb testing technology and equipment.

10KV Oil-immersed Transformer



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10KV Oil-immersed Transformer
S□-M Series Oil-immersed Fully Sealed

- The S□-M series three-phase oil-immersed transformer adopts a fully oil-filled, sealed corrugated oil tank. and the oil tank shell adapts to the expansion performance of the oil with its own elasticity and meets the heat dissipation requirements. It has the characteristics of high efficiency and low loss, which can save a lot of power consumption and operating costs, and is widely used in power plants, substations, industrial and mining enterprises, ports, airports and other environmental protection places.
- Standard: IEC60076-1, IEC60076-2, IEC60076-3, IEC60076-5, IEC60076-10.

General

Selection

S □-M □/□

- High voltage level (KV):6~11KV
- Rated capacity (KVA):30~2500KVA
- M:Fully sealed structure
- Performance level code:9,11,13,14
- Three phase

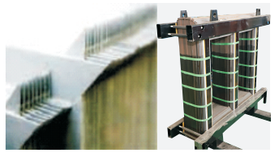
Operating conditions

1. Ambient temperature: maximum temperature: +40℃, minimum temperature: -25℃.
2. Average temperature of the hottest month:+30℃, average temperature in the hottest year: +20℃.
3. Altitude not exceeding 1000m.
4. The waveform of the power supply voltage is similar to a sine wave.
5. The three-phase supply voltage should be approximately symmetrical.
6. The total harmonic content of the load current shall not exceed 5% of the rated current.
7. Where to use: indoors or outdoors.

Features

1. The product has the characteristics of high efficiency, low loss, low noise, etc.
2. High mechanical strength, balanced ampere-turn distribution, and strong short-circuit resistance.
3. Low no-load and load loss.
4. Small size, reliable operation, long service life, and maintenance free.

10KV Oil-immersed Transformer
S□-M Series Oil-immersed Fully Sealed



Structure

- Iron core:
- The iron core is made of high-quality, high-performance, high-permeability silicon steel sheet, with low no-load loss.

- High/low voltage winding:
- The low-voltage winding of 500KVA and below is a layer type, and the new spiral type is used for 630KVA and above.
- It has the characteristics of high mechanical strength, balanced ampere turn distribution, and strong short-circuit resistance.

- Fully sealed structure:
- The product is a fully sealed structure. The vacuum oil filling process is used for the transformer packaging, which completely removes the moisture of the transformer, ensures the isolation of the transformer oil from the outside air, prevents the aging of the oil, and improves the operation reliability of the transformer.

- Positioning structure:
- The product body has added a positioning structure to prevent displacement during transportation, and all fasteners are equipped with fastening nuts to ensure that the fasteners do not loosen during long-term operation of the product.

- Oil tank:
- The oil tank adopts a corrugated oil tank.Simple process, high mechanical strength,good welding effect,not easy to leak,due to the strong fluidity of the oil, the heat dissipation capacity of the product is improved.

- Other configuration:
- Equipped with pressure relief valve, signal thermometer, ensures the safe operation of the transformer.

S□-M Series Oil-immersed Fully Sealed

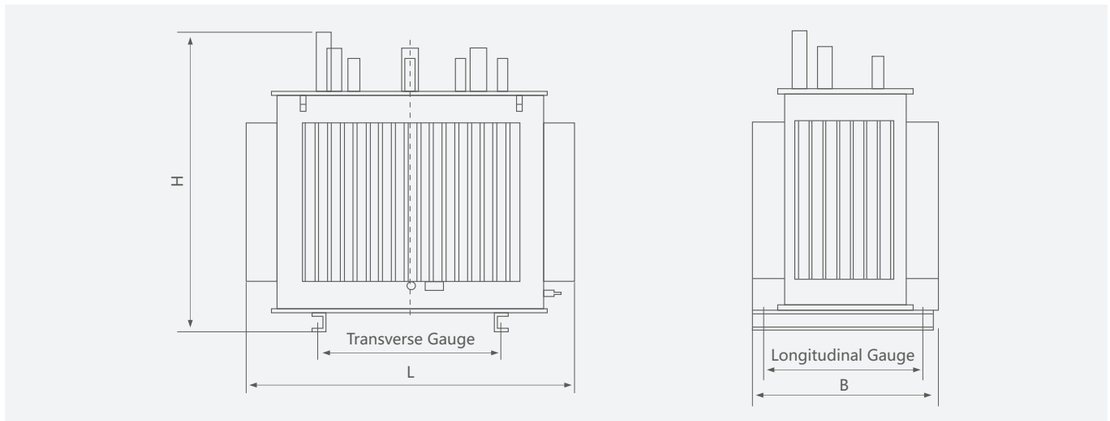
S9-M 30~2500/10KV technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H	
30	6 6.3 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0 Yzn11	130	630/600	2.3	4.0	745	530	890	280
50					170	910/870	2.0		790	560	940	365
63					200	1090/1040	1.9		820	570	950	425
80					250	1310/1250	1.9		850	580	1000	485
100					290	1580/1500	1.8		900	620	1010	540
125					340	1890/1800	1.7		880	630	1050	610
160					400	2310/2200	1.6		950	690	1120	710
200					480	2730/2600	1.5		990	730	1200	835
250					560	3200/3050	1.4		1180	700	1200	970
315					670	3830/3650	1.4		1230	760	1250	1125
400					800	4520/4300	1.3		1260	800	1300	1310
500					960	5410/5150	1.2		1400	900	1320	1530
630				Dyn11 Yyn0	1200	6200	1.1	4.5	1530	940	1350	1890
800					1400	7500	1.0		1580	1000	1420	2185
1000					1700	10300	1.0		1770	1180	1450	2480
1250					1950	12000	0.9		1920	1290	1430	3020
1600					2400	14500	0.8		1990	1340	1620	3550
2000					3000	17100	0.7	5.0	1950	1680	2100	4530
2500					3300	23200	0.7		2020	1710	2100	5030

Note 1:for transformers with rated capacity of 500kVA and below, the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

Note 2:when the average annual load rate of the transformer is between 35% and 40%, the maximum operating eficiency can be obtained by using the loss value in the table.

Overall and mounting dimensions(mm)



Note:The dimensions and weights provided are only for reference in design and selection.The final size and weight are subject to our product drawings.

S□-M Series Oil-immersed Fully Sealed

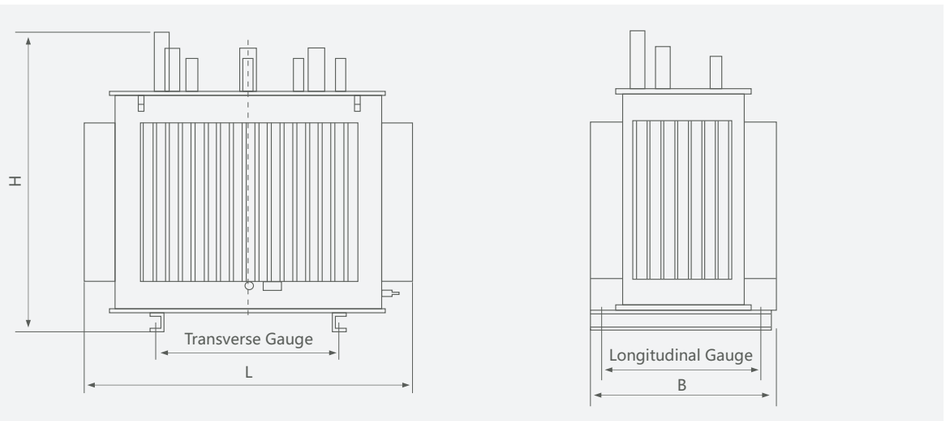
S11-M 30~2500 /10KV technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H	
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0 Yzn11	100	630/600	1.5	4.0	690	510	920	275
50					130	910/870	1.3		730	510	960	340
63					150	1090/1040	1.2		750	550	1000	385
80					180	1310/1250	1.2		790	620	1020	450
100					200	1580/1500	1.1		790	700	1040	520
125					240	1890/1800	1.1		840	800	1070	625
160					280	2310/2200	1.0		1070	670	1130	695
200					340	2730/2600	1.0		1140	750	1140	795
250					400	3200/3050	0.9		1200	800	1190	955
315					480	3830/3650	0.9		1300	860	1210	1085
400					570	4520/4300	0.8		1380	900	1240	1290
500					680	5410/5100	0.8		1450	950	1300	1590
630				Dyn11 Yyn0	810	6200	0.6	4.5	1500	970	1360	1850
800					980	7500	0.6		1660	1140	1400	2210
1000					1150	10300	0.6		1690	1190	1530	2570
1250					1360	12000	0.5		1760	1230	1600	3115
1600					1640	14500	0.5		1800	1250	1660	3520
2000					1940	18300	0.4	5.0	1930	1360	1490	4060
2500					2290	21200	0.4		2080	1360	1570	5105

Note 1:for transformers with rated capacity of 500kVA and below, the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

Note 2:when the average annual load rate of the transformer is between 35% and 40%, the maximum operating eficiency can be obtained by using the loss value in the table.

Overall and mounting dimensions(mm)



Note:The dimensions and weights provided are only for reference in design and selection.The final size and weight are subject to our product drawings.

S□-M Series Oil-immersed Fully Sealed

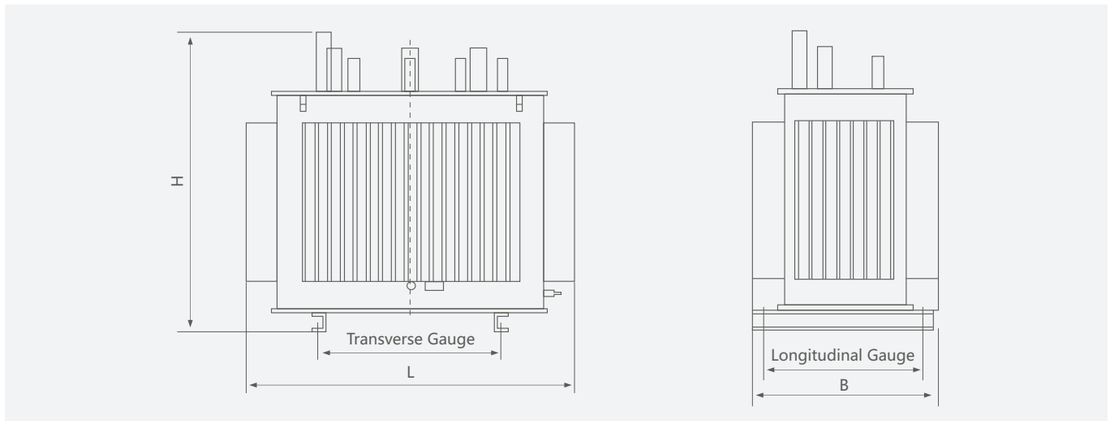
S13-M 30~2500 /10KV technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H	
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0 Yzn11	80	630/600	1.5	4.0	685	490	860	260
50					100	910/870	1.3		725	520	955	365
63					110	1090/1040	1.2		750	535	970	415
80					130	1310/1250	1.2		770	565	985	465
100					150	1580/1500	1.2		800	595	1000	545
125					170	1890/1800	1.1		815	670	1010	585
160					200	2310/2200	1.1		1015	645	1055	695
200					240	2730/2600	1.0		1020	650	1115	810
250					290	3200/3050	1.0		1140	730	1120	930
315					340	3830/3650	0.9		1195	785	1175	1075
400					410	4520/4300	0.9		1265	855	1195	1255
500					480	5410/5100	0.8		1325	915	1240	1435
630				Dyn11 Yyn0	570	6200	0.8	4.5	1465	960	1295	1880
800					700	7500	0.6		1515	995	1340	2145
1000					830	10300	0.6		1605	1095	1460	2455
1250					970	12000	0.5		1685	1145	1485	2840
1600					1170	14500	0.5		1775	1225	1580	3310
2000					1550	18300	0.4	5.0	1855	1265	1600	3960
2500					1830	21200	0.4		1885	1305	1780	4980

Note 1:for transformers with rated capacity of 500kVA and below, the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

Note 2:when the average annual load rate of the transformer is between 35% and 40%, the maximum operating eficiency can be obtained by using the loss value in the table.

Overall and mounting dimensions(mm)



Note:The dimensions and weights provided are only for reference in design and selection.The final size and weight are subject to our product drawings.

S□-M Series Oil-immersed Fully Sealed

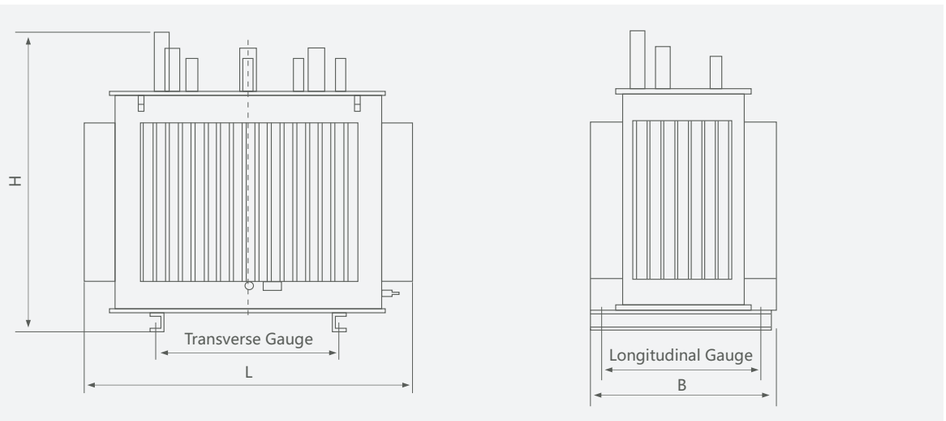
S14-M 30~2500 /10KV technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H	
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0 Yzn11	80	505/480	1.5	4.0	785	710	880	370
50					100	730/695	1.3		800	730	940	480
63					110	870/830	1.2		815	720	970	535
80					130	1050/1000	1.2		830	740	990	580
100					150	1260/1200	1.1		875	790	1010	705
125					170	1510/1440	1.1		875	770	1050	775
160					200	1850/1760	1.0		935	820	1140	975
200					240	2180/2080	1.0		995	870	1140	1140
250					290	2560/2440	0.9		995	900	1180	1240
315					340	3060/2920	0.9		1030	880	1250	1425
400					410	3610/3440	0.8		1075	910	1270	1635
500					480	4330/4120	0.8		1120	930	1320	1950
630				Dyn11 Yyn0	570	4960	0.6	4.5	1165	950	1350	2150
800					700	6000	0.6		1210	1050	1390	2515
1000					830	8240	0.6		1520	1020	1450	2635
1250					970	9600	0.5		1630	1090	1540	3210
1600					1170	11600	0.5		1680	1150	1600	3905
2000					1550	14600	0.4	5.0	1890	1300	1600	4130
2500					1830	16900	0.4		1990	1360	1700	5250

Note 1:for transformers with rated capacity of 500kVA and below, the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

Note 2:when the average annual load rate of the transformer is between 35% and 40%, the maximum operating eficiency can be obtained by using the loss value in the table.

Overall and mounting dimensions(mm)



Note:The dimensions and weights provided are only for reference in design and selection.The final size and weight are subject to our product drawings.

10KV Oil-immersed Transformer

SBH15 Series Amorphous Alloy Oil-immersed Transformer

- SBH15 series amorphous transformer is a low loss, high energy efficiency oil-immersed transformer. The iron core of this product is wound from amorphous alloy strip.
  Its no-load loss is more than 70%,lower than that of traditional transformers using silicon steel sheets as iron cores. It is a new generation of energy-saving, safe, green and environmentally friendly high-tech products.
- And it can replace ordinary oil-immersed transformers, and is mainly suitable for high-rise buildings, commercial centers, infrastructure, industrial and mining enterprises, power plants, etc.
- Standard：IEC60076-1, IEC60076-2, IEC60076-3, IEC60076-5, IEC60076-10.

General

10KV Oil-immersed Transformer

SBH15 Series Amorphous Alloy Oil-immersed Transformer

Standard

S B H 15 - □/□

- High voltage level(KV):6~11KV
- Rated capacity(KVA):30~2500KVA
- Performance level code:15
- Amorphous alloy core
- Low voltage foil coil
- Three phase

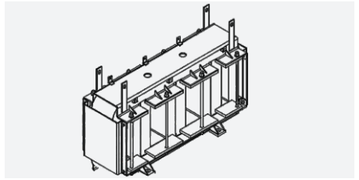
Operating conditions

1. Ambient temperature: maximum temperature:+40℃, minimum temperature:-25℃.
2. Average temperature of the hottest month:+30℃, average temperature in the hottest year:+20℃.
3. Altitude not exceeding 1000m.
4. The waveform of the power supply voltage is similar to a sine wave.
5. The three-phase supply voltage should be approximately symmetrical.
6. The total harmonic content of the load current shall not exceed 5% of the rated current.
7. Where to use: indoors or outdoors.

Features

1. The product has the characteristics of high efficiency, low loss, low noise, etc.
2. High mechanical strength, balanced ampere-turn distribution, and strong short-circuit resistance.
3. Low no-load and load loss.
4. Small size, reliable operation, long service life, and maintenance free.

SBH15 Series Amorphous Alloy Oil-immersed Transformer



Structure

- Iron core:
- The iron core is made of high-quality, high-performance, high-permeability silicon steel sheet, with low no-load loss.

- Other configuration:
- Equipped with and relief valve,signal thermometer, gas relay, ensures the safe operation of the transformer.

- Positioning structure:
- The product body has added a positioning structure to prevent displacement during transportation, and all fasteners are equipped with fastening nuts to ensure that the fasteners do not loosen during long-term operation of the product.

- Fully sealed structure:
- The product is a fully sealed structure. The vacuum oil filling process is used for the transformer packaging, which completely removes the moisture of the transformer, ensures the isolation of the transformer oil from the outside air, prevents the aging of the oil, and improves the operation reliability of the transformer.

- Oil tank:
- The transformer oil tank is composed of corrugated walls, The surface is sprayed with dust and the paint film is firm,With cooling function,The elasticity of corrugated heat sink can compensate for the volume change of transformer oil caused by temperature rise and fall, so there is no oil conservator in the fully sealed transformer, reducing the overall height of the transformer.

10KV Oil-immersed Transformer

SBH15 Series Amorphous Alloy Oil-immersed Transformer

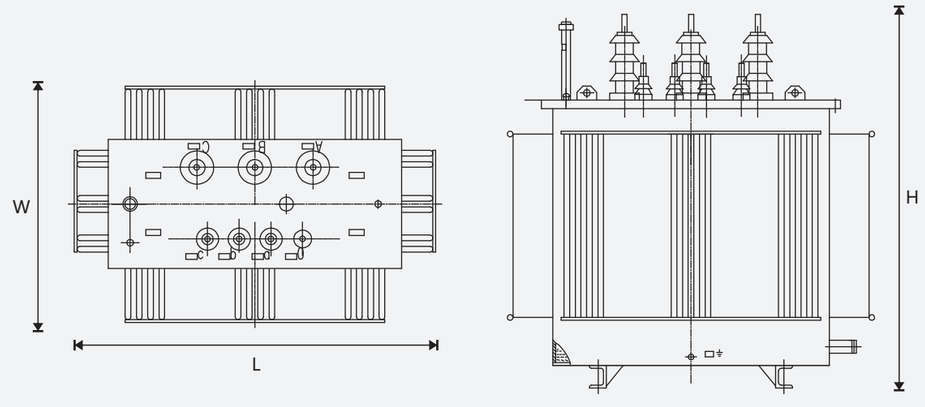
SBH15 technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)	Dimensions			Gouge Horizontal and Vertical (a×b)	Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H		
30	6 6.3 6.6 10 10.5 11	±2×2.5 ±5	0.4	Dyn11	33	630/600	1.50	4.0	950	620	1040	400×550	680
50					43	910/870	1.20		1060	7770	1070	400×660	890
63					50	1090/1040	1.10		1240	920	1200	550×870	1030
80					60	1310/1250	1.00		1240	920	1200	550×870	1170
100					75	1580/1500	0.90		1280	920	1200	550×870	1230
125					85	1890/1800	0.80		1320	940	1200	660×870	1400
160					100	2310/2200	0.60		1340	940	1200	660×870	1470
200					120	2730/2600	0.60		1340	940	1200	660×870	1540
250					140	3200/3050	0.60		1370	1120	1260	660×1070	1720
315					170	3830/3650	0.50		1370	1120	1330	660×1070	2000
400					200	4520/4300	0.50		1520	1190	1360	820×1070	2400
500					240	5410/5150	0.50		1890	1220	1470	820×1070	2950
630					320	6200	0.30	4.5	1960	1210	1550	820×1070	3500
800					380	7500	0.30		2030	13110	1560	820×1070	4100
1000					450	10300	0.30		2570	1350	1800	820×1070	5550
1250					530	12000	0.20		2080	1540	1970	1070×1475	6215
1600					630	14500	0.20		2560	1690	2380	1070×1475	6600
2000					750	18300	0.20	5.0	2660	1800	2400	1070×1475	6950
2500					900	21200	0.20		2720	1800	2460	1070×1475	7260

Note 1 :for transformers with rated capacity of 500kVA and below,the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

Note 2:when the average annual load rate of the transformer is belween 35% and 40%, the maximum operating eficiency can be obtained by using the loss value in the table.

Overall and mounting dimensions(mm)



Note:The dimensions and weights provided are only for reference in design and selection.the final size and weight are subject to our prodect drawings.

10KV Oil-immersed Transformer

S□-ML Series Three-dimensional Wound Core Oil-immersed Transformer

- S□-ML series three-dimensional wound core oil immersed transformer produced by the company is a new generation transiom product with more reasonable structure, lower operation noise, better performance and stronger reliabilty. The product breaks through the traditional plane structure and adopts three-phase symmetrical three-dimensional structure. The three cores are arranged in an equilateral triangle, and the length of the three magnetic circuits is consistent. It has the characteristics of high efficiency and low loss. It can save a lot of power consumption and operating costs,and has significant social benefits.It has been widely used in power plants,substations, industrial and mining enterprises, ports, airports and other places.
- Standard:IEC 60076-1, IEC60076-2, IEC 60076-3, IEC 60076-5, IEC 60076-10.

General

10KV Oil-immersed Transformer

S□-ML Series Three-dimensional Wound Core Oil-immersed Transformer

Standard

S □-M L - □/□

- High voltage, level (kV)
- Rated capacity(kva)
- Thee dimensional rolled iron core
- Fully sealed structure
- Functional level code (11,13,14)
- Three-phase

Operating conditions

1. Ambient temperature:maximum temperature:+40℃, minimum temperature:-25℃.
2. Average temperature of the hottest month:+30℃, average temperature in the hottest year:+20℃.
3. Altitude not exceeding 1000m.
4. The waveform of the power supply voltage is similar to a sine wave.
5. The three-phase supply voltage should be approximately symmetrical.
6. The total harmonic content of the load current shall not exceed 5% of the rated current.
7. Where to use: indoors or outdoors.

Features

1. Optimized magnetic circuit design: the three-phase magnetic circuit length of three-dimensional wound core is completely equal, the sum of the three-phase magnetic circuit length is the shortest, the three-phase magnetic circuit is completely symmetrical, and the three-phase no-load current is completely balanced.
2. Low loss and remarkable energy-saving effect: the magnetization direcfion of three-dimensional coil core is completely consistent with the rolling direction of silicon steel sheet, the magnetic fux distribution is uniform throughout the magnetic circuit, and there is no obvious distorfioroft magnetic flux density in high resistance area and joint. On the premise of the same material, the process coefficient of core loss is significantly lower than that of laminated core, the core loss can be reduced by 10%-20%, and the no-load loss can be reduced by 25%-35%.
3. Low noise: as the three-dimensional core is made of slicon steel strip in a speciadl cor winding machine, there is no seam, so it will not produce the noise caused by the magnetic circuit discontinuity as the laminated core. Therefore, the voice of the product is greatly reduced, almost reaching the state of environmental protection mute, which is most suitable for indoor and residential use.
4. Strong overload capacity: the no-load loss and no-load current of this type of transformer are very small, so the calorific value of the product itself is vey low;in addition, the three-phase coils are arranged in three rectangle structure, forming a central natural airway-"exhaust chimney" between the coils. Because the temperature difference between the upper and lower yokes is 30-40 ℃, strong air convection is generated, and the cold air is replenished from below to the central channel, the heat radiates out from the inner slope of the upper yoke, and the heat generated by the transformer is quickly taken away in the natural circulation.
5. Compact structure and small occupation: the three-dimensional iron core makes the product compact in structure, the plane occupation area of the body is reduced by 10-15% compared with the traditional products, and the body height is reduced by 10-20%.

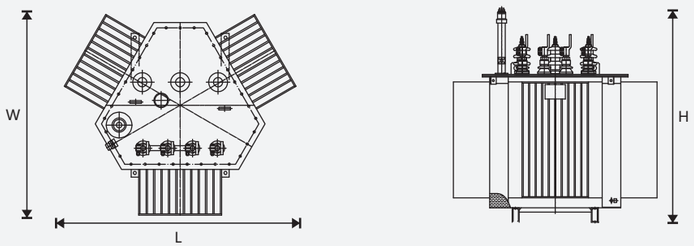
S□-ML Series Three-dimensional Wound Core Oil-immersed Transformer

S11-ML technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)	Sound power level (dB)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)							L	W	H	
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0 Yzn11	100	630/600	0.30	4.0	48	945	815	920	290
50					130	910/870	0.24		48	910	655	1030	390
63					150	1090/1040	0.23		48	1005	870	995	395
80					180	1310/1250	0.22		49	1025	705	970	455
100					200	1580/1500	0.21		49	1095	750	990	515
125					240	1890/1800	0.20		50	1105	955	1085	585
160					280	2310/2200	0.19		50	940	830	1100	630
200					340	2730/2600	0.18		52	1070	925	1050	745
250					400	3200/3050	0.17		52	1160	1005	1150	915
315					480	3830/3650	0.16		54	1130	980	1185	995
400					570	4520/4300	0.16		54	1285	1110	1260	1205
500					680	5410/5150	0.16		56	1300	1125	1335	1435
630				Dyn11 Yyn0	810	6200	0.15	4.5	56	1400	1215	1410	1790
800					980	7500	0.15		58	1480	1285	1400	2080
1000					1150	10300	0.14		58	1600	1295	1610	2500
1250					1360	12000	0.13		60	1605	1330	1660	2985
1600					1640	14500	0.12		60	1730	1485	1675	3745
2000					1940	18300	0.11	5.0	62	1850	1605	1795	4775
2500					2290	21200	0.11		62	1910	1655	1835	5225

Note:the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

Capacity (KVA)	Installatuon dimensions			Low voltage line terminal					Low voltage 0 line terminal				
	E1	E2	D	Grapical	b	b1	d	f	Grapical	b	b1	d	f
30	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
50	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
63	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
80	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
100	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
125	400	660	19	2	35	26	12.5	8	2	35	26	12.5	8
160	400	660	19	2	35	26	12.5	8	2	35	26	12.5	8
200	400	660	19	2	35	26	12.5	8	3	35	26	12.5	8
250	400	660	19	3	46	26	12.5	10	3	46	26	12.5	10
315	550	820	19	3	46	26	12.5	10	3	46	26	12.5	10
400	550	820	19	3	46	26	12.5	10	3	46	26	12.5	10
500	550	820	19	4	80	45	14.5	13	4	80	45	14.5	13
630	550	820	19	4	80	45	14.5	13	4	80	45	14.5	13
800	550	820	19	4	80	45	14.5	13	4	80	45	14.5	13
1000	550	1070	19	4	90	45	18	17	4	80	45	14.5	13
1250	550	1070	19	4	100	45	18	17	4	80	45	14.5	13
1600	550	1070	19	4	100	45	18	17	4	100	45	18	17
2000	600	1300	19	4	100	45	18	17	4	100	45	18	17
2500	600	1300	19	4	125	50	19	15	4	100	45	18	17



Note:The dimensions and weights provided are only for reference in design and selection.The final size and weight are subject to our prodect drawings.

10KV Oil-immersed Transformer

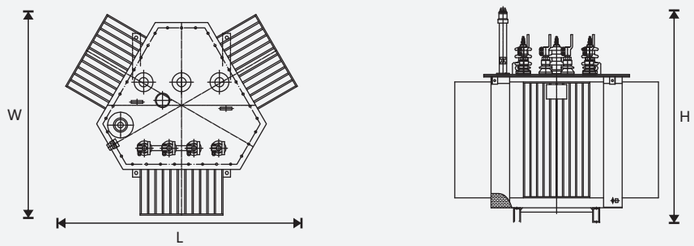
S□-ML Series Three-dimensional Wound Core Oil-immersed Transformer

S13-ML technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)	Sound power level (dB)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)							L	W	H	
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0 Yzn11	80	630/660	0.30	4.0	48	695	650	890	257
50					100	910/870	0.24		48	745	680	915	335
63					110	1090/1040	0.23		48	945	820	1020	400
80					130	1310/1250	0.22		49	1045	705	995	490
100					150	1580/1500	0.21		49	890	795	1005	490
125					170	1890/1800	0.20		50	905	815	1040	620
160					200	2310/2200	0.19		50	1120	800	1105	775
200					240	2730/2600	0.18		52	1075	930	1115	780
250					290	3200/3050	0.17		52	1140	990	1220	985
315					340	3830/3650	0.16		54	1145	990	1275	1150
400					410	4520/4300	0.16		54	1260	945	1250	1250
500					480	5410/5150	0.16		56	1320	1140	1325	1505
630				Dyn11 Yyn0	570	6200	0.15	4.5	56	1525	1320	1490	2400
800					700	7500	0.15		58	1500	1300	1485	2470
1000					830	10300	0.14		58	1585	1370	1540	2695
1250					970	12000	0.13		60	1670	1445	1650	3245
1600					1170	14500	0.12		60	1735	1505	1760	3995
2000					1550	18300	0.11	5.0	62	1890	1620	1720	4800
2500					1830	21200	0.11		62	1940	1670	1860	5540

Note:the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

Capacity (KVA)	Installatuon dimensions			Low voltage line terminal					Low voltage 0 line terminal				
	E1	E2	D	Grapical	b	b1	d	f	Grapical	b	b1	d	f
30	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
50	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
63	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
80	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
100	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
125	400	660	19	2	35	26	12.5	8	2	35	26	12.5	8
160	400	660	19	2	35	26	12.5	8	2	35	26	12.5	8
200	400	660	19	2	35	26	12.5	8	3	35	26	12.5	8
250	400	660	19	3	46	26	12.5	10	3	46	26	12.5	10
315	550	820	19	3	46	26	12.5	10	3	46	26	12.5	10
400	550	820	19	3	46	26	12.5	10	3	46	26	12.5	10
500	550	820	19	4	80	45	14.5	13	4	80	45	14.5	13
630	550	820	19	4	80	45	14.5	13	4	80	45	14.5	13
800	550	820	19	4	80	45	14.5	13	4	80	45	14.5	13
1000	550	1070	19	4	90	45	18	17	4	80	45	14.5	13
1250	550	1070	19	4	100	45	18	17	4	80	45	14.5	13
1600	550	1070	19	4	100	45	18	17	4	100	45	18	17
2000	600	1300	19	4	100	45	18	17	4	100	45	18	17
2500	600	1300	19	4	125	50	19	15	4	100	45	18	17



Note:The dimensions and weights provided are only for reference in design and selection.The final size and weight are subject to our prodect drawings.

10KV Oil-immersed Transformer

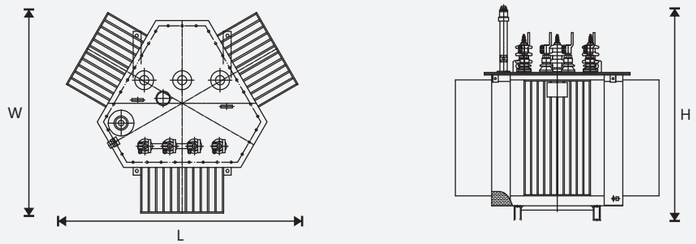
S□-ML Series Three-dimensional Wound Core Oil-immersed Transformer

S14-ML technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)	Sound power level (dB)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)							L	W	H	
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0 Yzn11	80	505/480	0.30	4.0	48	695	650	890	257
50					100	730/695	0.24		48	745	680	915	335
63					110	870/830	0.23		48	945	820	1020	400
80					130	1050/1000	0.22		49	1045	705	995	490
100					150	1260/1200	0.21		49	890	795	1005	490
125					170	1510/1440	0.20		50	905	815	1040	620
160					200	1850/1760	0.19		50	1120	800	1105	775
200					240	2180/2080	0.18		52	1075	930	1115	780
250					290	2560/2440	0.17		52	1140	990	1220	985
315					340	3060/2920	0.16		54	1145	990	1275	1150
400					410	3610/3440	0.16		54	1260	945	1250	1250
500					480	4330/4120	0.16		56	1320	1140	1325	1505
630				Dyn11 Yyn0	570	4960	0.15	4.5	56	1525	1320	1490	2400
800					700	6000	0.15		58	1500	1300	1485	2470
1000					830	8240	0.14		58	1585	1370	1540	2695
1250					970	9600	0.13		60	1670	1445	1650	3245
1600					1170	11600	0.12		60	1735	1505	1760	3995
2000					1550	14600	0.11	5.0	62	1890	1620	1720	4800
2500					1830	16900	0.11		62	1940	1670	1860	5540

Note:the load loss values above the diagonal line in the table are applicable to the Dyn11 or Yzn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

Capacity (KVA)	Installatuon dimensions			Low voltage line terminal					Low voltage 0 line terminal				
	E1	E2	D	Grapical	b	b1	d	f	Grapical	b	b1	d	f
30	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
50	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
63	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
80	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
100	380	550	19	2	35	26	12.5	8	2	35	26	12.5	8
125	400	660	19	2	35	26	12.5	8	2	35	26	12.5	8
160	400	660	19	2	35	26	12.5	8	2	35	26	12.5	8
200	400	660	19	2	35	26	12.5	8	3	35	26	12.5	8
250	400	660	19	3	46	26	12.5	10	3	56	26	12.5	10
315	550	820	19	3	46	26	12.5	10	3	56	26	12.5	10
400	550	820	19	3	46	26	12.5	10	3	56	26	12.5	10
500	550	820	19	4	80	45	14.5	13	4	80	45	14.5	13
630	550	820	19	4	80	45	14.5	13	4	80	45	14.5	13
800	550	820	19	4	80	45	14.5	13	4	80	45	14.5	13
1000	550	1070	19	4	90	45	18	17	4	80	45	14.5	13
1250	550	1070	19	4	100	45	18	17	4	80	45	14.5	13
1600	550	1070	19	4	100	45	18	17	4	100	45	18	17
2000	600	1300	19	4	100	45	18	17	4	100	45	18	17
2500	600	1300	19	4	125	50	19	15	4	100	45	18	17



Note:The dimensions and weights provided are only for reference in design and selection.The final size and weight are subject to our prodect drawings.

10KV Oil-immersed Transformer

S□-MD Series Buried Oil-immersed Transformer

- S□-MD series three-phase buried oil immersed transformer produced by the company is a kind of compact power distribution equipment which installs transformer, high-voltage load switch, fuse for protection in the same oil tank. The high-voltage and low-voltage incoming and outgoing lines adopt fully insulted, fully sealed and fully shielded waterproof joints, which do not occupy the surface space, can be immersed in water for a certain period of fime, and are maintenance free. It can be widely used in densely populted central city, streets, highways, bridges, tunnels, parking lots, airports,ports, tourist attractions and other power distribution systems,especially for places with strict requirements on height and floor area.
- In the product design, the special situation of ventilation and heat dissipation is fully considered, and the design of low loss and low temperature rise is adopted.According to the distribution mode, it can be divided into ring network distribution type and terminal distribution type to meet the different needs of users.
- Standard: IEC60076-1, IEC60076-2, EC 60076-3, IEC 60076-10.

General

S□-MD Series Buried Oil-immersed Transformer

Standard

S □-M D-H - □/□

- Rated voltage on high side
- Rated capacity(kva)
- (H Ring maintypeor Z Terminal type)
- Buried
- Fully sealed structure
- Performance leve
- Three phase

Operating conditions

1. The maximum operating ambient temperature is+50℃ under natural ventilation,+40℃ under forced ventilation,+40℃ whenthe underground water depth does not exceed 1.5m,+45℃ when th underground water depth exceeds 1.5m.
2. Altitude:No more than 1000m.
3. The power supply voltage's wave is similar to sine wave.
4. Three-phase power supply voltage is approximately symmetrical.
5. The total harmonic content of load current shall not exceed 5% of rated current.

Features

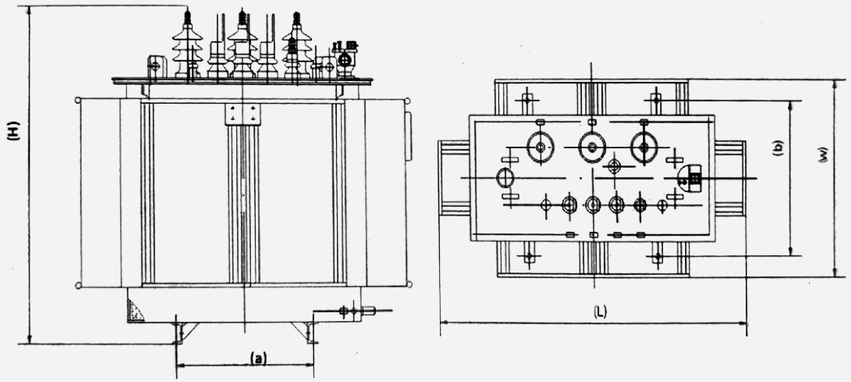
1. The product can be directly immersed in water or buried in underground tunnel, with protection degree of P68.
2. High corrosion resistance stainless steel box, safe and reliable, maintenance free design.
3. All components are installed on the box shell to facilitate inspection and maintenance. High voltage side with back-up and plug-in fuse, to give the transformer more secure protection.Load switch can be terminal type or ring network type, suitable for a variety of power supply systems.
4. The core made of high permeability silicon steel sheet or amorphous alloy material has lower no-load loss.
5. The high and low voltage incoming and outgoing lines adopt fully insulated, fully sealed and fully shielded waterproof joints, which makes the operation safer.
6. It adopts buried transformer and billboard type low-votage structure, which conforms to the urban ecological design concept, beautifies the environment and occupies a small area.

10KV Oil-immersed Transformer

S□-MD Series Buried Oil-immersed Transformer

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)	Dimensions		
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H
30	6.3 10	±2×2.5	0.4	Dyn11 Yyn0	100	600	1.0	4.0	1025	625	995
50					135	870	0.9		1075	640	1025
63					155	1040	0.9		1125	665	1065
80					175	1250	0.8		1150	675	1095
100					205	1500	0.8		1180	695	1100
125					240	1750	0.7		1200	705	1110
160					275	2100	0.7		1235	725	1210
200					330	2500	0.7		1295	745	1240
250					400	2950	0.7		1365	755	1260
315					475	3500	0.7		1335	755	1320
400					570	4200	0.7		1395	780	1360
500					680	5000	0.7		1465	825	1440
630					805	6000	0.6	4.5	1565	845	1460
800					980	7200	0.6		1685	925	1560
1000					1155	10000	0.6		1855	1095	1670
1250					1365	11800	0.6		1925	1195	1700
1600					1645	14000	0.6		1995	1235	1790

Overall and mounting dimensions(mm)



Note:The dimensions and weights provided are only for reference in design and selection.The final size and weight are subject to our prodect drawings.

10KV Oil-immersed Transformer

KS9 Three-phase Mining Oil-immersed Transformer

- KS9 series oil immersed mining transformer is suitable for central transformer substation, mining stop, general wind dypass and main wind dypass which has gas but has not explosive ganger. Moreover, it is suitable for the moisture environment.
- The iron cores of these series transformers adopt silicon steel slice, which is made of excellent low loss crystal granule. They have the advantages such as low no-load loss, small no-load current and low noise.

General

10KV Oil-immersed Transformer

KS9 Three-phase Mining Oil-immersed Transformer

Standard

K S 9 - □ / □

- Rated voltage rating (kV)
- Rated capacity (kVA)
- Property level code
- Three-phase
- Mining use

Operating conditions

1. Installation height do not exceed altitude of 1000m (for general), please point it out if it has special demand.
2. Ambient relative temperature no exceed 40℃.
3. Ambient relative humidity no exceed 95% (25℃).
4. No violent jounce and the vertical pitch not exceeding 15 degree.

KS9 series of mining common type non-excitation tap-changing not exceeding distribution transformer technical data

Rated capacity (kVA)	Voltage (kV)	Connection	Impedance voltage (%)	No-load loss(W)	Load loss(W)	No-load current (%)	Weight (t)			Boundary dimension			Gauge vertical/ horizontal (mm)
							Machine weight	Oil weight	Overall weight	L	B	H	
50	H.V: 10 6 L.V: 0.69 0.4	Yy0 Yd11	4.0	170	870	2.0	0.248	0.110	0.410	1240	830	1050	660/630
80				250	1250	1.8	0.335	0.130	0.570	1260	830	1050	
100				290	1500	1.6	0.360	0.140	0.610	1280	850	1150	
160				400	2200	1.4	0.505	0.190	0.790	1355	860	1200	
200				480	2600	1.3	0.585	0.210	1.050	1380	860	1250	
250				560	3050	1.2	0.715	0.235	1.150	1440	890	1300	
315				670	3650	1.1	0.820	0.255	1.270	1635	1020	1350	
400				800	4300	1.0	0.980	0.290	1.580	1720	1070	1450	
500				960	5100	1.0	1.155	0.335	1.790	1760	1080	1580	600/790
630			4.5	1200	6200	0.9	1.430	0.440	2.200	1890	1120	1600	
800				1400	7500	0.9	1.860	0.530	2.850	1970	1170	1700	
1000				1700	10300	0.7	2.035	0.610	3.430	2500	1300	1700	

Note:The dimensions and weights provided are only for reference in design and selection.The final size and weight are subject to our prodect drawings.

35KV Oil-immersed Transformer

CNC ELECTRIC

35KV Oil-immersed Transformer

S□-35KV Series Non-excitation Voltage Regulating Transformer

- This kind of product is applied to power system of three-phase, 50Hz as well as 35kV and below,is the main transformer equipment of medium and small-sized transformer substation, supplies power distribution, power and illumination for the industry and agriculture.
- The company introduces in domestic and overseas advanced technique, adopts the latest material and optimizes design, which enables the product structure more reasonable, and greatly improves the product electric strength, mechanical strength and heat-sinking capability.

General

S□-35KV Series Non-excitation Voltage Regulating Transformer

Standard

S □ - □ / 35

- Primary side voltage of the product (kV)
- Rated capacity of the product (kVA)
- Code of performance level
  divided into series 9,10,11,13 according to national standard
- Phase number: three-phase-S

Operating conditions

1. Altitude: ≤1000m.
2. Ambient temperature: the highest temperature +40℃,the highest monthly average temperature +30℃; The highest yearly average temperature +20℃.
3. Installation environment: inclination of installation place < 3°, no obvious dirt and corrosive or flammable gas.

Features

1. Iron core:
   The iron core is made of high-quality cold-rolled silicon steel sheet, and adopts various forms such as fully biased multi-stage joints, without punch holes, wind cores, etc., and clamp them with stainless steel stays and epoxy glass tapes.
2. Coil:
   The conductor is made of high-quality oxygen-free copper enameled wire or paper-wrapped flat copper wire, and the coil is made of drum type, spiral type, improved spiral type, continuous type, staggered type and other types.
3. Oil tank:
   The oil tank is barrel type or shielded type, and the heat dissipation element adopts corrugated plate or electroplating radiator.The transformer is not equipped with a trolley, but a base that conforms to the national standard gauge is welded on the bottom of the box for your convenience.
4. Safety protection device:
   According to national standards and user requirements, the transformer can be equipped with the following safety protection devices:pressure relief valve, gas relay, signal thermometer, oil filter, oil conservator, oil sample valve, etc.

S□-35KV Series Non-excitation Voltage Regulating ransformer

S9-50~1600/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection symbol	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)
	H.V (kV)	Tapping range of high voltage	L.V (kV)					
50	35	±5%	0.4	Dyn11 Yyn0	210	1270/1210	2.0	6.5
100					290	2120/2020	1.8	
125					340	2050/2380	1.7	
160					360	2970/2830	1.6	
200					430	3500/3330	1.5	
250					510	4160/3960	1.4	
315					610	5010/4770	1.4	
400					730	6050/5760	1.3	
500					860	7280/6930	1.2	
630					1040	8280	1.1	
800					1230	9900	1.0	
1000					1440	12150	1.0	
1250					1760	14670	0.9	
1600					2120	17550	0.8	

Note:The table above the load loss in the value of a slash aply to Dynll or znl1 coecin group, slash the botom of the load os values for Yyn0 connection group

S9-800~31500/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection symbol	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)
	H.V (kV)	Tapping range of high voltage	L.V (kV)					
800	35	±5% ±2×2.5%	3.15 3.3 6.3 6.6 10.5	Yd11	1250	9900	1.05	6.5
1000					1480	12150	1.00	
1250					1760	14670	0.90	
1600					2130	17550	0.85	
2000					2610	19350	0.75	
2500					3150	20700	0.75	
3150	38.5 35				3870	24300	0.70	7.0
4000					4640	28800	0.70	
5000					5490	33030	0.60	
6300					6570	36900	0.60	8.0
8000		±2×2.5%		YNd11	9000	40500	0.55	
10000					10600	47700	0.55	
12500					12600	56700	0.50	
16000					15.3	69300	0.50	
20000					18090	84000	0.50	
25000					21510	99000	0.40	10.0
31500					25650	119000	0.40	

Note :outline dimension is designed according to requirements

S□-35KV Series Non-excitation Voltage Regulating Transformer

S11-50~1600/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection symbol	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)
	H.V (kV)	Tapping range of high voltage	L.V (kV)					
50	35	±5	0.4	Dyn11 Yyn0	170	1210/1150	2.00	6.5
100					230	2010/1920	1.80	
125					270	2380/2260	1.70	
160					290	2820/2690	1.60	
200					340	3330/3160	1.50	
250					410	3950/3760	1.40	
315					490	4760/5450	1.40	
400					580	5750/5470	1.30	
500					690	6920/6580	1.20	
630					830	7870	1.10	
800					980	9410	1.00	
1000					1150	11540	1.00	
1250					1410	13940	0.90	
1600					7000	16670	0.80	

Note:the load loss values above the diagonal line in the table are applicable to the Dyn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

S11-630~31500/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection symbol	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)
	H.V (kV)	Tapping range of high voltage	L.V (kV)					
630	35	±5	3.15 3.3 6.5 6.6 10.5	Yd11	830	7780	1.10	6.5
800					980	9410	1.00	
1000					1150	11540	1.00	
1250					1410	13940	0.90	
1600					1700	16670	0.90	
2000					2180	18380	0.70	
2500					2560	19670	0.60	
3150	35 ~38.5				3040	23090	0.56	7.0
4000					3620	27360	0.56	
5000					4320	31380	0.48	
6300					5250	35060	0.48	8.0
8000		±2×2.5		Ynd11	7200	38480	0.42	
10000					8700	45320	0.42	
12500					10080	53870	0.40	
16000					12160	65840	0.40	
20000					14400	79520	0.40	
25000					17020	94050	0.32	10.0
31500					20220	112860	0.32	

Note :outline dimension is designed according to requirements

S□-35KV Series Non-excitation Voltage Regulating Transformer

S13-50~2500/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection symbol	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)
	H.V (kV)	Tapping range of high voltage	L.V (kV)					
50	35 38.5	±2×2.5 ±5	0.4	Dyn11 Yyn0	160	1200/1140	1.30	6.5
100					230	2010/1910	1.10	
125					270	2370/2260	1.10	
160					280	2820/2680	1.00	
200					310	3320/3160	1.00	
250					400	3950/3760	0.95	
315					480	4750/4530	0.95	
400					580	5740/5470	0.85	
500					680	6910/6580	0.85	
630					830	7860	0.65	
800					980	9400	0.65	
1000					1150	11500	0.65	
1250					1400	13900	0.60	
1600					1690	16600	0.60	
2000					1990	19700	0.55	
2500					2360	23200	0.55	

Note:the load loss values above the diagonal line in the table are applicable to the Dyn11 coupling group,and the load loss values below the diagonal line are applicable to the Yyn0 coupling group.

S13-630~31500/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection symbol	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)
	H.V (kV)	Tapping range of high voltage	L.V (kV)					
630	35	±2×2.5 ±5	3.15 3.3 6.3 6.6 10.5	Yd11	830	7860	0.65	6.5
800					980	9400	0.65	
1000					1150	11500	0.65	
1250					1400	13900	0.55	
1600					1690	16600	0.45	
2000					2170	18300	0.45	
2500					2560	19600	0.45	
3150	35 ~38.5				3040	23000	0.45	7.0
4000					3610	27300	0.45	
5000					4320	31300	0.45	
6300					5240	35000	0.45	8.0
8000		±2×2.5		Ynd11	7200	38100	0.35	
10000					8700	45300	0.35	
12500					10000	53800	0.30	
16000					12100	65800	0.30	
20000					14400	79500	0.30	
25000					17000	94000	0.25	10.0
31500					20200	112000	0.25	

Note :outline dimension is designed according to requirements

35KV Oil-immersed Transformer

SZ□-35KV Series On-load Voltage Regulating Transformer

- This kind of product is applied to power system of three-phase, 50Hz as well as 35kV and below,is the main transformer equipment of medium and small-sized transformer substation, supplies power distribution, power and illumination for the industry and agriculture.
- The company introduces in domestic and overseas advanced technique, adopts the latest material and optimizes design, which enables the product structure more reasonable, and greatly improves the product electric strength, mechanical strength and heat-sinking capability.

General

35KV Oil-immersed Transformer

SZ□-35KV Series On-load Voltage Regulating Transformer

Standard

S Z □ - □/35

- High voltage level(kV)
- Rated capacityl(kVA)
- Characteristic code(9,10,11,13)
- On load voltage regulation
- Three-phase

Operating conditions

1. Altitude: ≤1000m.
2. Ambient temperature: the highest temperature +40℃, the highest monthly average temperature +30℃; The highest yearly average temperature +20℃.
3. Installation environment: inclination of installation place < 3°, no obvious dirt and corrosive or flammable gas.

Features

1. Iron core:
   The iron core is made of high-quality cold-rolled silicon steel sheet, and adopts various forms such as fully biased multi-stage j oints, without punch holes, wind cores, etc., and clamp them with stainless steel stays and epoxy glass tapes.
2. Coil:
   The conductor is made of high-quality oxygen-free copper enameled wire or paper-wrapped flat copper wire, and the coil is made of drum type, spiral type, improved spiral type, continuous type, staggered type and other types.
3. Oil tank:
   The oil tank is barrel type or shielded type, and the heat dissipation element adopts corrugated plate or electroplating radiator.The transformer is not equipped with a trolley, but a base that conforms to the national standard gauge is welded on the bottom of the box for your convenience.
4. Safety protection device:
   According to national standards and user requirements, the transformer can be equipped with the following safety protection devices:pressure relief valve, gas relay, signal thermometer, oil filter, oil conservator, oil sample valve, etc.

SZ9-35KV technical data

Rated capacity (kVA)	Voltage combination			Connected group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)
	High voltage(kv)	Tapping range	Low voltage					
2000	35	±3×2.5	6.3 10.5	Yd11	2900	20200	0.90	6.5
2500					3400	22700	0.90	
3150	35~38.5				4100	26000	0.80	7.0
4000					4900	30700	0.80	
5000					5800	36000	0.75	
6300					7000	38700	0.75	8.0
8000			6.3 6.6 10.5	Ynd11	9900	43000	0.70	
10000					11600	50600	0.70	
12500					13800	59900	0.70	
16000					16200	73000	0.70	
20000					19500	84600	0.70	
25000					22500	100200	0.70	10.0
31500					26400	124000	0.60	

SZ11-35KV technical data

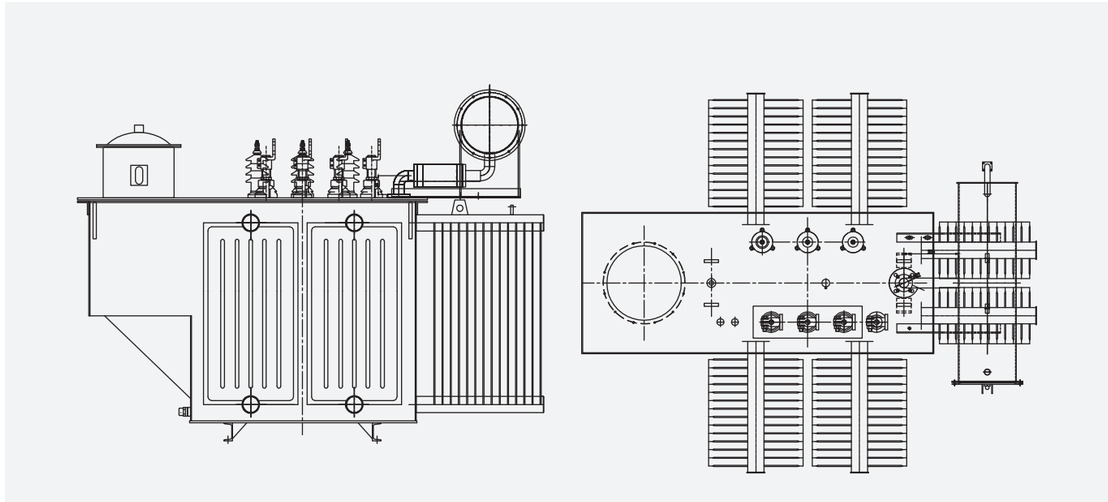
Rated capacity (kVA)	Voltage combination			Connected group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)
	High voltage(kv)	Tapping range	Low voltage					
2000	35	±3×2.5	6.3 10.5	Yd11	2300	19240	0.80	6.5
2500					2720	20640	0.80	
3150	35~38.5				3230	24710	0.72	7.0
4000					3870	29160	0.72	
5000					4640	31200	0.68	
6300					5630	36770	0.68	7.5
8000			6.3 6.6 10.5	Ynd11	7870	40610	0.60	
10000					9280	48050	0.60	
12500					10940	56860	0.56	8.0
16000					13170	70320	0.54	
20000					15570	82780	0.54	

35KV Oil-immersed Transformer
SZ□-35KV Series On-load Voltage Regulating Transformer

SZ13-35KV technical data

Rated capacity (kVA)	Voltage combination			Connected group label	No-load loss(W)	Load loss(W)	No-load current (%)	Short circuit impedance (%)
	High voltage(kv)	Tapping range	Low voltage					
2000	35	±3×2.5	6.3 10.5	Yd11	2300	19200	0.50	6.5
2500					2720	20600	0.50	
3150	35~38.5				3230	24700	0.50	7.0
4000					3870	29100	0.50	
5000					4640	34200	0.50	
6300					5630	36700	0.50	8.0
8000			6.3 6.6 10.5	Ynd11	7870	40600	0.40	
10000					9280	48000	0.40	
12500					1090	56800	0.35	
16000					1310	70300	0.35	
20000					1550	82100	0.35	
25000					1830	97800	0.30	10.0
31500					2180	716000	0.30	

Overall and mounting dimensions(mm)



Note :outline dimension is designed according to requirements.

10KV Dry-type Transformer

CNC ELECTRIC

10KV Dry-type Transformer

SC(B)□ Series Epoxy Resin Dry-type Transformer

- The SC (B) series epoxy resin dry type transformers have the advantages of flame retardant, fireproof, explosion-proof, maintenance free, and small size due to their coils being encapsulated with epoxy resin. They can be directly installed in load centers and are widely used in power transmission and transformation systems, as important places as commercial residences, public buildings, airports, as well as in harsh environments like subways, smelters, ships, and marine drilling.
- Standard：IEC60076-1, IEC60076-11.

General

SC(B)☐ Series Epoxy Resin Dry-type Transformer

Selection

S C (B) ☐ - ☐ / ☐

- High voltage level (KV):6~11KV
- Rated capacity (KVA):30~2500KVA
- Performance level code:9,11,13
- Low voltage foil coil
- Fixed molding (resin casting)
- Three phase

Operating conditions

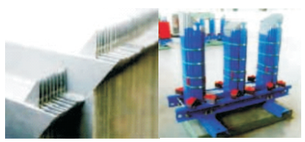
1. Ambient temperature: maximum temperature: +40℃, minimum temperature: -25℃.
2. Average temperature of the hottest month:+30℃, average temperature in the hottest year:+20℃.
3. Altitude not exceeding 1000m.
4. The waveform of the power supply voltage is similar to a sine wave.
5. The three-phase supply voltage should be approximately symmetrical.
6. The relative humidity of the surrounding air should be lower than 93%.
7. And there should be no water droplets on the surface of the coil
8. Where to use: indoors or outdoors.

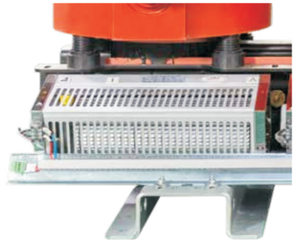
Features

1. The carefully designed coil structure and vacuum immersion treatment ensure that the SG (B) 10 transformer operates without partial discharge and will not exhibit crack performance throughout its service life. Its insulation level will remain in good condition as before.
2. The high-voltage part adopts continuous wire winding, low-voltage foil winding, vacuum immersion, curing treatment, and high-strength ceramic support, which has good resistance to sudden short circuit currents.
3. Flame retardant, explosion-proof, non-toxic, self-extinguishing, and fireproof
4. The SG (B) 10 transformer produces almost no smoke when burned in a high-temperature open flame
5. The insulation level of the transformer is Class H (180℃).
6. The insulation layer is very thin, with strong short-term overload capacity, without the need for forced cooling, and can overload by 120% for long term use, 140% lasting for 3 hours. Due to its elasticity and non aging properties, this insulation material can be fully loaded at one time at ± 50℃.

10KV Dry-type Transformer

SC(B)☐ Series Epoxy Resin Dry-type Transformer





Structure

- Iron core:
  - The iron core is made of high-quality oriented cold-rolled silicon steel sheet, with a laminated structure of 45° full oblique seam, and the core column is bound with insulating tape.
  - The surface of the iron core is sealed with insulating resin paint to prevent moisture and rust, and the clamps and fasteners are surface-treated to prevent rust.
- Low voltage copper foil coil:
  - The low-voltage winding is wound with high-quality copper foil, so that zero axial short-circuit stress can be achieved in the case of short circuit. The interlayer and winding end are insulated with thermosetting epoxy prepreg cloth. The whole winding is placed in the oven. After heating, the winding is aggregated into a solid whole. Scientific and reasonable design and pouring process make the product partial discharge less, noise lower, and heat dissipation capacity strong.
- High voltage winding:
  - The high-voltage winding adopts enamelled copper wire or film-coated copper wire, and glass fiber and epoxy resin composite material are used for insulation. Its expansion coefficient is similar to that of copper conductor, and it has good impact resistance, temperature change resistance, and crack resistance. All components of glass fiber and epoxy resin are self-extinguishing, flame retardant and non-polluting. Epoxy resin has good insulation properties and is especially suitable for making high-voltage coils.
- Temperature control device and air cooling system:
  - The temperature control device has the functions of failure alarm, over-temperature alarm, over-temperature trip, automatic/manual start and stop of the fan, and is connected to the computer through the RS485 interface for centralized monitoring and control.At the same time, it also has the function of "black gate", which can record the winding temperature of the transformer when it is powered off.
  - The air-cooling system adopts a cross-flow top-blowing cooling fan, which has the characteristics of low noise, high wind pressure, and beautiful appearance. It can run for a long time under the condition of forced air cooling at 125% of the rated load.
- Shell:
  - Protect the shell and provide further safety protection for the transformer,with protection levels such as IP20, IP23, etc.
  - The shell materials include cold-rolled steel plate, stainless steel plate, aluminum alloy, etc. for users to choose from.

Structure

- The factory configuration of SCB without protective shell (IP00) is as follows
- 4 bi-directional flat wheels (when requested by the customer)
- 4 lugs
- Towing holes on the base
- 2 grounding points
- 1 nameplate
- 2 "Electric Hazard" warning signs
- No load voltage regulating tap, operated when the transformer is powered off, to adapt the transformer to the actual supply voltage
- High voltage side connecting rod with connecting wire from above
- Low-voltage outgoing busbar with upward outlet

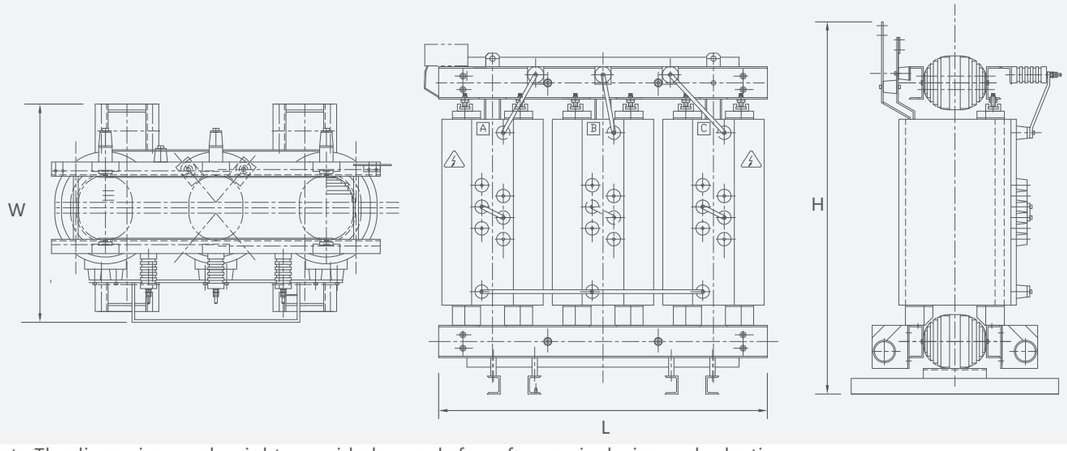
- The factory configuration of SCB with IP21, IP23 metal protective shell is as follows
- All contents mentioned above for SCB without protective casing (Ip00)
- 1 set of IP21 metal protective housing, standard anti-corrosion protection

10KV Dry-type Transformer
SC(B)☐ Series Epoxy Resin Dry-type Transformer

SCB9-30~2500/10KV technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance(%)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H	
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0	220	750	2.4	4.0	700	350	620	250
50					310	1060	2.4		710	350	635	295
80					420	1460	1.8		860	730	780	430
100					450	1670	1.8		940	710	795	520
125					530	1960	1.6		1000	710	860	670
160					610	2250	1.6		1080	710	1020	840
200					700	2680	1.4		1100	710	1060	960
250					810	2920	1.4		1150	710	1100	1120
315					990	3670	1.2		1150	770	1125	1230
400					1100	4220	1.2		1190	870	1175	1485
500					1310	5170	1.2		1230	870	1265	1580
630					1510	6220	1.0		1465	870	1245	1840
630					1460	6310	1.0	6.0	1465	870	1245	1840
800					1710	7360	1.0		1420	870	1395	2135
1000					1990	8610	1.0		1460	870	1420	2500
1250					2350	10260	1.0		1580	970	1485	2970
1600					2760	12400	1.0		1640	1120	1715	3900
2000					3400	15300	0.8		1780	1120	1710	4225
2500					4000	18180	0.8		1850	1120	1770	4790

Overall and mounting dimensions(mm)



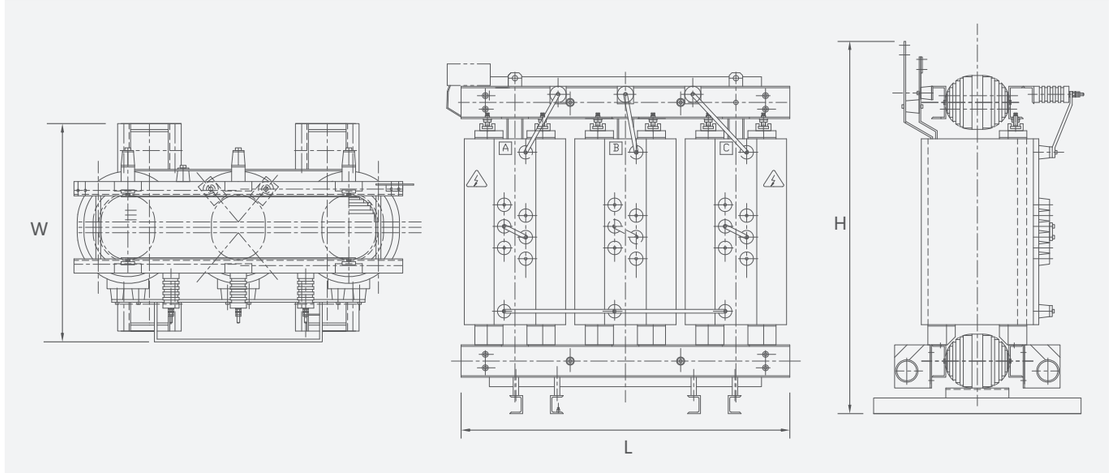
Note:The dimensions and weights provided are only for reference in design and selection.
The final size and weight are subject to our prodect drawings.

SC(B)□ Series Epoxy Resin Dry-type Transformer

SCB10-30~2500/10KV technical data

Rated capacity (kVA)	Voltage combination			Connection group label	No-load loss(W)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance (%)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H	
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0	190	710	2.6	4.0	580	450	650	300
50					270	1000	2.2		600	450	650	380
80					370	1380	2.0		880	500	800	470
100					400	1570	2.0		970	500	820	560
125					470	1850	1.8		970	500	860	650
160					550	2130	1.8		980	650	950	780
200					630	2530	1.6		1000	650	970	880
250					720	2750	1.6		1040	760	1070	1030
315					880	3470	1.4		1100	760	1110	1250
400					980	3990	1.4		1170	760	1235	1400
500					1160	4880	1.4		1190	760	1250	1600
630					1360	5870	1.4		1220	760	1250	1900
630					1300	5960	1.3	6.0	1220	760	1250	1900
800					1520	6950	1.3		1330	760	1330	2580
1000					1770	8130	1.3		1350	920	1450	2850
1250					2090	9690	1.1		1440	920	1550	3200
1600					2450	11730	1.1		1510	1170	1620	3800
2000					3060	14450	1.1		1530	1170	1785	4280
2500					3600	17170	1.0		1560	1170	1930	5250

Overall and mounting dimensions(mm)



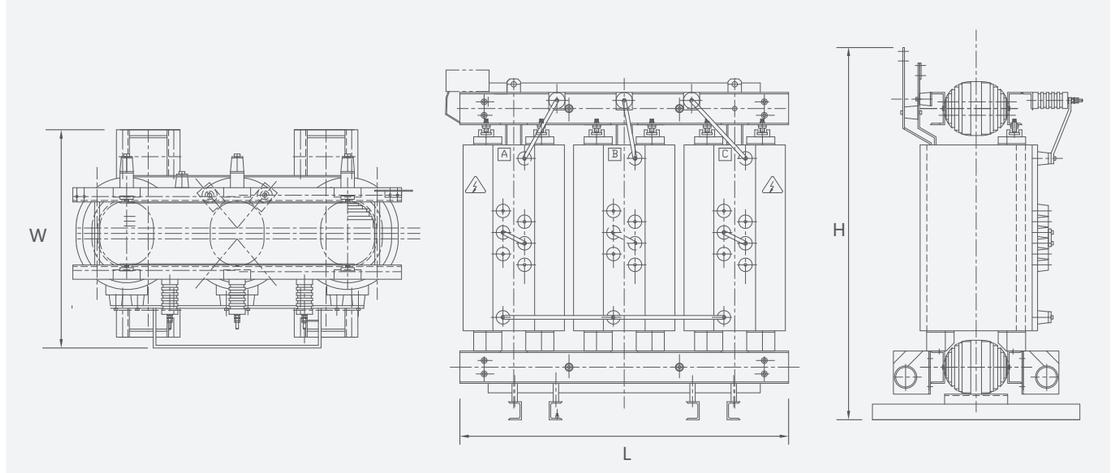
Note:The dimensions and weights provided are only for reference in design and selection.
The final size and weight are subject to our prodect drawings.

SC(B)□ Series Epoxy Resin Dry-type Transformer

SCB11-30~2500/10KV technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance(%)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H	
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11 Yyn0	170	710	2.3	4.0	955	750	840	270
50					240	1000	2.2		970	750	860	340
80					330	1380	1.7		1015	750	925	460
100					360	1570	1.7		1030	750	960	530
125					420	1850	1.5		1060	750	1000	605
160					480	2130	1.5		1090	900	1045	730
200					550	2530	1.3		1105	900	1080	825
250					640	2760	1.3		1180	900	1125	1010
315					790	3470	1.1		1225	900	1140	1165
400					880	3990	1.1		1330	900	1195	1490
500					1040	4880	1.1		1345	900	1255	1650
630					1200	5880	0.9		1540	1150	1175	1915
630					1170	5960	0.9		1540	1150	1175	1915
800					1360	6960	0.9		1600	1150	1220	2305
1000					1590	8130	0.9		1645	1150	1285	2690
1250					1880	9690	0.9	6.0	1705	1150	1345	3225
1600					2200	11700	0.9		1765	1150	1405	3805
2000					2740	14400	0.7		1840	1150	1475	4435
2500					3240	17100	0.7		1900	1150	1560	5300
1600					2200	12900	0.9	8.0	1765	1150	1405	3805
2000					2740	159000	0.7		1840	1150	1475	4435
2500					3240	1800	0.7		1900	1150	1560	5300

Overall and mounting dimensions(mm)



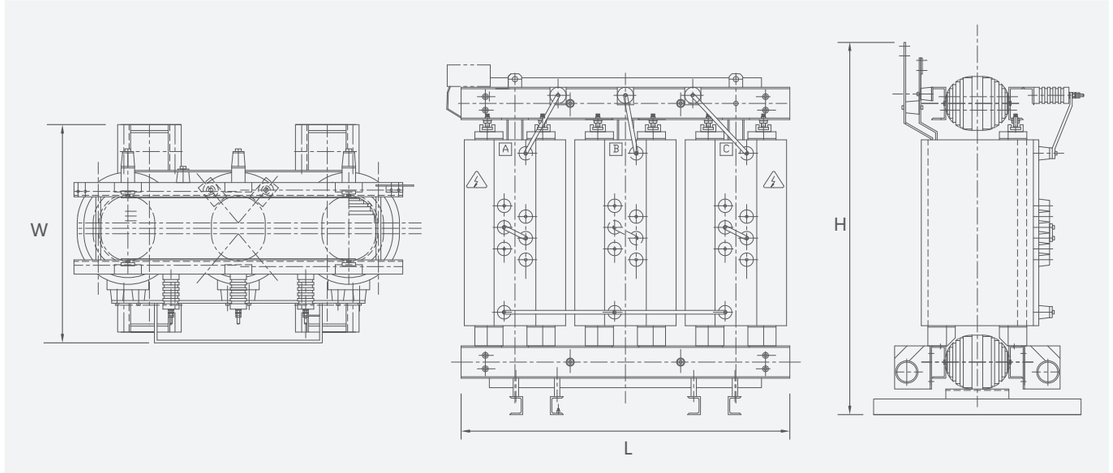
Note:The dimensions and weights provided are only for reference in design and selection.
The final size and weight are subject to our prodect drawings.

SC(B)☐ Series Epoxy Resin Dry-type Transformer

SCB12-30~2500/10KV technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load Loss(w) 120℃	No-load current(%)	Short circuit impedance(%)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H	
30	6 6.3 6.6 10	±5 ±2×2.5	0.4	Dyn11 Yyn0	150	710	2.3	4.0	955	750	840	270
50					215	1000	2.2		970	750	860	340
80					295	1380	1.7		1015	750	925	460
100					320	1570	1.7		1030	750	960	530
125					375	1850	1.5		1060	750	1000	605
160					430	2130	1.5		1090	900	1045	730
200					495	2530	1.3		1105	900	1080	825
250					575	2760	1.3		1180	900	1125	1010
315					705	3470	1.1		1225	900	1140	1165
400					785	3990	1.1		1330	900	1195	1490
500					930	4880	1.1		1345	900	1255	1650
630					1070	5880	0.9		1540	1150	1175	1915
630	10.5 11				1040	5960	0.9	6.0	1540	1150	1175	1915
800					1210	6960	0.9		1600	1150	1220	2305
1000					1410	8130	0.9		1645	1150	1285	2690
1250					1670	9690	0.9		1705	1150	1345	3225
1600					1960	11700	0.9		1765	1150	1405	3805
2000					2440	14400	0.7		1840	1150	1475	4435
2500					2880	17100	0.7		1900	1150	1560	5300
1600					1960	12900	0.9	8.0	1765	1150	1405	3805
2000					2440	15900	0.7		1840	1150	1475	4435
2500					2880	18800	0.7		1900	1150	1560	5300

Overall and mounting dimensions(mm)



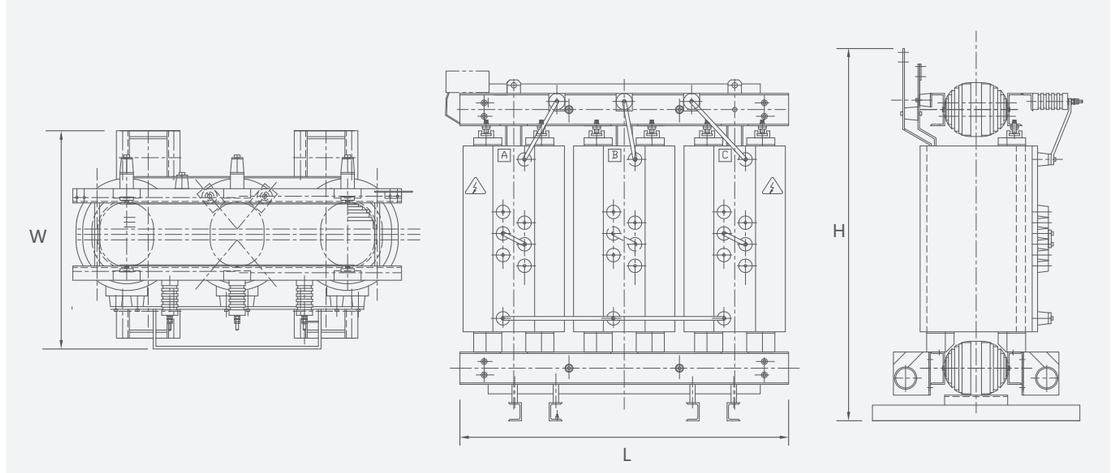
Note:The dimensions and weights provided are only for reference in design and selection.
The final size and weight are subject to our prodect drawings.

SC(B)☐ Series Epoxy Resin Dry-type Transformer

SCB13-30~2500/10KV technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance(%)	Dimensions			Total weight (kg)
	High voltage (KV)	Tapping range	Low voltage (KV)						L	W	H	
30	6 6.3 6.6 10	±5 ±2×2.5	0.4	Dyn11 Yyn0	135	640	2.3	4.0	955	750	840	270
50					195	900	2.2		970	750	860	340
80					265	1240	1.7		1015	750	925	460
100					290	1410	1.7		1060	750	960	560
125					340	1660	1.5		1075	750	1000	630
160					385	1910	1.5		1105	900	1045	770
200					445	2270	1.3		1120	900	1105	875
250					515	2480	1.3		1195	900	1125	1055
315					635	3120	1.1		1555	1150	1175	1190
400					705	3590	1.1		1225	900	1140	1500
500					835	4390	1.1		1315	900	1190	1700
630					965	5290	0.9		1345	900	1265	1985
630	10.5 11				935	5360	0.9	6.0	1555	1150	1175	1985
800					1090	6260	0.9		1600	1150	1220	2360
1000					1270	7310	0.9		1660	1150	1285	2775
1250					1500	8720	0.9		1720	1150	1350	3310
1600					1760	10500	0.9		1780	1150	1405	3940
2000					2190	13000	0.7		1840	1150	1475	4595
2500					2590	15400	0.7		1900	1150	1565	5495
1600					1760	11600	0.9	8.0	1780	1150	1405	3940
2000					2190	14300	0.7		1840	1150	1475	4595
2500					2590	17000	0.7		1900	1150	1565	5495

Overall and mounting dimensions(mm)



Note:The dimensions and weights provided are only for reference in design and selection.
The final size and weight are subject to our prodect drawings.

Carry

- The transformer is equipped with safe handling devices.
- For transformers without enclosures and transformers with top door openings, use the four lifting lugs of the transformer for lifting (must be lifted vertically, not diagonally); For transformers with 2 lifting lugs in the center of the top of the casing, use 2 lifting lugs for lifting. The angle formed by the sling should not exceed 60°.
- Firstly, the forking capacity of the forklift should be checked. If appropriate, the fork arm should be inserted into the base channel steel after removing the rollers.
- Pulling and moving the transformer should be carried out from the base. For this purpose, holes with a diameter of 27 mm are made on each side of the base. Dragging is possible in two directions: the axis of the base and the direction perpendicular to this axis.

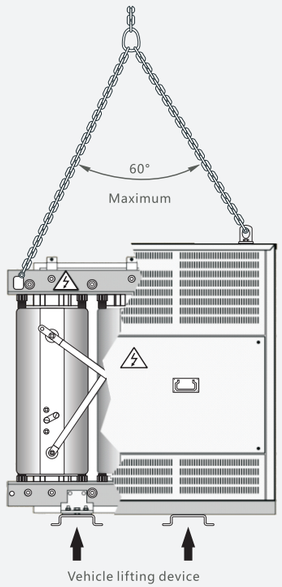


Figure 1- Lifting with a sling or forklift

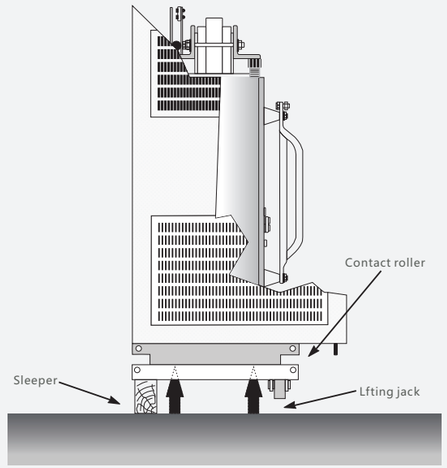


Figure 2- Installation of the roller

10KV Dry-type Transformer

SCBH15 Series Amorphous Alloy Dry-type Transformer

- SCBH series amorphous alloy dry-type transformer is a dry-type transformer with low loss and high energy efficiency. Its no-load loss is more than 70% lower than that of traditional transformers using silicon steel sheets as iron cores. It is a new generation of energy-saving, safe, green and environmentally friendly high-tech products. This product can replace ordinary dry-type transformers, and is mainly suitable for high-rise buildings, commercial centers, infrastructure, industrial and mining enterprises, power plants, etc.
- Standard:IEC60076-1, IEC60076-11.

General

SCBH15 Series Amorphous Alloy Dry-type Transformer

Selection

S C (B) H 15 - □ / □

- High voltage level(KV):6~11KV
- Rated capacity(KVA):30~2500KVA
- Performance level code:15
- Performance level code: amorphous alloy iron core
- Low voltage foil coil
- Fixed molding (resin casting)
- Three phase

Operating conditions

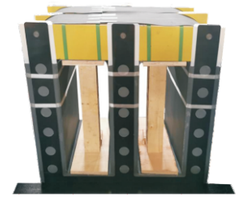
1. Ambient temperature: Maximum temperature:+40℃,Minimum temperature:-25℃.
2. Average temperature of the hottest month:+30℃,Average temperature in the hottest year:+20℃.
3. Altitude not exceeding 1000m.
4. The waveform of the power supply voltage is similar to a sine wave.
5. The three-phase supply voltage should be approximately symmetrical.
6. The relative humidity of the surrounding air should be lower than 93%, and there should be no water droplets on the surface of the coil.
7. Where to use: indoors or outdoors.

Features

1. Low loss, good energy-saving effect, and economical operation.
2. Flame retardant, fireproof, explosion-proof and non-polluting.
3. Good moisture resistance and strong heat dissipation.
4. High mechanical strength, small partial discharge and high reliability.
5. Short-circuit resistance, high level of lightning impact, and large overload capacity.
6. Small size, light weight, small footprint, and convenient installation.

10KV Dry-type Transformer

SCBH15 Series Amorphous Alloy Dry-type Transformer



Structure

- Iron core:
- The iron core is made of amorphous alloy material and adopts a three-phase three column structure.
- The iron core is suspended on the reinforced insulation board on the upper part of the coil, which is completely free from external force, and fully utilizes the characteristics of low no-load loss and low no-load current of the amorphous alloy material, and the energy saving effect is obvious.

- High and low voltage winding:
- The high and low voltage adopt rectangular winding, and the inner and outer layers are filled and wound with glass fiber mesh and glass ribbon, which are permeated and solidified with resin,and have strong resistance to cracking and sudden short circuit.

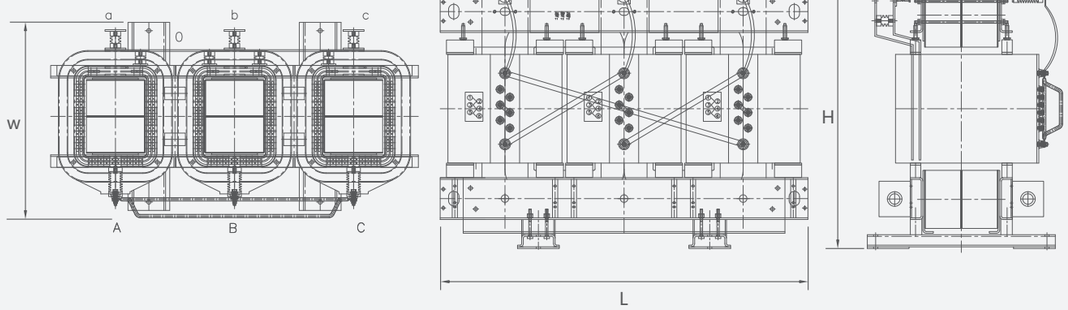
- Simple and beautiful structure:
- The transformer adopts a frame type clamp structure, and the coil is compressed by elastic compression nails, resulting in a simple and beautiful overall structure

- Advanced technology:
- Using vacuum film degassing, metering pump, static mixing and other advanced technologies,Ensure the proportioning accuracy and pouring quality of the epoxy mixture.
- The HTC winding adopts advanced "airway rod" technology,Not limited by the curvature radius of the winding, one or more axial air ducts can be set at the heating center of the winding according to design requirements to achieve the best heat dissipation effect of the entire machine,Simultaneously, multiple supporting ribs can be generated in the air duct, effectively enhancing the mechanical strength of the winding.

SCB15 technical data

Rated capacity (KVA)	Voltage combination			Connection group label	No-load loss(W)	Load Loss(w) 120℃	No-load current(%)	Dimensions			Total weight (KG)	Short circuit impedance(%)
	High voltage (KV)	Tapping range	Low voltage (KV)					L	W	H		
30					70	710	0.6	900	800	300	900	
50					90	1000	0.5	955	900	350	900	
80					120	1380	0.5	985	960	400	950	
100					130	1570	0.5	1035	980	450	1250	
125					150	1850	0.4	1060	1000	500	1280	
160					170	2130	0.4	1120	1050	680	1320	
200					200	2530	0.4	1135	1105	770	1330	4.0
250					230	2760	0.4	1170	1165	900	1330	
315	6				280	3470	0.3	1185	1225	1010	1360	
400	6.3				310	3990	0.3	1210	1300	1205	1380	
500	6.6	±5	0.4	Dyn11	360	4880	0.3	1245	1380	1400	1400	
630	10	±2×2.5			420	5880	0.3	1295	1355	1515	1410	
630	10.5				410	5960	0.3	1295	1355	1515	1410	
800	11				480	6960	0.3	1375	1480	1880	1450	
1000					550	8130	0.2	1430	1525	2170	1480	
1250					650	9690	0.2	1480	1570	2525	1500	6.0
1600					760	11730	0.2	1500	1710	2980	1520	
2000					1000	14450	0.2	1570	1735	3480	1550	
2500					1200	17170	0.2	1625	1825	4080	1600	
1600					760	12960	0.2	1500	1710	2980	1520	
2000					1000	15960	0.2	1570	1735	3480	1550	8.0
2500					1200	18890	0.2	1625	1825	4080	1600	

Overall and mounting dimensions(mm)



10KV Dry-type Transformer

SG(B)10 Insulated Three-phase Dry-type Transformer

The non-encapsulated coil three-phase dry type power transformer that adopt UL certificated NOMEX insulation system, with advantages of safe, reliable, energy saving, fireproof, explosion resistant, simple maintaining and so on. It has superior design, reasonable structure, elegant appearance, and its main performance index is superior to domestic standard, such as local discharge level, no-load loss, load loss,noise and capability of operating in serious humid environment, it can be installed in humid environment like places near lake, sea or river, also suitable for areas that require high fireproof capability and high load, such as high-rise, airport, station,dock,underground railway,hospital,electric power plant,metallurgy industry,shopping center, residential area, petrochemical industry, nuclear power station,nuclear submarine, etc.

General

SG(B)10 Insulated Three-phase Dry-type Transformer

Standard

S G (B) 10 - □ / □

- Primary voltage measurement (kV)
- Rated capacity (kVA)
- Code of performance level
- The foil coll of low voltage
- Dry type, air self cooling
- Three phase

Operating conditions

1. Ambient temperature: -50℃~+50℃.
2. Altitude:≤1000m.
3. Other requirements that are beyond the stipulation range of this technical manual,please negotiate with our technical department and indicate out when placing an order.

Features

1. The elaborate designed coil structure and vacuum immersed treatment enable SG(B)10 transformer operates without local discharging,and no crack performance will be find during the whole service life, and its insulation level will be kept as good as beginning.
2. The high voltage part adopts continuous wire winding, LV foil winding, vacuum immersed, curing processed and high strength ceramics supporting, with fine withstand capability to paroxysmal short-circuit current.
3. Flame resisting, flameproof, nontoxic, self-extinguishing, fireproof.
4. When burn SG(B)10 transformer in high temperature and open fire, almost no fume will by produced.
5. Insulation of the transformer is H grade (180℃).
6. The insulation layer is very thin, with strong short-time over load capability,needless of forced cooling, can be overloaded for 120% for long term and 140% for 3 hours. As this kind of insulation material has elasticity and will not be aged,it can be full loaded at once under ±50℃.

10KV Dry-type Transformer

SG(B)10 Insulated Three-phase Dry-type Transformer

SG(B)10 series of non-encapsulated coil three-phase dry type power transformer main technical parameters

1. Voltage grade:high voltage (kV): 3, 6, 6.3, 6.6, 10, 10.5, 11;Low voltage:0.4, 0.69.
2. High voltage tap range:±5% or ±2×2.5%.
3. Mark of joint group:Yyn0 or Dyn11.

Model and capacity (kVA)	No-load loss(W)		Load loss(W)(145℃)		No-load current(%)		Sound level(LPA)dB		Short circuit impedance (%)	Body weight (kg)
	Enterprise standard	National standard	Enterprise standard	National standard	Enterprise standard	National standard	Enterprise standard	National standard		
SG(B)10-100/10	405	510	1880	2550	2.4	2.4	40	55	4	590
SG(B)10-160/10	560	700	2550	3650	2.0	2.0	42	58	4	870
SG(B)10-200/10	660	820	3100	4680	2.0	2.0	42	58	4	970
SG(B)10-250/10	760	950	3600	5500	1.8	2.0	44	58	4	1160
SG(B)10-315/10	880	1100	4600	6600	1.8	1.8	46	60	4	1350
SG(B)10-400/10	1040	1300	5400	7800	1.8	1.8	46	60	4	1580
SG(B)10-500/10	1200	1500	6600	9350	1.8	1.8	47	62	4	1830
SG(B)10-630/10	1340	1680	7900	11500	1.6	1.6	47	62	6	2060
SG(B)10-800/10	1690	2120	9500	13600	1.3	1.6	48	63	6	2450
SG(B)10-1000/10	1980	2480	11400	15700	1.3	1.4	48	63	6	2910
SG(B)10-1250/10	2380	2980	12500	18400	1.3	1.4	49	65	6	3190
SG(B)10-1600/10	2730	3420	13900	21300	1.3	1.4	50	66	6	4160
SG(B)10-2000/10	3320	4150	17500	15000	1.2	1.2	50	66	6	4860
SG(B)10-2500/10	4000	5000	20300	29100	1.2	1.2	51	67	6	5860

Outline size list

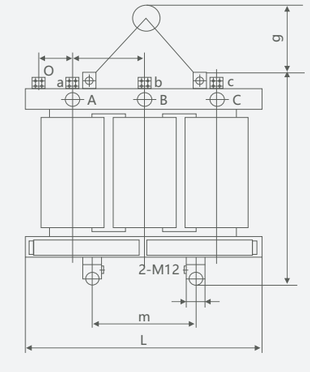
Model and capacity (kVA)	Non-enclosed type (without protective enclosure)			m	n	Non-enclosed type (without protective enclosure)			m	n
	L	H	B			L	H	B		
SG(B)10-100/10	940	920	500	660	400	1340	1150	800	660	400
SG(B)10-160/10	940	960	500	660	400	1340	1150	800	660	400
SG(B)10-200/10	1100	1050	550	660	450	1500	1280	900	660	450
SG(B)10-250/10	1120	1120	550	660	450	1500	1280	900	660	450
SG(B)10-315/10	1190	1210	860	660	660	1700	1460	1000	660	660
SG(B)10-400/10	1300	1330	860	820	660	1700	1460	1000	820	660
SG(B)10-500/10	1330	1410	860	820	660	1900	1610	1000	820	660
SG(B)10-630/10	1450	1365	860	820	660	1900	1610	1000	820	660
SG(B)10-800/10	1500	1480	1020	820	820	2000	1770	1100	820	820
SG(B)10-1000/10	1590	1570	1020	820	820	2000	1770	1100	820	820
SG(B)10-1250/10	1610	1700	1270	1070	1070	2100	2130	1270	1070	1070
SG(B)10-1600/10	1660	1770	1270	1070	1070	2100	2130	1270	1070	1070
SG(B)10-2000/10	1700	1930	1270	1070	1070	2100	2130	1270	1070	1070
SG(B)10-2500/10	1780	2090	1675	1475	1475	2200	2300	1675	1475	1475

Note:The dimensions and weights provided are only for reference in design and selection.
The final size and weight are subject to our prodect drawings.

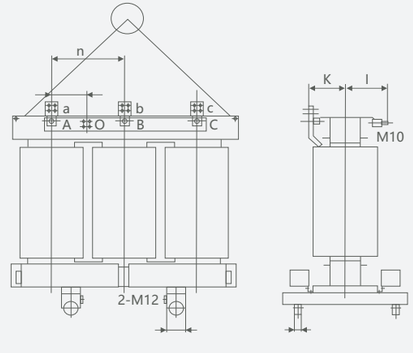
SG(B)10 Insulated Three-phase Dry-type Transformer

Overall and mounting dimensions(mm)

Size drawing of SG(B)10-100~400kVA

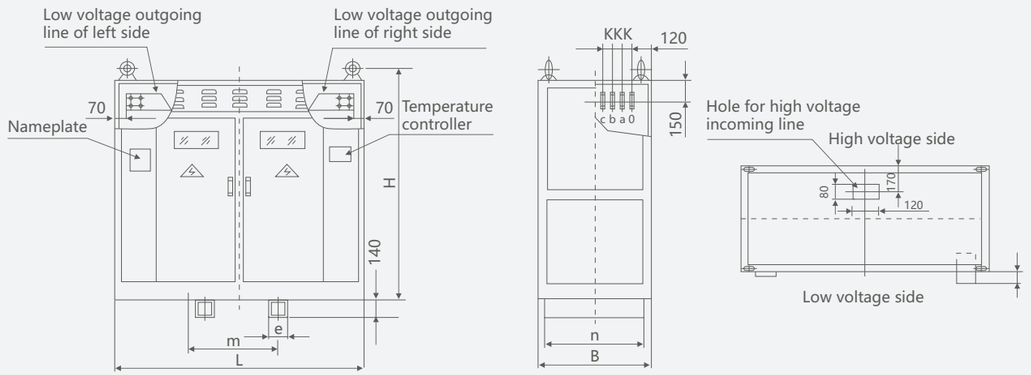


Size drawing of SG(B)10-500~2500kVA



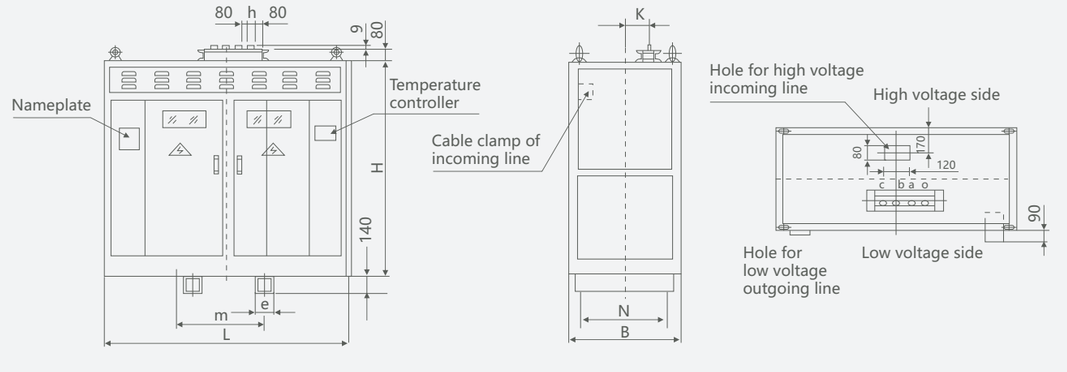
Note:the outline dimensions and track gauge dimensions covered in the catalog are only for reference.
welcome to contact us for accurate dimensions

Outline diagram of standard side coiling out of SG(B)10 type non-encapsulated coil power transformer

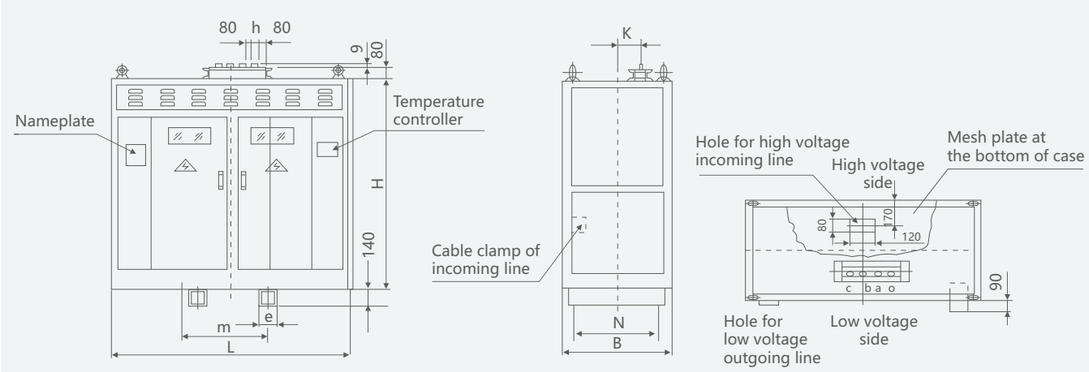


SG(B)10 Insulated Three-phase Dry-type Transformer

Outline diagram of IP20 of SG(B)10 type non-encapsulated coil power transformer (HS1)



Outline diagram of IP20 of SG(B)10 type non-encapsulated coil power transformer (HS2)



10KV Dry-type Transformer

SG(B)10 Insulated Three-phase Dry-type Transformer

Outline diagram of IP20 of SG(B)10 type non-encapsulated coil power transformer (HS3)

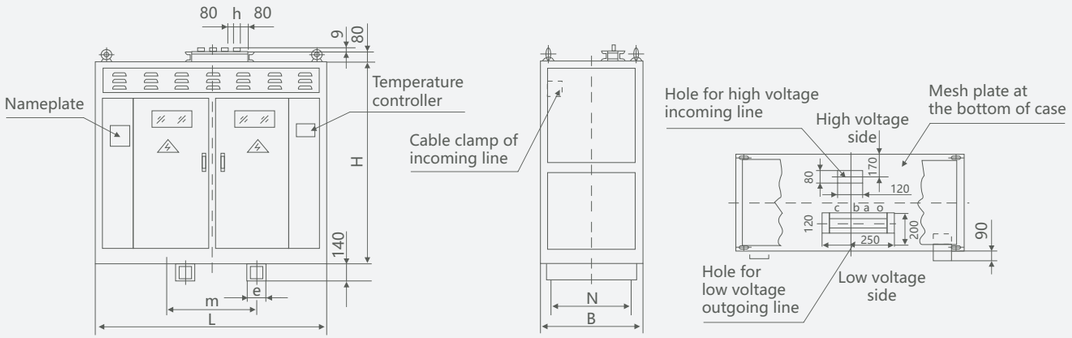
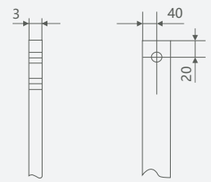
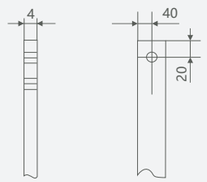


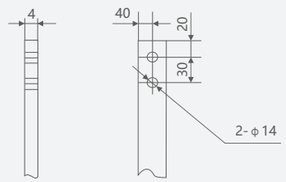
Diagram of LV terminal



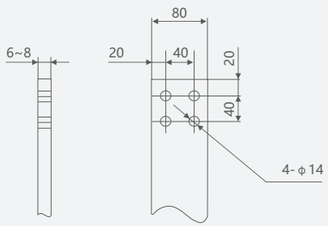
(Applicable 30~100kVA)



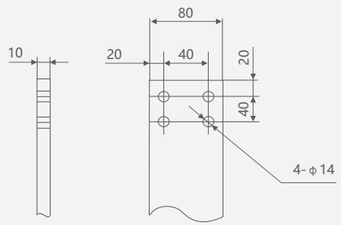
(Applicable 160~250kVA)



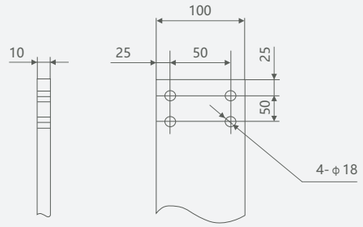
(Applicable 315~500kVA)



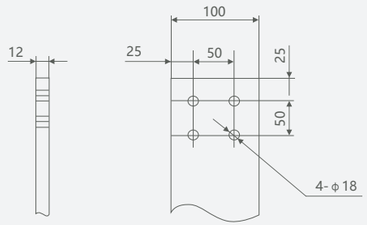
(Applicable 630~800kVA)



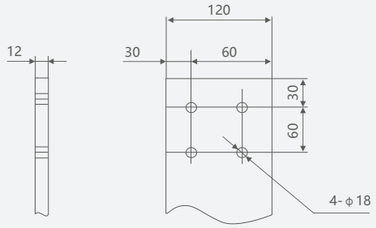
(Applicable 1000kVA)



(Applicable 1250~1600kVA)



(Applicable 2000kVA)



(Applicable 2500kVA)

35KV Dry-type Transformer

CNC ELECTRIC

35KV Dry-type Transformer
SC(ZB)□ Series Dry-type Transformer

- This kind of product is applied to power system of three-phase, 50Hz as well as 35kV and below, is the main transformer equipment of medium and small-sized transformer substation, supplies power distribution, power and illumination for the industry and agriculture.
- The company introduces in domestic and overseas advanced technique, adopts the latest material and optimizes design, which enables the product structure more reasonable, and greatly improves the product electric strength, mechanical strength and heat-sinking capability.
- Standard: IEC726.

General

35KV Dry-type Transformer
SC(ZB)□ Series Dry-type Transformer

Standard

SC(Z)B 10 - □ / □

- Rated HV(filling with the rated value)
- Rated capacity(kVA)
- Functionallevel code
- LV foil winding
- Dn-load tap changing
- Triple phase solid molding(epoxy casting)

Features

1. Low loss, good energy-saving effect, and economical operation.
2. Flame retardant, fireproof, explosion-proof and non-polluting.
3. Good moisture resistance and strong heat dissipation.
4. High mechanical strength, small partial discharge and high reliability.
5. Short-circuit resistance, high level of lightning impact, and large overload capacity.
6. Small size, light weight, small footprint, and convenient installation.
7. Can be directly installed in the load center.

External connecting mode

1.Coil out mode of high voltage terminal:
  a. Coil out from the top is standard
  b. Coil out from the bottom is acceptable
2.Coil out mode of low voltage terminal:
  a. Coil out from the top is standard
  b. Coil out from the bottom is acceptable
  c. Coil out from the horizontal side is acceptable

SC(ZB)□ Series Dry-type Transformer

SC(B)9-50~2500/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection	No-load loss (w)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance (%)
	H·V (kV)	Tapping range of high voltage	L·V (kV)					
50	35 38.5	±5 ±2*2.5	0.4	Dyn11 Yyn0	500	1500	2.8	6.0
100					700	2200	2.4	
160					880	2960	1.8	
200					980	3500	1.8	
250					1100	4000	1.6	
315					1310	4750	1.6	
400					1530	5700	1.4	
500					1800	7000	1.4	
630					2070	8100	1.2	
800					2400	9600	1.2	
1000					2700	11000	1.0	
1250					3150	13400	0.9	
1600					3600	16300	0.9	
2000					4250	19200	0.9	
2500					4950	23000	0.9	

SC(B)9-800~20000/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection	No-load loss (w)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance (%)
	H·V (kV)	Tapping range of high voltage	L·V (kV)					
800	35 38.5	±5 ±2*2.5	3.15 6 6.3 10 10.5 11	Dyn11 Yd11 Yyn0	2500	9900	1.1	6.0
1000					2970	11500	1.1	
1250					3480	13600	1.0	
1600					4100	16300	1.0	
2000					4700	19200	0.9	7.0
2500					5400	23000	0.9	
3150					6700	25800	0.8	8.0
4000					7800	31000	0.8	
5000					9300	36800	0.7	
6300					11000	43000	0.7	
8000					12600	48500	0.6	9.0
10000					14400	58500	0.6	
12500					17500	68000	0.5	
16000					21500	80000	0.5	
20000					25500	90000	0.4	10.0

Note:Outline dimension is designed according to requirements.

SC(ZB)□ Series Dry-type Transformer

SC(B)10-50~2500/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection	No-load loss (w)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance (%)
	H·V (kV)	Tapping range of high voltage	L·V (kV)					
50	35 38.5	±5 ±2*2.5	0.4	Dyn11 Yyn0	450	1420	2.30	6.0
100					630	2090	2.00	
160					790	2810	1.50	
200					880	3320	1.50	
250					990	3800	1.30	
315					1170	4510	1.30	
400					1370	5410	1.10	
500					1620	6650	1.10	
630					1860	7690	1.00	
800					2160	9120	1.00	
1000					2430	10400	0.75	
1250					2830	12700	0.75	
1600					3240	15400	0.75	
2000					3820	18200	0.75	
2500					4450	21800	0.75	

SC(B)10-800~20000/35KV technical data

Rated capacity (kVA)	Voltage combination			Connection	No-load loss (w)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance (%)
	H·V (kV)	Tapping range of high voltage	L·V (kV)					
800	35 38.5	±5 ±2*2.5	3.15 6 6.3 10 10.5 11	Dyn11 Yd11 Yyn0	2250	9100	0.95	6.0
1000					2670	10900	0.95	
1250					3130	12900	0.85	
1600					3690	15400	0.85	
2000					4230	18200	0.75	7.0
2500					4860	21800	0.75	
3150					6030	24500	0.70	8.0
4000					7020	29400	0.70	
5000					8370	34900	0.60	
6300					9900	40800	0.60	
8000					11300	46000	0.50	9.0
10000					12900	55500	0.50	
12500					15700	64600	0.4	
16000					19300	76000	0.40	
20000					22900	85000	0.35	10.0

Note:Outline dimension is designed acco rding to requi rements.

SC(ZB)□ Series Dry-type Transformer

SCZ(B)9-35KV on-load tap changer technical data

Rated capacity (kVA)	Voltage combination			Connection	No-load loss (w)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance (%)
	H·V (kV)	Tapping range of high voltage	L·V (kV)					
2000	35 38.5	±4*2.5	6 6.3 10 10.5 11	Dyn11 Yd11	5000	20000	0.90	7.0
2500					5800	23800	0.90	
3150					7000	26800	0.80	
4000					8200	32100	0.80	
5000					9700	38000	0.70	8.0
6300					11500	44000	0.70	
8000					13200	50000	0.60	9.0
10000					15100	60200	0.60	
12500					18300	70000	0.50	
16000					22500	82400	0.50	
20000					26500	92700	0.40	10.0

Note:Outline dimension is designed acco rding to requi rements.

SCZ(B)10-35KV on-load tap changer technical data

Rated capacity (kVA)	Voltage combination			Connection	No-load loss (w)	Load Loss(w) 120℃	No-load current (%)	Short circuit impedance (%)
	H·V (kV)	Tapping range of high voltage	L·V (kV)					
2000	35 38.5	±4*2.5	6 6.3 10 10.5 11	Dyn11 Yd11	4500	10000	0.75	7.0
2500					5220	22600	0.75	
3150					6300	26400	0.70	8.0
4000					7380	30400	0.70	
5000					8730	36100	0.60	
6300					10300	41800	0.60	
8000					11800	47500	0.50	9.0
10000					13500	57100	0.50	
12500					16400	66500	0.40	
16000					20200	78200	0.40	
20000					23800	88000	0.35	10.0

Note:Outline dimension is designed according to requirements.