

10kV、20kV级油浸式变压器

Oil-immersed transformer

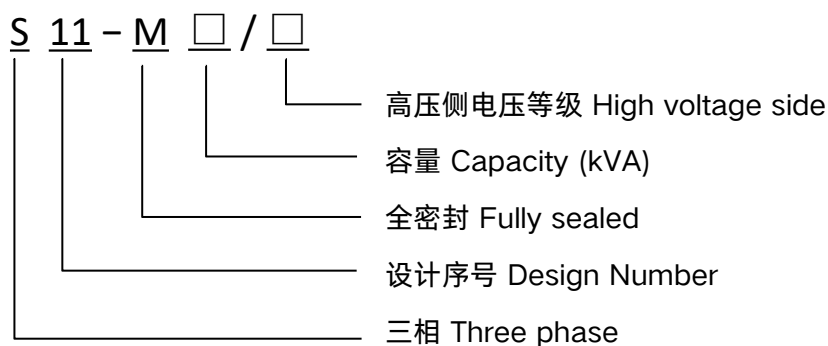


1、产品概述 Product Overview

10kV、20kV 级油浸式变压器是主流配电变电设备，依靠绝缘油完成绝缘与散热，运行稳定、维护简便。可独立安装，也能集成于箱变内，广泛用于电网、工业园、光伏、市政及工矿项目，适配各类中压配电场景。

10kV & 20kV oil-immersed transformers are mainstream power distribution transformation equipment. With insulating oil for insulation and heat dissipation, they feature stable operation and easy maintenance. They can be installed standalone or integrated into box-type substations, widely applied in power grids, industrial parks, photovoltaic projects, municipal works and industrial & mining facilities to meet various medium-voltage power distribution demands.

2、型号及含义 Model and Meaning



3、变压器产品标准 Transformer Product Standards

GB 1094.1-2013

GB 1094.2-2013

GB 1094.3-2017

GB 1094.5-2008

GB/T6451-2015

GB/T 7595-2017

GB/T 25289-2010

JB/T 3837-2016

4、变压器正常使用条件 Normal Service Conditions for Transformer

海拔高度：不超过1000m

环境温度：最高气温+40°C

最高日平均气温+30°C

最高年平均气温 + 20°C

户外最低气温-25°C

电源电压的波形近似于正弦波 三相电源电压应大致对称

安装环境：无明显的污秽；

地震引发的地面加速度ag：水平方向低于3m/s²，垂直方向低于1.5m/s²

户内使用

注：凡是需要满足变压器正常使用条件之外的特殊使用条件，应在询价和订货时说明

Altitude: not exceeding 1000m

Ambient temperature: Maximum air temperature: +40°C

Maximum daily average air temperature: +30°C

Maximum annual average air temperature: +20°C

Minimum outdoor air temperature: -25°C

Power voltage waveform approximates sine wave; three-phase power voltage is approximately symmetrical

Installation environment: no obvious contamination

Seismic ground acceleration ag: horizontal value below 3m/s², vertical value below 1.5m/s²

Indoor usage

Note: If special service conditions outside the above normal ranges are required, relevant conditions shall be stated when requesting quotation and placing orders

5、技术参数 Technical Parameters

S11 系列 10kV 级配电变压器 S11 Series 10kv distribution transformer

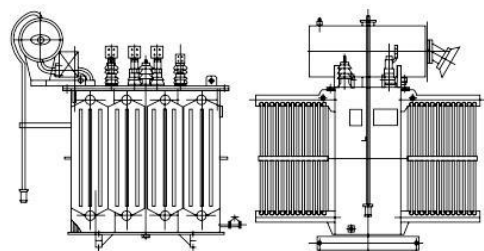
30kVA ~ 2500kVA 三相双绕组无励磁调压配电变压器

30kva ~ 2500kva 3-phase duplex winding non-excited tap-changing distribution transformer

额定容量 Rated capacity (kVA)	电压组合及分接范围 Voltage Combination and Tap range			联结组 标号 Vector Group Symbol	损耗 Loss (kW)		空载电流 No-load current (%)	短路阻抗 Impedance Voltage (%)	重量 Weight (kg)			外形尺寸 Boundary Dimension (mm) 长 (L)x 宽 (W)x 高 (H)		轨距纵向 / 横向 (mm) Gauge vertical / horizontal
	高压 HV (kV)	高压分接范围 % HV Tap Range	低压 LV (kV)		空载 No-load	负载 Load			器身重 Body	油重 Oil	总重 Total	全密封 Omniseal	非全密封 Un-omniseal	
30	6 6.3 10 10.5 11	±5 ±2X2.5	0.4	Dyn11 Yzn11 Yyn0	0.10	0.63/0.60	2.3	4.0	150	750	340	730x780x930	950x720x1000	400/400
50					0.13	0.91/0.87	2.0		220	950	440	800x750x965	1020x700x1035	400/400
63					0.15	1.09/1.04	1.9		260	110	490	820x780x970	1140x740x1040	400/400
80					0.18	1.31/1.25	1.9		300	120	580	840x800x1000	1060x720x1070	400/400
100					0.20	1.58/1.50	1.8		350	120	660	850x840x1010	1105x760x1110	450/400
125					0.24	1.89/1.80	1.7		400	130	700	860x900x1080	1120x800x1150	550/550
160					0.28	2.31/2.20	1.6		480	160	840	1220x840x1100	1440x760x1290	550/550
200					0.34	2.73/2.60	1.5		560	170	920	1250x860x1150	1470x780x1350	550/550
250					0.40	3.20/3.05	1.4		640	180	1040	1260x850x1220	1480x780x1420	550/550
315					0.48	3.83/3.65	1.4		800	200	1220	1340x900x1200	1560x840x1400	550/550
400					0.57	4.52/4.30	1.3		980	240	1460	1380x900x1260	1600x840x1520	550/550
500					0.68	5.41/5.15	1.2		1130	280	1710	1520x1000x1330	1740x960x1590	660/660
630				Dyn11 Yyn0	0.81	6.20	1.1	4.5	1350	330	2050	1580x1040x1270	1900x1040x1600	660/660
800					0.98	7.50	1.0		1610	400	2460	1650x1160x1400	1970x1160x1730	820/820
1000					1.15	10.30	1.0		1690	450	3680	1750x1240x1460	2070x1240x1970	820/820
1250					1.36	12.00	0.9		1910	500	3050	1800x1240x1550	2100x1240x1870	820/820
1600					1.64	14.50	0.8		2330	590	3800	1830x1800x1930	1830x1800x1930	820/820
2000					1.96	17.80	0.6		2750	780	4660	1950x1900x2080	1950x1900x2080	820/820
2500					2.31	20.70	0.5		3350	920	5440	2060x1930x2130	2160x1930x2130	1070/1070

注 1: 表中斜线上方的负载损耗值适用于 Dyn11 或 Yzn11 联结组, 斜线下方的负载损耗值适用于 Yyn0 联结组。

Note 1: 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.

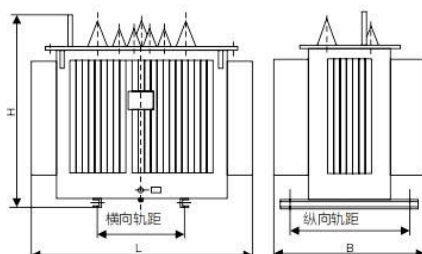


全密封 (带胶囊) 片式变压器

OMNISEAL (ENCAPSULANT)
SHEET TYPE TRANSFORMER

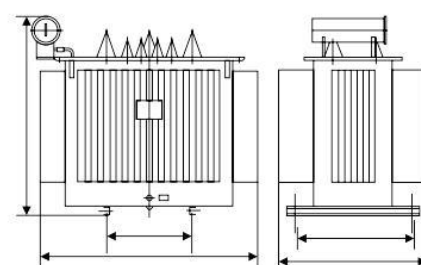
非全密封片式变压器

UN-OMNISEAL SHEET TYPE TRANSFORMER



全密封波纹式变压器

OMNISEAL CORRUGATED TYPE TRANSFORMER



非全密封波纹式变压器

UN-OMNISEAL CORRUGATED TYPE TRANSFORMER



S11、SZ11 系列 10kV 级 电力变压器 S11、SZ11 Series 10kv power transformer

630kVA ~ 6300kVA 三相双绕组无励磁调压电力变压器
630kva ~ 6300kva 3-phase Duplex Winding Non-excited Tap-changing Power Transformer

额定容量 Rated capacity (kVA)	电压组合及分接范围 Voltage Combination and Tap range			联结组 标号 Vector Group Symbol	损耗 Loss (kW)		空载电流 No-load current (%)	短路阻抗 Impedance Voltage (%)	重量 Weight (kg)			轨距纵向 / 横向 (mm) Gauge vertical / horizontal
	高压 HV (kV)	高压分接范围 % HVTap Range	低压 LV (kV)		空载 No-load	负载 Load			器身重 Body	油重 Oil	总重 Total	
630	6 6.3 10 10.5 11	±5 ±2X2.5	3 3.15 6.3	Yd11	0.84	6.93	1.1	5.5	1780	450	2710	750/660
800					1.02	8.46	1.0		2100	520	3310	850/660
1000					1.20	9.92	1.0		2580	600	3860	850/820
1250					1.42	11.80	0.9		2880	700	4370	850/820
1600					1.71	14.11	0.8		3400	780	4760	900/820
2000					2.04	16.93	0.8		3800	890	5570	900/820
2500					2.40	19.67	0.8		4350	960	6670	1070/1070
3150	10 10.5 11		3.15 6.3		2.84	23.09	0.7		4940	1180	8500	1070/1070
4000					3.48	27.36	0.7		5900	1580	9850	1070/1070
5000					4.16	31.38	0.7		6850	1760	11580	1070/1070
6300					4.96	35.06	0.6		7920	1910	13650	1070/1070

注 1: 根据用户需要, 可提供高压分接范围为 $\pm 2 \times 2.5\%$ 的变压器。
Note 1: According to requirements, the transformer can supply HV tap change $\pm 2 \times 2.5\%$.

200kVA~2500kVA 三相双绕组有载调压配电变压器
200kva~2500kva 3-phase duplex winding on-load tap-changing distribution transformer

额定容量 Rated capacity (kVA)	电压组合及分接范围 Voltage Combination and Tap range			联结组 标号 Vector Group Symbol	损耗 Loss (kW)		空载 电流 No-load current (%)	短路 阻抗 Impedance Voltage (%)	重量 Weiaht (kg)			轨距纵向 / 横向 (mm) Gauge vertical / horizontal
	高压 HV (kV)	高压分接 范围 % HVTap Range	低压 LV (kV)		空载 No-load	负载 Load			器身重 Body	油重 Oil	总重 Total	
200	6 6.3 10	±4×2.5	0.4	Dyn11 Yyn0	0.39	2.91	1.5	4.0	980	260	1530	650/550
250					0.45	3.42	1.4		1070	310	1740	650/550
315					0.54	4.10	1.4		1320	350	1980	650/550
400					0.65	4.96	1.3		1580	430	2270	750/550
500					0.77	5.90	1.2		1750	450	2500	750/660
630					0.97	7.27	1.1	4.5	1900	530	2920	750/660
800					1.13	8.89	1.0		2150	600	3320	850/660
1000					1.38	10.43	1.0		2480	680	3710	850/820
1250					1.58	12.40	0.9		2620	770	4200	850/520
1600					1.94	14.79	0.8		3100	880	4850	900/820
2000					2.27	18.69	0.6		3980	1080	5880	900/820
2500					2.52	21.74	0.6		3950	1300	6370	1070/1070

注 1: 根据用户需要, 可提供高压绕组电压为 10.5kV 及 11kV 的变压器。
Note 1: According to requirements, the transformer can supply HV winding voltage 10.5kV and 11 kV.

注 2: 根据用户需要, 可提供低压电压为 0.69kV 的变压器。
Note 2: According to requirements, the transformer can supply LV 0.69kV

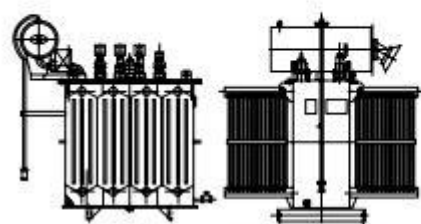
S13 系列 10kV 级配电变压器 S13 Series 10kv distribution transformer

30kVA ~ 2500kVA 三相双绕组无励磁调压配电变压器

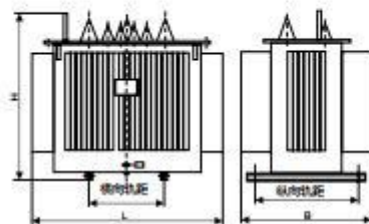
30kva~2500kva 3-phase duplex winding non-excited tap-changing distribution transformer

额定容量 Rated capacity (kVA)	电压组合及分接范围 Voltage Combination and Tap range			联结组 标号 Vector Group Symbol	损耗 Loss (kW)		空载电流 No-load current (%)	短路阻抗 Impedance Voltage (%)	重量 Weight (kg)			外形尺寸 Boundary Dimension (mm) 长(L)x宽(W)x高(H)		轨距纵向/横向 (mm) Gauge vertical/horizontal
	高压 HV (kV)	高压分接范围 % HV Tap Range	低压 LV (kV)		空载 No-load	负载 Load			器身重 Body	油重 Oil	总重 Total	全密封 Omniseal	非全密封 Un-omniseal	
30	6 6.3 10 10.5 11	± 5 $\pm 2 \times 2.5$	0.4	Dyn11 Yzn11 Yyn0	0.08	0.63/0.60	2.3	4.0	130	700	300	710x710x930	930x580x1000	400/400
50					0.10	0.91/0.87	2.0		200	800	400	730x710x1010	950x600x1080	400/400
63					0.11	1.09/1.04	1.9		240	900	450	750x730x1040	970x630x1100	400/400
80					0.13	1.31/1.25	1.9		280	1000	520	760x740x1060	980x640x1120	400/400
100					0.15	1.58/1.50	1.8		310	1100	550	770x750x1130	1000x650x1200	450/400
125					0.17	1.89/1.80	1.7		370	1200	640	800x770x1150	1030x670x1220	550/550
160					0.20	2.31/2.20	1.6		440	1300	740	820x780x1240	1050x680x1310	550/550
200					0.24	2.73/2.60	1.5		500	1400	810	840x810x1260	1070x700x1330	550/550
250					0.29	3.20/3.05	1.4		610	1600	970	870x850x1300	1100x750x1370	550/550
315					0.34	3.83/3.65	1.4		750	2000	1200	1180x820x1390	1400x720x1460	550/550
400					0.41	4.52/4.30	1.3		900	2400	1420	1260x840x1450	1480x760x1520	550/550
500					0.48	5.41/5.15	1.2		1050	2500	1620	1300x860x1500	1560x800x1600	660/660
630				Dyn11 Yyn0	0.57	6.20	1.1	4.5	1240	2800	1860	1370x890x1470	1630x930x1680	660/660
800					0.70	7.50	1.0		1510	3400	2250	1430x930x1580	1960x930x1680	820/820
1000					0.83	10.30	1.0		1560	3600	2410	1600x1100x1610	1860x1100x1720	820/820
1250					0.97	12.00	0.9		1910	4200	2930	1690x1140x1750	1950x1140x1860	820/820
1600					1.17	14.50	0.8		2320	5200	3630	1820x1650x2060	1820x1650x2060	820/820
2000					1.26	17.80	0.6		2820	6600	4550	1920x1750x2160	1920x1750x2160	820/820
2500					1.49	20.70	0.5		3550	7600	5470	2020x1910x2260	2020x1910x2260	1070/1070

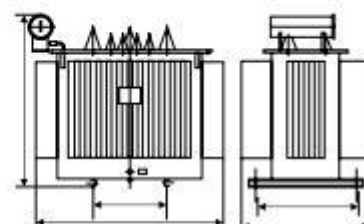
注 1: 表中斜线上方的负载损耗值适用于 Dyn11 或 Yzn11 联结组, 斜线下方的负载损耗值适用于 Yyn0 联结组。
Note 1: The load loss above the oblique line in the table applies to Dyn11 or Yzn11; the load loss below the oblique line applies to Yyn0.



全密封 (带胶囊) 片式变压器
OMNISEAL (ENCAPSULANT)
SHEET TYPE TRANSFORMER
非全密封片式变压器
UN-OMNISEAL SHEET TYPE TRANSFORMER



全密封波纹式变压器
OMNISEAL CORRUGATED TYPE TRANSFORMER



非全密封波纹式变压器
UN-OMNISEAL CORRUGATED TYPE TRANSFORMER



S11 系列 20kV 级配电变压器 S11 Series 20kv distribution transformer

30kVA ~ 2500kVA 三相双绕组无励磁调压配电变压器

30kva~2500kva 3-phase duplex winding non-excited tap-changing distribution transformer

额定容量 Rated capacity (kVA)	电压组合及分接范围 Voltage Combination and Tap range			联结组 标号 Vector Group Symbol	空载损耗 No-load Loss(kW)	负载损耗 load Loss(kW)	空载电流 No-load current %	短路阻抗 Short-circuit Impedance Voltage (%)
	高压 HV (kV)	高压分接范围 % HVTap Range	低压 LV (kV)					
30	20	±5	0.4	Dyn11 Yzn11 Yyn0	0.10	0.69/0.66	2.1	5.5
50					0.13	1.01/0.96	2.0	
63					0.15	1.20/1.15	1.9	
80					0.18	1.44/1.37	1.8	
100					0.20	1.73/1.65	1.6	
125					0.24	2.08/1.98	1.5	
160					0.29	2.54/2.42	1.4	
200					0.34	3.00/2.86	1.3	
250					0.40	3.52/3.35	1.2	
315					0.48	4.21/4.01	1.1	
400					0.57	4.97/4.73	1.0	
500					0.68	5.94/5.66	1.0	
630					0.81	6.82	0.9	6.0
800					0.98	8.25	0.8	
1000					1.15	11.33	0.7	
1250					1.38	13.20	0.7	
1600					1.66	15.95	0.6	
2000					1.95	19.14	0.6	
2500					2.34	22.22	0.5	

注：对于额定容量为 500kV 及以下的变压器，表中斜线上方的负载损耗值适用于 Dyn11 或 Yzn11 联结组，斜线下方的负载损耗值适用于 Yyn0 联结组。

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



S13 系列 20kV 级配电变压器 S13 Series 20kv distribution transformer

30kVA ~ 2500kVA 三相双绕组无励磁调压配电变压器

30kva~2500kva 3-phase duplex winding non-excited tap-changing distribution transformer

额定容量 Rated capacity (kVA)	电压组合及分接范围 Voltage Combination and Tap range			联结组 标号 Vector Group Symbol	空载损耗 No-load Loss(kW)	负载损耗 load Loss(kW)	空载电流 No-load current %	短路阻抗 Short-circuit Impedance Voltage (%)
	高压 HV (kV)	高压分接范围 % HVTap Range	低压 LV (kV)					
30	20	±5	0.4	Dyn11 Yzn11 Yyn0	0.08	0.66/0.63	2.1	5.5
50					0.10	0.96/0.91	2.0	
63					0.11	1.14/1.09	1.9	
80					0.13	1.38/1.31	1.8	
100					0.15	1.66/1.58	1.6	
125					0.17	1.98/1.89	1.5	
160					0.20	2.43/2.31	1.4	
200					0.24	2.87/2.73	1.3	
250					0.29	3.36/3.20	1.2	
315					0.34	4.02/3.83	1.1	
400					0.41	4.77/4.51	1.0	6.0
500					0.48	5.68/5.40	1.0	
630					0.57	6.51	0.9	
800					0.70	7.88	0.8	
1000					0.83	10.81	0.7	
1250					0.97	12.60	0.7	
1600					1.17	15.22	0.6	
2000					1.26	19.74	0.6	
2500					1.49	21.73	0.5	

注：对于额定容量为 500kV 及以下的变压器，表中斜线上方的负载损耗值适用于 Dyn11 或 Yzn11 联结组，斜线下方的负载损耗值适用于 Yyn0 联结组。

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.



35kV级系列油浸式变压器

Oil-immersed transformer



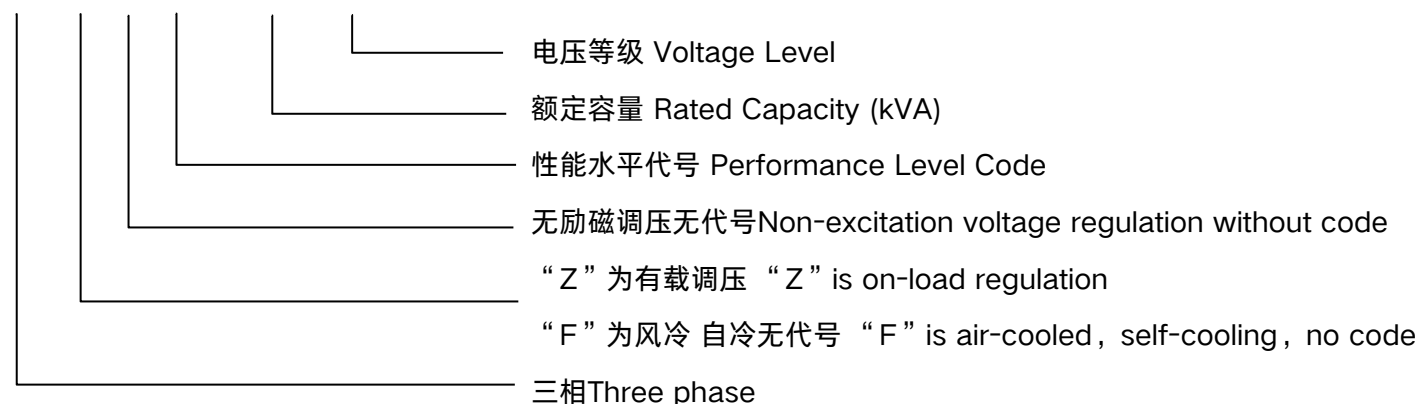
1、产品概述 Product Overview

35kV 油浸式电力变压器适配变电站、工矿企业配电场景，依靠绝缘油完成散热与绝缘隔离；设备运行稳定、过载能力强，散热结构成熟可靠，维护便捷，可长期在户外工况稳定供电，是高压输配电常用主力设备。

This 35kV oil immersed power transformer is applicable to power distribution of substations and industrial & mining plants. Insulating oil serves for heat dissipation and electrical insulation. Featuring stable operation, strong overload capacity, reliable cooling structure and easy maintenance, it can supply power steadily under long-term outdoor conditions, and is widely used for high-voltage power transmission and distribution.

2、型号及含义 Model and Meaning

S □ □ □ - □ / □



3、变压器产品标准 Transformer Product Standards

GB 1094.1-1996

GB 1094.2-1996

GB 1094.3-2003

GB 1094.5-2008

GB/T 6451-2008

GB/T 7595-2008

JB/T 3837-2010

4、变压器正常使用条件 Transformer Normal Service Conditions

海拔高度不超过 1000m;
环境温度;
最高气温 + 40℃;
最高日平均气温 + 30℃;
最高年平均气温 + 20℃;
户外最低气温 -25℃。

The height above the sea level is below 1000m;
Ambient temperature;
Highest air temperature +40℃;
Highest daily average air temperature +30℃;
Highest annual average air temperature +20℃;
Lowest outdoor air temperature -25℃;

5、技术参数 Technical Parameters

S11 系列 35kV 级油浸式变压器 S11 series level 35kV oil-immersed transformers

50kVA~1600kVA 三相双绕组无励磁调压配电变压器

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

额定容量 Rated capacity (kVA)	电压组合及分接范围 Voltage Combination and Tap range			联结组 标号 Vector Group Symbol	空载损耗 No-load Loss(kW)	负载损耗 load Loss(kW)	空载电流 No-load current %	短路阻抗 Short-circuit Impedance Voltage (%)
	高压 HV (kV)	高压分接范围 % HVTap Range	低压 LV (kV)					
50	35	±5	0/4	Dyn11 Yyn0	0.19	1.21/1.15	2.00	6.5
100					0.26	2.01/1.92	1.80	
125					0.31	2.38/2.26	1.70	
160					0.32	2.82/2.69	1.60	
200					0.39	3.33/3.16	1.50	
250					0.46	3.95/3.76	1.40	
315					0.55	4.76/4.53	1.40	
400					0.66	5.75/5.47	1.30	
500					0.77	6.92/6.58	1.20	
630					0.94	7.87	1.10	
800					1.11	9.41	1.00	
1000					1.30	11.54	1.00	
1250					1.58	13.94	0.90	
1600					1.91	16.67	0.80	

注 1: 对于额定容量为 500kVA 及以下的变压器, 表中斜线上方的负载损耗值适用于 Dyn11 联结组, 斜线下方的负载损耗值适用于 Yyn0 联结组。

注 2: 根据用户需要, 可提供高压分接范围为 $\pm 2 \times 2.5\%$ 的变压器。注 3: 外形尺寸根据用户具体需要进行设计。

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 $\pm 2 \times 2.5\%$ Note 3: outline dimension is designed according to requirements.

630kVA ~ 31500kVA 三相双绕组无励磁调压电力变压器

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

额定容量 Rated capacity (kVA)	电压组合及分接范围 Voltage Combinationand Tap range			联结组 标号 Vector Group Symbol	空载损耗 No-load Loss(kW)	负载损耗 load Loss(kW)	空载电流 No-load current %	短路阻抗 Short-circuit Impedance Voltage (%)
	高压 HV (kV)	高压分接范围 % HVTap Range	低压 LV (kV)					
630	35	±5	3.15 6.3 10.5	Yd11	0.94	7.87	1.10	6.5
800					1.11	9.41	1.00	
1000					1.30	11.54	1.00	
1250					1.58	13.94	0.90	
1600					1.91	16.67	0.80	
2000					2.45	18.38	0.70	
2500					2.88	19.67	0.60	
3150	35~38.5	±5	3.15 6.3 10.5		3.42	23.09	0.56	7.0
4000					4.07	27.36	0.56	
5000					4.86	31.38	0.48	
6300					5.90	35.06	0.48	
8000	35~38.5	±2×2.5	3.15 3.3 6.3 6.6 10.5 11	Yd11	8.10	38.48	0.42	7.5
10000					9.79	45.32	0.42	
12500					11.34	53.87	0.40	
16000					13.68	65.84	0.40	8.0
20000					16.20	79.52	0.40	
25000					19.15	94.05	0.32	
31500					22.75	112.86	0.32	

注 1: 外形尺寸根据用户具体需要进行设计。 Note 1: Outline dimension is designed according to requirements.



油浸式非晶合金变压器

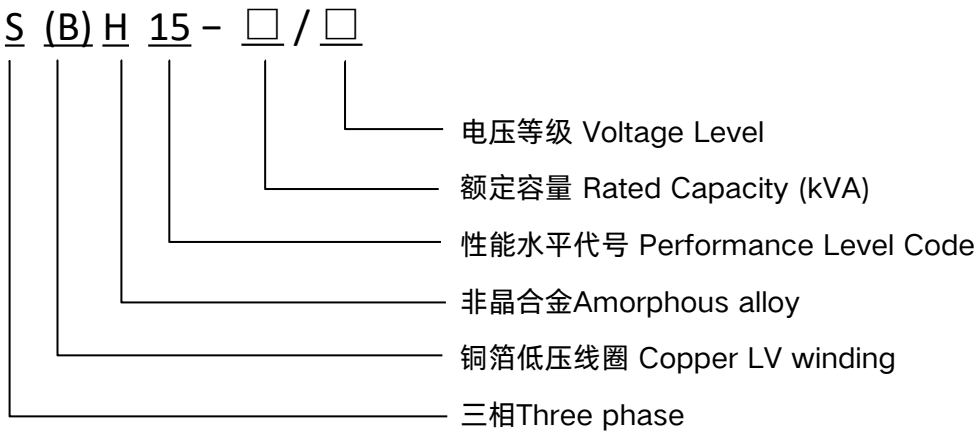
Oil-immersed amorphous alloy transformer

1、产品概述 Product Overview

本系列非晶合金油浸变压器以非晶合金为铁芯主材，依托绝缘油实现散热与绝缘，铁损极低、节能降耗。全密封结构防渗漏免维护，低温升设计延缓绝缘老化，适配户外配电、工商业、新能源项目，低碳环保，全生命周期用电成本更低。

This amorphous alloy oil-immersed transformer uses amorphous alloy as core material, with insulating oil for cooling and insulation. It features extremely low core loss and remarkable energy saving. The fully sealed structure prevents oil leakage with maintenance-free performance. Low temperature rise slows insulation aging, suitable for outdoor power distribution, industrial & commercial sites and new energy projects. It is eco-friendly with lower overall power consumption during service life.

2、型号及含义 Model and Meaning



3、变压器正常使用条件 Transformer Normal Service Conditions

海拔高度：不超过1000m
环境温度：最高气温+40℃
最高日平均气温+30℃
最高年平均气温+20℃
户外最低气温-25℃

电源电压的波形近似于正弦波 三相电源电压应大致对称
安装环境：无明显的污秽；
地震引发的地面加速度ag：水平方向低于3m/s²，垂直方向低于1.5m/s²
户内使用
注：凡是需要满足变压器正常使用条件之外的特殊使用条件，应在询价和订货时说明

Altitude: not exceeding 1000m
Ambient temperature: Maximum air temperature: +40℃
Maximum daily average air temperature: +30℃
Maximum annual average air temperature: +20℃
Minimum outdoor air temperature: -25℃
Power voltage waveform approximates sine wave; three-phase power voltage is approximately symmetrical
Installation environment: no obvious contamination
Seismic ground acceleration ag: horizontal value below 3m/s², vertical value below 1.5m/s²
Indoor usage
Note: If special service conditions outside the above normal ranges are required, relevant conditions shall be stated when requesting quotation and placing orders



4、技术参数 Technical Parameters

S(B)H15 系列 6kV、10kV 级非晶合金油浸式变压器
S(B)H15 Series 6kV / 10kV Class Amorphous Alloy Oil-Immersed Transformers

额定容量 Rated capacity (kVA)	电压组合及分接范围Voltage Combinationed Tap Range			连接组标号 Vector Group Symbol	损耗Loss (W)		空载电流 No-load current%	阻抗电压 Impedance voltage%	重量Weight (kg)			外形尺寸 L(长)*B(宽)*H(高) Overall dimension L×W×H	轨距 纵向/横向 Track gauge Longitudinal / Transverse
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)		空载 No-load Loss	负载 Load Loss			器身重 Body	油重 Oil	总重 Total		
30	11 10.5 10 6.3 6	±5 ±2×2.	0.4	Dyn11[	33	630	1.5	4.0	240	80	410	920x600x980	400×550
50					43	910	1.2		310	110	510	950x620x1040	
63					50	1090	1.1		350	125	570	990x670x1040	
80					60	1310	1.0		410	135	630	1030x720x1040	400x660
100					75	1580	0.9		475	150	720	1060×770x1070	
125					85	1890	0.8		550	170	830	1060x900x1070	
160					100	2310	0.6		630	190	960	1060x930x1150	550x820
200					120	2730	0.6		670	210	1040	1100x930x1170	
250					140	3200	0.6		750	240	1160	1180x1010x1180	
315					170	3830	0.5	4.5	810	264	1240	1200x1010x1180	820×1070
400					200	4520	0.5		860	290	1330	1270x1160x1200	
500					240	5410	0.5		950	320	1460	1450x1240x1330	
630					320	6200	0.3		1120	380	1860	1450x1240x1330	
800					380	7500	0.3	5.0	1340	410	2230	1520x1380x1460	
1000					450	10300	0.3		1620	540	2700	1720x1460x1510	
1250					530	12000	0.2		1900	640	3180	1780x1500x1690	
1600					630	14500	0.2		2560	680	4240	1880x1540x1970	
2000					750	18300	0.2		2900	980	4920	2080x1580x1970	
2500					900	21200	0.2		3940	1160	6560	2350x1580×2020	

注：本手册提供的外形尺寸仅供选型时参考，最终尺寸以产品外形图为准
Note: The overall dimensions provided in this manual are for type selection reference only. Final dimensions shall be subject to the product outline drawing.

S (B) H25 系列 6kV、10kV 级一级能效非晶合金油浸式变压器
S(B)H25 Series 6kV / 10kV Class First-Class Energy Efficiency Amorphous Alloy Oil-Immersed Transformers

额定容量 Rated capacity (kVA)	电压组合及分接范围 Voltage Combinationed Tap Range			连接组标号 Vector Group Symbol	损耗Loss (W)		空载电流 No-load current%	阻抗电压 Impedance voltage%	重量Weight (kg)			外形尺寸 L(长)*B(宽)*H(高) Overall dimension L×W×H	轨距 纵向/横向 Track gauge Longitudinal / Transverse
	高压HV(kV)	高压分接范围 % HV Tap Range	低压LV(kV)		空载 No-load Loss	负载 Load Loss			器身重 Body	油重 Oil	总重 Total		
30	11 10.5 10 6.3 6	±5 ±2×2.	0.4	Dyn11[	33	630	1.5	4.0	240	80	410	920x600x980	400×550
50					43	910	1.2		310	110	510	950x620x1040	
63					50	1090	1.1		350	125	570	990x670x1040	
80					60	1310	1.0		410	135	630	1030x720x1040	400x660
100					75	1580	0.9		475	150	720	1060 × 770x1070	
125					85	1890	0.8		550	170	830	1060x900x1070	
160					100	2310	0.6		630	190	960	1060x930x1150	550x820
200					120	2730	0.6		670	210	1040	1100x930x1170	
250					140	3200	0.6		750	240	1160	1180x1010x1180	
315					170	3830	0.5	4.5	810	264	1240	1200x1010x1180	820×1070
400					200	4520	0.5		860	290	1330	1270x1160x1200	
500					240	5410	0.5		950	320	1460	1450x1240x1330	
630					320	6200	0.3		1120	380	1860	1450x1240x1330	
800					380	7500	0.3	5.0	1340	410	2230	1520x1380x1460	
1000					450	10300	0.3		1620	540	2700	1720x1460x1510	
1250					530	12000	0.2		1900	640	3180	1780x1500x1690	
1600					630	14500	0.2		2560	680	4240	1880x1540x1970	
2000					750	18300	0.2		2900	980	4920	2080x1580x1970	
2500					900	21200	0.2		3940	1160	6560	2350x1580×2020	

注：①当铁心为三相三柱时，根据需要也可以采用 Yyn0 联结组。
②对于额定容量为 500kVA 及以下的变压器，表中斜线上方的负载损耗值适用于 Dyn11 或 Yzn11 联结组，斜线下方的负载损耗值适用于 Yyn0 联结组。
Notes:
① For a three-phase three-limb core, Yyn0 connection group may also be adopted as required.
② For transformers with rated capacity up to 500kVA, the load loss values above the slash in the table apply to Dyn11 or Yzn11 connection groups; the load loss values below the slash apply to Yyn0 connection group.

10kV级树脂绝缘干式变压器

Resin insulation dry transformer



1、产品概述 Product Overview

树脂绝缘干式变压器安全，难燃防火，无污染，可直接安装在负荷中心。免维护、安装简便，综合运行成本低、损耗低、防潮性能好，可在 100% 湿度下正常运行，停运后不经预干燥即可投入运行。局部放电率低、噪音小，散热能力强，强迫风冷条件下可以 150% 额定负载运行。配备有完善的温度保护控制系统，为变压器安全运行提供可靠保障，可靠性高。

Resin-insulated dry-type transformers feature high safety, flame retardancy and zero pollution, and can be installed directly at load centers. They are maintenance-free and easy to install, with low overall operating cost and power loss. Thanks to excellent moisture resistance, the transformers operate reliably at 100% relative humidity, and can be restarted without pre-drying after shutdown. With low partial discharge, low noise and outstanding heat dissipation, they can run at 150% rated load under forced air cooling. A complete temperature protection & control system is equipped to ensure secure operation, delivering high operational reliability.

2、型号及含义 Model and Meaning

SC Z (B) 11 - □ / □

SC	Z (B)	11	-	□	/	□	
							额定高压电压 (按额定值填入) Rated HV (Fill in rated value)
							额定容量 Rated Capacity (kVA)
							性能水平代号 Performance Level Code
							低压箔式绕组 Low voltage foil winding
							有：有载调压 On-load tap changing
							无：励磁调压 Excitation Voltage Regulation
							三相固体成型 (环氧浇注) Triple Phase Solid Molding (Epoxy Resin Casting)

3、产品特点 Product Features

- 低损耗，节能降耗，运行成本低
- 阻燃防火防爆，环保无污染
- 防潮、散热性能优秀
- 局放小、噪音低，免维护
- 机械强度高，抗短路、使用寿命长
- Low loss, energy-saving with low operating cost
- Flame-retardant, fire & explosion proof, eco-friendly
- Excellent moisture resistance and heat dissipation
- Low partial discharge, low noise, maintenance-free
- High mechanical strength, strong short-circuit resistance, long service life



4、技术参数 Technical Parameters

SC (ZB) 11 系列 6kV~10kV 级无励磁调压配电干式变压器

SC(ZB)11 Series 6kV~10kV Class Off-Circuit Tap-Changing Distribution Dry-type Transformers

额定容量 Rated Capacity (kVA)	电压组合及分接范围Voltage Combinationed Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
30	6 6.3 6.6 10 10.5 11	$\pm 2 \times 2.5$ ± 5	0.4	Dyn11 Yyn0	170	670	710	760	2.0	4.0
50					240	940	1000	1070	2.0	
80					330	1290	1380	1480	1.5	
100					360	1480	1570	1690	1.5	
125					420	1740	1850	1980	1.3	
160					480	2000	2130	2280	1.3	
200					550	2370	2530	2710	1.1	
250					640	2590	2760	2690	1.1	
315					790	3270	3470	3730	1.0	
400					880	3750	3990	4280	1.0	
500					1040	4590	4880	5230	1.0	6.0
630					1200	5530	5880	6290	0.85	
630					1170	5610	5960	6400	0.85	
800					1360	6550	6960	7460	0.85	
1000					1590	7650	8130	8760	0.85	
1250					1880	9100	9690	10300	0.85	
1600					2200	11000	11700	12500	0.85	
2000					2740	13600	14400	15500	0.7	
2500					3240	16100	17100	18400	0.7	
1600					2200	12200	12900	13900	0.85	8.0
2000					2740	15000	15900	17100	0.7	
2500					3240	17700	18800	20200	0.7	

SC (ZB) 13 系列 6kV~10kV 级无励磁调压配电干式变压器

SC(ZB)13 Series 6kV~10kV Class Off-Circuit Tap-Changing Distribution Dry-type Transformers

额定容量 Rated Capacity (kVA)	电压组合及分接范围Voltage Combinationed Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
30	6 6.3 6.6 10 10.5 11	$\pm 2 \times 2.5$ ± 5	0.4	Dyn11 Yyn0	135	605	640	685	2.0	4.0
50					195	845	900	965	2.0	
80					265	1160	1240	1330	1.5	
100					290	1330	1410	1520	1.5	
125					340	1565	1660	1780	1.3	
160					385	1800	1910	2050	1.3	
200					445	2135	2270	2440	1.1	
250					515	2330	2480	2660	1.1	
315					635	2940	3120	3350	1.0	
400					705	3370	3590	3850	1.0	6.0
500					835	4130	4390	4700	1.0	
630					965	4970	5290	5660	0.85	
630					935	5050	5360	5760	0.85	
800					1090	5890	6260	6710	0.85	
1000					1270	6880	7310	7880	0.85	
1250					1500	8190	8720	9330	0.85	
1600					1760	9940	10500	11300	0.85	
2000					2190	12200	13000	14000	0.7	
2500					2590	14500	15400	16600	0.7	
1600					1760	11000	11600	12500	0.85	8.0
2000					2190	13500	14300	15400	0.7	
2500					2590	15900	17000	18200	0.7	

注：表中所列的负载损耗为不同绝缘系统在括号内参考温度 (GB/T1094.11 的规定) 下的值，表中未包括的其他绝缘系统下的负载损耗需根据各自的参考温度，以 “155°C(F)” 绝缘系统温度的数据作参考进行相应的折算。

Note: The load losses listed in the table are measured values for different insulation systems at the reference temperatures given in parentheses (specified in GB/T 1094.11). For load losses under other insulation systems not covered in this table, corresponding conversion shall be carried out based on their respective reference temperatures, using the data of the 155 ° C (Class F) insulation system as the benchmark.



SC (B) 12 系列三级能耗 6kV~10kV 级无励磁调压配电干式变压器

SC(ZB)12 Series Energy Efficiency Class 3 6kV, 10kV Off-Circuit Tap-Changing Distribution Dry-type Transformers

额定容量 Rated Capacity (kVA)	电压组合及分接范围Voltage Combinationed Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130℃(B)100℃	155℃(F)120℃	180℃(H)145℃		
30	6 6.3 6.6 10 10.5 11	±2×2.5 ±5	0.4	Dyn11 Yyn0	150	670	710	760	2.0	4.0
50					215	940	1000	1070	2.0	
80					295	1290	1380	1480	15	
100					320	1480	1570	1690	1.5	
125					375	1740	1850	1980	1.3	
160					430	2000	2130	2280	1.3	
200					495	2370	2530	2710	1.1	
250					575	2590	2760	2960	1.1	
315					705	3270	3470	3730	1.0	
400					785	3750	3990	4280	1.0	
500					930	4590	4880	5230	1.0	6.0
630					1070	5530	5880	6290	0.85	
630					1040	5610	5960	6400	0.85	
800					1215	6550	6960	7460	0.85	
1000					1415	7650	8130	8760	0.85	
1250					1670	9100	9690	10370	0.85	
1600					1960	11050	11730	12580	0.85	
2000					2440	13600	14450	15560	0.7	
2500					2880	16150	17170	18450	0.7	

SC (B) 14 系列二级能耗 6kV~10kV 级无励磁调压配电干式变压器

SC(ZB)14 Series Energy Efficiency Class 2 6kV, 10kV Off-Circuit Tap-Changing Distribution Dry-type Transformers

额定容量 Rated Capacity (kVA)	电压组合及分接范围 Voltage Combinationed Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围 % HV Tap Range	低压LV(kV)			130℃(B)100℃	155℃(F)120℃	180℃(H)145℃		
30	6 6.3 6.6 10 10.5 11	±2×2.5 ±5	0.4	Dyn11 Yyn0	130	605	640	685	2.0	4.0
50					185	845	900	965	2.0	
80					250	1160	1240	1330	1.5	
100					270	1330	1415	1520	1.5	
125					320	1565	1665	1780	1.3	
160					365	1800	1915	2050	1.3	
200					420	2135	2275	2440	1.1	
250					490	2330	2485	2665	1.1	
315					600	2945	3125	3355	1.0	
400					665	3375	3590	3850	1.0	6.0
500					790	4130	4390	4705	1.0	
630					910	4975	5290	5660	0.85	
630					885	5050	5365	5760	0.85	
800					1035	5895	6265	6715	0.85	
1000					1205	6885	7315	7885	0.85	
1250					1420	8190	8720	9335	0.85	
1600					1660	9945	10555	11320	0.85	
2000					2075	12240	13005	14005	0.7	
2500					2450	14535	15445	16605	0.7	

注：①表中所列的负载损耗为不同绝缘系统在括号内参考温度 (GB/T1094.11 的规定) 下的值，表中未包括的其他绝缘系统下的负载损耗需根据各自的参考温度，以 “155 °C (F)” 绝缘系统温度的数据作参考进行相应的折算。

②表中所列的空负载损耗符合 GB20052-2020 表 2 中三级能效规定

Notes:① The load losses listed in the table are values for different insulation systems at the reference temperatures given in parentheses (specified in GB/T 1094.11). For load losses of other insulation systems not covered in this table, corresponding conversion shall be conducted based on their respective reference temperatures, with the data of the 155 °C (Class F) insulation system taken as the benchmark.

② The no-load losses listed in the table meet the requirements for energy efficiency Class 3 specified in Table 2 of GB 20052-2020.

SC (B) 18 系列一级能效 6kV~10kV 级无励磁调压配电干式变压器

SC(ZB)18 Series Energy Efficiency Class 1 6kV, 10kV Off-Circuit Tap-Changing Distribution Dry-type Transformers

额定容量 Rated Capacity (kVA)	电压组合及分接范围Voltage Combination Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
30	6 6.3 6.6 10 10.5 11	±2×2.5 ±5	0.4	Dyn11 Yyn0	105	605	640	685	2.0	4.0
50					155	845	900	965	2.0	
80					210	1160	1240	1330	1.5	
100					230	1330	1415	1520	1.5	
125					270	1565	1665	1780	1.3	
160					310	1800	1915	2050	1.3	
200					360	2135	2275	2440	1.1	
250					415	2330	2485	2665	1.1	
315					510	2945	3125	3355	1.0	
400					570	3375	3590	3850	1.0	
500					670	4130	4390	4705	1.0	6.0
630					775	4975	5290	5660	0.85	
630					750	5050	5365	5760	0.85	
800					875	5895	6265	6715	0.85	
1000					1020	6885	7315	7885	0.85	
1250					1205	8190	8720	9335	0.85	
1600					1415	9945	10555	11320	0.85	
2000					1760	12240	13005	14005	0.7	
2500					2080	14535	15445	16605	0.7	

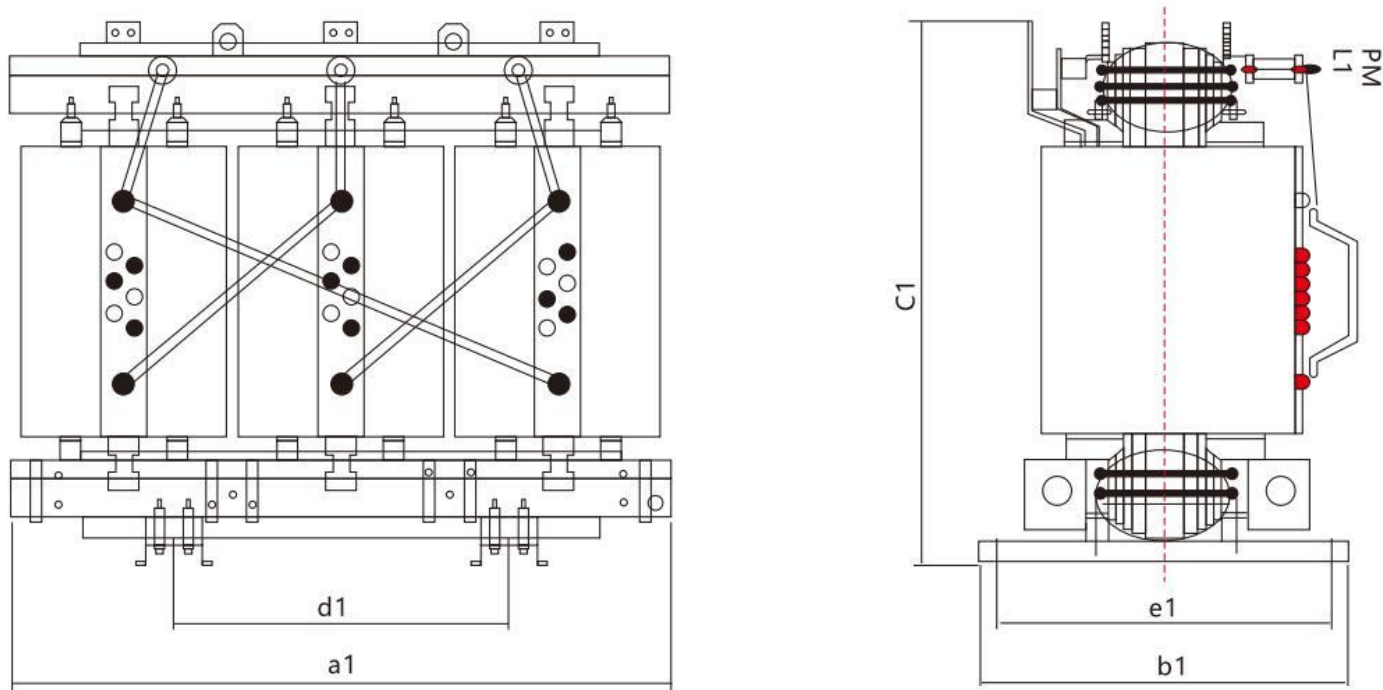
注：①表中所列的负载损耗为不同绝缘系统在括号内参考温度 (GB/T1094.11 的规定) 下的值，表中未包括的其他绝缘系统下的负载损耗需根据各自的参考温度，以“155 ° C (F)”绝缘系统温度的数据作参考进行相应的折算。

②表中所列的空负载损耗符合 GB20052-2020 表 2 中三级能效规定

Notes:① The load losses listed in the table are values for different insulation systems at the reference temperatures given in parentheses (specified in GB/T 1094.11). For load losses of other insulation systems not covered in this table, corresponding conversion shall be conducted based on their respective reference temperatures, with the data of the 155 ° C (Class F) insulation system taken as the benchmark.

② The no-load losses listed in the table meet the requirements for energy efficiency Class 3 specified in Table 2 of GB 20052-2020.

5、外形尺寸图 Outline Dimension Drawing



Outline Dimension Drawing of 10kV Class Distribution Transformer
10KV级配电变压器外形尺寸图

20kV级树脂绝缘干式变压器

Resin insulation dry transformer



1、产品概述 Product Overview

树脂绝缘干式变压器安全，难燃防火，无污染，可直接安装在负荷中心。免维护、安装简便，综合运行成本低、损耗低、防潮性能好，可在 100% 湿度下正常运行，停运后不经预干燥即可投入运行。局部放电率低、噪音小，散热能力强，强迫风冷条件下可以 150% 额定负载运行。配备有完善的温度保护控制系统，为变压器安全运行提供可靠保障，可靠性高。

Resin-insulated dry-type transformers feature high safety, flame retardancy and zero pollution, and can be installed directly at load centers. They are maintenance-free and easy to install, with low overall operating cost and power loss. Thanks to excellent moisture resistance, the transformers operate reliably at 100% relative humidity, and can be restarted without pre-drying after shutdown. With low partial discharge, low noise and outstanding heat dissipation, they can run at 150% rated load under forced air cooling. A complete temperature protection & control system is equipped to ensure secure operation, delivering high operational reliability.

2、型号及含义 Model and Meaning

SC Z (B) 10 - □ / □

SC	Z (B)	10	-	□	/	□	额定高压电压 (按额定值填入) Rated HV (Fill in rated value)
							额定容量 Rated Capacity (kVA)
							性能水平代号 Performance Level Code
							低压箔式绕组 Low voltage foil winding
							有：有载调压 On-load tap changing
							无：励磁调压 Excitation Voltage Regulation
							三相固体成型 (环氧浇注) Triple Phase Solid Molding (Epoxy Resin Casting)

3、产品特点 Product Features

- 低损耗，节能降耗，运行成本低
- 阻燃防火防爆，环保无污染
- 防潮、散热性能优秀
- 局放小、噪音低，免维护
- 机械强度高，抗短路、使用寿命长
- Low loss, energy-saving with low operating cost
- Flame-retardant, fire & explosion proof, eco-friendly
- Excellent moisture resistance and heat dissipation
- Low partial discharge, low noise, maintenance-free
- High mechanical strength, strong short-circuit resistance, long service life



4、技术参数 Technical Parameters

SC (ZB) 10 系列 20kV 级无励磁调压配电干式变压器
SC(ZB)10 Series 20kV Class Off-Circuit Tap-Changing Distribution Dry-type Transformers

额定容量 Rated Capacity (kVA)	电压组合及分接范围Voltage Combinationed Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
50	20 22 24	$\pm 2 \times 2.5$ ± 5	0.4	Dyn11 Yyn0	340	1160	1230	1310	2.0	6.0
100					540	1870	1990	2130	1.8	
160					670	2330	2470	2640	1.5	
200					730	2770	2940	3140	1.5	
250					840	3220	3420	3660	1.3	
315					910	3850	4080	4360	1.3	
400					1150	4650	4840	5180	1.1	
500					1350	5460	5790	6190	1.1	
630					1530	6450	6840	7320	1.0	
800					1750	7790	8260	8840	1.0	
1000					2070	9220	9780	10400	0.85	
1250					2380	10800	11500	12300	0.85	
1600					2790	13000	13800	14800	0.85	
2000					3240	15400	16300	17500	0.7	
2500					3870	18200	19300	20700	0.7	
2000					3240	16800	17800	19100	0.7	8.0
2500					3870	20000	21200	22700	0.7	

SC (ZB) 12 系列 20kV 级无励磁调压配电干式变压器
SC(ZB)12 Series 20kV Class Off-Circuit Tap-Changing Distribution Dry-type Transformers

额定容量 Rated Capacity (kVA)	电压组合及分接范围Voltage Combinationed Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
50	20 22 24	$\pm 2 \times 2.5$ ± 5	0.4	Dyn11 Yyn0	340	1160	1230	1310	2.0	6.0
100					540	1870	1990	2130	1.8	
160					670	2330	2470	2640	1.5	
200					730	2770	2940	3140	1.5	
250					840	3220	3420	3660	1.3	
315					910	3850	4080	4360	1.3	
400					1150	4650	4840	5180	1.1	
500					1350	5460	5790	6190	1.1	
630					1530	6450	6840	7320	1.0	
800					1750	7790	8260	8840	1.0	
1000					2070	9220	9780	10400	0.85	
1250					2380	10800	11500	12300	0.85	
1600					2790	13000	13800	14800	0.85	
2000					3240	15400	16300	17500	0.7	
2500					3870	18200	19300	20700	0.7	
2000					3240	16800	17800	19100	0.7	8.0
2500					3870	20000	21200	22700	0.7	

注：①表中所列的负载损耗为不同绝缘系统在括号内参考温度 (GB/T1094.11 的规定) 下的值，表中未包括的其他绝缘系统下的负载损耗需根据各自的参考温度，以 “155 ° C (F)” 绝缘系统温度的数据做折算。

②本表适用于 20kV 和 10kV 双电压互换的变压器。

Notes: ① The load losses listed in the table are measured values of different insulation systems at the reference temperatures specified in parentheses (stipulated by GB/T 1094.11). For load losses under other insulation systems not covered in this table, conversion shall be performed based on respective reference temperatures by taking the data of the 155 ° C (Class F) insulation system as the benchmark.

② This table applies to transformers with interchangeable dual voltage ratings of 20 kV and 10 kV.



35kV级树脂绝缘干式变压器

Resin insulation dry transformer



1、产品概述 Product Overview

树脂绝缘干式变压器安全，难燃防火，无污染，可直接安装在负荷中心。免维护、安装简便，综合运行成本低、损耗低、防潮性能好，可在 100% 湿度下正常运行，停运后不经预干燥即可投入运行。局部放电率低、噪音小，散热能力强，强迫风冷条件下可以 150% 额定负载运行。配备有完善的温度保护控制系统，为变压器安全运行提供可靠保障，可靠性高。

Resin-insulated dry-type transformers feature high safety, flame retardancy and zero pollution, and can be installed directly at load centers. They are maintenance-free and easy to install, with low overall operating cost and power loss. Thanks to excellent moisture resistance, the transformers operate reliably at 100% relative humidity, and can be restarted without pre-drying after shutdown. With low partial discharge, low noise and outstanding heat dissipation, they can run at 150% rated load under forced air cooling. A complete temperature protection & control system is equipped to ensure secure operation, delivering high operational reliability.

2、型号及含义 Model and Meaning



3、产品特点 Product Features

- 低损耗，节能降耗，运行成本低
- 阻燃防火防爆，环保无污染
- 防潮、散热性能优秀
- 局放小、噪音低，免维护
- 机械强度高，抗短路、使用寿命长
- Low loss, energy-saving with low operating cost
- Flame-retardant, fire & explosion proof, eco-friendly
- Excellent moisture resistance and heat dissipation
- Low partial discharge, low noise, maintenance-free
- High mechanical strength, strong short-circuit resistance, long service life



4、技术参数 Technical Parameters

35kV 级无励磁调压配电干式变压器
35kV Class Off-Circuit Tap-Changing Distribution Dry-type Transformer

额定容量 Rated Capacity (kVA)	电压组合及分接范围 Voltage Combinationed Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
50	35 ~ 38.5	$\pm 2 \times 2.5$ ± 5	0.4	Dyn11 Yyn0	450	1340	1420	1520	2.3	6.0
100					630	1970	2090	2230	2.0	
160					790	2650	2810	3000	1.5	
200					880	3130	3320	3550	1.5	
250					990	3580	3800	4060	1.3	
315					1170	4250	4510	4820	1.3	
400					1370	5100	5410	5790	1.1	
500					1520	5270	6650	7110	1.1	
630					1860	7250	7690	8230	1.0	
800					2160	8500	9120	9760	1.0	
1000					2430	9860	10400	11100	0.75	
1250					2830	12000	12700	13600	0.75	
1600					3240	14600	15400	16500	0.75	
2000					3820	17200	18200	19500	0.75	
2500					4450	20600	21800	23300	0.75	

35kV 级无励磁调压电力变压器
35kV Class Off-Circuit Tap-Changing Power Transformer

额定容量 Rated Capacity (kVA)	电压组合及分接范围Voltage CombinationedTap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
800	35~ 38.5	$\pm 2 \times 2.5$ ± 5	3.15 6 6.3 10 10.5 11	Dyn11 Yd11 Yyn0	2250	8870	9400	10000	0.95	6.0
1000					2670	10300	10900	11600	0.95	
1250					3130	12100	12900	13800	0.85	
1600					3690	14600	15400	16500	0.85	7.0
2000					4230	17200	18200	19500	0.75	
2500					4860	20600	21800	23300	0.75	
3150			6 6.3 10 10.5 11	Dyn11 Yd11 Ynd11	6030	23100	24500	26200	0.70	8.0
4000					7020	27700	29400	31500	0.70	
5000					8370	32900	34900	37400	0.60	
6300					9900	38500	40800	43700	0.60	9.0
8000			6 6.3 10 10.5 11	Dyn11 Yd11 Ynd11	11300	43400	46000	49300	0.50	
10000					12900	52400	55500	59400	0.50	
12500					15700	60900	64600	69100	0.40	
16000					19300	71700	75000	81300	0.40	
20000					22900	80600	85500	91500	0.35	10.0

35kV 级有载调压电力变压器
35kV Class On-Load Tap-Changing Power Transformer

额定容量 Rated Capacity (kVA)	电压组合及分接范围Voltage CombinationedTap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
2000	35 ~ 38.5	$\pm 4 \times 2.5$	6 6.3 10 10.5 11	Dyn11 Yd11	4500	17900	19000	20300	0.75	7.0
2500					5220	21300	22600	24200	0.75	
3150					6300	24000	25400	27200	0.70	
4000					7380	28700	30400	32600	0.70	
5000					8730	34000	36100	38600	0.60	8.0
6300					10800	39400	41800	44700	0.60	
8000					11800	44800	47500	50800	0.5	9.0
10000					13500	53900	57100	61200	0.5	
12500					16100	62700	66500	71100	0.4	
16000					20200	73800	78200	83700	0.4	
20000					23800	83000	88000	94200	0.35	10.0

干式非晶合金变压器

Dry-type amorphous alloy transformer



1、产品概述 Product Overview

干式非晶合金变压器是以非晶合金制作铁芯、依靠空气完成散热绝缘的干式配电变压器，绕组多采用环氧树脂浇注成型，无需绝缘冷却油。产品空载损耗低、节能效果优异，无燃油起火爆炸风险，运维简单，可安装在室内配电室，多用于小区、商业建筑、工厂等配电供电场景。

Dry-type amorphous alloy transformers adopt amorphous alloy for iron cores and use air for heat dissipation and insulation, with windings usually cast and solidified by epoxy resin. Featuring low no-load loss, excellent energy-saving performance, no risk of oil leakage and fire, as well as easy maintenance, they are widely applied to indoor power distribution scenarios such as buildings and industrial plants.

2、型号及含义 Model and Meaning



3、使用环境Service Conditions

- 最高气温：+40°C
- 最低气温：-5°C
- 最热月平均温度：+30°C
- 最热年平均温度：+20°C
- 海拔不超过1000m
- 三相电源电压大致对称
- 电源电压波形近似正弦波
- 安装环境无明显污秽
- 仅限户内使用
- Maximum ambient temperature: +40°C
- Minimum ambient temperature: -5°C
- Average temperature of the hottest month: +30°C
- Average temperature of the hottest year: +20°C
- Altitude not exceeding 1000m
- Three-phase supply voltages shall be approximately symmetrical
- Waveform of supply voltage approximates sine wave
- No obvious contaminants in installation environment
- Indoor application only



4、技术参数 Technical Parameters

6~10kV级SCBH15系列干式无励磁调压非晶合金配电变压器

6~10kV Class SCBH15 Series Dry-type Off-Circuit Tap-Changing Amorphous Alloy Distribution Transformers

额定容量 Rated Capacity (kVA)	电压组合及分接范围Voltage Combination Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11	70	670	710	760	1.6	4.0
50					90	940	1000	1070	1.4	
80					120	1290	1380	1480	1.3	
100					130	1480	1570	1690	1.2	
125					150	1740	1850	1980	1.1	
160					170	2000	2130	2280	1.1	
200					200	2370	2530	2710	1.0	
250					230	2590	2760	2960	1.0	
315					280	3270	3470	3730	0.9	
400					310	3750	3990	4280	0.8	
500					360	4590	4880	5230	0.8	
630					420	5530	5880	6290	0.7	
630					410	5610	5960	6400	0.7	6.0
800					480	6550	6960	7450	0.7	
1000					550	7650	8130	8760	0.6	
1250					650	9100	9690	10370	0.6	
1600					760	11050	11730	12580	0.6	
2000					1000	13600	14450	15560	0.5	
2500					1200	16150	17170	18450	0.5	
1600					760	12280	12960	13900	0.6	8.0
2000					1000	15020	15960	17110	0.5	
2500					1200	17760	18890	20290	0.5	

6~10kV级SCBH15系列干式无励磁调压非晶合金配电变压器

6~10kV Class SCBH15 Series Dry-type Off-Circuit Tap-Changing Amorphous Alloy Distribution Transformers

额定容量 Rated Capacity (kVA)	电压组合及分接范围 Voltage Combination Tap Range			连接组标号 Vector Group Symbol	空载损耗 No-load Loss (W)	负载损耗Load Loss(W)			空载电流 No-load Current %	阻抗电压 Impedance Voltage %
	高压HV(kV)	高压分接范围% HV Tap Range	低压LV(kV)			130°C(B)100°C	155°C(F)120°C	180°C(H)145°C		
30	6 6.3 6.6 10 10.5 11	±5 ±2×2.5	0.4	Dyn11	70	670	710	760	1.6	4.0
50					90	940	1000	1070	1.4	
80					120	1290	1380	1480	1.3	
100					130	1480	1570	1690	1.2	
125					150	1740	1850	1980	1.1	
160					170	2000	Q0	2280	1.1	
200					200	2370	2530	2710	1.0	
250					230	2590	2760	2960	1.0	
315					280	3270	3470	3730	0.9	
400					310	3750	3990	4280	0.8	
500					360	4590	4880	5230	0.8	
630					420	5530	5880	6290	0.7	
630					410	5610	5960	6400	0.7	6.0
800					480	6550	6960	7450	0.7	
1000					550	7650	8130	8760	0.6	
1250					650	9100	9690	10370	0.6	
1600					760	11050	11730	12580	0.6	
2000					1000	13600	14450	15560	0.5	
2500					1200	16150	17170	18450	0.5	
1600					760	12280	12960	13900	0.6	8.0
2000					1000	15020	15960	17110	0.5	
2500					1200	17760	18890	20290	0.5	

注：①表中所列的负载损耗为不同绝缘系列在括号内参考温度（GB/T1094.11的规定）下的值
② 当采用其他联结标号时，具体要求由制造方与用户协商规定
Notes: ① The load losses listed in the table are values obtained at the reference temperatures specified in parentheses for different insulation systems (in accordance with GB/T 1094.11).
② If other vector group symbols are adopted, specific requirements shall be determined through negotiation between the manufacturer and the user.



ZGS型组合式变电站

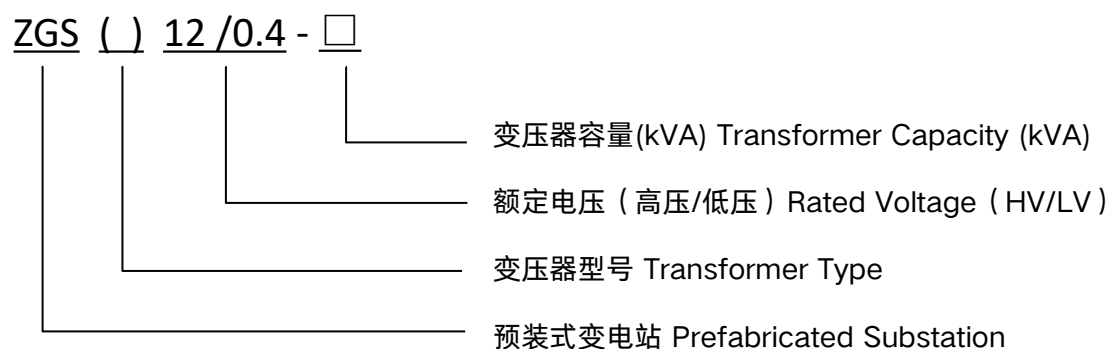
ZGS Type Combined Transformer Substation

1、产品概述 Product Overview

ZGS 系列预装式变电站适用于 7.2KV 和 12KV 环网供电，双电源供电或终端供电系统，作为高压配电计量，补偿控制和保护装置，高压侧还装有四工位负荷开关或二工位负荷开关，后备保护熔断器及插入式熔断器，低压侧按用户要求装配控制电器，配电电气，补偿装置及电能计量表等。ZGS 系列预装式变电站可用于室内，又用于室外，广泛运用于工业园区，商业中心，及高层建筑等各种场所。

ZGS series prefabricated substation is suitable for 7.2KV and 12KV ring network power supply, dual power supply or terminal power supply system. It is used as high voltage power distribution metering, compensation control and protection device. The high voltage side is also equipped with four station load switch or two station. Load switch, backup protection fuse and plug-in fuse, low-voltage side according to user requirements to install control appliances, distribution electrical, compensation devices and energy meters. ZGS series prefabricated substations can be used indoors and outdoors, and are widely used in industrial parks, commercial centers, and high-rise buildings.

2、型号及含义 Model and Meaning



3、使用环境 Service Conditions

- 海拔高度不超过1000m
- 环境温度：-35℃ ~ +40℃：
- 相对湿度：日平均值不大于95%，月平均值不大于90%
- 安装场所：无火灾、爆炸危险、化学腐蚀性气体及通风良好的场所，地面倾角不大于3°。
- Altitude shall not exceed 1000m;
- Ambient temperature: -35℃~ +40℃;
- Relative humidity: daily average ≤ 95%, monthly average ≤ 90%;
- Installation site: locations free from fire and explosion hazards, corrosive chemical gases, with good ventilation; ground inclination angle no more than 3°.

4、结构特点Structural Features

该系列产品箱体结构分为前、后两部分。前面为高低压操作间隔。高压间隔内包括高压端子、负荷开关、无载调压分接开关、插入式熔断器，压力释放阀、油温计、放油阀。低压间隔内包括低压端子，后部为注油箱体及散热片，变压器绕组和铁芯，高压负荷开关及保护用熔断器都在储油箱中。

The box structure of the series is divided into front and back parts. The front is the high and low voltage operation interval. The high-voltage interval includes a high-voltage terminal, a load switch, a no-load tap-changer, a plug-in fuse, a pressure relief valve, an oil temperature gauge, and a drain valve. The low voltage interval includes a low voltage terminal, the rear part is a fuel tank body and a heat sink, the transformer winding and the iron core, the high voltage load switch and the protection fuse are all in the oil storage tank.

5、技术参数 Technical Parameters

ZGS11-12/0.4组合式变压器

ZGS11-12/0.4 Combined Transformer

项目Project	单位Unit	参数Parameter
额定电压Rated voltage	kV	10/0.4(高压/低压High pressure/low pressure)
最高工作电压Maximum working voltage	kV	12(高压侧High pressure side)
额定频率Rated frequency	Hz	50
额定容量Rated Capacity	kVA	50-1600
1分钟工频耐压 1 minute power frequency withstand voltage	kV	35
雷电冲击电压Lightning impulse voltage	kV	75
冷却方式cooling method		油浸自冷Oil immersed from cold
高压后备熔断器开断电流 High voltage backup fuse breaking current	kA	50
插入式熔断器开断电流 Plug-in fuse breaking current	kA	2.5
环境温度Ambient temperature	°C	-35~+40
线圈允许温升Coil allows temperature rise	°C	65
无载调压Unloaded voltage regulation		±5%或±2×2.5%
噪声等级Noise level	db	50
防护等级Protection level		IP43



YBW户外组合式变电站

YBW Outdoor Prefabricated Substation

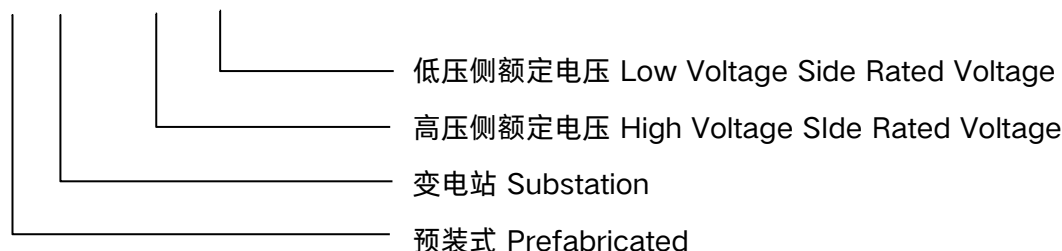
1、产品概述 Product Overview

YBW 系列预装式变电站整合高压电器、变压器、低压电器，构成紧凑型成套配电设备，适用于高层楼宇、居民区、工业园区、矿山油田、临时施工现场等场所，完成电能的接收与分配。该产品成套性强、结构紧凑、运维便捷、可迁移；同等容量下占地面积仅为土建变电站的 1/10 至 1/5，能缩减设计、施工工作量，降低建设投入。设备可适配环网、双电源、放射终端多种配电模式，广泛用于城乡变电站新建与改造项目。

YBW series prefabricated substations integrate high-voltage devices, transformers and low-voltage devices into compact complete distribution units, to receive and distribute power for high-rise buildings, residential zones, industrial parks, mines, oil fields and temporary construction sites. They feature high integration, compact layout, easy maintenance and mobility. Occupying 1/10 – 1/5 of the land area of conventional masonry substations at the same capacity, they cut design workload, construction work and overall investment. Compatible with ring main, dual-power and radial terminal distribution systems, they are widely adopted for new build and upgrade of urban and rural substations.

2、型号及含义 Model and Meaning

Y BW - 12 /0.4



3、使用环境 Service Conditions

- 1. 周围空气温度：上限≤40 °C，下限 - 10 °C
- 2. 阳光辐射≤1000W/m²
- 3. 海拔≤1000m
- 4. 覆冰≤20mm
- 5. 风速≤35m/s
- 6. 湿度：日平均相对湿度≤95%；月平均相对湿度≤90%；日平均水蒸气压力≤2.2kPa；月平均水蒸气压力≤1.8kPa
- 7. 地震烈度≤8 度
- 8. 无火灾、爆炸危险、严重污秽、化学腐蚀及剧烈震动的场所。
- 注：特殊使用条件，订货时提出与制造厂协商解决。
- 1. Ambient air temperature: upper limit ≤ 40 °C, lower limit -10 °C
- 2. Solar radiation ≤ 1000W/m²
- 3. Altitude ≤ 1000m
- 4. Ice coating thickness ≤ 20mm
- 5. Wind speed ≤ 35m/s
- 6. Humidity: daily average relative humidity ≤ 95%; monthly average relative humidity ≤ 90%; daily average water vapor partial pressure ≤ 2.2kPa; monthly average water vapor partial pressure ≤ 1.8kPa
- 7. Seismic intensity ≤ 8 degrees
- 8. Sites without fire risk, explosion hazard, heavy contamination, chemical corrosion and severe vibration.
- Note: If special operating conditions apply, please consult the manufacturer before placing orders.



4、结构特点Structural Features

1. 箱体分高压、变压器、低压三个舱室；高压支持多种供电模式，变压器可选油浸 / 干式类型，低压可按需配置各类配电功能。

2. 高压室带防误联锁，变压器可轨道抽出检修；舱内自带照明，运维便捷。

3. 自然 + 强制双通风，温控风扇自动散热，保障设备稳定运行。

4. 彩钢板外壳防腐防水防尘，适配长期户外使用。
1. The enclosure has high-voltage, transformer and low-voltage compartments. Multiple supply modes, two transformer types and customizable low-voltage functions are available.

2. Anti-misoperation interlocks are equipped in the high-voltage compartment. Transformers can be track-mounted for easy removal, with built-in compartment lighting for convenient maintenance.

3. Combined natural and forced ventilation with thermostatic fans ensures reliable operation.

4. Color steel casing provides corrosion, water and dust protection for long outdoor use.

5、技术参数 Technical Parameters

YBW-12/0.4户外组合式变电站

YBW-12/0.4 Outdoor Prefabricated Substation

名称 Name	单位 Unit	高压电气设备 High voltage electrical equipment	变压器 Transformer	低压电气设备 Low voltage electrical equipment
额定电压 Rated voltage	kv	10	10/0.4	0.4
额定电流 Rated current	A	630		100~2500
额定频率 Rated frequency	Hz	50	50	50
额定容量 Rated Capacity	KVA		100~1250	
额定热稳定电流 Rated thermal stability current	KA	20/45		30/15
额定动稳定电流(峰值) Rated dynamic current(peak)	KA	50		63
额定关合短路电流(峰值) Rated short circuit current (peak)	KA	50		15~30
额定开断短路电流 Rated breaking short-circuit curreet	KA	31.5(熔断器fuse)		
额定开断负荷电流 Rated breaking load current	A	630		
1min工频耐受电压 1min power frequency withstand voltage	KA	对地、相间42断口间48 42 for earth /phase-to-phase,48 across break gap	35/28(5mln)	2.0/2.5
雷电冲击耐受电压 Lightning impulse withstand voltage	KA	对地、相间75断口间85 75 for earth /phase-to-phase,85 across break gap	75	
壳体防护等级 Shell protection grade		IP33D/IP23D(变压器壳Transformer Endlosure)		
噪音水平 Noise level	dB		油变s55、干变s65	
回路数 Number of loops	个	1-6	2	4-30
低压侧最大无功补偿量 Maximum reactive power compensation on the low voltage side	Kvar			300

华式箱式变电站

Chinese box type substation



1、产品概述 Product Overview

华式箱变既不同于美式箱变也不同于欧式箱变，扬其之长避其之短。独特的 R 法高压联接，业界首创，拥有中国自主知识产权，充分展示华式箱变的不同凡响：安全、可靠、方便、环保。目前已大量应用于光伏、风电等 35KV 变配电领域。

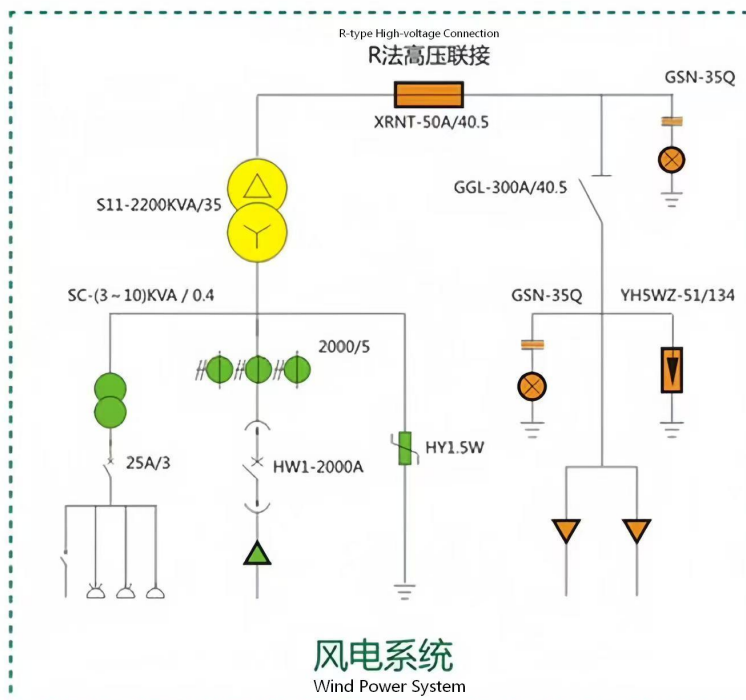
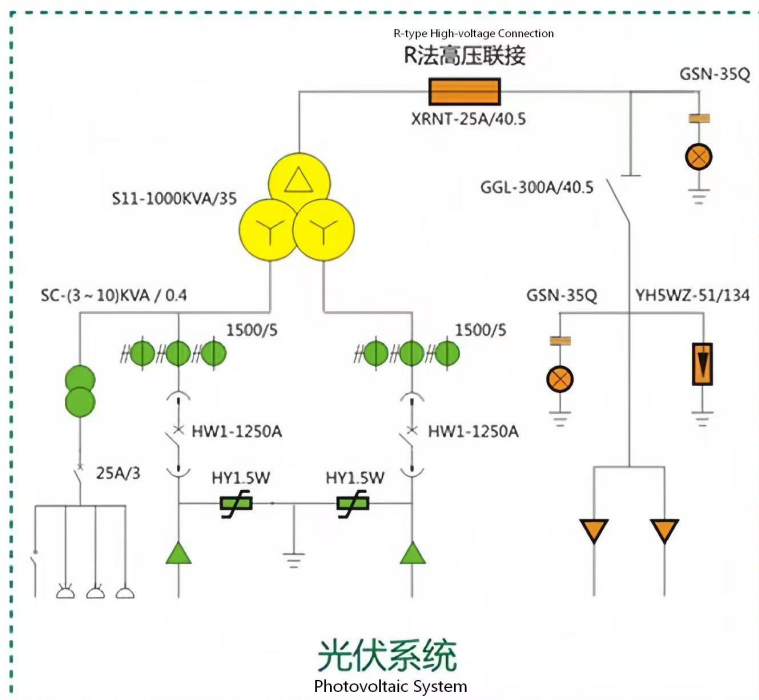
Chinese box type transformer substation is different from American box type transformer substation and European box type transformer substation. The unique R method high-voltage connection, which is the first in the industry, has China's independent intellectual property rights, and fully demonstrates the extraordinary features of the Chinese box type transformer: safety, reliability, convenience, and environmental protection. At present, it has been widely used in 35KV power transformation and distribution fields such as photovoltaic and wind power.

2、产品亮点 Product Highlights

- 1、不用放油加油 免除美变烦恼
- 2、系统无需停电 发电不受影响
- 3、变压器免暴晒 发电效率更高
- 4、油质不受污染 二十年有保障
- 5、运维方便安全 恶劣天气无妨
- 6、全面隔热防护 自然通风散热

- 1.No oil draining or refilling required, eliminating maintenance troubles of American-type box substations.
- 2.System operation keeps running without power outage, power generation remains unaffected.
- 3.The transformer is shielded from direct sunlight to achieve higher generating efficiency.
4. Insulating oil stays free from contamination, securing stable performance for 20 years.
- 5.Safe, convenient operation & maintenance, adaptable to harsh weather conditions.
- 6.Full thermal insulation protection, with natural ventilation for heat dissipation.

3、电气系统 Electrical System





4、技术参数 Technical Parameters

型号 Model	JSJ-1000/35	JSJ-1500/35	JSJ-2000/35
总功率(KW) Total power(KW)	1000	1500	2000
交流输入(AC) AC input	(270V+270V) 光伏Photovoltaic	~800V(风电Wind Power)	~800V(风电Wind Power)
交流升压(AC) AC boost	35KV~38.5KV	35KV~38.5KV	35KV~38.5KV
高压开关柜 High voltage switch cabinet	GGR-25A/40.5	GGR-35A/40.5	GGR-50A/40.5
节能变压器 Energy saving transformer	S11-1000KVA/35	S11-1600KVA/35	S11-2200KVA35
箱变测控 Box transformer measurement and control	RS485	RS485	RS485
外形尺寸(长×宽×高) Overall dimensions(length×wide×high)	3600×2430×2900 (仅供参考for reference only)	4300×3000×2900 (仅供参考for reference only)	4300×3000×2900 (仅供参考for reference only)
重量(KG) Weight(KG)	6000 (仅供参考for reference only)	7000 (仅供参考for reference only)	8000 (仅供参考for reference only)

5、35kV 美变、欧变、华变相互比较

Comparison Among 35kV American-type, European-type and Chinese-type Transformers

比较项目 Compare items	美式箱变 American box type substation	欧式箱变 European box type substation	华式箱变 Chinese box type substation
维保检修放油加油 Maintenance,overhaul,oil drainage and refueling	必须(严重缺陷) Mandatory(serious defect)	不要 No	不要 No
维保检修系统停电 Power failure of maintenance and repair system	不要 No	必须(严重缺陷) Mandatory(serious defect)	不要 No
太阳暴晒影响发电 Solar exposure affects power generation	会(缺陷) Meeting	不会 can't	不会 can't
开关消弧油质污染 The switch arc extinguishing oil is polluted	会(缺陷) Meeting	不会 can't	不会 can't
系统停电减少发电 Power generation reduction due to system outage	不会 can't	会(缺陷) Meeting	不会 can't
异地误操作安全隐患 Potential safety hazard of misoperation in different places	不可能 Impossible	可能(缺陷) Possible	不可能 Impossible
变压器风机散热 Heat dissipation of transformer fan	不要 No	要(缺陷) Essential	不要 No
外壳隔热防 Shell thermal insulation	没有(缺陷) None	有 have	有 have
操作检修天气影响 Weather impact of operation and maintenance	有(缺陷) Have	没有 No,	没有 No,
三种箱变造价 Cost ot three types of box type substation	略低 Slightly low	略高 Slightly higher	略高 Slightly higher



YB智能型预装式变电站

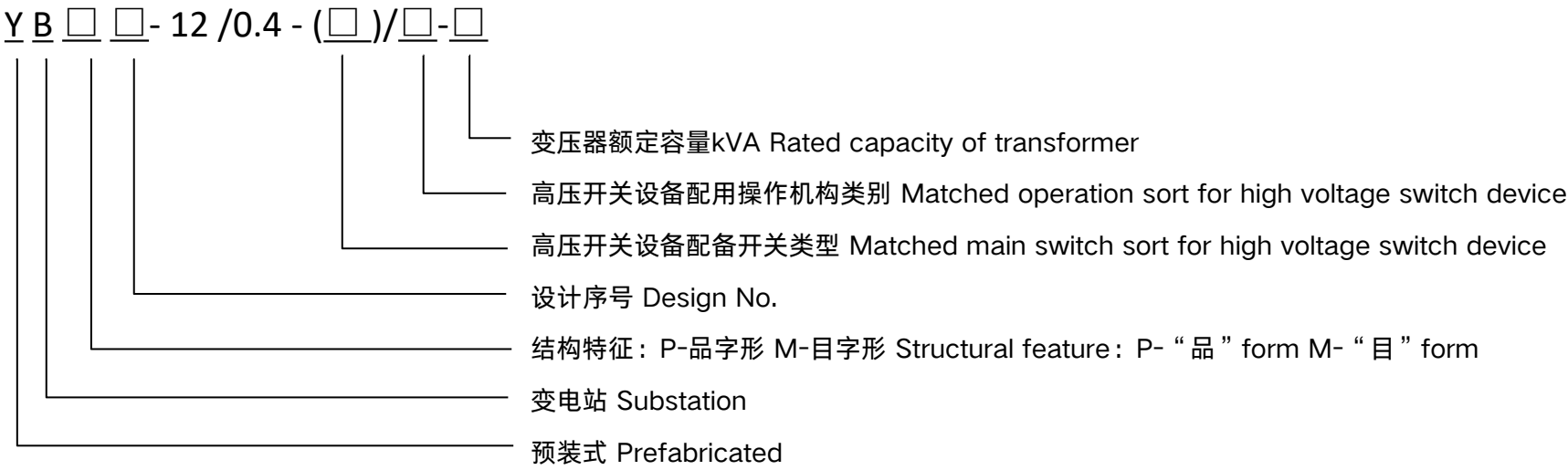
YBW Intelligent prefabricated substation

1、产品概述 Product Overview

YB 智能型预装式变电站整合高低压配电单元、变压器与智能监控系统，工厂预制集成，现场快速安装。依托智能测控平台实现运行参数采集、故障预警与远程运维，防护性能优异，结构紧凑，广泛用于新能源、市政、园区、地产等配电场景，提供可靠、智能化的电能变换与分配解决方案。

YB Intelligent Prefabricated Substation integrates high & low voltage distribution units, transformer and intelligent monitoring system. Pre-assembled in factory for quick on-site installation. Supported by intelligent measurement & control platform, it realizes operation data collection, fault early warning and remote operation & maintenance. Featuring excellent protection and compact layout, it is widely applied in new energy, municipal works, industrial parks and real estate, delivering reliable and intelligent power conversion & distribution solutions.

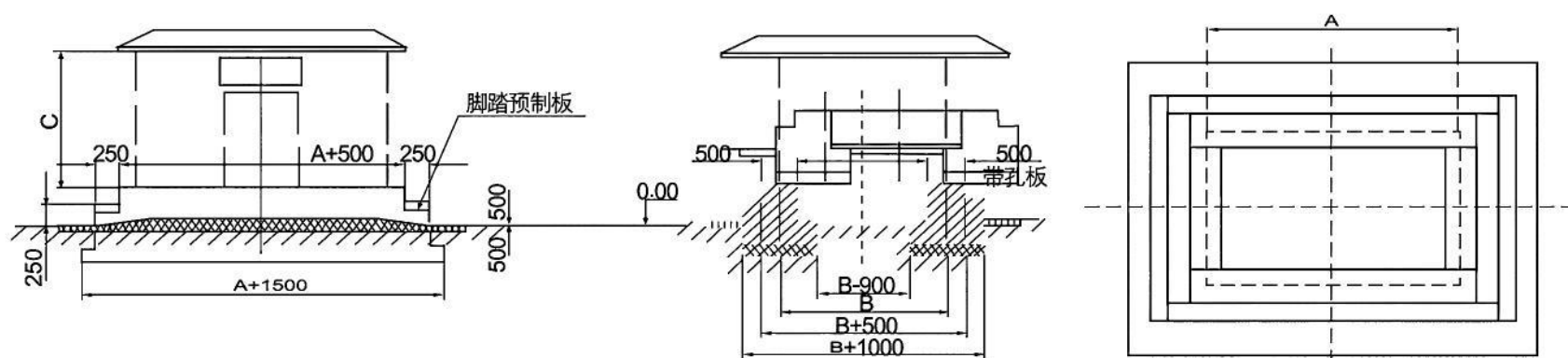
2、型号及含义 Model and Meaning



3、主要技术参数 The Main Technical Parameters

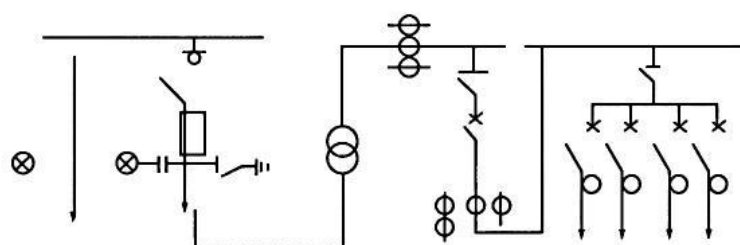
项目Item	单位Unit	高压电器High voltage electrical equipment	变压器Transfomer	低压电器Low voltage electrcalequipment
额定电压Rated voltage	kV	7.2、12	6/0.4、10/0.4	0.4
额定容量Rated capacity	kvA		目型“目” type:200~1250 品型”品” type:50~400	
额定电流Rated current	A	200~630		100~3000
额定开断电流Rated breaking current	A	负荷开关Load switch400~630A		15~63
	kA	组合电器取决于熔断器 Combined electrical equipmentis dependent on fuse		
额定短时耐受电流(秒) Rated short time withstand current	kA(xs)	20×(2)	200~400kvA	15×1
		(12.5×4)	400kvA	30×1
额定峰值耐受电流 Rated peak withstand curent	kA	31.5、50	200~400kvA	30
			400kvA	63
额定关合电流Rated closing current	kA	31.5、50		
工频耐受电压 Line frequency withstand voltage	kV	相对地及相同Phase to earth and phase similar 32、40	油浸Oilimmersion:35/5min	≤ 300V时2kV
		隔离断口Isolated fracture 34、48	干式Dry type:28/5min	300,600V时2.5kV
雷击冲击 Thunderstroke impact	kV	相对地及相同Phase to earth and phase similar 60、75	75	
		隔离断口Isolated fracture 75、85	75	
噪声水平Noise level	dB		油浸Oil immersion:<55	
			干式Dry type:<65	
防护等级Protection grade			IP23D	
外形尺寸 Outline dimension		根据所选变压器容量和形式，选定不同的外形尺寸。 Choose different outline dimension according to the capacity and mode of selected transformer.		

4、安装基础图 Installation Base Map

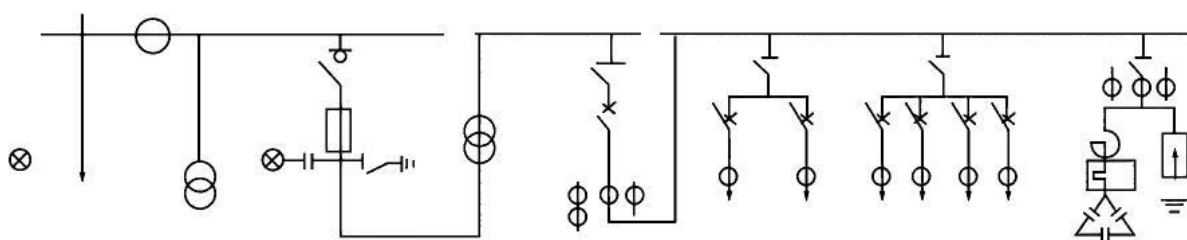


5、典型系统方案举例参考 Typical System Scenario Example Reference

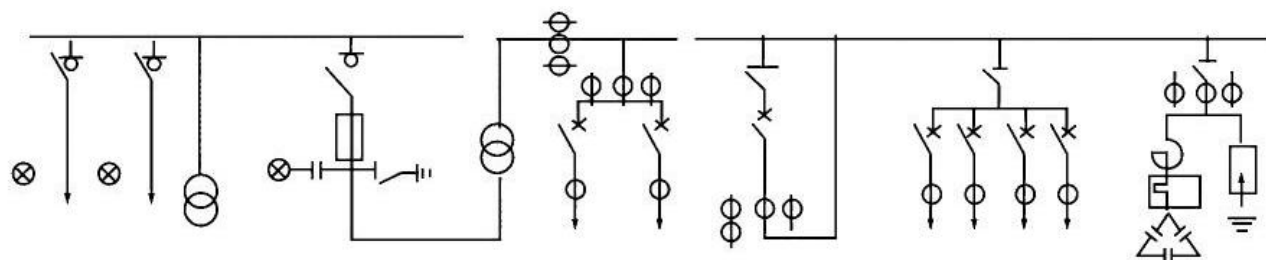
电缆进出，终端供电，低压计量 Cable incoming and outgoing, terminal power supply, low voltage metering



电缆进出，终端供电，高压计量，低压走廊图，低压电容补偿 Cable incoming and outgoing, terminal power supply, high voltage metering, low voltage corridor diagram, low voltage capacitance compensation,



电缆进出，环网供电，低压计量，低压走廊式，低压电容补偿 Cable incoming and outgoing, ring network power supply, low voltage metering, low voltage corridor diagram, low voltage capacitance compensation,



光伏逆变一体升压机

Photovoltaic Inverter Booster



1、产品概述 Product Overview

光伏逆变一体升压机集成逆变器、变压器、配电与保护单元，实现光伏直流电逆变、电压升压一体化输出。整机模块化集成、安装便捷，节省现场施工空间，适配各类集中式光伏电站，保障光伏电力稳定并网输送。

The photovoltaic inverter booster integrates inverter, transformer, power distribution and protection units, realizing integrated DC-AC conversion and voltage boosting for photovoltaic power. Featuring modular integrated design, it enables convenient installation and saves on-site space. Widely applied in centralized photovoltaic power stations to ensure stable grid connection of solar power.

2、使用环境Service Conditions

2.1 工作环境条件Operating Environmental Conditions

安装场地：户外固定水平基础，水泥或钢结构平台	Installation Site: Outdoor fixed horizontal foundation, concrete or steel platform.
海拔：2000m以内	Altitude: ≤2000 m
最低环境温度：-45℃或-25℃	Minimum ambient temperature: -45 ° C or -25 ° C
最高环境温度：+60℃	Maximum ambient temperature: +60 ° C
相对湿度：≥95%（日平均），偶有凝露	Relative humidity: ≤95% (daily average), occasional condensation

2.2 贮存环境条件Storage Environmental Conditions

贮存场地：无特殊防护的户外场地	Storage Site: Outdoor area without special protection
地面坡度：≥15°	Ground slope: ≤15°
最低环境温度：-40℃	Minimum ambient temperature: -40 ° C
最高环境温度：+70℃	Maximum ambient temperature: +70 ° C
相对湿度：≥95%（日平均），偶有凝露	Relative humidity: ≤95% (daily average), occasional condensation

3、功能和性能要求 Functional and Performance Requirements

一体机低压电源取自升压变压器低压侧，采用 2 台变压器取电，1 台三相变压器用于一体机和逆变器的辅助供电，1 台单相变压器用于逆变器控制供电，其中辅助电源配置 1 套 UPS 用于给通信、消防、监控等关键设备供电，UPS 类型为 AC220V 单进单出塔式。低压电源回路拓扑如下图所示，具体容量、回路数及开关配置按工程需要调整。

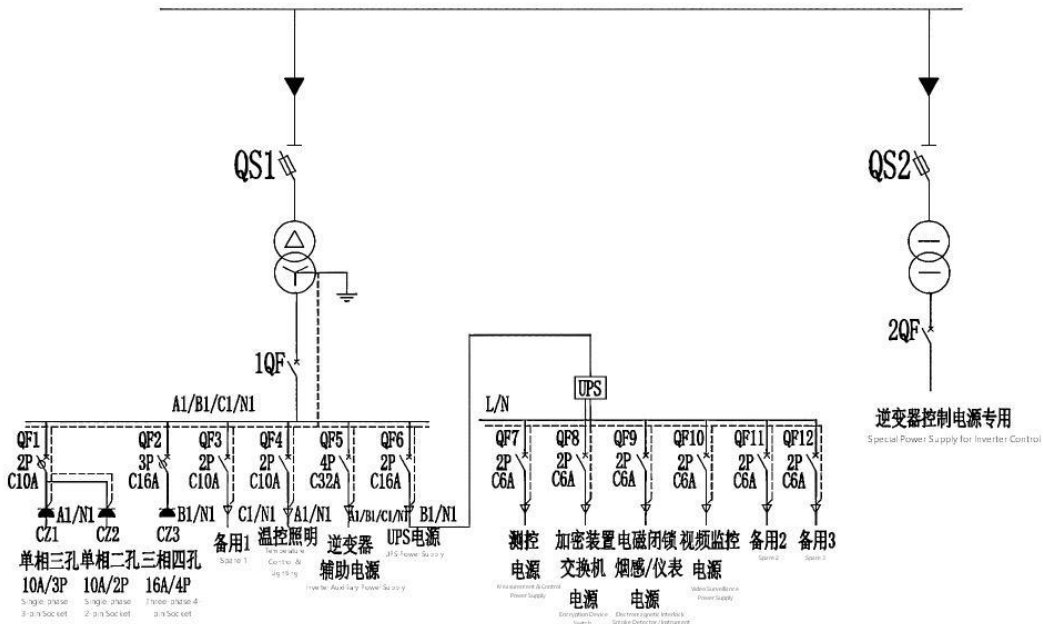


图3一体机低压电源回路示意图
Figure 3 Schematic Diagram of Low-Voltage Power Circuit for Integrated Machine

光伏逆变升压一体机将户外型光伏逆变器【需方提供】、升压变压器、高压开关设备、低压辅助供电、通讯和监控等设备集成到一起形成一体化设备，拥有独立的自供电系统、温湿度控制系统、火灾报警系统（烟感）、消防系统（灭火器）、照明系统，并具备视频监控等系统的电源供应和网络接入能力。

全套设备均安装于一体机公共底座上，主回路采用母排连接，套管等不能承受较大应力的部件需采用软连接过渡。一体机主电路拓扑如下图所示（逆变器柜内部拓扑图仅供参考）。

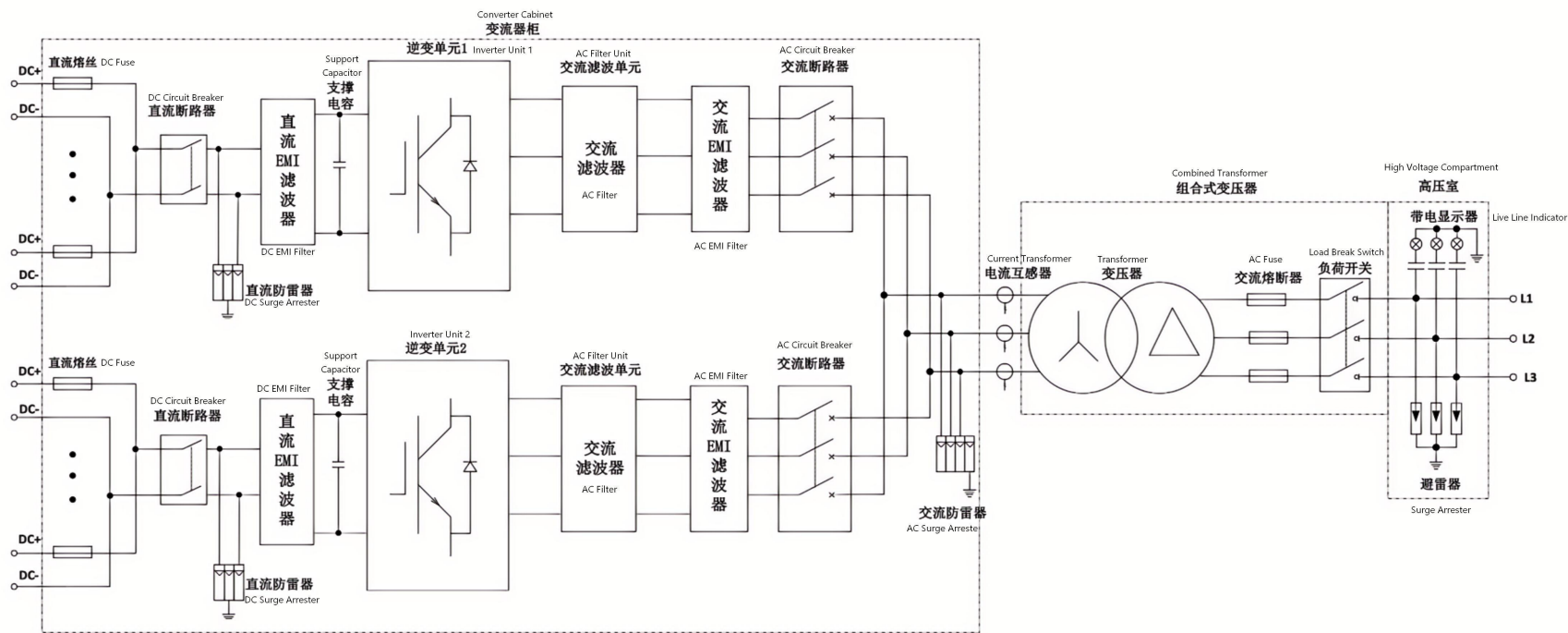


图1 美变方案一体机主电路拓扑图

Figure 1 Main Circuit Topology Diagram of Integrated Unit for American Transformer Scheme

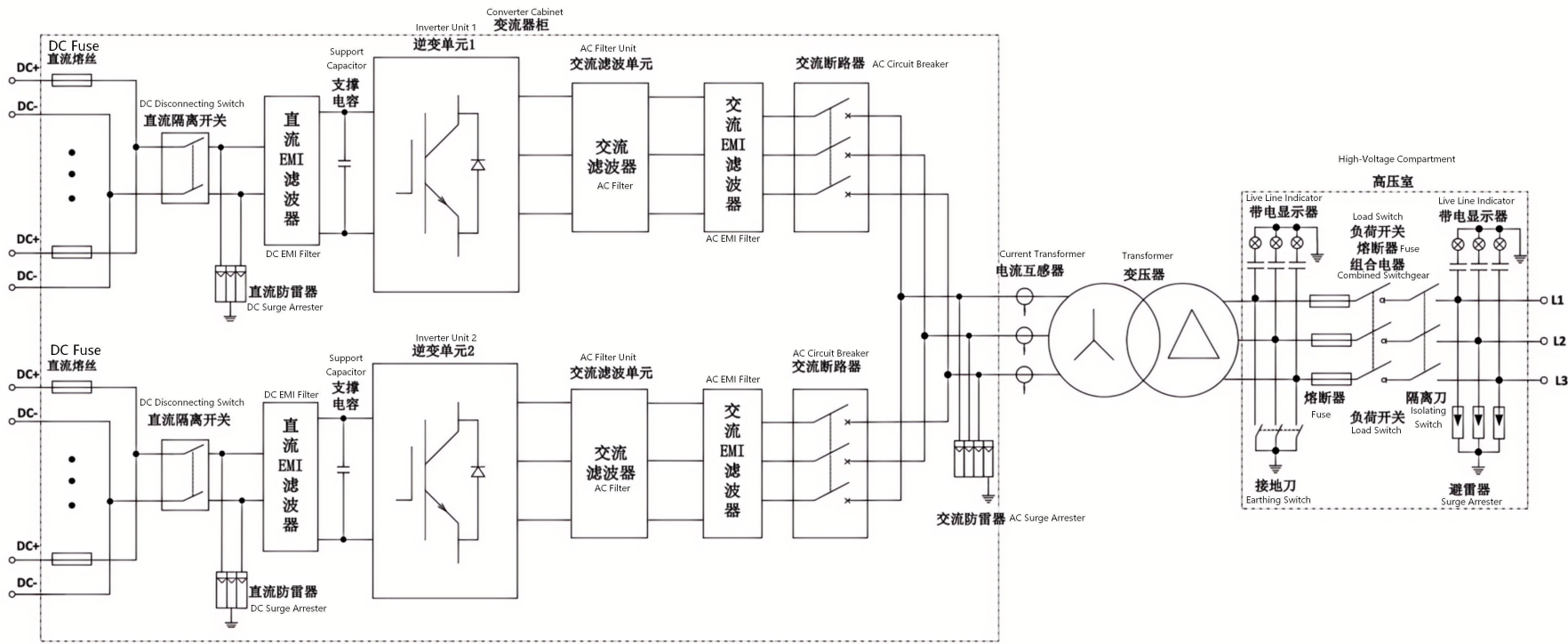


图2 华变方案一体机主电路拓扑图

Figure 2 Main Circuit Topology Diagram of Integrated Unit for Chinese Transformer Scheme



逆变器技术参数Inverter Technical Parameters

项 目Item	数值/内容 Value/Content
额定交流输出功率Rated AC Output Power	3125kVA
最大交流输出功率Maximum AC Output Power	3437kVA
额定交流输出电压Rated AC Output Voltage	600V
允许交流输出电压Allowable AC Output Voltage	510V~660V
额定电网频率Rated Grid Frequency	50Hz
允许电网频率Allowable Grid Frequency	45Hz ~ 55Hz
交流输出路数/相数Number of AC Output Circuits / Phases	1路/3相 1 circuit / 3-phase
负载能力Load Capacity	3125kVA@50°C(额定负载) 3437kVA@45°C(1.1倍过载) 3125kVA@50°C (rated load) 3437kVA@45°C (1.1 times overload)
输出电流波形畸变率Output Current Total Harmonic Distortion	≤3%(额定功率下) ≤3% (under rated power)
功率因数可调范围Adjustable Power Factor Range	-0.8(超前)~+0.8(滞后) -0.8 (leading) ~ +0.8 (lagging)
直流分量DC Component	≤0.5%(额定电流下) ≤0.5% (under rated current)
防护等级Protection Class	IP55
重量Weight	2270kg
待机功耗Standby Power Consumption	<200W
控制电源需求Control Power Supply Requirement	AC220V/50Hz/单相, 500VA AC220V/50Hz/Single-phase, 500VA
辅助电源需求Auxiliary Power Supply Requirement	AC400V/50Hz/三相四线, 5000VA AC400V/50Hz/3P4W, 5000VA
散热冷却方式Heat Dissipation & Cooling Method	智能强迫风冷 Intelligent Forced Air Cooling
最高工作海拔Maximum Operating Altitude	5000m(3000m以上降额运行) 5000m (derated operation above 3000m)
工作环境温度Operating Ambient Temperature	-35°C~60°C
工作环境湿度Operating Ambient Humidity	0 ~ 95%,无冷凝 0 ~ 95%, non-condensing
通讯接口Communication Interface	RS485+RJ45各1路 1 channel each for RS485 and RJ45

低压侧交流断路器技术参数TechnicalParameters of Low-Voltage Side AC Circuit Breakers

项目Item	一体机整体技术要求Overall Technical Requirements for Integrated Unit
安装结构Mounting Structure	固定式Fixed Type
极数Number of Poles	3
额定电流(A)(40°C)Rated Current (A) @ 40°C	2000
额定工作电压(V)Rated Operational Voltage (V)	AC690
额定频率(Hz)Rated Frequency (Hz)	50
额定绝缘电压(V)Rated Insulation Voltage (V)	1000
额定冲击耐受电压(kV)Rated Impulse Withstand Voltage (kV)	12
全分断时间(ms)Total Breaking Time (ms)	<30
闭合时间(ms)Closing Time (ms)	<70
额定极限短路分断能力(有效值)(kA) Rated Ultimate Short-Circuit Breaking Capacity (r.m.s.) (kA)	65
额定运行短路分断能力(有效值)(kA) Rated Operational Short-Circuit Breaking Capacity (r.m.s.) (kA)	65
额定短路接通能力(峰值)(kA) Rated Short-Circuit Making Capacity (peak) (kA)	143
额定短时耐受电流(有效值)(kA)(1s) Rated Short-Time Withstand Current (r.m.s.) (kA) (1s)	40/50
电气寿命(次)Electrical Endurance (Operations)	5000
电气拓扑Electrical Topology	2路MPPT各1台, 并联输出 2 MPPT channels with one unit each, parallel output



一体升压机整体技术性能要求Overall Technical Performance Requirements of Integrated Booster Unit

项 目Item	指标要求Specification Requirements
最大直流输入电压Maximum DC Input Voltage	1500V
最小输入电压/启动电压Minimum Input Voltage / Start-up Voltage	875V/915V
满载MPPT电压范围Full-load MPPT Voltage Range	875V~1300V
MPPT数量Number of MPPT Channels	2
最大直流输入数量Maximum DC Input Strings	16(18/20/22/24可选) 16 (18/20/22/24 optional)
最大直流输入电流Maximum DC Input Current	3968A
最大直流短路电流Maximum DC Short-circuit Current	5000A
交流输出功率AC Output Power	3125kVA@50℃(额定负载) 3437kVA@45℃(1.1倍过载) 3125kVA @50℃ (rated load) 3437kVA @45℃ (1.1 times overload)
电网电压等级Grid Voltage Level	35kV
电网最高工作电压Maximum Grid Operating Voltage	40.5kV
额定电网频率Rated Grid Frequency	50Hz
电网频率范围Grid Frequency Range	45Hz~55Hz
总电流波形畸变率Total Current Harmonic Distortion	≤3%(额定功率时) ≤3% (at rated power)
直流分量DC Component	≤0.5%(额定电流时) ≤0.5% (at rated current)
功率因数Power Factor	0.99(额定功率下) 0.99 (at rated power)
功率因数可调范围Adjustable Power Factor Range	0.8(超前)~0.8(滞后) 0.8 (leading) ~ 0.8 (lagging)
馈电相数/输出端相数Feeder Phase Number / Output Terminal Phase Number	3/3
防护等级Protection Class	IP55
防腐水平Anti-corrosion Grade	按工程要求确定(C3、C4、C5) Determined according to project requirements (C3, C4, C5)
辅助电源Auxiliary Power Supply	三相四线, 15kVA+2kVA 3-phase 4-wire, 15kVA+2kVA
UPS单元UPS Unit	AC220V单进单出 AC220V single input & single output
变压器冷却方式Transformer Cooling Method	油浸自冷 Oil Natural Cooling
逆变器冷却方式Inverter Cooling Method	温控强制风冷 Temperature-controlled Forced Air Cooling
高低压柜冷却方式HV & LV Cabinet Cooling Method	强制风冷Forced Air Cooling
工作温度范围Operating Temperature Range	-35℃~+60℃(50℃以上降额运行) -35℃~+60℃ (derated operation above 50℃)
工作湿度范围Operating Humidity Range	0~100%
海拔Altitude	2000m(2000m以上定制) 2000m (customized for altitude above 2000m)
通讯Communication	RS485/以太网 RS485 / Ethernet

带电显示器Live Line Indicator

项目Item	数值Value
电压等级Voltage Class	40.5kV
芯棒容量Core Capacitance	>40pF
工频耐压Power Frequency Withstand Voltage	100kV/5min(一次对二次及地)、2kV/1min(二次对地) 100kV/5min (primary to secondary), 2kV/1min (secondary to earth)
局放Partial Discharge	<10pC
规范要求Standard Requirements	满足GB25081-2010、DL/T538-2006规范要求 Comply with GB 25081-2010, DL/T 538-2006
其他Others	具有闭锁、相位识别功能 With interlock and phase identification function
美变方案独立配置，输入侧1路；华变方案集成到负荷开关熔断器组合电器，输入输出侧均配置。 Independently configured for American Transformer scheme, 1 input circuit; integrated into fuse-load switch composite apparatus for Chinese Transformer scheme, configured on input side.	

变压器技术参数Transformer Technical Parameters

项 目Item	指标要求Specification Requirements	
额定容量(kVA)Rated Capacity (kVA)	3150	
过载能力Overload Capacity	环温45℃时1.1倍过载长期运行	
额定电压(高压侧)(kV)Rated Voltage (HV Side) (kV)	35kV等级(36.75、37、38.5等) 35kV class (36.75kV, 37kV, 38.5kV, etc.)	
额定电压(低压侧)(kV)Rated Voltage (LV Side) (kV)	0.6或0.63	
高压调压方式HV Voltage Regulation Method	无励磁手动调压Off-circuit Manual Tap-changer	
高压分接范围HV Tap Range	±2×2.5%,满足GB10230.1-2007要求	
联结组别Vector Group	Dy11或Yd11	
相数Number of Phases	三相3-phase	
频率(Hz)Frequency (Hz)	50	
冷却方式Cooling Method	ONAN	
绝缘水平Insulation Level	按GB311.1的规定	
声级水平Sound Level	按JB/T10088的规定(70dB)	
温升Temperature Rise	油面顶层温升≤60K	
短路阻抗Short-circuit Impedance	6%、6.5%、7%等	
负载损耗Load Loss	27.6kW	21.9kW
空载损耗No-load Loss	2.8kW	2.4kW
总损耗Total Loss	30.4kW	24.3kW
变压器油Transformer Oil	25#或45#	
硅钢片Silicon Steel Sheet	宝钢钢, 30QG120以上规格	
高压套管HV Bushing	40.5kV100A树脂套管40.5kV 100A resin bushing	
低压套管LV Bushing	1kV4000A树脂或瓷套管1kV 4000A resin or porcelain bushing	

1.注：变压器其他要求

- 1) 变压器的各相交流母排应配置相应的相序标识，低压侧相序与逆变器一致。
- 2) 变压器的分接端子要方便调接，并有明确的标识。
- 3) 变压器应可靠接地，并有相应的接地端子和标识。
- 4) 油箱的密封部位应可靠耐久，无渗漏油现象；
- 5) 箱体的焊接与组装应牢固，焊缝应光洁均匀，无焊穿、裂纹、溅渣、气孔等现象。6) 箱体应进行防锈处理，保证漆膜颜色均匀，附着力强，不得有裂纹、斑点、气泡和附着物等。
- 7) 辅助保护监测设备满足 GB/T 1094.1、GB/T 6451 等标准的要求，配置瓦斯继电器、油枕、油位计、压力释放阀、顶层油温检测、油温表等监测。
- 8) 变压器应配置注油孔、卸油阀、取样口等，并采取防窃油措施。

Note: Other Requirements for Transformer

- 1.Each phase AC busbar of the transformer shall be marked with corresponding phase sequence identification. The phase sequence on the low-voltage side shall be consistent with that of the inverter.
- 2.The tap terminals of the transformer shall be convenient for connection adjustment and provided with clear markings.
- 3.The transformer shall be reliably earthed, equipped with corresponding earthing terminals and identification marks.
- 4.Sealing parts of the oil tank shall be reliable and durable without oil leakage.
- 5.Welding and assembly of the tank shall be firm. Weld seams shall be smooth and uniform, free of burn-through, cracks, spatter, blowholes and other defects.
- 6.The tank shall be treated for rust prevention to ensure uniform paint film color and strong adhesion. No cracks, spots, bubbles or attachments are allowed.
- 7.Auxiliary protection and monitoring equipment shall comply with standards such as GB/T 1094.1 and GB/T 6451. The transformer shall be equipped with Buchholz relay, conservator, oil level gauge, pressure relief valve, top oil temperature detection, oil temperature indicator and other monitoring devices.
- 8.The transformer shall be provided with oil filling hole, oil drain valve, oil sampling port, etc., and anti-oil-theft measures shall be adopted.



高压负荷开关技术参数Technical Parameters of High-Voltage Load Switch

项 目Item	美变适用Suitable for American Transformer	华变适用Suitable for Chinese Transformer
额定电压Rated Voltage	40.5kV	40.5kV
频率Frequency	50Hz	50Hz
负荷开关额定电流Rated Current of Load Switch	630A	630A
额定短路耐受电流Rated Short-Time Withstand Current	31.5kA/4s	31.5kA/4s
额定峰值耐受电流Rated Peak Withstand Current	80kA	80kA
1分钟工频耐受电压1-min Power Frequency Withstand Voltage	三相对地、相间95kV;隔离断口118kV 95kV phase-to-earth & phase-to-phase; 118kV across isolating gap	三相对地、相间95kV;隔离断口118kV 95kV phase-to-earth & phase-to-phase; 118kV across isolating gap
雷电冲击耐受电压(峰值)Lightning Impulse Withstand Voltage (peak)	对地、相间185kV;隔离断口215kV 185kV phase-to-earth & phase-to-phase; 215kV across isolating gap	对地、相间185kV;隔离断口215kV 185kV phase-to-earth & phase-to-phase; 215kV across isolating gap
灭弧介质Arc Extinguishing Medium	变压器油Transformer Oil	真空Vacuum
辅助触点Auxiliary Contacts	2常开2常闭(独立接线) 2NO + 2NC (independent wiring)	不少于2常开2常闭(独立接线) Min. 2NO + 2NC (independent wiring)
操作结构Operating Mechanism	弹簧储能, 手动操作 Spring energy storage, manual operation	电动操作 Motor operation
规范要求Standard Requirements	满足JB/T10681-2006规范要求 Comply with JB/T 10681-2006	满足GB16926-2009规范要求 Comply with GB 16926-2009
其他Others	地刀、隔离开关配置电磁锁 Earthing switch & disconnecter equipped with electromagnetic interlock	带输入侧隔离开关、输入侧熔断器安装位 置、输出侧接地刀 Equipped with input-side disconnecter, input- side fuse mounting device and output-side earthing switch

熔断器技术参数Technical Parameters of Fuse

项 目Item	美变适用Suitable for American Transformer	华变适用Suitable for Chinese Transformer
型号规格Model & Specification	XRNT-40.5kV/100A/S/H2-31.5kA	XRNT-40.5kV/100A/S/H2-31.5kA
额定电压Rated Voltage	40.5kV	40.5kV
额定电流Rated Current	100A	100A
最大开断电流Maximum Breaking Current	31.5kA	31.5kA
安装方式Mounting Method	变压器专用油箱安装, 操作箱操作维护 Installed inside dedicated transformer tank; operable & maintainable from operating compartment	与熔断器-负荷开关组合电器配套安装 Installed in combination with fuse-load switch composite apparatus
其它Others	带辅助触点With auxiliary contact	带输出信号指示With output signal indication
规范要求Standard Requirements	满足GB/T15166.2-2008规范要求 Comply with GB/T 15166.2-2008	满足GB/T15166.2-2008规范要求 Comply with GB/T 15166.2-2008

高压避雷器技术参数Technical Parameters of High-Voltage Surge Arrester

项 目Item	数值Value
额定电压Rated Voltage	相对地51kV 51kV phase-to-earth
持续运行电压Continuous Operating Voltage	相对地40.8kV 40.8kV phase-to-earth
操作冲击电流残压Residual Voltage under Switching Impulse Current	≤114kV(峰值) ≤114kV (peak)
雷电冲击电流残压Residual Voltage under Lightning Impulse Current	≤134kV(峰值) ≤134kV (peak)
2ms方波载流量2ms Square Wave Discharge Capacity	≥400A
放电计数器Discharge Counter	3只 3 sets
规范要求Standard Requirements	满足GB11032-2020规范要求 Comply with GB 11032-2020

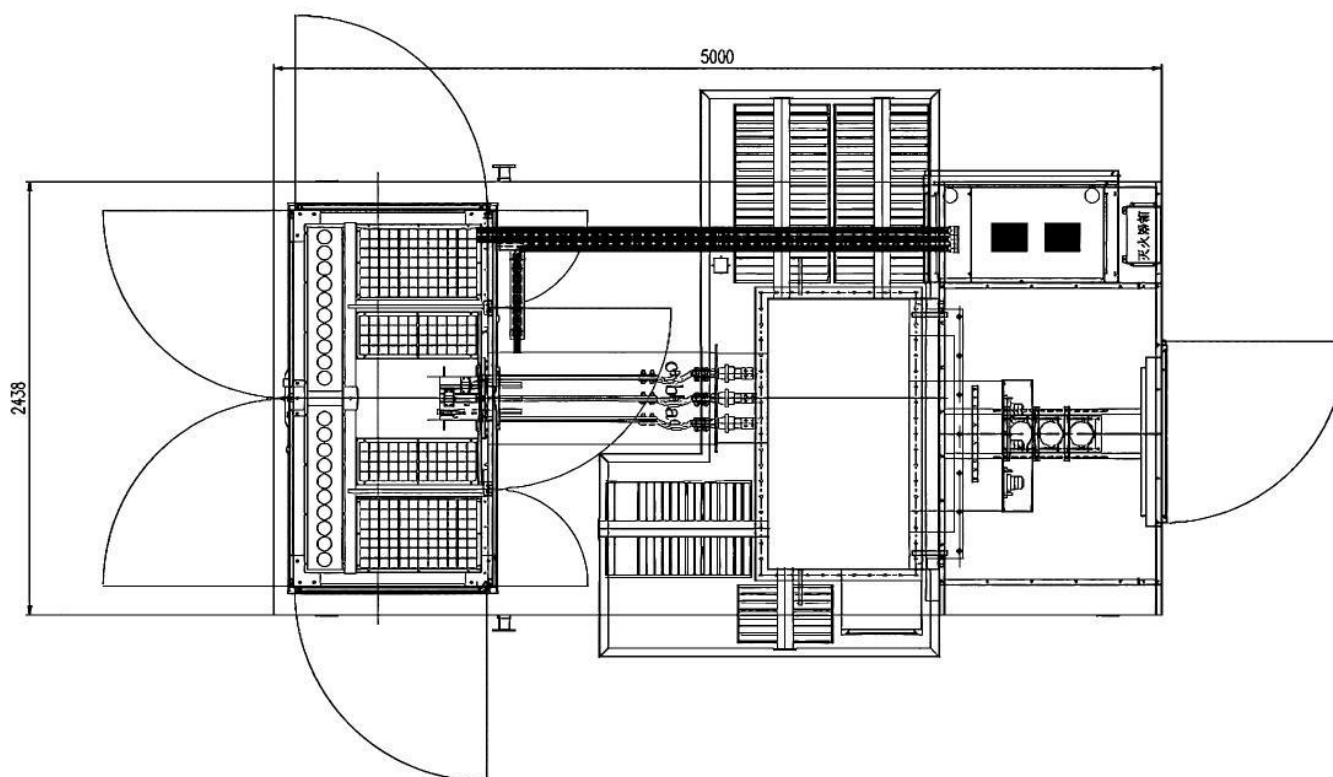
4、接口要求Interface Requirements

4.1 美变方案

- 1.底座尺寸：2438cm × 5000cm，高度 2700mm 以内
 - 2.参考重量：< 15000kg（以最终设计确认为准）
 - 3.高压室底部进线，预留三回三芯电缆进出和接线（包括铜铝过渡）的空间。
 - 4.逆变器底部需满足直流进线和出风要求，一体机底座对应位置留空。
 - 5.高压电缆接线采用 3 组独立的接线铜排。
 - 6.进线孔配置在 B 相接口处，防止安装时电缆扭曲，过线孔处配置电缆固定装置。
 - 7.底座配置接油盘，尺寸超出散热器外沿投影不小于 30mm，深度不小于 40mm，在底座内部合适位置预留导流管道接口。
 - 8.尺寸公差满足 GB/T 1804-2000《一般公差 未注公差的线性和角度尺寸的公差》最低等级要求。
- 参考布局如下图。

4.1 American Transformer Scheme

- 1.Base dimension: 2438cm × 5000cm, height within 2700mm
 - 2.Reference weight: < 15000kg (subject to final design confirmation)
 - 3.Cables enter from the bottom of the high-voltage compartment. Space shall be reserved for incoming/outgoing routing and termination of three circuits of 3-core cables (including copper-aluminum transition connections).
 - 4.The bottom of the inverter shall meet the requirements for DC cable entry and air outlet. Corresponding positions on the integrated unit base shall be kept vacant.
 - 5.Three sets of independent copper connection busbars shall be adopted for high-voltage cable termination.
 - 6.Cable entry holes are arranged at the B-phase interface to prevent cable twisting during installation, and cable fixing devices shall be installed at the cable penetration holes.
 - 7.An oil collecting tray shall be fitted on the base. Its size shall extend no less than 30mm beyond the outer projection of the radiator, with a depth of no less than 40mm. Interfaces for drainage pipelines shall be reserved at appropriate positions inside the base.
 - 8.Dimensional tolerances shall comply with the lowest grade specified in GB/T 1804-2000 General Tolerances – Tolerances for Linear and Angular Dimensions without Individual Tolerance Indications.
- Refer to the figure below for the layout.

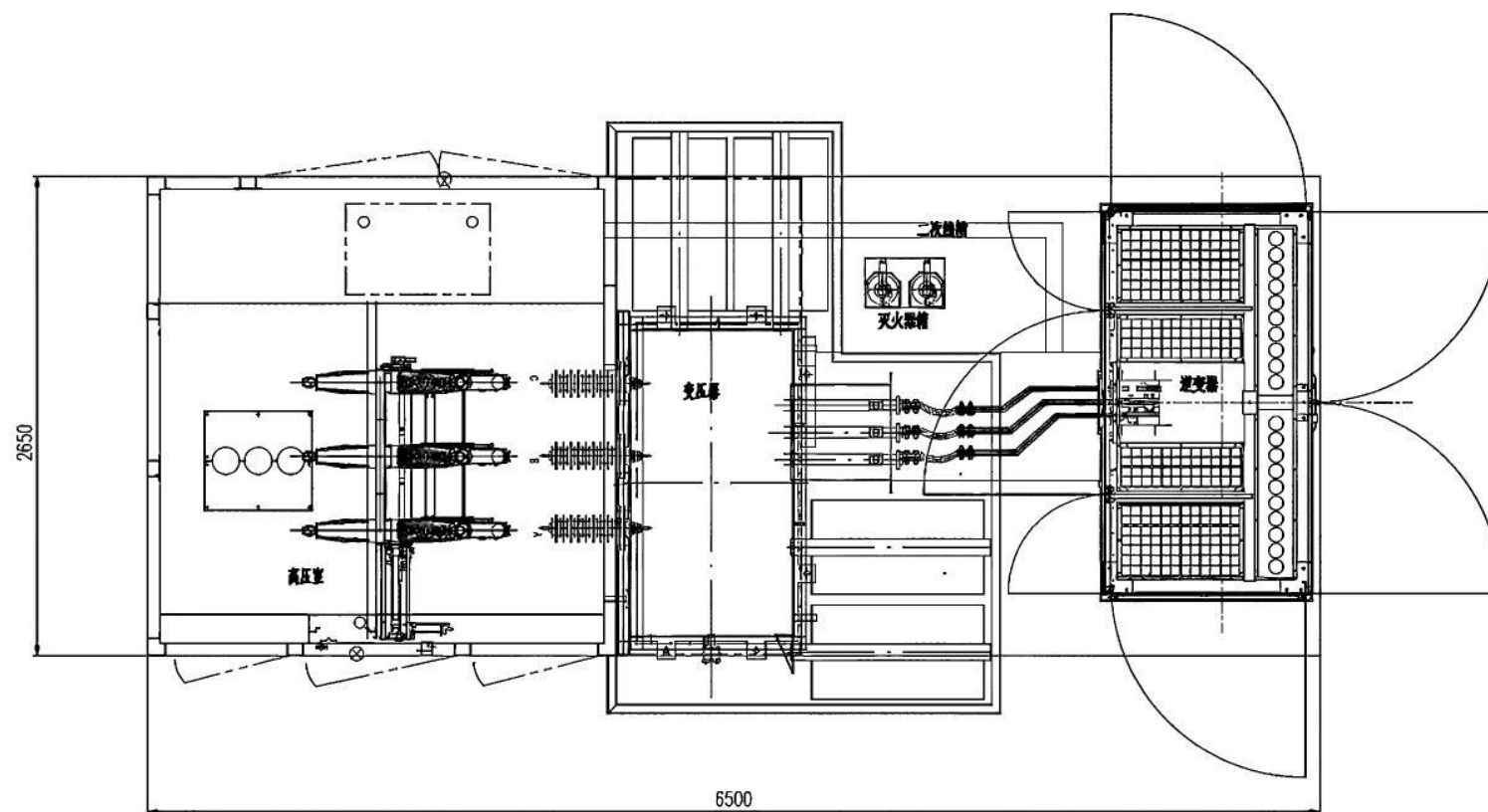


4.2 华变方案

- 1.底座尺寸：2650cm × 6500cm，高度 2700mm 以内
 - 2.参考重量：< 20000kg（以最终设计确认为准）
 - 3.高压室底部进线，预留三回三芯电缆进出和接线（包括铜铝过渡）的空间。
 - 4.逆变器底部需满足直流进线和出风要求，一体机底座对应位置留空。
 - 5.高压电缆接线采用 3 组独立的接线铜排。
 - 6.进线孔配置在 B 相接口处，防止安装时电缆扭曲，过线孔处配置电缆固定装置。
 - 7.底座配置接油盘，尺寸超出散热器外沿投影不小于 30mm，深度不小于 40mm，在底座内部合适位置预留导流管道接口。
 - 8.尺寸公差满足 GB/T 1804-2000《一般公差 未注公差的线性和角度尺寸的公差》最低等级要求。
- 参考布局如下图。

4.2 Chinese Transformer Scheme

- 1.Base dimension: 2650cm × 6500cm, height within 2700mm
 - 2.Reference weight: < 20000kg (subject to final design confirmation)
 - 3.Cables enter from the bottom of the high-voltage compartment. Space shall be reserved for incoming/outgoing routing and termination of three circuits of 3-core cables (including copper-aluminum transition connections).
 - 4.The bottom of the inverter shall meet the requirements for DC cable entry and air outlet. Corresponding positions on the integrated unit base shall be kept vacant.
 - 5.Three sets of independent copper connection busbars shall be adopted for high-voltage cable termination.
 - 6.Cable entry holes are arranged at the B-phase interface to prevent cable twisting during installation, and cable fixing devices shall be installed at the cable penetration holes.
 - 7.An oil collecting tray shall be fitted on the base. Its size shall extend no less than 30mm beyond the outer projection of the radiator, with a depth of no less than 40mm. Interfaces for drainage pipelines shall be reserved at appropriate positions inside the base.
 - 8.Dimensional tolerances shall comply with the lowest grade specified in GB/T 1804-2000 *General Tolerances – Tolerances for Linear and Angular Dimensions without Individual Tolerance Indications*.
- Refer to the figure below for the layout.





KYN28A-12

铠装移开式交流金属封闭开关设备

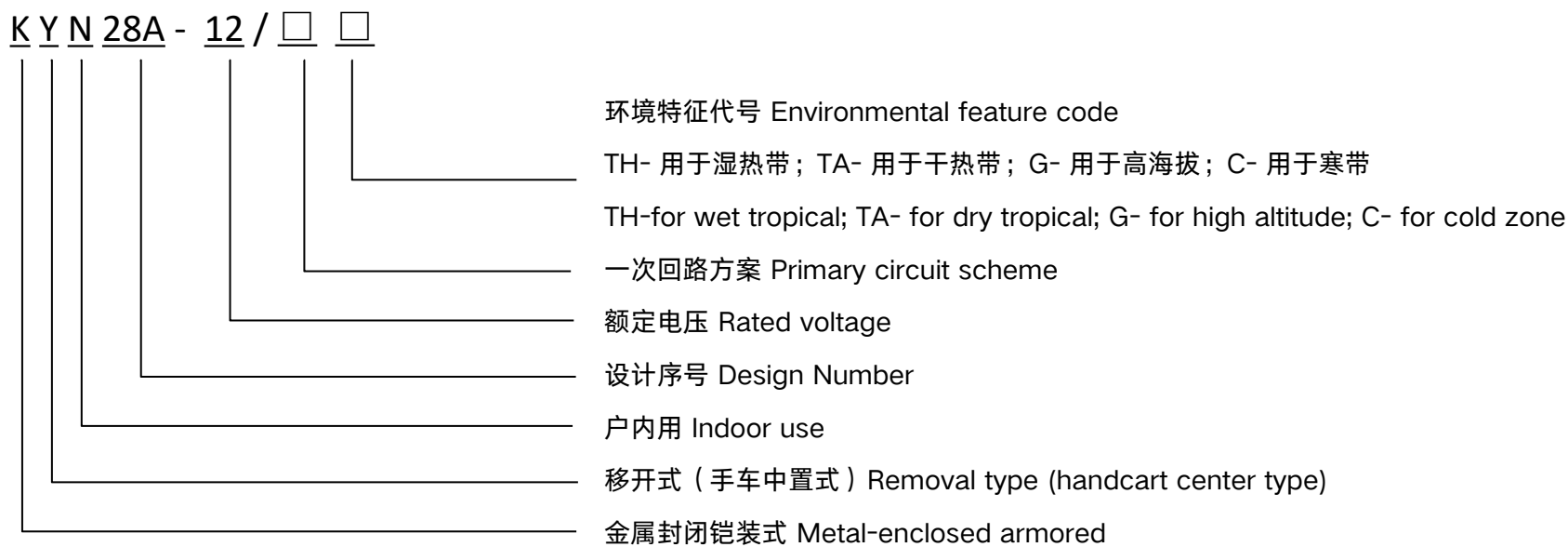
Armored Removable AC Metal-enclosed Switchgear

1、产品概述 Product Overview

KYN28A- 12 是户内 12kV 铠装移开式开关柜，柜体分独立隔舱，配备五防联锁；采用可抽出式断路器小车，适配多款主流真空断路器，运维便捷，多用于厂区、电站、配电房完成电能分配与线路保护。

KYN28A- 12 is indoor 12kV armored withdrawable switchgear. It features independent compartment layout and five-prevention interlock system, compatible with mainstream vacuum circuit breakers via removable trolley structure for easy maintenance. Widely used in factories, power stations and distribution rooms for power distribution and circuit protection.

2、型号及含义 Model and Meaning



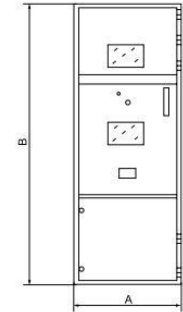
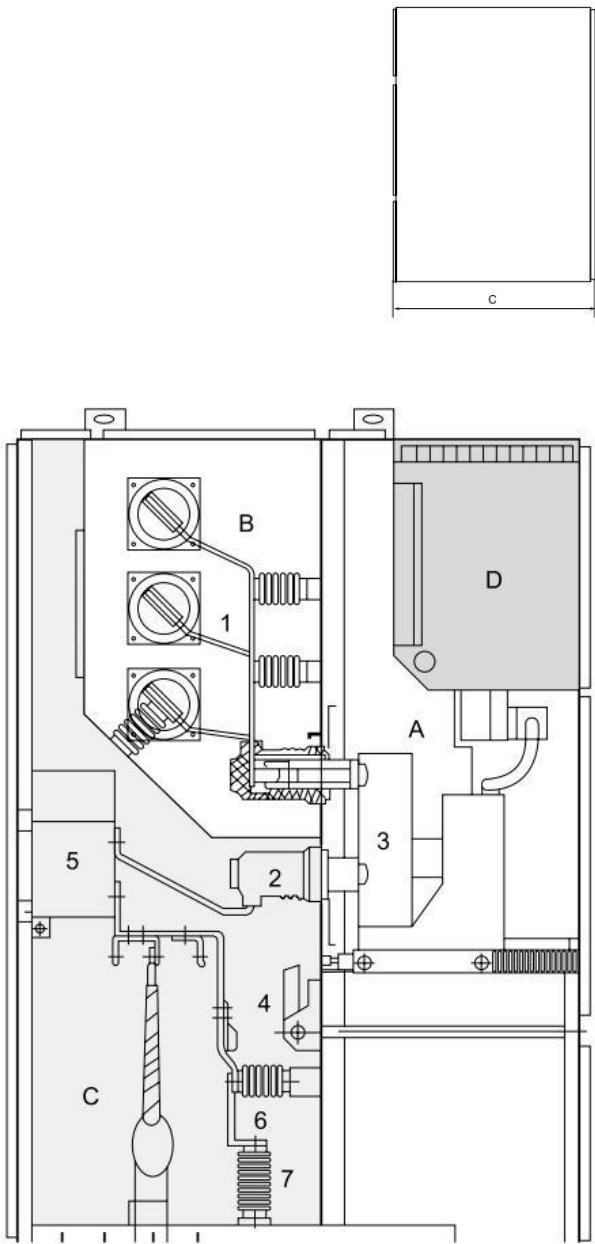
3、使用环境Service Conditions

- 环境温度：最高温度 +40℃，最低温度 -15℃（特殊工艺下，可达 -45℃）；
 - 环境湿度：日平均 < 95%，月平均值 ≤ 90%；
 - 海拔高度：1000m 以下；
 - 抗地震度：地震烈度不超过 8 级；
 - 周围空气应不含腐蚀性或可燃气体、水蒸气等明显污染；
 - 无严重污秽及经常性的剧烈震动，严酷条件下严酷度设计满足 1 类要求；
 - 在超过 GB3906 规定的正常环境条件下使用时，由用户和制造厂协商。
- 注：①相对湿度大于 70% 时应接通电加热器。②凡海拔高度超过 1000m 的地方，按 JB/Z102-71 规定处理。
- Ambient temperature: the highest temperature +40 °C, the lowest temperature -15 °C (under special process, up to -45 °C);
 - Ambient humidity: daily average <95%. Monthly average ≤ 90%;
 - Altitude: less than 1000m;
 - Anti-seismic; the seismic intensity does not exceed 8;
 - The surrounding air should be free of corrosive or flammable gas, water vapor and other obvious pollution;
 - No serious pollution and frequent severe vibration. Strict design under severe conditions meets Class 1 requirements;
 - When using beyond the normal environmental conditions specified in GB3906, the user and the manufacturer negotiate.
- Note: 1 When the relative humidity is greater than 70%, the electric heater should be turned on. 2 Where the altitude is more than 1000m, it shall be treated according to JB/Z102-71.

4、技术参数 Technical Parameters

项目Project		单位Unit	参数Parameter	
额定电压Rated voltage		kV	3.6,7.2,12	
额定频率Rated frequency		Hz	50	
断路器额定电流Circuit breaker rated current		A	630、1250、1600、2000、2500、3150	
开关柜额定电流Switch cabinet rated current		A	630、1250、1600、2000、2500、3150	
额定动稳定电流Rated dynamic current(4s)		kA	16、20、25、31.5、40、50	
额定稳定电流(峰值)Rated steady current(peak)		kA	40、50、63、80、100、125	
额定短路开断电流Rated short-circuit breaking current		kA	16、20、25、31.5、40、50	
额定短路关合电流(峰值)Rated short circuit closing current(peak)		kA	40、50、63、80、100、125	
额定绝缘水平 Rated insulation level	1 min工频耐受电压Power frequency withstand voltage	KV	24	32 42
	雷冲击耐受电压Light impulse withstand voltage		40	60 75
防护等级Protection level			外壳IP4X、隔离间、断路器室门打开时为IP2X IP2X for enclosure IP4X,isolation compartment,and circuit breaker compartment door	

5、开关柜外形尺寸图 Switchgear Dimensions



- A 手车 Handcar
- B 母线室 Bus chamber
- C 电缆室 Cable chamber
- D 继电器仪表室Relay instrument chambe



HXGN□-12 （ SF6 ）

单元式交流金属封闭环网开关设备

Unite type AC metal closed ring network switchgear

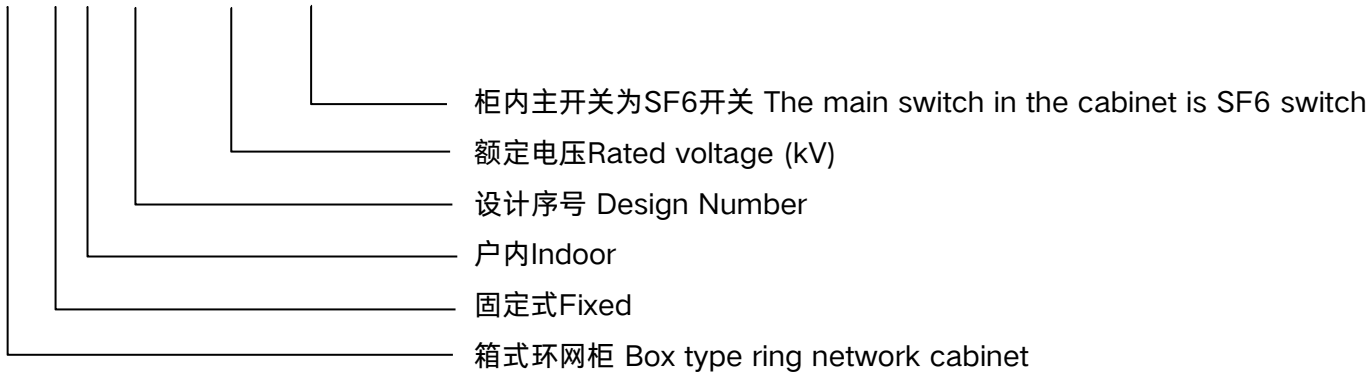
1、产品概述 Product Overview

HXGN17-12 箱式固定交流金属封闭开关设备，主要面向城市电网改造、新建配电工程研发生产，属于常用高压环网柜。设备可靠开断负荷电流、短路电流，也能完成短路电流关合，满足配电系统通断、故障保护需求。主回路配置弹簧操作机构，支持手动、电动两种操控方式；接地开关、隔离刀闸搭配独立手动操作机构，适配检修工况操作。产品成套集成度高、结构紧凑占地小，运行无燃烧、爆炸隐患；同时配备完整的五防联锁功能，能规避各类误操作，供电安全稳定，适用于各类环网配电场景。

The HXGN17-12 box-type fixed AC metal-enclosed switchgear is a common high-voltage ring main unit developed for urban power grid renovation and new distribution engineering construction. It is capable of breaking load current and short-circuit current, as well as making short-circuit current reliably to meet the requirements of circuit switching and fault protection in power distribution systems. The main circuit adopts spring operating mechanisms with both manual and electric operation modes. Separate manual operating mechanisms are equipped for earthing switches and isolating blades to adapt to operation in maintenance scenarios. Featuring high integration and compact size to save installation space, the equipment brings no combustion or explosion risks during operation. It is also fitted with complete five-prevention interlocks to avoid incorrect operations, delivering stable and safe power supply for various ring network power distribution applications.

2、型号及含义 Model and Meaning

HXGN□-12(SF6)



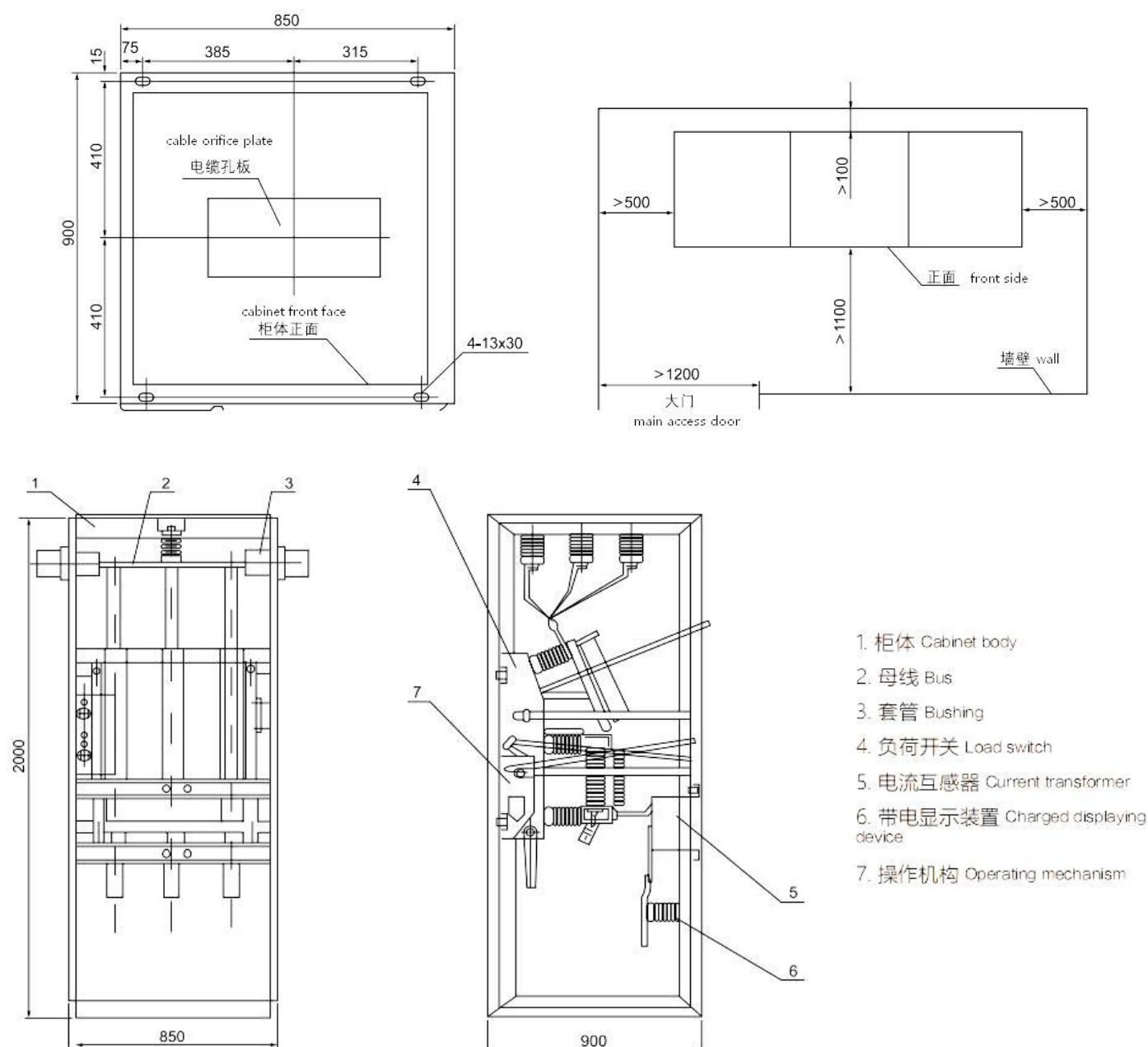
3、使用环境Service Conditions

- 环境温度：上限 +40℃，下限 -25℃；
- 海拔高度：海拔高度不超过 2000m；
- 相对湿度：日平均值不大于 95%；月平均值不大于 90%；
- 周围环境：周围空气不受腐蚀气体或可燃性气体、水蒸气等明显污染；
- 无经常性的剧烈震动。
- Ambient temperature: upper limit +40℃ , lower limit -25℃ ;
- Altitude: the altitude does not exceed 2000m;
- Relative humidity: the daily average is not more than 95%; the monthly average is not more than 90%;
- Ambient environment: The surrounding air is not obviously polluted by corrosive gases or flammable gases, water vapor, etc.
- No frequent and severe vibrations.

4、技术参数 Technical Parameters

项目Item	单位Unit	参数Parameters
额定电压Rated voltage	kV	12
额定频率Rated frequency	Hz	50
主母线额定电流/熔断器最大额定电流Main bus bar rated current fuse breaker maximum rated current	A	630/125
主回路、接地回路额定短时耐受电流 Main loop,earthed loop short time endurable rated current	kA/s	20/3
主回路、接地回路额定峰值耐受电流 Main loop,earthed loop maximum endurable rated current	kA	50
主回路、接地回路额定短路关合电流 Main loop,earthedloop short circuit on-and off rated current	kA	50
负荷开关满容量开断数 the opening number of the load switch with full capacity	次	100
熔断器开断电流The fused breaker opening the current	kA	31.5、40
额定闭环开断电流Rated closed loop opening current	A	630
额定转移电流Rated shift current	A	1600
机械寿命Machine'life	次	2000
1 min 工频耐压 (峰值) 相间、对地/隔离断口 1min line frequency resistance(peak value)recurrence,to the earth/isolation fracture	kV	42/48
雷电冲击耐受电压(峰值)相间、对地/隔离断口 The lightning shock resistance (peak value)recurrence,to the earth/isolation fracture	kV	75/85
二次回路1min工频耐压Secondary loop 1min line frequency voltage resistance	kV	2
防护等级Protection grade	IP3X	

5、开关柜外形尺寸图 Switchgear Dimensions



MNS

低压抽出式成套开关设备

Low-voltage withdrawable switchgear

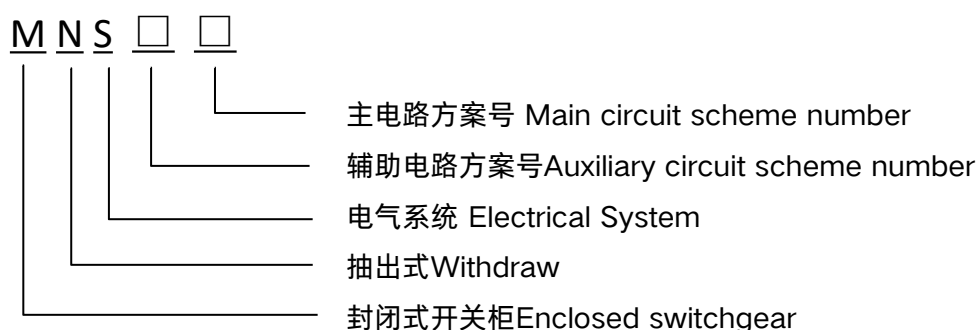


1、产品概述 Product Overview

MNS 低压抽出式成套开关设备（以下简称为装置）是参考瑞士 ABB 公司 MNS 系列低压开关柜并加以综合改进后用标准模块生产制造的产品。本装置适用于交流 50Hz，额定工作电压 660V 及以下的系统。作为各种发电、输电、配电、电能转换和电能消耗设备的控制设备，能广泛应用于各工矿企业、大楼宾馆、市政建设等低压配电系统中。除一般陆用外，经过特殊处理后，还可以用于海上石油钻采平台和核电站中。

MNS LV withdrawable switchgear (hereinafter referred to as device) is manufactured by standard module through consulting MNS series low voltage switch cabinet of Switzerland ABB Co-mpany, and synthetically improved. The device is applicable to the system with AC 50Hz, rated working voltage 660V and below, used as control device for various power generation, transmission, distribution, power transfer and power consumption device. It is widely used in low voltage distribution system of various mining enterprise, tall building and hotel, municipal construction etc. Besides the general land use, after special disposal, it also can be used for marine petrol drill taken platform and nuclear power station.

2、型号及含义 Model and Meaning



3、使用环境 Service Conditions

- 周围空气温度不高于 +40℃，不低于 -5℃，并且 24h 平均温度不高于 +35℃；
- 周围空气清洁，相对湿度在最高温度为 +40℃时不超过 50%，在较低温度时允许有较高的相对湿度，例如 +25℃时为 90%，但应考虑到由于温度变化可能会偶然产生适度的凝露；
- 户内使用，海拔高度不超过 2000m；
- 在无显著摇动和冲击震动的地方；
- 污染等级：3 级；
- 抗震烈度：8 级；
- 开关柜运输和储存过程中的温度可在 -25℃至 55℃范围之间，在短时间内（不超过 24h）温度可达到 +70℃；
- 若上述使用条件不能满足时，应由用户和制造厂协商解决。

- The ambient air temperature is not higher than +40℃, not lower than -5℃, and the average temperature of 24 h is not higher than +35℃;
- The surrounding air is clean, the relative humidity is not more than 50% at the highest temperature of +40℃, and the higher relative humidity is allowed at lower temperatures, for example, 90% at +25℃, but it should be considered that moderate condensation may occasionally occur due to temperature changes;
- Indoor use, the altitude does not exceed 2000m;
- in places where there is no significant shaking or shock;
- Pollution level: 3;
- Seismic intensity: 8 levels;
- The temperature during the transportation and storage of the switchgear can be between -25℃ and 55℃, and the temperature can reach +70℃ in a short time (not more than 24h);
- If the above conditions of use cannot be met, it should be resolved by the user and the manufacturer.

4、技术参数 Technical Parameters

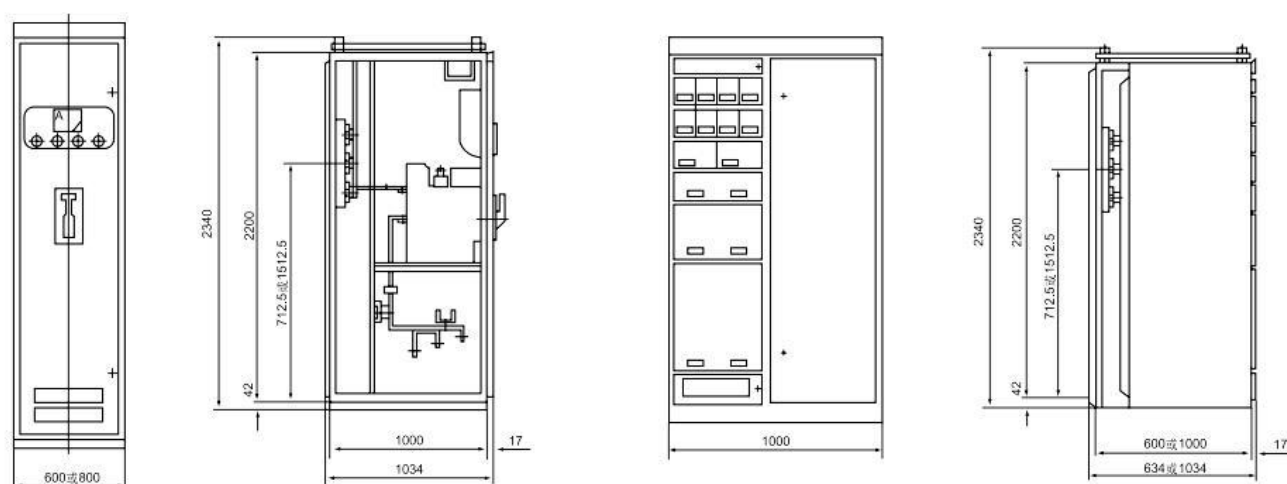
项目Project	参数Parameter
额定绝缘电压Rated insulation voltage	690VIAC
额定工作电压Rated operating voltage	400VIAC
额定冲击耐受电压Rated impulse withstand voltage	8kV
额定频率Rated frequency	50-60Hz
主母线最大工作电流Main busbar maximum operating current	6300A
主母线额定耐受电流Main busbar rated withstand current	100kA
主母线额定峰值耐受电流Main busbar rated peak withstand current	220kA
配电母线(垂直母线)最大工作电流 Distribution bus(vertical bus)maximum operating current	1200(2000A)
配电母线(垂直母线)短时峰值电流 Distribution bus(vertical bus)short-time peak current	176kA
防护等级Protection level	IP30~IP54

5、结构特点 Structural features

装置的基本柜架为组合式装配结构，柜架的基本结构件都经过镀锌处理，通过自攻锁紧螺钉或 8.8 级方角螺丝紧固互相连接成基本柜架，再按方案变化需要，加上相应的门、封板、隔板、安装支架，以及母线、功能单元等零部件，组装成一台完整的装置。装置内零部件尺寸，隔室尺寸实行模数化（模数单位 $e=25\text{mm}$ ）。

The basic cabinet of device is combined assembly structure. Basic structural pieces of cabinet is zinc plated, connected and firmed into basic bracket through self tappinglocking screw or 8.8 grade square corner screw. According to the change demand of project, additionally add corresponding gate, closing board,baffle plate, installationsupport and the components of bus bar, function units, to assemble a complete set of device. Perform modulus to interior component and compartment size (Modulus unite= 25mm).

6、内部结构 Internal structure



PC 柜
PC cabinet

抽出式 MCC 柜（单面操作）
Draw-out type MCC cabinet (Single side operation)



GCS

低压抽出式成套开关设备

Low-voltage withdrawable switchgear

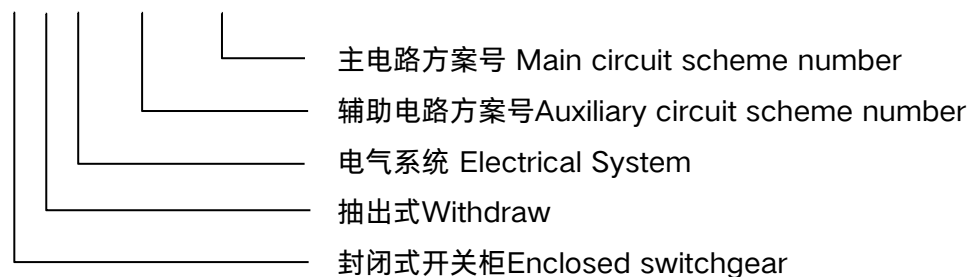
1、产品概述 Product Overview

GCS 低压成套配电装置适配发电厂、石油化工、冶金、纺织、高层建筑等多行业配电场景，尤其适用于自动化程度高、需对接计算机控制系统的大型电厂、石化项目。设备适用三相交流 50 (60) Hz 电网，额定工作电压涵盖 380V、400V、660V，额定电流最高可达 6300A，可完成配电输送、电机集中控制、无功功率补偿等功能，是通用性强、适配工业及建筑供电的主流低压配电设备。

GCS low-voltage complete distribution equipment is applicable to power distribution scenarios across power plants, petrochemical, metallurgical, textile, high-rise building and other industries, especially for large-scale power plant and petrochemical projects featuring high automation and computer system interfacing requirements. Designed for 3-phase 50(60)Hz AC power grids with rated operating voltages of 380V, 400V, 660V and rated current up to 6300A, the unit fulfills power distribution, centralized motor control and reactive power compensation duties, serving as a widely adopted reliable low-voltage power distribution solution for industrial and building power supply systems.

2、型号及含义 Model and Meaning

G C S - □ - □



3、使用环境 Service Conditions

- 海拔不超过 2000m；
- 周围空气温度不高于 +40℃，并且 24h 内平均温度不高于 +35℃，周围空气温度不低于 -50℃；
- 大气条件：空气清洁，相对湿度在温度为 +40℃时不超过 50%，在温度较低时允许有较高的相对湿度，例如：+20℃时为 90%；
- 没有火灾，爆炸危险，严重污秽，化学腐蚀及剧烈震动的场所；
- 与垂直面倾斜不超过 5°；
- 本产品适合以下温度运输储存：-25℃ ~ +55℃，在短时间内（不超过 24h）不超过 +70℃。
- 注：如上述使用条件不能满足时，应由用户在订货时向制造厂方提出，协商解决。

- The altitude does not exceed 2000m;
- The ambient air temperature is not higher than +40℃, and the average temperature within 24h is not higher than +35℃, and the ambient air temperature is not lower than -50℃;
- Atmospheric conditions: the air is clean, the relative humidity does not exceed 50% at a temperature of +40℃, and the higher relative humidity is allowed at a lower temperature, such as: 90% at +20℃;
- There is no fire, explosion hazard, serious pollution, chemical corrosion and severe vibration;
- It is inclined no more than 5° from the vertical plane;
- This product is suitable for the following temperature transportation and storage: -25℃ ~ +55℃, in a short time (not more than 24h) does not exceed +70℃.
- Note: If the above conditions of use cannot be met, the user shall submit it to the manufacturer at the time of ordering and resolve it by negotiation.

4、技术参数 Technical Parameters

主电路额定电压(V)Rated voltage of main circuit	
交流AC 380(400)、(660)	母线额定短时耐受电流(kA/1s)Rated short time withstand current of bus bar 50、80
辅助电路额定电压(V)Rated voltage of auxiliary circuit	母线额定峰值耐受电流(kA/0.1s)Rated peak withstand curent of bus bar 105、176
交流AC 220、380(400)	工频试验电压(V/1min)Line frequency test voltage
直流DC 110、220	主电路Main circuit 2500
额定频率(Hz)Rated frequency 50(60)	辅助电路Auxiliary circuit 1760
额定绝缘电压(V)Rated insulation voltage 660(1000)	母线Bus bar
额定电流(A)Rated current	三相四线制Three-phase four-wire system A.B.C.N
水平母线Horizontal bus bar ≤4000	三相五线制Three-phase ve-wire system A.B.C.PE.N
垂直母线(MCC)Vertical bus bar 1000	防护等级Protection grade IP30、IP40

5、主要特点 Main Features

1. 主构架采用 8MF 型钢，型钢的二侧面分别有模数 20mm 和 100mm 的 f9.2mm 安装孔，内部安装灵活方便。

2. 主构架装配形式设计为两种，全组装式结构和部分（侧框和横梁）焊接式结构，供用户选择。

3. 装置的各功能室相互隔离，其隔室分为功能单元室、母线室和电缆室。各室的作用相对独立。

4. 水平主母线采用柜后平置排列方式，以增强母线抗电动力的能力，是使装置的主电路具备高短路强度能力的基本措施。

5. 电缆隔室的设计使电缆上下进出均十分方便。
1. Main framework adopts 8MF bar steel. Both sides of bar steel is installed with $\varphi 9.2\text{mm}$ mounting hole with modulus 20mm and 100mm. Inner installation is flexible and easy.

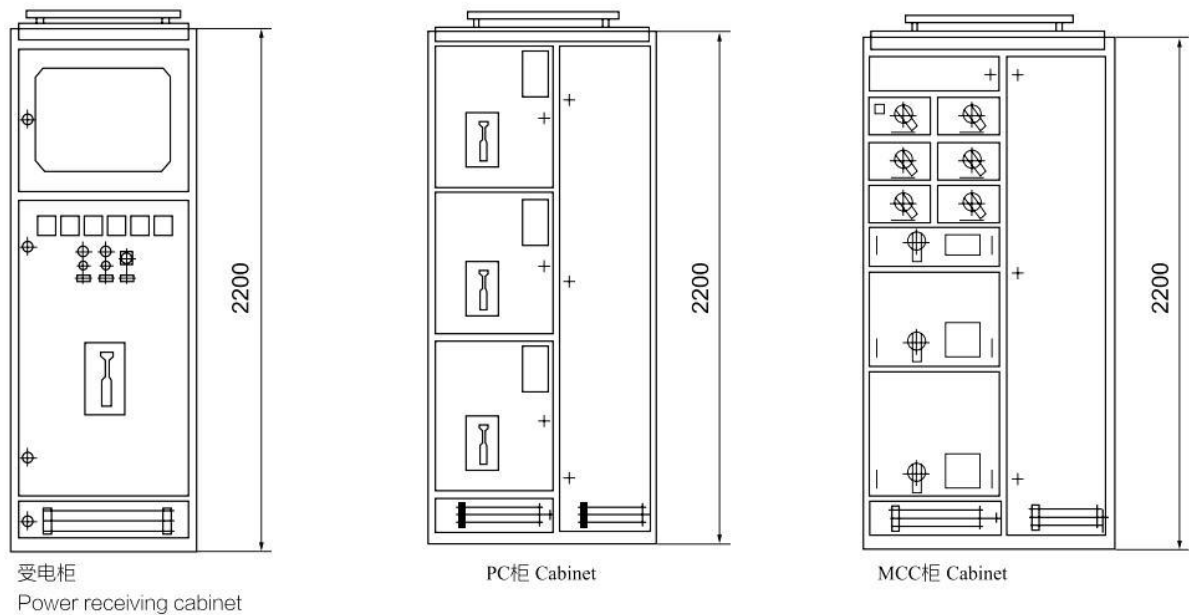
2. Two types of assembly form design for main framework, full assembly structure and partial (side frame and cross rail) welding structure for user selection.

3. Each function compartment of device is separated mutually. The compartments are divided into function unit compartment, bus bar compartment and cable compartment. Each one hasrelative independent function.

4. Horizontal bus bar adopts cabinet back level placed array pattern for enhancing the capacity of resisting electrodynamic force for bus bar. It is the basic measure for obtaining highshort circuitstrength capacity for main circuit.

5. Cable compartment design makes cable outlet and inlet up and down convenient.

6、内部结构 Internal Structure



高 H	2200									
宽 W	400		600		800			1000		
深 D	800	1000	800	1000	600	800	1000	600	800	1000



GCK

低压抽出式成套开关设备

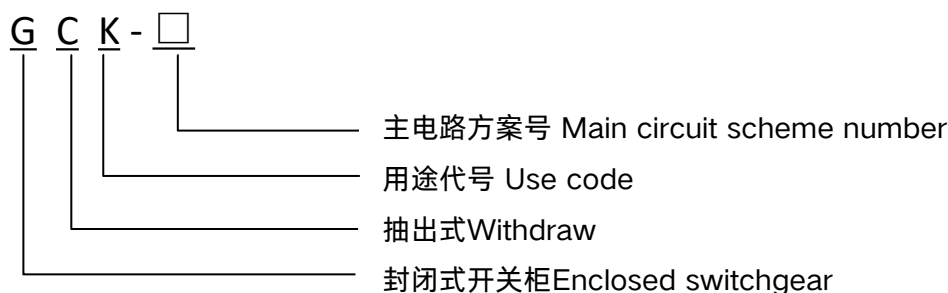
Low-voltage withdrawable switchgear

1、产品概述 Product Overview

GCK 低压抽出式开关柜成套开关设备适用于交流 50Hz，额定工作电压 380V 的低压配电系统。它包含动力中心 (PC) 和电动机控制中心 (MCC) 的功能，各项技术参数均达到国家标准，具有结构先进、外形美观、电气性能高、防护等级高、安全可靠、维护方便等特点，是冶金、石油、化工、电力、机械、轻纺等行业低压供电系统理想的配电装置。

GCK LV withdrawable switchgear cabinet is applicable to the low voltage distribution system with AC50Hz, rated working voltage 380V. It contains power center (PC) and motor control center (MCC) functions. Each technical parameter all reaches national standards. With characteristics of advanced structure, beautiful appearance, high electric performance, high protection grade, reliable and safe and easy to maintain. It is the ideal distribution device for low voltage power supply system in metallurgy, petroleum, chemical, power, machinery and light weaving industries etc.

2、型号及含义 Model and Meaning



3、使用环境 Service Conditions

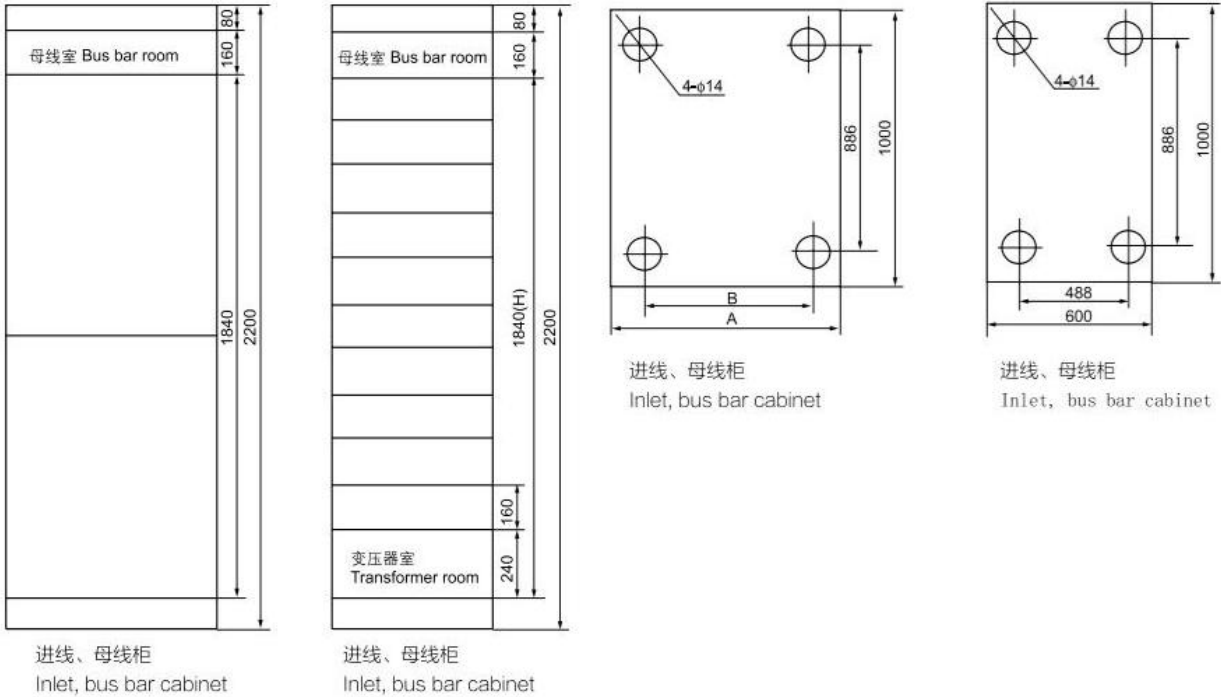
- 海拔不超过 2000m；
- 周围空气温度不高于 +40℃，并且 24h 内平均温度不高于 +35℃，周围空气温度不低于 -50℃；
- 大气条件：空气清洁，相对湿度在温度为 +40℃ 时不超过 50%，在温度较低时允许有较高的相对湿度，例如：+20℃ 时为 90%；
- 没有火灾，爆炸危险，严重污秽，化学腐蚀及剧烈震动的场所；
- 与垂直面倾斜不超过 5°；
- 本产品适合以下温度运输储存：-25℃ ~ +55℃，在短时间内（不超过 24h）不超过 +70℃。
- 注：如上述使用条件不能满足时，应由用户在订货时向制造厂方提出，协商解决。

- The altitude does not exceed 2000m;
- The ambient air temperature is not higher than +40℃, and the average temperature within 24h is not higher than +35℃, and the ambient air temperature is not lower than -50℃;
- Atmospheric conditions: the air is clean, the relative humidity does not exceed 50% at a temperature of +40℃, and the higher relative humidity is allowed at a lower temperature, such as: 90% at +20℃;
- There is no fire, explosion hazard, serious pollution, chemical corrosion and severe vibration;
- It is inclined no more than 5° from the vertical plane;
- This product is suitable for the following temperature transportation and storage: -25℃ ~ +55℃, in a short time (not more than 24h) does not exceed +70℃.
- Note: If the above conditions of use cannot be met, the user shall submit it to the manufacturer at the time of ordering and resolve it by negotiation.

4、技术参数 Technical Parameters

防护等级Protection grade		IP40、IP30
额定工作电压Rated working voltage		AC、380(V)
频率Frequency		50Hz
额定绝缘电压Rated insulation voltage		660V
工作条件Working conditions		
环境Environment		室内Indoors
海拔高度Altitude		≤2000m
环境温度Ambient temperature		-5℃~+40℃
在储存、运输条件下，最低温度为The min temperature under store and transportation		-30℃
相对湿度Relative humidity		≤90%
控制电动机容量(kW)Capacity of control motor(kW)		0.4—155
额定电流(A)Rated curent(A)		
水平母线Horizontal bus bar		1600、2000、3150
垂直母线Vertical bus bar		630、800
主电路触头接插件Contact connector of main circuit		200、400
馈电电路Supply circuit		1600
最大电流Max current	PC柜cabinet	630
受电电路Power receiving circuit	MCC柜cabinet	1000、1600、2000、2500、3150
额定短时耐受电流(kA)Rated short time withstand current(kA)		
有效值Virtual value		50、80
峰值Peak value		105、176
工频耐压(V/1min)Line frequency withstand voltage(V/1min)		2500

5、内部结构 Internal Structure



PC 柜 PC cabinet	2200 × 600 (800、1000) × 1000
MCC 柜 MCC cabinet	2200 × 600 × 1000
抽屉高度 Height of drawer	160 240 320 400 480 560 640
受电或馈电 Power receiving or feeding	600 486
受电或母联 Power receiving or bus bar connection	800 686
受电或母联 Power receiving or bus bar connection	1000 886

注：出线柜可组合功能单元的 H 为 1600，若不用公用电源时，可达 1840。
Note: "H" of combined function unit of outlet cabinet is 1600. If not using public power, it will achieve 1840。



GGD

交流低压固定式成套开关设备

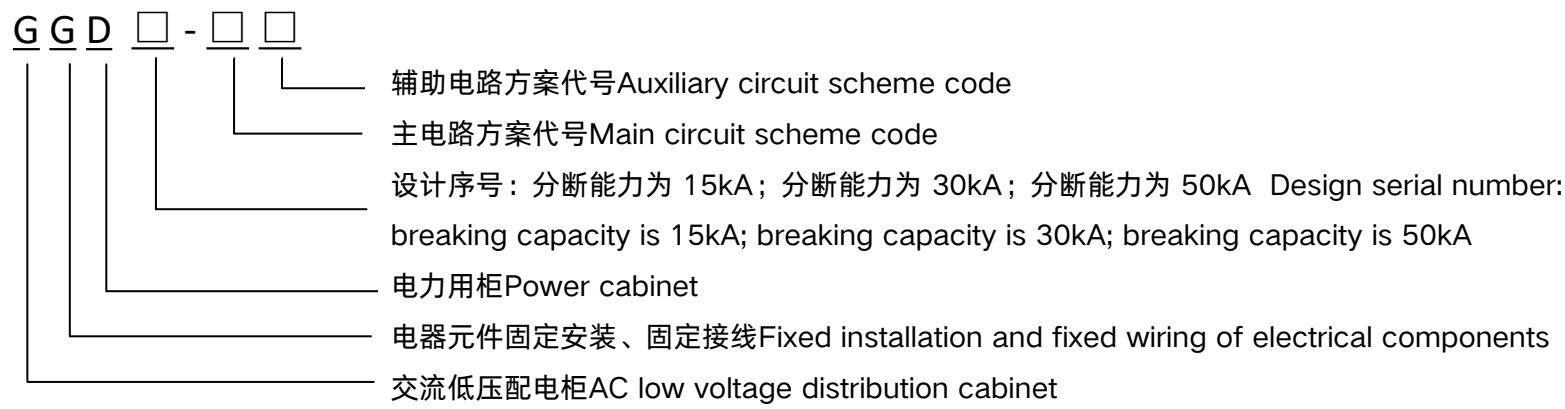
AC low-voltage fixed switchgear

1、产品概述 Product Overview

GGD 型交流低压配电柜适用于发电厂、变电站、厂矿企业等电力用户的交流 50Hz，额定工作电压 380V，额定工作电流至 3150A 的配电系统，作为动力、照明及配电设备的电能转换、分配与控制之用。GGD 型交流低压配电柜是根据能源部主管上级与广大电力用户及设计部门的要求，本着安全、经济、合理、可靠的原则设计的新型低压配电柜。产品具有分断能力高、动热稳定性好、电气方案灵活、组合方便、系列性、实用性强、结构新颖、防护等级高等特点，可作为低压成套开关设备的更新换代产品使用。

GGD-type AC low-voltage power distribution cabinet is a new type of low-voltage power distribution cabinet designed according to the requirements of the superior department of the Ministry of Energy and the majority of power users and design departments, based on the principles of safety, economy, reasonableness and reliability. The product has the characteristics of high breaking capacity, good dynamic thermal stability, flexible electric scheme, convenient combination, seriality, practicability, novel structure and high protection level. It can be used as a new generation of low-voltage switchgear.

2、型号及含义 Model and Meaning



3、使用环境Service Conditions

- 1. 周围空气温度不高于 +40℃，不低于 -5℃，并且 24h 内其平均温度不高于 +35℃。

•2. 户内安装使用，使用地点的海拔高度不超过 2000 米。

•3. 周围空气相对湿度在最高温度 +40℃时不超过 50%，在较低温度时允许有较大的相对湿度，例如 +20℃时为 90%，应考虑到温度变化，
•可能会偶然产生凝露的影响。

•4. 设备安装时与垂直面的倾斜度不超过 5°。

•5. 设备安装在无剧烈震动和冲击的地方，以及不足以使电器元件受到腐蚀的场所。

•6. 用户有特殊要求时可与制造厂协商。

•1. Ambient air temperature: -5℃ ~+40℃ and the average temperature should not exceed +35℃ in 24h.

•2. Install and use indoors. Altitude above sea level for operation site should not exceed 2000M.

•3. Relative humidity should not exceed 50% at max temperature +40℃ . Higher relative humidity is allowed at lower temperature. Ex. 90% at +20℃ . But in view of the
•temperature change, it is possible that moderate dews will produce casually.

•4. Installation gradient not exceed 5° .

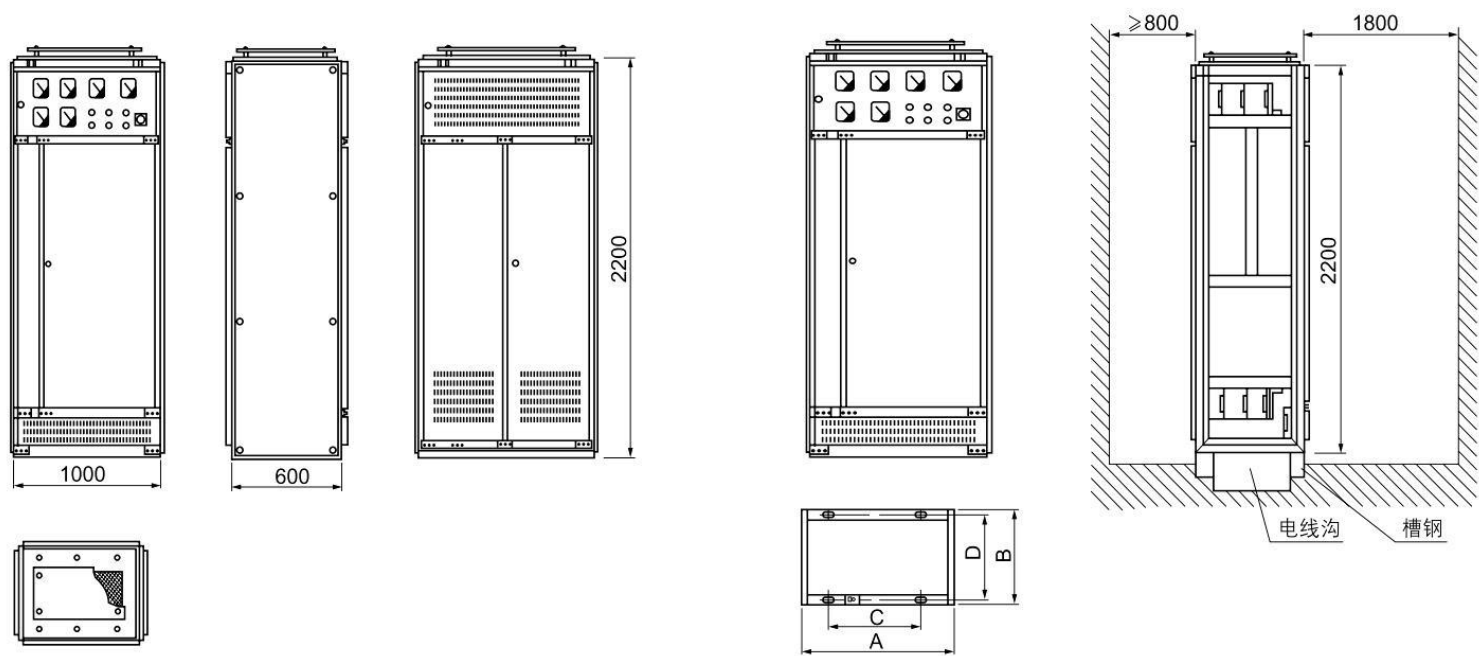
•5. Install in the places without fierce vibration and shock and the sites insufficient to erode the electrical components.

•6. Any specific requirement, consult with manufactory.

4、技术参数 Technical Parameters

型号 Model	额定电压 Rated voltage(V)	额定电流 Rated current(A)		额定短路开断电流 Rated short-circuit breaking current(kA)	额定短时耐受电流 Rated short-time withstand current(kA)	额定峰值耐受电流 Rated peak withstand current(kA)
GGD1	380	A	1000	15	15	30
GGD1	380	B	600(630)	15	15	30
GGD1	380	C	400	15	15	30
GGD2	380	A	1500(1600)	30	30	63
GGD2	380	B	1000	30	30	63
GGD2	380	C	600	30	30	63
GGD3	380	A	4000	50	50	105
GGD3	380	B	2500	50	50	105
GGD3	380	C	2000	50	50	105

5、内部结构 Internal Structure

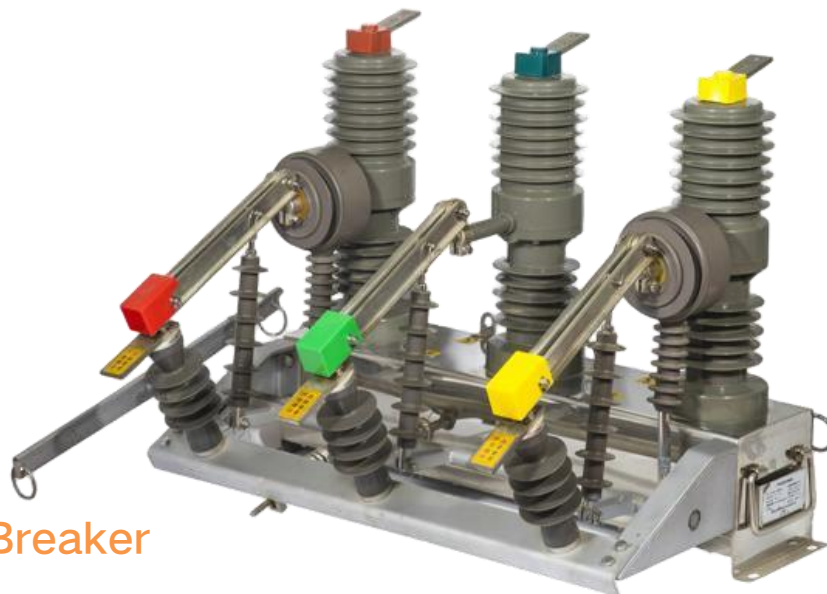


产品代号 Product code	A	B	C	D
GGD06	600	600	450	556
GGD06A	600	800	450	756
GGD08	800	600	650	556
GGD08A	800	800	650	756
GGD10A	1000	600	850	556
GGD10A	1000	800	850	756
GGD12	1200	800	1050	756

ZW32-12

户外高压永磁真空断路器

Outdoor Permanent-magnetic Circuit Breaker



1、产品概述 Product Overview

ZW32-12 型户外高压真空断路器用于交流 50Hz, 电压 10-12KV 的三相电力系统, 作为分断、关合负荷电流之用, 它具有过载及短路保护功能, 满足控制、测量要求, 还可实现远方控制、监视等。适用于变电站及工矿企业配电系统中作保护和控制之用及农村电网中频繁操作场所。

ZW32-12 type outdoor high voltage VCB, is suitable for the 3-phase power system with AC 50HZ, voltage 10-12KV, used as breaking, closing load current. It has the function of overload and short circuit protection, can meet the requirements of controlling and measurement. It also can be used as remote control, monitoring, etc. It is suitable for controlling and protecting equipment for substation and mining enterprises power system, also suitable for the places with frequently operation in rural power grid.

2、型号及含义 Model and Meaning



3、使用环境 Service Conditions

- 海拔高度标准设计为不超过1000米, 如有特殊要求, 也可按海拔2000米~4000 米的要求修正设计, 以满足不同海拔的要求;
- 周围空气温度: -40℃ ~ +40℃;
- 风速不大于35m/s;
- 无剧烈震动的场合;
- 污秽等级IV级。
- The standard design altitude does not exceed 1000 m. For special requirements, the design can be revised for altitudes ranging from 2000 m to 4000 m to meet operation demands at different altitudes;
- Ambient air temperature: -40℃ ~ +40℃;
- Maximum wind speed: 35 m/s;
- Installation site free from severe vibration;
- Pollution class IV.

4、功能特点 Functional Features

断路器采用三相支柱式结构, 开断性能稳定可靠, 无燃爆风险、免维护、体积小、重量轻、使用寿命长; 整体密封结构优异, 防潮防凝露能力突出, 适配严寒、潮湿区域使用。

The circuit breaker adopts a three-phase pillar structure with stable & reliable breaking performance, no fire/explosion hazard, maintenance-free operation, compact size, light weight and long service life. Its high-performance sealed structure greatly improves moisture and condensation resistance, suitable for cold and humid regions.



5、技术参数 Technical Parameters

序 号 sl.No	项 目 Item			单位 Unit	数据 Data	
1	额定电压Rated voltage				12	24
2	额定绝缘水平 Rated insulation level	1min工频耐压 1min power frequency withstand voltage	干式Dry	kV	42	65
			湿式Wet		34	50
		雷电冲击耐压(峰值) Lightning impuse wihstand voltage(peak)			75	1250
3	额定电流Rated Current			A	630;400;200	630;400;200
4	额定短路开断电流Rated short circuit breaking current			kA	20;16;12.5	20;16;12.5
5	额定操作顺序Rated operating sequence				分0.35-合分180S-合分O-0.35-CO-180S-CO	分0.35-合分180S-合分O-0.35-CO-180S-CO
6	额定短路开断次数Rated short-circuit swiching current(peak)			次Times	30	30
7	额定短路关合电流(峰值) Rated short-circuit switching current(peak)			kA	50	50
8	额定峰值耐受电流 Rated peak wihstand current					
9	额定短路耐受电流 Rated short-circuit withstand current			kA	20	20
10	额定短路持续时间 Rated short circuit duration			S	4	4
11	分 闸 时 间 (分励脱扣) Opening time(SHT)	最高操作电压 Maximum operating voltage		ms	15-50	15-50
		额定操作电压 Rated operating voltage				
		最低操作电压 Minimum operating voltage			30-60	30-60
12	合闸时间 Closing time			ms	25-50	25-50
13	全开断时间 Full-off fime				≤100	≤100
14	燃弧时间 Arcing time				20	20
15	机械寿命 Mechanical life			次Times	1000	1000
16	储能电机额定输入功率 Charging motor rated input power			W	40	40
17	额定操作电压及辅助回路额定电压 Rated operating voltage and auxiliary voltage circuit			V	DC220、110、24	DC220、110、24
					AC220、10、24	AC220、110、24
18	额定电压下储能时间 Rated voltage of the storage time			S	≤10	≤10
19	过电流脱扣器 Over current Release	额定电流 Rated Current		A	5	5
		脱扣电流准确度 Trip current Accuracy		%	±10	± 10

ZW20-12

户外高压真空断路器

Outdoor High Voltage Vacuum Circuit Breaker

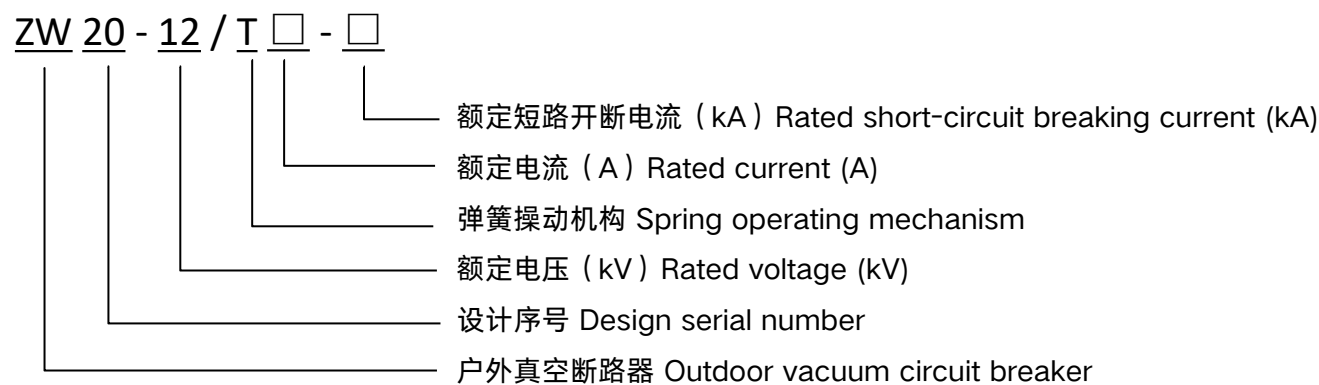


1、产品概述 Product Overview

ZW20-12 户外高压交流分界真空断路器，额定电压 12kV、三相 50Hz，可分合负荷、过载、短路电流；适配变电站、工矿及城乡配电网，适配频繁操作、配网自动化场景，搭配控制器可实现重合闸功能。产品箱体充 SF₆ 气体密封免维护，弹簧机构传动可靠，适合柱上安装使用。

ZW20-12 outdoor high-voltage AC boundary vacuum circuit breaker, rated 12kV, 3-phase 50Hz, switches load, overload and short-circuit currents. It serves substations, industrial plants and urban/rural grids, fits frequent operation and distribution automation; paired with controllers to realize reclosing. SF₆ filled sealed cabinet enables maintenance-free use, reliable spring mechanism makes it ideal for pole-mounted installation.

2、型号及含义 Model and Meaning



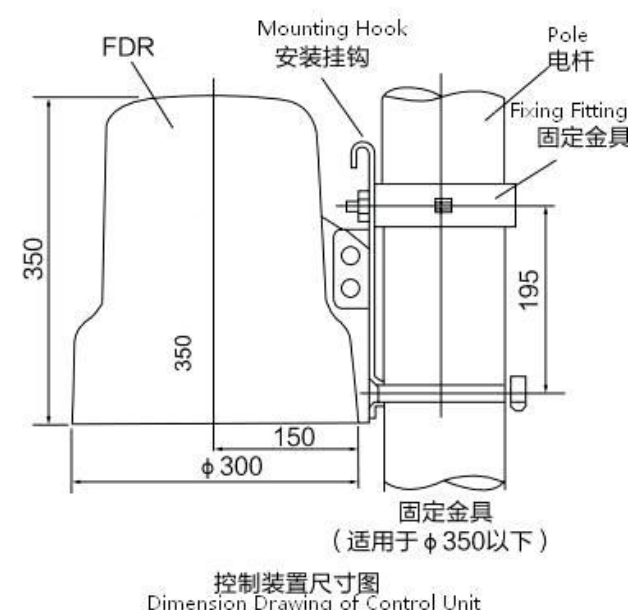
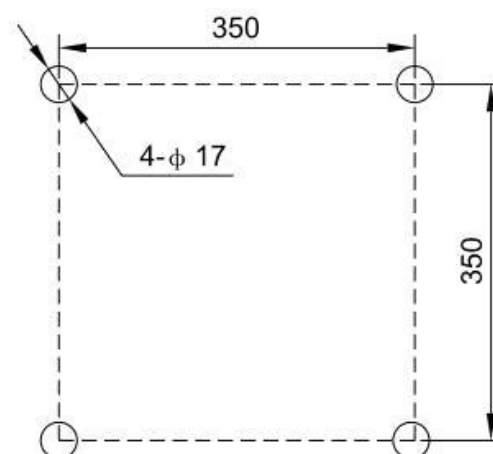
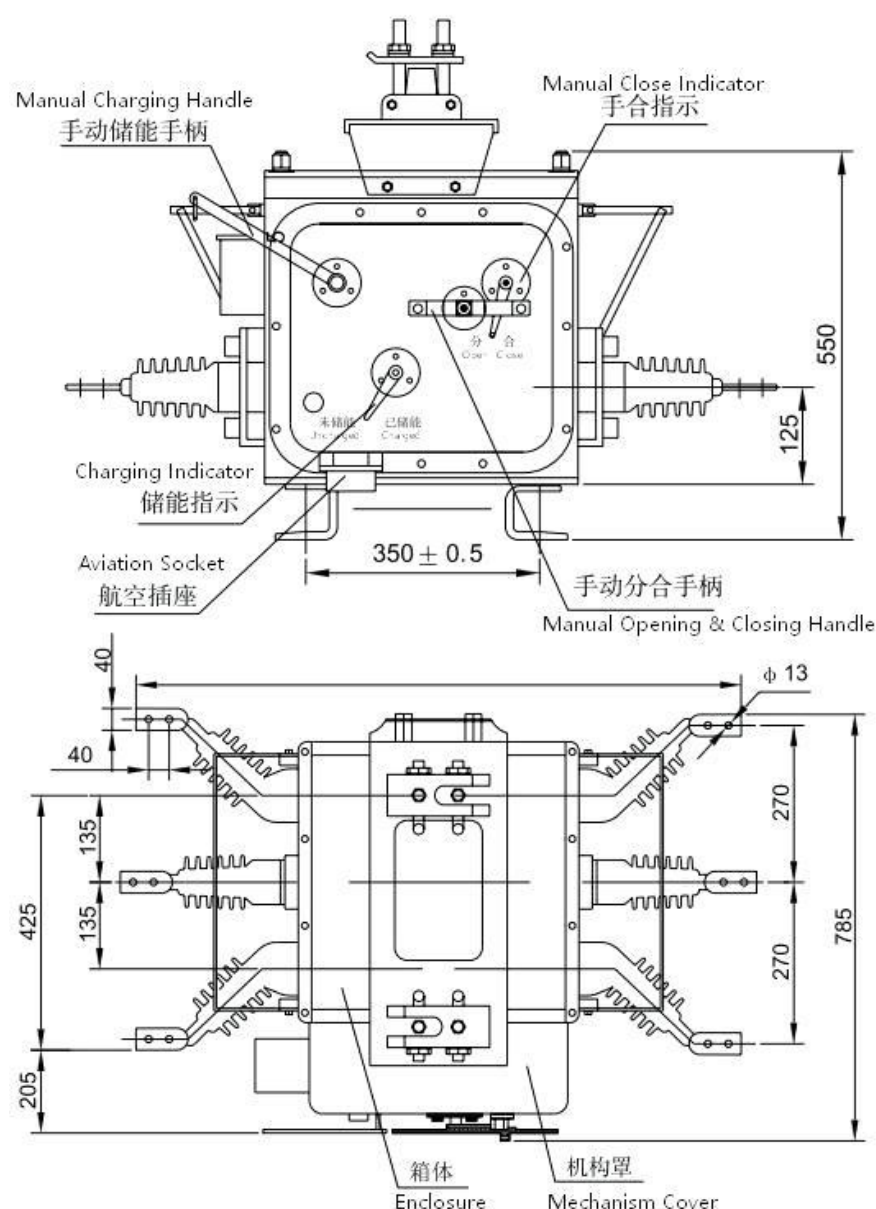
3、使用环境 Service Conditions

- 周围空气温度：-40℃~+40℃；日温差：日温变化不大于 25℃；根据SF₆气体物质性质，当环境温度在 - 40℃时，如箱体内部气压为 0.05MPa，此时SF₆仍为气态，保证产品正常工作。(当环境温度 - 40℃，表压为 0.05MPa 时，SF₆液化点为 - 55℃；零表压，SF₆液化点不会超过 - 60℃)。
- 风速不大于 35m/s；
- 无易燃、爆炸危险、强烈化学腐蚀物 (如各种酸、碱或浓烟等) 和剧烈振动的场所。
- 海拔：≤1000m；
- 覆冰厚度：10mm；
- 空气污秽程度：IV 级；
- 地震烈度：≤7 度；
- 电网中性点接地方式：中性点不接地、中性点经消弧线圈接地、中性点经低电阻接地。
- Ambient air temperature: -40℃ ~ +40℃; Daily temperature difference: maximum daily temperature variation ≤ 25℃. According to the physical properties of SF₆ gas, SF₆ remains gaseous to ensure normal product operation when the internal tank pressure is 0.05 MPa at ambient temperature of -40℃. (At ambient temperature of -40℃ and gauge pressure of 0.05 MPa, the liquefaction point of SF₆ is -55℃; at zero gauge pressure, the liquefaction point of SF₆ will not exceed -60℃).
- Maximum wind speed: 35 m/s;
- The installation site shall be free from fire & explosion hazards, severe chemical corrosive substances (such as various acids, alkalis, dense fumes, etc.) and violent vibration.
- Altitude: ≤ 1000 m;
- Ice coating thickness: 10 mm;
- Pollution degree: Class IV;
- Seismic intensity: ≤ Grade 7;
- Neutral grounding modes of power grid: isolated neutral, neutral grounded via arc-suppression coil, neutral grounded via low resistor.

4、技术参数 Technical Parameters

序号No	项目Project	单位unit	数值Value
1	额定电压Rated voltage	kV	12
2	额定频率Rated frequency	Hz	50
3	额定电流Rated current	A	630
4	额定短路开断电流Rated short-circuit breaking current	kA	20
5	额定关合电流峰值Rated closing current peak	kA	50
6	额定动稳定电流峰值Rated dynamic current value	kA	50
7	4s热稳定电流 4s thermal stability current	kA	20
8	额定操作顺序Rated operation sequence		分-0.3s-合分-180s-合分
9	额定储能电机电压Rated energy storage motor voltage	V	AC220
10	最高/最低储能电机电压Highest/lowest stored motor voltage	V	AC242/187
11	额定合闸操作电压Rated closing operation voltage		AC220
12	最高/最低合闸操作电压Highest/lowest closing operation voltage	V	AC264/143
13	额定分闸操作电压Rated opening operating voltage	V	AC220
14	最高/最低分闸操作电压Highest/lowest opening operating voltage	V	AC264/143
15	合闸不同期Switching period	ms	≤2
16	分闸不同期Opening time	ms	≤2
17	SF6气体额定压力(表压)SF6 gas rated pressure(gauge pressure)	Mpa	0.01
18	额定短路电流开断次数Rated short-circuit current breaking frequency	次	30
19	机械寿命Mechanical life	次	10000

5、内部结构 Internal structure



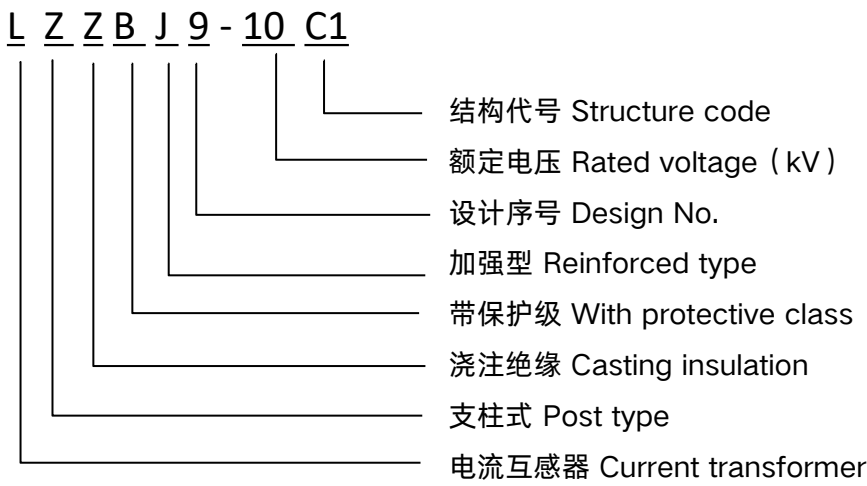


LZZBJ9-10C1 型电流互感器

Current Transformer



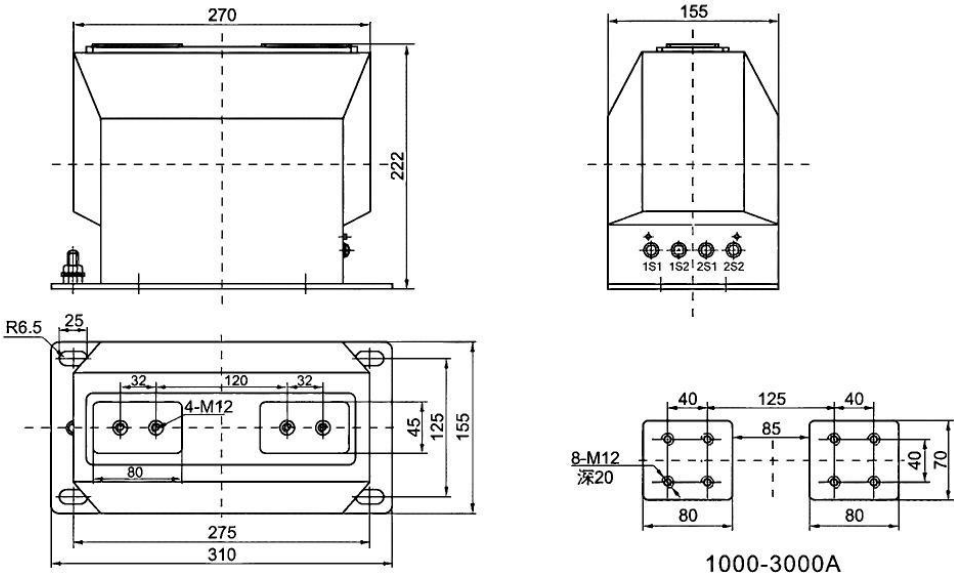
1、型号及含义 Model and Meaning



2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)			短时热电流 (kA/s) Rated short-time thermal current kA/s	动稳定电流 Rated dynamic current (kA)
		0.2S(0.2)	0.5S(0.5)	10P10		
5	0.2S/10P10 0.5S/10P10 0.2/10P10 0.5/10P10	10	10	15	0.3	0.75
10					0.6	1.5
15					0.9	2.25
20					1.2	3
25					1.5	3.75
30					1.8	4.5
40					2.4	6
50					3	7.5
75					4.5	11.25
100					6	15
150					9	22.5
200					12	30
300					18	45
400					24	60
500					30	75
600					36	90
800					48	120
1000					60	130
1200					80	160
1500						
2000						
2500						
3000						

3、外形及安装尺寸 Overall Dimension Drawing



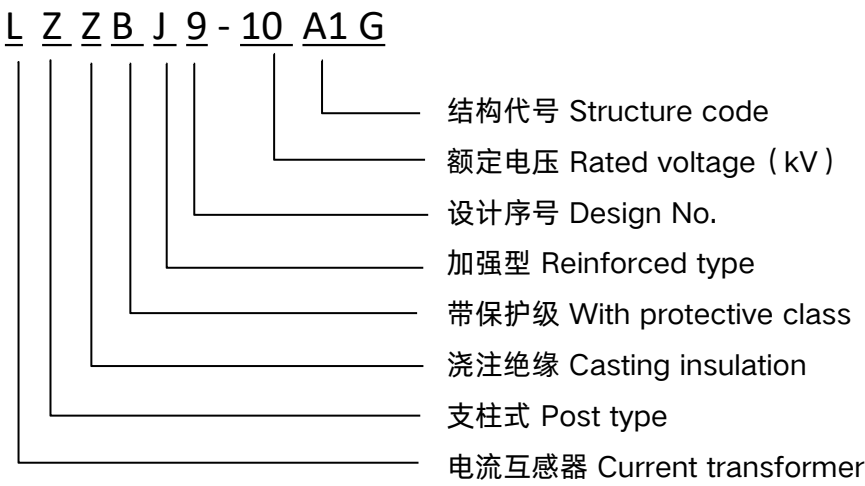


LZZBJ9-10A1G 型电流互感器

Current Transformer



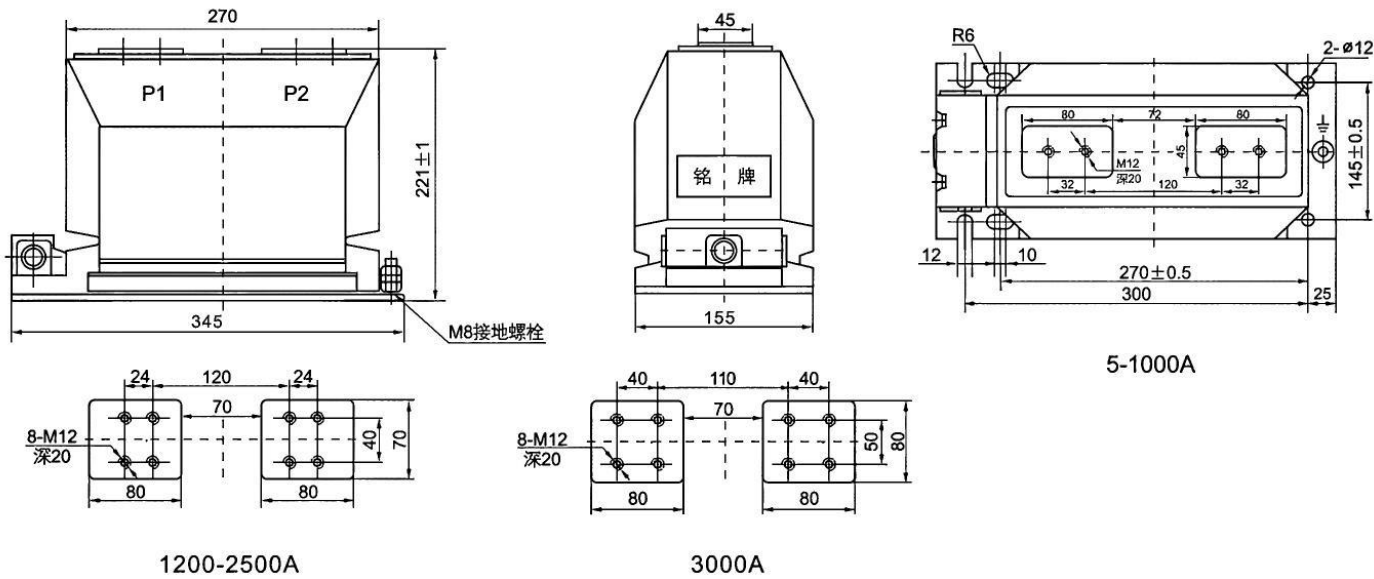
1、型号及含义 Model and Meaning



2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)			短时热电流 (kA/s) Rated short-time thermal current kA/s	动稳定电流 Rated dynamic current (kA)
		0.2S(0.2)	0.5S(0.5)	10P10		
10	0.2S/10P15 0.5S/10P15 0.2/10P15 0.5/10P15	10	15	15	0.6	1.5
15					0.9	2.25
20					1.2	3
25					1.5	3.75
30					1.8	4.5
40					2.4	6
50					4.5	7.5
75					3	11.25
100					6	15
150					9	22.5
200					12	30
300					18	45
400					24	60
500					30	75
600					36	90
800					48	120
1000	15	20	30	30	60	130
1200					80	160
1500						
2000						
2500						
3000						

3、外形及安装尺寸 Overall Dimension Drawing



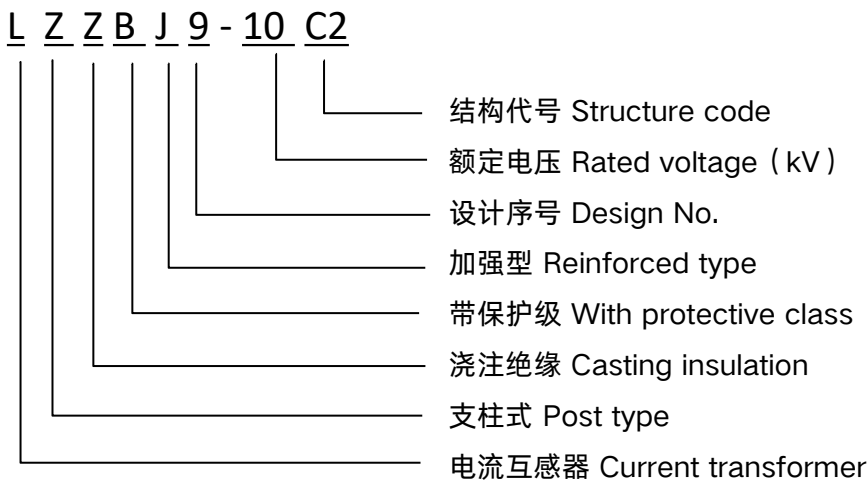


LZZBJ9-10C2 型电流互感器

Current Transformer



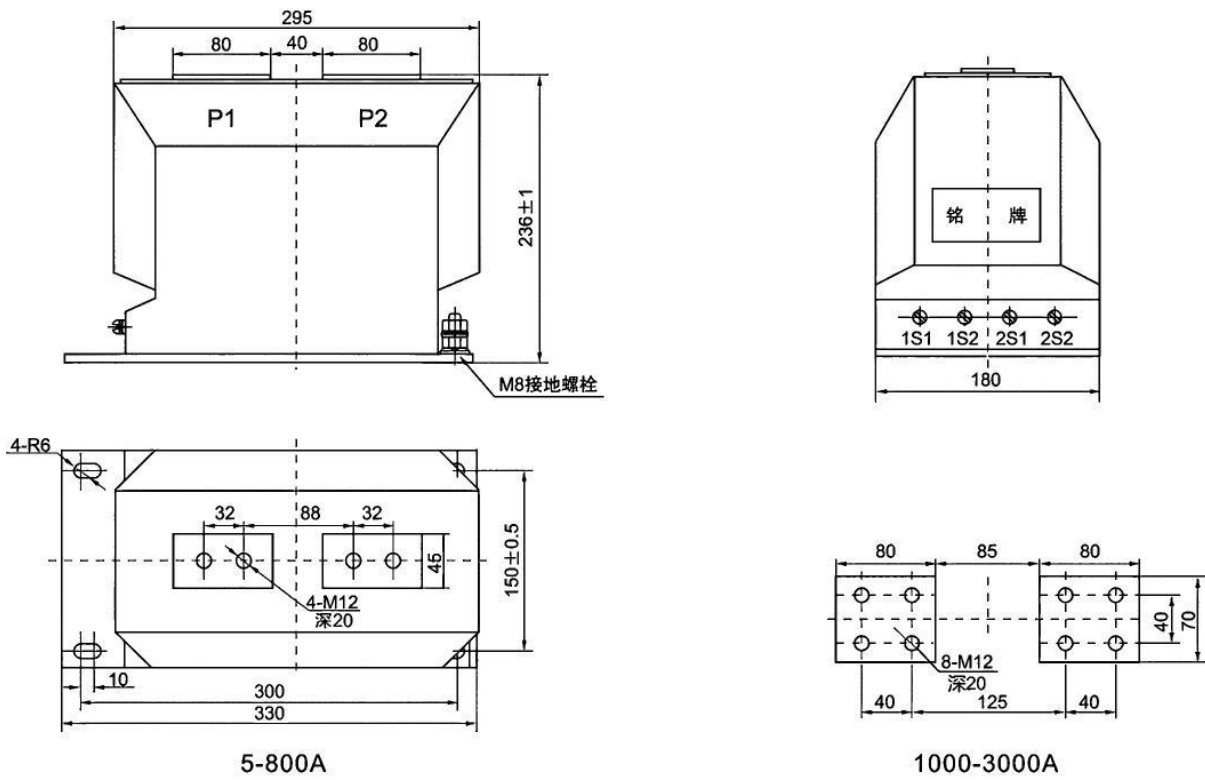
1、型号及含义 Model and Meaning



2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)					短时热电流 (kA/s) Rated short-time thermal current kA/s	动稳定电流 Rated dynamic current (kA)	备注 Notes
		0.2S/0.5S	0.2	0.5	10P10	10P15			
5-150	0.2S/10P15	10	10	15	15	20	0.06I _n	0.15I _n	两绕组 Two windings
200	0.5S/10P15								
300-800	0.2/10P15								
1000-1500	0.5/10P15		15	20	20	30	63	130	
2000-3150	10P10/10P10						80	160	
5-150	0.2S/0.2/10P15	10	10	15	15	15	0.06I _n	0.15I _n	三绕组 Three windings
200	0.2S/0.5/10P15								
300-800	0.2/0.5/10P15								
1000-1500	0.5/0.5/10P15			20	20	20	63	130	
2000-3150							80	160	

3、外形及安装尺寸 Overall Dimension Drawing

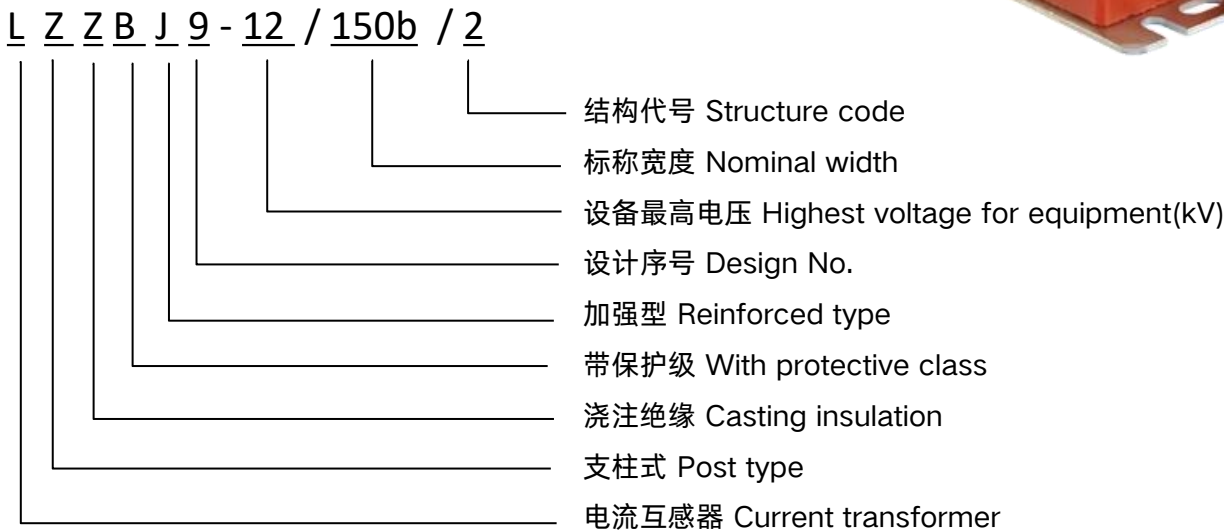




LZZBJ9-12/150b/2 型电流互感器

Current Transformer

1、型号及含义 Model and Meaning

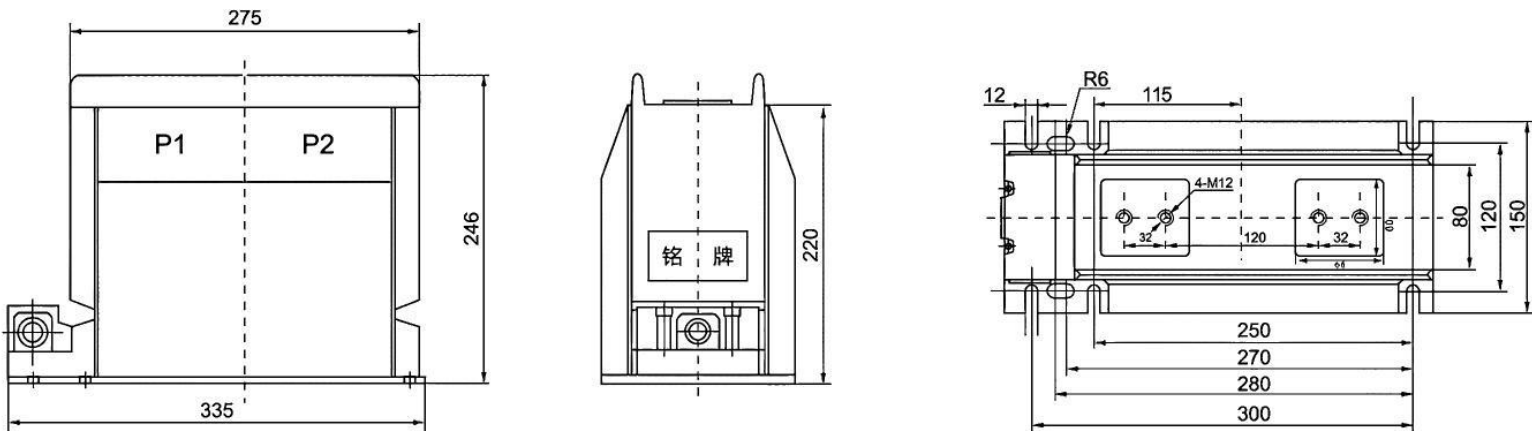


2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)			短时热电流 (kA/s) Rated short-time thermal current kA/s	动稳定电流 Rated dynamic current (kA)
		0.2S(0.2)	0.5S(0.5)	10P10		
5	0.2S/10P10 0.2S/10P15 0.2/10P10 0.2/10P/15 0.5/10P10 0.5/10P15	10	10	15*、20	0.3	0.75
10					0.6	1.5
15					0.9	2.25
20					1.2	3
25					1.5	3.75
30					1.8	4.5
40					2.4	6
50					3	7.5
75					4.5	11.25
100					6	15
150					9	22.5
200					12	30
300			18		45	
400			24		60	
500			30		75	
600			36		90	
800			48		120	
1000			60		130	
1200						

注:表中带*数据为常规产品时的参数。
Note:In the table, the data marked with* are the parameters of general products.

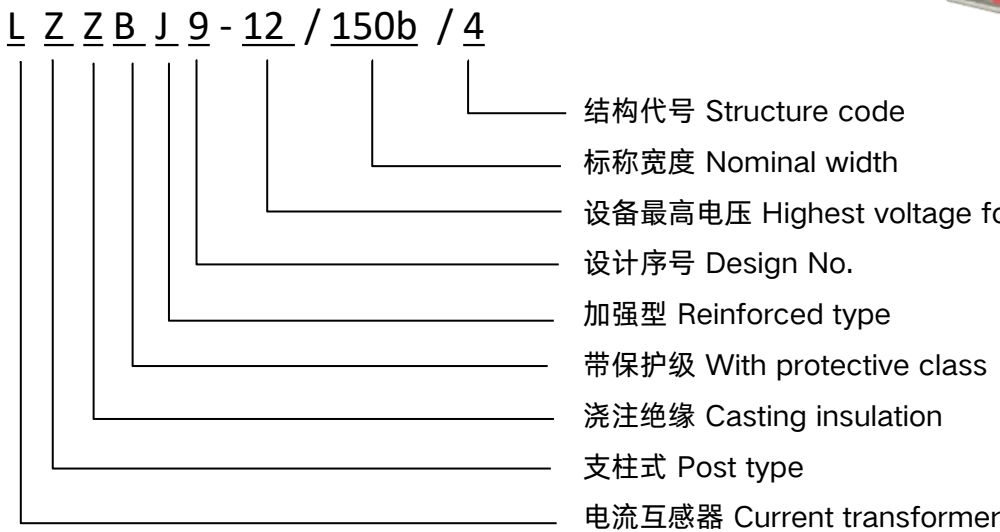
3、外形及安装尺寸 Overall Dimension Drawing



LZZBJ9-12/150b/4 型电流互感器

Current Transformer

1、型号及含义 Model and Meaning

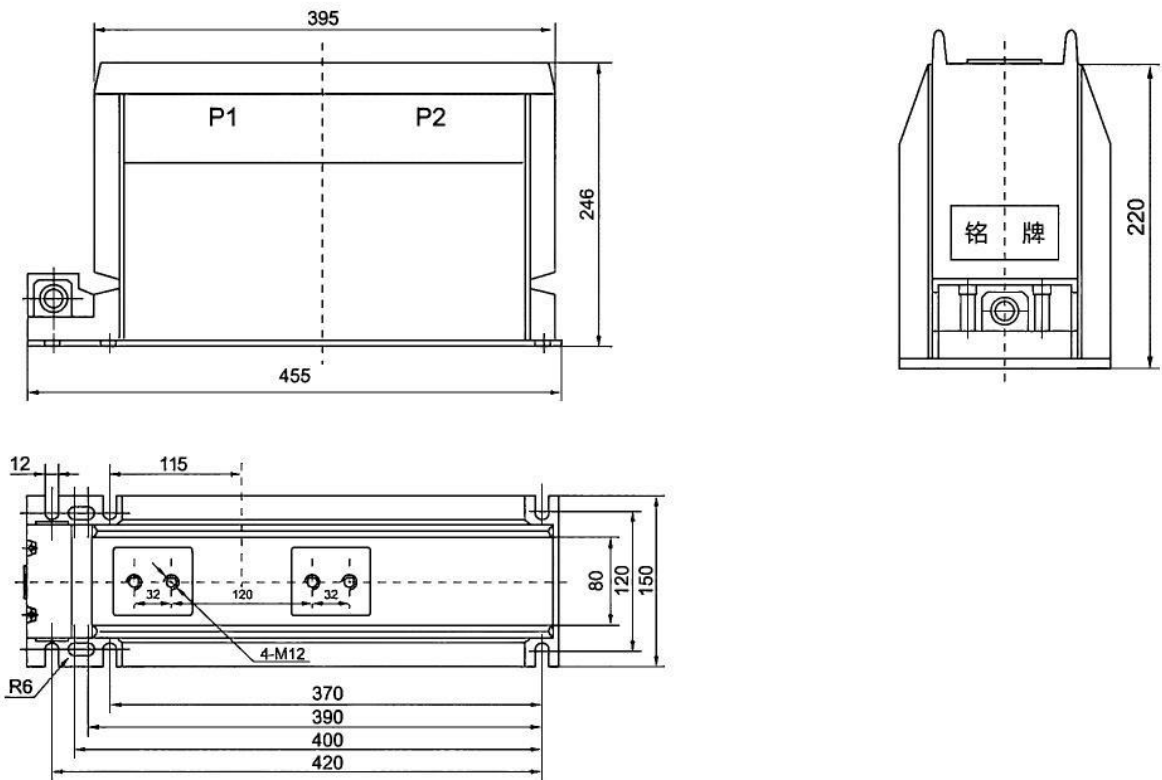


2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)						短时热电流 (kA/s) Rated short-time thermal current kA/s	动稳定电流 Rated dynamic current (kA)
		0.2S	0.2	0.5	(5)10P10	(5)10P15	(5)10P20		
20-100	0.2(S)/10P	10	10	10	10*、30	15*、20	15*、10	0.06I _n	0.15I _n
150, 200	0.5/10P								
300, 400	0.2(S)/0.2/5P								
500	0.2(S)/0.5/5P						15		
600-800	0.2(S)/0.5/5P20		10	15	15*、30	20			
1000-1250	0.2(S)/5P10/10P15						15*、20	63	130
	0.5/5P10/10P20		15	20					

注:表中带*数据为级组合0.2/5P10/10P15和0.5/5P10/10P20时的参数
Note:The data marked with* in the table are parameters for class combination 0.2/5P10/10P15 and 0.5/5P10/10P20

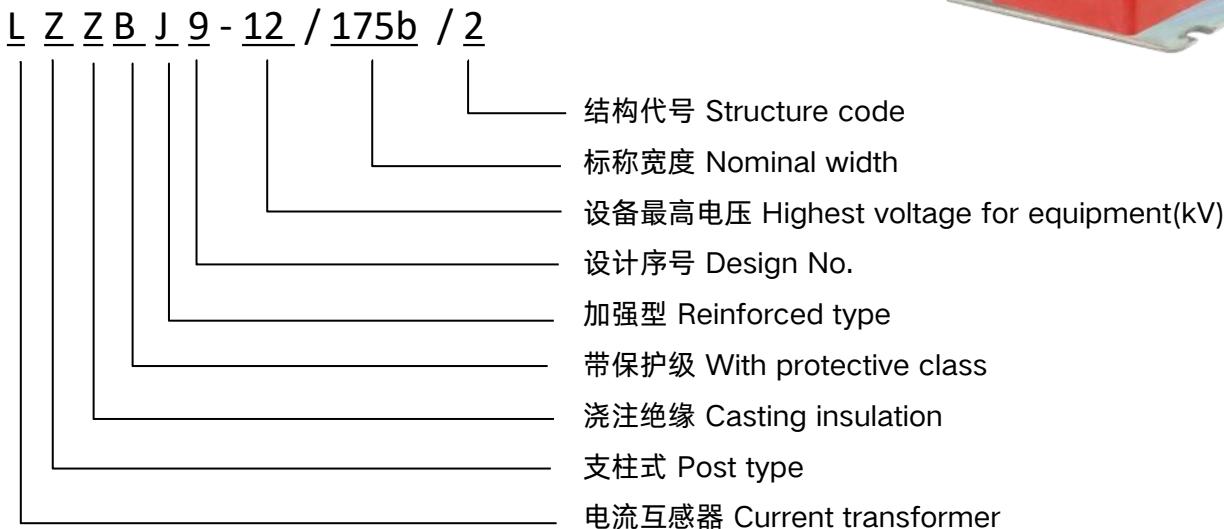
3、外形及安装尺寸 Overall Dimension Drawing



LZZBJ9-12/175b/2 型电流互感器

Current Transformer

1、型号及含义 Model and Meaning

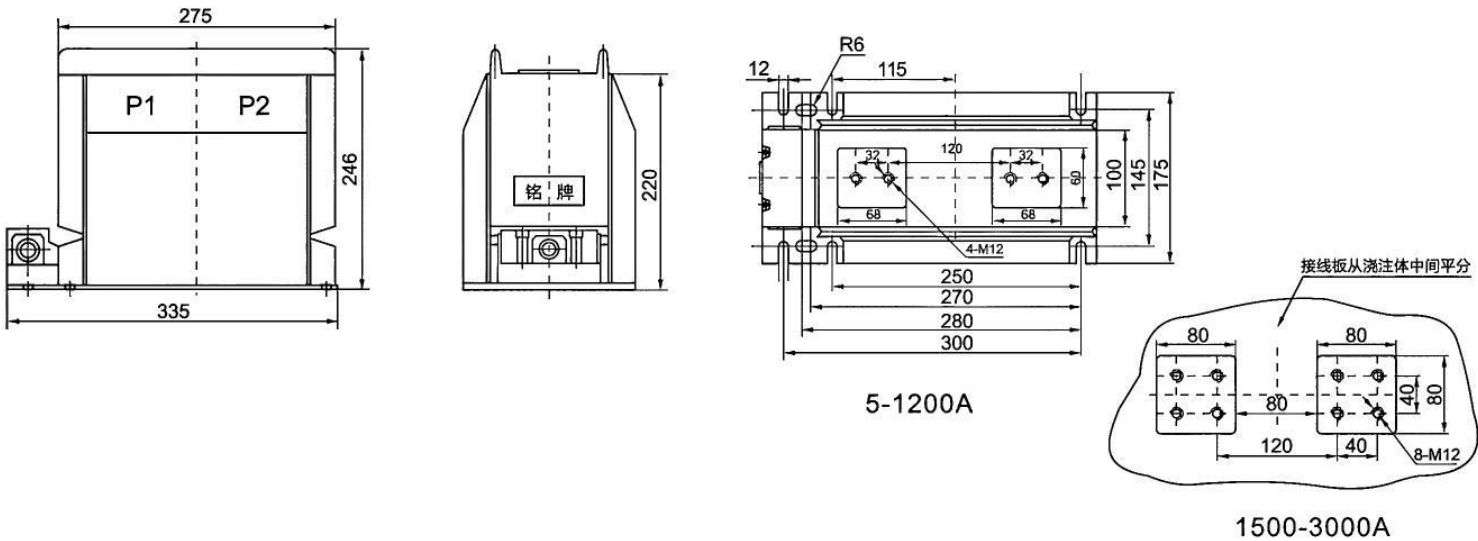


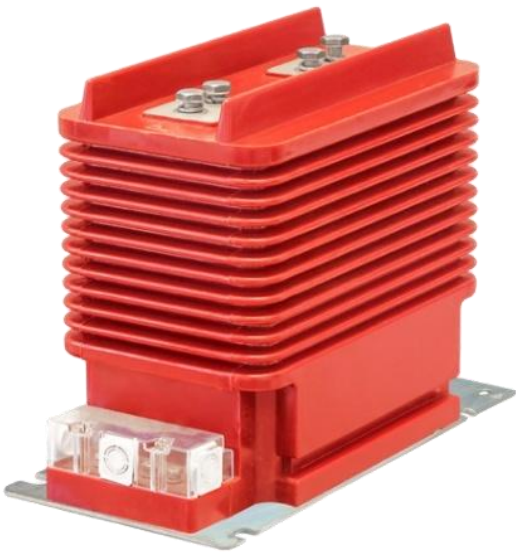
2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)					短时热电流 (kA/s) Rated short-time thermal current kA/s	动稳定电流 Rated dynamic current (kA)
		0.2S	0.2	0.5	10P10	10P15		
5	0.2(S)/10P10 0.2(S)/10P15 0.5/10P10 0.5/10P15	10	10	15*、20	20	20	0.3	0.75
10							0.6	1.5
15							0.9	2.25
20							1.2	3
25							1.5	3.75
30							1.8	4.5
40							2.4	6
50							3	7.5
75							4.5	11.25
100							6	15
150							9	22.5
200							12	30
300				20	30	30	18	45
400							24	60
500							30	75
600							36	90
800				15	30	30	48	120
1000							60	130
1200							60	130
1500-3000			30	60		30	80	160

注：表中带*数据为0.5级/10P15时的参数。
Note: The data marked with* in the table are parameters for class combination 0.5 and 10P15.

3、外形及安装尺寸 Overall Dimension Drawing

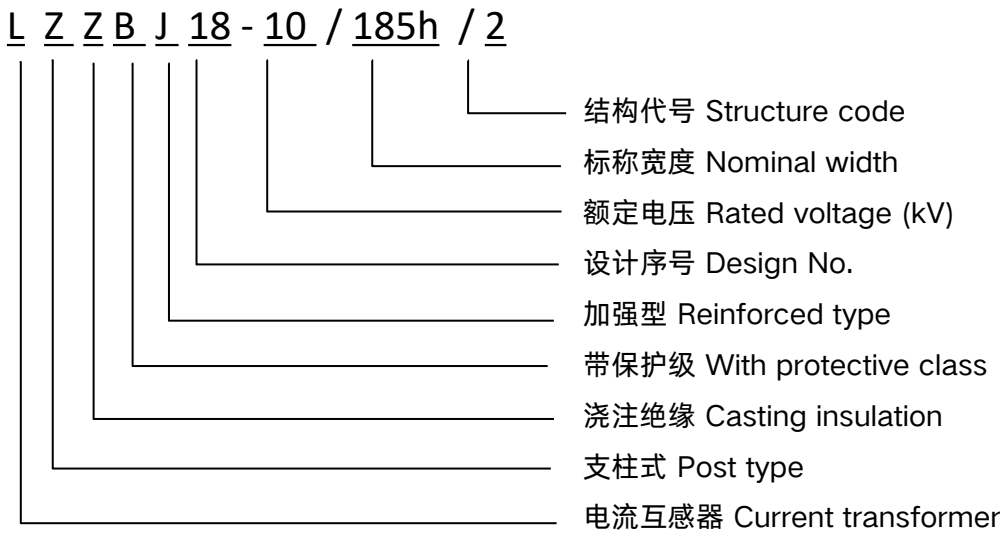




LZZBJ18-10/185h/2 型电流互感器

Current Transformer

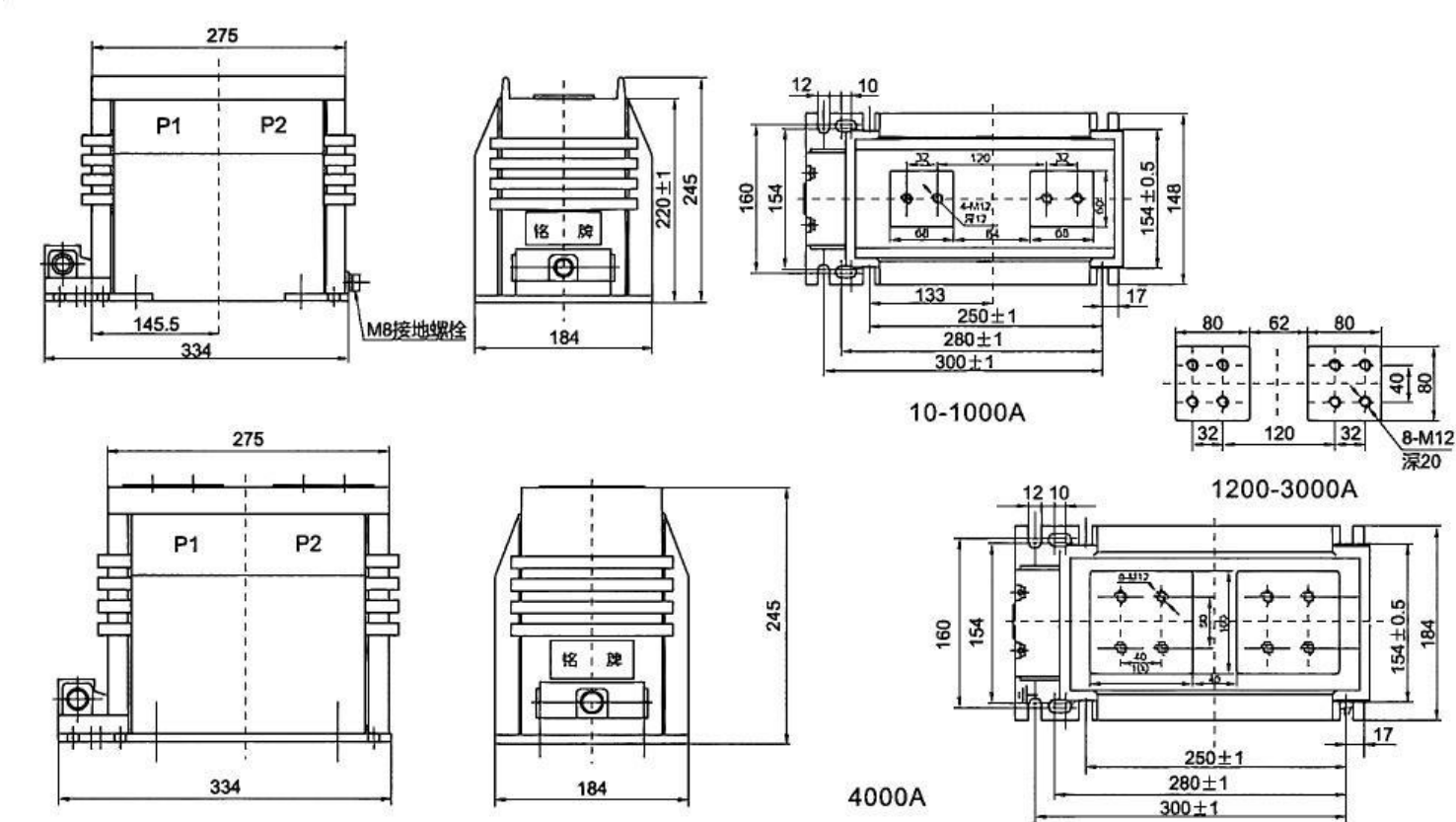
1、型号及含义 Model and Meaning



2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)					短时热电流 (kA/s) Rated short-time thermal current kA/s	动稳定电流 Rated dynamic current (kA)
		0.2S	0.2	0.5	(5)10P10	(5)10P15		
10-40	0.2S/10P 0.5S/10P 0.2/10P 0.5/10P	10	10	15	20	15	0.06I _{ln}	0.15I _{ln}
50-100								
150-300								
400, 500								
600-1000								
1200-1600								
2000-4000			15	20	30		60	130
							80	160

3、外形及安装尺寸 Overall Dimension Drawing



LZZBJ9-12/175b/4 型电流互感器

Current Transformer

1、型号及含义 Model and Meaning

L Z Z B J 9 - 12 / 175b / 4

L	Z	Z	B	J	9	-	12	/	175b	/	4	
												结构代号 Structure code
												标称宽度 Nominal width
												设备最高电压 Highest voltage for equipment (kV)
												设计序号 Design No.
												加强型 Reinforced type
												带保护级 With protective class
												浇注绝缘 Casting insulation
												支柱式 Post type
												电流互感器 Current transformer



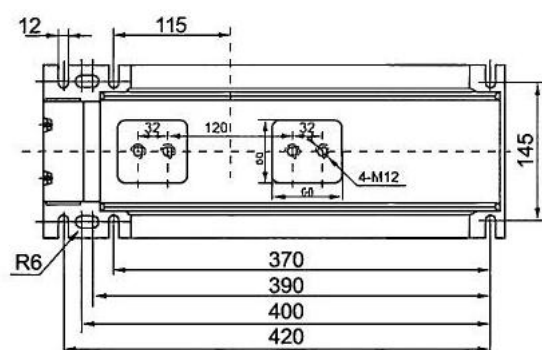
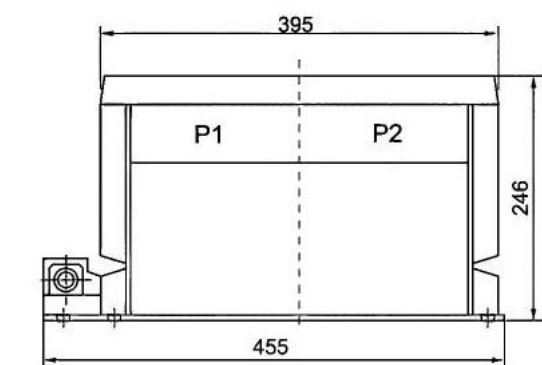
2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)						短时热电流 (kA/s) Rated short-time thermal current kA/s	动稳定电流 Rated dynamic current (kA)
		0.2S	0.2	0.5	(5)10P10	(5)10P15	(5)10P20		
20-100	0.2(S)/10P 0.5/10P	10	10	10	30*、10	20*、15	15*、10	0.06I _n	0.15I _n
150,200								9	22.5
300,400	10		15	15*、30	20	15	18	45	
500									30
600-800	0.2(S)/0.5/5P20 0.2(S)/5P10/10P15		15	20	30*、40	30*、40	30*、40	36	90
1000-1250									
1500,2000	0.5/5P10/10P20		20	40	30*、40	30*、40	30*、40	80	160
2500									
3000									

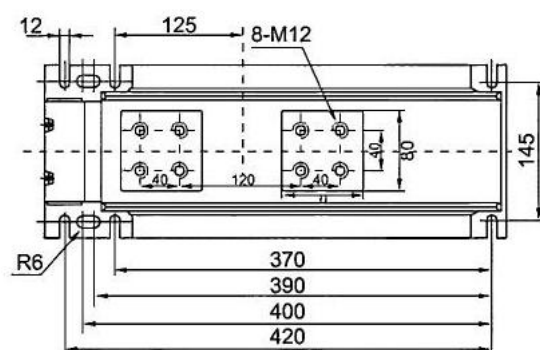
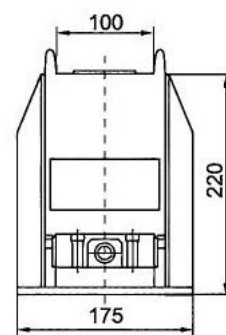
注:表中带*数据为级次组合0.2/5P10/10P15和0.5/5P10/10P20时的参数。

Note:The data marked with* in the table are parameters for class combination 0.2/5P10/10P15 and 0.5/5P10/10P20

3、外形及安装尺寸 Overall Dimension Drawing



5-1250A



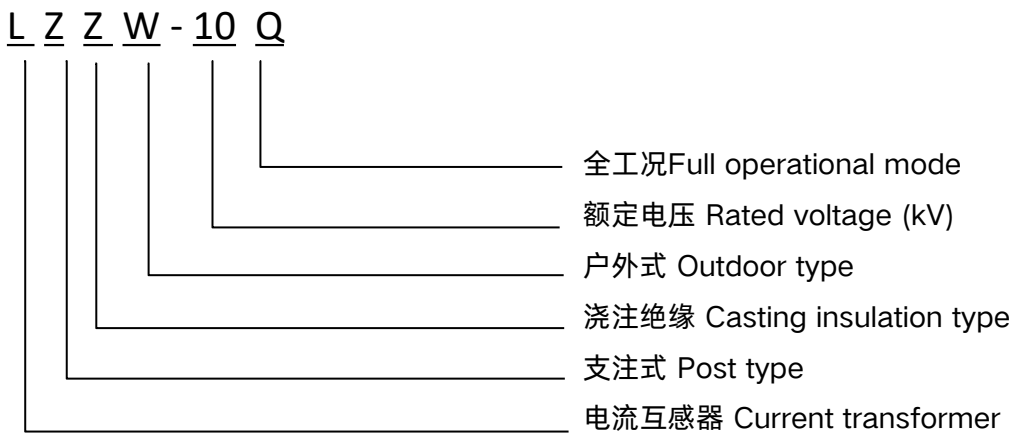
1500-3000A



LZZW-10Q型户外电流互感器

Outdoor Current Transformer

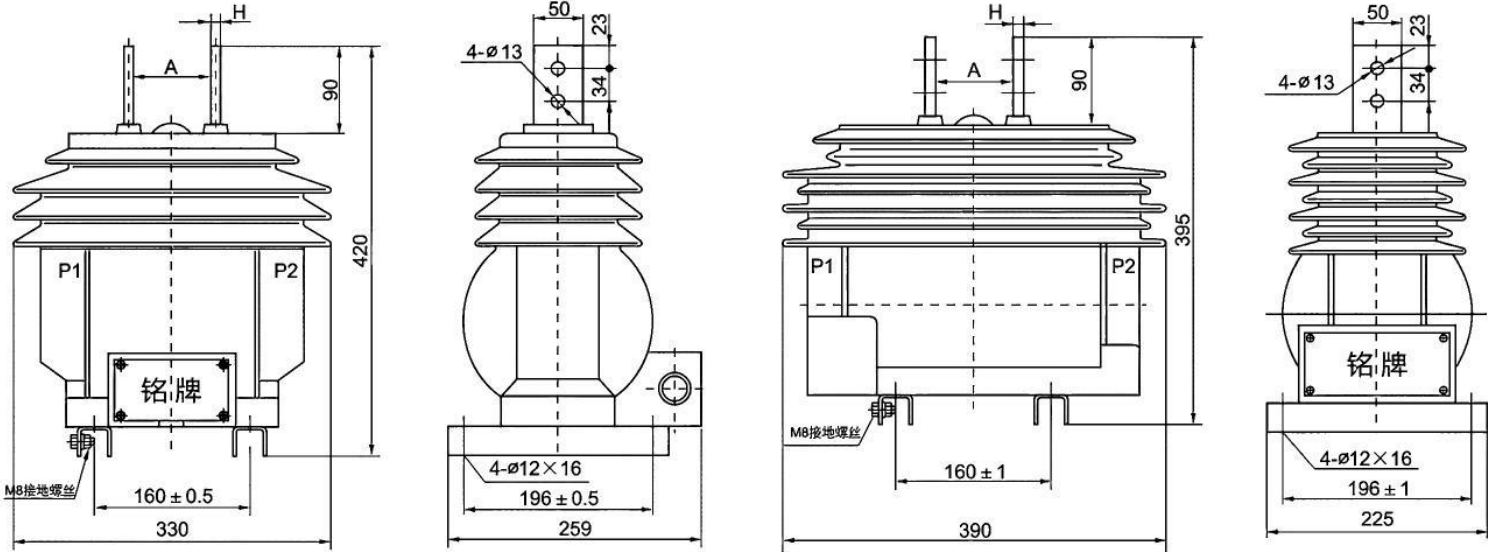
1、型号及含义 Model and Meaning



2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)			1s短时热电流倍数 Multiple of 1s short-time thermocurrent	额定动稳定电流倍数 Multiple of rated peak withstand current
		0.2(S)	0.5	10P15		
10	0.2(S)/10P15 0.5(S)/10P15 0.2(S)/0.5/10P15 0.5(S)/0.5/10P15	10	15	15	0.6	1.5
15					0.9	2.25
20, 25					1.2	3
30					1.8	4.5
40, 50					2.4	6
60					3	7.5
75					4.5	11.25
100					6	15
150					9	22.5
200					12	30
250-600					36	90
750-1000					60	130
1200-1500						

3、外形及安装尺寸 Overall Dimension Drawing



一次电流 Primary current (A)	H	A
10-600	8	80
800-1000	10	80
1200-1500	15	70

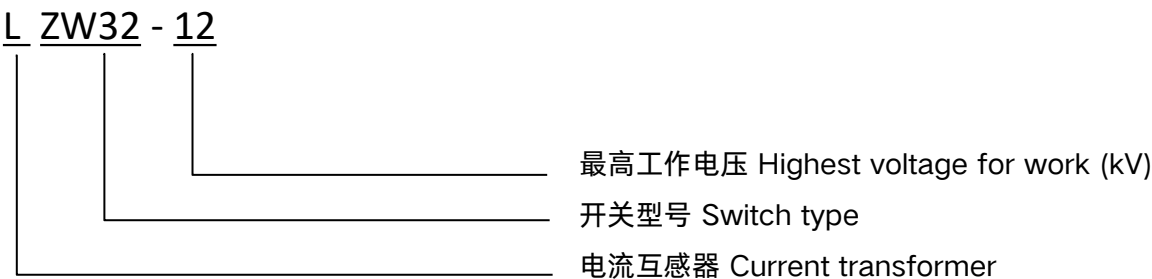
四绕组外形
Four windings appearance



LZW32-12型柱上开关配套户外电流互感器

Outdoor Current Transformer For Pole-Mounted switch

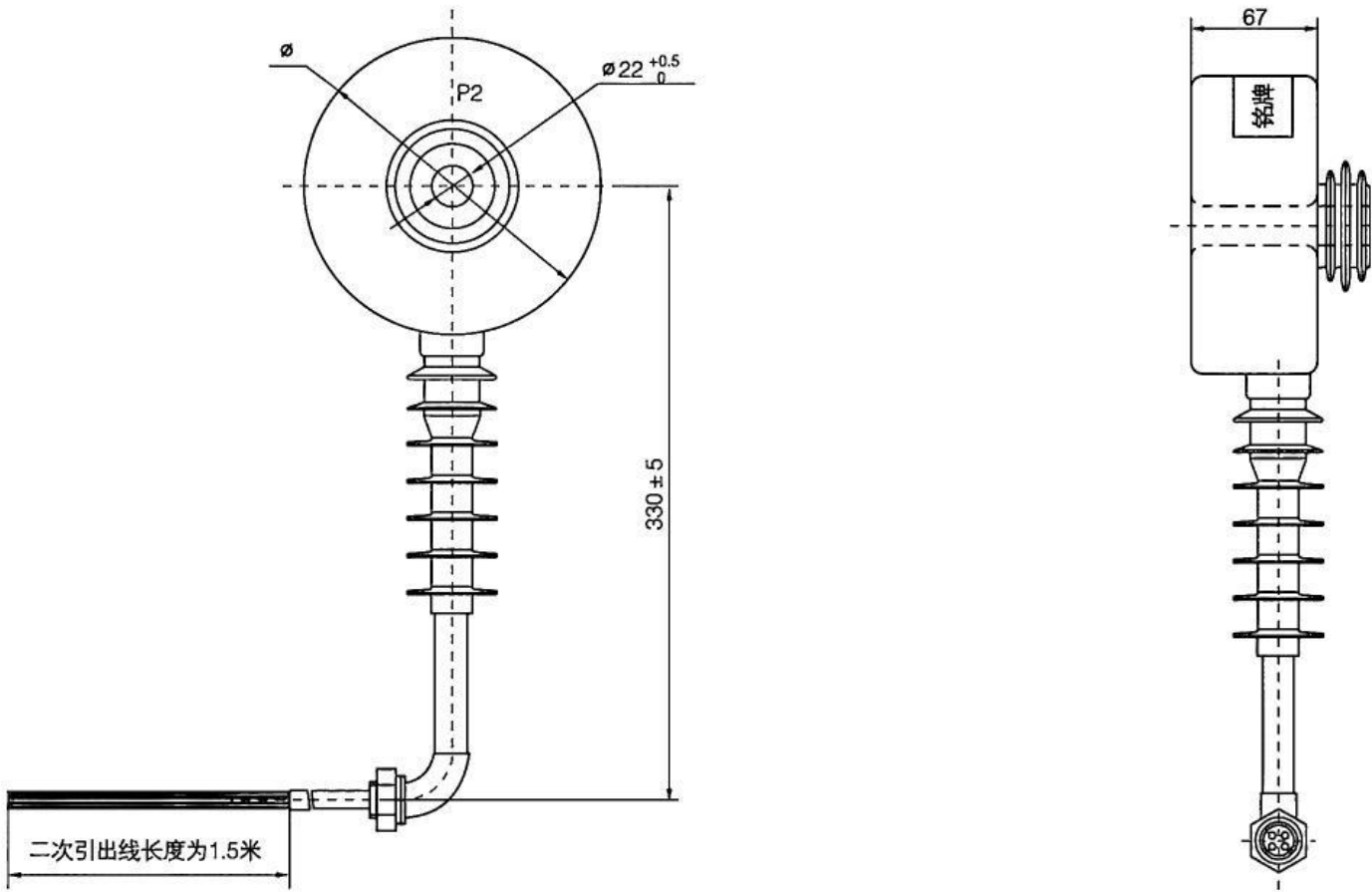
1、型号及含义 Model and Meaning



2、技术参数 Technical Parameters

额定一次电流 Rated primary current (A)	额定二次输出 Rated secondary output (VA)			
	0.2(S)	0.5(S)	5P	10P
50-75-100	3.75	5	5	10
75-100-150		7.5		
100-150-200	5	7.5	7.5	
150-200-300	7.5			
200-300-400	10	10	10	15
300-400-500				
400-500-600		15	15	20
500-600-800				
600-800-1000				

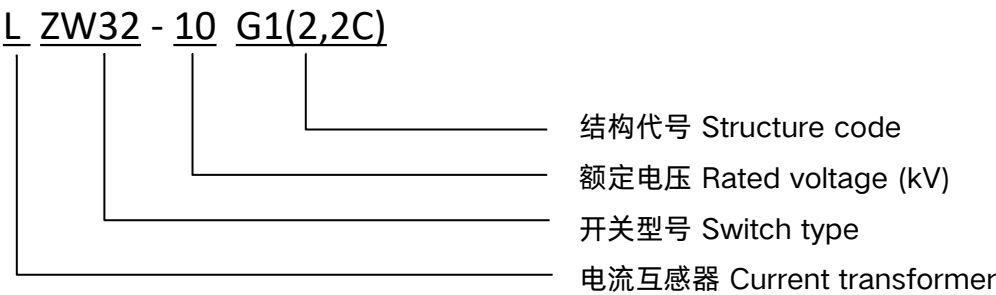
3、外形及安装尺寸 Overall Dimension Drawing





LZW32-10G1(12),
LZW32-10G2C型柱上开关配套用户外电流互感器
Outdoor Current Transformer For Pole-Mounted switch

1、型号及含义 Model and Meaning



2、技术参数 Technical Parameters

LZW32-10G1、LZW32-10G2、LZW32-10G2C技术参数1:两绕组 表1
LZW32-10G1、LZW32-10G2、LZW32-10G2C Type technical;data 1:two windings Table1

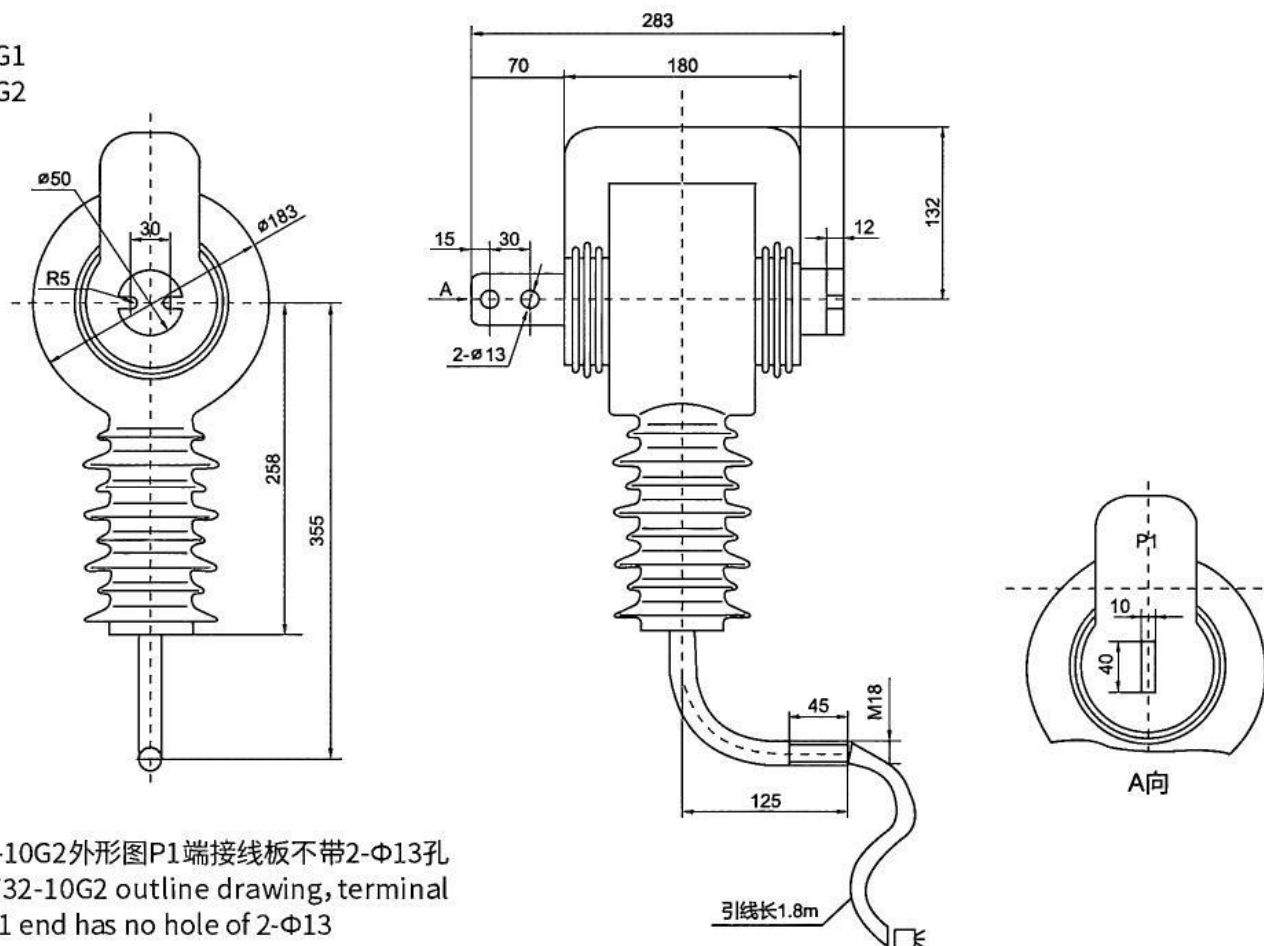
额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)			短时热电流 (kA/s) Rated short-time thermal current kA/s	动稳定电流 Rated dynamic current (kA)
		0.2	0.5	3		
30	0.2/3 0.5/3	10	10	50	1.8	4.5
40					2.4	6
50					3	7.5
75					4.5	11.25
100					6	15
150					9	22.5
200					12	30
300					18	45
400-630					24	60

LZW32-10G1、LZW32-10G2、LZW32-10G2C技术参数2:单绕组复变比
LZW32-10G1、LZW32-10G2、LZW32-10G2C Type technical;data 2: single winding double transformation ratio Table2

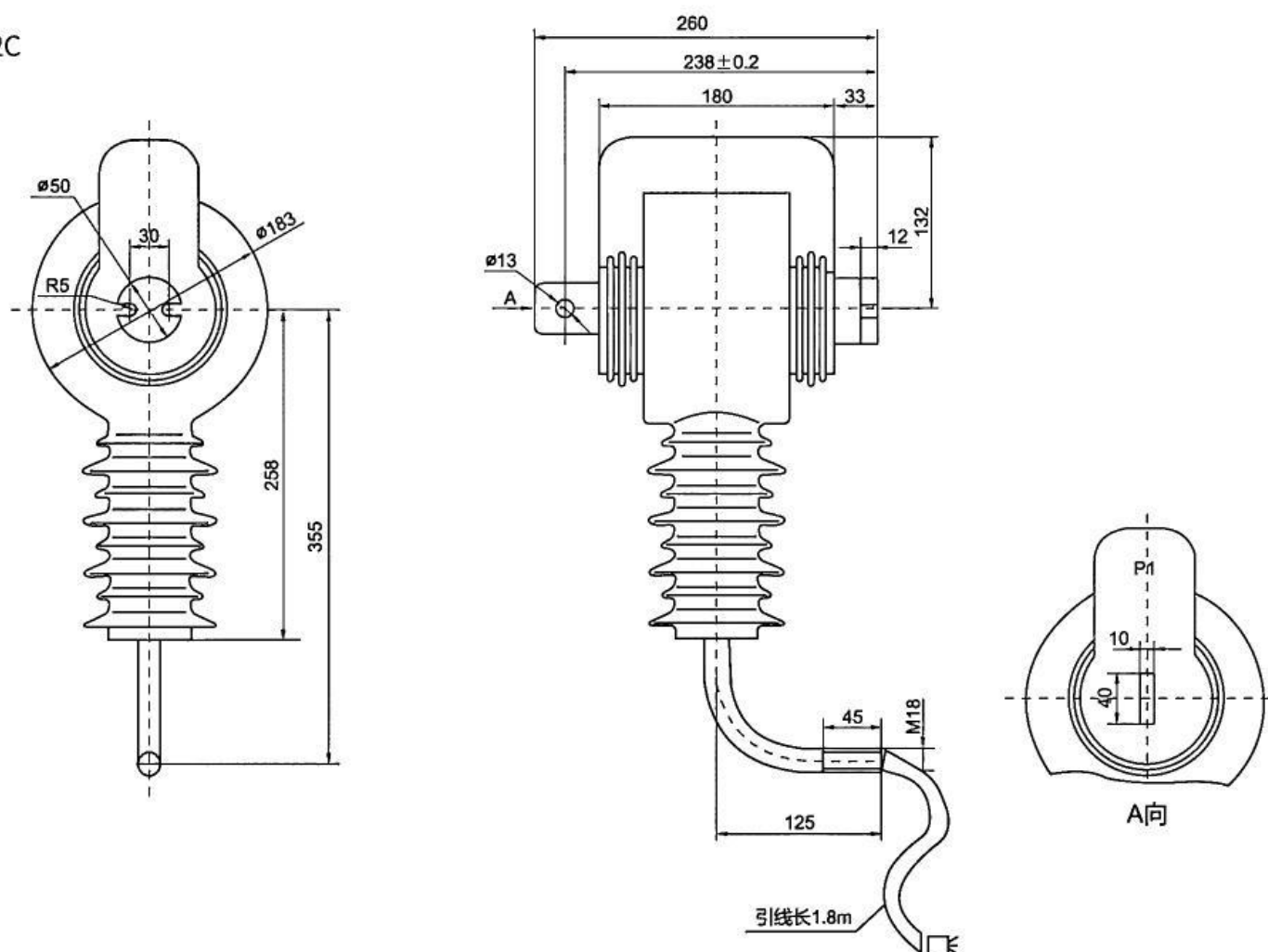
额定一次电流 Rated primary current (A)	准确级组合 Accuracy classes combination	额定二次输出 Rated secondary output (VA)	一秒热稳定电流 1s thermal current (kA)	动稳定电流 Rated dynamic current (kA)
50-100	3	50	3	7.5
75-150			4.5	11.25
100-200			6	15
150-300			9	22.5
200-400			12	30
400-630			24	60

3、外形及安装尺寸 Overall Dimension Drawing

LZW32-10G1
LZW32-10G2



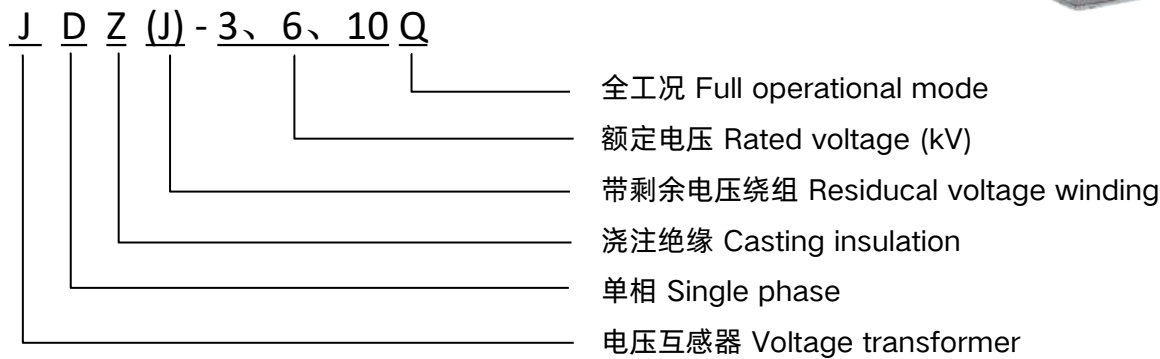
LZW32-10G2C



JDZ(J)-3、6、10Q型电压互感器

Voltage Transformer

1、型号及含义 Model and Meaning

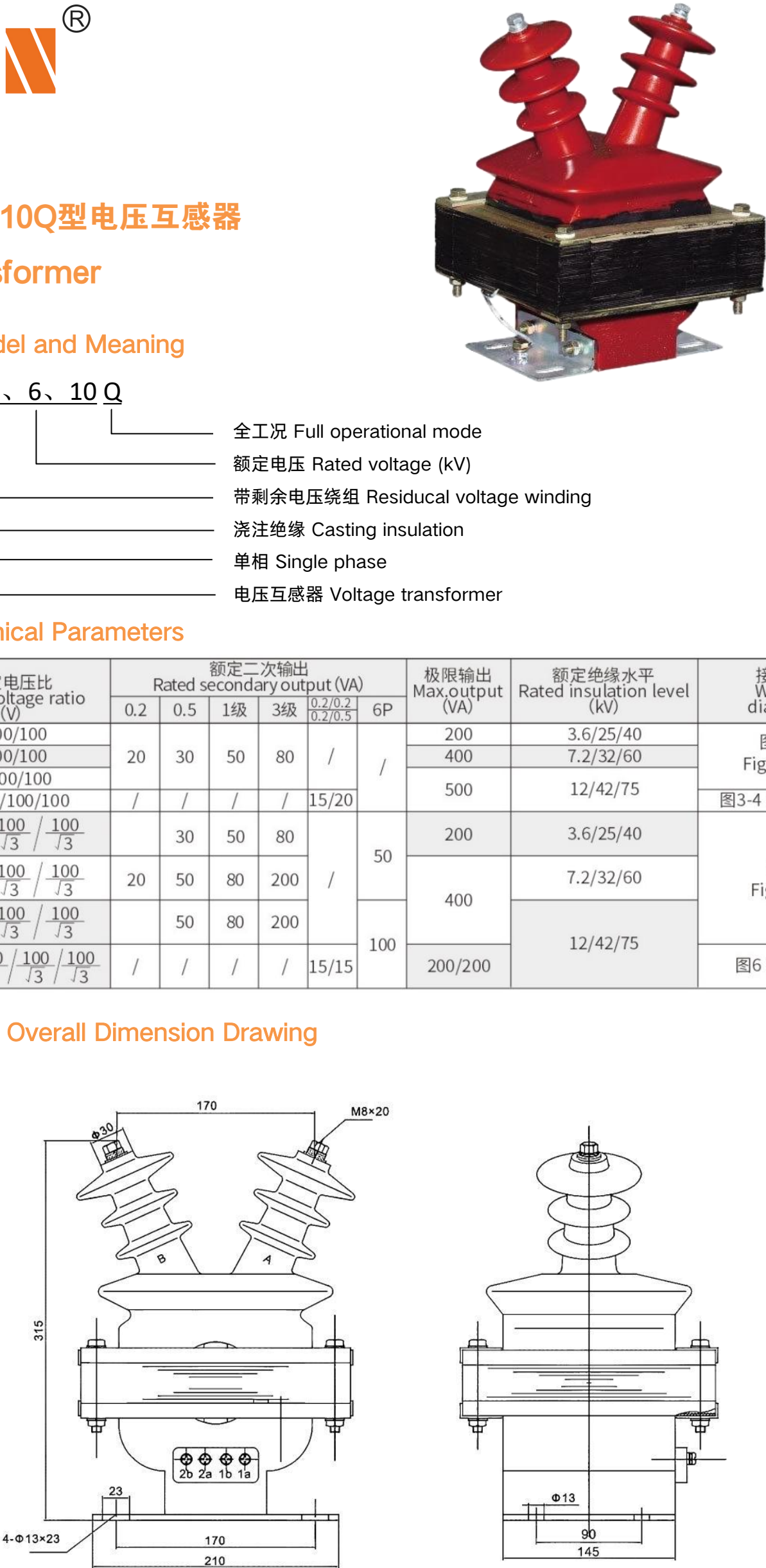


2、技术参数 Technical Parameters

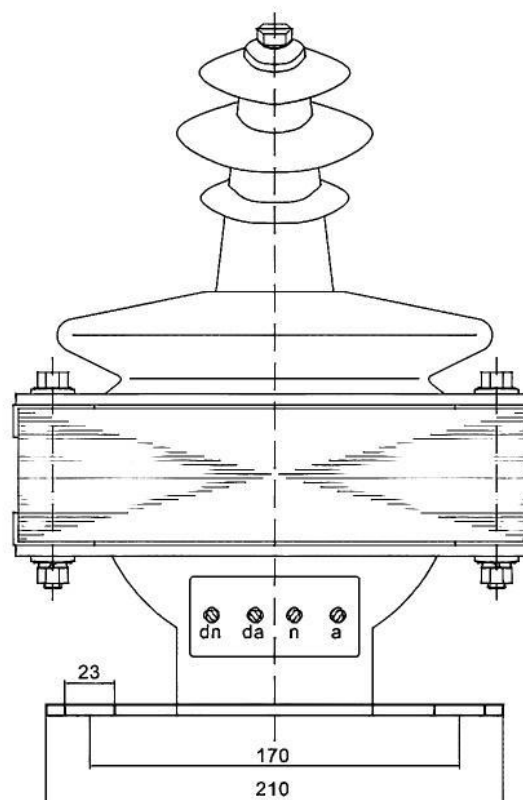
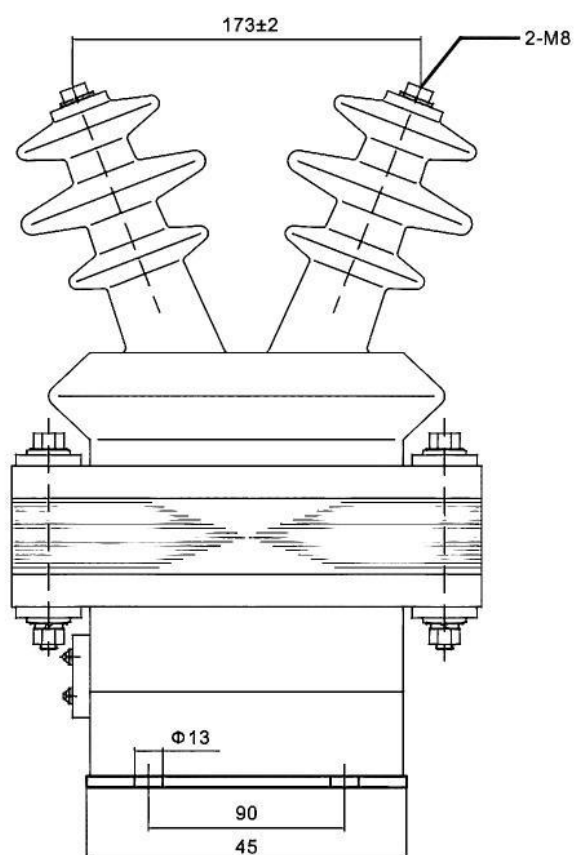
型号 Type	额定电压比 Rated voltage ratio (V)	额定二次输出 Rated secondary output (VA)						极限输出 Max.output (VA)	额定绝缘水平 Rated insulation level (kV)	接线图 Wiring diagram
		0.2	0.5	1级	3级	0.2/0.2 0.2/0.5	6P			
JDZ-3Q	3000/100	20	30	50	80	/	/	200	3.6/25/40	图1-2 Figure1-2
JDZ-6Q	6000/100							400	7.2/32/60	
JDZ-10Q	10000/100	/	/	/	/	15/20		500	12/42/75	图3-4 Figure3-4
	10000/100/100									
JDZJ-3Q	$\frac{3000}{\sqrt{3}} / \frac{100}{\sqrt{3}} / \frac{100}{\sqrt{3}}$	20	30	50	80	/	50	200	3.6/25/40	图5 Figure5
JDZJ-6Q	$\frac{6000}{\sqrt{3}} / \frac{100}{\sqrt{3}} / \frac{100}{\sqrt{3}}$							400	7.2/32/60	
JDZJ-10Q	$\frac{10000}{\sqrt{3}} / \frac{100}{\sqrt{3}} / \frac{100}{\sqrt{3}}$	/	/	/	/	15/15	100	200/200	12/42/75	图6 Figure6
	$\frac{10000}{\sqrt{3}} / \frac{100}{\sqrt{3}} / \frac{100}{\sqrt{3}} / \frac{100}{\sqrt{3}}$									

3、外形及安装尺寸 Overall Dimension Drawing

JDZ-3、6、10Q



JDZJ-3,6, 10Q



4、接线图 Wiring Diagram

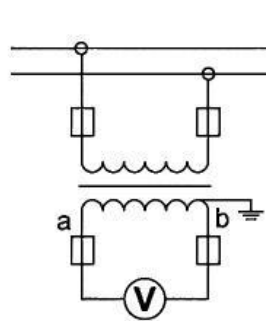


图1 (Figure 1)

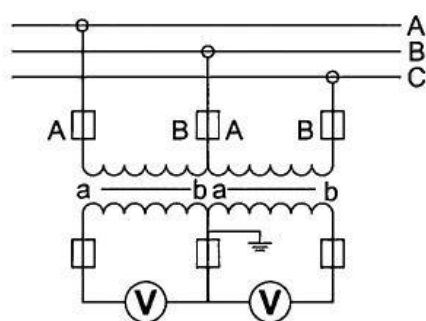


图2 (Figure 2)

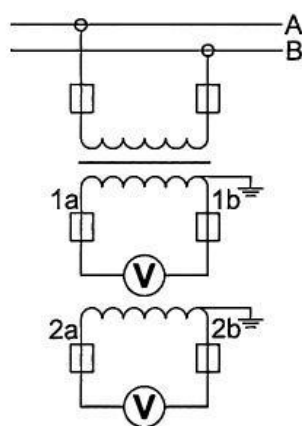


图3 (Figure 3)

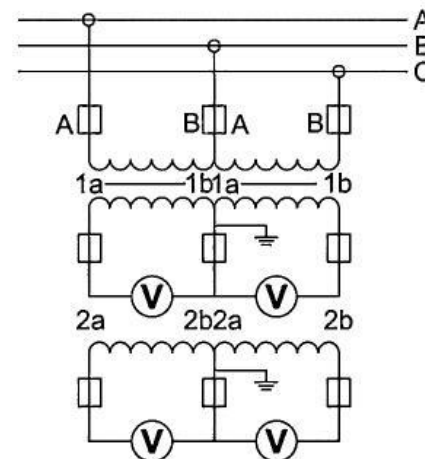


图4 (Figure 4)

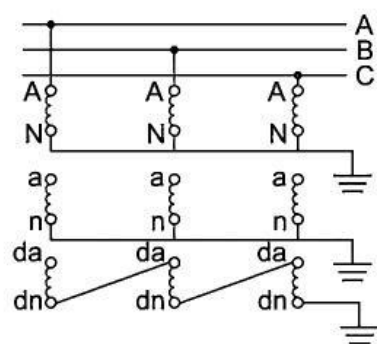


图5 (Figure 5)

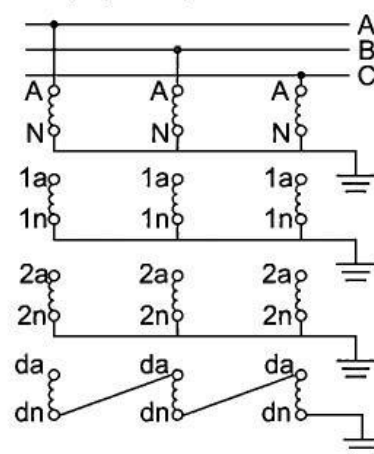
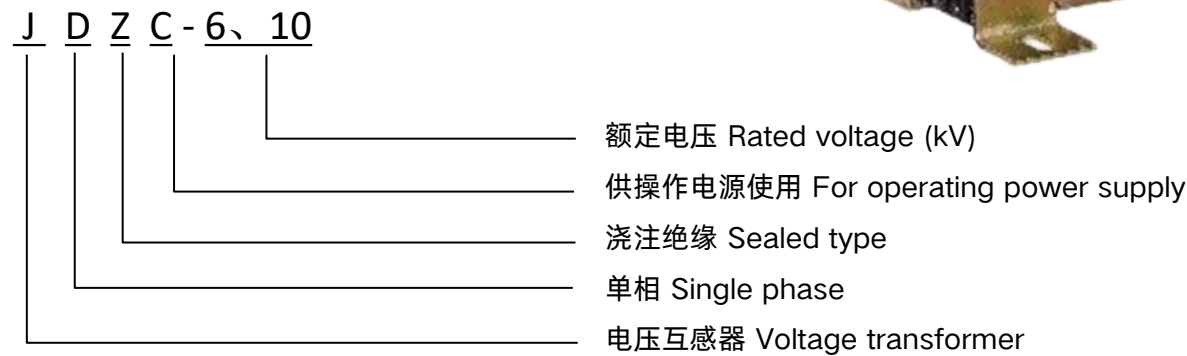


图6 (Figure 6)



JDZC-6、10型电压互感器
Voltage Transformer

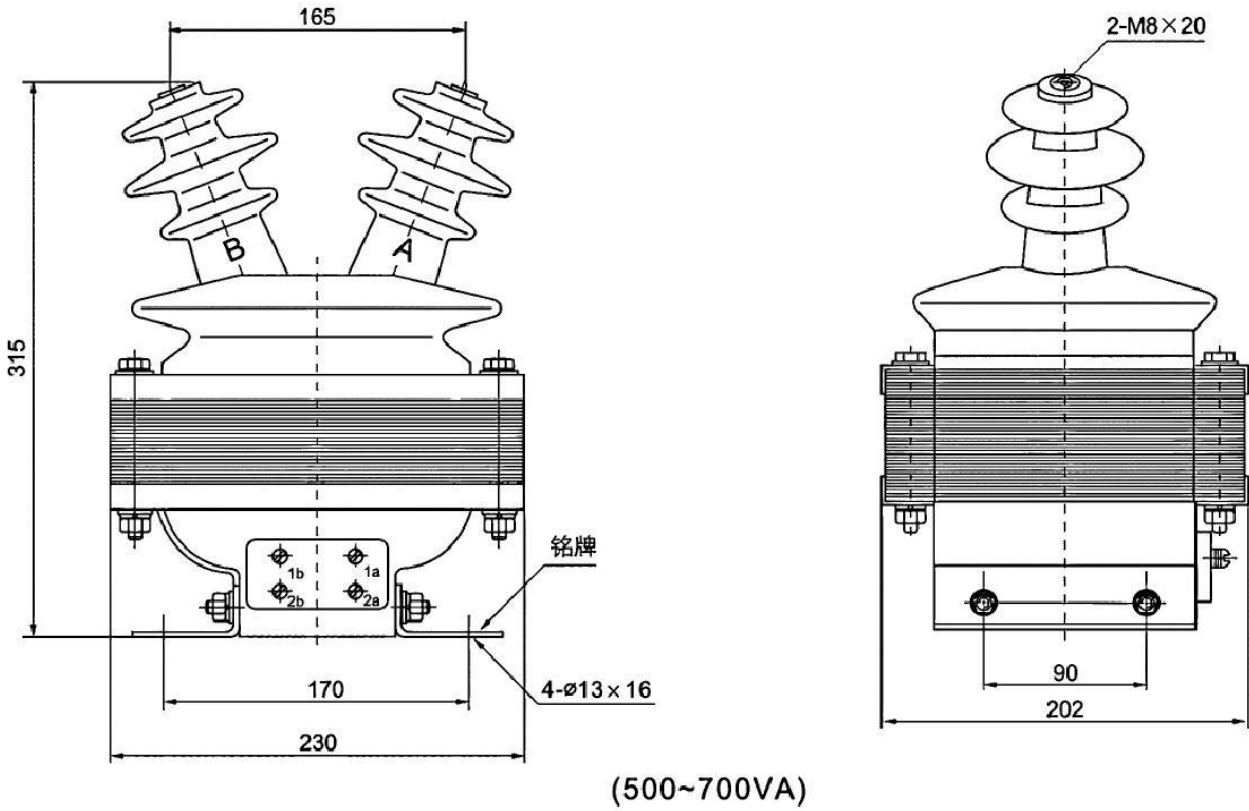
1、型号及含义 Model and Meaning

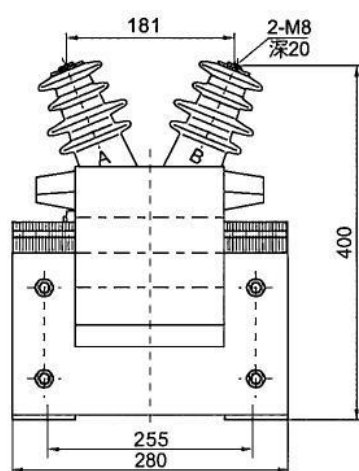


2、技术参数 Technical Parameters

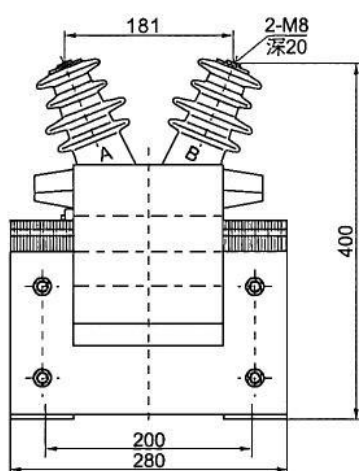
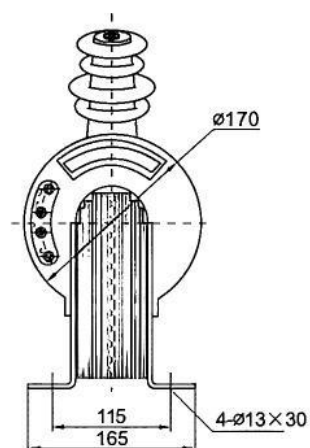
型号 Type	额定电压比 Rated voltage ratio (V)	额定二次输出 Rated secondary output (VA)	极限输出 Max.output (VA)	额定绝缘水平 Rated insulation level (kV)
JDZC-6 JDZC-10	6000/100/220 10000/100/220	0.2/3---30/300 0.5/3---50/300	500 700	7.2/32/60 12/42/75
		0.2/3---30/400 0.5/3---50/400	800 1000	
		0.2/3---50/1000 0.5/3---80/1000	2000	
		0.2/3---50/1500 0.5/3---80/1500	3000	

3、外形及安装尺寸 Overall Dimension Drawing

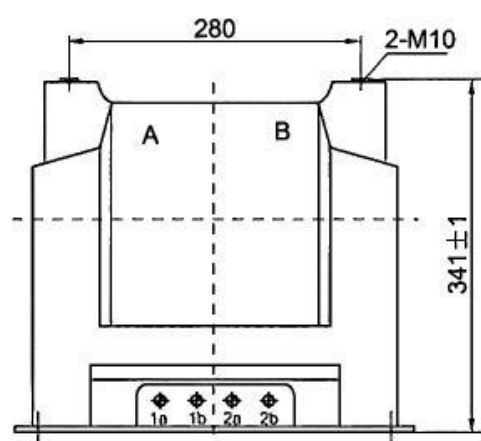
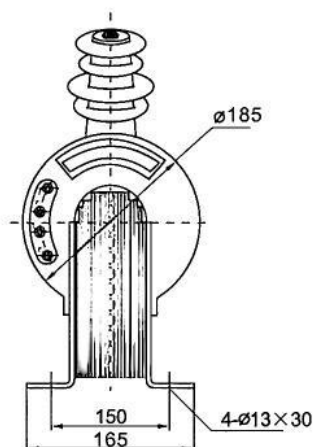




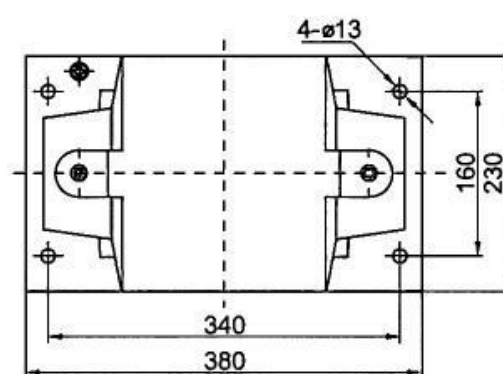
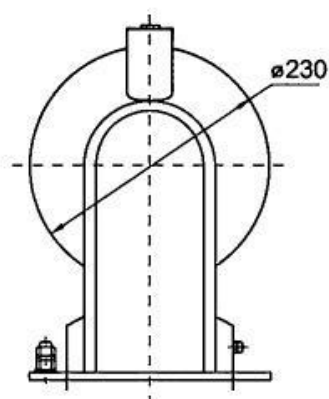
(800-1000VA)



(2000VA)



(3000VA)



4、接线图 Wiring Diagram

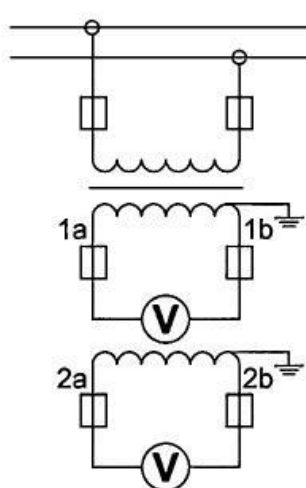


图1 (Figure 1)

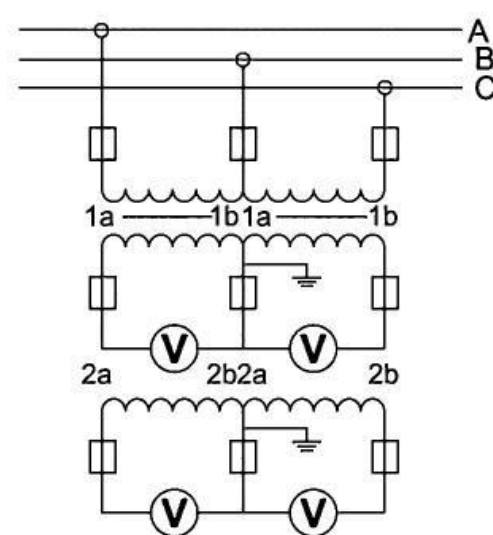
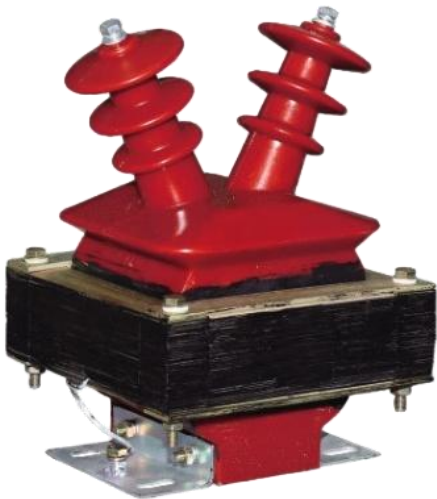
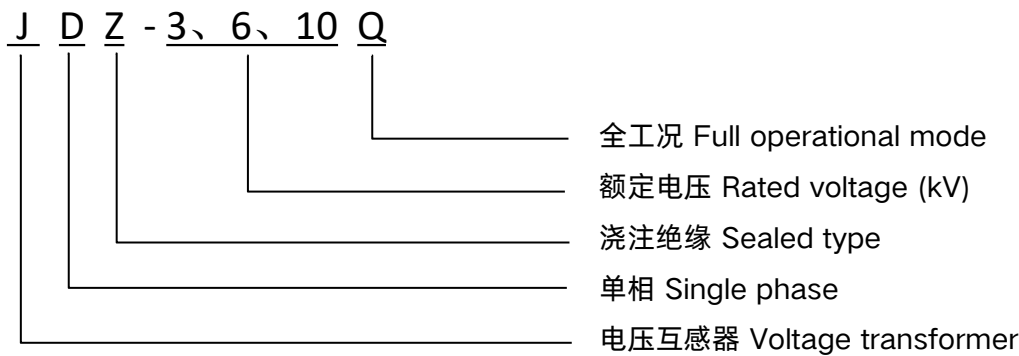


图2 (Figure 2)

JDZ-3、6、10Q型电压互感器
Voltage Transformer

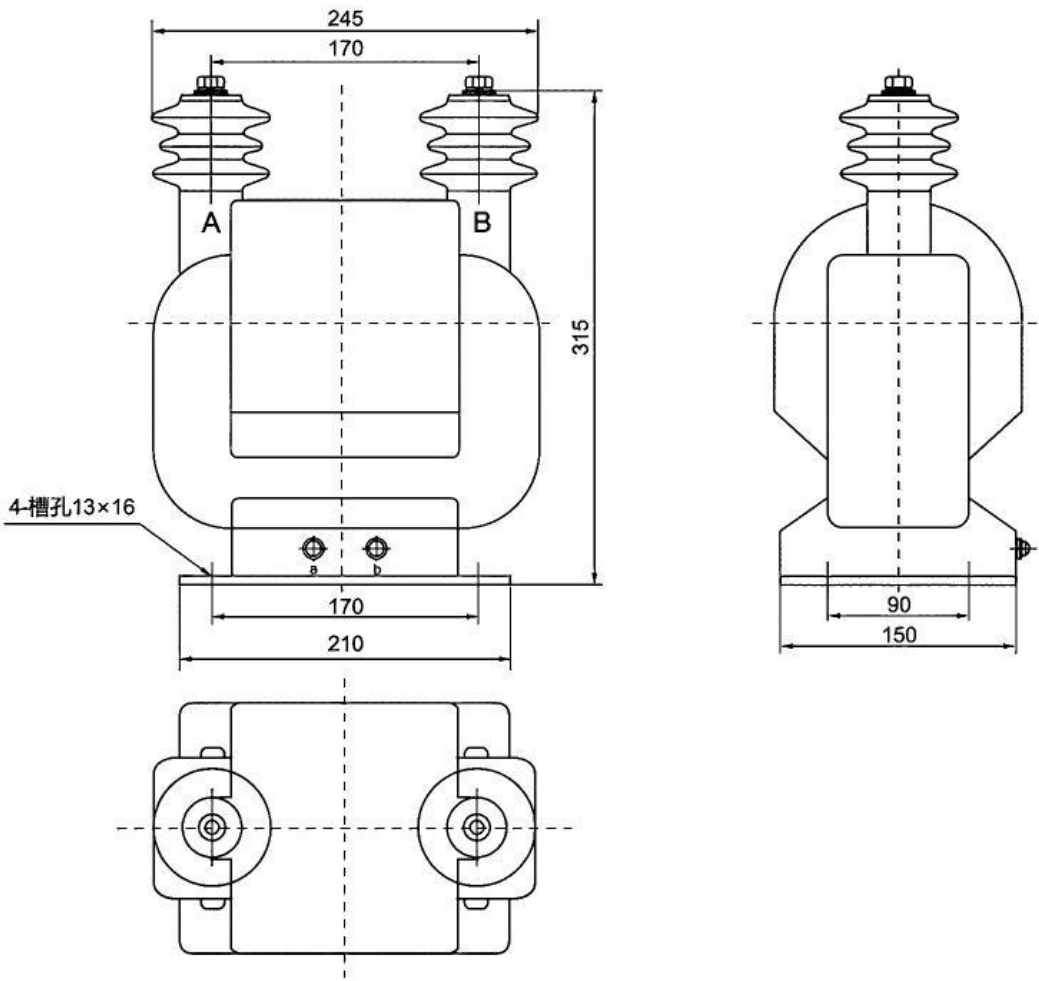
1、型号及含义 Model and Meaning



2、技术参数 Technical Parameters

型号 Type	额定电压比 Rated voltage ratio (V)	额定二次输出 Rated secondary output (VA)					极限输出 Max.output (VA)	额定绝缘水平 Rated insulation level (kV)
		0.2	0.5	1级	3级	0.2/0.5		
JDZ3-3Q	3000/100	20	30	50	80	/	200	3.6/25/40
JDZ3-6Q	6000/100						400	7.2/32/60
JDZ3-10Q	10000/100						500	12/42/75
JDZ3-10Q	10000/100/100	/	/	/	/	15/20	500	12/42/75

3、外形及安装尺寸 Overall Dimension Drawing

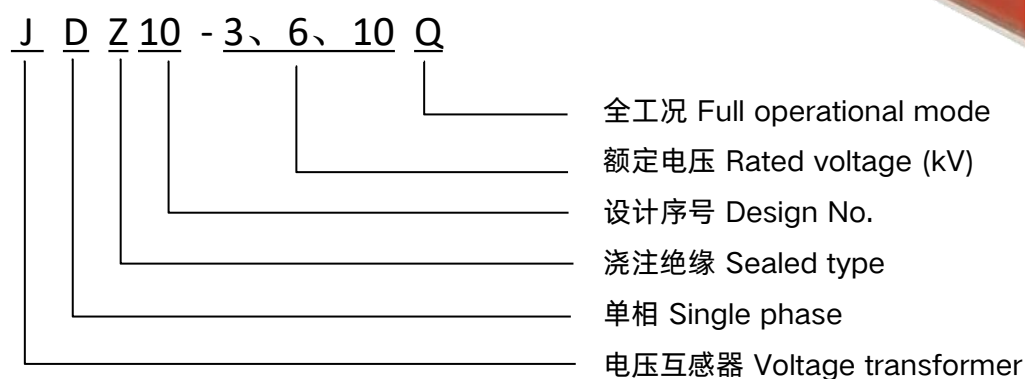


JDZ10-3、6、10(Q)型电压互感器

Voltage Transformer



1、型号及含义 Model and Meaning

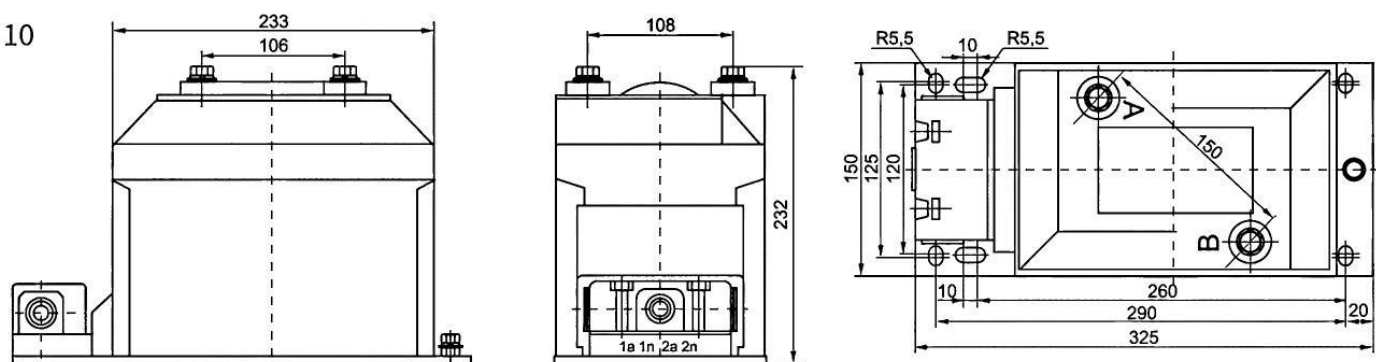


2、技术参数 Technical Parameters

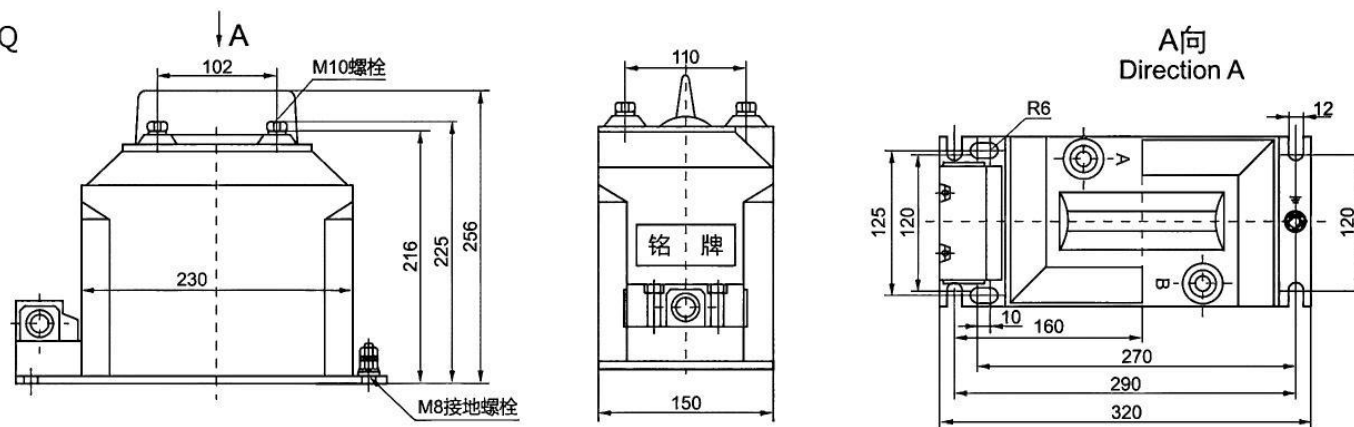
额定电压比 Rated voltage ratio (V)	额定二次输出 Rated secondary output (VA)				极限输出 Max.output (VA)	额定绝缘水平 Rated insulation level (kV)	备注 Notes	接线图 Wiring diagram
	0.2	0.5	1级	3级				
3000/100	15	30	60	150	200	3.6/25/40	等同"RZL" Same"RZL"	图1-图2 Figure 1-2
6000/100						7.2/32/60		
10000/100						12/42/75		

3、外形及安装尺寸 Overall Dimension Drawing

JDZ10-3, 6, 10



JDZ10-3, 6, 10Q



4、接线图 Wiring Diagram

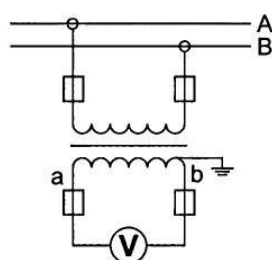


图1 (Figure 1)

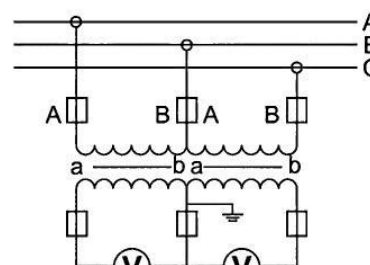
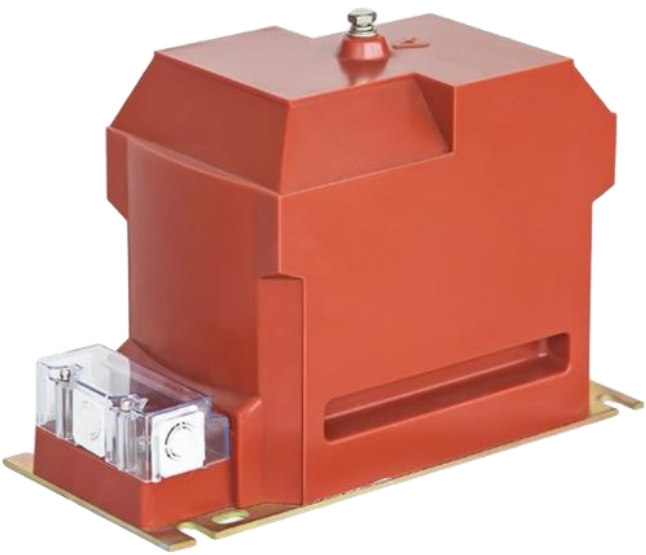


图2 (Figure 2)

JDZX10-3、6、10型电压互感器

Voltage Transformer



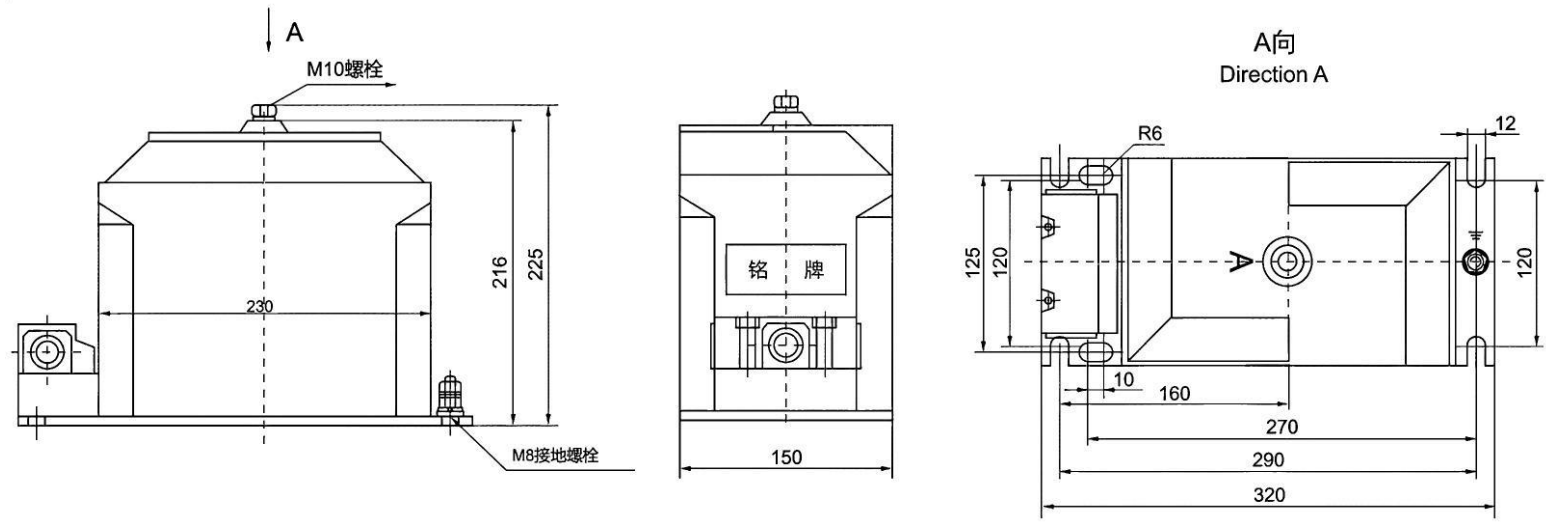
1、型号及含义 Model and Meaning



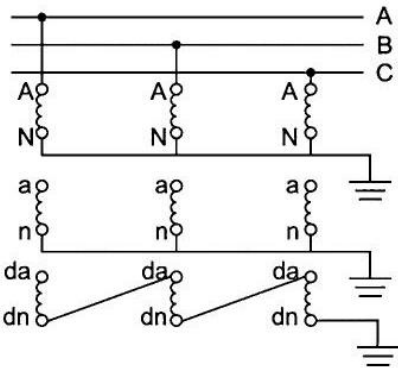
2、技术参数 Technical Parameters

额定电压比 Rated voltage ration (V)	额定二次输出 Rated secondary output (VA)					极限输出 Max.output (VA)	额定绝缘水平 Rated insulation level (kV)	备注 Notes
	0.2	0.5	1级	3级	6P			
$\frac{3000}{\sqrt{3}}/\frac{100}{\sqrt{3}}/\frac{100}{3}$	15	30	60	150	50	200	3.6/25/40	等同“REL” Same“REL”
$\frac{6000}{\sqrt{3}}/\frac{100}{\sqrt{3}}/\frac{100}{3}$							7.2/32/60	
$\frac{10000}{\sqrt{3}}/\frac{100}{\sqrt{3}}/\frac{100}{3}$							12/42/75	

3、外形及安装尺寸 Overall Dimension Drawing



4、接线图 Wiring Diagram



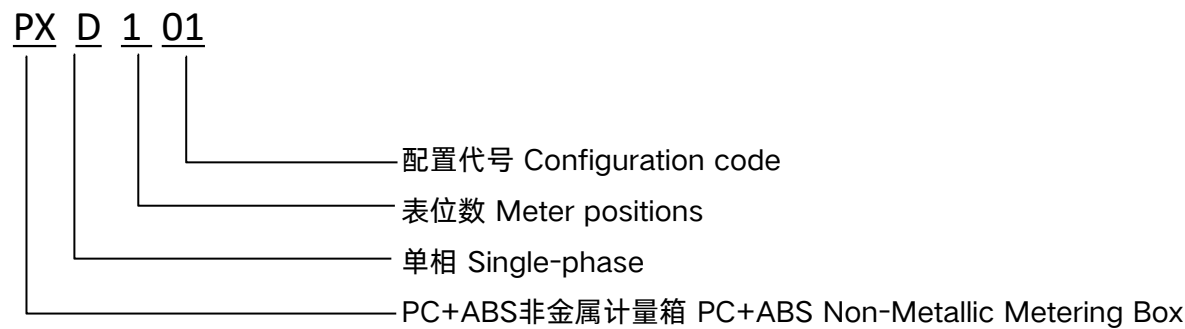


PXD101新国网单相一表位电能计量箱

New State Grid Single-Phase Single-Meter Energy Metering Box



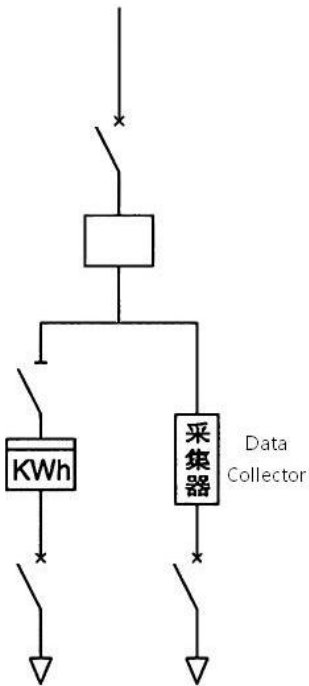
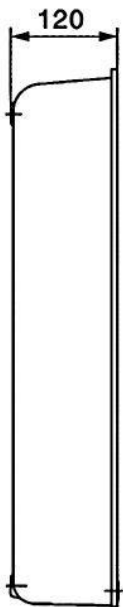
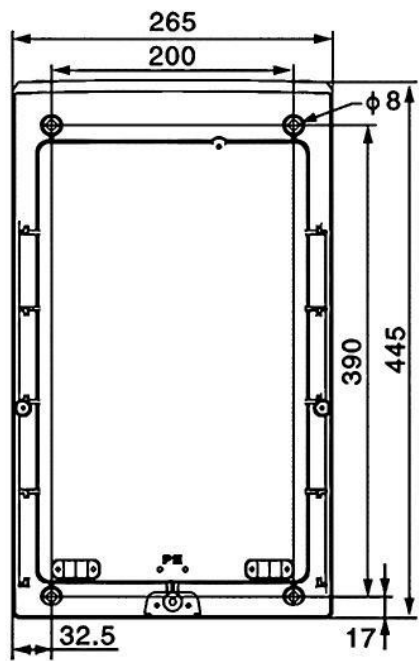
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
PXD101/1	表前配置Before-meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A CDGK-125/2P-100A(可选配) CDGK-100/2P-80A CDGK-125/2P-100A (Optional)	1
	表后配置After-meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDBK-1P+N 32A/63A(可选配) CDBK-63/2P-63A CDBK-1P+N 32A/63A (Optional)	1
	表室配置Meter Chamber Configuration	导线Wire	BV 10mm ² /16mm ²	/
	表室配置Meter Chamber Configuration	接插件Connector	YD-D160A(可选配) YD-D1 60A (Optional)	1

3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram



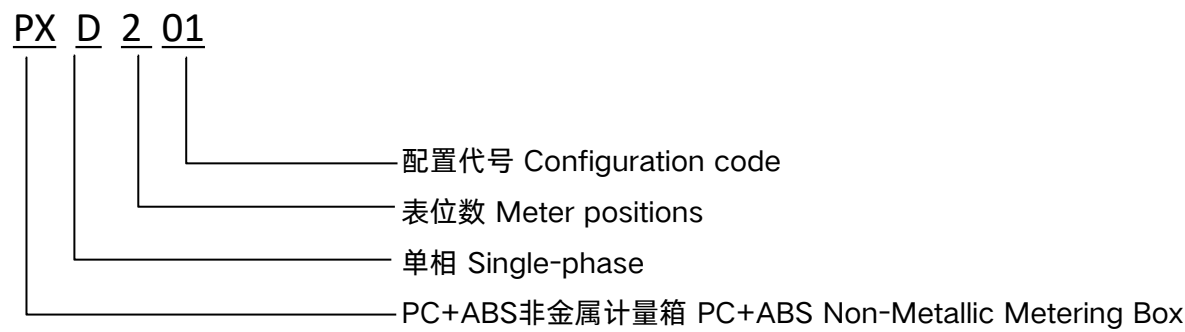


PXD201新国网单相二表位电能计量箱

New State Grid Single-Phase Two-Meter Energy Metering Box



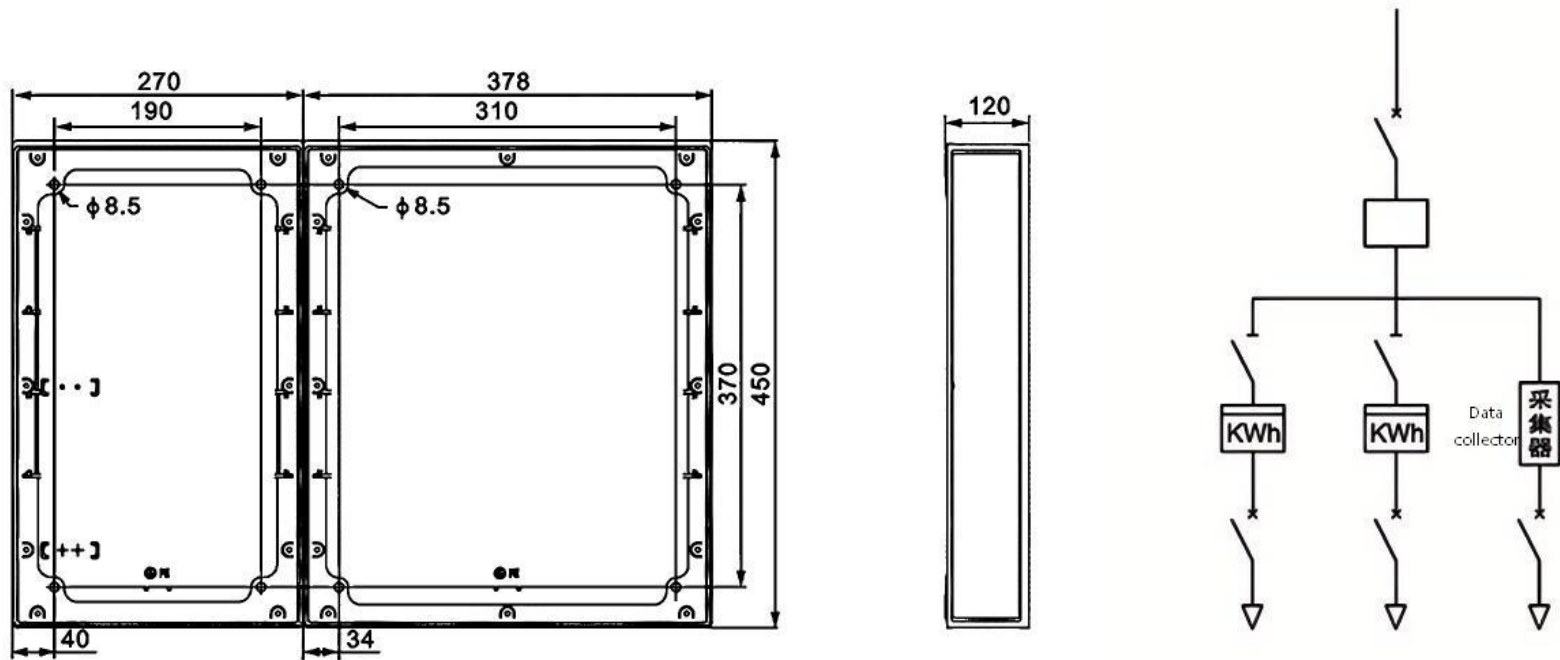
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
PXD201/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-125C/2300100A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDBK-63/2P-63A CDBK-1P+N 32A/63A(可选配Optional)	2
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-100/2P-63A CDBK-1P+N 32A/63A(可选配Optional)	2
	表室配置Meter Compartment Configuration	导线Wire	BV 10mm ² /16mm ²	/
	表室配置Meter Compartment Configuration	接插件Connector	YD-D160A(可选配Optional)	2

3、安装尺寸图、接线图 IInstallation Dimension Drawing, Wiring Diagram



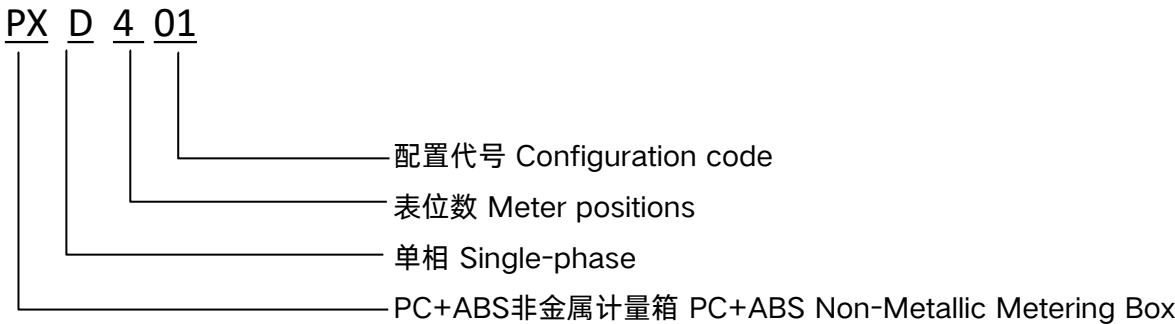


PXD401新国网单相四表位电能计量箱

New State Grid Single-Phase Four-Meter Energy Metering Box



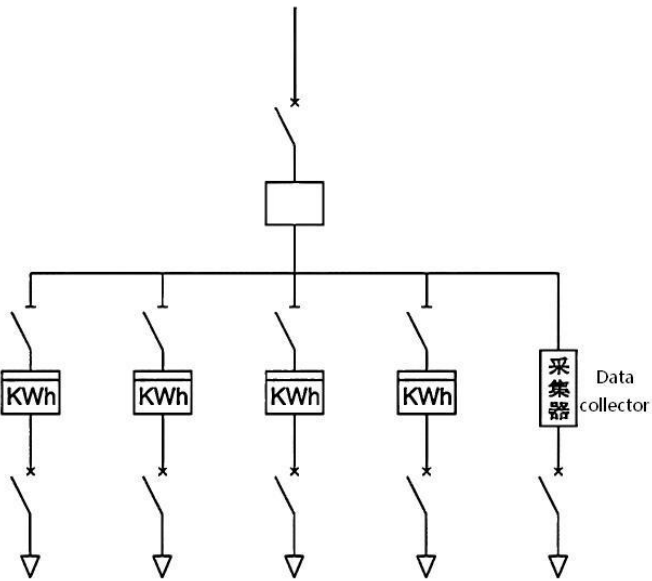
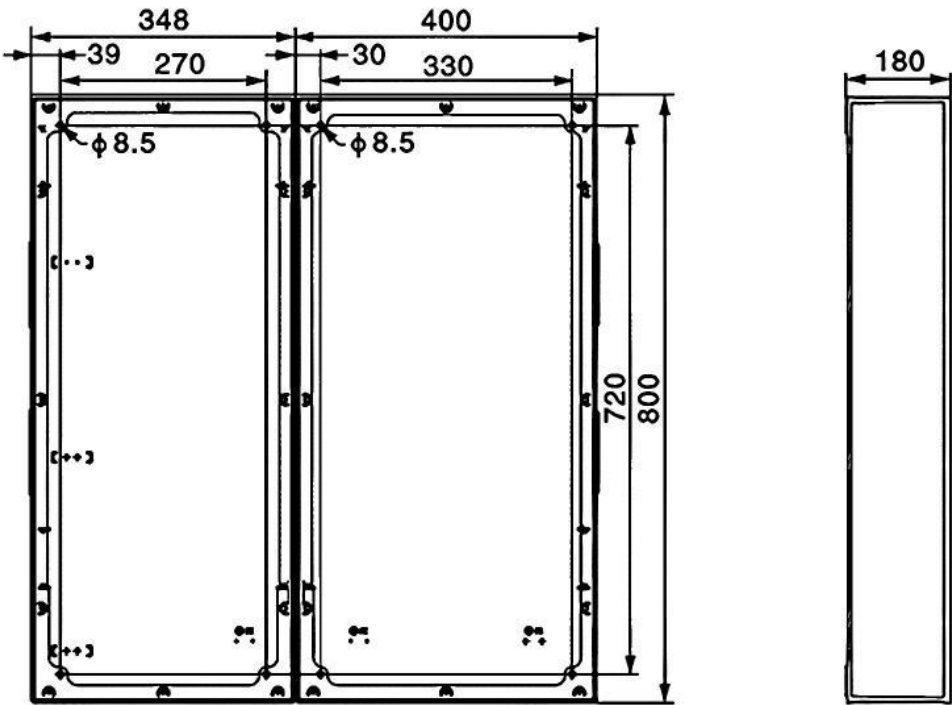
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
PXD401/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit	CDMK-125C/3300125A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A、CDGK-125/1P-100A(可选配Optional)	4
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A、CDBK-1P+N 32A/63A(可选配Optional)	4
	表前配置Pre-Meter Configuration	开关端子Switch Terminal	FJ6G-100/2×25	3
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/a	1
	表室配置Meter Compartment	导线Conductor	BV10mm ² /16mm ²	/
	表室配置Meter Compartment	PE端子PE Terminal	FJ6NB-100/4×25	1
	表室配置Meter Compartment	接插件Connector	YD-D160A(可选配Optional)	4
	浪涌配置Surge Configuration	浪涌保护开关Surge Protection Switch	CDBK-63/4P-63A(可选配Optional)	1
	浪涌配置Surge Configuration	浪涌保护器Surge Protector Device	YCD1-4P-40KA(可选配Optional)	1
	采集器配置Data Collector	采集器开关Collector Circuit Breaker	CDBK-63/2P-63A(可选配Optional)	1
	采集器配置Data Collector	采集器接插件Collector Connector	YD-D1 C(可选配Optional)	1

3、安装尺寸图、接线图 IInstallation Dimension Drawing, Wiring Diagram



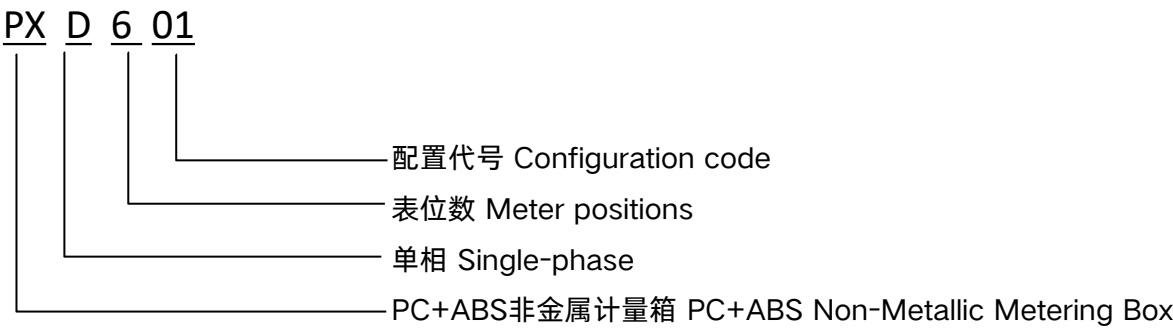


PXD601新国网单相六表位电能计量箱

New State Grid Single-Phase Six-Meter Energy Metering Box



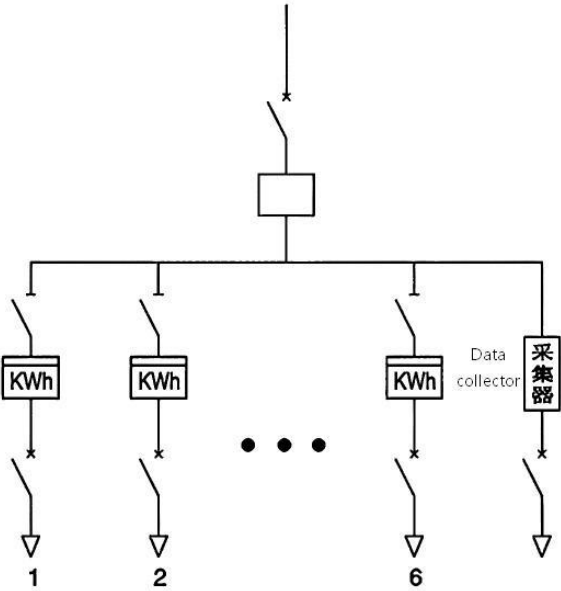
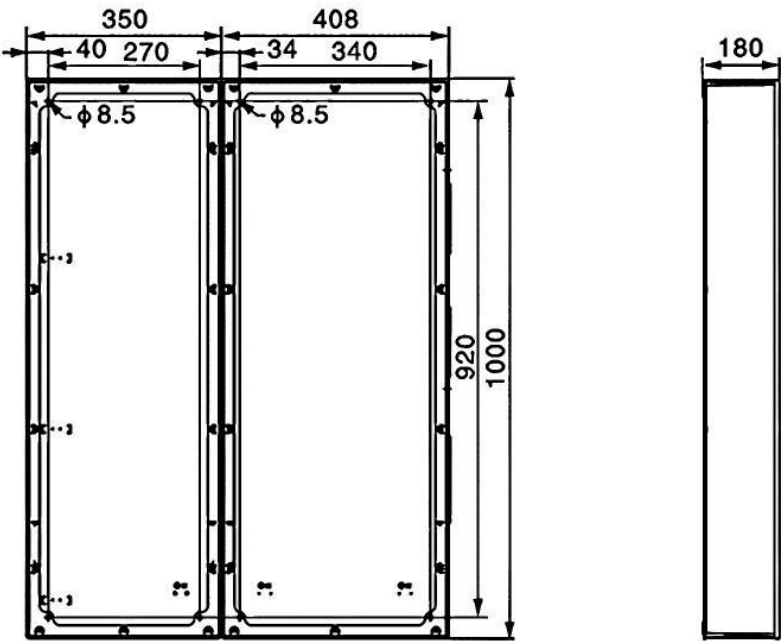
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
PXD601/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-125C/3300125A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A、CDGK-125/1P-100A(可选配Optional)	6
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A、CDBK-1P+N32A/63A(可选配Optional)	6
	表前配置Pre-Meter Configuration	开关端子Switch Terminal	FJ6G-100/3×25	3
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/a	1
	表室配置Meter Compartment Configuration	导线Conductor	BV10mm ² /16mm ²	/
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-100/6×25	1
	表室配置Meter Compartment Configuration	接插件Connector	YD-D160A(可选配Optional)	6
	浪涌配置Surge Configuration	浪涌保护开关Surge Protection Switch	CDBK-63/4P-63A(可选配Optional)	1
	浪涌配置Surge Configuration	浪涌保护器Surge Protector Device	YCD1-4P-40KA(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器开关Collector Circuit Breaker	CDBK-63/2P-63A(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器接插件Collector Connector	YD-D1C(可选配Optional)	1

3、安装尺寸图、接线图 IInstallation Dimension Drawing, Wiring Diagram



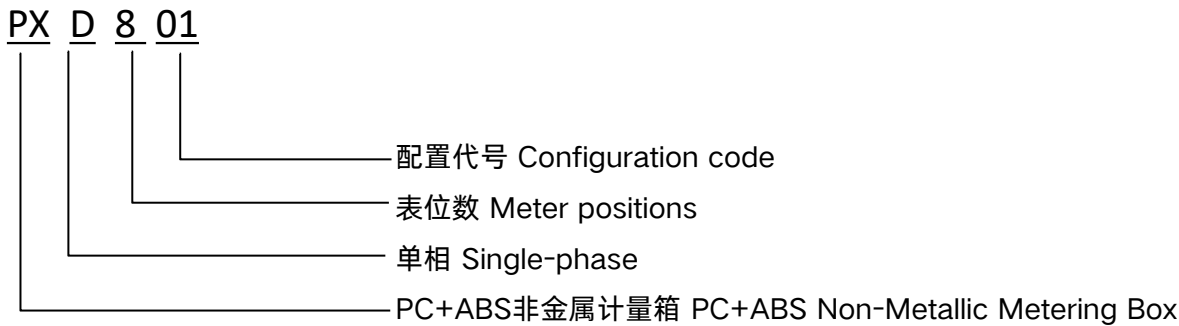


PXD901新国网单相九表位电能计量箱

New State Grid Single-Phase Nine-Meter Energy Metering Box



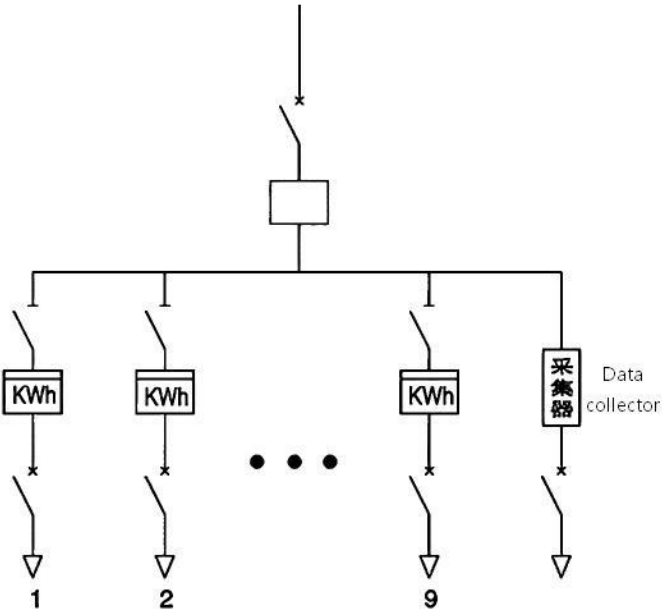
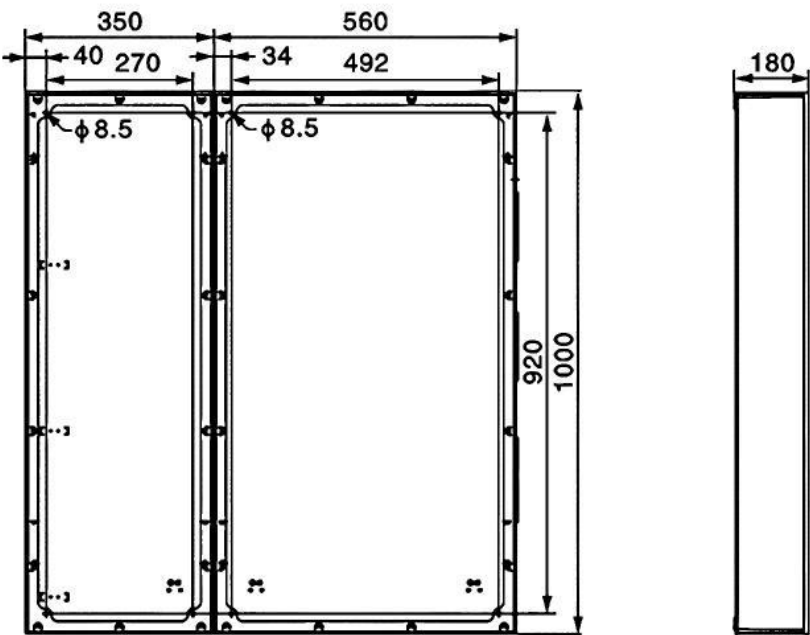
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
PXD901/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-250C/3300200A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A、CDGK-125/1P-100A(可选配Optional)	9
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A、CDBK-1P+N32A/63A(可选配Optional)	9
	表前配置Pre-Meter Configuration	开关端子Switch Terminal	FJ6G-250/4×25	3
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/b	1
	表室配置Meter Compartment Configuration	导线Conductor	BV10mm ² /16mm ²	/
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-100/9×25	1
	表室配置Meter Compartment Configuration	接插件Connector	YD-D160A(可选配Optional)	9
	浪涌配置Surge Configuration	浪涌保护开关Surge Protection Switch	CDBK-63/4P-63A(可选配Optional)	1
	浪涌配置Surge Configuration	浪涌保护器Surge Protector Device	YCD1-4P-40KA(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器开关Collector Circuit Breaker	CDBK-63/2P-63A(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器接插件Collector Connector	YD-D1C(可选配Optional)	1

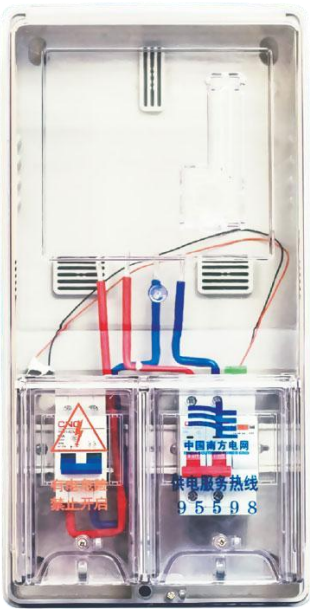
3、安装尺寸图、接线图 IInstallation Dimension Drawing, Wiring Diagram



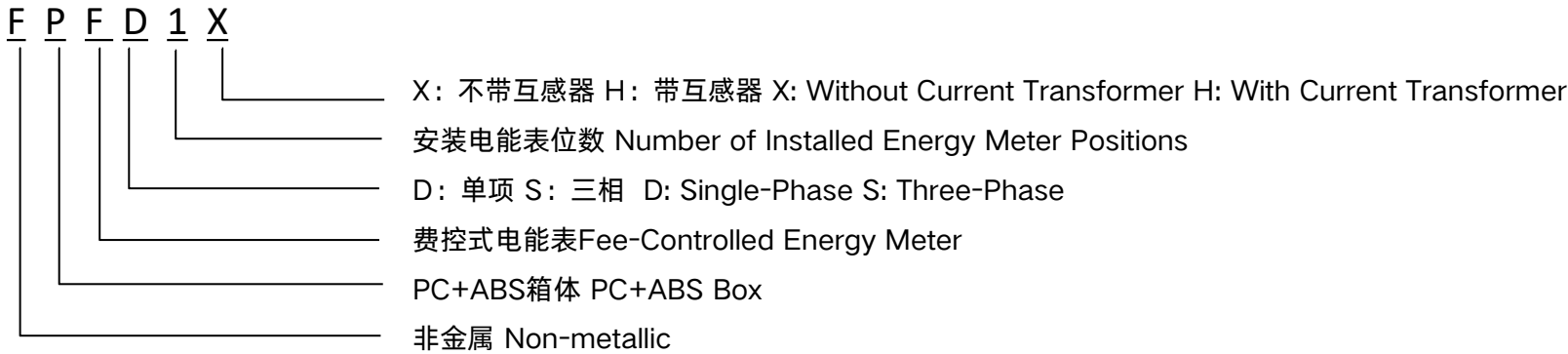


FPFD1X 南网费控单相一表位计量箱

Southern Power Grid Fee-Controlled Single-Phase One-Meter Energy Metering Box



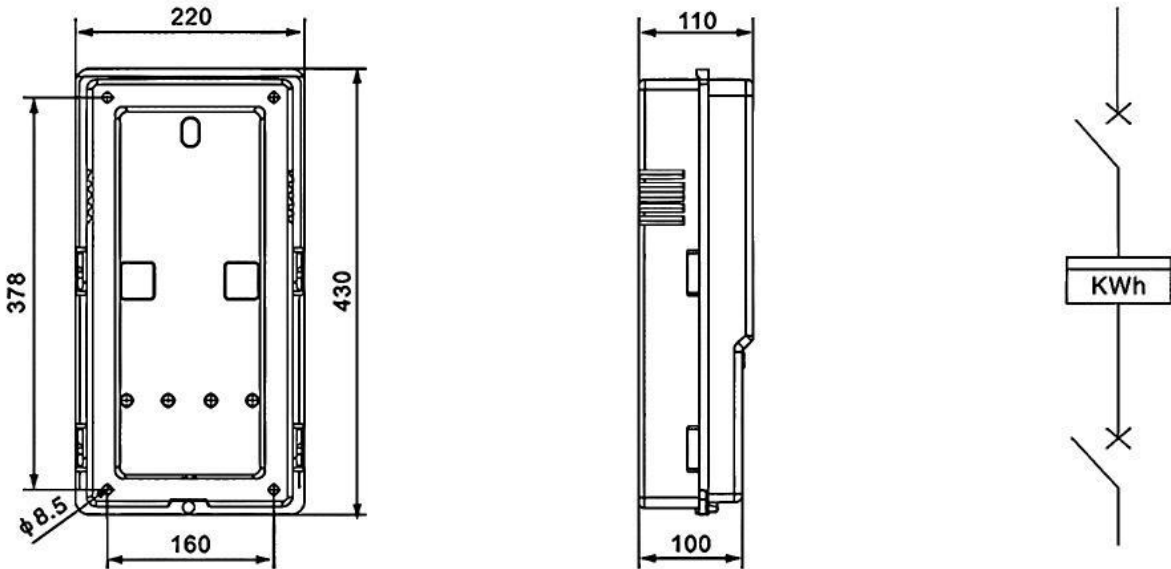
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
FPFD1X/1	表前配置 Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A CDGK-125/2P-100A(可选配Optional)	1
	表后配置 Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDB9SRC-100/2P-80A/费控开关(可选配Optional)	1
	表室配置 Meter Compartment Configuration	导线Conductor	BV10mm ² /16mm ²	/

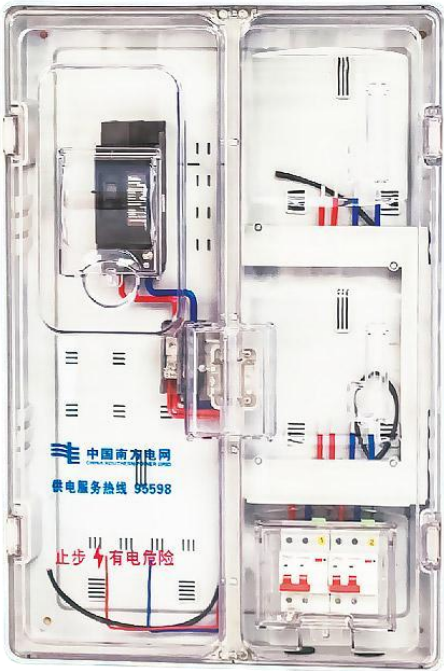
3、安装尺寸图、接线图 IInstallation Dimension Drawing, Wiring Diagram



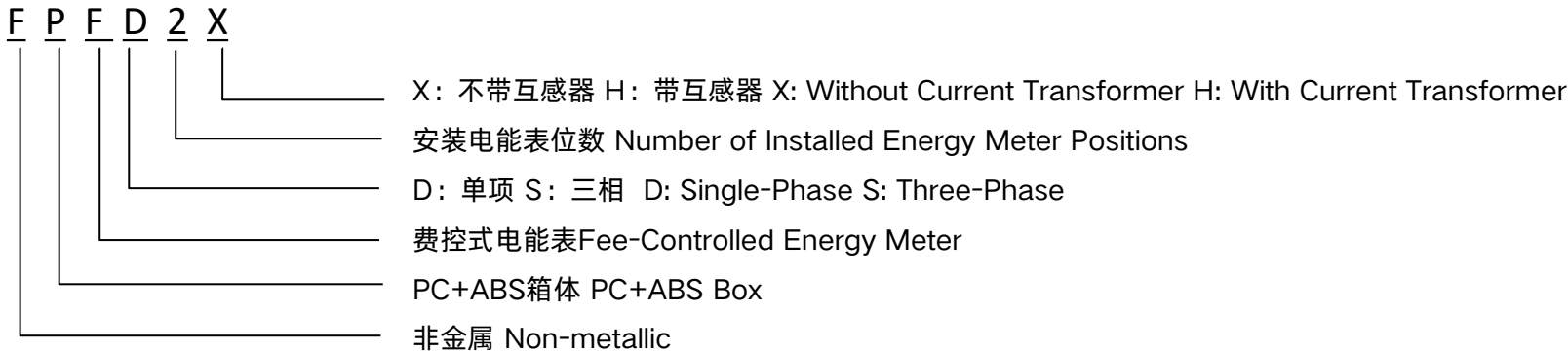


FPFD2X 南网费控单相二表位计量箱

Southern Power Grid Fee-Controlled Single-Phase Two-Meter Energy Metering Box



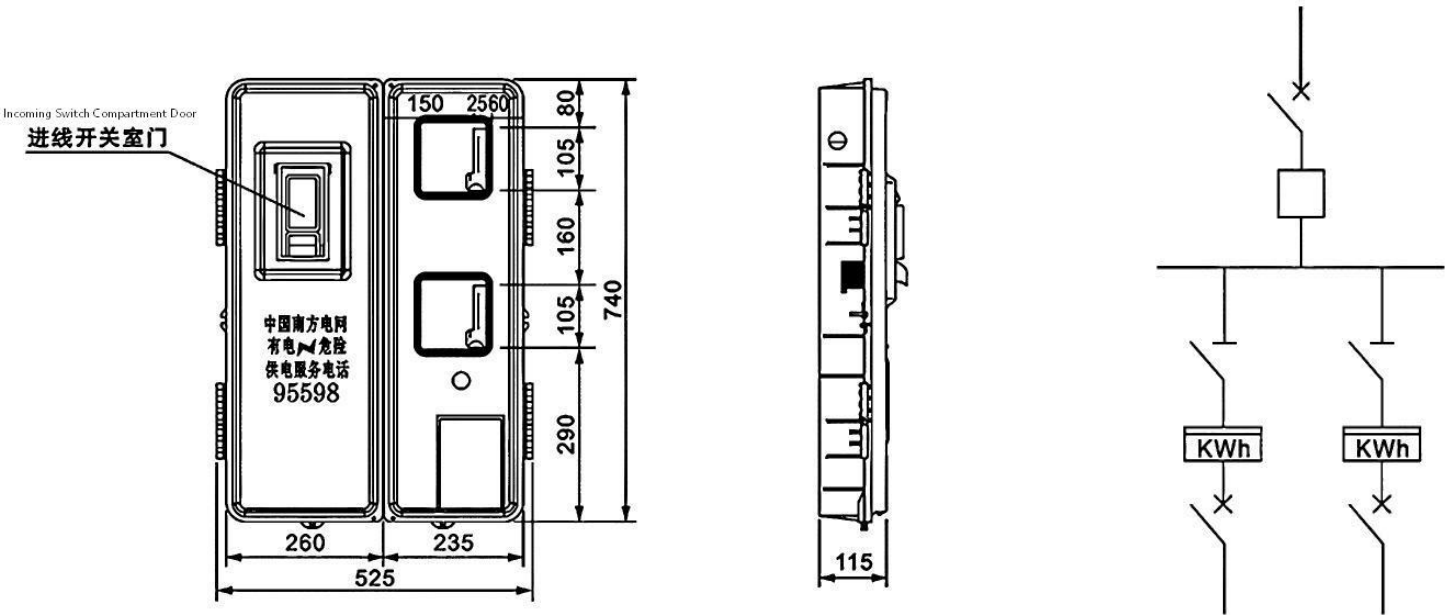
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
FPFD2X/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-125C/2300-100A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/1P-80A CDGK-125/1P-100A(可选配Optional)	2
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDB9SRC-100/2P-80A/费控开关Fee-Controlled Switch(可选配Optional)	2
	表前配置Pre-Meter Configuration	开关端子Switch Terminal	FJ6G-100/2×25	2
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-100/2×25	1
	表室配置Meter Compartment Configuration	导线Conductor	BV 10mm²/16mm²	/
	浪涌配置Surge Configuration	浪涌保护开关Surge Protection Switch	CDBK-63/2P-63A	1
	浪涌配置Surge Configuration	浪涌保护器Surge Protector Device	CDY1-2P-20KA	1

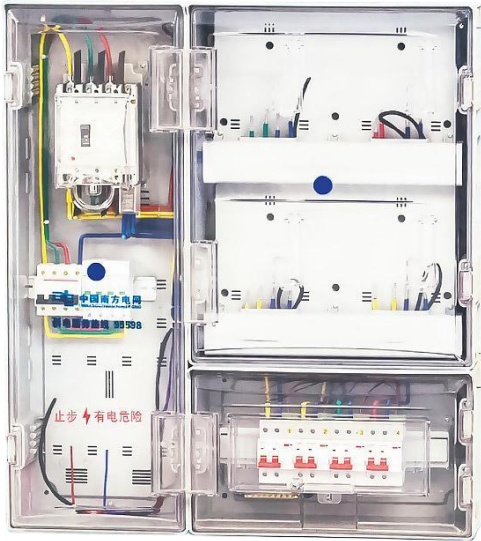
3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram



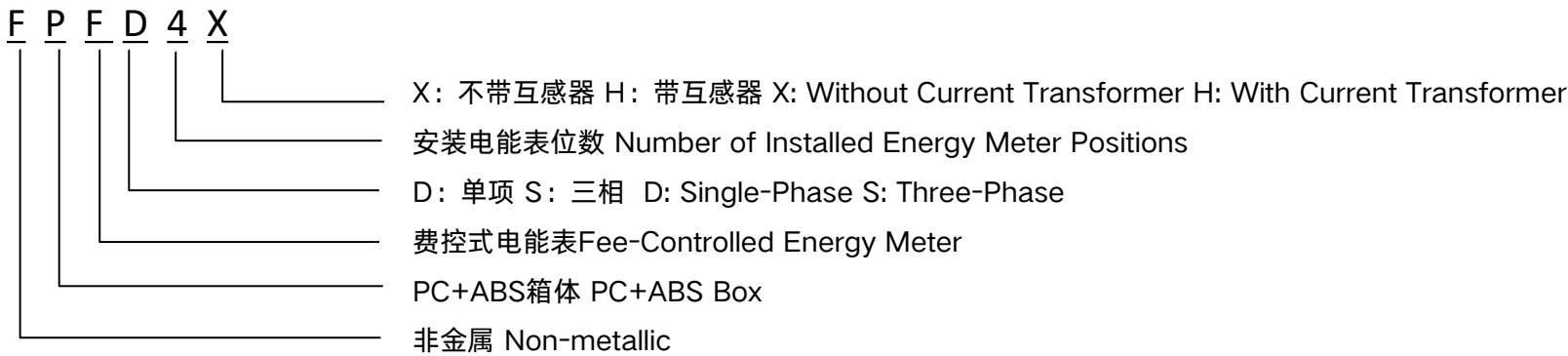


FPFD4X 南网费控单相四表位计量箱

Southern Power Grid Fee-Controlled Single-Phase Four-Meter Energy Metering Box



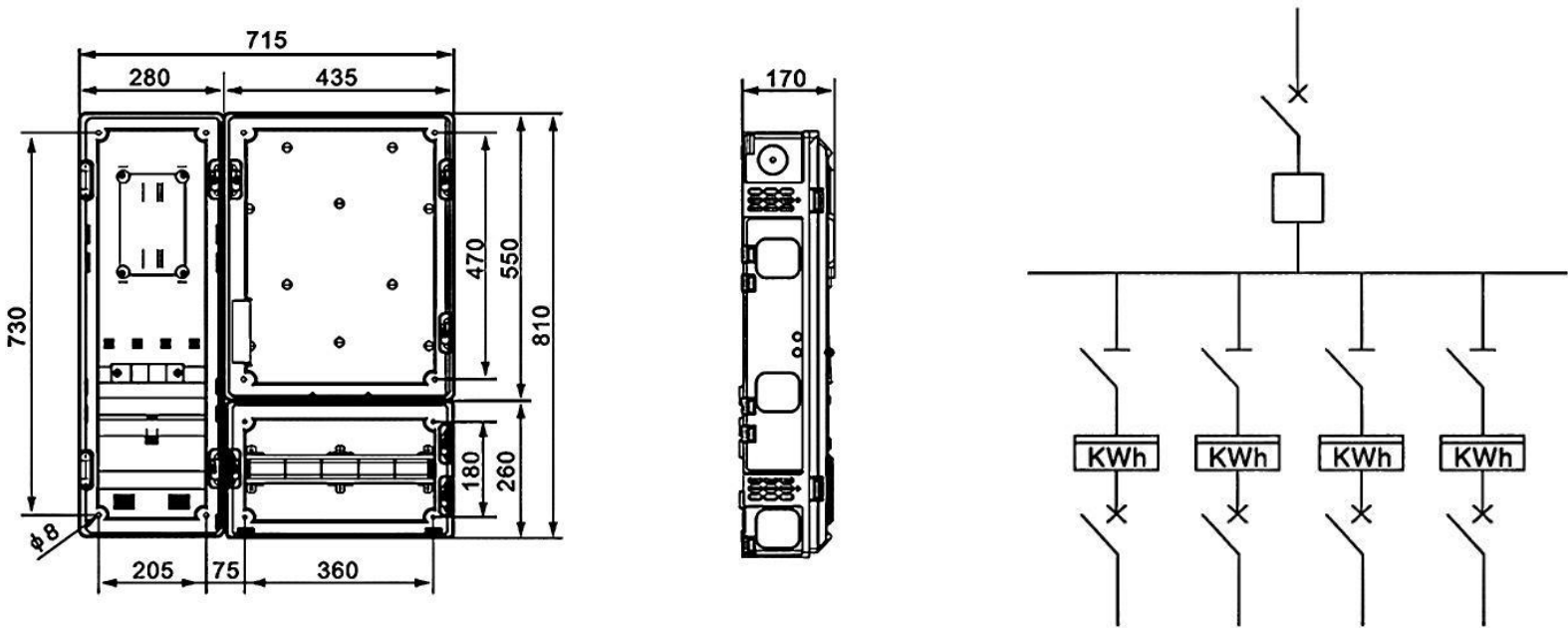
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
FPFD4X/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-125C/3300-125A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/1P-80A CDGK-125/1P-100A(可选配Optional)	4
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDB9SRC-100/2P-80A/费控开关Fee-Controlled Switch(可选配Optional)	4
	表前配置Pre-Meter Configuration	开关端子Switch Terminal	FJ6G-100/2×25	3
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/a	1
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-100/4×25	1
	表室配置Meter Compartment Configuration	导线Conductor	BV 10mm²/16mm²	/
	浪涌配置Surge Configuration	浪涌保护开关Surge Protection Switch	CDBK-63/4P-63A	1
	浪涌配置Surge Configuration	浪涌保护器Surge Protector Device	YCD1-4P-40KA	1

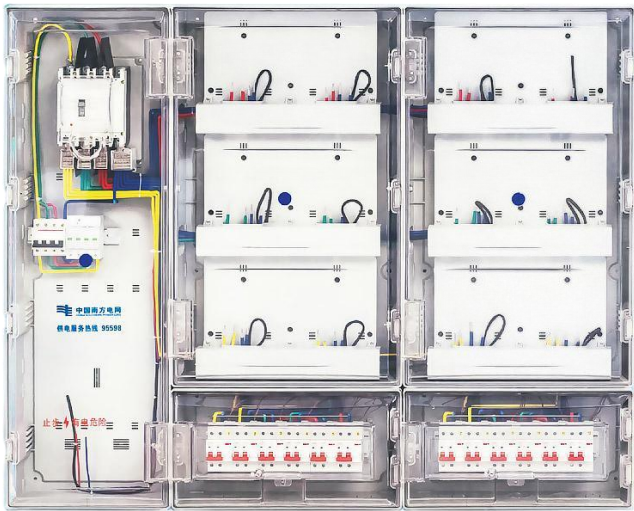
3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram



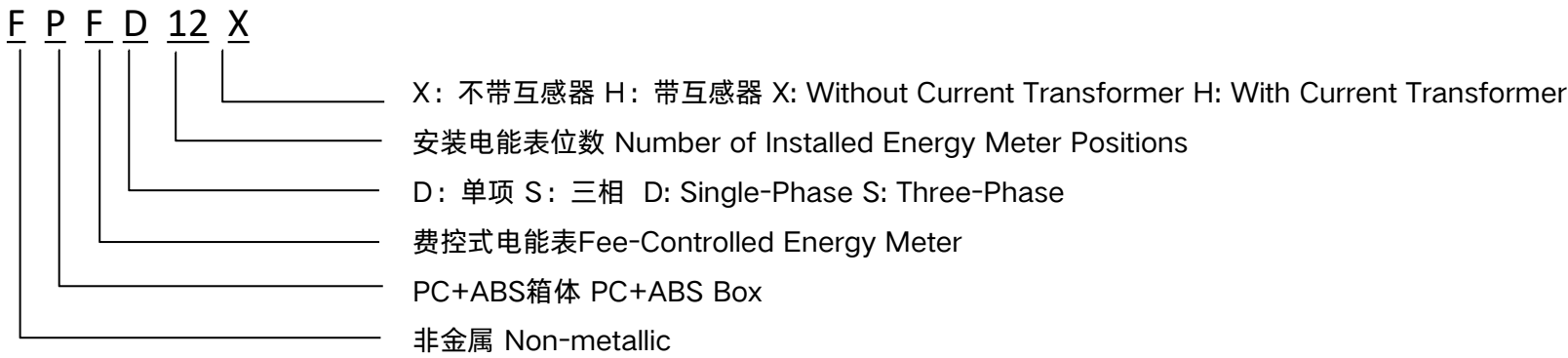


FPFD12X 南网费控单相留十二表位计量箱

Southern Power Grid Fee-Controlled Single-Phase Twelve-Meter Energy Metering Box



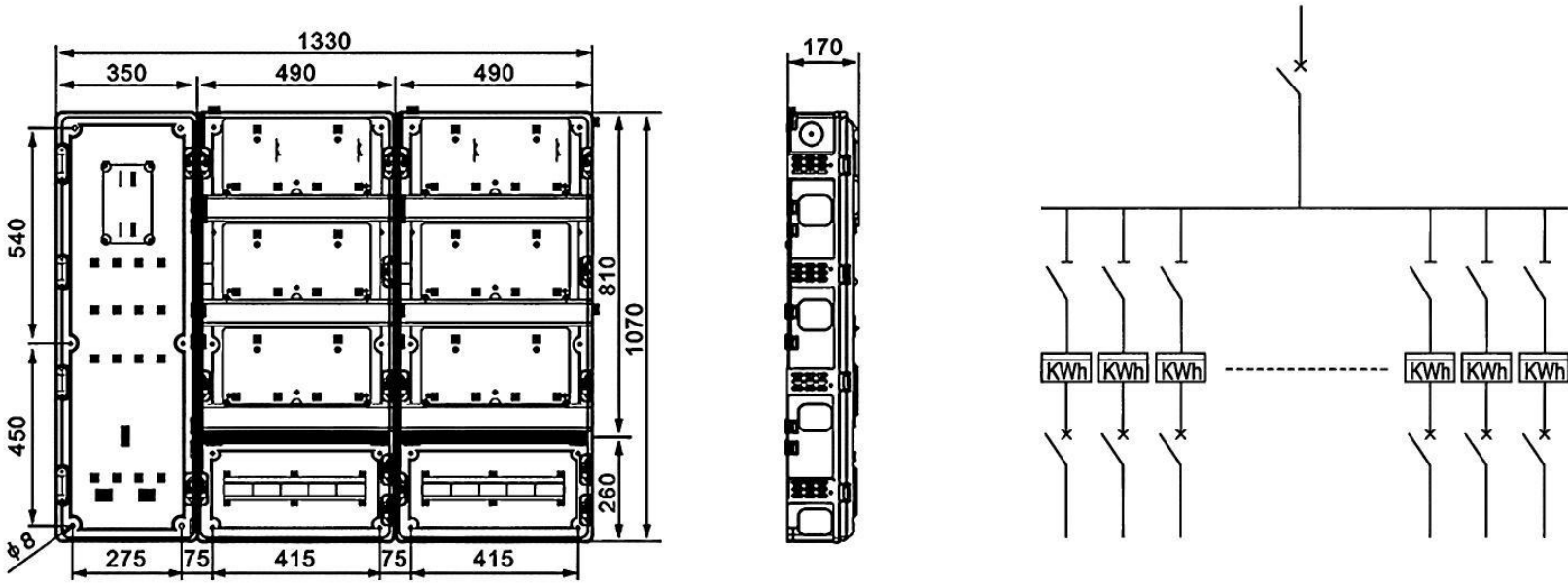
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
FPFD12X/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-250C/3300-250A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/1P-80A CDGK-125/1P-100A(可选配Optional)	12
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDB9SRC-100/2P-80A/费控开关Fee-Controlled Switch(可选配Optional)	12
	表前配置Pre-Meter Configuration	开关端子Switch Terminal	FJ6G-250/4×25	3
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/CL	1
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-250/12×25	1
	表室配置Meter Compartment Configuration	导线Conductor	BV 10mm²/16mm²	/
	浪涌配置Surge Configuration	浪涌保护开关Surge Protection Switch	CDBK-63/4P-63A	1
	浪涌配置Surge Configuration	浪涌保护器Surge Protector Device	YCD1-4P-40KA	1

3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram





SXD101X SMC单相一表位电能计量箱

Single-Phase One-Meter Energy Metering Box



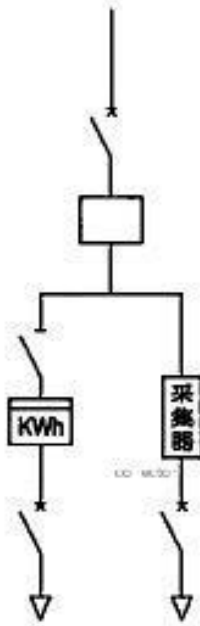
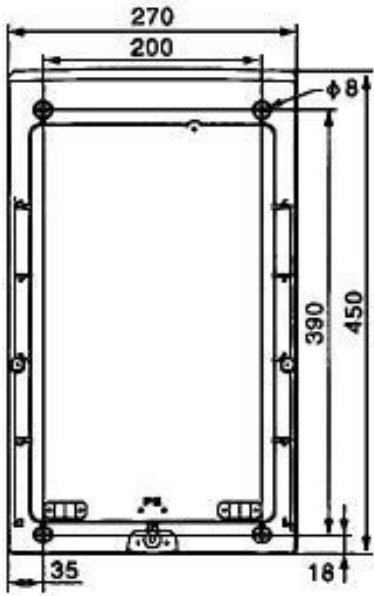
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
SXD101X/1	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A CDGK-125/2P-100A(可选配Optional)	1
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDBK-1P+N32A/63A(可选配Optional)	1
	表室配置Meter Compartment Configuration	导线Conductor	BV 10mm/16mm ²	/
	表室配置Meter Compartment Configuration	接插件Connector	YD-D160A(可选配Optional)	1

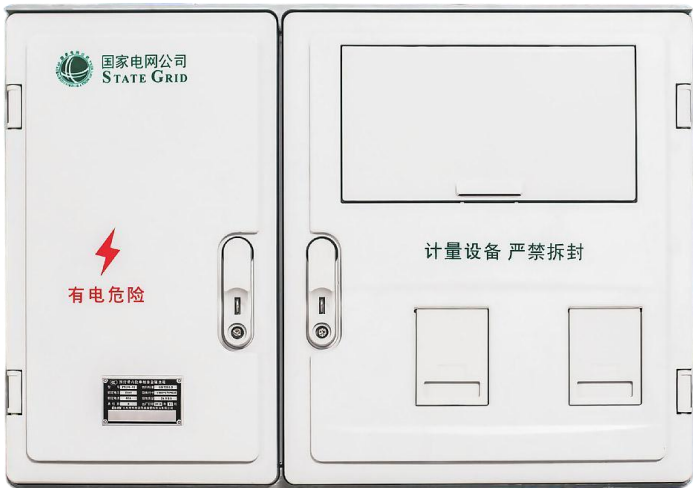
3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram





SXD201X SMC单相二表位电能计量箱

Single-Phase Two-Meter Energy Metering Box



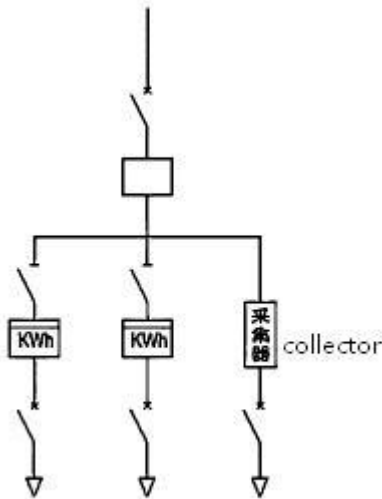
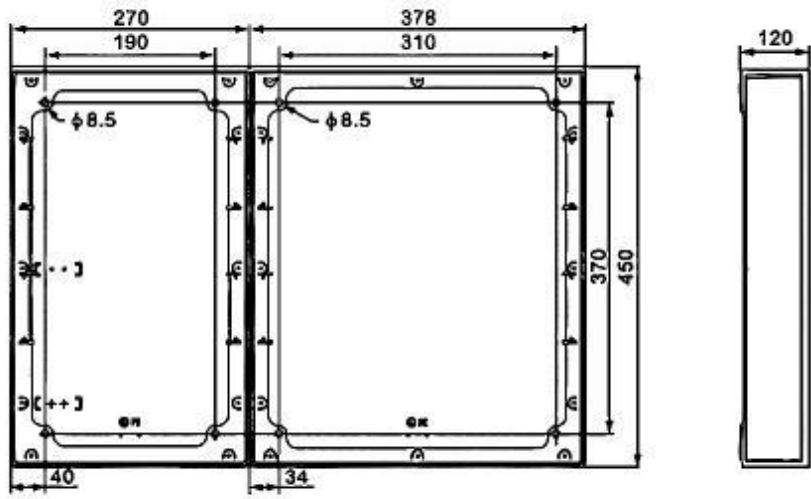
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
SXD201X/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-125C/2300 100A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A CDGK-125/2P-100A(可选配Optional)	2
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDBK-1P+N32A/63A(可选配Optional)	2
	表室配置Meter Compartment Configuration	导线Conductor	BV 10mm ² /16mm ²	1
	表室配置Meter Compartment Configuration	接插件Connector	YD-D160A(可选配Optional)	2

3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram





SXD401X SMC单相四表位电能计量箱

Single-Phase Four-Meter Energy Metering Box

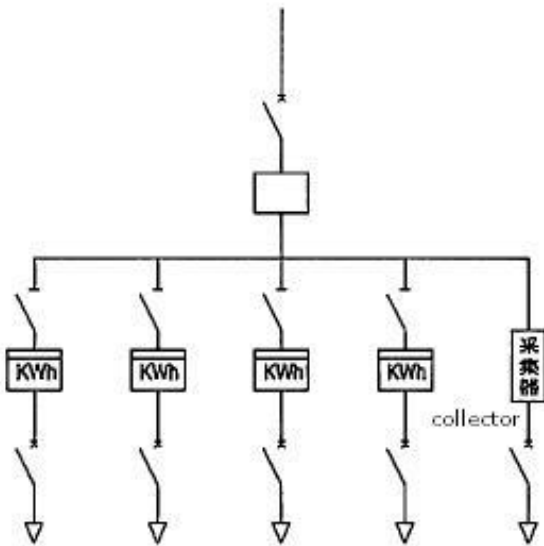
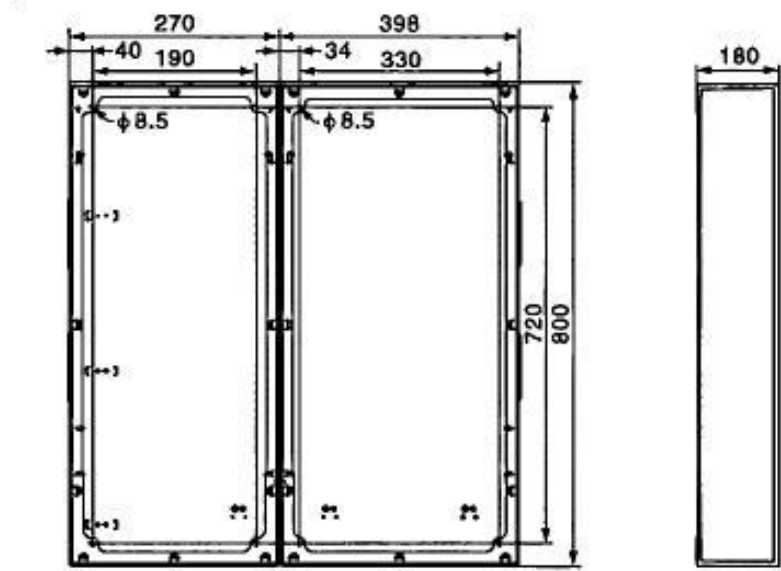
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
SXD401X/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-125C/3300 125A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A、CDGK-125/1P-100A(可选配Optional)	4
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A、CDBK-1P+N 32A/63A(可选配Optional)	4
	表前配置Pre-Meter Configuration	开关端子Switch Terminal	FJ6G-100/2×25	3
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/a	1
	表室配置Meter Compartment Configuration	导线Conductor	BV 10mm ² /16mm ²	/
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-100/4×25	1
	表室配置Meter Compartment Configuration	接插件Connector	YD-D1 60A(可选配Optional)	4
	浪涌配置Surge Configuration	浪涌保护开关Surge Protection Switch	CDBK-63/4P-63A(可选配Optional)	1
	浪涌配置Surge Configuration	浪涌保护器Surge Protector Device	YCD1-4P-40KA(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器开关Collector Circuit Breaker	CDBK-63/2P-63A(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器接插件ConfigurationCollector Connector	YD-D1C(可选配Optional)	1

3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram

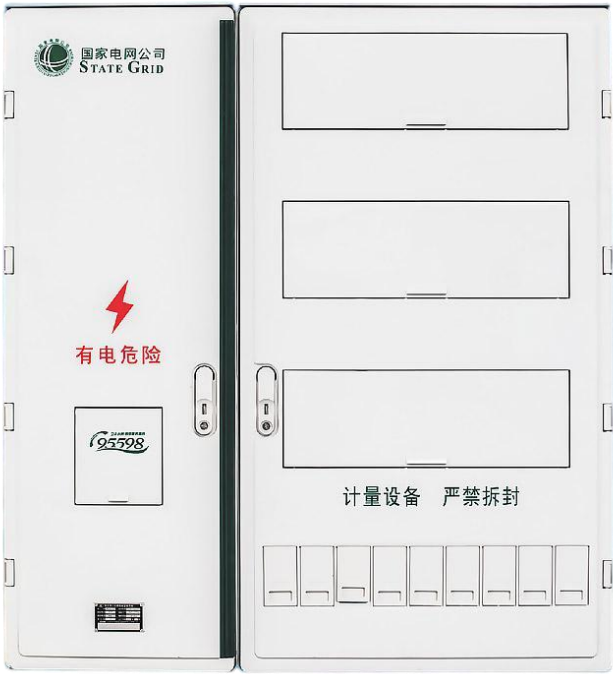




SXD901X SMC单相九表位电能计量箱

Single-Phase Nine-Meter Energy Metering Box

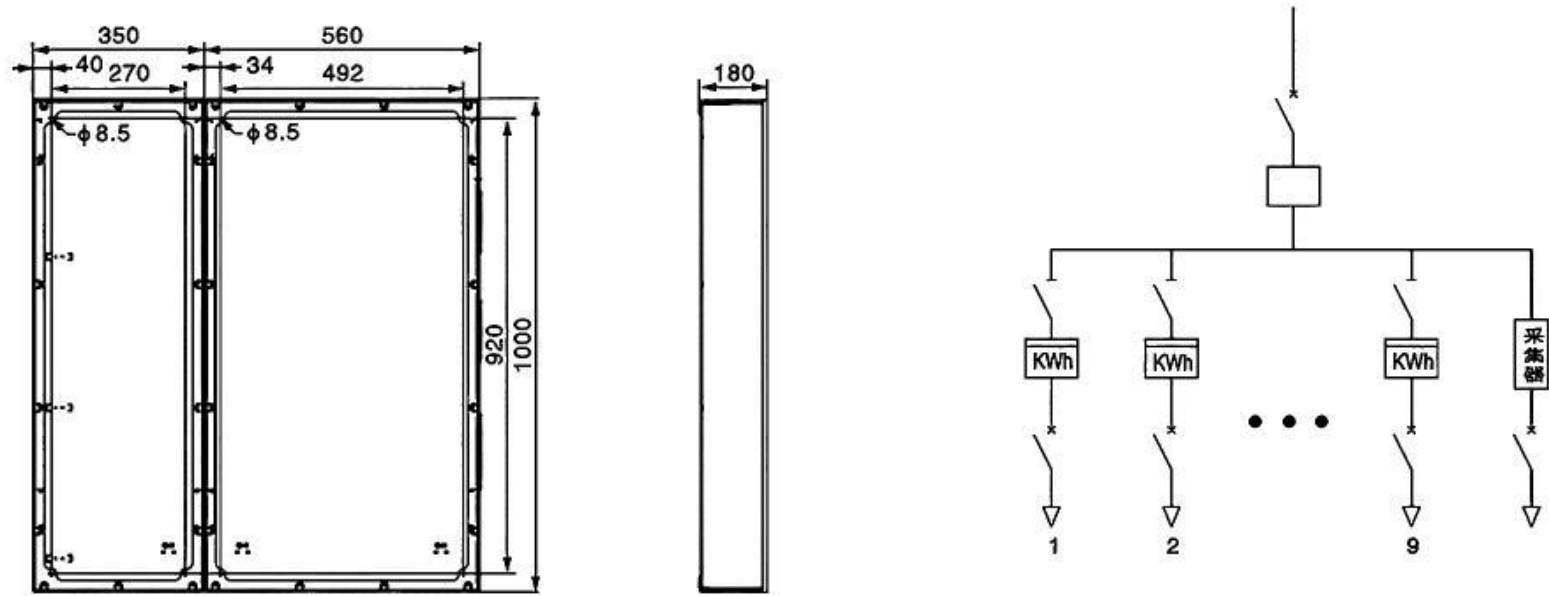
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
SXD901X/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-250C/3300 200A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A、CDGK-125/1P-100A(可选配Optional)	9
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A、CDBK-1P+N 32A/63A(可选配Optional)	9
	表前配置Pre-Meter Configuration	开关端子Switch Terminal	FJ6G-250/4×25	3
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/b	1
	表室配置Meter Compartment Configuration	导线Conductor	BV 10mm ² /16mm ²	/
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-100/9×25	1
	表室配置Meter Compartment Configuration	接插件Connector	YD-D1 60A(可选配Optional)	9
	浪涌配置Surge Configuration	浪涌保护开关Surge Protection Switch	CDBK-63/4P-63A(可选配Optional)	1
	浪涌配置Surge Configuration	浪涌保护器Surge Protector Device	YCD1-4P-40KA(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器开关Collector Circuit Breaker	CDBK-63/2P-63A(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器接插件ConfigurationCollector Connector	YD-D1C(可选配Optional)	1

3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram





SXD1201X SMC单相十二表位电能计量箱

Single-Phase Twelve-Meter Energy Metering Box



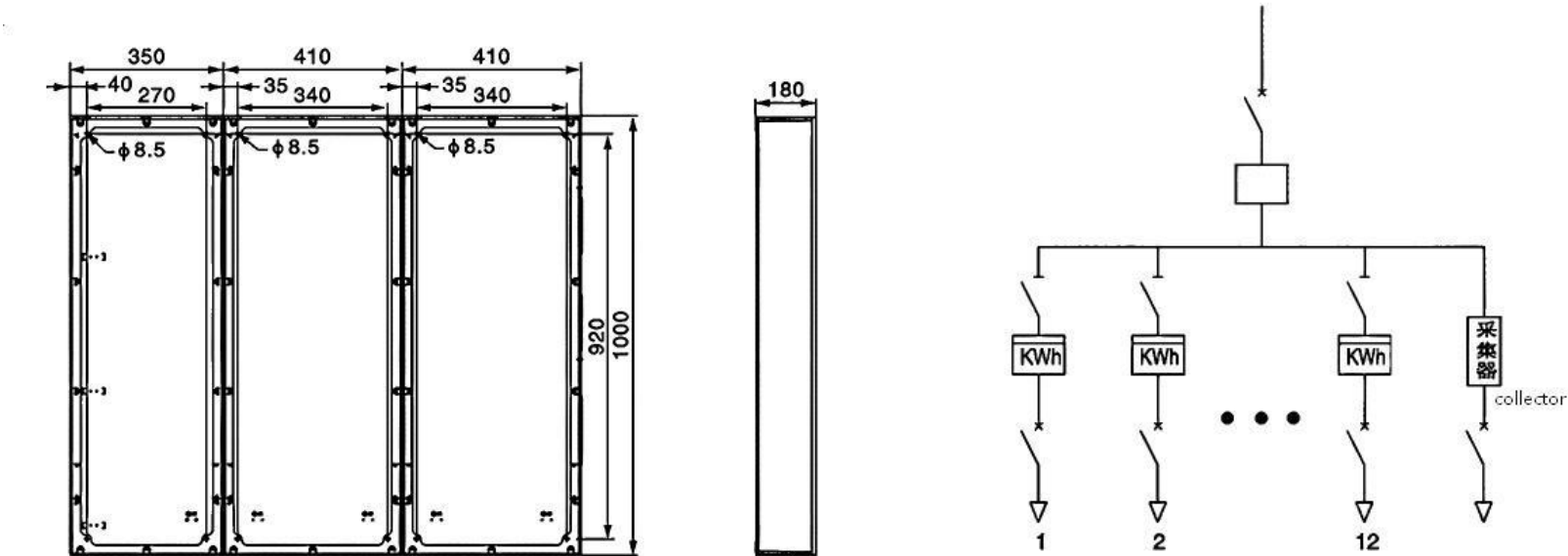
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
SXD1201X/1	总控配置Main Control Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-125C/3300 200A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A、CDGK-125/1P-100A(可选配Optional)	12
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A、CDBK-1P+N 32A/63A(可选配Optional)	12
	表前配置Pre-Meter Configuration	开关端子Switch Terminal	FJ6G-250/4×25	3
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/CL	1
	表室配置Meter Compartment Configuration	导线Conductor	BV 10mm²/16mm²	/
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-100/12×25	1
	表室配置Meter Compartment Configuration	接插件Connector	YD-D1 60A(可选配Optional)	12
	浪涌配置Surge Configuration	浪涌保护开关Surge Protection Switch	CDBK-63/4P-63A(可选配Optional)	1
	浪涌配置Surge Configuration	浪涌保护器Surge Protector Device	YCD1-4P-40KA(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器开关Collector Circuit Breaker	CDBK-63/2P-63A(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器接插件ConfigurationCollector Connector	YD-D1C(可选配Optional)	1

3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram



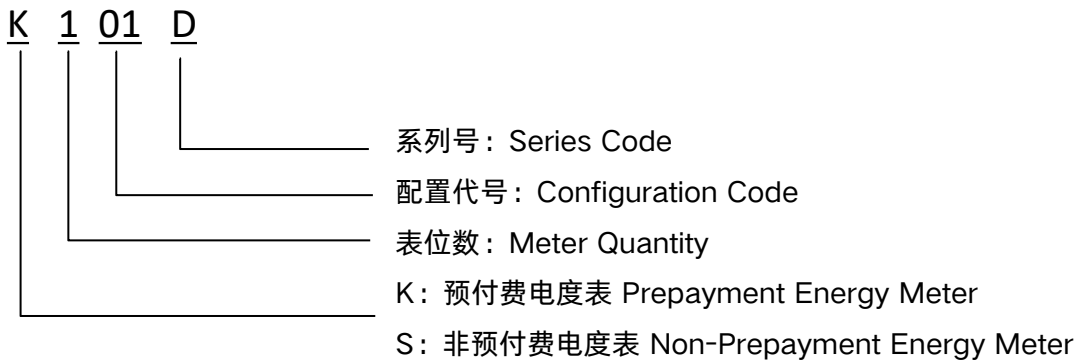


K101D 单相一表位电能计量箱

Single-Phase One-Meter Energy Metering Box



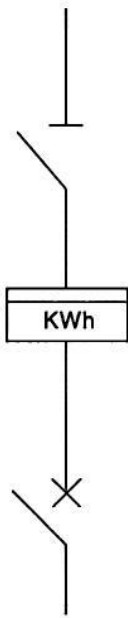
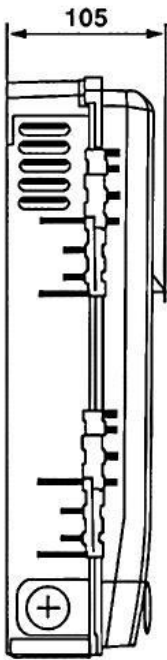
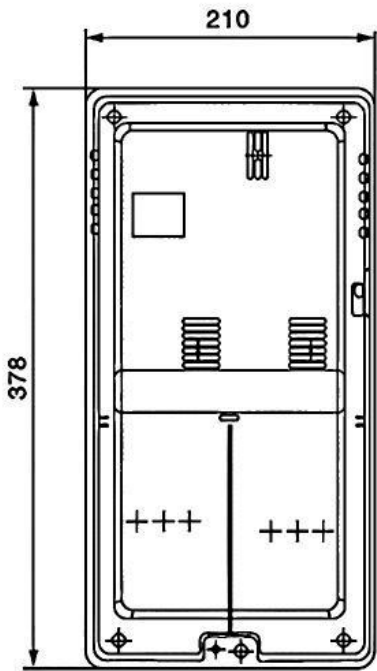
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
K101D	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A CDGK-125/2P-100A(可选配Optional)	1
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDBK-1P+N 32A/63A(可选配Optional)	1
	表室配置Meter Compartment Configuration	导线Conductor	BV6mm²/10mm²	/

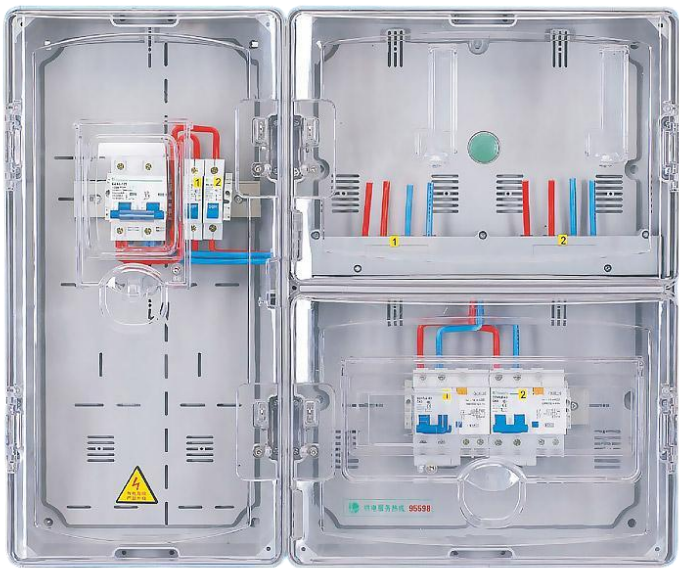
3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram



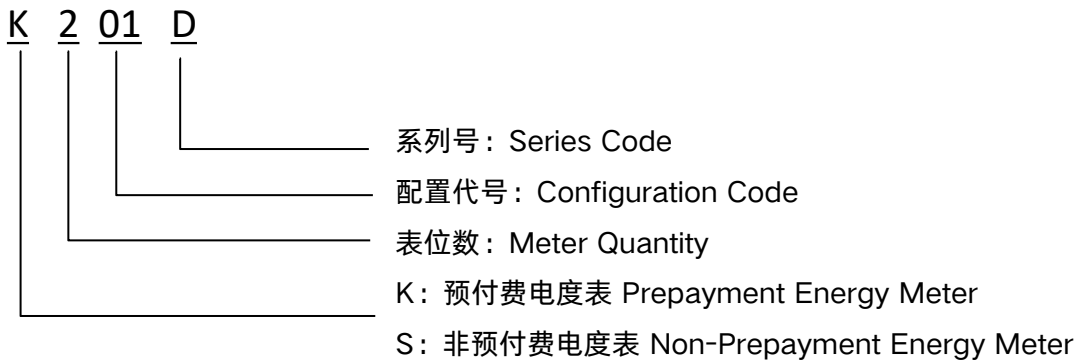


K201D 单相二表位电能计量箱

Single-Phase Two-Meter Energy Metering Box



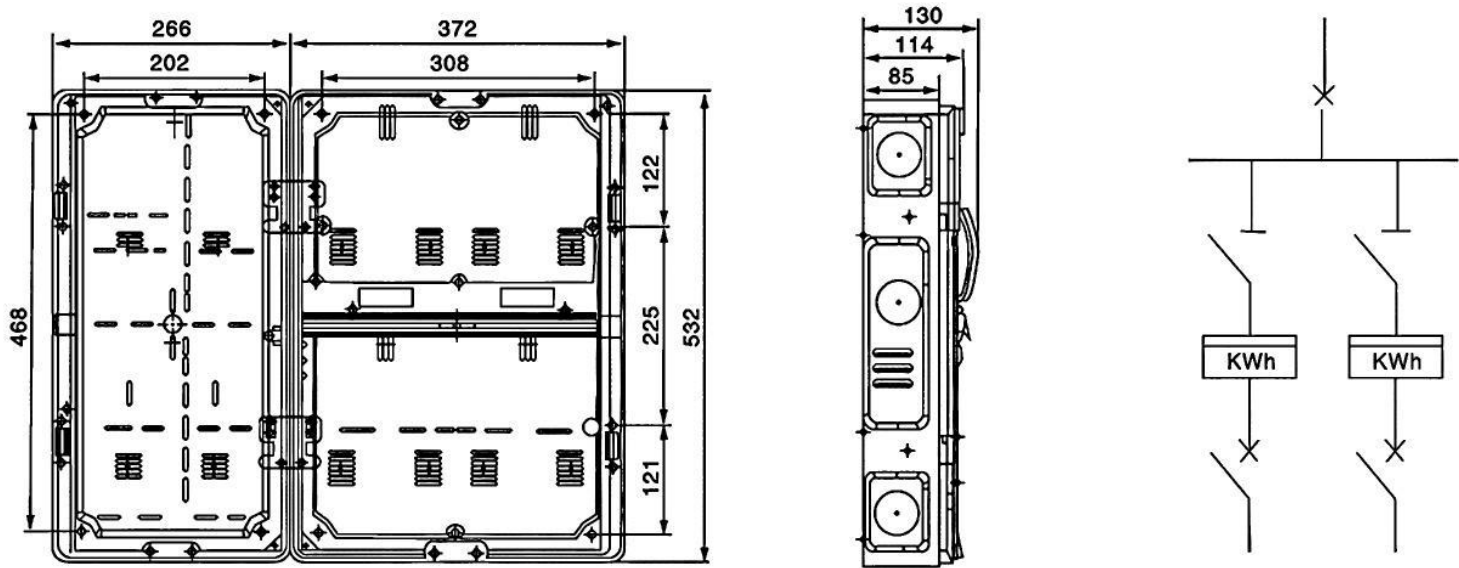
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
K201D	总控开关配置Main Control Switch Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-125C/2300 100A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/2P-80A CDGK-125/2P-100A(可选配Optional)	1
	表前配置Pre-Meter Configuration	接线端子Terminal Block	FJ6/JTS2-35/2*10	2
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDBK-1P+N 32A/63A(可选配Optional)	2
	表室配置Meter Compartment Configuration	导线Conductor	BV6mm ² /10mm ²	/

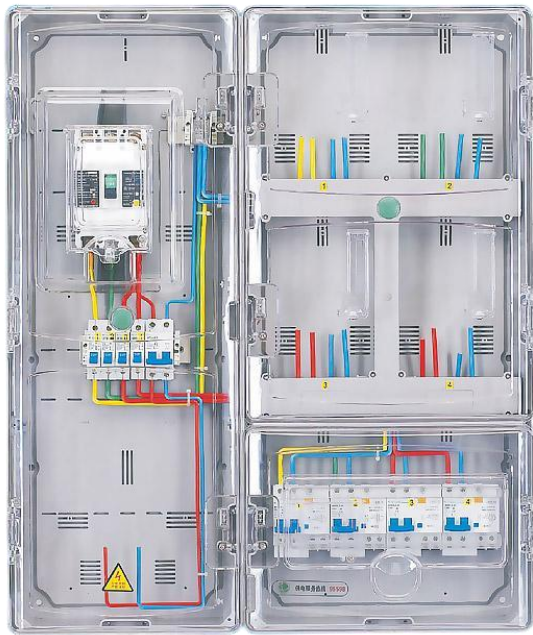
3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram



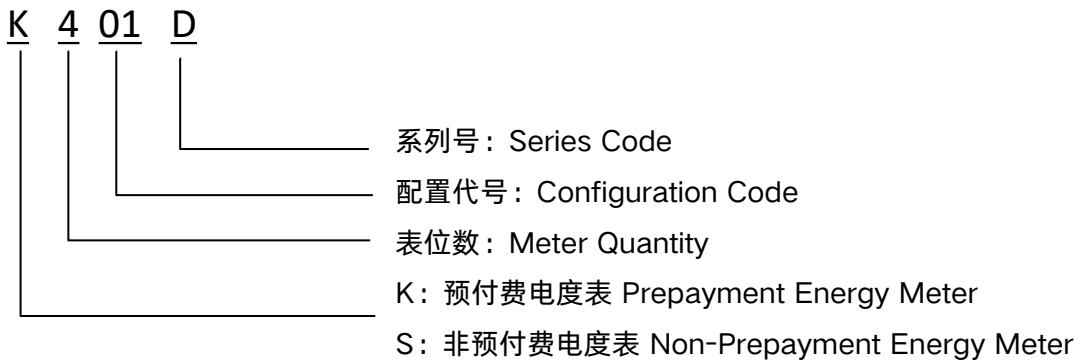


K401D 单相四表位电能计量箱

Single-Phase Four-Meter Energy Metering Box



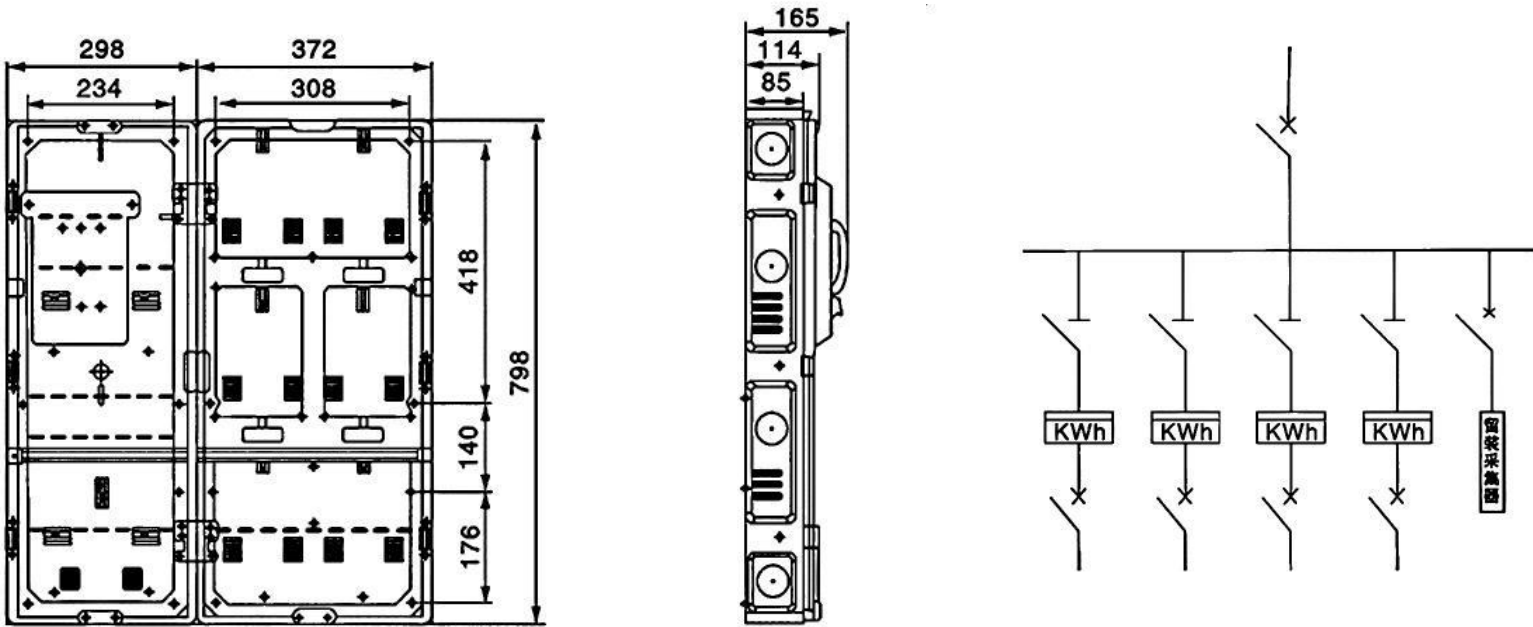
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
K401D	总控开关配置Main Control Switch Configuration	断路器Circuit Breaker	CDMK-125C/3300 125A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/1P-80A CDGK-125/1P-100A(可选配Optional)	1
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDBK-1P+N 32A/63A(可选配Optional)	2
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/b	1
	表室配置Meter Compartment Configuration	导线Conductor	BV6mm ² /10mm ²	/

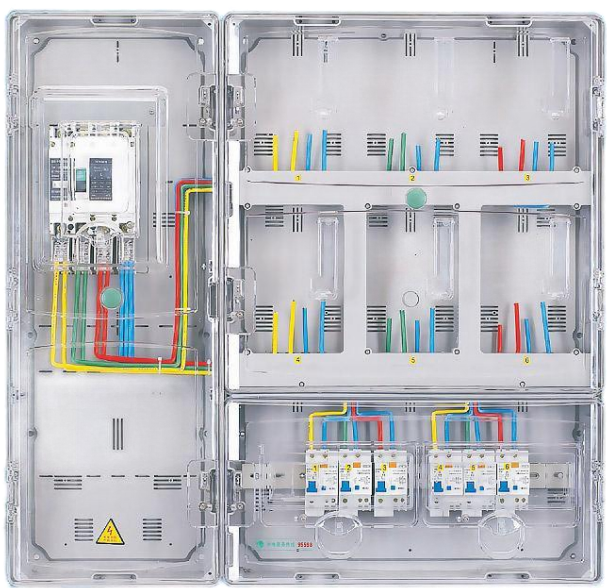
3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram



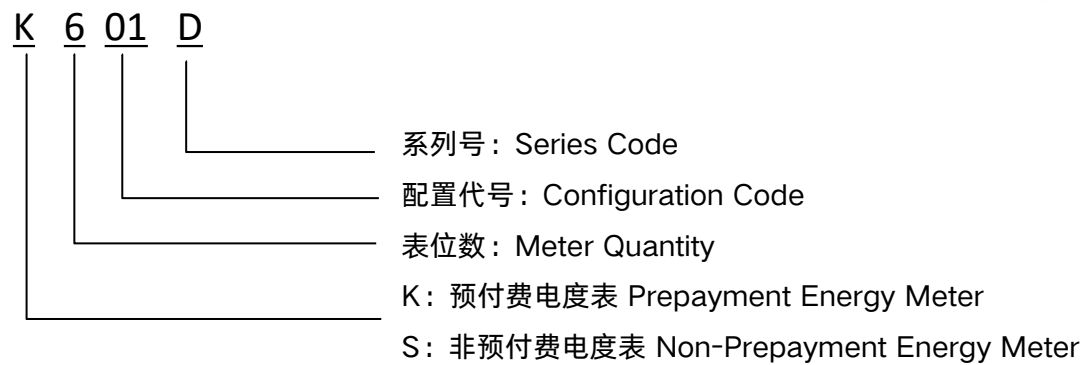


K601D 单相六表位电能计量箱

Single-Phase Six-Meter Energy Metering Box



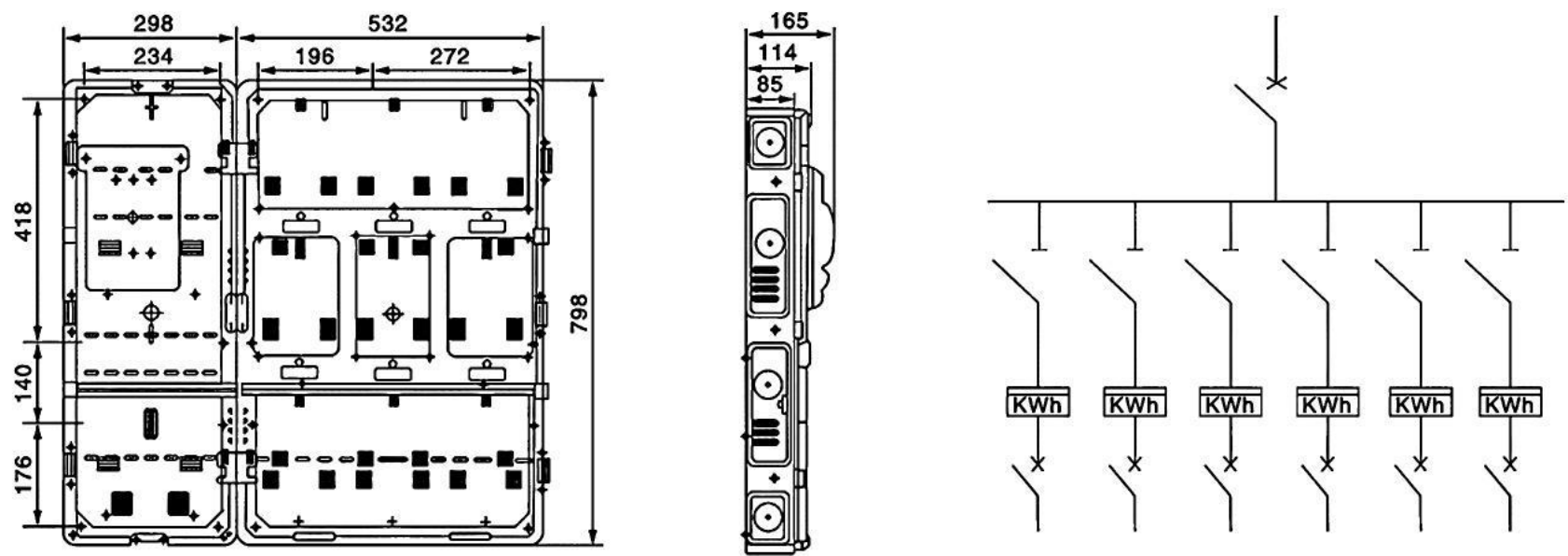
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
K601D	总控开关配置Main Control Switch Configuration	塑壳断路器Molded Case Circuit Breaker	CDMK-125C/3300 125A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/1P-63A CDGK-125/1P-100A(可选配Optional)	1
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/b	6
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDBK-1P+N 32A/63A(可选配Optional)	6
	表室配置Meter Compartment Configuration	导线Conductor	BV6mm ² /10mm ²	/

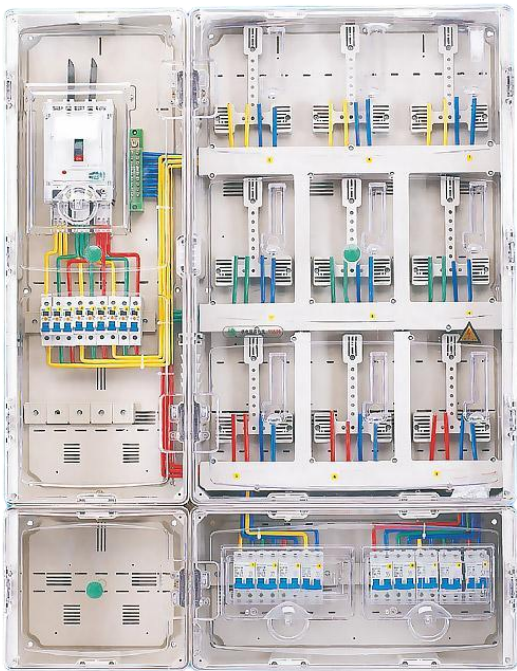
3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram



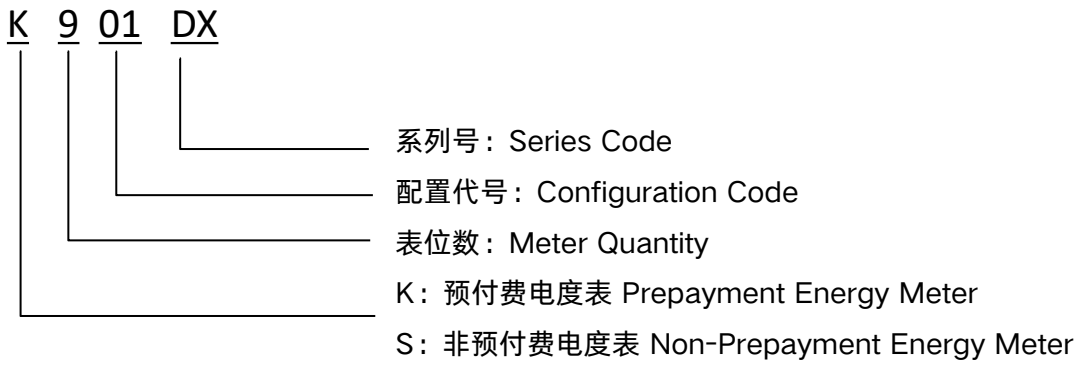


K901DX 单相九表位电能计量箱

Single-Phase Nine-Meter Energy Metering Box



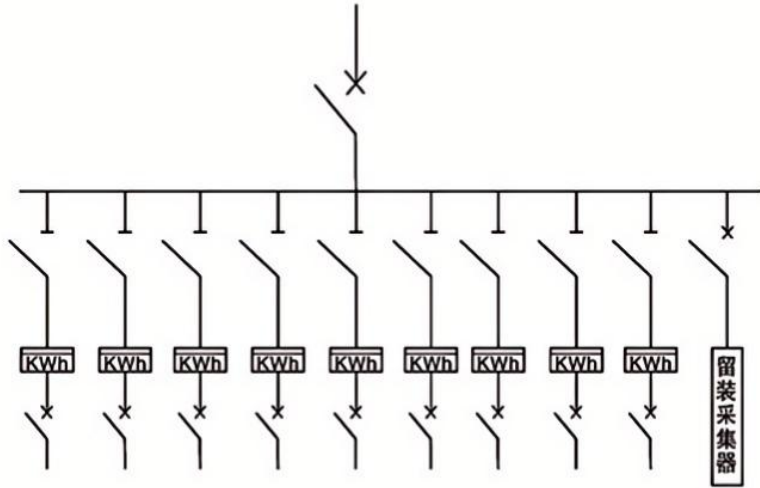
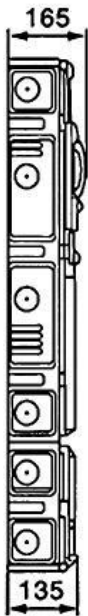
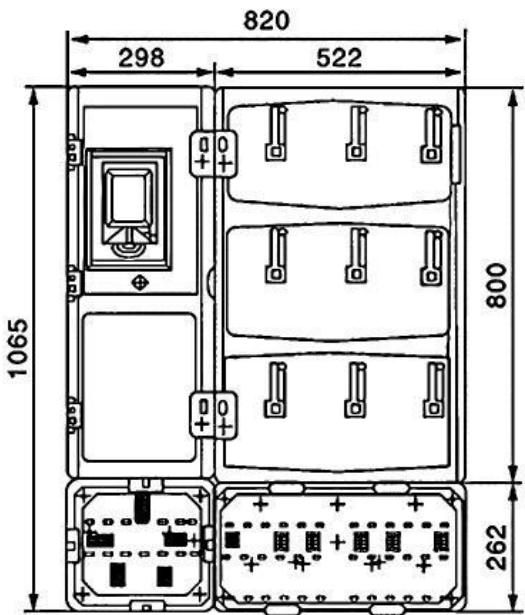
1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
K901DX	总控开关配置Main Control Switch Configuration	断路器Circuit Breaker	CDMK-250C/3300 160A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/1P-63A CDGK-125/1P-100A(可选配Optional)	9
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDBK-1P+N 32A/63A(可选配Optional)	9
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/b	1
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-100/9×25	1
	表室配置Meter Compartment Configuration	导线Conductor	BV 6mm ² /10mm ²	/
	采集器配置Data Collector Configuration	采集器开关Collector Circuit Breaker	CDBK-63/2P-63A(可选配Optional)	1
	采集器配置Data Collector Configuration	采集器接插件ConfigurationCollector Connector	YD-D1 C(可选配Optional)	1

3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram



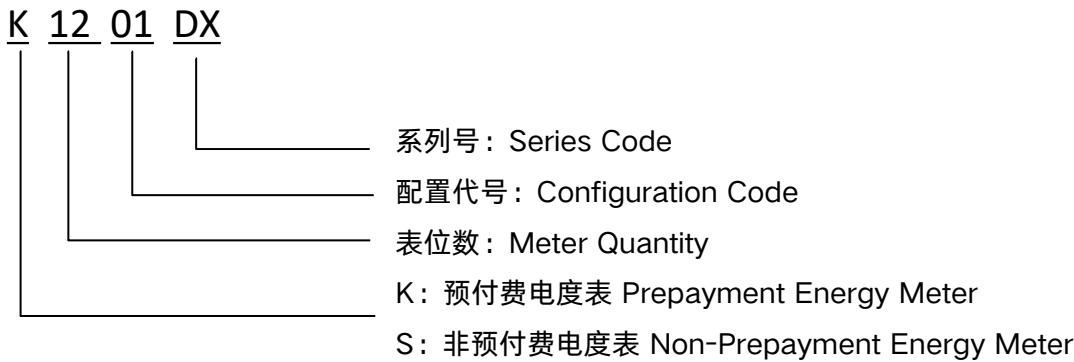


K1201D 单相十二表位电能计量箱

Single-Phase Twelve-Meter Energy Metering Box



1、型号及含义 Model and Meaning



2、产品型号及主要配置 Product Model and Main Configuration

型号Model	配置Configuration Location	名称Name	规格Specification	数量Quantity
K1201D	总控开关配置Main Control Switch Configuration	断路器Circuit Breaker	CDMK-250C/3300 225A	1
	表前配置Pre-Meter Configuration	隔离开关Isolating Switch	CDGK-100/1P-63A CDGK-125/1P-100A(可选配Optional)	12
	表后配置Post-Meter Configuration	微型断路器Miniature Circuit Breaker	CDBK-63/2P-63A CDBK-1P+N 32A/63A(可选配Optional)	12
	表前配置Pre-Meter Configuration	零线端子Neutral Terminal	FJ6/JHD-1/CL	1
	表室配置Meter Compartment Configuration	PE端子PE Terminal	FJ6NB-100/12×25	1
	表室配置Meter Compartment Configuration	导线Conductor	BV 6mm²/10mm²	/

3、安装尺寸图、接线图 Installation Dimension Drawing, Wiring Diagram

