



CW3G 系列 交直流隔离开关

CW3G SERIES (AC, DC) SWITCH-DISCONNECTOR



- 隔离开关具有交流型式和直流型式，直流可至DC1000V
- 直流隔离开关可用于不接地或接地直流系统
- 与外部保护继电器配合实现短路保护

2011.02

常熟开关制造有限公司
(原常熟开关厂)

CHANGSHU SWITCHGEAR MFG. CO., LTD.
(FORMER CHANGSHU SWITCHGEAR PLANT)



中国驰名商标
China Well-known Trademark



博士后科研工作站
Postdoctoral Programme



国家重点高新技术企业证书
China Certificate of "the Key High-tech Enterprise"



国家科学技术进步奖证书
National Awards for Science and Technology Certificate



中国名牌产品
China Top Brand



中国名牌产品
China Top Brand



质量管理体系认证证书
Quality Management System Certificate



环境管理体系认证证书
Environmental Management System Certificate



职业健康安全管理体系认证证书
Occupational Health And Safety Management System Certificate



测量管理体系认证证书
Certificate Of Conformity For Measurement Management Systems

公司简介

Introduction

常熟开关制造有限公司是国有资产参股的电器制造企业、“国家重点高新技术企业”，占地约300亩，员工1500人。主要生产中低压电器元件、工控产品、太阳能光伏逆变器、成套装置等，可以为您提供“智能配电系统三位一体完整的解决方案”。

公司建有博士后科研工作站、省级企业技术中心和江苏省电器控制工程中心，具有一支以博士、硕士、本科生为主的多层次研发队伍，工程技术人员占企业员工总数的45%左右。公司拥有先进的模具制造、零部件自动化生产、断路器装配自动检测流水线等一大批先进的制造和试验检测设备；实施以ERP管理为重点的信息化、网络化管理；完善质量/环境/职业健康安全体系，确保为用户提供优质、安全、可靠的产品。公司“”商标被国家工商行政管理总局认定为中国驰名商标，CM系列塑料外壳式断路器、CW系列智能型万能式断路器双双被评为中国名牌产品。

Changshu Switchgear Mfg. Co., Ltd. (Former Changshu Switchgear Plant), an enterprise with state-owned equity, covered an area of 200,000 m², with 1500 staffs, is a "National Key New High-tech Enterprise" and mainly produces HV and LV electrical components, industry control products, solar photovoltaic inverters and complete sets of equipment etc, all of which could provide trinity and complete solutions for intelligent power distribution system.

Post - doctoral scientific research station, Province Enterprise Technique Center and Jiangsu Province Electrical Apparatus Control Engineering Research Center have been established and a multi-level professional technique team has been formed consisting of PHD candidates, postgraduates and university graduates. Engineers and technicians have covered 45% of all staffs.

Advanced mould manufacturing equipments, automation producing equipments for spare parts, assembling and inspecting lines for breakers and test equipments have been brought in. Meanwhile, information and network management, taking ERP management as the focal point, has been applied and quality environmental systems (ISO9001/ISO14001/OHSMS18001) have also been established and perfected to ensure reliability and safety for customers.

The registered trademark  has been recognized as Famous Trademark of China by State Administration for Industry and Commerce of China. And CM Series Moulded Case Circuit Breaker and CW Series Intelligent Air Circuit Breaker are both China Top Brand products.





常熟开关制造有限公司 为您提供电气系统完整的解决方案

高压真空断路器



CV1-12系列
高压真空断路器



CV2-12系列
高压真空断路器



CV1-24系列
高压真空断路器



CV1-40.5系列
高压真空断路器

智能型万能式断路器



CW1系列
智能型万能式断路器



CW2系列
智能型万能式断路器



CW3系列
智能型万能式断路器



CW3V系列
智能型真空万能式断路器

塑料外壳式断路器



CM1系列
塑料外壳式断路器



CM1e系列
电子式塑壳断路器



CM1z系列
智能型断路器



CM1系列
带剩余电流保护塑壳断路器



CM1EL系列
带剩余电流保护
电子可调式断路器



CM2系列
塑料外壳式断路器



CM2Z系列
智能型塑壳断路器



CM2L系列
带剩余电流保护塑壳断路器



CM3系列
塑料外壳式断路器



CM5系列
塑料外壳式断路器



CM5Z系列
塑料外壳式断路器

自动转换开关



CA1系列自动
转换开关 (CB级)



CAP1系列自动
转换开关 (PC级)



CAP2系列自动
转换开关 (PC级)

接触器和过载继电器



CK3系列接触器



CJR3系列
热过载继电器



CJD3系列
电子过载继电器

剩余电流动作继电器



CLJ3 剩余电流
动作继电器



常熟开关制造有限公司 为您提供电气系统完整的解决方案

电动机软起动器



CR1系列
电动机软起动器



CR2系列
电动机软起动器

电动机保护器



CD1系列
电动机保护器



CD4系列
智能马达保护器

控制和保护电器



CB1系列
控制和保护开关电器(CPS)

变频调速



CF1系列
通用变频器

光伏发电用产品



CS1G系列三相并网型
光伏发电逆变器



CW3G系列
隔离开关(AC, DC)



CM3DC系列
塑料外壳式断路器

小型断路器



CH系列小型断路器

电力质量和系统自动化器件



CE1系列
智能型电力仪表



CI1系列
远程智能I/O模块



CN1DP-MP
CN1DP-MD
CN1DP-MC
通信适配器
CN1EG以太网
适配器



FDM3
短消息通知模块



FWB1温度报警模块

电气火灾探测



CSJ1系列剩余电流式电气
火灾监控探测器(独立式)
CMSJ2系列剩余电流式电气
火灾监控探测器(非独立式)
CSX1电气火灾监控设备

智能化通信低压配电网络监控系列



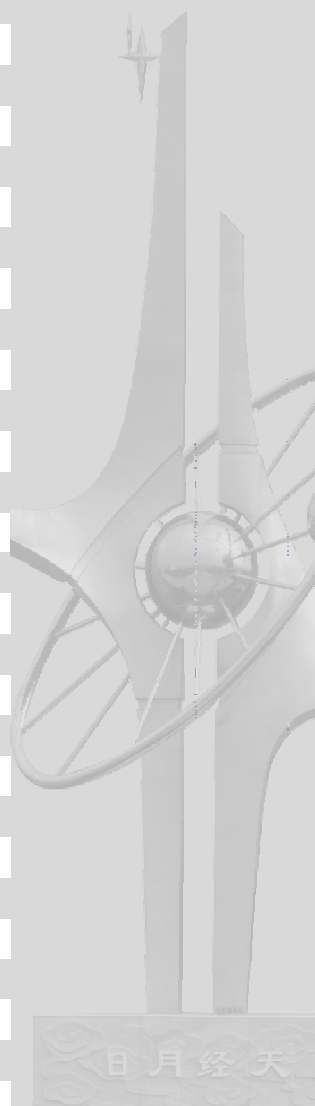
● Riyear-PowerNet 配电监控系统



● FCX3 智能配电监控器

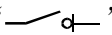
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概 述 GENERAL

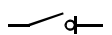
CW3G系列隔离开关是由相应的CW3系列断路器派生并保持了相同的外形尺寸及安装尺寸，主要安装在低压配电电路中作主电路的接通和断开，并可起隔离作用。其符号表示为“”。

- 额定工作电流630A~2500A;
- 额定工作电压AC690V及以下，DC1000V及以下;
- 具有3极和4极;
- 抽屉式和固定式;
- 产品符合以下标准:

IEC60947-1及GB14048.1-2006 低压开关设备和控制设备 总则

IEC60947-3及GB14048.3-2008 低压开关设备和控制设备 开关、隔离器、隔离开关以及熔断器组合电器

- 产品获国家强制性产品认证CCC标志

CW3G series switch-disconnector (hereinafter short as switch) is derived from the corresponding CW3 series circuit-breaker, and it keeps the same outline dimensions and mounting dimensions of CW1. The switch is installed in the low voltage distribution circuits, to make the main circuit closed and opened. The switch also plays isolated role, its corresponding symbol is shown as “”.

- Rated operational current: 630A ~ 2500A;
- Rated operational voltage: AC690V or below DC1000V or below;
- Three or four poles;
- Draw-out type or fixed type;
- Comply with the demands of the following standards:

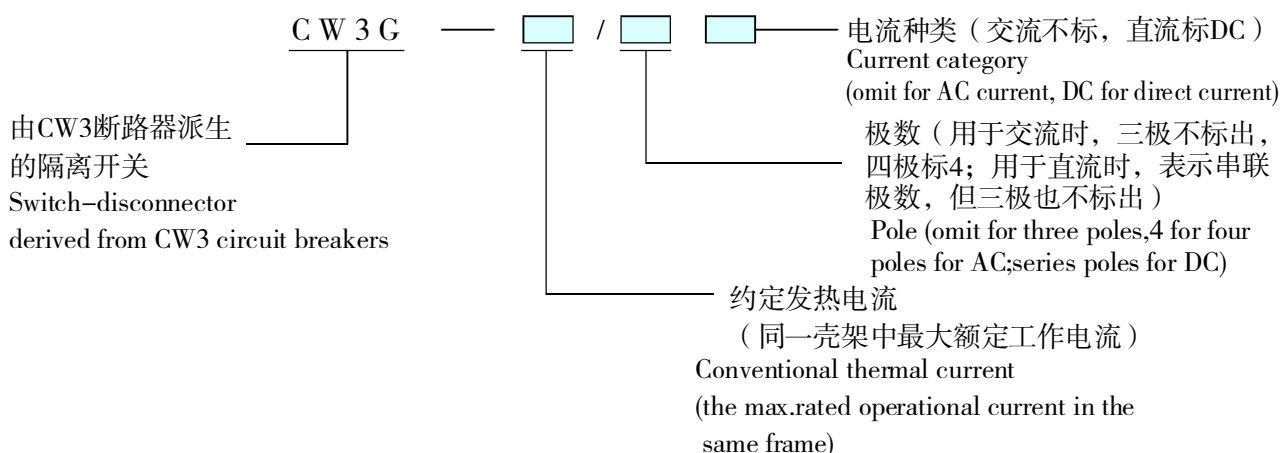
IEC60947-1及 GB14048.1-2006 Low-Voltage switchgear and controlgear General rules

IEC60947-3及 GB14048.3-2008 Low-Voltage switchgear and controlgear switches, disconnectors, switch-disconnectors and fuse-combination units

- The product is permitted to use the CCC marking of CQC.



型号含义 TYPE AND ITS MEANING



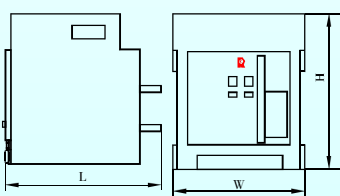


- 周围空气温度为 $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$ ，且24h的平均值不超过 $+35^{\circ}\text{C}$ ；
- 安装地点的海拔不超过2000m；
- 安装地点的空气相对湿度在最高温度为 $+40^{\circ}\text{C}$ 时不超过50%；在较低温度下可以有较高的相对湿度，最湿月的月平均最低温度不超过 $+25^{\circ}\text{C}$ ，该月的月平均最大相对湿度不超过90%，并考虑因温度变化发生在产品表面上的凝露；
- 污染等级为3级；
- 主电路的安装类别为Ⅳ，其余辅助电路、控制电路安装类别为Ⅲ；
- 产品应按使用说明书要求安装。其垂直倾斜度不超过 5° 。

- Ambient temperature: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$. The average temperature in 24 hours below $+35^{\circ}\text{C}$.
- Elevation of installation site: $\leq 2000\text{m}$.
- Relative humidity: not exceeding 50% at the maximum ambient temperature of $+40^{\circ}\text{C}$. With lower temperature, higher humidity would be permitted, but the lowest average temperature in a month not exceeding $+25^{\circ}\text{C}$ during the most moist month, and the maximum monthly average relative humidity not exceeding 90% in that month, and giving consideration to the dews on the goods surface, which would appear due to temperature change.
- Pollution degree: 3.
- Installing categories: Ⅳ for switch' s main circuits; Ⅲ for other auxiliary circuits and control circuits.
- The switch should be installed according to stipulations in operation manual, the vertical gradient isn' t more than 5° .



CW3G交流隔离开关主要技术指标MAIN TECHNICAL PARAMETERS FOR CW3G AC SWITCH-DISCONNECTOR

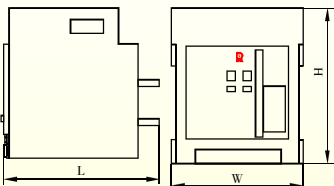
型号 Type			CW3G-2500				
最大约定发热电流I _{th} (A) Conventional thermal current I _{th} (A)			2500				
额定工作电流I _e (A) Rated operational current I _e (A)			630, 800, 1000, 1250, 1600, 2000, 2500				
额定工作电压U _e (V) Rated operational voltage U _e (V)			AC50Hz/400、690				
额定绝缘电压U _i (V) Rated insulation voltage U _i (V)			1000				
额定冲击耐受电压 U _{imp} (V) Rated impulse withstand voltage U _{imp} (V)			12000				
极数 Poles			3、4				
N极额定工作电流I _N Rated operational current of N-pole I _N (A)			100%I _e				
额定短路接通能力 I _{cm} (kA)(峰值) Rated short-circuit making capacity I _{cm} (kA) (peak)		AC400V	143				
		AC690V	143				
额定短时耐受电流(1s)I _{cw} (kA)(有效值) Rated short-time withstand current I _{cw} (kA) (effective value)		AC400V	65				
		AC690V	65				
具有外部保护继电器，最大延时0.4s极限分断能力(kA) Limited breaking capacity at max. delay time 0.4s (with exterior protect relay) (kA)		AC400V	65				
使用类别 Utilization category			AC-22A, AC-23A				
分闸时间(无附加延时)(ms) Break time (without additional time-delay) (ms)			30~40				
合闸时间(ms) Make time (ms)			最大70 Max				
电气寿命*（次）times） Electrical durability		AC400V	8000				
		AC690V	2500				
机械寿命*（次）times） Mechanical durability		免维护 Non-maintenance	12500				
		有维护 Maintenance	25000				
外形尺寸 		H × W × L Outline dimensions (mm)			W	H	L
		抽屉式 Draw-out	水平(后置) Horizontal(back set)	3P	347	438	395
				4P	442	438	395
			垂直(后置) Vertical(back set)	3P	347	438	395
				4P	442	438	395
		固定式 Fixed	水平联接 Horizontal	3P	362	395	290
				4P	457	395	290

*注: 根据GB14048.1-2006, 术语“寿命”表示电器在修理或更换部件前能完成的操作循环次数的概率。

*Note: for GB14048.1-2006,the term"durability" expresses the expectancy of the number of operating cycles which can be performed by the equipment before repair or replacement parts.



CW3G直流隔离开关主要技术指标MAIN TECHNICAL PARAMETERS FOR CW3G DC SWIRCH-DISCONNECTOR

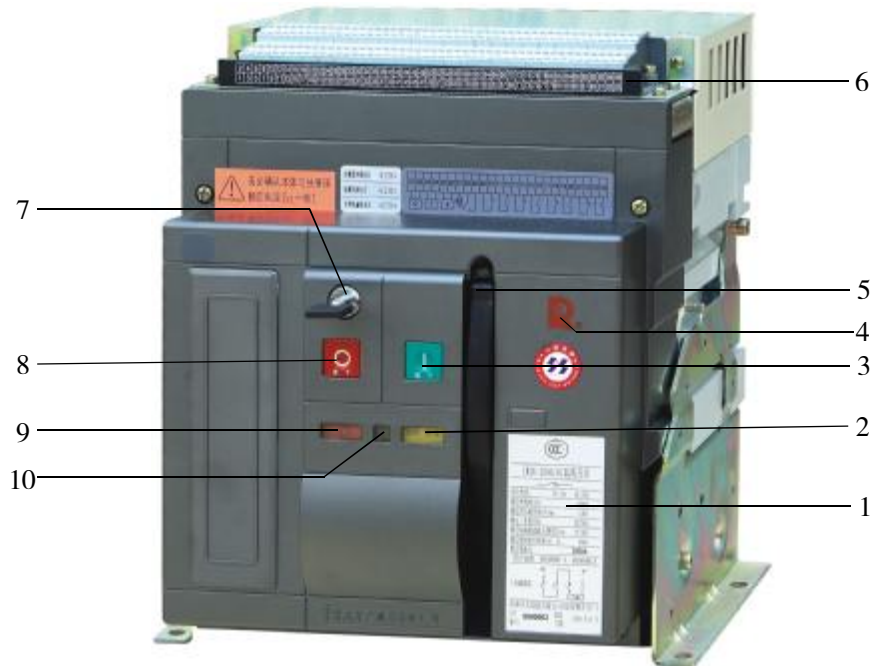
型号 Type		CW3G-2500/DC				
最大约定发热电流I _{th} (A) Conventional thermal current I _{th} (A)		2500				
额定工作电流I _e (A) Rated operational current I _e (A)		630, 800, 1000, 1250, 1600, 2000, 2500				
额定工作电压U _e (V) Rated operational voltage U _e (V)		DC750、1000				
额定绝缘电压U _i (V) Rated insulation voltage U _i (V)		1000				
额定冲击耐受电压 U _{imp} (V) Rated impulse withstand voltage U _{imp} (V)		12000				
串联极数 Series poles		三极串/四极串				
额定短路接通能力 I _{cm} (kA)(峰值) Rated short-circuit making capacity I _{cm} (kA)(peak)	DC750V	52.5				
	DC1000V	52.5				
额定短时耐受电流(1s)I _{cw} (kA)(有效值) Rated short-time withstand current I _{cw} (kA)(effective value)	DC750V	40				
	DC1000V	40				
		DC-22A, DC-23A				
具有外部保护继电器, 最大延时0.4s极限分断能力(kA) Limited breaking capacity at max. delay time 0.4s (with exterior protect relay) (kA)	DC1000V	25				
分闸时间(无附加延时)(ms) Break time (without additional time-delay) (ms)		30~40				
合闸时间(ms) Make time (ms)		最大70 Max				
电气寿命* (次times) Electrical durability	DC750V	2000				
	DC1000V	1500				
机械寿命* (次times) Mechanical durability	免维护 Non-maintenance	12500				
	有维护 Maintenance	25000				
外形尺寸 	H × W × L Outline dimensions (mm)		W	H	L	
	抽屉式 Draw-out	水平(后置) Horizontal(back set)	三极串	347	438	395
			四极串	442	438	395
		垂直(后置) Vertical(back set)	三极串	347	438	395
			四极串	442	438	395
	固定式 Fixed	水平联接 Horizontal	三极串	362	395	290
			四极串	457	395	290

*注: 根据GB14048.1-2006, 术语“寿命”表示电器在修理或更换部件前能完成的操作循环次数的概率。

*Note: for GB14048.1-2006, the term "durability" expresses the expectancy of the number of operating cycles which can be performed by the equipment before repair or replacement parts.



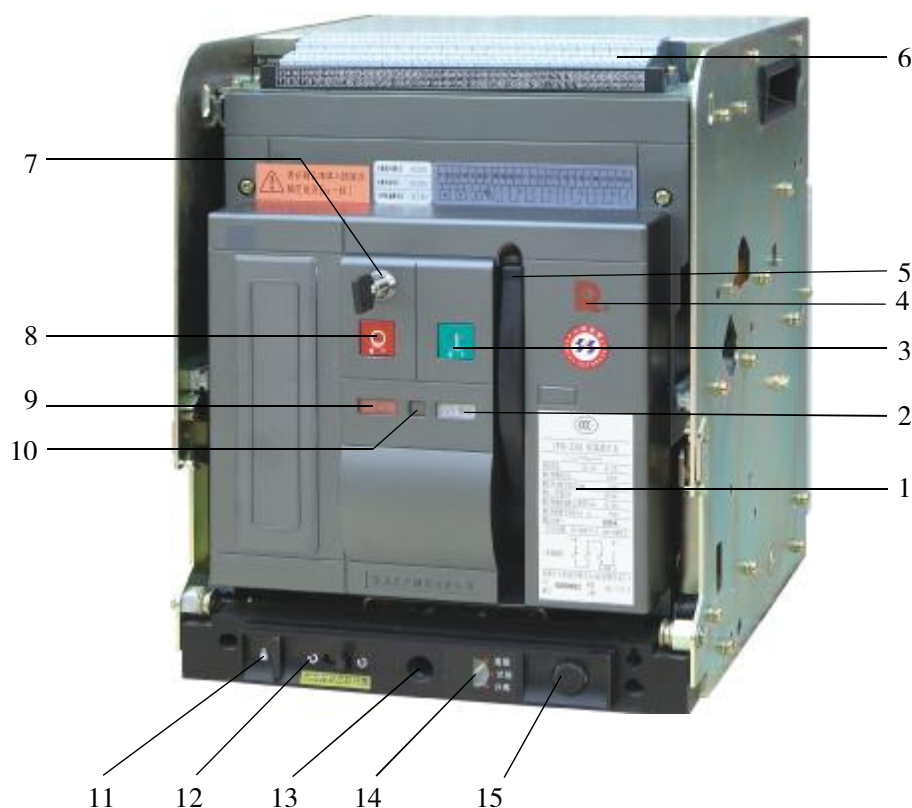
结构简介 SYNOPSIS OF STRUCTURE



- | | |
|-------------------------------|--|
| 1 铭牌 | 1 Nameplate |
| 2 贮能释能指示 | 2 Indications of charging and discharging |
| 3 合闸按钮 | 3 Closing button |
| 4 商标 | 4 Brand |
| 5 手动贮能手柄 | 5 Manual charging handle |
| 6 二次回路接线端子 | 6 Terminals of secondary circuit |
| 7 “分闸”锁定装置 | 7 “opening” lock mechanism |
| 8 分闸按钮 | 8 Opening button |
| 9 合闸“1”、分闸“0”指示 | 9 Indication of closing (“1”) and opening (“0”) |
| 10 合闸准备就绪时指示“OK” | 10 Indication of ready-for-close (“OK”) |
| 11 抽屉式“分离”位置安全挂锁装置 | 11 Safety padlock mechanism as the draw-out indicates the position of “separated” |
| 12 抽屉式“分离”、“试验”、“连接”三位置“解锁按钮” | 12 "Unlock button" of the three positions ("separated", "test" and "connected") for draw-out |
| 13 抽屉式摇杆工作孔 | 13 Rocker operating hole of the draw-out |
| 14 抽屉式“分离”、“试验”、“连接”三位置指示 | 14 Indications of the three positions ("separated", "test" and "connected") of the draw-out |
| 15 抽屉式摇杆存放孔 | 15 Rocker storage hole of the draw-out |



结构简介 SYNOPSIS OF STRUCTURE



注：

1 “分离”：指示主回路与二次回路均为隔离状态；

“试验”：指示主回路为隔离状态，二次回路为连接状态；

“连接”：指示主回路与二次回路均为连接状态。

2 当本体被摇至“分离”或“试验”或“连接”位置时即可被自动锁定（摇杆不可再摇动），可通过向左拨动“解锁按钮”解锁。

Note:

1 "Separated": indicates that main circuit and secondary circuit are both in isolation.

"Test": indicates that main circuit is in isolation and secondary circuit is in connection.

"Connected": indicates that main circuit and secondary circuit are both in connection.

2 The switch-disconnector can be automatically locked (rocker can not be turned at this point) when its main part is at the position of "separated", "test" or "connected" by turning the rocker, and can be unlocked by pushing "unlock button" to the left side.



结构简介 SYNOPSIS OF STRUCTURE

- 抽屉式隔离开关的抽屉座
- Draw-out socket of draw-out switch-disconnector

抽屉式隔离开关的抽屉座具有隔离主回路母排的挡板，当抽出时起安全保护作用。

The draw-out socket has the back plate for isolating the copper bar of the main circuit, which takes the role of safety protection when the switch-disconnector is draw out.



- 16 安装孔
- 17 安全挡板
- 18 二次回路接线端子
- 19 侧板

- 16 Installation hole
- 17 Safety back plat
- 18 Wiring terminals of secondary circuit
- 19 Side plate



● 分励脱扣器 Shunt release

可远距离操纵使隔离开关断开 To break the circuit breaker by remote control

特性 Characteristics

额定控制电源电压 U_s (V) Rated voltage of control power supply	AC400	AC230	DC220	DC110
动作电压(V) Operating voltage	$(0.7 \sim 1.1)U_s$			
瞬时电流(A) Instantaneous current	0.5	0.9	0.9	1.8
分断时间(ms) Breaking time	不大于30 No more than 30			



● 合闸电磁铁 Closing electromagnet

贮能结束后，合闸电磁铁能使操作机构的贮能弹簧力瞬间释放，使隔离开关快速闭合。

After the circuit breaker ends up its energy storage the closing electromagnet will make the energy storing spring to release its energy instantly so that the circuit breaker is closed quickly.

特性 Characteristics

额定控制电源电压 U_s (V) Rated voltage of control power supply	AC400	AC230	DC220	DC110
动作电压(V) Operating voltage	$(0.85 \sim 1.1)U_s$			
瞬时电流(A) Instantaneous current	0.5	0.9	0.9	1.8
合闸时间(ms) Closing time	不大于70 No more than 70			



● 电动操作机构 Motor driven operating mechanism

隔离开关具有电动机贮能及自动再贮能功能，亦可手动贮能。

The circuit breaker has the function of motor driven energy storage and automatic energy-restoring. The energy storage can also be done manually.

特性 Characteristics

额定控制电源电压Us(V) Rated voltage of control power supply	AC400	AC230	DC220	DC110
动作电压(V) Operating voltage	(0.85~1.1)Us			
功耗 Power loss	192VA		192W	
储能时间(s) Charging time	不大于5			





● 辅助开关 Auxiliary switch

额定值 Rated value

额定工作电压(V) Rated operational voltage		约定发热电流I _{th} (A) Conventional thermal current	额定控制容量 Rated capacity
AC	230	6	300VA
	400		
DC	220		60W
	110		



● 抽屉式隔离开关“分离”位置安全挂锁装置

抽屉式断路器处于“分离”位置时，可拔出锁杆来锁定，锁定后开关将无法摇至“试验”或“连接”位置。

挂锁用户自备。

Safety padlock mechanism of draw-out circuit breakers at the position of "separated"

When the draw-out circuit breaker indicates the positions of "separated" the locking stick can be locked with padlock after pulling out so that the rocker of the circuit breaker can not be turned to the position of "test" or "connected".

Padlock should be provided by users themselves



“分离”位置安全挂锁装置
Safety padlock mechanism at the position of "separated"

● “分闸”锁定装置 "opening" locking mechanism

“分闸”锁定装置可将隔离开关的断开按钮锁定在按下位置上，此时，隔离开关将不能闭合。

"opening" locking mechanism can lock the "OFF" button of the circuit breaker on the pressed position. As a result, the switch-disconnector can not be closed.



“分闸”锁定装置
"Opening" locking mechanism

● 按钮锁定装置 "Pushbutton" locking device

加装按钮锁定装置可防止误操作合闸或分闸按钮。

挂锁用户自备。

When "Pushbutton" locking device is installed it can prevent somebody from operating button of closing or opening by mistake.

Padlock should be provided by users themselves.



按钮锁定装置
Pushbutton locking device



附件 ACCESSORIES

● 计数器 Counter

计数器累计隔离开关机械操作的次数，用户一目了然。

The counter can count mechanical operation times accumulatively and an exact number is presented.



● 相间隔板 Interphase barriers

相间隔板加强母排间绝缘，为隔离开关选择件，用户需要时可配置。

Interphase barriers which strengthen insulation between bus-bars are optional and will be equipped when users need.



相间隔板
Interphase barriers



功耗及降容系数 POWER LOSS AND DERATING COEFFICIENT

功耗（环境温度+40℃）

Power loss (environment temperature +40℃)

功耗是在通以最大约定发热电流情况下测量的总的损耗。

Power loss is the overall consumption measured with the switch-disconnector which is electrified with current I_{nm} .

型号 Type	三极/四极 功耗 (W) Three/Four-poles power loss	
	固定式 Fixed type	抽屉式 Draw-out type
CW3G-2500	356.8	823.4

降容系数 Derating coefficient

下表表示隔离开关在所处周围工作环境温度且满足GB14048.3中约定发热条件下持续承载电流的能力。
The following table shows continual current-loading capacity of switch-disconnector at different ambient environment temperature and under the conditions of the satisfaction of conventional heating in GB14048.3.

周围工作环境温度 Ambient environment temperature		+40℃	+45℃	+50℃	+55℃	+60℃
持续承载电流能力 Continual current-loading capacity	CW3G-2500	$1I_{nm}$	$0.96I_{nm}$	$0.90I_{nm}$	$0.86I_{nm}$	$0.80I_{nm}$



高海拔降容 ALTITUDE DERATING

海拔超过适用工作环境的2000m，电气性能可参照下表修正：

If altitude exceeds work environment for 2000m the electric property of switch-disconnector can be corrected according to the following table.

海拔(m) Altitude	2000	3000	4000	5000
工频耐压(V) Power-frequency withstand voltage	3500	3150	2500	2000
工作电流修正系数 Correction factor of operational current	1	0.93	0.88	0.82



隔离开关主回路接线铜排规格参考表 REFERENCE TABLE OF MAIN CIRCUIT WIRING COOPER BAR FOR SWITCH-DISCONNECTOR

型号 Type	额定工作电流I _e (A) Rated current	铜排规格 Specification of cooper bars	
		根数 Number	尺寸(mm × mm) Size
CW3G-2500	630	2	50 × 5
	800	2	60 × 5
	1000	2	60 × 5
	1250	3	60 × 5
	1600	2	60 × 10
	2000	3	60 × 10
	2500	4	60 × 10

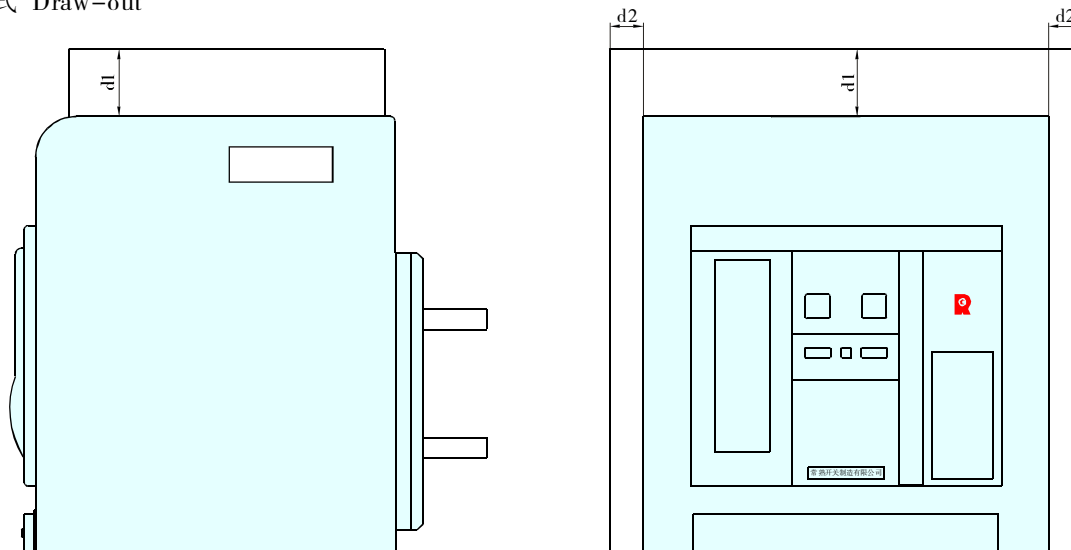
表中规格为隔离开关处于周围环境温度最高40℃，敞开安装且满足GB14048.3中约定发热条件。

The specification of cooper bars in the above table are introduced under the conditions that the switch-disconnectors open installed are at the maximum ambient environment temperature of 40℃ and satisfy conventional heating in GB14048.3.



安装安全间隙 MOUNTING SAFETY CLEARANCE

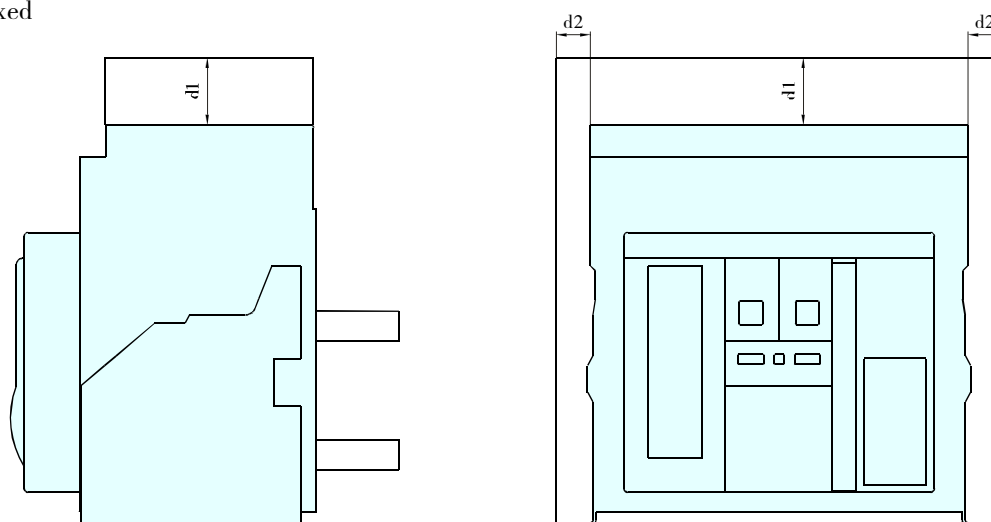
● 抽屉式 Draw-out



隔离开关与柜壁或带电部件最小距离
Minimn distance between breaker with switchboard wall or live part.

	柜壁 Switchboard wall	带电部分 Live part
d1(注note)(mm)	0	60
d2(mm)	0	60

● 固定式 Fixed



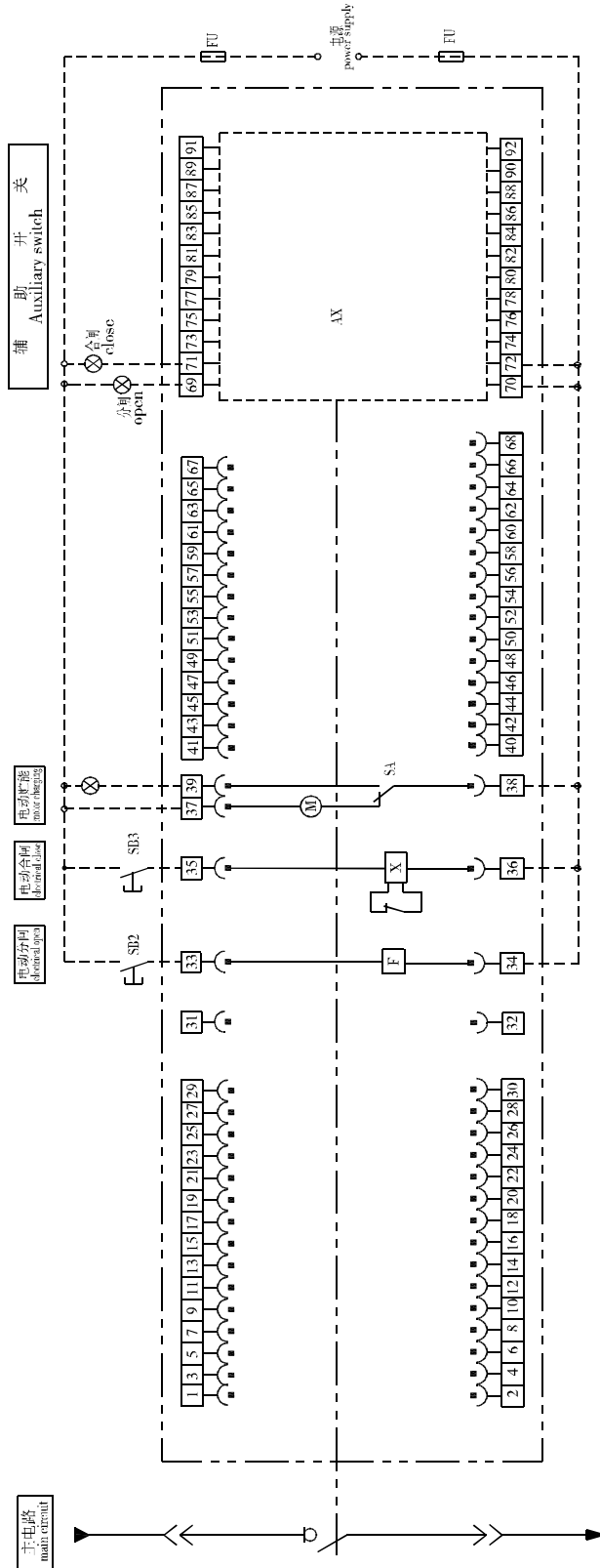
隔离开关与柜壁或带电部件最小距离
Minimn distance between breaker with switchboard wall or live part.

	柜壁 Switchboard wall	带电部分 Live part
d1(注note)(mm)	0	60
d2(mm)	0	60

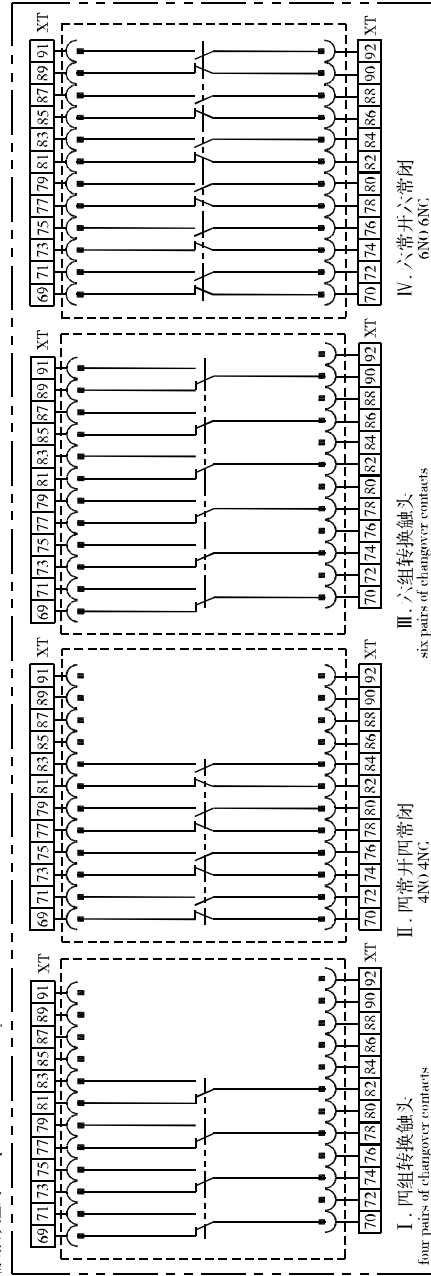
注：安全间隙要考虑两次回路的走线。
Note:secondary circuit wiring must be considered for safety clearance.



CW3G交直流隔离开关二次回路接线图 SECONDARY CIRCUIT WIRING DIAGRAM FOR CW3G AC OR DC SWITCH-DISCONNECTOR

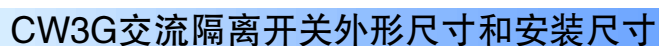


辅助开关型式 the pattern of auxiliary switch



注: Note:

- 33、34 分励脱扣器 shunt release
- 35、36 合闸电磁铁 closing electromagnet
- 37、38、39 电动机 (电机) 储能 (power driven automatic charging with a manual open button simultaneously/manual energy pre-charge)
- 69-92 辅助开关连接端子 connecting terminals of auxiliary switch
- SB2 分励按钮 opening button
- SB3 合闸按钮 closing button
- F 分励脱扣器 shunt release
- X 合闸电磁铁 closing electromagnet
- SA 电动机行程开关 Travel-limit switch of motor
- M 储能电机 motor charging
- XT 二次回路接线端子 terminals of secondary circuit
- FU 熔断器 Fuse
- AX 辅助开关 Auxiliary switch
- 37、38-可直接接电源 (手动储能), 也可由接常开按钮后接电源 (手动储能能) in power supply directly(auto energy charging power supply with a manual open button simultaneously/manual energy pre-charge), also can be connected to power supply after connecting with a normally open button (manual energy pre-charge)
- F、X、M的额定电压不同应分别接不同电源 voltage of F、X、M is different, should be connected to different power supply



CW3G-2500 three poles switch-disconnector(drow-out,AC type)

Technical drawing showing the back view of a cabinet with dimensions and labels:

- Labels:**
 - 柜门外边 Outside of the cabinet
 - 基点 Base point
 - “分离”位置 "Separated" position
 - 垂直 (后置) Vertical (back set)
- Dimensions:**
 - Overall width: 395
 - Overall height: 438
 - Distance from left edge to base point: 102
 - Distance from base point to right edge: 175
 - Distance from left edge to vertical line: 10
 - Distance from vertical line to base point: 97
 - Distance from base point to right edge (bottom): 107.5
 - Distance from left edge to right edge (bottom): 47
 - Top mounting dimensions: 63, 30, 15
 - Right side mounting dimensions: 30, 70, 127
 - Bottom right mounting dimensions: 107.5
 - Mounting holes: 24 - $\phi 11$



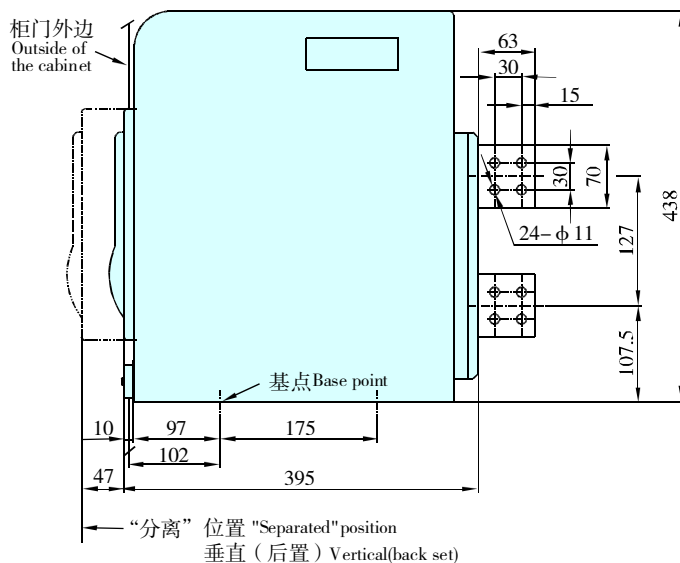
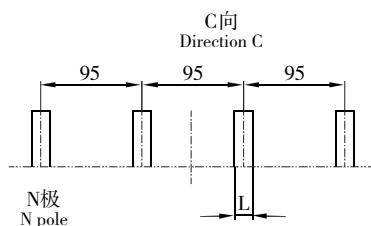
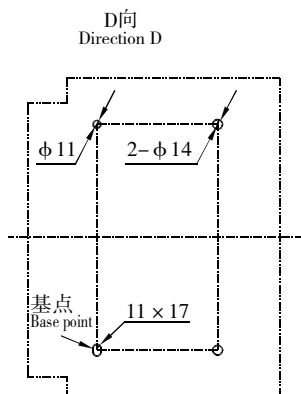
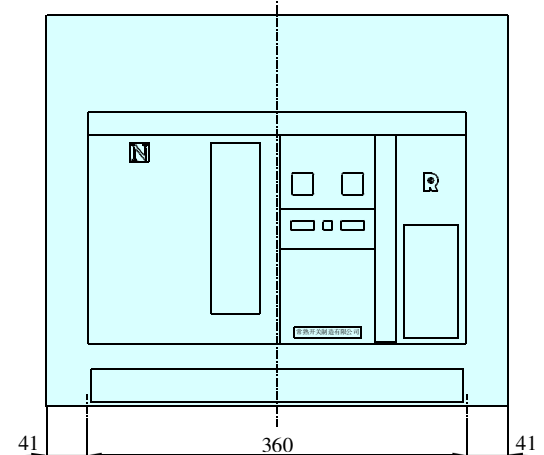
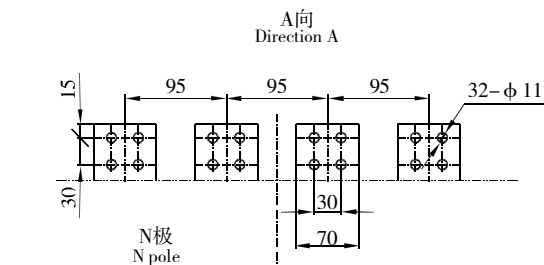
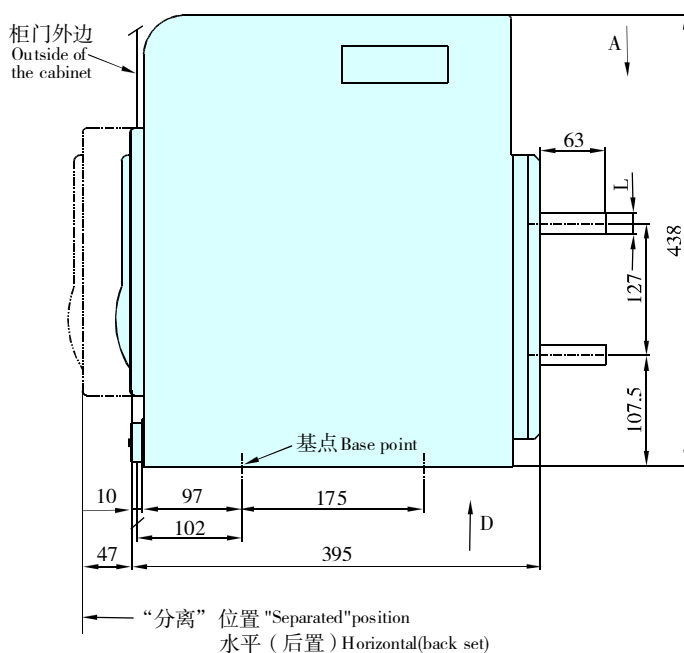
CW3G交流隔离开关外形尺寸和安装尺寸

OUTLINE DIMENSIONS AND MOUNTING DIMENSIONS FOR CW3G AC SWITCH-DISCONNECTOR

CW3G-2500四极隔离开关（抽屉式交流型）

CW3G-2500 four pole switch-disconnector(drow-out,AC type)

电流规格 Current specifications	L (mm)
2000A、2500A	20
630A~1600A	15





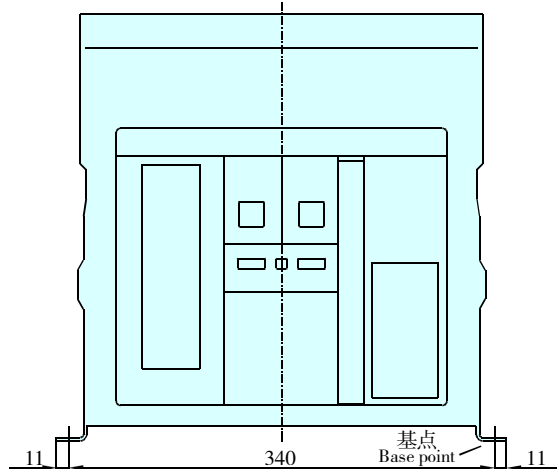
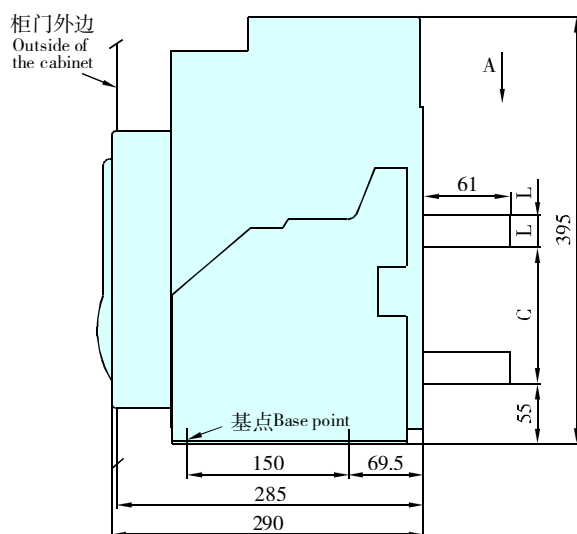
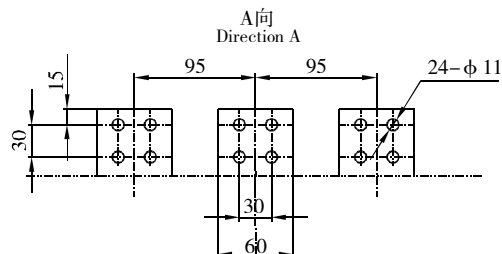
CW3G交流隔离开关外形尺寸和安装尺寸

OUTLINE DIMENSIONS AND MOUNTING DIMENSIONS FOR CW3G AC SWITCH-DISCONNECTOR

CW3G-2500三极隔离开关（固定式交流型）

CW3G-2500 three poles switch-disconnector(Fixed,AC type)

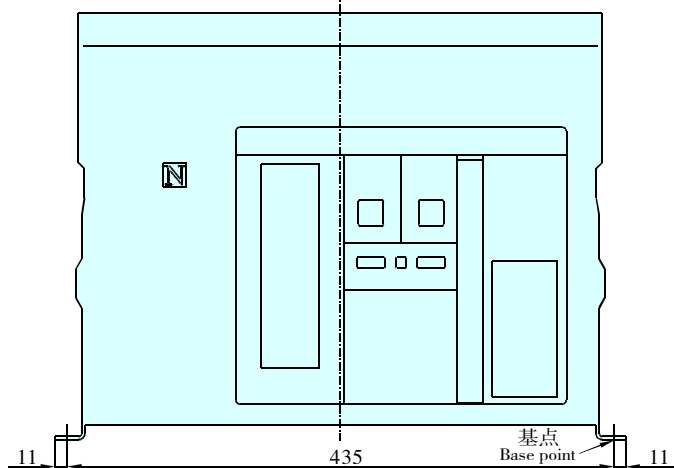
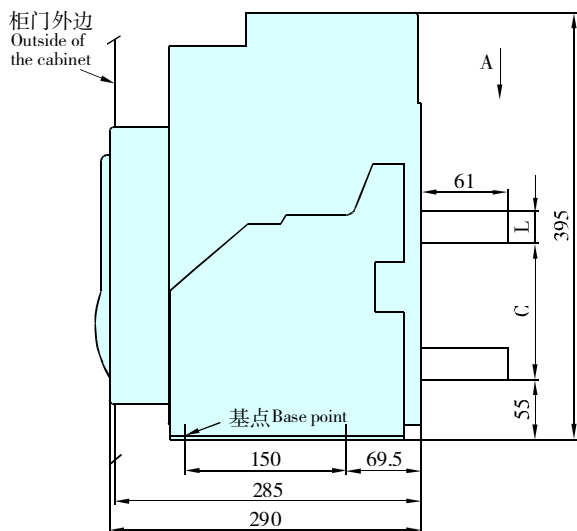
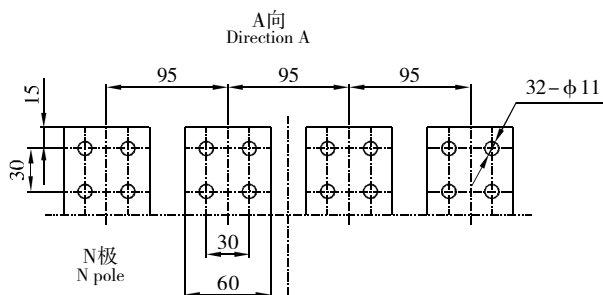
电流规格 Current specifications	L (mm)	C (mm)
2000A、2500A	20	132
630A~1600A	15	134.5



CW3G-2500四极隔离开关（固定式交流型）

CW3G-2500 four pole switch-disconnector(Fixed,AC type)

电流规格 Current specifications	L (mm)	C (mm)
2000A、2500A	20	132
630A~1600A	15	134.5



面板中心离柜门右铰链最小距离为256mm

Distance from the panel center of switch-disconnector to the righthing of cabinet door should be at least 256mm



面板中心离柜门右铰链最小距离为256mm

Distance from the panel center of switch-disconnector to the right hinge of cabinet door should be at least 256mm



面板中心离柜门右铰链最小距离为303.5mm

Distance from the panel center of switch–disconnector to the right hinge of cabinet door should be at least 303.5mm



面板中心离柜门右铰链最小距离为303.5mm

Distance from the panel center of switch-disconnector to the right hinge of cabinet door should be at least 303.5mm





直流系统中隔离开关接线方式

Connected type of switch-disconnector for DC system

三极串隔离开关 Three series switch-disconnector

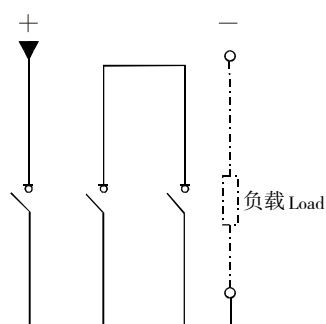
——A型接线方式 A connected type

——B型接线方式 B connected type

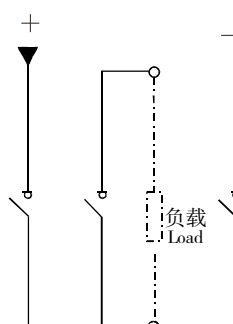
四极串隔离开关 Four series switch-disconnector

——C型接线方式 C connected type

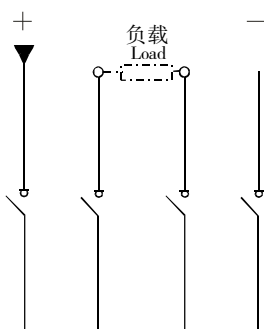
——D型接线方式 D connected type



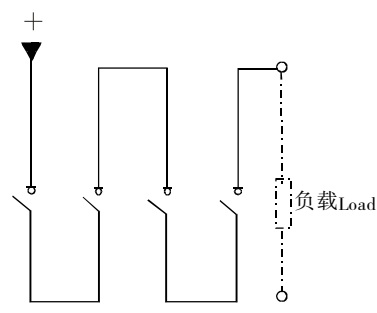
A型接线方式
A connected type



B型接线方式
B connected type



C型接线方式
C connected type



D型接线方式
D connected type



直流系统应用 Application for D.C system

在直流系统中选择开关电器主要考虑以下方面: in d.c. system, choosing a switch-disconnector is in consideration of the followings:

- 额定工作电压, 考虑分断的串联极数 1、 rated operation voltage, in consideration of breaking number of poles in series
- 额定电流, 考虑负载功率 2、 rated current, in consideration of load power
- 接地系统方式 (如下所示) 3、 manner of ground system (as followings)

系统类型 system catelogy		接地系统 ground system		不接地系统 no grounding system
		负极接地 negative pole grounding	中心点接地 core point grounding	
各种故障类型 all offault catelogy				
故障影响 fault effect	故障 I Fault I	接电源正极触头的电压为U voltage U of the positive pole contact connected to power	接电源正极触头的电压为U/2 voltage U/2 of the positive pole contact connected to power	无影响 no effect
	故障 II Fault II	串联的触头电压为U voltage U of the contacts in series	串联的触头电压为U voltage U of the contacts in series	串联的触头电压为U voltage U of the contacts in series
	故障 III Fault III	无影响 no effect	接电源负极的触头电压为U/2 voltage U/2 of the negative pole contact connected to power	无影响 no effect
	故障 I 和 IV Fault I and IV at same time	——	——	接电源正极或负极触头的电压为U voltage U of the positive or negative pole contact connected to power
最严重情况 the most serious condition		故障 I fault I	故障 I 和 III Fault I and fault III	同时发生故障 I 和 IV Fault I and IV at same time
解决方案 Item		可在正极串联 can be in series on the positive pole	电源正负极都接触头	可在正负极串联 can be in series on the positive or negative pole

CW3G直流隔离开关适用的不同电源系统/负载接线方法

suitable different power system / load wiring manner for CW3G switch-disconnector

额定电压 Rated operational voltage	电源/负载接线方式 Power/load wiring manner		
	不接地系统 No grounding system	负极接地系统 Negative point grounding system	中心点接地系统 Core point grounding system
DC750V	C	A	B
DC1000V	C	D	C

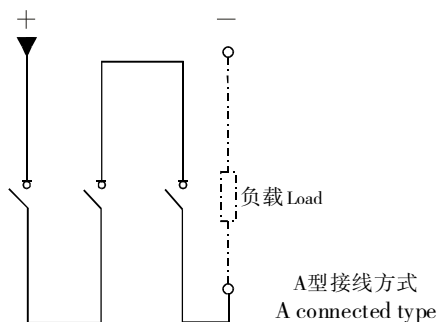
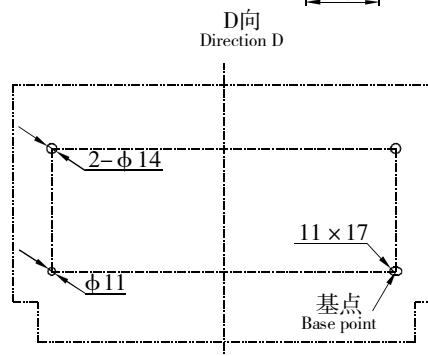
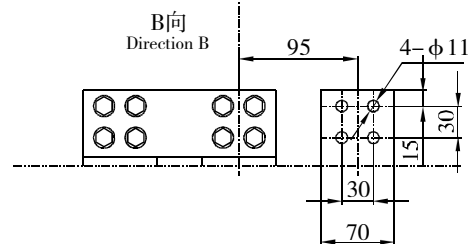
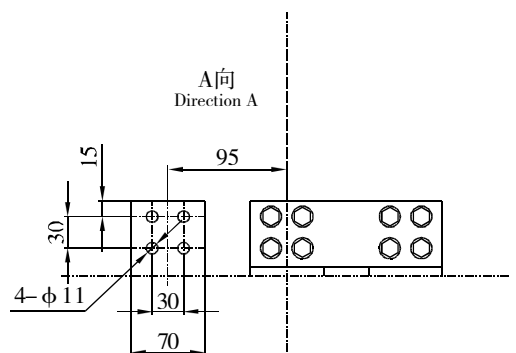
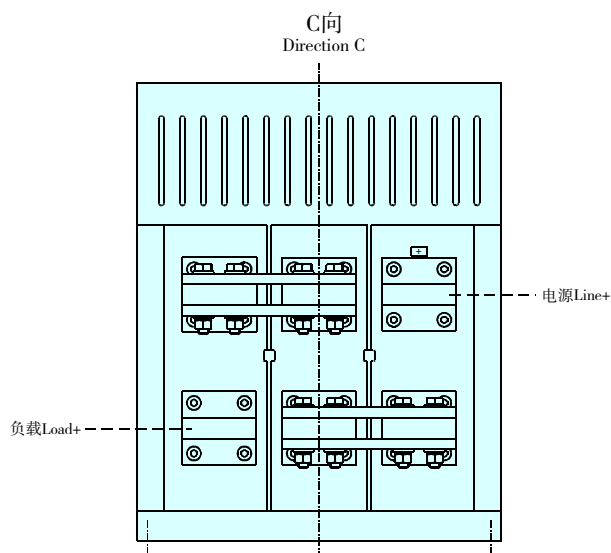
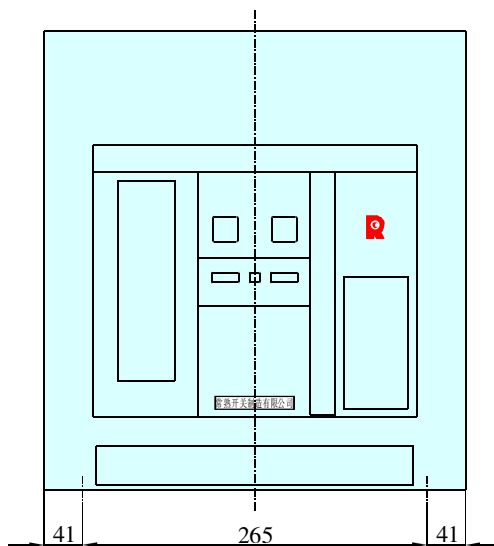
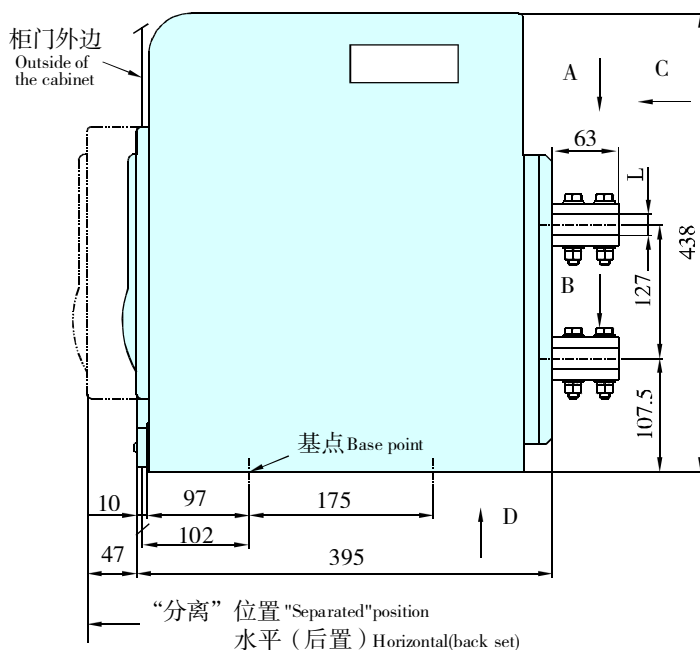


CW3G直流隔离开关外形安装尺寸和接线方式

OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/DC隔离开关（直流A型接线方式，抽屉式水平后置）
CW3G-2500/DC switch-disconnector(A connected type for DC,
draw-out and horizontal back set)

电流规格 Current specifications	L (mm)
2000A、2500A	20
630A~1600A	15



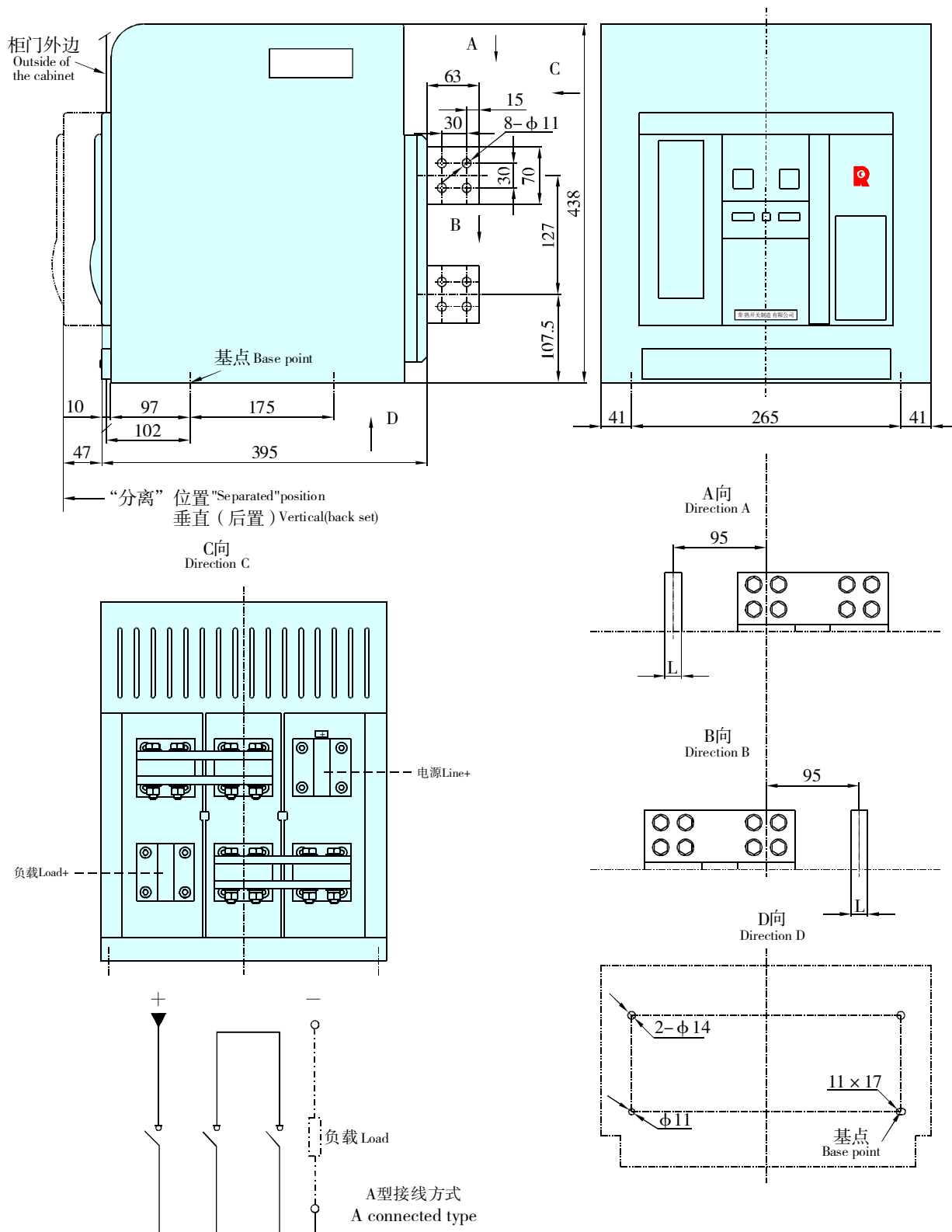


CW3G直流隔离开关外形安装尺寸和接线方式

OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/DC隔离开关（直流A型接线方式，抽屉式垂直后置）
CW3G-2500/DC switch-disconnector(A connected type for DC,
draw-out and vertical back set)

电流规格 Current specifications	L (mm)
2000A、2500A	20
630A~1600A	15



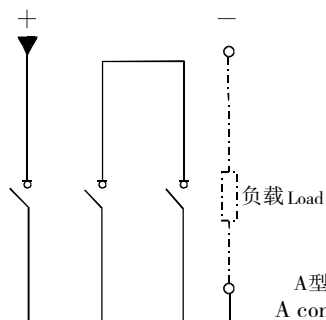
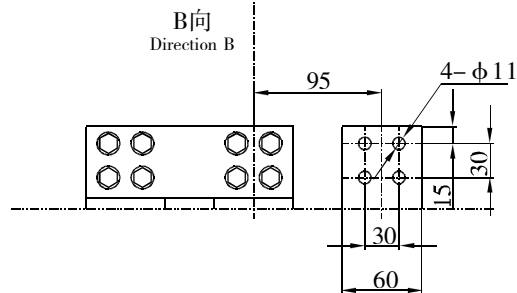
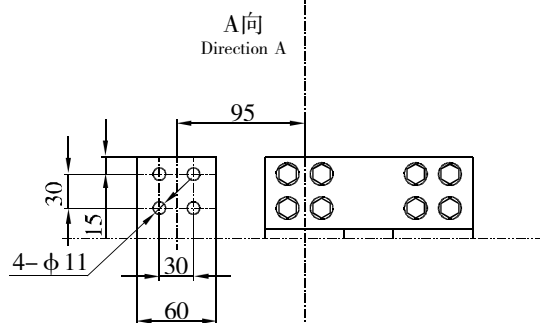
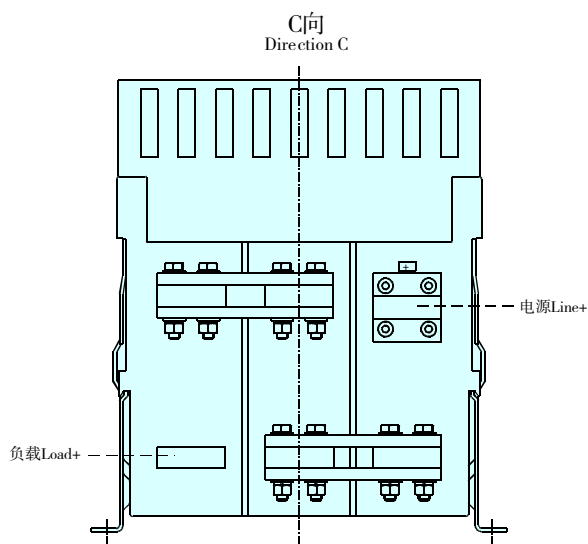
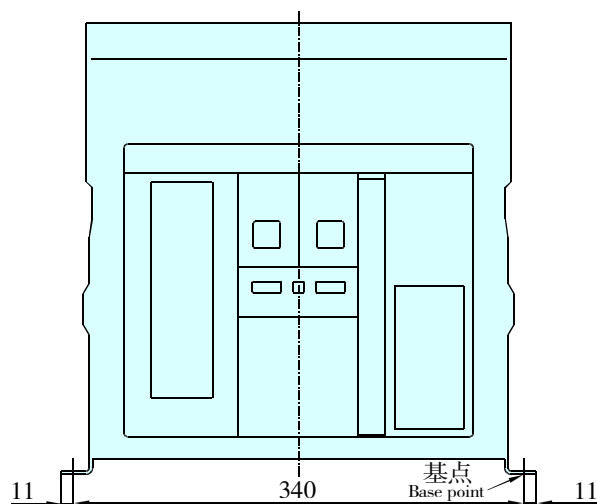
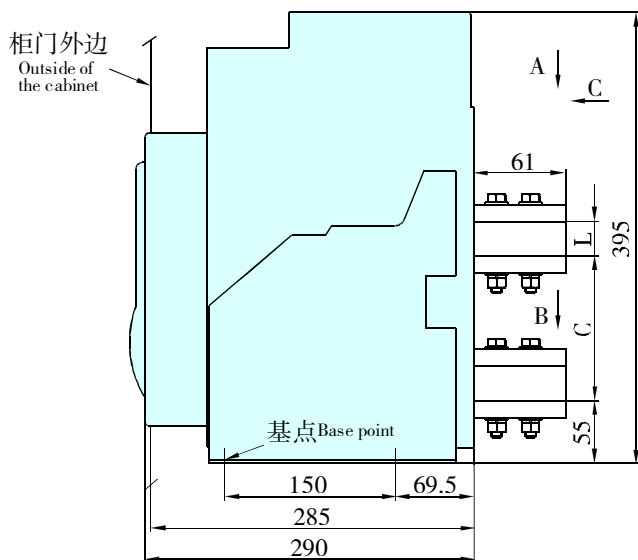


CW3G直流隔离开关外形安装尺寸和接线方式

OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/DC隔离开关（直流A型接线方式，固定式）
CW3G-2500/DC switch-disconnector(A connected type
for DC, fixed)

电流规格 Current specifications	L (mm)	C (mm)
2000A、2500A	20	132
630A~1600A	15	134.5



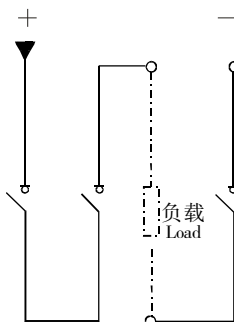
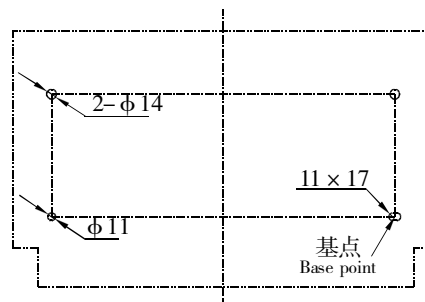
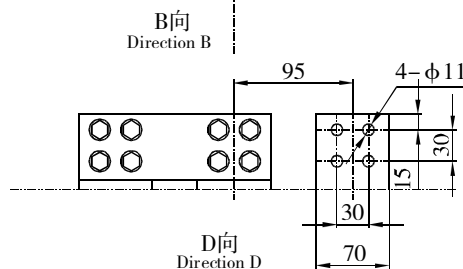
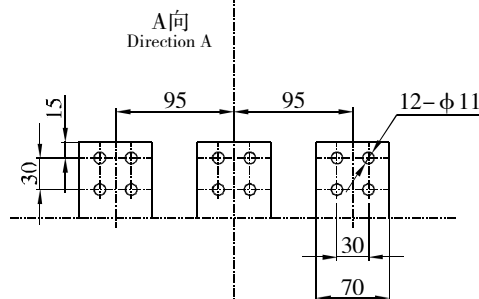
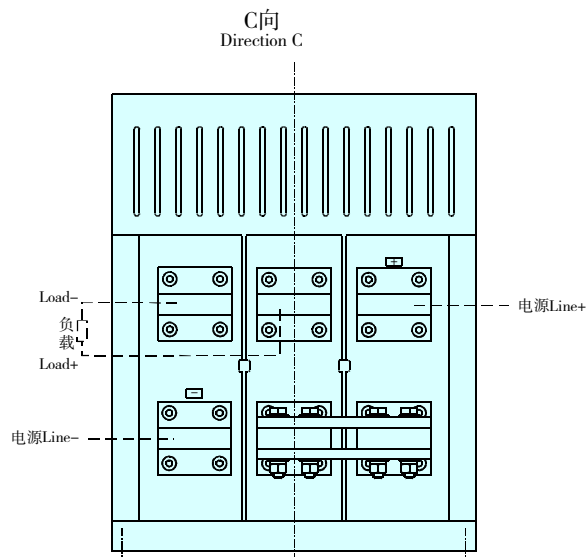
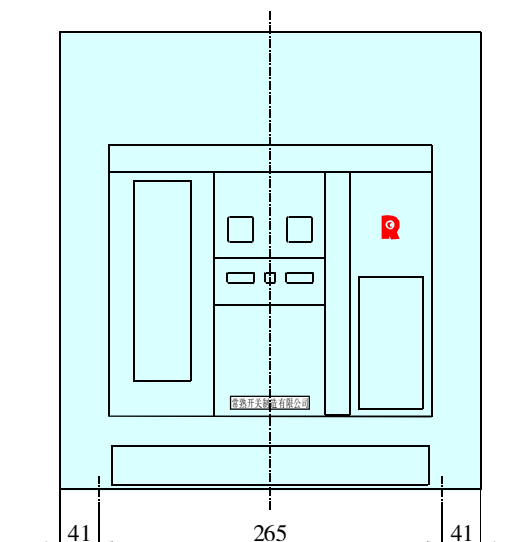
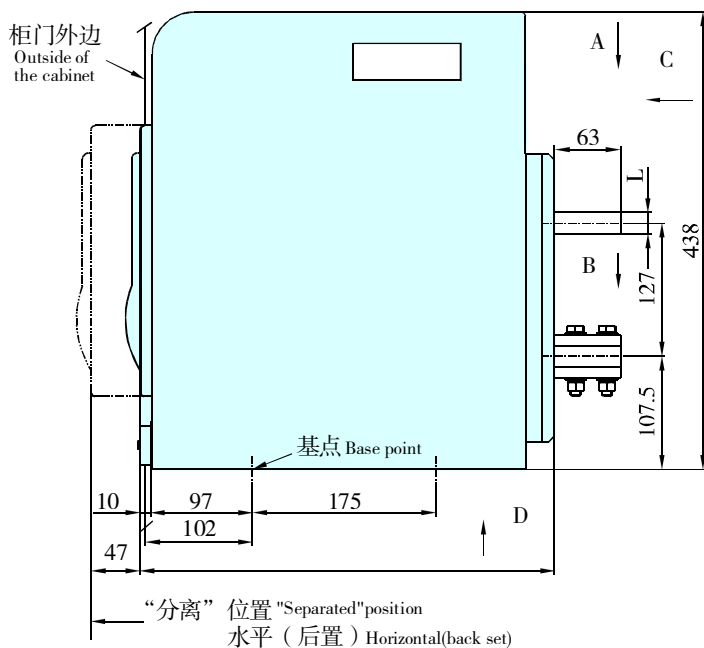


CW3G直流隔离开关外形安装尺寸和接线方式

OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/DC隔离开关（直流B型接线方式，抽屉式水平后置）
CW3G-2500/DC switch-disconnector(B connected type for DC,
draw-out and horizontal back set)

电流规格 Current specifications	L (mm)
2000A、2500A	20
630A~1600A	15



B型接线方式
B connected type

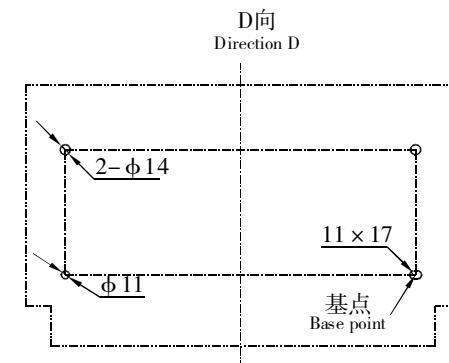
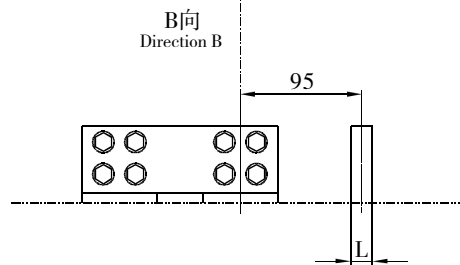
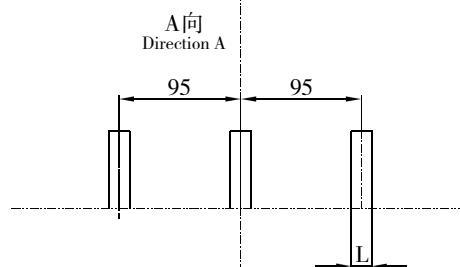
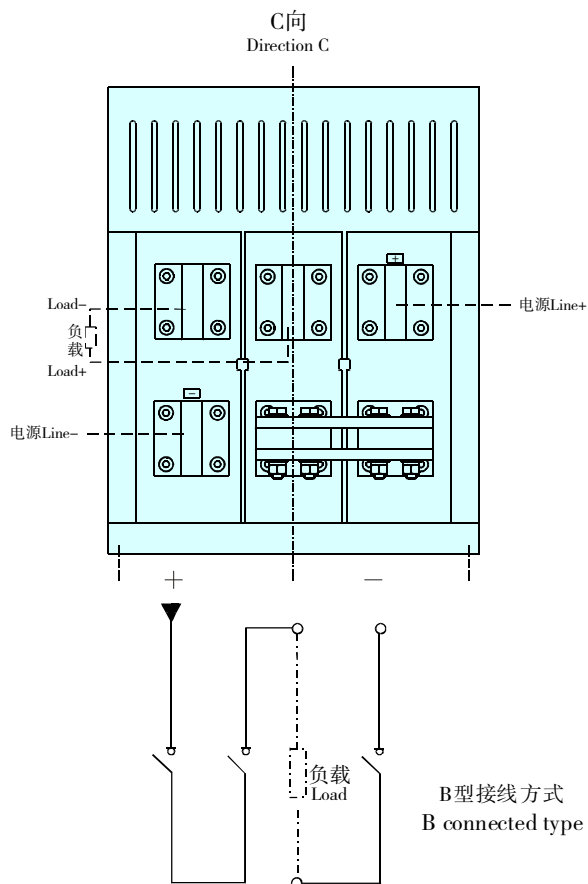
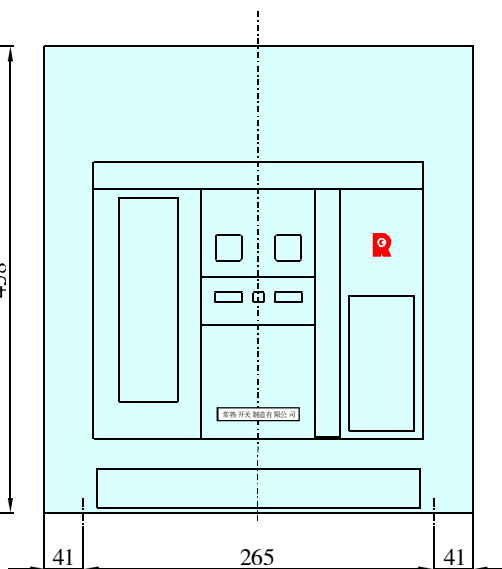
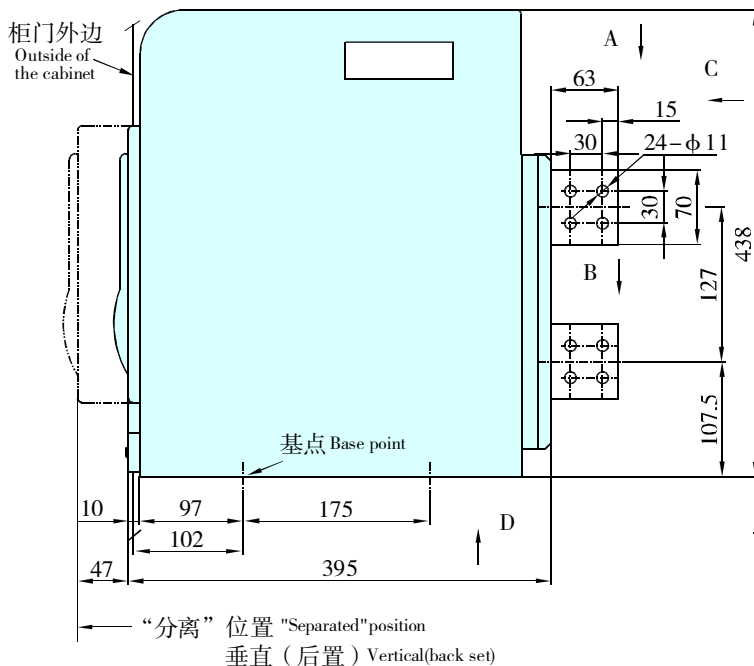


CW3G直流隔离开关外形安装尺寸和接线方式

OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/DC隔离开关（直流B型接线方式，抽屉式垂直后置）
CW3G-2500/DC switch-disconnector(B connected type for DC,
draw-out and vertical back set)

电流规格 Current specifications	L (mm)
2000A、2500A	20
630A~1600A	15



B型接线方式
B connected type

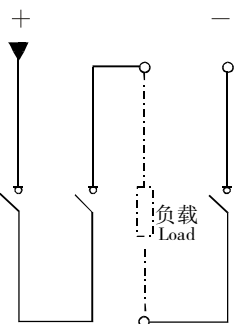
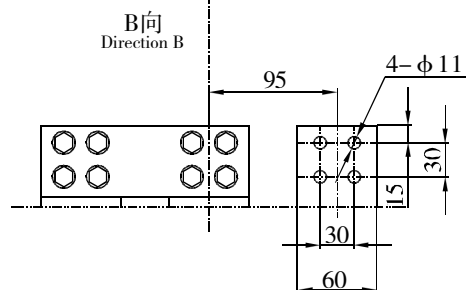
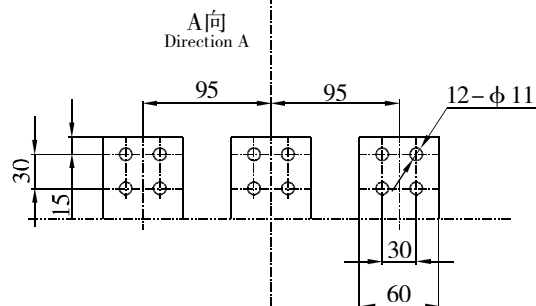
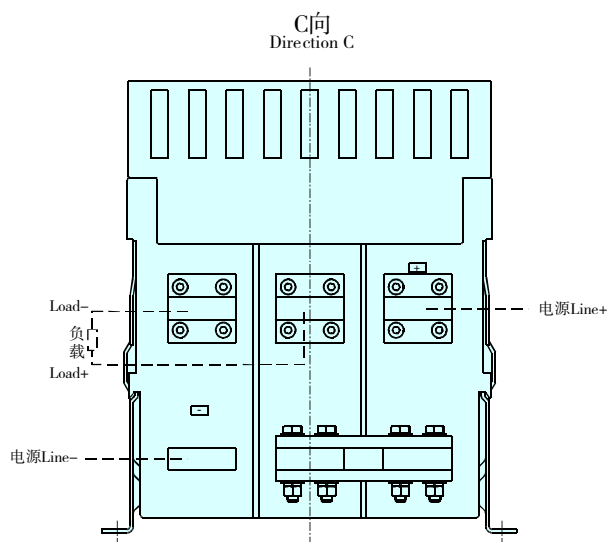
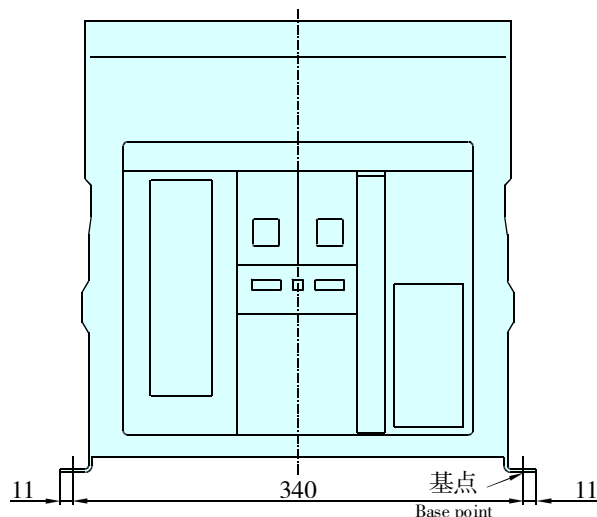
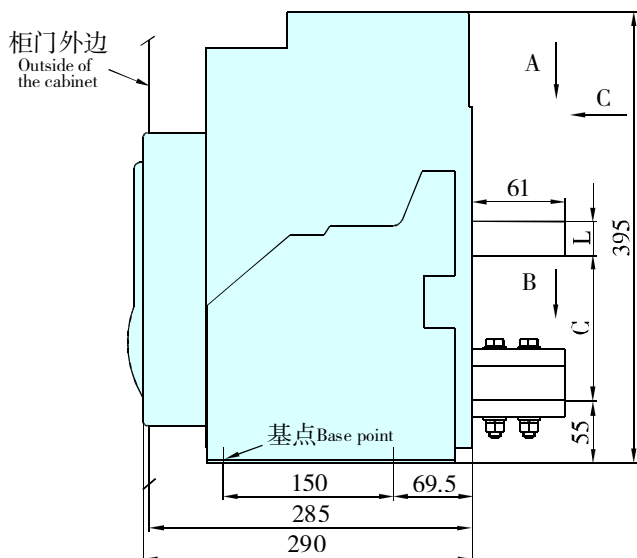


CW3G直流隔离开关外形安装尺寸和接线方式

OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/DC隔离开关（直流B型接线方式，固定式）
CW3G-2500/DC switch-disconnector(B connected type
for DC, fixed)

电流规格 Current specifications	L (mm)	C (mm)
2000A、2500A	20	132
630A~1600A	15	134.5



B型接线方式
B connected type

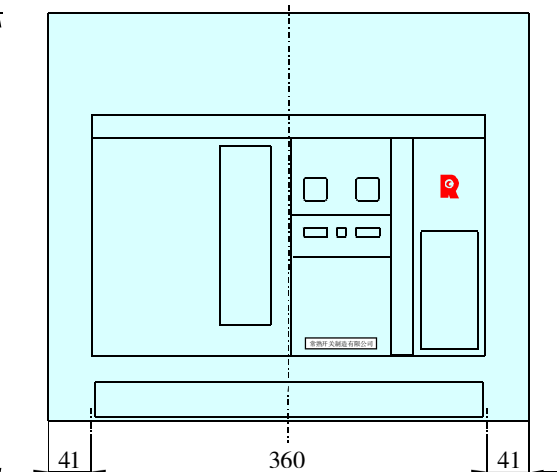
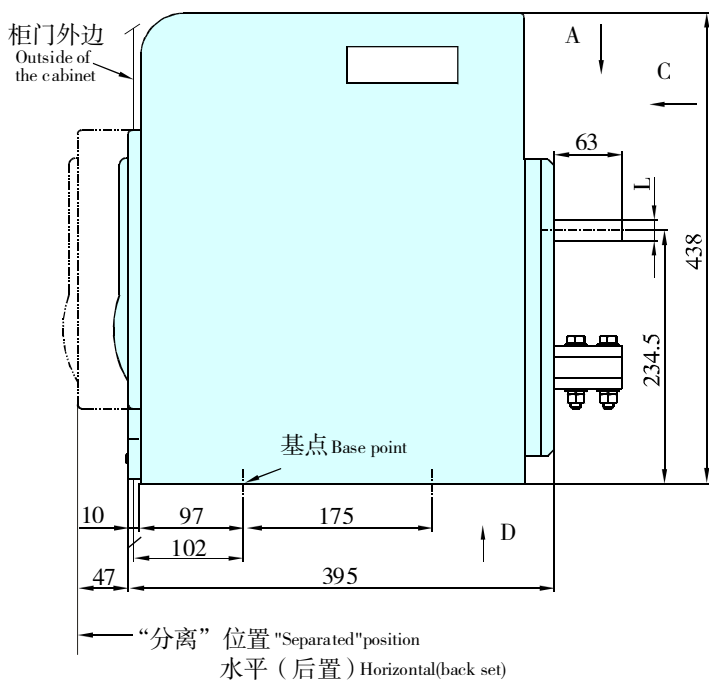


CW3G直流隔离开关外形安装尺寸和接线方式

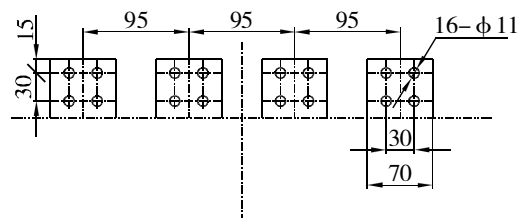
OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/4DC隔离开关（直流C型接线方式，抽屉式水平后置）
CW3G-2500/4DC switch-disconnector(C connected type for DC,
draw-out and horizontal back set)

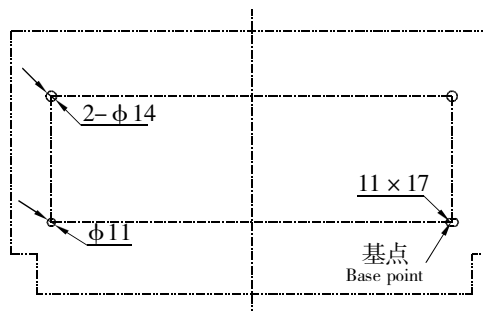
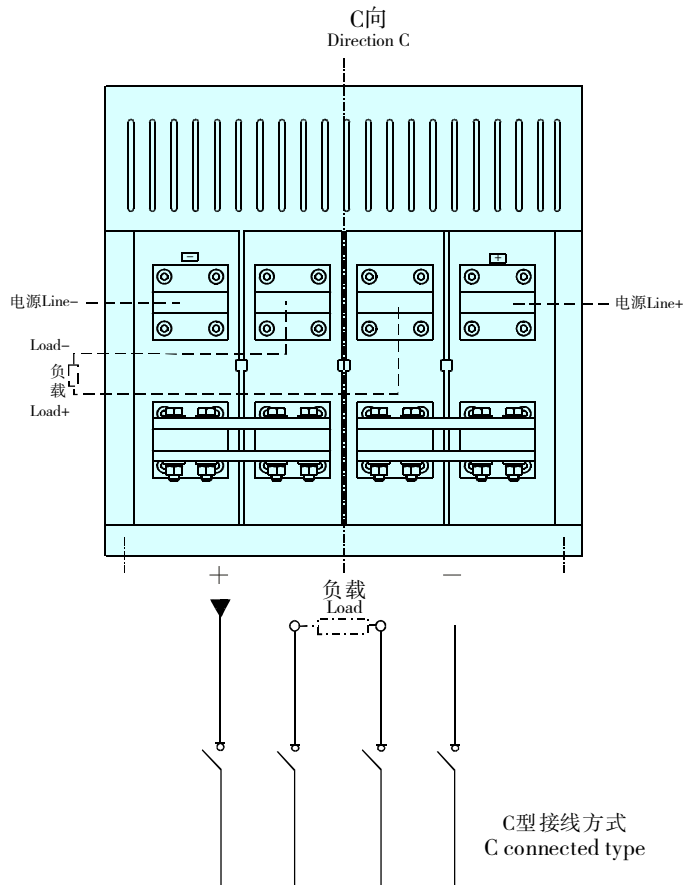
电流规格 Current specifications	L (mm)
2000A、2500A	20
630A~1600A	15



A向
Direction A



D向
Direction D



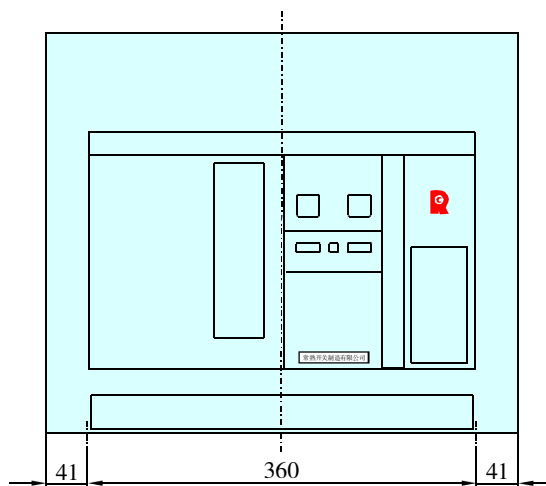
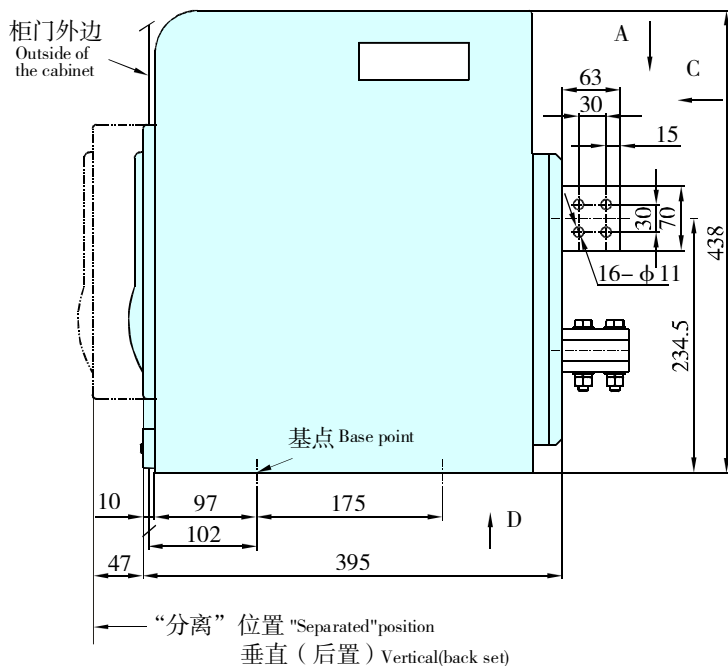


CW3G直流隔离开关外形安装尺寸和接线方式

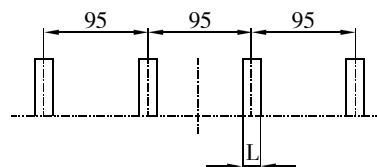
OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/4DC隔离开关（直流C型接线方式，抽屉式垂直后置）
CW3G-2500/4DC switch-disconnector(C connected type for DC,
draw-out and vertical back set)

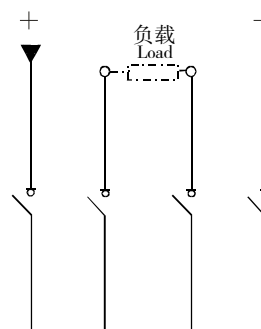
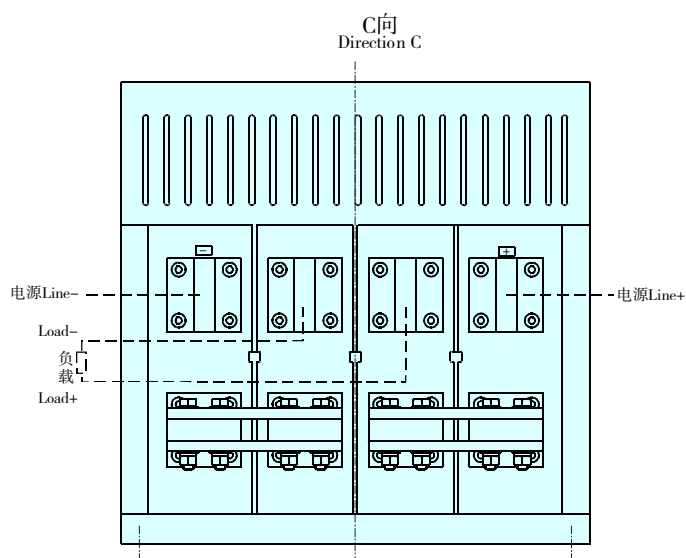
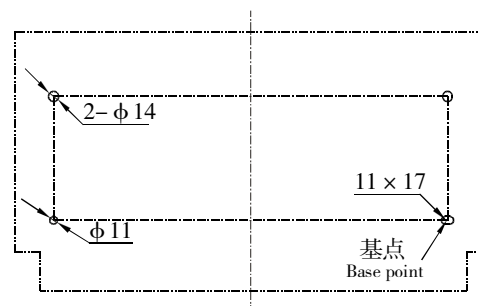
电流规格 Current specifications	L (mm)
2000A、2500A	20
630A~1600A	15



A向
Direction A



D向
Direction D



C型接线方式
C connected type

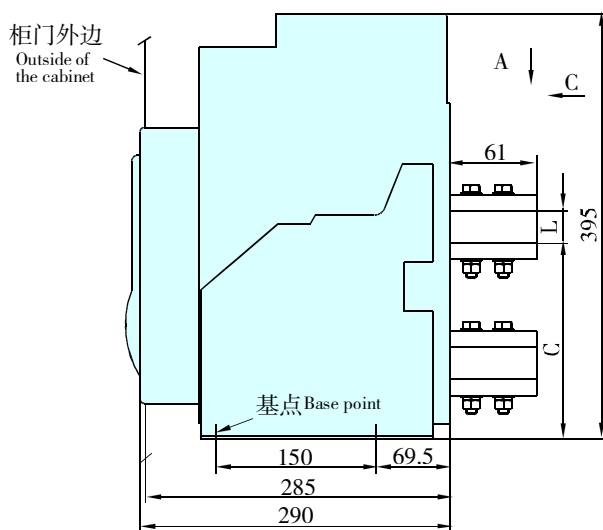


CW3G直流隔离开关外形安装尺寸和接线方式

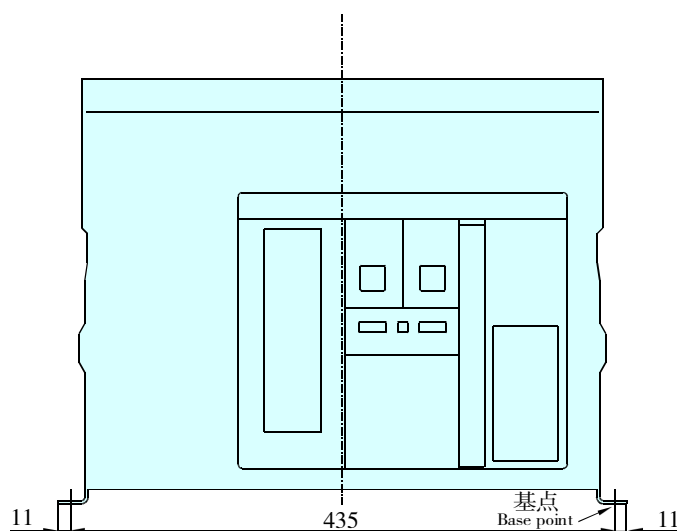
OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/4DC隔离开关（直流C型接线方式，固定式）
CW3G-2500/4DC switch-disconnector(C connected type
for DC, fixed)

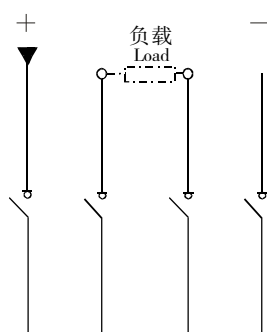
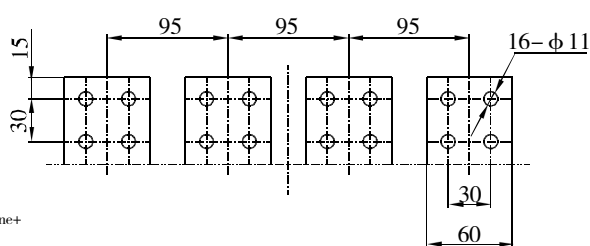
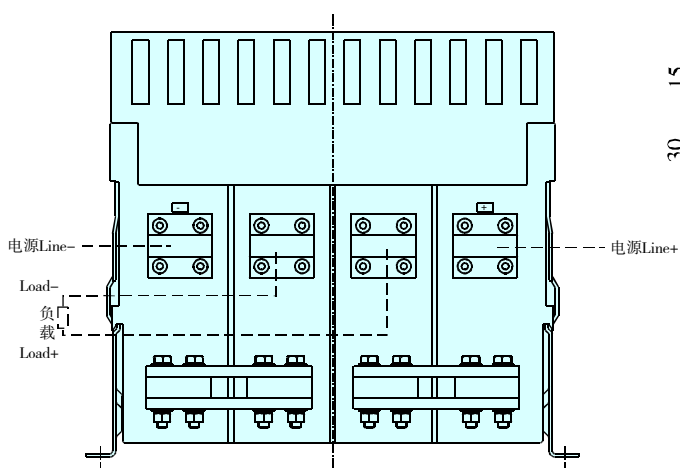
电流规格 Current specifications	L (mm)	C (mm)
2000A、2500A	20	187
630A~1600A	15	189.5



C向
Direction C



A向
Direction A



C型接线方式
C connected type

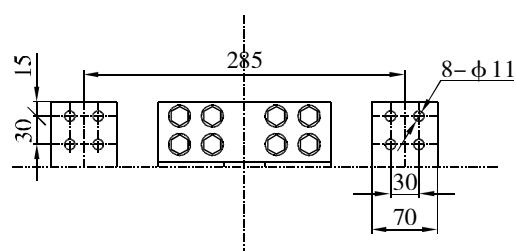
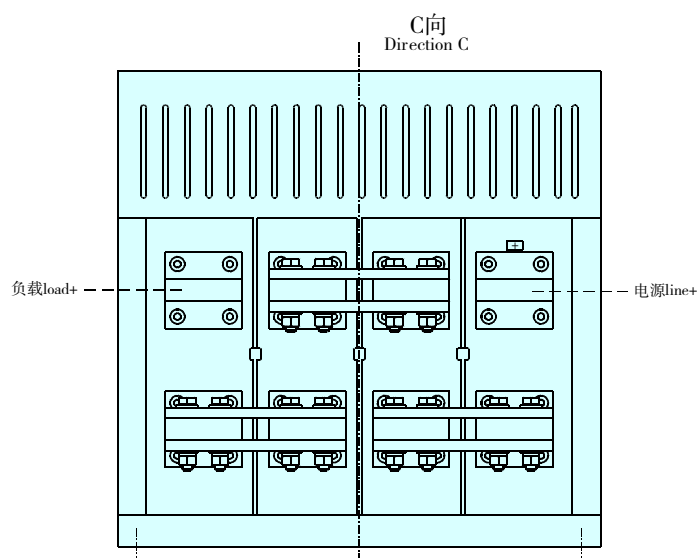
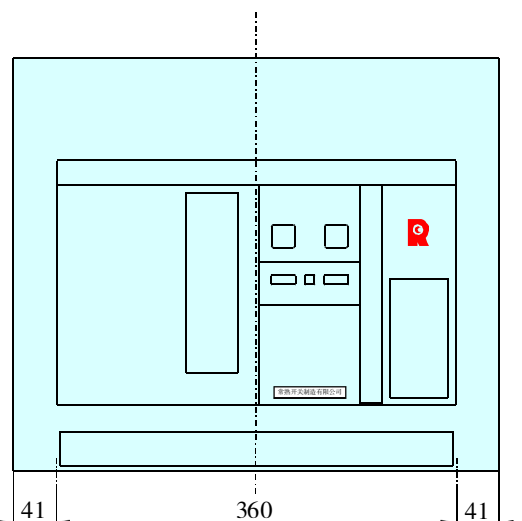
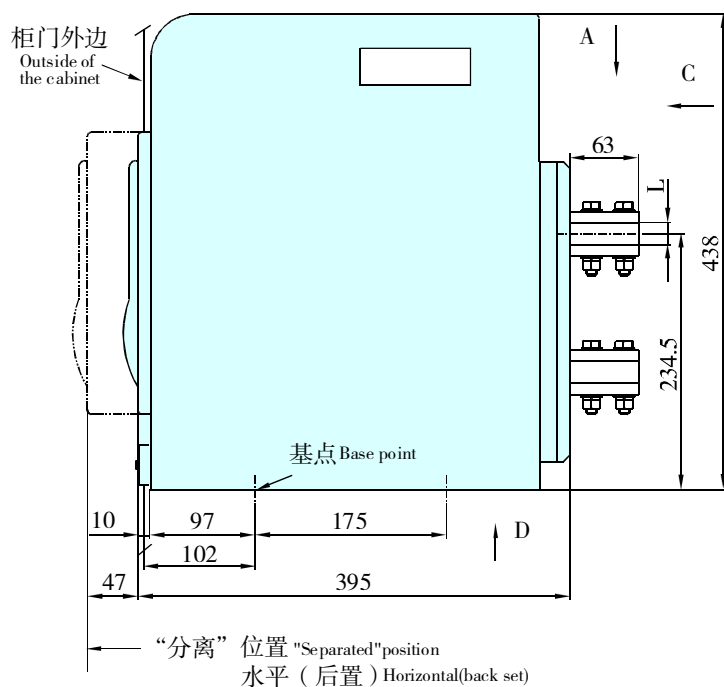


CW3G直流隔离开关外形安装尺寸和接线方式

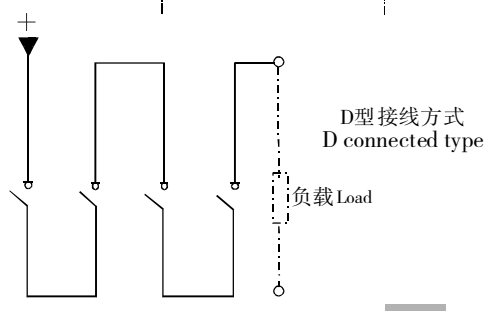
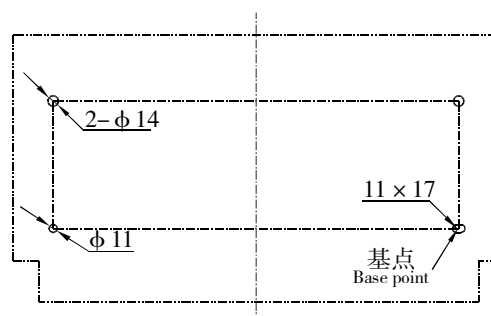
OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/4DC隔离开关（直流D型接线方式，抽屉式水平后置）
CW3G-2500/4DC switch-disconnector(D connected type for DC,
draw-out and horizontal back set)

电流规格 Current specifications	L (mm)
2000A、2500A	20
630A~1600A	15



D向
Direction D



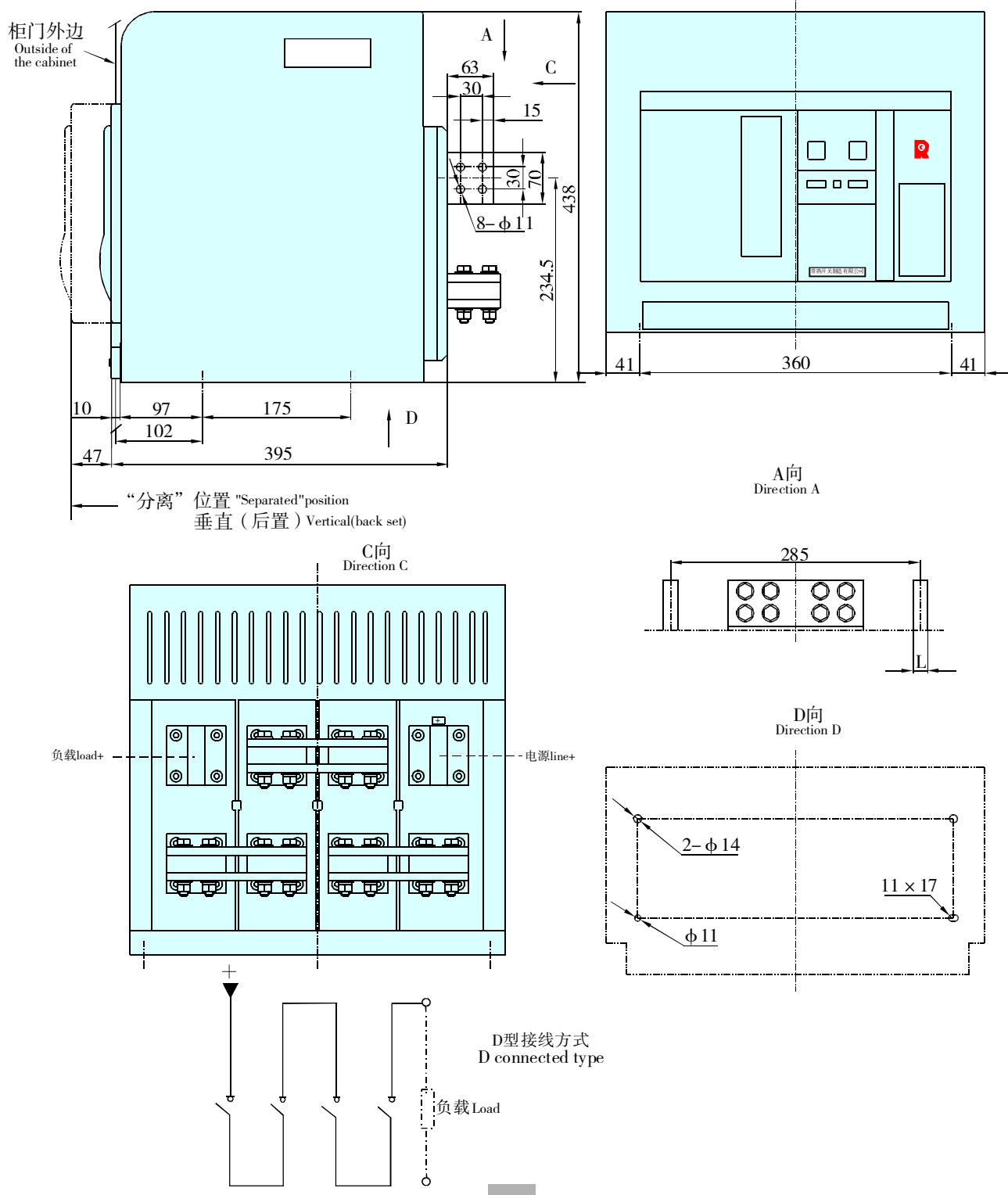


CW3G直流隔离开关外形安装尺寸和接线方式

OUTLINE AND MOUNTING DIMENSIONS AND CONNECTED FOR CW3G DC SWITCH-DISCONNECTOR

CW3G-2500/4DC隔离开关（直流D型接线方式，抽屉式垂直后置）
CW3G-2500/4DC switch-disconnector(D connected type for DC,
draw-out and vertical back set)

电流规格 Current specifications	L (mm)
2000A、2500A	20
630A~1600A	15



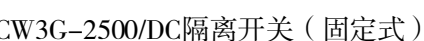


安装门框前盖开孔图

面板中心离柜门右铰链最小距离为256mm

The drawing of cutout dimensions for mounting cover of doorframe

Distance from the panel center of switch-disconnector to the righting of cabinet door should be at least 256mm

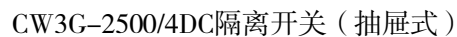


安装门框前盖开孔图

面板中心离柜门右铰链最小距离为256mm

The drawing of cutout dimensions for mounting cover of doorframe

Distance from the panel center of switch-disconnector to the right hinge of cabinet door should be at least 256mm



安装门框前盖开孔图

面板中心离柜门右铰链最小距离为303.5mm

The drawing of cutout dimensions for mounting cover of doorframe

Distance from the panel center of switch-disconnector to the right hinge of cabinet door should be at least 303.5mm

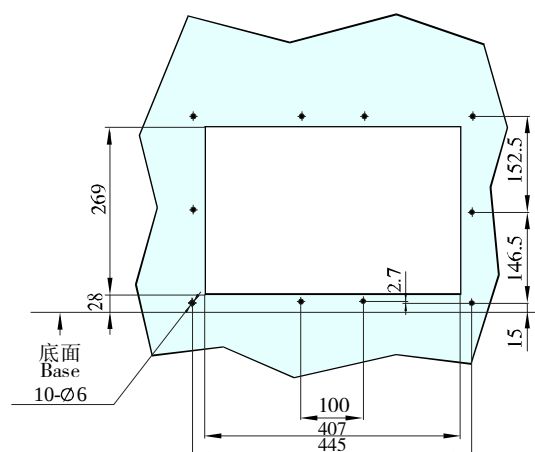


安装门框前盖开孔图

面板中心离柜门右铰链最小距离为303.5mm

The drawing of cutout dimensions for mounting cover of doorframe

Distance from the panel center of switch-disconnector to the right hinge of cabinet door should be at least 303.5mm





CW3G交流隔离开关订货规范

ORDERING FORM FOR CW3G AC SWITCH-DISCONNECTOR

(请在____上填上数字, □内打上√)
(please filled figures in ____, or sign √ in □)

用户单位 Name		订货台数 Order amount		订货日期 Order date	
型号 Type	CW3G- _____ / _____				
额定工作电流 Rated operational current	Ie = _____ A	额定电压 Rated voltage ☐ AC400V ☐ AC690V			
安装方式 Mounting	☐ 固定式 Fixed ☐ 抽屉式 Draw-out				
联接方式 Connection	☐ 水平 Horizontal ☐ 垂直 Vertical				
附件配置 Accessories	分励脱扣器 ☐ AC230V ☐ AC400V ☐ DC220V ☐ DC110V Shunt release				
	合闸电磁铁 ☐ AC230V ☐ AC400V ☐ DC220V ☐ DC110V Closing electromagnet				
	电动操作机构 ☐ AC230V ☐ AC400V ☐ DC220V ☐ DC110V Power-driven operation mechanism				
	辅助开关 ☐ 4组转换触头 Auxiliary switch Four pairs of change over contacts ☐ 4常开4常闭 four pieces of normally-open contacts(NC) and four pieces of normally-closed contacts 特殊形式 Exceptional pattern ☐ 6组转换触头 six pairs of change over contacts ☐ 6常开6常闭 six pieces of normally-open contacts(NC)and six pieces of normally-closed contacts				
选择附件 Choice of accessories	☐ 按钮锁 ☐ 相间隔板 ☐ 计数器 Pushbutton lock mechanism Interphase barriers Counter				



CW3G直流隔离开关订货规范

ORDERING FORM FOR CW3G DC SWITCH-DISCONNECTOR

(请在____上填上数字, □内打上√)
(please filled figures in ____, or sign √ in □)

用户单位 Name		订货台数 Order amount		订货日期 Order date	
型号 Type	CW3G- _____ / _____ DC				
额定工作电流 Rated operational current	Ie = _____ A		额定电压 Rated voltage ☐ DC750V ☐ DC1000V		
安装方式 Mounting	☐ 固定式 ☐ 抽屉式 Fixed Draw-out				
电源/负载联接方式 Power/load connected type	☐ A型 ☐ B型 ☐ C型 ☐ D型 A type B type C type D type				
附件配置 Accessories	分励脱扣器 ☐ AC230V ☐ AC400V ☐ DC220V ☐ DC110V Shunt release				
	合闸电磁铁 ☐ AC230V ☐ AC400V ☐ DC220V ☐ DC110V Closing electromagnet				
	电动操作机构 ☐ AC230V ☐ AC400V ☐ DC220V ☐ DC110V Power-driven operation mechanism				
	辅助开关 ☐4组转换触头 ☐4常开4常闭 Auxiliary switch Four pairs of change over contacts four pieces of normally-open contacts(NC) and four pieces of normally-closed contacts 特殊形式 ☐6组转换触头 ☐6常开6常闭 Exceptional pattern six pairs of change over contacts six pieces of normally-open contacts(NC)and six pieces of normally-closed contacts				
选择附件 Choice of accessories	☐按钮锁 ☐相间隔板 ☐计数器 Pushbutton lock mechanism Interphase barriers Counter				

全国一级经销商明细表

北京

北京欣凯通机电有限公司 010-66162644
北方森源电气有限公司 010-87581701

天津

天津市强强电器科技有限公司 022-83715527

上海

上海常开电器设备有限公司 021-56319090
上海企开电器设备有限公司 021-56319090
上海森昊电器有限公司 021-54791857
上海泰耀机电设备有限公司 021-57428230
上海三樱电气有限公司 021-56032616

重庆

重庆宏腾物资有限公司 023-68615538

福建

泉州市恒源电力设备有限公司 0595-22587087

浙江

杭州华森电器有限公司 0571-86947817
杭州天源机电设备有限公司 0571-87244850
乐清市新格电气有限公司 0577-61722717
宁波市江东腾辉电器有限公司 0574-87890910

安徽

合肥恒祥电气设备安装有限公司 0551-4668867

江苏

南京扬力电器有限公司 025-84605256
南京苏能动力工程设计有限公司 025-85283021
常州市中环电器有限公司 0519-88867161
镇江兆丰电器有限公司 0511-88320888
苏州市机电设备有限责任公司 0512-67202006
苏州苏新机电设备有限公司 0512-67571866
苏州市中信机电设备有限公司 0512-65225732
苏州明大机电有限公司 0512-65833162
无锡市法德兰电器成套公司 0510-82736734
盐城市科宇电气有限公司 0515-89800508
连云港市希门自动化电器设备有限公司 0518-85452767
徐州泛得电子有限公司 0516-83846977
南通正源电气有限公司 0513-85030391
扬州通润电气设备有限公司 0514-87856707
常熟市中通电力设备有限责任公司 0512-52853511
常熟市欧亚机电产品销售有限公司 0512-52221970
常熟市润源电气设备销售有限公司 0512-51580510

山东

淄博新能机电设备有限公司 0533-2186118
济南中机电亿万电器有限公司 0531-85869188
烟台信谊电气技术有限公司 0535-6105866
江苏华晟电器设备有限公司山东电气技术中心 0531-88950385

江西

江西佳创实业有限公司 0791-8317951

广东

广州市友朋电气设备有限公司 020-34528679
佛山市君鹏机电设备有限公司 0757-83811990
佛山市嘉合贸易有限公司 0757-83397660
东莞市运通泰电气科技有限公司 0769-22028877
深圳市华冠电器销售有限公司 0755-83928001
众业达电气股份有限公司 0754-88739922
汕头市新兴工业配套材料有限公司 0754-88681888

湖南

长沙常开电气有限公司 0731-84699925
长沙市康发电器有限公司 0731-84422858

湖北

武汉万千新能电气有限公司 027-87256467
武汉圣天科技有限公司 027-82706552

广西

南宁市德控机电设备有限责任公司 0771-3212829

河北

河北华尔电气有限公司 0311-87834870

河南

河南中电电器有限公司 0371-66974968
河南航天机电数字有限公司 0371-63329025

四川

成都慧永电器成套设备有限公司 028-68003527

陕西

陕西新力源电气有限公司 029-88348089
西安西菱电器机械设备有限公司 029-88320213

云南

昆明惠尔电气有限公司 0871-7367961

宁夏

银川同正电气有限公司 0951-6014483

甘肃

天水上联电器成套有限公司 0938-8381068

山西

山西万里顺贸易有限公司 0351-6521630
山西常顺电器销售服务有限公司 0351-7023860

新疆

新疆德控电气有限公司 0991-5818361

辽宁

沈阳市新业物资实业公司 024-22734762
鞍山市耐特机电系统工程有限公司 0412-5230221

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哈尔滨北低成套设备有限公司 0451-88387734

内蒙古

包头市杰德自动化工程有限公司 0472-6973800

海南

海南华胜电气设备有限公司 0898-66226803



常熟开关 持续超越

- 国家重点高新技术企业
- 全国企事业知识产权示范单位
- 全国守合同重信用企业
- 国家科学技术进步二等奖获得者

2011.02

常熟开关制造有限公司(原常熟开关厂)

CHANGSHU SWITCHGEAR MFG. CO., LTD. (FORMER CHANGSHU SWITCHGEAR PLANT)

公司地址: 江苏省常熟市建业路8号
网 址: <http://www.rlyue.com.cn>
电子信箱: cskg0001@cs-kg.com
邮 编: 215500

ADDRESS: NO.8 JIANYE ROAD CHANGSHU, JIANGSU, P.R.CHINA
URL: [HTTP://WWW.RIYUE.COM.CN](http://www.rlyue.com.cn)
E-MAIL: cskg0001@cs-kg.com
POST CODE: 215500

办 公 室: 0512-52842237 52846851
元件销售: 0512-52840577 52840993 52844994 52845227
52840995 52841441 52841442 52841616
成套销售: 0512-52846862 52846863 52840073 52845582
技术热线: 0512-52841486 8008282528
传 真: 0512-52841606 52841465 52841042

OFFICE: 0512-52842237 52846851

SALES DEP. FOR ELECTRIC COMPONENTS:

0512-52840577 52840993 52844994
52840995 52841441 52841442
52845227 52841616

SALES DEP. FOR COMPLETE SWITCHGEAR EQUIPMENT:

0512-52846862 52846863 52840073 52845582

TECHNICAL SUPPORT HOTLINE: 0512-52841486 8008282528

FAX: 0512-52841606 52841465 52841042

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