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电子样本



浙江朗翊电气有限公司
ZHEJIANG LANGYI ELECTRIC CO., LTD.

本广告资料由朗翊电气有限公司印制，仅用于说明本系列产品的相关信息，朗翊电气随时可能因技术升级或采用更新的产品工艺而改进本手册有关内容，或对本手册的印刷错误及不准确的信息进行改进和更改，恕不另行通知。

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朗翔

高压开关柜配套件
High voltage switch cabinet accessories



2023 版
厂家直销 终身售后



朗翔电气
LANGYI ELECTRIC

汇聚创新精神 领略智慧科技

电力驱动文明进步，追求创新卓越，科技引领未来。

朗翊将一如既往地电气产品领域，潜心钻研，大胆探索，

不断融合先进的技术和管理经验，

专心致力于高压成套电气产品辅件的研究和发展，

为提供性能可靠，物超所值的产品而奋斗不息！

Electricity drives the progress of civilization, the pursuit of innovation and excellence, and technology leads the future.

LangYi will continue to concentrate on researching in the field of electrical products,

Boldly explore, continue to integrate advanced technology and management experience,

Concentrate on the research and development of accessories for high-voltage

complete sets of electrical products,

Struggling to provide reliable performance and value-for-money products!





公司简介 COMPANY PROFILE

朗翊电气是目前国内成套柜架生产配套企业生产厂商之一、位于中国电器之都 -- 柳市，企业工程师从业于 2001 年，具有丰富的现场实际操作经验，同时也是成套柜架行业解决非标柜体联锁结构件以及柜体联锁优化方案提供商之一，致力于为个人和企业用户提供最具创新品牌价值的产品及应用方案。朗翊电气的产品线完整覆盖至中置式铠装高压开关柜 KYN28A-12、小型化中置式高压铠装开关柜 KYN-550 型柜体辅件的智造。朗翊电气公司以优质的系列产品，借助以优秀的客户为中心，以完整无忧的服务理念为客户保驾护航！已经成为朗翊电气公司的主要竞争实力。

以人为本是一贯遵循的经营理念之一。公司一直把人才的引进和员工的稳定作为一项重要的工作来做，除努力提高员工的工资收入外，在福利方面和员工的生活方面，多方进行改进和提高，使员工能安心在企业工作，因而确保了公司的快速和稳定的发展。

在企业的管理方面，公司在实行人性化管理的同时，加强现代化企业制度的健全的落实、并充分利用现代化技术，实行计算机管理，技术研发、办公销售、仓储、客户档案，会计核算及安全保卫等方面均用电脑进行控制和管理。

使公司的管理做到了规范化和制度化，为企业的进一步发展奠定了坚实的基础我们欣喜于用户对每台产品的选择与慎重，并相信在惬意与快意中让我们的客户可以更加从容地开拓与创造价值！

每一个梦想的实现，都出自对极致标准的执着追求。我们将始终致力于提升自我的创新与效率，为您不断发掘新的机遇，呈献引领科技与前沿的全新高度！



Langyi Electric is currently one of the domestic manufacturers of complete sets of cabinets and racks. It is located in Liushi, the capital of China's electrical appliances. The company's engineers were employed in 2001 and have rich on-site practical operation experience. One of the providers of standard cabinet interlocking structural parts and cabinet interlocking optimization solutions, dedicated to providing individuals and corporate users with the most innovative brand value products and application solutions. Langyi Electric's product line completely covers the intelligent manufacturing of KYN28A-12 center-mounted high-voltage armored switch cabinets and KYN-550 cabinet accessories of miniaturized center-mounted high-voltage armored switch cabinets. Langyi Electric Co., Ltd. escorts customers with high-quality series of products, with excellent customers as the center, and a complete and worry-free service concept! Has become the main competitive strength of Langyi Electric Company.

People-oriented is one of the business philosophy that has always been followed. The company has always regarded the introduction of talents and the stability of employees as an important task. In addition to working hard to increase employees' wages, improvements and enhancements have been made in many ways in terms of welfare and employees' lives, so that employees can work in the company with peace of mind. , Thus ensuring the company's rapid and stable development.

In terms of corporate management, while implementing humanized management, the company strengthens the sound implementation of modern corporate systems and makes full use of modern technology to implement computer management, technology research and development, office sales, warehousing, customer files, accounting and security protection All aspects are controlled and managed by computers.

The management of the company has been standardized and institutionalized, laying a solid foundation for the further development of the company. We are delighted with the choice and prudence of each product by users, and believe that our customers can develop more calmly in the comfort and pleasure. And create value!

The realization of every dream comes from the persistent pursuit of the ultimate standard. We will always strive to improve our own innovation and efficiency, continue to explore new opportunities for you, and present a new level of leading technology and cutting-edge!





QUALITY ASSURANCE 品质保证

高起点，高品质是我们矢志不移的追求目标，每一道工序，每一个环节，我们恪守一丝不苟的产品制造工艺，每一个细节都完善的表达了规范化、系统化、标准化。合理控制生产过程，使管理、品质效益贯穿企业经营的每一个细节，保证产品各项性能符合标准。

多年的生产工艺技术奠定了朗翊电气的制造能力，技术与设备的完美结合缔造了朗翊电气的品质基础。优秀的员工团队精确的生产管理、规范的作业流程严格的过程控制精准的校验设备，朗翊实现高效、规模生产。





A high starting point and high quality are our unwavering pursuit goals. In every process and every link, we abide by the meticulous product manufacturing process, and every detail perfectly expresses the standardization, systematization and standardization. Reasonably control the production process, make management, quality and efficiency run through every detail of business operations, and ensure that the performance of the product meets the standards. Years of production technology has laid the manufacturing capacity of Langyi Electric, and the perfect combination of technology and equipment has created the quality foundation of Langyi Electric. Excellent staff team, precise production management, standardized operation process, strict process control and precise calibration equipment, Langyi realizes high-efficiency and large-scale production.




品质保证 QUALITY ASSURANCE

坚持稳定的产品质量，恪守产品制造的一丝不苟，在设计、在制造、在检测、在服务，每一个工序，完善的管理尽皆表露出 ISO9001 的标准性。凭借一流的开发、生产、检测、一流的质量保证体系和行业领先的生产工艺构建的核心竞争力，全力打造具有行业一流品质的企业。

With perseverance in stable quality and meticulous manufacturing process, normalization, systematization and standardization of ISO9001 has entirely been reflected into every process, covering design, manufacturing, inspection, management and service. With the core competitiveness of first-class development, manufacturing and inspection, first-class quality assurance system and leading production technology, we will make full effort to create a world-class quality enterprise.



ISO9001



质量管理体系认证证书

证书编号: 20219Q21259R05


兹证明
浙江朗电电气有限公司
统一社会信用代码: 91330302MA28ARDC0X




质量管理体系符合:
GB/T19001-2016 idt ISO9001:2015 标准

证书覆盖范围:
高低压电源成套设备配件的生产

注册地址/审核地址: 浙江省乐清市柳市镇金湖头村

本次颁发日期: 2019年07月30日
证书有效期至: 2022年07月29日
首次颁发日期: 2019年07月30日

证书负责人: 

浙江至品认证有限公司
中国·浙江·杭州滨江区西兴街道长河社区121100121

ISO9001



QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificate No.: 20219Q21259R05

We hereby certify that the organization:
Zhejiang Langdi Electric Co., Ltd.
Unified social credit code: 91330302MA28ARDC0X

is in conformity with Quality Management System Standard:
GB/T19001-2016 idt ISO9001:2015

The certificate is valid to the following products/service:
Production of Complete Sets of Equipment Accessories for High and Low Voltage Electrical Equipment Appliances

Registration Address/Audit Address: Jirongtuo Village, Lushui Town, Yuyao City, Zhejiang Province, China.

Date of Issue: 2019-07-30
Date of Expiry: 2022-07-29
Date of Issue: 2019-07-30

Issued by: 





ZHEJIANG QUANPIN CERTIFICATION CO., LTD.
Room 401, 14th Floor, No. 14, Juyuan Road, Juyuan Street, Hangzhou, Zhejiang, China
China Quality Assurance Center (CQAC) Member, www.cqac.com.cn


■ 朗电电气有限公司 ■

朗电电气



第 13377550 号

商标注册证



朗电电气





核定使用商品/服务项目 (国际分类: 9)
第9类: 电话自动化装置; 电话; 电话 (截止)

注册人 乐清市朗电电气有限公司

注册人地址 浙江省温州市乐清市柳市镇西仁岩村

注册日期 2019年10月26日 有效期至 2029年10月27日

局长 **申长雨** 发证机关 

NEIC®    

190021253110

中国合格评定国家认可委员会
TESTING
CNAS L0007

YJ 11042134

检验报告


TEST REPORT

样品名称: 高压接地开关

型号: JMS-12/31.5

委托单位: 浙江朗明电气有限公司

检测类别: 型式试验



国家高低压电器质量监督检验中心
National High-Voltage Electrical Apparatus Quality Supervision and Inspection Center
甘肃电器科学研究所
Gansu Electric Apparatus Research Institute

证书号第 1089274 号 

实用新型专利证书

实用新型名称: 一种开关柜手车导轨组件

发明人: 潘钟和

专利号: ZL 2019 2 0889724.8

专利申请日: 2019年06月27日

专利权人: 浙江朗明电气有限公司

地址: 325004 浙江省温州市乐清市柳市镇金湖头村

授权公告日: 2020年09月23日 授权公告号: CN 210838672 U

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局长 申长雨 

2020年09月23日

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其他事项参见专利

证书号第 1089274 号 

实用新型专利证书

实用新型名称: 一种开关柜手车导轨组件

发明人: 潘钟和

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专利申请日: 2019年06月27日

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地址: 325004 浙江省温州市乐清市柳市镇金湖头村

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局长 申长雨 

2020年09月23日

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其他事项参见专利

证书号第 1304218 号 

实用新型专利证书

实用新型名称: 一种分闸线圈

发明人: 潘钟和

专利号: ZL 2021 2 1371067.9

专利申请日: 2021年07月12日

专利权人: 浙江朗明电气有限公司

地址: 325000 浙江省温州市乐清市柳市镇金湖头村

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局长 申长雨 

2021年12月17日

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其他事项参见专利

证书号第 1296347 号 

实用新型专利证书

实用新型名称: 一种开关柜手车固定用限位装置

发明人: 潘钟和

专利号: ZL 2019 2 2346237.8

专利申请日: 2019年12月18日

专利权人: 浙江朗明电气有限公司

地址: 325000 浙江省温州市乐清市柳市镇金湖头村

授权公告日: 2021年04月16日 授权公告号: CN 212601773 U

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局长 申长雨 

2021年04月16日

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其他事项参见专利

证书号第 1319767 号 

实用新型专利证书

实用新型名称: 一种快开限位块

发明人: 潘钟和

专利号: ZL 2021 2 1571464.X

专利申请日: 2021年07月12日

专利权人: 浙江朗明电气有限公司

地址: 325000 浙江省温州市乐清市柳市镇金湖头村

授权公告日: 2021年12月17日 授权公告号: CN 215212809 U

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局长 申长雨 

2021年12月17日

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其他事项参见专利

证书号第 1780369 号 

实用新型专利证书

实用新型名称: 中置式高压开关柜用门锁机构

发明人: 潘钟和

专利号: ZL 2022 2 1574711.6

专利申请日: 2022年06月22日

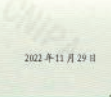
专利权人: 浙江朗明电气有限公司

地址: 325000 浙江省温州市乐清市柳市镇金湖头村

授权公告日: 2022年11月29日 授权公告号: CN 217814777 U

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局长 申长雨 

2022年11月29日

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其他事项参见专利

证书号第 10145410 号 

实用新型专利证书

实用新型名称: 一种开关柜手车导轨组件

发明人: 潘钟和

专利号: ZL 2019 2 0569796.X

专利申请日: 2019年04月24日

专利权人: 浙江朗明电气有限公司

地址: 325004 浙江省温州市乐清市柳市镇金湖头村

授权公告日: 2020年03月20日 授权公告号: CN 210187711 U

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局长 申长雨 

2020年03月20日

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其他事项参见专利

证书号第 5035007 号 

外观设计专利证书

外观设计名称: 开关柜手车导轨

设计人: 潘钟和

专利号: ZL 2019 3 0221722.1

专利申请日: 2019年05月08日

专利权人: 浙江朗明电气有限公司

地址: 325004 浙江省温州市乐清市柳市镇金湖头村

授权公告日: 2020年09月28日 授权公告号: CN 305630206 S

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局长 申长雨 

2020年09月28日

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KYN28A-12 型户内金属铠装抽出式开关设备，系 3-10 千伏三相交流 50Hz 单母线及单母线分段系统的成套配电装置。主要用于发电厂、中小型发电机送电、工矿企事业配电以及电业系统的二次变电所的变电、送电及大型高压电动机起动等。作控制保护、监测之用。

本开关柜具有防止误操作断路器，防止带负荷推拉手车，防止带电关合接地开关，防止接地开关在接地位置送电和防止误入带电间隔，即简称的“五防”。它即能配用 VDS 或 VS1 真空断路器，也可配置进口的 VM1、VD4 真空断路器。

本开关设备满足 DL/T404-91，IEC298、GB3906 等标准要求，具有防止带负荷推拉断路器手车，防止误分合断路器、防止接地开关处于闭合位置时关合断路器、防止误入带电间隔、防止在带电时误合接地开关的联锁功能，既可配用 VS1 真空断路器，又可配用 ABB 公司的 VD4 真空断路器。实为一种性能优越的配电装置。

KYN28A-12 type indoor metal armored withdrawable switchgear is a complete set of power distribution equipment for 3-10kV three-phase AC 50Hz single bus and single bus segmentation system. Mainly used in power plants, small and medium-sized generators, power distribution in industrial and mining enterprises, and secondary substations of electrical systems, power transmission, and large-scale high-voltage motor starting. For control, protection and monitoring purposes. This switchgear has the function of preventing misoperation of the circuit breaker, preventing the pushing and pulling of the handcart with load, preventing the grounding switch from being switched on when the power is on, preventing the grounding switch from transmitting power at the grounding position and preventing the erroneous entry of the charged interval, which is called "five prevention" for short. It can be equipped with VDS or VS1 vacuum circuit breakers, and can also be equipped with imported VM1, VD4 vacuum circuit breakers. This switchgear meets the requirements of DL/T404-91, IEC298, GB3906 and other standards, and has the function of preventing the load-carrying push-pull circuit breaker trolley, preventing accidental opening and closing of the circuit breaker, preventing the closing of the circuit breaker when the grounding switch is in the closed position, and preventing accidental access. The interlock function of the compartment to prevent the grounding switch from being mistakenly closed when the power is on can be equipped with both VS1 vacuum circuit breaker and ABB company's VD4 vacuum circuit breaker. It is a power distribution device with superior performance.

◎ 结构 Structure

KYN28 柜体由柜架和可抽出式手车二部分组成，柜体外壳和各功能的隔板均采用覆铝锌钢板栓接而成。外壳防护等级达 IP4X，个单元防护等级为 IP2X。

各种手车均采用蜗杆摇动推进和退出，其操作轻便、灵活。整个手车体积小，检查和维修方便。

KYN28 中置柜共有母线室、手车室、电缆室和二次仪表室。其中根据手车的用途不同，可分为：转运车、PT 车、熔断器车、计量车、隔离车、下置 PT 车、下置避雷器车和接地车等。

The KYN28 cabinet is composed of a cabinet frame and a withdrawable handcart. The cabinet shell and the partitions of each function are bolted with aluminum-zinc steel plate. The protection level of the shell is IP4X, and the protection level of each unit is IP2X. All kinds of handcarts are driven and retracted by worm shaking, and the operation is light and flexible. The whole handcart is small in size and convenient for inspection and maintenance.

The KYN28 central cabinet has a busbar room, a handcart room, a cable room and a secondary instrument room. According to the different uses of the handcart, it can be divided into: transfer car, PT car, fuse car, metering car, isolation car, lower PT car, lower lightning arrester car and grounding car, etc.

◎ 主要技术参数 The main technical parameters

额定电压 Rated voltage	12KV
额定电流 Rated current	630-3150A
额定短路开断电流 Rated breaking current	16-50KA
额定短路关合电流 Rated open circuit closing current	40-125KA
防护等级 Protection level	IP4X(外壳 Shell) IP2X(断路器门打开 Circuit breaker door open)

◎ 尺寸 Size

高度 Height	2300mm	
宽度 Width	分支小母线额定电流 1250A 及以下，短路开断电流 31.5KA The rated current of the branch small busbar is 1250A and below, and the short-circuit breaking current is 31.5KA	800mm
	分支小母线额定电流 1600A 以上 Rated current of branch small busbar is above 1600A	1000mm
深度 Depth	电缆进出线 Cable in and out	1500mm
	架空进出线 Overhead incoming and outgoing lines	1600mm
重量 weight (KG)	800-1200	

特点 Features

- 柜体结构采用敷铝锌板经多重折弯组装而成。
- 完全采用金属铠装及彻底分隔。
- 柜壳密封度高，防止设备受杂物和虫害侵入，防护等级 IP4X
- 可配用 VDS、VS1 及进口 VM1，VD4 真空断路器。
- 高压室内的真空断路器及其操作机构仅需少量维护。
- 更换断路器非常简单，手车互换性好。
- 柜体可靠墙安装，柜前维修，减少占地面积。也可以不靠墙安装，双面维护。
- 二次线敷设于尺寸宽裕的线槽内，容易接线。
- 电缆室有充裕的空间，可以联结多根电缆。
- 透过面板门，极易观察到电缆室安装情况。
- 快速接地开关用于接地和回路短接。
- 产品符合 GB3906、DL404 参照采用国标，EC-298 标准。

联锁装置 Interlocking device

- 接地开关在分闸位置时，手车才能在试验位置与工作位置之间移动
- 只有断路器手车可靠定位在试验位置或工作位置时，方可操作
- 接地开关合闸时，手车不能从试验位置移至工作位置
- 接地开关仅在手车在试验位置时才能操作
- 手车在工作位置时，二次插头被锁定不能拔出
- 手车只有在试验位置时，二次插头才能插入或拔出

柜顶小母线室
Small busbar room on top of the cabinet

仪表室
Instrument room

二次插头
Secondary plug

断路器
Breaker

手车室
Handcart room

接地开关操作机构
Earthing switch operating mechanism

泄压通道
Pressure relief chann

母线套管
Bus bushing

母线室
Busbar room

分支小母线
Branch small bus

主母线
Main bus

触头盒
Contact box

电流互感器
Current Transformer

接地开关
Earthing switch

避雷器
lightning arrester

接地主母线
Grounded main bus

电缆室
Cable room



◎ 主要技术参数 Main technical parameters

● 额定参数 Rated parameter

在满足配网需要的基础上兼顾了变电站中 12kV 开关柜设备的技术要求，根据额定电流、额定短路开断电流确定以下六个参数序列。

表 1-1 12kV 手车式开关柜参数系列

On the basis of meeting the needs of distribution network, taking into account the technical requirements of 12kV switchgear equipment in substation, the following six parameter sequences are determined according to rated current and rated short-circuit breaking current.
Table 1-1 12kV hand-operated switchgear parameter series

额定电流 Rated current A	630	1250	1250	2500	3150	4000
额定短路开断电流 Rated short-circuit breaking currentkA	20	25	31.5	31.5	40	40

● 使用条件 Conditions of use

满足 DL/T 593 中户内开关设备和控制设备的正常使用条件。

- (1) 周围空气温度最高不超过 40°C，且 24h 内测得的平均温度不超过 35°C。周围空气最低温度为 -25°C。
- (2) 阳光辐射的影响可以忽略。
- (3) 海拔不超过 1000m。
- (4) 周围空气没有明显地受到尘埃、烟、腐蚀性和 / 或可燃性气体、蒸汽或盐雾的污染，外绝缘的最小标称爬电距离应满足户内开关设备外绝缘的爬电距离要求。
- (5) 湿度条件如下：在 24h 内测得的相对湿度的平均值不超过 95%；月相对湿度的平均值不超过 90%。
- (6) 来自开关设备和控制设备外部的振动或地震可以忽略。

DL/T 593 indoor switchgear and control equipment to meet the normal conditions of use.

- (1) The ambient air temperature shall not exceed 40 ° C, and the average temperature measured within 24 hours shall not exceed 35 ° C.
The lowest ambient air temperature is -25°C .
- (2) The effect of solar radiation is negligible.
- (3) The altitude does not exceed 1000m.
- (4) The surrounding air is not significantly contaminated by dust, smoke, corrosive and/or flammable gas, steam or salt spray, and the minimum nominal creepage distance of the external insulation should meet the external insulation of the indoor switchgear
Creepage distance requirement.
- (5) The humidity conditions are as follows: the average relative humidity measured within 24h does not exceed 95%;
The average monthly relative humidity does not exceed 90%.
- (6) Vibrations or earthquakes from outside switchgear and control equipment can be ignored.

◎ 关键元器件 Key component

● 真空断路器及手车 Vacuum circuit breaker and handcart

(1) 真空断路器统一采用弹簧操作机构与断路器本体一体化中置式结构，断路器底盘车接地方式可采用底盘车两侧鸭嘴触片与开关柜铜铁轨摩擦接触方式，如图 1 所示。接地连接的载流能力应不小于对外壳要求的数值，接地连接线截面不小于 6mm²。

- (2) 真空断路器的主要检测手段应包括绝缘试验、机械特性、回路电阻。
- (3) 手车室防护板处印刷“工作位置”、“试验位置”标识，用以表示手车的行进位置。

The current-carrying capacity of the grounding connection must be no less than the required value for the shell, and the cross-section of the grounding cable must be no less than 6mm².

- (2) The main detection means of vacuum circuit breaker should include insulation test, mechanical characteristics, circuit resistance.
- (3) The "working position" and "test position" marks are printed on the protection plate of the handcart to indicate the traveling position of the handcart.



图 1 Figure 1

● 活门 Valve

(1) 开关柜活门采用金属材料,当分支母线电流 $\geq 2500A$ 时,活门靠近静触头侧加装绝缘板,如图2所示,或金属板表面采用硫化等阻燃、抗老化处理。

(2) 开关柜的金属活门需接地,采用 $6mm^2$ 镀锡的编织铜带加透明套管,如图3所示。

(1) The switch cabinet valve is made of metal material. When the branch bus current is $\geq 2500A$, the valve is equipped with an insulating plate near the static contact side, as shown in Figure 2, or the surface of the metal plate is treated with flame retardant and anti-aging treatment such as vulcanization.

(2) The metal valve of the switch cabinet should be grounded, using $6mm^2$ tin-plated braided copper tape and transparent sleeve, as shown in Figure 3.

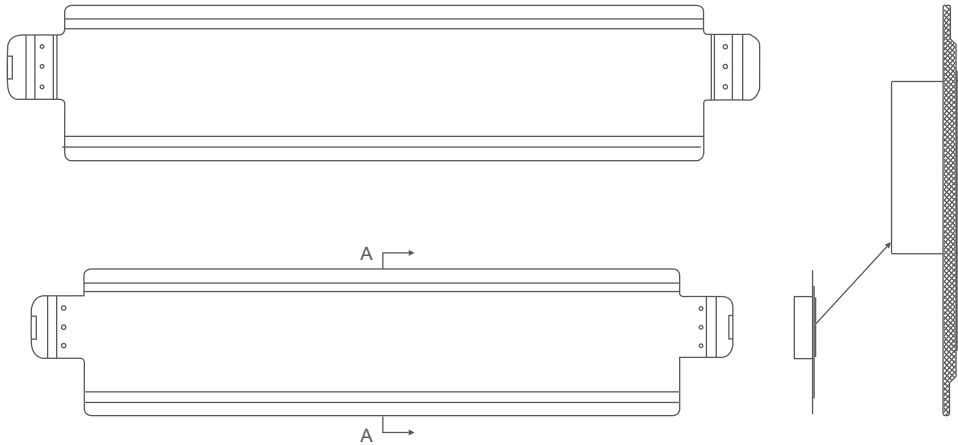


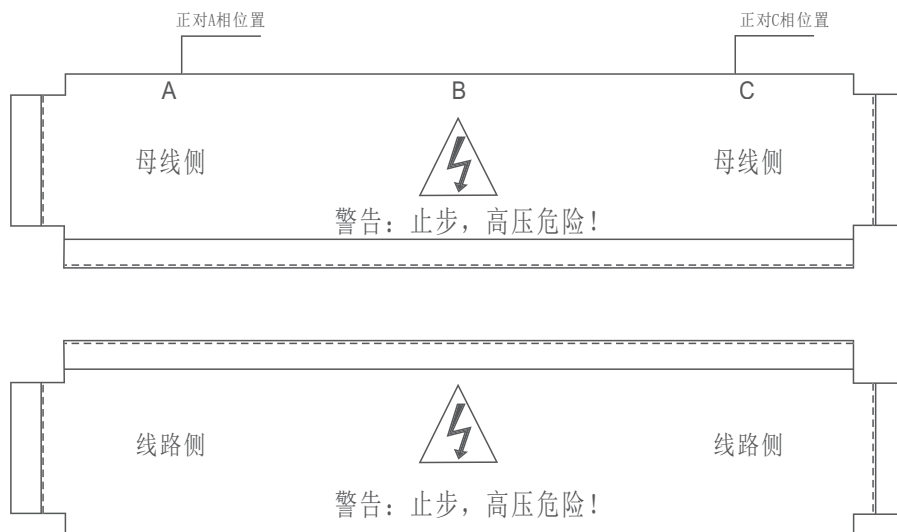
图2 金属活门加装绝缘板
Figure 2 Metal valve with insulation board



图3 金属活门接地
Figure 3 Metal valve grounding

(3) 活门板颜色为RAL7035,开关柜的活门印字如图5-4所示,“A”、“B”、“C”字体颜色分别为黄、绿、红色,其他文字和符号颜色均为红色,根据一次方案印制“主变侧”、“进线侧”、“母线侧”、“联络侧”、“线路侧”等字样,所有字体都为宋体,“A”、“B”、“C”字高为15mm,其余字高都为25mm。

(3) The color of the valve panel is RAL7035, and the characters on the valve of the switch cabinet are shown in Figure 5-4. The font colors of A, B, and C are yellow, green, and red respectively. The colors of other characters and symbols are red. All fonts are typeface, "A", "B", "C" word height is 15mm, the rest of the word height is 25mm.



活门印字示意图 Schematic diagram of the valve printing

● 功能车 Functional vehicle

因功能车为成套厂家自行设计配柜，尺寸与断路器相关，尺寸不进行统一规定。

(1) 接地车

接地车主要用于检修时的接地，接地车处于工作位置时应具有与主回路相同的额定短时耐受电流、额定峰值耐受电流和额定短路持续时间。接地车宽度尺寸的选择需结合对应开关柜额定电流因素等因素，与柜体尺寸配套即可。

相应接地车外形结构与相应柜内断路器、功能车外形保持一致即可，确保仅可开启上活门或下活门。

接地车的使用工况如下：

1) 主母线侧接地（均为上触头接地）：常用于 PT 柜，包括方案 10、方案 11。

2) 电源进线侧接地：

上触头接地：母线室上进线方案（方案 3 中的隔离柜）。

下触头接地：后架空进线柜方案（方案 1、方案 2）。

电缆下进线方案（方案 5、方案 6）。

(2) 验电车

用于检修前对线路及母线的解锁打开活门工具。

(3) 下层手车

下层小车推进机构为摇进式，采用万向节操作手柄，二次插件统一采用 24 芯。

(1) Grounding car

The grounding car is mainly used for grounding during maintenance. When the grounding car is in the working position, it should have the same rated short-time withstand current, rated peak withstand current and rated short-circuit duration as the main circuit. The selection of the width size of the grounding car should be combined with the rated current factor of the corresponding switch cabinet and other factors, and can be matched with the size of the cabinet.

The shape structure of the corresponding grounding car should be consistent with the shape of the circuit breaker and function car in the corresponding cabinet. Ensure that only the upper valve or the lower valve can be opened.

The working conditions of the grounding car are as follows:

1) Main bus side grounding (both are upper contact grounding) : commonly used in PT cabinets, including solution 10 and solution 11.

2) Grounding on the power inlet side:

Upper contact grounding: Upper line solution in the busbar room (isolation cabinet in solution 3).

Bottom contact grounding: Rear overhead cable entry cabinet solution (Solution 1 and Solution 2).

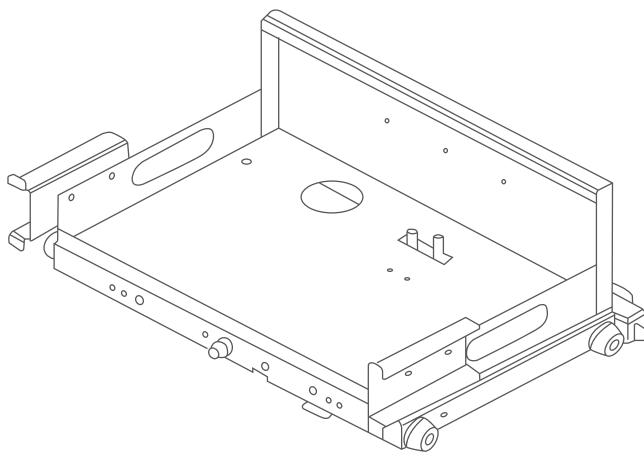
Cable entry scheme (Scheme 5, Scheme 6).

(2) Check the trolley

Used to unlock and open the valve of the line and bus before maintenance.

(3) Lower level handcart

The propulsion mechanism of the lower carriage is a rolling type, using a universal joint operation handle, and the secondary plug-in adopts 24



验电车 Electric car inspection

● 特殊机械联锁 Special mechanical interlock

除产品必备的五防闭锁功能外，本次标准化设计需增加如下 11 种特殊机械联锁功能，具体为接地开关挂锁功能、断路器手车操作孔挂锁功能、活门自锁功能、断路器在工作 / 试验位置时可实现关门状态下紧急分闸功能、手车室强制关门操作闭锁功能、上下后盖板（门）之间的闭锁功能等，标准化设计的产品应作为常规配置，具备以上全部功能。

In addition to the five anti-locking functions necessary for the product, this standardized design needs to add the following 11 special mechanical locking functions. Specifically for the grounding switch padlock function, circuit breaker handcar operating hole padlock function, valve self-locking function, circuit breaker in the working/test position can achieve the emergency opening function in the closed state, the handcar room forced closing operation lock function, the upper and lower rear cover plate (door) between the lock function, etc., standardized design products should be used as a conventional configuration, with all the above functions.

接地开关挂锁功能

Grounding switch padlock function

接地开关操作孔处增加五防挂锁装置，增加人为操作程序，提高可靠性。典型的实现方案举例如图 4 所示。

A five-guard padlock device is added to the ground switch operation hole to increase the manual operation procedure and improve reliability. Figure 4 shows the typical implementation solution.



图 4 Figure 4

接地开关挂锁功能典型实现方案图
Grounding switch padlock function
typical implementation scheme
diagram



图 5 Figure 5

断路器手车操作孔挂锁功能典型实现方案图
Circuit breaker hand car operation hole
padlock function typical implementation
scheme diagram

断路器手车操作孔挂锁功能

Circuit breaker hand car operating hole padlock function

断路器推进操作孔处增加五防挂锁装置，需有专人打开挂锁后方可转开摇进孔动挡板，操作手车。增加人为操作程序，提高可靠性。典型的实现方案举例如图 5 所示。

Five anti-padlock devices are added to the operation hole of the circuit breaker. A special person needs to open the padlock before turning the dynamic baffle plate of the swing into the hole to operate the hand car. Increase human procedures to improve reliability. An example of a typical implementation is shown in Figure 5.

活门自锁功能

Valve self-locking function

手车从工作位置移至试验 / 隔离位置后，活门板自动闭合并锁定；只有手车推入柜内时，活门机构才打开，防止人员误开活门，接触带电静触头。活门或推进机构处应设置可挂机械锁的位置。

After moving from the working position to the test/isolation position, the door plate automatically closes and locks; Only when the hand car is pushed into the cabinet, the valve mechanism is opened to prevent personnel from opening the valve by mistake and contacting the live static contact. The valve or the propulsion mechanism shall be provided with a position where the mechanical lock can be hung.

断路器在工作位置时可实现关门状态下紧急手动分闸功能

When the circuit breaker is in the working position, it can realize the emergency manual opening function under the closed state

在断路器室面板上安装该紧急手动分闸机构，按钮不能突出旋钮端面，防止误碰，同时不应带挂锁功能。在断路器需紧急分闸时可在不开门的情况实现断路器分闸功能。典型的实现方案举例如图 6-3 所示。

Install the emergency manual opening mechanism on the panel of the circuit breaker room, and the button should not protrude the knob end face to prevent miscontact, and should not have the padlock function. When the circuit breaker needs emergency opening, the circuit breaker opening function can be realized without opening the door. Figure 6-3 shows the typical implementation solution.



断路器在工作位置时可实现关门状态下紧急分闸功能典型实现方案图
When the circuit breaker is in the working position, it can realize
the emergency opening function under the closed state

手车室强制关门操作闭锁功能

Car room forced close operation locking function

手车室可设强制关门操作闭锁装置，手车室门关闭才能摇入手车，手车必须退回试验位置才能开门。
The handcart room can be equipped with a forced door closing operation locking device, the handcart door can be shaken only when the door is closed, and the handcart must be returned to the test position to open the door.

上下后盖板（门）之间的闭锁功能

Interlock function between upper and lower rear panels (doors)

当需要打开后盖板（门）时，应实现先开后上；当需要关闭时，应实现先关上后关下。
When it is necessary to open the rear cover plate (door), it should be opened first and then opened up; When it is necessary to close, it should be implemented turn it off and then turn it off.

前下门与接地开关联锁功能

Front lower door and ground switch interlock function

前下门没有关闭，接地开关无法分闸，手车无法进入工作位置。接地开关分闸后，前下门无法打开。
当手车室下部隔室与电缆室之间有隔板完全隔开，且手车室下部隔室内无带隔板。电一次元件时，可不设此功能。
当手车室下部隔室与电缆室直接相通，或手车室下部隔室内有带电一次元件时，需设置此功能，或在手车室下部隔室与前下门之间设置基于工具打开的检修
The front lower door is not closed, the ground switch cannot be opened, and the hand car cannot enter the working position. After the ground switch is switched on, the front lower door cannot be opened.
When the lower compartment of the handcart room is completely separated from the cable room by a partition board, and the lower compartment of the handcart room is without a partition board. This function is not available when the primary component is powered on.
This function should be set when the lower compartment of the compartment is directly connected to the cable compartment, or there is a live primary component in the lower compartment of the compartment, or a tool-based open inspection should be set between the lower compartment of the compartment and the front lower door

接地开关与后门闭锁功能

Ground switch and rear door locking function

后门未关上时，接地开关不能分闸；接地开关合闸后，后门才可打开。典型的实现方案举例如图 6 所示。
When the rear door is not closed, the ground switch cannot be opened. The rear door can be opened only after the ground switch is closed. An example of a typical implementation is shown in Figure 6.



图 6 Figure 6

接地开关与后门闭锁功能典型实现方案图
Typical implementation scheme diagram of ground switch and rear door lock function

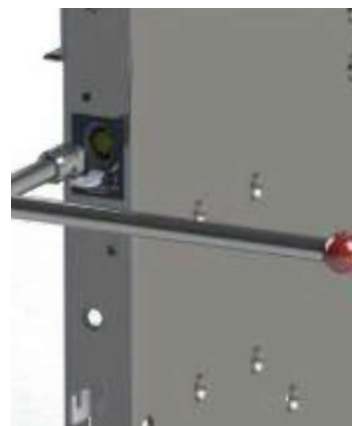


图 7 Figure 7

接地开关操作手柄防误闭锁功能典型实现方案图
Typical implementation scheme of the anti-error locking function of the ground switch operating handle

前后门预留挂锁功能

Front and rear doors reserve padlock function

除仪表室外，柜体前中门、前下门以及后下门需预留一处挂锁孔，孔径 $\Phi \geq 8.5\text{mm}$ ，限制非专业人员随意开启，可根据项目要求选择使用挂锁。

In addition to the outside of the instrument room, a padlock hole shall be reserved for the front middle door, front lower door and back lower door of the cabinet with an aperture of $\geq 8.5\text{mm}$, which is restricted to non-professionals to open at will. Padlocks can be selected according to project requirements.

接地开关操作手柄防误闭锁功能

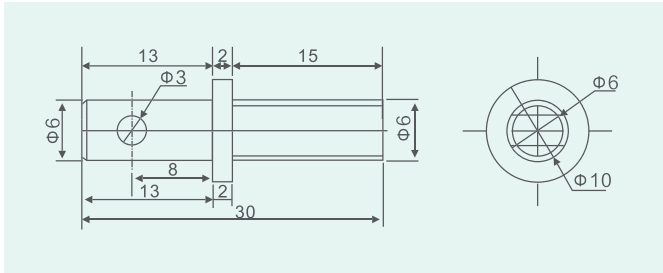
Ground switch operation handle anti-error locking function

接地开关分、合到位后才能取出操作手柄，确保操作的正确性及可靠性。典型的实现方案举例如图 7 所示
Take out the handle only when the grounding switch is in place to ensure the correctness and reliability of the operation. An example of a typical implementation is shown in Figure 7

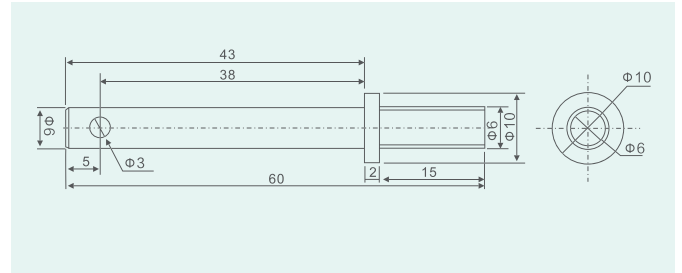
◎ 铅封螺柱 Lead seal stud



6×30



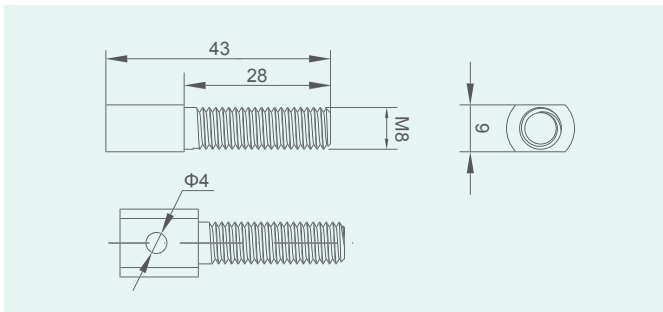
6×60



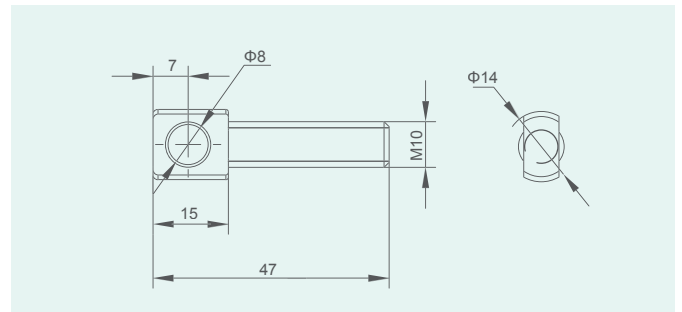
◎ 后门挂锁螺柱装置 Rear door padlock stud device



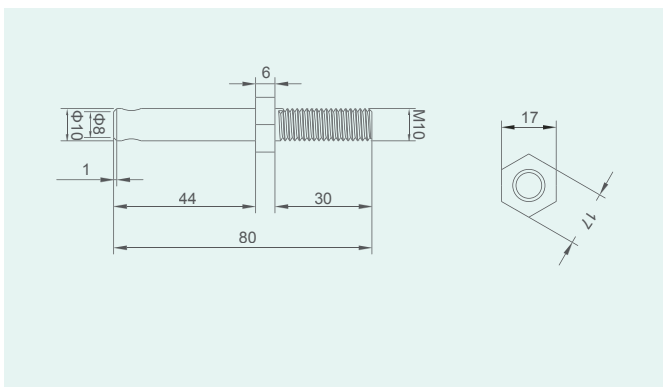
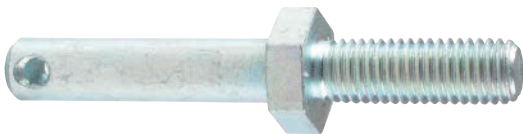
M8×43



M10×47



◎ 计量铅封螺柱 Metering lead seal stud M10×80



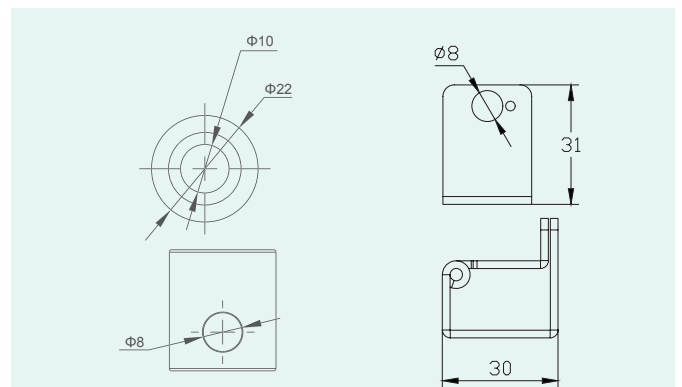
◎ 后门挂锁锁套 Rear door padlock lock sleeve



10×30

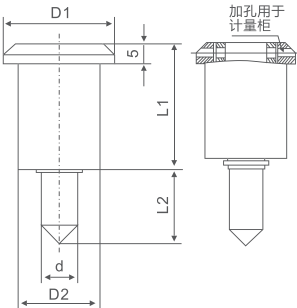


5LY.GS.HM1



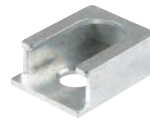
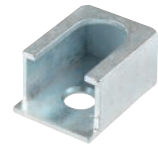
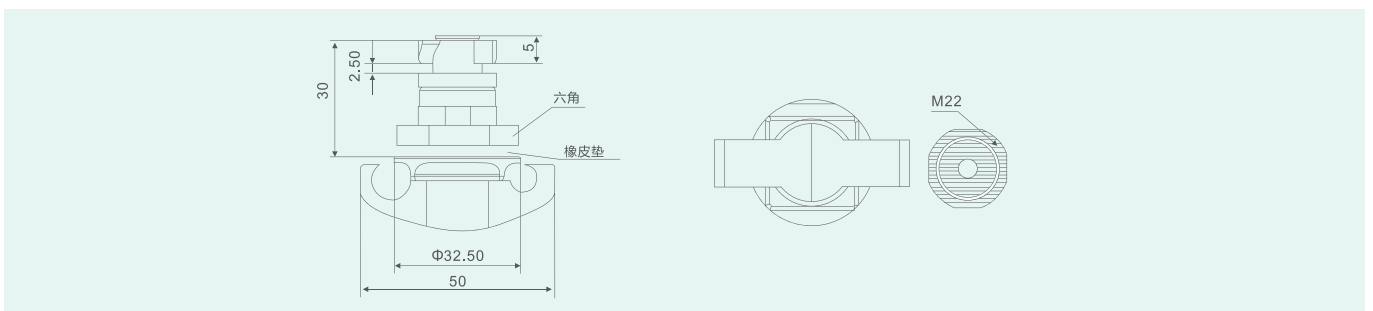
◎ GMS1 门锁 Door lock



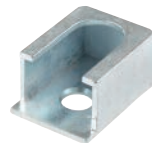
安装尺寸 Installation size	型号 Type	D1	D2	d	L1	L2
	GMS1-1	Φ24	Φ20	M8	31	22.5
	GMS1-2	Φ30	Φ22	M10	35	20.5
	GMS1-3	Φ24	Φ20	M8	31	34.5
	GMS1-4	Φ30	Φ22	M8	35	20.5
	GMS1-5	Φ30	Φ22	M10	35	29
	GMS1-6	Φ30	Φ22	M10	40	20.5
	GMS1-7	Φ30	Φ22	M8	27	23
	GMS1-8	Φ30	Φ22	M10	45	20.5
	GMS1-9	Φ30	Φ22	M8	35	25
	GMS1-10	Φ30	Φ22	M10	31	24.5

◎ GMS2 门锁 Door lock


 深蓝色
Navy blue

 黑色
Black

 配门板高度 H=28mm
Equipped with door height

 配门板高度 H=33mm
Equipped with door height


◎ GMS3 门锁 Door lock


 配门板高度 H=28mm
Equipped with door height

 配门板高度 H=33mm
Equipped with door height


M12 M16 M20

◎ 吊环 Rings

◎ GMS 带盖 (铅封) 门锁
Door lock with cover (lead seal)



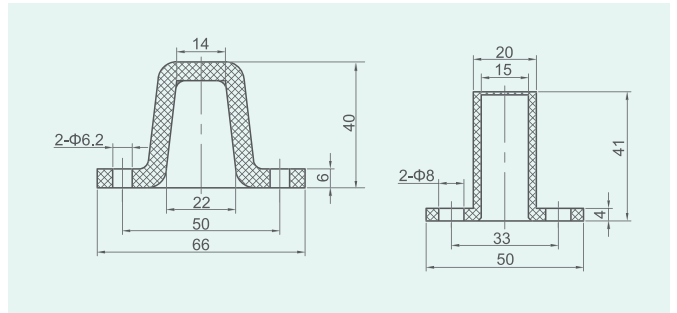
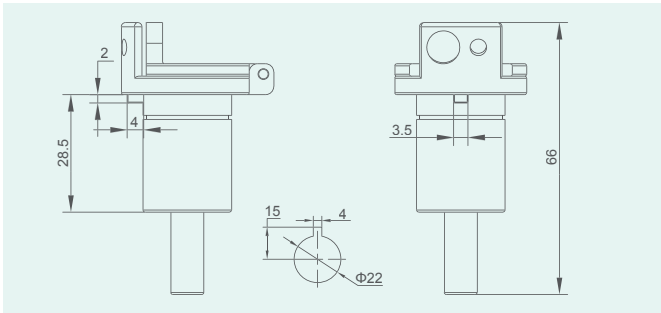
◎ 套 Set



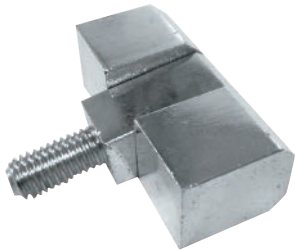
8LY.211.053



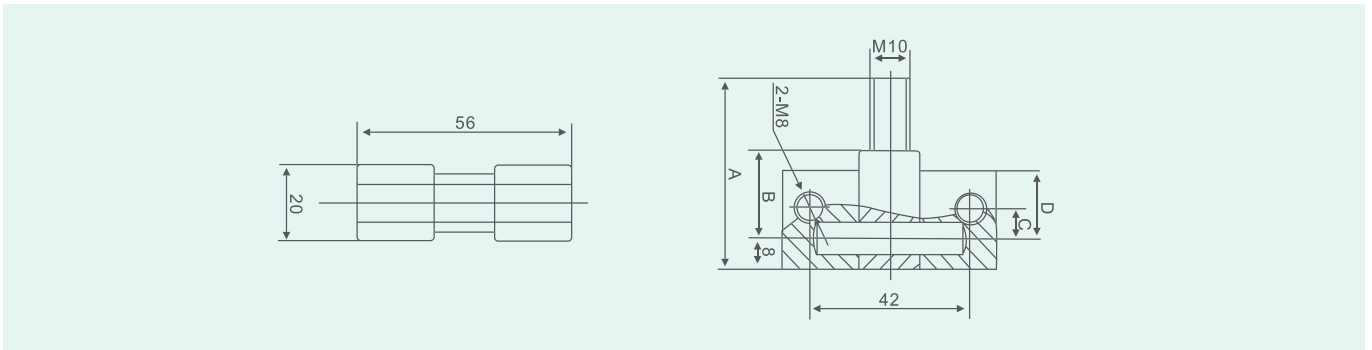
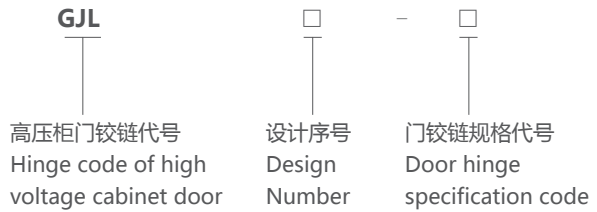
8LY.211.054



◎ GJL1- □ 高压柜门铰链 High voltage cabinet door hinge



型号及其含义 Model and its meaning

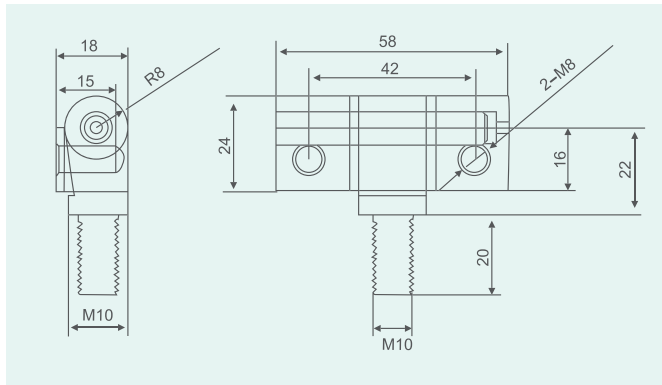


型号 Model	图号 Drawing number	A	B	C	D	2-M8
GJL1-1	5LY.872.011	50	23	8	18	通孔 Through hole
GJL1-2	5LY.872.011.1	56	26	12	22	通孔 Through hole
GJL1-3	5LY.870.012	50	23	8	18	盲孔 Blind hole
GJL1-4	5LY.872.012.1	56	26	12	22	盲孔 Blind hole

◎ GJL9-1 高压柜门铰链 High voltage cabinet door hinge
订货时颜色备注 Color remarks when ordering



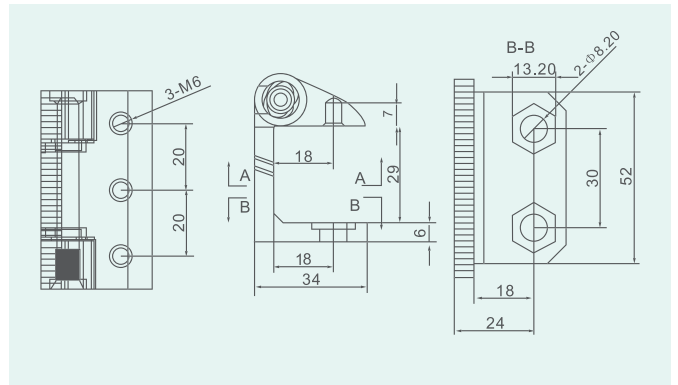
改进型 Improved



◎ GJL9-2 高压柜门铰链 High voltage cabinet door hinge
订货时颜色备注 Color remarks when ordering



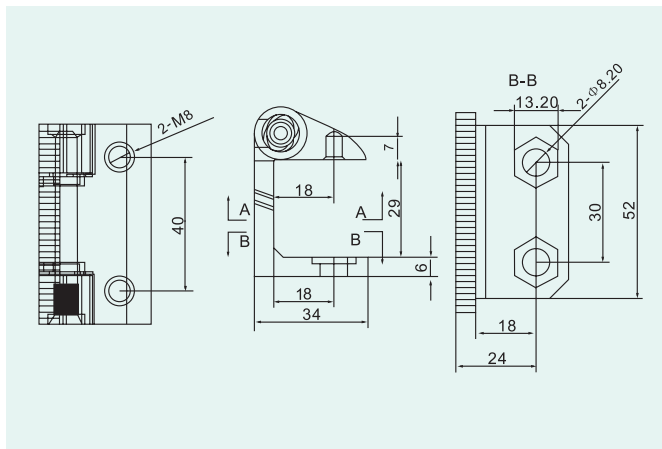
三孔安装 M6 Three-hole M6 installation 改进型 Improved



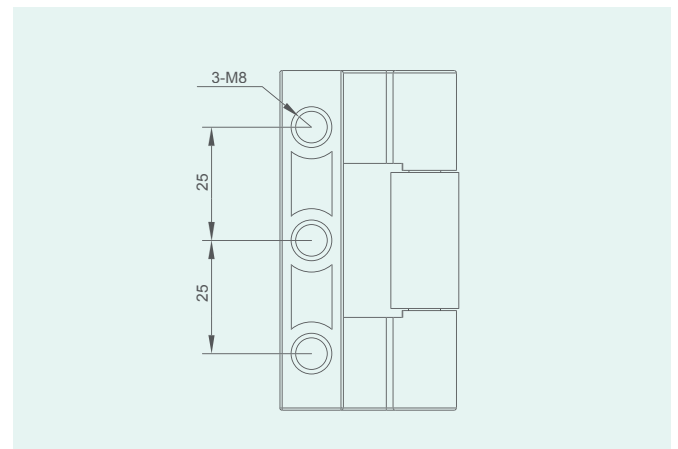
◎ GJL9-2 高压柜门铰链 High voltage cabinet door hinge
订货时颜色备注 Color remarks when ordering



两孔安装 M8 Two-hole M8 installation 改进型 Improved

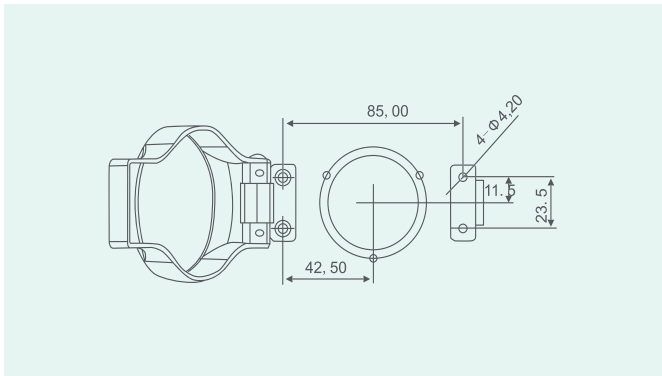


◎ GJL9-4 高压柜门铰链(暗装)
High voltage cabinet door hinge(Concealed)

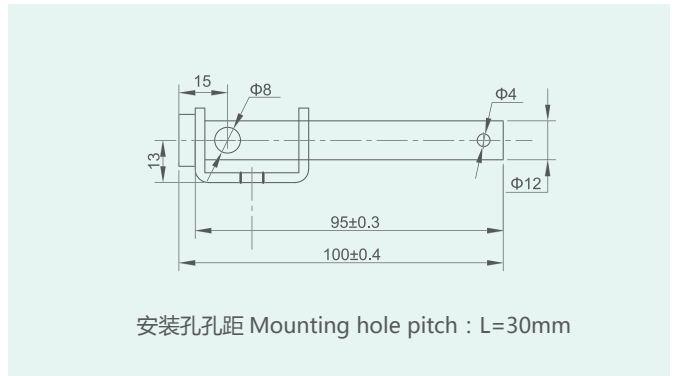


挂锁装置 Padlock device

GS-1 中门挂锁装置 Middle door padlock device



GS-2 挂锁装置 Padlock device



5LY.GS-3 接地刀挂锁装置 Grounding knife padlock device



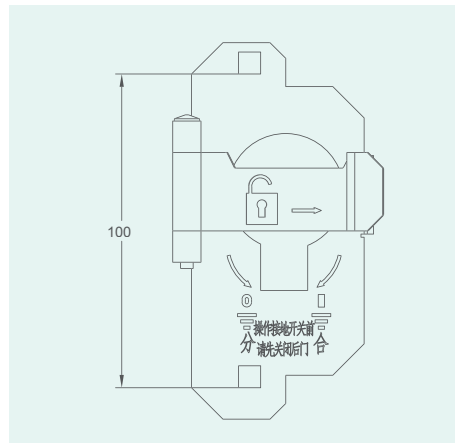
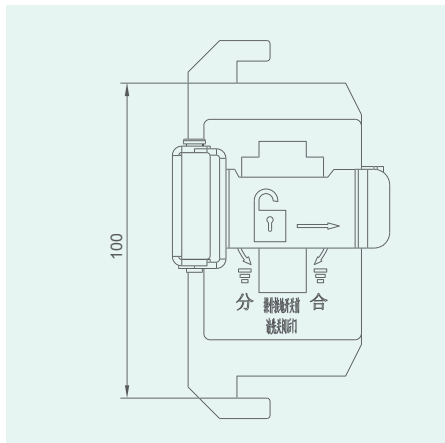
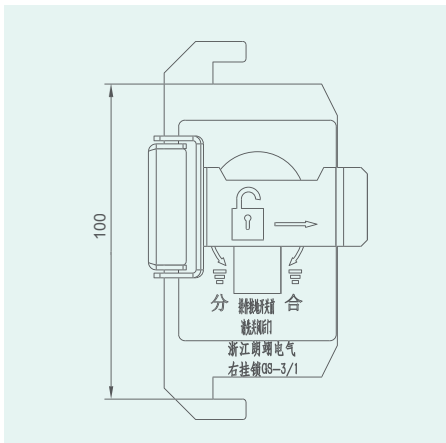
5LY.GS-3-1



5LY.GS-3-2



5LY.GS-3-3



◎ 5LY.GS-3 接地刀挂锁装置 Grounding knife padlock device



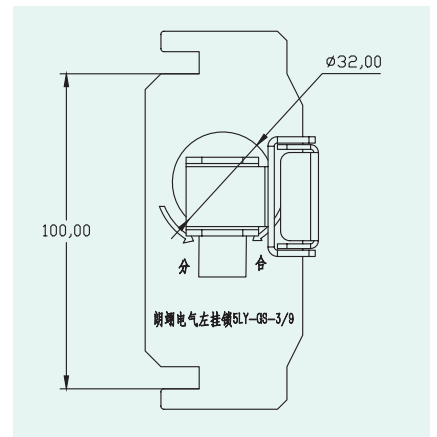
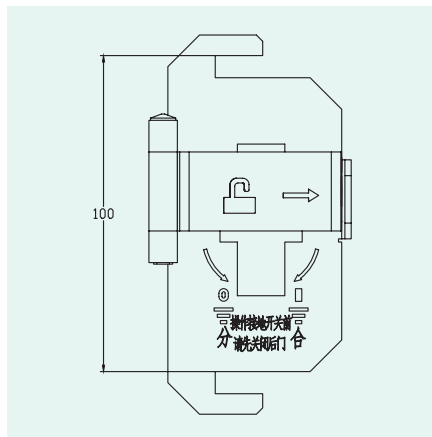
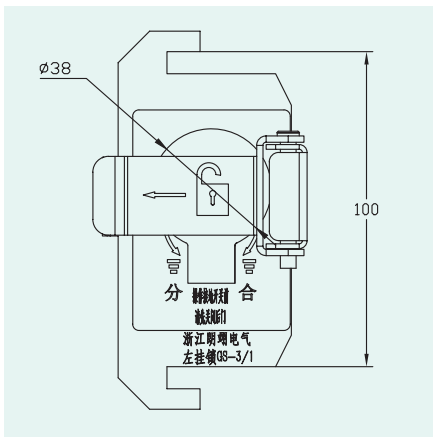
5LY.GS-3-1(左侧挂锁)



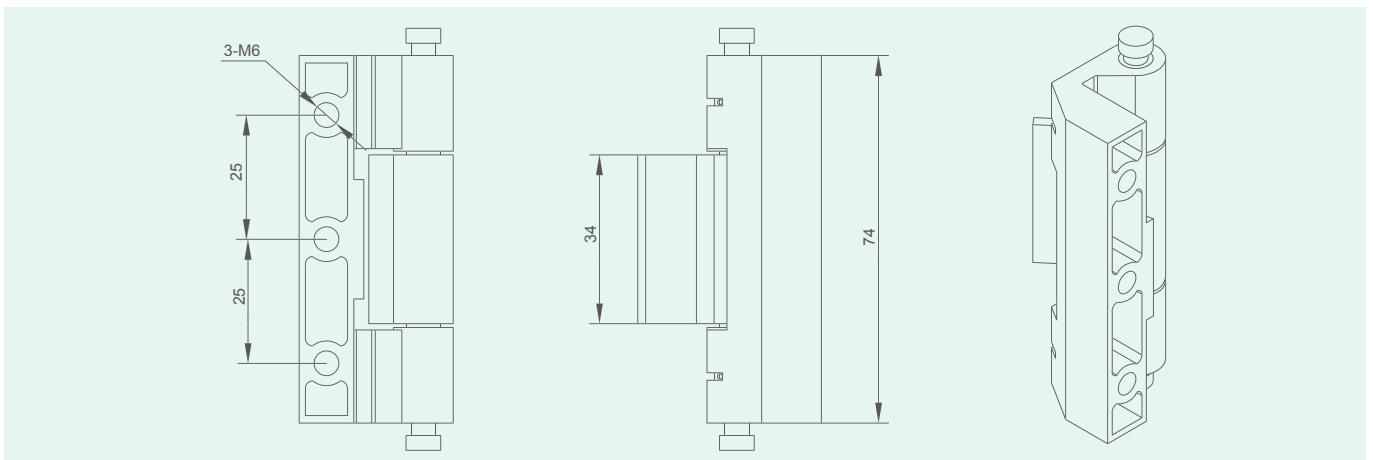
5LY.GS-3-7



5LY.GS-3-9



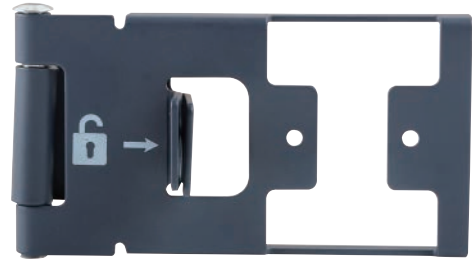
◎ 201-1 铰链 Hinge



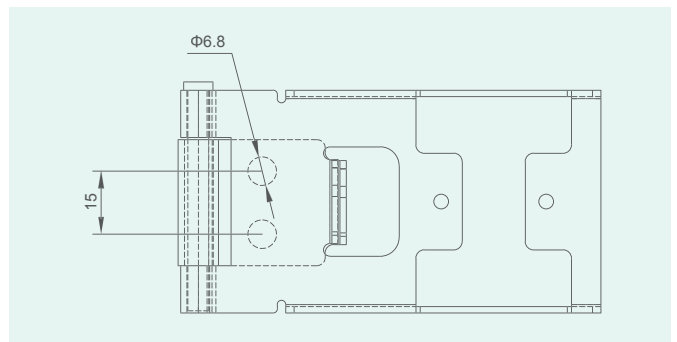
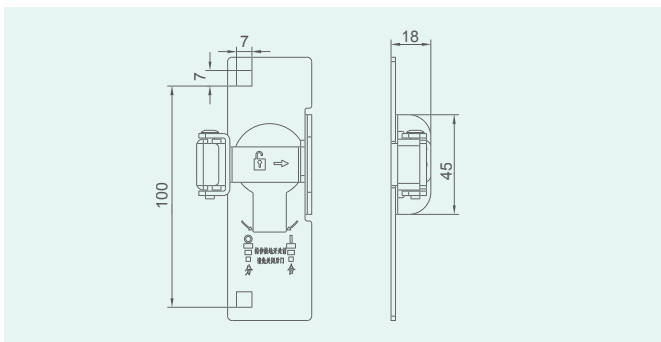
◎ 5LY.GS-3 接地刀挂锁装置 Grounding knife padlock device



5LY.GS-3-4



5LY.GS-3-5



◎ 5LY.GS-4 中门挂锁装置 Middle door padlock device

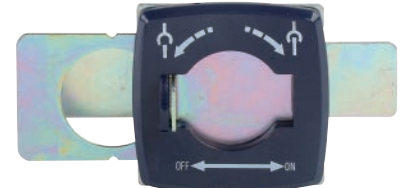


5LY.GS-4-1



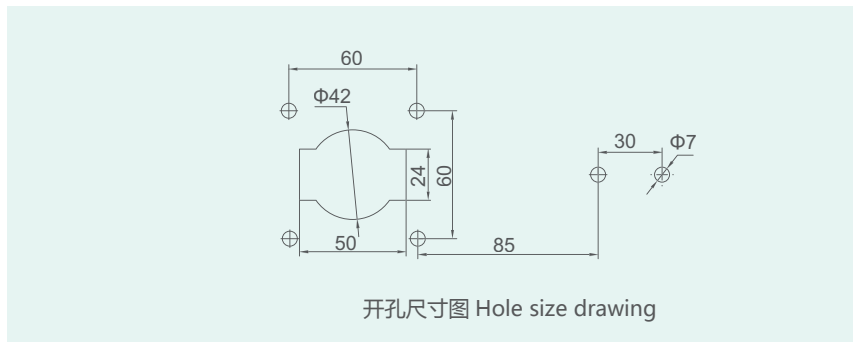
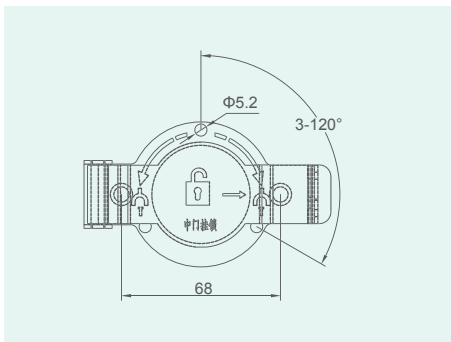
5LY.GS-4-2

配凹凸门 With concave-convex door



5LY.GS-4-3

配平板门 With flat door



○ 中门联锁支架 Middle door interlock bracket



H=48mm



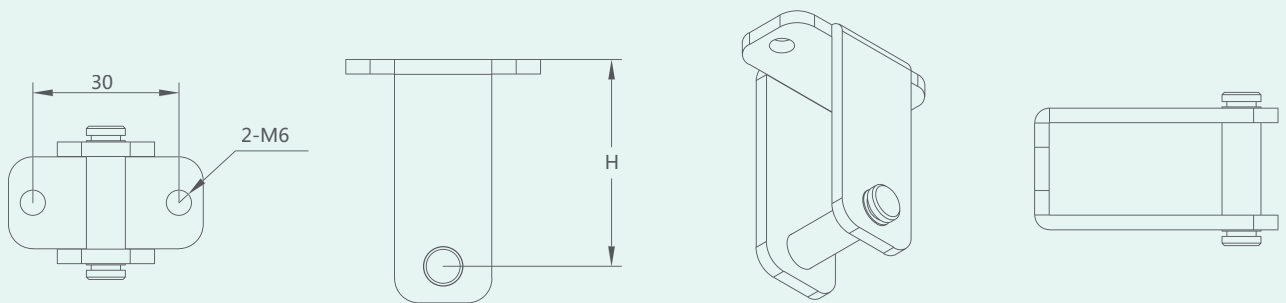
H=42.5mm



H=28mm



H=16.5mm

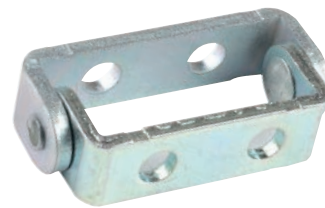


注：其他尺寸请备注 H 高度 Note: Please note H height for other sizes

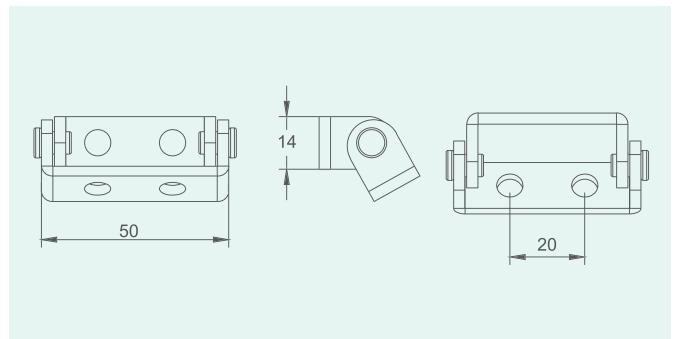
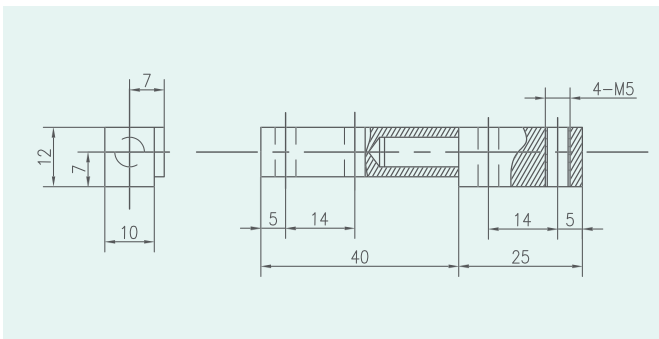
○ 顶盖铰链 Top cover hinge



GJL4-1



GJL6-1



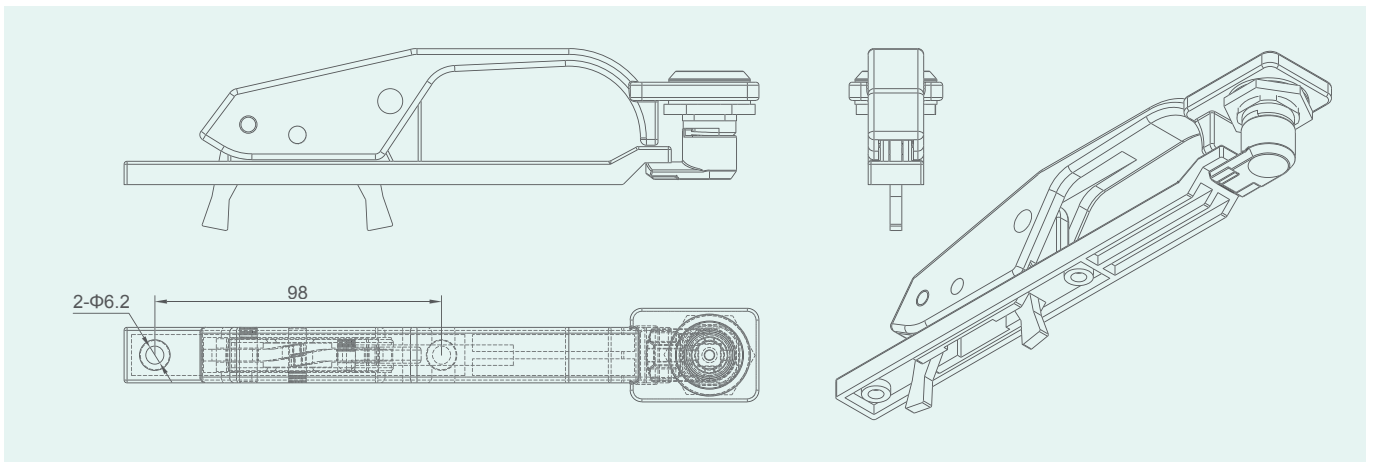
快开提拉锁 Quickly open the zip lock

5LY.KLS.001



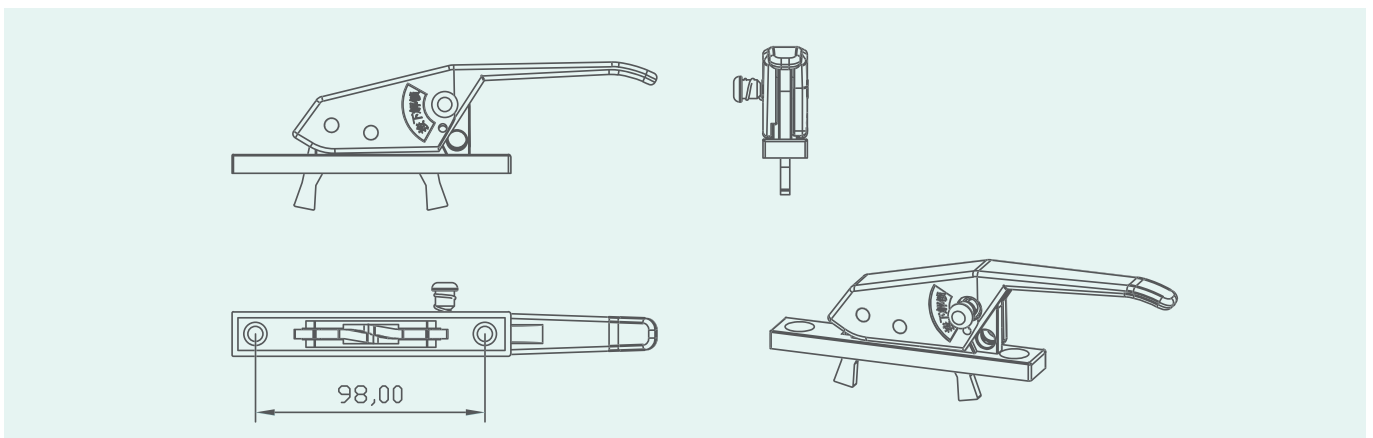
喷塑颜色请在订货时注明

Please specify the spray color when ordering



快开提拉锁 (改进型) Quick open pull lock (Improved)

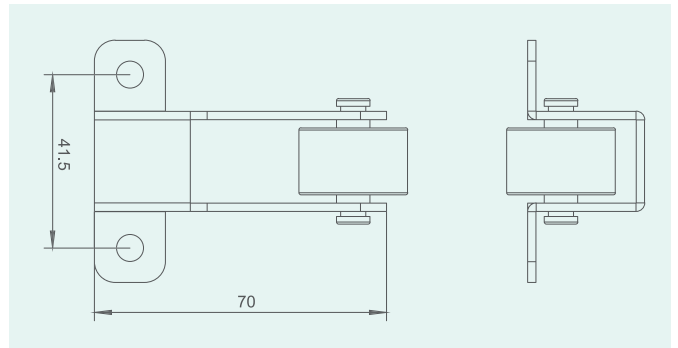
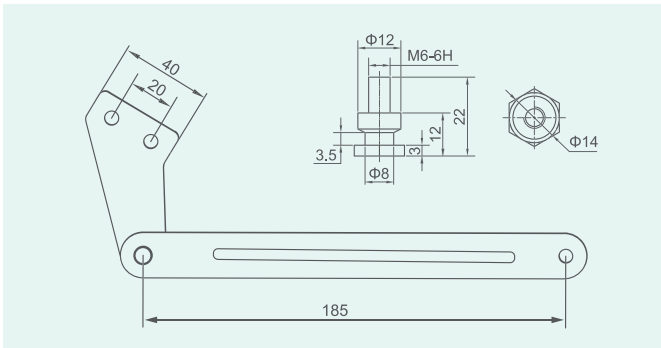
5LY.KLS.002



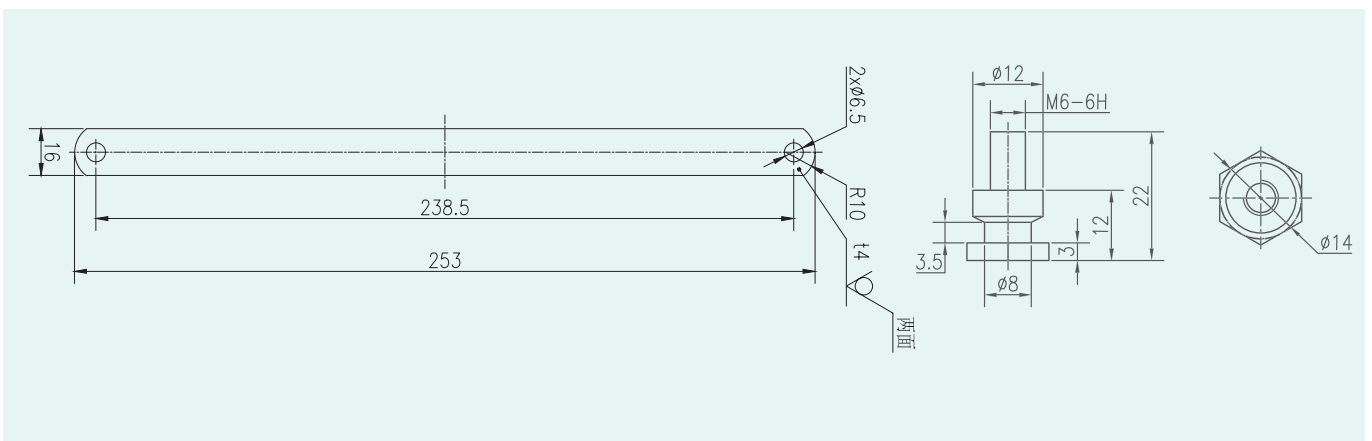
- ◎ 仪表门定位装置 5LY.YBM.001
Instrument door positioning device



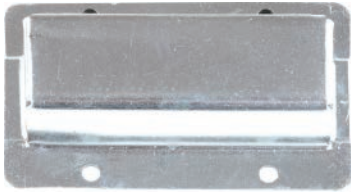
- ◎ 仪表门防掉脚支架 5LY.YBM.002
Anti-dropping foot bracket for instrument door



- ◎ 仪表门定位装置 5LY.YBM.003
Instrument door positioning device



◎ 拎手 Iron handle



铁拎手 Iron handle

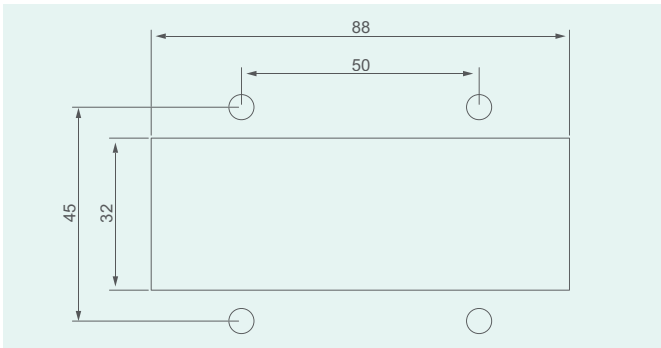


塑料拎手 (配 1.2 厚板)
Plastic handle
(with 1.2 thick plate)



塑料拎手 (配 2.0 厚板)
Plastic handle
(with 2.0 thick plate)

* 详细开孔尺寸请咨询公司技术部
* Please consult the technical department for detailed hole size



◎ 螺钉把手 8LY.989.010
Screw handle

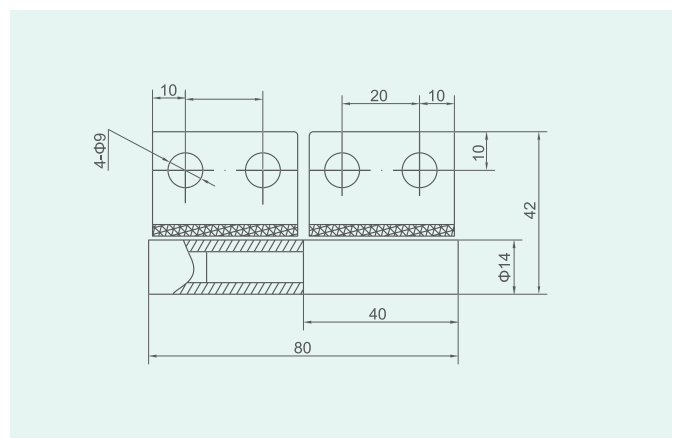
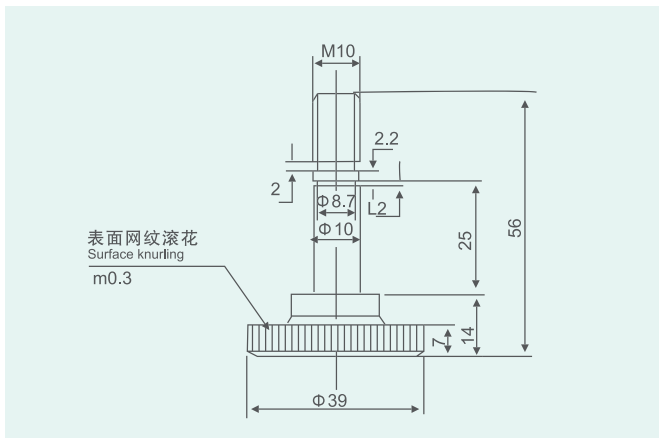


◎ GJL5-1 高压柜门铰链
High voltage cabinet door hinge

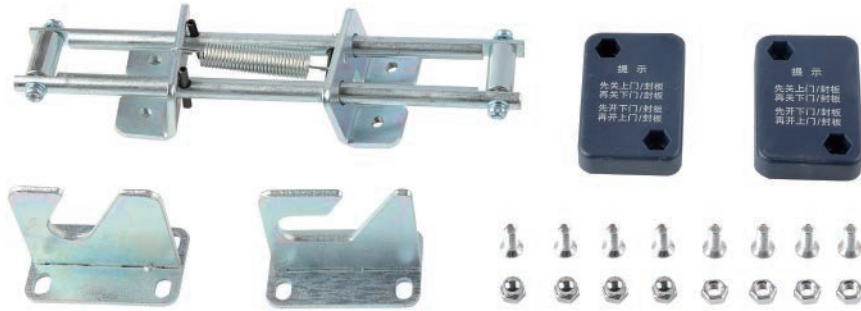
卷筒式
Reel



焊接式
Welded

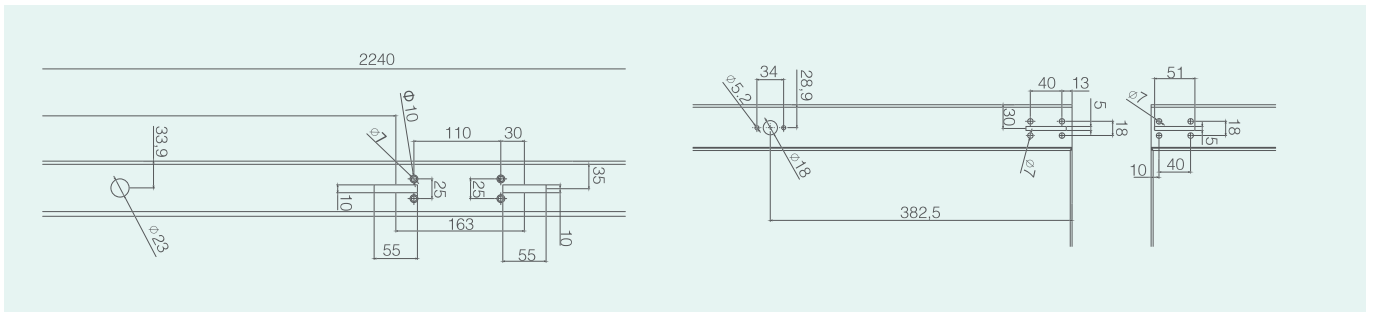


◎ 后上下门联锁机构 (A) Rear door interlocking mechanism (A)

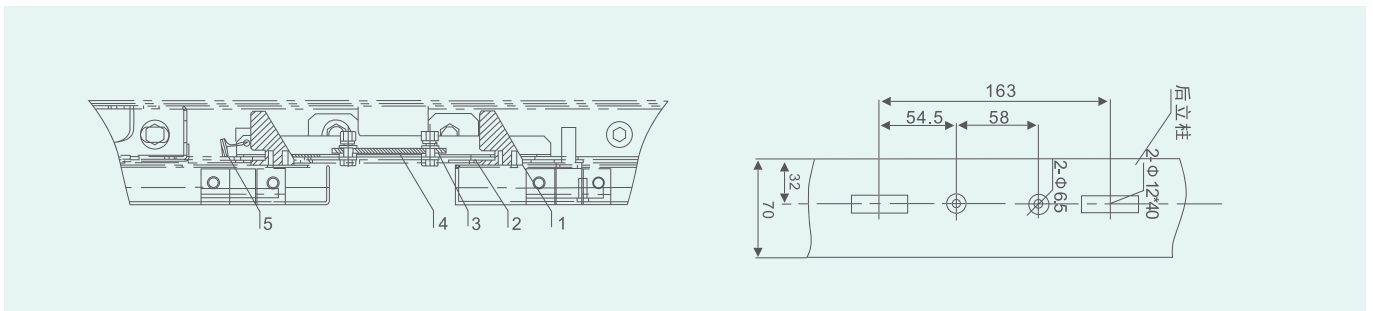


本联锁机构在常规后下门压后上门的基础上经我公司加以改进而来,关门时:必须先关后上门,再关后下门,开门时:必须先开后下门,再开后上门。此联锁灵活可靠,强度好。使用此联锁柜体更美观。

This interlocking mechanism is improved by our company on the basis of the conventional rear door pressing and then door opening. When closing the door: the door must be closed first, then the door is closed, and then the door is closed. When opening the door: the door must be opened first, then the door is closed, and then opened Come back home. This interlock is flexible, reliable, and strong. Using this interlocking cabinet is more beautiful.



◎ 后上下门联锁机构 (B) Rear door interlocking mechanism (B)



◎ 程序锁 Program lock



四锁—钥匙 Four locks and one key

JLY(W)- 型防误操作程序锁，是一种高压开关设备用机械锁。该锁强制运行人员按照规定的安全操作程序，对电气设备进行操作，从而避免了电气设备的误操作，较为完善的达到了供电部门提出的五防要求：

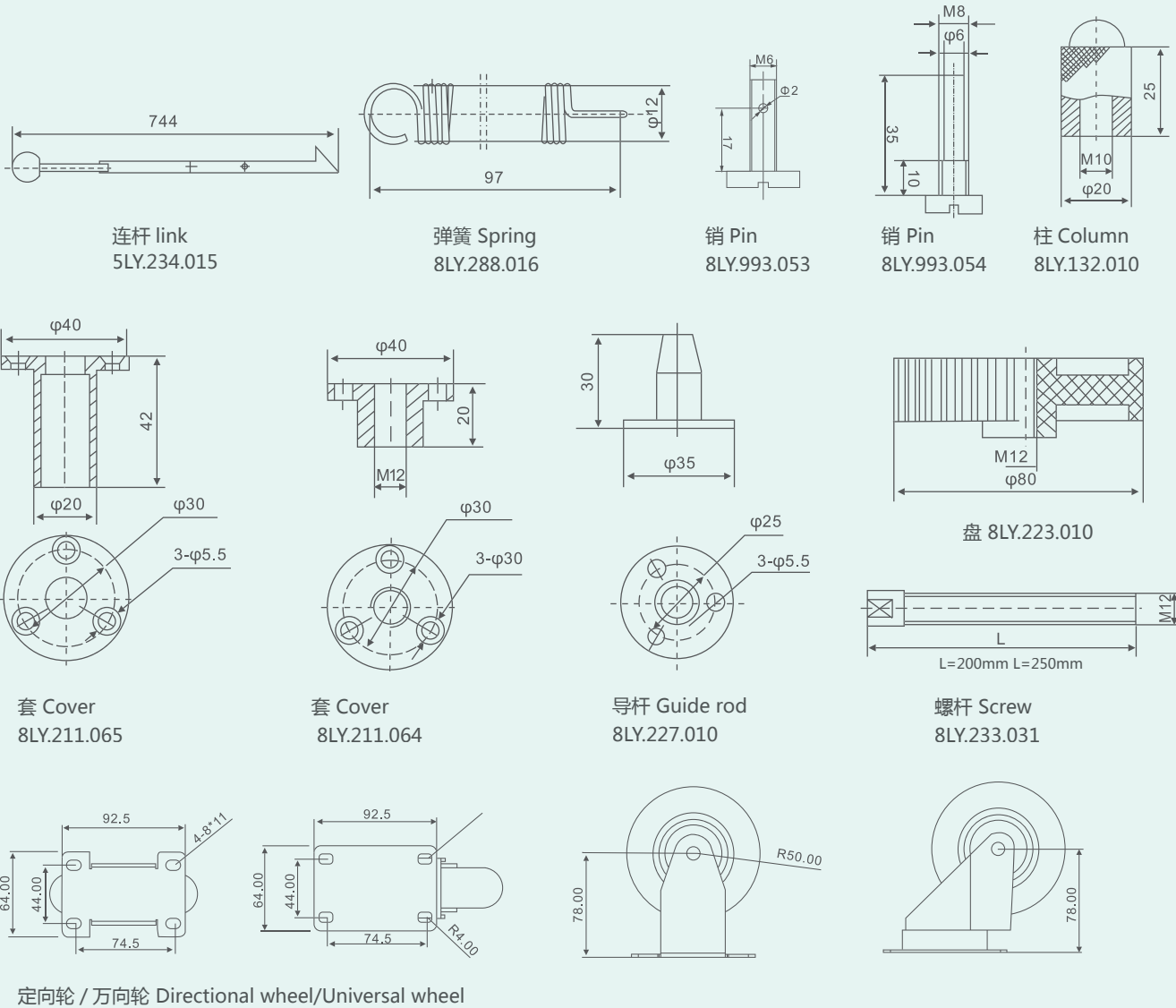
防止误拉合开关；防止带负荷拉合隔离刀闸；防止误入带电间隔；防止带电挂地线（接地刀闸）；防止带地线（接地刀闸），合闸等；

JLY(W)-type anti-misoperation program lock is a mechanical lock for high voltage switch equipment. The lock compels the operating personnel to operate the electrical equipment in accordance with the prescribed safe operating procedures, thereby avoiding the misoperation of the electrical equipment, and fully meeting the five prevention requirements proposed by the power supply department:

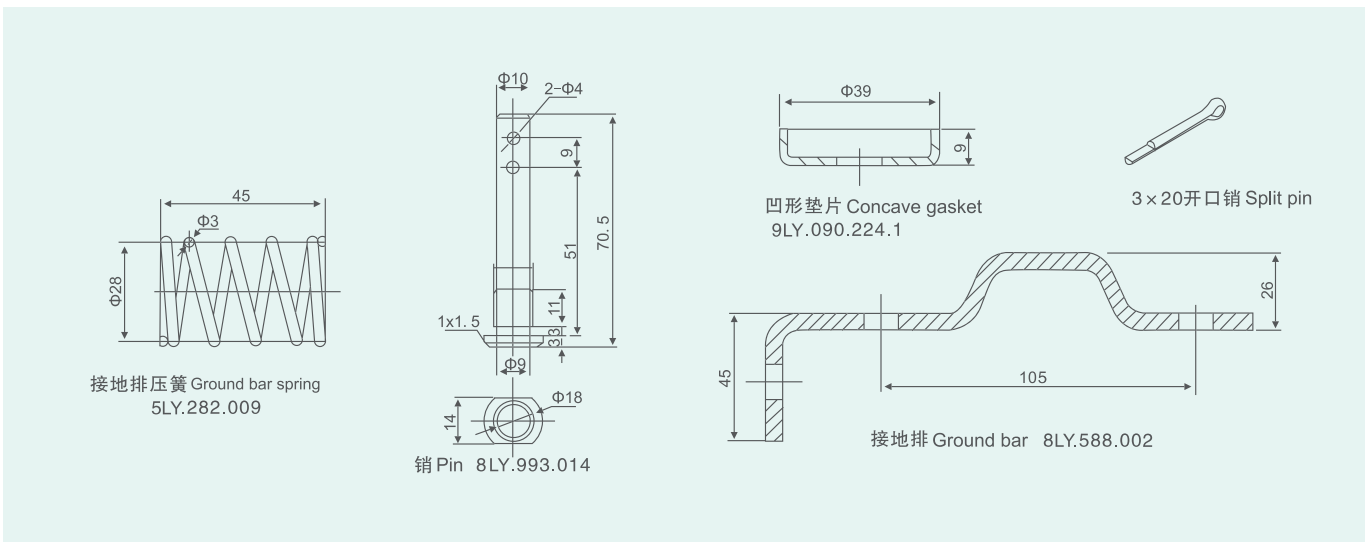
Prevent the switch from being pulled and closed by mistake; prevent the isolation switch with load from being pulled and closed; prevent from entering the charged interval by mistake; prevent the ground wire (grounding switch) with electricity; prevent the ground wire (grounding switch), closing, etc.;

型号规格 Type	操作功能 Operation function	备注 Remarks
21JS	真空开关，上隔离，后门，前门 Vacuum switch, upper isolation, back door, front door	1A 4A 5A 5B
22JS	真空开关，上隔离，前门 Vacuum switch, upper isolation, front door	1A 4A 5A
23JS	真空开关，上隔离，下隔离，后门，前门 Vacuum switch, upper isolation, lower isolation, back door, front door	1A 4A 4B 5A 5B
24JS	真空开关，上隔离，下隔离，前门 Vacuum switch, upper isolation, lower isolation, front door	1A 4A 4B 5A
27JS	上隔离，后门，前门 Upper isolation, back door, front door	4A 5A 5B
28JS	隔离，前门 Isolation, front door	4A 5A
	205XGN 柜子，专用锁，前门，后门 205XGN cabinet, special lock, front door, back door	
	202JS 二锁—钥 202JS two locks and one key	

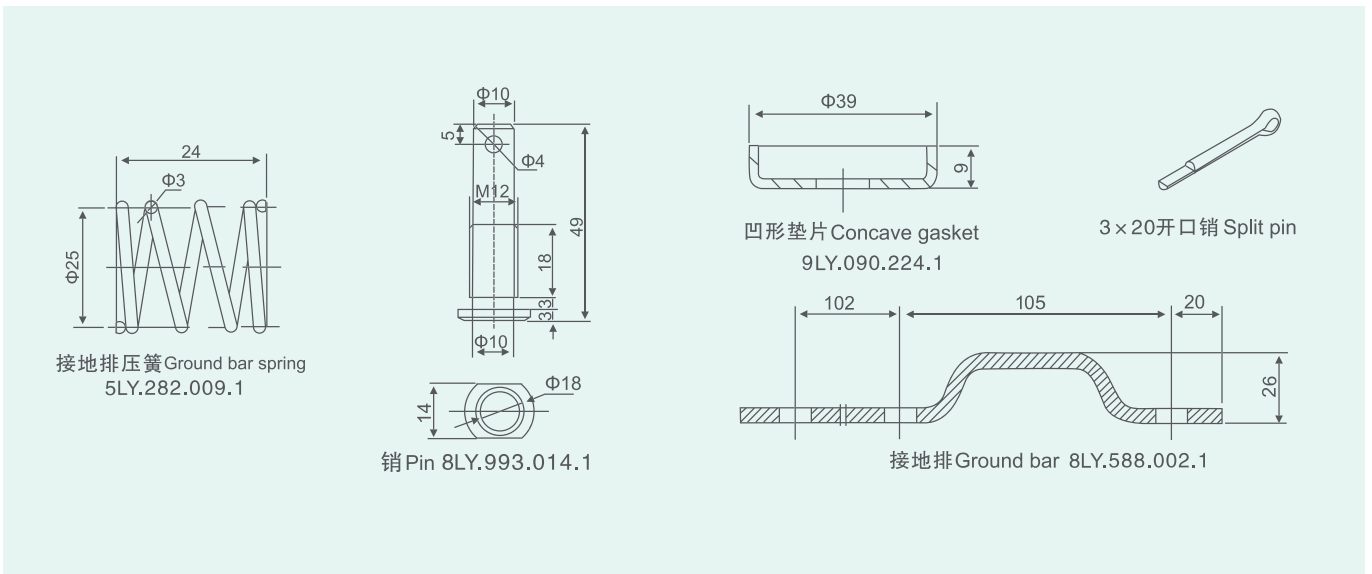
◎ 转运车配套件 Transfer car accessories



◎ 接地排 (中隔板配套件) Grounding bar (middle partition kit)



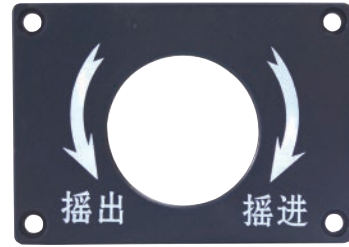
◎ 接地排及配件 (下置式用) Grounding bar and accessories (for bottom-mounted type)



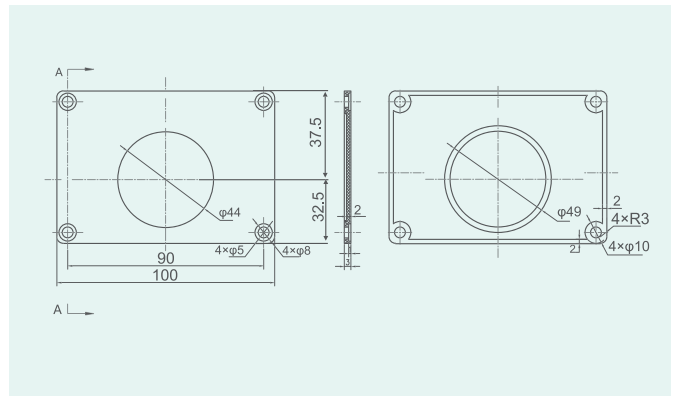
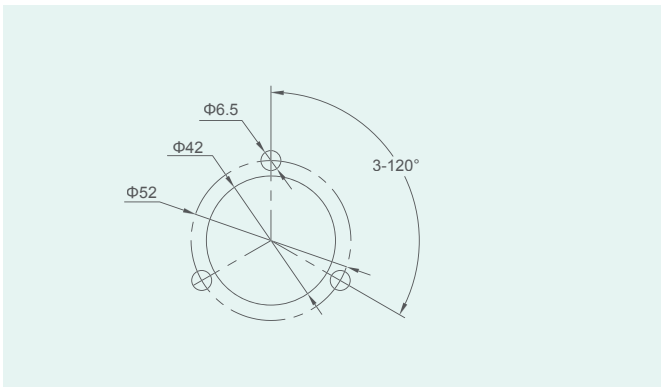
◎ 进退标牌 Advance and retreat signs



8LY.GT.001



8LY.GT.002



◎ 进退标牌 Advance and retreat signs

8LY.GT.003



H=34mm



H=29mm



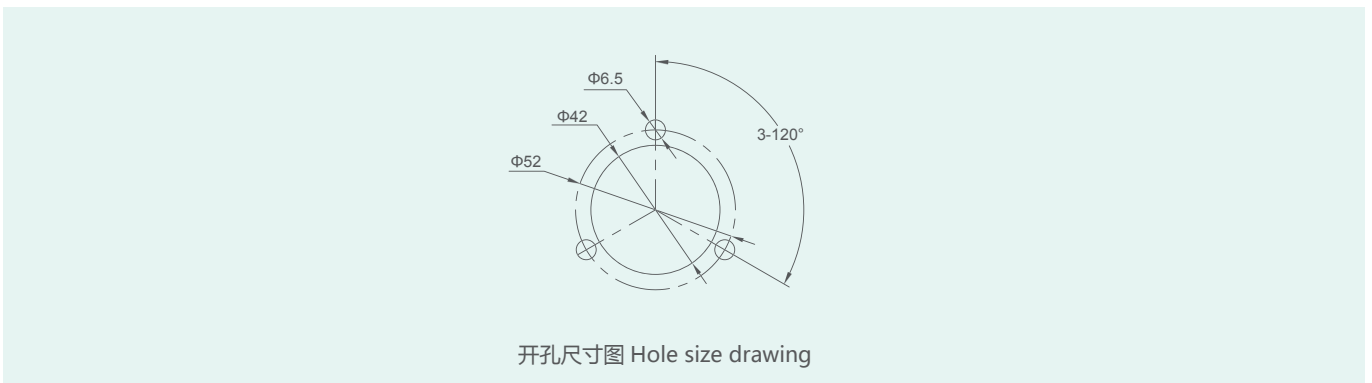
H=24mm



H=14mm



H=9mm



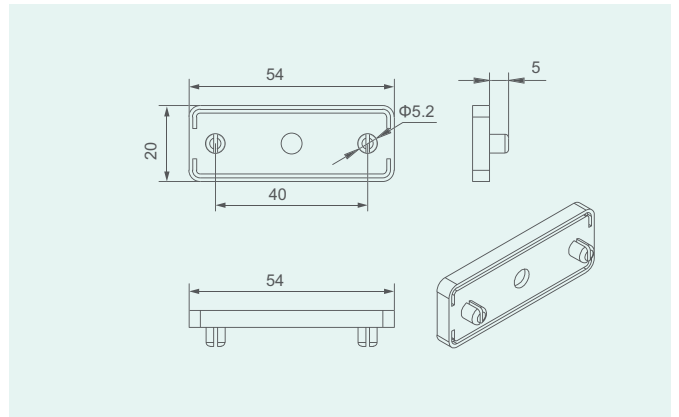
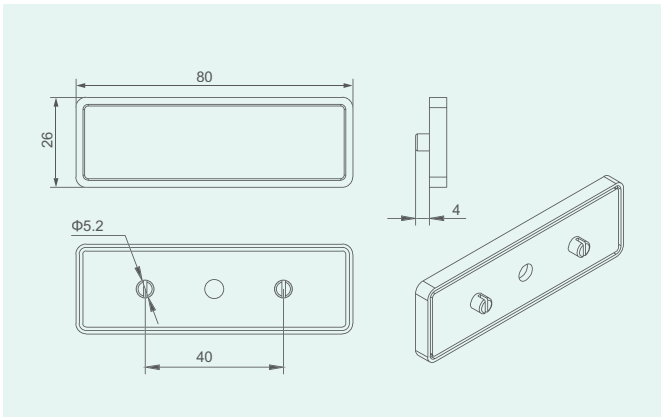
◎ 标签框 Label frame



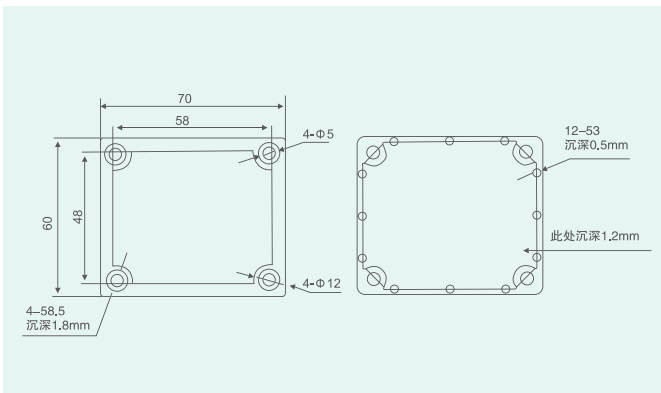
26×80



20×54



◎ 警告标示 Warning sign

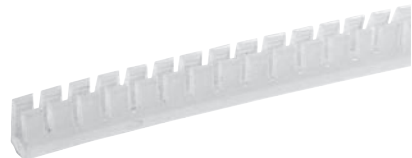


◎ 尼龙螺钉 (防爆螺钉)
Nylon screw (Explosion-proof screw)



M6×16 M6×20

◎ 锯齿密封条
Serrated seal



注：订货时请注明板厚
Note: Please specify the plate thickness when ordering

○ 护线套 Protective liner



椭圆 Oval $\Phi 50 \times 80\text{mm}$



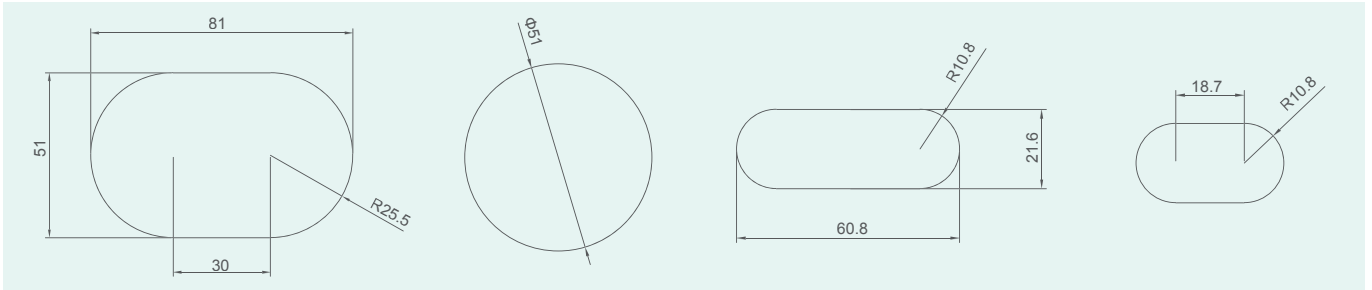
圆 Round $\Phi 50\text{mm}$



椭圆 Oval $\Phi 20 \times 60\text{mm}$



椭圆 Oval $\Phi 20 \times 40\text{mm}$



圆 Round $\Phi 81\text{mm}$



圆 Round $\Phi 36\text{mm}$



圆 Round $\Phi 20\text{mm}$



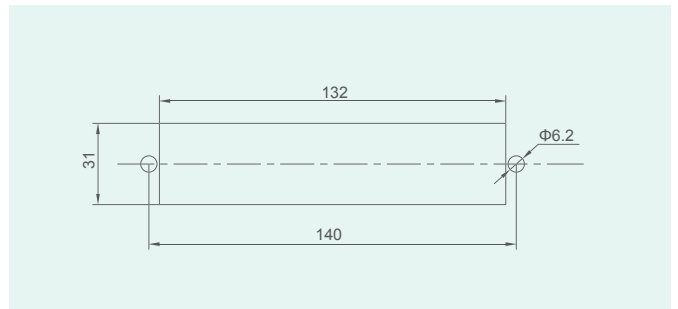
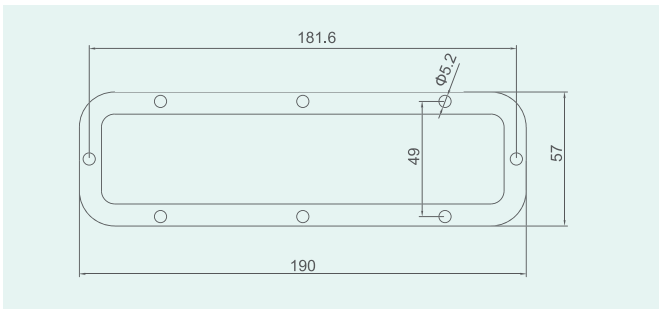
半圆 Semicircle $\Phi 20\text{mm}$



171×36



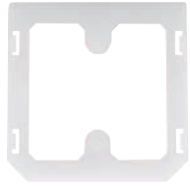
蓝色护线套 Blue wire sheath 130×30



◎ 护线套 Protective liner



塑料支架 Plastic rack



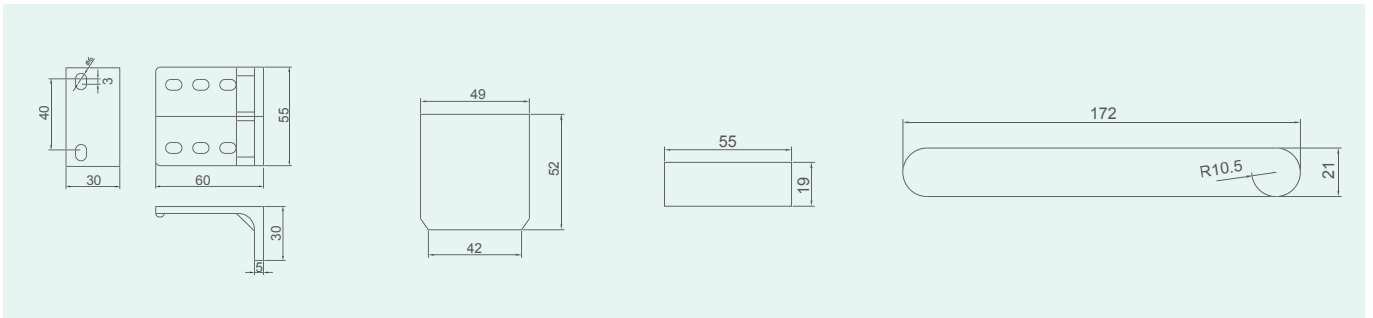
方形 Square 50×50



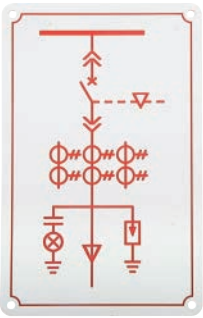
方形 Square 20×50



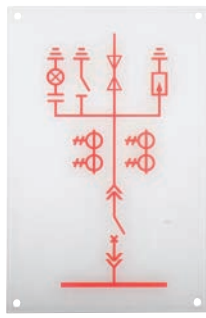
170×20



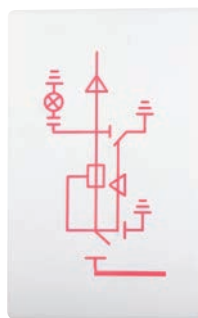
◎ 模拟牌 Analog cards



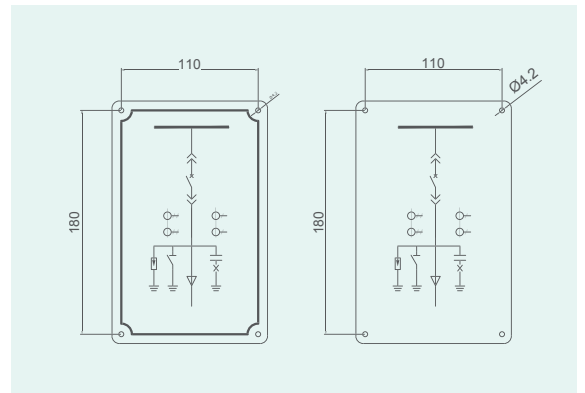
PVC(老型)
Old type



亚克力
Acrylic



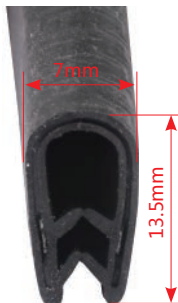
无孔卡角
Non-perforated corner



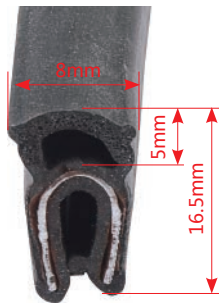
◎ 中置柜密封条 Central cabinet sealing strip



U型密封条 -001
U-shaped sealing strip



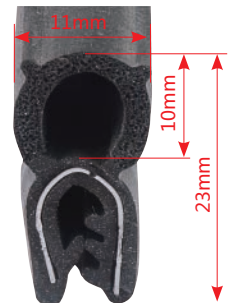
U型密封条 -002
U-shaped sealing strip



U型密封条 -003
U-shaped sealing strip

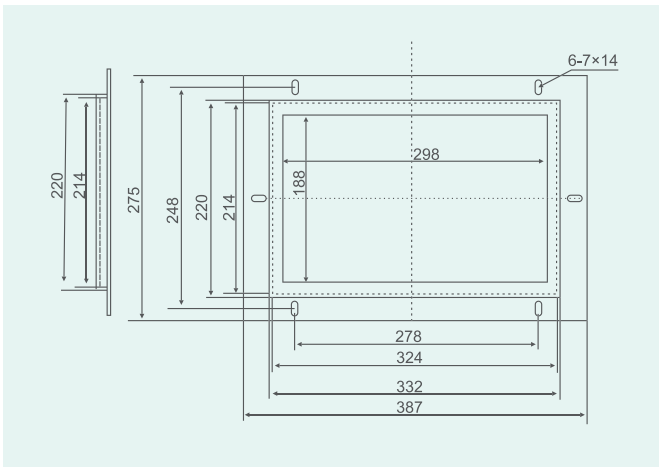


U型密封条 -004
U-shaped sealing strip

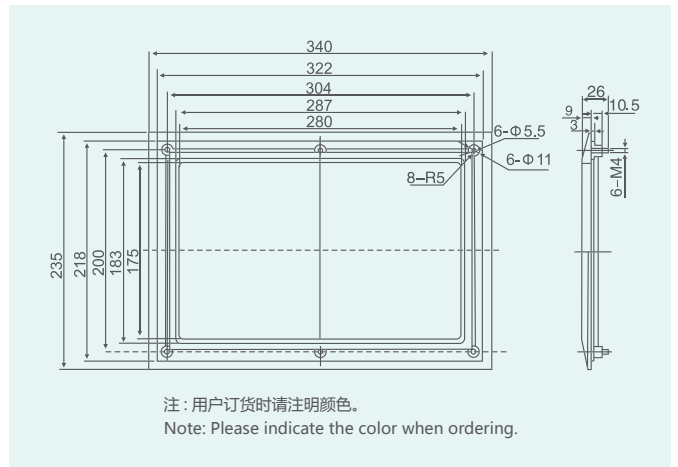


U型密封条 -005
U-shaped sealing strip

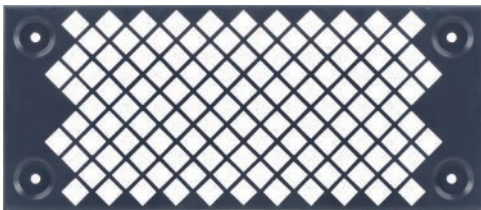
○ 玻璃压框 Glass frame
8LY.321.550



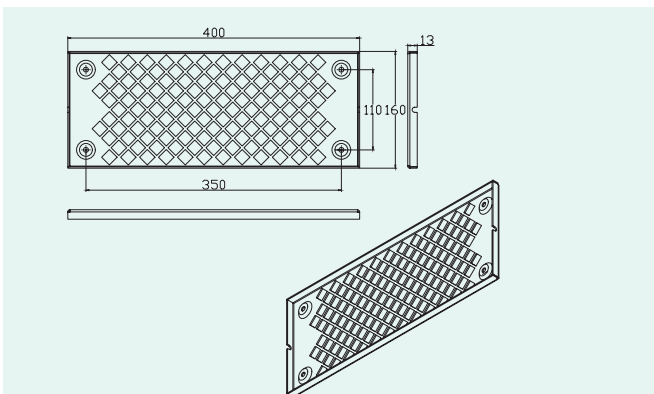
○ 玻璃压框 Glass frame
8LY.321.550.1



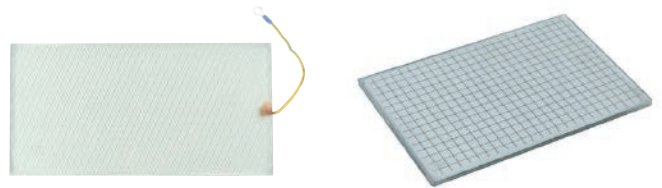
○ 玻璃压框 (金属) Glass frame
8LY.321.550.2



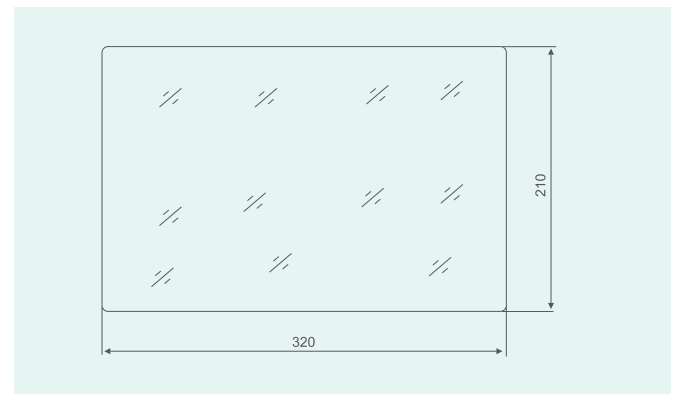
橡胶压块 Rubber block



○ 防爆 (钢化) 玻璃 Explosion-proof (tempered) glass

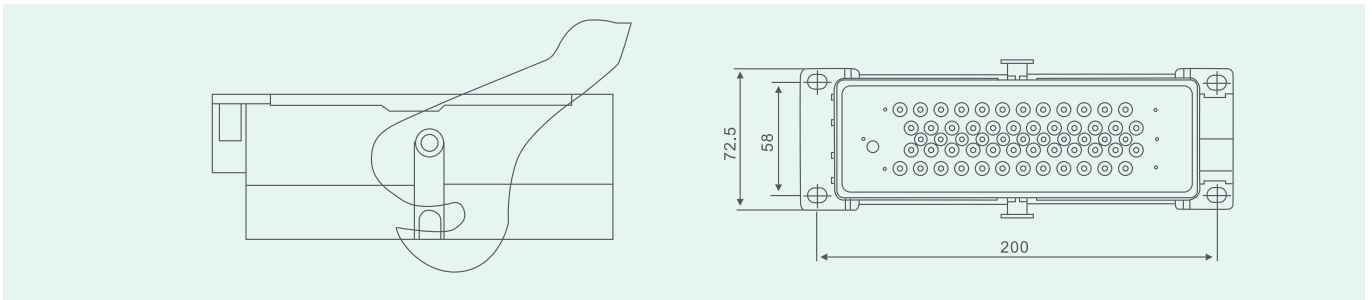


注：若用户如需带屏蔽网和其他规格时请注明。
Note: If the user needs to bring shielding net and other specifications, please specify.



◎ 58 芯航空插座 58 core aviation socket

GZD-58 二次插头座 GZD-58 secondary plug seat



GZD-58 二次插头座,系 GZS1(配 VS1.VD4) 等中置式高压开关柜二次线路连接之用。
 额定电压:交流 380V,直流 220V ;
 额定电流:交流 16A,直流 10A ;
 机械寿命:2000 次。

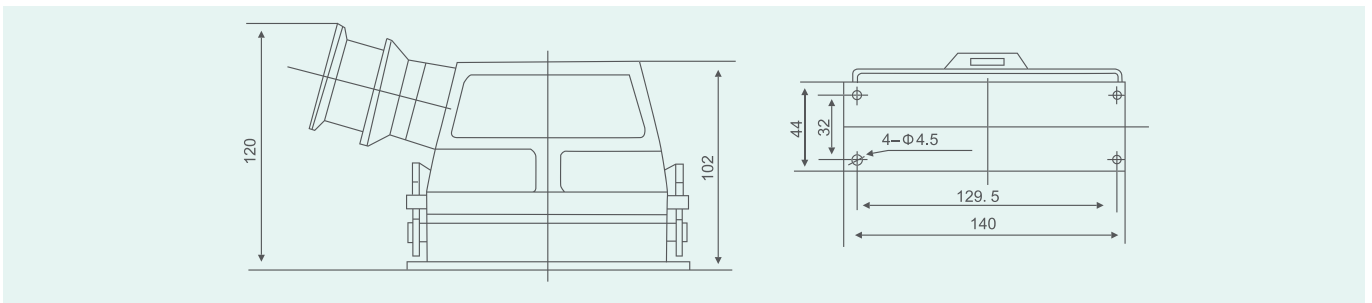
GZD-58 secondary plug socket, GZS1 (with VS1.VD4), etc. Used for secondary line connection of middle-mounted high-voltage switchgear.
 Rated voltage: AC 380V, DC 220V;
 Rated current: AC 16A, DC 10A;
 Mechanical life: 2000 times.

注:插头座配针,插孔的接线孔,只限于使用 1.5 平方以下导线;
 若需 2.5 平方,4 平方订货时另请注明。

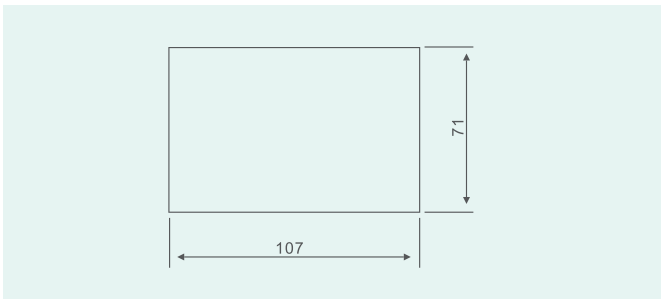
Note: The pins of the plug seat and the wiring hole of the jack are limited to the use of wires below 1.5 square meters;
 If you need 2.5 square meters, please specify when ordering 4 square meters.

◎ 46 芯航空插座 46-pin aviation socket

◎ GZD-46 二次插头座 GZD-46 secondary plug seat

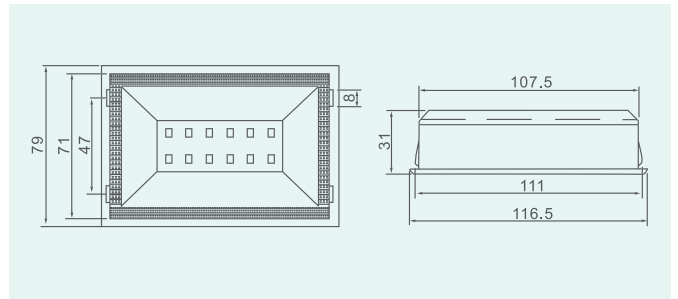


◎ CM-1 柜内照明灯
CM-1 cabinet lighting

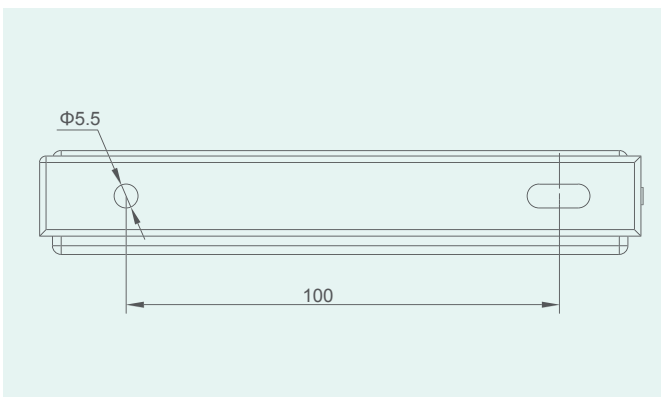


◎ CM-1-LED 柜内照明灯 (塑料型)
CM-1-LED cabinet lighting (plastic type)

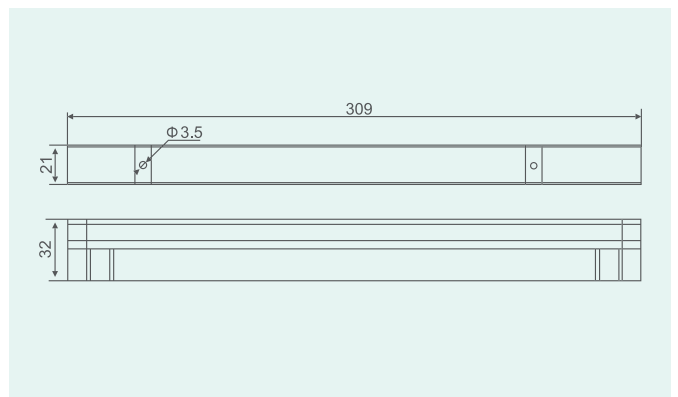
额定电压：AC 220V 额定功率：2~4W
Rated voltage: AC 220V Rated power: 2~4W



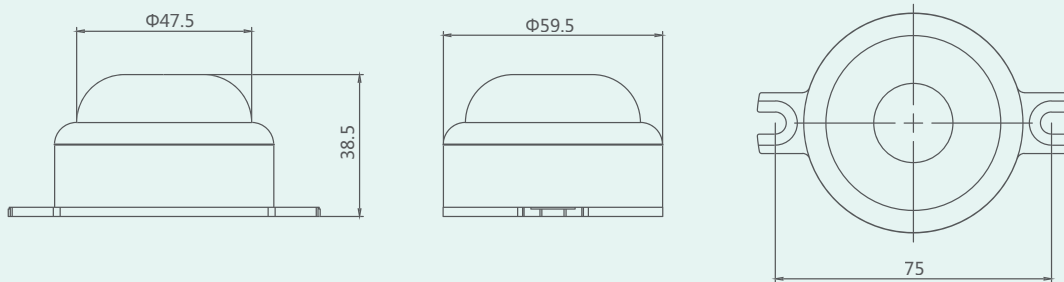
◎ 仪表室照明灯
Instrument room lighting
LED/LL10-W-AC/220V



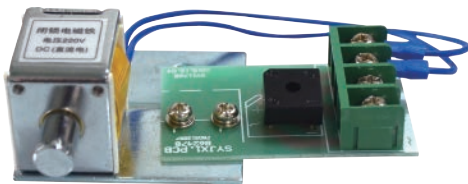
◎ T5 仪表室照明灯
Instrument room lighting
额定功率：18W
Rated power: 18W



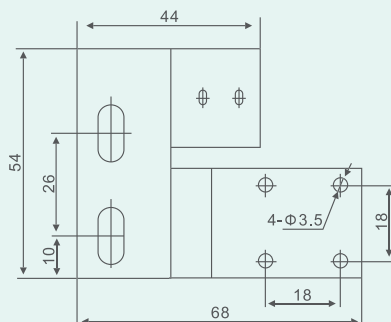
LED 圆形照明灯 LED circular lighting



闭锁电磁铁 Locking solenoid(DC220V/110V)

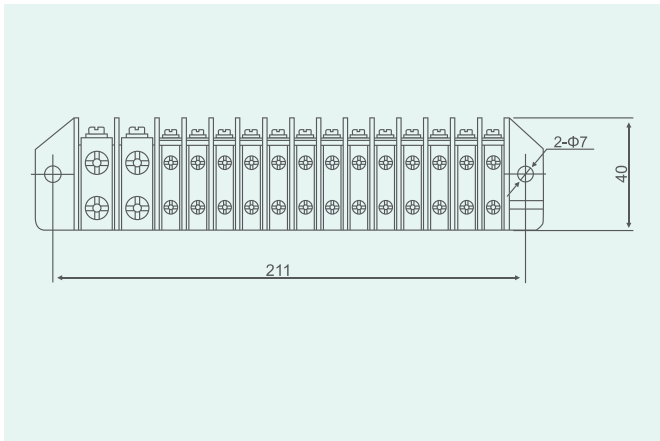
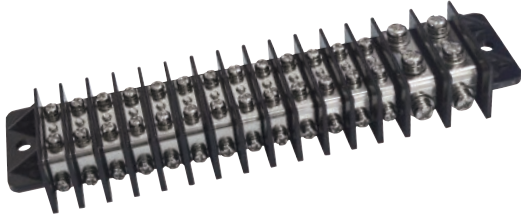


带微动开关 (选用)
With microswitch (optional)

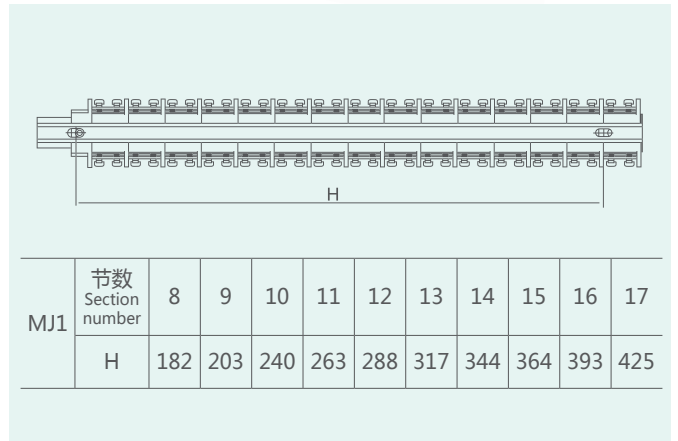


注：
交直流通用，
电源电压 110V/220V
Note：
AC and DC universal,
Power supply voltage 110V/220V

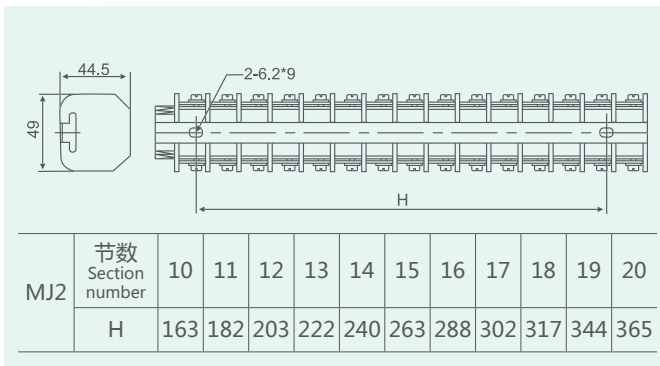
- CM1 母线架 -15/20 节 (4-6mm 导线式)
CM1 busbar -15/20 section (4-6mm wire type)



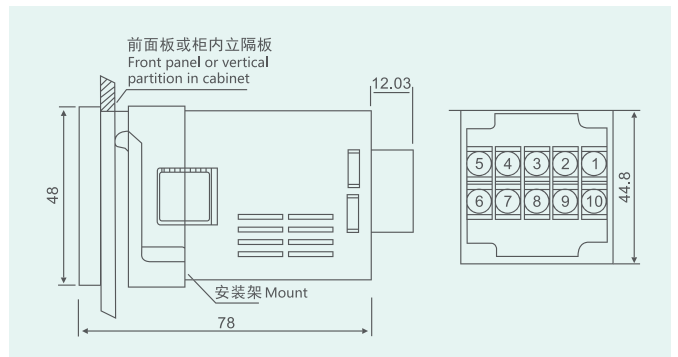
- MJ1 母线架 (φ8 铜棒式)
MJ1 busbar frame (φ8 copper rod type)



- MJ2 母线架 (Φ6 铜棒式)
MJ2 busbar frame (Φ6 copper rod type)



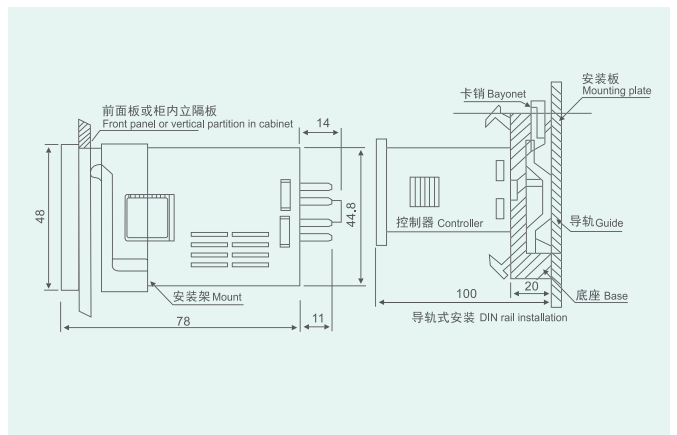
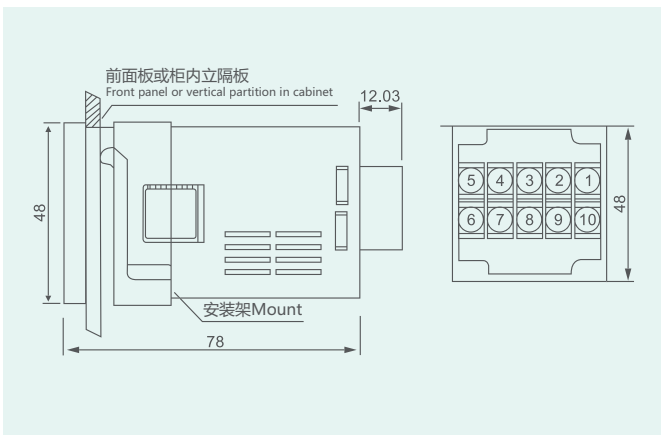
- LX-WK 温度监控器
LX-WK temperature monitor



- LX-WSK(S) 温度、凝露 (湿度)
LX-WSK(S) temperature, condensation (humidity)



- WSK-ZSK 智能温湿度监控器
WSK-ZSK Intelligent Temperature and Humidity Monitor



- DSN-BM 型户内电磁锁
DSN-BM type indoor electromagnetic lock

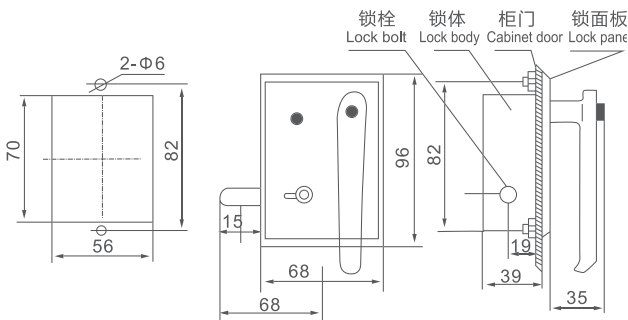


DSN-BM 型户内电磁锁是一种防止高压开关设备电气误操作的电控制机构联锁装置，主要供高压开关柜柜门及其它需要安全联锁的地方实现强制联锁，防止误入带电间隙和误操锁钥匙强制开锁。是发电和供电部门不可缺少的闭锁装置。

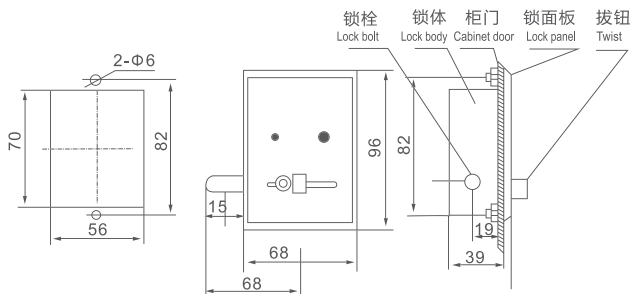
- 开孔尺寸：56mmx70mm
- 工作电压：AC220V DC220V DC110V(通用电源)
- 锁栓行程：15mm
- 安装尺寸：Φ6x82mm
- 安装方式：DSN-BMZ 左开安装 DSN-BMY 右开安装

DSN-BM type indoor electromagnetic lock is an electric control mechanism interlocking device to prevent electrical misoperation of high-voltage switchgear. It is mainly used for high-voltage switchgear cabinet doors and other places that require safety interlocking to achieve compulsory interlocking to prevent accidental access to live electricity Clearance and misoperation of the lock key for forced unlocking. It is an indispensable locking device for power generation and power supply departments.

- Hole size: 56mmx70mm
- Working voltage: AC220V DC220V DC110V (universal power supply)
- Stroke of lock bolt: 15mm
- Installation size: Φ6x82mm
- Installation method: DSN-BMZ left opening installation DSN-BMY right opening installation



◎ DSN-AM 型户内电磁锁
 DSN-AM type indoor electromagnetic lock



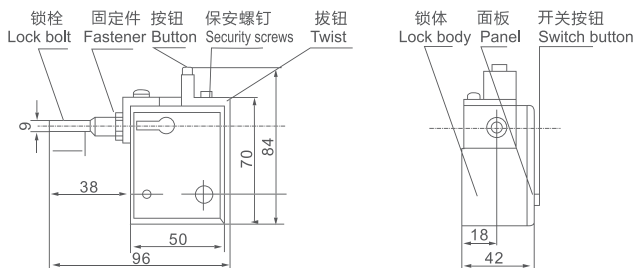
DSN-AM 型户内电磁锁是一种防止高压开关设备电气误操作的电控机构联锁装置，主要供高压开关柜柜门及其它需要安全联锁的地方实现强制联锁，防止误入带电间隙和误操作的发生，是发电和供电部门不可缺少的闭锁装置。

- 开孔尺寸：56mmx70mm
- 工作电压：AC220V DC220V DC110V (通用电源)
- 锁栓行程：15mm
- 安装尺寸：Φ6x82mm
- 安装方式：DSN-AMZ 左开安装 DSN-AMY 右开安装

DSN-AM type indoor electromagnetic lock is an electric control mechanism interlocking device to prevent electrical misoperation of high-voltage switchgear. It is mainly used for high-voltage switchgear cabinet doors and other places that require safety interlocking to achieve compulsory interlocking to prevent accidental access to live electricity. The occurrence of gaps and misoperations is an indispensable locking device for power generation and power supply departments.

- Hole size: 56mmx70mm
- Working voltage: AC220V DC220V DC110V (universal power supply)
- Stroke of lock bolt: 15mm
- Installation size: Φ6x82mm
- Installation method: DSN-AMZ left open installation DSN-AMY right open installation

◎ DSN-I 型户内电磁锁
 DSN-I type indoor electromagnetic lock



DSN 型户内电磁锁是一种防止高压开关设备电气误操作的电控机构联锁装置，主要供高压开关柜柜门及其它需要安全联锁的地方实现强制联锁，防止误入带电间隙和误操作的发生，是发电和供电部门不可缺少的闭锁装置。

- 产品型号：DSN-Z DSN-Y
- 工作电压：AC220V DC220V DC110V(通用电源)
- 安装支架螺纹规格：M14、M16 锁栓行程：14mm
- 安装方式：DSN-Z 左开安装 DSN-Y 右开安装

DSN type indoor electromagnetic lock is an electric control mechanism interlocking device to prevent electrical misoperation of high-voltage switchgear. It is mainly used for high-voltage switchgear cabinet doors and other places where safety interlocking is required to achieve compulsory interlocking to prevent accidental entry into the live gap and The occurrence of misoperation is an indispensable locking device for power generation and power supply departments.

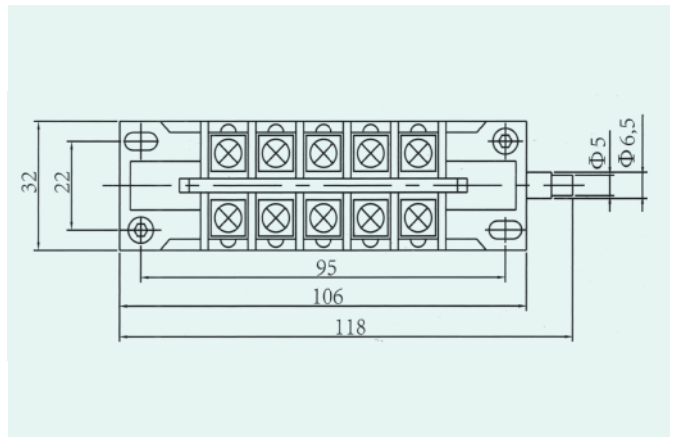
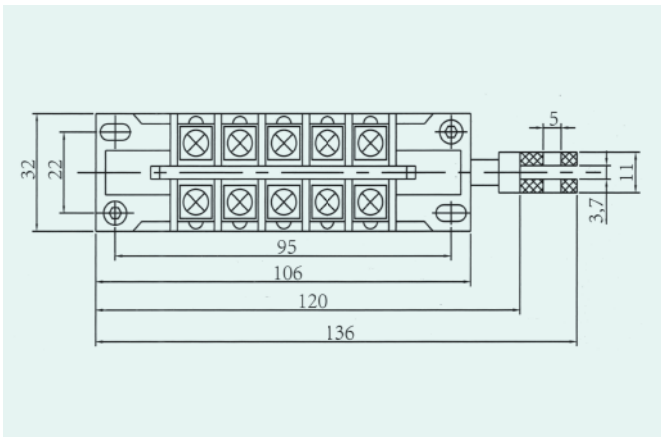
- Product model: DSN-Z DSN-Y
- Working voltage: AC220V DC220V DC110V (universal power supply)
- Mounting bracket thread specifications: M14, M16 lock bolt stroke: 14mm
- Installation method: DSN-Z left opening installation DSN-Y right opening installation

辅助开关系列 Auxiliary switch series

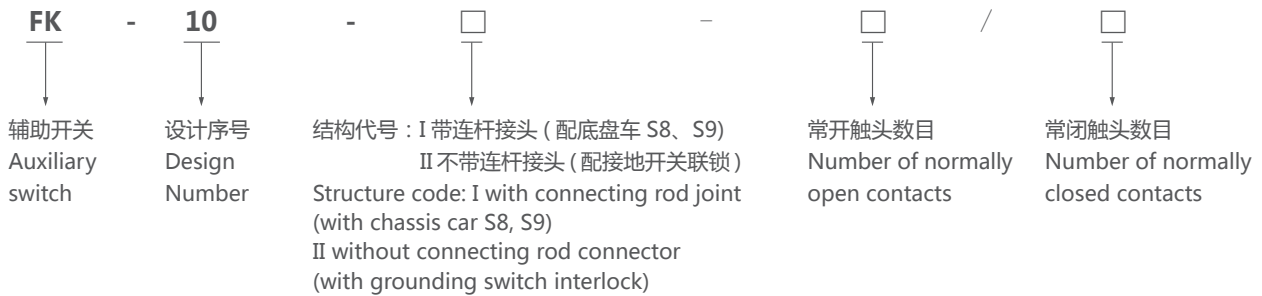
◎ FK10- I - □□型辅助开关外形及安装尺寸图
Auxiliary switch and installation dimension



◎ FK10- II - □□型辅助开关外形及安装尺寸图
Auxiliary switch and installation dimension



◎ 产品型号及含义 Product model and meaning



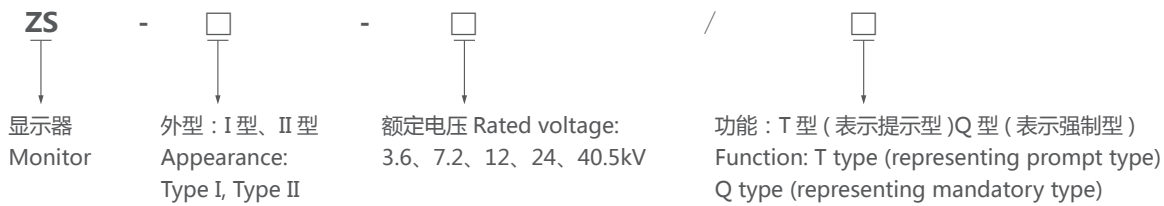
◎ 主要技术参数 The main technical parameters

- 额定电压 Rated voltage : AC660V
- 额定频率 Rated frequency : 50Hz
- 额定电流 Rated current : 10A

ZS 显示器 ZS display



◎ 产品型号及含义 Product model and meaning



I 型显示器有提示型 (T 型) 和强制闭锁型 (Q 型) 两种，II 型显示器仅有提示型 (Y 型)，不具备强制闭锁 (Q 型)。

Type I displays have two types: prompt type (T type) and forced locking type (Q type). Type II displays only have prompt type (Y type) and do not have forced locking (Q type).

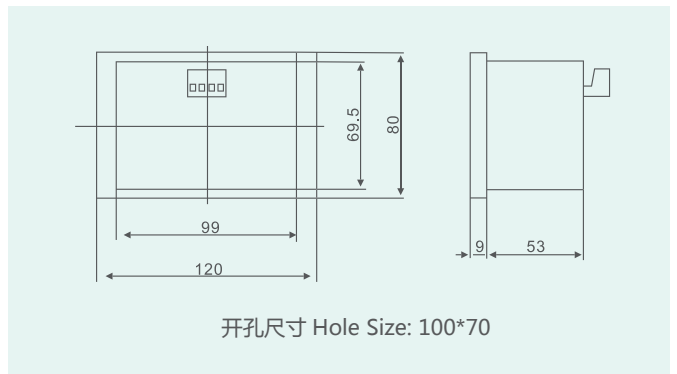
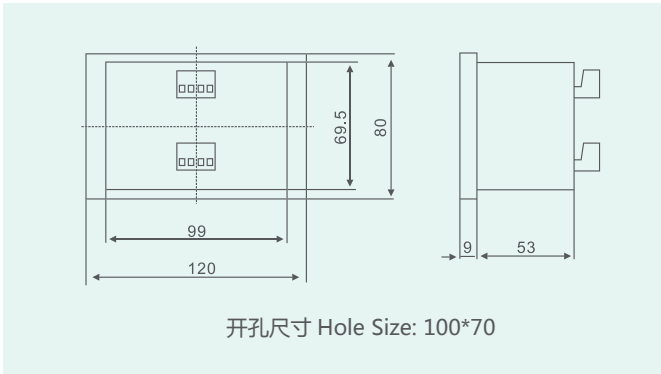
◎ ZS 型显示器 I 型、II 型安装开孔尺寸 ZS type display I type, II type installation hole size

型号 Type	开孔尺寸 Hole Size	额定电压 (KV) Rated voltage	工作电源 Power supply	接线方式 Wiring	K1K2 输出 Output	核相功能 Function	型号接地 Grounding	适配电容 Adaptation capacitor
T1	100*70	7.2~40.5	/	接插件 Connector	/	无 No	无 No	100~120PF
T2	100*70	7.2~40.5	/		/	有 Have	无 No	100~120PF
Q5	100*70	7.2~40.5	AC220V		有源 Active	无 No	无 No	100~120PF
Q6	100*70	7.2~40.5	DC220V		有源 Active	无 No	无 No	100~120PF
Q7	100*70	7.2~40.5	DC110V		有源 Active	无 No	无 No	100~120PF
Q8	100*70	7.2~40.5	AC/DC110~220V		无源 Passive	无 No	无 No	100~120PF
Q9	100*70	7.2~40.5	AC/DC110~220V		无源 Passive	有 Have	无 No	100~120PF
Q10	100*70	7.2~40.5	AC220V		有源 Active	有 Have	无 No	100~120PF
Q11	100*70	7.2~40.5	DC220V		有源 Active	有 Have	无 No	100~120PF
Q12	100*70	7.2~40.5	AC110V		有源 Active	无 No	无 No	100~120PF
Q13	100*70	7.2~40.5	DC110V		有源 Active	有 Have	无 No	100~120PF
Q14	100*70	7.2~40.5	AC110V		有源 Active	有 Have	无 No	100~120PF
T3	92*44	7.2~40.5	/		/	有 Have	有 Have	100~120PF
T3A	92*44	7.2~40.5	/		/	无 No	无 No	100~120PF
T3B	92*44	7.2~40.5	/	/	有 Have	无 No	100~120PF	
Q1	92*44	7.2~40.5	AC220V	有源 Active	有 Have	有 Have	100~120PF	
Q2	92*44	7.2~40.5	DC110V	有源 Active	有 Have	有 Have	100~120PF	
Q3	92*44	7.2~40.5	DC220V	有源 Active	有 Have	有 Have	100~120PF	
Q4	92*44	7.2~40.5	AC/DC110~220V	无源 Passive	有 Have	有 Have	100~120PF	
Q4A	92*44	7.2~40.5	AC/DC110~220V	无源 Passive	无 No	无 No	100~120PF	
Q4B	92*44	7.2~40.5	AC/DC110~220V	无源 Passive	有 Have	无 No	100~120PF	

◎ DXN-Q8 带电显示器 DXN-Q8 charged display



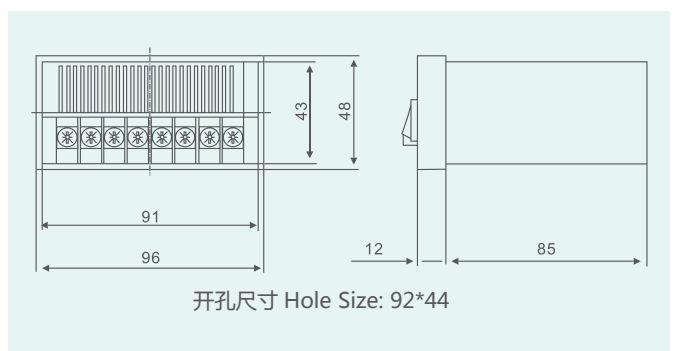
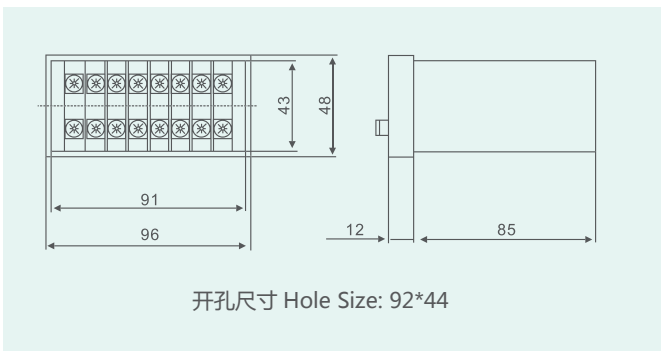
◎ DXN-T1 带电显示器 DXN-T1 charged display



◎ DXN-Q4 带电显示器 DXN-Q4 charged display



◎ DXN-T3 带电显示器 DXN-T3 charged display



加热器 Heater 带安装支架 With mounting bracket



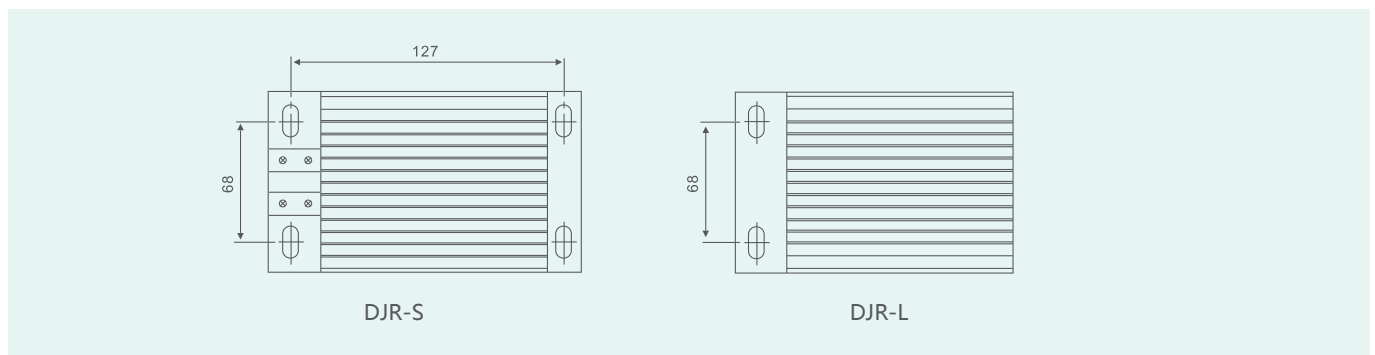
产品概述 Product description

DJR- 型铝合金梳妆加热器是专为电力设备防潮除湿设计的新型电热器。该加热器采用了专用的铝合金散热板型材和优质的合金电热丝组成。它体积小、外型美观、散热均匀、热传导快、散热面积大等特点，从而保证点热丝的使用寿命比一般加热器长很多，可以长期可靠的工作。

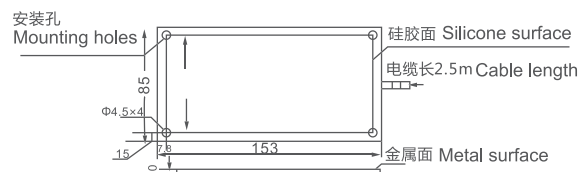
DJR-type aluminum alloy dressing heater is a new type of electric heater specially designed for moisture-proof and dehumidification of electric equipment. The heater is composed of a special aluminum alloy heat sink profile and high-quality alloy heating wire. It has the characteristics of small size, beautiful appearance, uniform heat dissipation, fast heat conduction, large heat dissipation area, etc., so as to ensure that the service life of the hot wire is much longer than that of the general heater, and can work reliably for a long time.

◎ **主要技术参数 The main technical parameters**

工作电压 Working voltage: AC220V 额定功率 Rated power: 50 ~ 500W±5%



DJR-G 型硅橡胶加热器 DJR-G silicone rubber heater



DJR-G型硅橡胶加热器 Silicone rubber heater
AC220V 30W/50W/70W/100W/150W

DJR-G 型硅橡胶加热器是新型超薄防水加热器。采用硅胶一次成型技术（国内独创），具备体积小、寿命长散热均匀防水等功能，不同功率的产品具有统一的外观和安装尺寸，使用非常方便，是传统加热器的理想替代品。

DJR-G silicone rubber heater is a new type of ultra-thin waterproof heater. Using silicone one-step molding technology (domestic original), it has the functions of small size, long life, uniform heat dissipation and waterproofing. Products with different powers have a unified appearance and installation size, which is very convenient to use. It is an ideal substitute for traditional heaters.

◎ 塔形密封圈 Tower seal

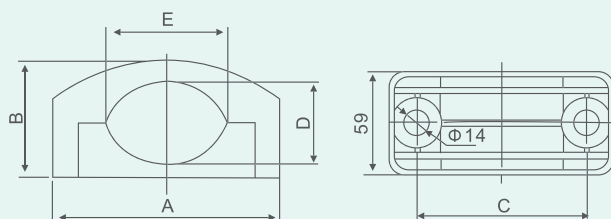


安装在柜体顶部或底部,方便进出线用,同时对电缆起到防护作用

Installed on the top or bottom of the cabinet for easy access to cables and protection for cables

8LS 766 003P3	扁型橡皮圈 Flat rubber band(53×13)
8LS 766 022	橡皮护圈 Rubber guard(φ62)
8LS 766 055.1	橡皮护圈 Rubber guard(φ80, 塔型 Tower type)
8LS 766 004	橡皮护圈 Rubber guard(φ90)
8LS 766 005	橡皮护圈 Rubber guard(φ110, 塔型 Tower type)

◎ 电缆夹 Cable clamp

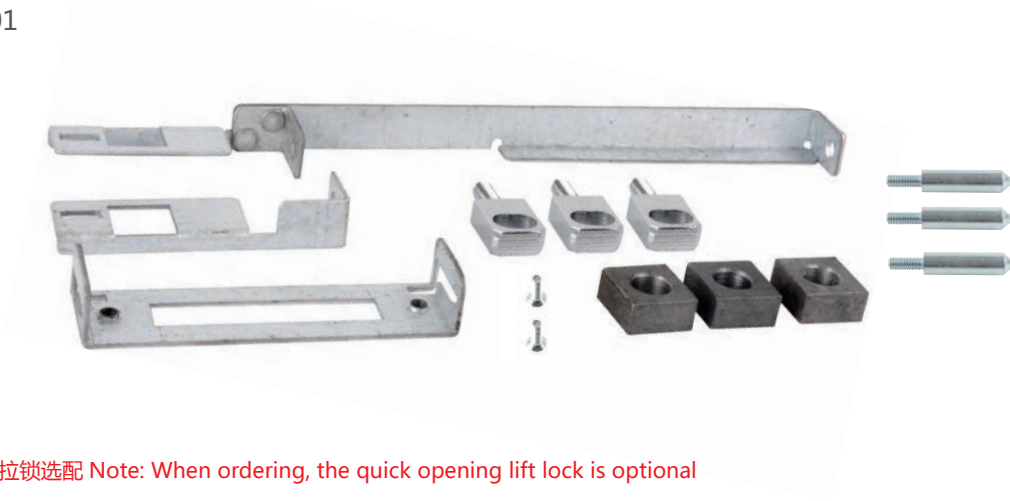


型号 Type	A	B	C	D	E	备注 Remarks
(30-52)mm ²	110	49.5	75	32.7	48	小号 Small
(50-70)mm ²	114.5	52.6	83.5	36	57	中号 Medium
(70-95)mm ²	128	66	96	46.7	69	大号 large
(90-120)mm ²	150	55	120	65	95	加大 Increase

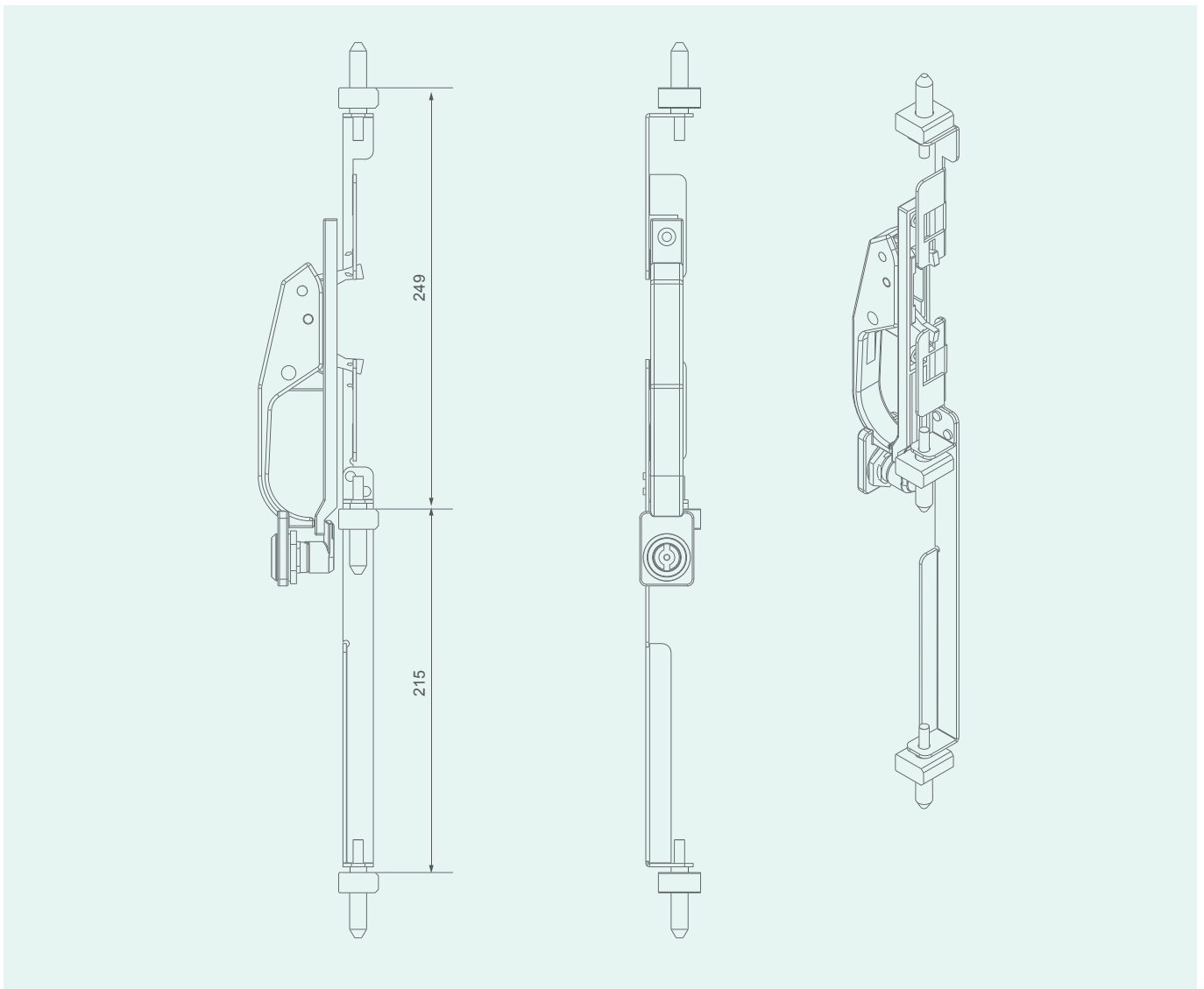
注: 材料 ABS 或 PAS, 订货时请注明。 Note: Material ABS or PAS, please specify when ordering.

◎ 快开提拉锁配套件系列 Quick opening lift lock accessory series

KLY-980.001



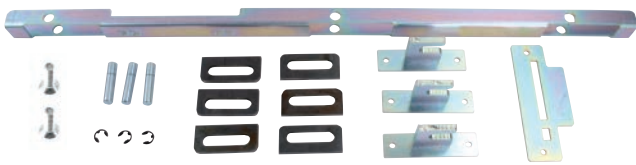
注：订货时快开提拉锁选配 Note: When ordering, the quick opening lift lock is optional



◎ 快开提拉锁配套件系列 Quick opening lift lock accessory series

KLY-980.002

专利号 : ZL 2021 2 1571464.X

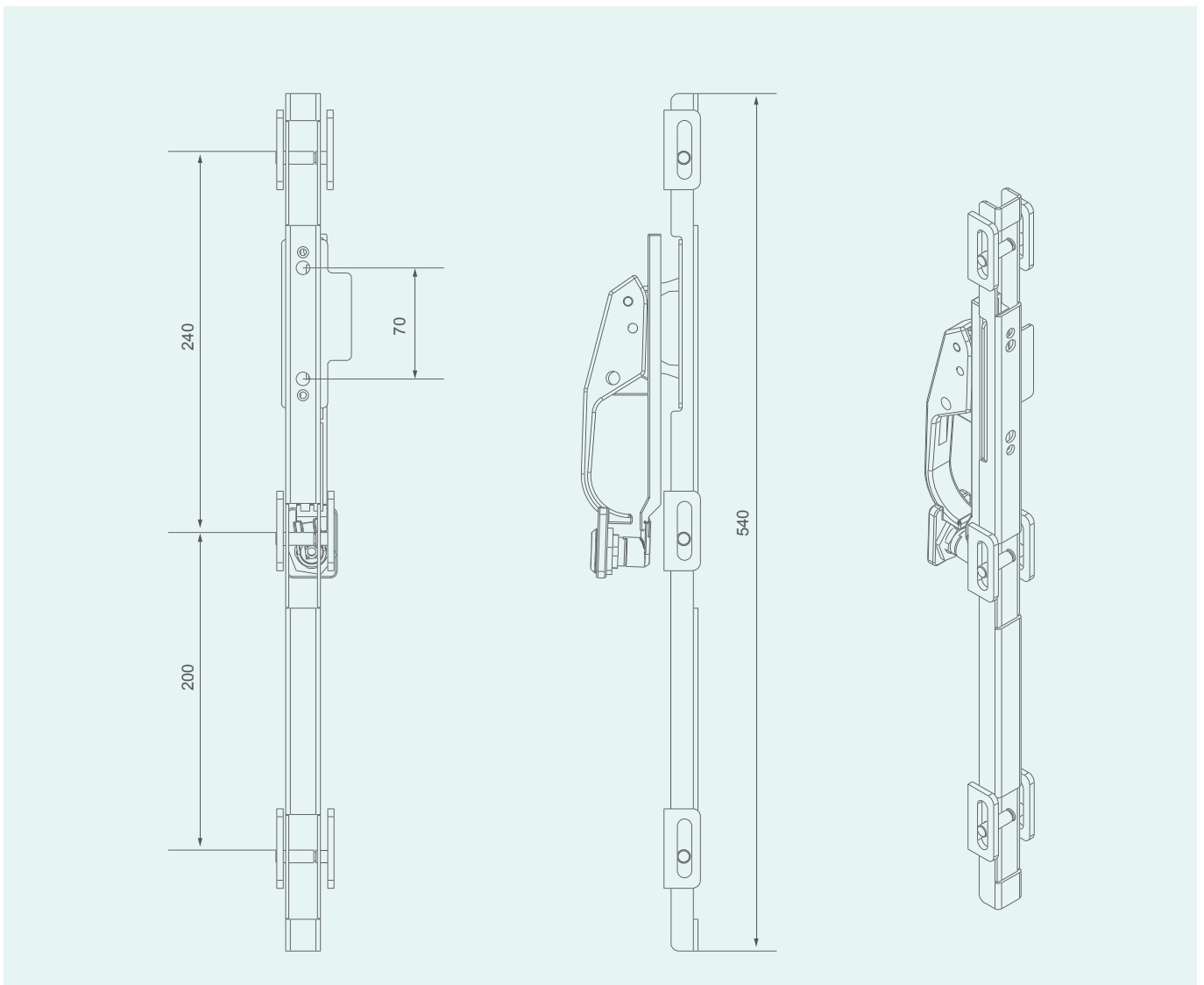


中门 3 锁点
3 lock points of the middle door



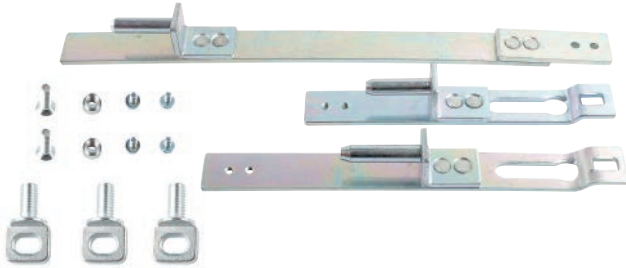
上 / 下门 2 锁点 (共用)
Upper/lower door 2 lock points (shared)

注 : 订货时快开提拉锁选配 Note: When ordering, the quick opening lift lock is optional



◎ 快开提拉锁配套件系列 Quick opening lift lock accessory series

KLY-980.003 (标准型: 中门 3 锁点, 下门 2 锁点)

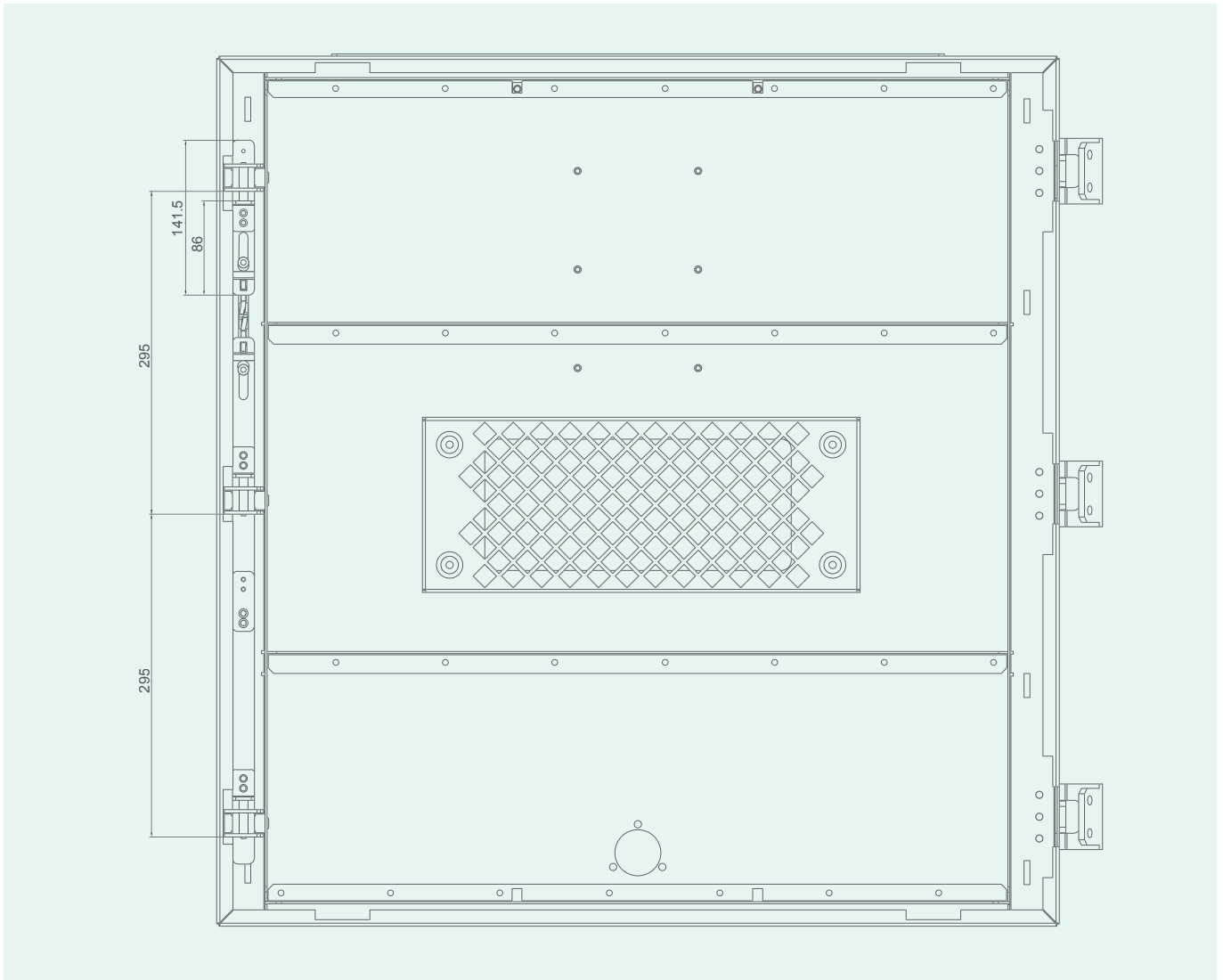


中门 3 锁点 3 lock points of the middle door



下门 2 锁点 2 lock points of the lower door

注: 订货时快开提拉锁选配 Note: When ordering, the quick opening lift lock is optional

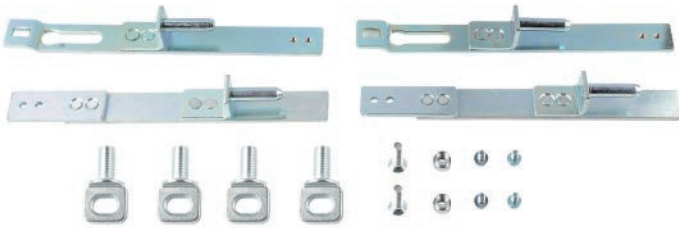


◎ 快开提拉锁配套件系列 Quick opening lift lock accessory series

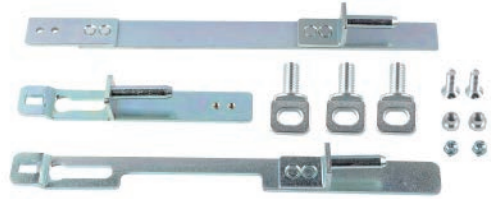
KLY-980.003 (国网型: 仪表门 2 锁点, 中门 4 锁点, 下门 3 锁点)



焊接块选配
Welding block selection

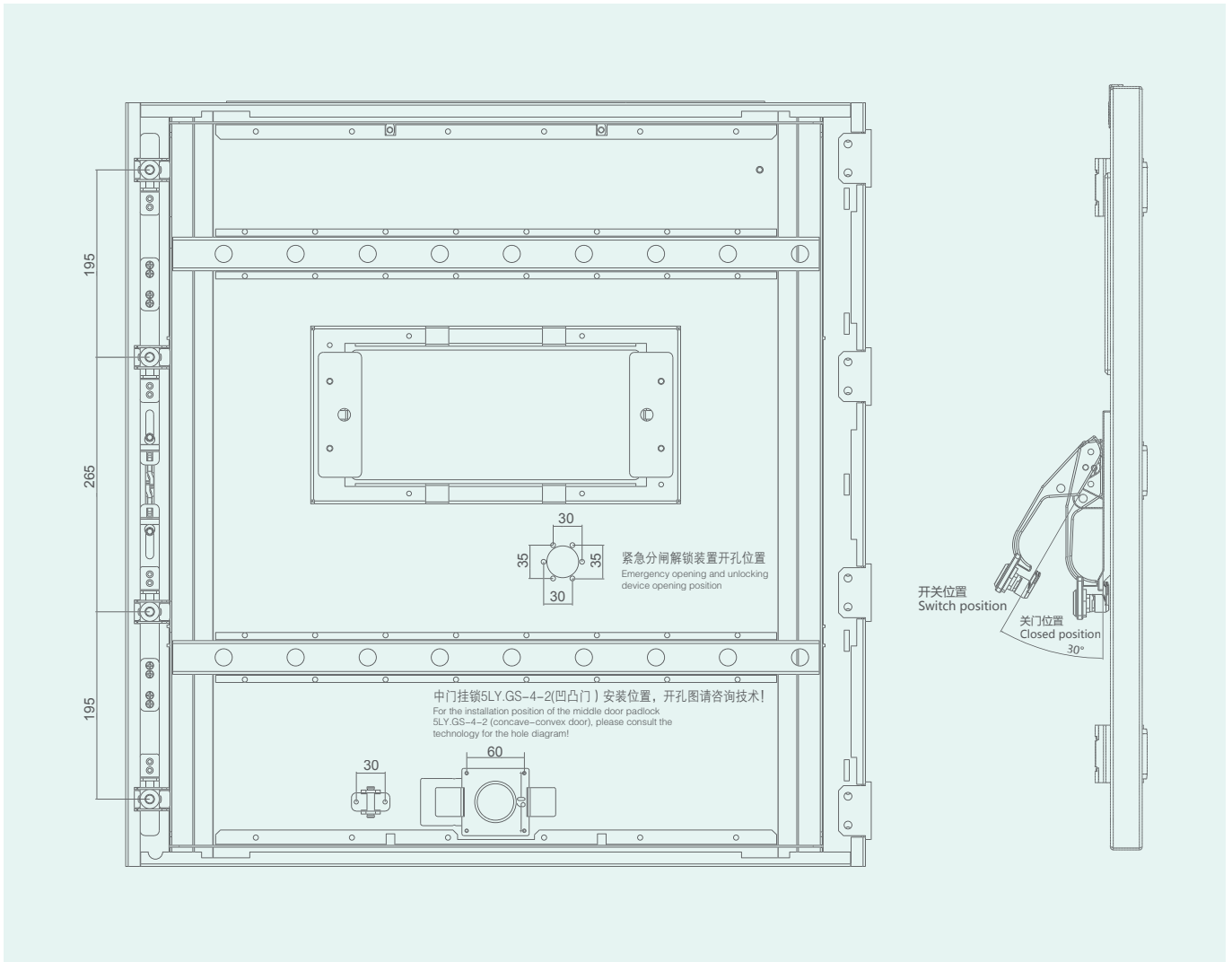


中门快拉锁 4 锁点 Middle door quick zipper 4 lock points



下门快拉锁 3 锁点 Lower door quick zipper 3 lock points

注: 订货时快开提拉锁选配 Note: When ordering, the quick opening lift lock is optional

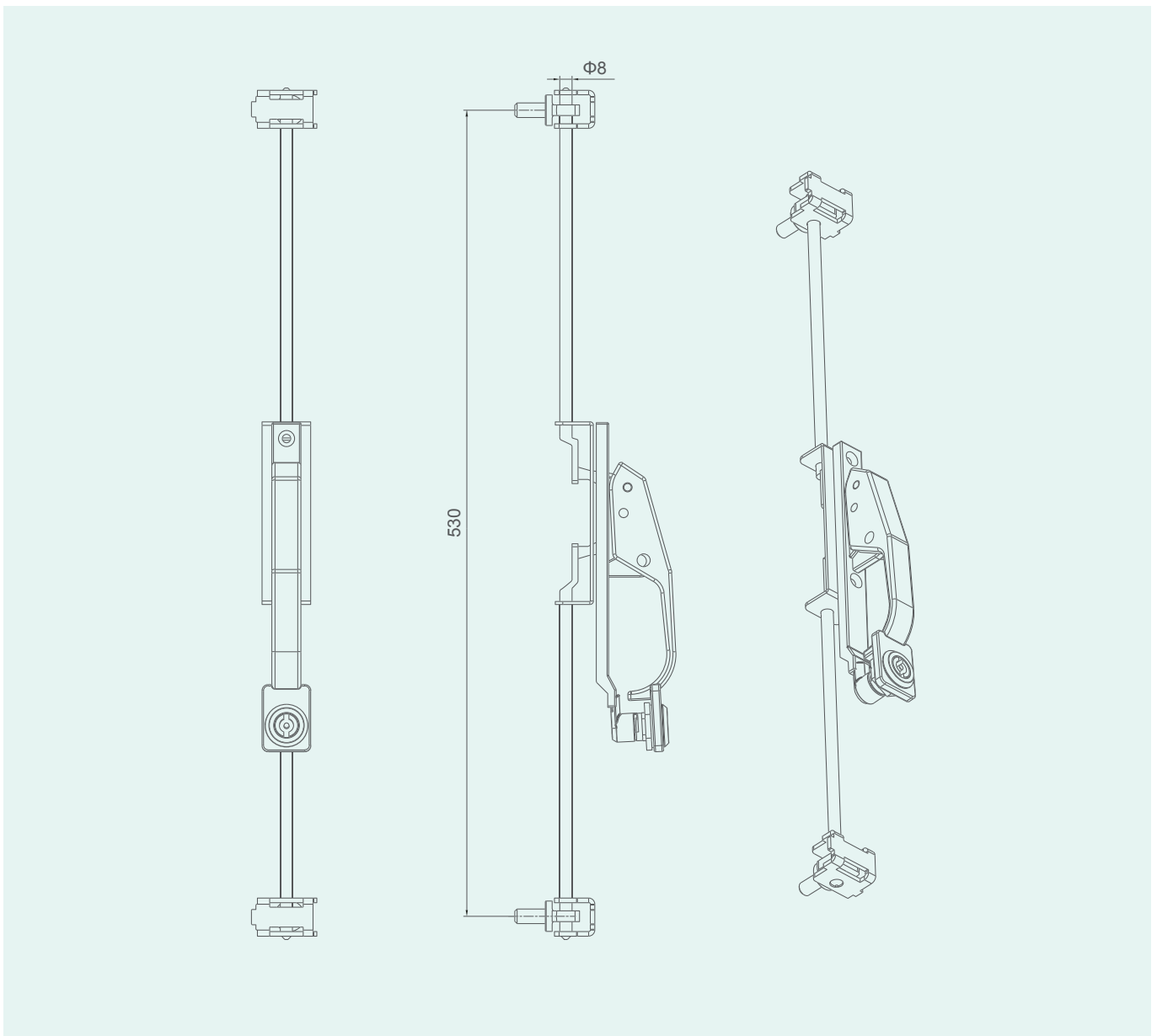


○ 快开提拉锁系列 Quick opening lift lock series

KLY-980.004



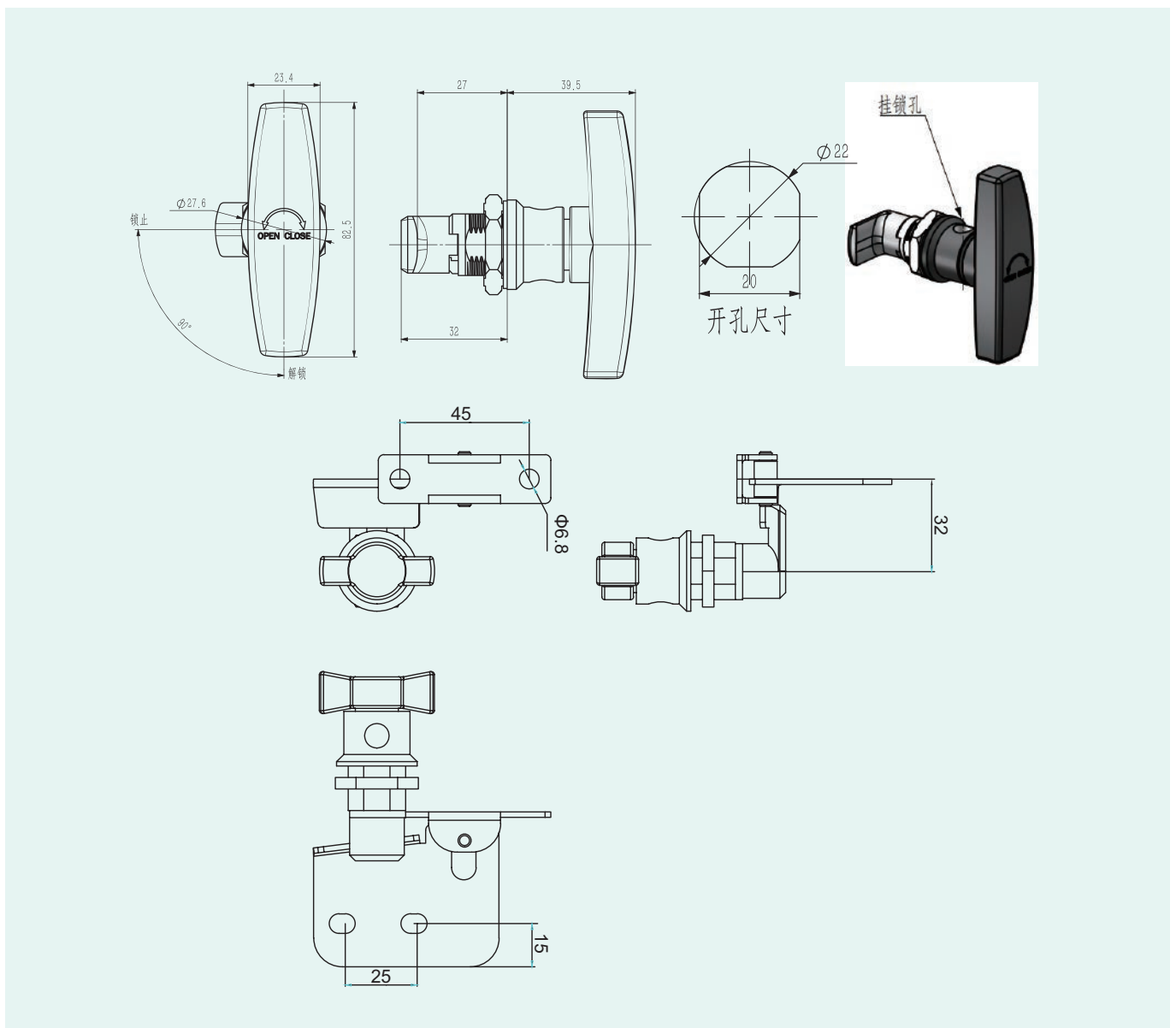
注：订货时快开提拉锁选配 Note: When ordering, the quick opening lift lock is optional



快开提拉锁配套件系列 Quick opening lift lock accessory series

KLY-980.005

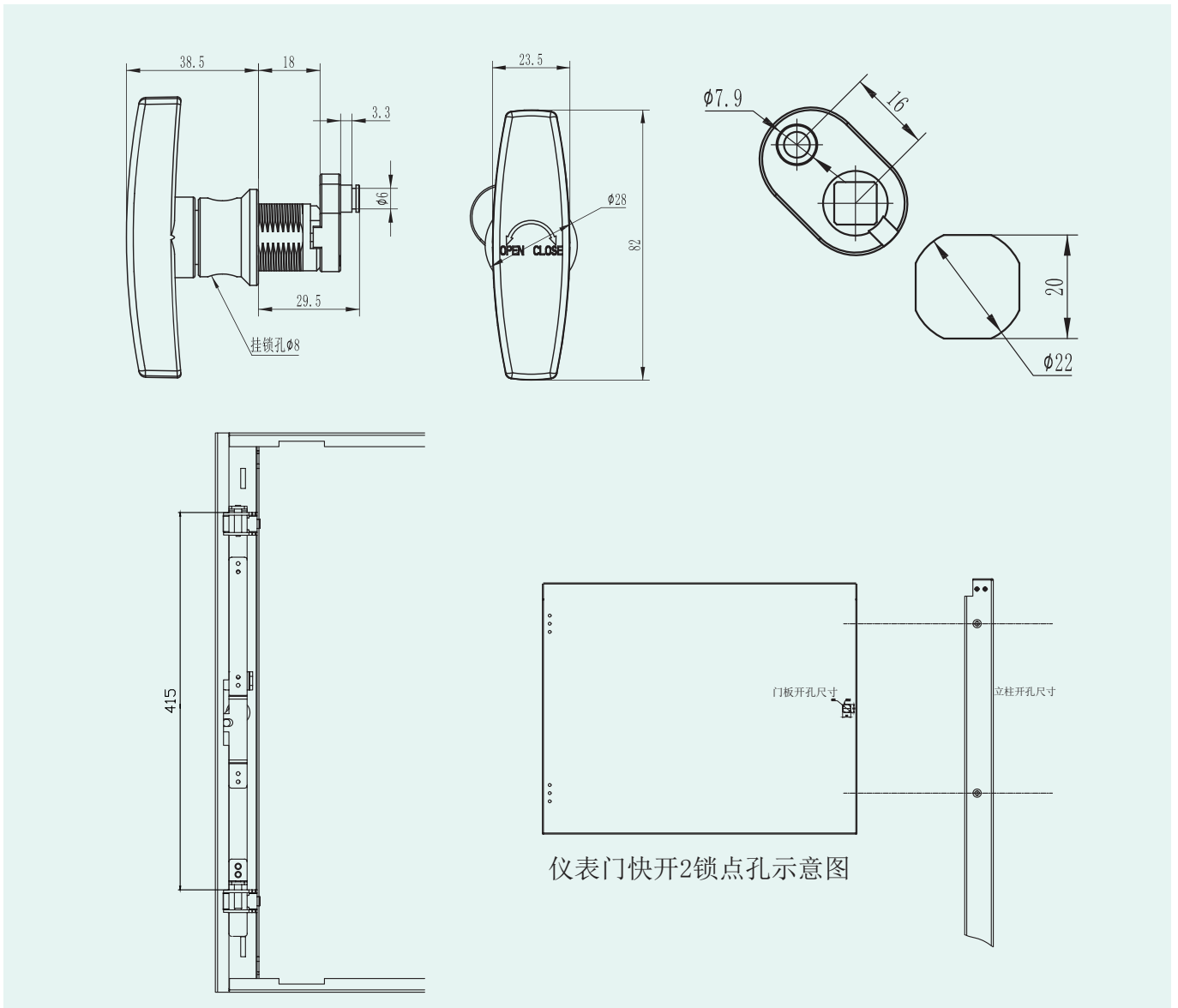
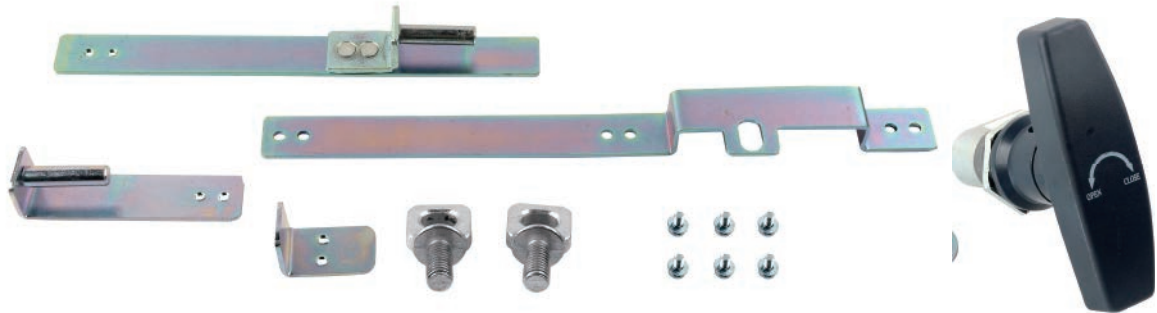
仪表门快开锁装置 (简易型)



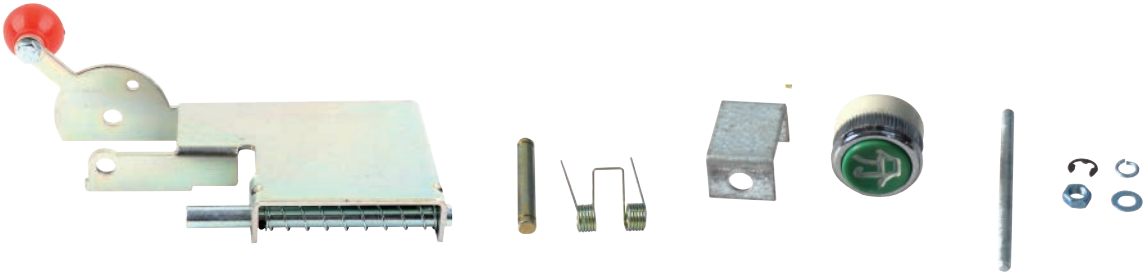
快开提拉锁配套件系列 Quick opening lift lock accessory series

KLY-980.006

仪表门燃弧型快开锁 (2 锁点)

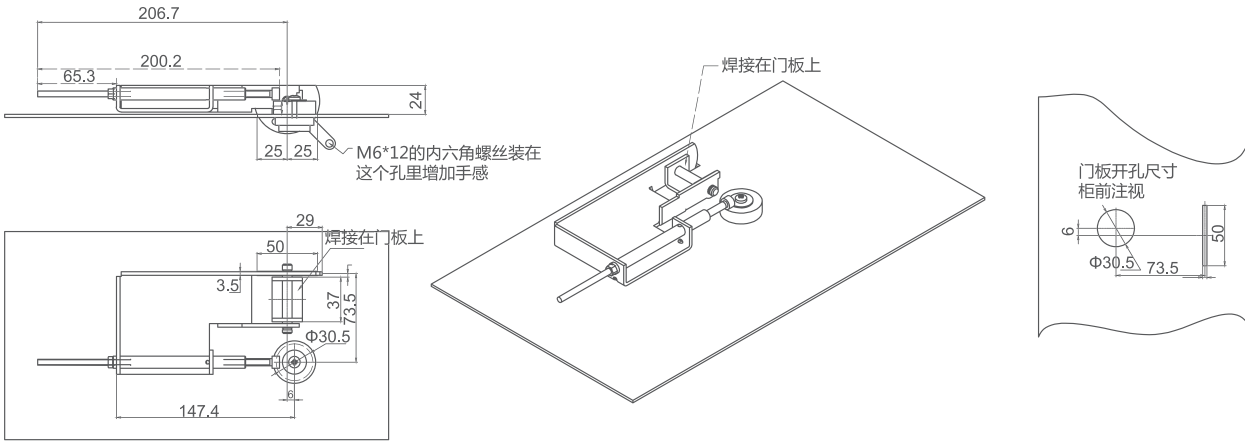


紧急分闸装置 Emergency opening device



说明 Description

此联锁成本低廉，安装简单，方便实用。可以在手车工作或试验位置不打开中门的情况下实现紧急分闸，从而有效的保证了操作者的安全。
The interlock is low in cost, simple to install, convenient and practical. It can realize emergency opening when the handcart is working or the test position does not open the middle door, thereby effectively ensuring the safety of the operator.



序号 No.	名称 Name	代号 Codename	数量只 / 套 Quantity only/set
1	按钮 (分)Button (minutes)		1
2	螺丝内六角 Hexagonal screw	M6*30	1
3	开口挡圈 Open retaining ring	φ6	2
4	顶杆 Mandrel	9LY.050.173	1
5	支撑轴 Support shaft	9LY.050.172	1
6	扭簧 Torsion spring	9LY.050.174	1
7	固定弯板 Fixed bent plate	9LY.050.171	1
8	压簧 Compression spring	8LY.282.021	2
9	弹性销 Elastic pin	3X18	1
10	螺母 Nut	M6	2
11	弯板 Bending	9LY.050.170	1
12	螺杆 Screw	M6*75	1
13	螺丝 (内六角)Screw (hexagon socket)	M6*10	1
14	防松螺母 Locknut	M6	1

◎ JFJ 紧急解锁装置 JFJ emergency unlocking device

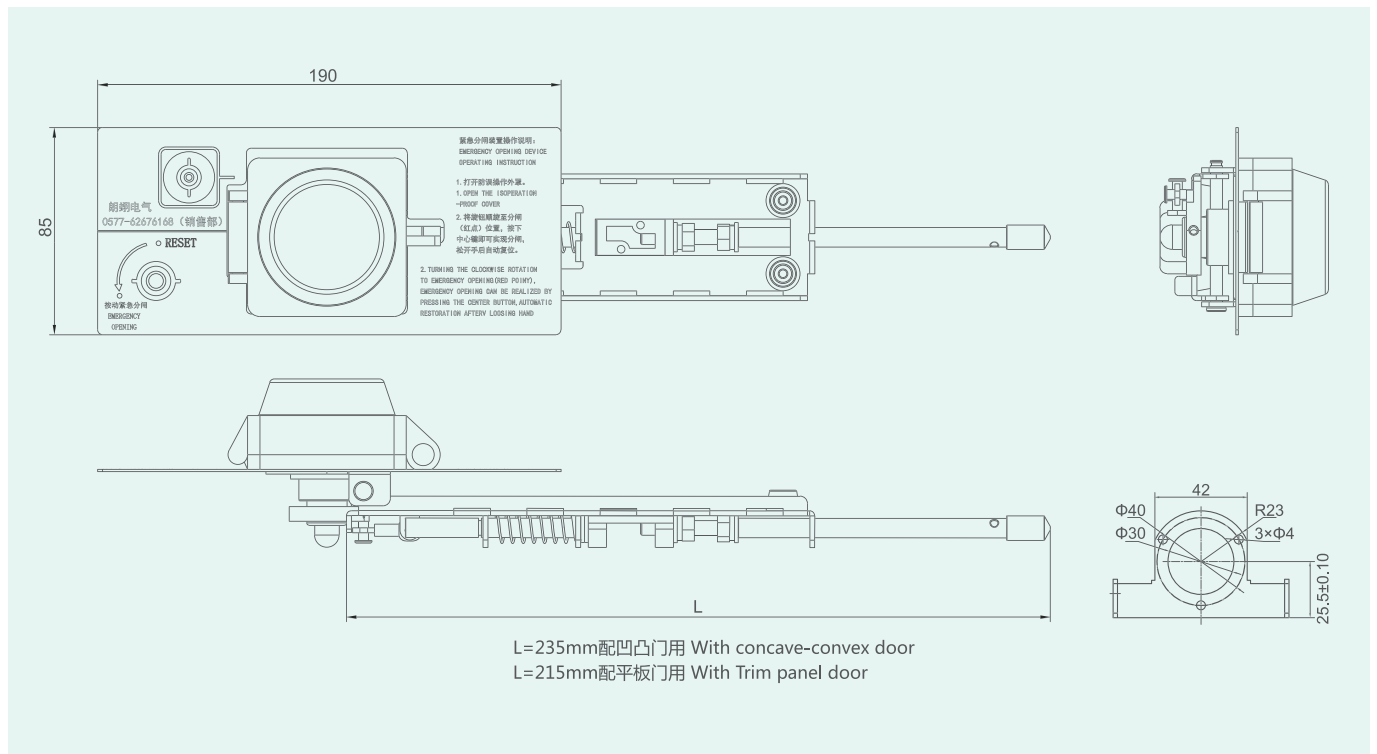
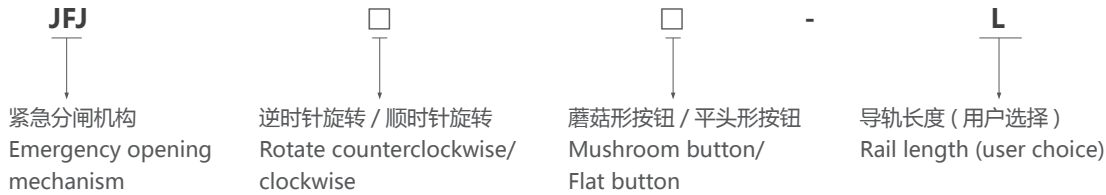


说明 Description

本产品主要用于开关柜中以简化断路器跳闸的操作程序、提高紧急状态下对电路突发故障的处置速度。该产品采用旋转折叠式结构，可在不打开柜门的情况下实现试验位置和工作位置的手动跳闸，而且该机构单手即可操作（松开手后可自动复位），因此具有操作方便、过程快速的优点。

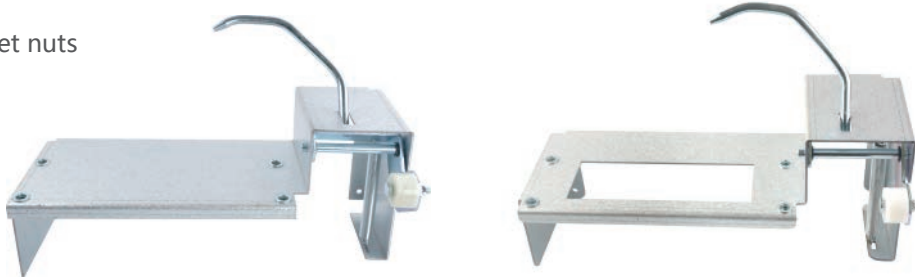
This product is mainly used in switch cabinets to simplify the operating procedures of circuit breaker tripping and improve the speed of handling sudden circuit failures in emergency situations. The product adopts a rotating and folding structure, which can realize manual tripping of the test position and working position without opening the cabinet door, and the mechanism can be operated with one hand (automatically reset after releasing the hand), so it has convenient operation, The process is a bit quick.

型号及含义 Model and meaning



二次插座联锁机构 Secondary socket interlocking mechanism

全系列 M6 铆螺母
Full range of M6 rivet nuts



选配 Assorting

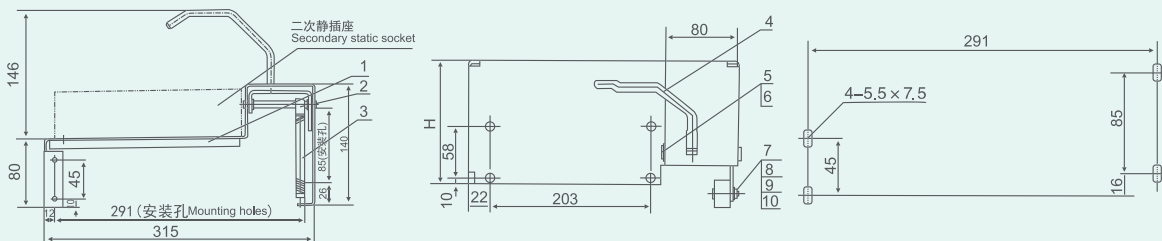
◎ 5LY.573.010 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/set
1	支架 Bracket	8LY.043.017.1-4	1
2	滚轮 Scroll wheel	8LY.224.021	1
3	拉簧 Tension spring	8LY.288.015	1
4	联锁杆焊接 Interlock rod welding	5LY.174.017	1
5	轴 Axis	8LY.200.020	1
6	开口挡圈 6 Open retaining ring 6	GB896-88	2
7	螺钉 Screw	8LY.900.010	1
8	螺母 Nut	GB617-86	1
9	垫圈 5 Washer 5	GB93-87	1
10	垫圈 5 Washer 5	GB97.1-85	1

◎ 5LY.573.010 中支架 8LY.043.017.1-4 选用表 Selection table

序号 No.	名称 Name	H	备注 Remarks
	8LY.043.017.1	136mm	配 ≤ 1250A 的 VD4 断路器手车及其同类尺寸规格手车 Equipped with VD4 circuit breaker handcart ≤ 1250A and handcarts of the same size
	8LY.043.017.2	116mm	配 VS1 断路器手车 Handcart with VS1 circuit breaker
支架 Bracket	8LY.043.017.3	126mm	配 1600-2500A 的 VD4 断路器手车及其同类尺寸规格手车 VD4 circuit breaker handcart with 1600-2500A and handcarts of the same size
	8LY.043.017.4	80mm	配 3150A 的 VD4 断路器手车及其同类尺寸规格手车 VD4 circuit breaker handcart with 3150A and handcart of similar size
	8LY.043.017.5	100mm	配 VB2 断路器手车 Handcart with VB2 circuit breaker

◎ 5LY.573.010 开孔尺寸图 Hole size drawing



1. 该产品支架安装孔均为 M6 拉铆螺母。
2. 订货时除表格以外的支架高度请注明。

1. The mounting holes of the product bracket are all M6 Blind rivet nut.
2. When ordering, please specify the height of the bracket except the table.

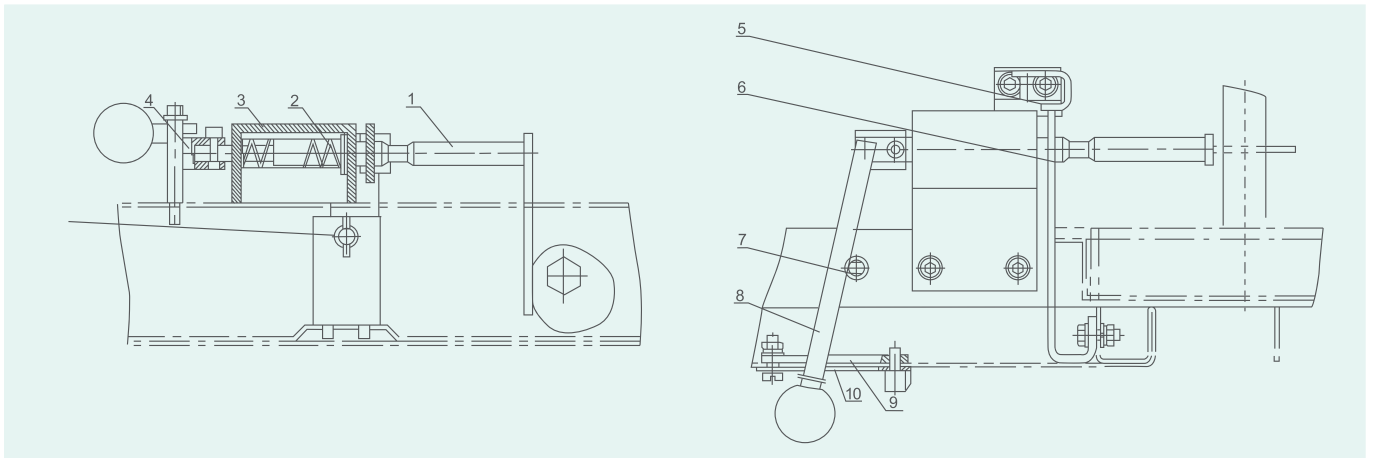
5LY.239.010 联锁机构装置 Interlocking mechanism device



说明

该机构经我厂改进后，能满足在没有关好下门的情况下无法将接地开关分闸 + 手车无法进入工作位置。必须按顺序先关好下门，再分接地开关，手车才能从试验位置进入工作位置以保证人身安全。

After the mechanism is improved by our factory, it can satisfy that the grounding switch cannot be opened without the door closed properly + the handcart cannot enter the working position. The door must be closed in order, and then the grounding switch must be divided. The handcart can enter the working position from the test position to ensure personal safety.

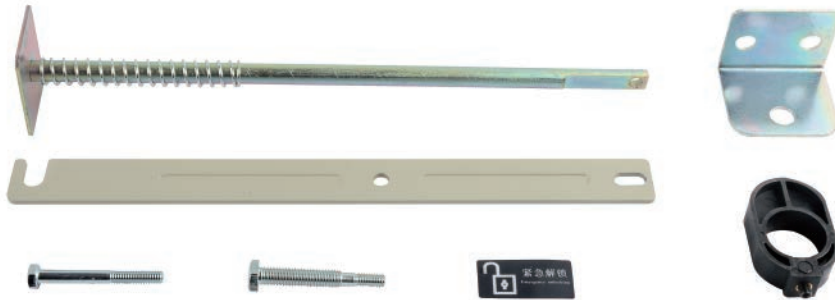


5LY.239.010 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	销轴焊接 Pin welding	5LY.234.013	1
2	压簧 Compression spring	8LY.282.021	1
3	支座 Support	8LY.043.020	1
4	端帽 End cap	8LY.017.010	1
5	支架装配 Bracket assembly	5LY.043.021	1
6	舌板 Tongue plate	8LY.060.012	1
7	销 Pin	8LY.200.015	1
8	手柄 handle	5LY.253.010	1
9	垫板 Pad	8LY.156.011	1
10	弯板 Bending	8LY.161.055	1
11	销 Pin	8LY.993.051	1

5LY.239.011 联锁机构装置 Interlocking mechanism device

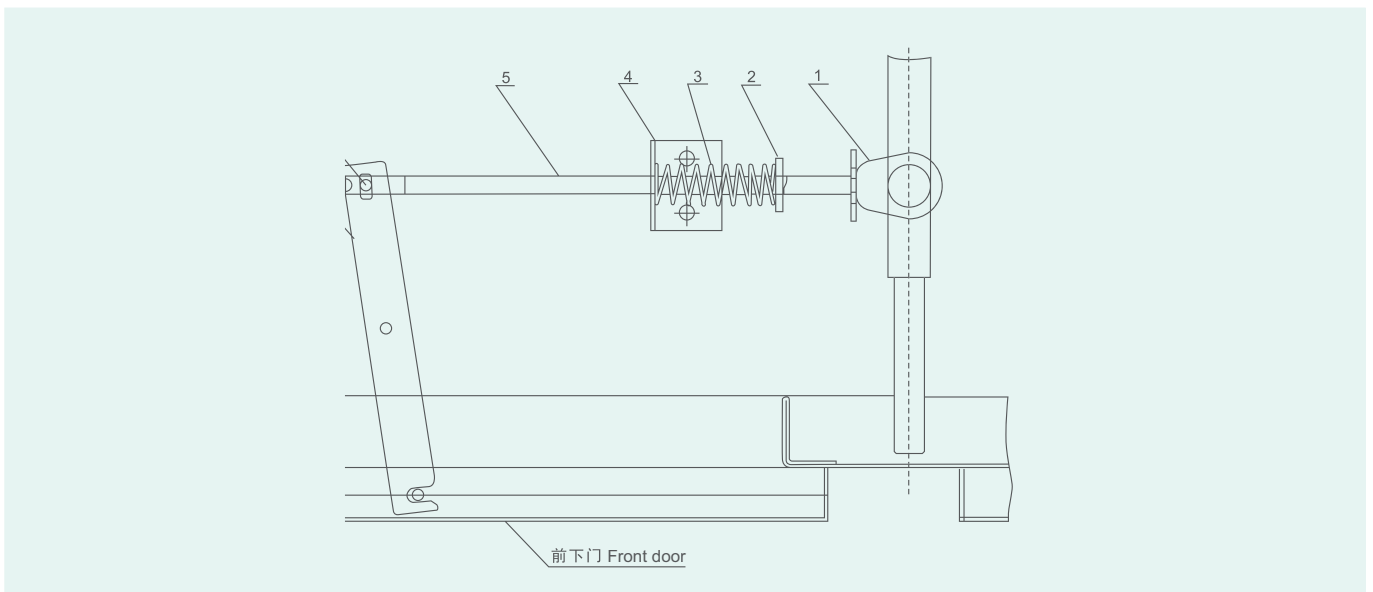
新型联锁机构 New interlocking mechanism



◎ 5LY.239.011 示意图 Schematic diagram

该机构经我公司改进后，能满足在接地刀分闸时，无法打开前下门，必须合闸接地刀才可打开前下门，从而保证人身安全。

After the improvement of our company, this mechanism can meet the requirement that when the grounding knife is opened, the front lower door cannot be opened, and the grounding knife must be closed to open the front lower door to ensure personal safety.

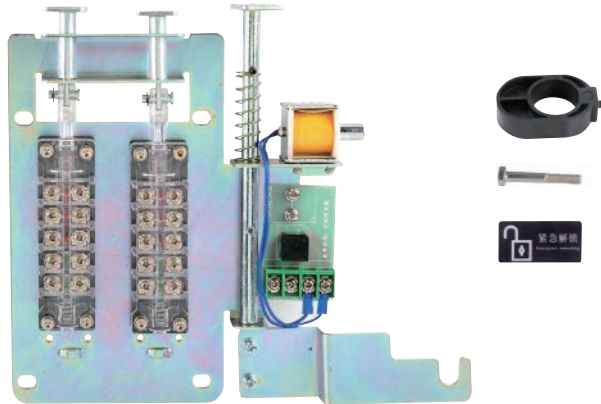


5LY.239.011 配套表 Matching table

新型联锁机构 New interlocking mechanism

序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	套 Set	11LY.04.232	1
2	开口销 Split pin	3*25	1
3	压簧 Compression spring	8LY.282.021	1
4	支架 Bracket	11LY.04.236	1
5	平头杆 Flat rod	11LY.04.230	1
6	螺杆 Screw	11LY.04.234	1
7	板 Board	11LY.04.233	1

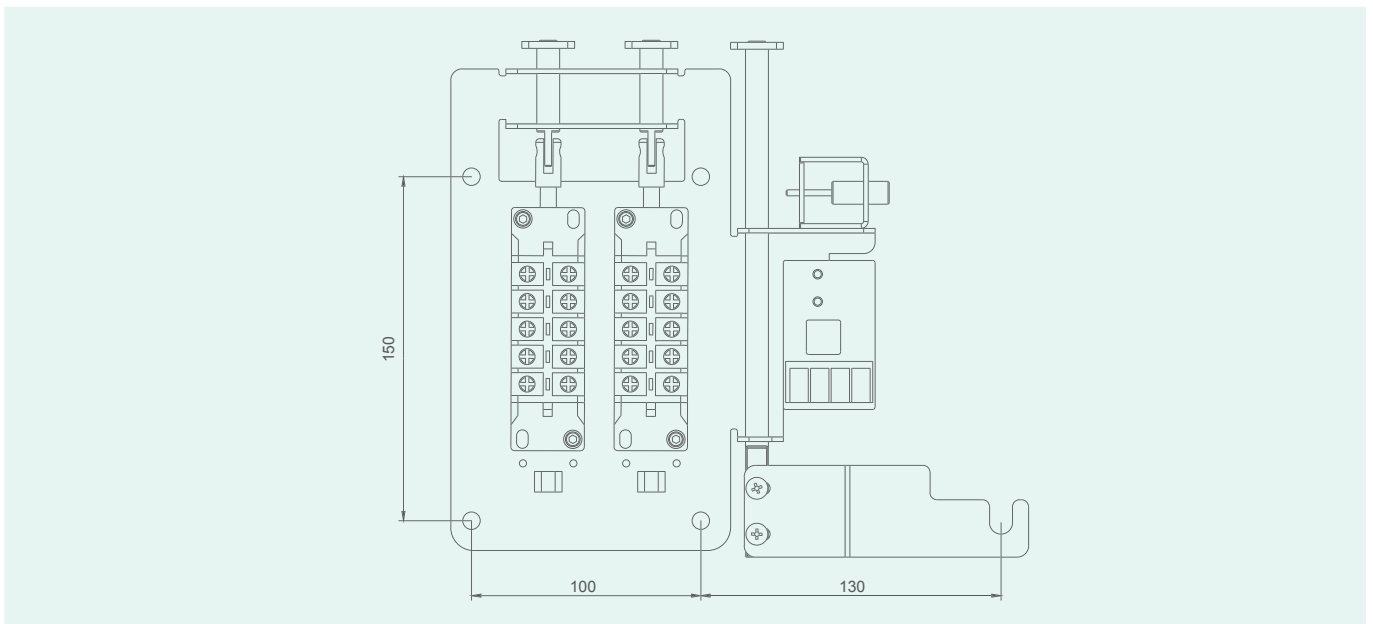
5LY.239.012 联锁机构装置 Interlocking mechanism device



◎ 5LY.239.012 示意图 Schematic diagram

该机构经我公司改进后，能满足在接地刀分闸时，无法打开前下门，必须合闸接地刀才可打开前下门，从而保证人身安全。

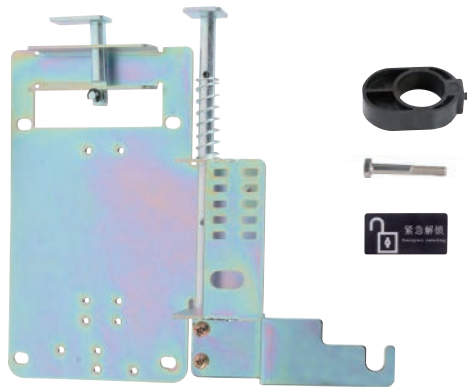
After the improvement of our company, this mechanism can meet the requirement that when the grounding knife is opened, the front lower door cannot be opened, and the grounding knife must be closed to open the front lower door to ensure personal safety.



◎ 5LY.239.012 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	弯板焊接 Bent plate welding	5LY.1411.0703	1
2	辅助杆焊接 Auxiliary rod welding	5LY.1411.0701	1
3	套 Set	11LY.04.232	1
4	压簧 Compression spring	8LY.282.021	1
5	扇形板 Sector plate	8LY.151.039	1
6	压杆焊接 Pressure rod welding	5LY.1411.0702	1
7	勾板 Hook plate	8LY.1411.0704	1

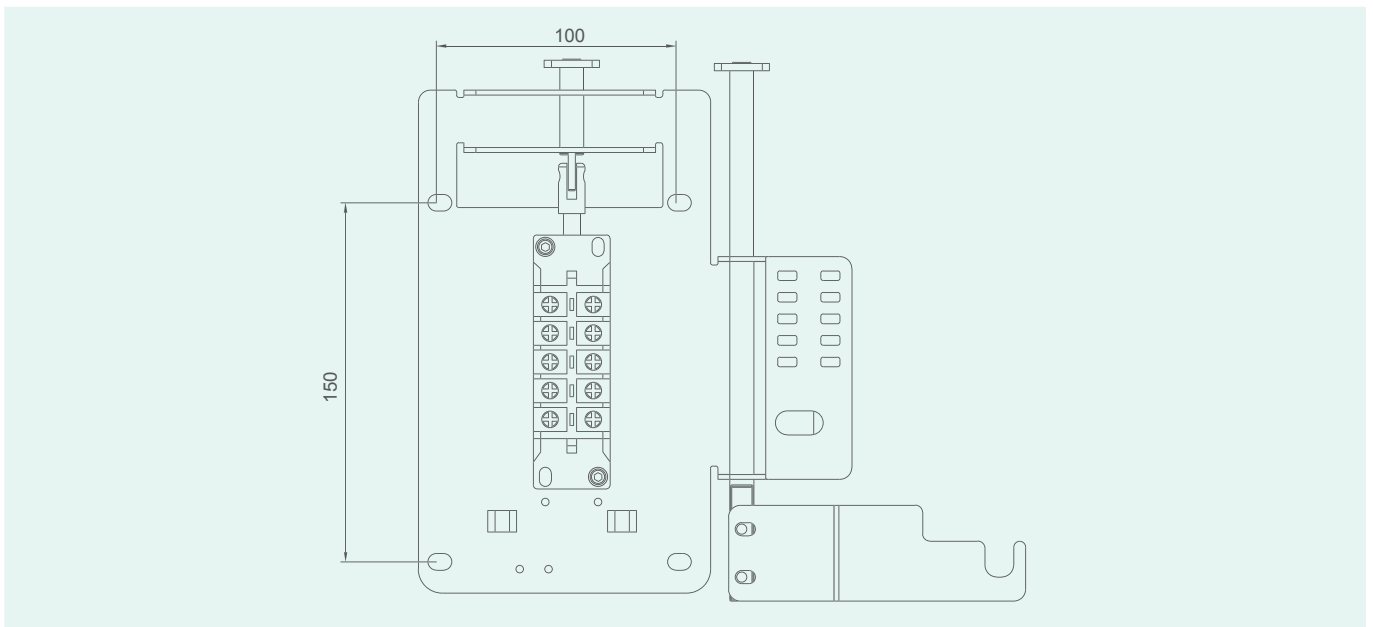
5LY.239.013 联锁机构装置 Interlocking mechanism device



◎ 5LY.239.013 示意图 Schematic diagram

该机构经我公司改进后，能满足在接地刀分闸时，无法打开前下门，必须合闸接地刀才可打开前下门，从而保证人身安全。

After the improvement of our company, this mechanism can meet the requirement that when the grounding knife is opened, the front lower door cannot be opened, and the grounding knife must be closed to open the front lower door to ensure personal safety.



◎ 5LY.239.013 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	弯板焊接 Bent plate welding	5LY.1411.0703	1
2	辅助杆焊接 Auxiliary rod welding	5LY.1411.0701	1
3	套 Set	11LY.04.232	1
4	压簧 Compression spring	8LY.282.021	1
5	扇形板 Sector plate	8LY.151.039	1
6	压杆焊接 Pressure rod welding	5LY.1411.0702	1
7	勾板 Hook plate	8LY.1411.0704	1

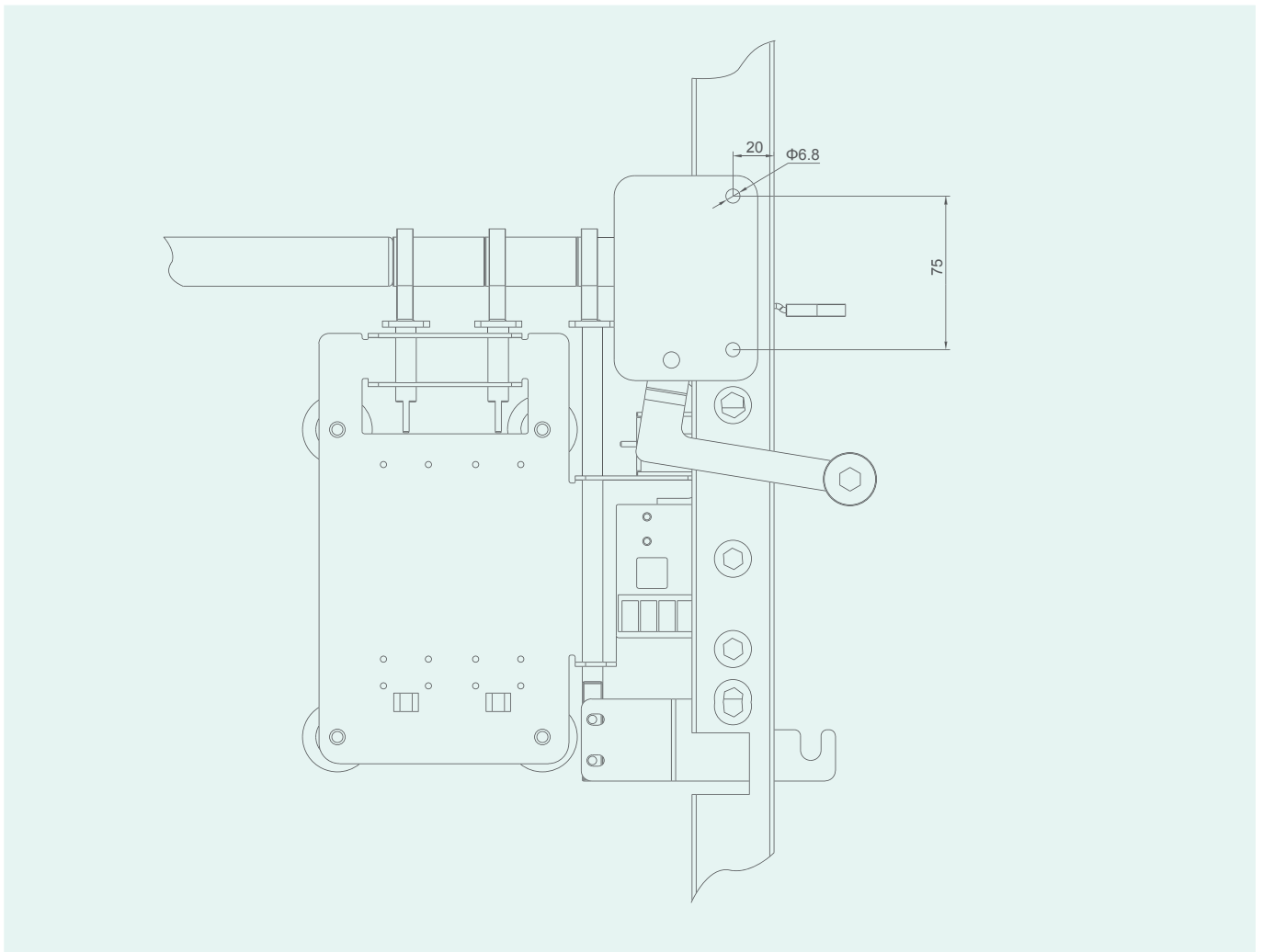
5LY.239.014 下门关门联锁装置 Lower door closing interlocking device



◎ 5LY.239.014 示意图 Schematic diagram

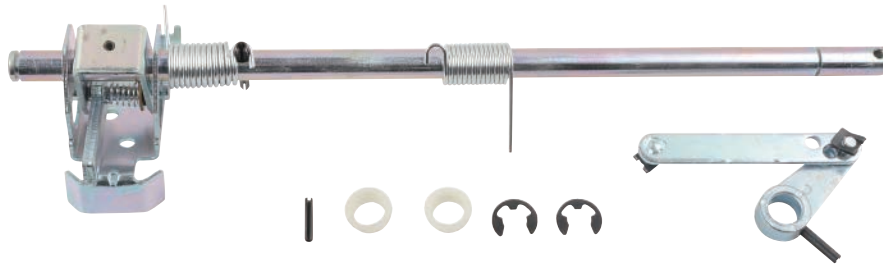
该机构经我公司改进后，必须关闭前下门，才能分合闸接地开关，从而保证人身安全。

After the mechanism is improved by our company, the front door must be closed to open and close the grounding switch to ensure personal safety.



5LY.363.011 导轨联锁装置 Rail interlocking device

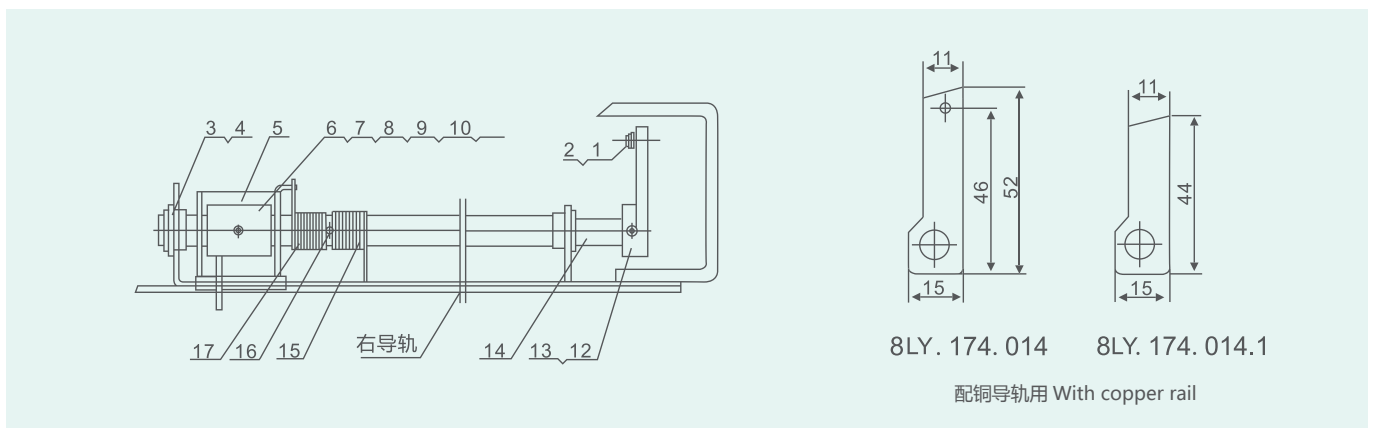
备注：连板尺寸如需加长请注明。Remarks: Please specify if the size of the connecting plate needs to be lengthened.



◎ 5LY.363.011 配套表 Matching table

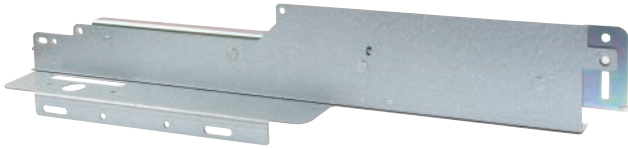
序号 Serial number	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	连板 Connecting plate	5LY.174.010	1
2	挡卡 Block card	DK-5	2
3	轴承 Bearing	8LY.263.010	3
4	开口挡圈 $\Phi 95$ Open retaining ring $\Phi 95$	GB896-86	3
5	弯板 Bending	8LY.161.056	1
6	弯板 Bending	8LY.161.057	1
7	销轴 Pin shaft	8LY.206.101	1
8	扭簧 Torsion spring	8LY.288.011	1
9	垫圈 $\Phi 8$ Washer $\Phi 8$	GB97.1-85	2
10	开口挡圈 $\Phi 6$ Open retaining ring $\Phi 6$	GB896-86	1
11	挡板 Baffle	8LY.174.014 8LY.174.014.1(选用 Choose)	1
12	拐臂焊接 Arm welding	5LY.156.010	1
13	弹性圆柱销 Elastic cylindrical pin 4×20	GB897-86	2
14	轴焊接 Shaft welding	5LY.200.010	1
15	扭簧 Torsion spring	8LY.288.013	1
16	弹性圆柱销 Elastic cylindrical pin 4×30	GB879-86	1
17	扭簧 Torsion spring	8LY.288.014	1

◎ 5LY.363.011 安装示意图 Installation diagram

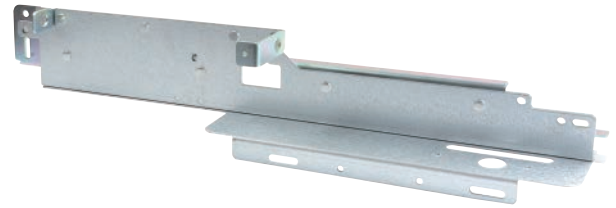


左右导轨装置系列 Left and right guide rail device series

专利号：ZL201930221722 3

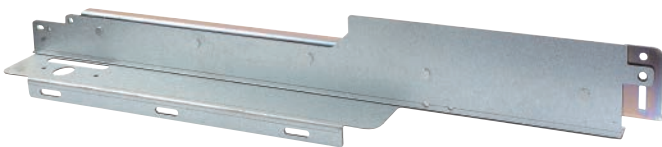
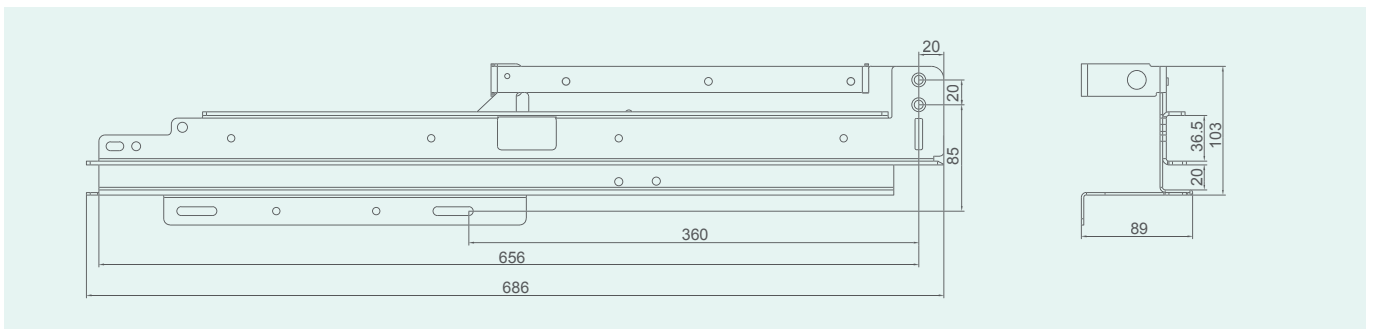


5LY.260.010 左导轨 Left rail



5LY.260.011 右导轨 Right rail

◎ 导轨 5LY.260.010/011(标装型) 外形及安装尺寸
Guide rail 5LY.260.010/011 (standard type) outline and installation dimensions

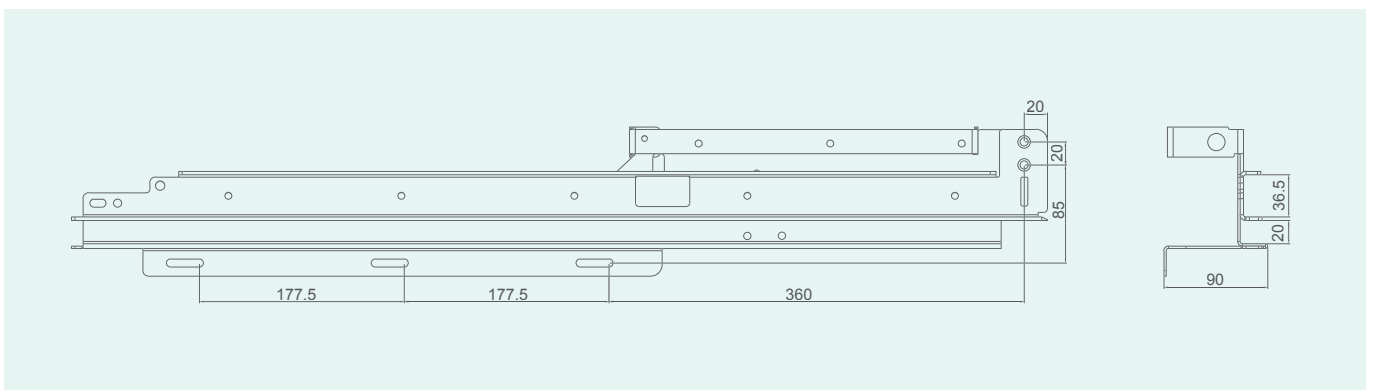


5LY.260.020 左导轨 (加长 160)
Left rail (Lengthen 160)



5LY.260.021 右导轨 (加长 160)
Right rail (Lengthen 160)

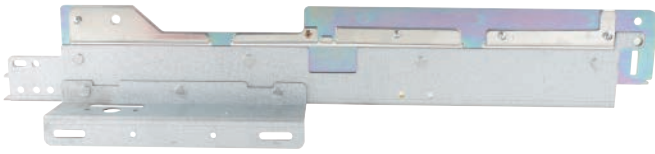
◎ 导轨 5LY.260.020/021 (加长型 : 加长 160、配 3AH、ZH12、ZN28、ZN65 等改装手车式断路器) -24KV
Guide rail 5LY.260.020/021 (lengthened type: lengthened 160, equipped with 3AH, ZH12, ZN28, ZN65 and other modified handcart type circuit breakers) -24KV



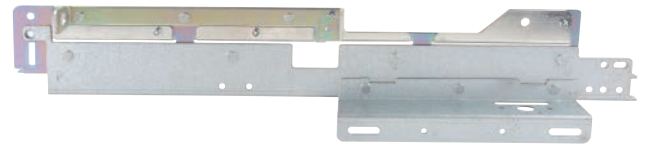
注：其他尺寸订货时请备注 Note: Please note when ordering other sizes

左右铜导轨装置系列 Left and right copper rail device series

标准型 Standard

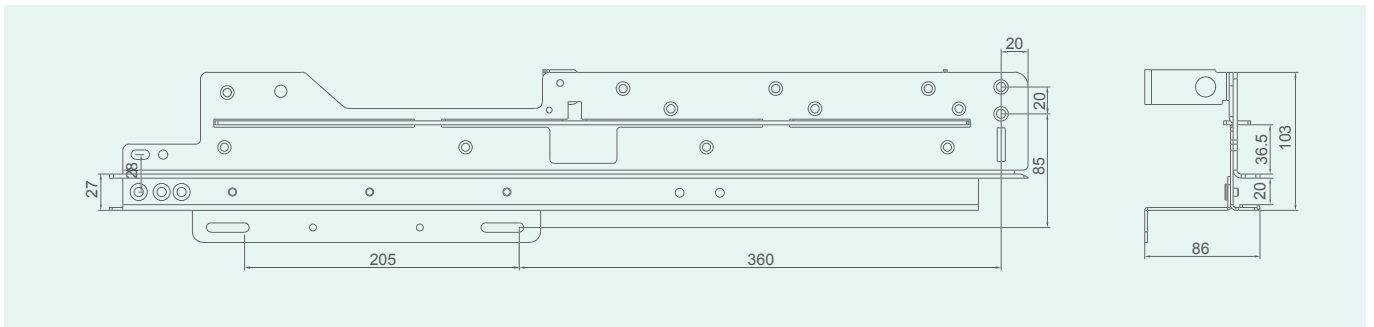


5LY.260.014 左铜导轨 Left copper rail



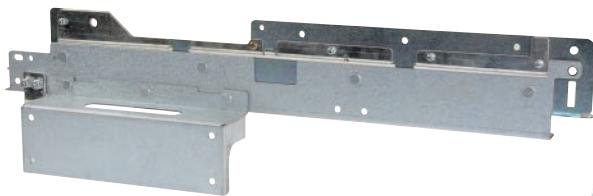
5LY.260.015 右铜导轨 Right copper rail

◎ 导轨 5LY.260.014/015 外形及安装尺寸 Guide rail 5LY.260.014/015 shape and installation dimensions



左右铜导轨装置系列 Left and right copper rail device series

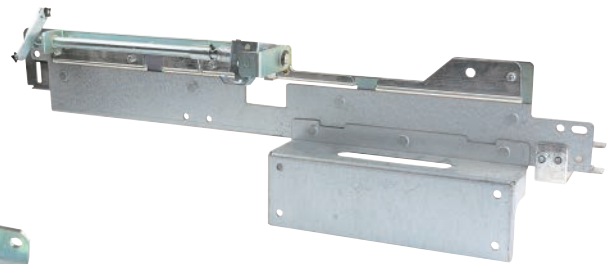
配套二代柜 Matching second generation cabinet



5LY.260.026 左铜导轨 (4点安装)
Left copper rail(4 point installation)

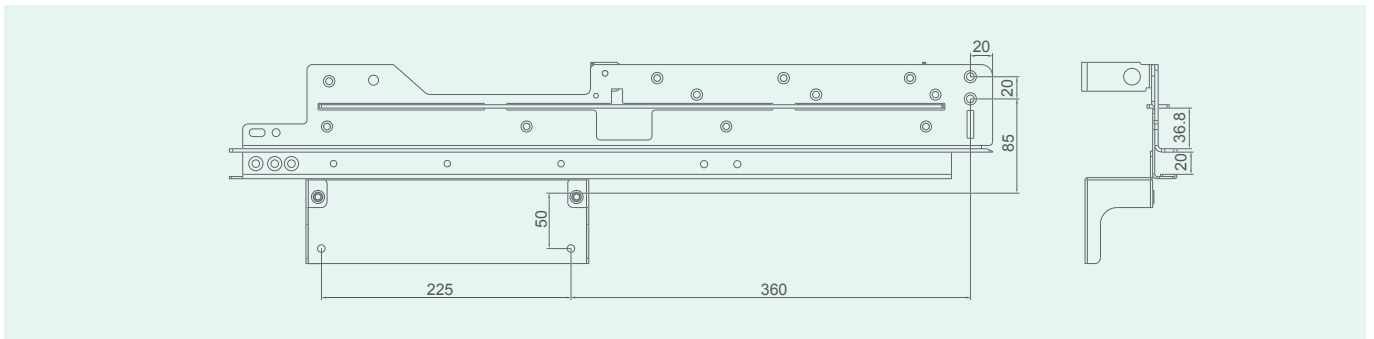


左右安装支架 (选用)
Left and right mounting bracket (optional)



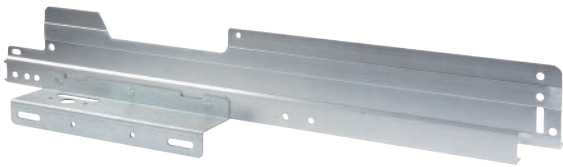
5LY.260.027 右铜导轨 (4点安装)
Right copper rail(4 point installation)

◎ 导轨 5LY.260.026/027 外形及安装尺寸 Guide rail 5LY.260.026/027 shape and installation dimensions



铝型材左右导轨装置 Aluminum profile left and right guide rail device

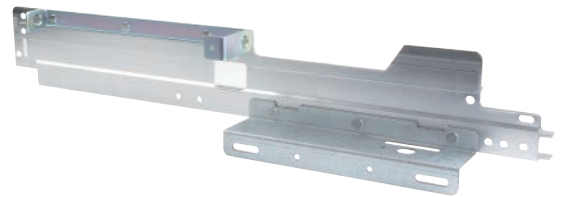
标准型 Standard



5LY.260.012 左铝导轨 Left aluminum rail

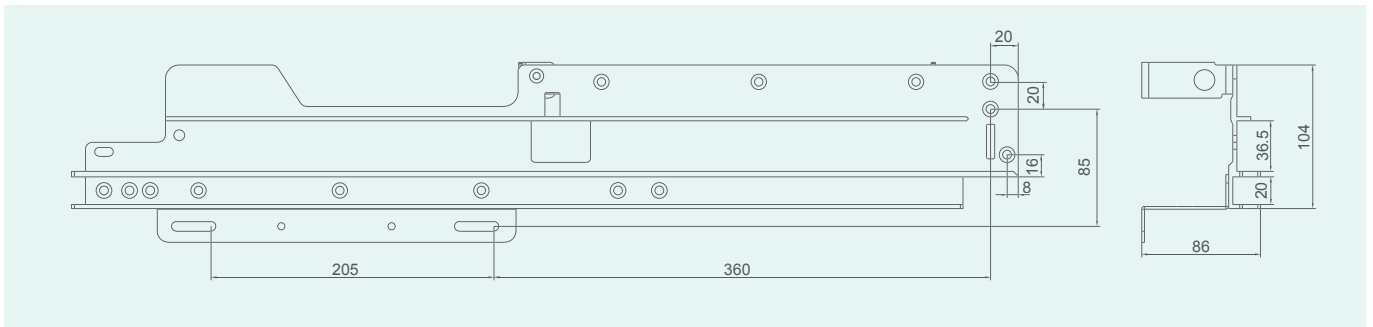


导轨接地排 (选用)
Rail grounding bar(optional)



5LY.260.013 右铝导轨 Right aluminum rail

- 铝型材左导轨 5LY.260.012/013(标装型) 外形及安装尺寸
Aluminum profile left guide rail 5LY.260.012/013(Standard type) shape and installation rule



铝型材左右导轨装置 Aluminum profile left and right guide rail device

配套二代柜 Matching second generation cabinet



5LY.260.024 左导轨 (4 点安装)
Left rail(4 point installation)

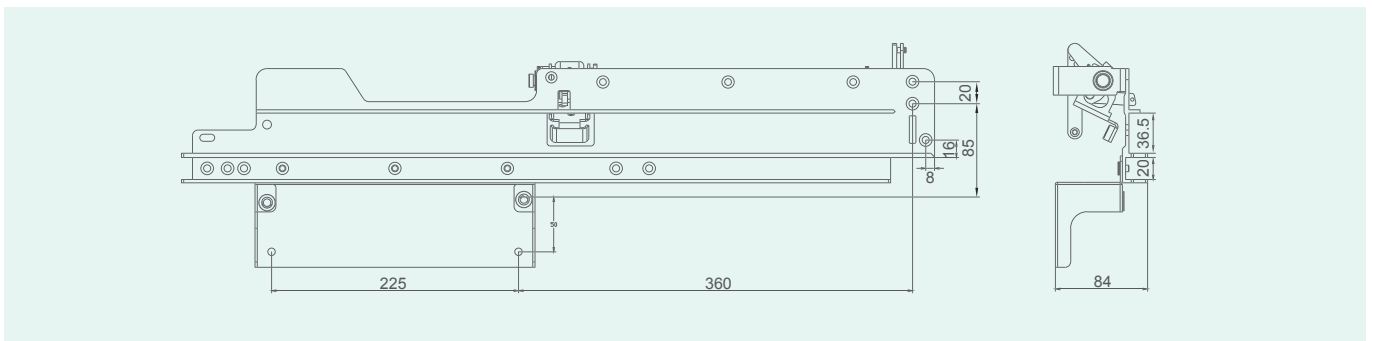


左右安装支架 (选用)
Left and right mounting bracket (optional)



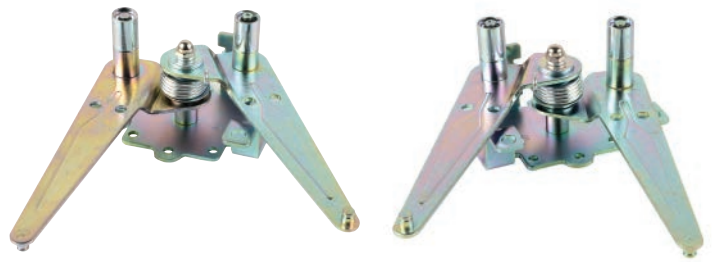
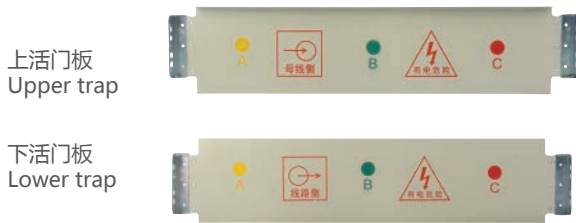
5LY.260.025 右导轨 (4 点安装)
Right rail(4 point installation)

- 铝型材左导轨 5LY.260.024/025(二代柜) 外形及安装尺寸
Shape and installation dimensions of aluminum profile left guide rail 5LY.260.024/025 (second generation cabinet)



5LY.320.010 活门联锁机构 Valve interlocking mechanism

800mm 宽中置式开关柜 800mm wide central switch cabinet



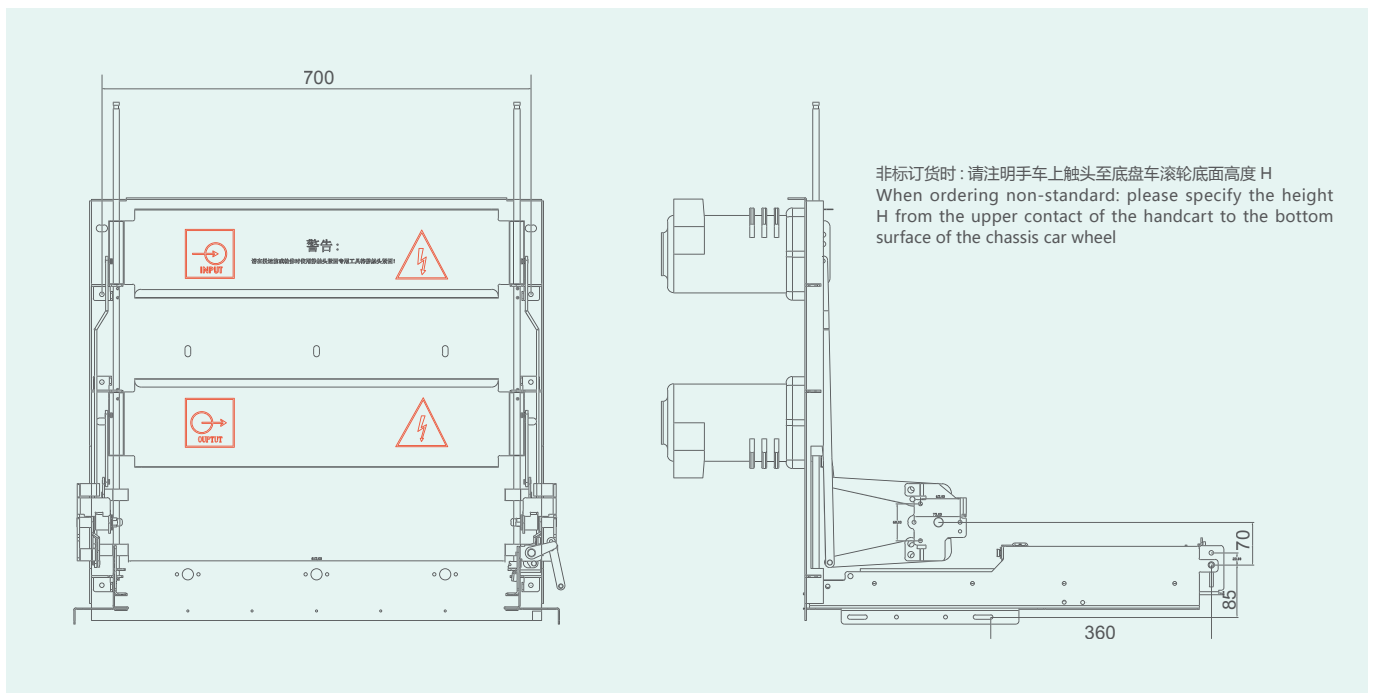
注：绝缘活门板选配 Note: optional insulation trap

一代柜、导杆式方案、活门板可提供硫化处理方案

安装配套表 Installation matching table

序号 No.	名称 Name	代号 Codename	数量 Quantity
1	右侧连板 Right connecting plate	8LY.235.011	1
2	左侧连板 Left connecting plate	5LY.235.010	1
3	连板焊装 Connecting plate welding	5LY.174.015.1	2
		5LY.174.015.2	
		5LY.174.015.3	
		5LY.174.015.4	
4	下活门 Lower trap	8LY.320.010(800mm) 8LY.320.010.1(650mm) 8LY.320.010.2(840mm) 8LY.320.010.3(900mm) 8LY.320.010.4(1000mm)	1
5	挡卡 Block card	DK-8	8

序号 No.	名称 Name	代号 Codename	数量 Quantity
6	支架板 Bracket plate	8LY.123.013	3
7	连板焊接 Joint plate welding	5LY.174.016.1	2
		5LY.174.016.2	
		5LY.174.016.3	
8	支架板 Bracket plate	8LY.123.012	3
9	上活门 Upper trap	8LY.320.011(800mm) 8LY.320.011.1(650mm) 8LY.320.011.2(840mm) 8LY.320.011.3(900mm) 8LY.320.011.4(1000mm)	1
10	导杆 Guide rod	8LY.234.011 8LY.234.011.1	2
11	限位套 Limit sleeve	8LY.210.011	2

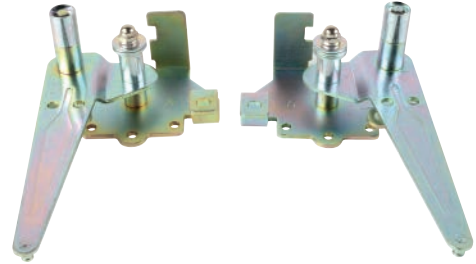


5LY.320.012 活门联锁机构 (中 PT) Valve interlocking mechanism (Middle PT)

800mm 宽中置式开关柜 800mm wide central switch cabinet



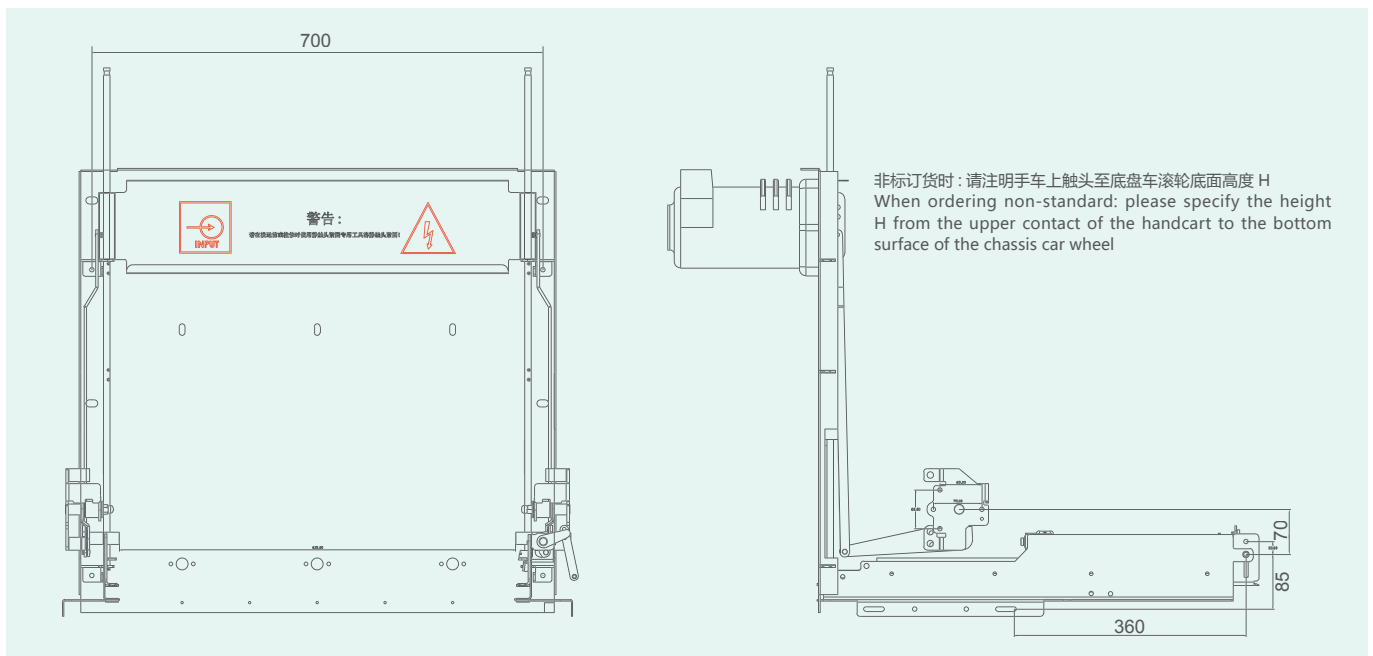
活门板 (上) Traps (top)



注：本套机构活门板向上移动
 Note: The trap door of this set of mechanism moves upward

配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 Quantity
1	下连板装配 (右) Lower connecting plate assembly (right)	5LY.174.004	1
2	支架板 Bracket plate	8LY.123.012	2
3	下连板装配 (左) Lower connecting plate assembly (left)	5LY.174.003	1
4	档卡 File card	DK-8	4
5	连板焊接 Joint plate welding	5LY.174.015.1 同 VD4.40KV	2
		5LY.174.015.2 同 VD4.31.5KV	
		5LY.174.01 5.3 同 VS1	
6	支架板 Bracket plate	8LY.123.013	2
7	导杆 Guide rod	8LY.234.011	2
8	上活门 Upper trap	8LY.320.011 配 800mm 柜	1
		8LY.320.011.5 配 1000mm 柜	
9	限位套 Limit sleeve	8LY.210.011	2



5LY.320.013 活门联锁机构 (下 PT) Valve interlocking mechanism(Under PT)

800mm 宽中置式开关柜 800mm wide central switch cabinet



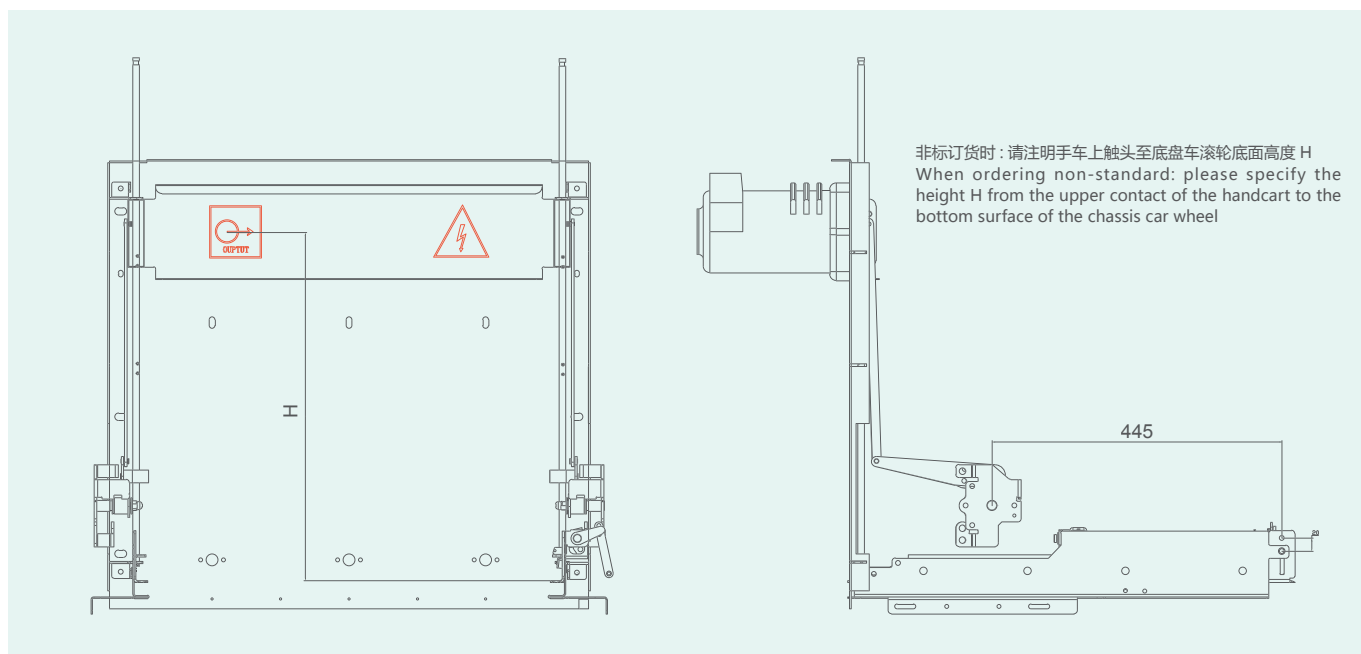
活门板 (下) Traps (Under)



注：本套机构活门板向下移动
Note: The trap door of this set of mechanism moves down

◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 Quantity
1	上连板装配 (右) Upper connecting plate assembly (right)	5LY.174.005	1
2	支架板 Bracket plate	8LY.123.012	2
3	上连板装配 (左) Upper connecting plate assembly (left)	5LY.174.006	1
4	档卡 File card	DK-8	4
5	连板焊接 Joint plate welding	5LY.174.015.1 同 VD4.40KV	2
		5LY.174.015.2 同 VD4.31.5KV	
		5LY.174.01 5.3 同 VS1	
6	支架板 Bracket plate	8LY.123.013	2
7	导杆 Guide rod	8LY.234.011	2
8	上活门 Upper trap	8LY.320.011 配 800mm 柜	1
		8LY.320.011.5 配 1000mm 柜	
9	限位套 Limit sleeve	8LY.210.011	2



5LY.320.010/ZS1 活门联锁机构 Valve interlocking mechanism

带自锁功能 With self-locking function



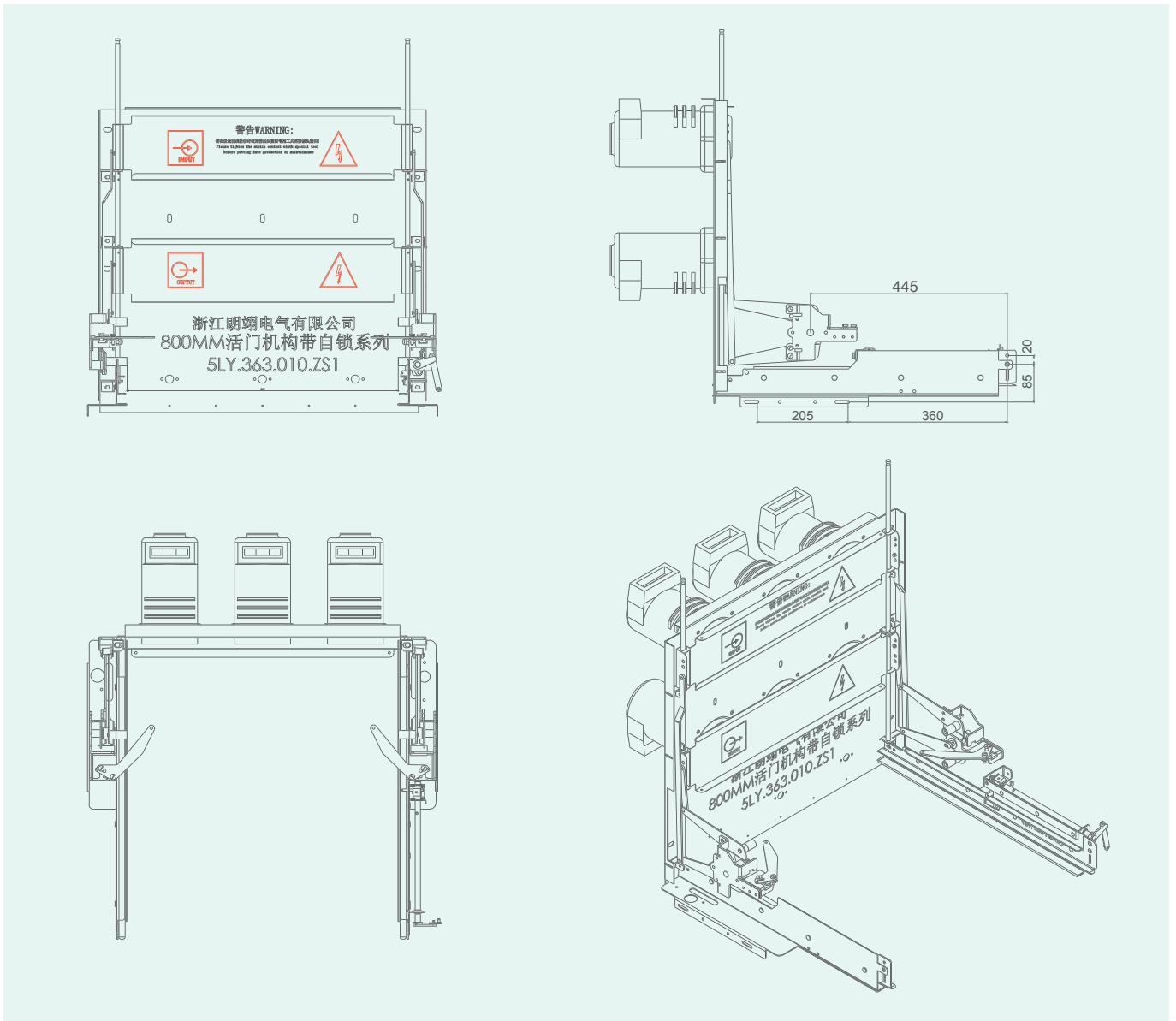
上活门板 Upper trap



下活门板 Lower trap



安装示意图 Installation diagram



◎ 说明 Description

为更好的保护检修人员，本公司对原 KYN28A-12 中置柜活门机构进行了优化，增加了自锁功能。当手车被抽出柜体后，检修人员在检修时，可以将活门板锁住，挡住触头盒和静触头，避免了误操作带来的触电伤害。

本机构是在 KYN28A-12 中置柜 800mm 活门机构的基础上增加了自锁功能。工作过程：当手车抽出柜体后，1 在拉簧的作用下绕 4 逆时针旋转，驱动 3 向右滑动，挡住 7，使 7 不能旋转。推进手车后，1 在手车推板的作用下，绕 4 顺时针旋转，驱动 3 向左滑动，将 7 解锁，此时 7 可以正常工作。

In order to better protect the maintenance personnel, the company optimized the original KYN28A-12 center cabinet valve mechanism and added a self-locking function. When the handcart is pulled out of the cabinet, the maintenance personnel can lock the trap door to block the contact box and the static contact during maintenance, avoiding electric shock damage caused by misoperation.

This mechanism adds a self-locking function on the basis of the KYN28A-12 center cabinet 800mm valve mechanism. Working process: when the handcart is pulled out of the cabinet. 1 rotates counterclockwise around 4 under the action of the tension spring, and drives 3 to slide to the right, blocking 7 and preventing 7 from rotating. After pushing the handcart, 1 rotates clockwise around 4 under the action of the push plate of the handcart, and drives 3 to slide to the left to unlock 7 and 7 can work normally.

◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 Quantity
1	下连板装配 (右) Lower connecting plate assembly (right)	5LY.135.005	1
2	右支架板 Right bracket plate	8LY.123.012	2
3	下连板装配 (左) Lower connecting plate assembly (left)	5LY.135.004	1
4	档卡 File card	DK-8	4
5	连板焊接 Joint plate welding	5LY.174.015.1 同 VD4.40KV	2
		5LY.174.015.2 同 VD4.31.5KV	
		5LY.174.01 5.3 同 VS1	
6	左支架板 Left bracket plate	8LY.123.013	2
7	导杆 Guide rod	8LY.234.011	2
8	上活门 Upper trap	8LY.320.011 配 800mm 柜	1
		8LY.320.011.5 配 1000mm 柜	
9	限位套 Limit sleeve	8LY.210.011	2
10	曲板 Curved board	8LY.009.021	1
11	左弯板 Left bending	8LY.009.023	1
12	右弯板 Right bending	8LY.009.022	1
13	滑板 Skateboard	8LY.009.020	1
14	左侧连板装配 Left side connecting plate assembly	5LY.235.010(ZS1)	1
15	右侧连板装配 Right side connecting plate assembly	5LY.235.011(ZS1)	1
16	一字螺栓 (短) Slotted bolt (short)	8LY.009.025	2
17	一字螺栓 (长) Slotted bolt (long)	8LY.009.026	2
18	拉簧 (右) Tension spring (right)	8LY.288.066.2	1
19	拉簧 (左) Tension spring (left)	8LY.288.066.1	1

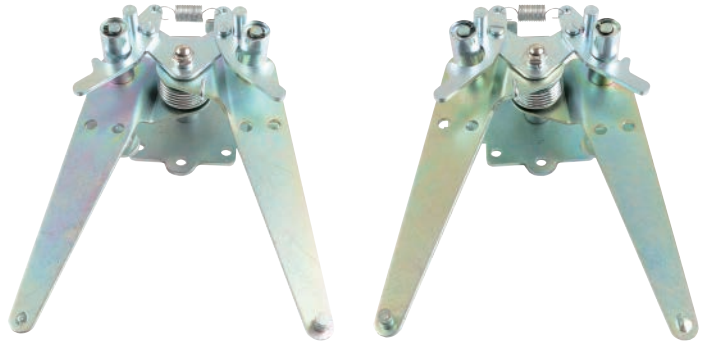
5LY.320.010/ZS2 活门联锁机构 Valve interlocking mechanism



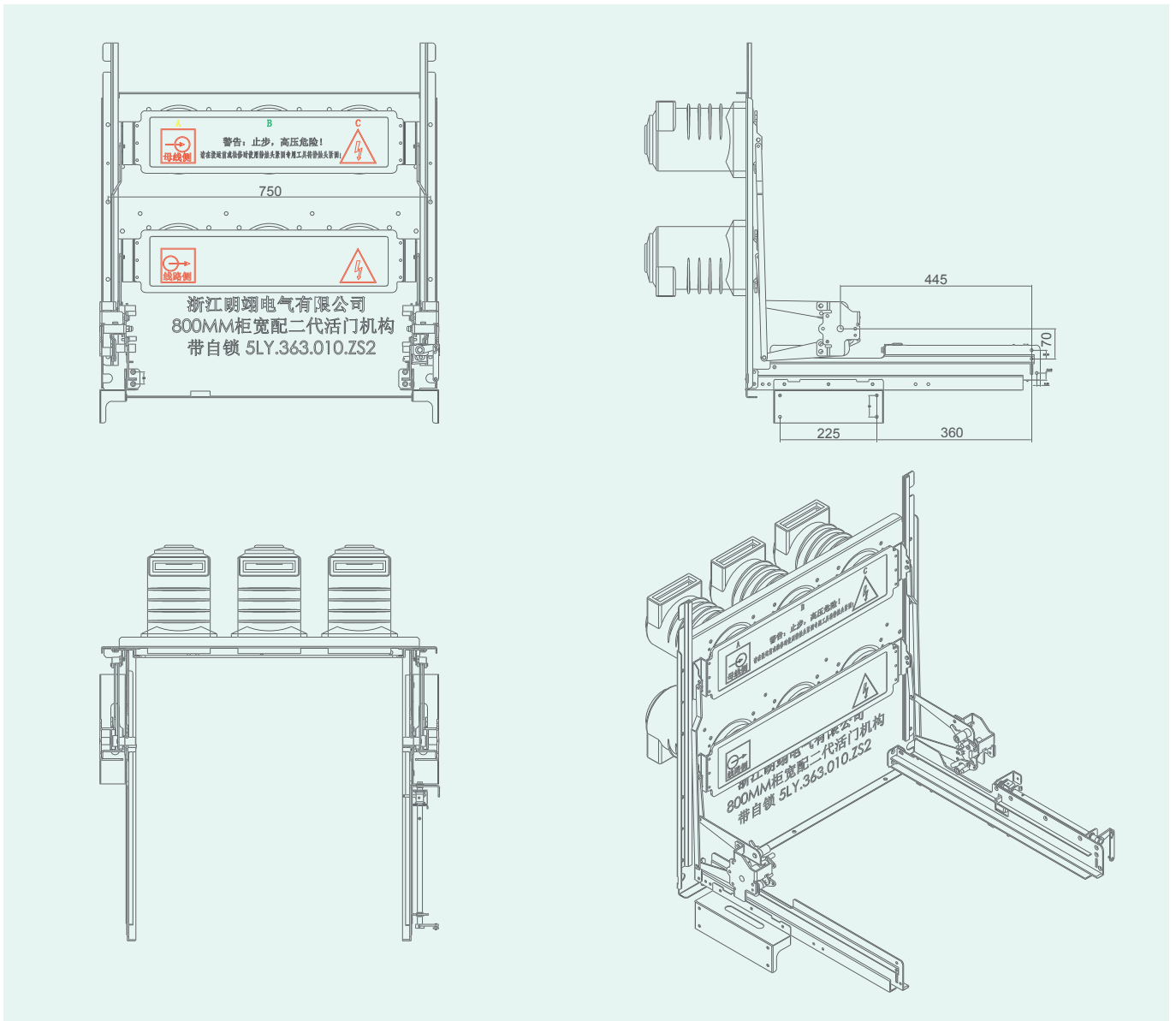
上活门板 Upper trap



下活门板 Lower trap



安装示意图 Installation diagram



◎ 说明 Description

为更好的保护检修人员，本公司对原 KYN28A-12 中置柜活门机构进行了优化，增加了自锁功能。当手车被抽出柜体后，检修人员在检修时，可以将活门板锁住，挡住触头盒和静触头，避免了误操作带来的触电伤害。

本机构是在 KYN28A-12 中置柜 800mm 活门机构的基础上增加了自锁功能。

In order to better protect the maintenance personnel, the company optimized the original KYN28A-12 center cabinet valve mechanism and added a self-locking function. When the handcart is pulled out of the cabinet, the maintenance personnel can lock the trap door to block the contact box and the static contact during maintenance, avoiding electric shock damage caused by misoperation.

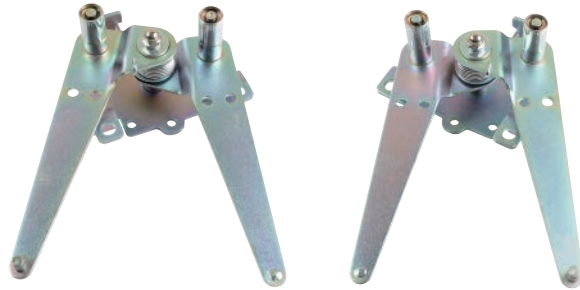
This mechanism adds a self-locking function on the basis of the KYN28A-12 center cabinet 800mm valve mechanism.

◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 Quantity
1	侧连板装配 (右) Side connecting plate assembly (right)	5LY.320.010 (ZS2)	1
2	右支架板 Right bracket plate	8LY.123.012	2
3	侧下连板装配 (左) Side connecting plate assembly (left)	5LY.320.011 (ZS2)	1
4	档卡 File card	DK-8	4
5	连板焊接 Joint plate welding	5LY.174.015.1 同 VD4.40KV	2
		5LY.174.015.2 同 VD4.31.5KV	
		5LY.174.01 5.3 同 VS1	
6	左支架板 Left bracket plate	8LY.123.013	2
7	导杆 Guide rod	8LY.234.011	2
8	上活门 Upper trap	8LY.320.011 配 800mm 柜	1
		8LY.320.011.5 配 1000mm 柜	
9	限位套 Limit sleeve	8LY.210.011	2
10	限位板 (左) Limit plate (left)	8LY.016.004	2
11	限位板 (右) Limit plate (right)	8LY.016.004.1	2
12	右三角支撑板 Right triangle support plate	8LY.016.007	1
13	左三角支撑板 Left triangle support plate	8LY.016.008	1
14	M6 防松螺母 M6 lock nut	GB5783-86	2
15	螺钉 Screw	6×20	2
16	拉簧 Tension spring	8LY.288.067.1	1

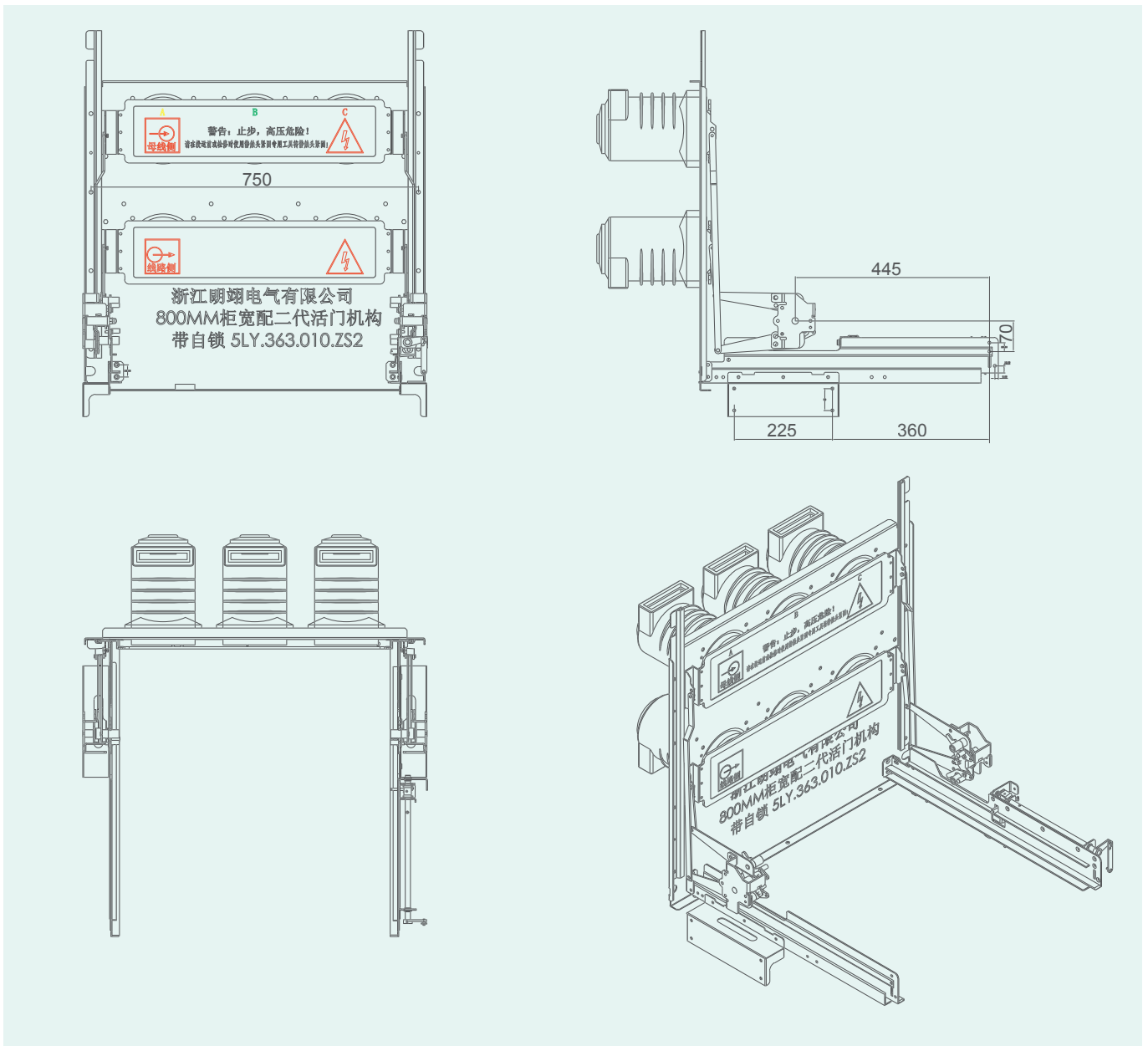
5LY.320.010.1 活门联锁机构 (二代柜) Valve interlocking mechanism

800mm 宽中置式开关柜 800mm wide central switch cabinet



二代柜、导轨式方案、活门板可提供硫化处理方案

◎ 安装示意图 Installation diagram



◎ 说明 Description

本公司对原 KYN28A-12 中置柜活门机构进行了优化，上下活门板固定在左右铝导槽内，上下自由滑动，更加灵活不卡阻。

The company has optimized the original KYN28A-12 center cabinet valve mechanism. The upper and lower valve plates are fixed in the left and right aluminum guide grooves, which can slide up and down freely, making it more flexible and not jammed.

◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	铝导槽 (左) Aluminum guide trough (left)	5LY.1411.0904	1
2	铝导槽 (右) Aluminum guide trough (right)	5LY.1411.0903	1
3	上活门板装配 Upper trap assembly	5LY.1411.0901	1
4	焊接 Welding	5LY.174.015.1-3	2
5	下活门板装配 Lower trap assembly	5LY.1411.0902	1
6	焊装 Welding	5LY.174.016.1-3	2
7	左固定板焊接 Left fixed plate welding	5LY.160.001	1
8	右固定板焊接 Right fixed plate welding	5LY.160.002	1
9	上连板焊接左 Upper connecting plate welding left	5LY.135.003	1
10	左扭簧 Left torsion spring	8LY.288.017	1
11	下连板焊接左 Lower connecting plate welding left	5LY.135.004	1
12	轴套 Shaft sleeve L=25	8LY.206.016	1
13	上连板焊接右 Upper connecting plate welding right	5LY.135.006	1
14	下连板焊接右 Lower connecting plate welding right	5LY.135.005	1

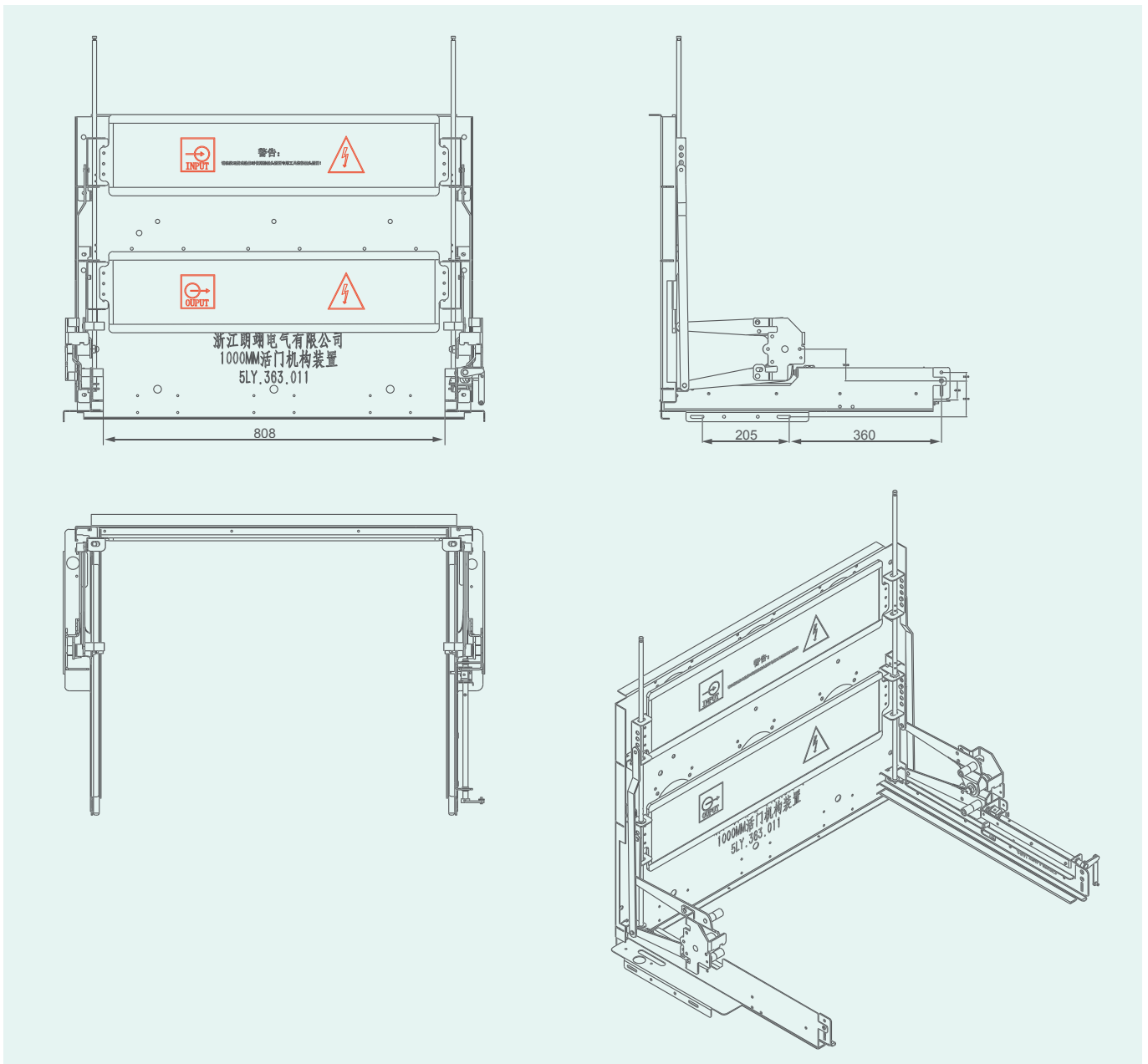
5LY.320.011 活门联锁机构 Valve interlocking mechanism

1000mm 宽中置式开关柜 1000mm wide central switch cabinet



一代柜、导杆式方案、活门板可提供硫化处理方案

◎ 安装示意图 Installation diagram



◎ 配套表 Matching table

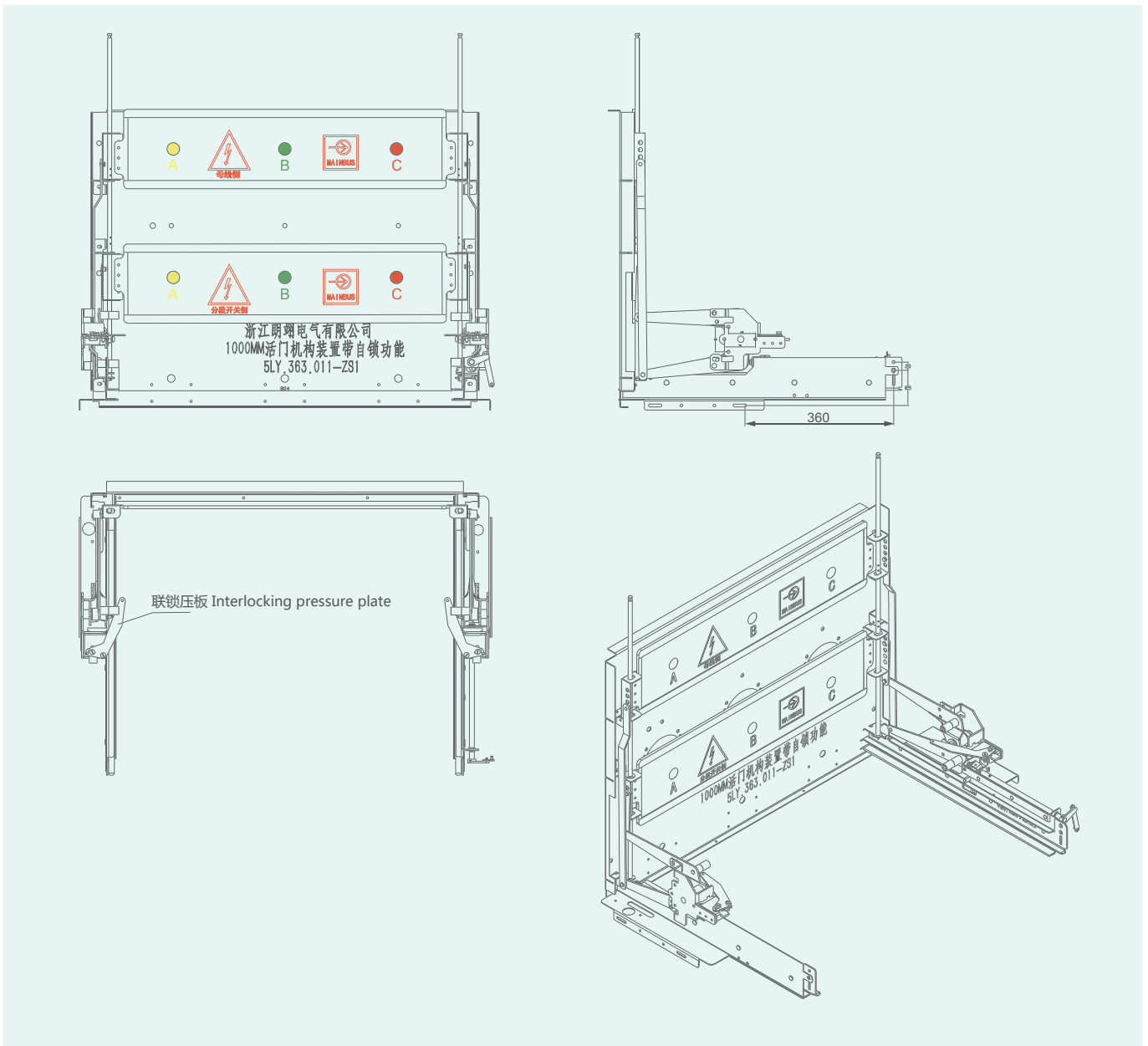
序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	上活门板装配 Upper trap assembly	5LY.050.003	1
2	连板焊接 L=140mm Welding	5LY.174.281	2
3	下活门板装配 Lower trap assembly	5LY.050.004	1
4	连板焊接 L=535mm Welding	5LY.174.282	2
5	左固定板焊接 Left fixed plate welding	5LY.160.003	1
6	右固定板焊接 Right fixed plate welding	5LY.160.004	1
7	上连板焊接左 Upper connecting plate welding left	5LY.135.008	1
8	左扭簧 Left torsion spring	8LY.288.012	1
9	下连板焊接左 Lower connecting plate welding left	5LY.135.012	1
10	轴套 Shaft sleeve L=25	8LY.206.016	1
11	上连板焊接右 Upper connecting plate welding right	5LY.135.009	1
12	下连板焊接右 Lower connecting plate welding right	5LY.135.010	1
13	左支架板 Left bracket plate	8LY.123.278	3
14	右支架板 Right bracket plate	8LY.123.277	3

5LY.320.011/ZS1 活门联锁机构 Valve interlocking mechanism

1000mm 宽中置式开关柜 1000mm wide central switch cabinet



安装示意图 Installation diagram



◎ 说明 Description

为更好的保护检修人员，本公司对原 KYN28A-12 中置柜活门机构进行了优化，增加了自锁功能。当手车被抽出柜体后，检修人员在检修时，可以将活门板锁住，挡住触头盒和静触头，避免了误操作带来的触电伤害。

本机构是在 KYN28A-12 中置柜 1000mm 活门机构的基础上增加了自锁功能。工作过程：当手车抽出柜体后，1 在拉簧的作用下绕 4 逆时针旋转，驱动 3 向右滑动，挡住 7，使 7 不能旋转。推入手车后，1 在手车推板的作用下，绕 4 顺时针旋转，驱动 3 向左滑动，将 7 解锁，此时 7 可以正常工作。

In order to better protect the maintenance personnel, the company optimized the original KYN28A-12 center cabinet valve mechanism and added a self-locking function. When the handcart is pulled out of the cabinet, the maintenance personnel can lock the trap door to block the contact box and the static contact during maintenance, avoiding electric shock damage caused by misoperation.

This mechanism adds a self-locking function on the basis of KYN28A-12 center cabinet 1000mm valve mechanism. Working process: when the handcart is pulled out of the cabinet. 1 rotates counterclockwise around 4 under the action of the tension spring, and drives 3 to slide to the right, blocking 7 and preventing 7 from rotating. After pushing the handcart, 1 rotates clockwise around 4 under the action of the push plate of the handcart, and drives 3 to slide to the left to unlock 7 and 7 can work normally.

◎ 配套表 Matching table

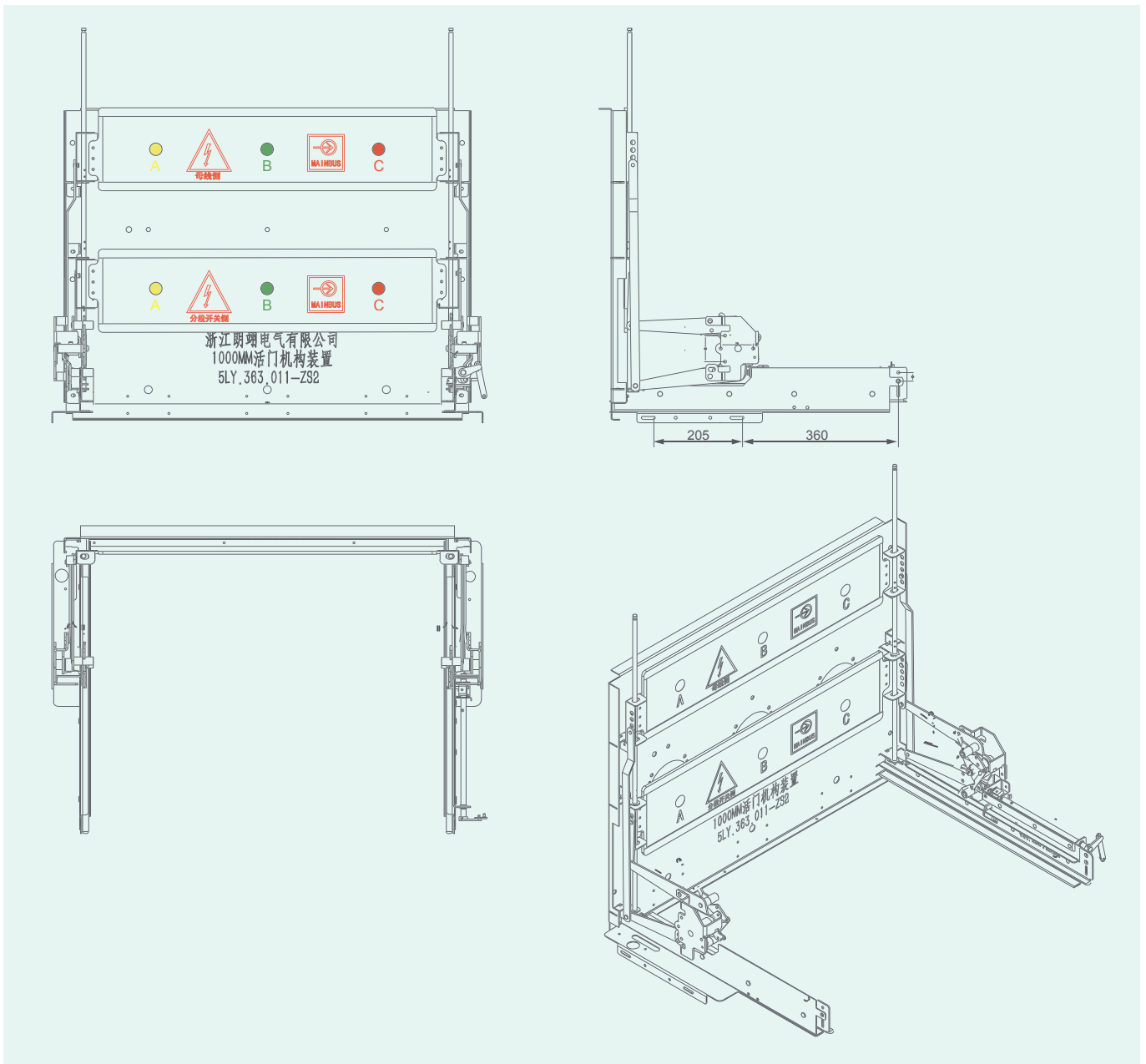
序号 No.	名称 Name	代号 Codename	数量 只/套 Quantity only/set	备注 Remarks
1	上活门板装配 Upper trap assembly	5LY.050.003	1	
2	连板焊接 L=140mm Welding	5LY.174.281	2	
3	下活门板装配 Lower trap assembly	5LY.050.004	1	
4	连板焊接 L=535mm Welding	5LY.174.282	2	
5	左扭簧 Left torsion spring	8LY.288.012	1	
6	轴套 Shaft sleeve L=25	8LY.206.016	1	
7	左支架板 Left bracket plate	8LY.123.278	3	
8	右支架板 Right bracket plate	8LY.123.277	3	
9	曲板 Curved board	8LY.009.021	1	
10	左弯板 Left bending	8LY.009.022	1	
11	右弯板 Right bending	8LY.009.023	1	
12	滑板 Skateboard	11LY.009.021	1	
13	销 Pin	8LY.993.051.1	1	
14	M6*25 内六角 Inner hexagon	GB5783-86	1	
15	组合螺丝 Combination screw	M6*12	3	
16	Φ6 平垫 Flat pad	GB97.1-85	3	
17	拉簧 Tension spring	8LY.288.066.1	1	左右对称 bilateral symmetry
18	左侧连板装配 Left side connecting plate 100mm	5LY.235.012-ZS1	1	
19	右侧连板装配 Right side connecting plate 100mm	5LY.235.013-ZS1	1	
20	左弯板焊接 Left bending plate welding	5LY.160.003-ZS1	1	
21	右弯板焊接 Right night bending plate welding	5LY.160.004-ZS1	1	

5LY.320.011/ZS2 活门联锁机构 Valve interlocking mechanism

1000mm 宽中置式开关柜 1000mm wide central switch cabinet



安装示意图 Installation diagram



◎ 说明 Description

为更好的保护检修人员，本公司对原 KYN28A-12 中置柜活门机构进行了优化，增加了自锁功能。当手车被抽出柜体后，检修人员在检修时，可以将活门板锁住，挡住触头盒和静触头，避免了误操作带来的触电伤害。

本机构是在 KYN28A-12 中置柜 1000mm 活门机构的基础上增加了自锁功能。

In order to better protect the maintenance personnel, the company optimized the original KYN28A-12 center cabinet valve mechanism and added a self-locking function. When the handcart is pulled out of the cabinet, the maintenance personnel can lock the trap door to block the contact box and the static contact during maintenance, avoiding electric shock damage caused by misoperation.

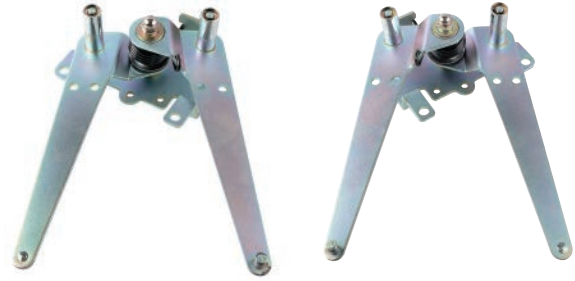
This mechanism adds a self-locking function on the basis of KYN28A-12 center cabinet 1000mm valve mechanism.

◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	上活门板装配 Upper trap assembly	5LY.050.003	1
2	连板焊接 L=140mm Welding	5LY.174.281	2
3	下活门板装配 Lower trap assembly	5LY.050.004	1
4	连板焊接 L=535mm Welding	5LY.174.282	2
5	上连板焊接左 Upper connecting plate welding left	5LY.135.008	1
6	左扭簧 Left torsion spring	8LY.288.012	1
7	下连板焊接左 Lower connecting plate welding left	5LY.135.012	1
8	轴套 Shaft sleeve L=25	8LY.206.016	1
9	上连板焊接右 Upper connecting plate welding right	5LY.135.009	1
10	下连板焊接右 Lower connecting plate welding right	5LY.135.010	1
11	左支架板 Left bracket plate	8LY.123.278	3
12	右支架板 Right bracket plate	8LY.123.277	3
13	限位板 (左) Limit plate (left)	8LY.016.234.1	2
14	限位板 (右) Limit plate (right)	8LY.016.234	2
15	三角支撑板 Triangle support plate	8LY.016.223	2
16	M6 防松螺母 Locknut	GB5783-86	2
17	螺钉 Screw	6×20	2
18	侧连板装配 Side connecting plate assembly	1000mm	1
19	拉簧 Tension spring	8LY.288.067.1	1
20	左侧连板装配 Left side connecting plate	5LY.235.012.ZS2	1
21	右侧连板装配 Right side connecting plate	5LY.235.013.ZS2	1

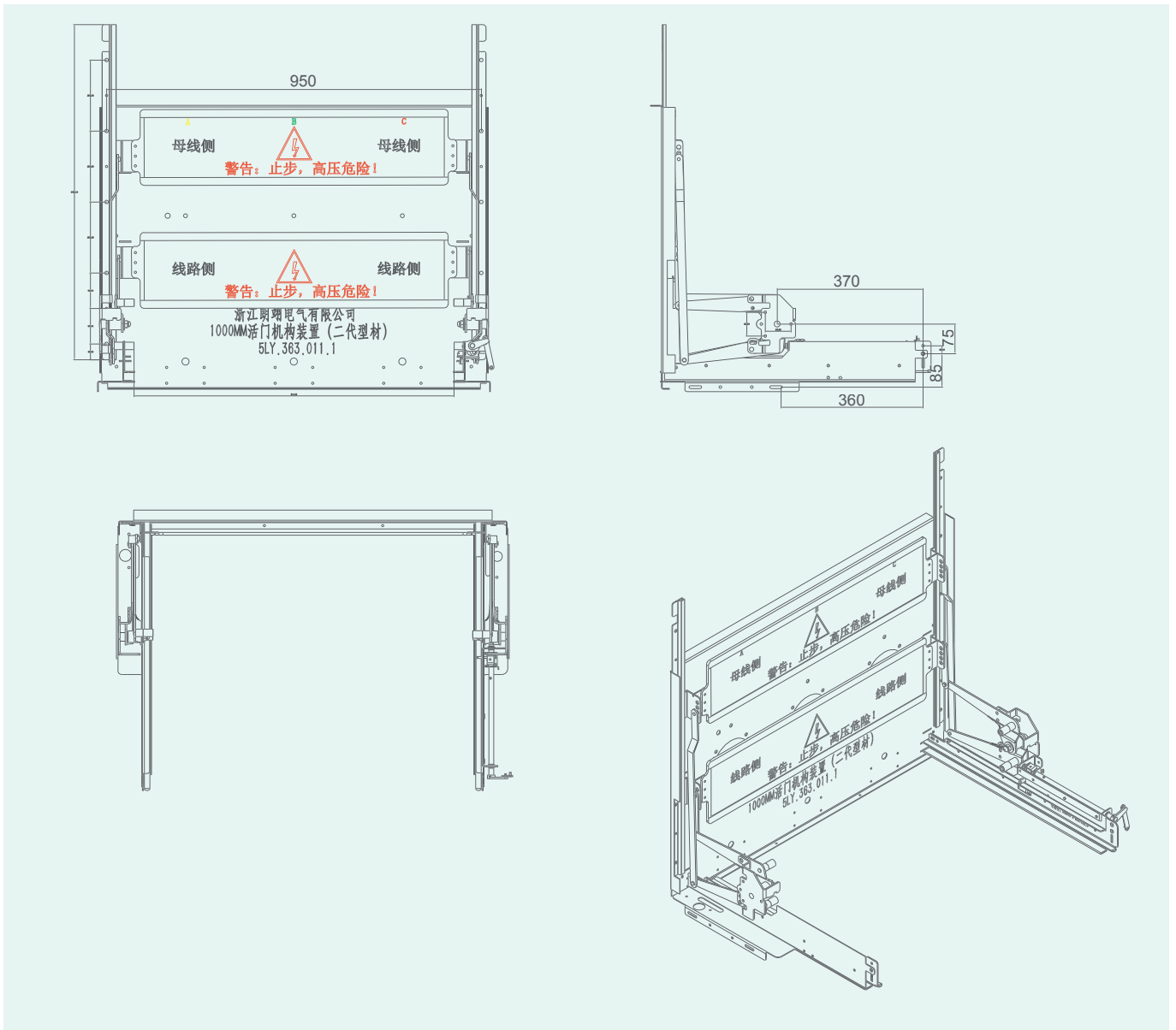
5LY.320.011.1 活门联锁机构 (二代柜) Valve interlocking mechanism

1000mm 宽中置式开关柜 1000mm wide central switch cabinet



二代柜、导轨式方案、活门板可提供硫化处理方案

◎ 安装示意图 Installation diagram

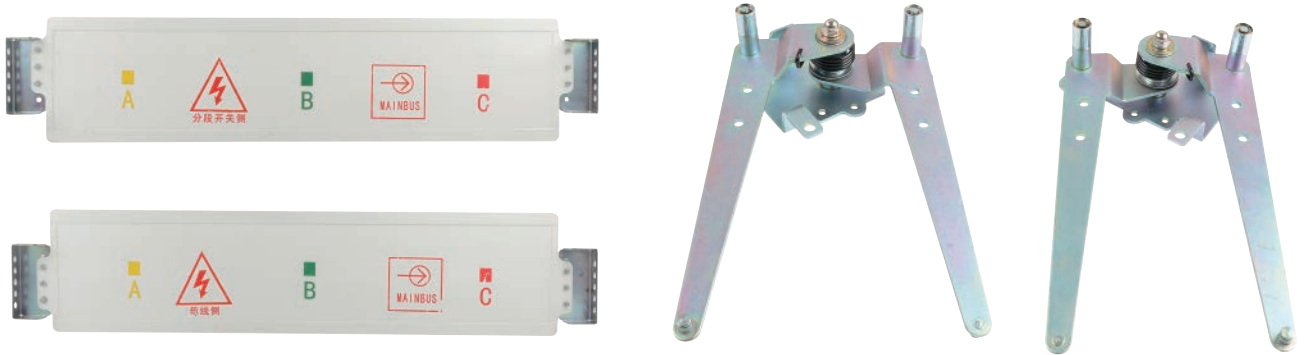


◎ 配套表 Matching table

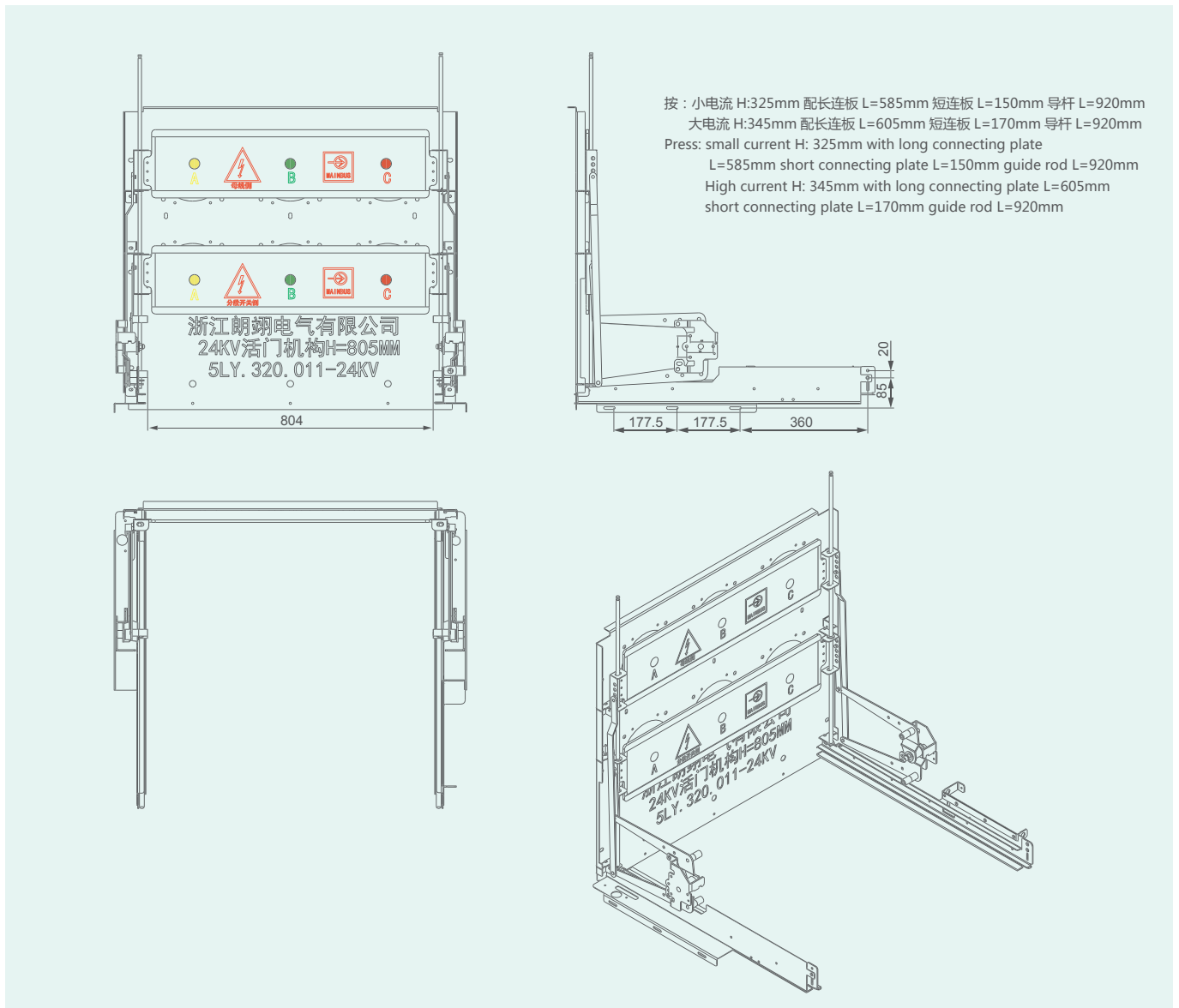
序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	连板焊接 L=140mm Welding	5LY.174.281	2
2	连板焊接 L=535mm Welding	5LY.174.282	2
3	左固定板焊接 Left fixed plate welding	5LY.160.003	1
4	右固定板焊接 Right fixed plate welding	5LY.160.004	1
5	上连板焊接左 Upper connecting plate welding left	5LY.135.008	1
6	左扭簧 Left torsion spring	8LY.288.012	1
7	下连板焊接左 Lower connecting plate welding left	5LY.135.012	1
8	轴套 Shaft sleeve L=25	8LY.206.016	1
9	上连板焊接右 Upper connecting plate welding right	5LY.135.009	1
10	下连板焊接右 Lower connecting plate welding right	5LY.135.010	1
11	右侧连扳 Right side	5LY.235.012	1
12	左侧连扳 Left continuous pull	5LY.235.013	1
13	连扳焊接 Continuous welding L=140	5LY.174.281	2
14	连扳焊接 Continuous welding L=535	5LY.174.282	2
15	右铝导槽 Right aluminum guide trough	8LY.1411.0905	1
16	左铝导槽 Left aluminum guide groove	8LY.1411.0906	1
17	上活门板 Upper trap	8LY.050.003.1	1
18	下活门板 Lower trap	8LY.050.004.1	1
19	挡卡 8 Block 8	DK-8	8

5LY.320.011-24KV 活门联锁机构 Valve interlocking mechanism

1000mm 宽中置式开关柜 1000mm wide central switch cabinet



安装示意图 Installation diagram



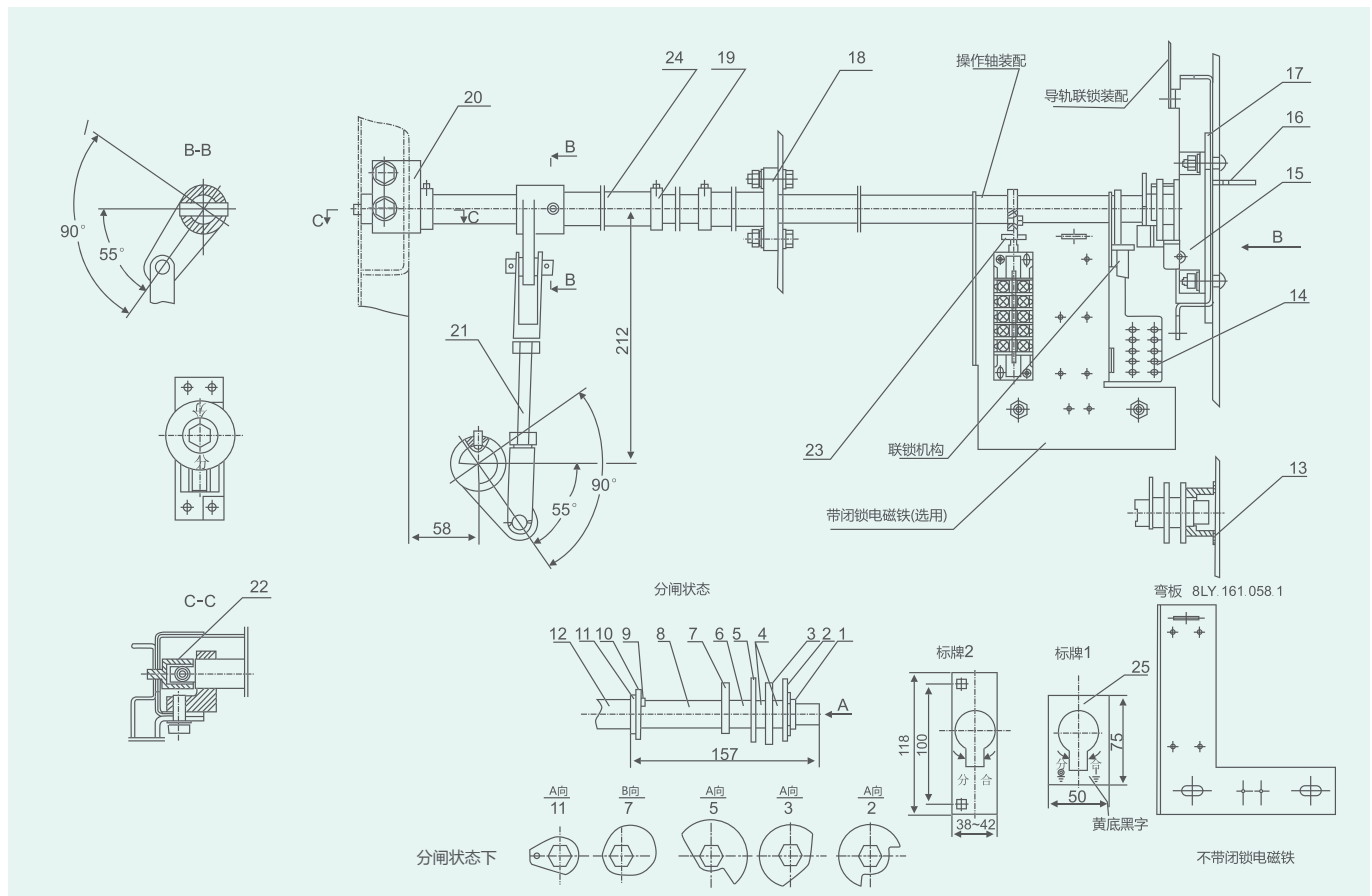
◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 只 / 套 Quantity only/Set
1	上活门板装配 Upper trap assembly	5LY.050.003	1
2	下活门板装配 Lower trap assembly	5LY.050.004	1
3	上连板焊接左 Upper connecting plate welding left	5LY.135.009	1
4	左扭簧 Left torsion spring	8LY.288.012	1
5	下连板焊接左 Lower connecting plate welding left	5LY.135.012	1
6	轴套 Shaft sleeve L=25	8LY.206.016	1
7	上连板焊接右 Upper connecting plate welding right	5LY.135.009	1
8	下连板焊接右 Lower connecting plate welding right	5LY.135.010	1
9	左支架板 Left bracket plate	8LY.123.278	3
10	右支架板 Right bracket plate	8LY.123.277	3
11	右侧连板装配 Right-side connecting plate assembly	5LY.235.013-24	1
12	左侧连板装配 Left side connecting plate assembly	8LY.866.014	1
13	连板焊接 Continuous welding L=605mm	5LY.174.284	2
14	挡卡 10 Block 10	DK-10	8
15	连板焊接 Joint plate welding L=170mm	8LY.174.283	2
16	螺母 M6 Nut M6	GB6170-86	6
17	导杆 Guide rod	8LY.008.073	2
18	限位套 Limit sleeve	8LY.210.011	2

5LY.363.010 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

用于拐臂传动操作 For turning wall drive operation

注：不带后门反向联锁功能 Note: No backdoor reverse interlocking function



◎ 配套表 Matching table

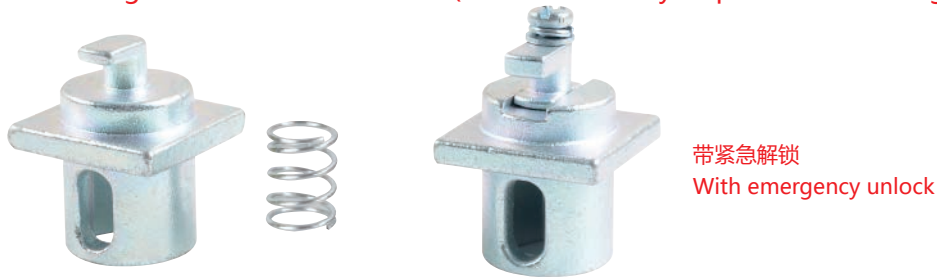
序 14 常配为 8LY.161.058.1 当需装闭锁电磁铁时, 请选用 8LY161.058, 当同时装闭锁电磁铁和联锁机构时, 请注明。序 25 标
牌为选配, 可选标牌 1/ 标牌 2 序 21 连杆装配中拐壁有两种尺寸: 常规按 60 中心距, 客户如需 80 中心距, 订货时请加以说明。
Sequence 14 is usually 8LY.161.058.1. When a locking electromagnet is required, please select 8LY161.058. When a
locking electromagnet and an interlocking mechanism are installed at the same time, please specify. The preface 25
sign is optional, and the optional sign 1 / sign 2 preface 21 connecting rod assembly has two sizes of turning wall:
conventionally 60 center distance, if the customer needs 80 center distance, please specify when ordering.

序号 No.	名称 Name	代号 Codename	数量 (只/套) Quantity (only/set)
1	轴承 Bearing	8LY.263.011	1
2	扇形板 Sector plate	8LY.192.010	1
3	扇形板 Sector plate	8LY.192.011	1
4	轴套 Shaft sleeve	8LY.210.014.1	2
5	扇形板 Sector plate	8LY.151.041	1
6	轴套 Shaft sleeve	8LY.211.061	1
7	扇形板 Sector plate	8LY.151.039	1
8	轴套 Shaft sleeve	8LY.211.062	1
9	螺钉 Screw M5×12	GB70-85	1
10	扇形板 Sector plate	8LY.151.042	1
11	扇形板 Sector plate	8LY.151.043	1
12	操作轴 Operating shaft	8LY.200.010.1(长 1430 配 1500 深柜) Length 1430 with 1500 deep cabinet	1
		8LY.200.010.2(长 1590 配 1660 深柜) Long 1590 with 1660 deep cabinet	1
13	盖 Cover	8LY.017.011	1
14	轴承 Bearing	8LY.161.058	1
		8LY.161.058.1(选用 Choose)	
15	支座 Support	8LY.043.022	1
16	弯板 Bending	8LY.161.059	1
17	滑块 Slider	8LY.143.010	2
18	轴套 Shaft sleeve	8LY.211.058	1
19	限位套 Limit sleeve	8LY.211.057	3
20	支座 Support	8LY.043.019	1
21	连杆装配 Connecting rod assembly	8LY.233.030.1	1
		8LY.233.030.3(选用 Choose)	
22	锁套 Lock sleeve	8LY.211.059	1
23	锁套 Lock sleeve	8LY.211.059.1(带紧急解锁) With emergency unlock	1
24	齿插板 Tooth plate	8LY.151.044	1
25	轴套 Shaft sleeve	8LY.211.060	1
26	标牌 Signage	8LY.860.010(选用 Choose)	1

5LY.363.010.1 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

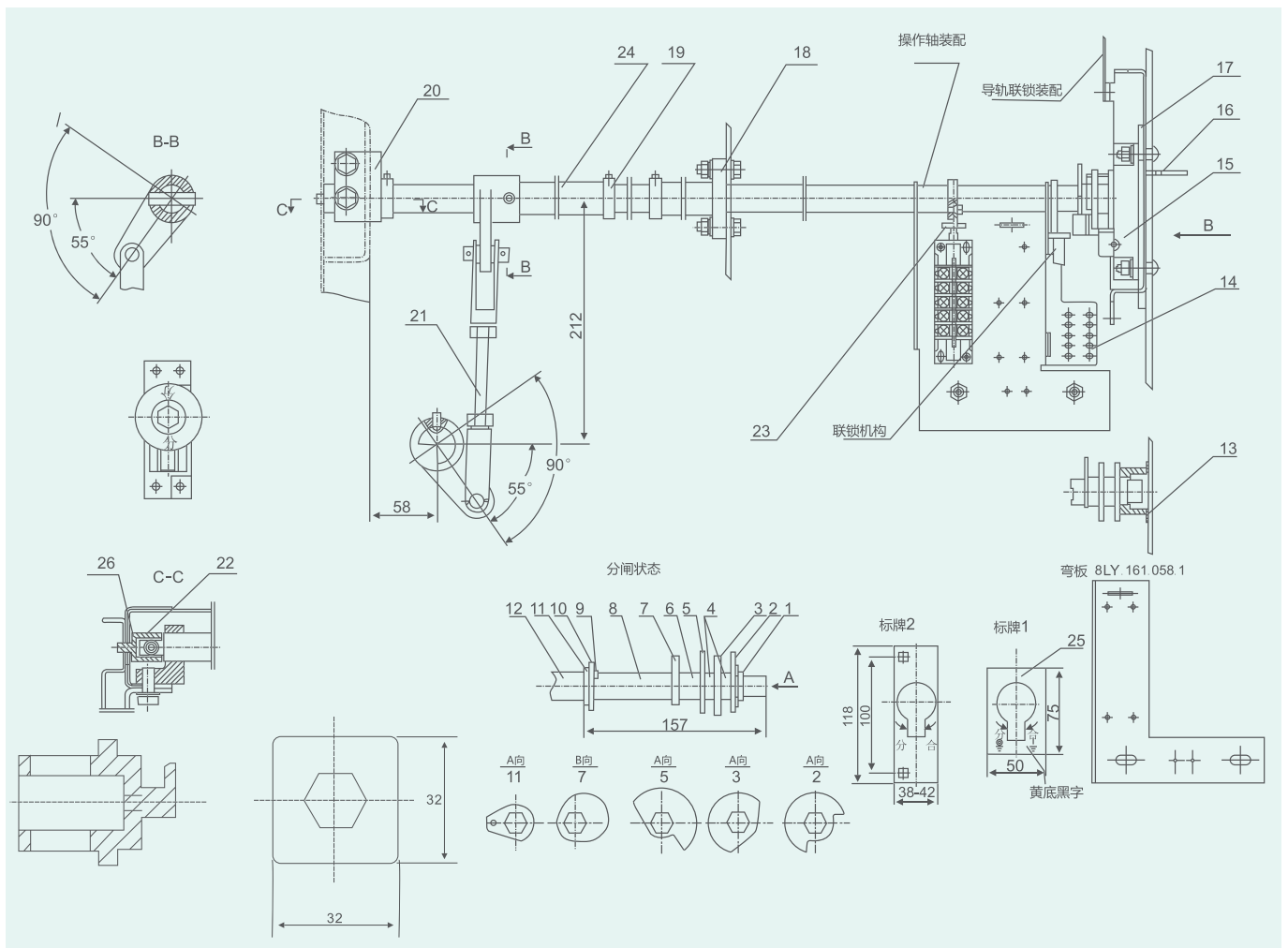
注：带后门反向联锁功能（柜体精度要求较高）

Note: reverse interlocking function with rear door (cabinet accuracy requirements are high)



本联锁装置在原 5LY.363.010 接地开关操作机构联锁装置的基础上增加与后门的反向联锁。接地开关合闸后打开后门（封板），原联锁装置的工作原理是在原 5LY.363.010 基础上将序 24 锁套改为如上图所示并加弹簧。当后门（封板）打开时锁套的四方处进入柜体方孔（推荐尺寸 35×35）内。接地开关无法操作。

This interlocking device adds reverse interlocking with the rear door on the basis of the original 5LY.363.010 grounding switch operating mechanism interlocking device. After the grounding switch is closed, open the rear door (sealing plate). The working principle of the original interlocking device is to change the sequence 24 lock sleeve to the picture above and add a spring on the basis of the original 5LY.363.010. When the rear door (sealing plate) is opened, the four sides of the lock sleeve enter the square hole of the cabinet (recommended size 35×35). The earthing switch cannot be operated.



◎ 配套表 Matching table

序 14 常配为 8LY.161.058.1 当需装闭锁电磁铁时, 请选用 8LY.161.058, 当同时装闭锁电磁铁和联锁机构时, 请注明。
 Sequence 14 is often equipped with 8LY.161.058.1. When a locking electromagnet is required, please select 8LY.161.058.
 When a locking electromagnet and an interlocking mechanism are installed at the same time, please specify.

序号 No.	名称 Name	代号 Codename	数量 (只 / 套) Quantity (only/set)
1	轴承 Bearing	8LY.263.011	1
2	扇形板 Sector plate	8LY.192.010	1
3	扇形板 Sector plate	8LY.192.011	1
4	轴套 Shaft sleeve	8LY.210.014.1	2
5	扇形板 Sector plate	8LY.151.041	1
6	轴套 Shaft sleeve	8LY.211.061	1
7	扇形板 Sector plate	8LY.151.039	1
8	轴套 Shaft sleeve	8LY.211.062	1
9	螺钉 Screw M5×12	GB70-85	1
10	扇形板 Shaft sleeve	8LY.151.042	1
11	扇形板 Shaft sleeve	8LY.151.043	1
12	操作轴 Operating shaft	8LY.200.010.1(长 1427 配 1500 深柜) (Length 1427 with 1500 deep cabinet)	1
		8LY.200.010.2(长 1587 配 1660 深柜) (Long 1587 with 1660 deep cabinet)	1
13	盖 Cover	8LY.017.011	1
14	弯板 Bending	8LY.161.058 8LY.161.058.1(选用 Choose)	1
15	支座 Support	8LY.043.022	1
16	弯板 Bending	8LY.161.059	1
17	滑块 Slider	8LY.143.010	2
18	轴套 Shaft sleeve	8LY.211.058	1
19	限位套 Limit sleeve	8LY.211.057	3
20	支座 Support	8LY.043.019	1
21	连杆装配 Connecting rod assembly	8LY.233.030.1 8LY.233.030.3(选用 Choose)	1
22	锁套 Lock sleeve	8LY.211.059.2(六角锁套 Hexagon lock sleeve)	1
23	锁套 Lock sleeve	8LY.211.059.21(六角带紧急解锁) Hexagonal belt emergency unlock	1
24	齿插板 Tooth plate	8LY.151.044	1
25	轴套 Shaft sleeve	8LY.211.060	1
26	弹簧 Spring	8LY.282.201	1
27	销钉 Pin	8LY.933.050.1	1

5LY.363.010.2 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

用于拐臂传动操作 For turning wall drive operation

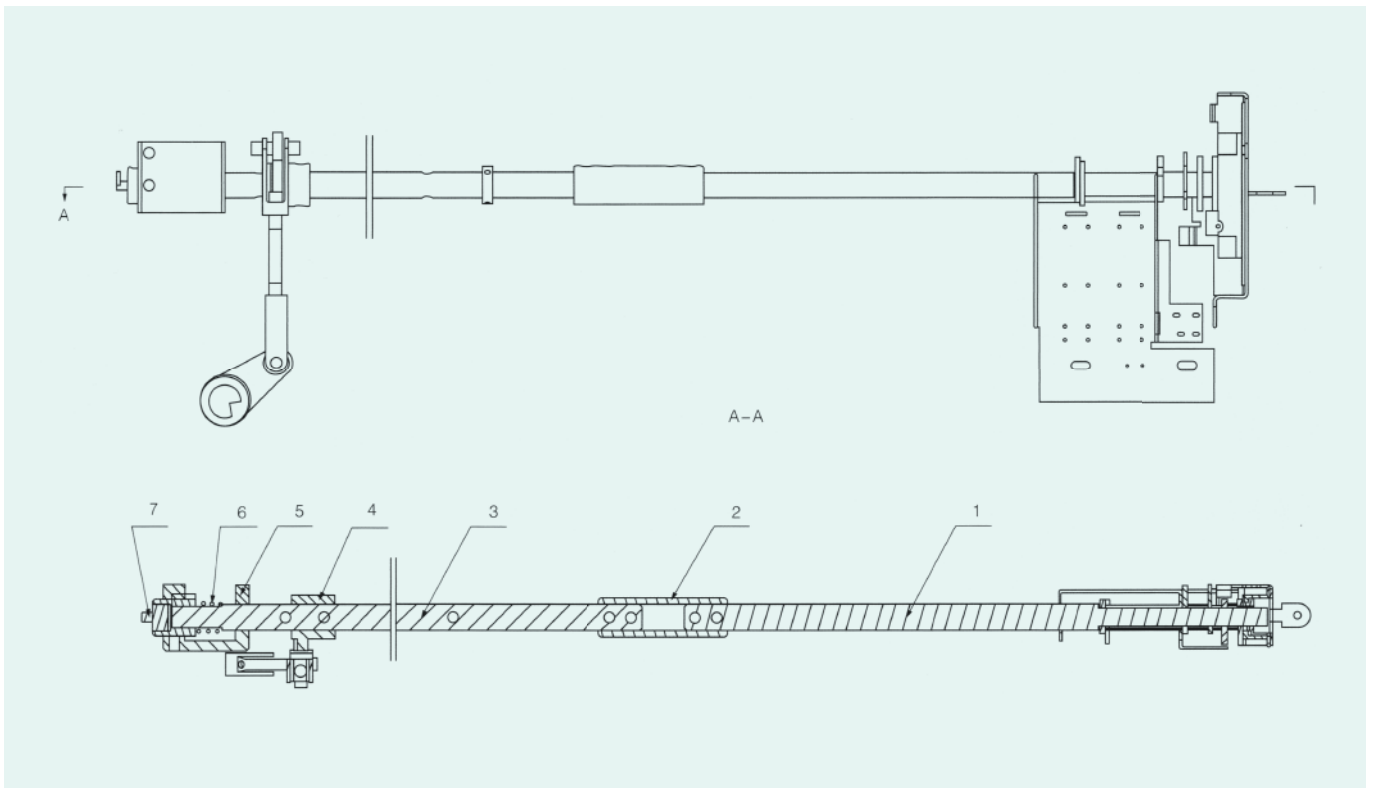
注：带后门反向联锁功能（柜体精度要求较高）

Note: reverse interlocking function with rear door (cabinet accuracy requirements are high)



说明：本联锁在原 5LY.363.010 接地联锁的基础上改进而来，用户不需要改动柜体任何尺寸，就可以实现后门反闭锁（后门不关闭，接地开关无法分闸，和原 5LY.363.010.1 一样的）功能，该联锁比 5LY.363.010.1 的联锁更可靠，强度更好，可以最大程度的减少操作人员误操作时产生零件损坏。如客户需要后门紧急解锁功能，请在备注栏注明。

Note: This interlock is improved on the basis of the original 5LY.363.010 grounding interlock. The user does not need to change any size of the cabinet to achieve reverse locking of the back door (the back door is not closed, the grounding switch cannot be opened, and the original 5LY.363.010.1 The same) function, this interlock is more reliable and stronger than the 5LY.363.010.1 interlock, which can minimize the damage of parts caused by the operator's misoperation. If the customer needs the emergency unlocking function of the back door, please indicate in the remarks column.



◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 (只 / 套) Quantity (only/set)
1	轴承 Bearing	8LY.263.011	1
2	扇形板 Sector plate	8LY.192.010	1
3	扇形板 Sector plate	8LY.192.011	1
4	轴套 Shaft sleeve	8LY.210.014.1	2
5	扇形板 Sector plate	8LY.151.041	1
6	轴套 Shaft sleeve	8LY.211.061	1
7	扇形板 Sector plate	8LY.151.039	1
8	轴套 Shaft sleeve	8LY.211.062	1
9	螺钉 Screw M5×12	GB70-85	1
10	扇形板 Shaft sleeve	8LY.151.042	1
11	扇形板 Shaft sleeve	8LY.151.043	1
12	盖 Cover	8LY.017.011	1
13	弯板 Bending	8LY.161.058 8LY.161.058.1(选用 Choose)	1
14	支座 Support	8LY.043.022	1
15	弯板 Bending	8LY.161.059	1
16	滑块 Slider	8LY.143.010	2
17	轴套 Shaft sleeve	8LY.211.058	1
18	限位套 Limit sleeve	8LY.211.057	3
19	支座 Support	8LY.043.019	1
20	连杆装配 Connecting rod assembly	8LY.233.030.1 8LY.233.030.3(选用 Choose)	1
21	齿插板 Tooth plate	8LY.151.044	1
22	前轴 Front axle	8LY.098.184	1
23	连接套 Connection sleeve	8LY.098.186	1
24	后轴 Rear axle	8LY.098.185 L=841, 配 1500 柜 L=1001, 配 1660 柜 L=841, equipped with 1500 cabinets L=1001, equipped with 1660 cabinets	1
25	连杆装配 Connecting rod assembly	5LY.223.030.1~3	1
26	联锁支座 Interlocking support	5LY.098.160	1
27	压簧 Compression spring	8LY.099.141	1
28	T 型锁套 T type lock sleeve	8LY.098.187	1

5LY.363.010.3 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

用于拐臂传动操作 Used for turning wall drive operation

注：带后门反向联锁功能（推荐）

Note: Reverse interlocking with rear door (recommended)

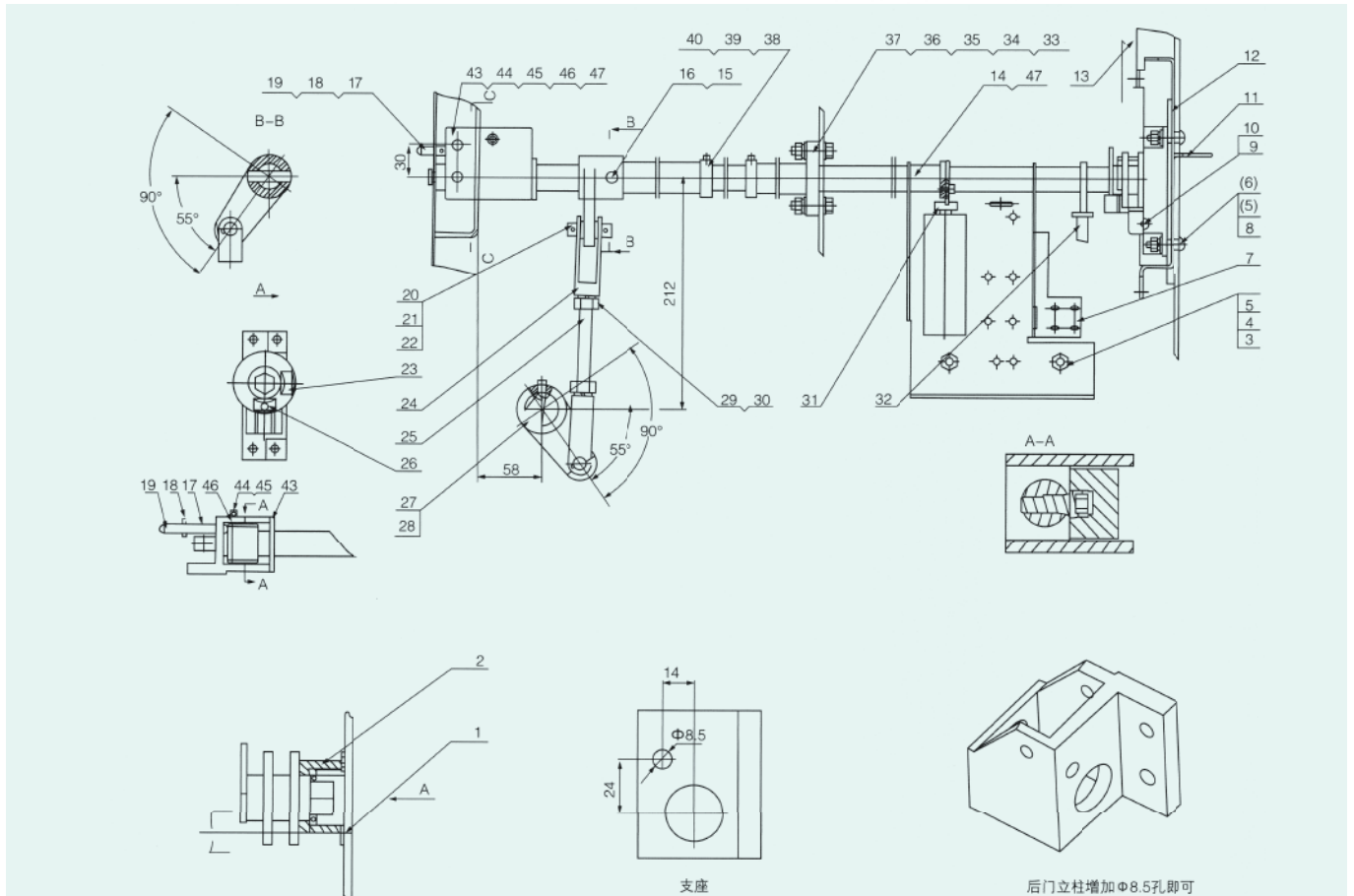


本联锁装置在原 5LY.363.010 接地开关操作，机构联锁装置的基础上改进门的反向闭锁。打开后门（封板），原联锁仍然可操作接地开关，而本锁不能操作，必须先关好后门（封板）方可操作接地开关。

本联锁装置的工作原理是在原 5LY.363.010 的基础上将后部改为支座改为闭锁，当后门（封板）打开时 13LY.02.286 销杆在压簧的作用力下向柜体外动，被顶住的转块向下卡住联锁螺钉，接地开关无法操作。

This interlocking device improves the reverse locking of the door on the basis of the original 5LY.363.010 grounding switch operation and mechanism interlocking device. Open the back door (sealing plate), the original interlock can still operate the grounding switch, but this lock cannot be operated, you must close the back door (sealing plate) before you can operate the grounding switch.

The working principle of this interlocking device is based on the original 5LY.363.010, the rear part is changed to a support to be locked. When the rear door (sealing plate) is opened, the 13LY.02.286 pin moves toward the outside of the cabinet under the force of the compression spring. The resisted rotary block clamps the interlock screw downwards, and the grounding switch cannot be operated.



◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 (只 / 套) Quantity (only/set)
1	盖 Cover	8LY.017.011	1
2	支座 Bearing	8LY.043.022	1
3	螺钉 Screw M6×20	GB70-85	2
4	螺母 Nut M6	GB6170-86	2
5	垫圈 Gasket 6	GB97.1-85	4
6	垫圈 Gasket 6	GB93-87	4
7	弯板 Bending of plate	8LY.161.058	1
8	螺栓 Bolt M6×30	GB12-86	2
9	挡块 Stop	8LY.143.011	1
10	销 Pin 4×20	GB879-86	1
11	弯板 Bending of plate	8LY.161.059	1
12	滑块 The slider	8LY.143.010	2
13	上拐 Up abduct	5LY.151.016	1
14	螺栓 Bolt M10×20	GB880-86	4
15	压簧 Compression spring	8LY.282.020	1
16	弹性销 The elastic pin	3×18	2
17	销杆 Pin rod	13LY.02.286	2
18	带孔销 Perforated pin12×40	GB880-86	2
19	开口销 Cotter pin4×20	GB91-86	4
20	垫圈 The gasket	8LY.950.010	4
21	夹叉 The clamp fork	8LY.233.030	2
22	分闸指示 Break-brake instructions	5LY.151.017	1
23	下拐 Lower abduct	GB78-85	1
24	内六角锥端紧定螺钉 M8×16 Inner hexagon end setting screw M8×16	GB6170-86	1
25	螺母 Nut M12	GB93-87	2
26	垫圈 The gasket 12	GB93-87	2
27	齿插板 Teeth gear plate	5LY.239.010	1
28	联锁机构 Interlock mechanism	8LY.211.058	1
29	弯板 Bending	GB5783-86	1
30	螺栓 M8×25 Bolt M8 x 25	GB5783-86	2
31	垫圈 8 Gasket 8	GB97.1-85	4
32	垫圈 8 Gasket 8	GB93-87	2
33	螺母 M8 Nut M8	GB6170-86	2
34	限位套 Limit set	8LY.211.057	3
35	内六角锥端紧定螺钉 M5×10 Inner hexagon end setting screw M5×10	GB78-85	3
36	轴套 Shaft sleeve	8LY.211.060	1
37	锁套 The lock sets	8LY.211.059	1
38	锁套 The lock sets	8LY.211.059.1(带紧急解锁) Strap emergency unlock	1
39	内六角螺钉 Hexagon socket screw M6×16	GB70-85	1
40	支座 Bearing	13LY.03.161	1
41	销杆 Pin rod	13LY.02.284	1
42	开口销 Cotter pin	2×35	1
43	转块 Turn piece	13LY.02.283	1
44	联锁螺钉 Locking screw	13LY.02.287	1

5LY.363.010.4 接地开关操作机构联锁装置

Grounding switch operating mechanism interlocking device

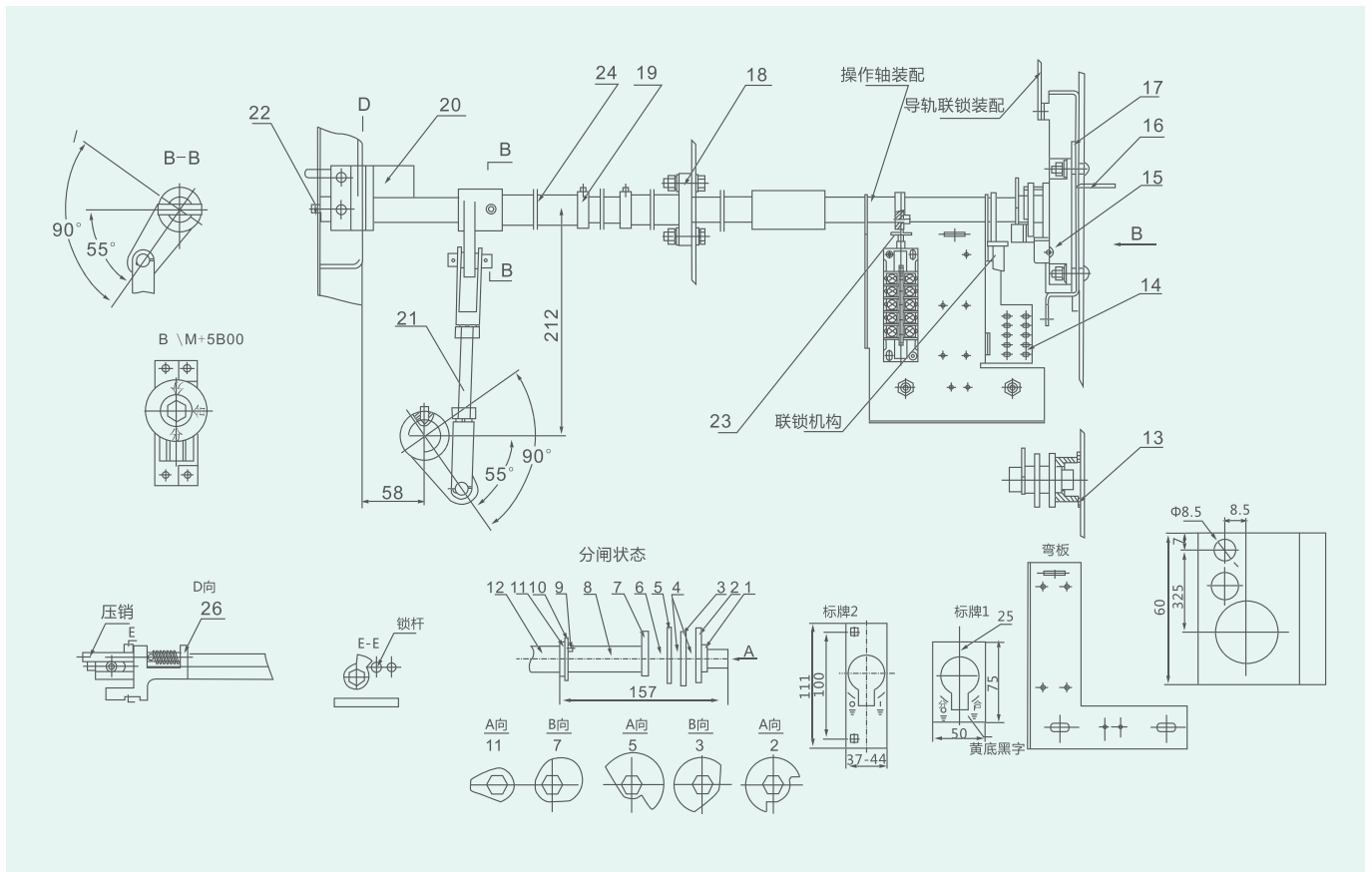
用于拐臂传动操作 Used for turning wall drive operation



本联锁装置在原 5LY.363.010 接地开关操作机构联锁装置的基础上改进了门的反向闭锁。打开后门（封板），原联锁仍可操作接地开关，而本锁不能操作，必须先关好后门（封板）方可操作接地开关。

本联锁装置的工作原理是在原 5LY.363.010 的基础上将后部改为支座改为闭锁，当后门（封板）打开时 13LY.02.286 销杆在压簧的作用力下向柜体外动，被顶住的转块向下卡住联锁螺钉，接地开关无法操作。

This interlock device is operated on the original 5LY.363.010 ground switch and improves the reverse locking of the door on the basis of the mechanism interlock device. Open the back door (sealing plate), the original interlock can still operate the earth switch, and this lock cannot operate, must close the back door (sealing plate) to operate the earth switch. The working principle of the interlock device is to change the rear seat to latching on the basis of the original 5LY.363.010. When the back door (sealing plate) is opened, the pin rod of 13LY.02.286 moves outward towards the cabinet body under the force of the pressure spring, and the supported rotary block sticks the interlock screw downward, so the ground switch cannot be operated.

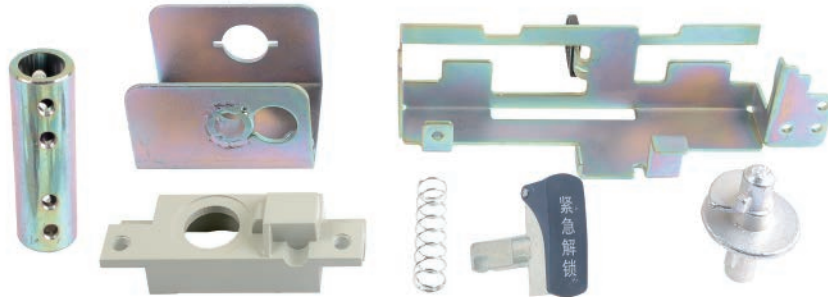


◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 (只 / 套)Quantity (only/set)
1	盖 Cover	8LY.017.011	1
2	支座 Bearing	8LY.043.022	1
3	螺钉 M6×20 Screw M6 x 20	GB70-85	2
4	螺母 M6 Nut M6	GB6170-86	2
5	垫圈 6 Washer (6)	GB97.1-85	4
6	垫圈 6 Washer (6)	GB93-87	4
7	弯板 Bending of plate	8LY.161.058	1
8	螺栓 M6×30 Bolt M6 * 30	GB12-86	2
9	挡块 Stop	8LY.143.011	1
10	销 4×20 Pin 4 x 20	GB879-86	1
11	弯板 Bending of plate	8LY.161.059	1
12	滑块 The slider	8LY.143.010	2
13	导轨联锁装配 Guide rail interlock assembly	5LY.363.011	1
14	操作杆装配 Lever assembly	5LY.234.011	1
15	拐臂 Turn the wall	5LY.151.016	1
16	螺栓 M10×20 Bolt M10 x 20	GB880-86	4
17	压簧 Compression spring	8LY.282.020	1
18	弹性销 The elastic pin	3×18	2
19	销杆 Pin rod	13LY.02.286	2
20	带孔销 12×40 Perforated pin 12 x 40	GB880-86	2
21	开口销 4×20 Cotter pin 4 x 20	GB91-86	4
22	垫圈 The gasket	8LY.950.010	4
23	合闸指示 Closing instructions	8LY.866.010	1
24	夹叉 The clamp fork	8LY.233.030	2
25	拉杆 Tie rod	8LY.866.011	1
26	分闸指示 Break-brake instructions	5LY.151.017	1
27	拐臂 Turn the wall	GB78-85	1
28	内六角锥端紧定螺钉 M8×16 Inner hexagon end setting screw M8×16	GB6170-86	1
29	螺母 M12 Nut M12	GB93-87	2
30	垫圈 12 Gasket 12	GB93-87	2
31	齿插板 Teeth gear plate	5LY.239.010	1
32	联锁机构 Interlock mechanism	8LY.211.058	1
33	轴套 Shaft sleeve	GB5783-86	1
34	螺栓 M8×25 Bolt M8 x 25	GB5783-86	2
35	垫圈 8 Gasket 8	GB97.1-85	4
36	垫圈 8 Gasket 8	GB93-87	2
37	螺母 M8 Nut M8	GB6170-86	2
38	限位套 Limit set	8LY.211.057	3
39	内六角锥端紧定螺钉 M5×10 Inner hexagon end set screw M5×10	GB78-85	3
40	轴套 Shaft sleeve	8LY.211.060	1
41	锁套 The lock sets	8LY.211.059.4(六角锁套 Hexagon lock set)	1
42	锁套 The lock sets	8LY.211.059.41(六角带紧急解锁) Hexagon lock set	1
43	内六角螺钉 M6×16 Hexagon socket screw M6×16	GB70-85	1
44	支座 Bearing	13LY.03.161	1
45	销杆 Pin rod	13LY.02.284	1
46	开口销 Cotter pin	2×35	1
47	转块 Turn piece	13LY.02.283	1
48	联锁螺钉 Locking screw	13LY.02.287	1

5LY.363.010.5 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

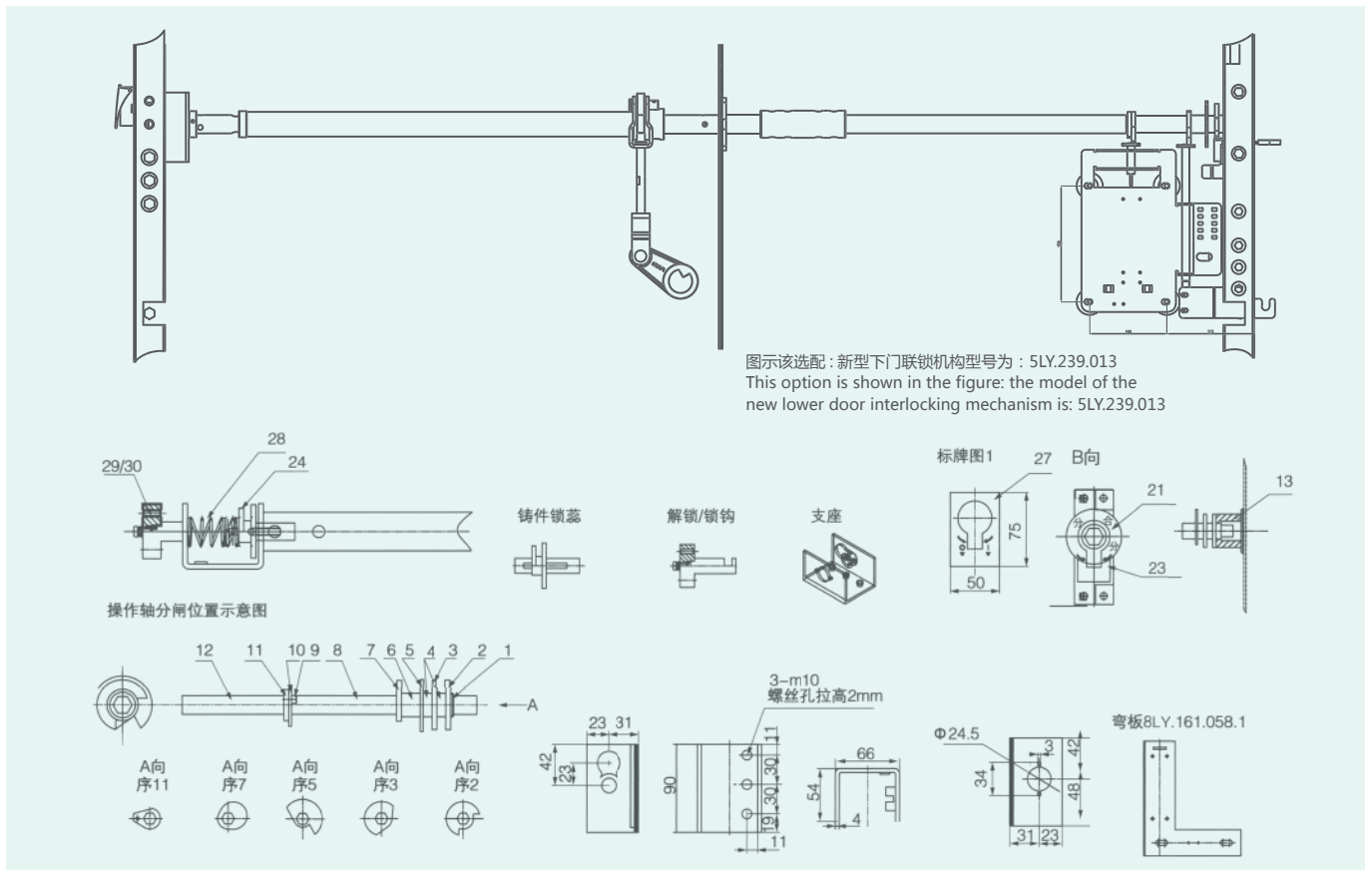
用于拐臂传动操作 Used for turning wall drive operation



本联锁装置在原 5LY.363.010 接地开关操作，机构联锁装置的基础上改进门的反向闭锁。打开后门（封板），原联锁仍然可操作接地开关，而本锁不能操作，必须先关好后门（封板）方可操作接地开关。

本联锁装置的工作原理是在原 5LY.363.010 的基础上将后部改为支座改为闭锁，当后门（封板）打开时 13LY.02.286 销杆在压簧的作用力下向柜体外动，被顶住的转块向下卡住联锁螺钉，接地开关无法操作。

This interlock device is operated on the original 5LY.363.010 ground switch and improves the reverse locking of the door on the basis of the mechanism interlock device. Open the back door (sealing plate), the original interlock can still operate the earth switch, and this lock cannot operate, must close the back door (sealing plate) to operate the earth switch. The working principle of the interlock device is to change the rear seat to latching on the basis of the original 5LY.363.010. When the back door (sealing plate) is opened, the pin rod of 13LY.02.286 moves outward towards the cabinet body under the force of the pressure spring, and the supported rotary block sticks the interlock screw downward, so the ground switch cannot be operated.



◎ 配套表 Matching table

序号 No.	名称 Name	代号 Code name	数量 (只/套) Quantity (only/set)	备注 Remark
1	轴承 Bearing	8LY.263.011	1	
2	扇形板 Fan-shaped plate	8LY.192.010	1	
3	扇形板 Fan-shaped plate	8LY.151.008	1	
4	轴承 Bearing	8LY.210.014.1	2	
5	轴承 Bearing	8LY.211.061	1	
6	轴承 Bearing	8LY.211.062	1	
7	螺钉 M5×12 Screw the M5 * 12	GB70-85	1	
8	扇形板 Fan-shaped plate	8LY.151.042	1	
9	扇形板 Fan-shaped plate	8LY.151.043	1	
10	连体轴套	8LY.998.010	3	
		8LY.998.011	1	
11	操作轴 Operating shaft	8LY.200.570 8LY.200.810		前轴 L=570, 配 1500 柜 后轴 L=810, 配 1500 柜 Front axle L=570, with 1500 cabinets Rear axle L=810, with 1500 cabinets
12	盖 Cover	8LY.017.011	1	
13	弯板 Bending of plate	8LY.161.058 8LY.161.058.1	1	
14	支座 Bearing	8LY.043.022	1	
15	弯板 Bending of plate	8LY.161.059	1	
16	滑块 Slider	8LY.143.010	2	
17	轴承 Bearing	8LY.211.058	1	
18	限位套 Limit set	8LY.211.057	3	
19	支座 Bearing	8LY.043.019.6	1	
20	分合指示牌 Separate and close the signs	8LY.866.010	1	
21	连杆装配 Connecting rod assembly	5LY.233.030.1 5LY.233.030.3	1	L=60mm L=80mm(选用 choose)
22	分合指示牌 Separate and close the signs	8SX.866.011	1	
23	齿插板 Teeth gear plate	8LY.151.044	1	
24	连接轴 The connecting shaft	8LY.200.187	1	
25	标牌 Scutcheon	8LY.860.010	1	
26	压簧 Compression spring	1.2×15×58	1	
		8LY.211.107.6	1	
27	解锁 Unlock 锁钩 lock the hook	8LY.211.107.7	1	
28	轴套 Shaft sleeve	8LY.211.060	1	

5LY.363.010.6 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

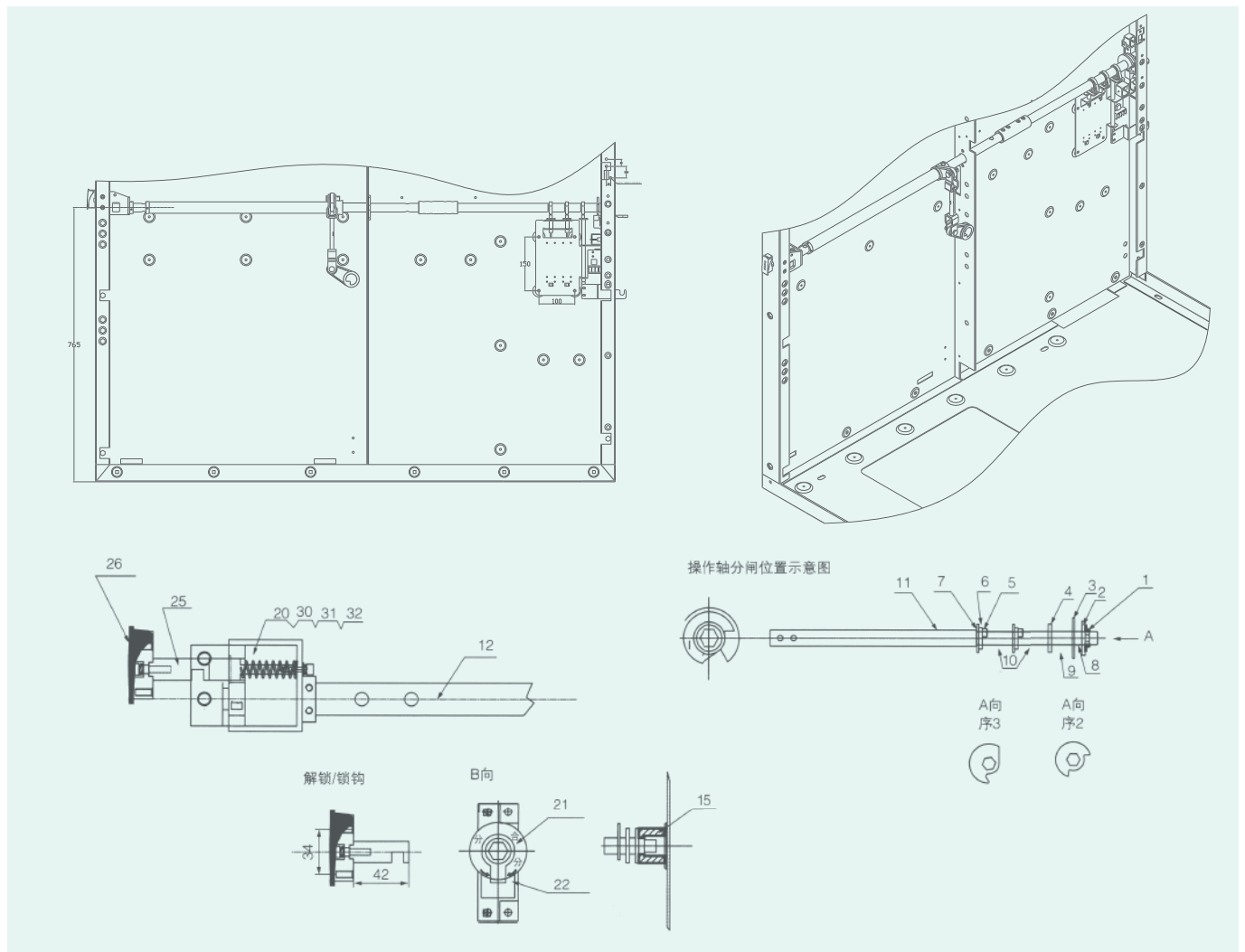
用于拐臂传动操作 Used for turning wall drive operation

重点推荐方案：可适用于接地开关后部安装 / 中部安装



本联锁装置在原 5LY.363.010 接地开关操作，机构联锁装置的基础上改进门的反向闭锁。打开后门（封板），原联锁仍然可操作接地开关，而本锁不能操作，必须先关好后门（封板）方可操作接地开关。

This interlock device is operated on the original 5LY.363.010 ground switch and improves the reverse locking of the door on the basis of the mechanism interlock device. Open the back door (sealing plate), the original interlock can still operate the earth switch, and this lock cannot operate, must close the back door (sealing plate) to operate the earth switch.

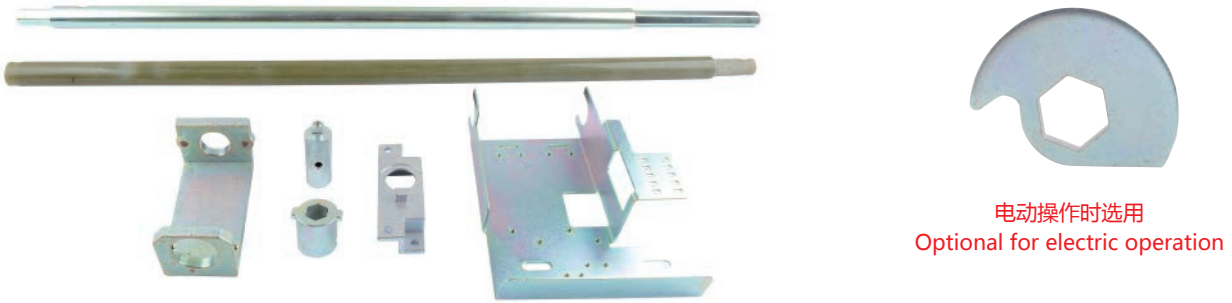


◎ 配套表 Matching table

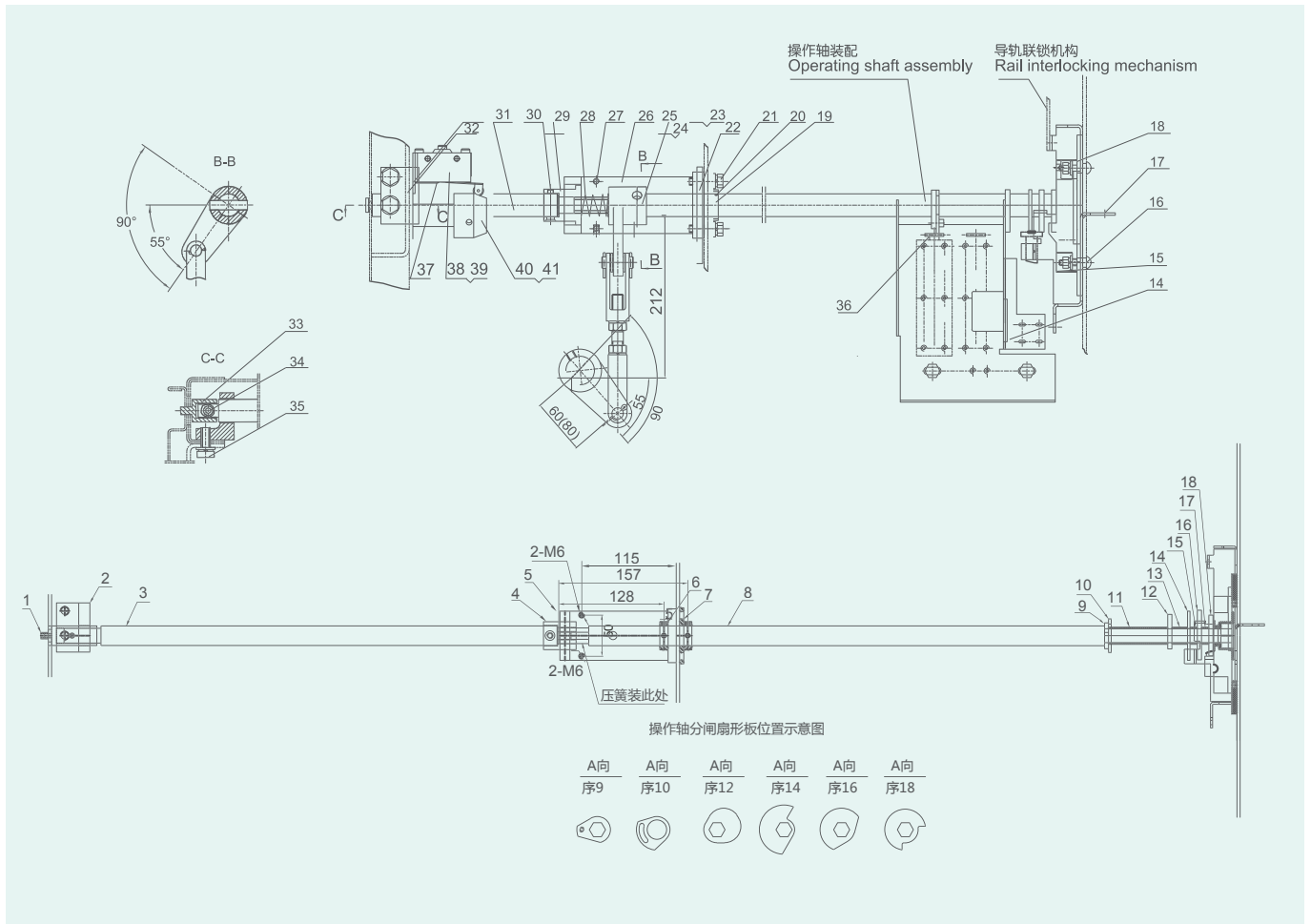
序号 No.	名称 Name	代号 Code name	数量 (只 / 套) Quantity (only/set)	备注 Remark
1	轴承 Bearing	8LY.263.011	1	
2	扇形板 Fan-shaped plate	8LY.192.010	1	
3	扇形板 Fan-shaped plate	8LY.192.011.7	1	
4	扇形板 Fan-shaped plate	8LY.151.039	1	
5	螺钉 Screw M5×12	GB70-85	2	
6	扇形板 Fan-shaped plate	8LY.151.042	2	
7	扇形板 Fan-shaped plate	8LY.151.043	2	
8	轴承 Bearing	8LY.210.014.1	1	
9	轴承 Bearing	8LY.211.061	1	
10	轴承 Bearing	8LY.211.062	2	
11	前轴 Front axle	8LY.200.485	1	长 485 配 1500 深柜 Long 485 with 1500 deep cabinet
12	后轴 Rear axle	8LY.200.920	1	长 920 配 1500 深柜 Long 920 with 1500 deep cabinet
13	连接套 Connection sleeve	8LY.200.187	1	
14	弯板 Bending plate	8LY.161.058.7	1	
15	盖 Cover	8LY.017.011	1	
16	弯板 Bending plate	8LY.161.059.7	1	
17	滑块 Slip Piece	8LY.143.010.30 8LY.143.010.20	1	
18	轴套 Shaft sleeve	8LY.211.058	3	
19	限位套 Limit sleeve	8LY.211.057	1	
20	支座 Support	8LY.143.019.7	1	
21	分合指示牌 Split and reunion signs	8LY.866.010	1	
22	分合指示牌 Split and reunion signs	8LY.866.011	1	
23	连杆装配 Connecting rod assembly	5LY.233.030.1	1	
24	轴套 Shaft sleeve	8LY.211.060	1	
25	解锁 / 锁构 Unlock/lock mechanism	8LY.211.107.7	1	
26	指示盖 Indicator cover	8LY.211.107.6	1	
27	销轴焊接 Pin welding	5LY.234.013.7	1	
28	销轴焊接 Pin welding	5LY.234.013.6	1	
29	解锁弯板 Unlock the bent plate	8LY.161.058.6	1	
30	销 Pin	7*65	1	
31	压簧 Compression spring	1.0*11*50	1	
32	M4*8	GB70-85	1	

5LY.363.010.7 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

10KV 中部联锁方案 10KV central interlocking program



此方案只适用接地开关装置中部时用。此方案后部采用绝缘材料。故无需考虑母排到操作轴的对地净距，大大提高了可靠性，安全性，且有后门反闭锁的功能。
This solution is only applicable to the middle part of the grounding switch device. Insulating materials are used in the back of this scheme. Therefore, there is no need to consider the net distance from the busbar to the operating shaft, which greatly improves the reliability and safety, and has the function of back door anti-locking.



◎ 配套表 Matching table

序号 No.	名称 Name	代号 Code name	数量 (只 / 套) Quantity (only/set)	备注 Remark
1	轴承 Bearing	8LY.263.011	1	
2	扇形板 Fan-shaped plate	8LY.192.010	1	
3	扇形板 Fan-shaped plate	8LY.192.011.7	1	
4	扇形板 Fan-shaped plate	8LY.151.039	1	
5	螺钉 Screw M5×12	GB70-85	2	
6	扇形板 Fan-shaped plate	8LY.151.042	2	
7	扇形板 Fan-shaped plate	8LY.151.043	2	
8	轴承 Bearing	8LY.210.014.1	1	
9	轴承 Bearing	8LY.211.061	1	
10	轴承 Bearing	8LY.211.062	2	
11	弯板 Bending plate	8LY.161.058.7	1	
12	盖 Cover	8LY.017.011	1	
13	弯板 Bending plate	8LY.161.059.7	1	
14	滑块 Slip Piece	8LY.143.010.30 8LY.143.010.20	1	
15	轴套 Shaft sleeve	8LY.211.058	3	
16	限位套 Limit sleeve	8LY.211.057	1	
17	支座 Support	8LY.143.019.7	1	
18	分合指示牌 Split and reunion signs	8LY.866.010	1	
19	分合指示牌 Split and reunion signs	8LY.866.011	1	
20	连杆装配 Connecting rod assembly	5LY.233.030.1	1	
21	轴套 Shaft sleeve	8LY.211.060	1	
22	指示盖 Indicator cover	8LY.211.107.6	1	
23	弯板 Bending	8LY.161.059	1	
24	操作轴 Operating shaft	9LY.009.424	1	L=822
25	扇形板 Sector plate	8LY.192.011.7	1	
26	连杆装配 Connecting rod assembly	5LY.223.030.1~3	1	
27	联锁块 Interlocking block	5LY.009.420	1	
28	止动件 Stop	9LY.009.423	1	
29	绝缘轴 Insulated shaft	8LY.091.100.1	1	L=600 配距深 1500 L=600, pitch depth 1500
30	支座 Support	5LY.043.022	1	
31	加长锁套 Lengthened lock sleeve	8LY.211.059.7	1	

5LY.363.010.8 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

10KV 中部联锁方案 10KV central interlocking program

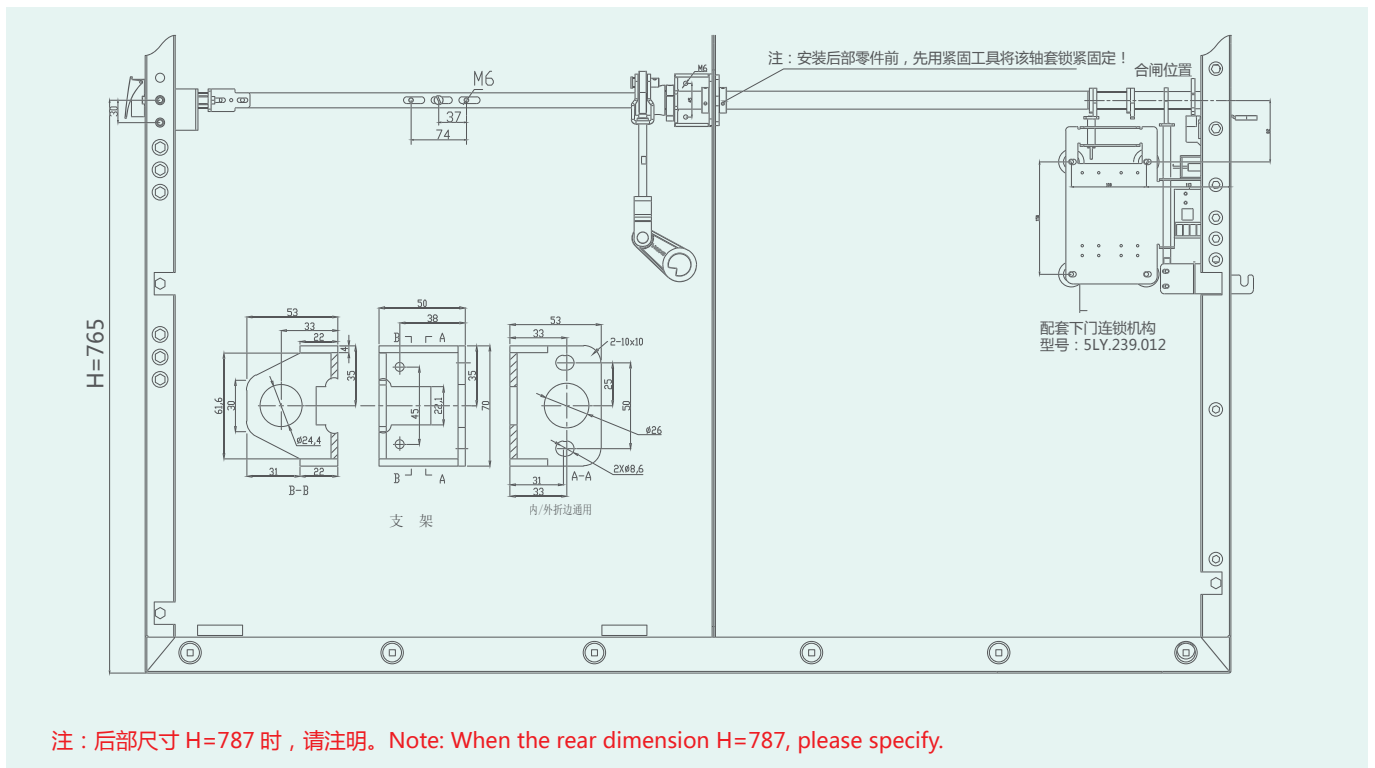
重点推荐方案：后轴扁钢结构，仅适用于接地开关中部安装方案



说明 Introduction

本联锁装置在原 5LY.363.010.3 接地开关操作机构联锁装置的基础上改进后门的反向闭锁。打开后门（封板），原联锁仍然可操作接地开关，而本联锁不能操作，必须先关好后门（封板）方可操作接地开关。本联锁装置的工作原理是在原 5LY.363.010.3 的基础上将后部支座装配放在中间实现后门反闭锁，当后门（封板）打开时连板焊接在压簧的作用下向柜体外运动，被顶住转块向柜体下部旋转联锁螺钉卡在转块下方槽中达到闭锁，接地开关无法操作。

This interlocking device improves the reverse locking of the rear door on the basis of the original 5LY.363.010.3 grounding switch operating mechanism interlocking device. Open the back door (sealing plate), the original interlock can still operate the grounding switch, but this interlock cannot be operated, you must close the back door (sealing plate) before you can operate the grounding switch. The working principle of this interlocking device is based on the original 5LY.363.010.3, the rear support is assembled in the middle to realize the reverse locking of the rear door. When the rear door (sealing plate) is opened, the connecting plate is welded under the force of the compression spring. The outside of the cabinet moves, and the interlocking screw is rotated to the lower part of the cabinet against the rotating block and stuck in the groove under the rotating block to lock, and the grounding switch cannot be operated.



◎ 配套表 Matching table

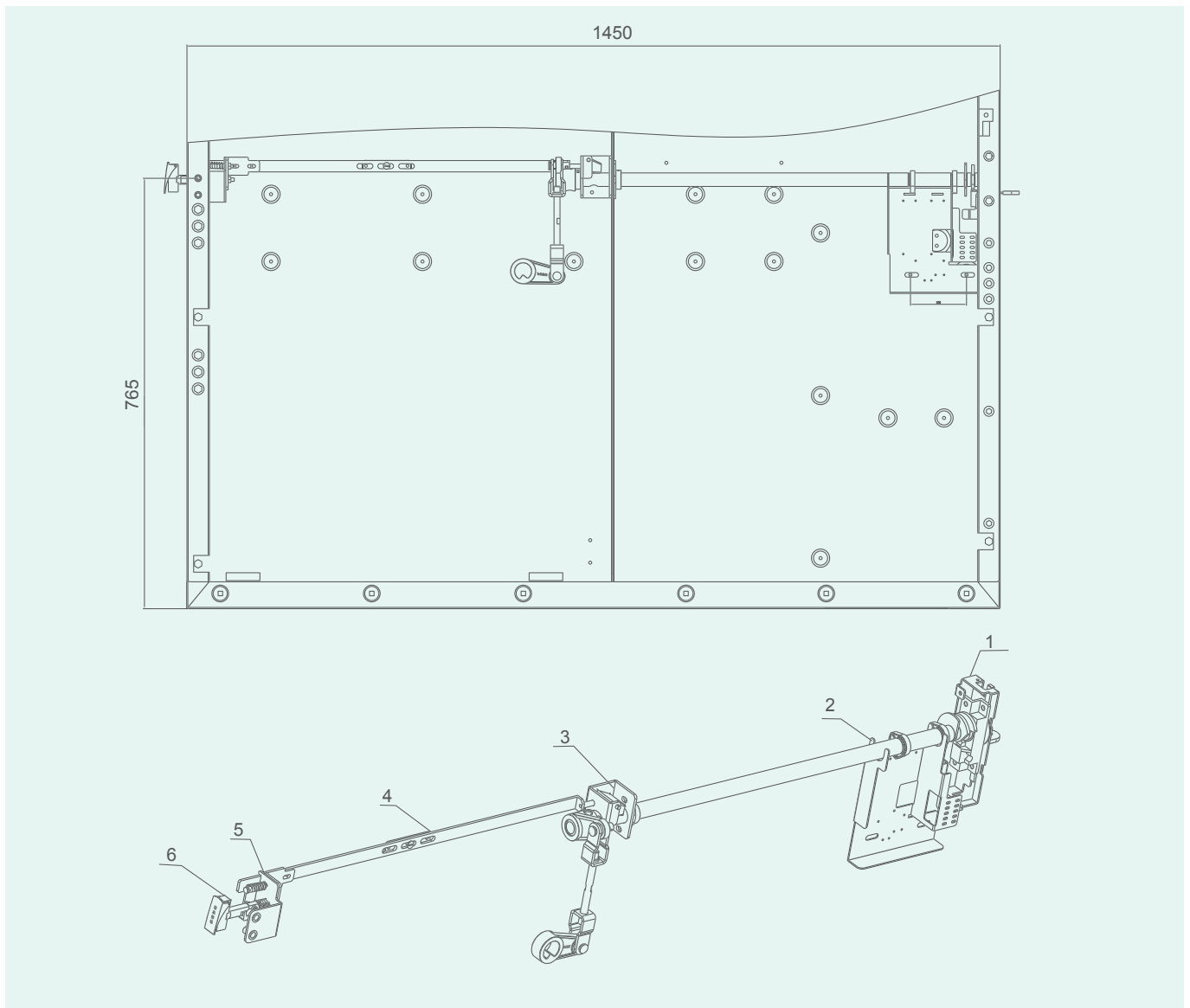
序号 No.	名称 Name	代号 Code name	数量(只/套) Quantity (only/set)	备注 Remark
1	轴承 Bearing	8LY.263.011	1	
2	扇形板 Fan-shaped plate	8LY.192.010	1	
3	扇形板 Fan-shaped plate	8LY.192.011.7	1	
4	扇形板 Fan-shaped plate	8LY.151.039	1	
5	螺钉 Screw M5×12	GB70-85	2	
6	扇形板 Fan-shaped plate	8LY.151.042	2	
7	扇形板 Fan-shaped plate	8LY.151.043	2	
8	轴承 Bearing	8LY.210.014.1	1	
9	轴承 Bearing	8LY.211.061	1	
10	轴承 Bearing	8LY.211.062	2	
11	前轴 Front axle	8LY.200.485	1	长 970 配 1500 深柜 Long 970 with 1500 deep cabinet
12	弯板 Bending plate	8LY.161.058.7	1	
13	盖 Cover	8LY.017.011	1	
14	弯板 Bending plate	8LY.161.059.7	1	
15	滑块 Slip Piece	8LY.143.010.30 8LY.143.010.20	1	
16	轴套 Shaft sleeve	8LY.211.058	3	
17	限位套 Limit sleeve	8LY.211.057	1	
18	支座 Support	8LY.143.019.7	1	
19	分合指示牌 Split and reunion signs	8LY.866.010	1	
20	分合指示牌 Split and reunion signs	8LY.866.011	1	
21	连杆装配 Connecting rod assembly	5LY.233.030.1	1	
22	轴套 Shaft sleeve	8LY.211.060	1	
23	解锁 / 锁构 Unlock/lock mechanism	8LY.211.107.7	1	
24	指示盖 Indicator cover	8LY.211.107.6	1	
25	销轴焊接 Pin welding	5LY.234.013.7	1	
26	销轴焊接 Pin welding	5LY.234.013.6	1	
27	解锁弯板 Unlock the bent plate	8LY.161.058.6	1	
28	销 Pin	7*65	1	
29	压簧 Compression spring	1.0*11*50	1	
30	M4*8	GB70-85	1	

5LY.363.010.9 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

说明 Introduction

本联锁装置在原 5LY.363.010.3 接地开关操作机构联锁装置的基础上改进后门的反向闭锁。打开后门（封板），原联锁仍然可操作接地开关，而本联锁不能操作，必须先关好后门（封板）方可操作接地开关。本联锁装置的工作原理是在原 5LY.363.010.3 的基础上将后部支座装配放在中间实现后门反闭锁，当后门（封板）打开时连板焊接在压簧的作用下向柜体外运动，被顶住转块向柜体下部旋转联锁螺钉卡在转块下方槽中达到闭锁，接地开关无法操作。

This interlocking device improves the reverse locking of the rear door on the basis of the original 5LY.363.010.3 grounding switch operating mechanism interlocking device. Open the back door (sealing plate), the original interlock can still operate the grounding switch, but this interlock cannot be operated, you must close the back door (sealing plate) before you can operate the grounding switch. The working principle of this interlocking device is based on the original 5LY.363.010.3, the rear support is assembled in the middle to realize the reverse locking of the rear door. When the rear door (sealing plate) is opened, the connecting plate is welded under the force of the compression spring. The outside of the cabinet moves, and the interlocking screw is rotated to the lower part of the cabinet against the rotating block and stuck in the groove under the rotating block to lock, and the grounding switch cannot be operated.



◎ 特点 Characteristic

- | | |
|---------------------|--|
| 1. 该装置不用考虑后部安全距离问题； | 1.Do not need consider the safty distance from the back. |
| 2. 安装方便、简单； | 2.Easy installation. |
| 3. 使用灵活联锁简单可靠。 | 3.flexible, simple and reliable. |

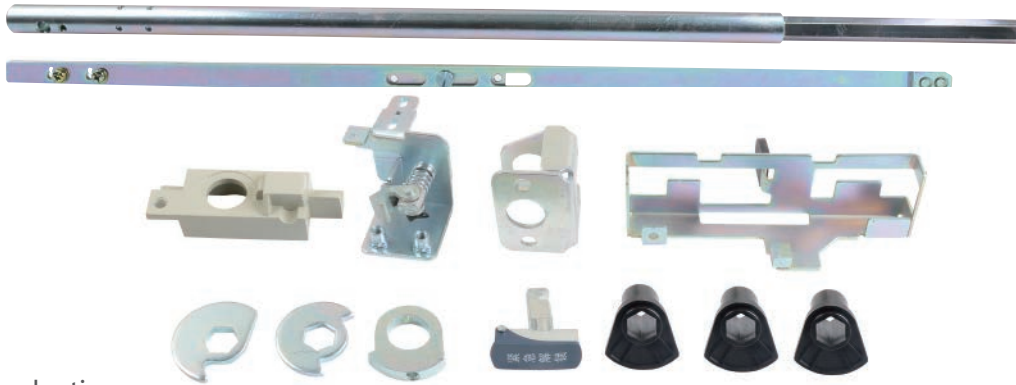
◎ 配套表 Matching table

序号 No.	名称 Name	代号 Code name	数量 (只 / 套) Quantity (only/set)
1	弯板 Curved Plate	8LY.161.059.3	1
2	滑块 Slider	8LY.143.010	1
3	盖 Cover	8LY.017.011	1
4	铝支座 Aluminum Support	8LY.043.022	1
5	轴承 Bearing	8LY.263.011	1
6	扇形板 Sector Plate	8LY.192.010	1
7	轴套 Shaft Sleeve	8LY.210.014.1	1
8	扇形板 Sector Plate	8LY.192.011	2
9	扇形板 Sector Plate	8LY.151.041	4
10	轴套 Shaft Sleeve	8LY.211.061	1
11	扇形板 Sector Plate	8LY.151.039	2
12	轴套 Shaft Sleeve	8LY.211.062	1
13	扇形板 Sector Plate	8LY.151.042	1
14	扇形板 Sector Plate	8LY.151.043	2
15	操作轴 Operating Shaft	8LY.1610.2501	1
16	弯板 Curved Plate	8LY.161.058	1
17	支座装配 Bearing Assembling	2LY.1610.2502	1
18	连杆装配 Connecting rod Assembly	5LY.233.030.1-3	1
19	连板焊接 Connecting Plate Welding	8LY.1610.2501	1
20	导向板 guide plate	8LY.1610.2506	2
21	外六角螺丝 Outer Hexagon Screw	M6*12	1
22	螺母 Nut	M8	1
23	支座焊接 Bearing Welding	5LY.1610.2502	1
24	联锁盖 Interlocking Cover	8LY.1407.0401	1
25	联锁块 Interlocking Block	8LY.1407.0410	1

5LY.363.010.10 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

10KV 中部联锁方案 10KV central interlocking program

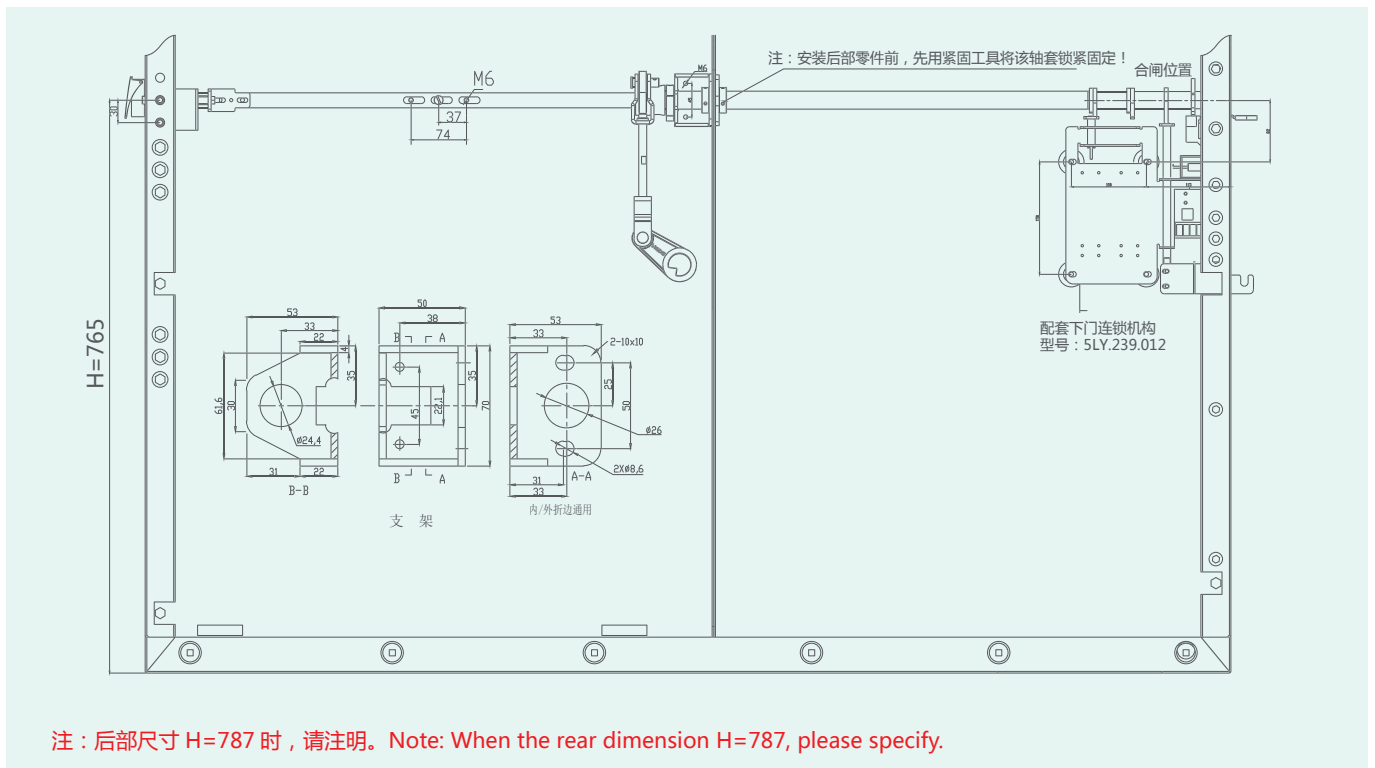
重点推荐方案：后轴扁钢结构，仅适用于接地开关中部安装方案



◎ 说明 Introduction

本联锁装置在原 5LY.363.010.3 接地开关操作机构联锁装置的基础上改进后门的反向闭锁。打开后门（封板），原联锁仍然可操作接地开关，而本联锁不能操作，必须先关好后门（封板）方可操作接地开关。本联锁装置的工作原理是在原 5LY.363.010.3 的基础上将后部支座装配放在中间实现后门反闭锁，当后门（封板）打开时连板焊接在压簧的作用下向柜体外运动，被顶住转块向柜体下部旋转联锁螺钉卡在转块下方槽中达到闭锁，接地开关无法操作。

This interlocking device improves the reverse locking of the rear door on the basis of the original 5LY.363.010.3 grounding switch operating mechanism interlocking device. Open the back door (sealing plate), the original interlock can still operate the grounding switch, but this interlock cannot be operated, you must close the back door (sealing plate) before you can operate the grounding switch. The working principle of this interlocking device is based on the original 5LY.363.010.3, the rear support is assembled in the middle to realize the reverse locking of the rear door. When the rear door (sealing plate) is opened, the connecting plate is welded under the force of the compression spring. The outside of the cabinet moves, and the interlocking screw is rotated to the lower part of the cabinet against the rotating block and stuck in the groove under the rotating block to lock, and the grounding switch cannot be operated.



注：后部尺寸 H=787 时，请注明。 Note: When the rear dimension H=787, please specify.

◎ 配套表 Matching table

序号 No.	名称 Name	代号 Code name	数量 (只 / 套) Quantity (only/set)	备注 Remark
1	轴承 Bearing	8LY.263.011	1	
2	扇形板 Fan-shaped plate	8LY.192.010	1	
3	扇形板 Fan-shaped plate	8LY.192.011.7	1	
4	扇形板 Fan-shaped plate	8LY.151.039	1	
5	螺钉 Screw M5×12	GB70-85	2	
6	扇形板 Fan-shaped plate	8LY.151.042	2	
7	扇形板 Fan-shaped plate	8LY.151.043	2	
8	轴承 Bearing	8LY.210.014.1	1	
9	轴承 Bearing	8LY.211.061	1	
10	轴承 Bearing	8LY.211.062	2	
11	前轴 Front axle	8LY.200.485	1	长 970 配 1500 深柜 Long 970 with 1500 deep cabinet
12	弯板 Bending plate	8LY.161.058.7	1	
13	盖 Cover	8LY.017.011	1	
14	弯板 Bending plate	8LY.161.059.7	1	
15	滑块 Slip Piece	8LY.143.010.30 8LY.143.010.20	1	
16	轴套 Shaft sleeve	8LY.211.058	3	
17	限位套 Limit sleeve	8LY.211.057	1	
18	支座 Support	8LY.143.019.7	1	
19	分合指示牌 Split and reunion signs	8LY.866.010	1	
20	分合指示牌 Split and reunion signs	8LY.866.011	1	
21	连杆装配 Connecting rod assembly	5LY.233.030.1	1	
22	轴套 Shaft sleeve	8LY.211.060	1	
23	解锁 / 锁构 Unlock/lock mechanism	8LY.211.107.7	1	
24	指示盖 Indicator cover	8LY.211.107.6	1	
25	销轴焊接 Pin welding	5LY.234.013.7	1	
26	销轴焊接 Pin welding	5LY.234.013.6	1	
27	解锁弯板 Unlock the bent plate	8LY.161.058.6	1	
28	销 Pin	7*65	1	
29	压簧 Compression spring	1.0*11*50	1	
30	M4*8	GB70-85	1	

5LY.363.010.10/ 电动 I 型 (手动优先) 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

10KV 中部联锁方案 10KV central interlocking program

注：仅适用于接地开关柜中方案

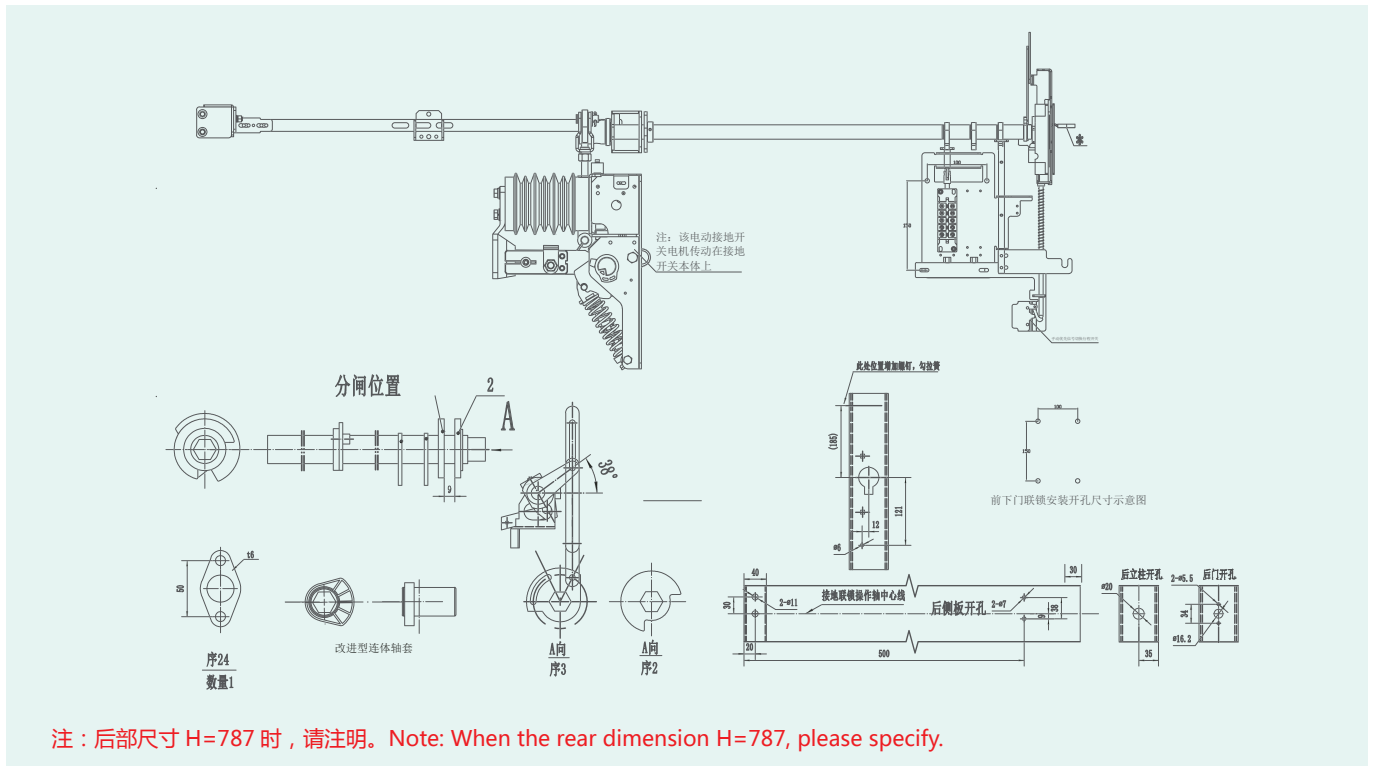
原理：通过序 15 弯板下压（手柄插入状态），触动微动开关，切断电机信号，从而实现电动手动优先注：1. 导轨连锁非标，需单独下单
2 本套机构序 15 弯板一直处于上拉状态（序 18 拉簧，需知悉！）



◎ 说明 Introduction

本联锁装置在原 5LY.363.010.3 接地开关操作机构联锁装置的基础上改进后门的反向闭锁。打开后门（封板），原联锁仍然可操作接地开关，而本联锁不能操作，必须先关好后门（封板）方可操作接地开关。本联锁装置的工作原理是在原 5LY.363.010.3 的基础上将后部支座装配放在中间实现后门反闭锁，当后门（封板）打开时连板焊接在压簧的作用下向柜体外运动，被顶住转块向柜体下部旋转联锁螺钉卡在转块下方槽中达到闭锁，接地开关无法操作。

This interlocking device improves the reverse locking of the rear door on the basis of the original 5LY.363.010.3 grounding switch operating mechanism interlocking device. Open the back door (sealing plate), the original interlock can still operate the grounding switch, but this interlock cannot be operated, you must close the back door (sealing plate) before you can operate the grounding switch. The working principle of this interlocking device is based on the original 5LY.363.010.3, the rear support is assembled in the middle to realize the reverse locking of the rear door. When the rear door (sealing plate) is opened, the connecting plate is welded under the force of the compression spring. The outside of the cabinet moves, and the interlocking screw is rotated to the lower part of the cabinet against the rotating block and stuck in the groove under the rotating block to lock, and the grounding switch cannot be operated.



◎ 配套表 Matching table

序号 No.	名称 Name	代号 Code name	数量 (只 / 套) Quantity (only/set)	备注 Remark
1	轴承 Bearing	8LY.263.011	1	
2	扇形板 Fan-shaped plate	8LY.192.010	1	
3	扇形板 Fan-shaped plate	8LY.192.011.7	1	
4	扇形板 Fan-shaped plate	8LY.151.039	1	
5	螺钉 Screw M5×12	GB70-85	2	
6	扇形板 Fan-shaped plate	8LY.151.042	2	
7	扇形板 Fan-shaped plate	8LY.151.043	2	
8	轴承 Bearing	8LY.210.014.1	1	
9	轴承 Bearing	8LY.211.061	1	
10	轴承 Bearing	8LY.211.062	2	
11	前轴 Front axle	8LY.200.485	1	长 970 配 1500 深柜 Long 970 with 1500 deep cabinet
12	弯板 Bending plate	8LY.161.058.7	1	
13	盖 Cover	8LY.017.011	1	
14	弯板 Bending plate	8LY.161.059.7	1	
15	滑块 Slip Piece	8LY.143.010.30 8LY.143.010.20	1	
16	轴套 Shaft sleeve	8LY.211.058	3	
17	限位套 Limit sleeve	8LY.211.057	1	
18	支座 Support	8LY.143.019.7	1	
19	分合指示牌 Split and reunion signs	8LY.866.010	1	
20	分合指示牌 Split and reunion signs	8LY.866.011	1	
21	连杆装配 Connecting rod assembly	5LY.233.030.1	1	
22	轴套 Shaft sleeve	8LY.211.060	1	
23	解锁 / 锁构 Unlock/lock mechanism	8LY.211.107.7	1	
24	指示盖 Indicator cover	8LY.211.107.6	1	
25	销轴焊接 Pin welding	5LY.234.013.7	1	
26	销轴焊接 Pin welding	5LY.234.013.6	1	
27	解锁弯板 Unlock the bent plate	8LY.161.058.6	1	
28	销 Pin	7*65	1	
29	压簧 Compression spring	1.0*11*50	1	
30	M4*8	GB70-85	1	

5LY.363.010.10/ 电动Ⅱ型 (手动优先) 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

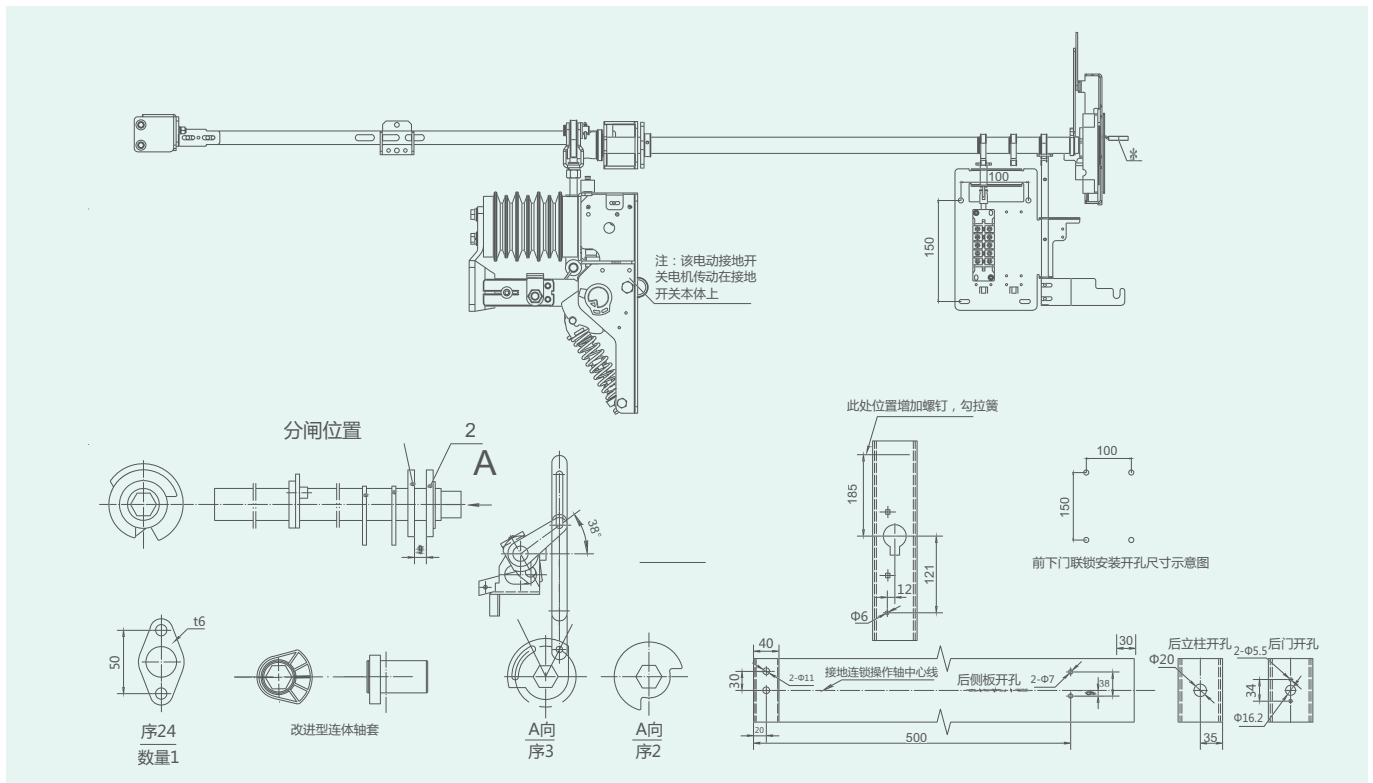
10KV 中部联锁方案 10KV central interlocking program



◎ 说明 Introduction

本联锁装置在原 5LY.363.010.3 接地开关操作机构联锁装置的基础上改进后门的反向闭锁。打开后门 (封板), 原联锁仍然可操作接地开关, 而本联锁不能操作, 必须先关好后门 (封板) 方可操作接地开关。本联锁装置的工作原理是在原 5LY.363.010.3 的基础上将后部支座装配放在中间实现后门反闭锁, 当后门 (封板) 打开时连板焊接在压簧的作用力下向柜体外运动, 被顶住转块向柜体下部旋转联锁螺钉卡在转块下方槽中达到闭锁, 接地开关无法操作。

This interlocking device improves the reverse locking of the rear door on the basis of the original 5LY.363.010.3 grounding switch operating mechanism interlocking device. Open the back door (sealing plate), the original interlock can still operate the grounding switch, but this interlock cannot be operated, you must close the back door (sealing plate) before you can operate the grounding switch. The working principle of this interlocking device is based on the original 5LY.363.010.3, the rear support is assembled in the middle to realize the reverse locking of the rear door. When the rear door (sealing plate) is opened, the connecting plate is welded under the force of the compression spring. The outside of the cabinet moves, and the interlocking screw is rotated to the lower part of the cabinet against the rotating block and stuck in the groove under the rotating block to lock, and the grounding switch cannot be operated.



注：后部尺寸 H=787 时，请注明。 Note: When the rear dimension H=787, please specify.

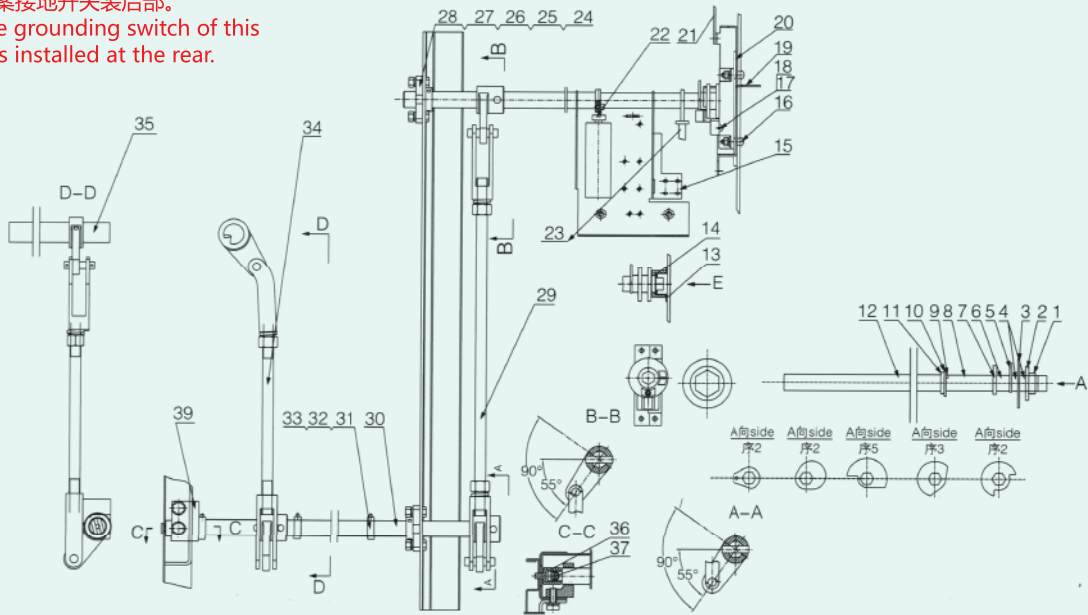
◎ 配套表 Matching table

序号 No.	名称 Name	代号 Code name	数量 (只 / 套) Quantity (only/set)	备注 Remark
1	轴承 Bearing	8LY.263.011	1	
2	扇形板 Fan-shaped plate	8LY.192.010	1	
3	扇形板 Fan-shaped plate	8LY.192.011.7	1	
4	扇形板 Fan-shaped plate	8LY.151.039	1	
5	螺钉 Screw M5×12	GB70-85	2	
6	扇形板 Fan-shaped plate	8LY.151.042	2	
7	扇形板 Fan-shaped plate	8LY.151.043	2	
8	轴承 Bearing	8LY.210.014.1	1	
9	轴承 Bearing	8LY.211.061	1	
10	轴承 Bearing	8LY.211.062	2	
11	前轴 Front axle	8LY.200.485	1	长 970 配 1500 深柜 Long 970 with 1500 deep cabinet
12	弯板 Bending plate	8LY.161.058.7	1	
13	盖 Cover	8LY.017.011	1	
14	弯板 Bending plate	8LY.161.059.7	1	
15	滑块 Slip Piece	8LY.143.010.30 8LY.143.010.20	1	
16	轴套 Shaft sleeve	8LY.211.058	3	
17	限位套 Limit sleeve	8LY.211.057	1	
18	支座 Support	8LY.143.019.7	1	
19	分合指示牌 Split and reunion signs	8LY.866.010	1	
20	分合指示牌 Split and reunion signs	8LY.866.011	1	
21	连杆装配 Connecting rod assembly	5LY.233.030.1	1	
22	轴套 Shaft sleeve	8LY.211.060	1	
23	解锁 / 锁构 Unlock/lock mechanism	8LY.211.107.7	1	
24	指示盖 Indicator cover	8LY.211.107.6	1	
25	销轴焊接 Pin welding	5LY.234.013.7	1	
26	销轴焊接 Pin welding	5LY.234.013.6	1	
27	解锁弯板 Unlock the bent plate	8LY.161.058.6	1	
28	销 Pin	7*65	1	
29	压簧 Compression spring	1.0*11*50	1	
30	M4*8	GB70-85	1	

5LY.363.010.241 接地开关操作机构联锁装置

Grounding switch operating mechanism interlocking device

注：该方案接地开关装后部。
 Note: The grounding switch of this scheme is installed at the rear.



接地开关操作联锁装置（用于拐臂传动操作）5LY.363.010-241 配套表

Earthing switch operation mechanism interlocking device transmission operation of connecting rod 5LY.363.010-241/242 assembly sheet

序号 No.	名称 Item	代号 Code	数量 只 / 套 Qty pcs/set	序号 No.	名称 Item	代号 Code	数量 只 / 套 Qty pcs/set
1	轴承 Bearing	8LY.263.011	1	19	弯板 Curved plate	8LY.151.059	1
2	扇形板 Sector plate	8LY.192.010	1	20	滑块 Slider	8LY.143.010	2
3	扇形板 Sector plate	8LY.192.011	2	21	导轨联锁 Guide rail interlock	5LY.363.011	1
4	轴套 Shaft sleeve	8LY.210.014.1	2	22	齿插板 Tooth flapper	8LY.151.044	1
5	扇形板 Sector plate	8LY.151.041	4	23	联锁机构 Interlocking mechanism	5LY.239.010	1
6	轴套 Shaft sleeve	8LY.211.061	4	24	轴套 Shaft sleeve	8LY.211.058	1
7	扇形板 Sector plate	8LY.151.039	1	25	螺栓 M8×25 Bolt M8×25	GB5783-86	2
8	轴套 Shaft sleeve	8LY.211.063	2	26	垫圈 8 Gasket 8	GB97.1-85	4
9	螺钉 M5×12 Screw M5×12	GB70-85	1	27	垫圈 8 Gasket 8	GB93-87	2
10	扇形板 Sector plate	8LY.151.042	1	28	螺母 M8 Nut M8	GB170-86	2
11	扇形板 Sector plate	8LY.151.043	1	29	连杆装配 Connecting rod assembly	8LY.008.882	1
12	前操作轴 (L=960mm) Shaft length 960mm	8LY.008.800	1	30	后操作轴 Back operation shaft	8LY.008.881	1
	前操作轴 (L=960mm 接地开关装中部) Shaft length 960mm middle installed	8LY.008.800.1	1	31	限位套 Limit sleeve	8LY.211.057	3
13	盖 Cover	8LY.017.011	1	32	内六角紧定螺钉 M5x 10	GB78-85	3
14	支座 Support	8LY.043.022	1	33	轴套 Shaft sleeve	8LY.211.060	2
15	弯板 Curved plate	8LY.161.05	2	34	连杆装配 Connecting rod assembly	86F.008.883	1
16	马车 M6×30 Carriage M6×30	8GB12-86	2	35	支座 Support	8LY.043.019	1
17	挡块 Block	8LY.143.011	1	36	锁套 Lock sleeve	8LY.211.059	1
18	销 4×20 Pin 4×20	GB879-86	1	37	内六角螺钉 M6×16	GB70-858	1

5LY.363.010.242 接地开关操作机构联锁装置 Grounding switch operating mechanism interlocking device

◎ 说明 Introduction

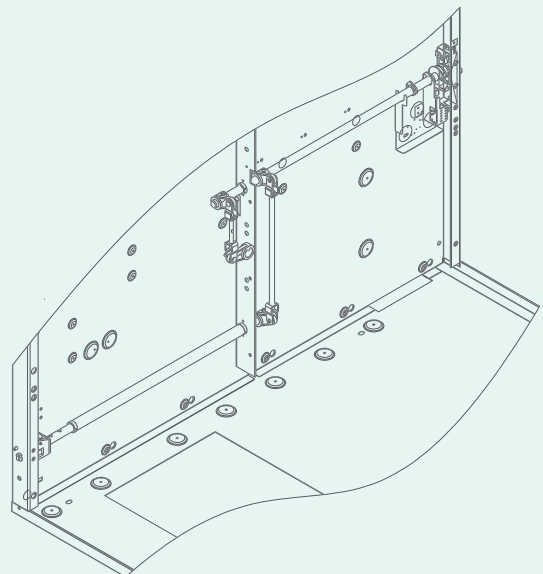
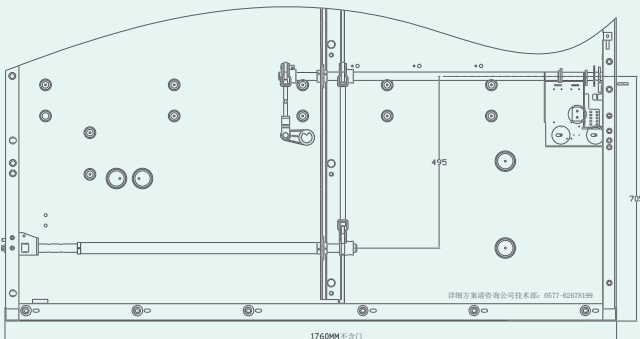
本联锁装置在原 5LY.363.010.3 接地开关操作机构联锁装置的基础上改进后门的反向闭锁。打开后门（封板），原联锁仍然可操作接地开关，而本联锁不能操作，必须先关好后门（封板）方可操作接地开关。本联锁装置的工作原理是在原 5LY.363.010.3 的基础上将后部支座装配放在中间实现后门反闭锁，当后门（封板）打开时连板焊接在压簧的作用下向柜体外运动，被顶住转块向柜体下部旋转联锁螺钉卡在转块下方槽中达到闭锁，接地开关无法操作。

This interlocking device improves the reverse locking of the rear door on the basis of the original 5LY.363.010.3 grounding switch operating mechanism interlocking device. Open the back door (sealing plate), the original interlock can still operate the grounding switch, but this interlock cannot be operated, you must close the back door (sealing plate) before you can operate the grounding switch. The working principle of this interlocking device is based on the original 5LY.363.010.3, the rear support is assembled in the middle to realize the reverse locking of the rear door. When the rear door (sealing plate) is opened, the connecting plate is welded under the force of the compression spring. The outside of the cabinet moves, and the interlocking screw is rotated to the lower part of the cabinet against the rotating block and stuck in the groove under the rotating block to lock, and the grounding switch cannot be operated.

◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 (只 / 套) Quantity (only/set)
1	弯板 Bending	8LY.161.059	1
2	操作轴 Operating shaft	9LY.009.424	1
3	接地开关 Earthing switch	JN15-12/31.5-275	1
4	连杆装配 Connecting rod assembly	5LY.223.030.1~3	1
5	联锁块焊接 Interlocking block welding	5LY.009.420	1
6	止动件 Stop Pieces	9LY.009.423	1
7	绝缘轴 Insulated shaft	8LY.091.100.1	1
8	支座 Support	5LY.043.022	1
9	加长锁套 Extended lock sleeve	8LY.211.059.8	1
10	后封板或后板 Back cover plate or back plate		1

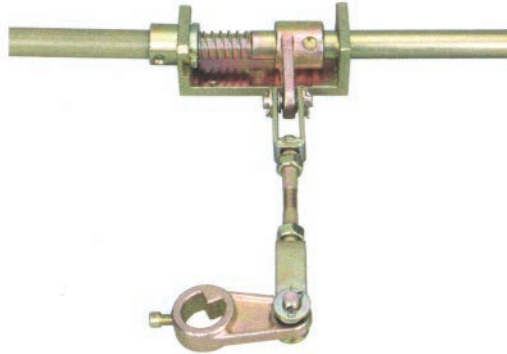
注：该方案接地开关装中部。
Note: The grounding switch of this scheme is installed in the middle.



5LY.363.010.243 接地开关操作机构联锁装置

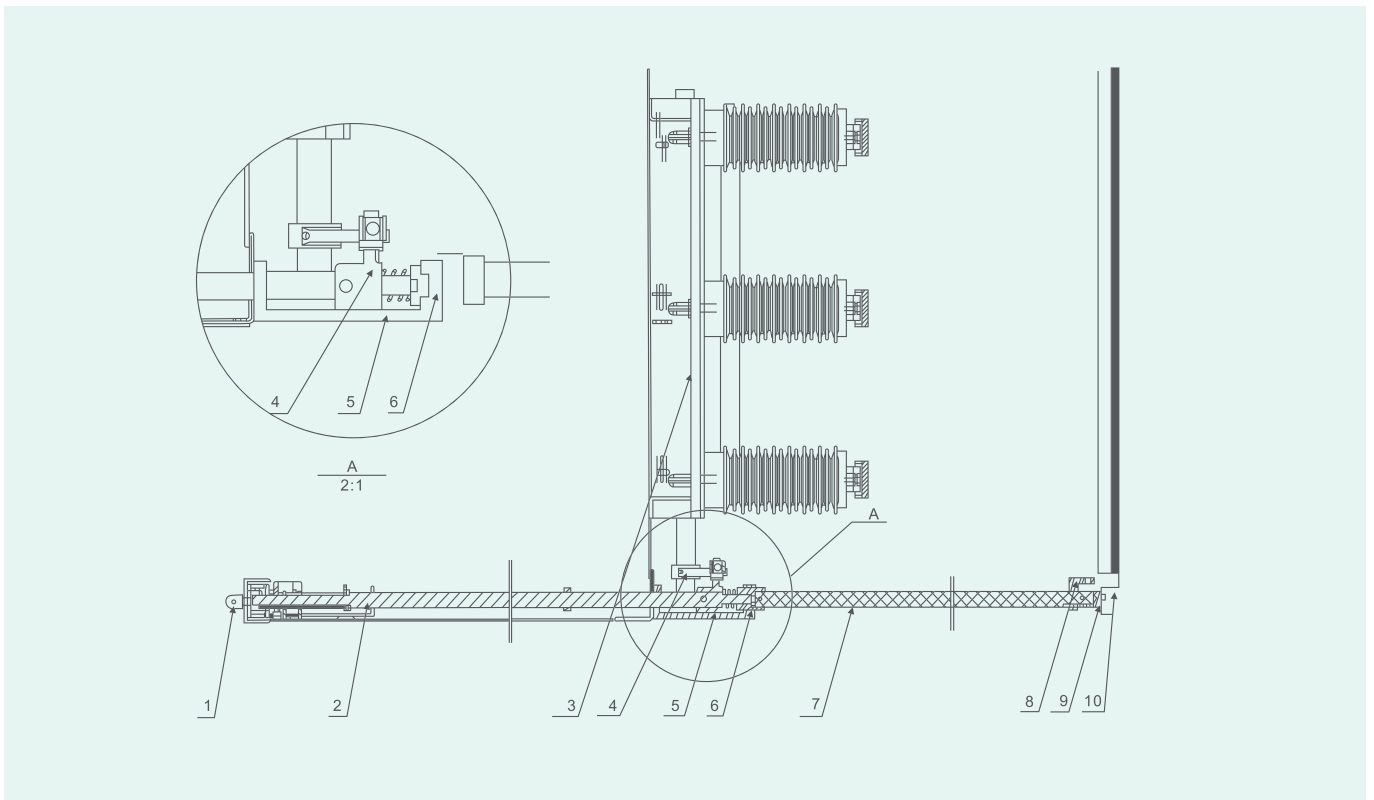
Grounding switch operating mechanism interlocking device

24KV 柜用接地联锁 (中部联锁方案) Grounding interlock for 24KV cabinet (central interlocking scheme)



说明：此方案只适用接地开关装置中部时用。如需装后部请选择 5LY.363.010-241/242; 此方案的后轴采用了绝缘材料，故无需考虑母排到操作轴的对地净距，大大提高了可靠性、安全性。且具有后门反闭锁功能：其强度同 5LY.363.010.3。

Note: This solution is only applicable to the middle part of the grounding switch device. If you need to install the rear part, please choose 5LY.363.010-241/242; the rear axle of this scheme is made of insulating materials, so there is no need to consider the clear distance from the busbar to the operating shaft, which greatly improves the reliability and safety. And has a back door anti-locking function: its strength is the same as 5LY.363.010.3.



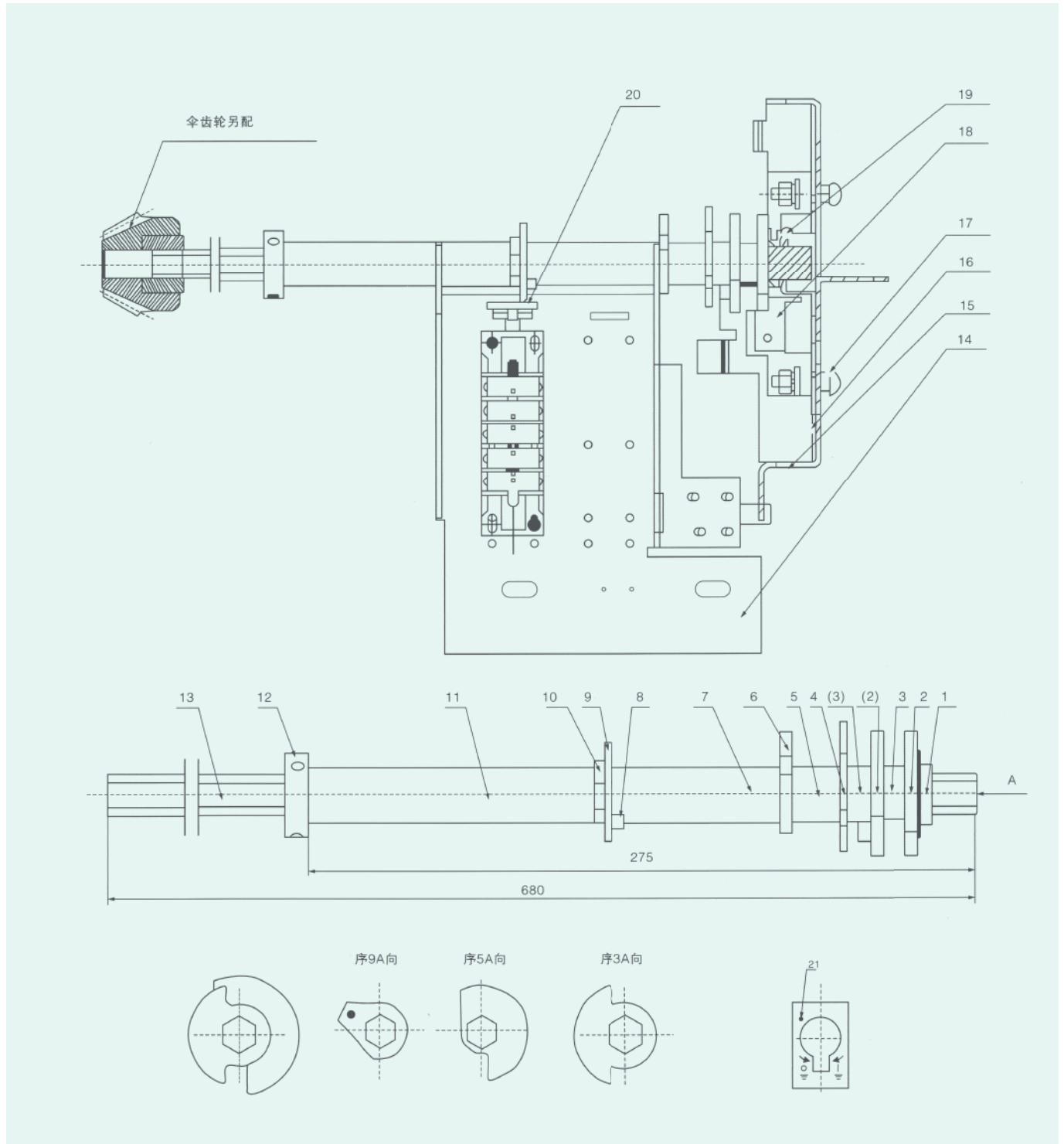
◎ 配套表 Matching table

序号 No.	名称 Name	代号 Code name	数量 (只 / 套) Quantity (only/set)
1	弯板 Curved Plate	8LY.161.059.3	1
2	滑块 Slider	8LY.143.010	1
3	盖 Cover	8LY.017.011	1
4	铝支座 Aluminum Support	8LY.043.022	1
5	轴承 Bearing	8LY.263.011	1
6	扇形板 Sector Plate	8LY.192.010	1
7	轴套 Shaft Sleeve	8LY.210.014.1	1
8	扇形板 Sector Plate	8LY.192.011	2
9	扇形板 Sector Plate	8LY.151.041	4
10	轴套 Shaft Sleeve	8LY.211.061	1
11	扇形板 Sector Plate	8LY.151.039	2
12	轴套 Shaft Sleeve	8LY.211.062	1
13	扇形板 Sector Plate	8LY.151.042	1
14	扇形板 Sector Plate	8LY.151.043	2
15	弯板 Bending	8LY.161.059	1
16	操作轴 Operating shaft	9LY.009.424	1
17	接地开关 Earthing switch	JN15-12/31.5-275	1
18	连杆装配 Connecting rod assembly	5LY.223.030.1~3	1
19	联锁块焊接 Interlocking block welding	5LY.009.420	1
20	止动件 Stop Pieces	9LY.009.423	1
21	绝缘轴 Insulated shaft	8LY.091.100.1	1
22	支座 Support	5LY.043.022	1
23	加长锁套 Extended lock sleeve	8LY.211.059.8	1
24	后封板或后板 Back cover plate or back plate		1

5LY.577.1001 连杆装置

Link device

用伞齿轮传动 Operate with bevel gear



◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 (只 / 套) Quantity (only/set)
1	轴承 Bearing	8LY.263.011	1
2	限位板 Limit plate	8LY.151.084	2
3	轴套 Shaft sleeve	8LY.210.014.1	2
4	扇形板 Sector plate	8LY.151.041	1
5	轴套 Shaft sleeve	8LY.210.061	1
6	扇形板 Sector plate	8LY.151.039	1
7	轴套 Shaft sleeve	8LY.211.062	1
8	螺钉 Screw M5×12	GB70-85	1
9	扇形板 Sector plate	8LY.151.042	1
10	扇形板 Sector plate	8LY.151.043	1
11	轴套 Shaft sleeve	8LY.210.014.3	1
12	限位套 Limit sleeve	8LY.210.322	1
13	操作杆 Joystick	8LY.174.214	1
14	弯板 Bending of plate	8LY.161.058	1
15	弯板 Bending of plate	8LY.161.059	1
16	滑板 The skateboard	8LY.143.010	2
17	马车螺丝 Carriage screw M6×25	GB 12-88	1
18	支座 Support	5LY.043.022	1
19	盖 Cover	8LY.017.011	1
20	齿插板 Tooth plate	8LY.151.044	1
21	标牌 Signage	8LY.860.010	1

注：1. 该机构需要与下门联锁，请在订货时注明。

2. 该机构包含 8LY.161.874 弯板和 8LY.143.501 固定块。

Note: 1. This mechanism needs to be interlocked with the lower door, please specify when ordering.

2. The mechanism includes 8LY.161.874 bent plate and 8LY.143.501 fixed block.

5LY.577.1002 伞齿轮 Bevel gear

用于双向伞齿轮传动操作 Operate with bevel gear



双向伞齿轮
5LY.245.002.1 伞齿轮装配

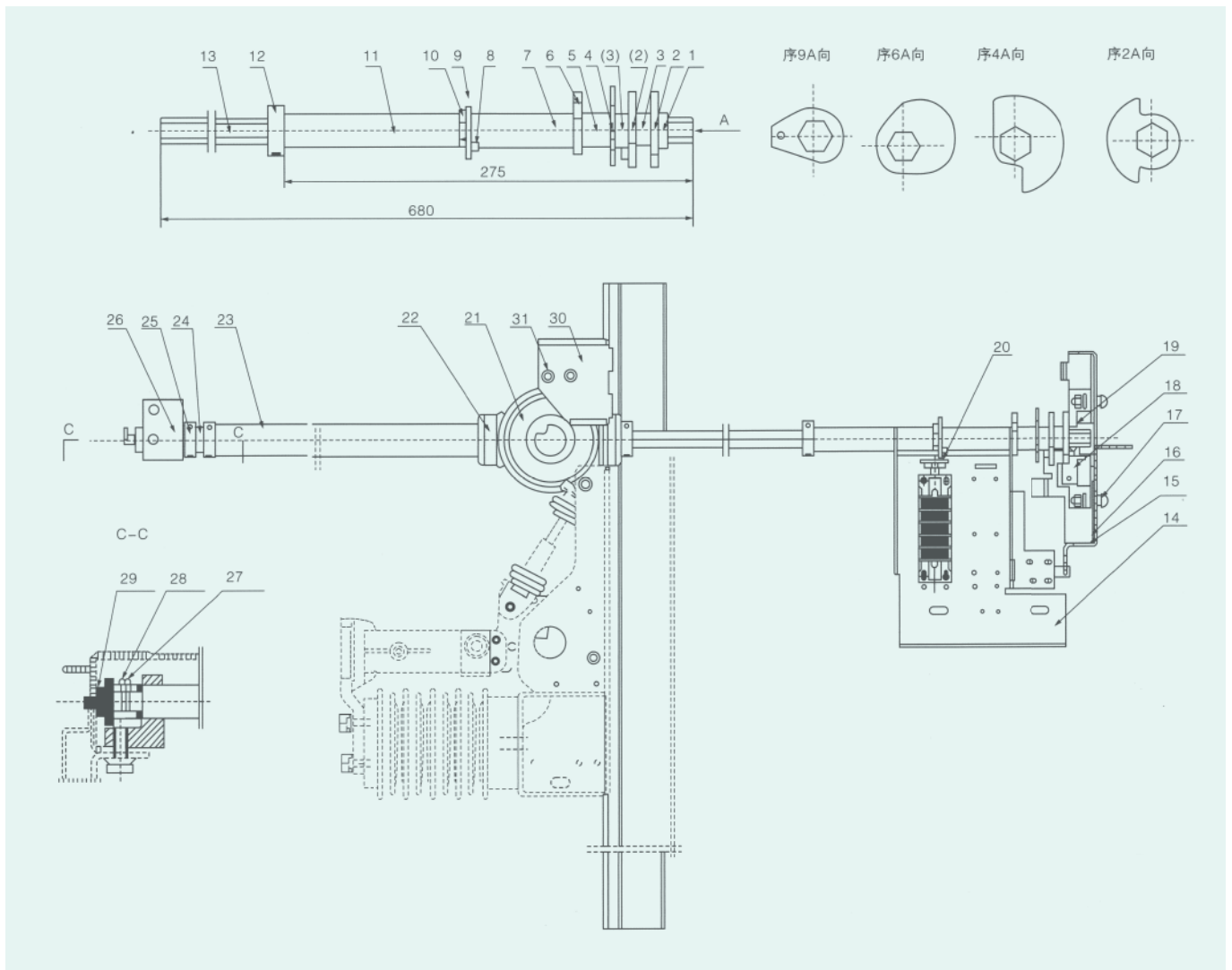
◎ 特点

采用双向（全齿）伞齿轮。实现后门（封板）联锁，并有两种形式：

- a. 5LY.577.1002 为单向联锁，接地开关合闸后才可打开后门（封板），后门（封板）开启后，仍可操作接地开关。其联锁功能同 5LY.363.010。
- b. 5LY.577.1002.1 为双向联锁。接地开关合闸后才可打开后门（封板），后门（封板）开启后，就无法再操作接地开关。其联锁功能 5LY.363.010.1。

Adopt bidirectional (full tooth) bevel gear. Realize the back door (sealing plate) interlocking, and there are two forms:

- a. 5LY.577.1002 is a one-way interlock, the back door (sealing plate) and back door (sealing plate) can be opened only after the grounding switch is closed after opening. The grounding switch can still be operated. Its interlocking function is the same as 5LY.363.010.
- b. 5LY.577.1002.1 is two-way interlocking. The back door (sealing plate) and the back door (sealing plate) can be opened only after the grounding switch is closed after it is turned on, the grounding switch can no longer be operated. Its interlocking function is 5LY.363.010.1.



◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 (只/套) Quantity (only/set)
1	轴承 Bearing	8LY.263.011	1
2	限位板 Limit plate	8LY.151.084	2
3	轴套 Shaft sleeve	8LY.210.014.1	2
4	扇形板 Sector plate	8LY.151.041	1
5	轴套 Shaft sleeve	8LY.210.061	1
6	扇形板 Sector plate	8LY.151.039	1
7	轴套 Shaft sleeve	8LY.211.062	1
8	螺钉 Screw M5×12	GB70-85	1
9	扇形板 Sector plate	8LY.151.042	1
10	扇形板 Sector plate	8LY.151.043	1
11	轴套 Shaft sleeve	8LY.210.014.3	1
12	限位套 Limit sleeve	8LY.210.322	1
13	操作杆 Joystick	8LY.174.214	1
14	弯板 Bending of plate	8LY.161.058	1
15	弯板 Bending of plate	8LY.161.059	1
16	滑板 The skateboard	8LY.143.010	2
17	马车螺丝 Carriage screw M6×25	GB 12-88	1
18	支座 Bearing	5LY.043.022	1
19	盖 Cover	8LY.017.011	1
20	齿插板 Teeth gear plate	8LY.151.044	1
21	伞齿轮装配 Bevel gear assembly	8LY.245.002.1	1
22	联接块 The connecting piece	8LY.143.108.2	1
23	轴套 Shaft sleeve	8LY.211.060	1
24	操作轴 (配 5LY.577.1002)	8LY.200.011.1	2
	Operating shaft (with 5LY.577.1002)	8LY.200.011.2	
	操作轴 (配 5LY.577.1002.1)	8LY.200.012.1	1
	Operating shaft (with 5LY.577.1002.1)	8LY.200.012.2	
25	限位套 Limit set	8LY.211.057	2
26	支座 bearing	8LY.43.019	1
27	销钉 pin	8LY.993.051.1	1
28	压簧 Compression spring	8LY.282.201(配 5LY.577.1002.1)	1
29	锁套 The lock sets	8LY.211.059(配 5LY.577.1002)	1
		8LY.211.201(配 5LY.577.1002.1)	
30	弯板 Bending of plate	8LY.161.874	1
31	固定块 Fixed block	8LY.143.501	1

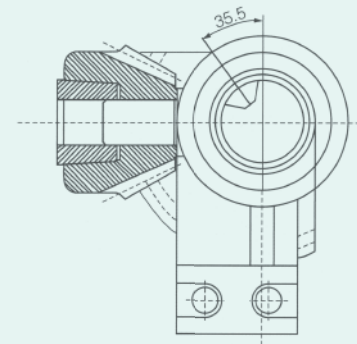
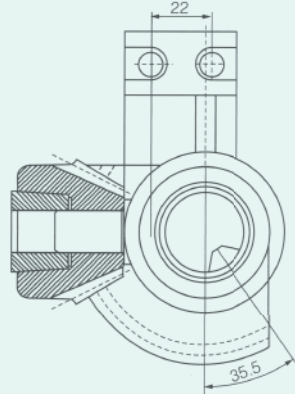
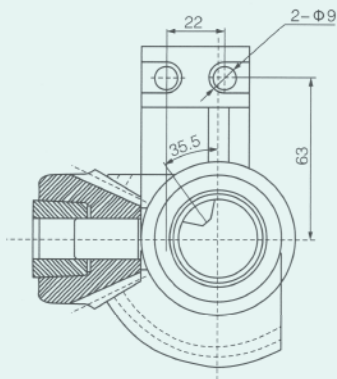
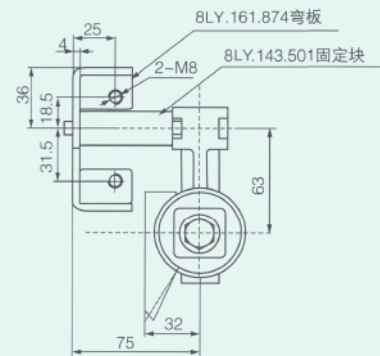
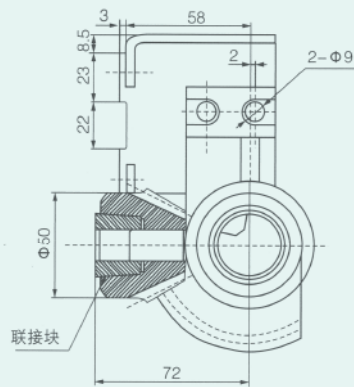
注：1. 当接地开关正装时，即和图纸反向安装时，序 21 伞齿轮装配反装。

2. 该机构包含 8LY.161.874 弯板和 8LY.143.501 固定块。

Note: 1. When the grounding switch is installed, i.e., when it is installed in reverse with the drawing, the bevel gear shall be installed in reverse.

2. The body consists of 8LY.161.874 bent plates and 8LY.143.501 fixed blocks.

5LY.245.002.1 伞齿轮
Bevel gear



伞齿轮装配 5LY.245.001.1
接地开关中部倒装时 (即右操)
Bevel gear assembly 5LY.245.001.1
When the ground switch is inverted in the middle
(i.e., right operation)

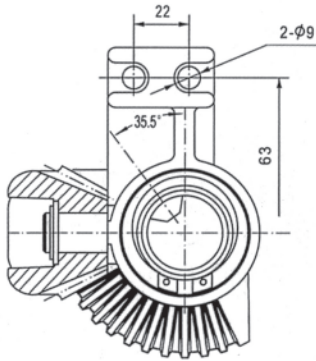
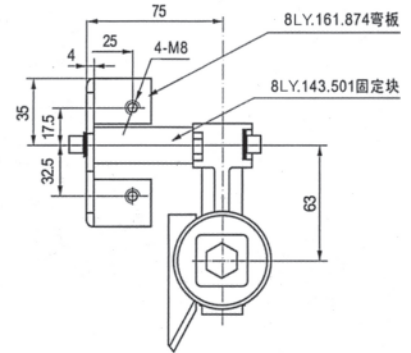
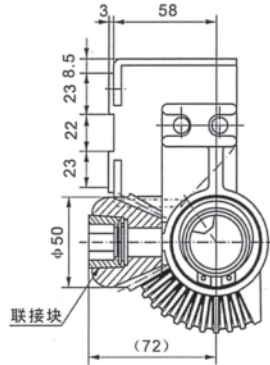
伞齿轮装配 5LY.245.001.2
Bevel gear assembly 5LY.245.001.2

伞齿轮装配 5LY.245.001.4
接地开关中部正装时 (即左操)
Bevel gear assembly 5LY.245.001.4
Ground switch is being installed in the middle
(i.e. left operation)

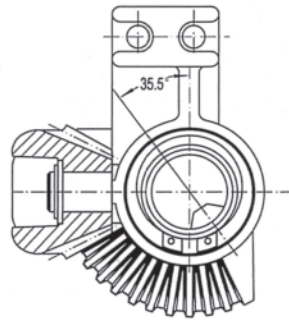
注：1. 订购时请注明型号；2. 型号 8LY.161.874 弯板及 8LY.143.501 固定块为用户选购件，不跟伞齿轮配套出货。

Note: 1. When ordering, please indicate the model number; 2. Model 8LY.161.874 bending plate and 8LY.143.501 fixed block are optional parts for the user. They are not shipped with bevel gears.

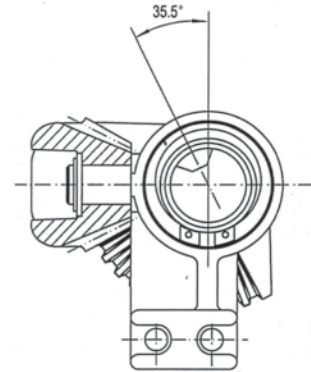
伞齿轮装配型号及安装尺寸
Bevel gear assembly model and installation size



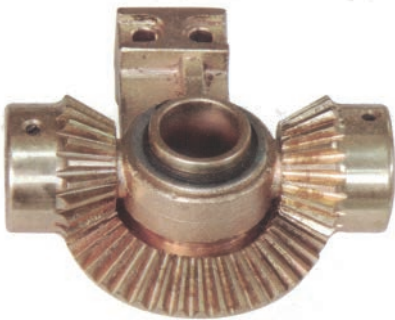
5LY.245.001.1 伞齿轮装配
Bevel gear assembly



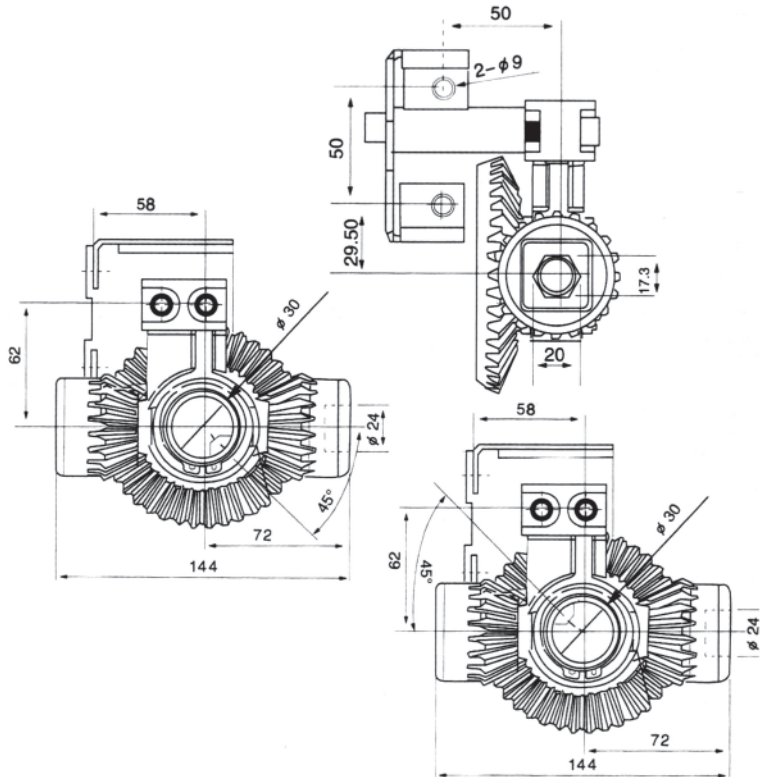
5LY.245.001.2 伞齿轮装配
Bevel gear assembly



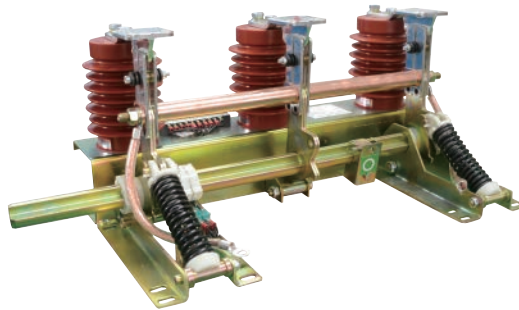
5LY.245.001.4 伞齿轮装配
Bevel gear assembly



5LY.245.002.1 伞齿轮装配
Bevel gear assembly



JN15-12/31.5(ES1-10/31.5) 型组合式接地开关 Combined Earthing switch series

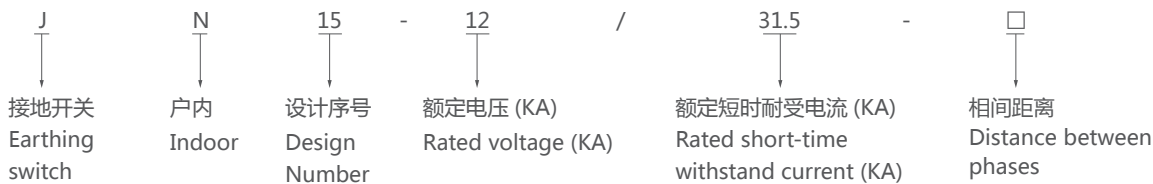


◎ 产品概述 Product description

JN15-12/31.5 型户内高压接地开关是我公司根据 ES1 型接地开关原型设计开发的一种具有国标先进水平的新型接地开关。结构形式为组装式，其性能符合 GB1985-2004《交流高压隔离开关形状和接地开关》及 IEC129 的要求，适用于户内 3-12KV 三相交流 50(60)Hz 的电力系统；它具有一定的关合能力以保护开关设备内其它电气设备不受损坏，可与各种高压开关柜配套使用作为高压电器设备检修时的接地保护。

JN15-12/31.5 type indoor high voltage grounding switch is a new type of grounding switch with advanced level of national standard developed by our company based on ES1 type grounding switch prototype design. The structure is assembled, and its performance meets the requirements of GB1985-2004 "AC high-voltage isolating switch shape and grounding switch" and IEC129. It is suitable for indoor 3-12KV three-phase AC 50 (60) Hz power system; it has certain The closing capacity is to protect other electrical equipment in the switchgear from damage, and can be used with various high-voltage switch cabinets as a grounding protection for high-voltage electrical equipment during maintenance.

◎ 型号及其含义 Model and its meaning



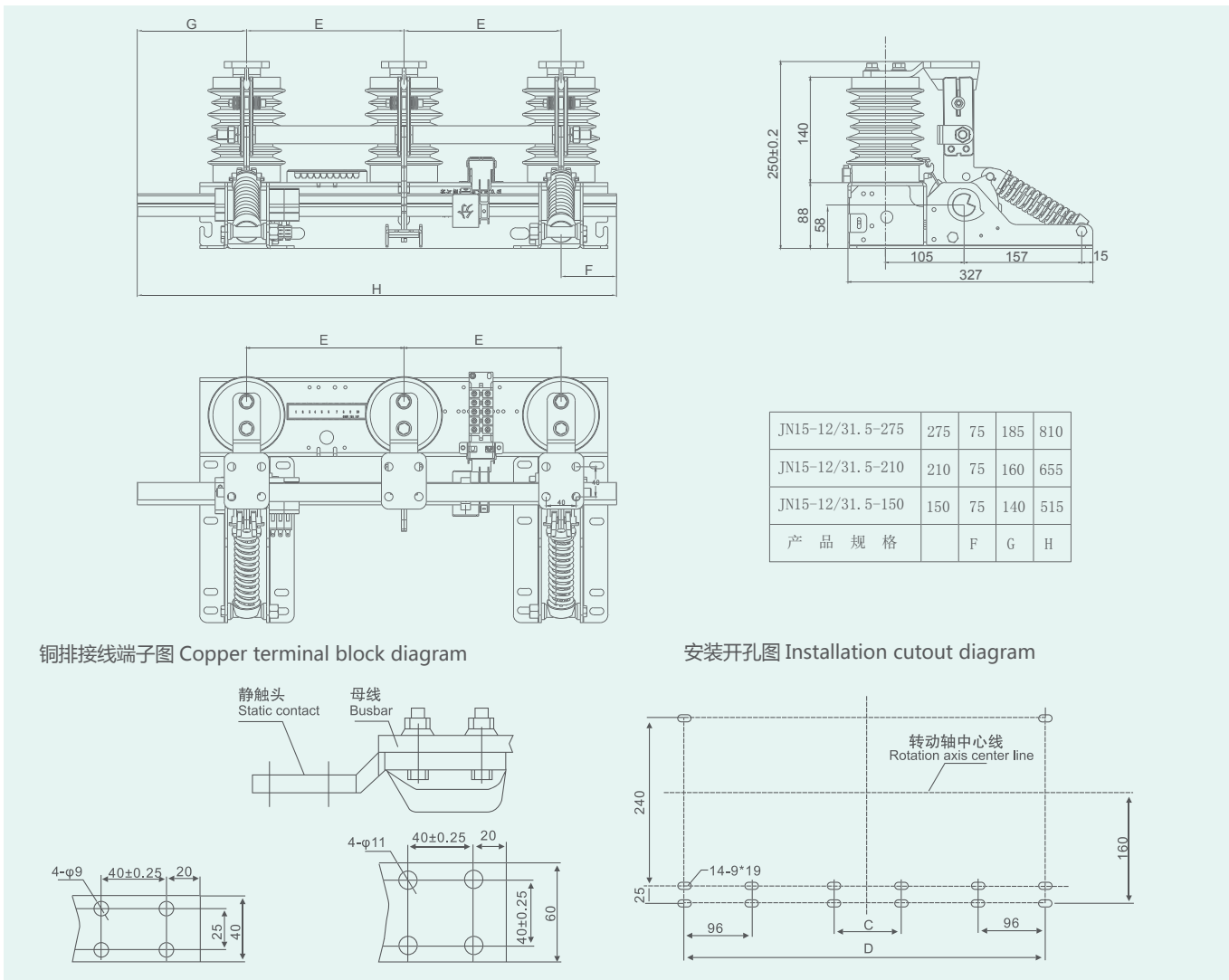
◎ 使用环境条件 Environmental conditions

- | | |
|---|---|
| 1、周围空气温度：上限 +40℃，下限 -10℃；
2、海拔高度：不超过 1000 米；
3、湿度条件：日相对湿度平均值不超过 95%，
月相对湿度平均值不超过 90%；
4、地震烈度：不超过 8 度；
5、污秽等级：II 级。 | 1. Ambient air temperature: upper limit +40℃, lower limit -10℃;
2. Altitude: not more than 1000 meters;
3. Humidity conditions: the average daily relative humidity does not exceed 95%, and the monthly average relative humidity does not exceed 90%;
4. Seismic range: no more than 8 degrees;
5. Pollution level: Level II. |
|---|---|

◎ 主要技术参数 The main technical parameters

	项目 Project	单位 Unit	数据 Data
	额定电压 Rated voltage	KV	12
	额定短时耐受电流 (热稳定) Rated short-time withstand current (thermal stability)	KA	31.5
	额定短路持续时间 Rated short circuit duration	S	4
	额定短路关合电流 Rated short-circuit making current	KA	80
	额定峰值耐受电流 (动稳定) Rated peak withstand current (dynamic stability)	KA	80
额定绝缘水平 Rated insulation level	额定短时工频耐受电压 1min Rated short-time power frequency withstand voltage 1min	KV	42
	额定雷电冲击耐受电压 Rated lightning impulse withstand voltage	KV	75
	机械寿命 Mechanical life	次	2000

外形及安装尺寸图 Outline and installation dimension drawing



JN15-12/31.5-275	275	75	185	810
JN15-12/31.5-210	210	75	160	655
JN15-12/31.5-150	150	75	140	515
产 品 规 格		F	G	H

铜排接线端子图 Copper terminal block diagram

安装开孔图 Installation cutout diagram

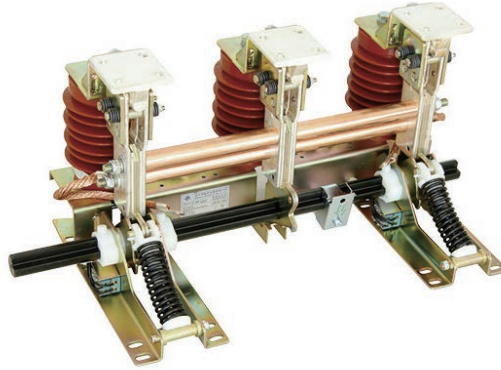
(单位 Unit:mm)

产品型号 Type	E	F	G	H	D	C
JN15-12/31.5-165	165	75	160	565	426	
JN15-12/31.5-180	180	75	160	595	456	
JN15-12/31.5-200	200	75	160	635	496	
JN15-12/31.5-210	210	75	160	655	516	
JN15-12/31.5-220	220	75	160	675	536	
JN15-12/31.5-230	230	75	160	695	556	96
JN15-12/31.5-250	250	75	160	735	596	96
JN15-12/31.5-275	275	75	185	810	646	96

订货须知 Ordering instructions

- 1、订购接地开关时，须注明产品型号、相距、是否配供带电显示装置（显示器型号）。
- 2、软连接长度是否需加长（常规 L:240）。
1. When ordering a grounding switch, you must indicate the product model, distance, and whether it is equipped with a live display device (display model).
2. Whether the length of the soft connection needs to be extended (regular L: 240).

JN17-12/40 型组合式接地开关 Combined Earthing switch series



◎ 产品概述 Product description

JN17-12/40(原型号 JN15-12/40 为了同市场上区别我公司改为 JN17-12/40) 型号内高压接地开关是我公司根据 ES1 型接地开关原型设计开发的具有国标先进水平的新型接地开关。结构形式为组合式,其性能符合 GB1985-2004《交流高压隔离开关形状和接地开关》及 IEC129 的要求,适用于户内 3-10 千伏三相交流 50(60)Hz 的电力系统;它具有一定的关合能力以保护开关设备内其它电气设备不受损坏,可与各种高压开关柜配套使用作为高压电器设备检修时的接地保护。

JN17-12/40 (the original model JN15-12/40 is changed from JN17-12/40 to JN17-12/40 in order to distinguish it from the market). The high-voltage grounding switch in the model is developed by our company based on the ES1 grounding switch prototype design and has the advanced level of the national standard. New type of grounding switch. The structure is a combined type, and its performance meets the requirements of GB1985-2004 "AC high-voltage isolating switch shape and grounding switch" and IEC129. It is suitable for indoor 3-10 kV three-phase AC 50 (60) Hz power system; it has A certain closing capacity can protect other electrical equipment in the switchgear from damage, and can be used with various high-voltage switch cabinets as a grounding protection for high-voltage electrical equipment during maintenance.

◎ 型号及其含义 Model and its meaning

J	N	17	-	12	/	40	-	□
↓	↓	↓		↓		↓		↓
接地开关 Earthing switch	户内 Indoor	设计序号 Design Number		额定电压 (KA) Rated voltage (KA)		额定短时耐受电流 (KA) Rated short-time withstand current (KA)		相间距离 Distance between phases

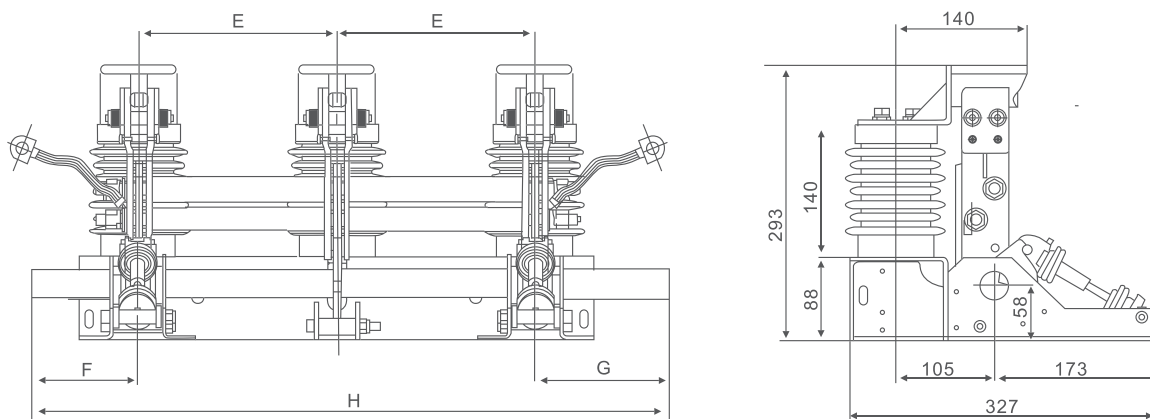
◎ 使用环境条件 Environmental conditions

- | | |
|--|--|
| 1、周围空气温度:上限 +40°C, 下限 -10°C ; | 1. Ambient air temperature: Upper limit +40°C , lower limit -10°C ; |
| 2、海拔高度:不超过 1000 米 ; | 2. Altitude: not more than 1000 meters; |
| 3、湿度条件:日相对湿度平均值不超过 95%,
月相对湿度平均值不超过 90% ; | 3. Humidity conditions: The average daily relative humidity does not exceed 95%,
The average monthly relative humidity does not exceed 90%; |
| 4、地震烈度:不超过 8 度 ; | 4. Seismic range: no more than 8 degrees; |
| 5、污秽等级 :II 级。 | 5. Pollution level: Level II. |

◎ 主要技术参数 The main technical parameters

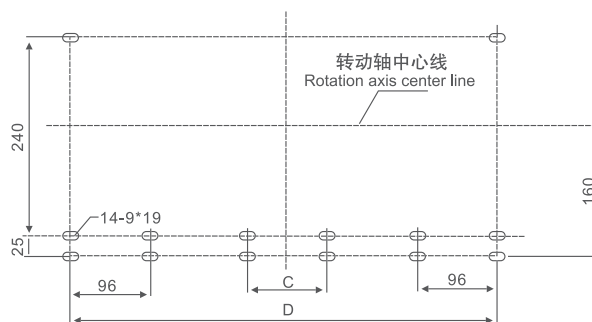
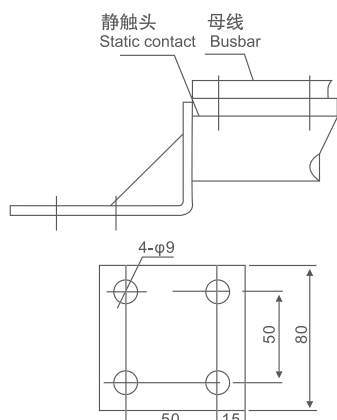
项目 Project	单位 Unit	数据 Data
额定电压 Rated voltage	KV	12
额定短时耐受电流 (热稳定) Rated short-time withstand current (thermal stability)	KA	40
额定短路持续时间 Rated short circuit duration	S	4
额定短路关合电流 Rated short-circuit making current	KA	100
额定峰值耐受电流 (动稳定) Rated peak withstand current (dynamic stability)	KA	100
额定绝缘水平 Rated insulation level		
额定短时工频耐受电压 1min Rated short-time power frequency withstand voltage 1min	KV	42
额定雷电冲击耐受电压 Rated lightning impulse withstand voltage	KV	75
机械寿命 Mechanical life	次	2000

◎ 外形及安装尺寸图 Outline and installation dimension drawing



铜排接线端子图 Copper terminal block diagram

安装开孔图 Installation cutout diagram



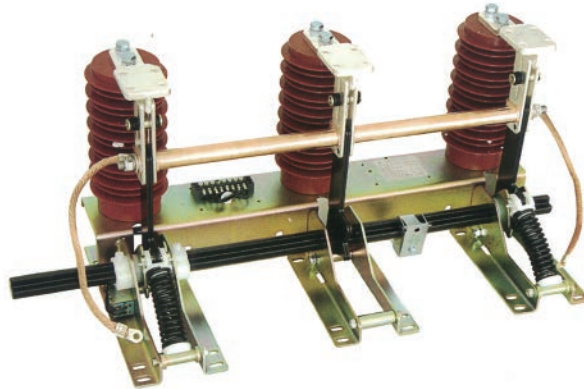
(单位 Unit: mm)

产品型号 Type	E	F	G	H	D
JN17-12/40-210	210	50	185	655	516
JN17-12/40-220	220	50	185	675	536
JN17-12/40-230	230	50	85	695	556
JN17-12/40-250	250	50	185	735	596
JN17-12/40-270	275	50	210	810	646

◎ 订货须知 Ordering instructions

- 1、订购接地开关时，须注明产品型号、相距、是否配供带电显示装置（显示器型号）。
- 2、软连接长度是否需加长（常规 L:240）。
 1. When ordering a grounding switch, you must indicate the product model, distance, and whether it is equipped with a live display device (display model).
 2. Whether the length of the soft connection needs to be extended (regular L: 240).

JN15-12/31.5 型组合式接地开关 Combined Earthing switch series



产品概述 Product description

JN15-12/31.5 户内高压接地开关是我公司最新开发的接地开关。该产品具有设计先进、结构简单紧凑、技术性能可靠等特点，符合 GB1985-2004《交流高压隔离开关和接地开关》及 IEC62271-102:2002 的要求，适用于户内 24KV 三相交流 50(60)Hz 的电力系统中；它具有短路关合能力以保护开关设备内其它电气设备不受损坏，可与各种高压开关柜配套使用，作为高压电器设备检修时的接地保护。

JN15-12/31.5 indoor high voltage grounding switch is the latest grounding switch developed by our company. The product has the characteristics of advanced design, simple and compact structure, reliable technical performance, etc. It meets the requirements of GB1985-2004 "AC high-voltage isolating switch and grounding switch" and IEC62271-102:2002, and is suitable for indoor 24KV three-phase AC 50(60) In the Hz power system; it has short-circuit closing capability to protect other electrical equipment in the switchgear from damage, and can be used in conjunction with various high-voltage switch cabinets as a grounding protection for high-voltage electrical equipment during maintenance.

使用环境条件 Environmental conditions

- | | |
|---|--|
| 1、周围空气温度：上限 +40℃，下限 -10℃； | 1. Ambient air temperature: Upper limit +40℃, lower limit -10℃； |
| 2、海拔高度：不超过 1000 米； | 2. Altitude: not more than 1000 meters; |
| 3、湿度条件：日相对湿度平均值不超过 95%，
月相对湿度平均值不超过 90%； | 3. Humidity conditions: The average daily relative humidity does not exceed 95%,
The average monthly relative humidity does not exceed 90%; |
| 4、地震烈度：不超过 8 度； | 4. Seismic range: no more than 8 degrees; |
| 5、污秽等级：II 级。 | 5. Pollution level: Level II. |

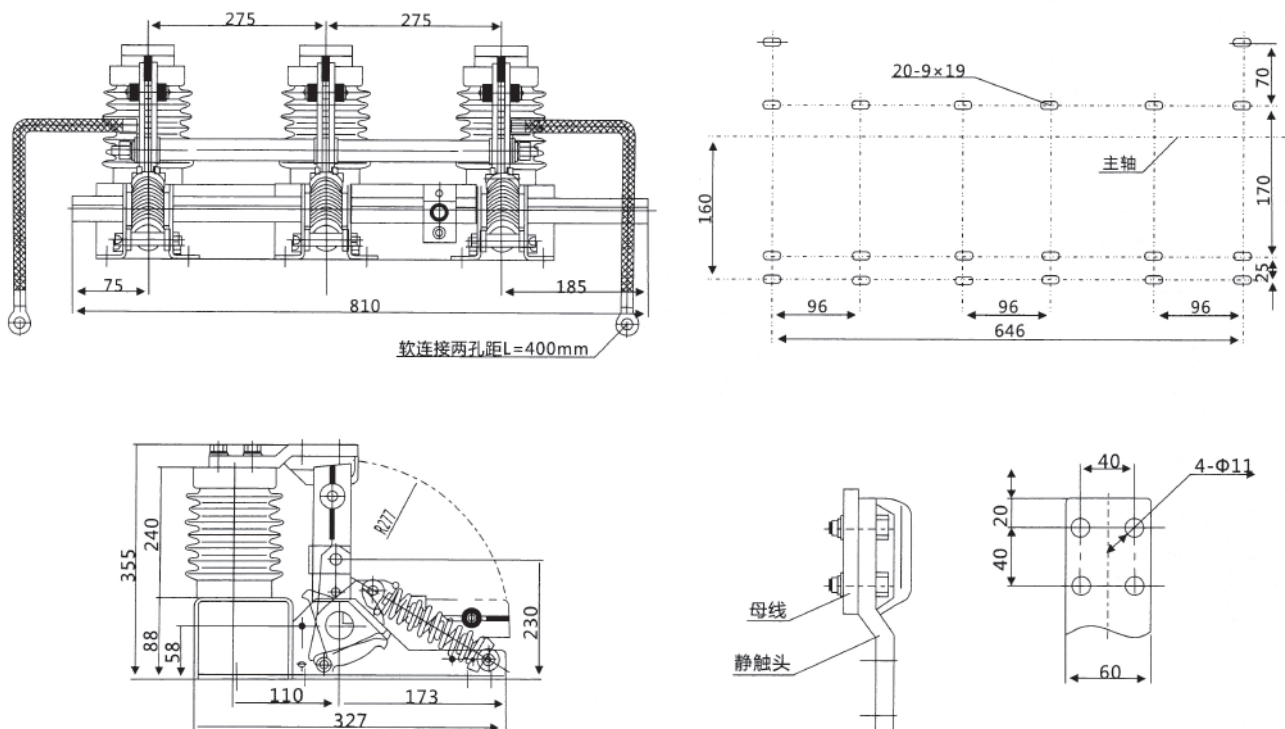
型号及其含义 Model and its meaning

J	N	15	-	24	/	31.5	-	□
↓	↓	↓		↓		↓		↓
接地开关 Earthing switch	户内 Indoor	设计序号 Design Number		额定电压 (KA) Rated voltage (KA)		额定短时耐受电流 (KA) Rated short-time withstand current (KA)		相间距离 Distance between phases

主要技术参数 The main technical parameters

项目 Project	单位 Unit	数据 Data
额定电压 Rated voltage	KV	24
额定短时耐受电流 Rated short-time withstand current (thermal stability)	KA	31.5
额定短路持续电流 Rated short-circuit continuous current	S	4
额定峰值耐受电流 (动稳定) Rated peak withstand current (dynamic stability)	KA	80
额定短路关合电流 Rated short-circuit making current	KV	80
额定绝缘水平	KV	相对地及相间
工作耐压 (1min) Working pressure		6.5
雷电冲击耐压 Lightning impulse withstand voltage		125
机械寿命 Mechanical life	次 Times	2000

◎ 外形及安装尺寸图 Outline and installation dimension drawing

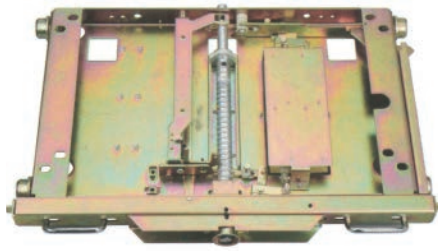


产品型号 Type	E	F	G	H	D	C
JN15-12/31.5-180	165	75	160	565	426	
JN15-12/31.5-180	180	75	160	595	456	
JN15-12/31.5-200	200	75	160	635	495	
JN15-12/31.5-210	210	75	160	635	516	
JN15-12/31.5-220	220	75	160	675	536	
JN15-12/31.5-230	230	75	160	695	556	
JN15-12/31.5-250	250	75	160	735	596	
JN15-12/31.5-275	275	75	160	810	646	96

◎ 订货须知 Ordering instructions

- 1、订购接地开关时，须注明产品型号、相距、是否配供带电显示装置（显示器型号）。
- 2、软连接长度是否需加长（常规 L:240）。
1. When ordering a grounding switch, you must indicate the product model, distance, and whether it is equipped with a live display device (display model).
2. Whether the length of the soft connection needs to be extended (regular L: 240).

底盘车系列 Chassis car series



◎ 用途及功能 Purpose and function

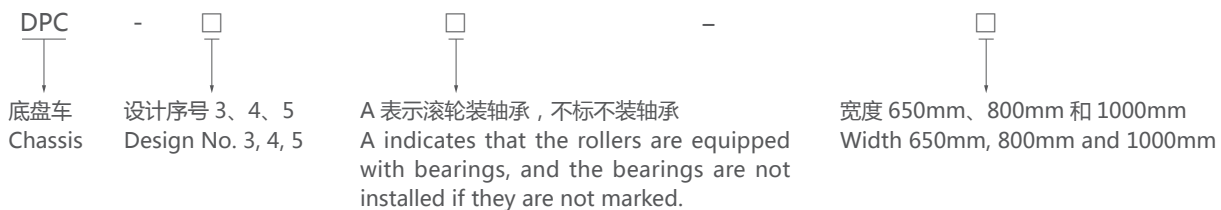
底盘车主要用于抽出式开关设备中承装断路器、互感器等元器件，将其推进及退出，作为元器件与母线连接的辅助操作。底盘车与断路器内部机构及中置柜其它联锁机构配合工作时，能满足 GB3906 中的“五防”联锁要求，具体功能如下：

1. 手车只有处于试验 / 隔离或工作位置时。断路器才能合闸，而断路器合闸后，手车便无法移动，从而防止了带负荷误接误合隔离触头情况的发生。
2. 手车在工作位置或离开试验 / 隔离位置 10mm 左右，接地开关便无法合闸。防止带电误合接地开关。
3. 接地开关合闸时。手车不能从试验 / 隔离位置移向工作位置。防止接地开关合闸位置时关合断路器。
4. 底盘车进入柜内后，一旦离开试验 / 隔离位置，手车就无法从柜内抽出。

Chassis vehicles are mainly used to carry components such as circuit breakers and transformers in withdrawable switchgear, and to push them in and out as auxiliary operations for connecting components and busbars. When the chassis vehicle works with the internal mechanism of the circuit breaker and other interlocking mechanisms of the center cabinet, it can meet the "five prevention" interlocking requirements in GB3906. The specific functions are as follows:

1. The handcart is only in the test/isolation or working position. The circuit breaker can be closed, and after the circuit breaker is closed, the handcart cannot be moved, thus preventing the occurrence of misconnection of the isolation contact with load.
2. The grounding switch cannot be closed when the handcart is at the working position or about 10mm away from the test/isolation position. Prevent the grounding switch from being turned on by mistake.
3. When the earthing switch is closed. The handcart cannot be moved from the test/isolation position to the working position. Prevent the circuit breaker from closing when the grounding switch is in the closing position.
4. After the chassis truck enters the cabinet, once it leaves the test/isolation position, the handcart cannot be withdrawn from the cabinet.

◎ 型号及其含义 Model and its meaning



◎ 底盘车配置的锁板 The lock plate of the chassis vehicle configuration



加长底盘车操作手柄
Extended chassis vehicle operating handle



8LY.141.012
锁板 Lock plate



8LY.141.012.1
锁板 Lock plate



8LY.141.012.2
锁板 Lock plate



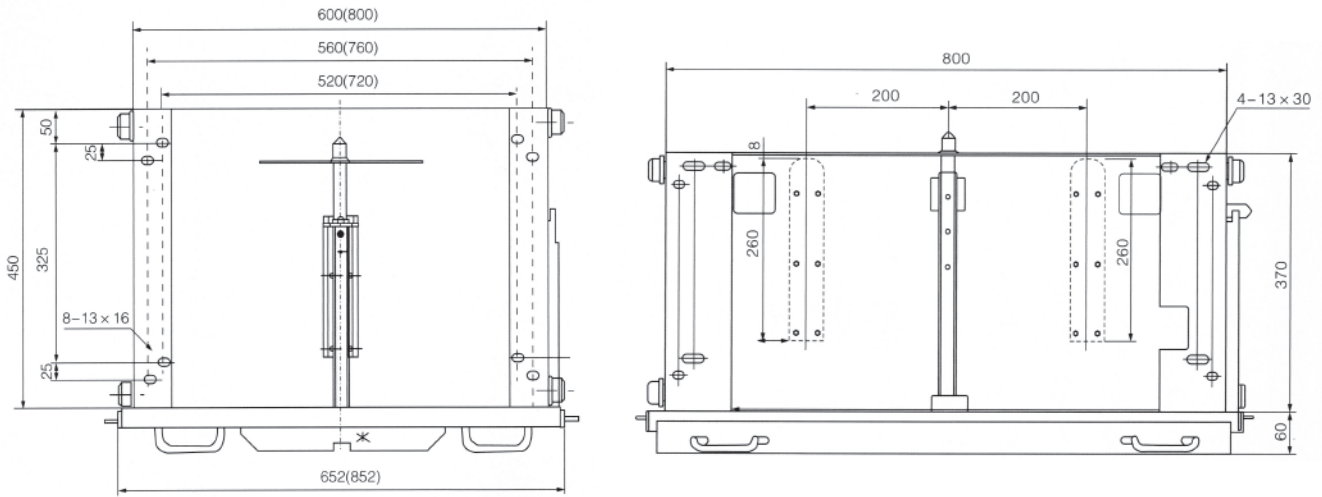
8LY.141.050
锁板 Lock plate



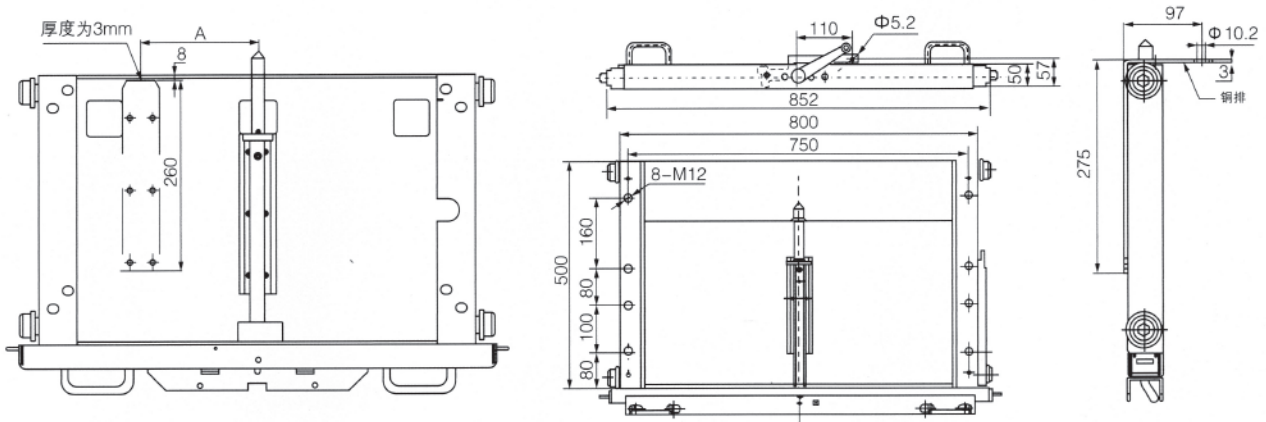
8LY.141.012S
锁板 Lock plate

◎ 外形及安装尺寸图 Outline and installation dimension drawing

加深底盘车 Deepen the chassis



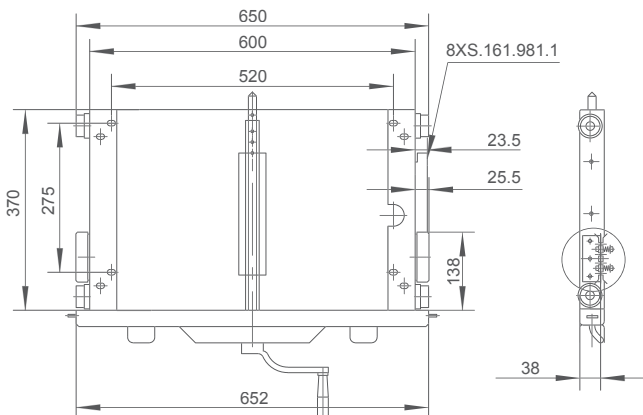
接地方式 Grounding method



接地排安装尺寸 (7 字铜排)
Grounding bar installation size (7-shaped copper bar)

产品型号 Type	A
DPC- □ 650	100
DPC- □ -800	160

接地夹安装尺寸图 Ground clamp installation size diagram

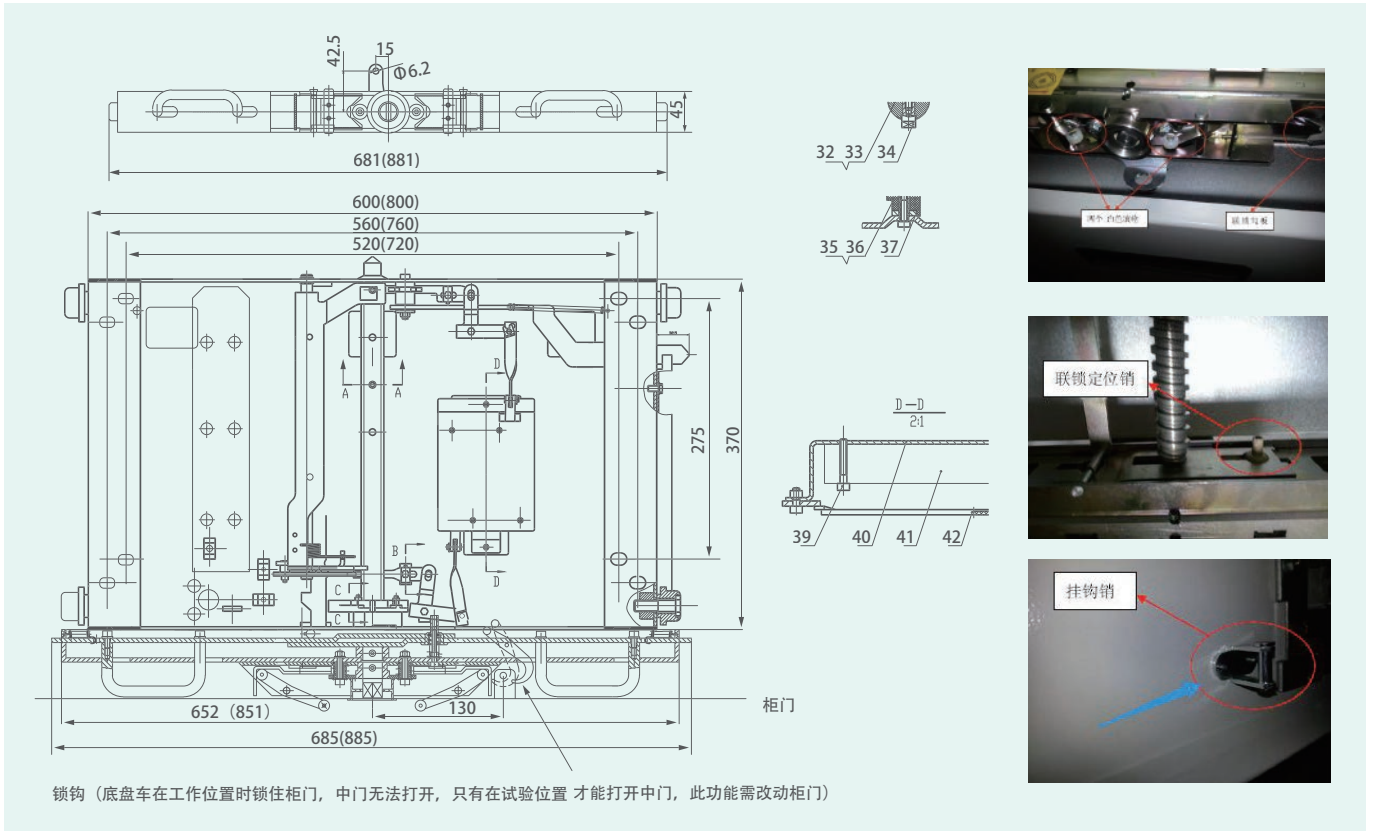


注：接地夹底盘车配相应铜导轨或者铝导轨，导轨联锁相应变动。
Note: The grounding clamp chassis vehicle is equipped with corresponding copper rails or aluminum rails, and the rail interlocking changes accordingly.

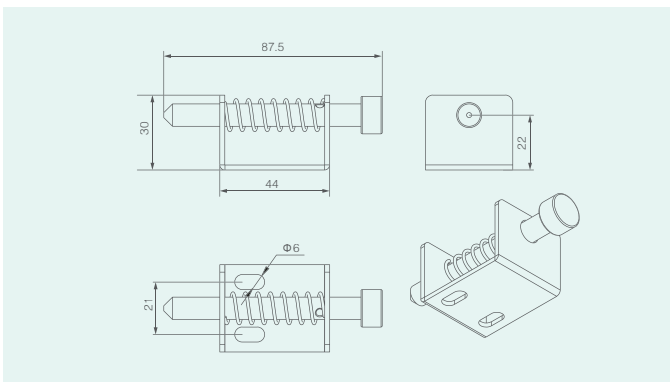
○ 底盘车中门联锁装配示意图 Schematic diagram

适用于 800 柜、1000 柜，此图为试验位置状态

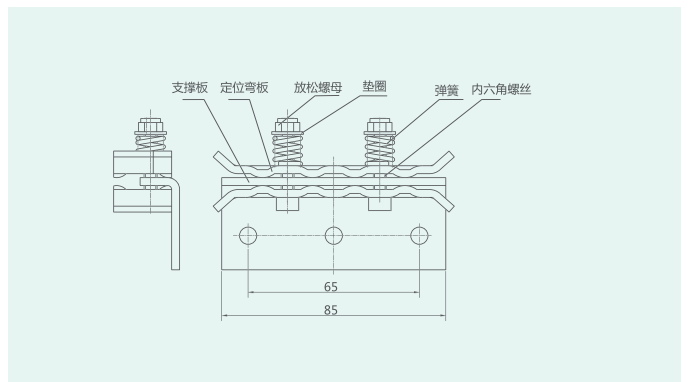
Applicable to 800 cabinets and 1000 cabinets, this picture shows the state of the test position



○ 手车紧急解锁装置
Emergency unlocking device for handcart



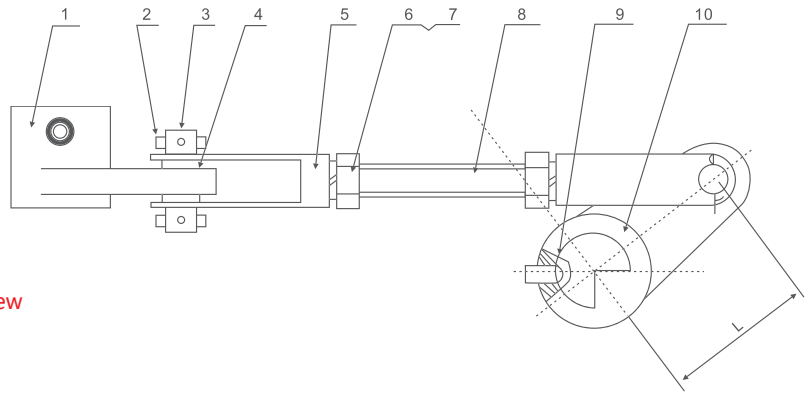
○ 底盘车接地夹
Chassis ground clamp



5LY.233.030.1~3 连杆装置
Link device



注：螺杆长度请备注
Note: Please note the length of the screw



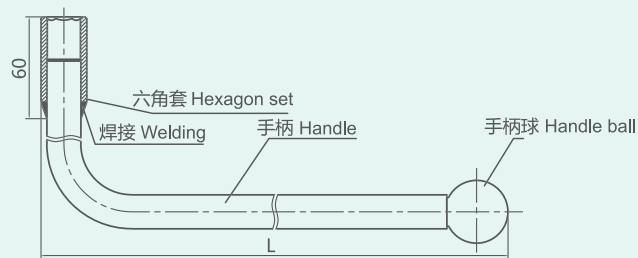
◎ 配套表 Matching table

序号 No.	名称 Name	代号 Codename	数量 (只 / 套) Quantity (only/set)
1	拐壁 Turn the wall	5LY.151.016	1
2	开口销 Split pin 4*20	GB91-86	4
3	带孔销 Hole pin 12*40	GB880-86	2
4	垫圈 Washer	8LY.950.010	4
5	夹叉 Clamp fork	8LY.257.010	2
6	螺母 Nut M12	GB170-86	2
7	垫圈 Washer 12	GB93-87	2
8	螺柱 Stud M12*120	GB901-88	1
9	螺钉 Screw M8*16	GB78-85	1
10	拐壁 Turn the wall	5LY.151.017	1

接地开关分合闸高压手柄
Grounding switch opening and closing high voltage handle



高压手柄 (标准型): 5LY.253.011 L=355mm
 高压手柄 (加长型): 5LY.253.011.1 L=500mm
 High pressure handle (standard type): 5LY.253.011 L=355mm
 High pressure handle (lengthened type): 5LY.253.011.1 L=500mm





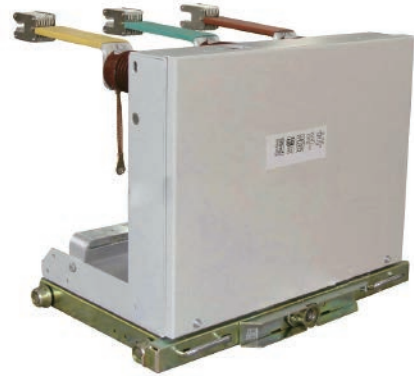
中置式加高计量手车
Mid-mounted heightening metering handcart



电压互感器手车
Voltage transformer handcart



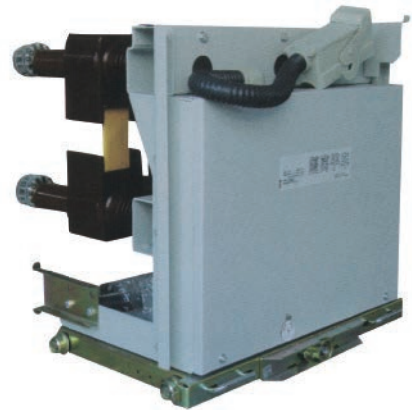
熔断器手车
Fuse trolley



避雷器手车
Lightning arrester handcart

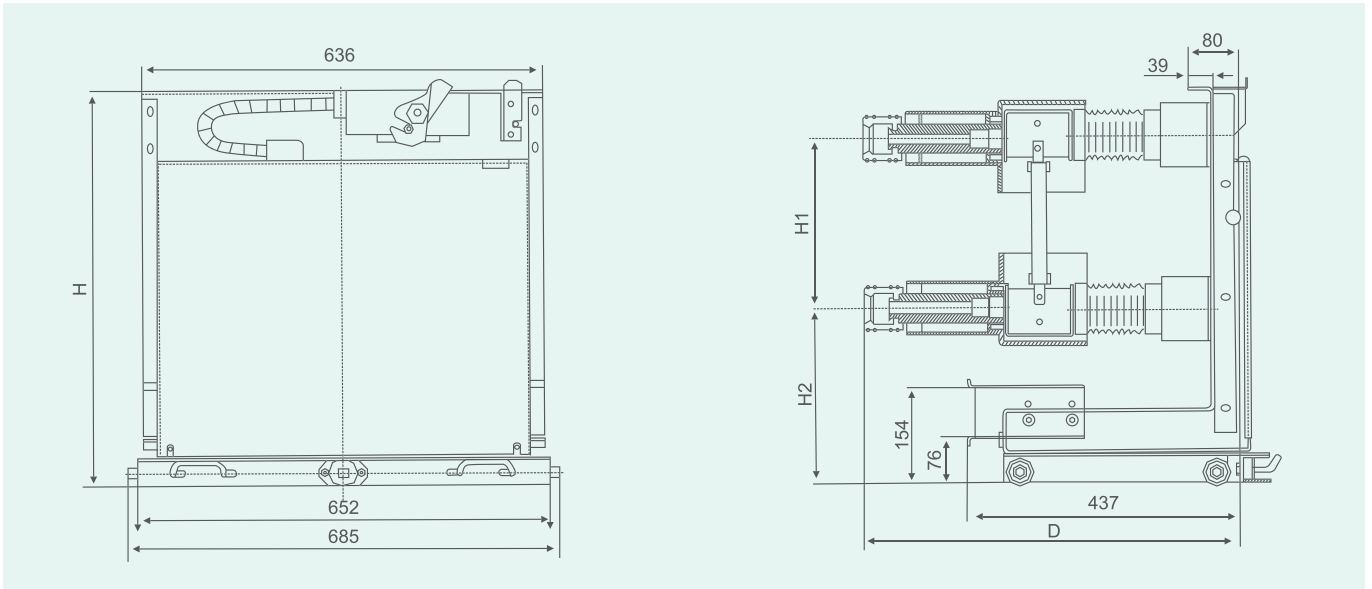


3PT 手车
3PT handcart



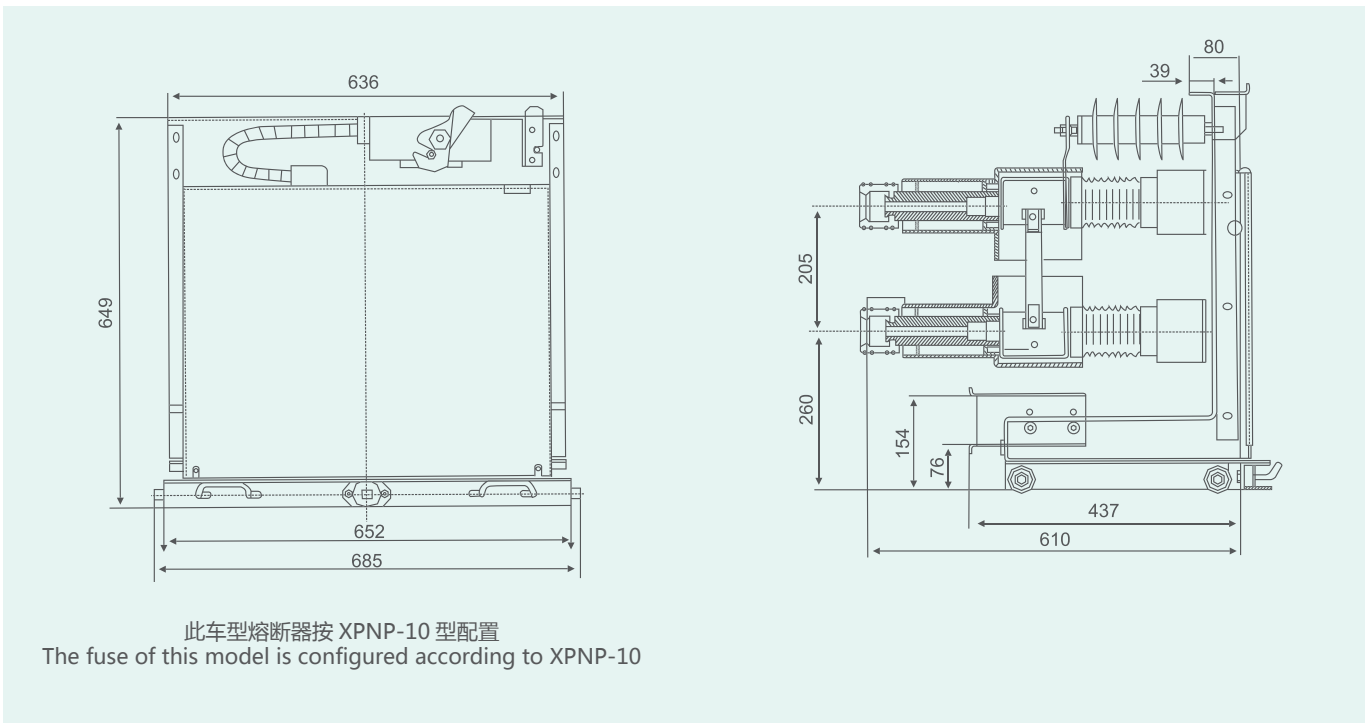
隔离手车
Isolated handcart

◎ 熔断器手车外形尺寸 Overall dimensions of fuse trolley

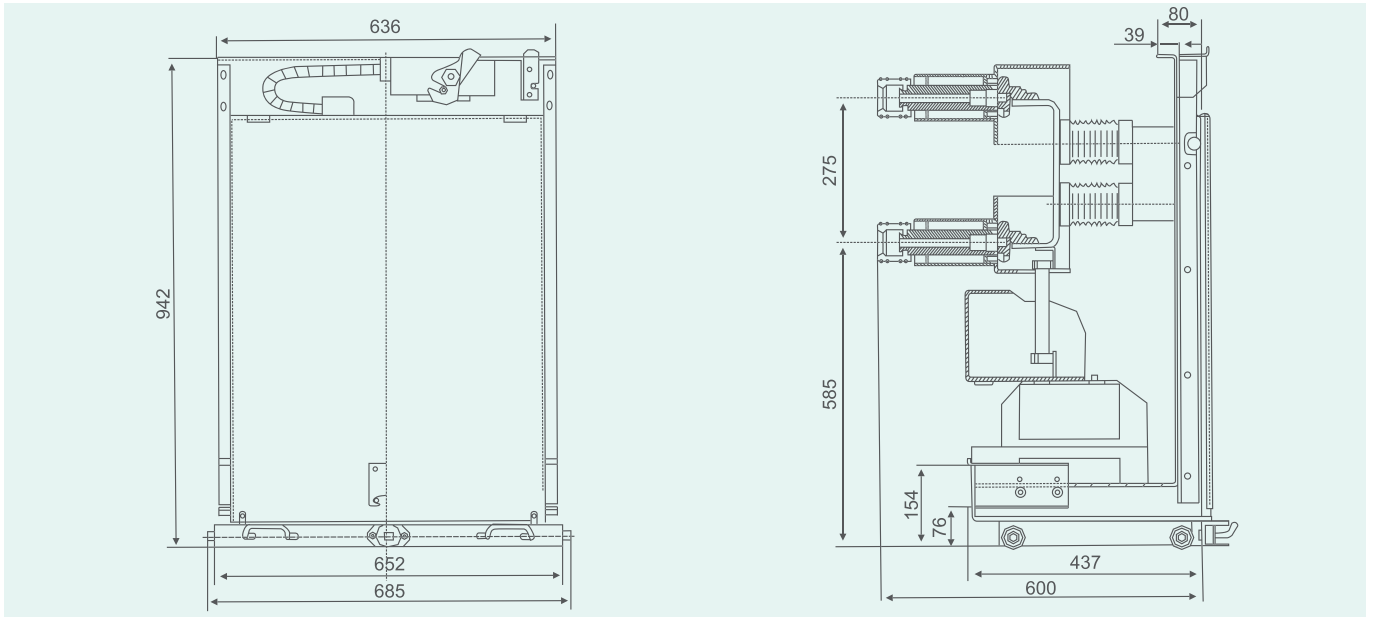


车型 Model	H (mm)	H1(mm)	H2(mm)	D(mm)	备注 Remarks
VS1 型 Type	637	275	280	600	配 XRNT-10 或 XRNP-10
VD4 型 Type	617	205	260	610	配 XRNP-10

◎ 熔断器 + 避雷针手车 (VD4) 外形尺寸 Fuse + lightning rod handcart (VD4) dimensions



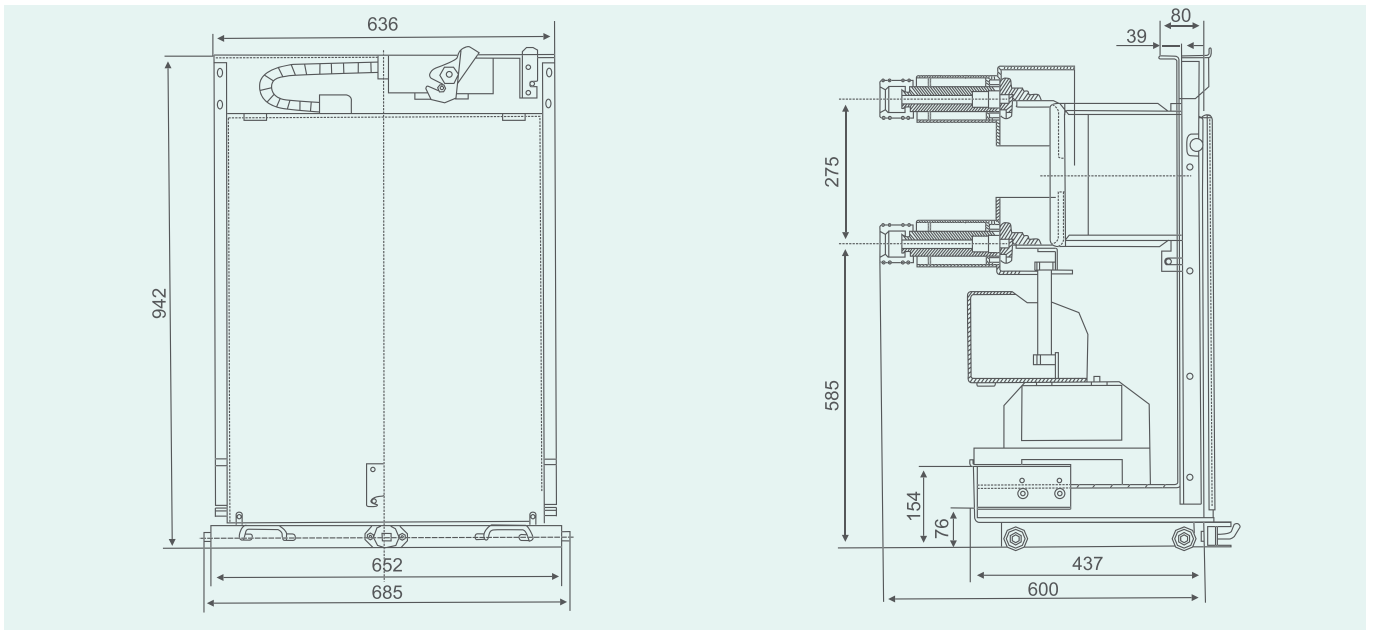
◎ 630A~1250A 隔离 +PT 手车外形尺寸 Isolation + PT handcart outline size



此车型适用于配置 JDZ(X)10-10C 型电压互感器, 安装尺寸参照大连第一互感器厂, 如配置其它型号电压互感器, 订货时需另外注明。熔断器按 XRNP-10 型配置。

This model is suitable for the configuration of JDZ(X)10-10C voltage transformer. The installation dimensions refer to Dalian No. 1 Transformer Factory. If other types of voltage transformers are configured, they must be noted separately when ordering. The fuse is configured according to XRNP-10.

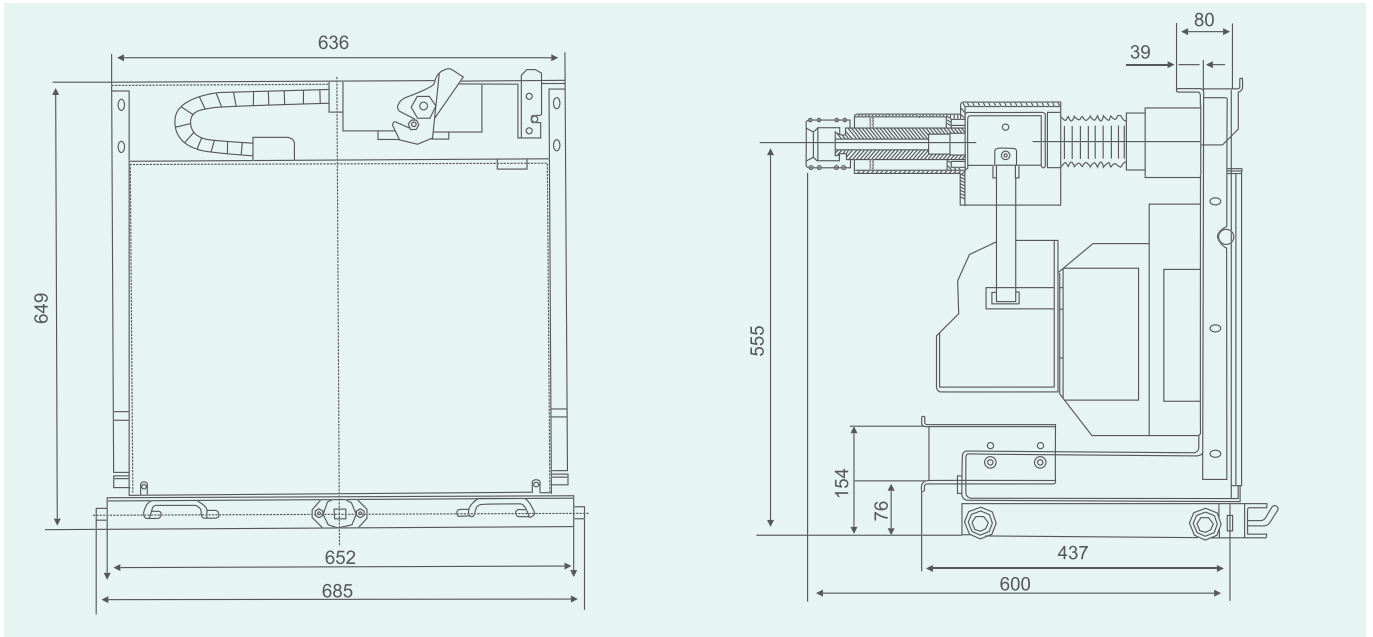
◎ 630A~1250A 计量手车外形尺寸 Dimension of metering handcart



此车型适用于配置 JDZ(X)10-10C 型电压互感器, LZZBJ9-12/150b/2 型电流互感器, 安装尺寸参照大连第一互感器厂, 如配置其它型号电压互感器, 订货时需另外注明。熔断器按 XRNP-10 型配置。

This model is suitable for the configuration of JDZ(X)10-10C voltage transformer, LZZBJ9-12/150b/2 type current transformer, the installation dimensions refer to Dalian No. 1 Transformer Factory, if other types of voltage transformers are configured, they are required when ordering. Note otherwise. The fuse is configured according to XRNP-10.

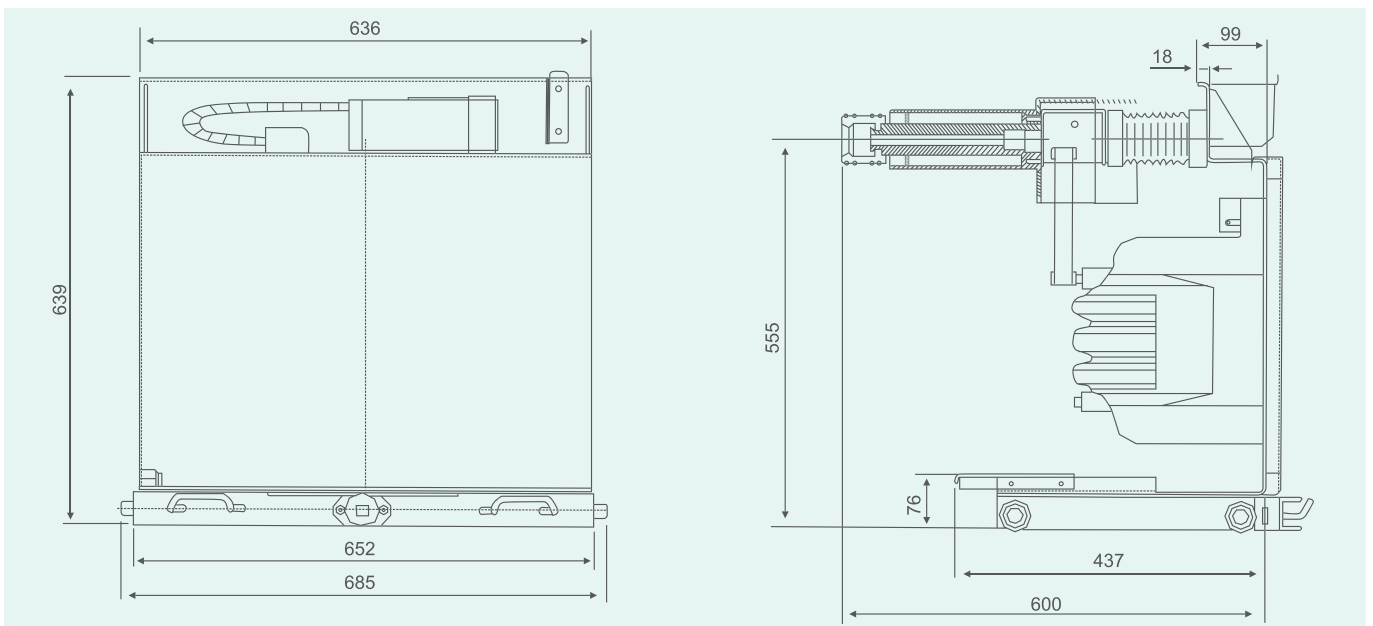
◎ 中置 PT 手车外形尺寸 Overall dimensions of mid-mounted PT handcart



此车型适用于配置 JDZ(X)10-10C 型电压互感器，安装尺寸参照大连第一互感器厂，如配置其它型号电压互感器，订货时需另外注明。熔断器按 XRNP-10 型或 RN2-10 配置。

This model is suitable for the configuration of JDZ(X)10-10C voltage transformer. The installation dimensions refer to Dalian No. 1 Transformer Factory. If other types of voltage transformers are configured, they must be noted separately when ordering. The fuse is configured according to XRNP-10 or RN2-10.

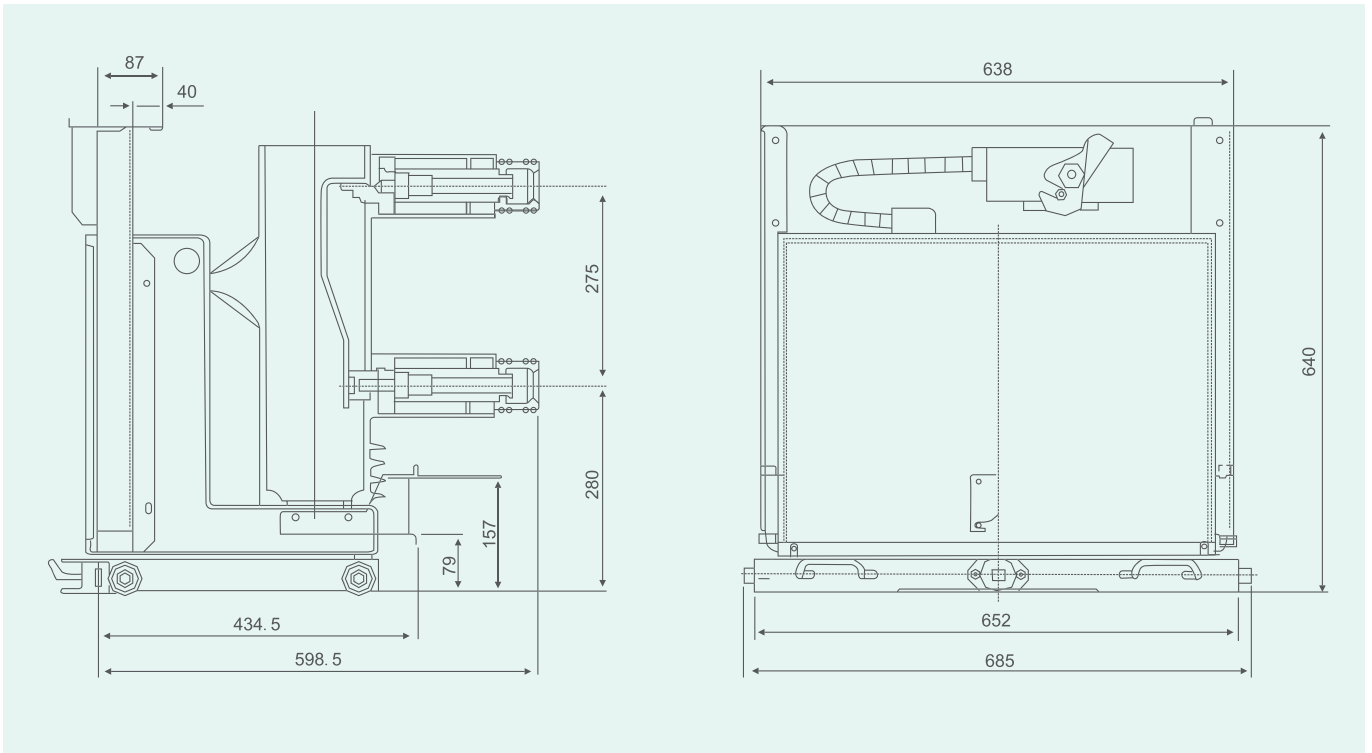
◎ 中置 PT 手车外形尺寸 Overall dimensions of mid-mounted PT handcart



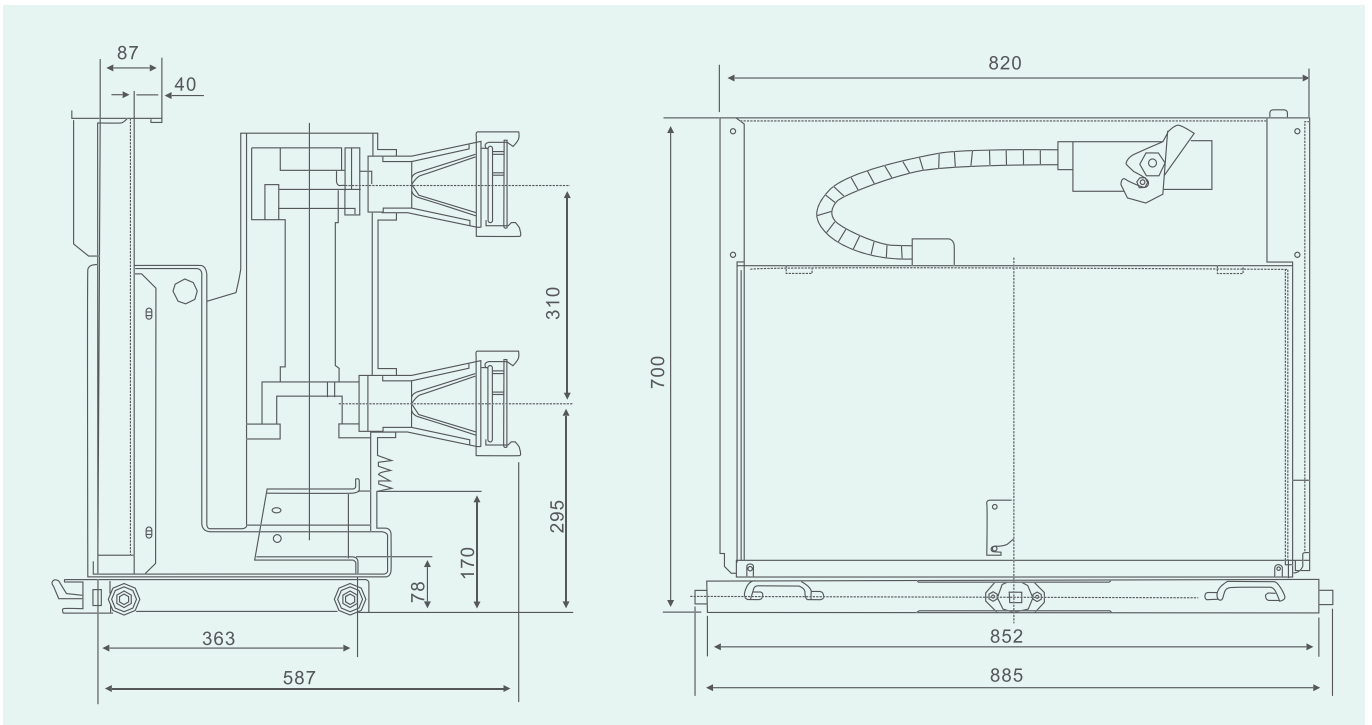
此车型适用于配置 JDZ(X)10(G) 型电压互感器，安装尺寸参照大连第一互感器厂，如配置其它型号电压互感器，订货时需另外注明。熔断器按 XRNP-10 型或 RN2-10 配置。

This model is suitable for the configuration of JDZ(X)10(G) voltage transformers. The installation dimensions refer to Dalian No. 1 Transformer Factory. If other types of voltage transformers are configured, they must be noted separately when ordering. The fuse is configured according to XRNP-10 or RN2-10.

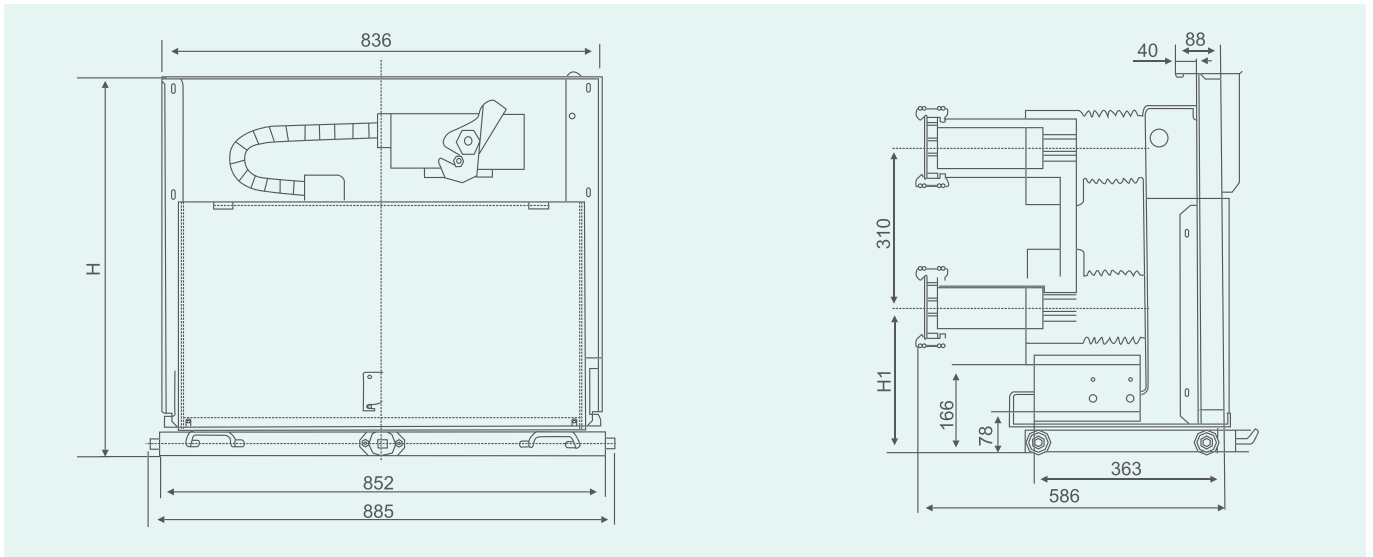
◎ 630A~1250A 隔离手车外形尺寸 Isolation Handcart Dimensions



◎ 2000A~3150A 隔离手车外形尺寸 Isolation Handcart Dimensions

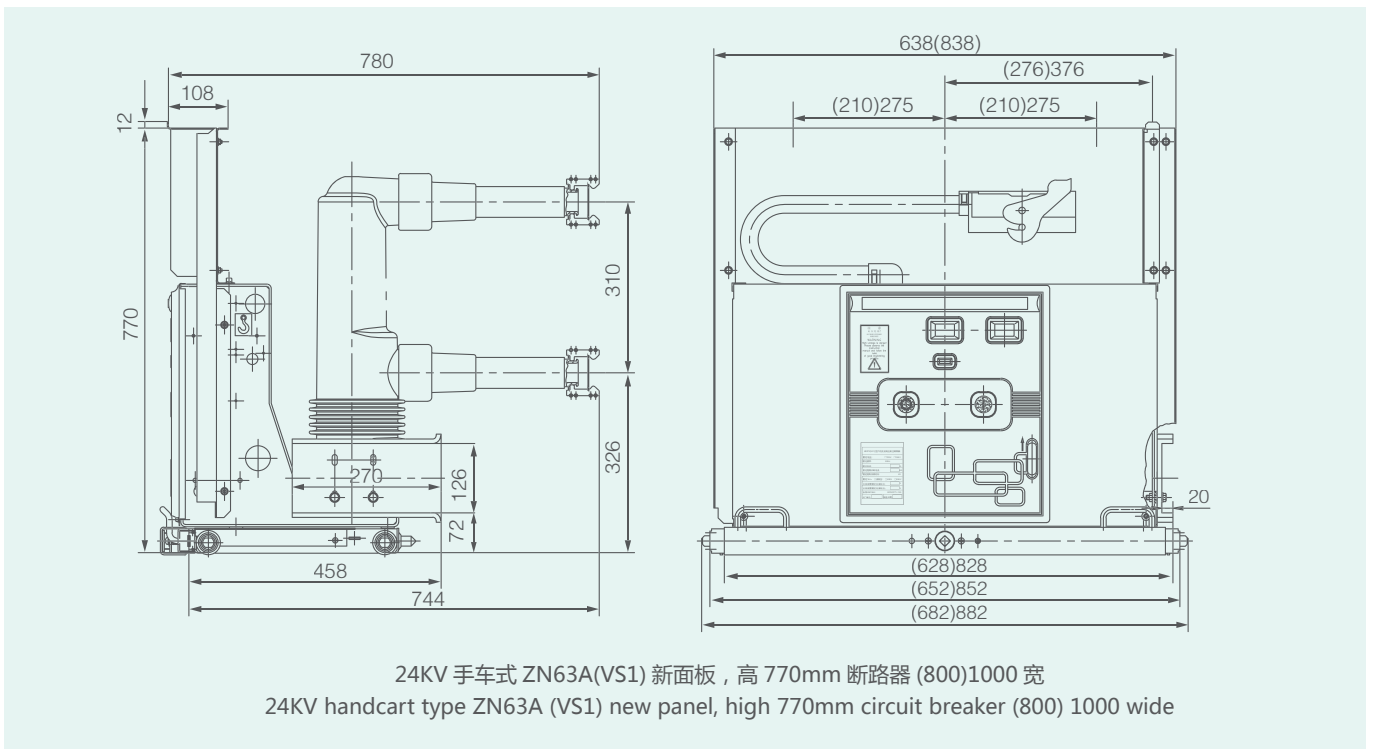


◎ 4000A 隔离手车外形尺寸 Isolation Handcart Dimensions



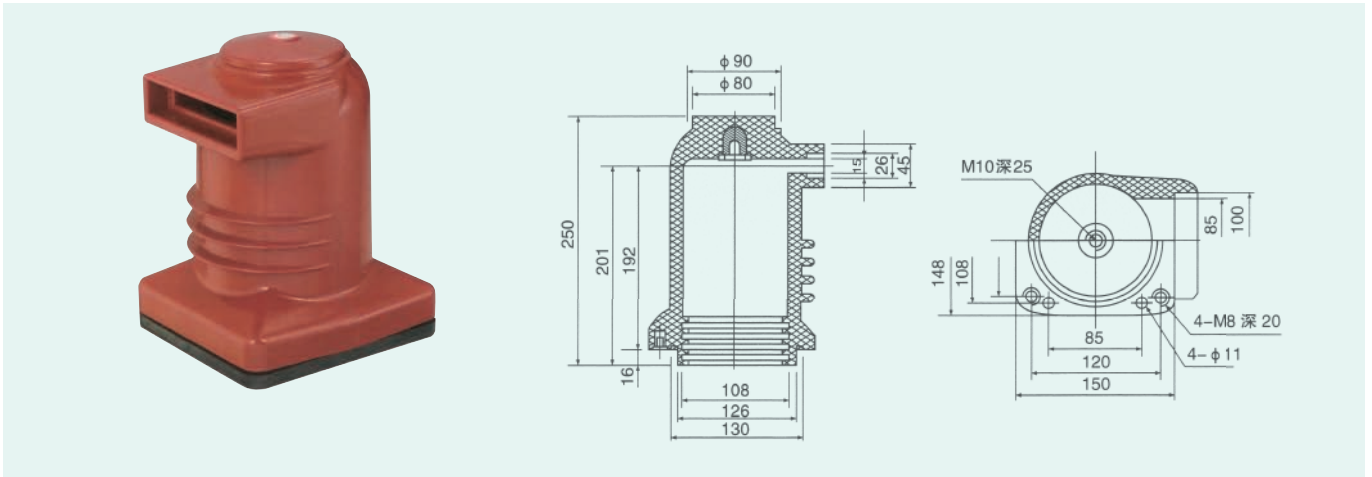
车型 Model	H (mm)	H1 (mm)
VS1 型 Type	699	295
VD4 型 Type	731	280

◎ 24KVZN63A(VS1) 手车外形尺寸 Dimension of handcart



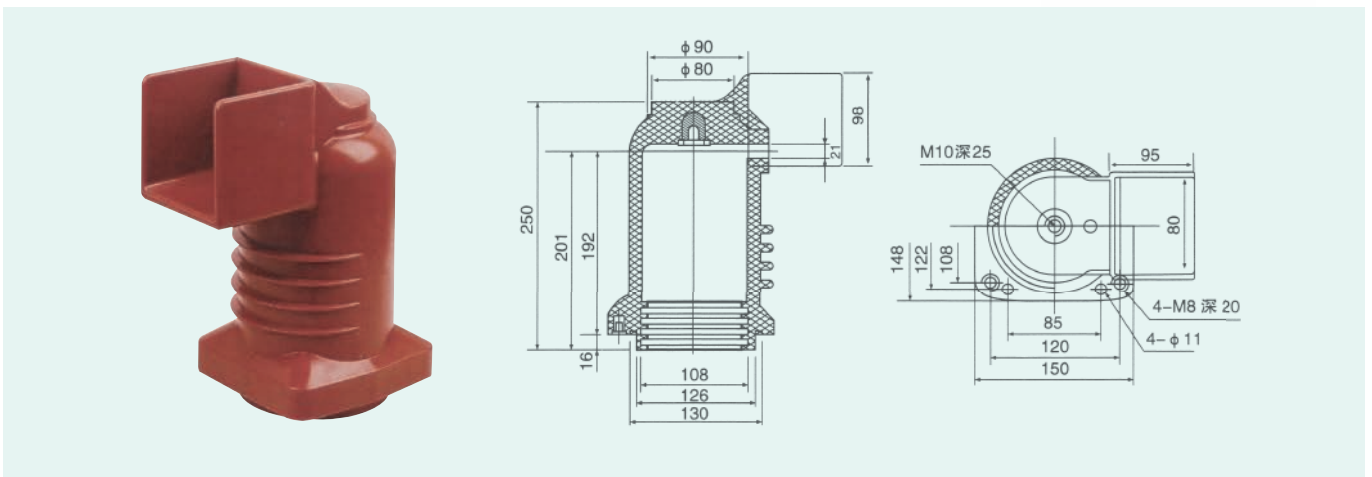
◎ CH3-10Q/150 中置柜触头盒 Center cabinet contact box

额定电流 Rated current: 630~1250A



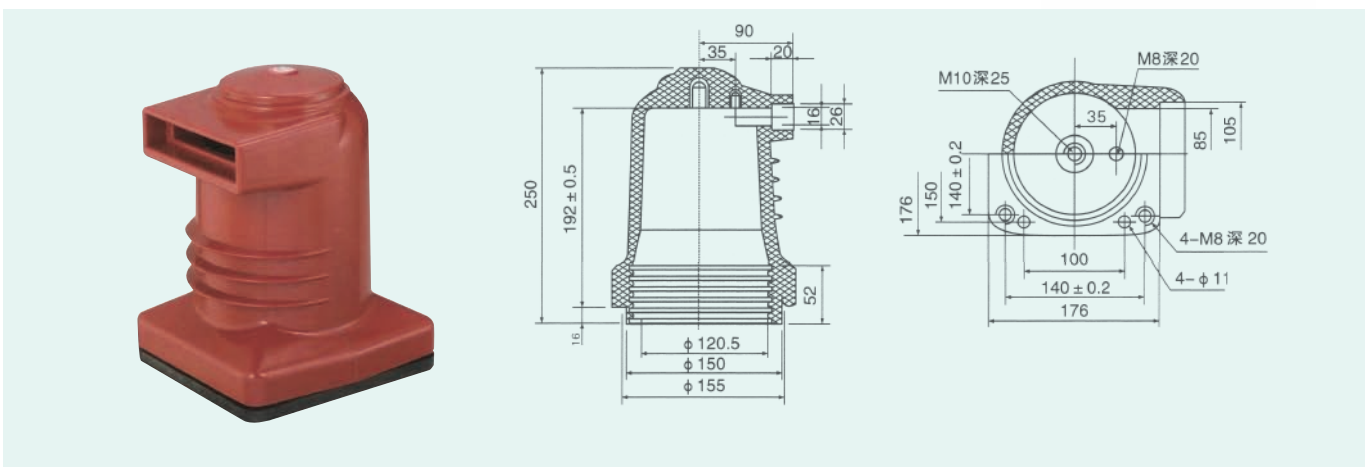
◎ CH3-10Q/150 550 中置柜触头盒 Center cabinet contact box

额定电流 Rated current: 630~1250A



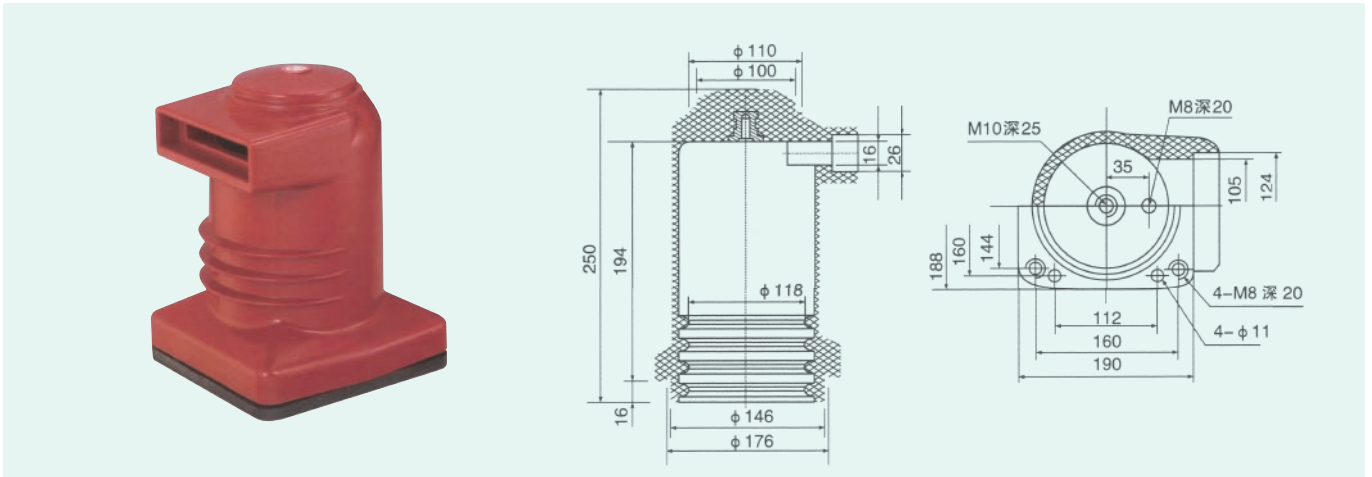
◎ CH3-10Q/180 中置柜触头盒 Center cabinet contact box

额定电流 Rated current: 1250A



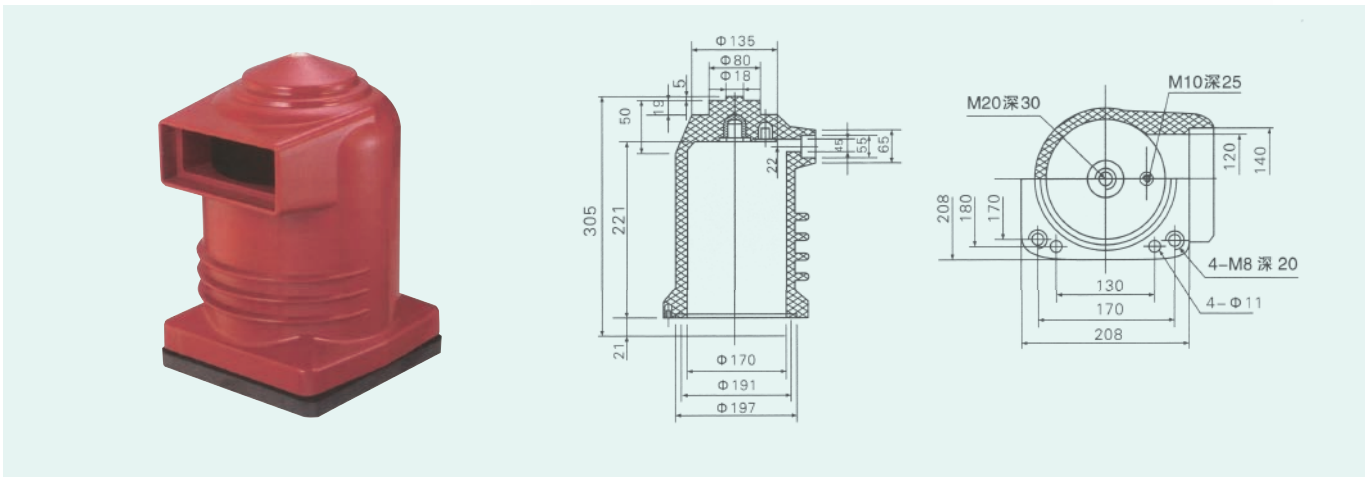
◎ CH3-10Q/190 中置柜触头盒 Center cabinet contact box

额定电流 Rated current: 1600A



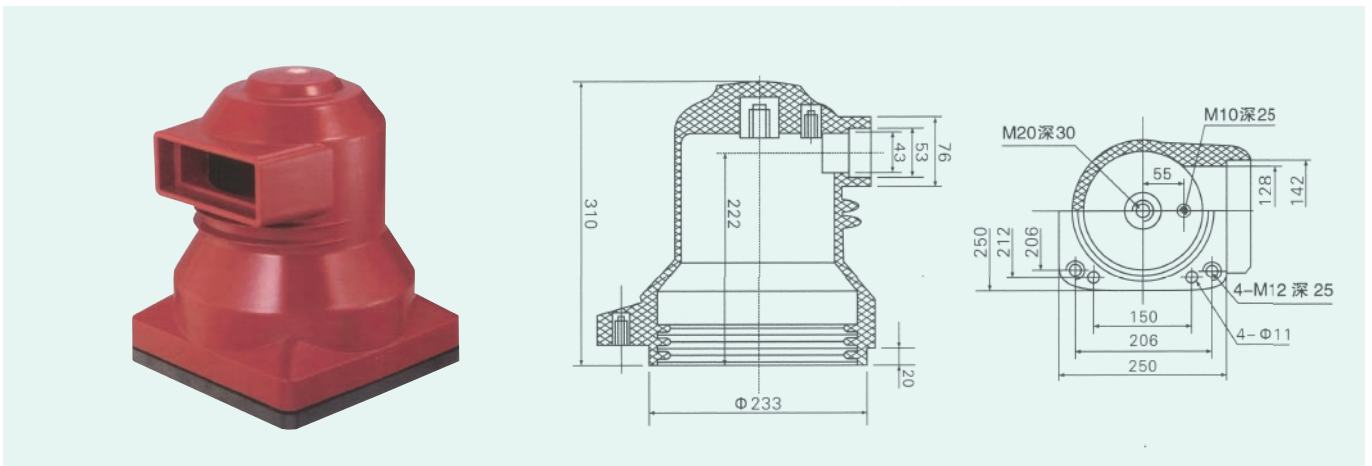
◎ CH3-10Q/208 中置柜触头盒 Center cabinet contact box

额定电流 Rated current: 1600A~2000A



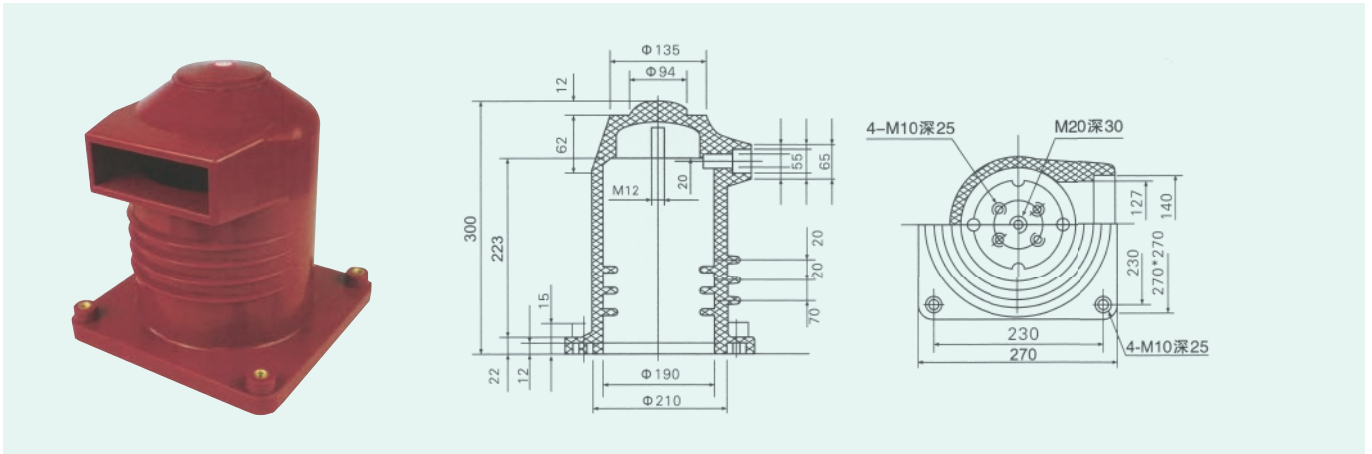
◎ CH3-10Q/250 中置柜触头盒 Center cabinet contact box

额定电流 Rated current: 2500A~3150A



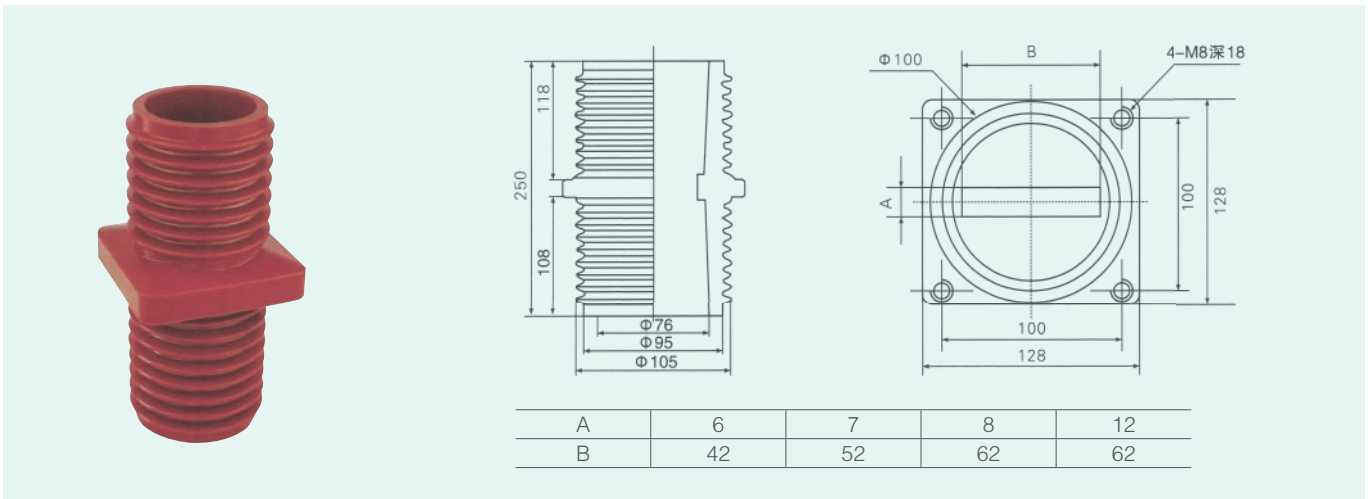
◎ CH3-10Q/270 中置柜触头盒 Center cabinet contact box

额定电流 Rated current: 4000A



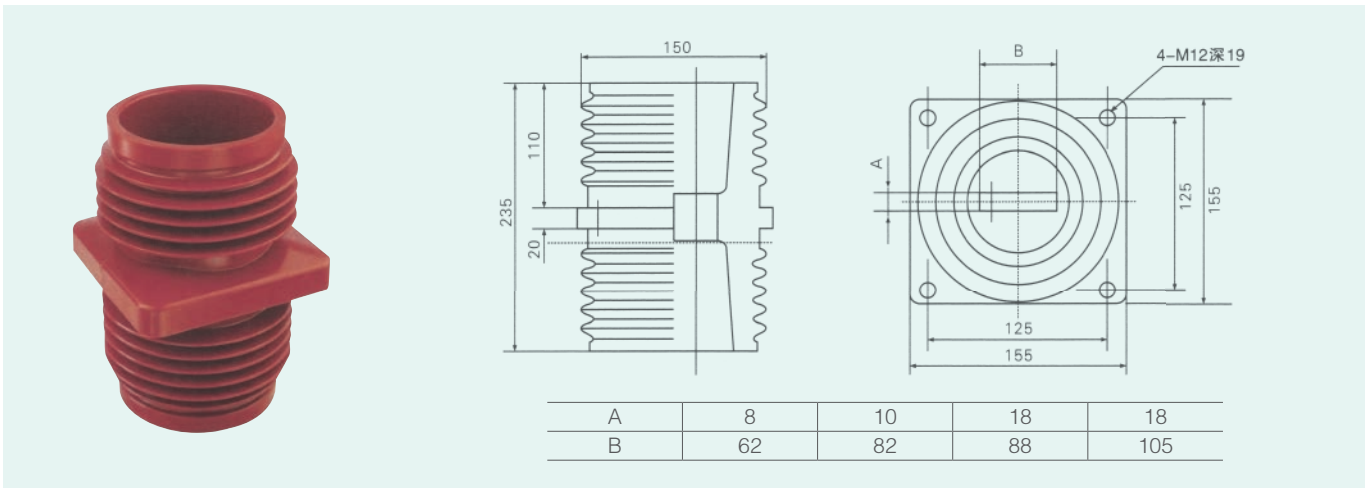
◎ TG1-10Q/128 套管 Bushing

100×100

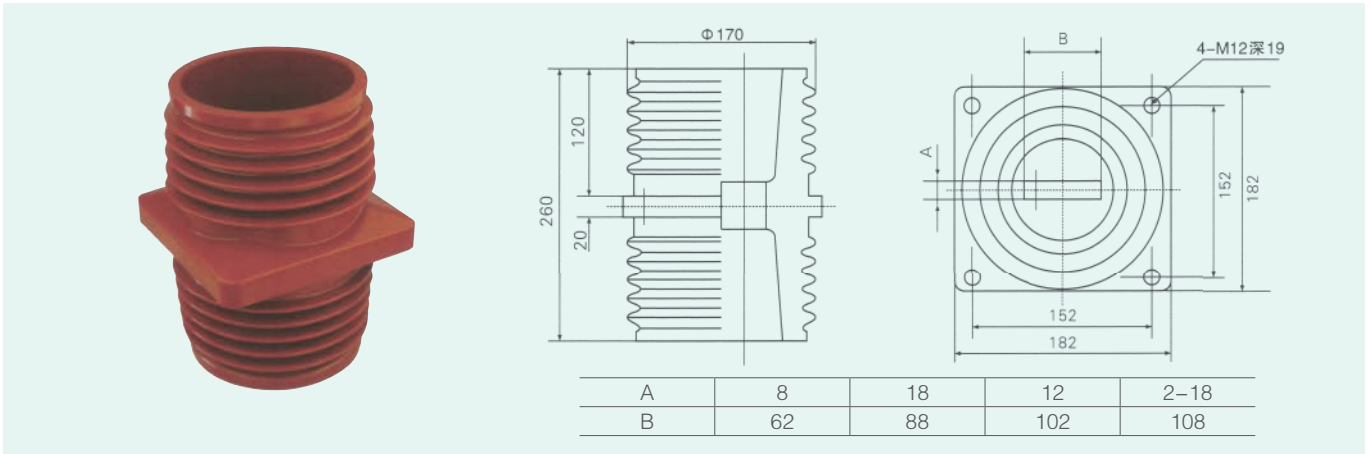


◎ TG1-10Q/182 套管 Bushing

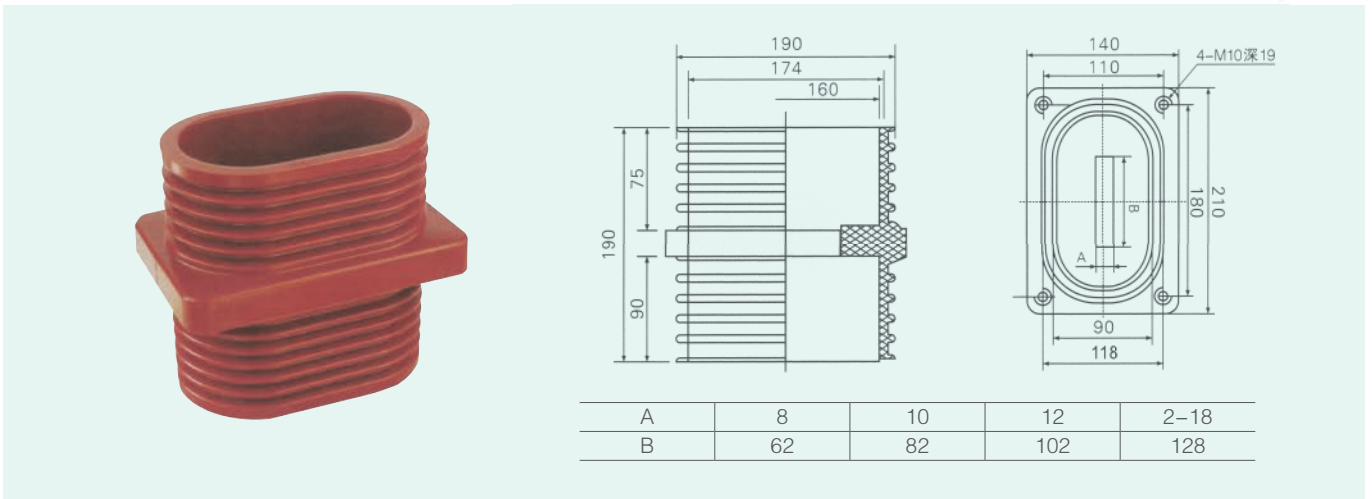
125×125



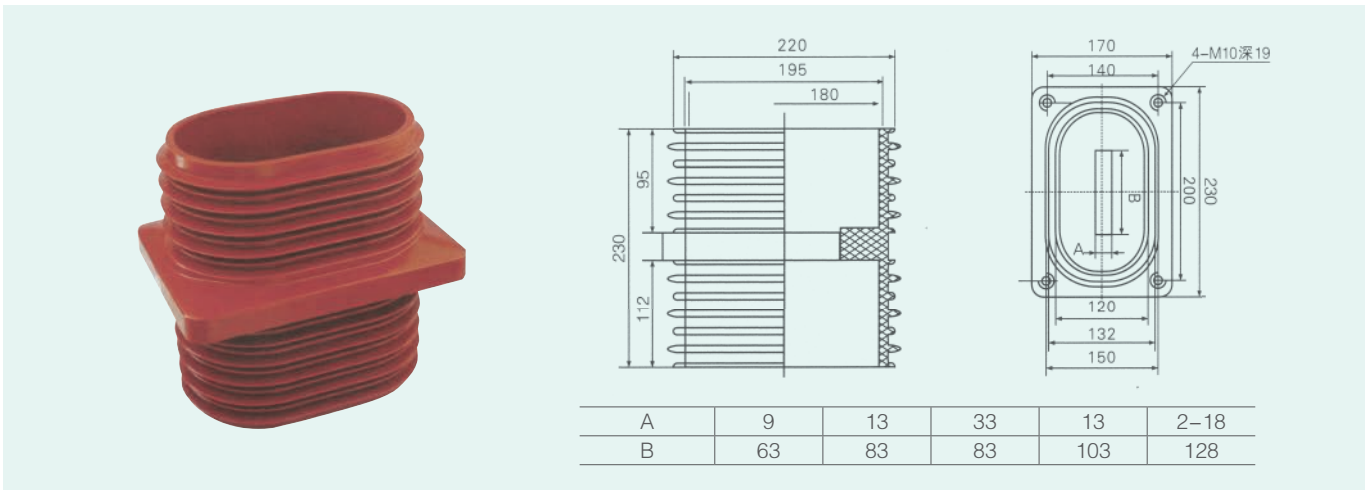
◎ TG2-10Q/210 套管 Bushing
152×152



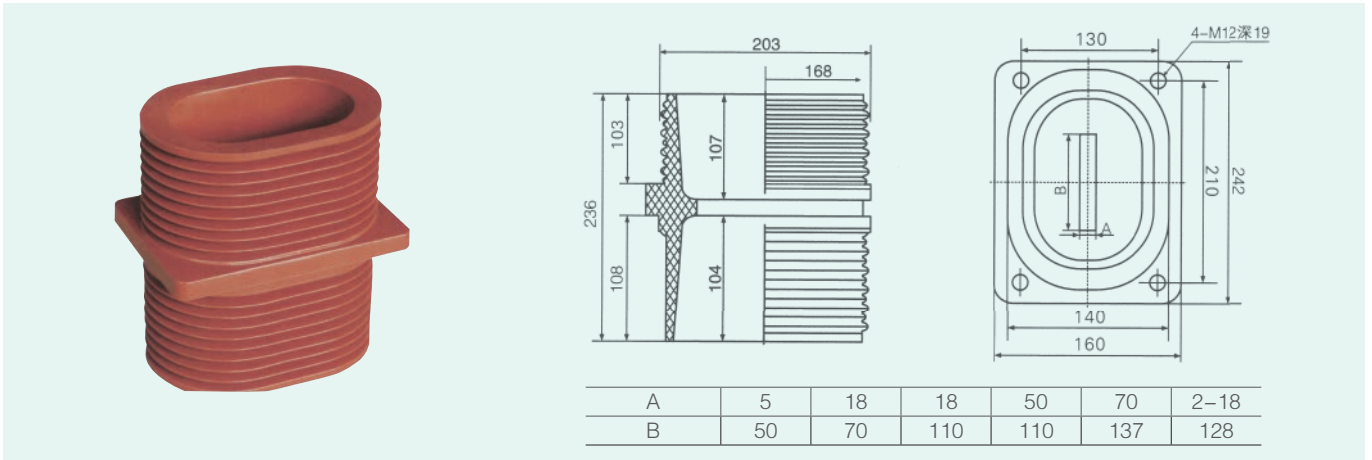
◎ TG3-10Q 套管 (中置柜用) Bushing (For center cabinet)
110×180



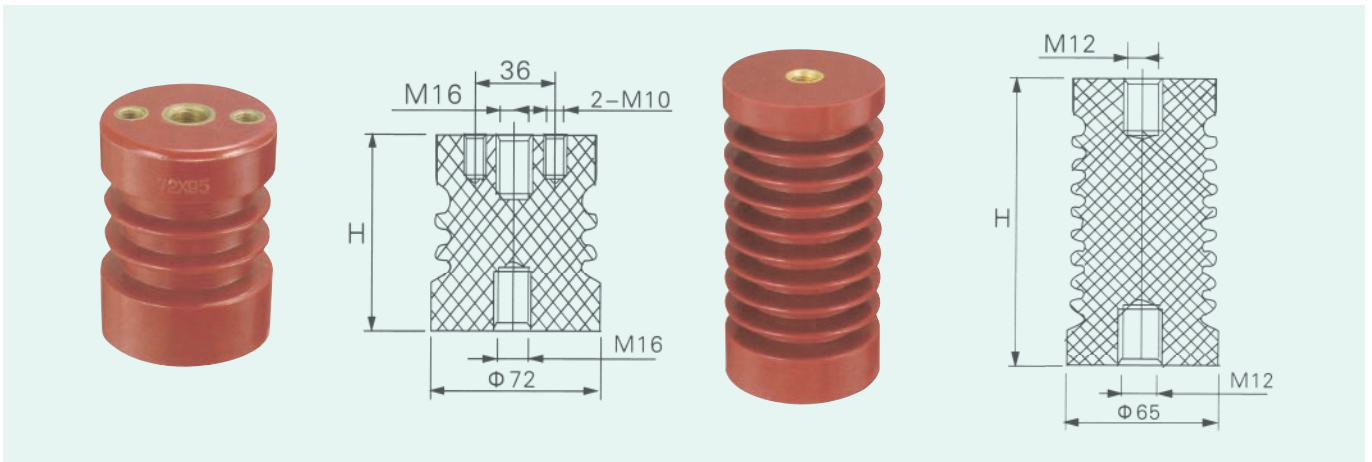
◎ TG3-10Q 套管 (中置柜用) Bushing (For center cabinet)
140×200



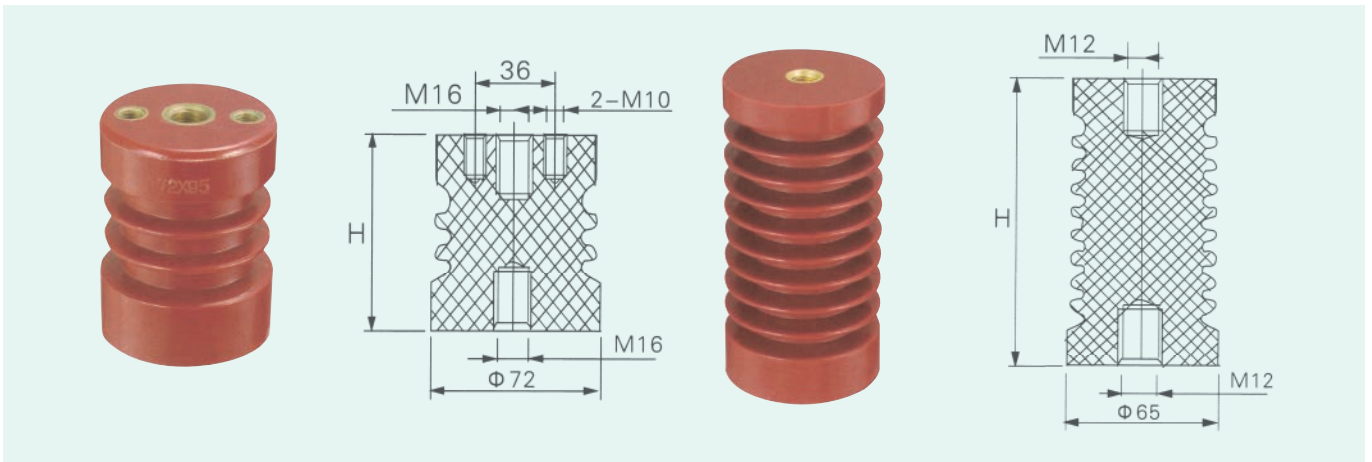
◎ TG3-10Q 套管 (中置柜用) Bushing (For center cabinet)
130×210



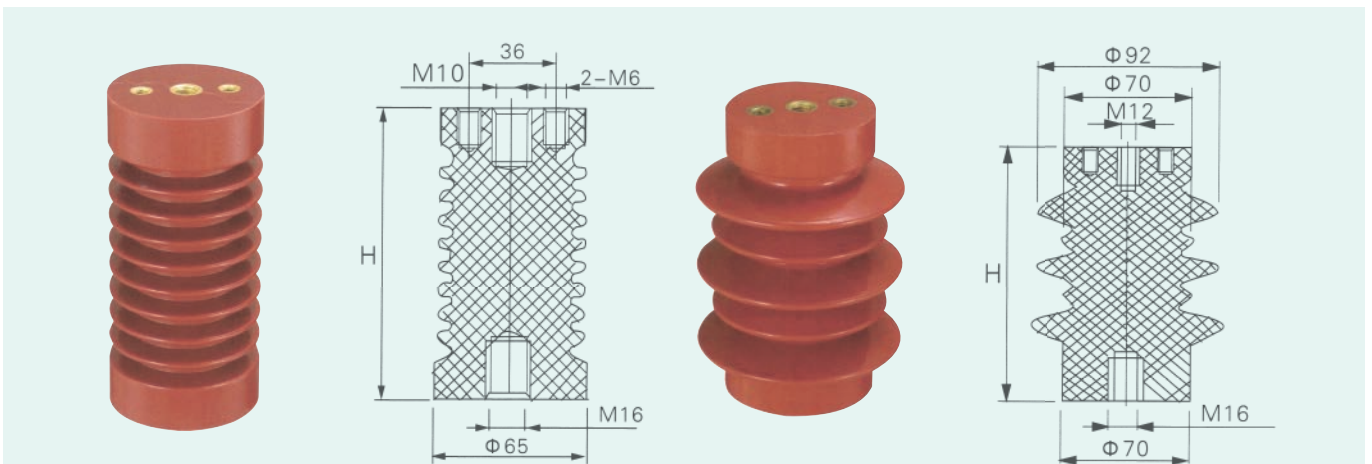
◎ ZJ-10Q 支柱绝缘子 Post insulator
Φ72×95



◎ ZJ-10Q 支柱绝缘子 Post insulator
Φ65×130/140



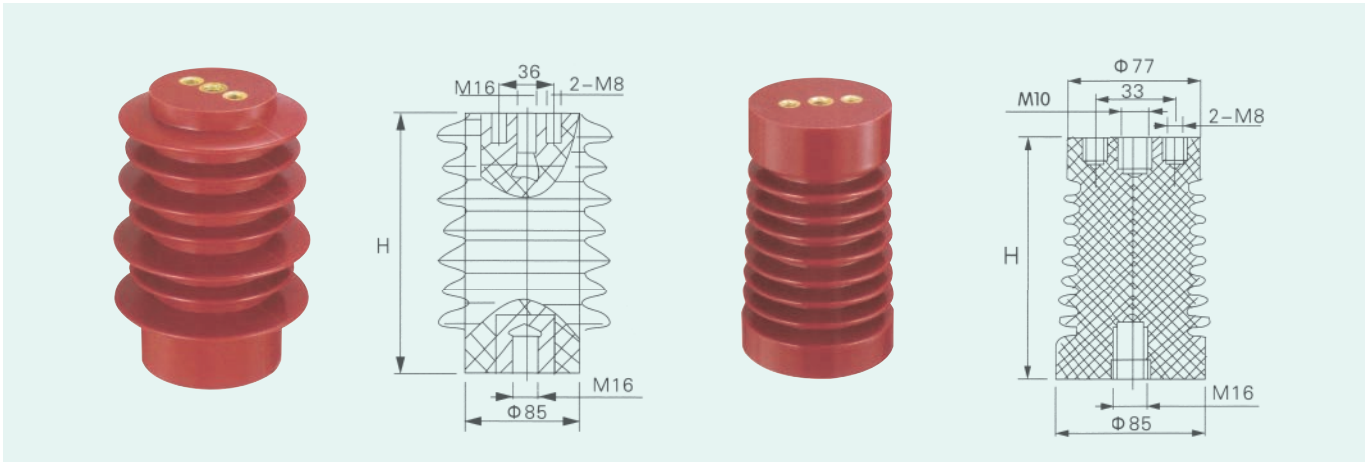
◎ ZJ-10Q 支柱绝缘子 Post insulator
Φ65×130/140



◎ ZJ-10Q 支柱绝缘子 Post insulator
Φ75×130

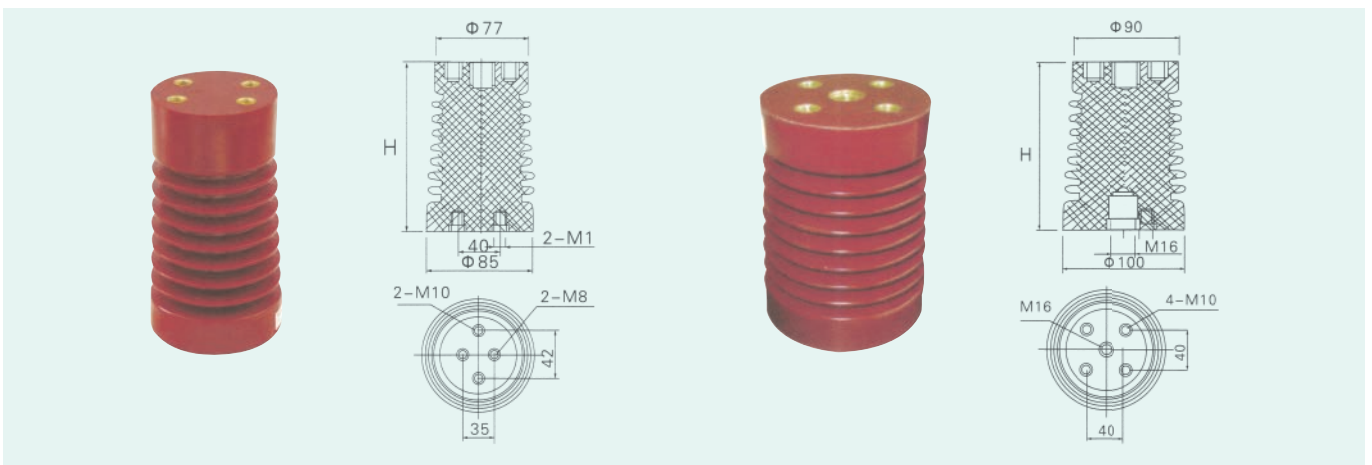
◎ ZJ-10Q 支柱绝缘子 Post insulator
Φ85×140/145/150/170

◎ ZJ-10Q 支柱绝缘子 Post insulator
Φ85×140/145/150/170

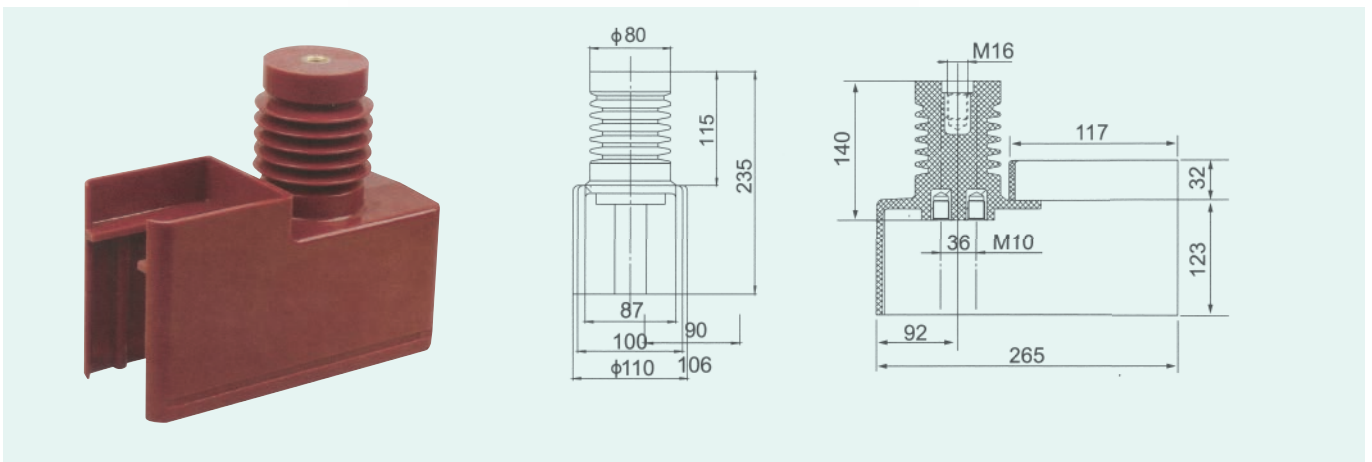


◎ ZJ-10Q 支柱绝缘子 Post insulator
Φ85×140/145

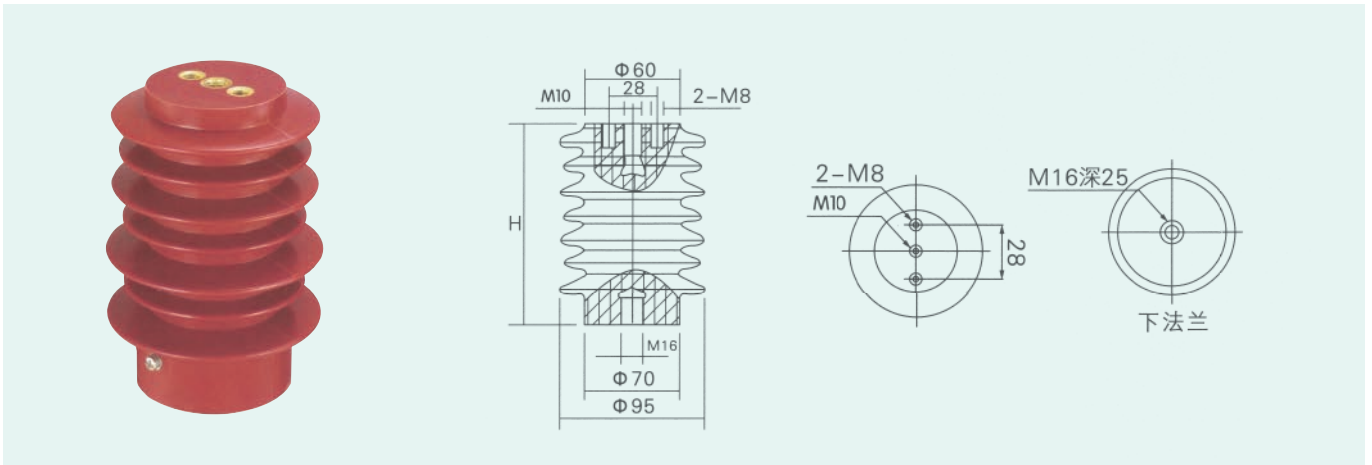
◎ ZJ-10Q 支柱绝缘子 Post insulator
Φ100×130/140



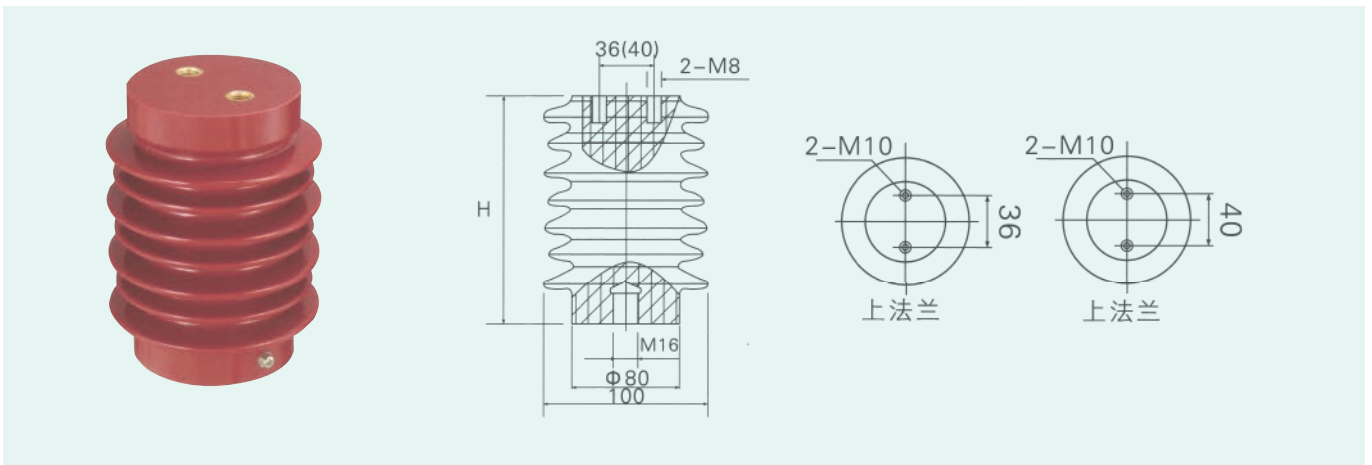
◎ CG-10Q 550 中置柜连体传感器 550 central cabinet conjoined sensor
Φ100×140



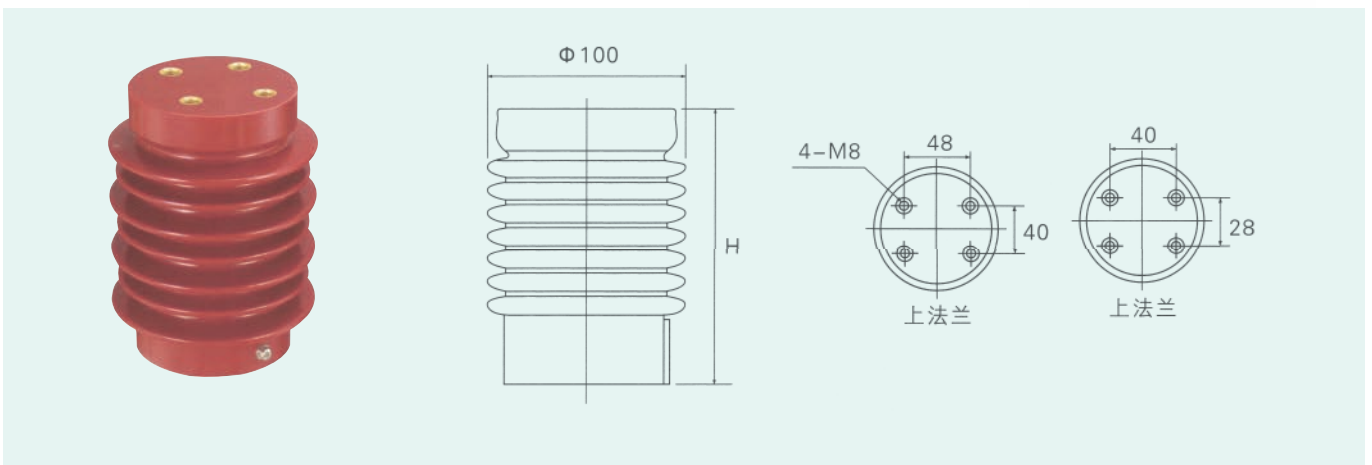
◎ CG5-10Q 传感器 Sensor
Φ95×130/135/140/145



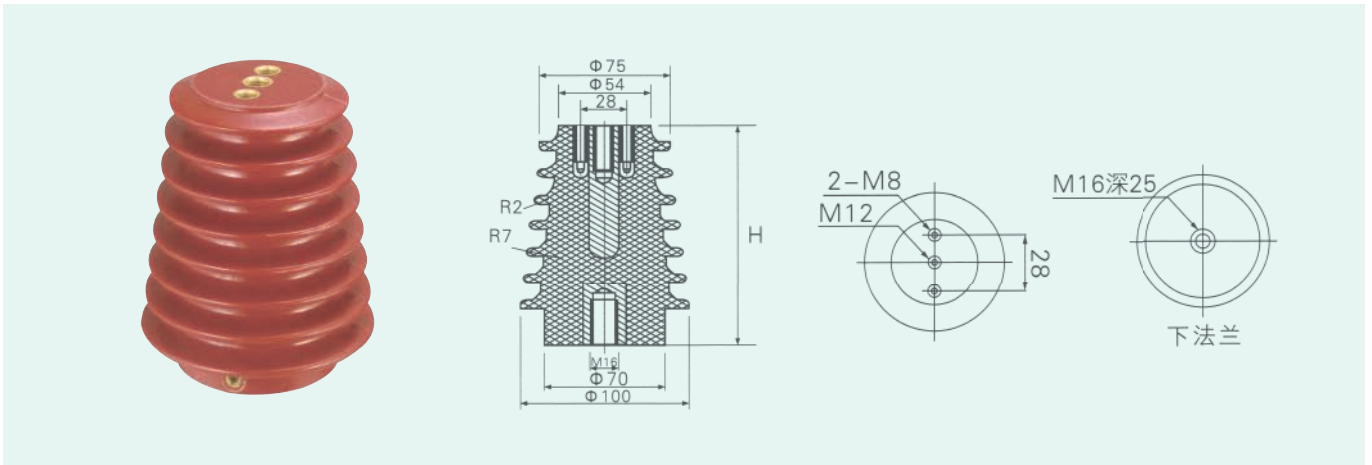
◎ CG5-10Q 传感器 Sensor
Φ100×140/145/150/170



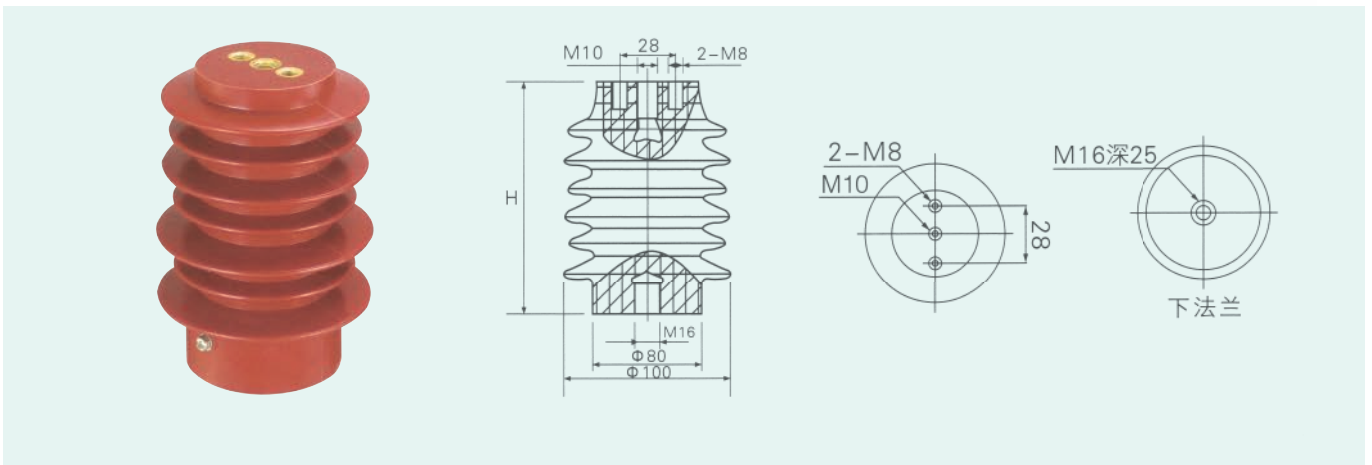
◎ CG5-10Q 传感器 Sensor
Φ100×140/145/150/170



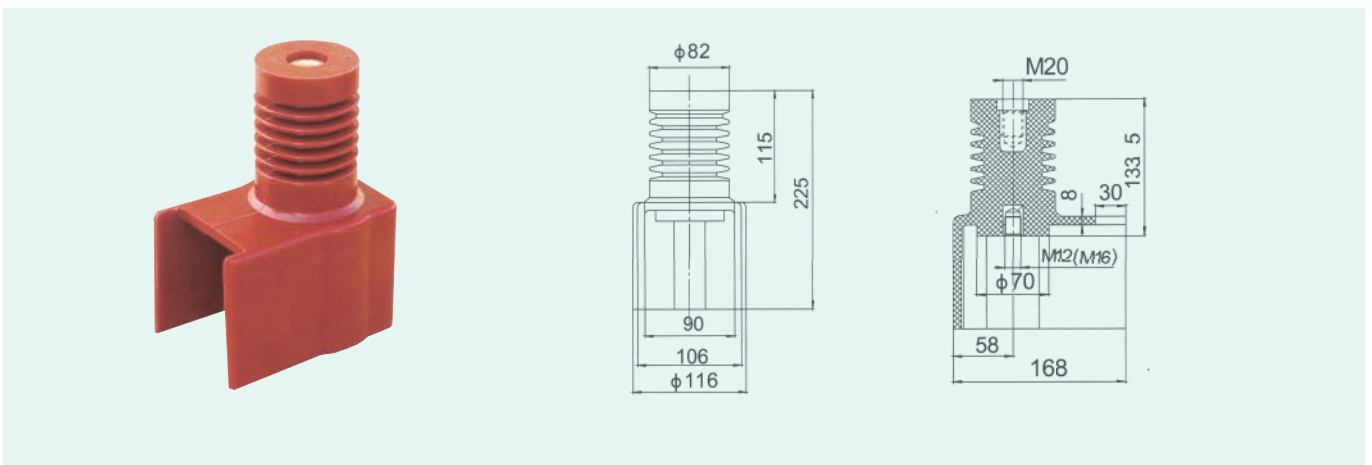
◎ CG5-10Q 传感器 (塔型) Sensor (Tower type)
 $\Phi 95 \times 125/140$



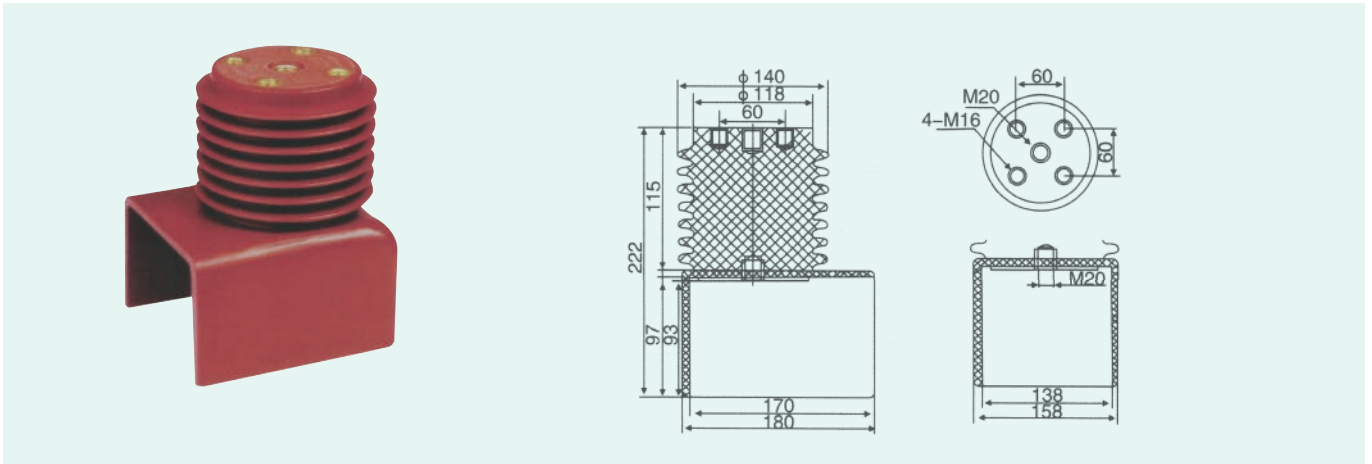
◎ CG5-10Q 传感器 Sensor
 $\Phi 95 \times 170$



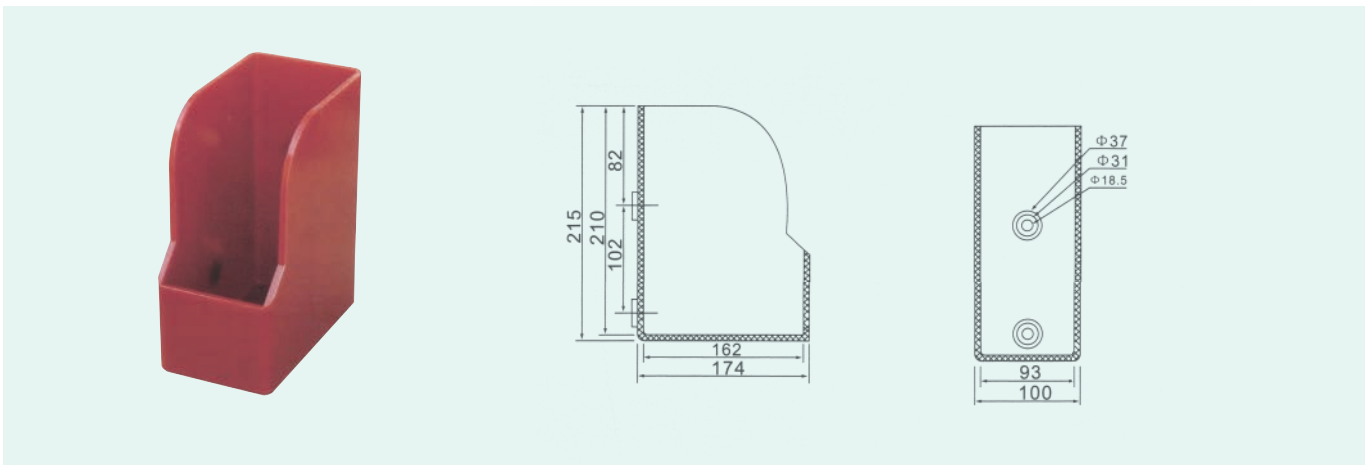
◎ 连体绝缘子 (PT车、隔离车专用) Connected insulators (for PT vehicles and isolation vehicles)
 630~1600A



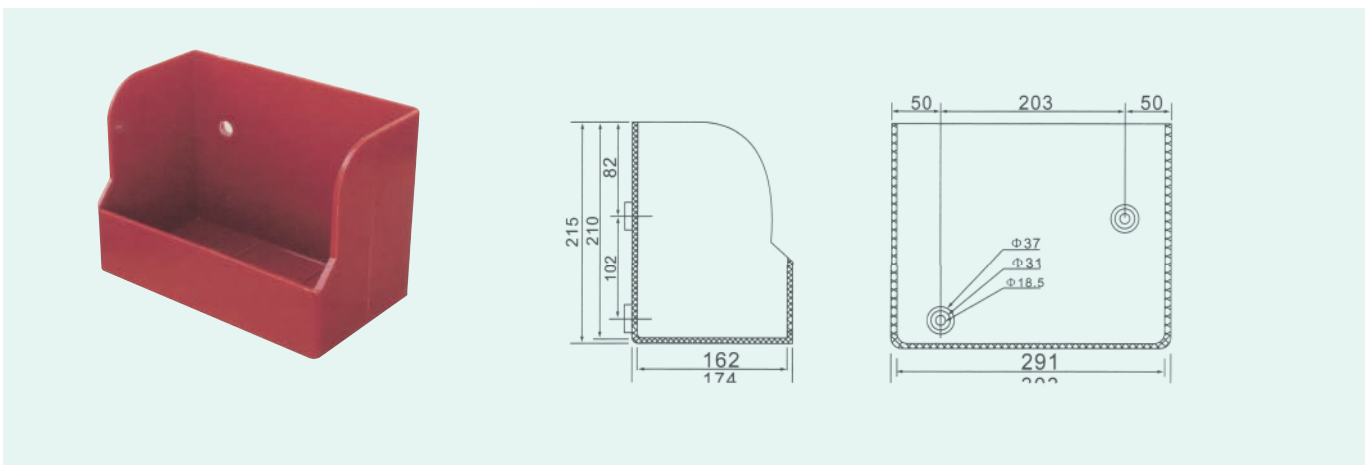
◎ ZJ-10Q 连体绝缘子 Conjoined insulator
1600A~3150A



◎ JV1-10 上绝缘罩 Upper insulation cover

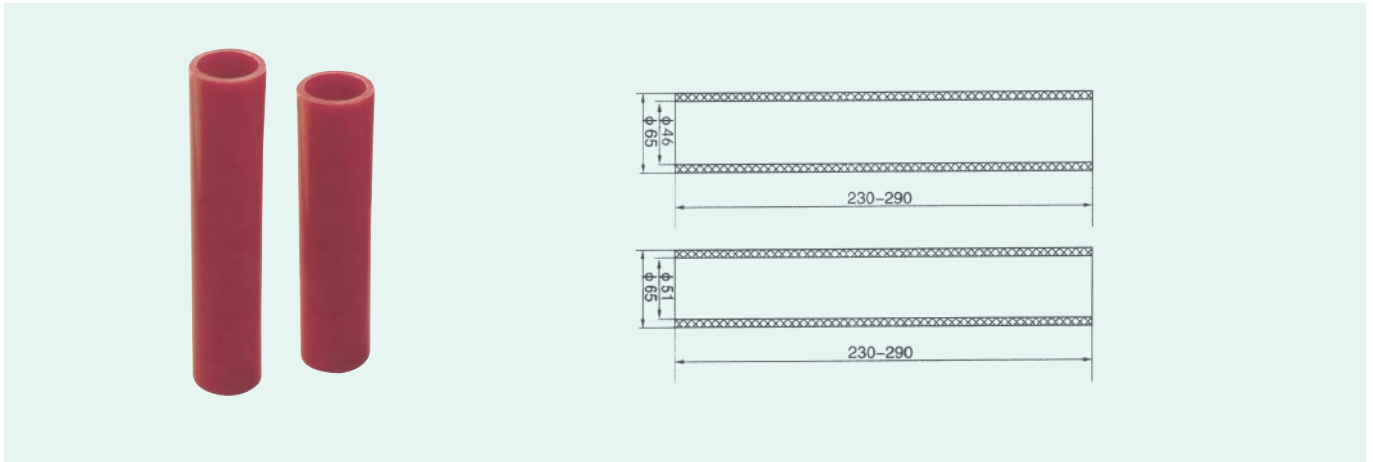


◎ JV2-10 下绝缘罩 Upper insulation cover



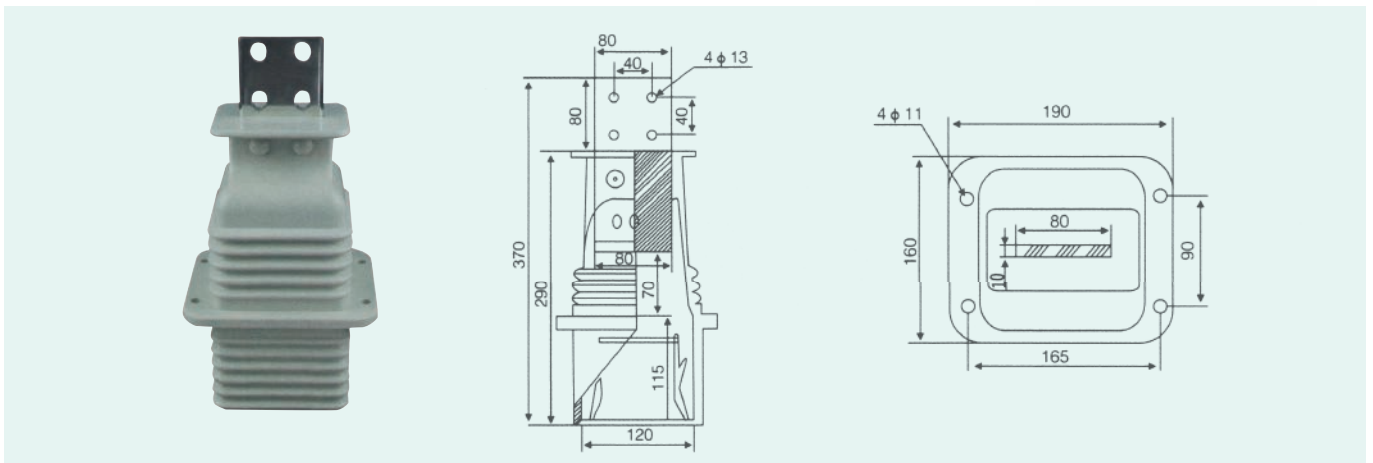
◎ 触臂套管 Contact arm sleeve

Φ46×290 Φ46×230 Φ46×210



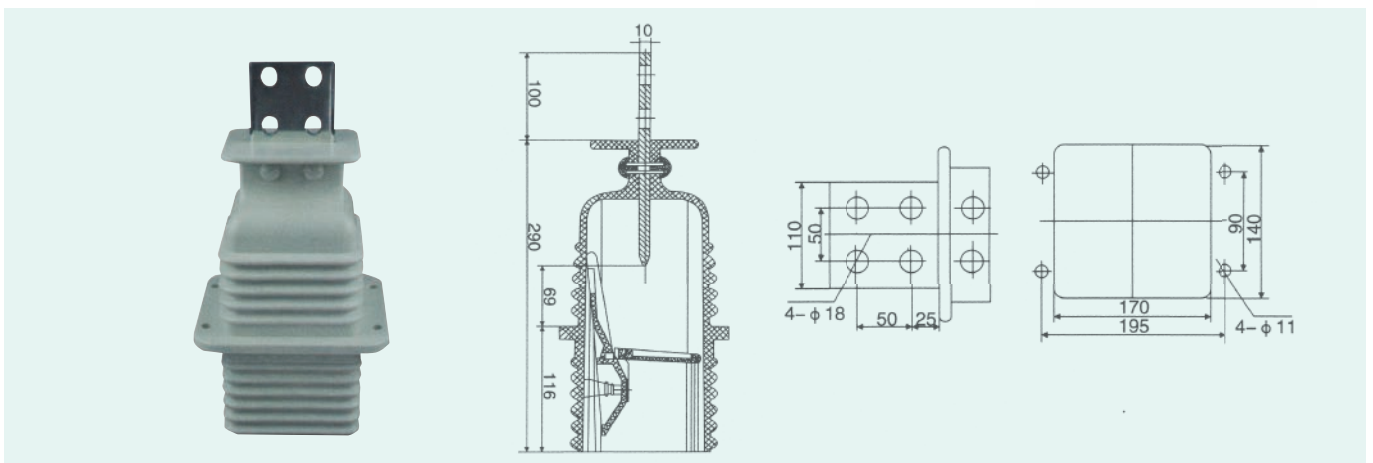
◎ JY2-10Q 触头盒 Contact box

90×165 额定电流 Rated current : 630~1250A



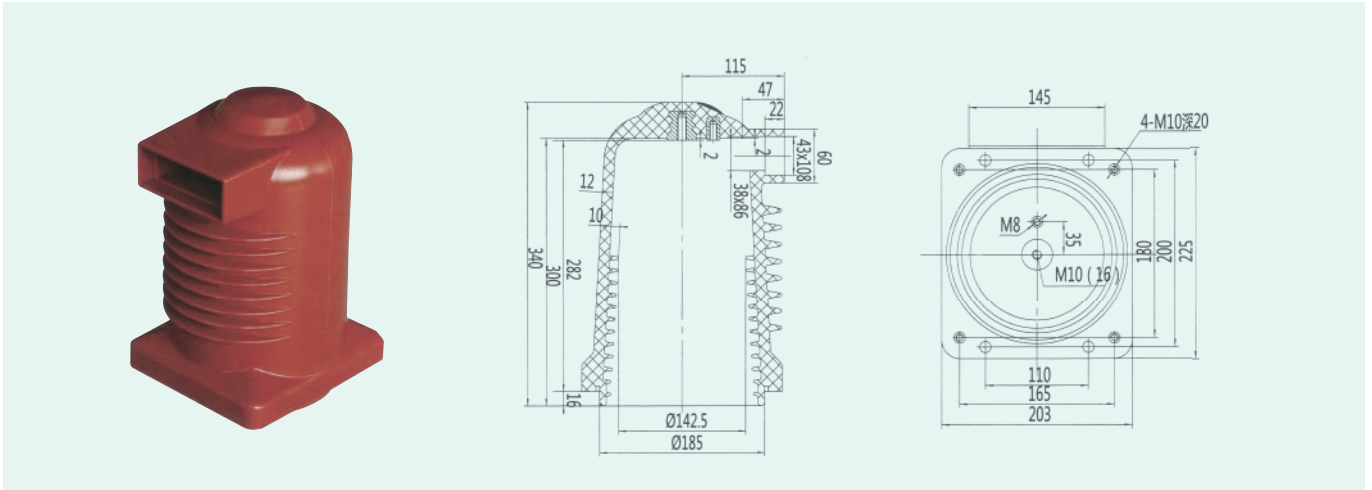
◎ JY2-10Q 触头盒 Contact box

90×165 额定电流 Rated current : 1600~2000A



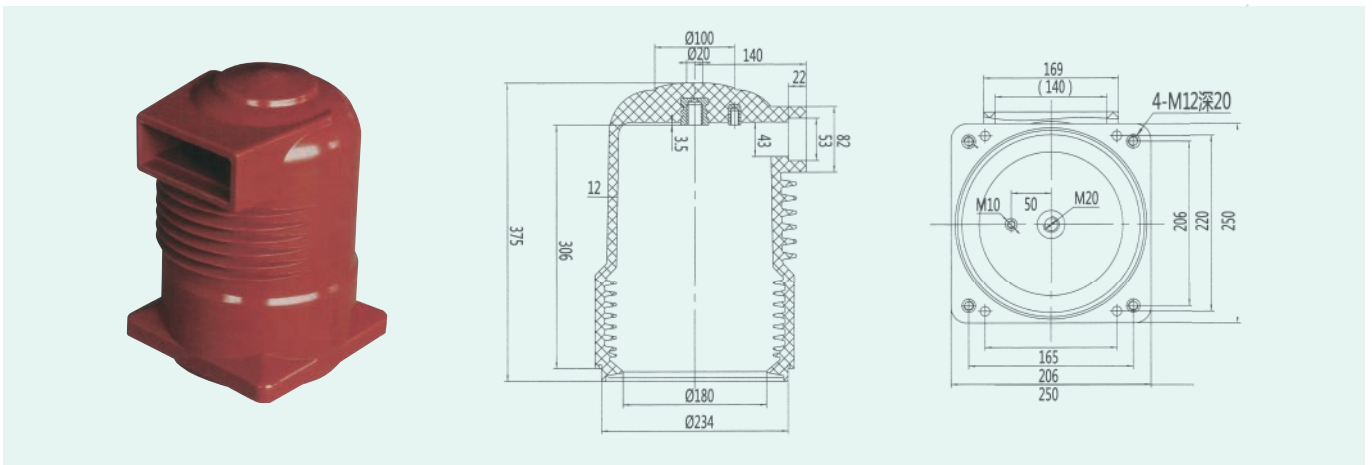
◎ CH3-24Q/225 触头盒 Contact box

额定电流 Rated current : 630~1600A



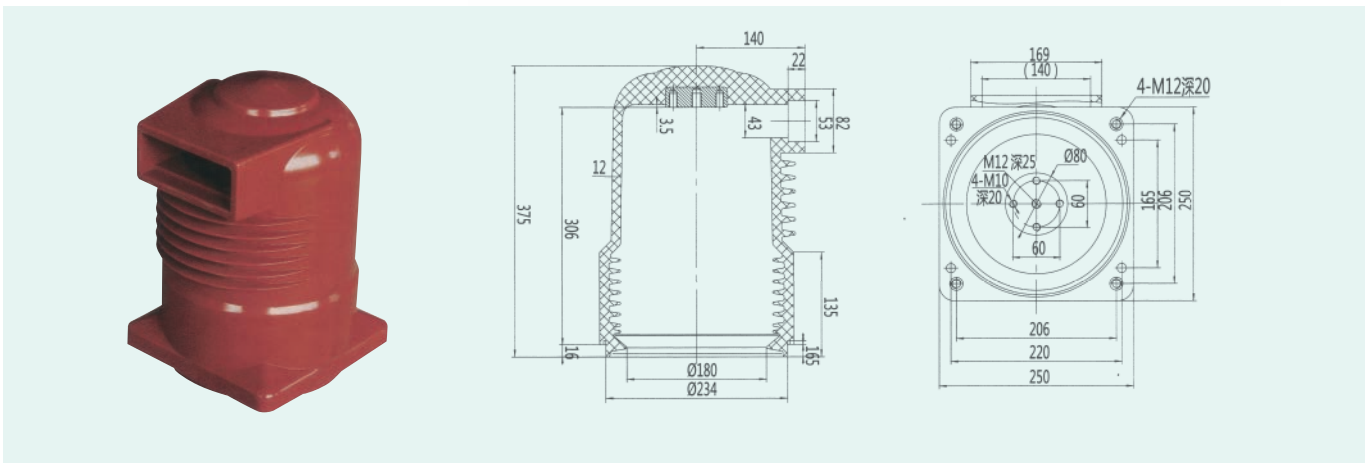
◎ CH3-24Q/250 触头盒 Contact box

额定电流 Rated current : 2000A~2500A

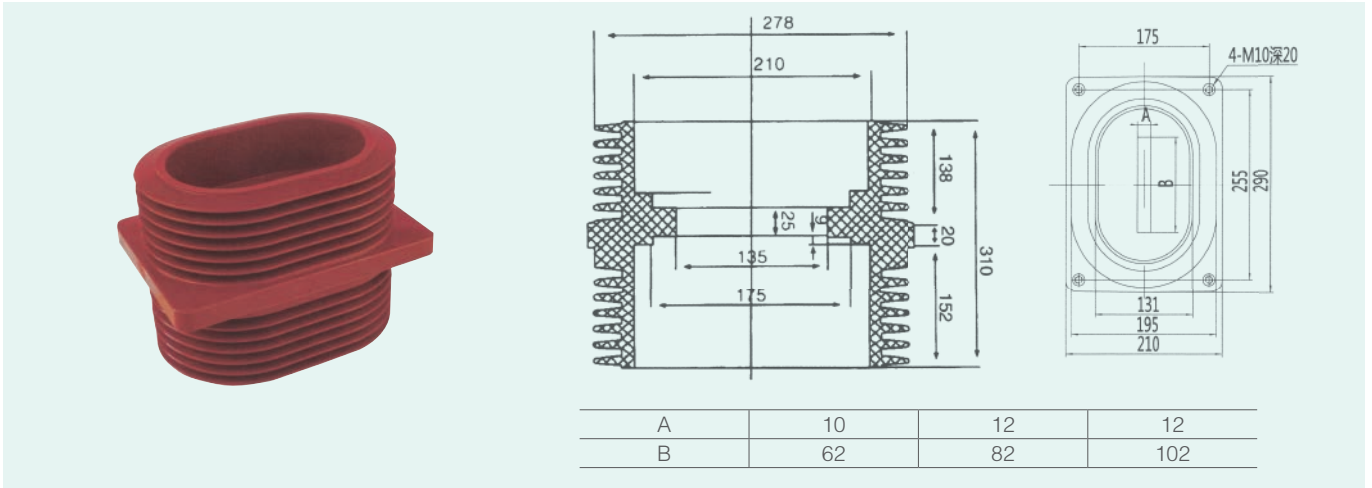


◎ CH3-24Q/252 触头盒 Contact box

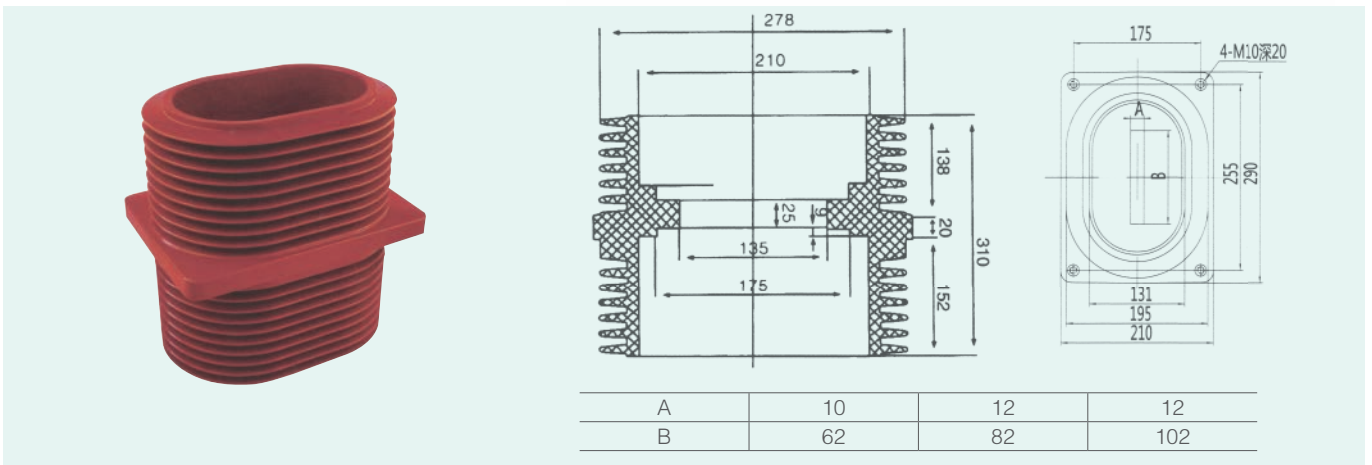
额定电流 Rated current : 3150A~4000A



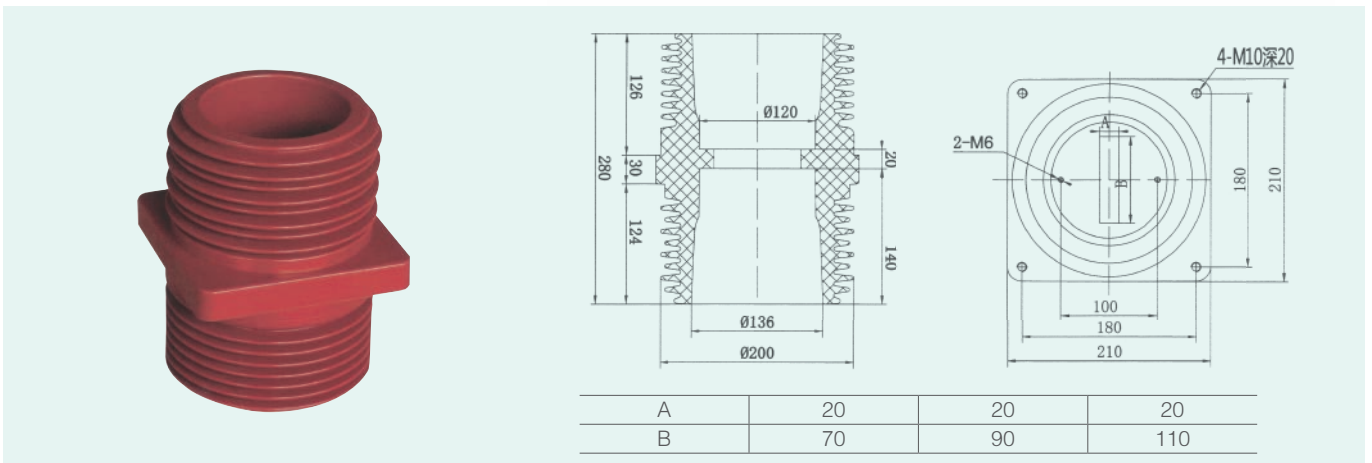
◎ TG3-24Q/210 套管 Bushing
175×255×218



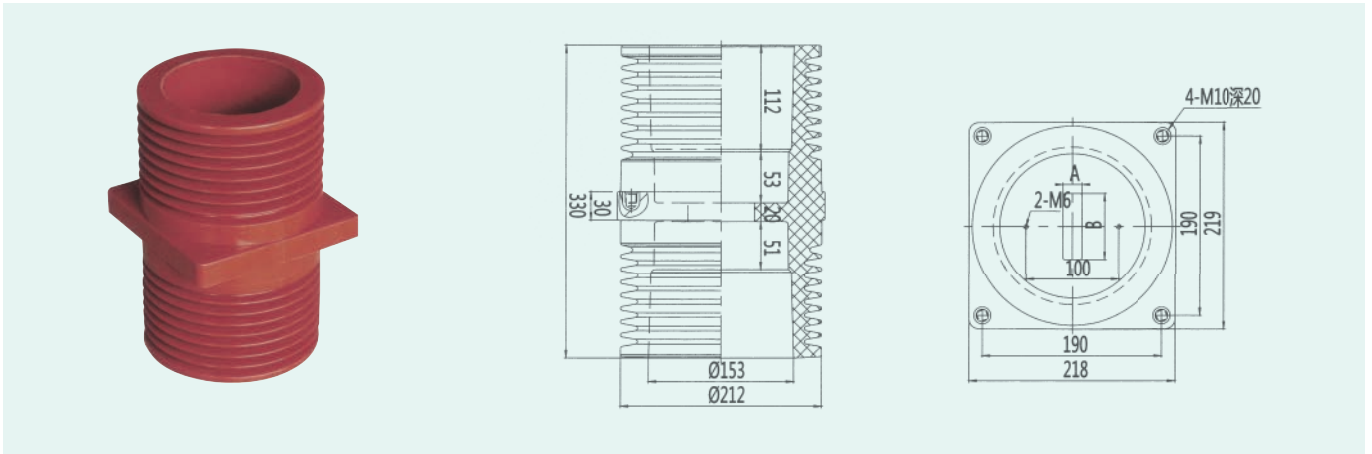
◎ TG3-24Q/210 套管 Bushing
175×255×310



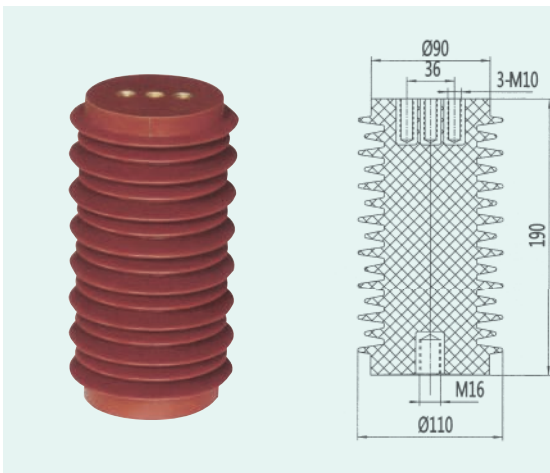
◎ TG3-24Q/210 套管 Bushing
180×180×280



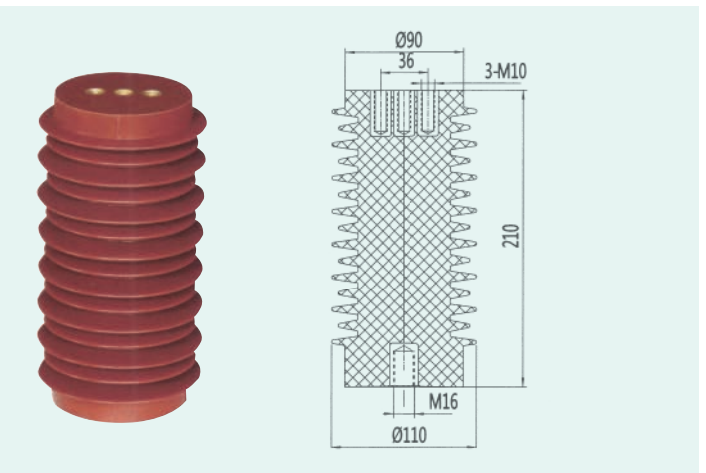
◎ 套管 Bushing
190×190×330



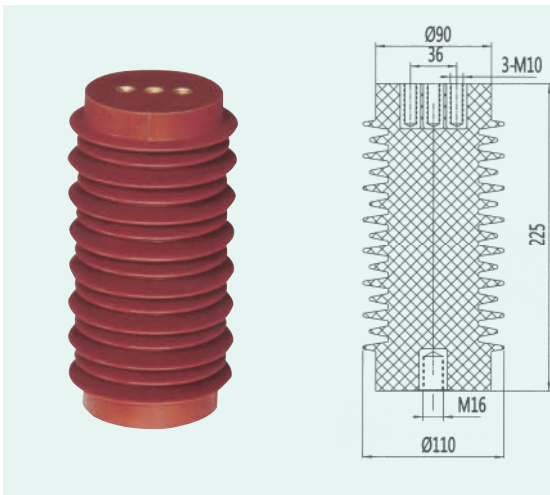
◎ ZJ-24Q 支柱绝缘子 Post insulator
Φ110×190



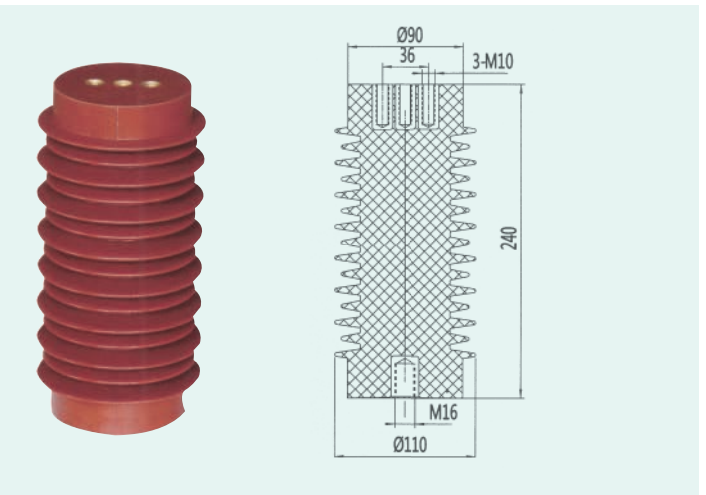
◎ ZJ-24Q 支柱绝缘子 Post insulator
Φ110×210



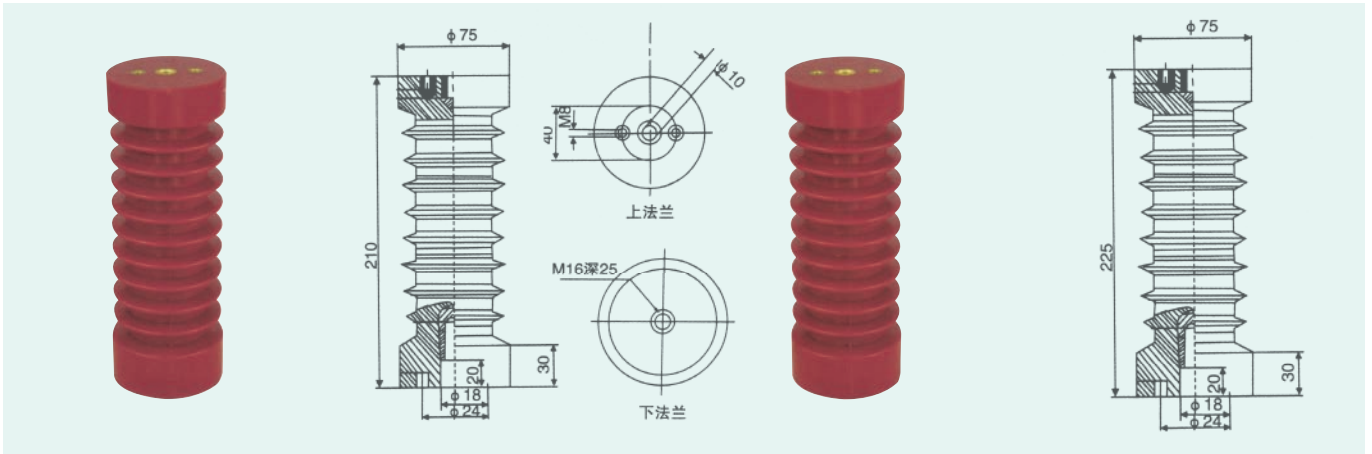
◎ ZJ-24Q 支柱绝缘子 Post insulator
Φ110×225



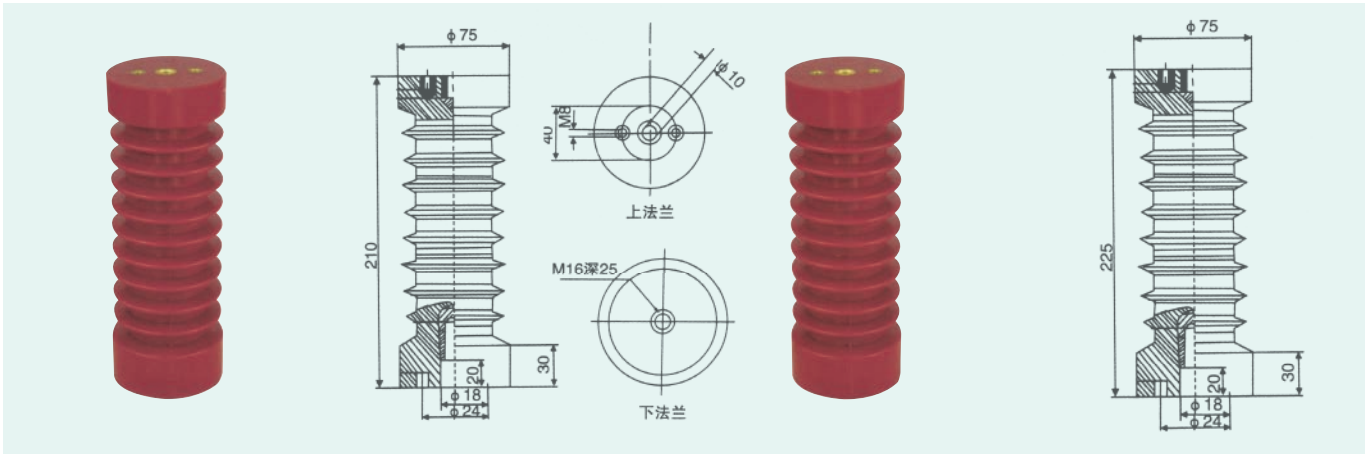
◎ ZJ-24Q 支柱绝缘子 Post insulator
Φ110×240



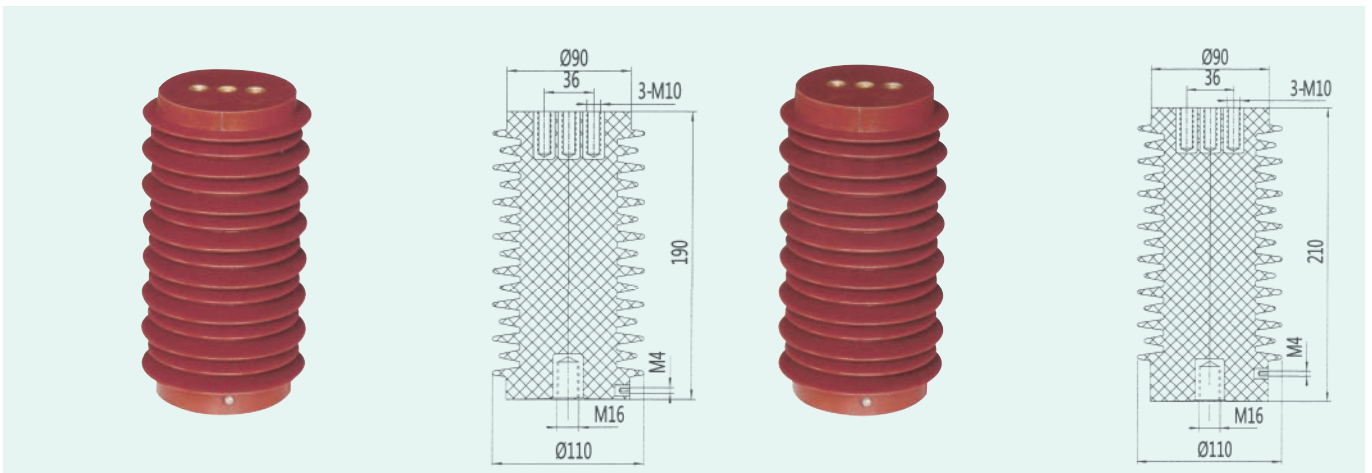
◎ ZJ-24Q 支柱绝缘子 Post insulator
Φ75×210



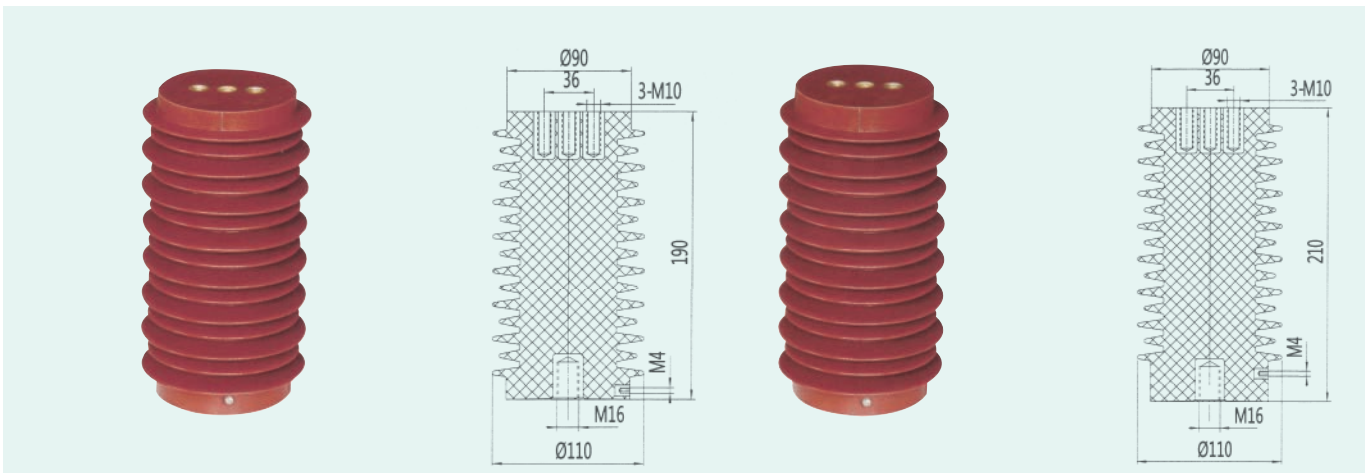
◎ ZJ-24Q 支柱绝缘子 Post insulator
Φ75×225



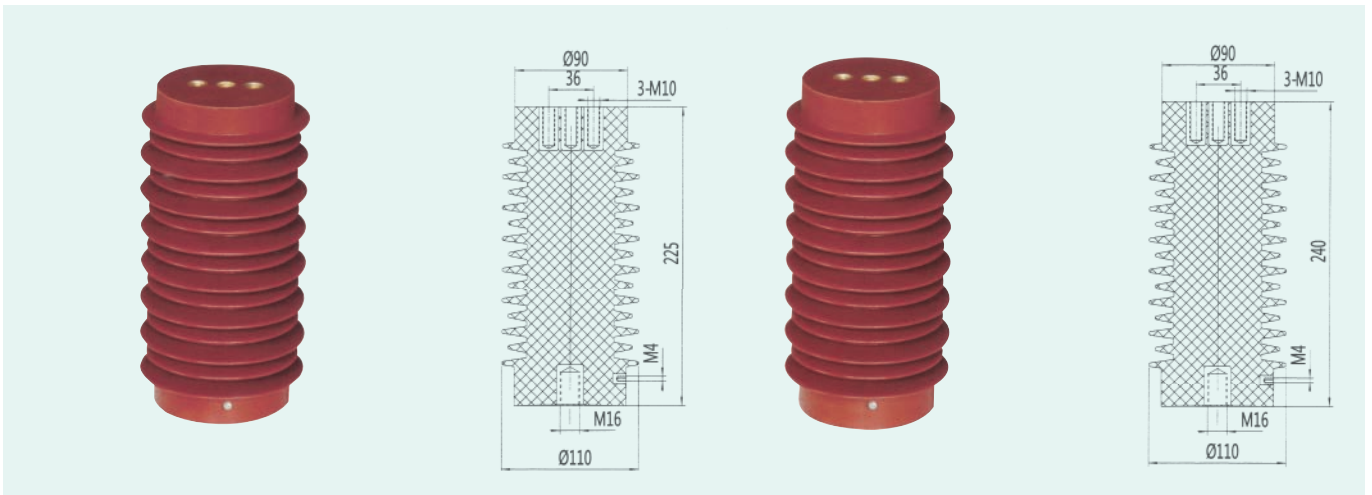
◎ CG5-24Q 传感器 Sensor
Φ110×190



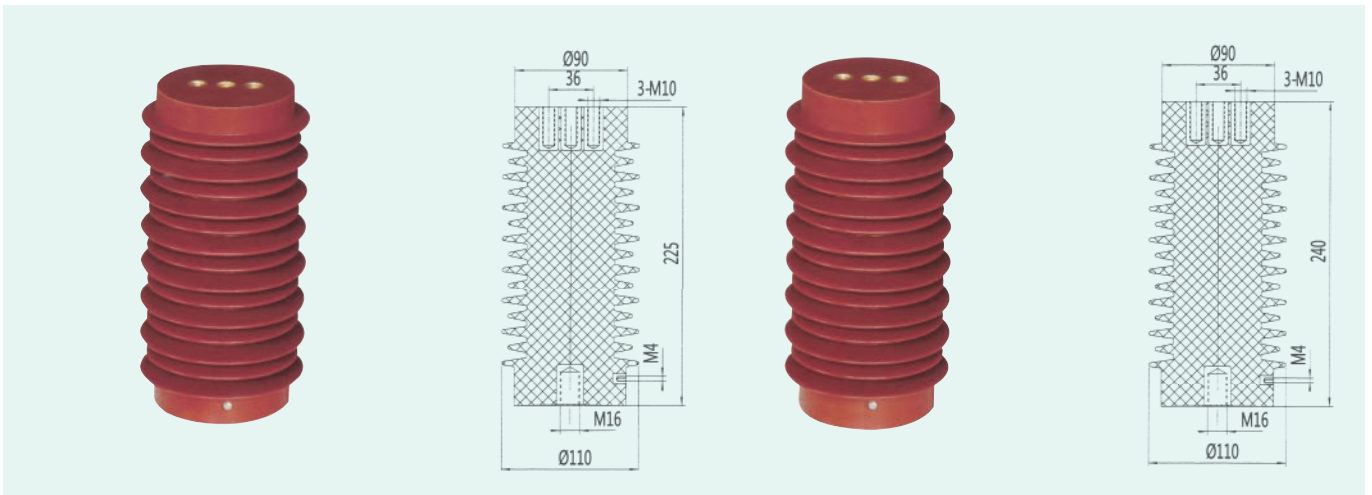
◎ CG5-24Q 传感器 Sensor
Φ110×210



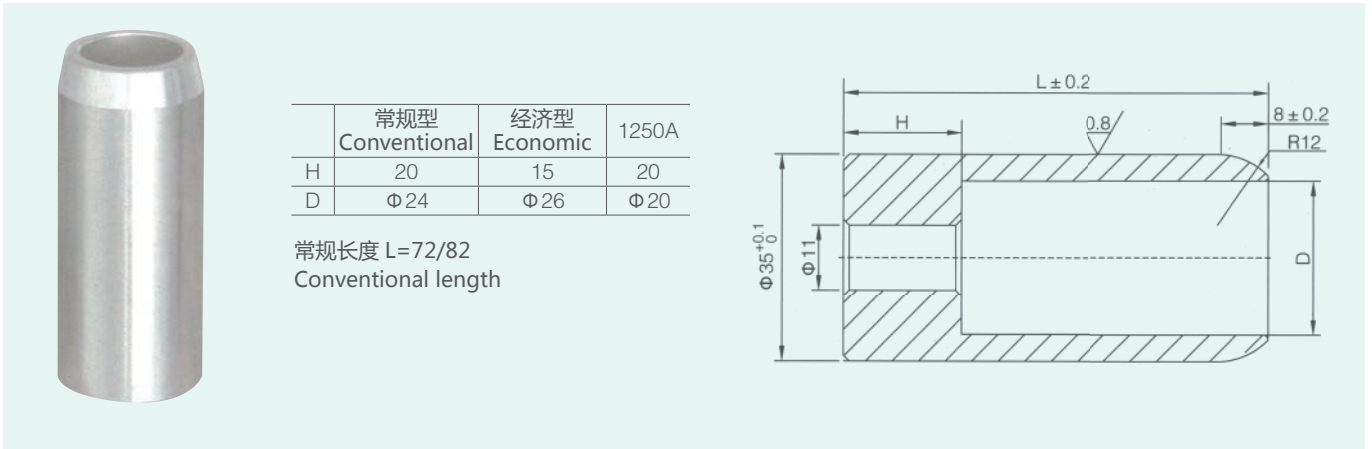
◎ CG5-24Q 传感器 Sensor
Φ110×225



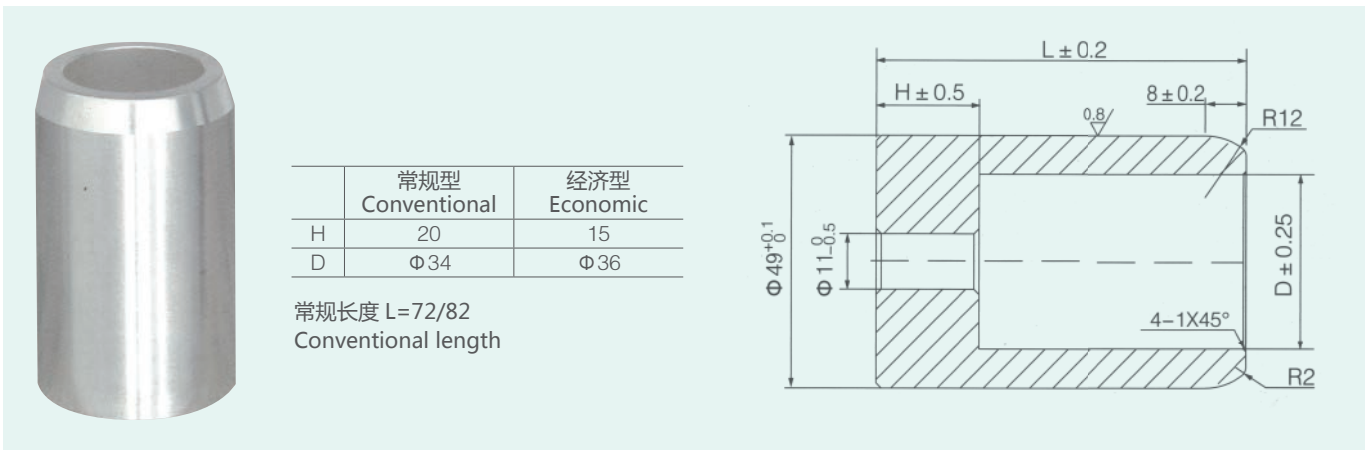
◎ CG5-24Q 传感器 Sensor
Φ110×240



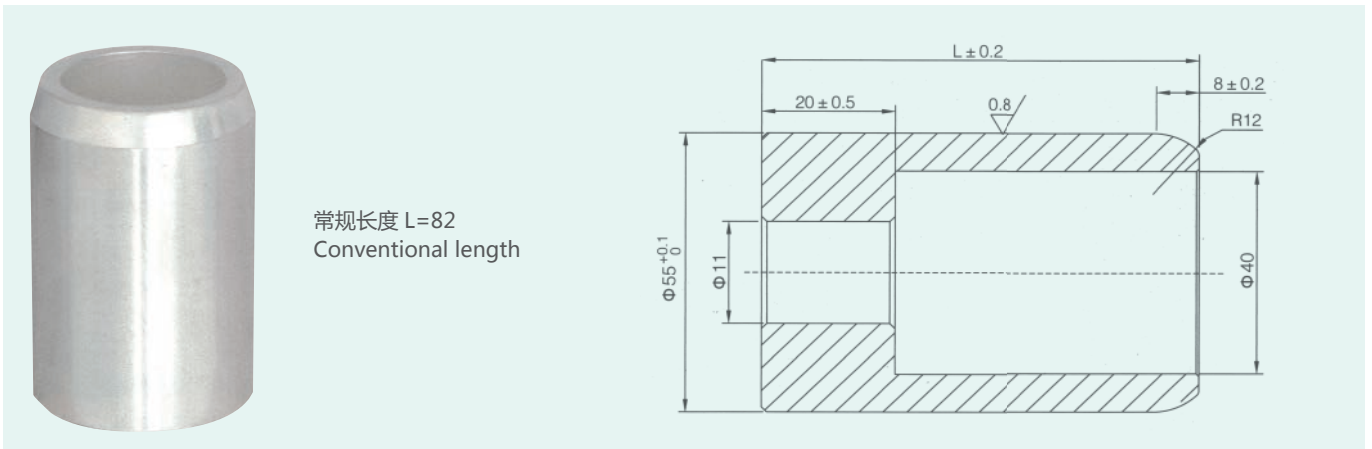
◎ 630A 静触头外形及安装尺寸 Static contact Outline and installation dimension



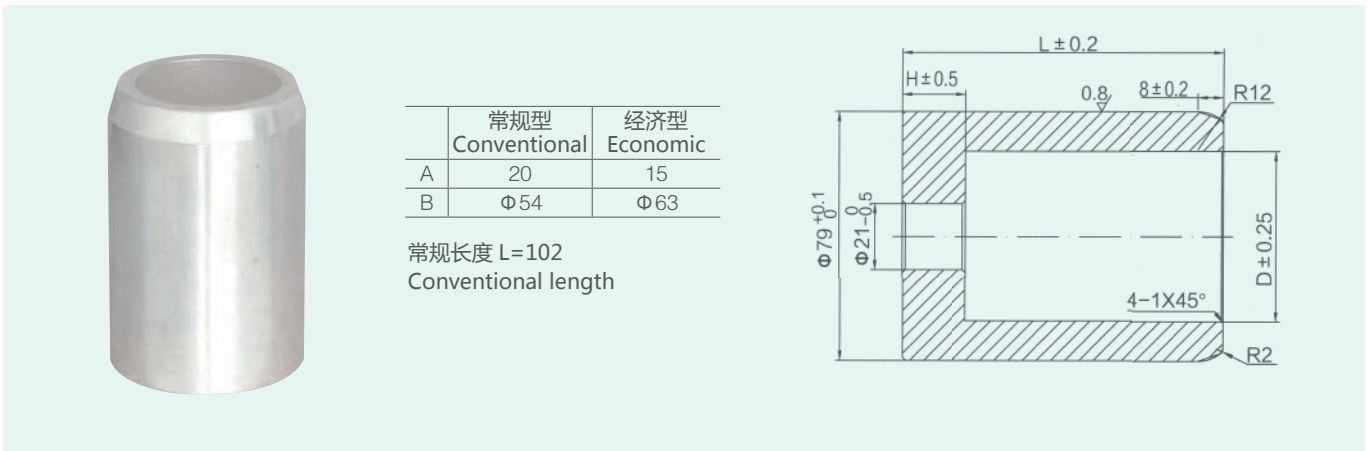
◎ 1250A 静触头外形及安装尺寸 Static contact Outline and installation dimension



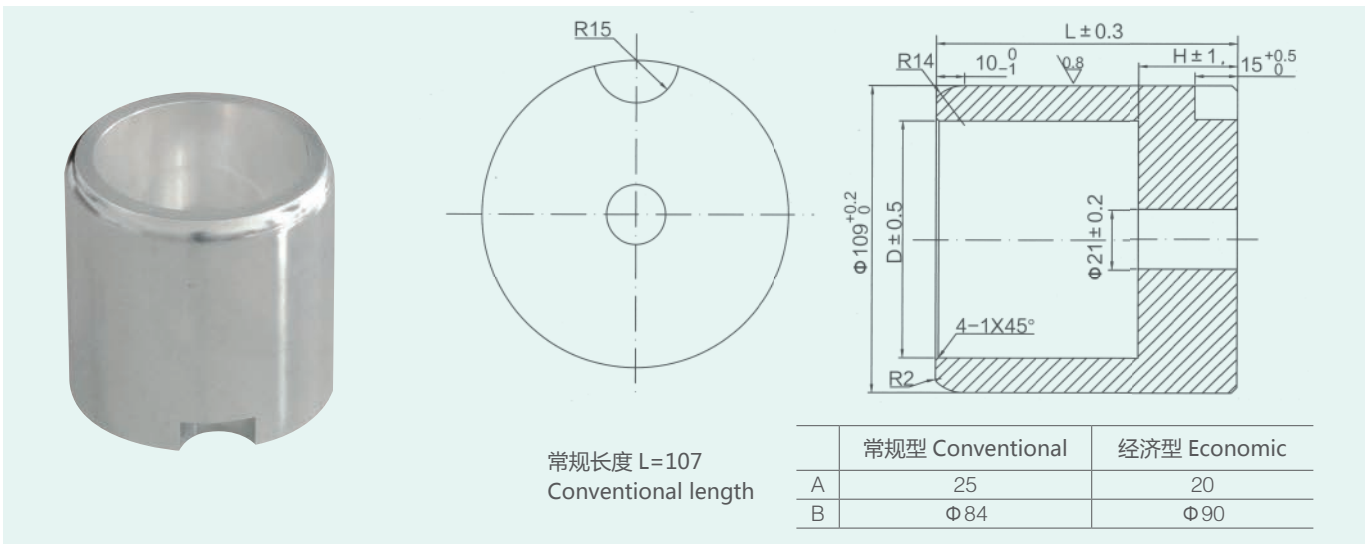
◎ 1600A 静触头外形及安装尺寸 Static contact Outline and installation dimension



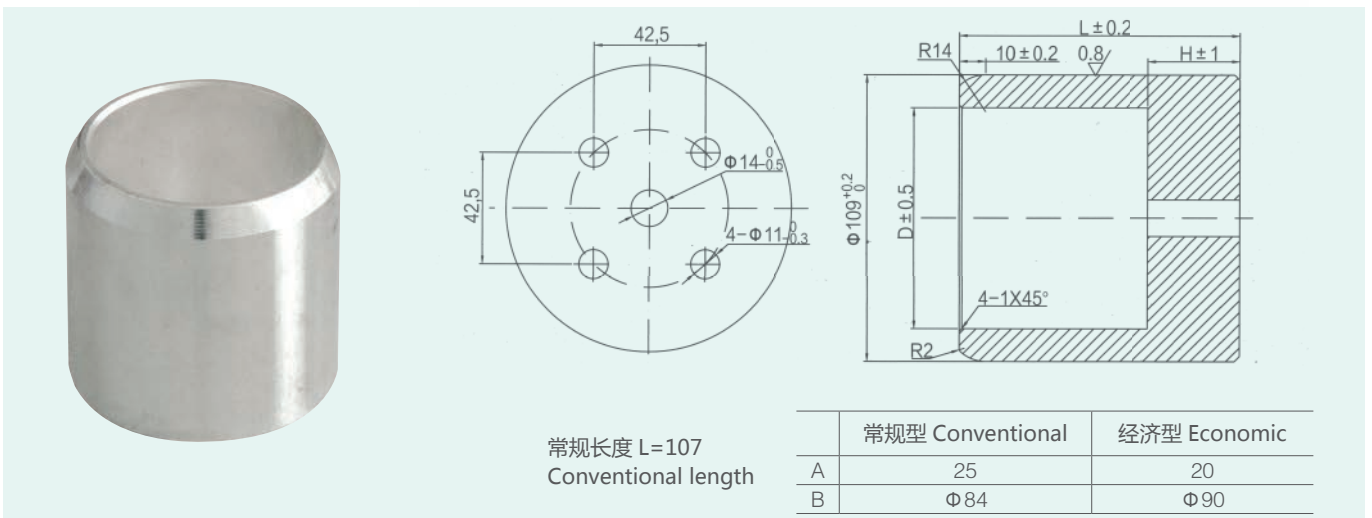
◎ 1600~2000A 静触头外形及安装尺寸 Static contact Outline and installation dimension



◎ 2500~3150A 静触头外形及安装尺寸 Static contact Outline and installation dimension



◎ 3150~4000A 静触头外形及安装尺寸 Static contact Outline and installation dimension



GS5 捆绑式梅花触头 Bundled plum contact

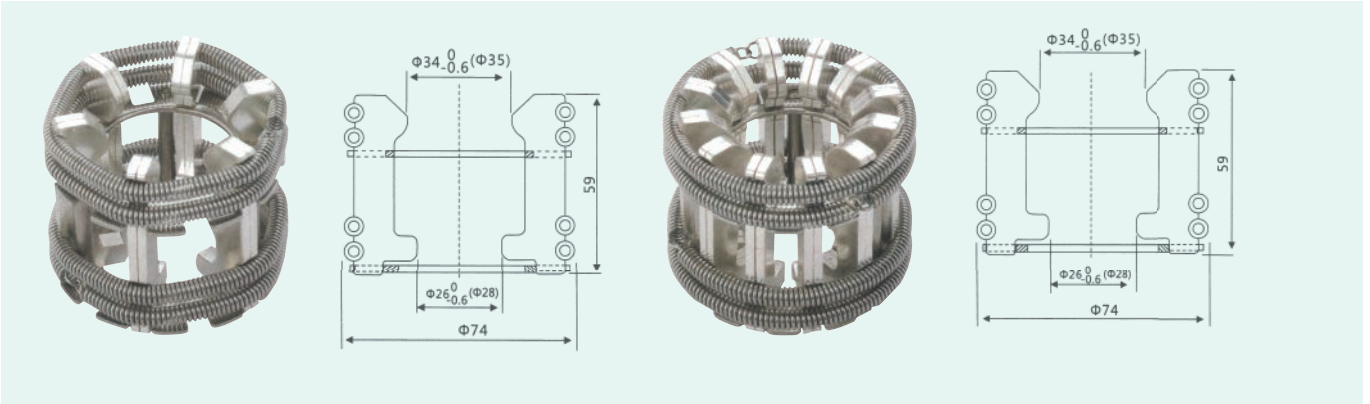
额定电流 Rated current: 630/1000A

触片数量 Number of contacts : 12 片 Sheet

GS5 捆绑式梅花触头 Bundled plum contact

额定电流 Rated current: 630/1000A

触片数量 Number of contacts : 12 片 Sheet



GS5 捆绑式梅花触头 Bundled plum contact

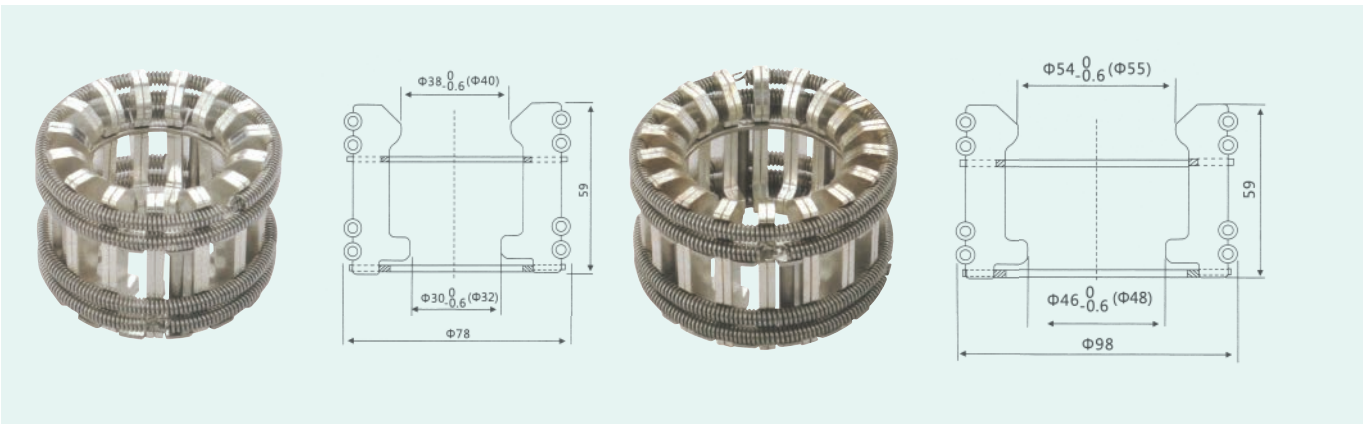
额定电流 Rated current: 1250A

触片数量 Number of contacts : 30 片 Sheet

GS5 捆绑式梅花触头 Bundled plum contact

额定电流 Rated current: 1600A

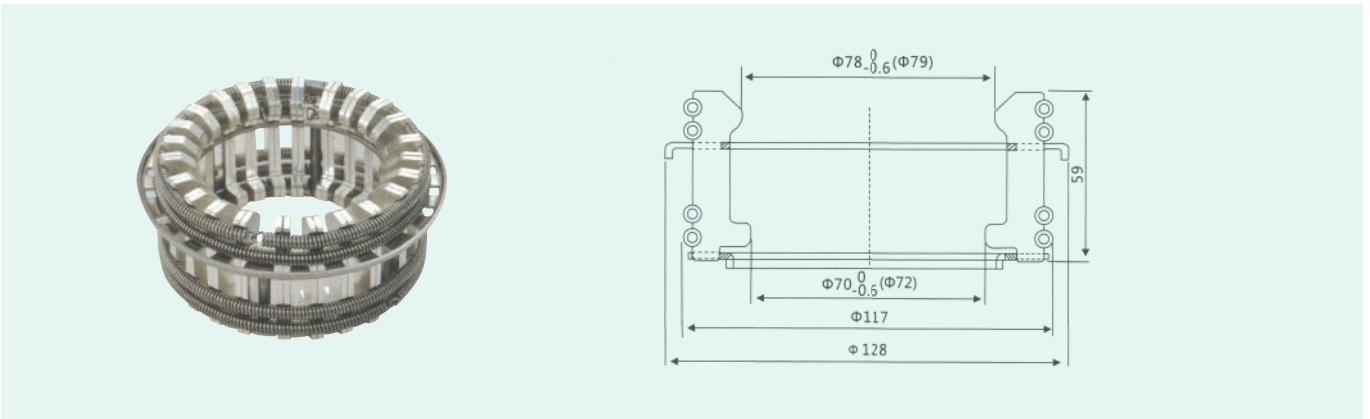
触片数量 Number of contacts : 30 片 Sheet



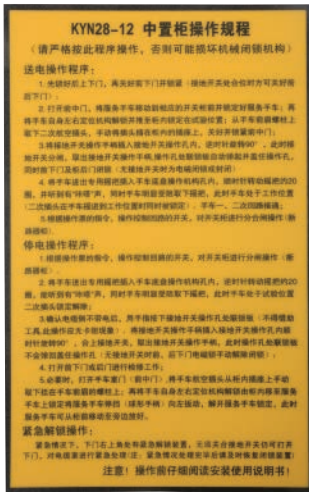
GS5 捆绑式梅花触头 Bundled plum contact

额定电流 Rated current: 2000A

触片数量 Number of contacts : 48 片 Sheet



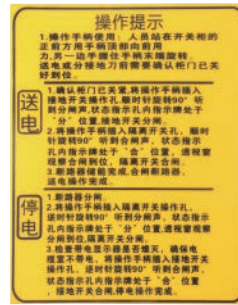
◎ 标识标牌 Logo signs



5LY.BP.001



5LY.BP.002



5LY.BP.003



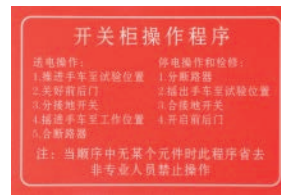
5LY.BP.004



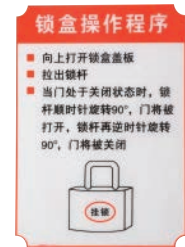
5LY.BP.005



5LY.BP.006



5LY.BP.007



5LY.BP.008



5LY.BP.009



5LY.BP.010



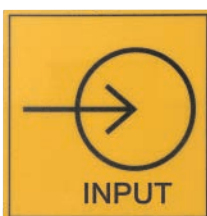
5LY.BP.011



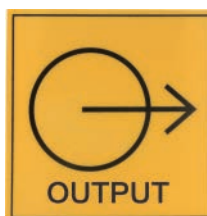
5LY.BP.012



5LY.BP.013



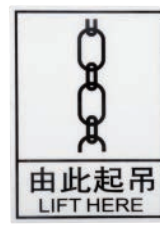
5LY.BP.014



5LY.BP.015



5LY.BP.016



5LY.BP.017



5LY.BP.018

KYN28A-24 中置柜操作程

(请严格按照此程序操作, 否则可能损坏机械闭锁机构)

送电操作程序:

1. 先锁好上下门, 再关闭前下门并锁紧 (接地开关合位时方可关闭前下门);
2. 打开前中门, 将服务手车移动到相应的开关柜前并锁紧服务手车, 再将手车自身左右定位机构解锁并锁定在试位位置; 从手车前侧螺栓上取下二次航空插头, 手动将插头插在柜内的插座上, 关闭并锁紧前中门;
3. 将接地开关手柄插入接地开关操作孔内, 逆时针旋转90°, 此时接地开关分闸, 取出接地开关操作手柄, 操作手柄应能自由转动并开启操作孔, 即可将“可”及“闭”牌挂 (空载地开关时勿挂牌或勿挂牌);
4. 将手车退出专用通道插入手车底座操作机构孔内, 顺时针转动柜内约20圈, 并听到有“咔嚓”声, 同时手车明显受阻向下塌陷, 此时手车处于工作位置 (二次插头在手车前部到工作位置时即被锁定), 手车一、二次回路接通;
5. 根据操作票的命令, 操作控制柜内的开关, 对开关柜进行分合闸操作 (断路器柜);

停电操作程序:

1. 根据操作票的命令, 操作控制柜内的开关, 对开关柜进行分闸操作 (断路器柜);
2. 将手车退出专用通道插入手车底座操作机构孔内, 逆时针转动柜内约20圈, 听到有“咔嚓”声, 同时手车明显受阻向上塌陷, 此时手车处于试验位置 (二次插头自动解锁);
3. 关闭柜内不带电后, 用手按压下接地开关操作孔处解锁 (不得借助工具, 此操作应无大声响), 将接地开关操作手柄插入接地开关操作孔内顺时针旋转90°, 合上接地开关, 取出接地开关操作手柄, 此时操作孔处解锁不会弹回至操作孔 (无接地开关时, 取下“地”牌并手动解锁解锁);
4. 打开前下门盖门 (进行检修工作);
5. 必要时, 打开手车室前门 (检修门), 将手车航空插头从柜内插座上手动取下挂在手车前侧的螺栓上, 再将手车自身左右定位机构和螺栓由柜内移至服务手车上锁定并锁紧服务手车 (挂好) 向左推动, 解除服务手车锁, 此时服务手车可从柜前移动到旁边放好;

紧急解锁操作:

紧急情况下, 下门左上角有紧急解锁装置, 无钥匙合接地开关仍可打开下门, 对电缆室进行紧急处理 (注: 紧急情况及处理完毕台请及时恢复并复位);

注意! 操作前仔细阅读安装使用说明书!

5LY.BP.019

KYN28-12 middle cabinet operation rules

(Please strictly follow this procedure, otherwise the mechanical locking mechanism may be damaged)

Power restoration procedure:

1. Lock the door before going up and down, then close the front door and lock it tightly (the front and rear doors can be closed when the grounding switch is in place);
2. Open the front middle door, move the service handcart to the corresponding switch cabinet and lock the service handcart; then unlock the left and right positioning mechanism of the handcart and push it into the cabinet to lock in the test position; from the front side bolt of the handcart, manually insert the secondary aviation plug from the cabinet, manually insert the plug into the socket in the cabinet, close and lock the front middle door;
3. Insert the operation handle of the earthing switch into the operation hole of the earthing switch, and turn it counterclockwise by 90°. At this time, the earthing switch is opened. Take out the operation handle of the earthing switch. The interlocking plate at the operation hole will automatically pop out and cover the operation hole. The lower door and the back door of the cabinet are locked (when there is no grounding switch, it is automatically locked or closed);
4. Insert the special crank handle for in and out of the handcart into the hole of the operating mechanism of the chassis of the handcart, turn the handle clockwise for about 20 laps, and hear a "click" sound, and the handcart is obviously obstructed to remove the handle. The car is in the working position (the secondary plug is locked at the same time when the working position is reached into the working position, the primary and secondary circuits of the handcart are connected);
5. According to the instructions of the operation ticket, operate the switch of the control circuit to perform the switch cabinet Operation between opening and closing (circuit breaker cabinet);

Power failure operation procedure:

1. Operate the switch of the control circuit according to the instruction of the operation ticket, and perform the division operation on the switch cabinet (circuit breaker cabinet);
2. Insert the special crank handle for the in and out of the handcart into the hole of the operating mechanism of the chassis of the handcart, and turn the handle counterclockwise for about 20 laps. A "click" can be heard, and the handcart is obviously obstructed to remove the handle. Unlock the secondary plug when the car is in the test position;
3. After confirming that the cabinet side is not live, press the interlocking plate at the grounding switch operation hole with your fingers (the tool should be used, there should be no sound in this operation), and insert the grounding switch operating vehicle into the grounding switch operation hole and rotate clockwise 90°, close the grounding switch and take out the operation handle of the grounding switch. At this time, the interlocking device operation handle of the operation hole will not bounce back to cover the operation hole (when there is no grounding switch, the front and rear door electromagnetic locks are automatically unlocked);
4. Open the front lower door or the back door for maintenance work;
5. If necessary, open the door of the handcart room (the front middle door), manually remove the air plug of the handcart from the socket in the cabinet and hang it on the stud on the front eyerow of the handcart; then unlock the left and right positioning mechanism of the handcart. Move the cabinet to the service handcart and lock it. Move the service handcart (still handle) to the left to unlock the service handcart. At this time, the service handcart can be moved from the front of the cabinet to the side and put it away;

Emergency unlock operation:

In an emergency, there is an emergency unlocking device at the upper right corner of the lower door. You can open the lower door without closing the grounding switch and perform emergency treatment on the cable room. (Note: Please restore the locking device in time after the emergency is handled)

Attention! Read the installation manual carefully before operation!

5LY.BP.020



紧急解锁螺钉
遇紧急情况, 锁失效时
松开螺钉, 紧急解锁开门

5LY.BP.021



5LY.BP.022



5LY.BP.023



5LY.BP.024



DANGER
Electric voltage.
Turn power off
before servicing.

5LY.BP.025

接地开关操作程序

1. 必须关上下门和后下门, 才能操作接地开关
2. 接地开关分闸时断路器手柄不能推送, 弹出
3. 地刀开关处于分闸状态时, 无法打开前下门和后下门, 必须合闸时才能打开前下门和后下门



接地开关处于合闸时
手柄朝向输入侧时针
转动90°为分闸

接地开关处于分闸时
手柄朝向输入侧时针
转动90°为合闸

5LY.BP.026

接地开关操作程序

1. 必须关上下门和后下门, 才能操作接地开关
2. 接地开关分闸时断路器手柄不能推送, 弹出
3. 地刀开关处于分闸状态时, 无法打开前下门和后下门, 必须合闸时才能打开前下门和后下门



接地开关处于合闸时
手柄朝向输入侧时针
转动90°为分闸

接地开关处于分闸时
手柄朝向输入侧时针
转动90°为合闸

5LY.BP.027



5LY.BP.028



5LY.BP.029

紧急分闸装置操作说明:

EMERGENCY OPENING DEVICE OPERATING INSTRUCTION

将按钮旋至分闸(红点)位置, 按压中心按钮可实现分闸, 松开手柄后自动复位。



紧急分闸
EMERGENCY OPENING

TURNING THE COUNTER ROTATION TO EMERGENCY OPENING POINT, EMERGENCY OPENING CAN BE REALIZED BY PRESSING THE CENTER BUTTON. AUTOMATIC RESTORATION AFTER LOSING HAND.

5LY.BP.030

紧急分闸装置操作说明:

EMERGENCY OPENING DEVICE OPERATING INSTRUCTION

将按钮旋至分闸(红点)位置, 按压中心按钮可实现分闸, 松开手柄后自动复位。



紧急分闸
EMERGENCY OPENING

TURNING THE COUNTER ROTATION TO EMERGENCY OPENING POINT, EMERGENCY OPENING CAN BE REALIZED BY PRESSING THE CENTER BUTTON. AUTOMATIC RESTORATION AFTER LOSING HAND.

5LY.BP.031



5LY.BP.032



5LY.BP.033



5LY.BP.034



5LY.BP.035

◎ 分合标示牌 Split and combine signs



38×119
(无孔 Nonporous)



38×119



40×119



42×119



PVC 50×75

◎ 行程开关 Limit switch



LX19-001



X2-N



LXW20-11M



LX19-001



LXW5-11Q1



AZ7121



LX12-2



WZ-7318/T



AZ-7311



TM-1309



KYN28A-12 型金属铠装中置移开式开关设备

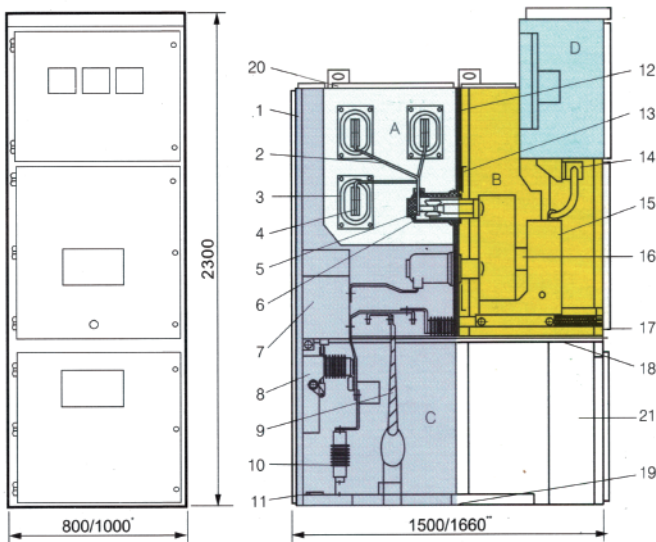
KYN28A-12 type metal armored central removable switchgear



外壳与隔板 Enclosure and partition

开关柜的外壳和隔板是用优质进口敷铝锌钢板经数控机床加工弯折之后栓接而成，因此装配好的开关柜能保持尺寸上的统一性。它具有很强的抗腐蚀与抗氧化作用，并具有比同等钢板高的机械强度。开关柜被隔板分成手车室（断路器隔室），母线室，电缆室，继电器仪表室（低压室）。每一单元外壳均独立接地。

The shell and partitions of the switchgear are bolted with high-quality imported aluminum-zinc-coated steel sheets processed and bent by CNC machine tools, so the assembled switchgear can maintain the uniformity of dimensions. It has strong anti-corrosion and anti-oxidation effects, and has higher mechanical strength than the same steel plate. The switch cabinet is divided into the handcart room (breaker compartment), busbar room, cable room, and relay instrument room (low voltage room) by partitions. Each unit shell is independently grounded.



- 1、泄压装置 Pressure relief device
- 2、外壳 Shell
- 3、分支母线 Branch bus
- 4、母线套管 Bus bushing
- 5、主母线 Main bus
- 6、解触头装置 Contact release device
- 7、静触头盒 Static contact box
- 8、电流互感器 Current Transformer
- 9、接地开关 Earthing switch
- 10、电缆 Cable
- 11、避雷器 Lightning arrester
- 12、接地母线 Ground bus
- 13、装卸式隔板 Removable partition
- 14、隔板车（活门） Bulkhead car (valve door)
- 15、二次插头 Bulkhead car (valve door)
- 16、断路器手车 Circuit breaker handcart
- 17、加热去湿器 Heating dehumidifier
- 18、可抽出式隔板 Withdrawable partition
- 19、接地开关操作机构
Earthing switch operating mechanism
- 20、控制小线槽 Control small trunking
- 21、底板 Bottom plate

A 母线室 Busbar room B 断路器手车室 Circuit breaker handcart room
C 电缆室 Cable room D 继电器仪表室 Relay instrument room

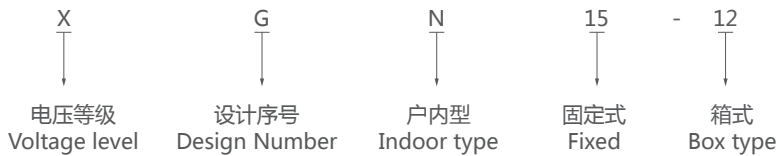
额定电流大于 1600A 为 1000(mm)，其余为 800(mm)
 电缆进出线为 1500(mm) 架空进出线为 1660(mm)
 Rated current greater than 1600A is 1000 (mm), the rest is 800 (mm)
 Cable inlet and outlet is 1500 (mm) overhead inlet and outlet is 1660 (mm)

XGN15-12 型高压环网柜 High voltage ring main unit



FLN36-12/FLN38-12 六氟化硫负荷开关设备
Sulfur hexafluoride load switch equipment

◎ 型号说明 Model Description



◎ 技术参数 Technical parameter

项目 Project	参数值 Parameter value
额定电压、额定电流 Rated voltage, rated current	12kV、630A
额定热稳定电流 (2S) Rated thermal stability current (2S)	20kA
额定动稳定电流 (峰值) Rated dynamic stability current (peak value)	50kA
额定短路关合电流 (峰值) Rated short-circuit making current (peak value)	50kA
额定转移电流 Rated transfer current	2000kA
雷电冲击电压 Lightning impulse voltage	85
工频耐压 Lightning impulse voltage	48
机械寿命 Mechanical life	2000 次
Sf6 气体额定压力 Sf6 gas rated pressure	0.03Mpa
Sf6 气体年泄漏率 Sf6 gas annual leakage rate	≤ 0.5%

KYN-550 金属铠装中置式开关柜 Metal armored central switch cabinet



◎ 概述 Overview

KYN-550 金属铠装中置式开关柜，适用于 3~12kV 三相交流的单母线或单母线分段的配电系统。作为接受和分配电能的成套开关装置，广泛用于电厂、变电站、工矿企业及城市建设，其柜体宽度只有 550mm，具有占地面积小、结构紧凑、可靠性高等特点。产品的设计和制造满足以下标准：

- 精密的丝杆传动机构，确保手车具有极好的互换性。
- 快速接地开关用于接地及回路短接，并可实现电动操作。
- 简单有效的“五防”联锁机构，能可靠地防止误操作，确保操作人员安全。
- GB 3906-1991 3~35kV 交流金属封闭开关设备
- GB/T 11022-1999 高压开关设备和控制设备标准的共同技术条件
- DL/T 404-1997 户内交流高压开关柜订货技术条件
- IEC 60298-1990 额定电压 1kV 以上至 72.5kV 交流金属封闭开关和控制设备

KYN-550 metal armored central switchgear is suitable for 3~12kV three-phase AC single bus or single bus segmented power distribution system. As a complete set of switchgear for receiving and distributing electric energy, it is widely used in power plants, substations, industrial and mining enterprises and urban construction. Its cabinet width is only 550mm, and it has the characteristics of small footprint, compact structure and high reliability. The design and manufacture of products meet the following standards:

- The precise screw drive mechanism ensures that the handcart has excellent interchangeability.
- Fast grounding switch is used for grounding and loop short circuit, and can realize electric operation.
- The simple and effective "five prevention" interlocking mechanism can reliably prevent misoperation and ensure the safety of operators.
- GB 3906-1991 3~35kV AC metal enclosed switchgear
- GB/T 11022-1999 Common technical conditions for high-voltage switchgear and control equipment standards
- DL/T 404-1997 Technical conditions for ordering indoor AC high voltage switchgear
- IEC 60298-1990 AC metal-enclosed switch and control equipment with rated voltage above 1kV to 72.5kV

◎ 正常的使用环境条件 Normal use environmental conditions

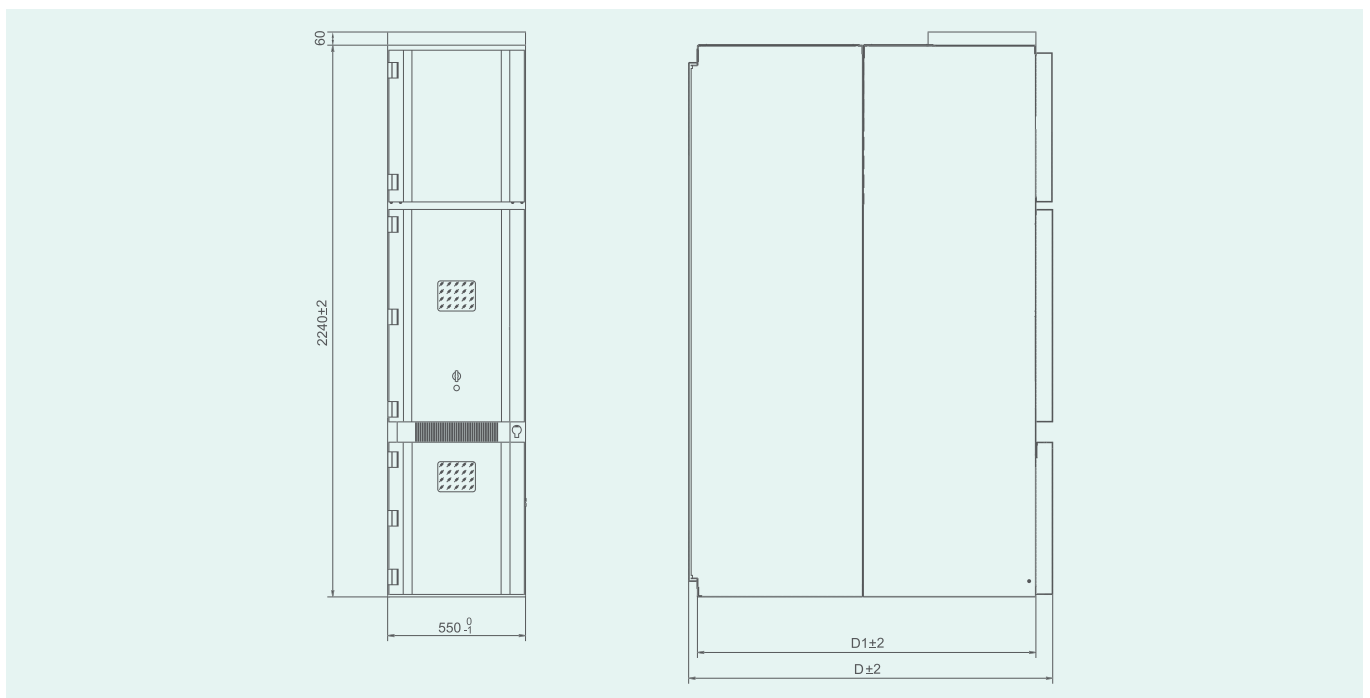
1. 环境温度：最高 +40°C，最低 -35°C
2. 环境湿度：相对湿度日平均不大于 95%，月平均不大于 90%
3. 海拔高度：不超过 1000 米
4. 地震烈度：不超过 8 级
5. 没有火灾、爆炸危险、化学腐蚀及剧烈震动的场所

1. Ambient temperature: highest +40°C, lowest -35°C
2. Ambient humidity: the daily average relative humidity is not more than 95%, and the monthly average is not more than 90%
3. Altitude: no more than 1000 meters
4. Earthquake intensity: no more than 8
5. There is no place where there is fire, explosion hazard, chemical corrosion and severe vibration

◎ 主要技术参数 The main technical parameters

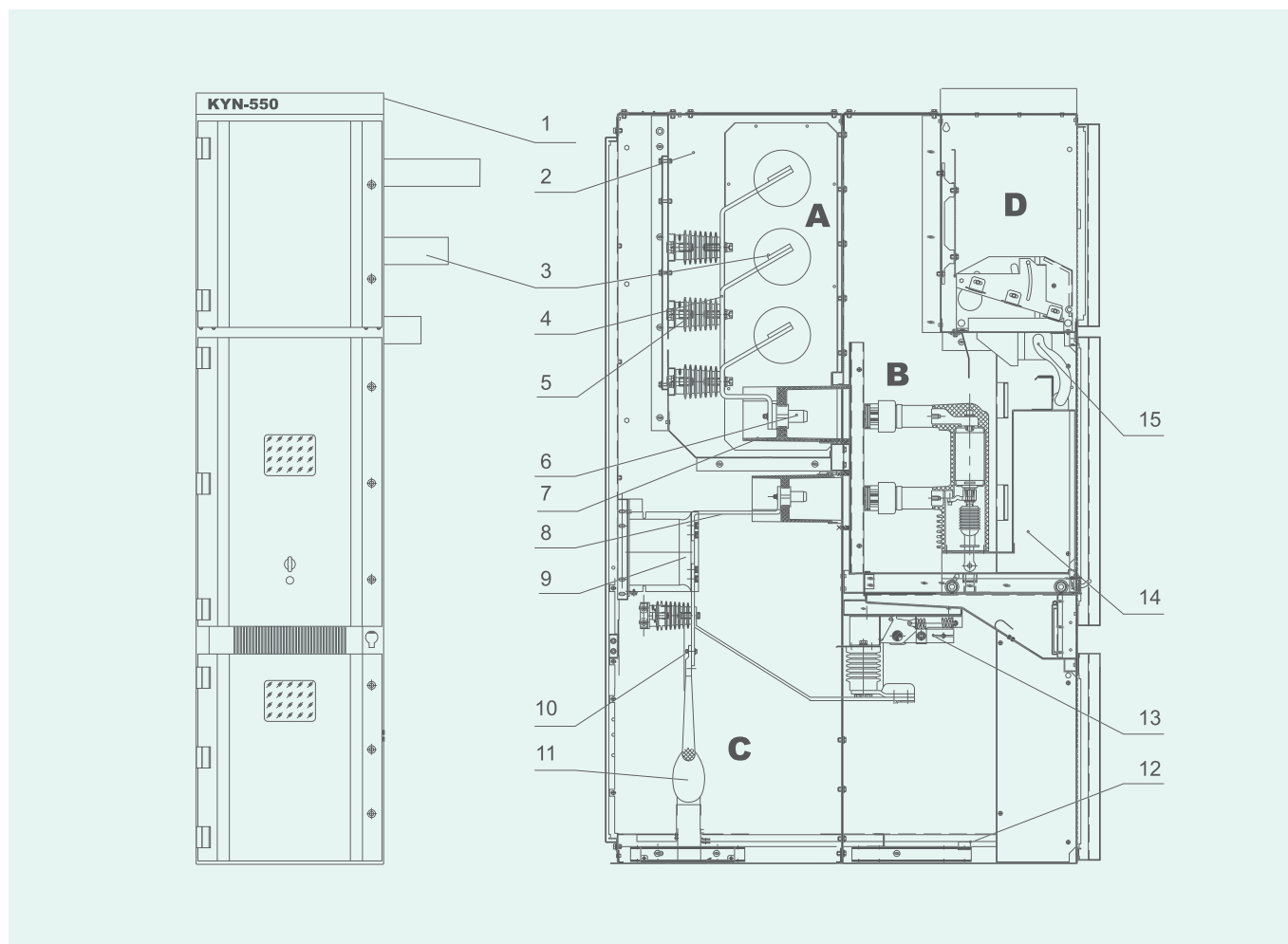
项目 Project	单位 Unit	数据 Data
额定电压 Rated voltage	kV	12
1min 工频耐压 Power frequency withstand voltage	kV	42
额定雷电冲击耐压 Rated lightning impulse withstand voltage	kV	75
额定电流 Rated current	A	630/1250/1600
4s 热稳定电流 (有效值) 4s thermal stability current (effective value)	kA	25/31.5
动稳定电流 (峰值) Dynamic stability current (peak value)	kA	63/80
防护等级 Protection level		IP4X (手车室门打开时 IP2X) IP4X (IP2X when the handcart room door is opened)

◎ 开关柜外形尺寸 Overall dimensions of switch cabinet



◎ 开关柜的结构 The structure of the switch cabinet

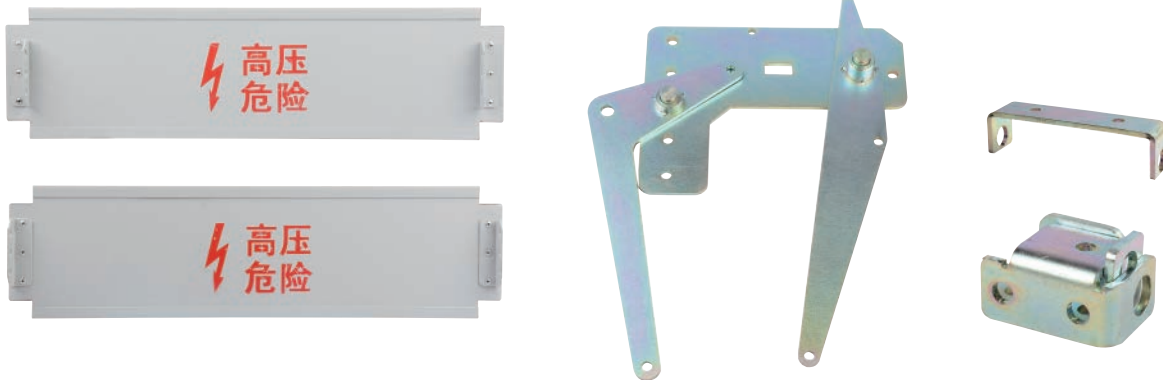
开关柜由固定的柜体和可抽出的手车两大部分组成。柜体的外壳及各功能单元的隔板均采用铝锌复合钢板经数控机床加工和折弯之后在专用工装夹具上组装栓接而成。其内部可分为手车室、母线室、电缆终端室以及二次继保室。各功能单元的分布以及主要电器元件的装配见下图：
The switch cabinet is composed of a fixed cabinet and a handcart that can be withdrawn. The shell of the cabinet and the partitions of each functional unit are made of aluminum-zinc composite steel plates processed and bent by CNC machine tools and then assembled and bolted on special fixtures. Its interior can be divided into handcart room, busbar room, cable terminal room and secondary protection room. The distribution of each functional unit and the assembly of the main electrical components are shown in the following figure:



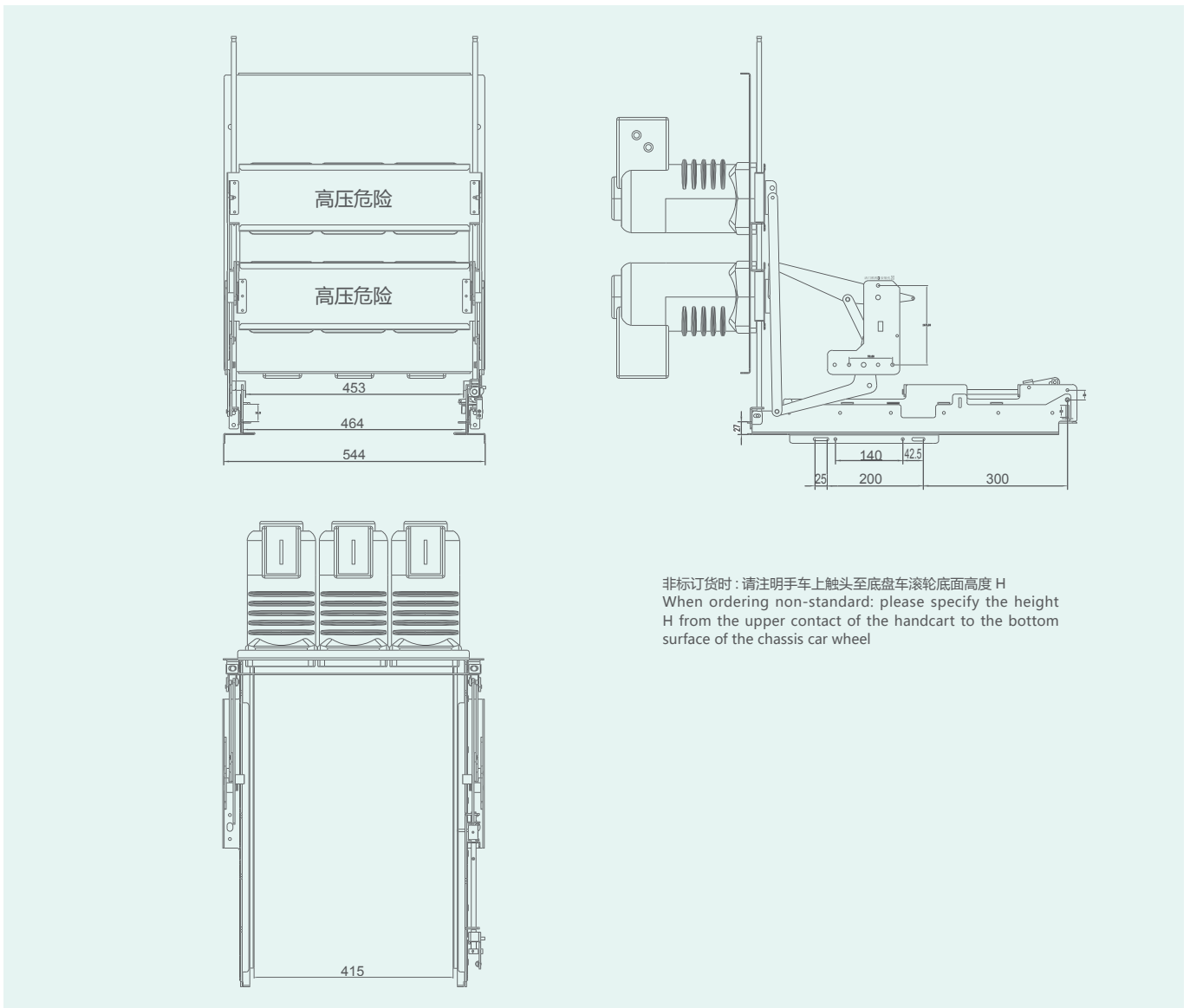
- | | | |
|--|-----------------------------|---|
| A - 母线室
Busbar room | 1 . 小母线室 Small busbar room | 9 . 电流互感器 Current Transformer |
| B - 手车室
Handcart room | 2 . 柜体 Cabinet | 10 . 电缆接头 Cable Connector |
| C - 电缆终端室
Cable terminal room | 3 . 主母线 Main bus | 11 . 电缆 Cable |
| D - 二次继保室
Secondary protection room | 4 . 支母线 Branch bus | 12 . 接地母线 Ground bus |
| | 5 . 绝缘支座 Insulation support | 13 . 接地开关 Earthing switch |
| | 6 . 静触头 Static contact | 14 . 断路器或接触器 Circuit breaker or contactor |
| | 7 . 触头盒 Contact box | 15 . 二次插头座 Secondary plug holder |
| | 8 . 支母线 Branch bus | |

LY550.320.010 活门联锁机构 Valve interlocking mechanism

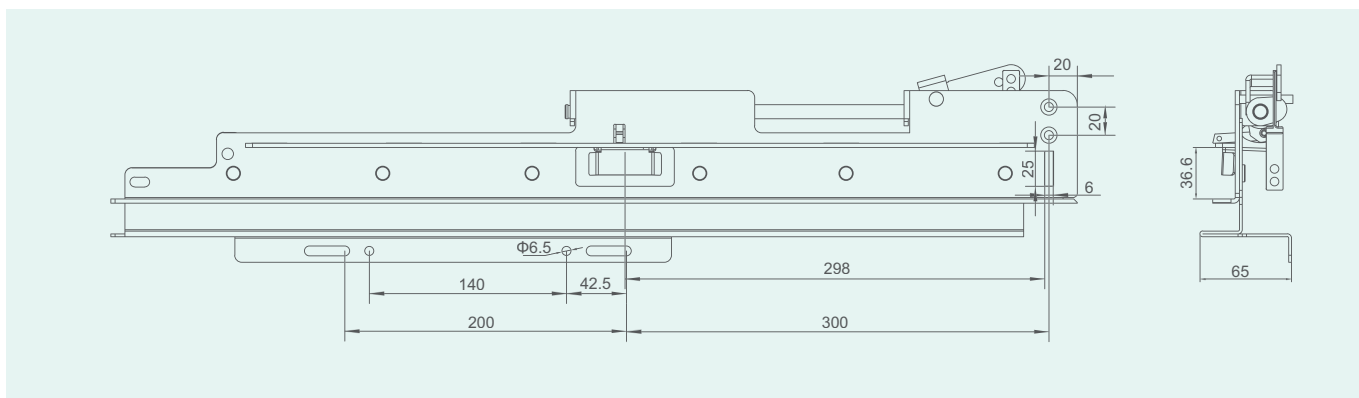
550mm 宽中置式开关柜 550mm wide central switch cabinet



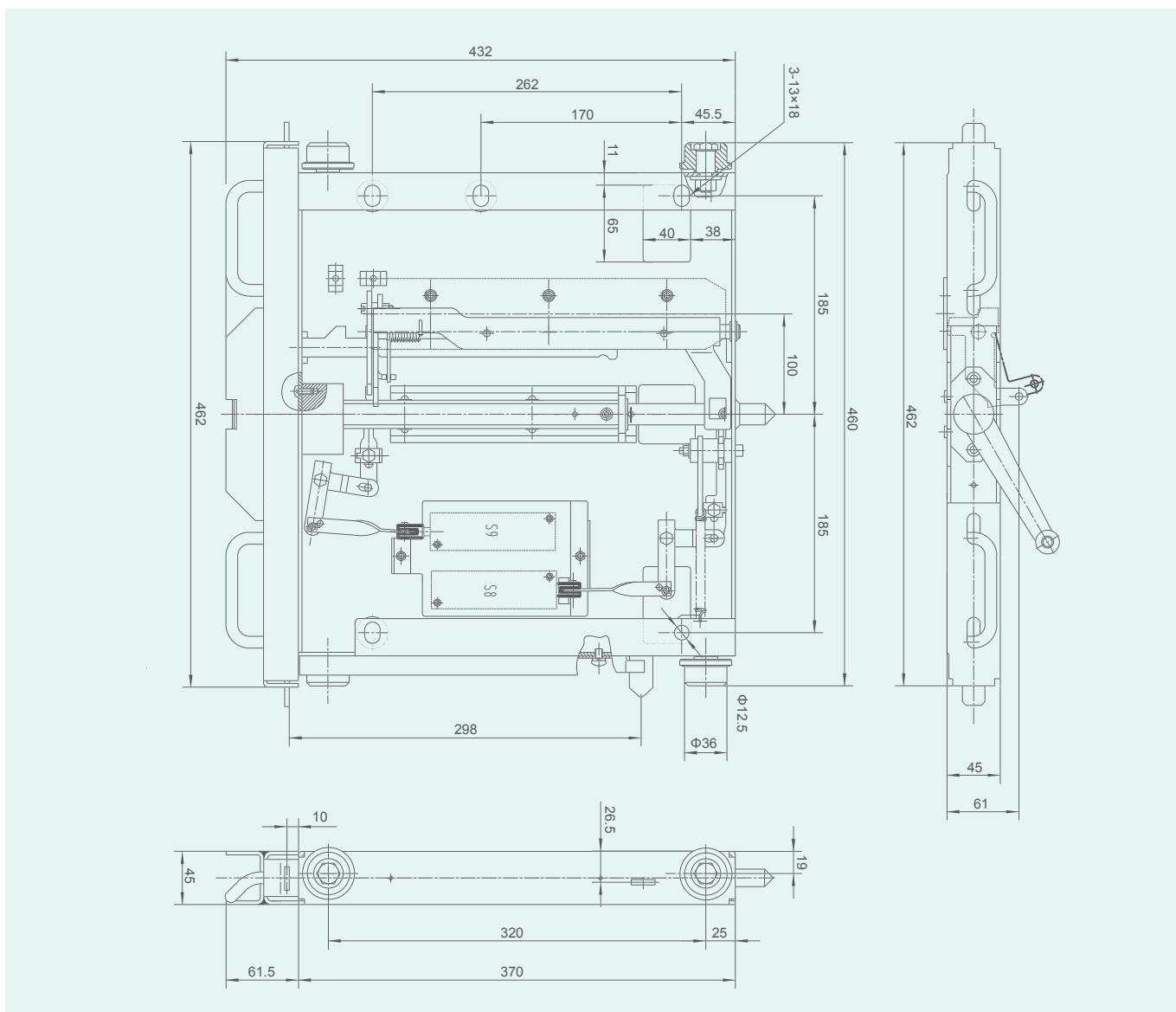
安装示意图 Installation diagram



◎ LY550.363.011 左右导轨 Left and right rails

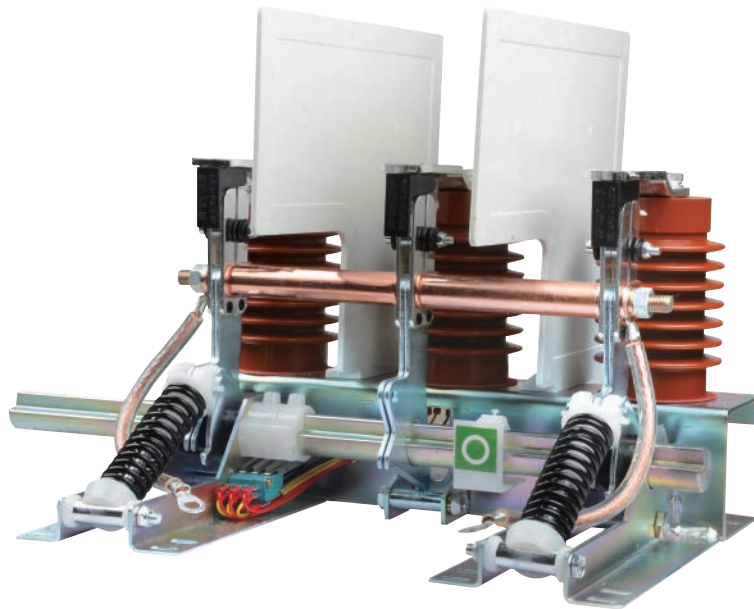


◎ 550 底盘车 Hchassis track



JN15-12/31.5-150 接地开关 Earthing switch

550mm 宽中置式开关柜 550mm wide central switch cabinet



◎ 型号及其含义 Model and its meaning



◎ 使用环境条件 Environmental conditions

- | | |
|---|---|
| 1、周围空气温度：上限 +40℃，下限 -10℃；
2、海拔高度：不超过 1000 米；
3、湿度条件：日相对湿度平均值不超过 95%，
月相对湿度平均值不超过 90%；
4、地震烈度：不超过 8 度；
5、污秽等级：II 级。 | 1. Ambient air temperature: upper limit +40℃ , lower limit -10℃ ;
2. Altitude: not more than 1000 meters;
3. Humidity conditions: the average daily relative humidity does not exceed 95%, and the monthly average relative humidity does not exceed 90%;
4. Seismic range: no more than 8 degrees;
5. Pollution level: Level II. |
|---|---|

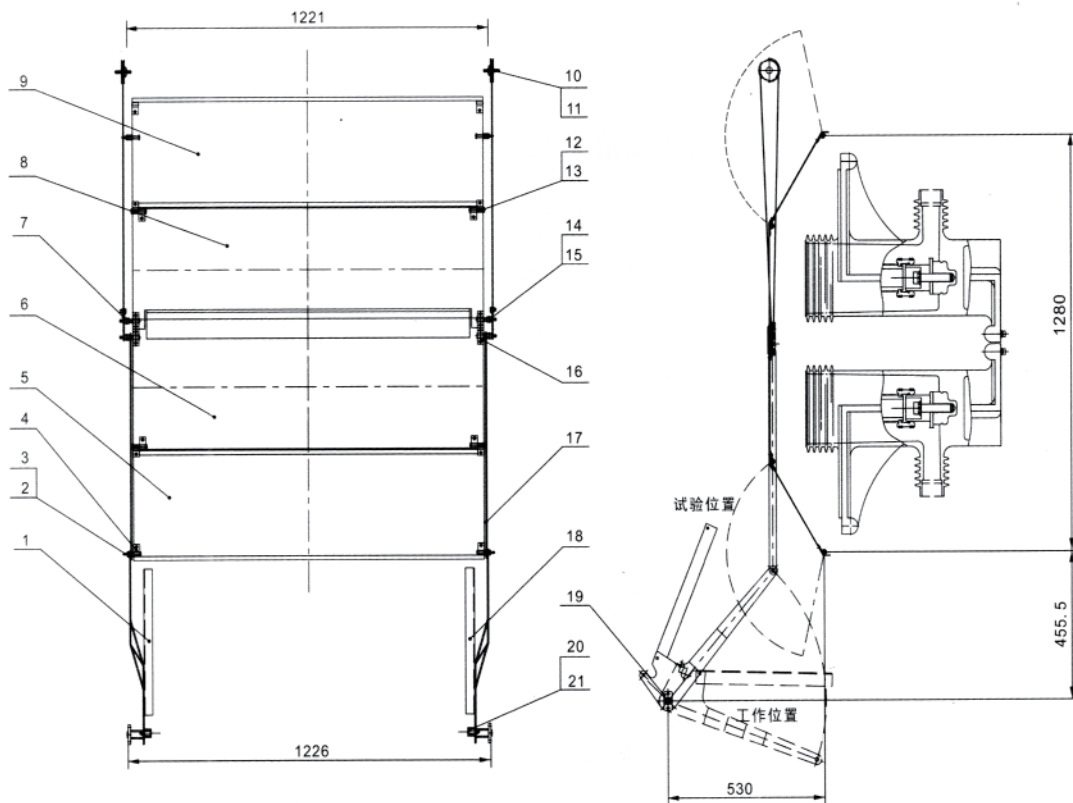
◎ 主要技术参数 The main technical parameters

	项目 Project	单位 Unit	数据 Data
	额定电压 Rated voltage	KV	12
	额定短时耐受电流 (热稳定) Rated short-time withstand current (thermal stability)	KA	31.5
	额定短路持续时间 Rated short circuit duration	S	4
	额定短路关合电流 Rated short-circuit making current	KA	80
	额定峰值耐受电流 (动稳定) Rated peak withstand current (dynamic stability)	KA	80
额定绝缘水平	额定短时工频耐受电压 1min Rated short-time power frequency withstand voltage 1min	KV	42
Rated insulation level	额定雷电冲击耐受电压 Rated lightning impulse withstand voltage	KV	75
	机械寿命 Mechanical life	次	2000

KYN61 活门机构装置 (钢丝绳式) Valve mechanism (wire rope) KYN.5LY.320.041

如需推荐如图国网印字, 需下单告知

If you need to recommend the printing as shown in the picture, you need to place an order



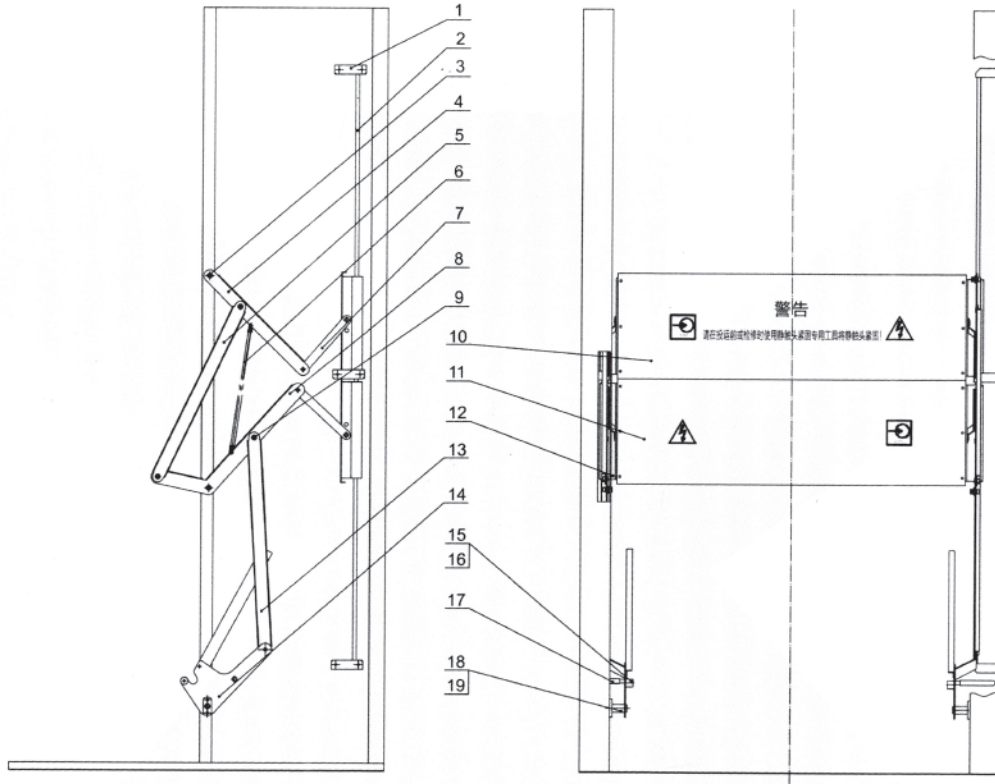
◎ 活门机构装置 KYN.5LY.320.041 配套表
Valve mechanism device KYN.5LY.320.041 matching list

序号 No.	名称 Name	代号 Designation	数量 (只/套) Quantity	序号 No.	名称 Name	代号 Designation	数量 (只/套) Quantity
1	大连杆焊装 (左)	KYN.6LY.364.1523	1	12	活门轴	KYN.8LY.200.1531	4
2	活门轴	KYN.8LY.200.1525	4	13	螺杆	KYN.8LY.200.1532	4
3	套	KYN.8LY.210.1525	4	14	螺杆	KYN.8LY.200.1526	4
4	活页	KYN.8LY.211.1521	12	15	滚轮	KYN.8LY.224.1521	4
5	活门板	KYN.8LY.320.1524	1	16	活页	KYN.8LY.211.1522	4
6	活门板	KYN.8LY.320.1522	1	17	小连杆	KYN.8LY.174.1523	2
7	钢丝绳固定板	KYN.8LY.050.1521	4	18	大连杆焊装 (右)	KYN.6LY.364.1522	1
8	活门板	KYN.8LY.050.1523	1	19	轴座	KYN.8LY.210.1521	2
9	活门板	KYN.8LY.320.1251	1	20	套	KYN.8LY.210.1523	2
10	滑轮轴	KYN.8LY.320.1524	2	21	螺钉	KYN.8LY.920.1522	2
11	滑轮	KYN.8LY.224.1522	2				

KYN61 连杆式活门机构 Linkage type valve mechanism KYN.5LY.320.051 (1400)

如需推荐如图国网印字，需下单告知

If you need to recommend the printing as shown in the picture, you need to place an order



活门机构装置 KYN.5LY.320.051 (1400) 配套表

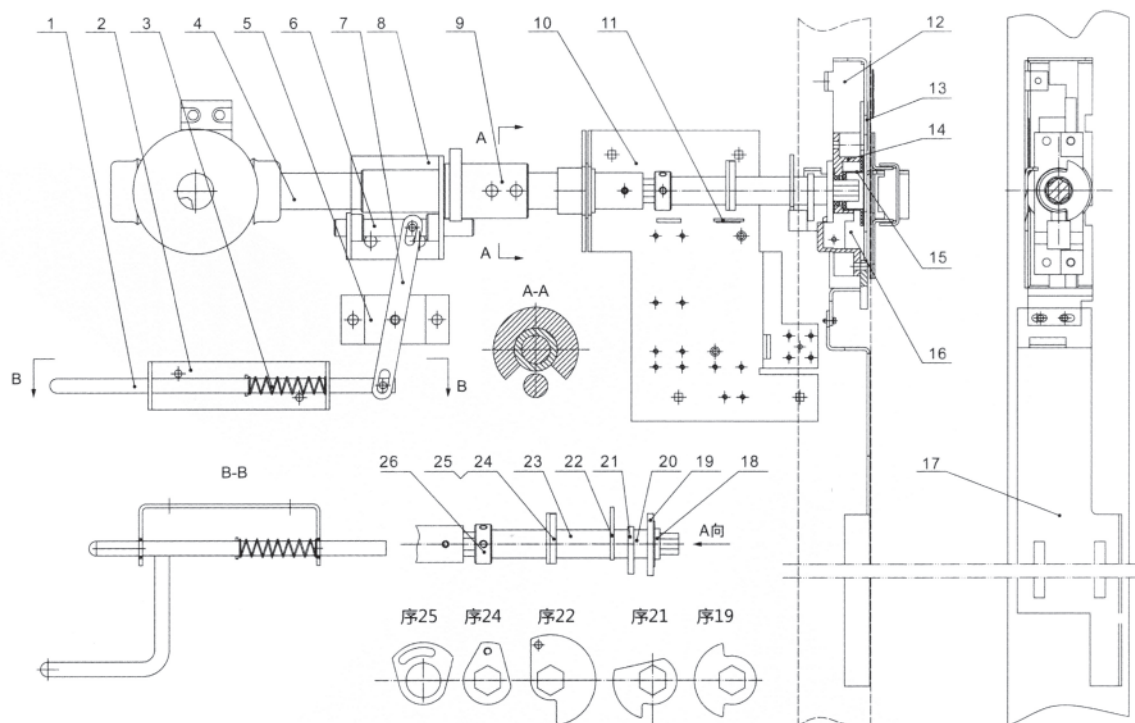
Valve mechanism device KYN.5LY.320.051 (1400) matching list

序号 No.	名称 Name	代号 Mesignation	数量 (只 / 套) Quantity	序号 No.	名称 Name	代号 Mesignation	数量 (只 / 套) Quantity
1	弯板	KYN.8LY.210.1536	4	10	活门轴	KYN.8LY.320.1521.11	1
2	导杆	KYN.8LY.174.1524	2	11	支架	KYN.8LY.210.1530	4
3	螺纹销	KYN.8LY.210.1528.1	4	12	下连接杆焊接	KYN.8LY.210.1534	2
4	左右连杆焊接	KYN.5LY.210.1536 KYN.5LY.210.1537	各 1	13	大连杆焊装 (左、右)	KYN.8LY.364.1522.6 KYN.8LY.364.1523.6	各 1
5	连杆焊接	KYN.5LY.174.1523	2	14	套	KYN.8LY.210.1523	2
6	拉簧	KYN.8LY.288.145	2	15	螺钉	KYN.8LY.920.1522	2
7	连接板	KYN.8LY.210.1531	4	16	限位杆	KYN.8LY.234.071.1	2
8	左右连杆焊接	KYN.8LY.210.1532 KYN.8LY.210.1532	各 1	17	螺杆	KYN.8LY.200.1521.2	2
9	销轴	KYN.8LY.993.248	16	18	轴套	KYN.8LY.210.1521	2

KYN61 接地开关操作机构联锁装置 (双向伞齿轮) Ground switch operating mechanism interlocking device KYN.5XJ.363.022 (2800)

如需推荐如图国网印字, 需下单告知

If you need to recommend the printing as shown in the picture, you need to place an order



◎ 接地开关操作机构联锁装置 KYN.5LY.363.022 配套表

Grounding switch operating mechanism interlock device KYN.5LY.363.022 matching table

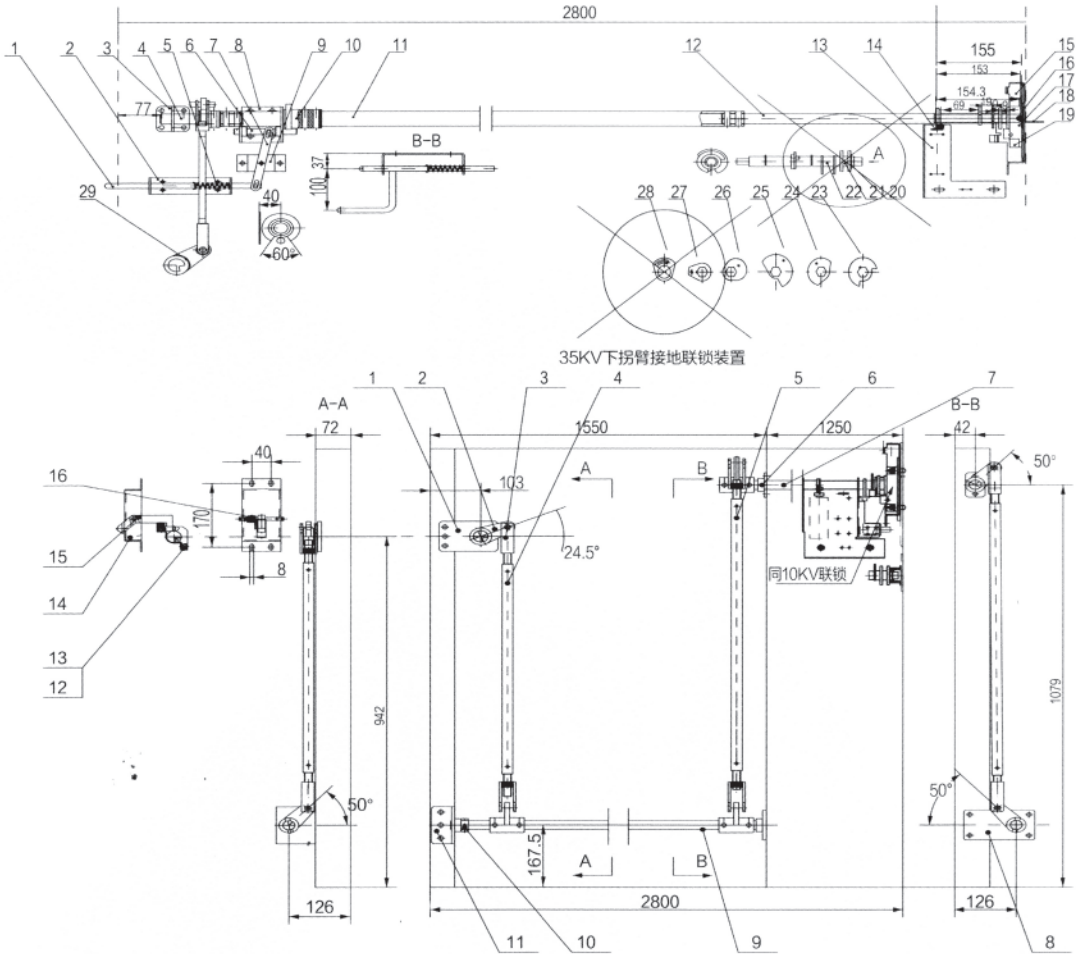
序号 No.	名称 Name	代号 Mesignation	数量 (只/套) Quantity	序号 No.	名称 Name	代号 Mesignation	数量 (只/套) Quantity
1	推杆焊接	KYN.5LY.235.115	1	14	支座	5XS.043.022	1
2	固定板	KYN.5LY.233.048	1	15	盖板	8XS.017.011.2	1
3	压簧	8XS.282.021	1	16	滑块	8XS.143.010	2
4	操作轴	KYN.5LY.200.130	1	17	弯板	KYN.8LY.161.134	1
5	支架焊接	KYN.5LY.043.045	1	18	轴承	8XS.263.011	1
6	限位轴	KYN.5LY.205.129	1	19	限位板	8XS.151.084	1
7	连板	KYN.5LY.233.047	1	20	套	8XS.210.14.9/HL	2
8	安装板焊接	KYN.5LY.062.023	1	21	扇形板	KYN.8LY.192.012	1
9	限位套焊接	KYN.5LY.210.012	1	22	扇形板	KYN.8LY.192.013	1
10	弯板	KYN.8LY.161.076	1	23	套	8XS.210.014.10/HL	2
11	齿插板	8XS.151.044	1	24	扇形板	8XS.151.043	1
12	弯板	8XS.161.059	1	25	扇形板	8XS.151.042	1
13	标签	KYN.8LY.867.029	1	26	限位套	8XS.210.322	1

KYN61C 接地开关操作机构联锁装置 (双向伞齿轮) KYN.5LY.362.015 (2600)

Ground switch operating mechanism interlocking device (bidirectional bevel gear)

如需推荐如图国网印字, 需下单告知

If you need to recommend the printing as shown in the picture, you need to place an order



接地开关操作机构联锁装置 KYN.5LY.362.015 配套表

Grounding switch operating mechanism interlock device KYN.5LY.362.015 Matching table

序号 No.	名称 Name	代号 Mesignation	数量 (只/套) Quantity	序号 No.	名称 Name	代号 Mesignation	数量 (只/套) Quantity
1	推杆焊接	KYN.5LY.235.119	1	15	支座	5XS.043.022	1
2	固定板	KYN.8LY.233.048	1	16	盖板	8XS.017.011.2	1
3	压簧	8XS.282.021	1	17	滑块	8XS.143.010	2
4	操作轴	KYN.5LY.200.130	1	18	连板焊接	KYN.5LY.174.033	1
5	支架焊接	KYN.5LY.043.045	1	19	接地与手车联锁装置	KYN, 5LY.362.012	1
6	限位轴	KYN.8LY.205.129	1	20	轴承	8XS.263.011	1
7	连板	KYN.8LY.233.047	1	21	限位板	8XS.151.084	1
8	安装板焊接	KYN.5LY.062.026	1	22	套	8XS.210.14.9/HL	2
9	限位套焊接	KYN.5LY.210.012	1	23	扇形板	KYN.8LY.192.012	1
10	弯板	KYN.8LY.161.076	1	24	扇形板	KYN.8LY.192.013	1
11	齿插板	8XS.151.044	1	25	套	8XS.210.014.10/HL	2
12	接地行程装置	KYN.5LY.362.013	1	26	扇形板	8XS.151.043	1
13	弯板	8XS.161.059	1	27	扇形板	8XS.151.042	1
14	标签	KYN.8LY.867.029	1	28	限位套	8XS.210.322	1

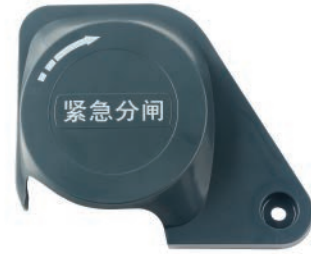
KYN61 标识标贴 Identification sticker



说明牌 (进退车)
Illustration plate
(Advance and retreat)



指示牌 (断路器 - 地刀)
Indicator (Circuit
breaker - ground knife)



指示牌 (紧急分闸)
Indicator
(emergency switching)