上海连成(集团)有限公司，是一家国内著名的研究制造泵、阀和流体输送系统、电气控制系统和环保设备的多元化经营的大型集团企业。

经过十多年的发展，现已拥有五大工业园区，分布于上海、江苏和浙江等经济发达地区，总占地面积达55万平方米，总部设在上海封浜工业园区。旗下拥有上海连成泵业制造有限公司、上海连成电机有限公司、上海连成阀门有限公司、上海连成集团物流有限公司、上海连成集团通用设备安装工程、上海阿美泰克工业设备有限公司、上海连成集团环境工程设备有限公司、上海连成集团苏州股份有限公司等多家全资子公司及控股公司，注册资金达5.8亿元以上，总资产达数十亿元。产品品种现已达三千多种，涵盖水泵、电机、电气柜、阀门、成套设备、机械配件等系列，其产品性价合理，质量可靠，广泛应用于市政、水利、建筑、消防、电力、环保、石油、化工、矿业、医药等领域。集团销售业绩每年均为行业前茅。

集团公司目前拥有大型水泵测试中心、三坐标测量仪、动静平衡测量仪、激光快速成型仪、多功能抛丸机、自动氩弧焊机、大型立车、大型磨床、数控机床集群等各种国内外先进的生产检测设备2000台套以上。现有员工4500余人，大中专

Shanghai Liancheng (Group) Co., Ltd is a domestic well-known large group enterprise and its multiple operations cover the research and production of pumps, valves and fluid transportation systems, electric control systems and environmental protection equipments.

After ten years development, the group holds five industrial parks in Shanghai, Jiangsu and Zhejiang etc. areas where the economy has been greatly developed, covering a total land area of 550 thousand square meters. Its headquarters is located at Fengbang Industrial Park and under it there are several wholly owned subsidiaries and holding companies: Shanghai Liancheng Pump Manufacturing Co. Ltd, Shanghai Liancheng Motor Co. Ltd, Shanghai Liancheng Valve Co. Ltd, Shanghai Liancheng Group Logistics Co. Ltd, Shanghai Liancheng Group General Equipment Installation Engineering, Shanghai Ametek Industrial Equipment Co. Ltd, Shanghai Liancheng Group Environment Engineering Equipment Co. Ltd and Shanghai Liancheng Group Suzhou Co. Ltd, with the registered capital up to 5.38 billion CNY, the total capital up to tens of billion CNY and the product categories up to more than 3000, ranging from water pump, motor, electric cabinet, valve, completed equipment, mechanical accessories etc. series, and, because of the reasonable performance-price and reliable quality, broadly used in the fields of municipal works, water conservancy, architecture, fire-fighting, electric power, environmental protection, petroleum, chemical industry, mining and medicine. The sales incoming of this group ranks first in the industry every year.

The group company now holds a large pump test center, a three-coordinate measurer, a dynamic-static measurer, a quick laser shaping instrument, a multi-functional shot-blasting machine, an automatic argon-arc welder, a large lathe, a large mill, numeral control machine tools etc. more than 2000 sets of various nationwide and world wide advanced production and detection facilities and over

售后服务体系 AFTER-SALES-SERVICES SYSTEM

■ 服务网络

连成在全国各大、中城市设有150多个分支机构，并建立了销售服务网络，拥有一支庞大的销售服务队伍。

■ 服务项目

- □ 技术培训
- □ 设备评估
- □ 安装调试
- □ 故障处理
- □ 维护修理保养
- □ 设备升级改进

■ 服务承诺

- □ 合同签约后，在安装期间本公司将派人无偿到现场协助安装及调试；
- □ 如您按说明书正确使用上海连成牌产品能确保您使用满意，万一发生异常情况，即请拨打技术热线，我们将为您提供优质的售后服务，给予你满意的答复；
- □ 产品保修期为一年，一年之内如产品出现质量问题，本公司将实行三包；一年以后出现产品质量问题，本公司提供无偿的技术服务，需方单位自购零配件；
- □ 产品售出后，本公司将终生与客户保持联系，听取使用意见，以便使产品质量更加完善；
- □ 本公司将定期与定购单位保持联系，定期回访，以确保定购单位使用的设备运行处于良好状态。

■ Service Network

With a strong team of sales promotion and after-sales-service, Liancheng established more than 150 nationwide branches in various large and middle.

■ Service Items

- □ Technical training
- □ Equipment evaluation
- □ Installation and adjustment
- □ Trouble-shooting
- □ Maintenance and repairing
- □ The modification & improvement of equipment

■ Service Promise

- □ After signing the contract, technical persons will be dispatched to the instand site to help install and adjust equipment, which is free of charge.
- □ In case the equipment is manipulated in accordance with instruction of tech manual, Shanghai Liancheng will guarantee the products. If something amal occurred, please contact us. Shanghai Liancheng will provide conside. Within the warrant period of 1 year, if products have quality problems, Liancheng will provide charge-free services.
- □ After warrant perild, if quality problems occur, will provide the charge-free technical support, the compone-nts and parts should be bought by customers.
- □ After the products are purchased, Shanghai Liancheng will keep lifelong contact with the customers, listening comments from customers so as to lmprove quality in pump performance.
- □ Shanghai Liancheng will keep regular contact with ordering companies so as to have pump running in proper order.

售后服务电话：021—59136786
AFTER-SALE SERVICE AND CONSULT TELEPHONE:
021-59136786

800免费咨询电话：800-820-5009
800 FREE CONSULTATION TELEPHONE:
800-820-5009

由于我们在不断努力改进产品，我们保留样本数据更改的权利，敬请谅解。
As we are constantly endeavouring to improve the performance of our equipment.
The company reserves the right to make alteration from time to time and equipment differ from that detailed in this brochure.

连成集团
LIANCHENG GROUP

GGD型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION CABINET

融入现代科技，创造控制的完美境界
Melt into modern technology, and created the control' s perfect abuttal

Product Catalog 2015

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型号意义 MODEL MEANING

G G D □ – □ – □

辅助电路方案代号 Code of auxiliary circuit plan

主电路方案代号 Code of main circuit plan

设计序号
- 1-分断能力为15KA Off capacity to be 15KA
- 2-分断能力为30KA Off capacity to be 30KA
- 3-分断能力为50KA Off capacity to be 50KA

电力用柜 Cabinet for electric power

电器元件固定安装、固定接线 Fixed mounting and wiring of electric components

交流低压配电柜 AC low-voltage distribution cabinet

电气性能 ELECTRIC PERFORMANCE

1、基本电气参数 Basic electric performance

型号	额定电压	额定电流		额定短路开断电流	额定短时耐受电流	额定峰值耐受电流
Model	Rated voltage (V)	Rated current (A)		Rated short-circuit off current (KA)	Rated short-time tolerant current (IS)(KA)	Rated peak tolerant current (KA)
GGD1	380	A	1000	15	15	30
		B	600(630)			
		C	400			
GGD2	380	A	1500(1600)	30	30	63
		B	1000			
		C				
GGD3	380	A	3150	50	50	105
		B	2500			
		C	2000			

2、主电路方案

GGD柜的主电路设计了129个方案，共298个规格(不包括辅助电路的功能变化及控制电压的变化而派生的方案和规格)。其中GGD1型：49个方案、123个规格；GGD2型：53个方案、107个规格；GGD3型：27个方案、68个规格。

主电路方案是征求了广大设计、使用部门的意见选编的。增加了发电厂需要的方案。额定电流增加至3150A，适合2000KVA及以下的配电变压器选用。

此外，为适应无功补偿的需要设计了GGJ1、GGJ2电容补偿柜，其主电路方案4个，共12个规格。

2. Main circuit plan

There are 129 plans and in total 298 specifications are designed for the main circuit of GGD cabinet (excluding those derived from the functional variations of the auxiliary circuit and the variations of the control voltage), of which for model GGD1, 49 plans, 123 specifications, for model GGD2, 53plans, 107 specifications and for model GGD3, 27 and 68, respectively.

The main circuit plans are drawn out by way of soliciting the comments from the sections of design and use, plus those necessary for power plants, with the rated current increased to 3150A and suitable for the distribution transformers of 2000KVA and below.

Besides, GGJ1 and GGJ2 capacitor compensation cabinets are designed to meet with the requirement of reactive compensation, of which there are 4 plans and in total 12 specifications for the main circuit.

使用条件 CONDITION OF USE

1、周围空气温度不高于+40℃，不低于-5℃，24h内的平均温度不得高于+35℃。

2、户内安装使用，使用地点的海拔高度不得超过2000M。

3、周围空气相对湿度在最高温度为+40℃时不超过50%，在较低温度时允许有较大的相对湿度。（例如+20℃时为90%）应考虑到由于温度的变化可能会偶然产生凝露的影响。

4、设备安装时与垂直面的倾斜度不超过50%。

5、设备应安装在无剧烈震动和冲击的地方，以及不足使电器元件受到腐蚀的场所。

6、用户有特殊要求时可与制造厂协商解决。

1. Ambient temperature within -5-+40°C,average temperature in 24 hours no more than +35°C.
2. For use indoors, the place where it is mounted has not to be more than 2000m of the elevation.
3. The RH in the ambient air no more than 50% at +40°C and is allowed to be larger at a lower temperature.(Sure as 90% at +20°C). The affection to occasionally produce condensed dews should be taken into conidderation.
4. The inclination to the vertical plane no more than 5% in installation.
5. It has to be mounted at the place without any severe shock and vibration as well as anything enough to have the electric components corroded.
6. Contact with the manufacturer for any special requirements by users.

4、柜门用转轴式活动铰链与构架相连，安装、拆卸方便。门的折边处均嵌有一根山型橡塑条，关门时门与构架之间的嵌条有一定的压缩行程，能防止门与柜体直接碰撞，也提高了门的防护等级。

5、装有电器元件的仪表门用多股软铜线与构架相连。柜内的安装件与构架间用滚花螺钉连接，整柜构成完整的接地保护电路。

6、柜体面漆选用聚脂桔形烘漆。附着力强，质感好。整柜呈亚光色调，避免了眩目效应，给值班人员创造了较舒适的视觉环境。

7、柜体的顶盖在需要时可拆除，便于现场主母线的装配和调整，柜顶的四角装有吊环，用于起吊和装运。

8、柜体的防护等级为IP30，用户也可根据使用环境的要求在IP20～IP40之间选择。

4. The cabinet door, connected to the frame with rotary-shaft flexible hinges, is easy to mount and remove and a rubber rod is inlaid in the folded side of the door, it can prevent the door from direct impacting with the cabinet due to a certain compressed travel with it when to close the door and also raises the protective grade of the door.
5. The meter's door inside of which there are mounted electric components is connected to the frame with multi-ply soft Cu-wires, the mounting pieces inside of the cabinet is connected to the frame with knurled screws and the integral cabinet constitutes a complete ground-protective circuit.
6. The cabinet surface is painted with polyester reddish orange baking finish. strong adhesive and good quality. The integral cabinet presents a subluminous color and avoids the dizzy effect, leaving a more comfortable sight environment to the person on duty.
7. The top cover of the cabinet can be removed when necessary in the assembly and adjustment of the main busbar on site and there are rings on the four corners of the top, used for lifting and shipping.
8. The protective grade of the cabinet body is IP30 and the one between IP20-IP40 can be selected by a user according to the requirement of the environment where it is used.

安装与使用 INSTALLATION AND USE

产品到达收货地点后，首选应当检查包装是否完整无损，发现问题应及时通知有关部门查找原因。对于不立即安装的产品，应根据正常使用条件的规定，置于适当的场所。

1、产品安装

产品的安装应按安装示意图(见附图2)，基础槽钢和螺栓由用户自备，主母线安装时应将搭接面修理平整，处理干净，涂上中性凡士林或采取其它措施，然后用螺栓紧固。

When the product gets to the delivery place, first check if the package is complete and intact and contact the related sections to find the cause if any problems are found. For those not to be mounted at once, place them in a proper place per the normal condition of use.

1. Installation

Installation has to be done per the schematic drawing (see the attached drawing 2) and both basic channel steel and bolts will be prepared by the user. To mount the main busbar, the lap-jointed face must be flatted, cleaned, coated with neutral vaseline or some other measures, and then fixed with bolts.

企业简介 CORPORATION OUTLINE

生占72.6%，其中中级职称者475人、高级职称者78人、国家级专家19人、教授6人。每年都投入大量资金用于技术创新、产品开发和设备引进，持有国家专利技术近达600余项，每年均参与大量的国家及行业标准起草及编写工作，涉及水利、化工、消防、城市供水等各领域的产品及技术标准累计达数十部。集团建有完善的销售服务网络，设有30余家分公司及200多个分支机构，拥有一支2800多人的专业销售服务队伍，为广大客户提供专业的技术支持与优良的营销服务。

集团通过了ISO9001、ISO14001、OHSAS18001等国际管理体系认证，全面推行ERP信息化管理；先后获得国家和行业颁发的工业、消防、煤矿、石油化工等重要领域的工业产品生产许可证、CCC中国国家强制性产品认证、CQC产品认证、CE认证、卫生许可批件、MA煤安认证、SMA计量合格认证、节能认证、节水认证、采用国际标准认证、进出口企业资格等生产经营资质；并获得了“国家级创新型企业”、“中国驰名商标”、“上海市著名商标”、“上海市名牌产品”、“中国著名品牌”、“大型企业”、“国家首批水泵节能认证通过企业”、“上海市高新科技企业”、上海“市级企业技术中心”、“上海市知识产权示范企业”、“上海市民营制造业50强”、“上海市百强工业企业”、“国家标准起草单位”、“中国水工业十大民族品牌”等众多的社会荣誉。

随着连成集团的永续经营，连成产品得到了用户广泛认可，目前拥有：国家体育场“鸟巢”、国家大剧院、上海世博工程、首都机场、广州白云机场、上海地铁、西安地铁、沈阳地铁、香港供水工程深圳沙湾泵站、澳门供水工程珠海平岗泵站、黄河灌溉山西夹马口泵站、山西省西范泵站、广东云安六都泵站、黄河小浪底水利工程、宁夏扬黄灌溉工程、鄂尔多斯城市饮水工程、秦山核电、岭奥核电、国电集团、大唐电厂、华能电厂、宝钢、首钢、唐钢、太钢、鞍钢、新疆八一钢铁、大庆油田、青海盐湖钾盐项目、山西焦化、潞安矿业、陕西咸阳化工、中海油惠州炼油项目、清华大学、海尔集团和安哥拉农业排灌工程、缅甸国家农业灌溉项目，以及核电、火电、水电、钢铁、油田、焦化、矿业、化工、炼油等一大批国内、外样板工程。在通用、拜耳、西门子、大众、可口可乐等国际知名企业在中国的工程均采用了连成集团的产品。

连成集团矢志于打造世界顶级流体处理工业企业，秉承永远珍惜人与自然和谐关系、为提高人类生活质量不懈努力的宗旨，为实现“百年连成”远大目标，一直致力于环保型、节能型产品的研发与制造，为民族企业的振兴与发展不懈努力！

水，因连成至高致远……！

4500 staff members, of which 72.6% are graduated from colleges and technical schools, 475 hold a junior title, 78 senior, 19 national experts and 6 professors. Every year this group puts a number of capital for technical innovation, product development and equipment import and, up till now, holds up to 600 national patent technologies and takes part in the draft-out and edition of both national and industrial standards, in total of tens of the product and technical standards covering water conservancy, chemical industry, fire-fighting, city water supply etc. fields. This group has set up a complete sales and service networks, comprised of 30 branches, more than 200 sub-organs and a group of 2800 special salesmen and servicemen, to provide the clients with special technical support and good business services.

Accredited to ISO9001, ISO14001, OHSAS18001 etc. international management system arrivals, this group is striving to implement ERP Information Management and has got the industrial production licenses in industry, fire-fighting, petrochemical, and mining etc. important fields issued by the state and the industry organization and the qualification as an I/E enterprise, been accredited to CCC, CQC product, CE, sanitation permit, MA mine safety, SMA gauging qualification, energy-saving, CCS, adoption of international standard etc. lots of approvals and awarded with the social honors such as: National-grade innovative brand-new enterprise, Chinese Famous Trademark, Shanghai Well-Known Trademark, Products of a famous brand of Shanghai, Famous brand of China A large enterprise, Enterprise in the first lot passing the pump energy-saving approval, A high-tech enterprise of Shanghai, Technical center of the enterprise in the city's level of Shanghai, An example enterprise for the intellectual property of Shanghai, One of the 50 powerful enterprises of Shanghai, One of the private technical enterprises of Shanghai, An enterprise qualified for the draft-out of the national standard, Ten national brands in the water industry of China and so on.

With the steady development of Liancheng Group, the products made therein have been greatly accepted by the users and now available with: the National Studium Birdnest, the National Theatre, Shanghai Expo, the Capital Airport, Guangzhou Baiyun Airport, Shanghai Metro, Shenyang Metro, Xi'an Metro, Hongkong Water Supply Project Shenzhen Shawan Pump Station, Macao Water Supply Project Zhuhai Pinggang Pump Station, Huanghe River Irrigation Shanxi Jiamakou Pump Station, Shanxi Xifan Pump Station, Guangdong Yun'an Liudu Pump Station, Xiaolangdi Water Conservancy Project in Yellow River, Ningxia Yanghuang Irrigation Engineering, E'erduosi City Drinking Project, Qinghai Salt Lake Sylvine Project, Qinshan Nuclear Power, Ling'ao Nuclear Power, National Power Group, Huaneng Power Plant, Datang Power Plant, Baoshan Steel, Capital Steel, Tai Steel, Anshan Steel, Xinjiang Bayi Steel, Daqing Oil Field, Shanxi Coking, Lu'an Mining Industry, Shanxi Xianyang Chemical Industry, China Marine Fuel Huizhou Refinery Project, Tsinghua University, Haier Group and Angola Agriculture Drainage and Irrigation Project, the national agricultural irrigation project of Burma, as well as nuclear power, thermal power, hydro-power, steel-iron, oil field, coking, mining, chemical, refinery, and in the projects set inside of China by GE, Bayer, Siemens, Volkswagen, Coca-cola etc. worldwide famous enterprises.

Liancheng Group has been trying its best to make itself a top fluid treatment enterprise in the world and follow such a concept as cherishing the harmony between human and nature forever and, to improve the people's living level and realize the great goal of a century-lasting Liancheng, making efforts for both development and manufacture of the environmental-protection and energy-saving products and for both promotion and progression of the national enterprises!

Water, flowing high and far to the utmost just because of Liancheng.....

中国驰名商标

上海市著名商标

国家级创新型企业

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d. 为进一步提高主电路的动稳定能力，NLS设计了GGD柜专用的ZMJ型组合式母线夹和绝缘支撑件。母线夹由高强度、高阻燃型PPO合金材料热塑成型，绝缘强度高、自熄性能好，结构独特，只需调整积木式间块即可方便地组合成单母线夹或双母线夹。绝缘支撑是套筒式模压结构，成本低，强度高，解决了老产品爬电距离不够的缺陷。

d. To further raise the dynamic stable capacity of the main circuit, NLS has designed model ZMJ combined busbar clip and dielectirc support specially used for GGD cabinet. The busbar clip is thermoplastic formed with PPO alloy material of a high strength and high combustion resistance, resulting in a high dielectric strength, good self-go-out property, unique structure and the convenience to form a single-busbar clip a dual-busbar one needs only adjusting the building blocks. The dielectric support in the bushing type moulded structure, of a low cost and a high strength and gets of the defect of the old one which has an unenough distance of creepage.

结构特点 CHARACTERISTICS OF STRUCTURE

1、GGD型交流低压配电柜的柜体采用通用柜的形式，构架用8MF冷弯型钢局部焊接组装而成，构架零件及专用配套件由型钢定点生产厂配套供货，以保证柜体的精度和质量。

通用柜的零部件按模块原理设计，并有20模的安装孔，通用系数高。可以使工厂实现予生产。既缩短了生产制造周期，也提高了工作效率。

2、GGD柜设计时充分考虑到柜体运行中的散热问题。在柜体上下两端均有不同数量的散热槽孔，当柜内电器元件发热后，热量不升，通过上端槽孔排出，而冷风不断地由下端槽孔补充进柜，使密封的柜体自下而上形成一个自然通风道，达到散热的目的。

3、GGD柜按照现代工业产品造型设计的要求，采用黄金分割比的方法设计柜体外形和各部分的分割尺寸，使整柜美观大方、面目一新。

1. The body of model GGD AC low-voltage distribution cabinet uses the form of the common ones, i.e.the frame is formed with 8MF cold-bent profile steel and by way of lacal welding and assembly and both frame parts and specially completing ones are supplied by the appointed manufacturers of the profile steel in order to guarantee both precision and quality of the cabinet body.

The parts of the common cabinet are designed per the modular principle and equipped with the mounting holes of 20 modules, a high module of universality, which makes the preproduction realized to shorten the manufacture period and raise the productivity as well.

2. In the design of GGD cabinet, heat radiation in running is completely regarded and settled such as setting radiation slots of different quantities on both upper and lower ends of the cabinet, through which the continually rising quantity of heat goes out along with the heated electric components inside of the cabinet while the cold air continually goes in it from the Slots on the lower end, thus making the sealed cabinet a natural venting path from lower to upper to get the purpose of radiation.

3. For the GGD cabinet, its appearance and the divided size of each part are designed with the method of golden ratio of division according to the demand of the modeling design for modern industrial products and the integral cabinet is thus made beautiful and generous , showing an entirely new look.

4、主母线

考虑到价格比和以铝代铜的可行性，额定电流在1500A及以下时采用单铝排母线。额定电流大于1500A时采用双铜排母线。也可根据用户的需求将铝母线换成同等载流量的铜母线。

母线的搭接面均采用搪锡工艺处理。

5、电器元件选择

a.GGD柜主要采用国内已能批量生产的较先进的电器元件。如ME、DZ20、DW15等。同时也根据经济、合理的原则，在充分考虑可行性的前提下保留了部分可用的老产品如DZ10等。不选用已淘汰的产品。

b.HD13BX和HS13BX型旋转操作式刀开关是NLS为满足GGD柜独特结构的需要而设计的专用元件，它改变了机构的操作方式，保留了老产品的优点，是一种实用新型的电器元件。

c. 如设计部门根据用户需要，选用性能更优良，技术更先进的新型电器元件时，因GGD柜具有良好的安装灵活性，一般不会因更新电器元件造成制造和安装方面的困难。

3. Auxiliary circuit plan

There are plans for electricity supply and use and for power plants designed for the auxiliary circuit. Inside of the GGD cabinet there is enough space for mounting secondary components and, in addition, NLS has also developed mode LMZ3D special current inducter so as to meet with the requirement for the power plant and some special users to attach the relay protection.

4. Main busbar

In consideration of the price ratio and the feasibility to use aluminium instead of copper, single-row of aluminum busbar is used for those with rated current to be 1500A and below and dual-row of copper busbar for those with reted current over 1500A. Can also change the aluminum busbar into the copper one of the equivalent current -carrying capacity upon the requirement of a user.

The lap-jointed face of the busbar uses the tin-spreading technology.

5. Choice of electric components

a. The electric components used with GGD cabinet are the more advanced ones domestically made in batches, such as ME, DZ20, DW15 etc.and, at the same time per the principle of economy and reasonability and undethe premise to fully consider the feasibility, some useful oil products such as DZ10 etc.are kept to use. No one already eliminated are used.

b. Model HD13BX and HS13BX rotary-operated contact Breakers are the special componen designed by NLS for the unique structure of GGD cabinet and change the operation way of the mechanism, rotain the advantages of the old products and are practical and brand-new electric components.

c. GGD cabinet can be flexibly mounted so that, in generaleral, no difficultiies will be caused in both manufacture and installation in case of updating the electric compone which may be done by the design section according to the need of the user to select the new-style ones with more excellent performance and more advanced technique.

前 言 FOREOWORDS

GGD型交流低压配电柜，是能源部以促进我国低压配电行业的技术进步，加速低压配电成套开关设备的更新换代为宗旨，于一九九一年下达的技术进步开发项目。由能源部低压成套开关设备联合设计研制组(简称NLS)完成设计和研制，并于一九九二年十月通过了由能源部主持的部级鉴定，目前在全国范围内已广泛应用。

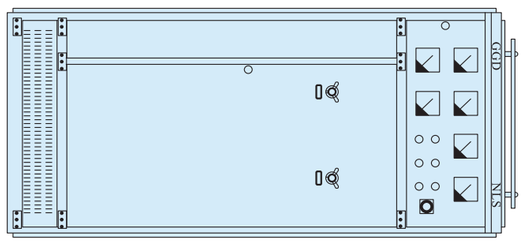
用 途 PURPOSE

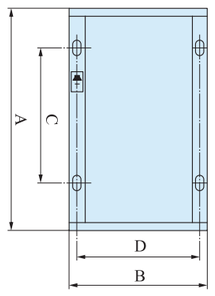
GGD型交流低压配电柜适用于发电厂、变电站、厂矿企业等电力用户的交流50Hz，额定工作电压380V，额定工作电流至3150A的配电系统，做为动力、照明及配电设备的电能转换，分配与控制之用。

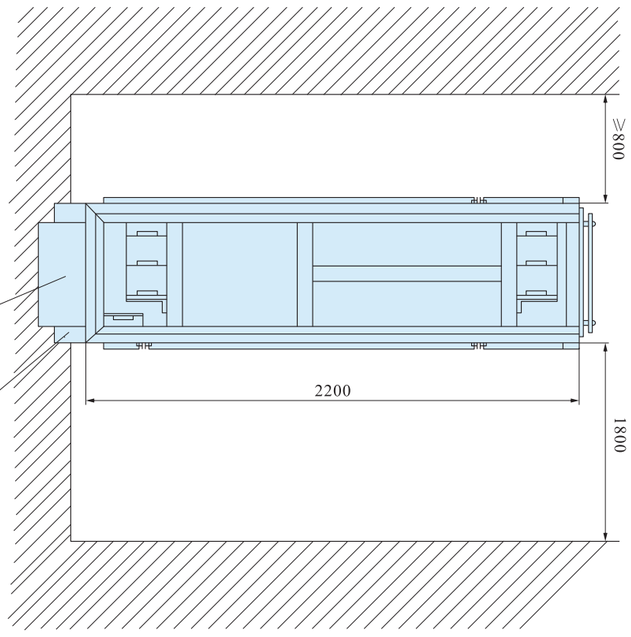
GGD型交流低配压电柜是根据能源部主管上级，广

Model GGD AC low-voltage distribution cabinet is the item for technica advance development issued by the Ministry of Energy Source aimed at promoting the technical advance of the low-voltage distribution trade of our country and quickening the renewal of the low-voltage distribution completed switch equipments and its design and development has been finished by the Allied Design and Development Group for Low-voltage Completed Switch Equipment of the Ministry of Energy Source (NLS for short) and, in October of 1992, it passed the appraisal in the ministerial grade held by the said ministry. At present it is extensively used nationwide.

Model GGD cabinet is suitable for the distribution system of AC 50Hz, rated working voltage 380V and rated working current up to 3150A for the users of electric power in power plant, electric substation, factory, mine etc. enterprises as the electric Energy switch-over, distribution and control for the power, illumination and distribution facilities.







图二 (Fig.2)

产品代号 Product code	A	B	C	D
TGGD 06	600	600	450	556
TGGD 06A	600	800	450	756
TGGD 08	800	600	650	556
TGGD 08A	800	800	650	756
TGGD 10	1000	600	850	756
TGGD 10A	1000	800	850	756
TGGD 12	1200	800	1050	756

安装示意图 INSTALLATION SCHEMATIC DRAWING

主电路方案编号 No.of main circuit plan

主电路方案 Main circuit plan	单线图 Single-line drawing	01	02	03	04	05	06
用途 Purpose	型号规格 Model/spec.	受电 Tolerant current	受电 Tolerant current	受电 Tolerant current	受电 Tolerant current	受电 馈电 Tolerant current feed	受电 Tolerant current
		A B C	A B C	A B C	A B C	A B C	A B C
主电路电器元件 Electric components of main circuit	HD13BX-1000/31		1	1	1	1	
	HD13BX-600/31				1	1	
	HD13BX-400/31		1	1			1
	DW15-1000/3 电动 Electric				1	1	1
	DW15-630/3 电磁Electromagnetic					1	2
	DW15-400/3 电磁Electromagnetic						1
	CJ20-400/3						
	CJ20-250/3						2
	CJ20-160/3						
	LMZ1-0.66（）/5				1		2
	LMZ3-0.66（）/5 (LMZ3D-0.66（）/5)				1		2
柜宽(mm) Cabinet width		600 600 600	600 800 800	600 800 800	600 600 600	800 800 800	800 800 800
柜深(mm) Cabinet depth		600 600 600	600 600 600	600 600 600	600 600 600	600 600 600	600 600 600
电路图图号 No.of circuit drawing		0101D,0102D,0109D,0110D 0115D,0116D,0118D,0119D 0127D,0128D,0201D,0202D 0204D,0205D,0207D,0208D 0501D,0506D 0103F,0104F,0209F,0210F 0211F,0212F,0503F,0504F 0601F,0602F,0603F,0604F 0605F,0606F,0634F,0635F 0636F,0637F					
备注 Remark		B、C方案柜宽可为600mm Cabinet can be 600mm wide in both B and C plans					

GGD1型主电路方案 MODEL GGD1 MAIN CIRCUIT PLAN

GGD1型主电路方案 MODEL GGD1 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan

主电路方案 Main circuit plan	单线图 Single-line drawing	19	20	21	22	23	24
用途 Purpose				联络 Liaison	联络 馈电 Liaison feed	联络 Liaison	馈电 备用 Feed reserve
	型号规格 Model/spec.	A B C	A B C	A B C	A B C	A B C	A B C
主电路电器元件 Electric components of main circuit	HD13BX-1000/31			2	2		
	HD13BX-600/31						
	HD13BX-400/31			2	2		
	HS13BX-1000/31(41)						1
	HS13BX-600/31(41)						1
	SM10-600P/3（）SE-600				2		
	SM10-250/3（）SE			2(3) 2(3) 2(3)	2 2 2		1 1 1
	SM10-100/3（）SE			3 3 3			
	JDG-0.5 380/100V						
	RT-20（）						3
	LMZ1-0.66（）/5				2 2 2		
	LMZ3D-0.66（）/5			1000 800 800	1000 800 800	600 600 600	600 600 600
柜宽(mm) Cabinet width				600 600 600	600 600 600	600 600 600	600 600 600
柜深(mm) Cabinet depth				0403F,0406F,0407F	0512D,0519D		0508D,0511D
电路图图号 No.of circuit drawing							
备注 Remark							

2、产品在安装完毕后，投入运行前需进行如下项目的检查与试验。

a. 检查柜体面漆有无脱落，柜内是否干燥、清洁。

b. 电器元件的操作机构是否灵活，不应有卡滞或操作力过大现象。

c. 主要电器的通断是否可靠、准确。输助接点的通断是否可靠准确。

d. 仪表指示与互感器的变比及极性是否正确。

e. 母线连接是否良好，绝缘支撑件、安装件及附件是否安装牢固可靠。

f. 辅助接点是否符合要求，熔断器的熔芯规格是否正确，继电器的整定值是否符合设计要求，动作是否准确。

g. 电路的接点是否符合电器原理图要求。

h. 保护电路系统是否符合要求。

i. 用500伏兆欧表测量绝缘电阻值不得低于1兆欧。

3、使用注意事项

a. 本产品为不靠墙安装，单面(正面)操作，双面开门维修的低压配电柜。产品的维修通道及柜门，必须经考核合格的专业人员方可进入或开启进行操作、检查和维修。

b. 空气断路器，经过多次合、分后，会使主触头局部烧伤和产生碳类物质，使接触电阻增大，应定期对空气断路器按其使用说明书进行维护和检修。

2. The following checks and tests have to be done after the product is mounted and prior to being put into running;

a. Check if any paintings off from the cabinet face, if it is dry and clean inside of the cabinet.

b. Check if the operation mechanism of the electric components flexible and no block-up or too large operation force with it is allowed.

c. Check if the on/off of the main electric appliances reliable and accurate, and those on the auxiliary connections as well.

d. Check if the indications of the meters and the ratio of transformation and polarity of the mutual inducter correct.e. Check if the busbar well connected and if the mounting pieces, dielectric support and the accessories securely and reliably mounted.

f. Check if the auxiliary connections in line with the requirements, if the norm of the fuse core correct, if the rectifying valve of the relay in line with the design requirement and its action accurate.

g. Check if the circuit connections conforming the requirements set in the electric schematic diagram.

h. Check if the protective circuit system in line with the requirements.

i. Measure the dielectric resistance value with a 500V megohmmeter, which should be no less than 1 megohm.

3. Precautions at use

a. This product is a low-voltage distribution cabinet mounted not against the wall, single-face (front) operated and with the doors on dual faces opened for repair. Only those persons examined to be acceptable can get in or open the path and the door for operation, check and repair.

b. For the air breaker, its main contacts may be partially burnt and produce with carbonaceous substance after many times of on and off to make the contacting resista increased, Therefore a periodical maintenance and overhaul has to be taken for it per its operation instructions.

产品成套性 COMPLETION OF THE PRODUCT

制造厂供货时应提供下列文件及附件：

1、装箱清单；
2、产品合格证；
3、使用说明书；
4、出厂试验报告；
5、有关电气图纸；
6、柜门钥匙，操作手柄及合同单规定的备品备件。

Following documents and accessories should be provided for the manufacturer to deliver the product:

1. Packing list;
2. Certificate of product;
3. Operation instructions;
4. Report of ex-works test;
5. Related electric drawings;
6. Key for the cabinet door, operation handle and the spare parts set forth in the contract.

订货须知 NOTICE AT ORDER

用户订货时应提供如下材料：

1、产品的全型号(包括主电路方案号和辅助电路方案号)；
2、主电路系统组合顺序图；
3、辅助电路电气原理图；
4、柜内元器件清单；
5、其它与产品正常使用条件不符的特殊要求。

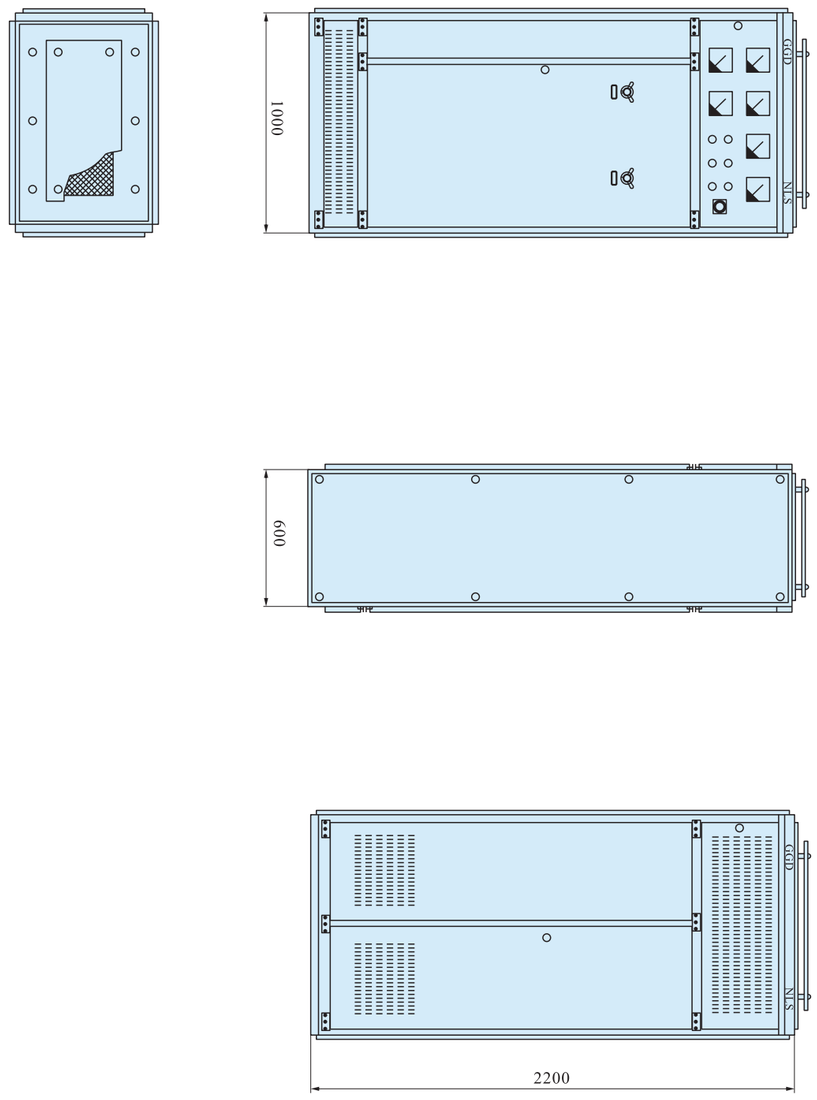
Following materials should be provided for users to order:

1. Full model of product (including the number of the main circuit plan and the auxiliary circuit one)
2. Sequence drawing of the main circuit system combination
3. Electric schematic diagram of auxiliary circuit
4. List of the components inside of the cabinet
5. Other special requirements different from the normal use conditions of the product.

GGD1型主电路方案 MODEL GGD1 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		13			14			15			16			17			18		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose		受电 备用 Tolerant current reserve			受电 备用 Tolerant current reserve			受电 备用 Tolerant current reserve			受电 备用 Tolerant current reserve						受电 Tolerant current		
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-1000/31	2															1		
	HD13BX-600/31		2															1	
	HD13BX-400/31			2															
	HS13BX-1000/31(41)				1			1			1								
	HS13BX-600/31(41)					1			1			1							
	HS13BX-400/31(41)						1			1			1						
	DW15-1000/3 电动 Electric	1			1			1			1						1		
	DW15-630/3 电磁 Electromagnetic		1			1			1			1						1	
	DW15-400/3 电磁 Electromagnetic			1			1			1			1						1
	LMZ1-0.66（）/5 (LMZ3D-0.66（）/5)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)				3(4)	3(4)	3(4)
柜宽(mm) Cabinet width		1000	800	800	1000	800	800	1000	800	800	1000	800	800				1000	800	
柜深(mm) Cabinet depth		600	600	600	600	600	600	600	600	600	600	600	600				600	600	
电路图图号 No.of circuit drawing		0104D,0105D,0112D,0113D			0107D,0108D			0107D,0108D			0107D,0108D			0101D,0102D,0109D,0110D			0101D,0102D,0109D,0110D		
		0121D,0122D,0124D,0125D												0115D,0116D,0118D,0119D			0115D,0116D,0118D,0119D		
		0130D,0131D,0133D,0134D												0127D,0128D,0201D,0202D			0127D,0128D,0201D,0202D		
		0210D,0211D,0213D,0214D												0204D,0205D,0207D,0208D			0204D,0205D,0207D,0208D		
		0216D,0217D,0301D,0302D																	
		0304D,0305D,0307D,0308D																	
		0310D,0311D,0313D,0314D																	
		0316D,0317D,0319D,0320D																	
		0209F,0210F,0211F,0212F																	
备注 Remark																			

外形示意图 EXTERNAL SCHEMATIC DRAWING

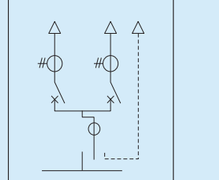
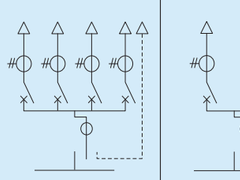
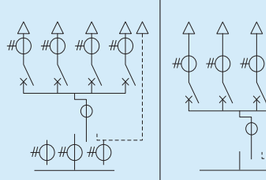
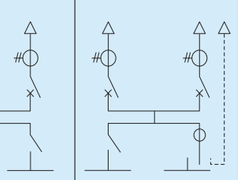


图一 (Fig.1)

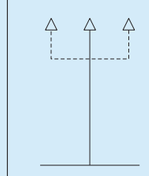
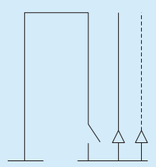
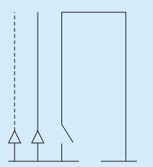
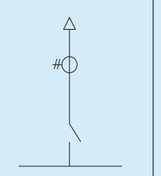
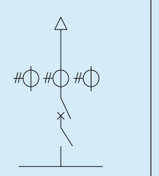
主电路方案编号 No.of main circuit plan		07	08	09	10	11	12
主电路方案 Main circuit plan	单线图 Single-line drawing						
用途 Purpose		受电 联络 Tolerant current liaison	受电 联络 Tolerant current liaison	受电 联络 Tolerant current liaison	受电 联络 Tolerant current liaison	受电 Tolerant current	受电 联络 Tolerant current liaison
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A B C	A B C	A B C	A B C	A B C	A B C
	HD13BX-1000/31	1	1	1	1	2	2
	HD13BX-600/31	1	1	1	1	2	2
	HD13BX-400/31	1	1	1	1	2	2
	DW15-1000/3 电动 Electric						
	DW15-630/3 电磁 Electromagnetic		1	1	1	1	1
	DW15-400/3 电磁 Electromagnetic		1	1	1	1	1
	LMZ1-0.66（）/5 (LMZ3D-0.66（）/5)	3(4) 3(4) 3(4)	3(4) 3(4) 3(4)	3(4) 3(4) 3(4)	3(4) 3(4) 3(4)	3(4) 3(4) 3(4)	3(4) 3(4) 3(4)
柜宽(mm) Cabinet width		1000	1000	1000	1000	1000	1000
柜深(mm) Cabinet depth		600	600	600	600	600	600
电路图图号 No.of circuit drawing		0304D,0305D,0307D,0308D	0304D,0305D,0307D,0308D	0304D,0305D,0307D,0308D	0304D,0305D,0307D,0308D	0304D,0305D,0307D,0308D	0304D,0305D,0307D,0308D
		0310D,0311D,0313D,0314D	0310D,0311D,0313D,0314D	0310D,0311D,0313D,0314D	0310D,0311D,0313D,0314D	0310D,0311D,0313D,0314D	0310D,0311D,0313D,0314D
		0316D,0317D,0319D,0320D	0316D,0317D,0319D,0320D	0316D,0317D,0319D,0320D	0316D,0317D,0319D,0320D	0316D,0317D,0319D,0320D	0316D,0317D,0319D,0320D
		0209F,0210F,0211F,0212F	0209F,0210F,0211F,0212F	0209F,0210F,0211F,0212F	0209F,0210F,0211F,0212F	0209F,0210F,0211F,0212F	0209F,0210F,0211F,0212F
备注 Remark							

GGD1型主电路方案 MODEL GGD1 MAIN CIRCUIT PLAN

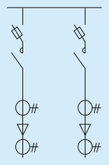
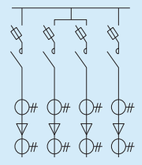
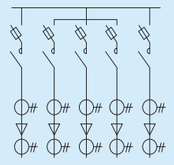
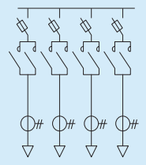
GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

主电路方案编号 No.of main circuit plan		25	26	27	28	29			30		
主电路方案 Main circuit plan	单线图 Single-line drawing										
用 途 Purpose		馈电备用 Feed reserve	馈电备用 Feed reserve	馈电备用 Feed reserve	联络备用馈电 Liaison reserve feed	联络备用馈电 Liaison reserve feed					
主电路元器件 Electric components of main circuit	型号规格 Model/spec.	A B C	A B C	A B C	A B C	A B C	A	B	C	A	B	C
	HD13BX-1000/31						1					
	HD13BX-600/31							1				
	HD13BX-400/31					1						
	HS13BX-1000/31(41)		1		1							
	HS13BX-600/31(41)	1		1				1			1	
	HS13BX-400/31(41)		1				1			1		
	HS13BX-200/31(41)		1									
	L.M2D-0.66 ( ) /5	2 2 2	4 4 4	4 4 4	2 2 2	2 2 2						
	L.MZ1-0.66 ( ) /5	2	3 3 3									
	SM10-100/3 ( ) SE	1	4 4	4	2 2	2 2						
	SM10-250/3 ( ) SE	2 1	4	4	2	2						

GGD2型主电路方案 MODEL GGD2 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		01			02			03			04			05			06		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose		受电 Tolerant current			受电 Tolerant current			受电 Tolerant current			受电 Tolerant current			受电 (馈电 Tolerant current feed					
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-1500/31																		
	HD13BX-1000/31																		
	HD13BX-600/31																		
	DW15-1600/3（）电动 Electric																		
	DW15-630/3（）电磁 Electromagnetic																		
	Electric components of main circuit																		
	LMZ1-0.66（）/5																		
	LMZ3D-0.66（）/5)																		
柜 宽(mm) Cabinet width		600	600	600	600	600	600	600	600	600	800	800	800	800	800	800			
柜 深(mm) Cabinet depth		600	600	600	600	600	600	600	600	600	600	600	600	600	600	600			
电路图图号 No.of circuit drawing		0101D,0102D,0109D,0110D																	
		0115D,0116D,0118D,0119D																	
		0127D,0128D,0201D,0202D																	
		0204D,0205D,0207D,0208D																	
		0501D,0506D																	
		0103F,0104F,0209F,0210F																	
		0211F,0212F,0503F,0504F																	
		0601F,0602F,0603F,0604F																	
		0605F,0606F,0634F,0635F																	
		0636F,0637F																	
备注 Remark														C方案柜宽为600mm Cabinet can be 600mm wide in both C plan					

GGD1型主电路方案 MODEL GGD1 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		55			56			57			58			59			60		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose			馈电 Feed					馈电(电动机) Feed (motor)			馈电(电动机) Feed (motor)			馈电(电动机) Feed (motor)			馈电(电动机) Feed (motor)		
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HR5-200/3（）							2											
	HR5-100/3（）								2		4	4		5	5		4	4	
	CJ10X-100/3							2			4			2	2		4	4	
	CJ10X-60/3								2			4		3			4		
	CJ10X-40/3														3			4	
	JR16-150/3D							2			4			2	2		2	2	
	JR16-60/3D								2			4		3	3		2	2	
	(LMZ3D-0.66（）/5)							2	2		4	4		5	5		4	4	
	LJ-（）							2	2		4	4		5	5				
柜 宽(mm) Cabinet width								800	800		800	800		800	800		800	800	
柜 深(mm) Cabinet depth								600	600		600	600		600	600		600	600	
电路图图号 No.of circuit drawing								0638F,0639F,0640F,0641F			0638F,0639F,0640F,0641F			0638F,0639F,0640F,0641F			0652F,0653F		
								0642F,0643F,0644F,0645F			0642F,0643F,0644F,0645F			0642F,0643F,0644F,0645F					
								0646F,0647F			0646F,0647F			0646F,0647F					
备注 Remark																			

GGD1型主电路方案 MODEL GGD1 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		31			32			33			34			35			36		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose								馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed		
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-1000/31																		
	HD13BX-600/31								1										
	HD13BX-400/31											1			1				
	HD13BX-200/31																		
	SM10-600P/3（）								1										
	SM10-250/3（）SE							1	2			4			4				
	SM10-100/3（）SE											4					6		
	LMZ1-0.66（）/5							1							3			3	
	LMZ2-0.66（）/5							1	2		4	4							
	(LMZ3D-0.66（）/5)																		
柜 宽(mm) Cabinet width								600	600	600	800	800	800	800	800		800		
柜 深(mm) Cabinet depth								600	600	600	600	600	600	600	600		600		
电路图图号 No.of circuit drawing								0512D,0519D,0520F			0513D,0520D,0521D			0509D,0521D			0524D		
								0505F,0506F											
备注 Remark																			

GGD1型主电路方案 MODEL GGD1 MAIN CIRCUIT PLAN

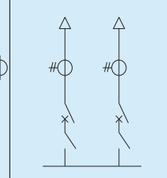
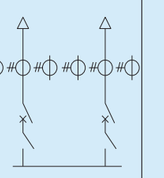
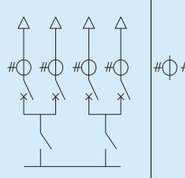
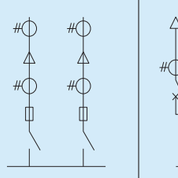
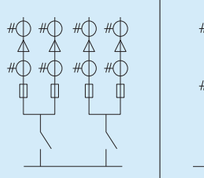
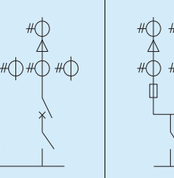
主电路方案编号 No.of main circuit plan		37			38			39			40			41			42		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose		馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed		
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-600/31							2			2			2			2		
	HD13BX-400/31	2			2				2			2			2			2	
	HD13BX-200/31		2			2							2			2			
	DW15-630/3 电磁 Electromagnetic																1		
	DW15-400/3 电磁 Electromagnetic																	1	
	SM10-250/3（）SE	2			2			4											
	SM10-100/3（）SE		2			2			4										
	RT20（）										6	6	6	12	12	12	3	3	
	LMZ3-0.66（）/5	2	2		6	6		4	4										
	(LMZ3D-0.66（）/5)										2	2	2	4	4	4	4	4	
	LJ-（）										2	2	2	4	4	4	2	2	
柜 宽(mm) Cabinet width		800	600		800	600		800	800		800	800	800	800	800	800	800	800	
柜 深(mm) Cabinet depth		600	600		600	600		600	600		600	600	600	600	600	600	600	600	
电路图图号 No.of circuit drawing		0512D,0519D			0510D,0522D			0513D,0520D			0507F,0508F			0507F,0508F			0503F,0504F,0507F,0508F		
		0505F,0506F			0503F,0514F,0632F,0633F			0505F,0506F									0601F,0602F,0603F,0604F		
																	0605F,0606F,0634F,0635F		
																	0636F,0637F		
备注 Remark																			

GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

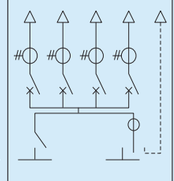
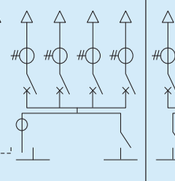
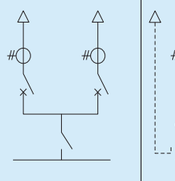
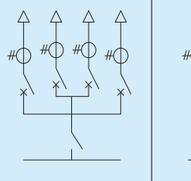
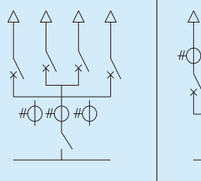
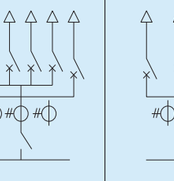
GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

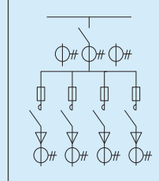
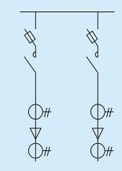
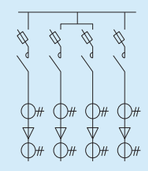
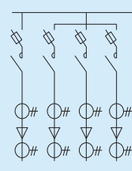
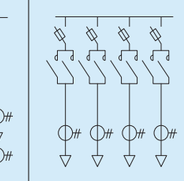
GGD2型主电路方案 MODEL GGD2 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		37	38	39	40	41	42
主电路方案 Main circuit plan	单线图 Single-line drawing						
用途 Purpose		馈电 Feed	馈电 Feed	馈电 Feed	馈电 Feed	馈电 Feed	馈电 Feed
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A B C	A B C	A B C	A B C	A B C	A B C
	HD13BX-1000/31	2	2	2	2	2	
	HD13BX-600/31	2	2	2	2	2	1
	HD13BX-400/31	2	2	2	2	2	1
	DW15-630/3（）电磁 Electromagnetic	2	2				
	DWX15-630/3（）电磁 Electromagnetic	2	2				1
	RMM1-400H/3	2	2	2			
	RMM1-400/3	2	2				
	RMM1-250H/3	2	2	2			
	NT-（）	6	6	6	12	12	3
	LMZ1-0.66（）/5	2	2	2	6	6	6
	(LMZ3D-0.66（）/5)	2	2	2	4	4	4
	LU-（）	2	2	2	4	4	2
柜宽(mm) Cabinet width		800	800	800	800	800	800
柜深(mm) Cabinet depth		600	600	600	600	600	600
电路图图号 No.of circuit drawing		050D,0510D	050D,0510D	050D,0510D	050D,0510D	050D,0510D	050D,0510D
		050F,0506F	050F,0506F	050F,0506F	050F,0506F	050F,0506F	050F,0506F
			060F,0604F,0605F,0606F	060F,0604F,0605F,0606F	060F,0604F,0605F,0606F	060F,0604F,0605F,0606F	060F,0604F,0605F,0606F
			063F,0635F,0636F,0637F	063F,0635F,0636F,0637F	063F,0635F,0636F,0637F	063F,0635F,0636F,0637F	063F,0635F,0636F,0637F
备注 Remark							

GGD2型主电路方案 MODEL GGD2 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		31	32	33	34	35	36
主电路方案 Main circuit plan	单线图 Single-line drawing						
用途 Purpose		联络 备用 馈电 Liaison reserve feed	联络 备用 馈电 Liaison reserve feed	馈电 Feed	馈电 Feed	馈电 Feed	馈电 Feed
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A B C	A B C	A B C	A B C	A B C	A B C
	HD13BX-1500/30			1			
	HD13BX-1000/31			1		1	1
	HD13BX-600/31	1	1	1	1	1	1
	HD13BX-400/31				1	1	
	HS13BX-600/31(41)	1	1				
	DW15-630/3（）电磁 Electromagnetic			2			
	RMM1-400H/3			2			
	RMM1-250H/3			2	2	4	2
	RMM1-100H/3	4	4		2	4	6
	LMZ1-0.66（）/5			2		3	3
	LMZ3-0.66（）/5	4	4	2	4	3	3
	(LMZ3-0.66（）/5)				4	4	
柜宽(mm) Cabinet width		800	800	800	800	800	800
柜深(mm) Cabinet depth		600	600	600	600	600	600
电路图图号 No.of circuit drawing		051BD	051BD	050D,0512D	051D,0520D	050D,0512D	052ADD
				050D,0506D			
备注 Remark							

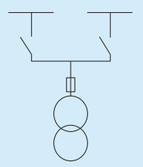
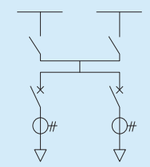
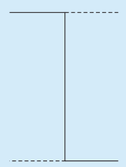
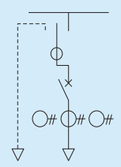
GGD2型主电路方案 MODEL GGD2 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		55	56	57	58	59	60
主电路方案 Main circuit plan	单线图 Single-line drawing						
用途 Purpose		馈电 Feed		馈电(电动机) Feed(motor)	馈电(电动机) Feed(motor)	馈电(电动机) Feed(motor)	馈电(电动机) Feed(motor)
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A B C	A B C	A B C	A B C	A B C	A B C
	HD13BX-600/31	1					
	HD13BX-400/31						
	HR5-200/3（）			2			
	HR5-100/3（）			2	4 4	5 5	4 4
	CJ20-100/3	4		2	4	2 2	4 4
	CJ20-63/3			2	4	3	4
	CJ20-40/3					3	4
	JR16-150/3D			2	4	2 2	2 2
	JR16-60/3D			2	4	3 3	2 2
	NT-（）	12 12					
	LMZ1-0.66（）/5	3 3					
	(LMZ3D-0.66（）/5)			2 2	4 4	5 5	4 4
	LJ-（）	4 4		2 2	4 4	5 5	4 4
柜宽(mm) Cabinet width		800 800		800 800	800 800	800 800	800 800
柜深(mm) Cabinet depth		600 600		600 600	600 600	600 600	600 600
电路图图号 No.of circuit drawing		0527D		0638F,0639F,0640F,0641F	0638F,0639F,0640F,0641F	0638F,0639F,0640F,0641F	0652F,0653F
				0642F,0643F,0644F,0645F	0642F,0643F,0644F,0645F	0642F,0643F,0644F,0645F	
				0646F,0647F	0646F,0647F	0646F,0647F	
备注 Remark							

GGD2型主电路方案 MODEL GGD2 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		13	14	15	16	17	18
主电路方案 Main circuit plan	单线图 Single-line drawing						
用途 Purpose		受电Tolerant current	受电 备用 Tolerant current reserve	受电 备用 Tolerant current reserve	受电 备用 Tolerant current reserve		受电 Tolerant current
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A B C	A B C	A B C	A B C	A B C	A B C
	HD13BX-1500/31	2					1
	HD13BX-1000/31	2					1
	HS13BX-1000/31(41)		1	1	1		
	DW15HH-1600/3 电动 Electric	1					1
	DW15HH-1000/3 电动 Electric	1	1	1	1		1
	LMZ1-0.66（）/5	3(4) 3(4)	3(4)	3(4)	3(4)		3(4) 3(4)
	(LMZ3D-0.66（）/5)						
柜宽(mm) Cabinet width		1000 1000	1000	1000	1000		1000 1000
柜深(mm) Cabinet depth		600 600	600	600	600		600 600
电路图图号 No.of circuit drawing		0104D,0105D,0112D,0113D	0107D,0108D	0107D,0108D	0107D,0108D		0101D,0102D,0109D,0110D
		0121D,0122D,0124D,0125D					0115D,0116D,0118D,0119D
		0130D,0131D,0133D,0134D					0127D,0128D,0201D,0202D
		0210D,0211D,0213D,0214D					0204D,0205D,0207D,0208D
		0216D,0217D,0301D,0302D					
		0304D,0305D,0307D,0308D					
		0310D,0311D,0313D,0314D					
		0316D,0317D,0319D,0320D					
		0209F,0210F,0211F,0212F					
备注 Remark							

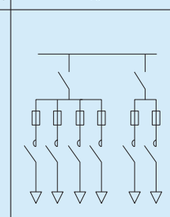
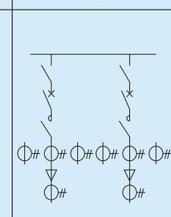
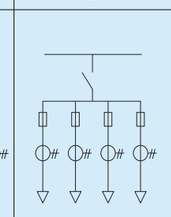
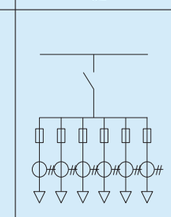
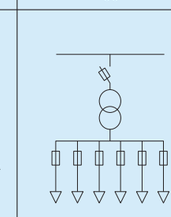
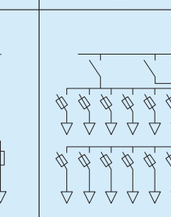
GGD2型主电路方案 MODEL GGD2 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		19			20			21			22			23			24		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose								联络 Liaison			联络 馈电 Liaison feed			联络 Liaison			馈电 备用 Feed reserve		
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-1500/30							2			2								
	HD13BX-1000/31								2			2							
	HS13BX-1000/31(41)																1		
	HS13BX-600/31(41)																	1	
	HS13BX-400/31(41)																		1
	DW15-630/3（ ）电磁 Electromagnetic																1		
	DW15-400/3（ ）电磁 Electromagnetic																	1	
	DW15-200/3（ ）电磁 Electromagnetic																		1
	RMM1-400H/3（ ）										2								
	RMM1-250H/3（ ）											2							
	NT-（ ）							3	3										
	JDG-0.5 380/100V							2(3)	2(3)										
	LMZ1-0.66（ ）/5										2						3	3	
	LMZ3-0.66（ ）/5											2							3
柜 宽(mm) Cabinet width								1000	1000		1000	1000		600	600	600	600	600	600
柜 深(mm) Cabinet depth								600	600		600	600		600	600	600	600	600	600
电路图图号 No.of circuit drawing								0403F,0406F			0512D						0503D		
备注 Remark																			

GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

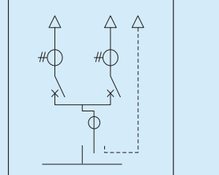
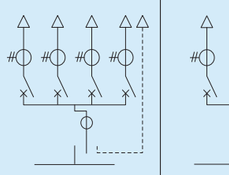
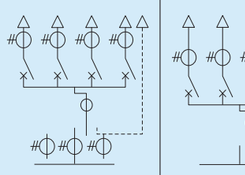
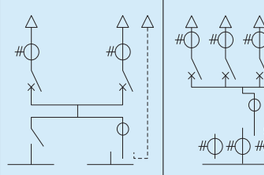
GGD2型主电路方案 MODEL GGD2 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		49			50			51			52			53			54		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose		馈电 Feed			馈电 Feed			照明 Lighting			照明 Lighting			照明 Lighting			照明 Lighting		
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-1000/31	2																	
	HD13BX-600/31		2			2		1			1							2	
	HD13BX-400/31								1			1							
	HR5-630/3（ ）													1					
	HR5-400/3（ ）														1				
	HG2-160																	12	
	RMM1-600HP/3					2													
	CJ20-630/3					2													
	CJ20-250/3	2																	
	CJ20-160/3		2																
	CJ20-63/3	4	4																
	NT-（ ）	18	18					12	12		18	18		18	18				
	SG-（ ）													1	1				
	LMZ3-0.66（ ）/5							4	4		6	6							
	(LMZ3D-0.66（ ）/5)					6													
	LJ-（ ）					2													
柜 宽(mm) Cabinet width			800			800		800	800		800	800		800	800			800	
柜 深(mm) Cabinet depth			600			600		600	600		600	600		600	600			600	
电路图图号 No.of circuit drawing		0648F,0649F,0650F,0651F			0625F,0626F,0627F,0628F			0701D			0701D								
					0629F,0630F,0631F,0654F														
					0655F,0656F,0657F														
备注 Remark																			

GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

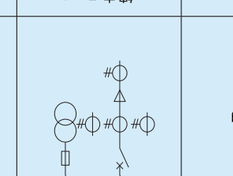
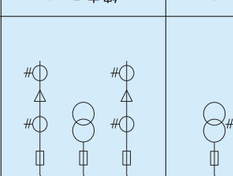
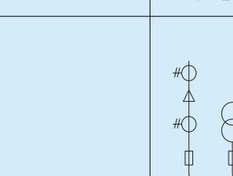
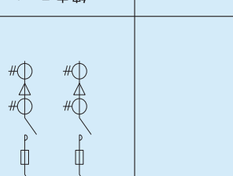
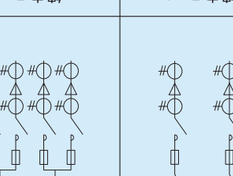
GGD2型主电路方案 MODEL GGD2 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		25			26			27			28			29			30		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose		馈电备用 Feed reserve			馈电备用 Feed reserve			馈电备用 Feed reserve			联络备用馈电 Liaison reserver feed			联络备用馈电 Liaison reserver feed					
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-600/31																		
	HD13BX-400/31																		
	HD13BX-1000/31(41)																		
	HS13BX-600/31(41)																		
	HS13BX-400/31(41)																		
	RMM1-400H/3																		
	RMM1-250H/3（ ）																		
	RMM1-100H/3																		
	LMZ1-0.66（ ）/5																		
	LMZ3-0.66（ ）/5																		
柜 宽(mm) Cabinet width		600	600	600	800	800	800	800	800	800		800			800	800			
柜 深(mm) Cabinet depth		600	800		600	600	600	600	600	600		600			600				
电路图图号 No.of circuit drawing		0514D,0517D			0515D,0518D			0516D,0523D			0517D			0517D					
备注 Remark																			

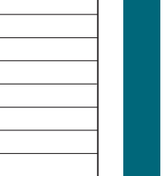
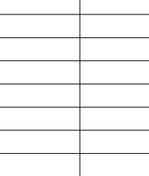
GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

GGD2型主电路方案 MODEL GGD2 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		43			44			45			46			47			48		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose		馈电 Feed			馈电 Feed						馈电 Feed			馈电 Feed			馈电 Feed		
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-600/31		1									2				2			
	HD13BX-400/31		1												2				
	HD13BX-200/31					3													3
	DWX15-630/3（）电磁 Electromagnetic				1														
	CJ20-630/3											1							
	CJ20-250/3											1			1				
	CJ20-160/3														1				
	CJ20-63/3														4	4			6
	NT-（）		3			9					6	6			12	12			18
	JDG-0.5 380/100V		2(3)																
	LD-（）		1			2					2	2			4	4			
	(LMZ3D-0.66（）/5)		3			2					2	2			4	4			
柜 宽(mm) Cabinet width			800			800					800	800			800	800			800
柜 深(mm) Cabinet depth			600			600					600	600			600	600			600
电路图图号 No.of circuit drawing		0401F,0404F,0407F,0507F			0401F,0404F,0407F,0507F			0538F,0639F,0640F,0641F			0538F,0639F,0640F,0641F			0538F,0639F,0640F,0641F			0648F,0649F,0650F,0651F		
		0504F,0601F,0602F,0603F			0508F			0642F,0643F,0644F,0645F			0642F,0643F,0644F,0645F			0642F,0643F,0644F,0645F					
		0604F,0605F,0606F,0634F						0646F,0647F			0646F,0647F								
		0635F,0636F,0637F																	
备注 Remark																			

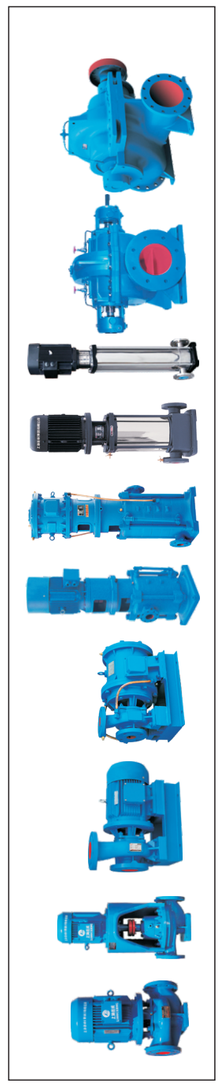
GGD3型主电路方案 MODEL GGD3 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		01	02	03	04	05	06
主电路方案 Main circuit plan	单线图 Single-line drawing						
用途 Purpose		受电联络 Tolerant current liaison	受电联络 Tolerant current liaison	受电联络 Tolerant current liaison	联络 Liaison	受电联络 Tolerant current liaison	受电馈电 Tolerant current5 feed
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A B C	A B C	A B C	A B C	A B C	A B C
	母线桥 Seclusion pin 3200A				1		
	母线桥 Seclusion pin 2500A				1		
	母线桥 Seclusion pin 2000A						
	ME-3205 电动 Electric	1	1	1	1		
	ME-2505 电动 Electric	1	1	1			1
	ME-2500 电动 Electric	1	1	1			1
	(LMZ3D-0.66（ ）/5)						
	HG2-160						
	CJ20-160/3						
	CJ20-400/3						
	RMM1-250H/3（ ）						
	DZ20-400/3						
	RMM1-400HP/3（ ）						
	DW15-400/3 电磁 Electromagnetic						
	DW15-630/3 电磁 Electromagnetic						
	HD13BX-600/31						
	HD13BX-1000/31						
	LJ-（ ）						
柜宽(mm) Cabinet width		800	800	800	800	800	800
柜深(mm) Cabinet depth		600	600	600	600	600	600
电路图图号 No.of circuit drawing		0101F,0102F,0201F,0202F 0203F,0204F,0205F,0206F 0207F,0208F	0101F,0102F,0201F,0202F 0203F,0204F,0205F,0206F 0207F,0208F	0101F,0102F,0201F,0202F 0203F,0204F,0205F,0206F 0207F,0208F	0312D,0315D,0318D,0321D 0312D,0315D,0318D,0321D 0312D,0315D,0318D,0321D	0218D,0303D,0306D,0309D 0218D,0303D,0306D,0309D 0218D,0303D,0306D,0309D	0206D,0209D,0212D,0215D 0206D,0209D,0212D,0215D 0206D,0209D,0212D,0215D
		0129D,0132D,0135D,0203D 0129D,0132D,0135D,0203D 0129D,0132D,0135D,0203D	0117D,0120D,0123D,0126D 0117D,0120D,0123D,0126D<0 0117D,0120D,0123D,0126D	0105D,0106D,0111D,0114D 0105D,0106D,0111D,0114D 0105D,0106D,0111D,0114D	040ZF,040SF	600(800)	800 800
柜宽(mm) Cabinet width		1000 800 800	1200 1000 1000	1200 1000 1000	1000 800 800	800	800 800
柜深(mm) Cabinet depth		800 800 800	800 800 800	800 800 800	800 800 800		800 800
Electric components of main circuit	HR3-100/3（）					1	
	DG-0.5 380/100V					2(3)	
	LMZ2-0.66（）/5	3(4) 3(4) 3(4)	3(4) 3(4) 3(4)	3(4) 3(4) 3(4)			3 3
	(LMZ3D-0.66（）/5)						

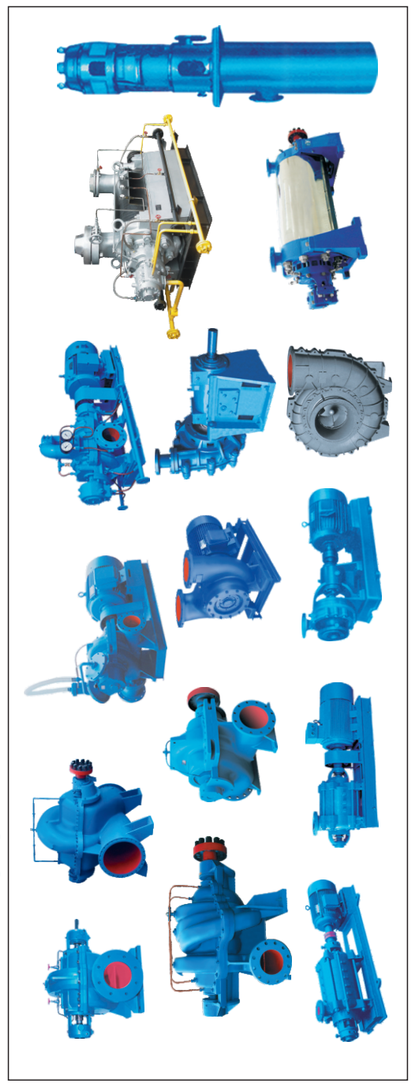
产品目录

泵 | 阀门 | 电气控制系统 | 污水处理设备 | 成套供水设备

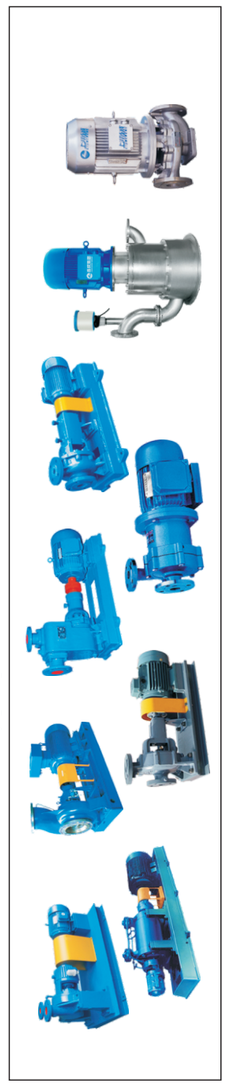
□ 空调、循环、生活用泵 Air-conditioning, circulation, civil water pump



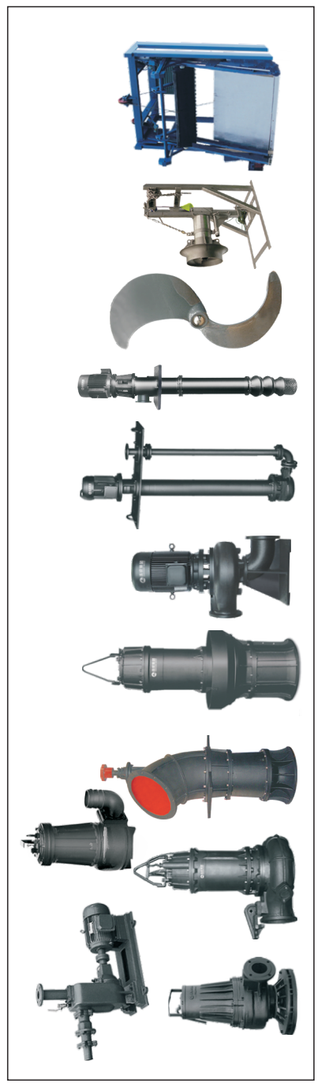
□ 工矿用泵 Industrial pump



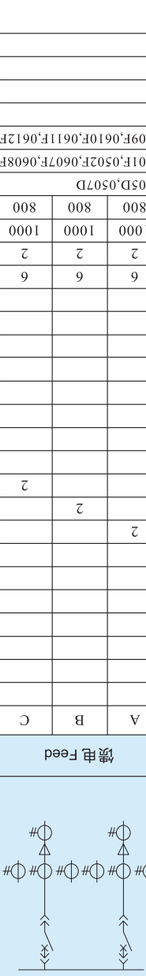
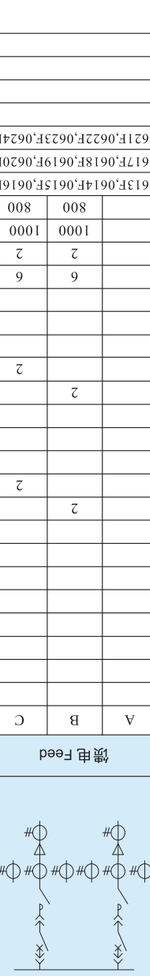
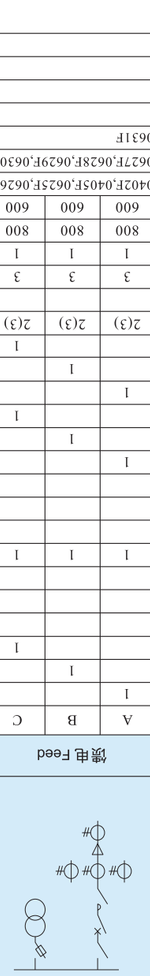
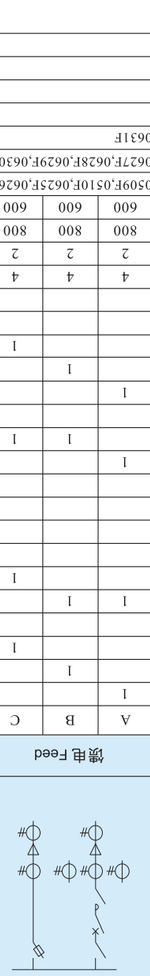
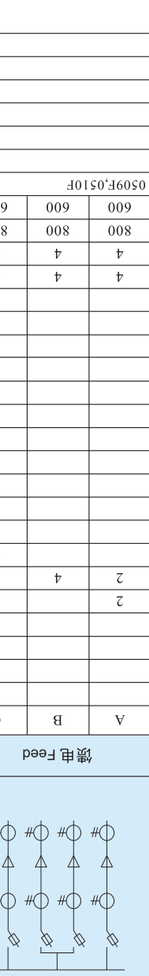
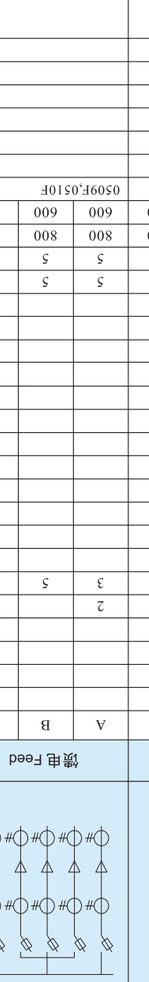
□ 石油化工用泵 Petro chemical industry pump



□ 污水处理设备 Sewage treatment equipment

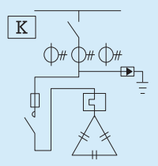
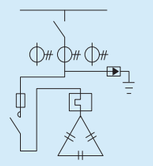
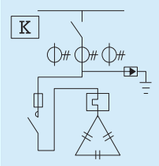
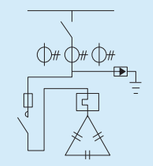


GGD3型主电路方案 MODEL GGD3 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		07			08			09			10			11			12		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose		馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed		
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-1000/31																		
	HD13BX-600/31																		
	HD13BX-400/31																		
	HR5-400/3（）																		
	HR5-200/3（）																		
	HR5-100/3（）																		
	ME-630 电动 Electric																		
	DW15C-630/3（）电磁 Electromagnetic																		
	DW15C-400/3（）电磁 Electromagnetic																		
	RMM1-630H/3																		
	RMM1-400H/3																		
	RMM1-250H/3																		
	CJ20-630/3（）																		
	CJ20-400/3（）																		
	CJ20-160/3（）																		
	JJG-0.5 380/100V																		
	(LMZ2-0.66（）/5)	6	6	6	6	6	6	3	3	3	4	4	4	4	4	4	5	5	5
	LJ-（）	2	2	2	2	2	2	1	1	1	2	2	2	4	4	4	5	5	5
柜宽(mm) Cabinet width		1000	1000	1000	1000	1000		800	800	800	800	800	800	800	800	800	800	800	800
柜深(mm) Cabinet depth		800	800	800	800	800		600	600	600	600	600	600	600	600	600	600	600	600
电路图图号 No.of circuit drawing		0501D,0507D,0611E,0612F,0621F,0622F,0623F,0624F						0631F			0509F,0510F,0625F,0626F,0627F,0628F,0629F,0630F			0509F,0510F			0509F,0510F		
备注 Remark																			

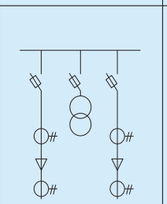
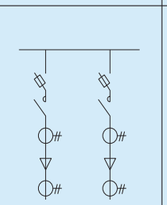
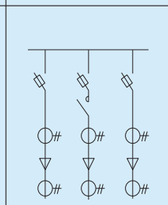
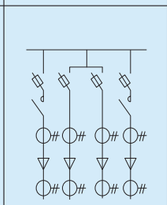
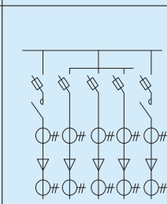
GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

GGD3型主电路方案 MODEL GGD3 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		GGJ1-01			GGJ1-02			GGJ2-01			GGJ2-02								
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose		无功补偿 Reactive compensation			无功补偿 Reactive compensation			无功补偿 Reactive compensation			无功补偿 Reactive compensation								
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HD13BX-1000/31							1	1	1	1	1	1						
	HD13BX-400/31	1	1	1	1	1	1												
	LMZ2-0.66（）/5	3	3	3	3	3	3	3	3	3	3	3	3						
	aM3-32	30	24	18	30	24	18	30	24	18	30	24	18						
	FYS-0.22	3	3	3	30	3	3	3	3	3	3	3	3						
	CJ16-32/（）或CJX2C-40	10	8	6	10	8	6	10	8	6	10	8	6						
	JR16-60/32	10	8	6	10	8	6	10	8	6	10	8	6						
	DWB-2N或JKL(G)A-12		1	1				1	1	1									
	BCMJ0.4-16/3	10	8	6	10	8	6	10	8	6	10	8	6						
	(BW0.4-16/3)	(10)	(8)	(6)	(10)	(8)	(6)	(10)	(8)	(6)	(10)	(8)	(6)						
柜宽(mm) Cabinet width		1000	800	800	1000	800	800	1000	800	800	1000	800	800						
柜深(mm) Cabinet depth		600	600	600	600	600	600	600	600	600	600	600	600						
电路图图号 No.of circuit drawing		0801D			0802D			0801D			0802D								
备注 Remark		主柜 Main cabinet			辅柜 Auxiliary cabinet			主柜 Main cabinet			辅柜 Auxiliary cabinet								

GGD 型低压配电柜
GGD TYPE LOW-VOLTAGE DISTRIBUTION EQUIPMENT

GGD3型主电路方案 MODEL GGD3 MAIN CIRCUIT PLAN

主电路方案编号 No.of main circuit plan		13			14			15			16			17			18		
主电路方案 Main circuit plan	单线图 Single-line drawing																		
用途 Purpose		馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed			馈电 Feed		
主电路电器元件 Electric components of main circuit	型号规格 Model/spec.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	HR5-630/3（）				2														
	HR5-400/3（）	2				2		2											
	HR5-200/3（）		2				2	1	2		2			2					
	HR5-100/3（）	1	1	3					1		2			3	5				
	CJ20-400/3				2														
	CJ20-250/3					2													
	CJ20-160/3						2	1			2			2					
	CJ20-100/3								1						2				
	JDG-0.5 380/100V	2(3)	2(3)	2(3)															
	(LMZ3D-0.66（）/5)	2	2	2	2	2	2	3	3		4			5	5				
	LJ-（）	2	2	2	2	2	2	3	3		4			5	5				
柜宽(mm) Cabinet width		800	800	800	800	800	800	800	800		800			800	800				
柜深(mm) Cabinet depth		600	600	600	600	600	600	600	600		600			600	600				
电路图图号 No.of circuit drawing		0402F,0405F,0509F,0510F			0638F,0639F,0640F,0641F			0509F,0510F,0638F,0639F			0509F,0510F,0638F,0639F			0509F,0510F,0638F,0639F					
					0642F,0643F,0644F,0645F			0640F,0641F,0642F,0643F			0640F,0641F,0642F,0643F			0640F,0641F,0642F,0643F					
					0646F,0647F			0644F,0645F,0646F,0647F			0644F,0645F,0646F,0647F			0644F,0645F,0646F,0647F					
备注 Remark																			