www.cnkxa.com

科技领先，迅速响应，安全用电
Leading in science and technology, quick response, safe use of electricity.

科迅安电气
KEXUN'AN ELECTRIC

COMPLETE POWER DISTRIBUTION

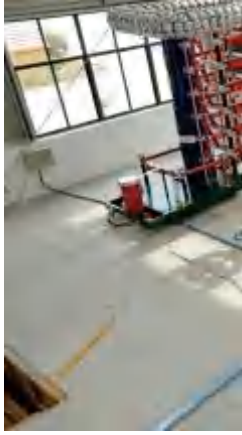
成套配电 | 产品选型手册

Catalog

科迅安电气技术有限公司

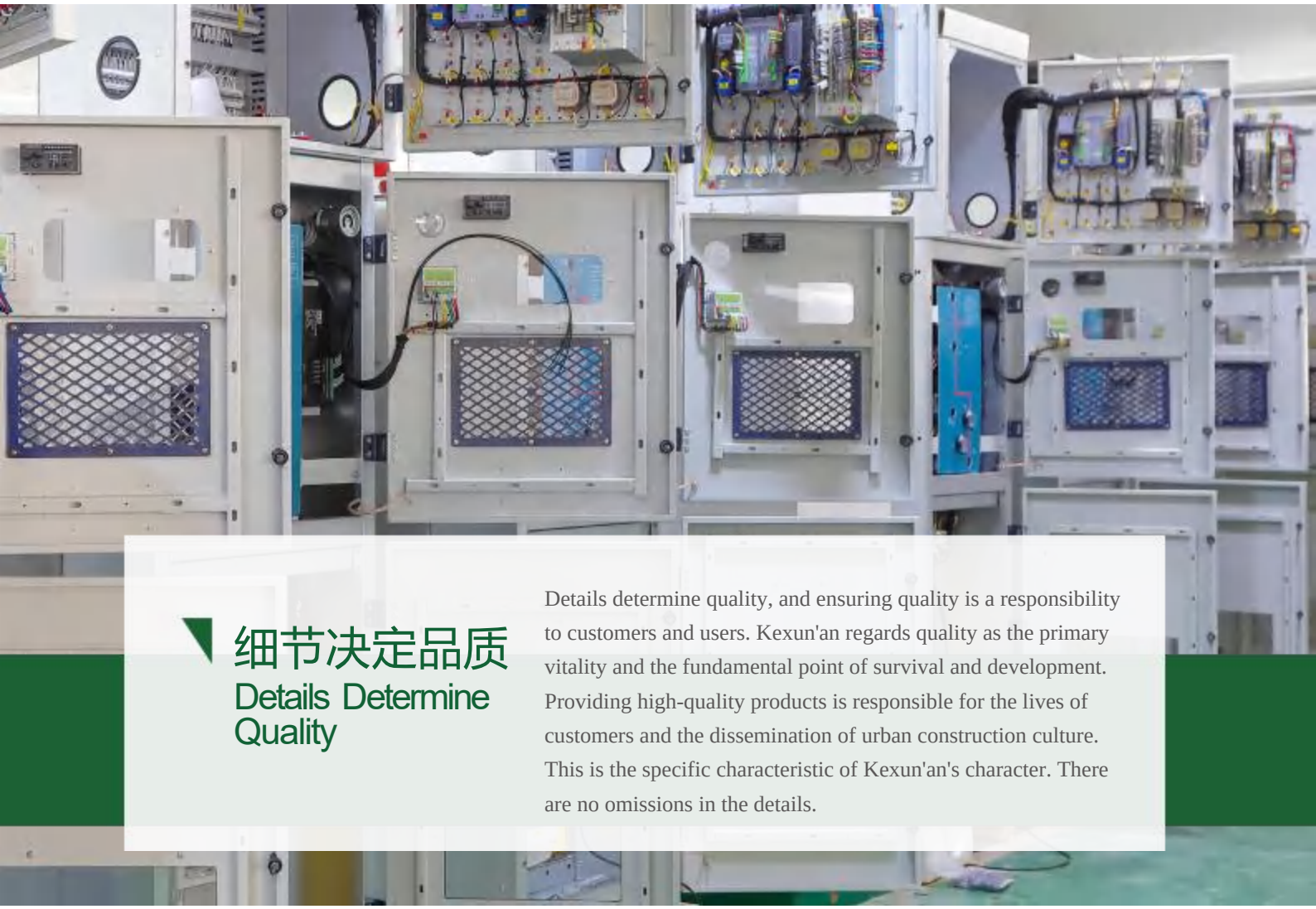
KEXUNAN ELECTRICAL TECHNOLOGY CO., LTD.

科迅安电气
KEXUN'AN ELECTRIC



精益求精
Tirelessly Seek Improvement

With professional production technology and perfect production equipment, Strictly implement inspection standards forcomponents and finished products. Meticulous,excellence.Let quality become the glory of Kexun'an.



细节决定品质
Details Determine Quality

Details determine quality, and ensuring quality is a responsibility to customers and users. Kexun'an regards quality as the primary vitality and the fundamental point of survival and development. Providing high-quality products is responsible for the lives of customers and the dissemination of urban construction culture. This is the specific characteristic of Kexun'an's character. There are no omissions in the details.

企业简介
Enterprise Profile

Kexun'an Electric Technology Co., Ltd. is located in Shenzhen, the forefront of China's reform and opening up. The company was established in 2016, covering an area of about 1100m, with an annual output value of over 90 million yuan. The company has more than 100 employees, including more than 30 engineering technicians, and can produce more than 3600 sets of medium-voltage switchgears annually. The company has been committed to development and innovation for many years. The 35KV gas insulated switchgear (C-GS and GIS) has a full range of products from 630A current to 3150A current (including circuit breakers, isolating switches, isolation mechanisms, modular controllers, outer sheet metal and busbar systems, etc.), as well as 35KV substations, 110 KV GIS, 35KV cable branch cabinets, 35KV box type switching stations, 35KV prefabricated substations ,fully insulated and fully enclosed permanent magnet ring main units (independently developed patented products), and fully insulated and environmentally friendly gas ring main units, The complete set of core accessories is independently designed, developed, and produced, with a focus on innovative development of energy and power equipment, industrial and mining project equipment, wind power generation equipment, photovoltaic power generation equipment, energy storage integration and other fields. It is an electric power enterprise that integrates the research and development, production, sales, service, and specialization of electric power equipment.

The company has established a comprehensive management system based on GB/T19580 performance, management system, safety production standardization, and other requirements. It has a technology research and development center with strong technical research and development capabilities. Based on the concept of lean production and integration of the two industries, the company has created a production and manufacturing system, which includes CNC punching machines, laser cutting, robot welding, automated assembly lines, power frequency withstand voltage, and shielding partial discharge Production and testing equipment such as vacuum box helium leak detection system. Our products have passed various certifications both domestically and internationally. With excellent quality and service, our products are exported to both domestic and international markets, and have become important strategic partners for many well-known manufacturers both domestically and internationally.

统一社会信用代码
91440300359852023P

营业执照

名　　称　科迅安电气技术有限公司

类　　型　有限责任公司（自然人独资）

法定代表人　徐军

成立日期　2016年01月10日

住　　所　深圳市宝安区石岩街道塘头社区宝安区石岩街道机荷高速立交北侧、松白公路西侧厂房1栋一单元夹层15

重要提示
1. 商事主体的经营范围由章程确定。经营范围中属于法律、法规规定应当经批准的项目，取得许可审批文件后方可开展相关经营活动。
2. 商事主体经营范围和许可审批项目等有关企业信用事项及年报信息和其他信用信息，请登录左下角的国家企业信用信息公示系统或扫描右上方的二维码查询。
3. 各类商事主体每年须于成立周年之日起两个月内，向商事登记机关提交上一自然年度的年度报告。企业应当按照《企业信息公示暂行条例》第十条的规定向社会公示企业信息。

登记机关

2023年04月25日

国家企业信用信息公示系统网址：http://www.gsxt.gov.cn

国家市场监督管理总局监制

KEXUNAN

<<3C certificate>>

质量管理体系认证证书

证 书 号：71123Q0135R0S

兹证明

科迅安电气技术有限公司

统一社会信用代码：91440300359852023P

注册地址：深圳市宝安区石岩街道塘头社区宝安区石岩街道机荷高速立交北侧、松白公路西侧厂房1栋一单元夹层15（邮政编码：518100）

生产/经营地址：深圳市光明新区马田街道薯田埔第四工业区第86栋301（邮政编码：518107）

质量管理体系符合：

GB/T 19001-2016 / ISO 9001:2015 标准

本证书覆盖范围

3C 范围外配电设备的生产（不含分支）

本证书的有效性需经中衡国际认证（广东）有限公司通过定期的监督或再认证审核确认保持。
组织应在证书本次有效日期截止前按规定进行监督或再认证申请并更换证书，逾期未通过审核，本证书作废。

本次发证日期：2023年07月25日　　本次有效日期：2024年07月24日

初次认证日期：2023年07月25日

有　效　期：2023年07月25日至2026年07月24日

证书签发人　　证书签发单位

注：本证书信息可在国家认证认可监督管理委员会官方网站（www.cnca.gov.cn）及本机构网站（www.zhic.org.cn）上查询或扫描右下方二维码获取

中衡国际认证（广东）有限公司

中国·深圳·龙岗区吉华街道三联社区坝塘新城5号楼1507

职业健康安全管理体系认证证书

证 书 号：71123S0137R0S

兹证明

科迅安电气技术有限公司

统一组织机构代码：91440300359852023P

注册地址：深圳市宝安区石岩街道塘头社区宝安区石岩街道机荷高速立交北侧、松白公路西侧厂房1栋一单元夹层15（邮政编码：518100）

生产/经营地址：深圳市光明新区马田街道薯田埔第四工业区第86栋301（邮政编码：518107）

职业健康安全管理体系符合：

GB/T 45001-2020 / ISO 45001:2018 标准

本证书覆盖范围

3C 范围外配电设备的生产（不含分支）

本证书的有效性需经中衡国际认证（广东）有限公司通过定期的监督或再认证审核确认保持。
组织应在证书本次有效日期截止前按规定进行监督或再认证申请并更换证书，逾期未通过审核，本证书作废。

本次发证日期：2023年07月25日　　本次有效日期：2024年07月24日

初次认证日期：2023年07月25日

有　效　期：2023年07月25日至2026年07月24日

证书签发人　　证书签发单位

注：本证书信息可在国家认证认可监督管理委员会官方网站（www.cnca.gov.cn）及本机构网站（www.zhic.org.cn）上查询或扫描右下方二维码获取

中衡国际认证（广东）有限公司

中国·深圳·龙岗区吉华街道三联社区坝塘新城5号楼1507

环境管理体系认证证书

证 书 号：71123E0136R0S

兹证明

科迅安电气技术有限公司

统一组织机构代码：91440300359852023P

注册地址：深圳市宝安区石岩街道塘头社区宝安区石岩街道机荷高速立交北侧、松白公路西侧厂房1栋一单元夹层15（邮政编码：518100）

生产/经营地址：深圳市光明新区马田街道薯田埔第四工业区第86栋301（邮政编码：518107）

环境管理体系符合：

GB/T 24001-2016 / ISO 14001:2015 标准

本证书覆盖范围

3C 范围外配电设备的生产（不含分支）

本证书的有效性需经中衡国际认证（广东）有限公司通过定期的监督或再认证审核确认保持。
组织应在证书本次有效日期截止前按规定进行监督或再认证申请并更换证书，逾期未通过审核，本证书作废。

本次发证日期：2023年07月25日　　本次有效日期：2024年07月24日

初次认证日期：2023年07月25日

有　效　期：2023年07月25日至2026年07月24日

证书签发人　　证书签发单位

注：本证书信息可在国家认证认可监督管理委员会官方网站（www.cnca.gov.cn）及本机构网站（www.zhic.org.cn）上查询或扫描右下方二维码获取

中衡国际认证（广东）有限公司

中国·深圳·龙岗区吉华街道三联社区坝塘新城5号楼1507

KEXUNAN

<<Patent Certificate>>

证书号第9955300号

实用新型专利证书

实用新型名称：一种超高压充气柜用断路器

发　明　人：徐军

专　利　号：ZL 2019 2 0939871.8

专利申请日：2019年06月21日

专利权人：深圳市特锐德电气科技有限公司

地　　址：518000 广东省深圳市坪山区石井街道田头社区求水岭路16号4号厂房3层

授权公告日：2020年01月21日　　授权公告号：CN 209981025 U

国家知识产权局依照中华人民共和国专利法经过初步审查，决定授予专利权，颁发实用新型专利证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。专利权期限为十年，自申请日起算。

专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长
申长雨

2020年01月21日

第1页(共2页)

其他事项参见背面

证书号第9958164号

实用新型专利证书

实用新型名称：一种具有模块化结构的充气柜

发　明　人：徐军

专　利　号：ZL 2019 2 0939798.4

专利申请日：2019年06月21日

专利权人：深圳市特锐德电气科技有限公司

地　　址：518000 广东省深圳市坪山区石井街道田头社区求水岭路16号4号厂房3层

授权公告日：2020年01月21日　　授权公告号：CN 209981890 U

国家知识产权局依照中华人民共和国专利法经过初步审查，决定授予专利权，颁发实用新型专利证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。专利权期限为十年，自申请日起算。

专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长
申长雨

2020年01月21日

第1页(共2页)

其他事项参见背面

证书号第9955299号

实用新型专利证书

实用新型名称：一种超高压充气柜专用隔离开关

发　明　人：徐军

专　利　号：ZL 2019 2 0939807.X

专利申请日：2019年06月21日

专利权人：深圳市特锐德电气科技有限公司

地　　址：518000 广东省深圳市坪山区石井街道田头社区求水岭路16号4号厂房3层

授权公告日：2020年01月21日　　授权公告号：CN 209981085 U

国家知识产权局依照中华人民共和国专利法经过初步审查，决定授予专利权，颁发实用新型专利证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。专利权期限为十年，自申请日起算。

专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长
申长雨

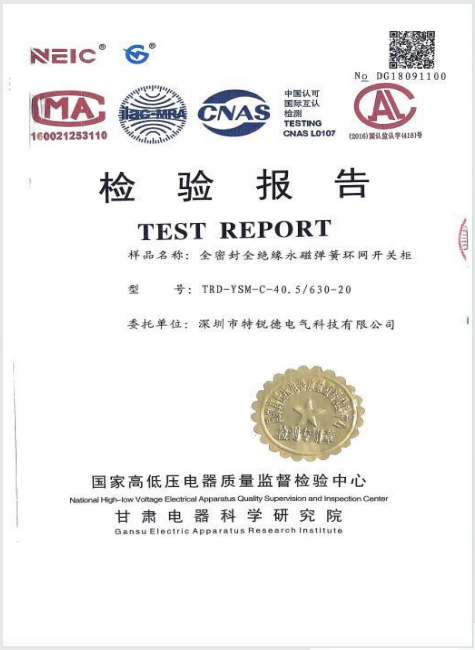
2020年01月21日

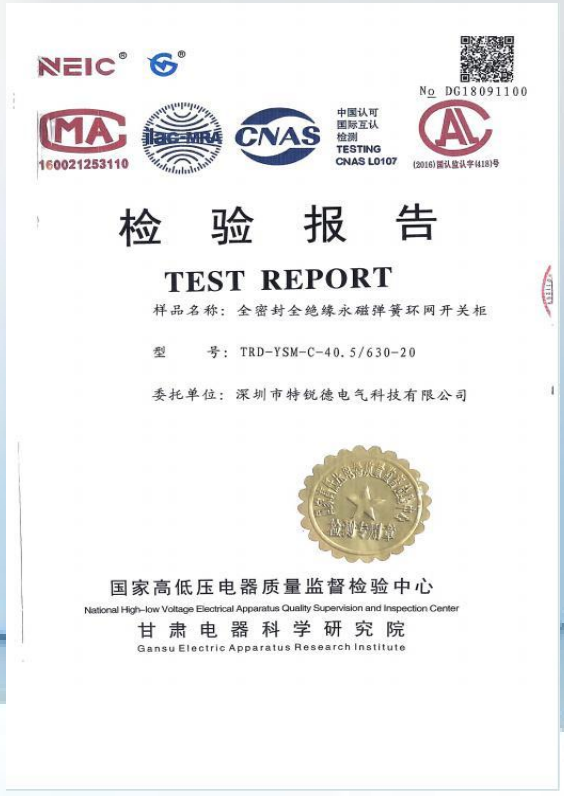
第1页(共2页)

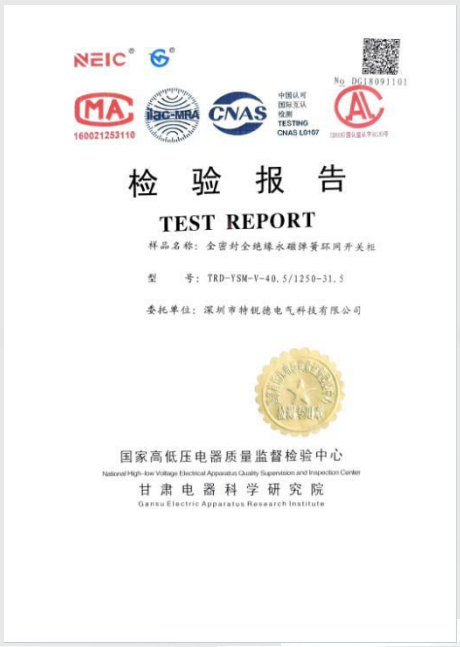
其他事项参见背面

KEXUNAN

<<Experimental Report>>







NEIC
No_DG18091101
160021253110
CNAS
TESTING
CNAS L0107
检 验 报 告
TEST REPORT
样品名称：全密封全绝缘永磁弹簧环网开关柜
型　　号：TRD-YSM-V-40.5/1250-31.5
委托单位：深圳市特锐德电气科技有限公司
国家高低压电器质量监督检验中心
National High-low Voltage Electrical Apparatus Quality Supervision and Inspection Center
甘 肃 电 器 科 学 研 究 院
Gansu Electric Apparatus Research Institute

CHPTL
XIHARI
No. 2100786
检 验 报 告
TEST REPORT
试品型号：
TYPE
试品名称：户内隔离开关
DESIGNATION
INDOOR DISCONNECTOR
委托单位：
APPLICANT
制造单位：
MANUFACTURER
检验类别：型式试验（绝缘性能）
CLASSIFICATION
TYPE TEST (DIELECTRIC PERFORMANCE)
西安高压电器研究院有限责任公司

CHPTL
XIHARI
No. 2100770
检 验 报 告
TEST REPORT
试品型号：
TYPE
试品名称：户内真空断路器
DESIGNATION
INDOOR VACUUM CIRCUIT BREAKER
委托单位：
APPLICANT
制造单位：
MANUFACTURER
检验类别：型式试验（绝缘性能）
CLASSIFICATION
TYPE TEST (DIELECTRIC PERFORMANCE)
西安高压电器研究院有限责任公司

NEIC
No_DG19051314
160021253110
CNAS
中国认可
国际互认
检测
TESTING
CNAS L0107
检 验 报 告
TEST REPORT
样品名称：户外电缆分支箱（开闭所）
型　　号：TRD-DFW-40.5/630-25
委托单位：深圳市特锐德电气科技有限公司
国家高低压电器质量监督检验中心
National High-low Voltage Electrical Apparatus Quality Supervision and Inspection Center
甘 肃 电 器 科 学 研 究 院
Gansu Electric Apparatus Research Institute

NEIC®

No. DG16101068

160021253110 | CNAS 中国认可 国际互认 检测 TESTING CNAS L0107 | (2016)国认监认字(618)号

检 验 报 告

TEST REPORT

样品名称：全密封全绝缘永磁弹簧环网开关柜

型　　号：TRD-YSM-V-12/630-20

委托单位：深圳市特锐德电气科技有限公司

国家高低压电器质量监督检验中心

National High-low Voltage Electrical Apparatus Quality Supervision and Inspection Center

报告编号：03401-23-10022D-S

221821340518 | CNAS 中国认可 国际互认 检测 TESTING CNAS L0933 | HNET

检 验 报 告

产品名称：预制舱

型　　号：KSN-YZC

委托单位：科迅安电气技术有限公司

检测机构：湖南电科院检测集团有限公司

检验检测专用章

180008223616 | CNAS 中国认可 国际互认 检测 TESTING CNAS L0223

CHPTL　　XIHARI

No. 210146G

检 验 报 告

TEST REPORT

试品型号:	TYPE	XGN61-40.5/3150-40
试品名称:	DESIGNATION	金属封闭式开关柜 METAL ENCLOSED SWITCH CABINET
委托单位:	APPLICANT	深圳市特锐德电气科技有限公司 SHENZHEN TERAD ELECTRIC TECHNOLOGY CO.,LTD.
制造单位:	MANUFACTURER	深圳市特锐德电气科技有限公司 SHENZHEN TERAD ELECTRIC TECHNOLOGY CO.,LTD.
检验类别:	CLASSIFICATION	型式试验 (温升性能) TYPE TEST (TEMPERATURE-RISE PERFORMANCE)

西安高压电器研究院有限责任公司

XI'AN HIGH VOLTAGE APPARATUS RESEARCH INSTITUTE CO.,LTD.

KEXUNAN

业绩 >> Partial project cases

NO.	Project Name	Equipment Name	Quantity	Operation time
1	Malkansu River 110KV Substation	40.5KV-1250A gas insulated ring main unit	11	2020-12-25
2	Machang 40.5KV Substation	40.5KV-2500A gas insulated ring main unit	38	2020-10-21
3	Jintang County Guangxing 35KV Substation	40.5KV-1250A gas insulated ring main unit	15	2019-12-18
4	Yanjia 35KV Transmission and Transformation	40.5KV-1250A gas insulated ring main unit	14	2019-12-24
5	Gate service area	40.5KV-1250A gas insulated ring main unit	5	2016-11-2
6	Yunnan Expressway	40.5KV-1250A gas insulated ring main unit	12	2016-8-27
7	Procurement of power system materials	40.5KV-1250A gas insulated ring main unit	22	2016-7-5
8	Wuhan Jinhai Agreement Inventory Materials	40.5KV-1250A gas insulated ring main unit	5	2016-9-15
9	Hainan Normal University	40.5KV-1250A gas insulated ring main unit	11	2016-8-6
10	Procurement of power system materials	40.5KV Box type switching station	8	2016-8-4
11	Procurement of power system materials	40.5KV Box type switching station	6	2016-9-5
12	35KV transmission and transformation in Shaojue	40.5KV-1250A gas insulated ring main unit	12	2020-5-9
13	Niuniuba 35KV Transmissi -on and Transformation	40.5KV-1250A gas insulated ring main unit	10	2020-9-18
14	Yasu 303 Huiguang 35KV Photovoltaic Station	40.5KV-1250A gas insulated ring main unit	10	2020-2-19
15	35kV substation in Zhangmu Town	40.5KV-1250A gas insulated ring main unit	16	2019-4-6
16	Huatu in Mangya City, Qinghai Province	40.5KV-1250A gas insulated ring main unit	8	2016-11-2
17	100MWp Agriculture in Luodian County	40.5KV-1250A gas insulated ring main unit	12	2020-5-21
18	220kV Khudi Substation in Nepal	40.5KV-1250A gas insulated ring main unit	12	2020-9-12
19	220kV Manang Substation in Nepal	40.5KV-1250A gas insulated ring main unit	10	2020-9-12
20	Hongyuan 110-35kV 63MVA Mobile Station	40.5KV-1250A gas insulated ring main unit	8	2020-12-17

KEXUNAN

业绩 >> project case

科迅安电气
KE XUN AN DIAN QI

NO.	Project Name	Equipment Name	Quantity	Operation time
21	Datang Shikou Reservoir 50MW Photovoltaic	40.5KV-1250A gas insulated ring main unit	9	2020-12-3
22	China Resources Power 30MW Wind Power Project	40.5KV-1250A gas insulated ring main unit	8	2020-8-13
23	Hebei Chongli 100MW Wind Farm Project Booster Station	40.5KV-1250A gas insulated ring main unit	12	2020-4-18
24	1600 MW Photovoltaic Project at Hainan New Energy Base	40.5KV-1250A gas insulated ring main unit	28	2020-9-12
25	33kV SWITCHGER EHOUS Technical Specification	40.5KV-1250A gas insulated ring main unit	42	2020-5-12
26	Foshan Sanshui Supply Bureau	Prefabricated photovoltaic substation	1	2019-6-24
27	Ortokash 35kV Transmission and Transformation Project	40.5KV-1250A gas insulated ring main unit	14	2021-5-31
28	Lushan Mao Co., Ltd. 35kv	40.5KV-1250A gas insulated ring main unit	9	2021-8-6
29	Maquju 110kV Substation Project	40.5KV-1250A gas insulated ring main unit	16	2021-8-5
30	110kV Guojiawan Substation	40.5KV-1250A gas insulated ring main unit	18	2021-8-25
31	Street needs 35KV gas charging cabinet	40.5KV-630A gas insulated ring main unit	24	2021-11-13
32	CNPC Gra Oil Pipeline	40.5KV-1250A gas insulated ring main unit	16	2021-10-25
33	Ningxia Electric Power Construction 17.7 MW	40.5KV-1250A gas insulated ring main unit	26	2021-12-4
34	Double isolation 35KV new construction project	40.5KV-1250A gas insulated ring main unit	12	2022-1-4
35	Complete set of power equipment for the Sichuan Tibet Railway	40.5KV-630A gas insulated ring main unit	32	2022-1-2
36	Banyunxian Wind Farm Project Switch Cabinet	40.5KV-1250A gas insulated ring main unit	18	2021-12-7
37	Tajikistan Aini Gold Mine 110kV Substation	40.5KV-1250A gas insulated ring main unit	48	2022-1-8
38	Maqu 200MW Photovoltaic Power Generation Project	40.5KV-1250A gas insulated ring main unit	16	2021-10-14
39	China Resources Power Cangnan 1 # Offshore Wind Power Project	40.5KV-1250A gas insulated ring main unit	11	2022-2-8

KEXUNAN

工程案例 >> Project Case

科迅安电气
KEXUN'AN ELECTRIC

200MW grazing and solar complementary photovoltaic power generation project in Maqu County,

35kV transmission and transformation project in Aksu Muhu, Xinjiang

2018 Project Construction Framework Project in Foshan Sanshui

Complete set of power equipment for the Sichuan Tibet Railway

35kV gas charging cabinet for Guojiawan 110KV substation project

Fishery solar complementary photovoltaic project for Datang Huayin Xiangtan Shibakou Reservoir

Central heating renovation (coal to electricity) 110kV substation project for Maqu county

Engineering switchgear for Banyun Xian Wind Farm

KEXUNAN

工程案例 >> Project Case

科迅安电气
KEXUN'AN ELECTRIC

11kV substation expansion project for Aini gold mine in Tajikistan

i# Offshore wind power project onshore centralized control center for Huarun Power in cangnan county

17.7 MW 35kV Project for Ningxia Dianjian Shenhua Lingwu

1600 MW Photovoltaic Project at the New Energy Base (One Zone, Two Parks) in Nanhai Prefecture, Qinghai Province

China Electric Power Construction Seventh Bureau
Moxi Tunnel 3# inclined shaft

China Electric Power Construction Seventh Bureau
Moxi Tunnel 2 # inclined shaft

Zhangmu Town 35kV Substation

Huarun Power Yuanyang 35MW Distributed Wind Power Project

KEXUNAN

工程案例 >> Project Case

科迅安电气
KEXUN'AN ELECTRIC

Lujiajing Photovoltaic Project in Lufeng City, Chuxiong Prefecture, Yunnan Province

KEXUNAN

工程案例 >> Project Case

科迅安电气
KEXUN'AN ELECTRIC

Huaneng Lufeng Taoyuan 220MW Photovoltaic Power Station

Product index

目录索引 >>

科迅安电气
KEXUN'AN ELECTRIC

A 风光储系列
Wind power, photovoltaic, and energy storage series

B 箱式变电站系列
Box-type substation series

C 高低压成套系列
High voltage、low voltage switchgear series

D 环网柜环网箱系列
Ring main uint series

科迅安电气
KEXUN'AN ELECTRIC

D 环网柜环网箱系列
Ring main uint series

E 高压电缆分支箱
High voltage cable branch box

G 配电箱电表箱系列
Distribution box meter box series

科迅安电气
KE XUN AN DIAN 口

All internal core components are independently developed and produced
Support non-standard customization and OEM outsourcing

630A-1250A-1600A-2000A-2500A-3150A
Complete series of gas insulated switchgear

产品概述 Introduction

In recent years, with the continuous development of society, economy, and switch technology, the complexity of engineering construction has increased. Products that are miniaturized, maintenance free, and intelligent for switch equipment are increasingly favored. Domestic and foreign switch manufacturing companies are vigorously developing medium voltage gas insulated switchgear(GIS).
The gas insulated switchgear is the sealing of high-voltage components such as busbar circuit breakers, isolating switches, power cables, etc. inside a shell filled with lower gas pressure.
The design provided by Kexunan Electrical Technology Co., Ltd. can meet the requirements of various users in the medium voltage distribution system for ring network mode, combination mode, operating conditions, safety protection, transportation, and installation. By using extended busbars to connect the switchgear, a fully modular configuration is achieved to meet various standard and non-standard distribution schemes in the distribution network.

Product features

A. Due to the use of hexafluoride with excellent insulation properties Gas serves as insulation and arc extinguishing medium, so it can reduce the size of the switch cabinet and make it more compact, achieving small typing.

B. High reliability and safety: The conductive part of the main circuit is sealed in SF6 gas, and the high-voltage live conductor is sealed and is not affected by changes in external environmental conditions, allowing the equipment to operate safely for a long time, with high reliability and no risk of electric shock or fire.

C. Independent modular design, the air box is a high-precision aluminum plate that can be installed and detached, and the isolation switch adopts a three-station linear transmission. In order to reduce the clutter of control relays and circuits, a control module with nearly 100 PLC points is designed to achieve The grounding and isolation switches are all electric remote-operated. The modular design of the mechanism switch uses plum blossom fusion joints to connect the opening and closing points, which eliminates the possibility of misoperation of the original rotary isolation switch and grounding switch and changes the contact of the original rotary isolation switch. To solve the problem of unstable and excessive resistance, a shielded voltage equalizing cover is installed outside each contact to completely solve the partialdischarge problem in switch breakpoint production.

D. Convenient application and layout of gas insulated switchgear, As an independent unit, it can meet various main needs through combination.Wiring requirements. Delivered to site in units It can shorten the on-site installation period and improve reliability.

执行标准Execution standards

IEC 62271-200: 2011 High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV
IEC 62271-102:2013 6.2 High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches
IEC 62271-100: 2017.6.2 High-voltage switchgear and controlgear - Part 100: Alternating-current circuit-breakers
GB/T11022-1999 Common technical requirements for high-voltage switchgear and control equipment standards
GB3906-2006 3.6kV~40.5kV AC Metal Enclosed Switchgear and Control Equipment
GB311.1-1997 Insulation Coordination of High Voltage Transmission and Transformation Equipment
GB/T16927.1-1997 High voltage testing technology Part: General test requirements
GB/T16927.2-1997 High voltage testing techniques Part 2: Measurement systems
GB/T7354-2003 Partial discharge measurement
GB1984-1989 AC High Voltage Circuit Breakers
GB3309-1989 Mechanical tests of high-voltage switchgear at room temperature
GB4208-2008 Code for Degree of Protection Provided by Enclosures (IP)
GB12022-2006 Industrial sulfur hexafluoride
GB8905-1988 Guidelines for gas management and inspection in sulfur hexafluoride electrical equipment
GB11023-1989 Test method for sulfur hexafluoride gas sealing of high-voltage switchgear
GB/T13384-1992 General technical requirements for packaging of electromechanical products
GB4207-2003 Solid insulation materials - Determination of relative and resistance to electrical trace index under humid conditions
GB/T14598.3-2006 Electrical relays - Part 5: Insulation of electrical relays
GB/T17626.2-1998 Electromagnetic Compatibility Testing and Measurement Techniques - Electrostatic Discharge Reactance Interference Test
GB/T17626.4-2008 Electromagnetic Compatibility Testing and Measurement Techniques - Electrical Fast Transient Pulse Group Immunity Test
GB/T17626.5-2008 Electromagnetic Compatibility Testing and Measurement Techniques - Surge (Impulse) Immunity Test
GB/T17626.12-1998 Electromagnetic Compatibility Testing and Measurement Techniques - Oscillating Wave Immunity Test

型式试验 Test Type

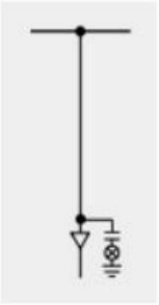
- Insulation test
- Temperature rise test
- Loop resistance measurement
- Short-time withstand current and peak withstand current tests.
- Verification of making and breaking capabilities
- Mechanical operation and mechanical characteristic testing tests
- Protection level detection
- Additional tests on auxiliary and control circuits
- Pressure tolerance test for inflatable compartments
- Sealing test
- Internal arc test
- Electromagnetic compatibility test

Basic Scheme

C	Load switch unit	(Width=600/800mm)
D	Direct unit	(Width=600/800mm)
F	Load switch fuse combination unit	(Width=600/800mm)
G	Isolation switch unit	(Width=600/800mm)
V	Circuit breaker unit	(Width=600/800mm)
CL	Load switch busbar lifting unit	(Width=600/800mm)
VL	Circuit breaker busbar lifting unit	(Width=600/800mm)
Me	Metering Unit	(Width=800/1200mm)

C

D

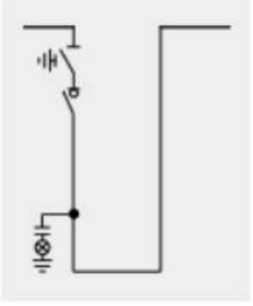


F

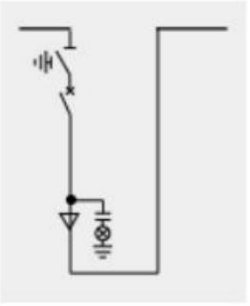
G

V

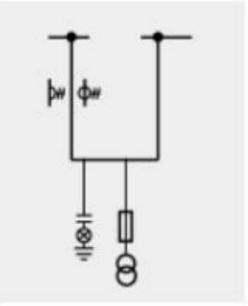
CL



VL



Me



Operation Condition

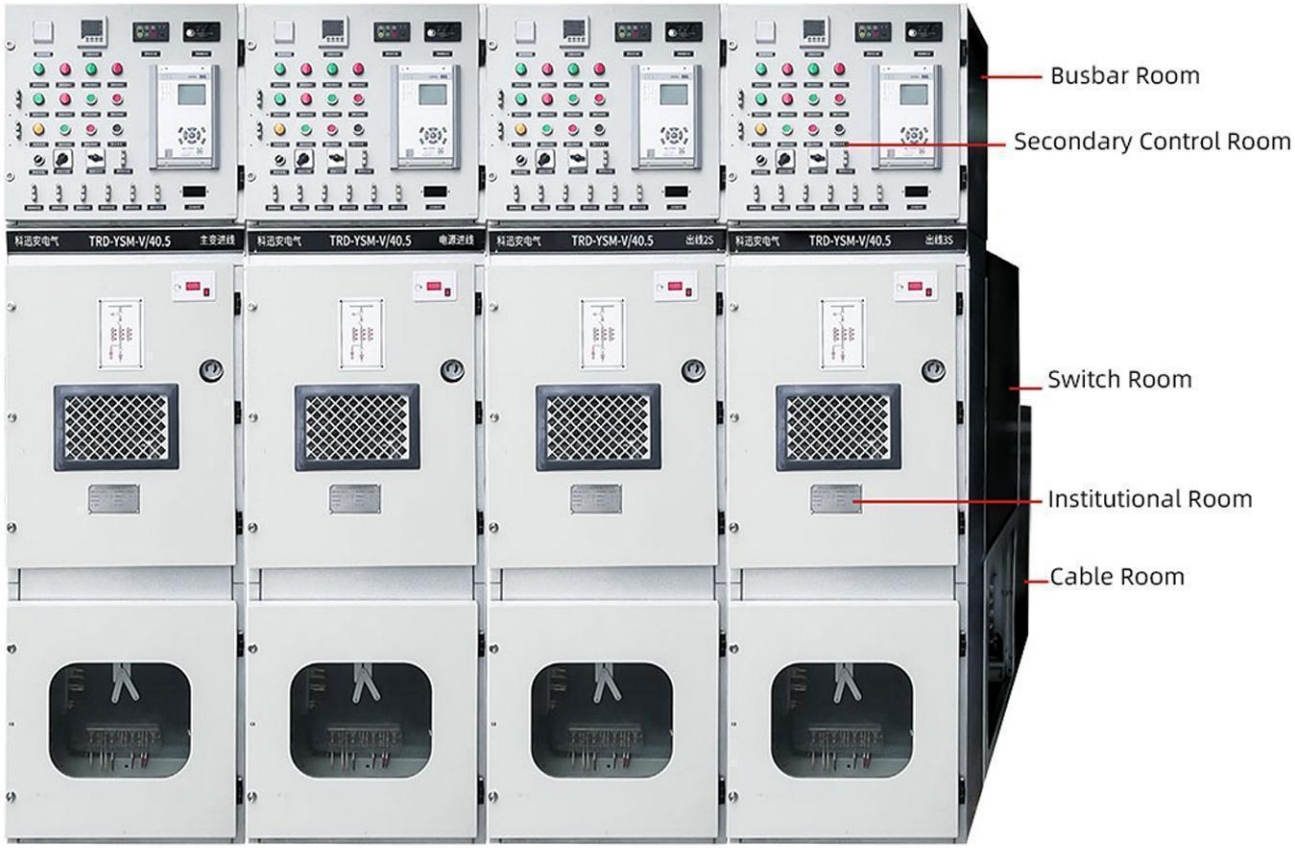
Installation location	Indoor
Environmental temperature (° C)	-15~40
Altitude (m)	⩽ 5000
seismic intensity	⩽ 8 Degrees
Inflation pressure	0.05MPa
Relative annual air leakage rate of each compartment	⩽ 0.2%
The amplitude of electromagnetic interference induced in the secondary system (kV)	⩽ 1.6
The severity of operation without combustible gases, fire and explosion hazards, condensation and pollution in the surrounding area: by the first level regulations in GB3906	

Technical Parameter

Item	Unit	C-unit Load switch	F-uint Combination appliances	V-unit VCB	Isolating switch	Vacuum circuit breaker
Rated Voltage	kV	40.5	40.5	40.5	40.5	40.5
Rated current	A	630	125	630-3150	630-3150	630-3150
Rated frequency	Hz	50	50	50	50	50
Main circuit anode	μΩ	⩽ 200 ⩽ 60	⩽ 400 ⩽ 60	⩽ 200 ⩽ 60	⩽ 200 ⩽ 60	⩽ 200 ⩽ 60
Rated short-term power frequency withstand voltage	kV	95	95	95	95	95
Rated lightning impulse withstand voltage	kV	185	185	185	185	185
Rated short-circuit breaking current	kA	20-25	31.5	20-40	20-40	20-40
Rated short-circuit making current	kA	50	80	80	80	80
Rated short-term power frequency withstand voltage (break)	次	118	118	115	118	118
Rated lightning impulse withstand voltage (break)	kA	215	215	215	215	215
Rated short-circuit duration	s	4	4	4	4	4
Rated peak withstand current	kA	50	80	80	80	80
Three phase closing asynchrony /Three phase opening asynchrony	ms	⩽ 5	⩽ 3	⩽ 2		
Rated transfer current	A	1750				
Internal arc test (AFLR Class)	kA/s	31.5kA/0.5s(including busbar room, switch room, cable room)				
partial discharge	pC	⩽ 10				
Protection level		IP67	IP67	IP67		
Mechanical lifespan	Times	10000	10000	10000	3000	3000

Grounding and Separation

The C-GIS gas-insulated high-voltage switchgear comes in various current levels,such as 630A,1250A, 1600A,2000A,2500A,3150A,etc.The size of the switchgear can be customized to suit specific requirements. The outershell is made from an aluminum zinc-coated plate,while the gas box is welded using 304 high-quality stainlesssteel plates.Each unit can be expanded and combined independently based on the design plan.The switchgear is divided into different rooms:a secondary control room,busbar room,circuit breaker room,circuit breaker operating mechanism room,and cable room.The cable connection height can reach 700mm,making maintenance and installation convenient.The switchgear is also equipped with a comprehensive grounding protection system.The switchgear comprises isolated functional compartments, such as switch rooms,busbar rooms,cable rooms,and secondary circuit channels.A grounding metal partition separates each functional compartment and operates independently.



Assembly Diagram Of Inflatable Switchgear

Grounding and Separation

一 Secondary control room

The switchgear is located directly below the secondary control room and has boards for installing components and brackets for fixing terminal blocks. The secondary control room allows for the installation of various devices, such as wiring terminals, small busbar terminals, and comprehensive protection devices. These devices enable the system to perform functions such as remote control, telemetry, remote signaling, and local monitoring. Circular holes on the left and right side panels and terminals make it easy to connect the cabinet with small busbars

Secondary control room

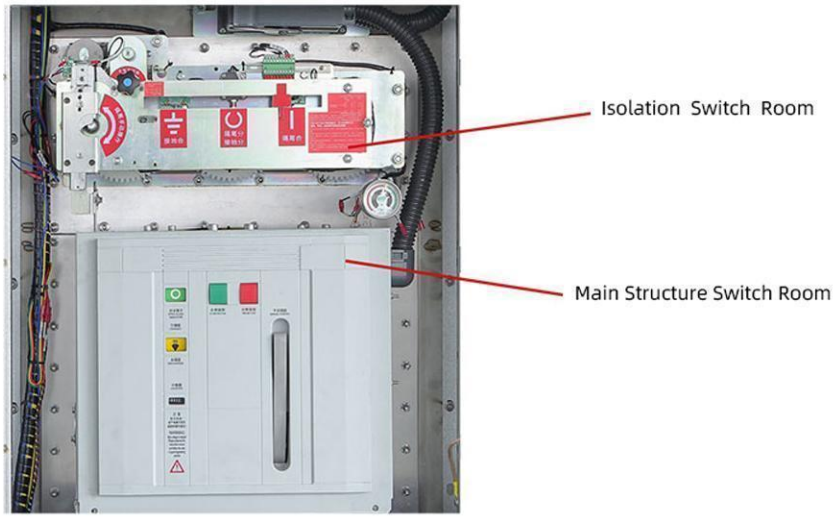
二 Busbar Compartment

The upper air box contains both the busbar room and the isolation mechanism. The circuit rooms and busbars on the left and right sides are securely linked together through cabinet merging once the cabinet is placed on the ground support.

Grounding and Separation

三 Switch Room

The gas-insulated switchgear has a plate-type structure with two chambers, one above the other, located in the center of the switchgear. The upper chamber contains a three-position isolation switch, while the lower chamber is equipped with a vacuum circuit breaker. The busbar, isolation switch, and circuit breaker are arranged in a vertical manner. The single chamber structure is simple, inexpensive, and easy to manufacture but has lower reliability due to the components' close proximity. On the other hand, the multi-chamber structure ensures high safety by avoiding mutual interference between components and allowing for easy replacement. However, it is a more complex, challenging to manufacture, and expensive option



四 Institutional Room

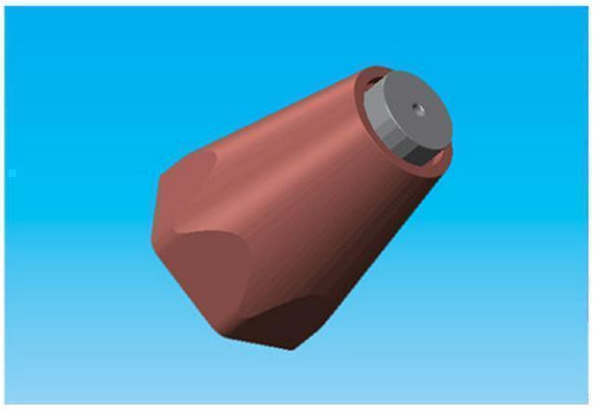
The spring-operated mechanism is situated in a flat plane, with the isolation and circuit breaker mechanisms separated independently. It is integrated with the insulation rod of the vacuum arc extinguishing chamber before and after, makingthe transmission process simpler. The mechanism's output characteristics better align with the circuit breaker's openingand closing attributes, resulting in reduced power usage and enhanced mechanical reliability and flexibility.

Grounding and Separation

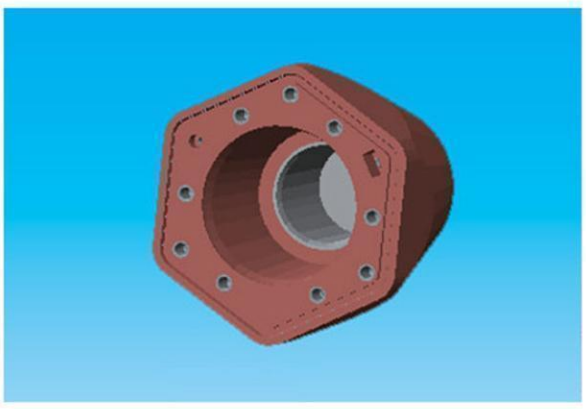
五 Cable Room

The cabinet sits above the cable room and has a separate pressure relief pathway. The distance from the ground to the cable connection terminals can be as high as 700mm. In compliance with regulations, grounding interlocks are present in the cable room, allowing for the installation of two cables and lightning arresters in each circuit. Further more, the internal cone insertion method connects the incoming and outgoing cables and lightning arresters.

电缆室
Cable Room



Cable Connector



Cabinet Connector

科迅安电气
KE XUN AN DIAN QI

户外电缆分支箱

Outdoor cable branch box

TRD-DFW-40.5/630-25

概述 Overview

35kv medium-voltage cable branch box is a supporting equipment for the cable transformation of the State grid, which is decorated in outdoor, indoor or buried places, and can connect the power cable with the box transformer, load switchgear, negative one-fusion combination electrical cabinet, ring network power supply unit, etc., to play the role of tap, branch, relay or conversion, providing great convenience for cable networking.

使用条件 Working condition

35kv medium voltage cable branch box conditions:
ambient temperature :-10℃-+40'C
Ambient humidity: the average daily relative humidity is 95% and below,
the average monthly relative humidity is 90% and below;
The earthquake was no more than eight degrees strong
No serious pollution, chemical corrosion and violent vibration.

技术参数 Technical parameters

	parameters
Rated voltage	40.5
Rated current	630
Rated frequency	50
Rated transfer current	/
Rated short-circuit withstand current duration: S	4
Rated short-time withstand current (main circuit) : KA	25
Rated peak withstand current (main circuit) : KA	63
Rated short-time withstand current (ground loop) : KA	21.7
Rated peak withstand current (ground loop) : KA	54.6
Rated short-time power frequency withstand voltage:	95
Rated lightning impulse withstand pressure	185
Rated short-time power frequency withstand voltage	118
Rated lightning impulse withstand voltage	215
Mechanical life	3000
Loop resistance	≤100
Rated operating voltage	220
Closing speed/Opening speed	≥3
Closing time/opening time	/
Three levels of different closing	≤5

KXAYZC-12

新能源一二次设备预制舱光伏

Photovoltaic of prefabricated cabin of new energy
Primary and secondary equipment

KXAYZC-12

新能源一二次设备预制舱光伏

Photovoltaic of prefabricated cabin of new energy Primary and secondary equipment

科迅安电气
KEXUN'AN ELECTRIC

概述 Overview

KXAYZC-12 new energy primary and secondary equipment prefabricated compartment photovoltaic is a product specially designed by our company for the box change equipment used in the northwest and northeast cold desert and harsh environment. In view of the temperature difference in the region (low cold or high temperature), more dust and other special features, the product uses a fully sealed double-layer temperature insulation split box, and the equipment is fully automatic heating and cooling equipment. Realize real-time monitoring and self-start function, effectively ensure the stable and reliable operation of the container. The remote device can be configured according to the requirements to realize the remote monitoring and operation of the switch and the whole process monitoring of the auxiliary information. It is a combination of high-voltage ring network switchgear, transformer, low-voltage switchgear, dual power supply detection device, power line fault automatic cutting system and low-voltage switch control part. Compact structure, safe and reliable. Free from external interference, the function expansion space is large, not only can real-time monitoring of signal power supply and fault analysis of high-voltage lines, but also can automatically cut out power faults through the relationship between voltage and time, and remote meter reading.

适用范围 Range of application

- Ventilation in a plateau or desert;
- Lighting in the plateau or desert;
- Power supply in the plateau or desert;

使用条件 Working condition

- Ambient temperature: maximum temperature +40℃, minimum temperature -25℃;
- Ambient temperature: the average daily relative temperature does not exceed 95%, the average monthly relative temperature does not exceed 90%;
- Altitude: no more than 1000 meters;
- Wind speed: outdoor wind pressure does not exceed 700pa (34m/s);
- Shockproof: horizontal acceleration is not more than 3m/s², horizontal acceleration of 1.5m/s²
- Installation site inclination: not more than 3 degrees;
- Installation environment: The surrounding air is not corrosive, flammable gas and other obvious pollution, installation site without violent vibration:
- Exceed the above conditions, you can negotiate with the company.

产品特点 Product feature

- Split structure, easy to change to the container transport;
- Fully sealed splicing, effective dustproof and waterproof, moisture release;
- Temperature condensation control, to ensure that the temperature and humidity in the box is stable
- Wind resistant structure, effectively prevent the impact caused by high temperature or desert strong airflow.

系列光伏升压变电站

Photovoltaic local
Step-up substation

科迅安电气
KE XUN AN DIAN QI

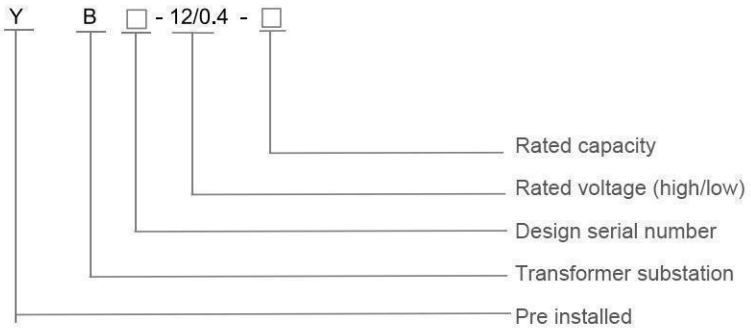
Photovoltaic power generation, as a clean energy production mode, has developed rapidly at home and abroad. It has made a great contribution to achieving carbon neutrality and reducing the pressure on energy imports. YBW series photovoltaic booster substation is to meet the growing demand for photovoltaic power generation, mostly used in industrial and commercial distributed photovoltaic power stations and centralized power stations. Under the premise of meeting various standards, the 10KV and 35KV European combined photovoltaic substations produced by our company have been optimized and upgraded to meet the needs of power generation boost in various scenarios. It has the advantages of small volume, high strength, easy installation and easy maintenance.

YBW 系列光伏升压变电站

YBW series photovoltaic step-up substation

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Type meaning



光伏升压变符合下列标准 The photovoltaic step-up transformer meets the following standards

GB1094. 1-1996 《Power Transformers Part 1: General Provisions》
GB1094. 2-1996 《Power Transformers Part 2: Temperature Rise》
GB1094. 3-2003 《Power transformers - Part 3: Insulation levels, insulation tests, and external insulation air gaps》
GB1094. 5-2008 《Power Transformers Part 5: Ability to withstand short circuits》
GB/T11022-1999 《Common technical conditions for high-voltage switchgear and control equipment standards》
GB14048. 1-2005 《Low voltage complete sets of equipment and control equipment - Part 1: General principles》
GB50150-2006 《Standard for Electrical Equipment Handover Test in Electrical Equipment Installation Engineering》
JB/T10217-2000 《Combination Transformer》

使用环境 Usage environment

- Posters shall not exceed 3000m;
- The ambient temperature range is -40 ℃~+45 ℃:
- Outdoor wind speed does not exceed 30m/s;
- Relative temperature: daily average not exceeding 95%, monthly average not exceeding 90%;
- The waveform of the power supply voltage is approximately sinusoidal, and the three-phase power supply voltage is approximately symmetrical;
- Installation location: Install in a place without fire, explosion hazard, severe pollution, chemical corrosion, and severe vibration.

Note: If the above normal usage environment conditions are exceeded, users can coordinate with our company to solve the problem.

技术参数 Technical parameter

- Rated voltage levels: 35KV and 10KV and below:
  insulation registration and level (see table below).

Voltage registration (kV)	Maximum voltage effective value of equipment (kV)	Effective value of rated short-term power frequency withstand voltage (kV)	Rated lightning impulse withstand voltage full wave peak value(kv)
≤1	≤1. 1	5	
10	12	35	75
35	40. 5	85	200

科迅安电气
KE XUN AN DIAN QI

35kv

华式箱变

35KV PV Pad mounted
Transformer

35kv华式箱变

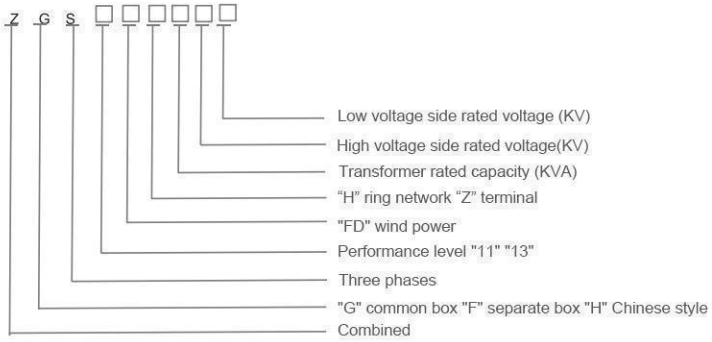
35KV PV pad mounted transformer

科迅安电气
KEXUN'AN ELECTRIC

概述 Overview

The 35KV PV pad mounted transformer is a combination transformer for wind power or photovoltaic power generation that integrates a step-up transformer, high-voltage fuse, load switch, low-voltage switch cabinet and corresponding auxiliary equipment. The capacity range is 500~6800KVA, and the voltage level It is 35kv and below, suitable for various onshore, pond and offshore photovoltaic and wind farms.

型号含义 Model meaning



技术参数 Technical Parameters

Project		Unit	Parameter				
Type			FYB-12(manual/electric)		FYB-24(manual/electric)	FYB-40.5 (manual/electric)	
Rated Voltage		KV	12		24	40.5	
1min Power frequency withstand voltage	Between each other, against the ground	KV	42		70	95	
	Isolate fracture		48		80	110	
Lightning impulse withstand current	Between each other, against the ground	KV	75		170	200	
	Isolate fracture		85		195	215	
Rated Current		A	315	630	400	315	630
Rated short circuit withstand current/2s		KA	12.5	20	16	12.5	20
Rated peak withstand current		KA	31.5	50	40	31.5	50
Making current		KA	31.5	20	40	31.5	50
100% load operation times		Times	30		30	30	
Mechanical life		Times	10000		1000	10000	

科迅安电气
KE XUN AN DIAN QI

储能变流升压舱

Energy storage
Conversion and surge tank

储能变流升压舱

Energy storage

Conversion and surge tank

科迅安电气
KEXUN'AN ELECTRIC

概述 Overview

The integrated equipment of this product includes dry-type transformers, PCS, high and low voltage switchgear, etc., with a voltage level of 6-35KV and a capacity range of 0.5-3.75MW.

产品功能 Product Function

The integrated design of "reverse" and "change" facilitates transportation, installation, and maintenance by integrating local controllers, achieving unified control scheduling and online fault diagnosis.

Integrated and efficient three-level topology energy storage inverter, with a maximum efficiency of 99% forced cold air, 110% long-term overload capacity, and no capacity reduction in a 50 °C environment. Integrated lithium battery charging and discharging management, extending battery life, supporting high/low voltage crossing, frequency crossing, fast power scheduling, and strong adaptability to the power grid. Suitable for various energy storage application scenarios such as peak shaving, frequency regulation and peak shaving, auxiliary new energy grid connection, etc., with PQ, VF, VSG, SVG and other functions, supporting off grid operation and "black start".

技术参数 Technical Parameters

型号 Model Number		FWSC1000A-MV35	FWSC1260A-MV35	FWSC2000A-MV35	FWSC2500A-MV35
直流 DC	Battery voltage range (v)	500~900			
交流 AC	Maximum apparent power (KVA)	1100	1386	2200	2750
	Rated output power (KW)	1000	1260	2000	2500
	Rated voltage (KV)	35			
	Voltage range (KV)	38.5±2×2.5%（6、10、22）可选			
	Rated current (A)	16.5	20.8	33	41.2
	Maximum output current (A)	18.1	22.9	36.3	45.4
	Rated rate (HZ)	50/62			
	Rate range (HZ)	45-55/55-65			
	THDi	<3%			
	Power factor	1 lead lag (adjustable)			
	Communication format	3W+PE			
交流数据 AC Data	Maximum efficiency	98%			
	Defense level	IP54			
	Noise	<75			
	Ambient temperature	-30°C~55°C			
	Cooling method	Temperature controlled forced air cooling			
	Relative humidity	0~95% non condensing			
	Altitude	5000m (derating above 3000m)			
	Dimensions w * D * H (mm)	4300*2438*2591		6058*2438*2591	
	Weight (kg)	4500		8000	
	Isolation voltage regulator	NO have			
	Shutdown self consumption (W)	<20		<40	
	Pressure regulator	Manual (default)/Automatic (optional)			

科迅安电气
KE XUN AN DIAN QI

中压箱式储能变流器

Medium voltage box
Type energy storage converter

中压箱式储能变流器

Medium voltage box

Type energy storage converter

科迅安电气
KEXUN'AN ELECTRIC

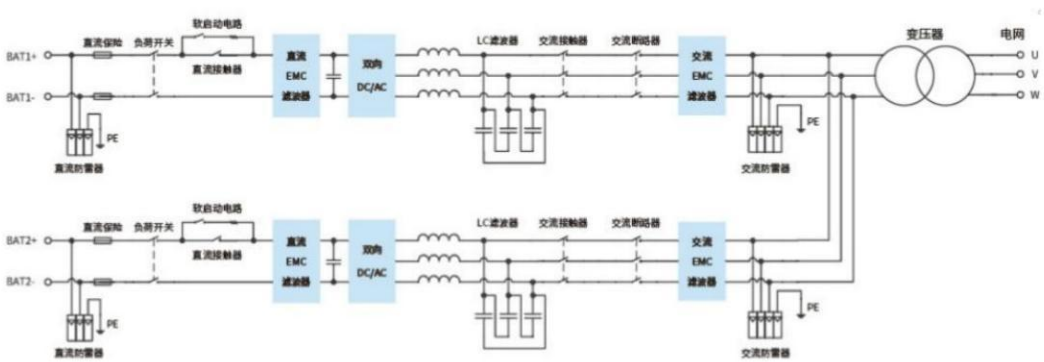
产品特点 Product feature

- Pre installed design, convenient for transportation and installation;
- IP54 protection level, suitable for harsh outdoor environments;
- Integrated inverter and step-up transformer, with high system efficiency and low cost;
- Friendly adaptability to the power grid, accepting power grid dispatch, and conducting active and reactive power compensation.

技术参数 Technical parameters

型号 Model number		1000-B-0D-10	1260-A-0D-10	1000-B-CD-35	1260-A-0D-35
直流侧参数 DC side parameters	Maximum input voltage	1000v	1000v	1000v	1000v
	Maximum DC current	2*1055A	2*1219A		
	Battery pack voltage range	580-850v	580-850v	580-850v	580-850v
	Number of accessible battery packs	2	2	2	2
电网侧参数 Grid side parameters	Rated AC power	1000kw	1260KW	1000KW	1260KW
	Maximum AC power	1200kw	1386KW	1200KW	1386KW
	Rated grid voltage	10kv	10KV	35KV	35KV
	Maximum AC current	69.2A	80A	19.7A	22.9A
	Rated grid frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
	Total harmonic distortion rate at rated power	<1.5%(>50% load)	<1.5%(>50% load)	<1.5%(>50% load)	<1.5%(>50% load)
	power factor	>0.99 (>20%load)	>0.99 (>20%load)	>0.99 (>20%load)	>0.99 (>20% load)
	Adjustable range of power factor	-1~+1	-1~+1	-1~+1	-1~+1
	Isolation method	Oil immersed transformer/dry type transformer			
	Maximum efficiency	98.08%			
	Protection level	IP54-30~+55℃			
	Working environment temperature	-30~+55℃			
	Permissible temperature range	0-100% (No condensation)			
	No reduction in altitude	4000m			
	Cooling method	Temperature controlled forced air cooling			
	Communication interface	RS485/CAN/Ethernet			
机械参数 Mechanical parameters	External dimensions (width/height/depth)	4708*2895*2438mm (Oil immersed) 4500*2896*2438 (Dry-type)		4708*2896*2438mm (Oil immersed) 6058*2896*2438 (Dry-type)	
	Weight	9500kg	9500kg	10400kg	10500kg

线路图 Circuit diagram



科迅安电气
KE XUN AN DIAN QI

BWG

光伏并网柜

Photovoltaic grid
Connection cabinet

光伏并网柜

Photovoltaic grid Connection cabinet

科迅安电气
KEXUN'AN ELECTRIC

概述 Overview

BWG photovoltaic grid connected cabinet is an important component that undertakes centralized inverters and step-up transformers or AC combiner box step-up transformers. The incoming line of this photovoltaic grid connected cabinet uses a short-circuit breaker input or direct input, and the output uses a circuit breaker or load isolation switch. The busbar is connected with electroplated or purified wire, and provides secondary lightning protection. The maximum rated voltage of the system is AC690V, and the protection level is | P40 indoors and | P65 outdoors; The cables for secondary measurement and control include cables with a current greater than 2.5mm2, cables with a voltage of 1.5mm2, and cables with a control voltage greater than 1.0mm2. The measuring current transformer is a current transformer of level 0.5, and the measuring current transformer is a current transformer of level 0.25. Relevant functions can also be added according to customer requirements. This product adopts professional electrical design, is simple, beautiful, convenient for on-site wiring and maintenance, and ensures long-term stable operation of the equipment.

技术参数 Technical Paremeters

型号 Model	BWG
Maximum input voltage	690VAV
Rated frequency	50HZ
Maximum rated frequency	3150A
Measure current	Three-phase current, three-phase voltage, active power, apparent power,power factor, frequency, electrical degree
Communication mode	RS485 bus/standard MODBUS-RTU protocol RS485bus/standard MODBUS-PTU protocol
Temperature and humidity	Working temperature: -40~+85 ℃, temperature 95%, no condensation, no corrosive gas in the workplace
Altitude	≤4000m
Cabinet material	Hot dip galvanized steel plate/stainless steel/cold-rolled steel plate
Protection level	IP40
Volume (width * height * depth)	2260mm*800mm*600mm
Installation method	Floor standing

科迅安电气
KE XUN AN DIAN QI

KXAHLX-AC

光伏交流汇流箱

Photovoltaic AC
Combiner box

KXAHLX-AC光伏交流汇流箱
Photovoltaic AC current box

科迅安电气
KEXUN'AN ELECTRIC

概述 Overview

KXAHLX photovoltaic grid connected box is an important power protection part suitable for series photovoltaic power generation systems, which is used to connect series inverters and power grid systems. The circuit protection part adopts photovoltaic grid connected circuit breakers, pull ring isolation switches, and adopts secondary explosion-proof protection. The protection level is the same as the series inverter | P65, meeting the requirements of outdoor installation, and meeting the requirements of waterproofing, dust-proof, UV protection, salt spray corrosion prevention, etc. The internal structure of this product is concise and the wiring is neat and reasonable. High reliability, simple maintenance, outdoor wall mounted installation, able to adapt to various harsh environments. In addition to standard materials and sizes, customization can be made according to user requirements. The KXAHLX-AC photovoltaic AC combiner box is an important component suitable for series photovoltaic power generation systems, which is used to connect series inverters with AC distribution cabinets or step-up transformers. The incoming line of this combiner box uses a circuit breaker input, and the output uses a circuit breaker or load isolation
switch. After the busbar converges, it adopts secondary lightning protection. The maximum rated voltage of the system is AC690V, and the protection level is | P65, which meets the requirements for outdoor installation, Meet the requirements of waterproofing, dust prevention, UV protection, and salt spray and turbidity prevention.
This product greatly simplifies the wiring between the string inverter and the AC distribution cabinet or step-up transformer. The internal structure of this product is simple and clear, and the wiring is neat and reasonable. High reliability and simple maintenance. Outdoor wall mounted installation, capable of adapting to various harsh environments. In addition to standard materials and sizes, customization can be made according to user requirements.

技术参数 Technical Parameters

Project	FWHLX-AC4	FWHLX-AC6	FWHLX-AC8
Number of input channels	1~4	5~6	7~8
Maximum input voltage	AC690		
Each input current	0~100A		
Maximum output current	250A	400A	630A
Rated working voltage Un	480VAC		
Voltage protection level Up	480VAC		
Nominal flow capacity In (8/20 μ S)	20KA (optional according to customer requirements)		
Maximum flow capacity Imax (8/20 μ S)	40KA (optional according to customer requirements)		
Response time	<25ns		
Temperature and humidity	Working temperature: -40~+85 ℃, temperature 95%, no condensation, no corrosive gas in the workplace		
altitude	≤4000m		
Cabinet material	Hot dip galvanized steel plate/stainless steel/cold-rolled steel plate		
Cabinet protection level	IP65		
Cable joint protection level	IP66		
Cable joint protection level volume (width * height * depth)	800mm*600mm*200mm	800mm*800mm*200mm	800mm*1000mm*200mm

科迅安电气
KE XUN AN DIAN QI

KXAHLX-PY

光伏直流汇流箱

Photovoltaic AC
Combiner box

KXAHLX-PY 光伏直流汇流箱

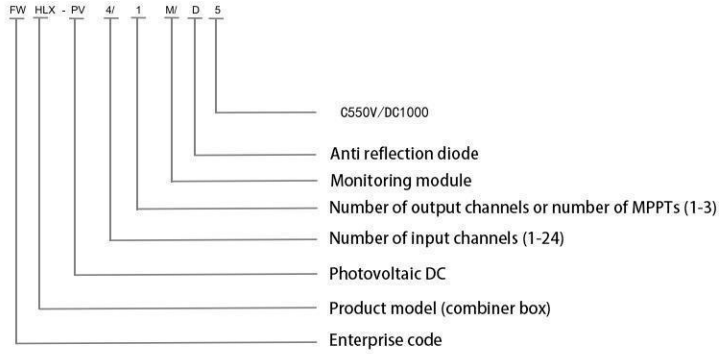
Photovoltaic AC Combiner box

科迅安电气
KEXUN'AN ELECTRIC

概述 Overview

KXAHLX-PY photovoltaic combiner box is suitable for inverters with a maximum input voltage of DC550V/DC1000V. The box is made of PVC engineering material and has tests for fire resistance, flame retardancy, temperature rise, impact resistance, UV resistance, etc. The protection level reaches | P65, etc. This product is designed and configured strictly in accordance with the requirements of the "Technical Specification for Photovoltaic Convergence Equipment" CGC/GF037:2014, providing users with a safe, concise, aesthetically pleasing and applicable photovoltaic system product.

型号含义 Model meaning



技术参数 Technical Parameters

Project				
电气参数 Electrical parameters	Maximum DC voltage of the system	1000	1000	1000
	Maximum input current per circuit	20A	20A	20A
	Maximum number of input channels	6	6	8
	Maximum output switch current	32A/40A	20A/32A	20A/32A
	Number of MPPT inverters	2	3	2
	Output modes	2	3	2
防雷保护 Lightning Protection	Experimental category	2-pole protection	2-pole protection	2-pole protection
	Nominal discharge current	20KA	20KA	20KA
	Maximum discharge current	40KA	40KA	40KA
	Voltage protection level	3.8KV	3.8KV	3.8KV
	Maximum continuous operating voltage	1050V	1050V	1050V
	Number of poles	3P	3P	3P
	Structural characteristics	Plug and play modules	Plug and play modules	Plug and play modules
防雷特点 Lightning protection characteristics	Protection level	IP65		
	Output switch	DC circuit breaker (standard)/DC rotary isolation switch (optional)		
	SMC4 waterproof joint	Standard configuration		
	Photovoltaic DC fuse	Standard configuration		
	Photovoltaic DC surge protector	Standard configuration		
	Detection module	N		
	Anti reflection diode	N		
	Box material	PVC		
	Installation method	Wall mounted		
	working temperature	-25℃~+55℃		
	Altitude	2000 meters		
	Allow relative temperature	0~95% (No condensation)		
	Width * Height * Depth (mm)	400*300*160	500*400*190	500*400*190

科迅安电气
KE XUN AN DIAN QI

YB□-12/0.4-630

户外预装式变电站（欧式）

Outdoor prefabricated
Substation (European type)

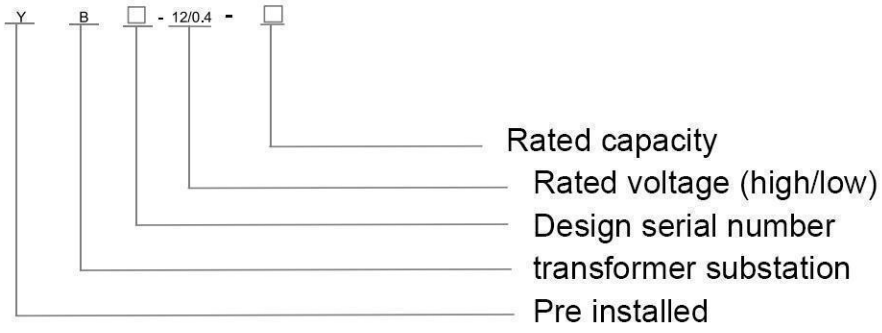
YB □-12/0.4-630 outdoor prefabricated substations (European style) are widely used in urban power grid renovation, residential communities, high-rise buildings, industrial and mining, hotels, shopping malls, airports, railways, oil fields, docks, highways, and temporary electrical facilities, both indoors and outdoors.

YB□ -12/0.4-630户外预装是变电站（欧式）

Outdoor prefabricated Substation (European type)

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Moedl meaning



使用条件 Working conditions

- The altitude does not exceed 2000m;
- Environmental temperature: -25 ℃~+40 ℃;
- Relative temperature: At 25 ℃, the daily average value shall not exceed 95%, and the monthly average value shall not exceed 90%:
- Installation location: A place without fire, explosion hazards, conductive dust, chemical corrosive gases, and severe vibrations. If the above conditions are exceeded, users can negotiate with our company

功能特点 Function features

- High voltage switchgear, distribution transformers, low-voltage switchgear, energy metering equipment, and reactive power compensation devices are combined according to a certain scheme, and the complete set is strong;
- Complete high and low voltage protection, safe and reliable operation, and simple maintenance;
- Small footprint, low investment, short production cycle, and convenient mobility;
- Flexible and diverse wiring schemes;
- Unique structure: The unique honeycomb structure has a double-layer (composite plate) outer shell that is sturdy, heat-insulating, ventilated, aesthetically pleasing, and has a high level of protection. The outer shell materials include stainless steel alloy, aluminum alloy, cold-rolled plate, and color steel plate;
- Diverse types: universal, villa, compact, and more;
- The high-voltage ring main cabinet can be equipped with network automation terminals (FTUs) to achieve reliable detection of short circuits and single-phase grounding faults, and has the "four remote" function for easy upgrading of distribution network automation

变压器 Transformer

The intelligent integrated substation adopts low loss, oil immersed, fully sealed S9, S10, and S11 series transformer, and can also choose resin insulated or NOMEX paper insulated environmentally friendly dry-type transformers. The bottom can be equipped with a small car, and the transformer can be easily accessed and exited.

高压侧 High voltage side

The high-voltage side of intelligent integrated substations is generally protected by a load switch fuse combination electrical device. After one phase of the fuse is fused, the three-phase linkage is tripped. The load switch can be selected in various forms such as compressed air, vacuum, and sulfur hexafluoride, and can be equipped with an electric operating mechanism to achieve automatic upgrading; The fuse is a high-voltage current limiting fuse with an impact device, which is reliable in operation and has a large breaking capacity. The main technical parameters are shown in the table below. For transformers above 800KVA, vacuum circuit breakers such as ZN12, ZN28, and VS1 can be used for protection.

低压侧 Low voltage side

The low-voltage side main switch adopts universal or intelligent circuit breakers for selective protection: the outgoing switch adopts a new type of plastic shell switch with small volume and short arc, up to 30 circuits; The intelligent automatic tracking device is free of charge, with two switching methods available for users to choose from: contact and contactless.

执行标准 Execution standards

This product meets the following standards:

GB/T17467-1998 《High voltage/low voltage prefabricated substations》

DL/T537-93 《Technical Conditions for Ordering 6-35KV Box Substation》

负荷开关技术参数 Technical parameters of load switch

Project	Unit	FKN12-12 Load switch	FZN25-12 Vacuum load switch
Rated voltage	KV	10	
Maximum working voltage	KV	12	
Rated frequency	HZ	50	
Rated current	KA	630	
Rated breaking load current	A	630	
Thermal stable current (effective value)	KA/S	20/2	20/4
Dynamic stable current	KA	50	50
Short circuit making current (peak)	KA	50	50
Number of full load interruptions	Times	20	10000
Mechanical lifespan	Times	2000	10000
1min power frequency withstand voltage	K V	42	42
Lightning impulse voltage (relative and ground)	KV	75	75

负荷开关技术参数 Technical parameters of load switch

Model		Rated voltage（KV）	Breaking current (A)	Breaking current (A)	Rated current of melt (A)
UK models	Chinese model				
SDL※J	XRNT-12	12	40	31.5	6.3、10、16、20、31.5、40
SFL※J		12	100	31.5	50、63、71、80、100
SKL※J		12	125	31.5	125

Model	Release form	Rated current of release (A)	OnV/Off Capability KA（AC380）
DW15-630	Thermal electromagnetic or electronic properties	315、400、630	40
DW15-1000	Thermal electromagnetic or electronic properties	630、800、1000	50
DW15-1600	Thermal electromagnetic or electronic properties	1600	50
DW15-2500	Thermal electromagnetic or electronic properties	1600、2000、2500	60
CW1-2000	Intelligent	630 、800、1000、1250、1600、2000	65
CW1-3200	Intelligent	2000、2500、3200	100

一次方案 Primary plan

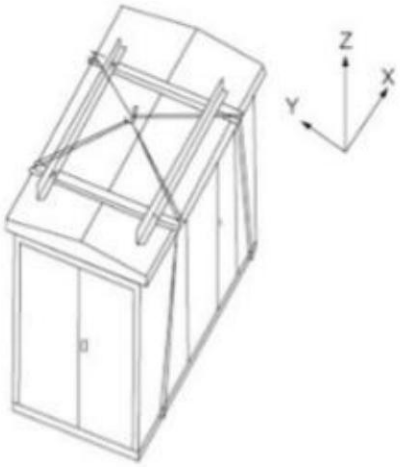
Substation primary plan (refer to attached figure)

Typical scheme example diagram
Typical scheme example diagram (refer to the attached figure).

Foundation and layout plan

Substation foundation diagram (refer to attached diagram);

Substation layout (refer to the attached diagram),
users can choose according to their needs



Product lifting diagram

安装，使用与维护 Installation, Use, and Maintenance

In terms of installation, acceptance, handover testing, operation and maintenance of intelligent integrated substations, in addition to the various regulations required by the power department, attention should be paid to the following matters:

◆ Users should carefully inspect the goods according to relevant regulations when receiving them. For products that are not installed immediately, they should be stored in appropriate places according to normal usage conditions.
◆ The product should be lifted using a dedicated lifting tool at the bottom, as shown in the product lifting diagram.
◆ The product is placed horizontally on a pre made foundation, and then the gap between the product base and the foundation is sealed with cement mortar to prevent rainwater from entering the cable room. The high and low voltage cables are connected through the bottom sealing plates of the high and low voltage rooms.
◆ After the product is installed in place, reliable grounding should be done. The two main grounding terminals on the channel steel of the power station base, the neutral point of the transformer and the outer shell, and the pile head under the lightning arrester should be grounded separately by the installation department. All grounding devices should use a total of one set, and their grounding resistance should be less than 4 ohms.
◆ After installation or maintenance, the product should undergo the following inspections and tests before being put into operation:

★ Whether the substation is clean;
★ Whether the operating mechanism is flexible;
★ Whether the main electrical appliances are flexible and reliable in making and breaking;
★ Whether the on/off of electrical auxiliary contacts is reliable and accurate;
★ Whether the operation of the meter and relay is accurate and error free;
★ Whether the transformation ratio and wiring polarity of instruments and transformers are correct;
★ Are all electrical installation nuts tightened and installed securely and reliably
★ Whether the busbar wiring is good, and whether the supporting insulators and clamps are installed reliably;
★ Whether the setting value of the electrical appliance meets the requirements, and whether the specifications of the fuse core are correct;
★ Whether the contacts of the main electrical appliances and auxiliary circuits meet the requirements of the electrical schematic.

◆Maintenance

★ All components in the product are maintained according to their respective technical requirements:
★ If the selected transformer is oil immersed, at least one oil sample analysis inspection should be conducted annually according to regulations:
★ After 20 on load or 2000 off load opening and closing operations of the high-voltage side switchgear in operation, the condition of the contacts and the degree of loss of the arc extinguishing device should be checked. If any abnormalities are found, they should be repaired or replaced in a timely manner;
★ After the low-voltage switchgear trips automatically, the cause of the trip should be checked and analyzed. Only after the fault is eliminated can it be put back into operation.
★ Lightning arresters should undergo a preventive test once a year before the arrival of the thunderstorm season;
★ Note: The product comes with a packing list, certificate of conformity, installation and operation manual, electrical wiring diagram, and instructions for the main components and equipment used in this product, key operation tools, and spare parts provided according to the agreement.

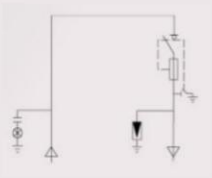
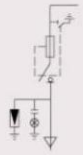
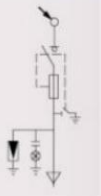
YB -12/0.4-630户外预装是变电站（欧式）

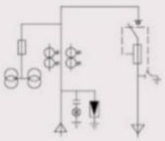
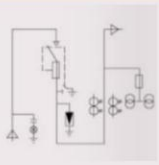
Outdoor prefabricated

Substation (European type)

科迅安电气
KEXUN'AN ELECTRIC

技术方案图例 Technical solution legend

Plan number		01	02	03
主回路单线图 Main circuit single line diagram				
用途 Use To		Terminal type cable inlet/primary outlet	Terminal type (reverse) incoming line	Terminal type overhead incoming line
柜型 Cabinet type		HXGN-12	HXGN-12	HXGN-12
Selection of primary equipment	Vacuum circuit breaker VS1. Zn28			
	Load switch FN, FZN, FLN	1	1	1
	Isolation switch GN			
	FUSE XRNT	3	3	3
	Fuse RN2			
	Lightning arrester HY5W	3	3	3
	Charged display GSN	1	1	1
	Current transformer LZZBJ			
	Voltage transformer JDZ			

Plan number		04	05	06
主回路单线图 Main circuit single line diagram				
用途 Use To		Terminal type vacuum circuit breaker incoming line	Terminal incoming line metering \ primary outgoing line	Terminal type cable inlet/outlet
Cabinet type		XGN66-12	HXGN-12	HXGN-12
Selection of primary equipment	Vacuum circuit breaker VS1. Zn28	1		
	Load switch FN, FZN, FLN		1	1
	Isolation switch GN	2		
	FUSE XRNT		3	3
	Fuse RN2		3	3
	Lightning arrester HY5W	3	3	3
	Charged display GSN	1	1	1
	Current transformer LZZBJ	2	2	2
	Voltage transformer JDZ		2	2

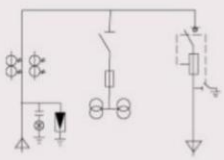
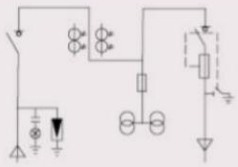
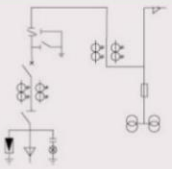
YB -12/0.4-630户外预装是变电站（欧式）

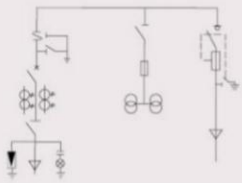
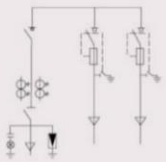
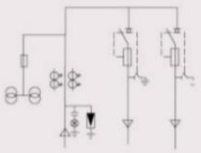
Outdoor prefabricated

Substation (European type)

科迅安电气
KEXUN'AN ELECTRIC

技术方案图例 Technical solution legend

Plan number		01	02	03
Main circuit single line diagram				
Use TO		Terminal type incoming line metering \ PT \ primary outgoing line	Terminal type primary inlet/metering /primary outlet	Terminal incoming line metering/ secondary outgoing line
Cabinet Type		HXGN-12	HXGN-12	XGN66-12
Selection of primary equipment	Vacuum circuit breaker VS1. Zn28			1
	Load switch FN, FZN, FLN	1	2	
	Isolation switch GN	1		2
	FUSE XRNT	3	3	3
	Fuse RN2	3	3	3
	Lightning arrester HY5W	3	3	3
	Charged display GSN	1	1	1
	Current transformer LZZBJ	2	2	4
	Voltage transformer JDZ	2	2	2

Plan number		04	05	06
Main circuit single line diagram				
Use TO		Terminal type circuit breaker incoming /PT/primary outgoing line	Terminal type primary inlet/secondary outlet	Terminal incoming line metering /secondary outgoing line
Cabinet Type		HXGN66-12 HXGN-12	HXGN-12	HXGN-12
Selection of primary equipment	Vacuum circuit breaker VS1. Zn28	1		
	Load switch FN, FZN, FLN	1	3	2
	Isolation switch GN	3	1	
	FUSE XRNT	3	6	6
	Fuse RN2	3		3
	Lightning arrester HY5W	3	3	3
	Charged display GSN	1	1	1
	Current transformer LZZBJ	2	2	2
	Voltage transformer JDZ	2		2

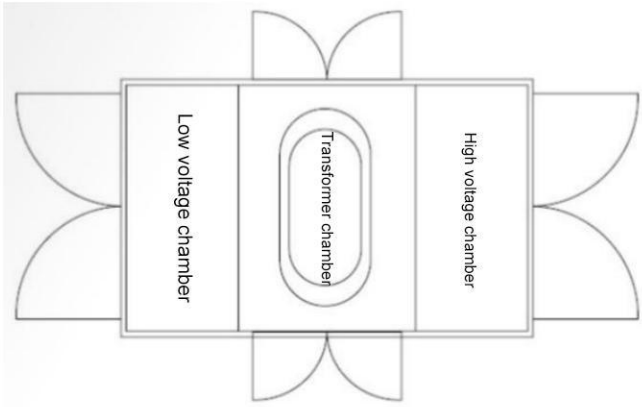
YB -12/0.4-630户外预装是变电站（欧式）

Outdoor prefabricated

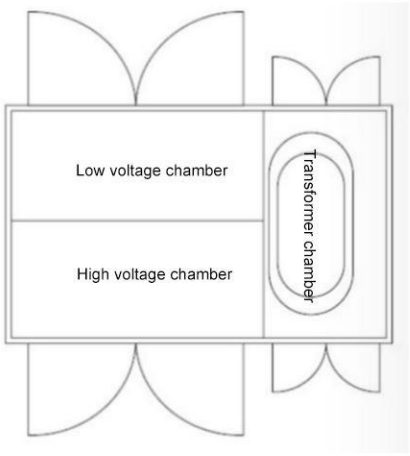
Substation (European type)

科迅安电气
KEXUN'AN ELECTRIC

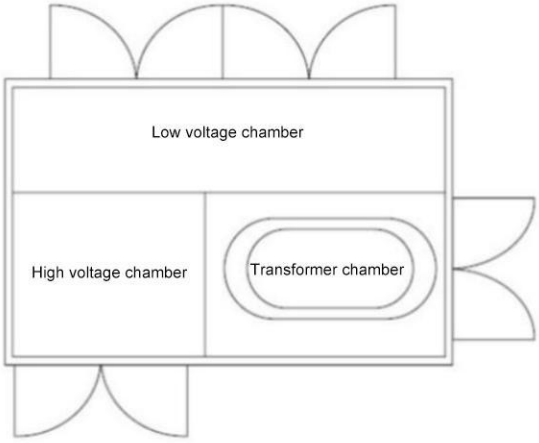
变电站平面布置图 Substation layout plan



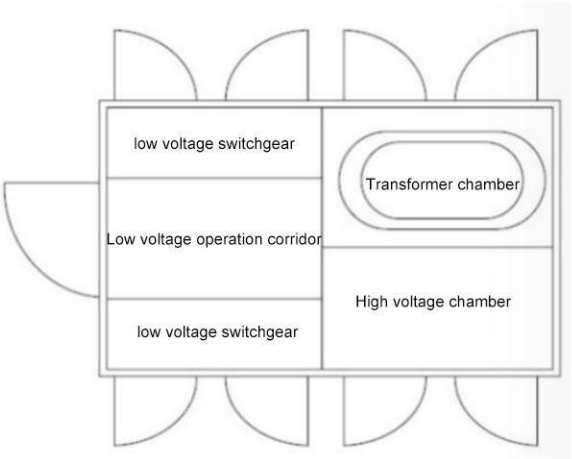
Equipment arrangement and distribution diagram 1



Equipment arrangement and distribution diagram 2



Equipment arrangement and distribution diagram 3



Equipment arrangement and distribution diagram 4

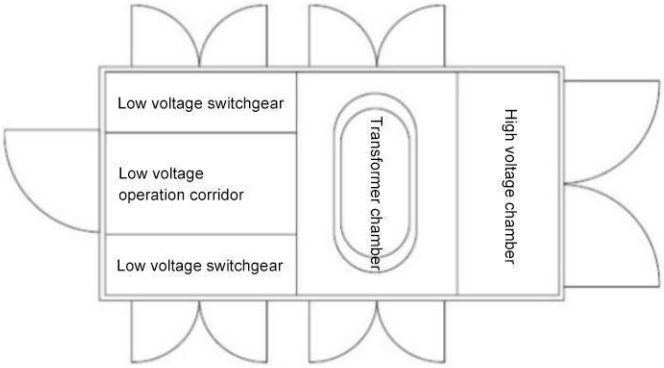
YB -12/0.4-630户外预装是变电站（欧式）

Outdoor prefabricated

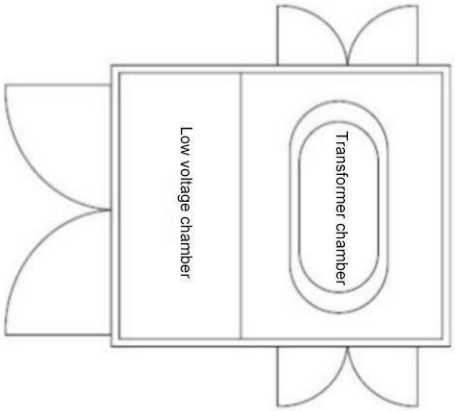
Substation (European type)

科迅安电气
KEXUN'AN ELECTRIC

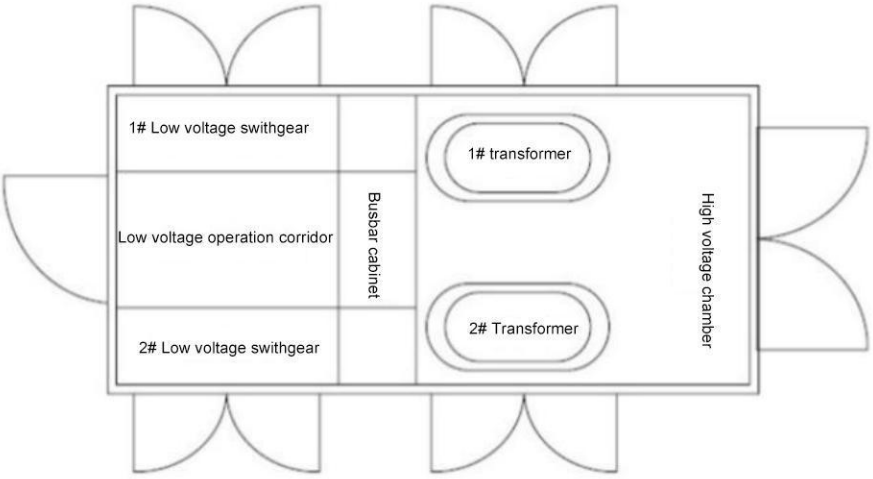
变电站平面布置图 Substation layout plan



“目”字型结构带压走廊
"Mu" - shaped structure with pressure corridor



简易型箱变不带高压室
Simple box transformer without high-voltage chamber



“目 ”字型结构两台变压器
"Mu" - shaped structure with two transformers

ZGS
美式箱变

American type prefabricated substation

This product is developed by absorbing the latest advanced technology from abroad and combining it with the actual situation in China. The entire product has the characteristics of small size, easy installation and maintenance, low noise, low loss anti-theft, strong overload capacity, and full protection. Suitable for newly built residential green belts, parks, stations, hotels, construction sites, airports, and other places.

ZGS American style box transformer is suitable for 10KV ring network power supply, dual power supply or terminal power supply systems, as a transformer, metering, compensation control and protection device.

This product meets the following standards:

GB/T17467-1998 "High voltage and low voltage prefabricated substations"

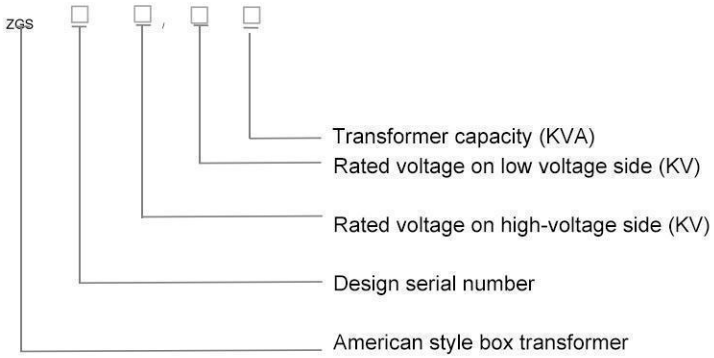
DL/T137-93 Technical Conditions for Ordering 6-35KV Box Substation

ZGS 美式箱变

American type
prefabricated substation

科迅安电气
KEXUN'AN ELECTRIC

符号含义 Model meanings



使用条件 Working conditions

- Altitude not exceeding 1000 meters
- Environmental temperature: -35 ℃~+40 ℃:
- Relative temperature:, daily average value not exceeding 90%,
  May average value not exceeding 90%:
- Installation location: No fire, explosion hazard, chemical corrosive gas,
  and well ventilated place, ground inclination angle not exceeding 3 °.

功能特点 Function features

- Fully insulated, fully sealed, maintenance free, and reliable to ensure personal safety;
- Compact structure, with a volume of only 1/3 to 1/5 of the same capacity of European transformers, and low height;
- A split box structure can be adopted to avoid oil contamination in the transformer oil tank;
- The high-voltage side adopts dual fuse weight range protection, greatly reducing costs;
- It can be used for ring networks or terminals, and the cable head can be urgently plugged and unplugged when the load current is 200A; The box adopts a honeycomb double layered composite board, which has the function of temperature insulation and heat dissipation
- Install an electronic phase loss protector on the low-voltage side, which can quickly disconnect the main incoming switch when abnormal voltage occurs in the system; High voltage oil immersed load switch or SF6 load switch can be upgraded electrically, laying the foundation for achieving distribution network automation; Use oil immersed S9 or better performing S11 series transformers.

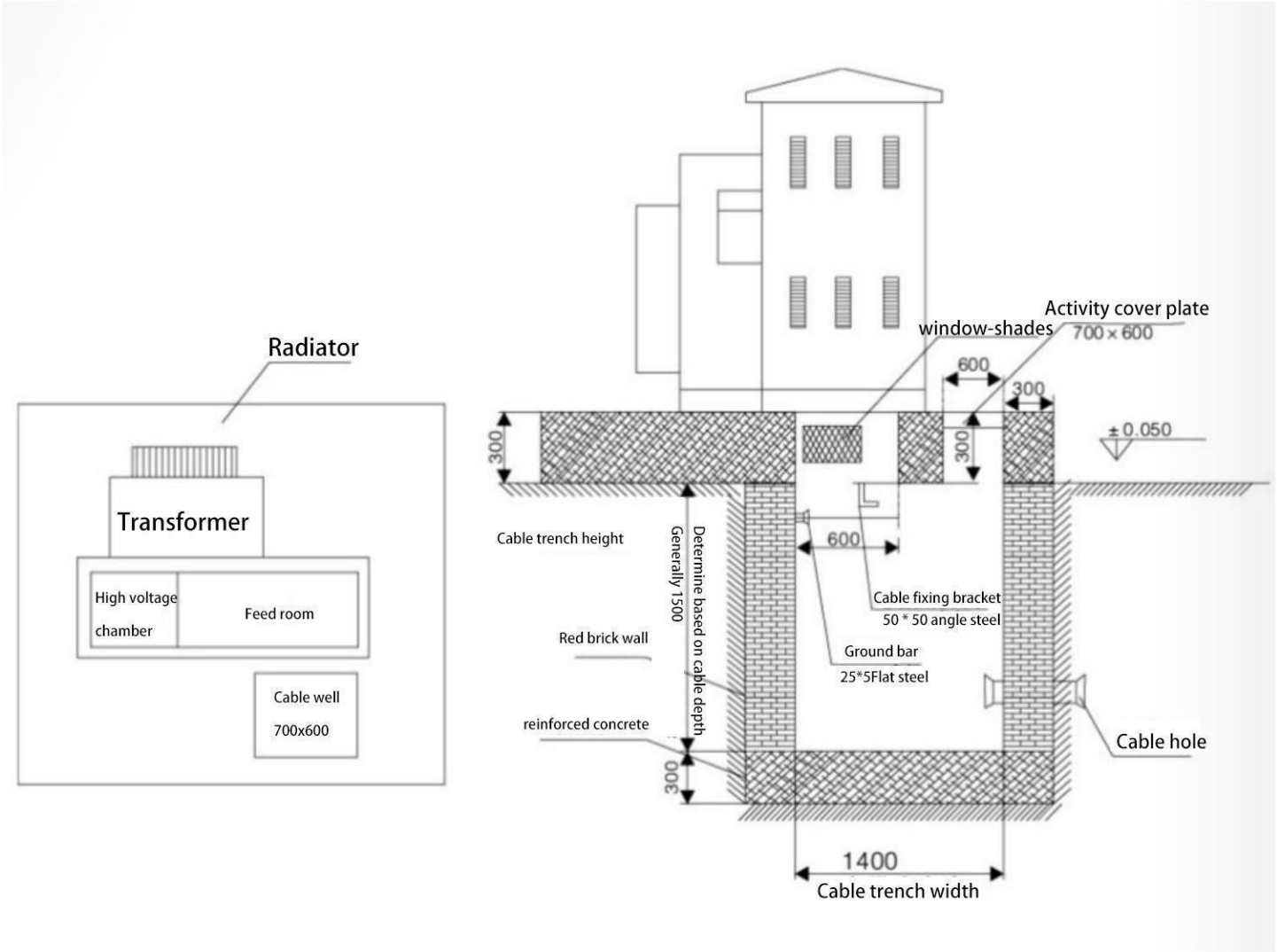
技术参数 Technicalparameters

Project	Unit	Parameters
Rated voltage	KV	10/0. 4 (High voltage/Low voltage)
Maximum working voltage	KV	12 (High voltage side)
Rated frequency	HZ	50
Rated capacity	KVA	50-1600
1 minute power frequency withstand voltage	KV	35
Cooling method for lightning impulse voltage	KV	75
Cooling method		ONAN
High voltage backup fuse breaking current	KA	50
Insertion fuse breaking current	KA	2. 5
ambient temperature	℃	-35~+40
Permissible temperature rise of the coil	℃	65
No load voltage regulation		±5% / ±2×2. 5%
Noise level	db	50
Protection level		|p43

Civil engineering drawing of substation cable inlet and outlet（ZB□）

Technical requirements:

- For dimensions, please refer to the actual dimensions of the combination variable;
- The concrete foundation machine should have a flat surface, and the combined substation should be fixed on the foundation using pressure plates;
- The types of grounding bars and cable fixing brackets can be determined according to the actual situation;
- Cable fixing brackets and grounding bars should be pre embedded;
- The position of cable holes for incoming and outgoing lines depends on the specific situation;
- After the installation of the combination transformer, there must be a gap of no less than 1.5m on the front of the switch for easy operation;
- The grounding grid can be made of 12 galvanized round steel or 40 × 4 galvanized flat copper, and the grounding resistance should meet the requirements of the power department.



ZGS 美式箱变

Americantype
prefabricatedsubstation

科迅安电气
KEXUN'AN ELECTRIC

KYN61-40.5

科迅安电气
KE XUN AN DIAN QI

铠装移开式交流金属封闭开关设备

Armored removable AC metal
Enclosed switchgear

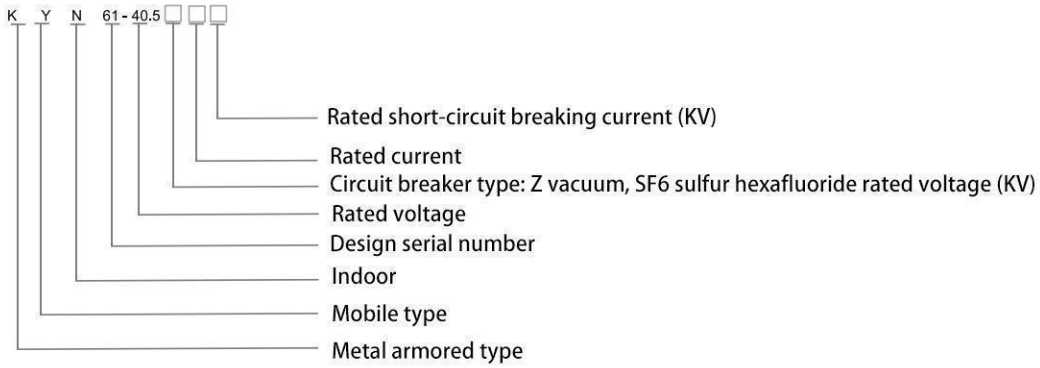
KYN61-40.5 (Z)　　mounted portable AC, metal enclosed switchgear, hereinafter referred to as switchgear, is suitable for three-phase AC 50Hz power systems. It is used for receiving and distributing electrical energy in power plants, substations, and distribution rooms of industrial and mining enterprises, and for controlling, protecting, and monitoring circuits.
This product meets the standards: GB3906《3-35KV AC Metal Enclosed Switchgear》, GB/T11022《Common Technical Requirements for High Voltage Switchgear and Control Equipment Standards》, and IEC60298《AC Metal Enclosed Switchgear and Control Equipment with Rated Voltages of 1KV and Below 50KV》.

KYN61-40.5铠装移开式交流金属封闭开关设备

Armored removable AC metal
Enclosed switchgear

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Model meanings



使用环境 Working conditions

- Surrounding air temperature: maximum temperature+40 ℃, minimum temperature -10 ℃
- Altitude: ≤ 1000m;
- Relative humidity around: daily average ≤ 95%, monthly average ≤ 90%

技术参数 Technical parameters

Project		Unit	Parameters
Rated voltage		KV	40.5
Rated insulation level	Lightning impulse withstand voltage (full wave)	KV	185
	Power frequency withstand voltage (1min)		95
Rated frequency		HZ	50
Rated current		A	630；1250；1600；2000
Rated short-circuit switching current		KV	20、25、31.5
Rated short-circuit making current		KA	50、63、80
Rated peak withstand current		KA	50、63、80
Rated short-term withstand current		KA	20、25、31.5
Shell protection level			IP4X
External dimensions (width * depth * height)	Vacuum circuit breaker cabinet body	mm	1400*2800*2600
	SF6 circuit breaker cabinet		

Project		Unit	Parameters	
			ZN85A-40.5/VD4	SF1/SF2
Rated voltage		KV	40.5	
Rated insulation level	Lightning impulse withstand voltage (full wave)	KV	185	
	Power frequency withstand voltage (1min)		95	
Rated frequency		HZ	50	
Rated current		A	1250；1600；2000	630；1250；2500
Rated short-circuit breaking time		KV	20、25、31.5	25、31.5
Rated short-circuit making current (peak)		KA	50、63、80	63、80
Rated dynamic stable current (peak)		KA	50、63、80	63、80
4s thermal stability current (peak)		KA	20、25、31.5	25、31.5（3s）
Opening time		ms	36~60	≤45
Closing time		ms	40~90	≤75
Rated operating sequence			Open -0.35 Close Open 180s Close Open	

科迅安电气
KE XUN AN DIAN QI

KYN28-12

New type of armored removable AC metal enclosed switchgear

KYN28A-12 (Z) (GZS1) armored movable AC metal enclosed switchgear (hereinafter referred to as "switchgear") is suitable for three-phase AC 50HZ power systems, used for contacting and distributing electrical energy, and controlling, protecting, and monitoring circuits.

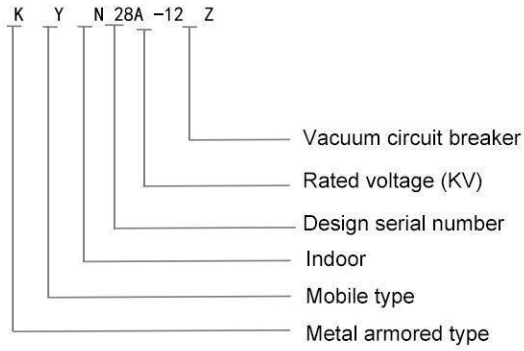
This product complies with the following standards: GB3906 "3-35KV AC Metal Enclosed Switchgear" GBT11022 "Common Technical Requirements for High Voltage Switchgear and Control Equipment Standards", 1EC60298 " AC Metal Enclosed Switchgear and Control Equipment with Rated Voltage of 1kV and Above"

KYN28-12 新型铠装移开交流金属封闭开关设备

New armored removable
AC Metal -enclosed switchgear

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Model meanings



使用条件 Working conditions

- Surrounding air temperature: maximum temperature+40 ℃, minimum temperature -15 ℃:
- Relative humidity: Daily average relative humidity: ≤ 95%, daily average water vapor pressure does not exceed 2.2KPa; Monthly average relative humidity ≤ 90%; The monthly average water vapor pressure does not exceed 1.8KPa; Altitude: ≤ 1000m:
- Earthquake intensity: not exceeding level 8;
- The surrounding air should not be significantly polluted by corrosive or combustible gases, water vapor, etc;
- No places with severe vibration;
- When using beyond the normal conditions specified in GB3906, the user and our company shall negotiate

技术参数 Technical parameters

Project		Unit	Data
Rated voltage		KV	3. 6、7. 2、12
Rated frequency		Hz	50
Rated current of circuit breaker		A	630、1250、1600、2000、2500、3150
Rated current of switchgear		A	630、1250、1600、2000、2500、3150
Rated short-term withstand current (4s)		KA	20、25、31. 5、40
Rated peak withstand current (peak)		KA	50、63、80、100
Rated short-circuit breaking current		KA	20、25、31. 5、40
Rated short-circuit making current (peak)		KA	50、63、80、100
Rated insulation level 1min power frequency withstand voltage	Between poles, between poles and ground	KV	24、32、42、
	Between fractures	KV	24、32、42、
Lightning impulse Withstand voltage (peak)	Between poles, between poles and ground	KV	40、60、75
	Between fractures	KV	46、70、85
Protection level			The shell is IP4X, and when the doors between compartments and circuit breakers are open, it is IP2X

VD4、VS1-12真空断路技术参数 Parameters of vacuum circuit breaker

Project		Unit	Parameters
Rated voltage		KV	12
Rated frequency		Hz	50
Rated current of circuit breaker		A	630、1250、1600、2000、2500、3150
Rated dynamic stable current (4s)		A	16、20、25、31.5、40、50
Rated stable current (peak)		KA	40、50、63、80、100、125
Rated short-circuit breaking current		KA	16、20、25、31.5、40、50
Rated short-circuit making current (peak)		KA	40、50、63、80、100、125
Rated insulation level	1Min Power frequency withstand current	KV	42
	Lightning impulse withstand current	KV	75
Rated operating sequence			on-0.3S on/off -180s on/off 50
Rated short-circuit breaking current breaking frequency		Times	50
Machinical life		Times	20000

Project		Unit	Parameters
Contact opening distance		mm	11±1
Overtravel		mm	4±0.5
Middle distance between phases		mm	210±0.5，275±0.5
Closing contact bounce time		ms	≤2
Three phase opening asynchrony		ms	≤2
Opening time when the operating electrical pressure is	Highest	ms	≤50
	Rated	ms	≤50
	Minimum	ms	≤60
Closing time		ms	≤100
Average closing speed		ms	0.9–1.2
Average opening speed		ms	0.6–0.8

When the circuit breaker is used to control the 3-10KV motor, if the starting current is less than 600A, a metal zinc oxide lightning arrester must be added. The specific requirements are negotiated between the user and our company: when the circuit breaker is used to disconnect the capacitor bank, the rated current of the capacitor should not exceed 80% of the rated current of the circuit breaker.

操作机构技术参数 Technical parameters of operating mechanism

Project		Unit	Parameters
Rated operating voltage	Closing coil	V	AC/DC220, 110
	Opening coil	V	AC/DC220, 110
Coil power	Closing coil	W	245
	Opening coil	W	245
Energy storage motor power		W	50
Rated voltage of energy storage motor		V	AC/DC220, 110
Energy storage time		S	≤10

The switchgear is designed according to the armored metal enclosed switchgear in GB3906-91. The whole is composed of two main parts: a cabinet and a central withdrawable spare part (i.e. a handcart) (see Figure 1). The cabinet is divided into four separate compartments, with an enclosure protection level of IP4X. When the doors of each compartment and circuit breaker room are opened, the protection level is IP2X. Equipped with overhead incoming and outgoing lines, cable incoming and outgoing lines, and other functional schemes, arranged and combined to form a complete set of power distribution system devices. This switchgear can be installed, debugged, and maintained from the front, so it can be back-to-back, arranged in a double arrangement, and installed against the wall, improving the safety, flexibility, and reducing the footprint of the switchgear.

◆ Shell and others

The main frame of the switchgear is made of aluminum zinc thin steel plate, processed by CNC machine tool, and adopts multiple folding process, which not only has the advantages of high precision, strong corrosion resistance and oxidation resistance, but also makes the cabinet lighter in weight, higher in mechanical strength, and more aesthetically pleasing in appearance compared to other similar equipment cabinets due to the use of multiple folding process. The cabinet adopts an assembled structure, connected by rivet nuts and high-strength bolts, which shortens the processing cycle, enhances the universality of components, occupies less space, and is convenient for organizing production.

◆ Handcart

The handcart frame is assembled from thin steel plates processed by CNC machine tools. The handcart and cabinet are insulated and coordinated, and the interlocking mechanism is safe, reliable, and flexible. According to their usage, handcart can be divided into circuit breaker handcart, voltage transformer handcart, metering handcart, isolation handcart, and other types of handcart. According to module and block type variations,handcart of the same specification can be freely exchanged 100%.The handcart has a disconnection position, a testing position, and a working position inside the cabinet. Each position is equipped with a positioning device to ensure reliable interlocking. The operation must be carried out according to the interlocking protection measures operation procedure. All handcart uses nuts and screws to move and exit, and its operation is light and flexible, suitable for on duty personnel to operate. When the handcart needs to be moved away from the cabinet, a dedicated transfer vehicle can be easily pulled out for various inspections and maintenance, And it adopts a mid mounted design, with a small volume for inspection, maintenance, and convenience.

◆ Compartment

The main electrical components of the switchgear have independent compartments, namely: circuit breaker handcart room, busbar room, cable room, relay instrument room. The protection level between each compartment reaches IP2x; Except for the relay, all other three formats have their own pressure relief channels. Due to the use of a central layout, the cable room space is greatly increased, allowing the equipment to connect multiple cables.

◆ Circuit breaker compartment

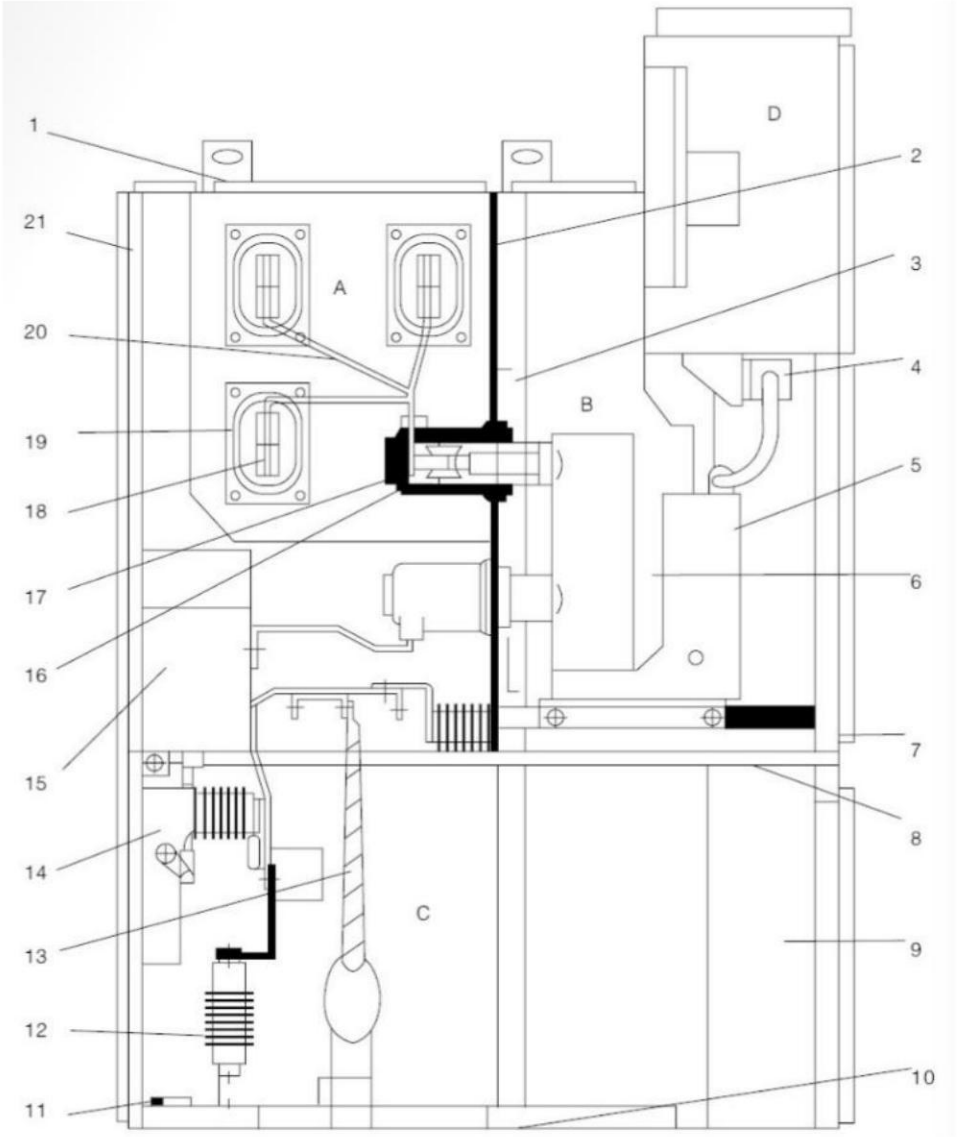
Tracks are installed on both sides of the compartment for handcart 5 to move and slide from the disconnected position and test position to the working position inside the cabinet. The partition 3 (valve) of the static contact box 16 is installed behind the rear wall of the handcart compartment. When the handcart moves from the disconnected position test position to the working position, the flaps on the upper and lower static contact boxes are linked with the handcart and automatically open. When moving in the opposite direction, the flaps automatically close until the handcart returns to a certain position and completely covers the static contact box, forming effective isolation. Due to the separate operation of the upper and lower valves, during maintenance, the valve on the live side can be locked to ensure that maintenance personnel do not touch the live body. When the circuit breaker room door is closed, the handcart can also be operated. Through the observation window of the middle door, the position of the handcart being disposed of and closed in the compartment can be observed, and the energy storage status can be displayed.

◆ Bus compartment

The main busbar 18 is a single unit spliced and connected to each other, fixed by the main busbar 20 and the static contact box. The main busbar and connecting busbar are copper bars with rectangular cross-sections, used for high currents. When composite, double busbars are used to assemble them. The branch busbar is connected to the static contact box 16 and the main busbar through bolts and does not require any other support. For special needs, the busbar can be covered with heat shrink tubing, insulation sleeves with connecting bolts, and end caps. Adjacent cabinet busbars are fixed with sleeve 19, so that the air buffer retained between the connecting busbars can prevent melting in the event of internal fault arcs. Sleeve 19 can effectively limit accidents to this cabinet and not spread to other cabinets.

结构特点 Structural characteristics

- The following diagram shows the structural components of the switchgear. All metal modular assembly structure, the cabinet body is made of imported aluminum zinc coated plate with strong anti-corrosion ability, without surface treatment. It is processed by CNC high-precision equipment and adopts advanced multiple folding process. The connection is connected with rivet nuts and high-strength bolts, with high accuracy, light weight, and good strength.
- The switchgear can be equipped with our company's VS1 series, VD4 series, ZN65 series and other vacuum circuit breakers, with wide applicability and strong interchangeability. The handcart is equipped with a working position, a testing position, and positioning and display devices at each position, ensuring safety and reliability.
- The cable room can accommodate up to 9 single core cables, and the equipment is equipped with reliable mechanical and electrical interlocking devices, fully meeting the "five prevention" requirements. Each room is equipped with pressure relief channels to ensure personal safety during operation.

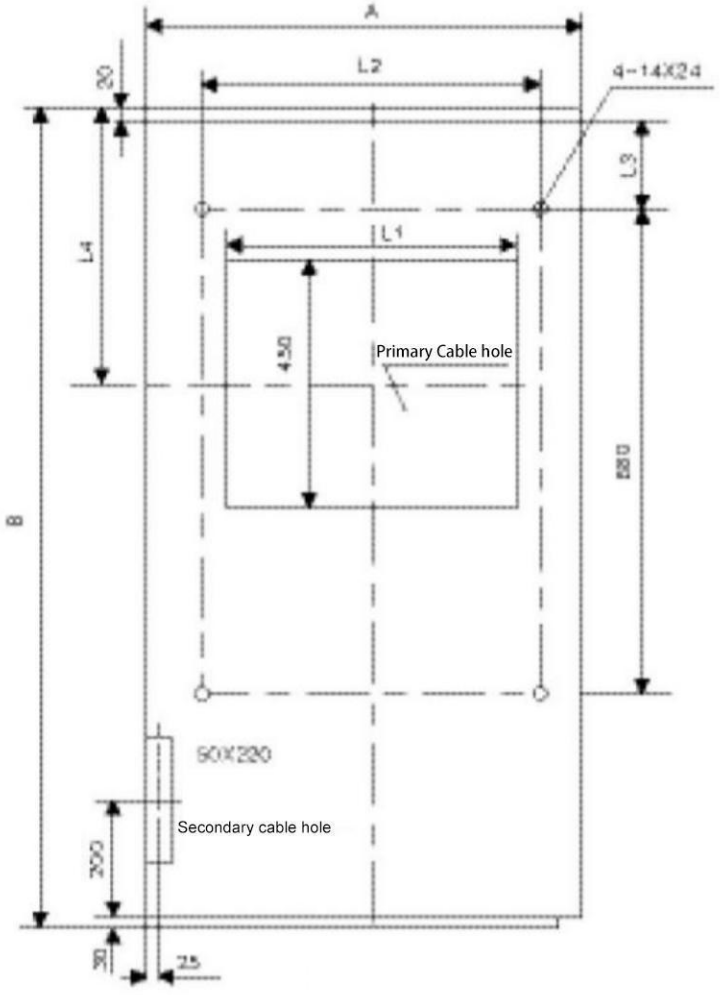


外形尺寸 Overall dimensions

Hight			2300
Width	Rated current	Rated current 1250A and above	800
	1250A and below	Rated current 1600A and above	1000
Depth	Cable inlet and outlet lines	Cable inlet and outlet lines	1500
	Aerial incoming and outgoing lines	Aerial incoming and outgoing lines	1600

安装尺寸（mm） Installation size

Cabinet width A	Cabinet depth B	L1	L2	L3	L4
800	1500 Cable	530	630	150	490
	1660 Aerial	530	630	310	650
1000	1500 Cable	730	830	150	490
	1660 Aerial	730	830	310	650



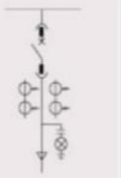
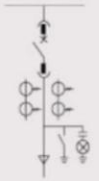
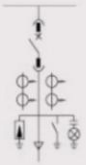
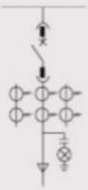
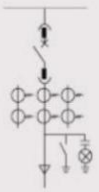
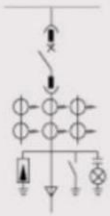
The back of the cabinet

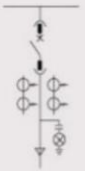
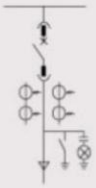
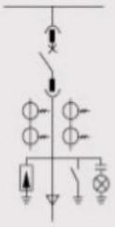
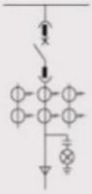
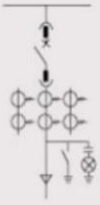
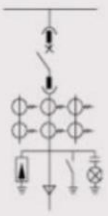
KYN28-12 新型铠装移开交流金属封闭开关设备

New armored removable
AC Metal -enclosed switchgear

科迅安电气
KEXUN'AN ELECTRIC

外形尺寸 Overall dimension

Plan number		1 4	15	16	17	18	
Main circuit scheme diagram							
Cabinet size (width * depth * height) mm		800（1000）*1660*2300					
Rated current		630~3150					
Main electrical components	Vacuum circuit breaker (VS1 or Vd4)	1	1	1	1	1	1
	Current Transformer LZZBJ9 Series	2	2	2	3	3	3
	Grounding switch		1	1		1	1
				3			3
Circuit name		Receiving electricity,feed					
Remarks		1. Rated current 1600A and above, cabinet width 1000mm. 2. The prototype switchgear with an altitude of 3000m~4000m has a rated current of 1250A and a cabinet width of 1000m					

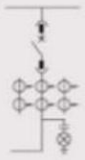
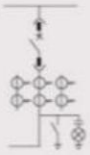
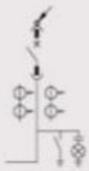
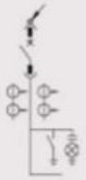
Plan number		13	1 4	15	16	17	18
Main circuit scheme diagram							
Cabinet size (width * depth * height) mm		800（1000）*1660*2300					
Rated current		630~3150					
Main electrical components	Vacuum circuit breaker (VS1 or Vd4)	1	1	1	1	1	1
	Current Transformer LZZBJ9 Series	2	2	2	2	3	3
	Grounding switch		1		1		1
Circuit name		Connection (right)	Connection (right)	Connection (left)	Connection (left)	Contection (right)	Contection (right)
Remarks		Rated current 1600A and above, cabinet width 1000mm					

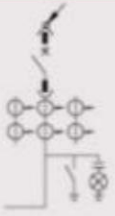
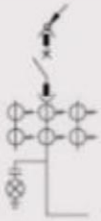
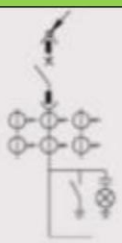
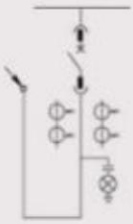
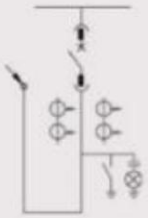
KYN28-12 新型铠装移开交流金属封闭开关设备

New armored removable
AC Metal -enclosed switchgear

科迅安电气
KEXUN'AN ELECTRIC

外形尺寸 Overall dimension

Plan number		01	02	02	17	18	
Main circuit scheme diagram							
Cabinet size (width * depth * height) mm		800（1000）*1660*2300					
Rated current		630~3150					
Main electrical components	Vacuum circuit breaker (VS1 or Vd4)	1	1	1	1	1	1
	Current Transformer LZZBJ9 Series	3	3	2	3	2	2
	Grounding switch JN15		1		1		1
Circuit name		Connection (left)	Connection (left)	Aerial incoming line (left connection)	Aerial incoming line (left connection)	Aerial incoming line (right connection)	Aerial incoming line (right connection)
Remarks		Rated current 1600A and above, cabinet width 1000mm					

Plan number		13	1 4	15	16	17	18
Main circuit scheme diagram							
Cabinet size (width * depth * height) mm		800（1000）*1660*2300					
Rated current		630~3150					
Main electrical components	Vacuum circuit breaker (VS1 or Vd4)	1	1	1	1	1	1
	Current Transformer LZZBJ9 Series	3	3	3	3	2	2
	Grounding switch JN15		1		1		1
Circuit name		Aerial incoming line (left connection)	Aerial incoming line (left connection)	Aerial incoming line (right connection)	Aerial incoming line (right connection)	Aerial incoming and outgoing lines	Aerial incoming and outgoing lines
Remarks		Rated current 1600A and above, cabinet width 1000mm					

FWM8-12
环保气体绝缘环网柜

Environmental friendly gas
insulated ring main unit

FWM8-12环保气体绝缘环网柜

Environmental friendly gas insulated ring main unit

科迅安电气
KEXUN'AN ELECTRIC

概述 Overview

- The **FWM8-12** environmentally friendly gas insulated ring main unit is a complete set of distribution equipment with a 12KV, three-phase AC 50Hz, and single busbar segmented system. This product has the characteristics of simple structure, flexible operation, reliable interlocking, and convenient installation. It can provide satisfactory technical solutions for various applications and users. The application of sensing technology and information technology, combined with advanced technological performance and simple and flexible configuration schemes, can meet the constantly changing needs of the market and be suitable for the intelligent requirements of the power grid.
- This **FWM8-12** environmentally friendly gas insulated ring main unit is suitable for industrial and residential cable ring network and distribution network terminal engineering. As a means of receiving and distributing electrical energy, it is particularly suitable for distribution in urban residential areas, small secondary substations, switching stations, cable branch boxes, box type substations, industrial and mining enterprises, shopping malls, airports, subways, wind power generation, hospitals, sports fields, railways, tunnels and other places.
- **FWM8-12** environmentally friendly gas insulated ring main unit meets the requirements of relevant national standards, power industry standards, international standards, and other standards. The switch and main electrical components are integrated modules, with solid insulation packaging between conductive parts. Shielded cable joints are used for external wiring, and shielded insulated busbars are used for functional unit wiring. Therefore, the safety of use is greatly improved. The operating mechanism adopts a spring structure, with a mechanical life of more than 10000 times. All operating data and equipment conditions can be remotely monitored and monitored, and can be unmanned, It is actually a high-performance distribution device.
  The following units can be selected inside the cabinet to form an economical and practical power supply unit:
  Vacuum circuit breaker unit (630A, 20-25KA)
  Vacuum load switch unit (630A, 20-25KA)
- The **FWM8-12** switchgear does not use SF6, does not require gas recovery or protective devices, does not contain toxic arc decomposition products, is easy to inflate, and is environmentally friendly.

技术参数 Technical parameters

Project	
Type of arc extinguishing chamber	Vacuum
Rated voltage	12KV
Rated frequency	50Hz
Rated current	630A
Temperature rise experiment	1.1Ir
Rated power frequency 1min withstand voltage	Interphase, phase to ground fracture 41KA, 48KA
Rated peak lightning impulse withstand voltage (1.2/50us)	Interphase, phase to ground fracture 75KA, 85KA
Short time power frequency withstand voltage of auxiliary and control circuits	2KV
Rated short-circuit breaking current frequency	25KV
Rated short-circuit breaking current/duration	Main circuit, grounding switch grounding circuit 20/4KA/s, 21.7/2KA/s
Rated peak withstand current	63KA
Rated short-circuit making current	63KA
Rated active load current	630A
Partial discharge (measured at 1.2ur)	≤20pC

科迅安电气
KE XUN AN DIAN QI

科迅安电气
KE XUN AN DIAN QI

KXAIS-12

固体绝缘环网柜

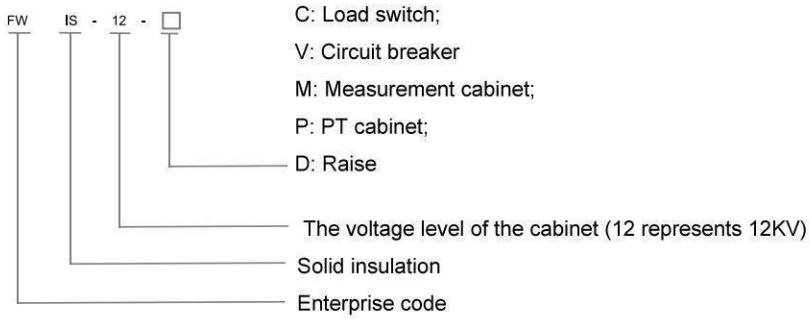
Solid insulation
ring main unit

KXAIS-12 固体绝缘环网柜

Solid insulation
ring main unit

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Model meannings



产品特点 Product features

The KXAIS-12 series ring main unit is a fully insulated, fully sealed, and anti condensation ring network switchgear equipment that is based on solid sealing and vacuum insulation technology, and is independently developed using epoxy resin (APG process) to pour the three position switch (isolation, grounding), circuit breaker vacuum arc extinguishing chamber, and main circuit primary conductive components together to form the insulation component body. It is assembled from insulated busbars and other insulation connectors to form a fully insulated, fully sealed, and anti condensation ring network switchgear.

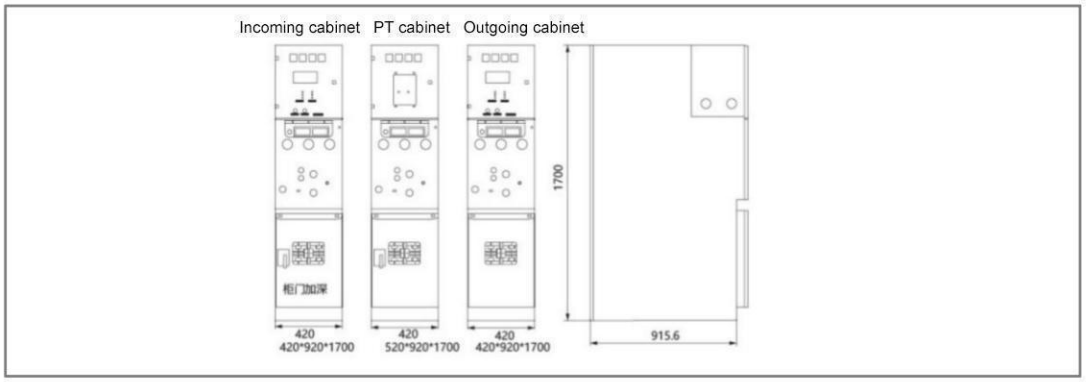
By using a circuit breaker vacuum arc extinguishing chamber and independently designing the electrical circuit connection and external structure of the insulation body, the structure of the insulation body is more reasonable in mechanical and electrical aspects. Conductive or semi conductive shielding technology is adopted on the surface of the insulation body to eliminate surface and partial discharge phenomena, truly achieving full insulation. Through independent research and development, we have designed insulated pull rods, transmission devices, and reliable interlocking operating mechanisms that meet the vacuum arc extinguishing requirements of circuit breakers.

By using rubber molding technology, the insulated pull rod and the fixed sealing unit pole are connected with insulated rubber to achieve full sealing, with a protection level of IP67.

技术参数 Technical parameters

Project		Parameters
	Rated voltage	7. 2KV, 12KV, 24KV
	Impulse withstand voltage	60KV, 75KV, 125KV
	Power frequency withstand voltage	32KV, 42KV, 65KV
	Rated frequency	50/60Hz
母线 Busbar	Rated current	630A
	Rated short-circuit withstand current	20/4, 25/4(K/Vs)
	Rated wind withstand current	50KA, 63KA
负荷开关 Load switch	Rated current	200/630A
	Rated breaking current	20KA, 25KA
	Rated short-circuit making current	50KA, 63KA
	Rated short-term withstand power	20/4, 25/4K/US
	Mechanical lifespan	10000 times

外形尺寸图（mm）Overall dimension （mm）



HXGN□-12

科迅安电气
KE XUN AN DIAN QI

单元式交流金属封闭环网开关设备

Modular AC metal enclosed

Ring main unit

The HXGN-12 unit type AC metal enclosed ring main unit (hereinafter referred to as the ring network cabinet) is a new generation of high-voltage electrical products that we have successfully designed and developed in accordance with the requirements of domestic rural power and urban network renovation by introducing advanced foreign technology. All technical performance indicators are in compliance with the IEC62271-200:2003 and GB3906 standards. The cabinet is riveted after being processed by CNC machine tools, with a protection level of IP3x and reliable mechanical interlocking and anti misoperation functions. This product has significant features such as small volume, light weight, beautiful appearance, easy operation, long service life, high parameters, no pollution, and less maintenance.

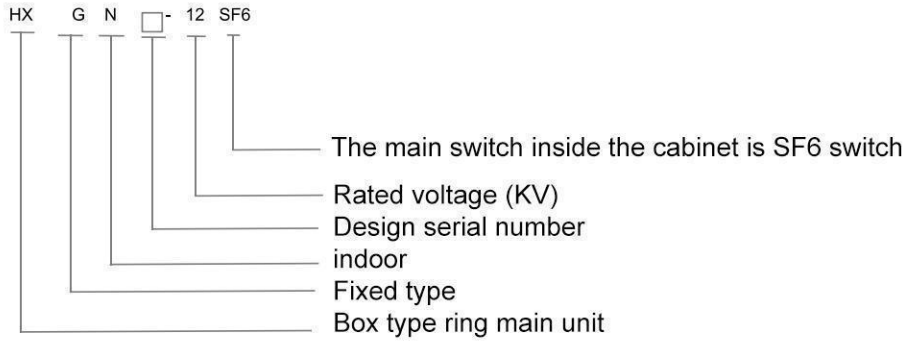
The HXGN-12 type modular AC metal enclosed ring network switchgear is suitable for AC metal enclosed ring network switchgear and is used for receiving and distributing electrical energy in AC 50Hz and 12KV power networks. The main switch inside the cabinet is SF6 switch.

HXGN □-12单元式交流金属封闭环网开关设备

Modular AC metal enclosed
Ring main unit

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Model meanings



使用条件 Working conditions

- Environmental temperature: upper limit+40 ℃, lower limit -25 ℃;
- Altitude: The altitude does not exceed 2000m;
- Relative temperature: The daily average value shall not exceed 95%; Monthly average not exceeding 92%
- Surrounding environment: The surrounding air is not significantly polluted by corrosive gases, flammable gases, water vapor, etc.,
- There is no frequent violent vibration.

技术参数 Technical parameters

Project	Unit	Parameters
Rated voltage	KV	12
Rated frequency	HZ	50
Rated current of main busbar/maximum rated current of fuse	A	630, 125
Rated short-term withstand current of main circuit and grounding circuit	KA/S	20, 3
Rated peak withstand current of main circuit and grounding circuit	KA	50
Rated short-circuit making current of main circuit and grounding circuit	KA	50
Number of full capacity interruptions of load switch	TIMES	100
Breaking current of fuse	KA	31. 5, 40
Rated closed-loop breaking current	A	630
Rated transfer current	A	1600
Mechanical lifespan	TIMES	2000
1min power frequency withstand voltage (peak) relative to ground/isolated fracture	KV	42, 48
Lightning impulse withstand voltage (peak), phase to phase, ground/isolated break	KV	75, 85
1min power frequency withstand current of secondary circuit	KV	2
Protection leve		IP3X

HXGN □ -12单元式交流金属封闭环网开关设备

Modular AC metal enclosed

Ring main unit

科迅安电气
KEXUN'AN ELECTRIC

结构特点 Structural characteristics

◆ Cabinet characteristics

✧ The ring main unit shell is formed by riveting 2mm thick aluminum zinc sheet (or cold-rolled sheet sprayed with plastic), and there are two pressure release holes at the back of the cabinet, one for the cable compartment and the other for the load switch/busbar compartment. This structure can maximize the reliability of personal installation and operation of equipment.

◆ Each compartment

✧ Busbar room:The busbar room is located at the top of the cabinet and connected to adjacent switchgear.

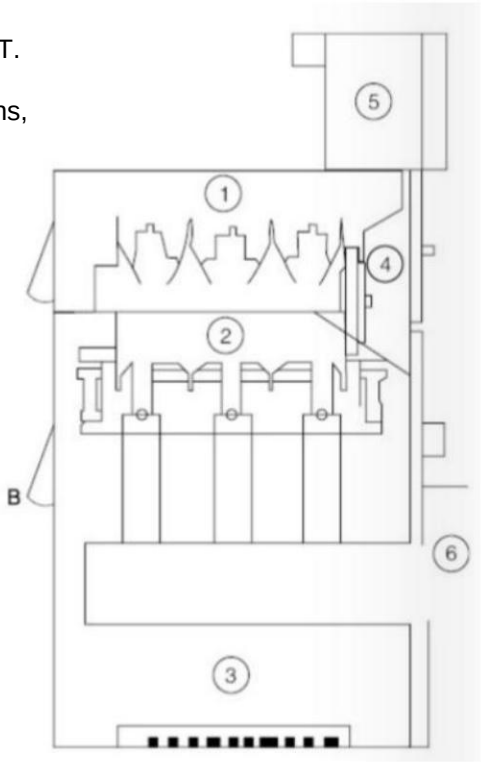
✧ The load switch is an independent unit filled with SF6 gas.

✧ Cable room: Approximately 75% of the space is used for cable connections, fuses, grounding switches, and installation of PT and CT.

✧ Mechanism Room and Interlocking: The room includes operating mechanisms and mechanism interlocks, as well as position indications, auxiliary contacts, trip coils, live displays, and interlocks.

✧ Low voltage box: The low voltage box is located at the top of the cabinet and is optional. The small room is used to install special devices such as instruments/relays and motor units.

✧ Circuit breaker room: A circuit breaker (SF6 or vacuum) can be placed below the load switch.



◆ Pressure release:

✧ Pressure release above: The above is used to release the gas pressure generated during arc accidents inside the busbar and load switch room.

✧ The pressure release below is used to release the gas pressure generated during an arc accident inside the cable compartment.

外形尺寸 Overall dimension

Project	Unit	Parameters
Circuit breaker cabinet width	mm	750
Other cabinet widths	mm	375、500
high	mm	1600、1850
deep	mm	980、900
Relay box high	mm	450

基本组件 Technical parameters

SFL Technical parameters				
Rated voltage	KV	12	17.5	24
Stamping pressure resistance	KV	75	95	125
1min power frequency withstand voltage	KV	28	38	50
Rated current	A	630	630	630
Closing capacity	KA	50	50	40
Thermal stable current	KA/S	20.3	-	-
Breaking capacity	A	1700	-	-
Maximum fuse	A	125	-	-
Polar distance	MM	210	210	210

VD4-STechnical data				
Rated voltage	kv	12	17.5	24
Impulse withstand voltage	kv	75	95	125
Power frequency withstand voltage	kv	28	38	50
Rated current	A	630	630	630
Thermal stable current	KA/S	20.3		
Polar distance	mm	210	210	210

This switch has many advantages:

- The duration of the arc is short, and the insulation strength in the arc extinguishing chamber recovers quickly.
- Ensure safety and reliability even in the most demanding environments.
- Can disconnect low value inductive and capacitive currents.
- The operating mechanism is simple, can quickly open and close, and has a long mechanical life.
- Reduced the loss of contacts and arc extinguishing chambers, and also extended the electrical life.
- Allow for multiple operations, but with minimal maintenance workload.
- Lightweight structure, compact and stable.

Standard equipment
-Electric operation
-Manual operation
-Auxiliary contact (2 normally open and 2 normally closed)
-One shunt trip with position contact
-Shunt closing coil
-Other pressure control of a signal contact

Can be installed with various
- SS solid current relays
-PR511-PR512 flow controller
-Low pressure release device
-Strong Circle
HAD120625
HAD120520
HAD170620
HAD170616

基本组件 Base Component

Working voltage	Rated capacity of transformer							
	50	75	100	125	160	200	250	315
	Selection of fuses (nominal value in amperes)							
3	25	25	25	40	63	63	63	80
5	16	16	16	25	40	40	63	63
6	16	10	10	25	25	40	40	63
10	10	10	10	16	25	25	25	40
12	10	10	10	16	16	25	25	25
15	10	10	10	16	16	16	25	25
20	10	10	10	10	16	16	16	25
24	10	10	10	10	16	16	16	15

Working voltage	Rated capacity of transformer							
	400	500	630	800	1000	1250	1600	200
	Selection of fuses (nominal value in amperes)							
3	100	100	160					
5	63	80	100	100	160			
6	63	63	80	100	100	160		
10	40	63	63	63	80	100	100	
12	40	40	63	63	63	80	100	
15	25	40	40	63	63	63	100	
20	25	25	40	40	63	63	63	80
24	25	25	25	40	40	63	63	63

◆ SFL-12/24 switchgear

✧ The main components of SFL-12/24 switchgear are imported original parts. The switchgear is a dual port, three station, rotating moving contact, and uses SF6 gas as the arc extinguishing medium. The moving contact is placed in a die cast epoxy resin shell with a reinforced structure.

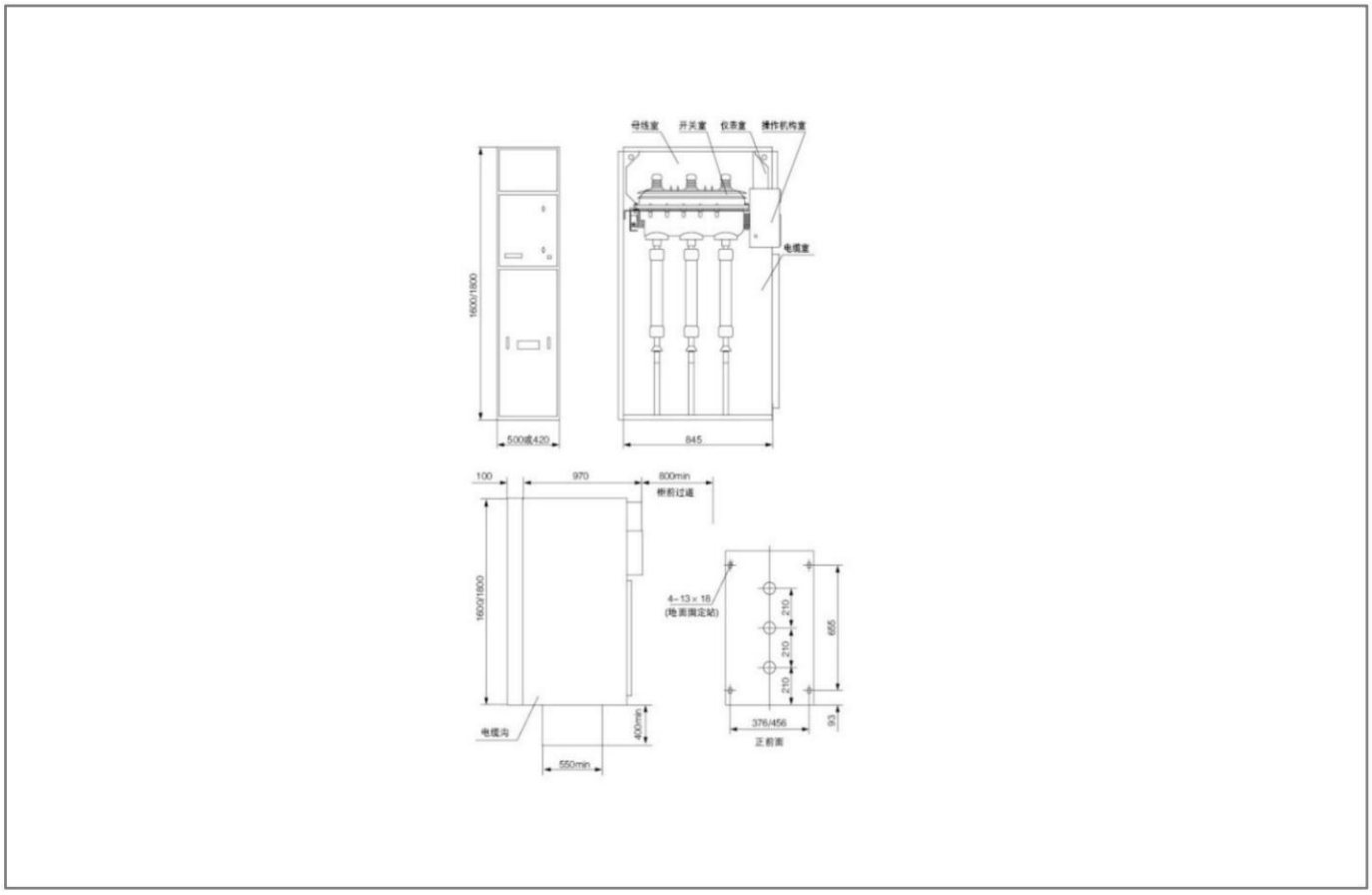
✧ Each switch is permanently sealed after being filled with SF6 gas at a pressure of 0.4 bars, and a helium detector can be used to detect any gas leakage. The switch is installed vertically and horizontally without limitation. A typical installation method in the ring main unit is to place a steel plate between the cable room and the busbar room and install it horizontally. This installation method isolates the busbar from the cable joints to meet the strictest safety requirements for operation and maintenance.

✧ If an internal arc occurs, there is a structural weakness at the back of the shell that will be pushed open, and then the arc valve on top of the cabinet will open and guide the overpressure airflow outside the cabinet.

操作 Operating

For switch equipment equipped with load switches, a dedicated operating handle is used to operate on the front of the switch equipment. There are two operating holes on the front of the operating mechanism, the upper part is the grounding switch operating hole, and the lower part is the load switch operating hole. When operating, the handle rotates clockwise to switch, and the closing direction rotates counterclockwise to switch opening direction. Electric opening and closing devices can also be strengthened for remote control operation. (Note: Sometimes the load switch does not come with a grounding switch, and the operating hole of the grounding switch is used to unlock the cabinet door.).
For switchgear with combined electrical appliances, except for the manual opening button of the load switch opening operation, the operation sequence is the same as above. The lower grounding switch installed in the combination electrical cabinet is connected and disconnected with the upper grounding switch through a connecting rod. Release the residual small current on the fuse holder when closing to improve safety when replacing the circuit breaker.

外形及安装尺寸 Outline and Installation Dimension



订货须知 Ordering Instructions

The following information is required when placing an order:

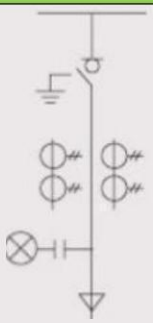
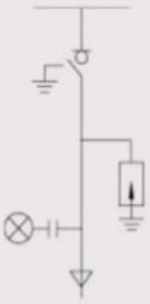
- Main circuit scheme number, main wiring system diagram, arrangement diagram, and layout plan:
- The model, specifications, and quantity of electrical components inside the switchgear;
- Name and quantity of spare parts;
- If there are special requirements, please consult with our company.

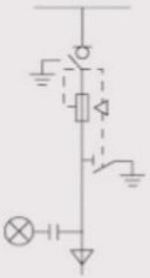
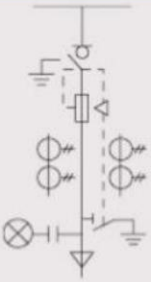
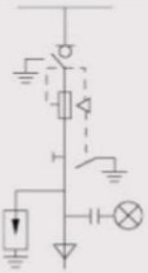
HXGN □-12单元式交流金属封闭环网开关设备

Modular AC metal enclosed
Ring main unit

科迅安电气
KEXUN'AN ELECTRIC

Main electrogram scheme diagram

Plan number		01	01-1	01-2	01-3
Plan diagram					
Use to		Incoming and outgoing lines	Incoming and outgoing lines	Incoming and outgoing lines	Incoming and outgoing lines (right or left)
Main electrical components	Load switch FLN36-12D	1	1	1	1
	Fuses				
	Current transformer LZZJ2-12		1~3		
	High voltage Charging display device DXN6-T	1	1	1	1
	Lightning arrester HY5WZ orHY5WS			3	
Width * Depth * Height (mm)		420/500*845*1600/1800	500*845*1600/1800	500*845*1600/1800	420*845*1600/1800

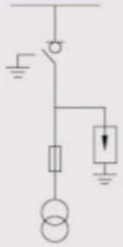
Plan number		02	02-1	02-2	
Plan diagram					
Use to		Protective transformer	Protective transformer	Protective transformer	Protective transformer
Main electrical components	Composite FLN36-12D	1	1	1	
	Fuses	S□LAJ	S□LAJ	S□LAJ	
	Current transformer LZZJ2-12		1~3		
	High voltage Charging display device DXN6-T	1	1	1	
	Lightning arrester			HY5WZ	
	Ground switch	1	1	1	
宽*深*高（mm）		500*845*1600/1800	500*845*1600/1800	500*845*1600/1800	

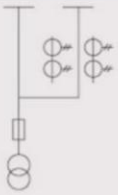
HXGN □-12单元式交流金属封闭环网开关设备

Modular AC metal enclosed
Ring main unit

科迅安电气
KEXUN'AN ELECTRIC

主电图方案图 Main electrogram scheme diagram

Plan number		02	02-1	02-2	
Main electrical circuit diagram					
Main electrical components	Load switch FLN36-12D	1			1 (without grounding switch)
	Fuses	3 (voltage transformer) RN2-10/0.5			
	Current transformer LZZJ2-12	2-3			
	High voltage charging display device DXN6-T			1	
	Lightning arrester	HY5WZ			
Width * Depth * Height (mm)		500*845*1600/1800	420*845*1600/1800	420*845*1600/1800	

Plan number		02	02-1	02-2	
Main electrical circuit diagram					
Use to		Meterage			
Main electrical components	Fuse RN2-10/0.5	3			1 (without grounding switch)
	Current transformer LZZJ2-12	2			
	Voltage transformer JDZ-10	2			
Width * Depth * Height (mm)		500*845*1600/1800	420*845*1600/1800	420*845*1600/1800	

联锁 Interlock

The switchgear has the following interlocks:

- When the load switch is in the closed position, the operation of the grounding switch is locked;
- When the grounding switch is in the closed position, the load switch operation is locked;
- Only when the grounding switch is closed, can the front door of the ring main unit be opened. In other cases, the front door is locked.

HYGN-□12
交流金属环网开关设备

科迅安电气
KE XUN AN DIAN QI

AC metal ring main unit

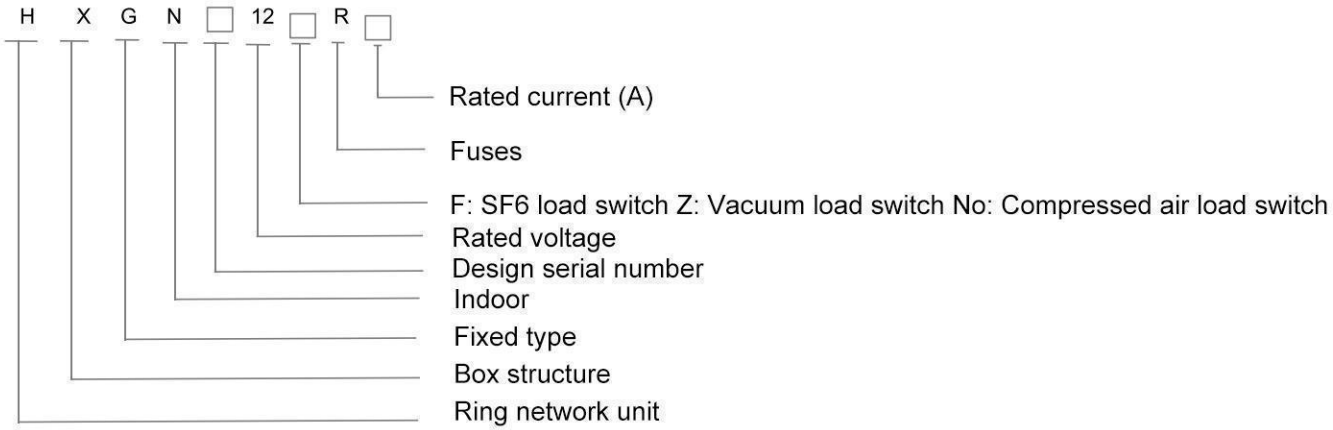
Communication metal ring network switchgear (vacuum switch) (referred to as ring network cabinet) is a new type of high-voltage switchgear produced for the renovation and construction of urban power grids,
In the power supply system, it is easy to use for breaking load current, short-circuit current, and making short-circuit current. This ring main unit is equipped with FZRN25 and FZRN21 vacuum load switches, with a spring operated mechanism that can be operated manually or electrically. The grounding switch and isolation knife are equipped with a manual operating mechanism. This ring main unit has strong completeness, small size, no combustion and explosion hazards, and also has reliable "five prevention" functions.
This ring main unit complies with the relevant provisions of GB3906 "3-35KV AC Metal Enclosed Switchgear" and IEC60420 "High Voltage AC Load Switch Fused Combination Electrical Appliances" standards.

HYGN-□12交流金属环网开关设备

AC metal ring main unit

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Model meanings



使用条件 Working conditions

- Surrounding air temperature: -15C~+40 ℃;
- Altitude: 1000m and below;
- Humidity conditions: The daily average value shall not exceed 95%, and the daily average value of water vapor pressure shall not exceed 202KPa; The monthly average value shall not exceed 90%, and the monthly average value of water vapor pressure shall not exceed 1.8KPa;
- The earthquake intensity does not exceed level 8;
- Places without obvious pollution such as corrosive or flammable gases.

Note: When the normal usage conditions are exceeded, users can negotiate with our company.

技术参数 Mathnical Parameters

Project		Unit		
Rated voltage		KV	12	
1min power frequency withstand voltage			To ground and between phases 42; Isolation fracture 48	
Lightning impulse voltage (peak)			To ground and between phases 75; Isolation fracture 85	
Rated frequency		HZ	50	
Stable current of the main busbar		A	630	
Load switch	Rated current		630	
	Electrical life under rated current	次	Not less than 100	
	Breaking the capacity of the no-load transformer	KAV	1250	
	Rated thermal stability current	KA/S	20/4；Grounding switch 20/2	
	Rated dynamic stable current	KA	50	
	Rated breaking making current		50	
	Fuse rated current	KV	100	
	Rated transfer current		1500	2000
	Rated breaking current	KA	315	
	Equipped with fuse model		S□LAJ-12（XRNTS□-10）	

HYGN-□12交流金属环网开关设备

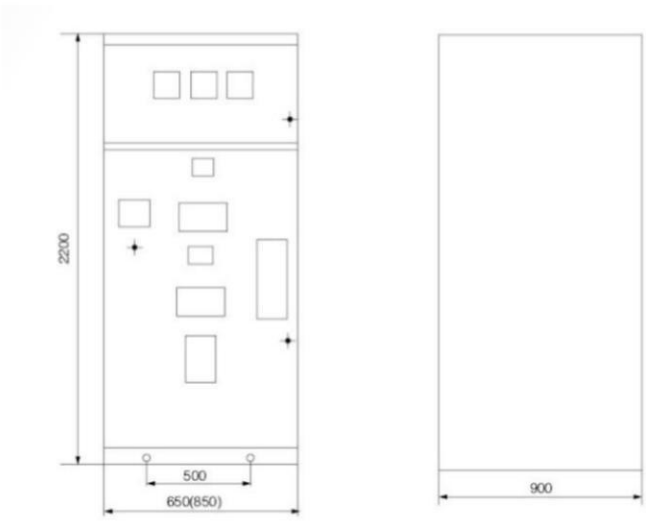
AC metal ring main unit

科迅安电气
KEXUN'AN ELECTRIC

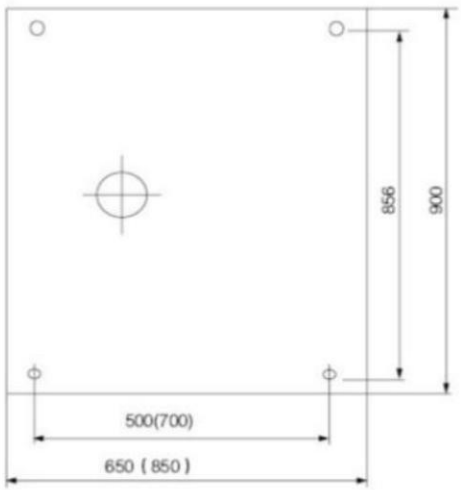
技术参数 Technical parameters

Project	Unit	FKN12-12	FKN25-12
Mechanical lifespan	Times	2000	10000
1min power frequency endurance of auxiliary circuit	KV	2	
Working voltage of electric operating mechanism	V	AC 220V, 110V	
Protection level		IP2X	
External dimensions	min	650 (850) *900*2000 (2200)	

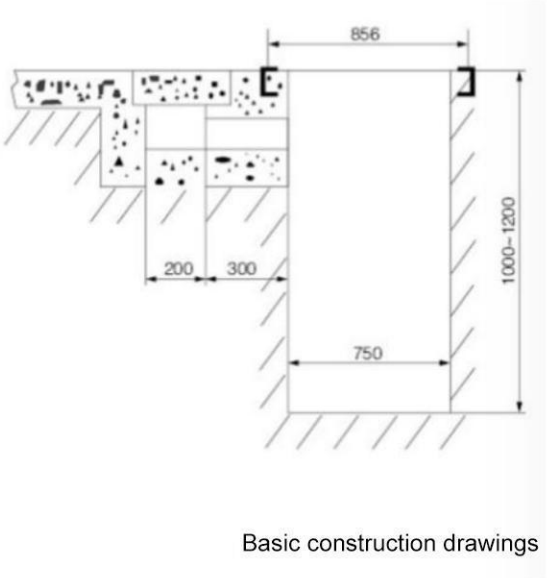
外形及安装尺寸（mm）Appearance and installation dimensions



Appearance dimensions



Installation dimensions



Basic construction drawings

使用与故障处理 Usage and troubleshooting

◆ Packaging, storage and transportation

✧ The ring main unit is packaged in a single wooden box when leaving the factory, and it is not allowed to tilt, invert, or vibrate violently during storage and transportation. When moving, it is not allowed to directly push or pull on the ground; When there is no lifting device, a cylinder can be placed under the sleeper of the packaging box to ensure its installation position on the slide.

✧ Prevent the cabinet from rain and moisture.

✧ The ring main unit should be placed in a well ventilated area that can prevent various toxic gases from entering. It is strictly prohibited to store it in the same warehouse with chemicals, acids, and bases.

◆ Acceptance

✧ Before opening the box, check the packaging for damage. When unpacking, pay attention to protecting the product, inspect the appearance of the

✧ cabinet, and check if all components inside the cabinet are damaged. Also, check if the accessories match the packing list.

✧ Check if the random files are secure.

1.Product user manual and instruction manual for various components inside the cabinet.
2.Factory test report;
3.Product Qualification Certificate
4.Packing list
5.Secondary wiring diagram

安装调试 Installation and commissioning

◆ When installing, first place the ring main unit on the installation foundation, arrange it neatly, adjust it, and then tighten it with fasteners.

◆ When installing the main busbar, open the busbar compartment for installation, and the contact surface connecting the busbar should be flat and free of dirt.

◆ The grounding of the ring main unit should be reliably grounded, and the circuit should be checked for grounding.

◆ During debugging, follow the user manual for the ring main unit and the instructions for each component inside the unit.

◆ After installation and debugging, perform 5 operations on each switch component and anti misoperation mechanism. If no abnormal phenomena are found, it is considered that the mechanical operation of the switch is correct.

使用与故障处理 Usage and troubleshooting

◆ Check before sending power

✧ Before sending power to the ring main unit, comprehensively check the electrical performance, insulation level and wiring correctness of all components in the cabinet before putting it into operation. normal operating status

✧ During normal operation, regardless of the incoming cabinet or the outgoing cabinet, the load switch should be in the closed position, the grounding knife should be in the open position, and the cabinet should be closed and locked.

◆ Troubleshooting

✧ When troubleshooting occurs in the incoming line cabinet, you should first cut off the incoming line power supply, open the load switch, and check the live display on the cabinet to confirm that it is correct, then close the grounding knife and open the door for inspection.

✧ When troubleshooting occurs in the outlet cabinet, you should first segment the load switch in the cabinet, close the grounding knife, and open the front door for maintenance. At this time, the main busbar is in a live state.

维护与检修 Maintenance and overhaul

◆ The ring main unit needs maintenance and repair in the following situations:

✧ After 5 years of operation, inspect the insulation level of the product

✧ After the load switch has been disconnected for 100 times, the main circuit resistance, power of the load switch,static contacts, and auxiliary contacts

◆ should be checked.

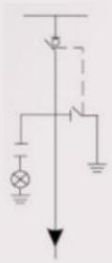
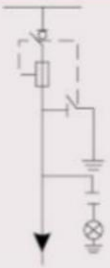
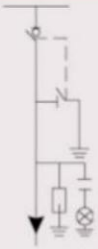
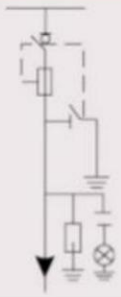
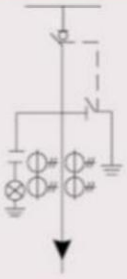
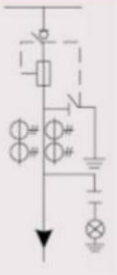
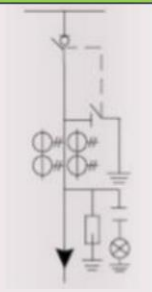
Generally, maintenance and repair of the ring main unit should be carried out after the power outage.

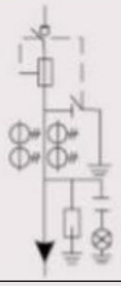
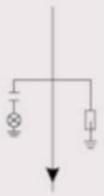
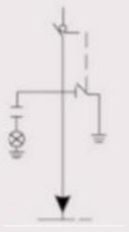
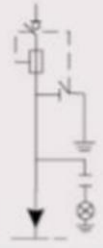
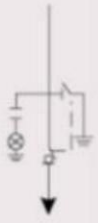
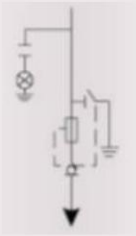
HYGN-□12交流金属环网开关设备

AC metal ring main unit

科迅安电气
KEXUN'AN ELECTRIC

电路方案图 Circuit scheme diagram

Plan number		01	02	03	04	05	06	07
Primary system diagram								
Use to		Cable outlet	Cable outlet	Cable outlet	Cable outlet	Cable outlet	Cable outlet	Cable outlet
Main electrical components	FN12-12D/630-20	1		1		1		1
	FN12-12D/T630-20		1		1		1	
	FN-12-12(R)D/100-31.5 FNRZN15-12D/T100-31.5		3		3		3	
	S□LAJ-12							
	Busbar through wall sleeve							
	RN2-10							
	LZJC-10、LZX-100					2	2	2
	JDZ-10							
	HY5W-17/50			3	3			
	GSN-10、TDS-10	1	1	1	1	1	1	1

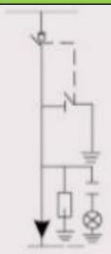
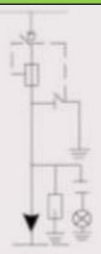
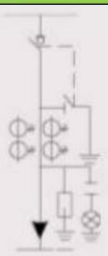
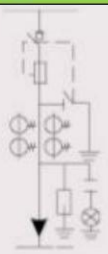
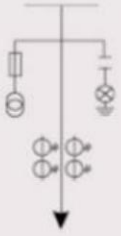
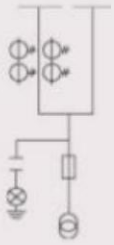
Plan number		08	09	10	11	12	13	14
Primary system diagram								
		Cable outlet	Cable outlet	Cable outlet	connection	connection	Cable outlet	Cable outlet
Main electrical components	FN12-12D/630-20				1		1	
	FN12-12D/T630-20	1				1		1
	FN-12-12(R)D/100-31.5 FNRZN15-12D/T100-31.5	3						3
	S□LAJ-12		3	3	3	3	3	3
	Busbar through wall sleeve							
	RN2-10							
	LZJC-10、LZX-100	2						
	JDZ-10							
	HY5W-17/50	3		3				
	GSN-10、TDS-10	1	1	1	1	1	1	1

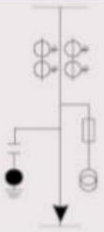
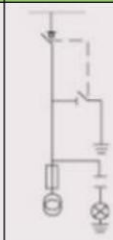
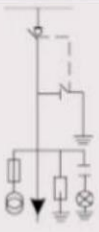
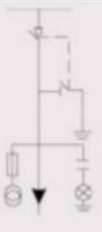
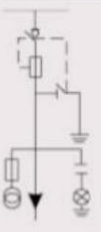
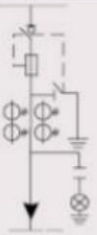
HYGN-□12交流金属环网开关设备

AC metal ring main unit

科迅安电气
KEXUN'AN ELECTRIC

电路方案图 Plan drawings

Plan number		15	16	17	18	19	20	21
Primary system diagram								
Use to		connection	connection	connection	connection	High voltage metering Cable outlet	High voltage metering Connection	High voltage metering
Main electrical components	FN12-12D/630-20 FN25-12D/T630-20			1				
	FN12-12(R)D/100-31.5 FZRN15-12D/T100-31.5		1		1			
	S□LAJ-12		3	3	3			
	Busbar through wall sleeve	3	3		3	3		3
	RN2-10			2		3		3
	LZJC-10、LZX-100				2			2
	JDZ-10					2		2
	HY5W-17/50	3	3	3	3			
	GSN-10、TDS-10			1				

Plan number		22	23	24	25	26	27	28
Primary system diagram								
Use to		connection	High voltage metering	High voltage metering Cable outlet	connection	High voltage metering Cable outlet	High voltage metering Cable outlet	connection
Main electrical components	FN12-12D/630-20 FN25-12D/T630-20		1	1		1		
	FN12-12(R)D/100-31.5 FZRN15-12D/T100-31.5						1	1
	S□LAJ-12						3	3
	Busbar through wall sleeve	3			3			3
	RN2-10	3	3	3		3	3	
	LZJC-10、LZX-100	2						2
	JDZ-10	2	2	3		2	2	
	HY5W-17/50			2				
	GSN-10、TDS-10			1				

XGW-12

一二次融合环网箱

Primary and secondary Fusion ring main unit

The XGW-12 series primary and secondary fusion standardized ring main unit (switchgear) is an inflatable outdoor ring main unit developed and produced by the company using advanced foreign technology based on the characteristics of distribution networks in various regions of China and the actual situation of urban distribution network cable transformation.

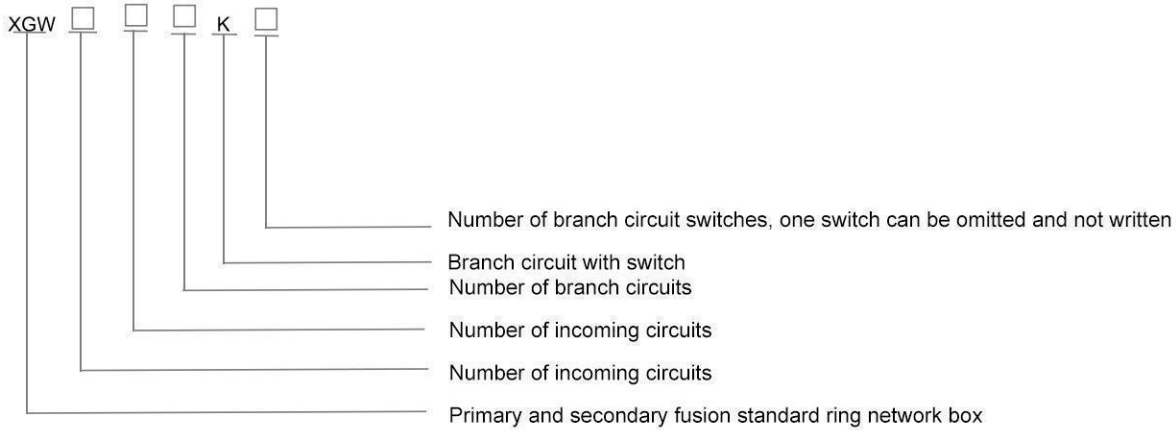
The XGW-12 series primary and secondary fusion standardized ring network box (switch station) adopts HTN-12 environmentally friendly gas ring network cabinet switchgear. This switchgear has the advantages of modularity, scalability, full insulation, full sealing, safety and reliability, maintenance free, wireless temperature measurement, online monitoring device, etc. It is suitable for any harsh environment and is widely used in industrial park residential areas, streets, airports, various buildings, bustling commercial centers, and other places.

XGW-12 一二次融合环网箱

Primary and secondary
Fusion ring main unit

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Model meanings



使用条件 Working conditions

- Environmental temperature: maximum temperature+50 ℃, minimum temperature -40 ℃, maximum daily average temperature not exceeding 35 ℃;
- Relative humidity: Daily average not exceeding 95%, monthly average not exceeding 90%
- Wind speed: not exceeding level 3
- Pollution level: Level 3
- Earthquake intensity: 8 degrees
- Ground slope: no more than 3 degrees
- Installation location: Install in a place without fire, explosion, or severe vibration, with good ventilation and no corrosive gases;
- Special conditions:When the equipment is installed at an altitude of over 1000 meters, special instructions should be given so that the company can adjust the SF6 pressure during manufacturing.
- If special harsh conditions are involved, please be sure to consult the company

型号定义 Technical Parameters

Project	Unit	Parameters
Rated voltage	KV	12
Rated current, you	A	630
Power frequency withstand voltage (phase to ground)	V/min	42k
Lightning impulse voltage	KV	75
Rated breaking current	A	630
Rated breaking making current (peak)	KA	50
Rated short-term withstand current	KA/S	25/4
Rated peak withstand current	KA	50
Rated breaking capacitance current	A	45
Rated breaking inductance current	A	16
Number of full load interruptions	Times	>100
Number of opening and closing mechanical operations	Times	2000

科迅安电气
KE XUN AN DIAN QI

DFW-12KV

欧式电缆分接箱

European try

Cable junction box

The European style cable junction box is a widely used cable engineering equipment in power and distribution network systems in recent years. Its main feature is bidirectional door opening, using through wall sleeves as connecting busbars, with significant advantages such as clear arrangement of small length cables and no need for large span crossing of three core cables

The cable joints used comply with the DIN47636 standard

Generally, a spiral fixed connection cable joint with a rated current of 630a is used

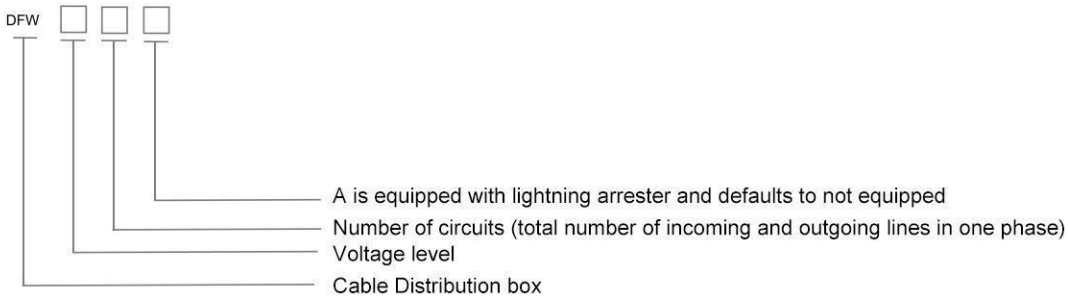
DFW-12KV欧式电缆分接箱

European try

Cable junction box

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Model meanings



使用条件 Working conditions

- Environmental temperature: maximum temperature:+40C, minimum temperature: -30 ℃;
- Wind speed: equivalent to 34m/s (not exceeding 700Pa);
- Humidity: The average daily relative humidity shall not exceed 95%, and the average monthly relative humidity shall not exceed 95%;
- Shockproof: The horizontal speed shall not exceed 0.4m/s², and the vertical acceleration shall not exceed 0.15m/s²
- The inclination of the installation: site shall not exceed 3 °;
- Installation environment: The surrounding air is not significantly poluted by corrosive, flammable gases, water vapor, etc., and there is no severe vibration at the installation site.
- Note: When ordering this product beyond the above conditions, please consult with our company.

技术参数 Technical papameters

Projcet	Parameters
Rated voltage	12KV
Rated current	630A
Dynamic stable current	50kA/0.3S
Thermal stable current	20kA/3s
1min power frequency withstand voltage	42KV
15 minute DC withstand voltage	52KV
Lightning impulse withstand voltage	105KV
Cabinet protection level	IP33

JP

科迅安电气
KE XUN AN DIAN QI

户外综合配电柜

Outdoor comprehensive Distribution box

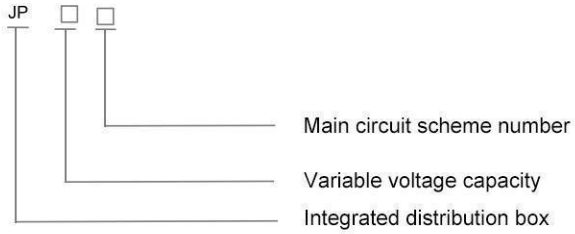
The JP series outdoor comprehensive distribution box is a multifunctional device that integrates metering, outgoing lines, reactive power compensation, and other functions to achieve outdoor comprehensive distribution. It has functions such as short circuit, overload, overvoltage, and leakage protection. It is small in size, beautiful in layout, economical and practical. It is installed on the poles of outdoor pole mounted transformers and is a new generation of ideal distribution products for urban and rural power grid renovation

JP户外综合配电柜

Outdoor comprehensive Distribution box

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Model meanings



工作环境 Working conditions

- ◆ Environmental temperature: -25 °C+40 °C
- ◆ Relative humidity of air: daily average not exceeding 90%, monthly average not exceeding 90%;
- ◆ Altitude: not exceeding 2000m;
- ◆ Installed in a place without severe vibration and impact, and without corrosive gases

结构特点 Structural characteristics

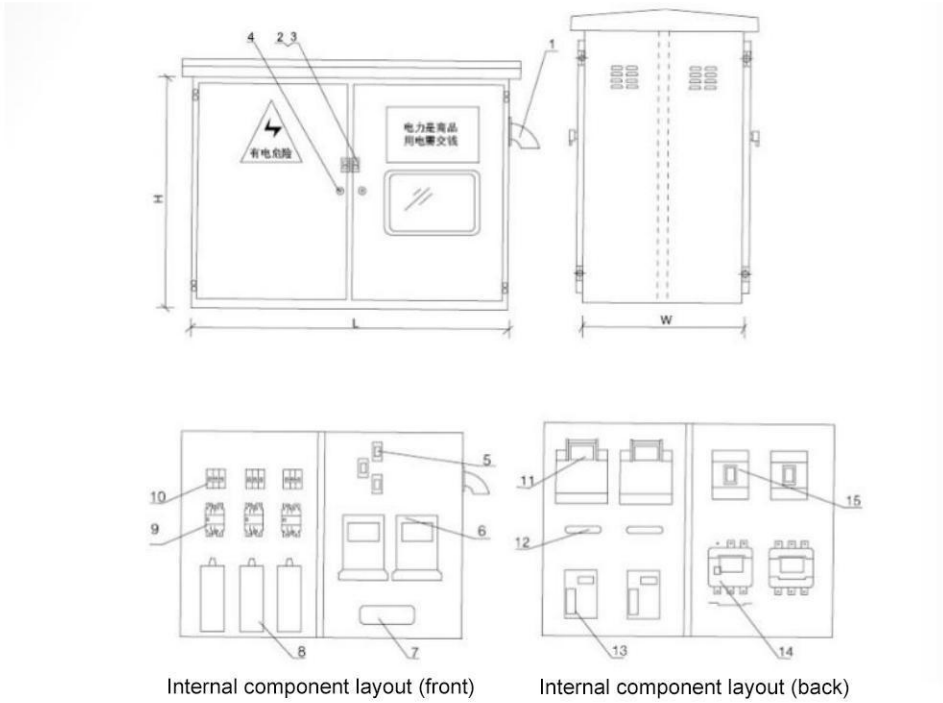
The box structure is discrete and horizontal, and the outer shell is made of 2mm high-quality stainless steel plate. It is bent through multiple folding processes (or uses a honeycomb structure of stainless steel double layered composite plate, which has flame retardant, environmental protection, thermal insulation, anti condensation and other properties). Special stainless steel welding technology is used. After the box is formed, the overall strength is high, the surface is smooth like a mirror, and there are no weld marks. The internal installation beams and plates are treated with hot zinc technology to ensure that they do not rust for 20 years. The front and rear doors of the box are easy for users to operate and maintain. The door is surrounded by high elasticity and anti-aging sealant strips, and each door is equipped with two types of door locks: light and dark. The exposed lock is equipped with an anti blocking and anti rust rain cover; Fully enclosed measuring room with lead sealing device; The side of the box is equipped with a rain proof and foreign object proof inlet cable conduit, with ventilation holes and cable outlet holes filled at the bottom. The top is equipped with ventilation ducts and wire mesh, which have the functions of waterproofing, rust prevention, dust prevention, and foreign object prevention.
The protection level is IP54.

技术参数 Technical parameters

Project	Unit	Parameters
Transformer capacity	kva	30~400
Rated working voltage	v	AC400
Auxiliary circuit working voltage	v	AC220
Rated frequency	HZ	50
Rated current	A	≤630
Rated leakage current	mA	30~300 Can be adjusted
Protection level		IP54

For isolation switches, models can be selected from HD11F and other series;
For knife melting switches, models can be selected from HR5, HR6, and other series;
For circuit breakers, models can be selected from series such as DZ20, CM1, NS, D247, etc;
For AC contactors, models can be selected from CJ20 and B series, with CJX2 and CJ19 switching Capacitor and other series;
For zero sequence transformers and leakage relays, model options include JD, LLJ, and other series;
For current transformers, models such as LMZ1-0.5 and LMK-0.66 series can be selected;
For lightning arresters, models can be selected from series such as FYS and Y3W;
For capacitors,models can be selected from BSMJ, BCMJ, and other series;
For automatic compensation controllers, models can be selected from JKL, JKG, and other series;
The number of compensation circuits is 1-4, and each circuit has a capacity of 3-20kVar;
Note: According to custormers'needs, temperature and humidity control devices can be optionally installed inside the box.

技术参数 Technical parameters



Internal component layout (front) Internal component layout (back)

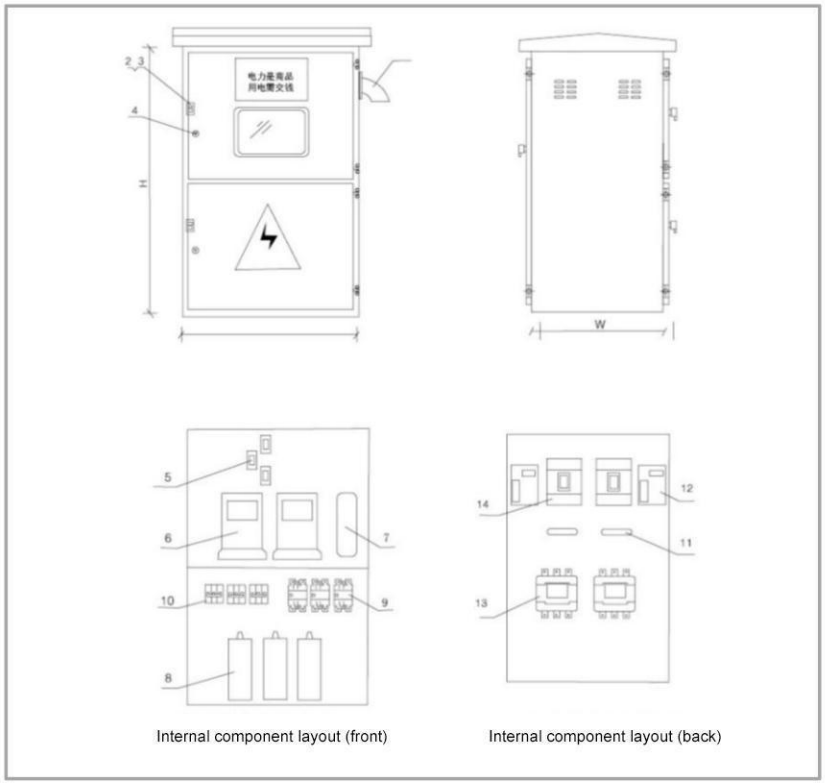
Figure 1: Schematic diagram of outdoor box structure (horizontal)

1. Incoming cable conduit
2. Door lock (open lock)
3. Door lock rainproof box
4. Door lock (hidden lock)
5. Current transformer
6. Measurement table
7. Junction box
8. Capacitors
9. Switching capacitor contactor
10. Small circuit breaker
11. Isolation switch
12. Zero sequence transformer
13. Leakage relay
14. Outgoing AC contactor
15. Outgoing air switch

JP户外综合配电柜

Outdoor comprehensive
Distribution box

科迅安电气
KEXUN'AN ELECTRIC



技术参数 Technical parameters

Capacity of transformer	Plan number	L	W	H
30~100KVA	01、06	800	450	700
30~250KVA	02、04、07 、09	900	500	700
100~400KVA	03、05、08、10	1100	600	800

立式箱外形尺寸 Vertical box dimensions

Capacity of transformer	Plan number	L	W	H
30~100KVA	01、06	600	450	1000
30~250KVA	02、04、07 、09	700	500	1000
100~400KVA	03、05、08、10	800	600	1100

科迅安电气
KE XUN AN DIAN QI

DJK

电能计量表

Electric energy

Metering box

DJK电能计量表

Electric energy
Metering box

科迅安电气
KEXUN'AN ELECTRIC

型号含义 Modelmeanings

Measuring box

- The materials of the measuring box body are mainly divided into two categories: metal and non-metal,
  The metal measuring box is made of galvanized cold-rolled steel plate or stainless steel plate, among which the stainless steel plate is non-magnetic stainless steel,Non metallic measuring box, made of unsaturated polyester glass fiber, reinforced molding, molding or other materials with similar properties.
- According to the installation method, measuring boxes are generally divided into two types: embedded and wall mounted. In special circumstances, a floor standing metering box can also be set up, which can be divided into indoor and outdoor according to the installation environment.
- According to the installation table, it can be divided into different quantities, including 1, 2, 4, 6, 8, 10, and 12 meters. Tables 4, 6, 8, 10, and 12 are the specifications, and can be used for electric energy information collection and monitoring terminals according to the installation of telemetry and remote communication equipment.
- The measuring box is equipped with an inlet chamber, a measuring chamber, and an outlet chamber, designed and arranged in a horizontal manner. The three chambers are independent of each other and equipped with corresponding partitions.
- The incoming and outgoing rooms adopt a two-layer panel structure. The first floor door is controlled by a key, and the second floor is equipped with a protective panel. Only the switch operating handle is exposed. The incoming room is equipped with an incoming main switch, a copper busbar, and a surge protector. The appearance room is equipped with an appearance switch, which provides isolation, overload, and short circuit protection functions for the metering box.
- The measuring room is equipped with wire grooves, and the laying grooves and wires are made of flame-retardant materials. Various cable channels for collection and reading methods are reserved indoors. The setting of the cable tray separates the strong and weak electrical wires, and the wiring is neat, beautiful, and reasonable. The components inside the box are installed on the insulated bottom plate.
- The measuring room can meet the installation needs of various induction mechanical meters, fully electronic meters, and time-sharing electricity meters. Each meter position is equipped with corresponding observation windows, which are made of polycarbonate resin material and clear, transparent, and do not change color.
- The incoming room and measuring room are sealed with lead and can be equipped with sealing devices to meet the measurement standards specified by the power supply department;
- Each meter position and outgoing circuit breaker should be labeled with a user tag, and set according to the principle of left to right and top to bottom. The meter positions of public meters and collection meters should have clear labels for easy management and use by users.
- The surface of the box should be marked with slogans such as "somewhat dangerous" and "95598 service hotline".

技术参数 Tenchnical parameters

Model	Accessory Name	Model specifications	Quantity
DJK9D01	Circuit breaker (incoming line)	NM1-225S/4300	1
	Switch terminal (incoming line)	One in, Four out	3
	Switch terminal (incoming line)	One in, Ten out	1
	Isolation switch (incoming line)	NH2-100/1	9
	Leakage circuit breaker (incoming line)	DZ47LE-63/1P+N	9
	Collector power switch	DZ267-32	1
	Information line terminal	RS485	2
DJK9D02	Circuit breaker (incoming line)	NM1-225H/3300	1
	Junction box (incoming line)	Three phase four wire nine households	1
	Isolation switch (incoming line)	NH2-100/1	9
	Leakage circuit breaker (outgoing line)	DZ47LE-63/1P+N	9
DJK9D03	Circuit breaker (incoming line)	NM1-225S/4300	1
	Switch terminal (incoming line)	One in, Three out	3
	Switch terminal (incoming line)	One in, Nine out	1
	Isolation switch (incoming line)	NH2-100/1	9
	Circuit breaker (incoming line)	DZ47-63/2	9

服务承诺书
Service Commitment Letter

Our company adheres to the principle of "putting customers first and ensuring their peace of mind", vigorously introducing domestic and foreign technologies, accelerating the development of new products, continuously improving product assembly levels, meticulous operation, and dedicated service. Strive to meet international standards in terms of technology, quality, and management level, and keep up with international high-level standards. Increase investment in quality management, actively adopt professional testing methods, achieve a 100% pass rate for factory products, achieve quality goals of "no work errors", "product maintenance free", and a user satisfaction rate of over 98%, so that users can use it with confidence, and make the following comprehensive service commitments to users:

Pre sales service:

Cooperate with user requirements, provide design consulting services, and provide users with economical and high-quality solutions.

In sales service:

1. Provide training on relevant knowledge for user operators to ensure that they master the characteristics and operating procedures of the product;
2. Allow users and relevant personnel to directly participate in the production and assembly of related products, allowing them to further understand the performance of the products;
3. Ensure that product quality complies with relevant international and national standards and contractual requirements.

After sales service:

1. For the domestic market, our company provides free maintenance services within one year after our products are put into operation, and we will continue to provide services after one year. The foreign market provides remote online video maintenance technical guidance and free training for relevant technical personnel.
2. To provide long-term enthusiastic and thoughtful services to users. Upon receiving user requests, we guarantee to arrive at the site within 3 hours in neighboring areas and within 24 hours in other domestic areas (within 12 hours of travel time); Arrive in traffic congested areas within 48 hours.For foreign markets, we will respond within one hour of receiving user requests
3. Provide permanent consulting services to users and answer any questions.

Kexun'an Electrical Technology Co., Ltd

科迅安电气技术有限公司

KEXUNAN ELECTRICAL TECHNOLOGY CO., LTD.

Phone：+86-13375321746
Whatsapp：+86 17626491118
E-mail:info@cnkxa.com
Website:www.cnkxa.com
Address:No. 258 Wei 16th Road, Yueqing Economic Development Zone, Wenzhou City, Zhejiang Province, China