

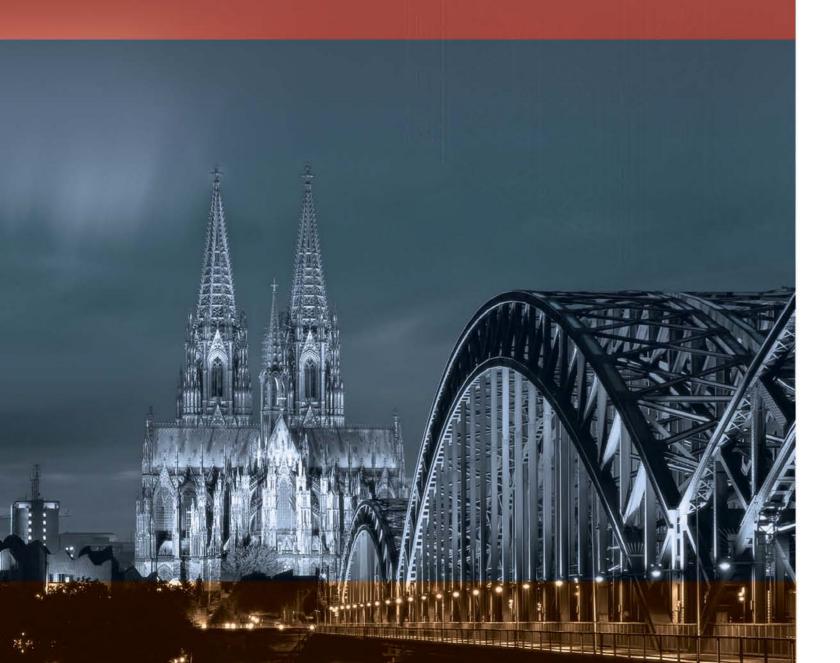
智能电气专家服务中国电力

Intelligent Electric Experts
Service China Electric Power



# alsburg

Quality Electrical from Germany





AMTS (ASG)高压双电源自动转换开关设备技术 源自德国, 系德国ALSBURG公司为满足中国电力市场 对高品质、环保型开关柜的需求,而推出的新一代 开关柜。



# 目录

# Contents

产品概述	02
Product overview	
技术特点	04
Technical characteristics	
技术参数	06
Technical parameter	
应用方式	0
Application mode	
系统构成	0
System composition	
外形尺寸	1
Dimension	
典型方案	1
Typical Portfolio	
布置与安装	1
Layout and installation	

AMTS(ASG) High voltage dual power supply automatic switching equipment coretechnology from Germany, Department of German ALSBURG company introduced anew generation to meet the electricity marketdemand for high-quality, environmentally friendly RMU.

- 德国阿斯博荣誉产品、品质卓越。
- 适合未来电网对产品技术可靠性和绿色环保的发展趋势。
- 新一代12kV中压自动转换开关设备。

AMTS(ASG)-12 中压自动转换开关设备为 12KV 及以下的电源自动转换系统,作为阿斯博双 电源产品线中的重要一员,专门用于高可靠性连续供电的场合。适用于数据中心、大型楼宇、智能 电网、医院、交通、机场、指挥中心及冶金化工等类型的场所。伴随大数据、云计算、人工智能等新 技术的开发和应用,现代社会对电能的使用和要求已经步入了新的发展阶段。AMTS(ASG)-12 应 用独特技术专利来满足负荷等级 升高。功率增大、供电范围扩大、高层建筑等新的用电环境, 并使其成为此类应用场合通用的中压切换解决方案。AMTS(ASG)-12 中压自动转换开关设备使 用两台具有机械和电气联锁的真空断路器进行切换,可作为具有选择性线路故障保护功能的进线 自动转换开关应用,也可独立应用于专用的双电源自动切换开关应用,自动监控和管理电源状 态,准确判断,快速转换,保障设备用电的供电质量和连续性。常规快速且简单的热备用切换以及 专为特定客户开发的安全模式 - 冷备用切换 , 可选择其中一种作为系统切换的标准动作模式。具 有断路器机械、电气双重联锁,保障两路电源不会合闸于同一回路。机械联锁完全独立于控制系 统,阿斯博专利设计的双程机械连杆硬连接在任何极端情况下均能可靠保障任何自动/手动运行 时的切换安全。同时 柜体也继承了成熟完善的五防联锁功能 极大保障了运行人员的安全。

Amts (ASG) -12 medium voltage automatic switching equipment for 12KV and below power automatic conversion system, as an important part of the Alsburg dual-power product line, dedicated to high reliability of continuous power supply occasions. Applicable to data center, large buildings, smart grid, hospitals, transportation, airports, command center and metallurgical chemical industry and other types of places. With the development and application of new technologies such as Big Data, cloud computing and Artificial Intelligence, the modern society has stepped into a new stage of development. The AMTS (ASG) -12 applies a unique technology patent to meet the load rating and upgrade. The new environment of power increasing, power supply expanding, high-rise building and so on makes it become the general medium-voltage switching solution for this kind of application. Amts (ASG) -12 medium voltage automatic transfer switch equipment uses two vacuum circuit breakers with mechanical and electrical interlock to switch, which can be used as an incoming automatic transfer switch with selective line fault protection, it can also be used in special dual-power automatic switch applications, automatic monitoring and management of power supply status, accurate judgment, fast conversion, to ensure the quality and continuity of power supply equipment. Conventional fast and simple hot standby switching and cold standby switching, a safety mode developed for specific customers, can be chosen as a standard action mode system switching. With the circuit breaker mechanical, electrical double interlocking, to ensure that the two power supply will not be closed in the same circuit. Mechanical interlocks are completely independent of the control system, and Alsburg's patented two-way mechanical connecting rod is hard-wired to reliably ensure safety during any automatic/manual operation in any extreme situation. At the same time, the cabinet has also inherited the mature and perfect five-prevention interlock function, greatly ensuring the safety of the operation personnel.



Honorable product from Alsburge with premium quality.

For future grid reliability of product technology and green trends.

A new generation 12kV medium voltage automatic switching equipment.

### 外壳

外壳采用耐腐蚀性能的敷铝锌钢板, 经 CNC 机床加工,并采用双重 折弯组装而成,高精度,高强度。间隔之间双层金属板隔离,并形成 4mm 空气层, 电弧故障时缩小故障影响, 检修恢复后快速投入备用 间隔正常运行。

### 母线系统

柜内使用铜排连接,载流容量大,温升小,具有非常高的抗短路电流 能力。

### 接地开关

根据方案设定,可以选择快速接地开关,开关可承受并作用于关合短 路故障电流, 柜外操作, 同时具有机械操作联锁、带电闭锁等电气联 锁,极大提高运行人员安全。

### 避雷器

可根据方案选择该配置

### 电缆连接分支

2000A以上柜型最多提供6组电缆搭接,1250A及以下,可同时提供 最大3组电缆搭接。

### 防凝露加热器

标准配置,分别安装于电缆室和断路器室,长寿命设计,可 24h 不间 断工作。

#### 带电显示器

标准配置,同时提供电缆室门带电闭锁控制,满足柜体五防联锁的所 有要求。

#### 零序电流互感器

柜内制作电缆头的情况下,根据需要可以安装1组零序CT,参数需 与图纸要求保持一致。

### 电压互感器

AMTS (ASG)-12选用两套电压互感器,分别置于常用电源进线柜 和备用电源进线柜进线侧。

### 手车式隔离设计操作检修更加安全

独立检测进线电源的供电品质,也可经电压小母线为其他功能使用; 为了保护电压互感器二次回路,预置了二次空开作为 PT 二次保护。

The shell is made of corrosion-resistant aluminum-zinc clad steel, machined by CNC machine, and assembled by double bending. High precision and high strength. The double-layer metal plate is isolated between the intervals, and a 4mm air layer is formed. When the arc fault occurs, the influence of the fault is reduced.

The cabinet is connected with copper bar, which has high current carrying capacity, low temperature rise and high short-circuit current resistance.

According to the scheme, quick earthing switch can be selected, which can bear and act on closing short-circuit fault current, operation outside the cabinet, at the same time with mechanical operation interlock, live lock and other electrical interlock, greatly improve the safety of operation personnel.

Lightning arrester configuration can be selected according to the scheme.

For 2000A or above cabinet type, a maximum of 6 groups of cable overlap, 1250A or below, a maximum of 3 groups of cable overlap can be provided.

Standard configuration, respectively installed in the cable room and circuit breaker room, long life design, can work 24 hours uninterrupted.

The live display is standard, and it also provides the electric lock control of the cable room door, which meets all the requirements of the five anti-interlock cabinet.

When the cable head is made in the cabinet, 1 set of zero sequence CT can be installed according to the need, and the parameters should be in accordance with the requirements of the drawings.

AMTS (ASG) -12 uses two sets of voltage transformers, which are respectively placed in the common power infeed cabinet and the standby power infeed cabinet. Handcart type isolation design is more safe for operation and maintenance.

In order to protect the secondary circuit of the voltage transformer, the secondary open circuit is preset as the secondary protection of Pt.



#### alsburg

### **Technical characteristics**

# 绿色 环保

Green



#### AMTS(SAG)所使用材料全部为可回收无污染环保材料

All the materials used in AMTS (SAG) are recyclable and pollution-free environmental protection materials

# 安全可靠

Safe and Reliable



可以选择快速接地开关,开关可承受并作用于关合短路故障电流, 柜外操作,同时具有机械操作联锁、带电闭锁等电气联锁,极大提 高运行人员安全。

Quick earthing switch can be selected, which can bear and act on closing short-circuit fault current, operating outside the cabinet, and has mechanical operation interlock, live lock and other electrical interlock, greatly improving the safety of operators.

# 方案

# 齐全

The scheme is complete



### 提供标准开路转换系统并联(闭路)转换系统、旁路/隔离转换系统 、三电源转换系统

Provide standard open-circuit conversion system parallel (closed-circuit) conversion system, Bypass/isolated conversion system, three-power conversion system.

# 智能

Intelligent



具备配网各种自动化运行保护装置、以及确保设备安全运行的在线 监测装置,确保AMTS(ASG)可以在全自动化电力网络中安全运行。 With all kinds of automatic operation protection devices and online monitoring devices to ensure the safe operation of equipment, to ensure that AMTS (ASG) can be safe operation in the fully automated power network.

# 应用

# 场所

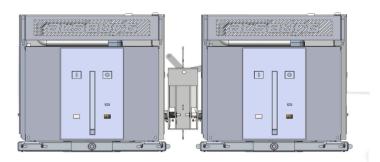
Applicable premises



适用于所有市电-市电、市电-油机之间的快速切换,广泛应用于发电、交通、电网、化工、机房数据中心等对供电保障要求高的场合。
It is widely used in power generation, transportation, power grid, chemical industry, data center of engine room and other occasions with high demand for power supply.

### 主开关元件技术特点

Technical characteristics of main switch element



AMTS (ASG)-12 中压自动转换开关使用两台具有机械联锁的独立间隔运行的真空断路器作为高压回路之间切换的执行机构,配合选择性保护继电器能够切除故障电流,配合前端断路器亦可短时耐受产品标准耐受值之内的故障电流。

- ●AMTS (ASG) -12系统真空断路器是阿斯博从最新一代 MVG 断路器演变而来,经过严谨的验证和一系列技术改进而来,凝聚了阿斯博电气在中压领域百年的智慧结晶,其开关本体继承了阿斯博MVG系列真空断路器的所有优异电气性能。
- 采用模块化设计的弹簧操作机构简单可靠,简化机构的同时,确保机构稳定操作。
- 可靠的固封极柱,寿命期内完全免维护,使极柱获得了最高的外部环境适应性,满足了断路器在恶劣的环境下长期稳定运行的需求。同时也极大减轻运行维护的工作。
- 系统由两台分别放在独立隔室的断路器构成,在
   2台断路器间设有固定安装的机械联锁和电气联锁,确保双回路断路器在任何时候只可一台断路器合闸的的设计要求。
- 独树一帜的真空灭弧室,凭借真空灭弧室的专利设计和阿斯博对真空灭弧室技术的透彻理解,使真空灭弧室以高稳定性、大容量、小体积,长寿命在中压真空领域独树一帜。产品坚持最高安全标准,每一只灭弧室出厂前都经过严格的电流老练和电压老练试验,品质高度同一。

The AMTS (ASG) -12 medium voltage automatic switching switch uses two independently spaced vacuum circuit breakers with mechanical interlocks as actuators for switching between high voltage circuits, with selective Protective relay to cut fault currents, with the front-end circuit breaker can also be short-term tolerance of the product within the standard tolerance value of the fault current.

AMTS (ASG) -12 system vacuum circuit breaker is Alsburg from the latest generation of MVG circuit breaker evolution, after rigorous verification and a series of technical improvements, condensed Alsburg electric in the field of medium voltage wisdom crystallization of a century, the switch body inherits all the excellent electrical properties of Alsburg MVG series vacuum circuit breakers.

The Modular design spring operating mechanism is simple and reliable, simplifies the mechanism and ensures stable operation of the mechanism. Reliable solid-sealed pole, completely maintenance-free during the life of the pole, so that the pole has the highest external environment adaptability, to meet the needs of circuit breakers in harsh environment long-term stable operation. At the same time also greatly reduce the operation and maintenance of the work.

The system consists of two circuit breakers placed in separate compartments, with a fixed mechanical interlock and an electrical interlock between the two circuit breakers, the design requirement to ensure that only one circuit breaker can be closed at any time for a double circuit breaker.

By virtue of the patent design of the vacuum interrupter and Alsburg's thorough understanding of the technology of the vacuum interrupter, the Nothing in Common vacuum interrupter has the advantages of high stability, large capacity and small volume, long life Nothing in Common in medium-pressure vacuum. Products adhere to the highest safety standards, each of the interrupter factory before going through a strict current aging and voltage aging test, high quality.

# 技术参数

### Technical parameters

## 使用环境

正常使用条件:

● 环境温度: -25~40° C, 日平均温度不超过35° C The altitude is not more than 1000m

● 海拔高度不大于1000m

● 周围空气没有明显地收到尘埃、烟、腐蚀性和可燃 combustible gases, steam, or salt spray 性气体、蒸汽或盐雾的污染

● 湿度条件: 日平均相对湿度<=95%,月平均相对湿 average relative humidity & LT; = 90% 度<=90%

● 地震烈度不超过8 度

● 在二次系统中感应的电磁干扰的幅值不超过1.6kV

### 防止凝露和腐蚀

来之危险。在断路器室和电缆室内分别装设加热器 以便在上述环境中使用和防止腐蚀发生。

### 特殊使用条件

在超过GB/T11022 和本标准规定的正常环境条件下 使用时,由用户和制造厂协商确定

Normal ambient conditions

ambient temperature:  $-25 \sim 40$  ° C, daily mean temperature not exceeding 35 ° C

The surrounding air was not visibly contaminated by dust, smoke, corrosive and

Humidity condition: daily average relative humidity & LT; = 95%, monthly

The earthquake was no more than 8 degrees

The magnitude of the induced electromagnetic interference in the secondary system does not exceed 1.6 kv

Prevent condensation and corrosion

To prevent the risk of condensation in a climate with high humidity and high 为了防止在高湿度变化较大的气候环境中产生凝露带 variability. The heater is installed in the circuit breaker room and the cable room respectively in order to use in the above-mentioned environment and prevent

Special conditions of use

When in excess of GB/T11022 and this standard under normal environmental conditions, by the user and the manufacturer agreed to determine

# AMTS(ASG) 可以应用于所有需要中压切换的场合,主要有以下主要类型:

AMTS(ASG) can be used in all situations requiring medium voltage switching, mainly in the following main types:

### • 数据中心

Data center

### ● 超高层建筑

Supertall building

### ● 智能电网

Smart grid

### ● 医疗

Medical treatment

### ● 机场

aerodrome

### • 大型服务机构

Large service organization

### • 工业及化工

Industrial and chemical Industry

### ● 隧道通风系统

Tunnel ventilation system













# 技术参数列表 List of Technical Parameters

	项 目 Item		单 位 Unit	-	数据	Technical	data
额定电压Rated vo	kV	12					
额定频率Rated fr	Hz	50					
额定电流Rated co	А	630 1250	630 1250	630 1250 1600	1250 1600 2000 2500 3150		
额定短路开断电流	kA	20	25	31.5	40		
额定短路关合电 value)	kA	50	63	80	100		
额定峰值耐受电流	kA	50	63	80	100		
4s额定短时耐受甲	kA	20	25	31.5	40		
	1min工频耐受电压(有效值)Rated power-frequency short-duration withstand voltage(1min)	相间及对地between phases and phases to earth	kV	42			
额定绝缘水平		真空断口间upper and lower terminal in open status	kV	48			
Rated insulation level	雷电冲击耐受电压(峰值) Rated lightning impulse withstand voltage (peak value)	相间及对地between phases and phases to earth	kV	95			
		真空断口间upper and lower terminal in open status	kV	95			
二次回路工频 secondary circuit	kV	2					
合闸线圈 Closing coil 分闸线圈Opening coil			V	AC :	110 / 22	20 DC 1	10 / 220
			V	AC :	110 / 22	20 DC 1	10 / 220
Rated operationa	I voltage	储能回路 Energy- storage motor	٧	AC 1	.10 / 22	20 DC 1	10 / 220
两台断路器之间均 breakers	ms	≤150					

注:其他电气参数的使用场合,需提前与公司市场部联系。

Note: For the use of other electrical parameters, please

# AMTS(ASG) 可以应用于多种电源之间的切换场合,主要划分为:

AMTS(ASG) can be used to switch between a variety of power supplies, mainly divided into:

# 市电-发电机

随着大数据时代的到来,用户 对电源的可靠性要求越来越高 , 负荷容量和供电半径越来越 长,高压油机的使用越来越受 到市场的青睐。AMTS 自动转 换开关针对该应用方式提供了 一系列特有的功能特点。油机 正常时为停机状态,切换时启 动,除传统热备用切换方式外 ,AMTS专门设计全自动冷备用 切换方式,符合油机启动特性 , 严格按照运行人员操作规范 进行自动切换,全面提高过程 的可靠性和安全性,最大满足 电网的安全要求。

- 1. 检测常用电源(故障)
- 2. 发送发电机启动信号
- 3. 自动进行双位置切换,待发 电机运转正常后,自动转入发 电机电源回路
- 4. 监测备用电源(恢复正常)
- 5. 经过双位置切换,自动转换 至常用电源(也可以手动)
- 6. 发送发电机停止信号

# 市电-市电

市电-市电应用中,

- 1. 检测常用电源(故障)
- 2. 自动转换至备用电源
- 3. 监测常用电源(恢复正常)
- 4. 自动转换至常用电源(也可 以手动)

With the advent of the era of big data, users have higher and higher requirements for the reliability of power supplies, load capacity and power supply radius are getting longer and longer, and the use of high-pressure oil machines is more and more favored by the market. The AMTS automatic switch provides a series of unique features for this application. In addition to the traditional hot standby switching mode, AMTS specially designed automatic cold standby switching mode, which conforms to the starting characteristics of the oil machine, and automatically switches in strict accordance with the operator's operating specifications, comprehensively improving the reliability and safety of the process, and meeting the safety requirements of the power grid to the maximum.

- 1. Detect common power supply (fault)
- 2. Send generator start signal
- 3. Automatic dual-position switching, when the motor is running normally, it will automatically turn into the generator power supply circuit
- 4. Monitor backup power supply (return to normal)
- 5. Automatically switch to common power supply after dual position switching (you can also manually)
- 6. Send generator stop signal

Mains - In mains applications,

- 1. Detect common power supply (fault)
- 2. Automatically switch to standby power
- 3. Monitor common power supply (return to
- 4. Automatic conversion to common power supply (can also be manual)





# 系统构成

System composition

# AMTS(ASG)中压自动转换开关设备具有丰富的解决方案

AMTS(ASG) medium voltage automatic switching switchgear has a wide range of solutions

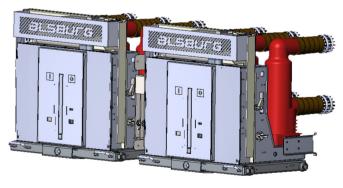
## 四个关键组成部分:

- 1. 用于承载两路讲线电源和开关设备的讲线柜体组 成部分,其中包括母线系统、电压电流互感器、避 雷器、快速接地开关、带电显示器、电缆连接分支 、可供选择的线路保护及相关二次设备。
- 2. 用于承接主回路转换执行机构的性能优异的真空 断路器。
- 3. 用于判断和执行设备自动转换、可靠动作的智能 控制系统,并具备就地转换或远方遥控转换等多种 方式冗余控制。
- 4. 为确保人员和设备安全运行的联锁系统,同时具 备机械联锁和电气联锁,每种联锁独立运行,同时 构建系统的安全体系,确保自动运行和人工操作的 双重安全。

Four key components:

- 1. Part of the inlet cabinet for carrying two inlet power supplies and switchgear, including bus system, voltage and current transformer, arrester, quick ground switch, live display, cable connection branch, optional line protection and related secondary equipment.
- 2. Vacuum circuit breaker with excellent performance to undertake the main circuit switching actuator.
- 3. Intelligent control system for judging and executing automatic conversion and reliable action of equipment, and has multiple redundant control methods such as local conversion or remote control
- 4. In order to ensure the safe operation of personnel and equipment, the interlock system has mechanical interlock and electrical interlock, each interlock operates independently, and the safety system of the system is built to ensure the dual safety of automatic operation and manual operation.







09

**ALSBU**FG

Incoming system composition

# 进线系统分为2个组成模块:

The incoming system is divided into 2 components:

### 1- 电源进线柜

- 用于连接和分断常用电源到主母线中;
- 监测备用电源状态,选择安装线路保护时,可进行相应选择性故障排除;
- 可将故障的备用电源隔离,单独进行检修,不影响常用电源供电;
- 包含安全操作的柜体五防联锁。

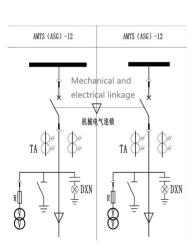
### 2-备用电源进线柜

- 用于连接和分断备用电源,备用电源可以是稳定的市电,或者是发电机;
- 监测常用电源状态,选择安装线路保护时,可进行相应选择性故障排除;
- 可将故障的常用电源隔离,单独进行检修,不影响 备用电源供电;
- 包含安全操作的柜体五防联锁。

- 1- Power input cabinet
- Used to connect and disconnect the common power supply to the main bus;
- Monitor the status of the standby power supply, select the installation of line protection, can carry out the corresponding selective troubleshooting;
- The faulty standby power supply can be isolated and repaired separately, without affecting the common power supply;
- Includes five interlocks for safe operation.

### 2- Standby power input cabinet

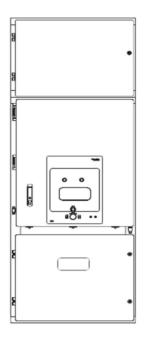
- Used to connect and disconnect the standby power supply, the standby power supply can be a stable mains power, or a generator;
- Monitor the status of common power supply, select the installation of line protection, can carry out the corresponding selective troubleshooting;
- The common power supply of the fault can be isolated and repaired separately, without affecting the backup power supply;
- Includes five interlocks for safe operation.

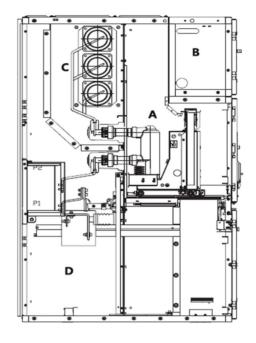




### 柜体结构

### Cabinet structure





A:断路器隔室
Breaker compartment
B:继电仪表室
Relay instrument room
C:母线隔室
Bus compartment
D:电缆隔室
Cable compartment

- ●金属铠装开关设备结构,两路进线 电源分隔布置为单独间隔,现场人员 可在不影响连续运行的前提下,进行 另一路故障电源的安全维护和检修。
- ●柜体采用断路器中置式结构,极大 方便检修人员的操作,方便断路器的 维修更换。更小的外形尺寸为客户提 供更为标准的安装尺寸和现场布置。
- ●每个柜体分别包装和运输,灵活搬运和组装。
- ●户内安装使用
- ●每个间隔分为四个相互独立的金属 分隔,一个间隔燃弧故障不会将影响 扩大到另一个间隔,继电仪表室隔离 于其他高压隔室,高压带电时可进行 开门检查。

• Metal armored switchgear structure, two inlet lines of power separation arrangement for a separate space, on-site personnel can not shadow

Under the premise of continuous operation, the safety maintenance and overhaul of the other faulty power supply are carried out.

• The cabinet adopts the middle structure of the circuit breaker, which greatly facilitates the operation of the maintenance personnel and the maintenance and replacement of the circuit breaker.

The smaller form factor provides customers with a more standard installation size and site layout.

- Each cabinet is packaged and transported separately, flexible handling and assembly.
- Indoor installation and use
- Each interval is divided into four independent metal partitions, one interval arc failure will not expand the impact to another interval, the relay instrument room is isolated from other high-voltage compartments, high-voltage live can be opened for inspection.

# 控制系统

Control system

# 控制系统由1 台控制柜以及自带进线系统中的两台进线PT 手车组成

The control system is composed of a control cabinet and two incoming PT carts in the built-in incoming system

### 控制柜的主要功能:

- 控制柜整合了完整的智能控制系统,在整体中压方案中独立运行双电源的自动切换职能。控制系统集成电源监视、逻辑判断、条件闭锁、动作输出、事故报警、事件记录、通讯组网等所有功能于一体,是管理电源投切、保障供电质量、提高供电连续性的关键核心之一。
- 系统以电压判断为主要依据,同时具有电压PT断 线闭锁保护,避免误判,使动作更准确。
- 独立的控制柜的另一个重要功能是其能够成为独立的出线间隔,可以放置在两台进线间隔的左边或右边,形成电缆上/下出线或铜排柜顶出线等更多灵活的方案设置,也可以作为母线提升/与相邻母线间隔形成母线连接转接柜等功能。

### 控制柜主要元件组成:

- 转换操作智能控制单元
- 智能电能监控仪表
- 系统综合智能控制显示屏

Main functions of the control cabinet:

- The control cabinet integrates a complete intelligent control system to independently operate the automatic switching function of dual power supplies in the overall medium voltage scheme. The control system integrates all functions such as power monitoring, logic judgment, condition locking, action output, accident alarm, event recording, communication networking, etc., which is one of the key cores to manage power switching, ensure power supply quality, and improve power supply continuity.
- The system is mainly based on voltage judgment, and has voltage PT break line blocking protection to avoid misjudgment and make the action more accurate.
- Another important function of the independent control cabinet is that it can become an independent outlet interval, which can be placed on the left or right of the two inlet intervals to form more flexible scheme Settings such as cable upper/lower outlet or copper cabinet top outlet, and can also be used as a bus lift/form a bus connection with the adjacent bus bar interval.

Main components of the control cabinet:

- Conversion operation intelligent control unit
- Intelligent power monitoring instrument
- System integrated intelligent control display

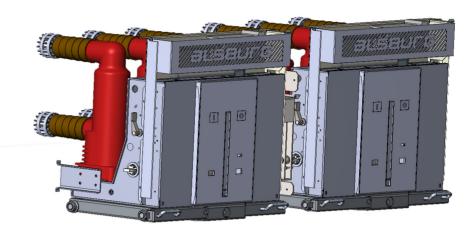






# 联锁系统

Interlocking system



## 电气连锁:

- ◆ 在两台真空断路器合闸回路中串接 节点信号,保障任意一台真空断路器 合闸时,另外一台真空断路器不能合 闸。
- AMTS(ASG) 的控制系统预设了程序闭锁,确保控制系统不会发出两路电源同时合闸的信号。

### 机械联锁:

- AMTS(ASG) 创新的发明了安全的 机械联锁,可以确保常用电源的真空 断路器和备用电源的真空断路器在运 行位置时不能同时合闸。
- ◆为了实现机械联锁, AMTS(ASG)选用经过特殊处理的真空断路器。
- 机械联锁需要在现场简易安装部分 零件。

#### Electrical chain:

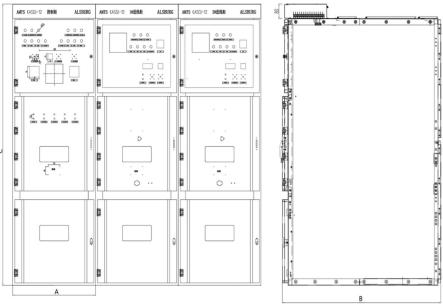
- Connect node signals in series in two vacuum circuit breaker closing circuits to ensure that when any vacuum circuit breaker closes, the other vacuum circuit breaker cannot close
- The control system of AMTS(ASG) presets the program lock to ensure that the control system will not send out the signal of two power supplies closing at the same time.

### Mechanical interlocking:

- AMTS(ASG) innovates a secure mechanical interlock to ensure that the vacuum circuit breaker for the common power supply and the vacuum circuit breaker for the standby power supply cannot be closed at the same time when in operation.
- In order to achieve mechanical interlocking, AMTS(ASG) uses specially treated vacuum circuit
- Mechanical interlocking requires easy installation of some parts on site.

# 外形尺寸

### Dimension



额定电流 Rated current	宽度A Width	深度B Depth	高度C Height	重量Weight	
630A	800mm*3	1500mm	2300mm		
1250A	800mm*3	1500mm	2300mm		
1600A	800mm*3	1500mm	2300mm	2000kg-3500kg	
2000A	1000mm*2+800/1000mm	1500mm	2300mm		
2500A	1000mm*2+800/1000mm	1500mm	2300mm		
3150A	1000mm*2+800/1000mm	1500mm	2300mm		

### 备注:

- 1特殊尺寸要求请与公司市场部联系。
- 2.2000A 控制柜, 当作为出线使用时为800/1000mm(标准)宽, 当仅作为控制柜时为800mm宽。
- 3.2500A 控制柜, 当作为出线使用时为1000mm宽, 当仅作为控制柜时为800mm宽。

#### Remarks

14

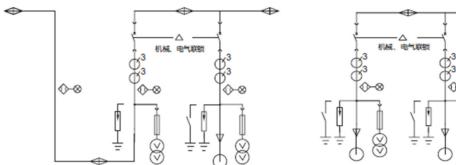
- 1 Please Contact Marketing Department for special size requirements.
- 2.2000A control cabinet, 800/1000mm (standard) wide when used as outlet, 800mm wide when used as control cabinet only.
- 3.2500A control cabinet, 1000mm wide when used as outlet and 800mm wide when used as control cabinet only.

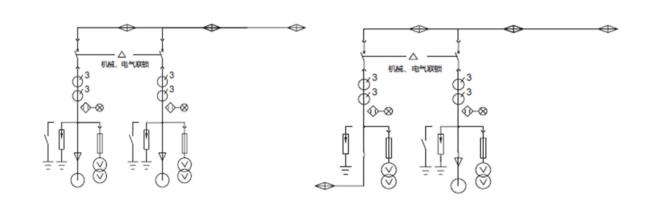
典型方案

Typical Portfolio

# 典型方案

Typical Portfolio





- 控制柜在方案中可以根据方案需要放在最 左或最右间隔,灵活布置。
- 上进/ 出线方案,可为电缆上进/ 出,也可为进/ 出铜排柜顶搭接。
- 进线方式还可以为母线柜顶连接,提供标准母线桥接口连接。
- The control cabinet can be placed in the leftmost or rightmost space according to the needs of the scheme, and can be flexibly arranged.

**alsburg** 

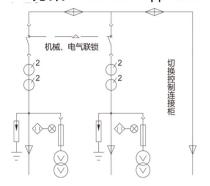
♦-

**15** 

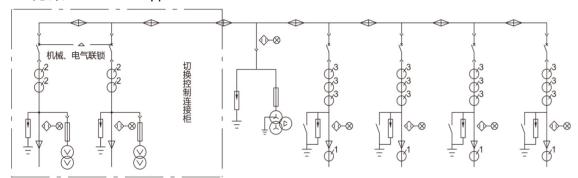
- Upper/lower cable solution, can be upper/lower cable, or upper/lower copper cabinet top lap.
- The entry mode can also be connected to the top of the bus cabinet, providing a standard bus bridge interface connection.

ANTS (ASS)-12 RAME ALSBORG ANTS (ASS)-12 THERE ALSBORG ANTS (ASS)-12 THERE ALSBORG ANTS (ASS)-12 THERE ALSBORG

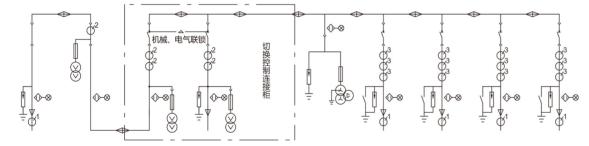
# 方案一 Solution Application 1



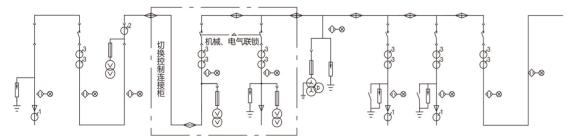
# 方案二 Solution Application 2



# 方案三 Solution Application 3



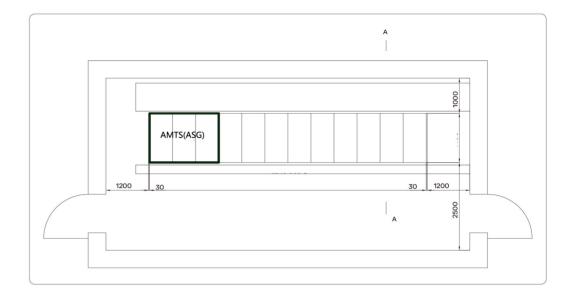
# 方案四 Solution Application 4



布置与安装

alsburg

Layout and installation



### 配电室平面布置基本方案

- •现场安装建议柜后到墙之间以及两侧到墙之间均留出适当的空间,作为维修通道。
- •图中所示为配电室平面布置图的参考方案。
- •建议柜前预留1200-2500mm,柜后至墙预留1000mm,左右距墙1200mm。

### Basic plan of distribution room layout

- Proper space should be set aside between the rear of the on-site installation cabinet and the wall, as well as between the two sides and the wall, as a maintenance channel.
- Shown in the figure is the reference scheme of the layout of the distribution room.
- It is recommended to reserve 1200-2500mm at the front of the cabinet, 1000mm at the back of the cabinet and 1200mm from the wall.

# alsburg

# 常州阿斯博开关有限公司 Changzhou ALSBURG Switchgear Co.,Ltd.

江苏省常州市武进高新技术产业开发区龙惠路6号 邮编: 213166 No.6 Longhui Road, Wujin Hi-Tech Industrial Zone, Changzhou, Jiangsu 213166 销售电话(Sales Tel): 0519-88239288 88239088 技术支持(Technical Advisory): 0519-88239788 售后服务热线(Service Hotline): 0519-88239688 传真(Fax): 0519-88239388 邮箱(Email): alsburg@163.com 网址: http://www.alsburg.cn







