

SIWOH(GLR) 系列隔离开关熔断器组

**SIWOH(GLR)**

沈阳斯沃电器

SHENYANG SIWO ELECTRICAL E

有 限 公 司

QUIPMENT CO., LTD.

斯沃电器
忠告用户
安全第一

SIWO GIVES ADVICE
TO ALL USERS
SAFETY IS FIRST.

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产品概述

Product General

SIWOH1 (GLR) 系列隔离开关熔断器组(以下简称开关)是一种多极，手动操作开关，采用不饱和聚脂玻璃纤维增强模塑料(DMC)，制造外壳，有很高的介电性能，防护能力和可靠的操作安全性。

操作机构是弹簧蓄能，瞬时释放的加速机构，瞬时接通与断开多断点触头结构。与操作手柄的速度无关，极大提高了各项电气性能与机械性能。

隔离开关熔断器组能够确保带负荷接通与断开电路，配备熔断体后具有可靠的过电流或短路的安全分断保护。

具有很强的耐湿热性。

开关造型美观、新颖、简洁、体积小功能全是同类产品的最佳选择。

SIWOH1 (GLR) 系列产品已获得3C认证证书。

Product General

SIWOH1(GLR) series switch-disconnector-fuse (hereinafter called as switch for short) is a kind of multipole manual operation switch. It adopts DMC enclosure which has high dielectric property, protective capability and operating safety.

The operating mechanism is an accelerating mechanism of spring stored energy and instantaneous release which instantaneously make and break multi-breakpoint contact structure. It has no relationship with the speed for operating the handle. Thus, greatly increase all electrical and mechanical properties.

The switch can ensure make and break circuit under load, the switch equipped with fuse which give reliable making and breaking protection to against over-current or short-circuit.

High resistance to wet heat.

The switch is beautiful, novel, simple, small size and has complete functions. It's the best choice among the similar products.

SIWOH1(GLR) series product has acquired China Compulsory Certificate.

产品特点

Product features

1. 弹簧蓄能瞬时释放的加速机构实现了快速接通或分断(13.8米/秒), 与操作手柄速度无关, 极大提高了熄灭电弧能力。
2. 由不饱和聚脂玻璃纤维增强模塑料(DMC), 制造的外壳具有良好的阻燃性能, 介电性能和操作的安全性。
3. 并联多断点触头具有自清洁作用。
4. 能够确保带负荷接通或断开电路, 并具有可靠的过电流与短路安全保护功能。
5. 更换熔体更加安全、方便、快捷。

Product Features

1. Accelerating mechanism of spring stored energy and instantaneous release realizes quick making and breaking (13.8m/s). It has no relationship with the speed for operating the handle. Thus, greatly increase the capability of extinguishing electric arc.
2. The DMC enclosure has excellent flame retardant property, dielectric property, operating safely.
3. The parallel multi-breakpoint contact has self-cleaning function.
4. It can ensure make and break circuit under load, and has the function of reliable protection to against over-current or short-circuit.
5. It's safer, quicker and more convenient to change fuse.

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SIWOH1(GLR)系列隔离开关熔断器组符合下列标准

SIWOH1(GLR) series switch-disconnector-fuse conforms to the following standards

- 国家标准 GB 14048.1 《低压开关设备和控制设备 总则》

GB 14048.3 《低压开关设备和控制设备 开关、隔离器、隔离开关及熔断器组合电器》

GB/T 4942.2 《低压电器外壳防护等级》

GB 13539.1 《低压熔断器 基本要求》

GB 13539.2 《低压熔断器 专职人员使用熔断器补充要求》

- 国际标准 IEC 60947-1 《低压开关设备和控制设备第一部分：总则》

IEC 60947-3 《低压开关设备和控制设备、开关、隔离器、隔离开关及熔断器组合电器》

- 使用环境与用途

使用环境 SIWOH1(GLR)隔离开关熔断器组在下列条件下能可靠工作

海拔高度不超过2000米；

环境温度不高于+40℃，不低于-5℃；

温度为+40℃时。相对湿度不超过50%；

对由于变化偶尔产生的凝露应采取特殊措施；

无爆炸危险介质环境；

无雨雪侵袭环境；

污染等级为3级。

用途 交流50赫兹，额定电压至380V，额定电流32A至1250A。用于不频繁接通与分断电路。690V产品适用于电气隔离。

- 产品如需特殊要求，请与公司联系。

- National Standard

GB 14048.1 Low-voltage switchgear and controlgear General rules

GB 14048.3 Low-voltage switchgear and controlgear, switches, disconnectors, switch-disconnectors and fuse-combination units

GB/T 4942.2 Degree of protection provided by enclosures for low-voltage apparatus

GB 13539.1 Low-voltage fuses General requirements

GB 13539.2 Low-voltage fuses Supplementary requirements for fuses by authorized persons

- International Standard

IEC 603947-1 Low-voltage switchgear and controlgear Part one: General rules

IEC 60947-3 Low-voltage switchgear and controlgear, switches, disconnectors, switch-disconnectors and fuse-combination units

- Operation environment and usage

Operation environment

SIWOH1 (GLR) series switch-disconnector-fuse can work reliably under the following conditions:

Height above sea level does not exceed 2,000m;

Ambient temperature is not higher than +40℃ and not lower than -5℃;

Relative humidity does not exceed 50% when temperature is +40℃;

Some special measures should be adopted on the condensation caused by change in temperature;

No explosive dangerous medium environment;

No rain and snow attack environment;

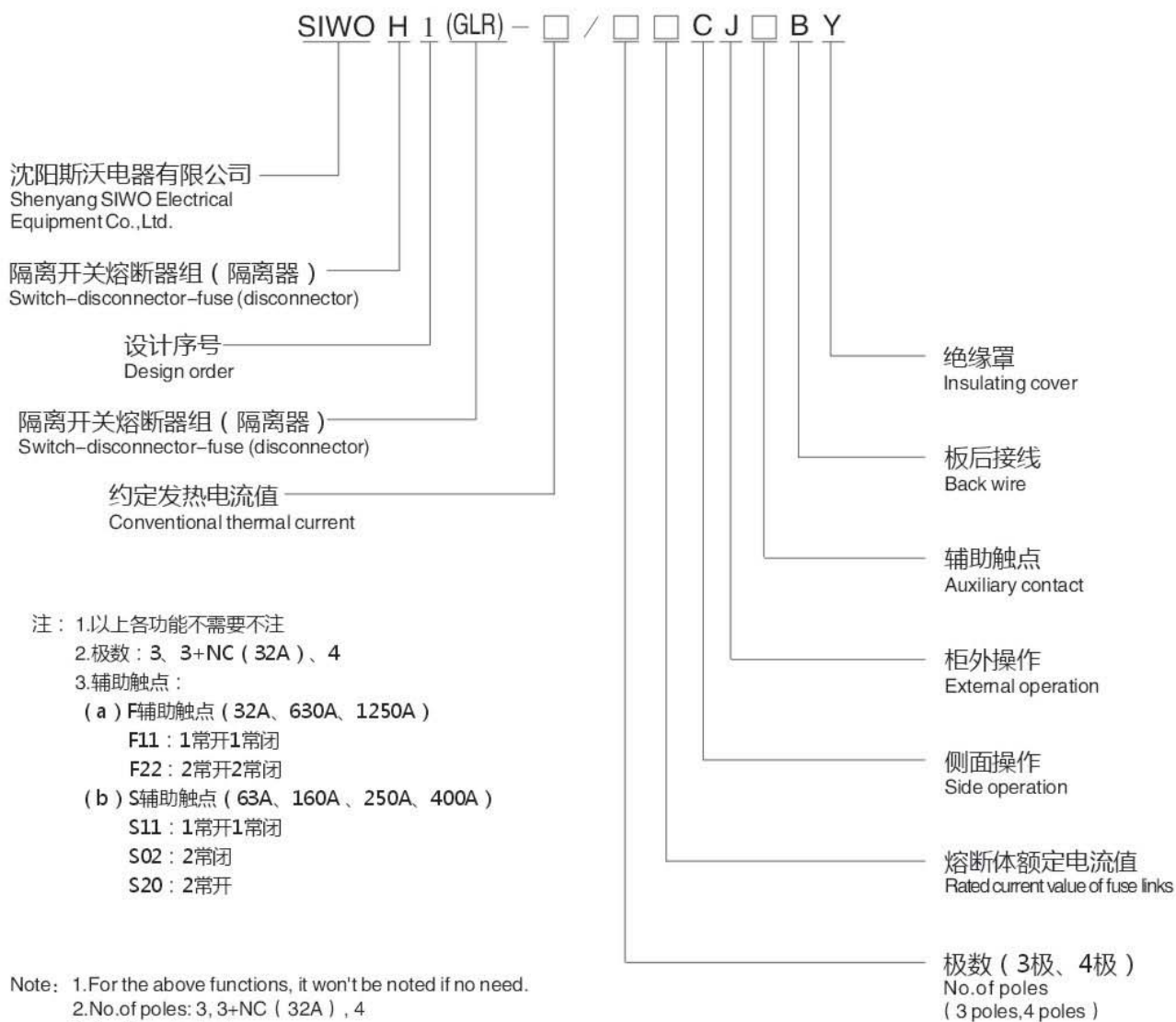
Pollution degree is 3.

Usage: AC 50Hz, rated voltage up to 380V, rated current from 32A to 1250A. The switch-disconnector-fuse used for infrequently making and breaking circuit. 690V products are used for electric isolation.

- If customer has any special requirement for products, please contact with the company.

SIWOH1(GLR)系列隔离开关熔断器组型号说明

Model description of SIWOH1(GLR) series switch-disconnector-fuse



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选型举例：

SIWOH1(GLR)-160/4 100CJS11

SIWOH1(GLR)-160隔离开关熔断器组。约定发热电流值160，4极，熔断体额定电流值100，侧面柜外操作，辅助触点为S型1常开1常闭。

SIWOH1(GLR)—32~1250/3.4为隔离开关熔断器组 (Ue : ~380V)

SIWOH1(GLR)—160~1250/3.4为隔离器熔断器组 (Ue : ~690V)

SIWOH1(GLR)—32~1250/3.4 is switch-disconnector-fuse(Ue:~380V)

SIWOH1(GLR)—160~1250/3.4 is switch-disconnector-fuse(Ue:~690V)

Example of model selection:

SIWOH1(GLR)-160/4 100CJS11

SIWOH1(GLR)-160 switch-disconnector-fuse. Conventional thermal current value 160, 4 poles, rated current value of fuse links is 100, side external operation, S type auxiliary contact 1NO 1NC.

SIWOH1(GLR)隔离开关熔断器组 (熔断体规格)

SIWOH1(GLR) switch-disconnector-fuse(specification of fuse links)

隔离开关熔断器组额定电流 (A) Rated current (A) of switch-disconnector-fuse	熔断体额定电流 (A) Rated current (A) of fuse links	熔断体尺码 Fuse links size
32	2、4、6、8、10、12、16 20、25、32	10×38
63	2、4、6、10、16、20、25、32、 40、50、63	000
160	2、4、6、10、16、20、25、32、 40、50、63、80、100、125、160	00
250	16、20、25、40、50、63、80、 100、125、160、200、250、	1
400	50、63、80、100、125、160、200、 250、315、400	2
630	200、250、300、400、500、630、	3
1250	800、1000、1250	4

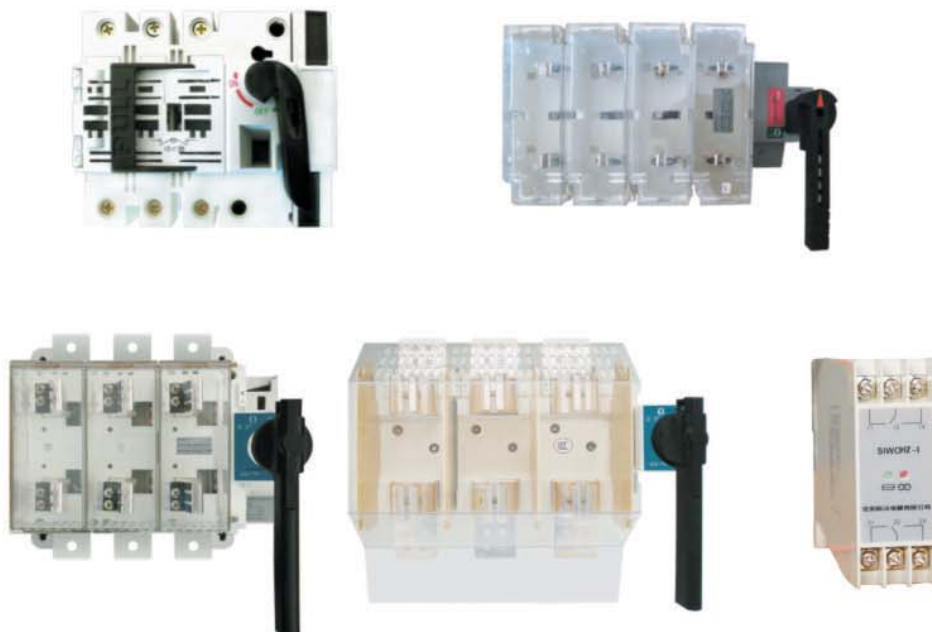
注：1.熔断体尺码：10×38为圆筒形帽熔断体
2.熔断体尺码：000、00、1、2、3为刀型触头熔断体
3.熔断体尺码：4为螺丝固定式熔断器

Note: 1.Fuse links size : 10×38 is cylinrical cap fuse links
2.Fuse links size : 000, 00, 1, 2, 3 is knife contact point fuse links
3.Fuse links size : 4 is screw type fuse



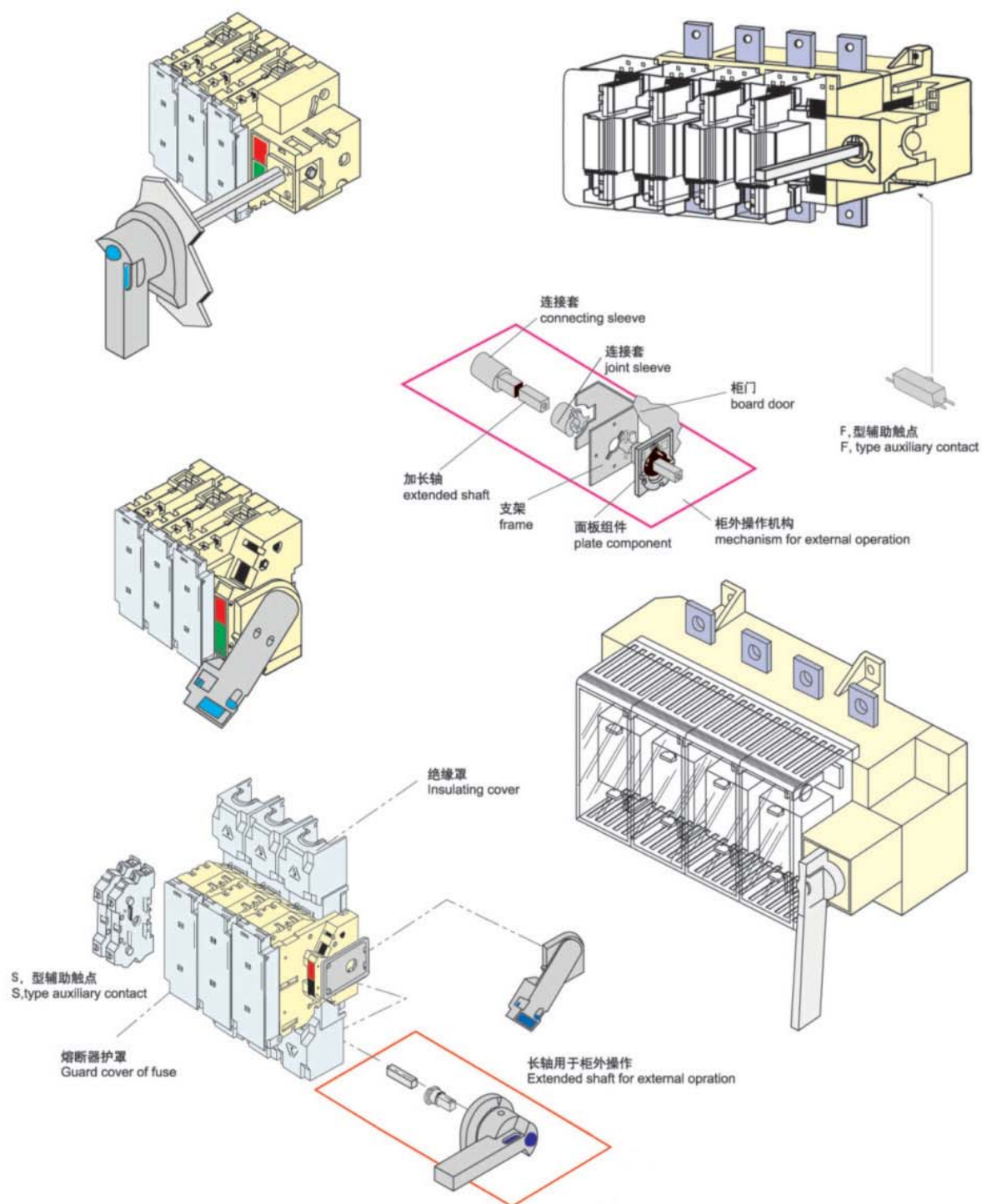
SIWOH1(GLR)-32~1250隔离开关熔断器组 SIWOH1(GLR)-32~1250 switch-disconnector-fuse

- SIWOH1(GLR)-32整体式设计结构。
SIWOH1(GLR)-63~400 模块式设计结构。
SIWOH1(GLR)-630~1250 整体式设计结构。
确保带负载接通与断开，可靠的过电流与短路安全断开保护。
 - 结构与操作形式
正面操作：手柄安装在开关正面。
侧面操作：手柄安装在开关右侧。
正面柜外操作：手柄安装在配电柜柜门外的正面。
侧面柜外操作：手柄安装在配电柜外的右侧。
 - 可配装F、S型辅助触点。
 - 可配装HZ熔断器熔丝指示器，通过指示器提供即时报警及脱扣指示。
- SIWOH1(GLR)-32 is entirely design structure.
SIWOH1(GLR)-63~400 are module design structures.
SIWOH1(GLR)-630 ~ 1250 are entirely design structures.
Ensure making and breaking under load, reliable breaking protection against over-current or short-circuit.
 - Structure and operation mode
Front operation : Handle is installed in front of the switch.
Side operation : Handle is installed at the right side of the switch.
Front external operation : Handle is installed outside the door of distribution board.
Side external operation : Handle is installed on the right side outside the distribution board.
 - F, S type auxiliary contacts can be installed.
 - HZ fuse monitor can be used, which gives alarm and trip indication



SIWOH1(GLR)-63~1250隔离开关熔断器组示意图

Diagram of SIWOH1(GLR)-63~1250 switch-disconnector-fuse

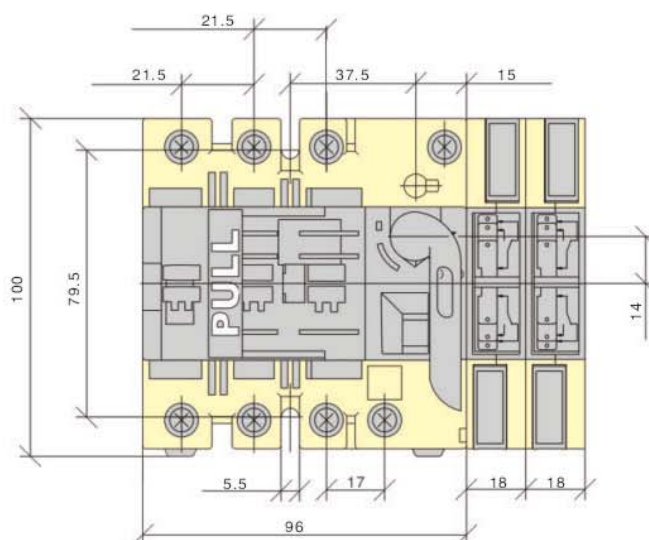
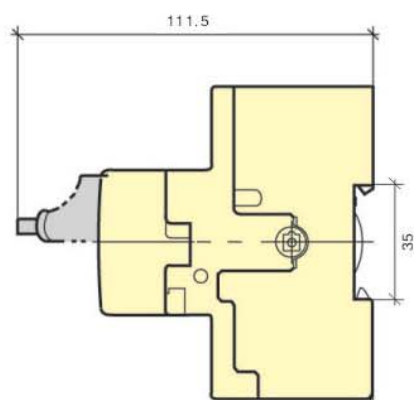


SIWOH1(GLR)-32~1250隔离开关熔断器组电气性能与机械性能

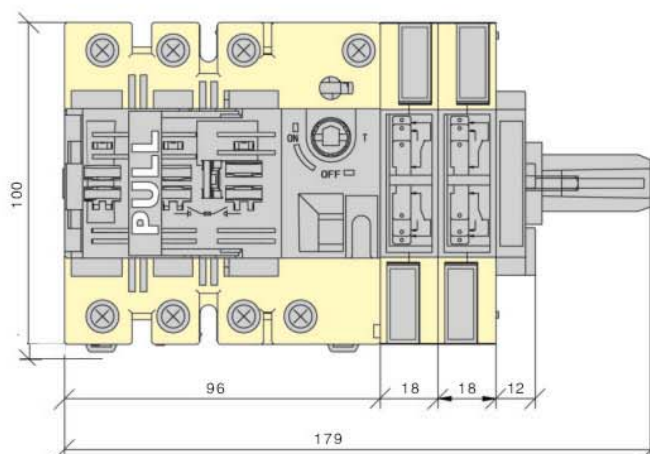
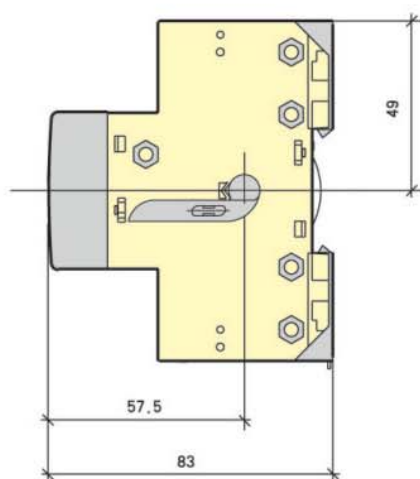
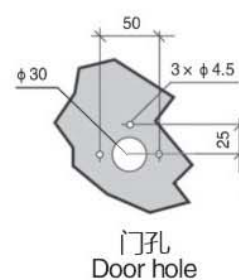
Electrical and mechanical properties of SIWOH1(GLR)-32~1250 switch-disconnector-fuse

约定发热电流 I_{th} (A) Conventional thermal current I_{th} (A)		32	63	160	250	400	630	1250
熔断体尺码 Fuse links size		10×38	000	00	1	2	3	4
额定绝缘电压 U_i Rated insulation voltage U_i		750	750	750	750	750	750	750
介电强度 (V) Dielectric strength (V)								
额定冲击耐受电压 U_{imp} kV Rated impulse withstand voltage U_{imp} kV		6	6	6	6	6	6	6
额定工作电流 I_e (A) Rated operational current I_e (A)								
380V	AC23A	32	63					
	AC23B			160	250	400	630	1250
690V	AC20A			160	250	400	630	1250
限制短路电流 (I_q) (kA) Limited short-circuit current(I_{cm})(kA)		50	50	50	50	50	50	50
接通与分断能力(A R_{ms}) Making and breaking capacity(A R_{ms})								
额定接通能力 Rated making capacity		320	630	1600	2500	4000	6300	10000
额定分断能力 Rated breaking capacity		256	504	1280	2000	3200	5040	10000
操作性能 Operation properties								
机械寿命 380V Mechanical durability 380V		8500	8500	1400	1400	800	800	500
电气寿命 380V Electrical durability 380V		1500	1500	200	200	200	200	100
机械寿命 690V Mechanical durability 690V				8000	8000	5000	5000	3000
重量 (kg) Weight(kg)								
3极 3poles		0.48	1	1.8	3.2	4.8	16	28
4极 4poles		0.5	1.3	2.3	4.5	6.1	19	33

SIWOH1(GLR)-32隔离开关熔断器组外形与安装尺寸 Outline and installation dimensions of SIWOH1(GLR)-32 switch-disconnector-fuse



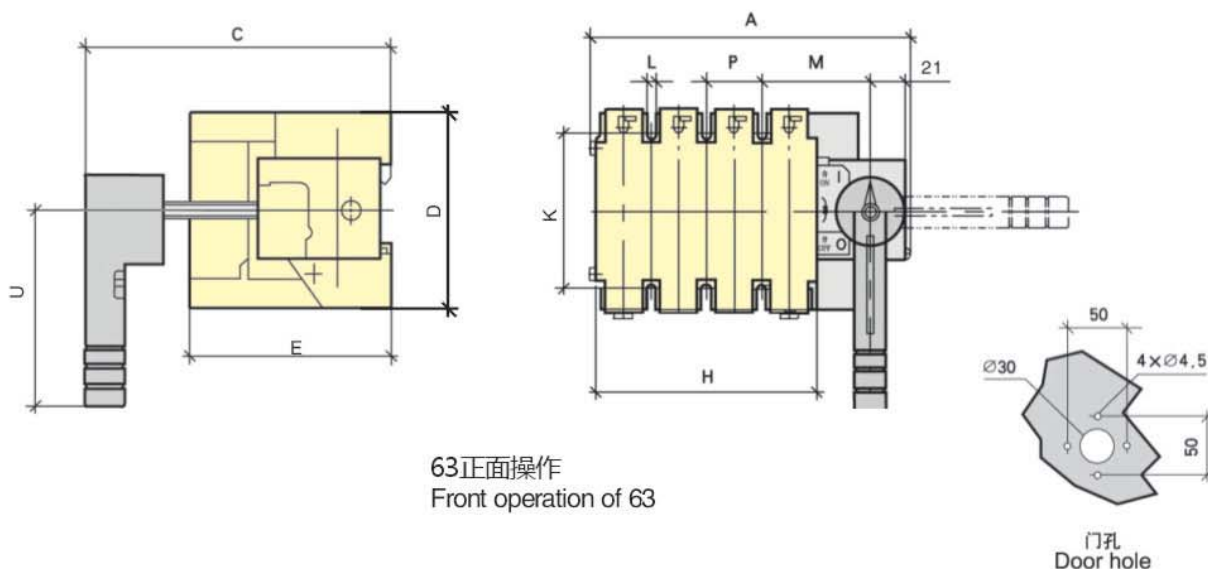
32正面操作
Front operation of 32



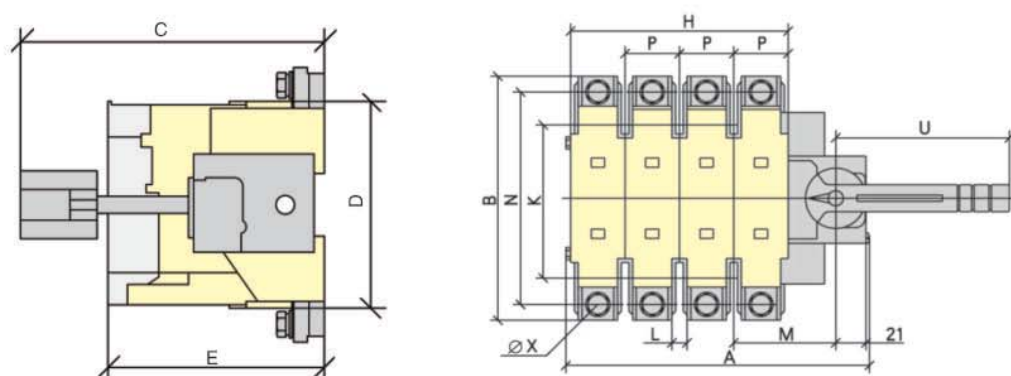
32侧面操作 (带F辅助触点)
Front operation of 32 (with F type auxiliary contact)

SIWOH1(GLR)-63~400外形与安装尺寸

Outline and installation dimensions of SIWOH1(GLR)-63~400 switch-disconnector-fuse



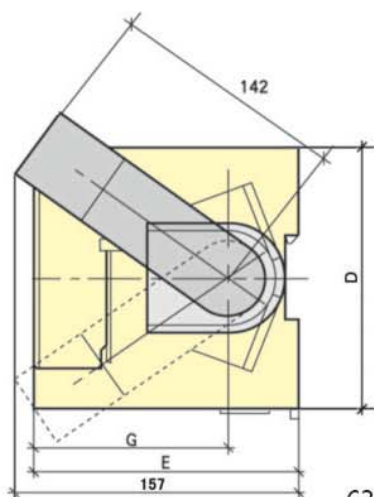
10



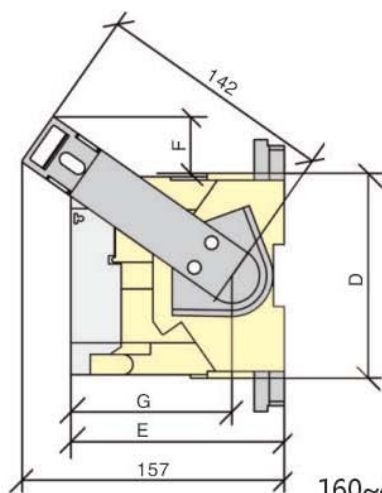
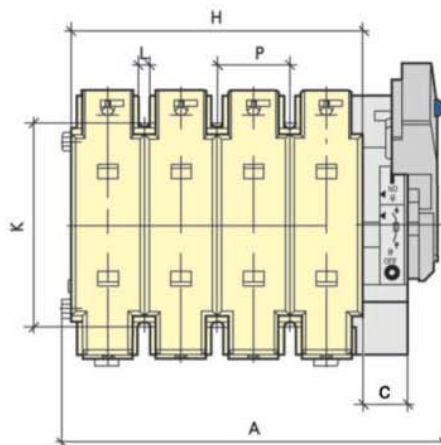
规格 Specification	外型尺寸与安装尺寸 Outline Dimension and Installation Dimension												
	A	B	C	D	E	H	M	K	N	P	U	L	ØX
SIWOH1(GLR)-63A/3	154		191	121	117	96	63	90		32	115	5	
SIWOH1(GLR)-63A/4	186		191	121	117	128	63	90		32	115	5	
SIWOH1(GLR)-160A/3	167	162	192	121	127	108	67	90	141	36	115	5	9
SIWOH1(GLR)-160A/4	203	162	192	121	127	144	67	90	141	36	115	5	9
SIWOH1(GLR)-250A/3	239	195	200	165	146	180	93	137	165	60	145	6	11
SIWOH1(GLR)-250A/4	323	195	200	165	146	240	117	137	165	60	145	6	11
SIWOH1(GLR)-400A/3	281	205	200	170	149	198	122	147	175	66	145	6	11
SIWOH1(GLR)-400A/4	347	205	200	170	149	264	122	147	175	66	145	6	11

SIWOH1(GLR)-63~400/C外形与安装尺寸

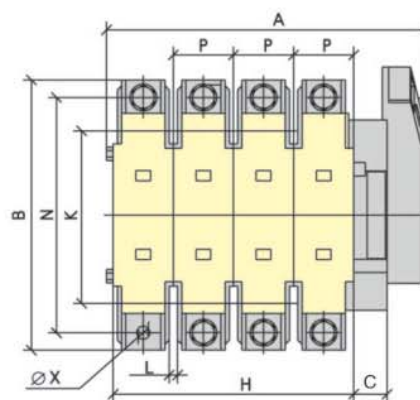
Outline and installation dimensions of SIWOH1(GLR)-63~400/C switch-disconnector-fuse



63侧面操作
Side operation of 63

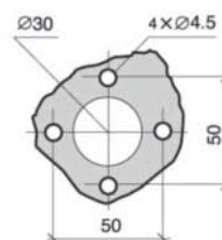


160~400正面操作
Side operation of 160~400



11

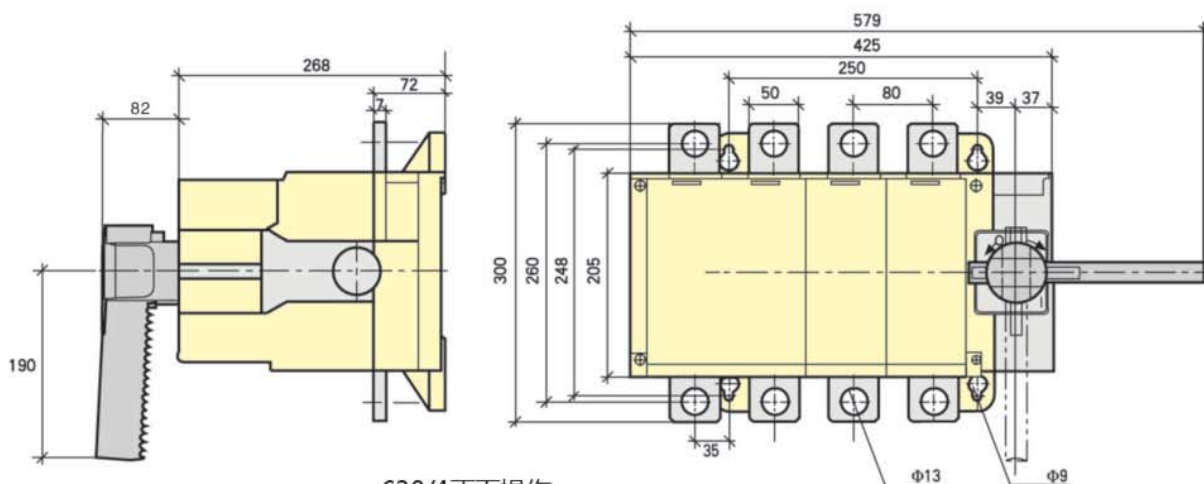
规格 Specification	外型尺寸与安装尺寸 Outline Dimension and Installation Dimension												
	A	B	C	D	E	F	H	K	N	P	L	G	ØX
SIWOH1(GLR)-63A/3C	140		20	121	117	40	96	90		32	5	94	
SIWOH1(GLR)-63A/4C	172		20	121	117	40	128	90		32	5	94	
SIWOH1(GLR)-160A/3C	152	162	20	121	127	40	108	90	141	36	5	104	9
SIWOH1(GLR)-160A/4C	188	162	20	121	127	40	144	90	141	36	5	104	9
SIWOH1(GLR)-250A/3C	224	195	20	165	146	18	180	137	165	60	6	123	11
SIWOH1(GLR)-250A/4C	314	195	50	165	146	18	240	137	165	60	6	123	11
SIWOH1(GLR)-400A/3C	272	205	50	170	149	15	198	147	175	66	6	126	11
SIWOH1(GLR)-400A/4C	338	205	50	170	149	15	264	147	175	66	6	126	11



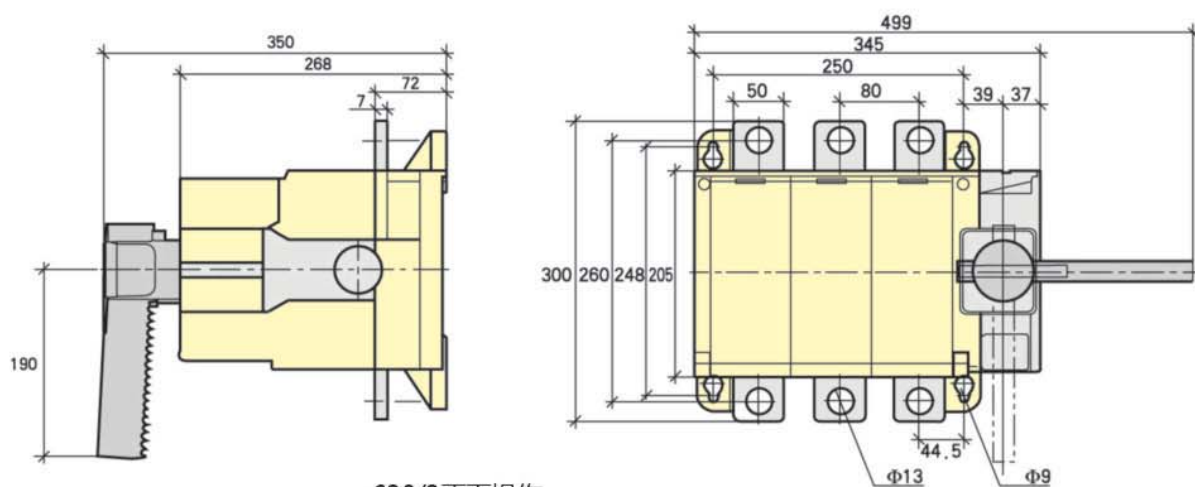
门孔
Door hole

SIWOH1(GLR)-630外形与安装尺寸

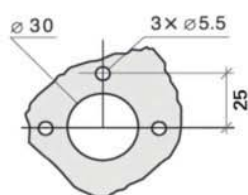
Outline and installation dimensions of SIWOH1(GLR)-630 switch-disconnector-fuse



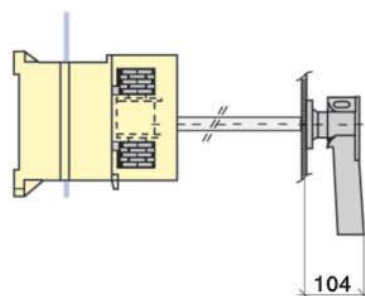
630/4正面操作
Front operation of 630/4



630/3正面操作
Front operation of 630/3



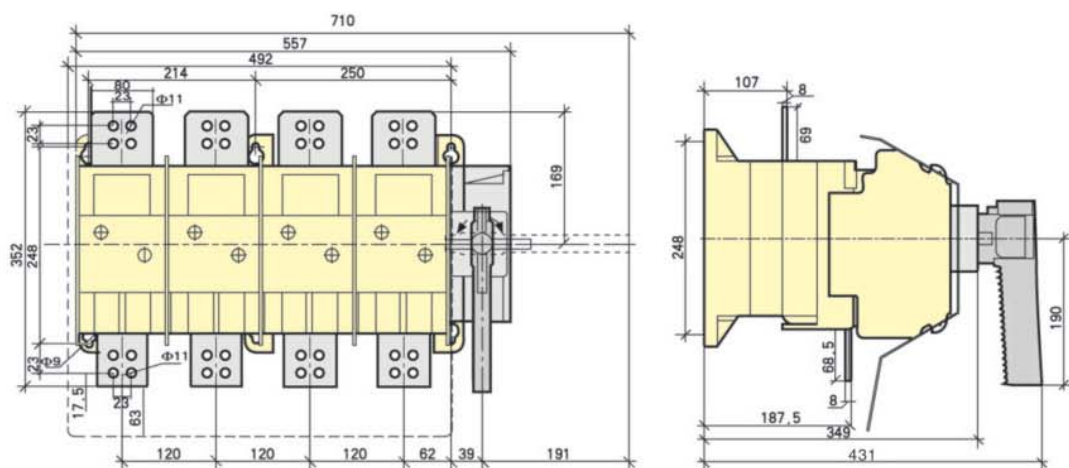
门孔
Door hole



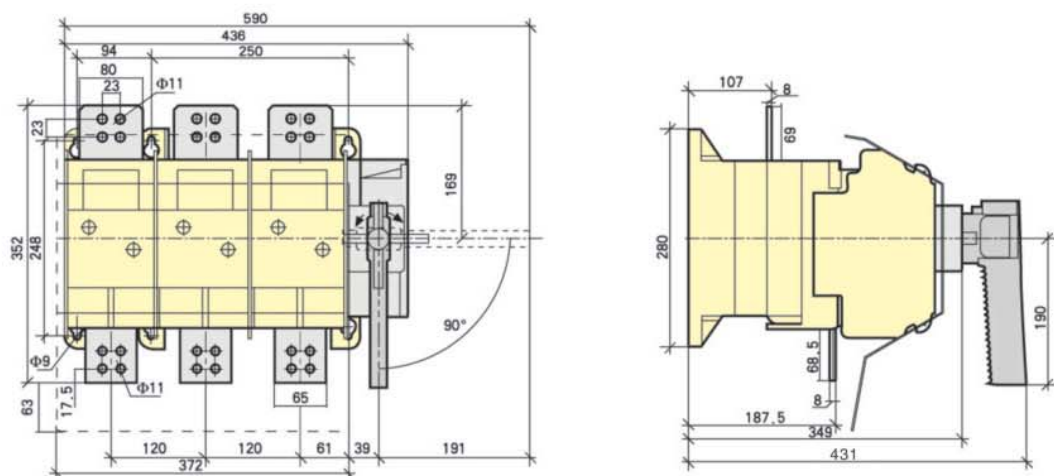
630正面柜外操作
Front external operation of 630

SIWOH1(GLR)-1250外形与安装尺寸

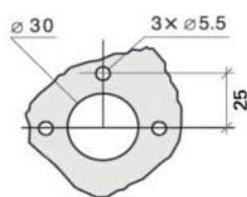
Outline and installation dimensions of SIWOH1(GLR)-1250 switch-disconnector-fuse



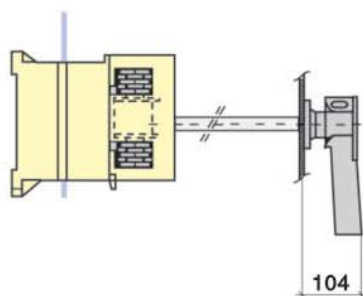
1250/4正面操作
Front operation of 1250/4



1250/3正面操作
Front operation of 1250/3



门孔
Door hole



1250正面柜外操作
Front external operation of 1250

实施的功能：

Executive Functions:

① 变压器输出

电力设备源的隔离

电力设备的一般过电流保护

与一个专门的变压器传感器或一个检测热继电器结合，
对变压器过负荷进行专门保护

① Transformer output

Isolation of electric power equipment source

General over-current protection for electric power equipment

To be combined with a special transformer transducer or an inspection thermal relay to take a special protection against transformer overload.

② 馈线

隔离

过流保护和间接的人身接触保护

开关功能或机械维护时关闭电源

② Cable

Isolation

Over-current protection and indirect human protection against contact injury

Switching function or turning off the power for equipment maintenance

③ 配电柜进线

总进线电流直接出柜内各分路电流决定

可带负荷断开，无需采用一个隔离接触器开关。

③ Inlet wiring of distribution board

The general inlet current directly depends on all the branch current inside the board

Being able to open under load without need of using a contactor switch for isolation.

④ 电动机回路

隔离

机械维护时关断电源

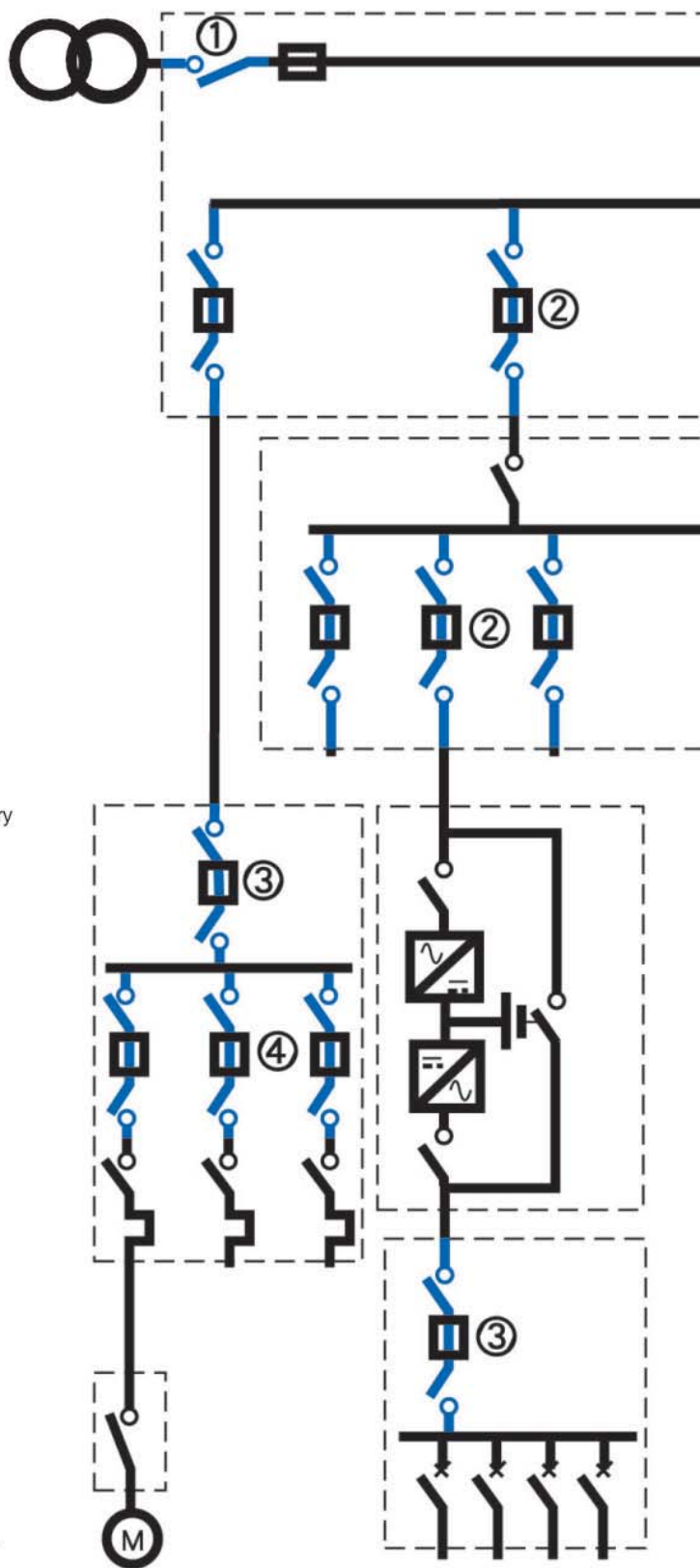
④ Motor circuit

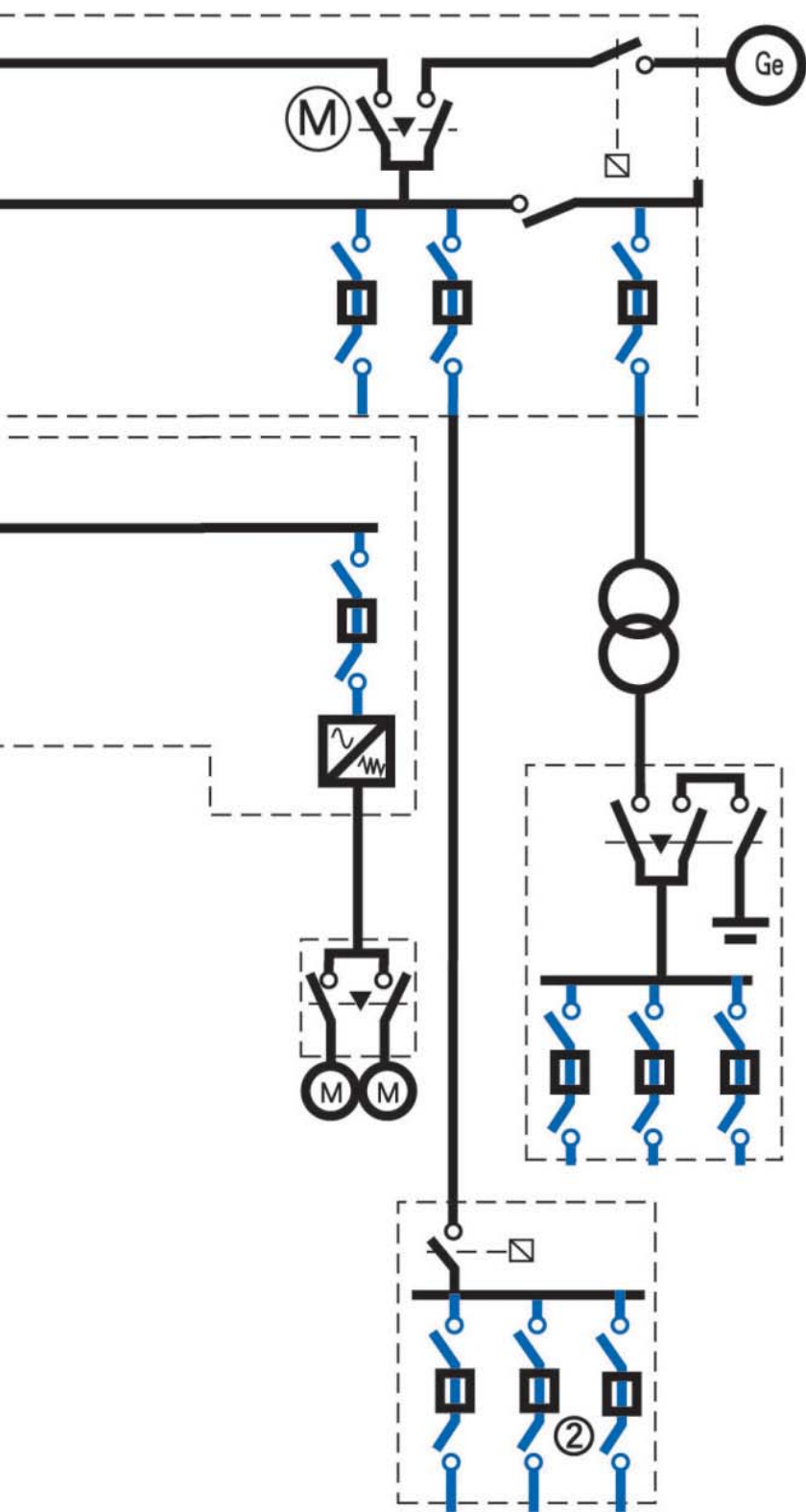
Isolation

To turn off the power for equipment maintenance

※一般的断开功能，符合IEC 60947-3和GB 14048.3标准。

※General cut-off function conforms to the standards of IEC 60947-3 and GB 14048.3.





2012

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