

MCB/RCBO Product Manual

小型断路器 产品手册



SINGI® 信基伟业

建筑电气 & 智能家居集成商 **国家高新技术企业**

Building electrical & intelligent household integrator
National high-tech enterprises



上海奉贤庄行欧洲工业园区的上海信基工业园
Shanghai Singi Electrical Co. Ltd



浙江信基电气股份有限公司工业园
Zhejiang Singi Electrical LLC

关于我们 About Us

信基伟业始创于1995年,是目前国内知名的建筑电气&智能家居集成商;专业研发和生产智能光纤信息箱、墙壁式无线路由器、吸顶式无线路由器、电脑线、电视线、照明配电箱、小型断路器、家居安防线缆、开关插座等。

Singi Electric was established in 1995 and now become the well-known building electric integrator. Singi are professional in producing fiber information box, wall-type WIFI router, roof-type WIFI router, low voltage cables, circuit breaker, wall switch and etc.

核心价值观:

- 以客户为中心;
- 以奋斗者为本,尊重个人,制度至上;
- 尽一切可能创新产品和管理;
- 正直、协作、效率、分享。

Core Values:

- Customer focus;
- Take the strivers as the foundation, respect the individual, and put the system first;
- Innovate products and management as much as possible;
- Integrity, collaboration, efficiency and sharing.

核心使命:

- 聚焦客户所想,以信赖的品质,做用户电气安全的好伙伴;
- 让更多善良的人因公司的久远存续得到帮助。

Core Mission:

- Focus on customers' needs, and be a good partner for users' electrical safety with reliable quality;
- Let more kind-hearted people get help because of the long-term existence of the company.

企业愿景:

提供客户称道的产品和服务,更提供安全和解决方案。

Enterprise Vision:

Provide products and services that customers praise, and provide security and solutions.

发展历程

development history

企业成长期

- 1995年 | 信基电器厂(信基伟业前身)成立
- 1999年 | 与正泰集团、鸿雁电气结为战略合作联盟

二次创业期

- 2001年 | 浙江信基电气股份有限公司、上海信基电气有限公司成立
- 2003年 | 与西蒙电气、霍尼韦尔朗能公司结为战略合作联盟

跨越发展期

- 2006年 | 投资3800多万元的浙江乐清信基工业园建成并投入使用
- 2007年 | 投资2000多万元的上海奉贤信基工业园建成并投入使用
- 2009年 | 产品出口欧美、东南亚等地;产品使用于上海世博场馆建设

企业腾飞期

- 2010年 | 举办“牵手姚明,共享未来”的品牌推广,年产值突破2亿
- 2011年 | 信基伟业商标被认定为“中国驰名商标”年产值突破2.7亿
- 2012年 | 与国内多家房地产集团建立战略合作关系,年产值突破3亿
- 2013年 | 信基伟业商标被评为“中国电工十大品牌”与“保障性安居工程推荐品牌”
- 2014年 | 公司通过ISO14000环境体系认证,公司产品由太平洋保险公司承保
- 2015年 | 公司通过OHSAS18001职业健康安全管理体系
- 2016年 | 信基携手CCTV强力助推,并获得“国家高新技术企业”称号
- 2017年 | 信基荣获“中国配电箱十大品牌”称号
- 2018年 | 信基荣获“中国房地产供应商高成长型企业”称号
- 2019年 | 国家高新技术企业顺利通过复评
- 2021年 | 建筑面积40000m²新厂房投入使用

Enterprise Growth Period

- In 1995, SINGI Electric Appliance Factory (predecessor of SINGI) was founded
- In 1999, it formed a strategic cooperation alliance with CHINT Group and HONYAR Electric

Second Entrepreneurial Period

- In 2001, Zhejiang SINGI Electric Co., Ltd. and Shanghai SINGI Electric Co., Ltd. were established
- In 2003, it formed a strategic cooperation alliance with SIMON Electric and Honeywell Lunergy

Leapfrog Development Period

- In 2006, Zhejiang Yueqing SINGI Industrial Park with an investment of more than 38 million yuan was completed and put into use
- In 2007, Shanghai Fengxian SINGI Industrial Park with an investment of more than 20 million yuan was completed and put into use
- In 2009, the products were exported to Europe, America, Southeast Asia and other places; The product is used in the construction of Shanghai World Expo venues

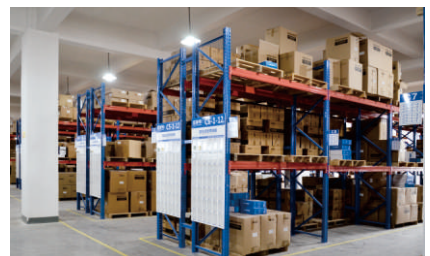
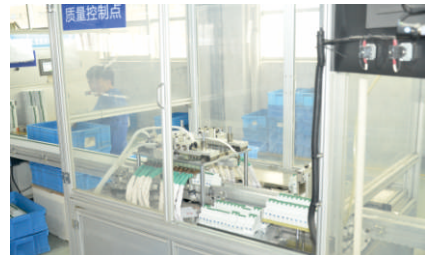
Enterprise Take-off Period

- In 2010, the brand promotion of "holding hands with Yao Ming and sharing the future" was held, and the annual output value exceeded 200 million
- In 2011, SINGI trademark was recognized as "China's famous trademark" with annual output value exceeding 270 million
- In 2012, it established strategic cooperative relations with many domestic real estate groups, with annual output value exceeding 300 million
- In 2013, the trademark of SINGI was rated as "Top Ten Brands of CNEEC" and "Recommended Brands for Affordable Housing Project"
- In 2014, the company passed ISO14000 environmental system certification, and its products were underwritten by Pacific Insurance Company
- In 2015, the company passed OHSAS18001 occupational health and safety management system
- In 2016, SINGI joined hands with CCTV and won the title of "National High-tech Enterprise"
- In 2017, SINGI won the title of "Top Ten Brands of Distribution Box in China"
- In 2018, SINGI won the title of "China's real estate supplier high-growth enterprise"
- In 2019, the national high-tech enterprises successfully passed the re-evaluation
- By 2021, a new plant with a building area of 40000 m² will be put into use

企业实力 Enterprise Strength

是目前国内专业生产建筑电气产品的高科技民营股份制企业,公司生产员工800多人,各种管理及技术人员100多人;各类大型生产、检测设备300多台,致力于智能家居、配电控制系统产品、照明控制系统产品、低压电器和安防线缆的研发、生产和销售。

At present, it is a high-tech private joint-stock enterprise specializing in the production of building electrical products in China. The company has more than 800 production staff and 100 management and technical personnel. Multiple people; More than 300 sets of large-scale production and testing equipment of various types are dedicated to smart home, power distribution control system products, lighting control system products, low-voltage electrical appliances and safety R&D, production and sales of anti-cable.



资质荣誉

Honor Of Qualification

公司先后通过ISO9001、ISO14001、ISO45001国际管理标准三体系认证及UL、CE、CB、ETL等国际产品认证；拥有50多项专利，40多份CCC强制认证，获得“中国建筑电气知名品牌”“中国电工十大品牌”、“保障性家居工程推荐品牌”、“CCTV央视上榜品牌”、“国家高新技术企业”、“中国房地产供应商高成长型企业”等70多项荣誉。

Singi has passed ISO9001, ISO14001, ISO45001 international three system certification. Also get the international production certification of the UL, CE, CB, ETL and etc. Singi have over 50 copy rights, over 60 CCC certification. During the 20 years production experience, Singi get the over 70 titles such as “top 10 electric brand in China”, “Chinese building electric well-known brand”, “Government-subsidized housing project recommend brand” and etc.



- 国家高新技术企业
National high-tech enterprises



- CCTV央视助推品牌
CCTV boosts brand



- 产品责任保险证书
Product liability insurance certificate



- ISO9001质量管理体系认证
ISO9001 quality management system certification



- ISO14001环境管理体系认证
ISO14001 Environmental Management System Certification



- ISO45001职业健康安全管理体系认证
ISO45001 Occupational Health and Safety Management System Certification



- 50多份专利
More than 50 patents



- 40多份CCC证书
More than 40 CCC certificates



- 欧盟RoHS认证
EU RoHS certification



- CE认证
CE certification



- CB认证
CB certification



- UL认证
UL certification



- ETL认证
ETL certification

工程案例 Engineering Template

多年来，SINGI信基，凭借卓越的品牌信誉和质量在竞争激烈的市场中开疆拓土，业绩斐然，产品销售网络覆盖国内各大中城市，在工程上广泛地得以应用。

在智能化信息化方面我们不断超越，在开发人性化产品的征途中，我们不遗余力，让SINGI信基的产品遍布世界每一个角落，是我们至高的追求目标。

Over the years, SINGI with its excellent brand reputation and quality, has expanded its territory in the highly competitive market, achieved remarkable results and covered its product sales network Large and medium-sized cities in China have been widely used in engineering.

In terms of intelligence and informatization, we continue to surpass. In the process of developing humanized products, we spare no effort to make the products of SINGI spread all over the world Every corner is our highest goal.



南宁凯旋1号 Nanning Kaixuan No.1



世博会中国馆 China Pavilion of the World Expo



昆明华润中央公园 Kunming China Resources Central Park



重庆西南医院 Chongqing Southwest Hospital



上海证大家园 Shanghai Zendai Home



珠江太阳城 Pearl River Sun City



深圳半岛·城邦 Shenzhen Peninsula · City State



聊城三山帝景城 Liaocheng Sanshan Emperor Scenic City

部分合作伙伴 Some of the partners



目录

Catalogue

小型断路器系列 MCB	漏电断路器系列 RCBO
SG65-63 07	SG65LE-63 09
SC65-63 13	SC65LE-63 15
SC65-125 13	SGB5L-40 20
DZ30-32N 19	DZ30LE-80 23
SN-63 28	SNLE-63 29
DZ47-63n 30	DZ47LE-63 31
SWM-100 35	SWML-100 36
DZ30-32 39	DZ30LE-32 40
	SWM2L-32 41
	DZ30LE-32 42
断路器附件 CIRCUIT BREAKER ACCESSORY	
SG65 11	
SC65 17	
DZ47 32	
SGB9SZL-100物联网漏电断路器 SGB9SZL-100 IOT LEAKAGE CIRCUIT BREAKER 21	
AFDD系列电弧故障保护器 AFDD SERIES ARC FAULT DETECTION DEVICE 22	
隔离开关 ISOLATION SWITCH	
HL30-125N 25	
HL30-100 45	
HLH 46	
GQ 系列全自动自复式过欠压延时保护器 GQ SERIES AUTOMATIC RESET RECOVER OVER AND UNDER VOLTAGE TIME DELAY PROTECTOR 26	
SGFE电子式漏电保护器 SGFE ELECTRONIC RCCB 37	
SGFL电磁式漏电保护器 SGFL ELECTROMAGNETIC RCCB 38	
IC卡电能表专用断路器 IC CARD WATT-HOUR METER DEDICATED CIRCUIT BREAKERS 43	
HG30熔断器式隔离器 HG30 FUSE TYPE ISOLATOR 47	
RT18圆筒形帽熔断器底座 RT18 CYLINDRICAL CAP FUSE BASE 48	
AC30 模数化系列插座 AC30 DIGITAL MOLDED SERIES SOCKET 49	
SG-40L漏电保护开关 SG-40L RESIDUAL CURRENT PROTECT SWITCH 50	



▶ 适用范围

APPLICABLE SCOPE

SG65-63小型断路器具有结构先进、性能可靠,分断能力高、外形美观小巧等特点,适用于交流50Hz或60Hz、额定工作电压AC230/400V、额定框架电流为63A及以下的工作场所。主要用于办公楼、住宅和类似的建筑物的照明、配电线路及设备的过载、短路故障时的线路保护,也可在正常情况下,作为线路不频繁的转换之用。机械寿命达10000次以上(断—通)。

符合IEC60898-1和GB10963.1等标准的要求。

SG65-63 high breaking miniature circuit breaker has the features of structure advanced, performance reliable, breaking capacity high, appearance elegant and its shell and parts are made of material with impact resistance, strong flame-retardant feature. It is suitable to power system of 50 or 60 frequency, Ue 400V and below, Ui 63A and below. It is mainly applied at office building, residence, for lighting, power distribution and overload and short circuit protection of equipment. Normally, it also can be used as the not frequent transfer of power system. Life more than 10,000 times (on-off). It conforms to the standards IEC60898 and GB10963.1.

▶ 技术参数

TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	额定电流(A) Rated current(A)	额定短路分断能力 I _{cn0} (A) Rated short circuit breaking capacity I _{cn} (A)
230/400(220/380)	1,2	6,10,16,20,25,32,40,50,63	6000
400	3,4		6000

▶ 过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13I _n	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	
1.45I _n	所有值 All	t < 1h	脱扣 Trip	热态 Heat	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
2.55I _n	I _n ≤ 32A	I _s < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
2.55I _n	I _n > 32A	I _s < t < 120s	脱扣 Trip		
3I _n (B型) 3I _n (B Type)	所有值 All	t ≤ 0.1s	不脱扣 Don't trip		
5I _n (B型) 5I _n (B Type)		t < 0.1s	脱扣 Trip		
5I _n (C型) 5I _n (C Type)		t ≤ 0.1s	不脱扣 Don't trip		
10I _n (C型) 10I _n (C Type)		t < 0.1s	脱扣 Trip		
10I _n (D型) 10I _n (D Type)		t ≤ 0.1s	不脱扣 Don't trip		
20I _n (D型) 20I _n (D Type)		t < 0.1s	脱扣 Trip		

▶ 型号含义

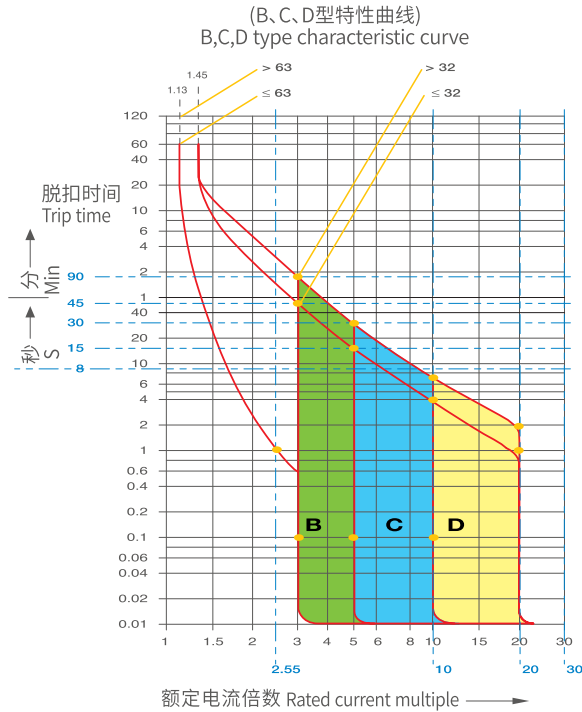
TYPE MEANING

SG 65 - 63 □

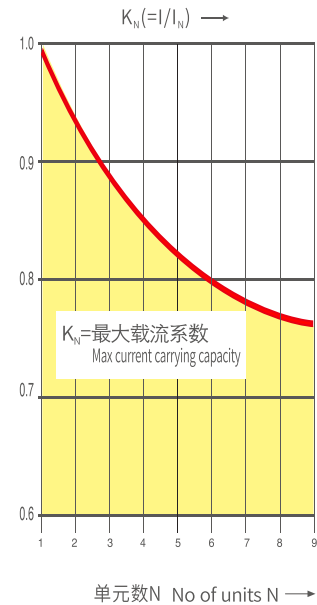
用途代号: B、C:配电用 D:电动机保护用	Code of using: B、C: distribution D: motor protection
壳架等级	Shell level rated current
设计序号	Design no
设计序号企业代号(信基公司)	Company code(SINGI)

▶ 动作特性曲线

BREAKING CHARACTERISTIC CURVE



载流修正系数 $K_N (=I/I_N)$
Current correction coefficient $K_N (=I/I_N)$



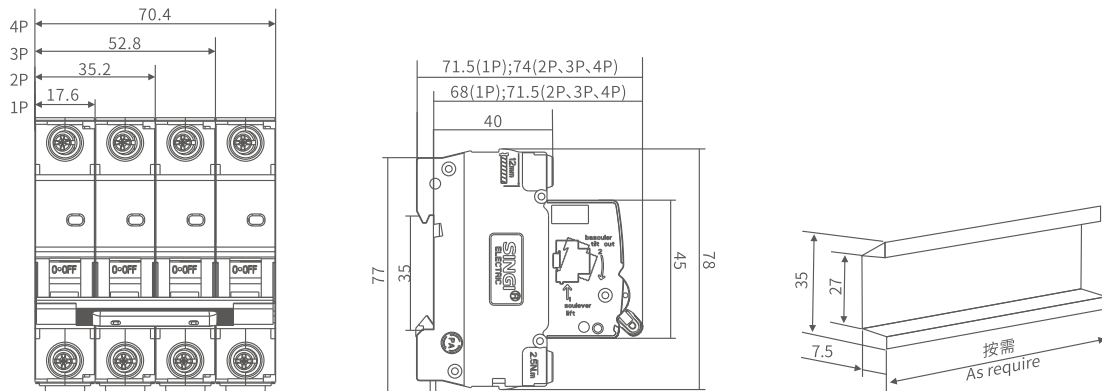
▶ 多极并排安装修正系数

MULTI-MACHINE SIDE-BY-SIDE INSTALLATION CORRECTION FACTOR

极数 Pole	1	2	3	4	5	6	7	8	9	>9
系数 Factor	1	0.95	0.9	0.86	0.82	0.795	0.78	0.77	0.76	0.76

▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





▶ 适用范围

APPLICABLE SCOPE

SG65LE-63漏电断路器适用于交流50Hz、单相AC230V、三相AC400V的线路中，当有人触电或电路泄漏电流超过规定值时，自动切断电源，保障人身安全和防止设备因泄漏电流造成的事故，亦可作为保护线路的过载和短路之用，以及在正常情况下作为线路的不频繁转换之用，还可根据用户的需要增加过压、欠压保护功能。符合IEC61009-1、GB16917.1标准的要求。

SG65LE RCBO is applied in the power system of AC 50Hz, single phase 230V, three phases 400V. When somebody gets an electric shock or the residual current exceeds the default value, the RCBO can cut off the power automatically to protect the personal safety and prevent the equipment from the fault resulted from the residual current. It also can protect the circuit against overload and short circuit or can be used for the unfrequent switch of the circuit under normal condition. And extra protection functions like over voltage, under voltage can be added according to customers' request. It conforms to the standard IEC61009-1.GB16917.1.

▶ 结构特征

STRUCTURE

SG65LE-63系列漏电断路器由SG65-63高分断小型断路器和漏电脱扣器拼装而成。漏电断路器系流动作型电子式漏电断路器，主要由零序电流互感器、电子组件板、漏电脱扣器及带有过载和短路保护的断路器组成。

SG65LE-63 series RCBO is composed of SG65-63 high breaking MCB and residual current release. This RCBO is current operating electronic RCBO, the main parts including zero sequence current transformer, electronic panel, current leakage release and the circuit breaker with protection functions of overload, short circuit.

▶ 技术参数

TECHNICAL PARAMETER

壳架等级额定电流 I _{nm} (A) Shell level rated current I _{nm} (A)	极数 Pole	额定电压(V) Rated voltage(V)	额定电流(A) Rated current(A)	额定短路分断能力 I _{cn} (A) Rated short circuit breaking capacity I _{cn} (A)	额定漏电动作电流 I _{Δn} (mA) Rated residual current breaking current I _{Δn} (mA)	额定漏电不动作电流 I _{Δn} (mA) Rated residual current no breaking current I _{Δn} (mA)	脱扣时间 Trip time
63	1P+N	230/400 (220/380)	6,10,16, 20,25,32, 40,50,63	6000	10	5	≤0.1S
	2P				30	15	
	3P	400			50	25	
	3P+N				75	37.5	
	4P				100	50	

▶ 过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13I _n	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	
1.45I _n	所有值 All	t < 1h	脱扣 Trip	热态 Heat	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
2.55I _n	I _n ≤ 32A	I _s < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
2.55I _n	I _n > 32A	I _s < t < 120s	脱扣 Trip		
3I _n (B型) 3I _n (B Type)	所有值 All	t ≤ 0.1s	不脱扣 Don't trip		
5I _n (B型) 5I _n (B Type)		t < 0.1s	脱扣 Trip		
5I _n (C型) 5I _n (C Type)		t ≤ 0.1s	不脱扣 Don't trip		
10I _n (C型) 10I _n (C Type)		t < 0.1s	脱扣 Trip		
10I _n (D型) 10I _n (D Type)		t ≤ 0.1s	不脱扣 Don't trip		
14I _n (D型) 14I _n (D Type)		t < 0.1s	脱扣 Trip		

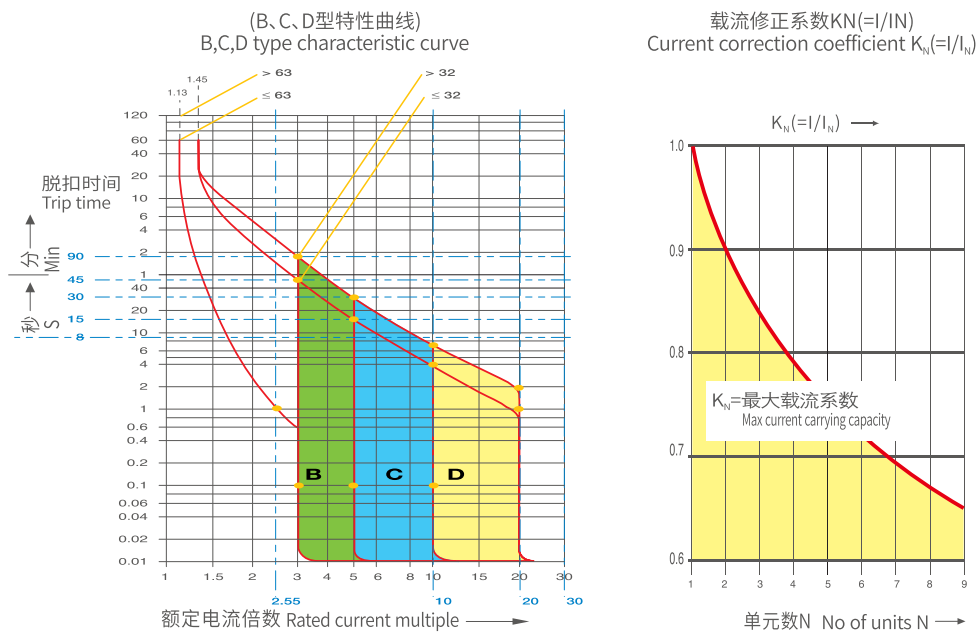
型号含义

TYPE MEANING

SG 65 LE - 63 / □ □ □	额定电流 Rated current	额定电流剩余动作电流 Rated current residual breaking current
	用途代号: B, C: 配电用 D: 电动机保护用 Code of using: B, C: distribution D: motor protection	
	极数 Pole	
	壳架等级额定电流 Shell level rated current	
	电子式剩余漏电动作型 Electronic residual breaking type	
	设计序号 Design no	
	企业代号 (信基公司) Company code (SINGI)	

动作特性曲线

BREAKING CHARACTERISTIC CURVE



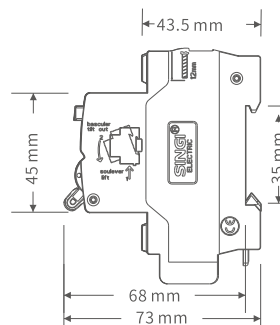
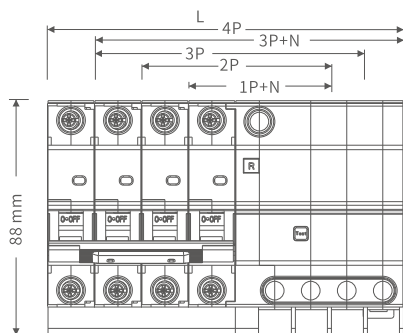
多极并排安装修正系数

MULTI-MACHINE SIDE-BY-SIDE INSTALLATION CORRECTION FACTOR

极数	Pole	1	2	3	4	5	6	7	8	9	>9
系数	Factor	1	0.9	0.85	0.8	0.75	0.73	0.70	0.68	0.65	0.65

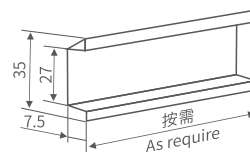
外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



L尺寸(size mm):

极数 Pole	1P+N	2P	3P	3P+N	4P
大壳 Big shell	54	72	104	118	136
小壳 Small shell	45	63	90	99	117





适用范围

APPLICABLE SCOPE

本系列断路器附件是我公司专为SG65系列断路器配套设计的辅助功能元件,在家居、建筑、消防、智能电气等电气线路中,可以根据需要选择不同的电气附件与SG65系列断路器配合使用,以实现欠压、过压、过欠压、失压保护、远程控制等功能。
本产品符合标准:GB14048.2 IEC60947-2

This series of circuit breaker accessory is auxiliary component,our company designed for the SG65 series circuit breakers, in the home, construction, fire, intelligent electrical and other electrical lines, can choose different electrical accessories by different requests and be used with SG65 series circuit breaker, In order to achieve undervoltage, overvoltage, over voltage, loss of pressure protection, remote control and other functions.
It conforms to the standard IEC60947-2.GB14048.2

技术参数

TECHNICAL PARAMETER

过压、欠压、过欠压脱扣器技术参数

Over-voltage,under-voltage,over-under voltage release technical parameter

附件名称 Accessory name	额定工作电压Ue Rated voltage Ue	动作电压 Breaking voltage	接线图 Connention image
MN 欠压脱扣器 MN under-voltage release	AC 230V	170V±5%	
MN 过压脱扣器 MV over-voltage release	AC 230V	280V±5%	
MV+MN 过欠压脱扣器 MV+MN over-under voltage release	AC 230V	欠压(Under-voltage): 170V±5% 过压(Over-voltage): 270V±5%	

辅助触头、报警触头技术参数

Auxiliary contact, alarm contact technical parameters

附件名称 Accessory name	额定电流(A) Rated current(A)			每组触头数 Number of contacts per group	接线图 Connention image
	AC400V	AC230V	DC220V		
OF 辅助触头 OF Auxiliary contact				一常开一常闭 one open one closed	
SD 报警触头 SD Alarm contact				一常开一常闭 one open one closed	

分励脱扣器、分励脱扣器+辅助触头技术参数

Shunt release device, shunt release+auxiliary contact technical parameters

附件名称 Accessory name	额定电压Ui Rated isolate voltage Ui	额定控制电源电压Us Rated contral power voltage Us	脱扣功耗(W或VA) Trip power(W or VA)	吸合电压 Pull up voltage	接线图 Connention image
MX+OF 分励脱扣器+辅助触头 MX+OF shunt release+auxiliary contact	415V	AC/DC: 230~400V 24~220V	240	(0.7~1.1)	
MX 分励脱扣器 MX shunt release	415V	AC/DC: 230~400V 24~220V	240	(0.7~1.1)	

▶ 型号含义

TYPE MEANING

SG	65	□	□	AC:230V	AC:230V
				MV+MN—过欠压脱扣器 MN—欠压 MV—过压	MV+MN—Over-under voltage release MN—Under-voltage
				MX+OF—分励脱扣器+辅助	MV—Over-voltage MX+OF—Shunt release+auxiliary contact
				OF—辅助触头 SD—报警触头	OF—Auxiliary contact SD—Alarm contact
				设计序号	Design no
				企业代号(信基公司)	Company code(SINGI)

▶ 断路器附件的名称、用途及符合标准

CIRCUIT BREAKER ACCESSORY NAME,APPLICATION,STANDARD

附件名称 Accessory name	代号 Code	用途 Application	符合标准 Standard
欠压脱扣器 Under-voltage release	MN	当电源电压从230V下降到170V±5%之间时,使断路器脱扣,实现线路的欠压保护 When the power supply voltage drops from 230V to 170V±5%, the circuit breaker trip, to achieve the line undervoltage protection	IEC60947-2 GB14048.2
过压脱扣器 Over-voltage release	MV	当电源电压从230V上升到270V±5%时,使断路器脱扣,实现线路的过压保护 When the power supply voltage up from 230V to 270V±5%, the circuit breaker trip, to achieve the line overvoltage protection	IEC60947-2 GB14048.2
过欠压脱扣器(220V) Over-under voltage release (220V)	MV+MN	当230V额定电源电压上升到270V±5%或下降在170V±5%时,使断路器脱扣,实现线路保护 When the 220V rated voltage up to 270V±5%,or drop to 170V±5% the circuit breaker trip, to achieve line protection	IEC60947-2 GB14048.2

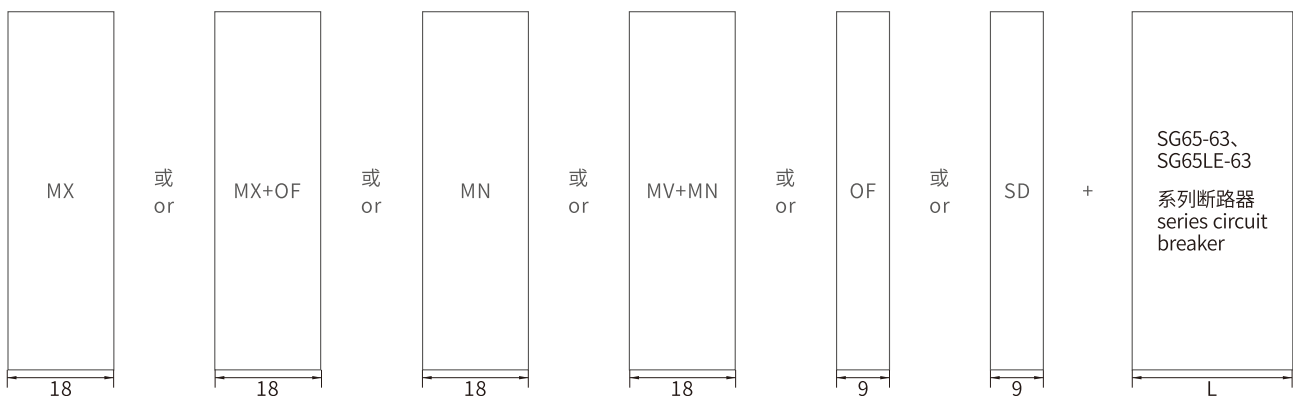
▶ 工作条件及安装条件

WORKING CONDITIONS AND INSTALLATION CONDITIONS

- ◎环境温度: -5°C~+40°C;
- ◎海拔高度: 不超过2000m;
- ◎环境条件: 应没有引起爆炸危险的介质,也没有腐蚀和破坏的有害气体和导电尘埃;
- ◎安装条件: 采用35mm标准导轨安装;
- ◎Ambient temperature: -5 °C ~+40°C;
- ◎Altitude: no more than 2000m;
- ◎Environmental conditions: there should be no danger of explosion caused by the media, there is no corrosion and destruction of harmful gases and conductive dust;
- ◎Installation conditions: 35mm standard rail installation;

▶ 外型及安装尺寸

OUTLOOK AND MOUNTING SIZE



注:在断路器左侧拼装附件可以是一个或多个。

NOTE: The assembly accessories on the left side of the circuit breaker can be one or more.



▶ 适用范围

APPLICABLE SCOPE

SC65-63/SC65-125小型断路器适用于交流50Hz或60Hz,额定工作电压AC230/400V,额定壳架电流为63A及以下的工作场所。主要用于办公楼、住宅和类似的建筑物的照明、配电线路及设备的过载、短路故障时的线路保护,也可在正常情况下,作为线路不频繁的转换之用。机械寿命达10000次以上(断-通)。符合IEC60898-1和GB10963.1等标准的要求。

SC65-63 is suitable to power system of AC50 or 60 frequency, rated voltage 400V and below, rated current 63A and below. It is mainly applied at office building, residence, for lighting, power distribution and overload and short circuit protection of equipment. Normally, it also can be used as the not frequent transfer of power system. Life more than 10,000 times (on-off). It conforms to the standards IEC60898 and GB10963.1.

▶ 技术参数

TECHNICAL PARAMETER

型号 Type	额定工作电压(V) Rated voltage(V)	极数 Pole	额定电流(A) Rated current(A)	额定短路分断能力 I _{cn} (A) Rated short circuit breaking capacity I _{cn} (A)
SC65-63	230/400(220/380)	1,2	6,10,16,20,25,32,40,50,63	10000
	400	3,4		
SC65-125	230/400(220/380)	1,2	80,100,125	6000
	400	3,4		

注:① 抗湿热性:2类(温度55°C时,相对湿度为95%)。

② 接线采用带夹箍的接线端子,电缆截面可达:25mm²

1.Heat resistance: category 2 (temperature 55°C, relative humidity 95%).

2.Wiring is terminal with clamp, cable dia.: 25mm²

▶ 过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13I _n	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	
	I _n > 63A	t ≤ 2h			
1.45I _n	所有值 All	t < 1h	脱扣 Trip	热态 Heat	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
	I _n > 63A	t ≤ 2h			
2.55I _n	I _n ≤ 32A	I _s < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
2.55I _n	I _n > 32A	I _s < t < 120s	脱扣 Trip		
3I _n (B型) 3I _n (B Type)	所有值 All	t ≤ 0.1s	不脱扣 Don't trip		
5I _n (B型) 5I _n (B Type)		t < 0.1s	脱扣 Trip		
5I _n (C型) 5I _n (C Type)		t ≤ 0.1s	不脱扣 Don't trip		
10I _n (C型) 10I _n (C Type)		t < 0.1s	脱扣 Trip		
10I _n (D型) 10I _n (D Type)		t ≤ 0.1s	不脱扣 Don't trip		
20I _n (D型) 20I _n (D Type)		t < 0.1s	脱扣 Trip		

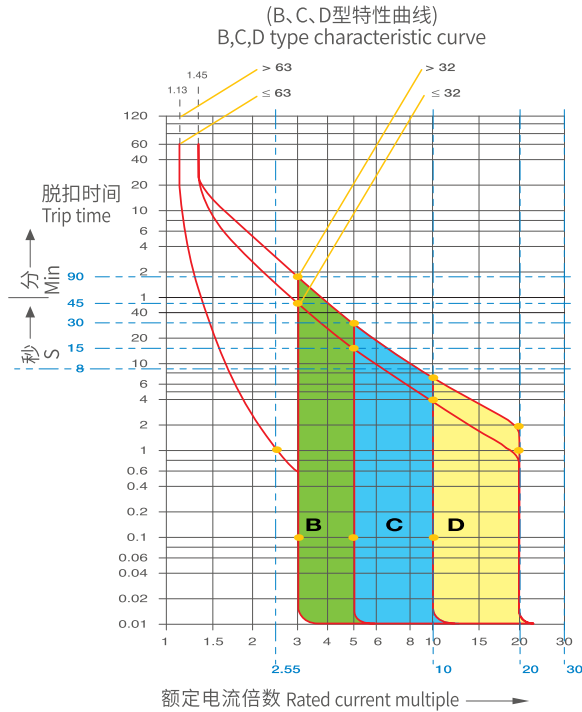
▶ 型号含义

TYPE MEANING

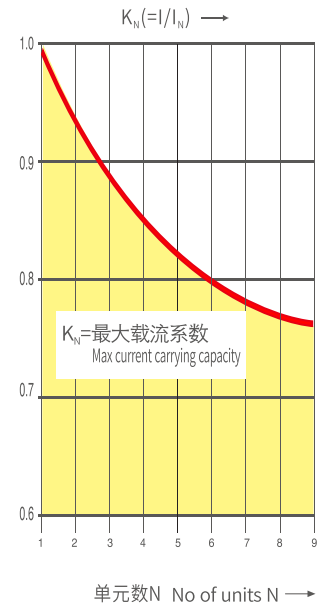
S	用途代号: B、C:配电用 D:电动机保护用	Code of using: B, C: distribution D: motor protection
C	壳架等级额定电流	Shell level rated current
65	设计序号	Design no
-	小型断路器	Mini circuit breaker
63	企业代号(信基公司)	Company code(SINGI)

▶ 动作特性曲线

BREAKING CHARACTERISTIC CURVE



载流修正系数 $K_N (=I/I_N)$
Current correction coefficient $K_N (=I/I_N)$



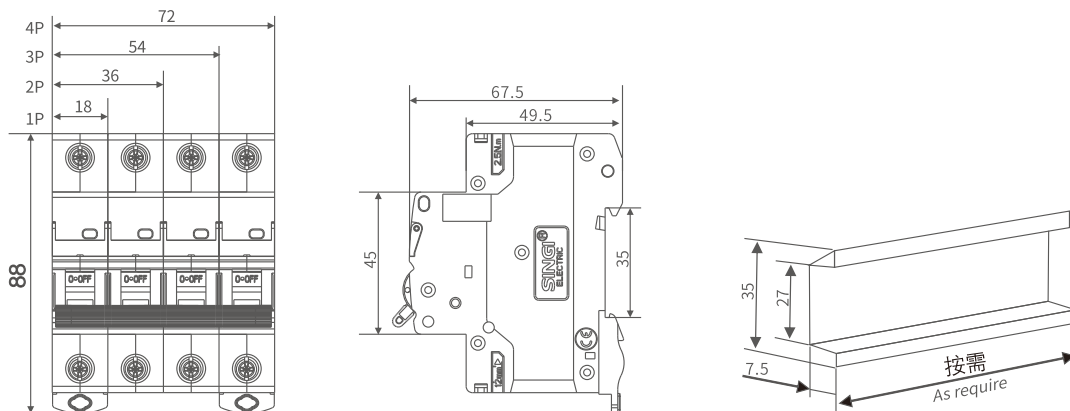
▶ 多极并排安装修正系数

MULTI-MACHINE SIDE-BY-SIDE INSTALLATION CORRECTION FACTOR

极数 Pole	1	2	3	4	5	6	7	8	9	>9
系数 Factor	1	0.95	0.9	0.86	0.82	0.795	0.78	0.77	0.76	0.76

▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





▶ 适用范围

APPLICABLE SCOPE

SC65LE-63漏电断路器适用于交流50Hz、单相AC230V、三相AC400V的线路中,当有人触电或电路泄漏电流超过规定值时,自动切断电源,保障人身安全和防止设备因泄漏电流造成的事故,亦可作为保护线路的过载和短路之用,以及在正常情况下作为线路的不频繁转换之用,还可根据用户的需要增加过压、欠压保护功能。符合IEC61009-1、GB16917.1标准的要求。

SC65LE RCBO is applied in the power system of AC 50Hz, single phase 230V, three phases 400V. When somebody gets an electric shock or the residual current exceeds the default value, the RCBO can cut off the power automatically to protect the personal safety and prevent the equipment from the fault resulted from the residual current. It also can protect the circuit against overload and short circuit or can be used for the unfrequent switch of the circuit under normal condition. And extra protection functions like over voltage, under voltage can be added according to customers' request. It conforms to the standard IEC61009-1, GB16917.1.

▶ 结构特征

STRUCTURE

SC65LE-63系列漏电断路器由SC65-63高分断小型断路器和漏电脱扣器拼装而成。漏电断路器系流动作型电子式漏电断路器,主要由零序电流互感器、电子组件板、漏电脱扣器及带有过载和短路保护的断路器组成。

SC65LE-63 series RCBO is composed of SG65-63 high breaking MCB and residual current release. This RCBO is current operating electronic RCBO, the main parts including zero sequence current transformer, electronic panel, current leakage release and the circuit breaker with protection functions of overload, short circuit.

▶ 技术参数

TECHNICAL PARAMETER

壳架等级额定电流 Inm(A) Shell level rated current Inm(A)	极数 Pole	额定电压(V) Rated voltage(V)	额定电流(A) Rated current(A)	额定短路分断能力 Icn(A) Rated short circuit breaking capacity Icn(A)	额定漏电动作电流 IΔn (mA) Rated residual current breaking current IΔn (mA)	额定漏电不动作电流 IΔn (mA) Rated residual current no breaking current IΔn (mA)	脱扣时间 Trip time
63	1P+N	230/400 (220/380)	6,10,16, 20,25,32, 40,50,63	10000	10	5	≤0.1S
	2P				30	15	
	3P	400			50	25	
	3P+N				75	37.5	
	4P				100	50	

▶ 过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13In	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	
1.45In	所有值 All	t < 1h	脱扣 Trip	热态 Heat	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
2.55In	In ≤ 32A	Is < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
2.55In	In > 32A	Is < t < 120s	脱扣 Trip		
3In(B型) 3In(B Type)	所有值 All	t ≤ 0.1s	不脱扣 Don't trip		
5In(B型) 5In(B Type)		t < 0.1s	脱扣 Trip		
5In(C型) 5In(C Type)		t ≤ 0.1s	不脱扣 Don't trip		
10In(C型) 10In(C Type)		t < 0.1s	脱扣 Trip		
10In(D型) 10In(D Type)		t ≤ 0.1s	不脱扣 Don't trip		
20In(D型) 20In(D Type)		t < 0.1s	脱扣 Trip		

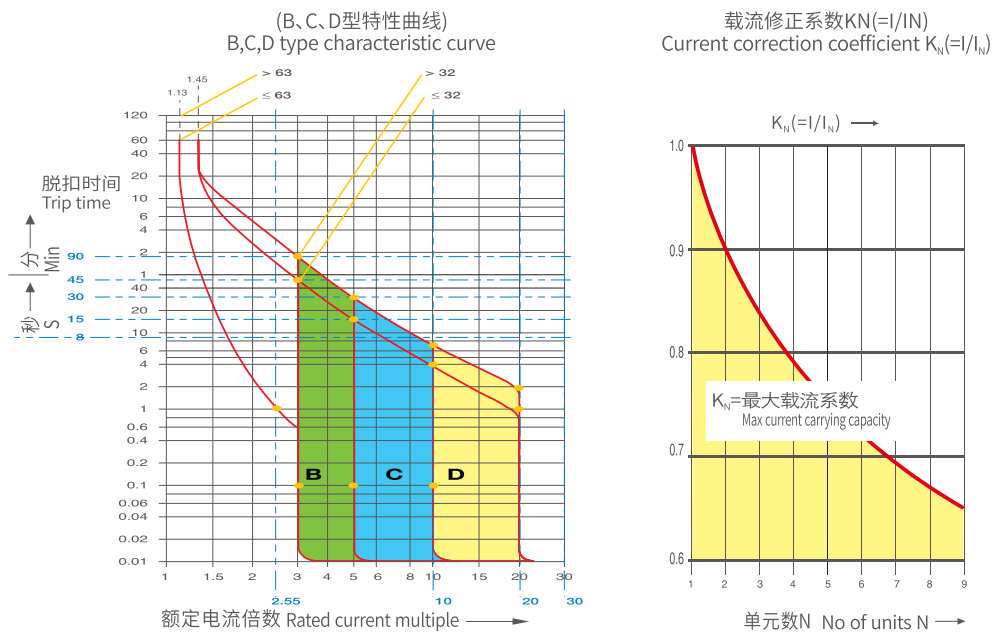
型号含义

TYPE MEANING

SC 65 LE - 63 / □ □ □	额定电流 Rated current	剩余动作电流 Residual breaking current
	用途代号: B, C: 配电用 D: 电动机保护用 Code of using: B, C: distribution D: motor protection	
	极数 Pole	
	壳架等级额定电流 Shell level rated current	
	电子式剩余漏电动作型 Electronic residual breaking type	
	设计序号 Design no	
	企业代号 (信基公司) Company code (SINGI)	

动作特性曲线

BREAKING CHARACTERISTIC CURVE



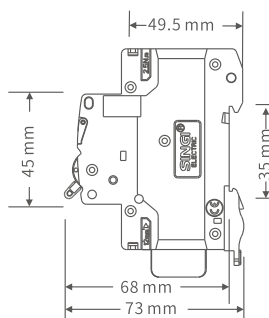
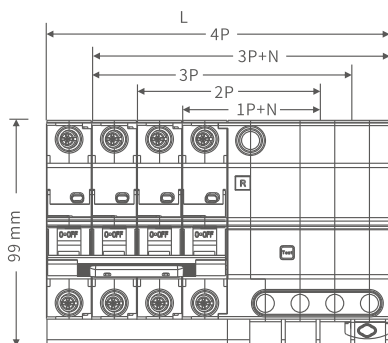
多极并排安装修正系数

MULTI-MACHINE SIDE-BY-SIDE INSTALLATION CORRECTION FACTOR

极数	Pole	1	2	3	4	5	6	7	8	9	>9
系数	Factor	1	0.9	0.85	0.8	0.75	0.73	0.70	0.68	0.65	0.65

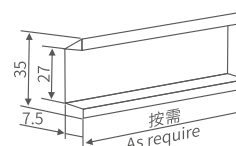
外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



L尺寸(size mm):

极数 Pole	1P+N	2P	3P	3P+N	4P
大壳 Big shell	54	72	104	118	136
小壳 Small shell	45	63	90	99	117





► 适用范围

APPLICABLE SCOPE

本系列断路器附件是我公司转为SC65-63系列断路器配套设计的辅助功能元件, 在家居、建筑、消防、智能电气等电气线路中, 可以根据需要选择不同的电气附件与SC65-63系列断路器配合使用, 以实现断路器的远程控制、分合状态指示、提供报警信号等功能, 更好的保护线路、人身和财产安全。

This series of circuit breaker accessory is auxiliary components, our company designed for the SC65 series circuit breakers, in the home, construction, fire, intelligent electrical and other electrical lines, can choose different electrical accessories by different requests and be used with SC65 series circuit breaker, To achieve the remote control of the circuit breaker, the separation of state instructions to provide alarm signals and other functions, protect the lines, personal and property safety better control and other functions.

► 技术参数

TECHNICAL PARAMETER

辅助触头、报警触头技术参数

Auxiliary contact, alarm contact technical parameters

附件名称 Accessory name	额定电流(A) Rated current(A)			每组触头数 Number of contacts per group	接线图 Connenction image
	AC400V	AC230V	DC220V		
OF 辅助触头 OF Auxiliary contact	3	6	1	一常开一常闭 one open one closed	
SD 报警触头 SD Alarm contact	3	6	1	一常开一常闭 one open one closed	

分励脱扣器、分励脱扣器+辅助触头技术参数

Shunt release device, shunt release+auxiliary contact technical parameters

附件名称 Accessory name	额定电压Ui Rated isolate voltage Ui	额定控制电源电压Us Rated control power voltage Us	脱扣功耗 (W或VA) Trip power(W or VA)	吸合电压 Pull up voltage	接线图 Connenction image
MX+OF 分励脱扣器+辅助触头 MX+OF shunt release+auxiliary contact	415V	AC/DC: 230~400V 24~220V	240	(0.7~1.1)Us	
MX 分励脱扣器 MX shunt release	415V	AC/DC: 230~400V 24~220V	120	(0.7~1.1)Us	

▶ 型号含义

TYPE MEANING

- OF ————— 辅助触头
Auxiliary contact
- SD ————— 报警触头
Alarm contact
- MV ————— 过压脱扣器
Over-voltage release
- MN ————— 欠压脱扣器
Under-voltage release
- MX ————— 分励脱扣器
Shunt release device
- MX+OF ————— 分励脱扣器+辅助触头
Shunt release+auxiliary contact



注：每台最多可拼装3个指示附件(OF或SD)，两个脱扣器附件。
Note: Each assembly can add 3 instructions accessories at most(OF or SD), 2 release accessories

▶ 断路器附件的名称、用途及符合标准

CIRCUIT BREAKER ACCESSORY NAME,APPLICATION,STANDARD

附件名称 Accessory name	代号 Code	用途 Application	符合标准 Standard
辅助触头 Auxiliary contact	OF	提供辅助信号，控制辅助电路 Auxiliary contact:Provide auxiliary signal, control auxiliary circuit	IEC60947-5-1 GB14048.5-2008
报警触头 Alarm contact	SD	当断路器因被保护线路故障分断时，提供报警信号 Alarm contact : When the circuit breaker is breaking due to broken of the protection line, offer an alarm signal	IEC60947-2 GB14048.2-2008
分励脱扣器 Shunt release device	MX	当控制电压超过额定电压的70%~110%时使断路器脱扣，实现线路保护 When the control voltage beyond rated voltage by 70% to 110%, make circuit breaker tripping, to achieve circuit protection	IEC60947-1 GB14048.1-2008
分励脱扣器+辅助触头 Shunt release+auxiliary contact	MX+OF	远距离分断电路，并通过辅助触头实现对辅助电路的控制 Long-distance breaking circuit, and through the auxiliary contact to achieve auxiliary circuit control	IEC60947-1 GB14048.1-2008

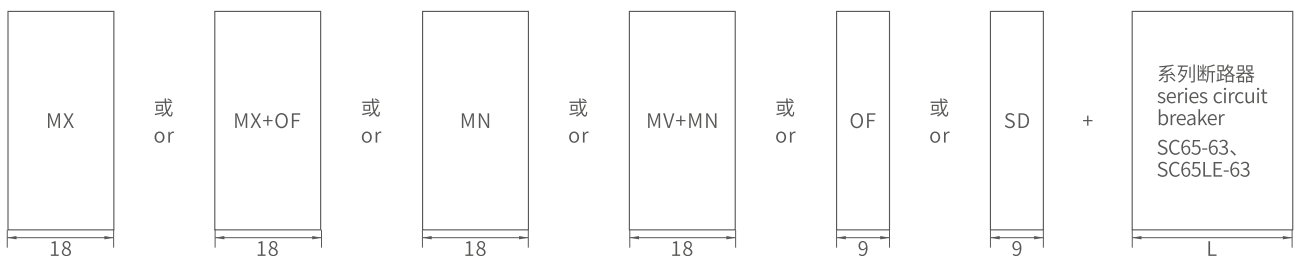
▶ 工作条件及安装条件

WORKING CONDITIONS AND INSTALLATION CONDITIONS

- ◎环境温度：-5°C~+40°C；
- ◎Ambient temperature: -5°C ~+40°C;
- ◎海拔高度：不超过2000m；
- ◎Altitude: no more than 2000m;
- ◎环境条件：应没有引起爆炸危险的介质，也没有腐蚀和破坏的有害气体和导电尘埃；
- ◎Environmental conditions: there should be no danger of explosion caused by the media, there is no corrosion and destruction of harmful gases and conductive dust;
- ◎安装条件：采用35mm标准导轨安装；
- ◎Installation conditions: 35mm standard rail installation;

▶ 外型及安装尺寸

OUTLOOK AND MOUNTING SIZE



注：在断路器左侧拼装附件可以是一个或多个。
NOTE: The assembly accessories on the left side of the circuit breaker can be one or more.



适用范围

APPLICABLE SCOPE

DZ30-32N系列(相线+中性线)断路器适用于交流50Hz或60Hz,额定电压230V的单相住宅线路中,对电气线路的过载和短路进行保护。该产品分断能力高、体积小,零、火线同时切断,杜绝了火线、零线接反或零线对地电位造成的人身及火灾危险,是目前民用住宅领域中最理想的配电保护开关。
本产品符合IEC60898-1和GB10963.1标准。

DZ30-32N series (phase line + neutral) circuit breaker for AC 50Hz or 60Hz, rated voltage 230V single-phase residential lines, can protect electrical circuit overload and short circuit. The product has breaking capacity high, small size, N, L Wire cut off on one time, put an end to the wrong connection between N wire and L wire, or N line connect with ground potential caused to personal and fire hazards, is ideal protection switch in the field of residential. This product complies IEC60898-1 and G B 10963.1.

技术参数

TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	壳架等级额定电流(A) Shell level rated current(A)	额定电流(A) Rated current(A)	额定短路分断能力 I _{cn} (A) Rated short circuit breaking capacity I _{cn} (A)
230/400(220/380)	1P+N	32	3,6,10,16,20,25,32	4500

注: ①抗湿热类型: 温度55°C时, 相对湿度95%。

②接线采用带夹箍的接线端子, 使用10mm²及以下硬导线。

1.Heat resistance: (temperature 55°C, relative humidity 95%.

2.Using the connection terminal with clamps to wiring, using the hard wire 10mm² or below

过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13I _n	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
1.45I _n		t < 1h	脱扣 Trip	热态 Heat	
2.55I _n		1s < t < 60s	脱扣 Trip	冷态 Cool	
5I _n		t ≤ 0.1s	不脱扣 Don't trip		
10I _n		t < 0.1s	脱扣 Trip		

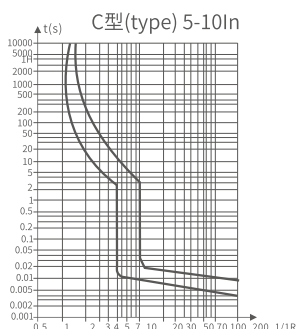
型号含义

TYPE MEANING

DZ	30	-	32	N	设计代号 Design code
					壳架等级额定电流 Shell level rated current
					设计序号 Design no
					塑料外壳式断路器 Plastic case type circuit breakers

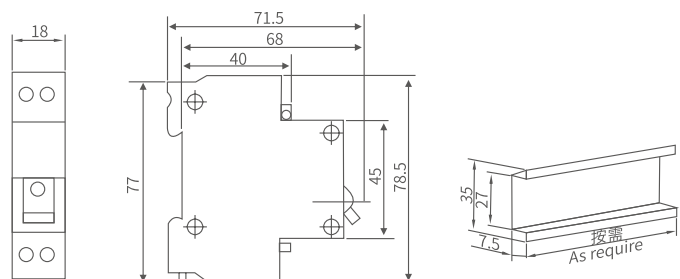
动作特性曲线

BREAKING CHARACTERISTIC CURVE



外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



SGB5L-40 (相线+中性线+漏电)保护断路器

SGB5L-40 (PHASE LINE+NEUTRAL LINE+LEAKAGE) RCBO



适用范围

APPLICABLE SCOPE

SGB5L-40断路器适用于交流50Hz或60Hz, 额定电压230V的单相住宅线路中, 作为漏电保护之用, 并对民用电气线路的过载和短路进行保护, 该产品具有体积小, 分断能力高; 零、火线同时切断, 并在火线接反的情况下, 仍能对漏电进行保护。
本产品符合GB/T 16917.1、IEC 61009-1等标准。

SGB5L-40 RCBO is suitable to the single phase residual circuit of 50/60Hz, rated voltage 230V, as the current leakage protection and protect the civil electrical circuit from over load and short circuit and it has the features of volume small, breaking capacity high. Null/live wire is cut at the same time, and even the wire is reverse connection, it still have current leakage Protection.
The product conforms to standards IEC1009.1, GB16917.1 etc.

技术参数

TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	壳架等级电流(A) Shell-level rated current(A)	额定电流(A) Rated current(A)	额定漏电动作电流(mA) Rated breaking residual current(mA)	额定漏不动作电流(mA) Rated not breaking residual current(mA)	额定漏电分断时间(S) Breaking time of rated residual current(s)	分断能力Ics(A) Breaking Capacity (A)
230(220)	1P+N	40A	6,10,16, 20,25,32,40	10, 30, 100	0.5I _{Δn}	≤0.1	6000

注: 接线采用带夹箍的接线端子, 使用与10mm²及以下硬导线。 Remark: wiring is terminal with clamp, cable dia.: 10mm² below available for hard cable.

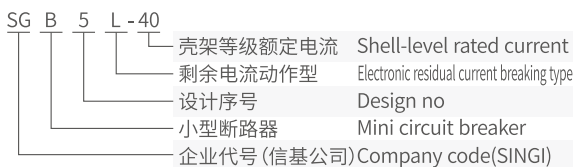
过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13I _n	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
1.45I _n		t < 1h	脱扣 Trip	热态 Heat	
2.55I _n	I _n ≤ 32A	I _s < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
2.55I _n	I _n > 32A	I _s < t < 120s	脱扣 Trip	冷态 Cool	
5I _n	所有值 All	t ≤ 0.1s	不脱扣 Don't trip	冷态 Cool	
10I _n		t < 0.1s	脱扣 Trip	冷态 Cool	

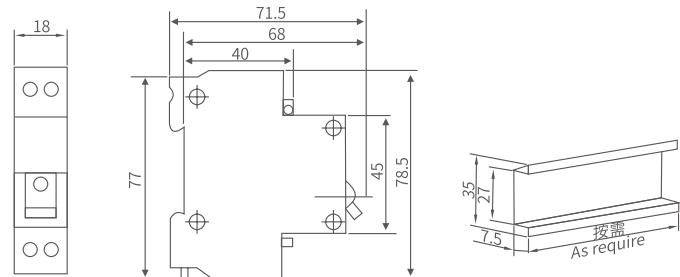
型号含义

TYPE MEANING



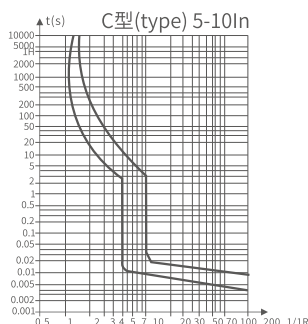
外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



动作特性曲线

BREAKING CHARACTERISTIC CURVE



应用指南:

- ①每月按压一次试验按钮, 检查漏电保护装置的動作。
- ②当漏电保护装置动作时, 装置的正面有红色的机械指示。
- ③当重新闭合断路器时, 保护装置自动复位。

Application guidelines:

1. Press the test button once a month, check leakage protective device.
2. When the leakage protective device, the device on the obverse of the red machine instructions.
3. When reclosing circuit breaker, the protection device reset automatically.



▶ 适用范围

APPLICABLE SCOPE

SGB9SZL-100物联网漏电断路器是本公司近期研发的全新智能断路器，采用人工智能与物联网技术设计，集过压、欠压、短路、过载、漏电保护于一体。具有结构紧凑、长寿命、模块化、高分断、智能遥控等特点。同时具有WIFI通信及RS485通信功能，能与后台系统组网实现远程监测及远程控制，便于用电部门运维管理。适用于交流50Hz，额定工作电压AC230V，额定电流6A至100A的线路中，对线路进行远距离控制分合闸，同时对线路起过载、短路、过欠压、漏电保护的作用，也可以作为线路的不频繁操作之用。广泛用于家居、学校、商场、小区、市政、农业灌溉、农业养殖、出租房管理等。

本产品符合标准：GB/T16917.1、CQC1149-2020

The SGB9SZL-100 IoT Leakage Circuit Breaker is a new intelligent circuit breaker recently developed by our company. It is designed using artificial intelligence and IoT technology and integrates overvoltage, undervoltage, short circuit, overload, and leakage protection. It has the characteristics of compact structure, long service life, modularization, high breaking, intelligent remote control, etc. Simultaneously equipped with WIFI communication and RS485 communication functions, it can network with the backend system to achieve remote monitoring and control, making it convenient for the operation and maintenance management of the electricity department. Suitable for AC 50Hz, rated working voltage AC230V, rated current 6A to 100A lines, for remote control of opening and closing of lines, and for overload, short circuit, overvoltage/undervoltage, and leakage protection of lines. It can also be used for infrequent operation of lines. Widely used in household, schools, shopping malls, residential areas, municipal, agricultural irrigation, agricultural breeding, rental housing management, etc.

This product meets the standards: GB/T16917.1, CQC1149-2020

▶ 技术参数

TECHNICAL PARAMETER

额定工作电压Ue	Rated voltage Ue	AC400V
额定绝缘电压Ui	Insulation voltage Ui	500V
额定冲击耐受电压Uimp	Rated impulse withstand voltage Uimp	6000V
额定电流In	Rated current In	6A、10A、16A、20A、25A、32A、40A、50A、63A、80A、100A
极数	Pole	1P+N、2P、3P、3P+N、4P
分断能力Icn	Breaking capacity Icn	6KA
工作温度范围	Operating temperature range	-40°C~70°C
漏电动作电流IΔn	Rated residual current breaking value IΔn	20、25、30、50、75、100、150、200mA可通过RS485通信设置。 20、25、30、50、75、100、150、200mA Can be set through RS485 communication.
漏电动作时间	Breaking time when have residual current IΔn	一般型、延时型，可通过RS485通信设置。 General type, delay type, can be set through RS485 communication.



▶ 功能优势

FEATURES BENEFITS

- ◎快速高效的电弧淬火
- ◎非常低的通电能, 等级3
- ◎增加安装和设备的使用寿命
- ◎Quick & Efficient Arc Quenching
- ◎Very low let through energy , class 3
- ◎Increases life of Installation & equipment

▶ 技术参数

TECHNICAL PARAMETER

执行标准	Standard	IEC / BS EN 62606, IEC / BS EN 61009-1	
额定短路分断能力 I _{cn} (A)	Rated short circuit breaking capacity I _{cn} (A)	6KA	
保护	Protection	过载/短路/接地/故障电弧故障	Overload Short circuit Ground fault Arc fault
额定电流 I _n	Rated current, I _n	6, 10, 16, 20, 25, 32, 40A	
极数	pole	1P+N(单模18mm)	1P+N (single mode 18mm)
额定剩余电流动作电流 I _{Δn}	Rated residual current breaking value I _{Δn}	10, 30, 100, 300mA	
特性	Characteristic	B, C 曲线(Curve)	
额定剩余不动作电流	Rated residual non-operating current	0.5 x I _{Δn}	
额定冲击耐受电压 U _{imp}	Rated impulse withstand voltage U _{imp}	4000V	
额定电压	Rated voltage	230/240VAC	
环境温度 (°C)	Ambient temperature (°C)	25~+40, 最大湿度为95%	25~+40, Max.95%humidity
剩余电流动作时间 I _{Δt}	Residual current off-time at I _{Δt}	≤0.1s	
剩余电流动作类型	Type of trip	电子式	Electronic release
接线端子	Terminal blocks	25mm ² 以下的电缆	Cables up to 25mm ²
防护等级	Protection degree	IP20	
机械寿命	Mechanical Endvrance	10000	
电气寿命	Electricac Endvrance	4000	
安装	Installation	35mm DIN导轨	35mm DIN rail



► 适用范围

APPLICABLE SCOPE

DZ30LE-80断路器适用于交流 50Hz 或 60Hz，额定电压 230V 的单相住宅线路中，作为漏电保护之用，并对民用电气线路的过载和短路进行保护，该产品具有体积小，分断能力高；零、火线同时切断，零线为带过载保底可开闭性触头，可作为线路的主开关保护，并在火线接反的情况下，仍能对漏电进行保护。
本产品符合 IEC61009-1 GB16917.1 等标准。

DZ30LE-80 series residual current circuit breaker is applied in the power system of AC 50 or 60Hz, single phase 230V. protecting the circuit from over load and short circuit. The product has high breaking capacity, volume small, live wire, null wire are cut at the same time to avoid the inversed grafting of live and null wire or danger caused by the voltage between zero wire and earth. It is the ideal power distribution switch for the present residence. It conforms to the standards IEC61009-1 and GB16917.1

► 技术参数

TECHNICAL PARAMETER

壳架等级额定电流 Inm(A) Shell level rated current Inm (A)	极数 Pole	额定电压(V) Rated voltage(V)	额定电流(A) Rated current(A)	额定短路分断能力 Icn(A) Rated short circuit breaking capacity Icn(A)	额定漏电动作电流 IΔn (mA) Rated residual current breaking current IΔn (mA)	额定漏电不动作电流 IΔn (mA) Rated residual current no breaking current IΔn (mA)	脱扣时间 Trip time
80	2P	230/400 (220/380)	6,10,16, 20,25,32, 40,50,63, 80	6000	10	5	≤0.1S
					30	15	
	3P+N	400			50	25	
					75	37.5	
					100	50	

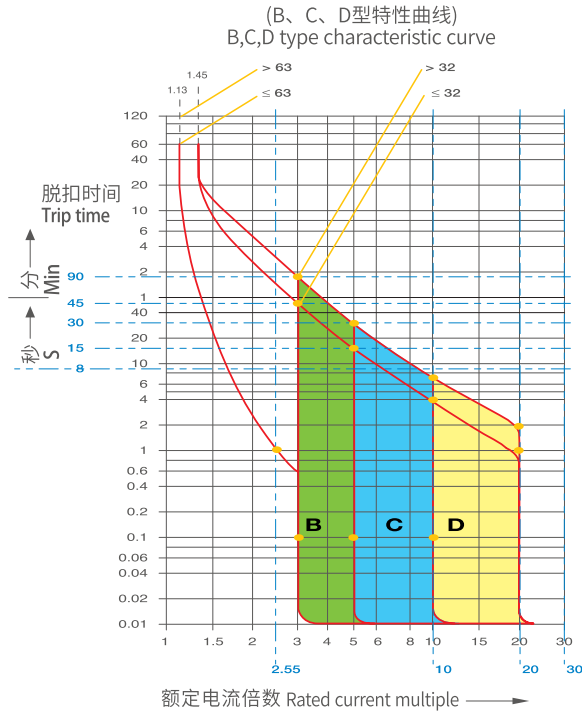
► 过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

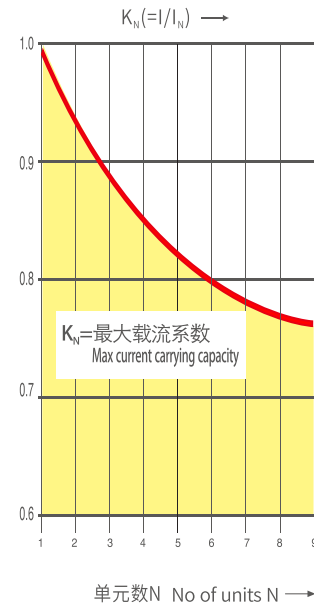
试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13In	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	
1.45In	所有值 All	t < 1h	脱扣 Trip	热态 Heat	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
2.55In	In ≤ 32A	Is < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
2.55In	In > 32A	Is < t < 120s	脱扣 Trip		
3In(B型) 3In(B Type)	所有值 All	t ≥ 0.1s	不脱扣 Don't trip		
5In(B型) 5In(B Type)		t < 0.1s	脱扣 Trip		
5In(C型) 5In(C Type)		t ≤ 0.1s	不脱扣 Don't trip		
10In(C型) 10In(C Type)		t < 0.1s	脱扣 Trip		
10In(D型) 10In(D Type)		t ≥ 0.1s	不脱扣 Don't trip		
20In(D型) 20In(D Type)		t < 0.1s	脱扣 Trip		

▶ 动作特性曲线

BREAKING CHARACTERISTIC CURVE



载流修正系数 $K_N (=I/I_N)$
Current correction coefficient $K_N (=I/I_N)$



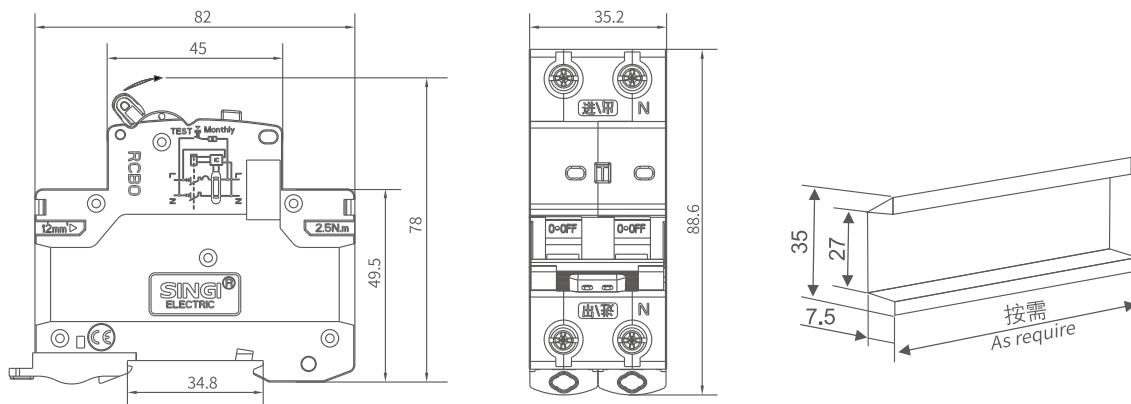
▶ 多极并排安装修正系数

MULTI-MACHINE SIDE-BY-SIDE INSTALLATION CORRECTION FACTOR

极数 Pole	1	2	3	4	5	6	7	8	9	>9
系数 Factor	1	0.9	0.85	0.8	0.75	0.73	0.70	0.68	0.65	0.65

▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





适用范围

APPLICABLE SCOPE

HL30-125N系列隔离开关适用于交流50Hz或60Hz, 额定工作电压400V及以下, 额定电流125A及以下的配电和控制回路中, 主要作为终端电器的总开关, 也可用于控制各类电动机, 小功率电器和照明等。具有明显分、断状态指示和状态锁定功能, 超长寿命等优点。产品符合GB 14048.3 和 IEC 60947-3标准。

HL30-125N Series isolation switch is suitable for AC 50Hz or 60Hz, rated voltage 400V and below, rated current 125A and below, to be the main switch of the terminal appliance, as well as control the electromotor, small-power appliance and illumination etc.

It conforms to the standards GB14048.3 and IEC60947-3

技术参数

TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	额定电流(A) Rated current(A)	额定通断能力 Rated breaking capacity	额定短路接通能力(A) Rated short circuit switched capacity(A)	额定熔断短路电流(A/s) Rated short circuit fuse capacity (A/s)
230/400(220/380)	32,63,80,100,125	3Ie, 1.05Ue	1500	2000

注: ①开关的极数分为: 单极、二极、三极、四极。

②TH35mm标准安装轨安装。

③接线能力50mm²及以下导线。

NOTE: Poles: 1, 2, 3, 4

Installation: On normal din rail TH35 mm

With wire connecting capacity 50mm² and below

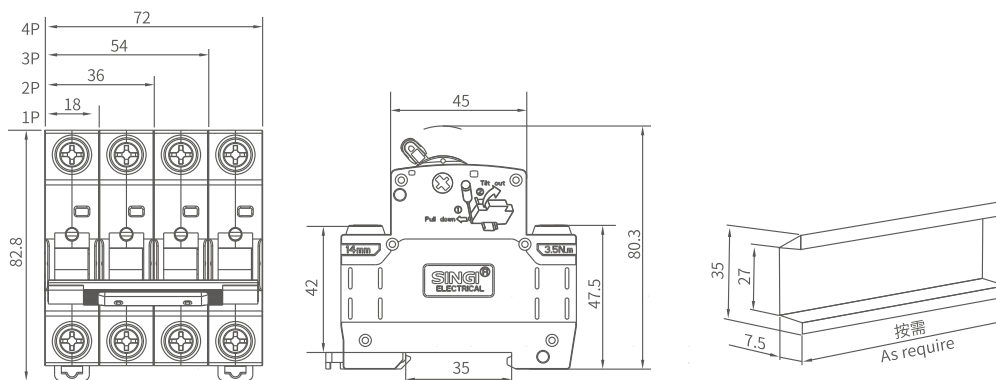
型号含义

TYPE MEANING

HL 30 - 125 N □	极数(1、2、3、4)	Pole(1、2、3、4)
	扩展型号	Expand the model
	壳架等级额定电流	Shell level rated current
	设计序号	Design no
	隔离开关	Isolating switch

外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



GQ 系列全自动自复式过欠压延时保护器

GQ SERIES AUTOMATIC RESET RECOVER OVER AND UNDER VOLTAGE TIME DELAY PROTECTOR



概述

GQ系列全自动自复式过欠压延时保护器(以下简称过欠压保护器)主要用于交流50Hz或60Hz,单相230V、三相400V,电流至125A的线路中起到过欠压保护功能,不频繁地通断电器装置和照明线路。尤其适用于工业和商业的照明配电系统。

APPLICATION

GQ series automatic reset recover over and under voltage time delay protector called over-under voltage protector suitable is for AC 50Hz or 60Hz, single 230V Three phase 400V ,rate current 125A and below, to be the over and under protector voltage of the terminal appliance. It is widely used in the line of power, post and telecommunications, transportation, coal mine. Special for industry and business lighting distribution system.

适用范围

- 1.周围空气不低於-5°C,不高于+40°C,日平均值不超过+35°C。
- 2.海拔高度安装地点:海拔高度不超过2000m。
- 3.大气相对湿度在最高温度+40°C时不超过50%,在较低温度下可以有较高的温度,如最湿月平均温度为+25°C时,月平均相对湿度不超过90%,并考虑到因温度变化发生在产品表面的凝露。

APPLICABLE SCOPE

- 1.Ambient temperature: -5°C~+40°C
- 2.Altitude: no more than 2000m;
- 3.Atmospheric relative humidity not more than 50% when the max temperature is +40°C, at lower temperatures can have a higher temperature, such as the monthy temperature is +25°C, the monthly relative humidity not more than 90% and concerning occurs on the surface of the product due to the temperature change

主要结构及工作原理

全自动过欠压延时保护器是根据目前市电状况开发设计的,新一代家电保护装置。能在电压异常的情况下起保护作用,当市电电压超过或低于保护器动作电压值时,保护器以迅速可靠的切断负载电源,达到保护电器设备安全,当市电电压恢复正常时,保护器自动接通电源恢复供电,实现全自动控制。面板上的指示灯指示保护器的工作状态,发绿光时为正常供电,发红光时保护功能启动切断负载电源。具有使用简单方便,性能稳定可靠的特点。

MAIN STRUCTURE AND WORKING PRINCIPLE

Automatic over and under voltage time delay protector is new developed product. The components are from foreign and national famous company and the production process is advanced. The product can swiftly cut off power when the power system is under situation of over voltage and under voltage to protect home appliance. When the voltage returns normal, after time duration ,it can automatically conduct the circuit and power is supplied and it can effectively protect the appliance from impacting cause of the instant power. All function are automatic. The indicator light on the panel indicates the working status of the protector, the normal power supply when the green light is issued, the protection function is working and cut off when the red lamp lighting. With a simple and convenient, stable and reliable performance characteristics. Has simple and convenient, stable and reliable performance characteristics

技术参数

TECHNICAL PARAMETER

型号 Type	极数 Pole	额定电流(A) Rated current(A)	断电后送电延时 Power transmission daly after power failure	动作延时 Action delay	自身功耗 Self power consume	过电压值 Over-voltage value(V)	欠电压值 Under-voltage value(V)	电气寿命 life
GQ-63	1P+N	32,40,50,63	60s-120s	1-5s	≤6W	270V±5%	150V±5%	≥5万次 ≥50,000 times
	3P+N					460V±5%	300V±5%	
GQ-125	1P+N	80,100,125						
	3P+N					270V±5%	150V±5%	
						460V±5%	300V±5%	

安装使用导线截面按下表选择

INSTALLATION USE THE WIRE SECTION TO SELECT FROM THE TABLE BELOW

额定电流	Pole	25A	32A	40A	50A	63A	80A	100A	125A
导线截面平方	Factor	2.5	4	6	10	16	25	35	50

注:导线选择请一定按照上表选择 Note: Choosing wire must follow the table

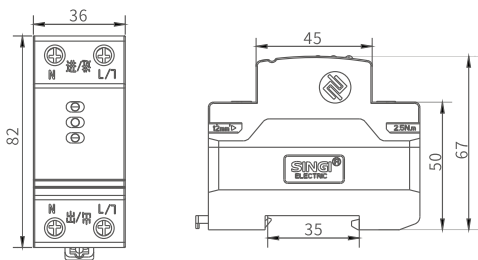
型号含义

TYPE MEANING

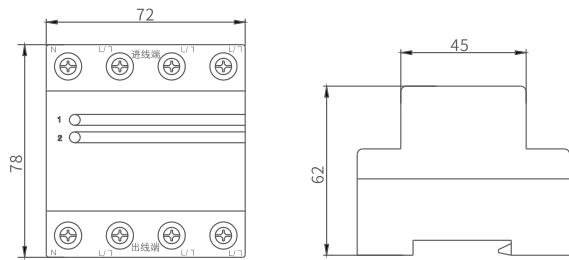


外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



GQ-63 1P+N



GQ-63 3P+N

指示灯:

- 1、电源指示灯, 绿色表示正常工作, 红灯表示电源输入;
- 2、故障指示灯, 灯亮表示欠压故障;
- 3、故障指示灯, 灯亮表示过压故障。

Indicator light:

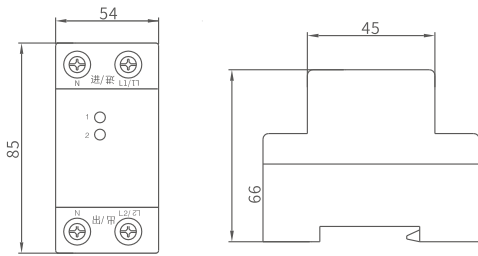
- 1.Power indicator, green means work, red means power on
- 2.trouble lamp, lighting means under-voltage
- 3.trouble lamp, lighting means over-voltage

指示灯:

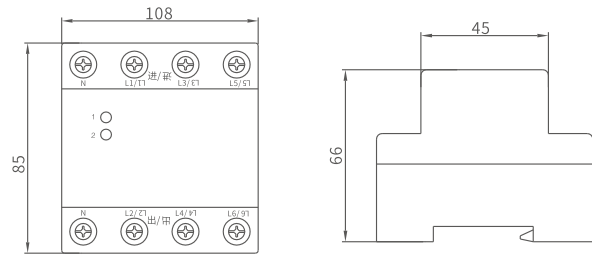
- 1、电源指示灯, 灯亮表示电源输入。
- 2、故障指示灯, 灯亮表示过压或欠压故障。

Indicator light:

- 1.Power indicator, lighting means power on
- 2.trouble lamp, lighting means over-voltage or under-voltage



GQ-125 1P+N



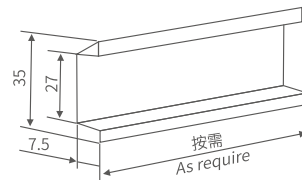
GQ-125 3P+N

指示灯:

- 1、电源指示灯, 灯亮表示电源输入。
- 2、故障指示灯, 灯亮表示过压或欠压故障。

Indicator light:

- 1.Power indicator, lighting means power on
- 2.trouble lamp, lighting means over-voltage or under-voltage



注意事项及订货须知

NOTES AND ORDERING INSTRUCTIONS

- 1.GQ系列全自动延时保护器在运输、储存、使用过程中, 不能受到雨雪侵袭。
- 2.GQ系列全自动延时保护器在使用中零线必须接入产品标有“N”字标识的接线端。
- 3.订货时需清楚注明产品型号规格、工作电压、额定电流、极数及数量。 例: 订货 GQ-63 230V 1P+N 63A 50台。

- 1.Transport can not be affected by rain and snow
- 2 Must be connected to the end of the product marked N word identification
- 3 Must note product type size, working voltage, rated current, poles and quantity. e.g. order GQ-63 230V 1P+N 63A 50pcs



▶ 适用范围

APPLICABLE SCOPE

SN-63高分断小型断路器具有结构先进、性能可靠、分断能力高、外型美观小巧等特点,壳体 and 部件是采用耐冲击、高阻燃材料构成。适用于交流 50Hz 或 60Hz, 额定工作电压 400V 及以下, 额定电流为 63A 以下的场所。主要用于办公楼、住宅和类似的建筑物的照明、配电线路及设备的过载、短路保护, 也可在正常情况下, 作为线路不频繁的转换之用。
符合 IEC60898-1 和 GB10963.1 等标准的要求。

SN-63 high breaking miniature circuit breaker has the features of structure advanced, performance reliable, breaking capacity high, appearance elegant and its shell and parts are made of material with impact resistance, strong flame-retardant feature. It is suitable to power system of 50 or 60 frequency, Ue 400V and below, Ui 63A and below. It is mainly applied at office building, residence, for lighting, power distribution and overload and short circuit protection of equipment. Normally, it also can be used as the not frequent transfer of power system.
It conforms to the standards IEC60898-1 and GB10963.1.

▶ 技术参数

TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	额定电流(A) Rated current (A)	额定短路分断能力 Icn(A) Rated short circuit breaking capacity Icn(A)
230/400(220/380)	1,2	6,10,16,20,	6000
400	3,4	25,32,40	
230/400(220/380)	1,2	50,63	4000
400	3,4		

注: ①抗湿热性: 2类 (温度 55°C 时, 相对湿度为 95%)。

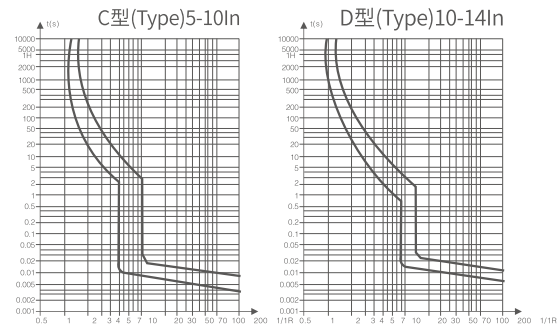
②接线采用带夹箍的接线端子, 电缆截面可达: 25mm²。

1.Heat resistance: category 2(temperature 55°C, relative humidity 95%).

2.Wiring is terminal with clamp, cable dia.: 25mm²

▶ 动作特性曲线

BREAKING CHARACTERISTIC CURVE



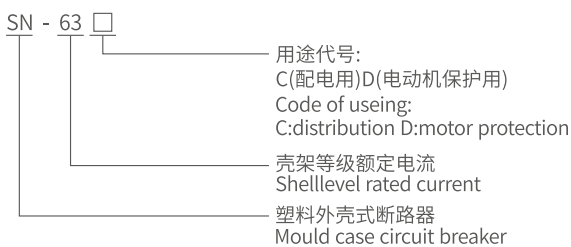
▶ 过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark	
1.13In	所有值	All	不脱扣 Don't trip	冷态 Cool		
1.45In	所有值	All	脱扣 Trip	热态 Heat	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s	
2.55In	In ≤ 32A	Is < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on	
2.55In	In > 32A	Is < t < 120s	脱扣 Trip			
5In(C型) 5In(C Type)	所有值	All	t ≤ 0.1s			不脱扣 Don't trip
10In(C型) 10In(C Type)			t < 0.1s			脱扣 Trip
10In(D型) 10In(D Type)			t ≥ 0.1s			不脱扣 Don't trip
14In(D型) 14In(D Type)			t < 0.1s	脱扣 Trip		

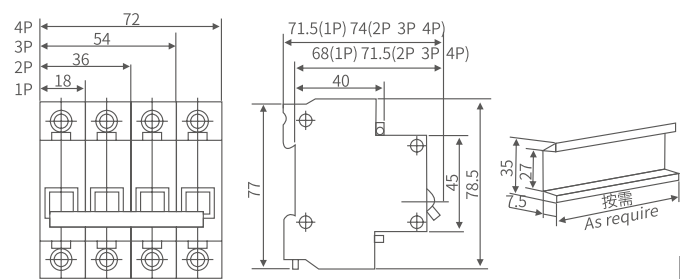
▶ 型号含义

TYPE MEANING



▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





适用范围

APPLICABLE SCOPE

SNLE-63断路器适用于交流50Hz或60Hz, 额定电压230V的单相住宅线路中, 作为漏电保护之用, 并对民用电气线路的过载和短路进行保护, 该产品具有体积小, 分断能力高; 零、火线同时切断, 并在火线接反的情况下, 仍能对漏电进行保护。
本产品符合IEC61009-1 GB16917.1等标准。

SNLE-63 RCBO is suitable to the single phase residual circuit of 50/60Hz, rated voltage 230V, as the current leakage protection and protect the civil electrical circuit from over load and short circuit and it has the features of volume small, breaking capacity high. Null/live wire is cut at the same time, and even the wire is reverse connection, it still have current leakage Protection.
The product conforms to standards IEC1009.1, GB16917.1 etc.

技术参数

TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	壳架等级电流(A) Shell-level rated current(A)	额定电流(A) Rated current(A)	额定漏电动作电流(mA) Rated breaking residual current(mA)	额定漏不动作电流(mA) Rated not breaking residual current(mA)	额定漏电分断时间(S) Breaking time of rated residual current(s)	分断能力Ics(A) Breaking Capacity (A)	过压动作值 Overvoltage action value	欠压动作值 Undervoltage action value
230(220)	1P+N	63A	6,10,16,20,25,32 50,63	30	15	≤0.1	6000 4000	280V±5V	170V±5V

注: 接线采用带夹箍的接线端子, 使用与10mm²及以下硬导线。 Remark: wiring is terminal with clamp, cable dia.: 10mm² below available for hard cable.

过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark	
1.13In	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s	
1.45In		t < 1h	脱扣 Trip	热态 Heat		
2.55In		Is < t < 60s	脱扣 Trip	冷态 Cool		
5In		t ≤ 0.1s	不脱扣 Don't trip	冷态 Cool		闭合辅助开关接通电源 Auxiliary switch closed and power on
10In		t < 0.1s	脱扣 Trip	冷态 Cool		

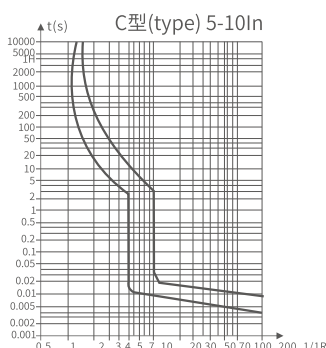
型号含义

TYPE MEANING

SN	LE - 63	□	G: 过压保护 Q: 欠压保护 GQ: 过欠压保护	G: over voltage protect Q: under-voltage protect GQ: over-under protect
			壳架等级额定电流	Shell-level rated current(A)
			电子式剩余电流动作型	Electronic residual current breaking type
			塑料外壳式断路器	Plastic case type circuit breaker

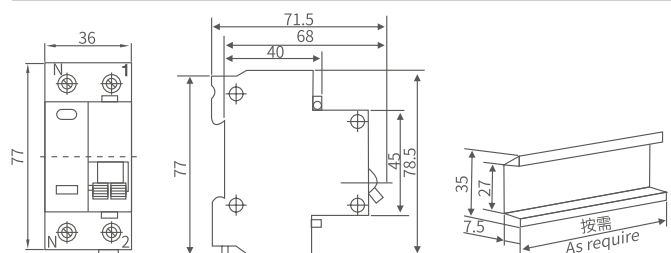
动作特性曲线

BREAKING CHARACTERISTIC CURVE



外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



应用指南: ①每月按压一次试验按钮, 检查漏电保护装置的动作。
②当漏电保护装置动作时, 装置的正面有红色的机械指示。
③当重新闭合断路器时, 保护装置自动复位。

Application guidelines:
1. Press the test button once a month, check leakage protective device.
2. When the leakage protective device, the device on the obverse of the red machine instructions.
3. When reclosing circuit breaker, the protection device reset automatically.

DZ47-63n 系列高分断小型断路器

DZ47-63n SERIES HIGH BREAKING MCB



▶ 适用范围

APPLICABLE SCOPE

SN-63高分断小型断路器具有结构先进、性能可靠、分断能力高、外型美观小巧等特点，壳体和部件是采用耐冲击、高阻燃材料构成。适用于交流50Hz或60Hz，额定工作电压400V及以下，额定电流为63A以下的场所。主要用于办公楼、住宅和类似的建筑物的照明、配电线路及设备的过载、短路保护，也可在正常情况下，作为线路不频繁转换之用。

符合 IEC60898-1和GB10963.1等标准的要求。

SN-63 high breaking miniature circuit breaker has the features of structure advanced, performance reliable, breaking capacity high, appearance elegant and its shell and parts are made of material with impact resistance, strong flame-retardant feature. It is suitable to power system of 50 or 60 frequency, Ue 400V and below, Ui 63A and below. It is mainly applied at office building, residence, for lighting, power distribution and overload and short circuit protection of equipment. Normally, it also can be used as the not frequent transfer of power system.

It conforms to the standards IEC60898-1 and GB10963.1.

▶ 技术参数

TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	额定电流(A) Rated current (A)	额定短路分断能力 Icn(A) Rated short circuit breaking capacity Icn(A)
230/400(220/380)	1,2	6,10,16,20,	6000
400	3,4	25,32,40	
230/400(220/380)	1,2	50,63	4000
400	3,4		

注：①抗湿热性：2类（温度55°C时，相对湿度为95%）。

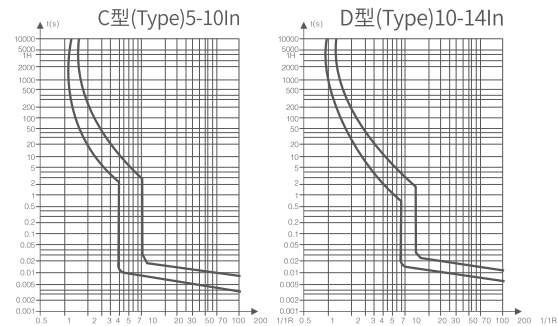
②接线采用带夹箍的接线端子，电缆截面可达：25mm²。

1.Heat resistance: category 2(temperature 55°C,relative humidity 95%).

2.Wiring is terminal with clamp, cable dia.:25mm²

▶ 动作特性曲线

BREAKING CHARACTERISTIC CURVE



▶ 过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark	
1.13In	所有值	All	不脱扣 Don't trip	冷态 Cool		
1.45In	所有值	All	脱扣 Trip	热态 Heat	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s	
2.55In	In ≤ 32A	Is < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on	
2.55In	In > 32A	Is < t < 120s	脱扣 Trip			
5In(C型) 5In(C Type)	所有值	All	t ≤ 0.1s			不脱扣 Don't trip
10In(C型) 10In(C Type)			t < 0.1s			脱扣 Trip
10In(D型) 10In(D Type)			t ≥ 0.1s			不脱扣 Don't trip
14In(D型) 14In(D Type)			t < 0.1s	脱扣 Trip		

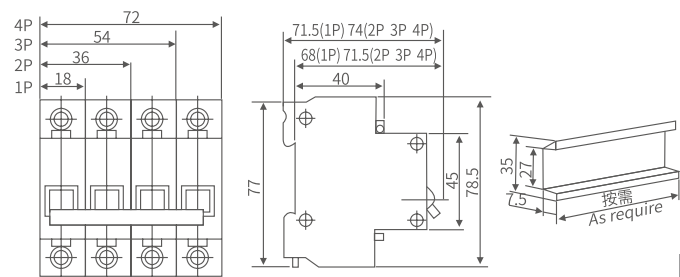
▶ 型号含义

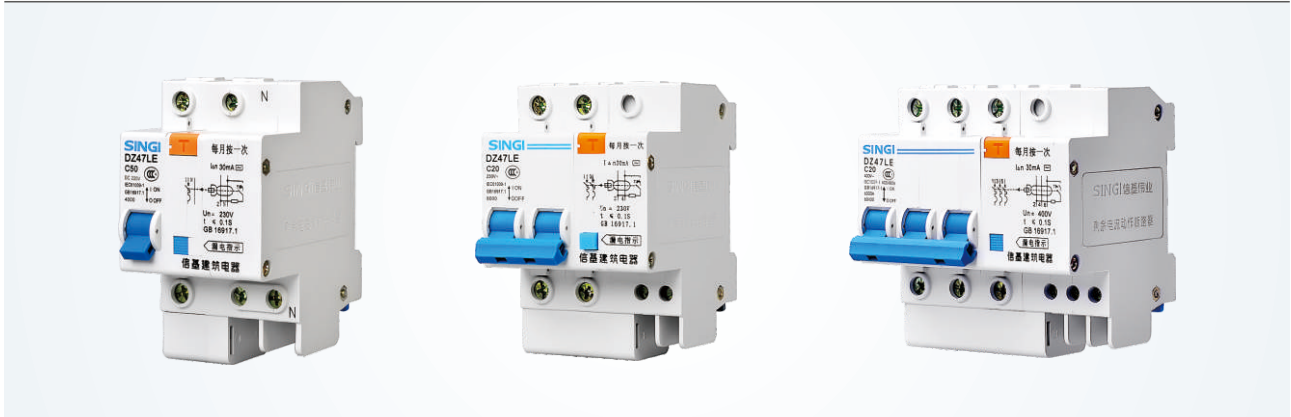
TYPE MEANING



▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





适用范围

APPLICABLE SCOPE

DZ47LE-63漏电断路器适用于交流50Hz,单相230V,三相400V的线路中,当有人触电或电路泄漏电流超过规定值时,自动切断电源,保障人身安全和防止设备因泄漏电流造成的事故,亦可作为保护线路的过载和短路之用,以及在正常情况下作为线路的不频繁转换之用,还可根据用户的需要增加过压,欠压保护功能。产品符合IEC61009-1、GB16917.1标准的要求。

DZ47LE-63 SERIES residual current circuit breaker is applied in the power system of AC 50Hz,single phase 230V;three phases 400V.When somebody gets and electric shock or the leakage current exceeds the default value, the RCBO can cut off the power automatically to protect the personal safety and prevent the equipment from the fault resulted from the leakage current or can be used for the unfrequent switch of the circuit under normal condition. And extra protection functions like over voltage, under voltage can be added according to customers' request. It conforms to the standard IEC1009-1,GB16917.1.

结构特征

STRUCTURE

DZ47LE系列漏电断路器由DZ47-63高分断小型断路器和漏电脱扣器拼装而成。漏电断路器系电流动作型电子式漏电断路器,主要由零序电流互感器、电子组件板、漏电脱扣器及带有过载和短路保护的断路器组成。

DZ47LE-63 series residual current circuit breaker is composed of DZ47-63high breaking mini circuit breaker and current residual current release. The RCBO is current electronic current leakage circuit breaker, the main parts include zero sequence current transformer, electronic panel, current leakage release and the circuit breaker with protection functions of over load, short circuit.

技术参数

TECHNICAL PARAMETER

壳架等级额定电流 Inm(A) Shell level rated current Inm (A)	极数 Pole	额定电压(V) Rated voltage(V)	额定电流(A) Rated current(A)	额定短路分断能力 Icn(A) Rated short circuit breaking capacity Icn(A)	额定漏电动作电流 IΔn (mA) Rated residual current breaking current IΔn (mA)	额定漏电不动作电流 IΔn (mA) Rated residual current no breaking current IΔn (mA)	脱扣器类型 Trip Type
63	1P+N 2P	230/400 (220/380)	6,10,16,20, 25,32,40	6000	30,50, 100,300	15,25, 50,150	C
	3P 3P+N 4P		400				4000

注: 接线采用带夹箍的接线端子, 可连接16mm²及以下的硬线导线。 Note: Using the terminals with clamped to wiring,hard wire 16mm² and below are available.

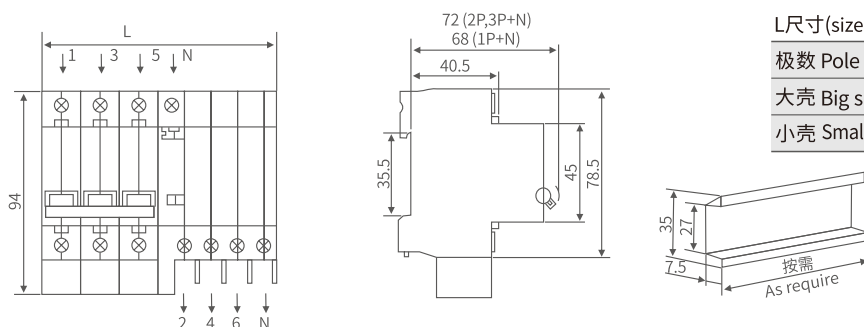
型号含义

TYPE MEANING

DZ 47 LE - 63 / □ □	额定电流剩余动作电流	Rated current residual breaking current
□ □	极数	Pole
□ □	壳架等级额定电流	Shell level rated current
□ □	电子式剩余电流动作型	Electronic type with earth leakage protection
□ □	设计序号	Design no.
□ □	塑料外壳式断路器	Plastic case type circuit breaker

外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



L尺寸(size mm):

极数 Pole	1P+N	2P	3P	3P+N	4P
大壳 Big shell	54	72	104	118	136
小壳 Small shell	45	63	90	99	117



► 适用范围

APPLICABLE SCOPE

本系列断路器附件是我公司专为DZ47-63系列断路器配套设计的辅助功能元件,在家居、建筑等电气线路中,可以根据需要选择不同的电气附件与DZ47-63系列断路器配合使用,以实现断路器的远程控制、分合状态指示、提供报警信号等功能,更好的保护线路、人身和财产安全。

This series of circuit breaker accessories is auxiliary components, our company designed for the DZ47-63 series circuit breakers, in the home, construction, fire, intelligent electrical and other electrical lines, can choose different electrical accessories by different requests and be used with DZ47-63series circuit breaker, to achieve the remote control of the circuit breaker, sub-status indication, to provide alarm signals and other functions, better protection of the circuit, personal and property safety.

► 过欠压脱扣器特点

OVER-UNDER VOLTAGE RELEASE FEATURE

- 1.拼装方式有两种:插针拼装,螺丝拼装。可满足不同改型产品
- 2.常用塑料插针易拼装,不会损坏产品铆钉

1. There are two ways to assemble: pin assembly, screw assembly. Can meet the different modified products
2. Commonly used plastic pins to assemble, will not damage the product rivets

► 断路器附件的名称、用途及符合标准

CIRCUIT BREAKER ACCESSORY NAME,APPLICATION,STANDARD

附件名称 Accessory name	代号 Code	用途 Application	符合标准 Standard
辅助触头 Auxiliary contact	OF	提供辅助信号,控制辅助电路 Provide auxiliary signal, control auxiliary circuit	IEC60947-5-1 GB14048.5-2008
报警触头 Alarm contact	SD	当断路器因被保护线路故障分时,提供报警信号 When the circuit breaker is protected circuit failure, provide alarm signal	IEC60947-2 GB14048.2-2008
分励脱扣器 Shunt release device,	MX	远距离分断电路 Long distance breaking electric	IEC60947-1 GB14048.1-2008
分励脱扣器+辅助触头 +auxiliary contact	MX+OF	远距离分断电路,并通过辅助触头实现对辅助电路的控制,有源型及无源型两种 Long distance breaking electric, and achieve the control of auxiliary circuit through auxiliary contact,owns active type and passive type	IEC60947-1 GB14048.1-2008
欠压脱扣器 Under-voltage release	MN	当电源电压从230V下降到170V±5%之间时,使断路器脱扣,实现线路的欠压保护。 When the power supply voltage drops from 230v to 170v±5%, the circuit breaker trip, to achieve the line undervoltage protection	IEC60947-2 GB14048.2
过压脱扣器 Over-voltage release	MV	当电源电压从230V上升到270V±5%时,使断路器脱扣,实现线路的过压保护。 When the power supply voltage up from 230v to 270v±5%, the circuit breaker trip, to achieve the line overvoltage protection	IEC60947-2 GB14048.2
过欠压脱扣器 Over-under voltage release	MV+MN	当230V额定电源电压上升到270V±5%或下降到170V±5%时,使断路器脱扣,实现线路的过压、欠压保护。 When the 220v rated voltage up to 270v±5%,or drop to170v±5% the circuit breaker trip, to achieve line protection	IEC60947-2 GB14048.2
过欠压、失压 (电子式)脱扣器 Overvoltage, loss voltage (electronic) release	MNVs	当230V额定电源电压上升到270V±5%或下降到170V±5%时,使断路器脱扣,实现线路的过压、欠压保护。同时当用户停电之后,脱扣器带动断路器跳闸,实现失压保护。 When the 220v rated voltage up to 270v±5%,or drop to170v±5% the circuit breaker trip, to achieve line protection. at same time when the user is powered down, release will take breaker to trip, achieve loss voltage protection	IEC60947-2 GB14048.2
三相过欠压脱扣器 Three phase over-under voltage release	MV+MN	当电源电压从380V上升到460V±5%下降到300V±5%时,实现线路的过欠压保护,冰袋有缺相保护功能。 When voltage up from 380V to 460V ±5% or drop to 300V ±5%, will achieve over-under voltage protection, and has the function about lack phase	IEC60947-2 GB14048.2

▶ 技术参数

TECHNICAL PARAMETER

附件名称 Accessory name		额定工作电压Ue(V) Rated voltage Ue	动作电压(V) Connention image
MN 欠压脱扣器	MN under-voltage release	AC230V	170V±5%
		AC400V	300V±5%
MV 过压脱扣器	MV over-voltage release	AC230V	270V±5%
		AC400V	460V±5%
MV+MN 过欠压脱扣器	MV+MN over-under voltage release	AC230V	欠压(Undervoltage): 170V±5% 过压(overvoltage): 270V±5%
		AC400V	欠压(Undervoltage): 300V±5% 过压(overvoltage): 460V±5%
MNVS 过欠压、失压(电子式) 脱扣器	MNVS Overvoltage, lossvoltage (Electronic) release	AC230V	欠压(Undervoltage): 170V±5% 过压(overvoltage): 270V±5%

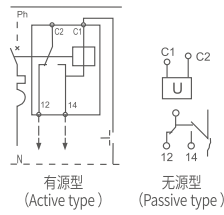
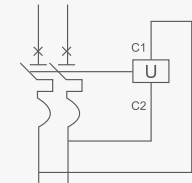
辅助触头、报警触头的技术参数

Auxiliary contact, alarm contact technical parameters

附件名称 Accessory name		额定电流(A) Rated current(A)			每组触头数 Number of contacts per group	接线图 Connention image
		AC400V	AC230V	DC220V		
OF 辅助触头	OF Auxiliary contact	3	6	1	一常开一常闭 one open one closed	
SD 报警触头	SD Alarm contact	3	6	1	一常开一常闭 one open one closed	

分励脱扣器、分励脱扣器+辅助触头的技术参数

Shunt release device, shunt release+auxiliary contact technical parameters

附件名称 Accessory name	额定电压Ui Rated isolate voltage Ui	额定控制电源电压Us Rated contral power voltage Us	脱扣功耗 (W或VA) Trip power(W or VA)	吸合电压 Pull up voltage	接线图 Connention image
MX+OF 分励脱扣器+辅助触头 MX+OF shunt release+auxiliary contact	415V	AC/DC: 230~400V 24~220V	240	(0.7~1.1)Us	
		AC/DC: 24~48V	120		
MX 分励脱扣器 MX shunt release	415V	AC/DC: 230~400V 24~220V	240	(0.7~1.1)Us	
		AC/DC: 24~48V	120		

► 型号含义

TYPE MEANING

OF	辅助触头	OF	Auxiliary contact
SD	报警触头	SD	Alarm contact
MX	分励脱扣器	MX	Shunt release device
MX+OF	分励脱扣器+辅助触头	MX+OF	Shunt release+auxiliary contact
MV	过压脱扣器	MV	Over-voltage release
MN	欠压脱扣器	MN	Under-voltage release



注：在断路器左侧拼装的附件可以是一个或多个，在断路器右侧拼装的附件只能是1个。
NOTE: The assembly on the left side of the circuit breaker can be one or more, There only have 1 accessory on the breaker right

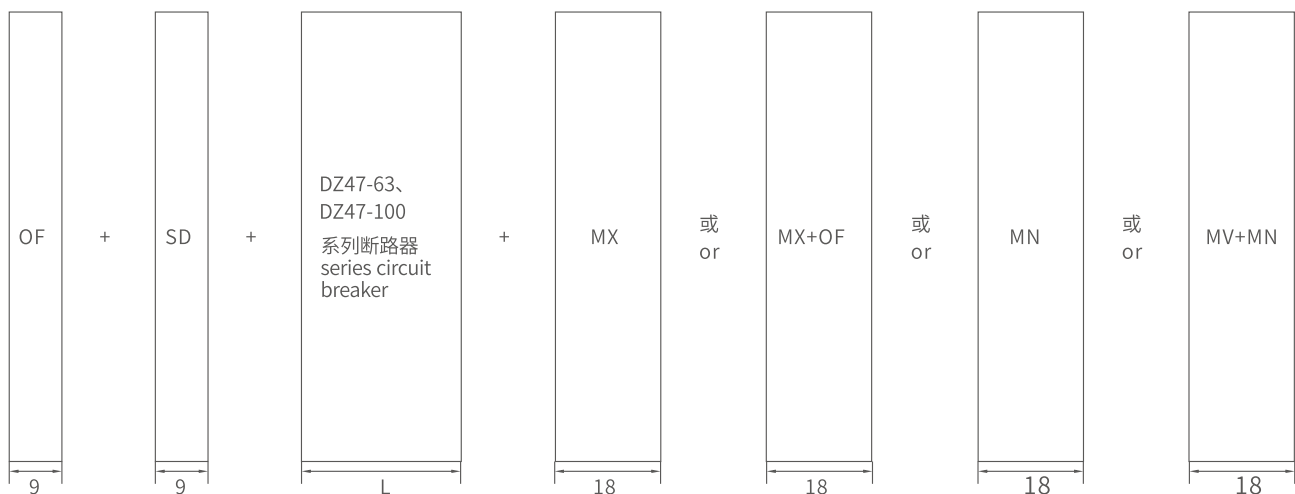
► 工作条件及安装条件

WORKING CONDITIONS AND INSTALLATION CONDITIONS

- ◎环境温度：-5°C~+40°C；
- ◎海拔高度：不超过2000m；
- ◎环境条件：应没有引起爆炸危险的介质，也没有腐蚀和破坏的有害气体和导电尘埃；
- ◎安装条件：采用35mm标准导轨安装；
- ◎Ambient temperature: -5°C ~+40°C;
- ◎Altitude: no more than 2000m;
- ◎Environmental conditions: there should be no danger of explosion caused by the media, there is no corrosion and destruction of harmful gases and conductive dust;
- ◎Installation conditions: 35mm standard rail installation;

► 外型及安装尺寸

OUTLOOK AND MOUNTING SIZE



注：在断路器左侧拼装附件可以是一个或多个，在断路器右侧拼装的附件只能是一个。
NOTE: The assembly accessory on the left side of the circuit breaker can be one or more, There only have 1 accessory on the breaker right



▶ 适用范围

APPLICABLE SCOPE

SWM-100 (NC100H) 高分断小型断路器用于保护线路的短路和过载,适用于照明配电系统和电动机的配电系统。外型美观小巧、重量轻,性能优良可靠,分断能力较高,脱扣迅速,导轨安装,壳体和部件采用高阻燃及耐冲击塑料,使用寿命长,主要用于交流50Hz或60Hz,额定电压400V线路的过载、短路保护,同时也可以在正常情况下不频繁地通断电器装置和照明线路。可加装欠电压脱扣器,分励脱扣器等附件,也适用于隔离开关及作为线路的欠电压保护和远距离断开之用。

该产品符合IEC60947-2, GB14048.2标准的要求。

SWM-100 high breaking miniature circuit breaker is used in lighting and motor protection system with protections of short circuit and over load. It mainly has the features of elegant and small, weight light, performance good and reliable, breaking capacity high, trip quickly, DIN installation and the material of shell and parts is high flameproof and anti-impact plastic ,life long. It is mainly applied in the system of 50/60Hz,single pole 230V,2,3,4poles for 400V as over load ,short circuit protection. And under voltage release, shunt release etc. And it also can be used in the isolation switch as the under voltage protection and remote distance breaking.

It conforms to IEC60947-2,GB14048.2

▶ 技术参数

TECHNICAL PARAMETER

◎主要类型:

1. C型主要用于照明配电保护
2. D型主要用于动力工业配电保护

◎断路器的额定电流为: 63A、80A、100A、125A

◎断路器的极数分为: 单极、二极、三极和四极

◎本断路器为嵌入式安装(可在安装轨上安装)

◎工频耐压: 在耐湿热性能后,断路器应能承受2500V工频耐压试验1分钟而无绝缘闪络和击穿现象。

◎机械电气寿命: 机械电气寿命为20000次,其中电气寿命6000次。

◎抗湿热性: 2类(温度55°C时,相对湿度为95%)。

◎接线: 采用带夹箍的接线端子,固定电缆截面可达至50mm²。

◎断路器的额定工作电压及其相关的额定短路通断能力见表

◎Main type:

1. C for lighting power distribution protection
2. D for motive industry power distribution protection

◎Rated current: 63A,80A,100A,125A

◎Poles: 1,2,3,4pooles

◎This MCB is embedded installation(can mount on rail)

◎power frequency voltage resistance: after humidity heat performance test, the circuit breaker can withstand 2500V power frequency voltage withstanding test for 1 minute ,but without insulation flashover and puncture

◎mechanical electrical life: mechanical life 20,000 times, electrical life 6,000 times

◎humidity heat withstanding:2 category(temperature 55°C,relative humidity 95%).

◎wiring is terminal with clamp, cable dia.: 50mm² below available for hard cable

◎The rated work voltage and related rated short circuit breaking capacity of this circuit breaker as follows

额定工作电压(V) Rated voltage(V)	极数 Pole	额定电流(A) Rated current (A)	额定短路分断能力 I _{cn} (A) Rated short circuit breaking capacity I _{cn} (A)
230/400(220/380)	1,2	63,80,	10000
400	3,4	100,125	

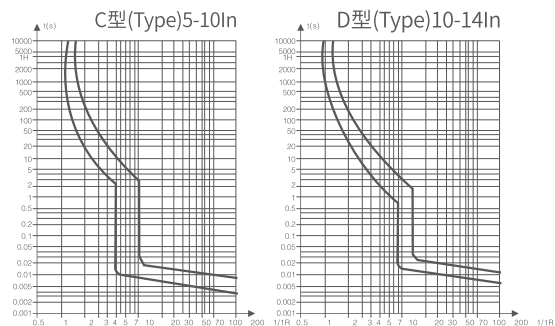
▶ 型号含义

TYPE MEANING



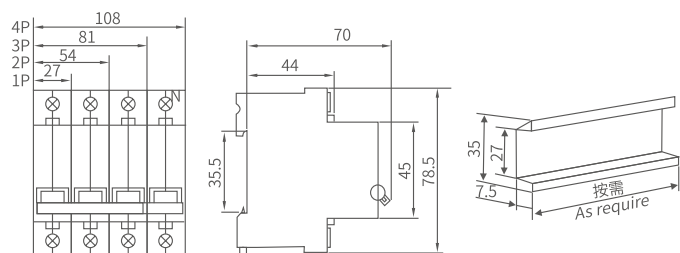
▶ 动作特性曲线

BREAKING CHARACTERISTIC CURVE



▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





▶ 适用范围

APPLICABLE SCOPE

SWMLE-100系列漏电断路器适用于交流50Hz, 额定电压 400V及单相230V, 额定电流100A的线路中, 具有漏电、过载、短路等保护功能, 还可根据用户的需要增加过压保护功能。主要用于建筑照明和配电系统的保护。

SWMLE-100 residual current circuit breaker is applied in the power system of AC 50Hz, single phase 230V, three phases 400V, rated current 100A. The RCBO also can protect the circuit against current leakage, over load, short circuit etc. And extra protection function like over voltage can be added according to customers' request. It mainly used as building lighting and power distribution protection..

▶ 结构特征

STRUCTURE

SWMLE-100系列漏电断路器由SWM-100高分断小型断路器和漏脱扣器拼装而成。漏电断路器系流动作型电子式漏电断路器, 主要由零序电流互感器、电子组件板、漏脱扣器及带有过载和短路保护的断路器组成。

SWMLE-100 earth leakage circuit breaker is composed of SWM-100 high breaking mini circuit breaker and current leakage release. The RCBO is current electronic current leakage circuit breaker, the main parts include zero sequence current transformer, electronic panel, current leakage release and the circuit breaker with protection functions of over load, short circuit.

▶ 技术参数

TECHNICAL PARAMETER

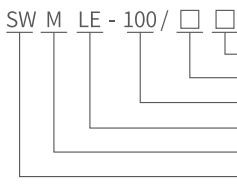
壳架等级额定电流 $I_{nm}(A)$ Shell level rated current $I_{nm}(A)$	极数 Pole	额定电压(V) Rated voltage(V)	额定电流(A) Rated current(A)	额定短路分断能力 $I_{cno}(A)$ Rated short circuit breaking capacity $I_{cno}(A)$	额定漏电动作电流 $I_{\Delta n}(mA)$ Rated residual current breaking current $I_{\Delta n}(mA)$	额定漏电不动作电流 $I_{\Delta n}(mA)$ Rated residual current no breaking current $I_{\Delta n}(mA)$	脱扣器类型 Trip Type
100	1P+N 2P	230/400 (220/380)	63,80,100	10000	30,50,100, 200,300	15,25,50,100,150	C,D
	3P 3P+N 4P	400					

注: 接线采用带夹箍的接线端子, 可连接50mm²及以下的硬线导线。

Note: Using the terminals with clamped to wiring, hard wire 50mm² and below are available.

▶ 型号含义

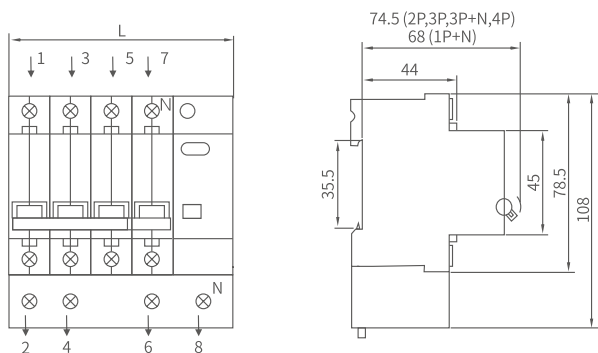
TYPE MEANING



额定电流剩余动作电流	Rated current residual breaking current
极数	Pole
壳架等级额定电流	Shell level rated current
电子式剩余电流动作型	Electronic type with earth leakage protection
塑料外壳式断路器	Plastic case type circuit breaker
企业代号	Company code(SINGI)

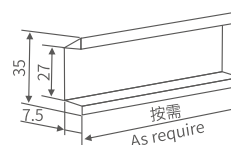
▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



L尺寸 (size mm):

极数 Pole	1P+N	2P	3P	3P+N	4P
	54	81	108	108	135





▶ 适用范围

APPLICABLE SCOPE

SGFE电子式漏电保护器适用于交流50/60Hz、单相AC240V、三相AC415V的线路中,当有人触电或电路泄漏电流超过规定值时,自动切断电源,保障人身安全和防止设备因泄漏电流造成的事故,以及在正常情况下作为线路的不频繁转换之用。
本产品符合GB16916.1 IEC / EN61008-1标准。

SGFE electronic residual current protector for AC 50 / 60Hz, single-phase AC 240V, three-phase AC415 line, when someone electric shock or circuit leakage current exceeds the specified value, automatically cut off the power to protect personal safety and prevent equipments get accident due to leakage current Caused, as well as under normal situation can be used for unfrequently transfer. This product pass G B16916.1 IEC / EN61008-1 standard.

▶ 产品特点

FEATURES

- ◎ 适合于双向母线布线能力
- ◎ 使用领先的电子驱动,更具成本效益
- ◎ 最大连接能力25mm²,接线扭矩3N.m,适用于各种安装设备
- ◎ 防护等级:IP20

- ◎ Suitable for two-way bus wiring capacity
- ◎ Using leading electronic drives, more cost-effective
- ◎ Maximum connection capacity is 25mm², wiring distance is 3N.m, suitable for different installation equipment, wiring better
- ◎ Protection level: IP20

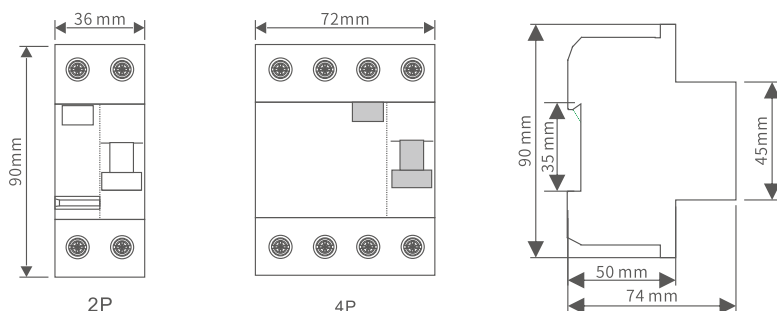
▶ 技术参数

TECHNICAL PARAMETER

电子特性 Electronic characteristics	执行标准	standard	GB16916.1 IEC/EN 61008-1
	额定电流 In	Rated current In	16A、25A、40A、63A
	极数	Pole	2P 4P
	额定电压 Ue	Rated voltage Ue	240V / 415V
	绝缘电压 Ui	Insulation voltage Ui	500V
	额定功率	Rated power	50Hz / 60Hz
	额定剩余电流动作值 I Δ n	Rated residual current breaking value I Δ n	0.01A、0.03A、0.1A、0.3A
	额定剩余接通过和分断能力 I Δ m	Rated residual current breaking capacity I Δ m	500A(In=16~40A)、630A(In=63A)
	额定限制/剩余短路电流 Inc=I Δ c	Rated limit/residual short-circuit current Inc=I Δ c	6000A
	SCPD 保险丝	SCPD fuse	[6000A]
机械特性 Mechanical characteristics	漏电动作时间 I Δ t	Breaking time when have residual current I Δ t	≤0.1S
	额定冲击耐受电压 Uimp	Rated impulse withstand voltage Uimp	6000V
	介电电压	Dielectric voltage	2.5kA
	电气寿命和机械寿命	life	4000
组合配件 Combination of accessories	故障电流指示器	Fault current indicator	Yes
	防护等级(每日平均值≤35°C)	Protect level(daily average ≤35°C)	IP20
	储存温度	Storage temperature	-5°C~+40°C
	使用环境温度	ambient temperature	-25°C~+70°C
	端子顶部尺寸/电缆底部	Size of terminal top/cable base	25mm ² (AWG)
端子顶部尺寸/母线底部	Size of terminal top/busbar base	25mm ² (AWG)	
螺钉扭矩	Distance of screw	3.0N.m	
安装方式	Mounting ways	在DIN轨道EN 60715 (35mm) 上通过快速夹装置 On DIN guideEN60715(35mm) by fastening the device	

▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





► 适用范围

APPLICABLE SCOPE

SGFL电磁式漏电保护器适用于交流50/60Hz、单相AC240V、三相AC415V的线路中,当有人触电或电路泄漏电流超过规定值时,自动切断电源,保障人身安全和防止设备因泄漏电流造成的事故,以及在正常情况下作为线路的不频繁转换之用。
本产品符合GB16916.1 IEC / EN61008-1标准。

SGFL electromagnetic type residual current protector for AC 50 / 60Hz, single-phase AC240V, three-phase AC415 line, when someone electric shock or circuit leakage current exceeds the specified value, automatically cut off the power to protect personal safety and prevent equipments get accident due to leakage current Caused, as well as under normal situation can be used for unfrequently transfer.This product pass G B16916.1 IEC / EN61008-1 standard.

► 产品特点

FEATURES

- ◎ 适合于双向母线布线能力
- ◎ 使用领先的电磁感应零电压驱动, 更具安全性
- ◎ 最大连接能力25mm², 接线扭矩3N.m, 适用于各种安装设备
- ◎ 防护等级: IP20

- ◎ Suitable for two-way bus wiring capacity
- ◎ Using leading electromagnetic induction zero voltage drive for greater safety
- ◎ Maximum connection capacity is 25mm², wiring distance is 3N.m, suitable for different installation equipment, wiring better
- ◎ Protection level: IP20

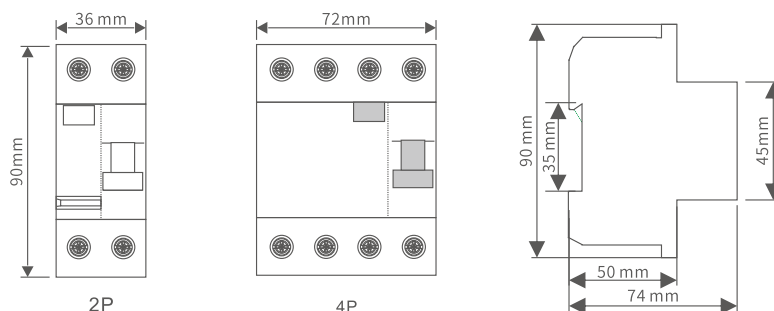
► 技术参数

TECHNICAL PARAMETER

电子特性 Electronic characteristics	执行标准	standard	GB16916.1 IEC/EN 61008-1
	额定电流 In	Rated current In	16A, 25A, 40A, 63A
	极数	Pole	2P 4P
	额定电压 Ue	Rated voltage Ue	240V / 415V
	绝缘电压 Ui	Insulation voltage Ui	500V
	额定功率	Rated power	50Hz / 60Hz
	额定剩余电流动作值 I Δ n	Rated residual current breaking value I Δ n	0.01A, 0.03A, 0.1A, 0.3A
	额定剩余接通过和分断能力 I Δ m	Rated residual current breaking capacity I Δ m	500A(In=16~40A), 630A(In=63A)
	额定限制/剩余短路电流 Inc=I Δ c	Rated limit/residual short-circuit current Inc=I Δ c	6000A
	SCPD 保险丝	SCPD fuse	[6000A]
	漏电动作时间 I Δ t	Breaking time when have residual current I Δ t	≤0.1S
机械特性 Mechanical characteristics	额定冲击耐受电压 Uimp	Rated impulse withstand voltage Uimp	6000V
	介电电压	Dielectric voltage	2.5kA
	电气寿命和机械寿命	life	4000
	故障电流指示器	Fault current indicator	Yes
组合配件 Combination of accessories	防护等级 (每日平均值≤35°C)	Protect level(daily average ≤35°C)	IP20
	储存温度	Storage temperature	-5°C~+40°C
	使用环境温度	ambient temperature	-25°C~+70°C
	端子顶部尺寸/电缆底部	Size of terminal top/cable base	25mm ² (AWG)
	端子顶部尺寸/母线底部	Size of terminal top/busbar base	25mm ² (AWG)
螺钉扭矩	Distance of screw	3.0N.m	
安装方式	Mounting ways	在DIN轨道EN 60715 (35mm) 上通过快速夹装置 On DIN guideEN60715(35mm) by fastening the device	

► 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





适用范围

APPLICABLE SCOPE

DZ30-32系列(相线+中性线)断路器适用于交流50Hz或60Hz,额定电压230V的单相住宅线路中,对电气线路的过载和短路进行保护。该产品分断能力高、体积小,零、火线同时切断,杜绝了火线、零线接反或零线对地电位造成的人身及火灾危险,是目前民用住宅领域中最理想的配电保护开关。
本产品符合IEC60898-1和GB10963.1标准。

DZ30-32 series (phase line + neutral) circuit breaker for AC 50Hz or 60Hz, rated voltage 230V single-phase residential lines, can protect electrical circuit overload and short circuit. The product has breaking capacity high, small size, N,L Wire cut off on one time, put an end to the wrong connection between N wire and L wire, or N line connect with ground potential caused to personal and fire hazards, is ideal protection switch in the field of residential. This product complies with IEC60898-1 and G B 10963.1.

技术参数

TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	壳架等级额定电流(A) Shell level rated current(A)	额定电流(A) Rated current(A)	额定短路分断能力Icno(A) Rated short circuit breaking capacity Icno(A)
230(220)	1P+N	32	3,6,10,16,20,25,32	3000

注: ①抗湿热类型: 温度55°C时, 相对湿度95%。

②接线采用带夹箍的接线端子, DZ30-32使用10mm²及以下硬导线。

1. Heat resistance: (temperature 55°C, relative humidity 95%.

2. Using the connection terminal with clamps to wiring, DZ30-32 using the hard wire 10mm² or below

过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13In	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
1.45In		t < 1h	脱扣 Trip	热态 Heat	
2.55In	In ≤ 32A	Is < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
5In	所有值 All	t ≤ 0.1s	不脱扣 Don't trip	冷态 Cool	
10In		t < 0.1s	脱扣 Trip	冷态 Cool	

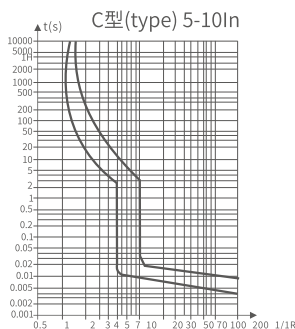
型号含义

TYPE MEANING

DZ	30	-	32	
				壳架等级额定电流 Shell level rated current
				设计序号 Design no
				塑料外壳式断路器 Plastic case type circuit breakers

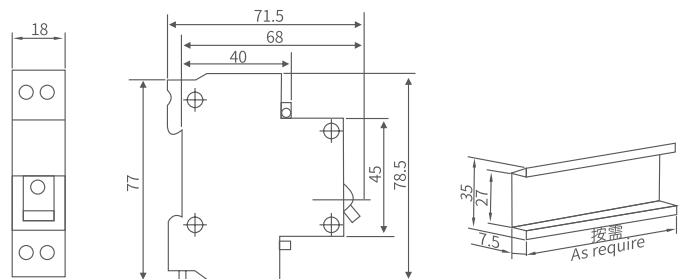
动作特性曲线

BREAKING CHARACTERISTIC CURVE



外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



DZ30LE-32 (相线+中性线+漏电)保护断路器

DZ30LE-32 (PHASE LINE+NEUTRAL LINE+LEAKAGE) RCBO



适用范围

APPLICABLE SCOPE

DZ30LE-32漏电断路器适用于交流50Hz或60Hz, DZ30LEG-32 (相线+中性线+漏电+过压) 漏电保护断路器适用于交流 50Hz 额定电压 230V的单相住宅线路中, 作为漏电保护之用, 并对民用电气线路的过载和短路进行保护, 该产品具有体积小, 分断能力高; 零、火线同时切断, 并在火线接反的情况下, 仍能对漏电进行保护。本产品符合IEC61009-1 GB16917.1等标准。

The DZ30LE-32 leakage circuit breaker is suitable for AC 50Hz or 60Hz, and the DZ30LEG-32 (phase line+neutral line+leakage+overvoltage) leakage protection circuit breaker is suitable for single-phase residential lines with a rated voltage of 230V at AC 50Hz. It serves as leakage protection and provides protection for overload and short circuit of civil electrical lines. This product has a small volume and high breaking capacity; The zero and live wires are cut off simultaneously, and even if the live wires are reversed, leakage protection can still be provided. This product complies with standards such as IEC61009-1 GB16917.1.

技术参数

TECHNICAL PARAMETER

型号 Type	额定工作电压(V) Rated voltage(V)	极数 Pole	壳架等级电流(A) Shell-level rated current(A)	额定电流(A) Rated current(A)	额定漏电动作电流(mA) Rated breaking residual current(mA)	额定漏不动作电流(mA) Rated not breaking residual current(mA)	额定漏电分断时间(S) Breaking time of rated residual current(s)	分断能力Ics(A) Breaking Capacity (A)	过压动作值 Overvoltage action value
DZ30LE-32 DZ30LE-32G	230(220)	1P+N	32A	6,10,16, 20,25,32	30	15	≤0.1	3000	280V±5V

注:接线采用带夹箍的接线端子, 使用与10mm²及以下硬导线。 Remark:wiring is terminal with clamp, cable dia.:10mm²below available for hard cable.

过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13In	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
1.45In		t < 1h	脱扣 Trip	热态 Heat	
2.55In	In ≤ 32A	Is < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
5In	所有值 All	t ≤ 0.1s	不脱扣 Don't trip	冷态 Cool	
10In		t < 0.1s	脱扣 Trip	冷态 Cool	

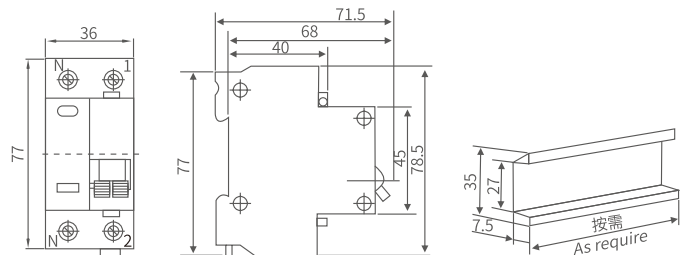
型号含义

TYPE MEANING

DZ	30	LE-32	G	过压保护 Overvoltage protection
				壳架等级额定电流 Shell-level rated current
				剩余电流动作型 Electronic residual current breaking type
				设计序号 Design no
				塑料外壳式断路器 Plastic case type circuit breaker

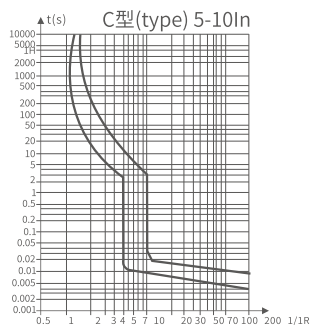
外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



动作特性曲线

BREAKING CHARACTERISTIC CURVE



应用指南:

- ①每月按压一次试验按钮, 检查漏电保护装置的動作。
- ②当漏电保护装置动作时, 装置的正面有红色的机械指示。
- ③当重新闭合断路器时, 保护装置自动复位。

Application guidelines:

1. Press the test button once a month, check leakage protective device.
2. When the leakage protective device, the device on the obverse of the red machine instructions.
3. When reclosing circuit breaker, the protection device reset automatically.



▶ 适用范围

APPLICABLE SCOPE

SWM2L-32 (DPN Vigi) 断路器适用于交流50Hz或60Hz, 额定电压230V的单相住宅线路中, 作为漏电保护之用, 并对民用电气线路的过载和短路进行保护, 该产品具有体积小, 分断能力高; 零、火线同时切断, 并在火线接反的情况下, 仍能对漏电进行保护。本产品符合IEC61009-1 GB16917.1等标准。

SWM2L-32 (DPN Vigi) RCBO is suitable for the single phase residual circuit of 50/60Hz, rated voltage 230V, as the current leakage protection and protect the civil electrical circuit from over load and short circuit and it has the features of volume small, breaking capacity high. Null/live wire is cut at the same time, and even the wire is reverse connection, it still have current leakage Protection. The product conforms to standards IEC61009.1, GB16917.1 etc.

▶ 技术参数

TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	壳架等级电流(A) Shell-level rated current(A)	额定电流(A) Rated current(A)	额定漏电动作电流(mA) Rated breaking residual current(mA)	额定漏不动作电流(mA) Rated not breaking residual current(mA)	额定漏电分断时间(S) Breaking time of rated residual current(s)	分断能力Ics(A) Breaking Capacity (A)
230(220)	1P+N	32A	6,10,16,20,25,32	30	15	≤0.1	3000

注: 接线采用带夹箍的接线端子, 使用与10mm²及以下硬导线。 Remark: wiring is terminal with clamp, cable dia.:10mm²below available for hard cable.

▶ 过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13I _n	所有值 All	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
1.45I _n		t < 1h	脱扣 Trip	热态 Heat	
2.55I _n	I _n ≤ 32A	I _s < t < 60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
5I _n	所有值 All	t ≤ 0.1s	不脱扣 Don't trip	冷态 Cool	
10I _n		t < 0.1s	脱扣 Trip	冷态 Cool	

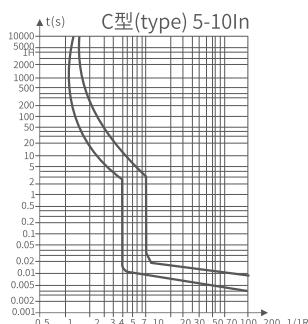
▶ 型号含义

TYPE MEANING

SW	M	2	L-32	壳架等级额定电流	Shell-level rated current
				剩余电流动作型	Electronic residual current breaking type
				设计序号	Design no
				塑料外壳式断路器	Plastic case type circuit breaker
				企业代号 (信基公司)	Company code (SINGI)

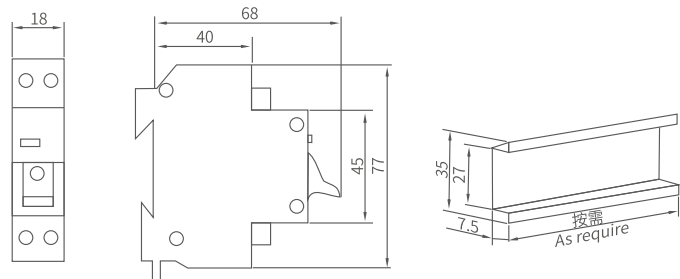
▶ 动作特性曲线

BREAKING CHARACTERISTIC CURVE



▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



应用指南:

- ① 每月按压一次试验按钮, 检查漏电保护装置的動作。
- ② 当漏电保护装置动作时, 装置的正面有红色的机械指示。
- ③ 当重新闭合断路器时, 保护装置自动复位。

Application guidelines:

1. Press the test button once a month, check leakage protective device.
2. When the leakage protective device, the device on the obverse of the red machine instructions.
3. When reclosing circuit breaker, the protection device reset automatically.

DZ30LE-32 (相线+中性线+漏电)保护断路器

DZ30LE-32 (PHASE LINE+NEUTRAL LINE+LEAKAGE) RCBO



适用范围

APPLICABLE SCOPE

DZ30LE-50断路器适用于交流 50Hz 或 60Hz，额定电压 230 V 的单相住宅线路中，作为漏电保护之用，并对民用电气线路的过载和短路进行保护，该产品具有体积小，分断能力高；零、火线同时切断，并在火线接反的情况下，仍能对漏电进行保护。本产品符合 IEC61009-1 GB16917.1 等标准。

DZ30LE-50 RCBO is suitable to the single phase residual circuit of 50/60Hz, rated voltage 230V, as the current leakage protection and protect the civil electrical circuit from over load and short circuit and it has the features of volume small, breaking capacity high. Null/live wire is cut at the same time, and even the wire is reverse connection, it still have current leakage Protection. The product conforms to standards IEC61009.1,GB16917.1etc.

技术参数

TECHNICAL PARAMETER

型号 Type	额定工作电压(V) Rated voltage(V)	极数 Pole	壳架等级电流(A) Shell-level rated current(A)	额定电流(A) Rated current(A)	额定漏电动作电流(mA) Rated breaking residual current(mA)	额定漏不动作电流(mA) Rated not breaking residual current(mA)	额定漏电分断时间(S) Breaking time of rated residual current(s)	分断能力Ics(A) Breaking Capacity (A)	过压动作值 Overvoltage action value	欠压动作值 Undervoltage action value
DZ30LE-50 DZ30LE-50G DZ30LE-50Q	230(220)	1P+N	50A	6,10,16, 20,25,32, 50	30	15	≤0.1	3000	280V±5V	170V±5V

注:接线采用带夹箍的接线端子,使用与10mm²及以下硬导线。 Remark:wiring is terminal with clamp, cable dia.:10mm²below available for hard cable.

过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

试验电流(A) Test current	额定电压(V) Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
1.13In	所有值 All	t≤1h	不脱扣 Don't trip	冷态 Cool	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
1.45In		t<1h	脱扣 Trip	热态 Heat	
2.55In	In≤32A	Is<t<60s	脱扣 Trip	冷态 Cool	闭合辅助开关接通电源 Auxiliary switch closed and power on
2.55In	In>32A	Is<t<120s	脱扣 Trip	冷态 Cool	
5In	所有值 All	t≤0.1s	不脱扣 Don't trip	冷态 Cool	
10In		t<0.1s	脱扣 Trip	冷态 Cool	

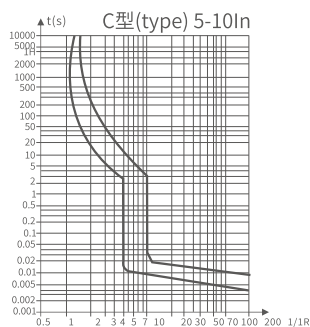
型号含义

TYPE MEANING

DZ 30 LE-50 □	G:过压保护 Q:欠压保护 GQ:过欠压保护	G: over voltage protect Q: under-voltage protect GQ: over-under protect
	壳架等级额定电流	Shell-level rated current
	剩余电流动作型	Electronic residual current breaking type
	设计序号	Design no
	塑料外壳式断路器	Plastic case type circuit breaker

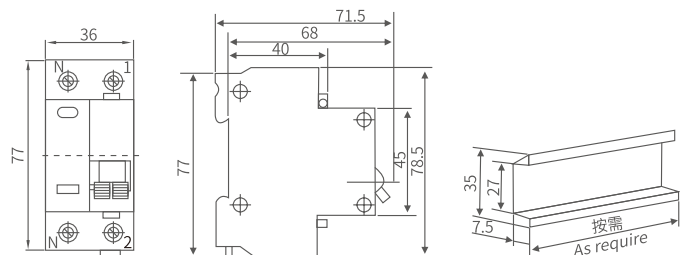
动作特性曲线

BREAKING CHARACTERISTIC CURVE



外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



- 应用指南: ①每月按压一次试验按钮,检查漏电保护装置的動作。
②当漏电保护装置动作时,装置的正面有红色的机械指示。
③当重新闭合断路器时,保护装置自动复位。

- Application guidelines:
1. Press the test button once a month, check leakage protective device.
2. When the leakage protective device, the device on the obverse of the red machine instructions.
3. When reclosing circuit breaker, the protection device reset automatically.



▶ 适用范围

APPLICABLE SCOPE

SWM-125-S(DZ47-63-S)系列IC卡预付费小型断路器主要用于50Hz, 电压230V/400V电流至125A的保护线路中过载、短路, 同时也可以在不正常情况下不频繁地通断电器装置和照明线路。尤其适用于工业和商业的照明系统。广泛应用于IC卡预付费电表配套使用来控制线路通断。

断路器符合IEC60898-1、GB10963.1标准, 具有国际先进水平。

SWM-125-S(DZ47-63-S)series IC card prepayment miniature circuit breaker is mainly used in 50Hz, voltage 230V/400V, current 125 a circuit overload protection, short circuit, at the same time it can also under normal circumstances do not frequent on-off electrical devices and lighting. Especially applicable to industrial and commercial lighting system, widely used in IC card prepaid meters are used to control line road break.

The product conforms to standards IEC60898-1, GB10963.1, with the international advanced level.

▶ 产品特点

FEATURES

◎主要类型:

1. C型主要用于照明配电保护
2. D型主要用于动力工业配电保护

◎本断路器为嵌入式安装(可在导轨上安装)

◎机械电气寿命: 断路器的机械电气寿命为20000次, 其中电气寿命大于10000次。

◎断路器在-40°C~+70°C的工作温度范围内无变形。

◎Main type: a. C use for lighting distribution

b. D use for Power industrial distribution protection

◎Installation: embedded installation(also can be installed on the guide rail)

◎Mechanical life: Mechanical life of circuit breaker for 20,000 times, including electrical life is more than 10000 times.

◎Circuit breaker in the -40°C~+70°C working temperature range without deformation

▶ 技术参数

TECHNICAL PARAMETER

型号 Type	额定工作电压(V) Rated voltage(V)	极数 Pole	额定电流(A) Rated current(A)	额定短路分断能力 I _{cn} (A) Rated short circuit breaking capacity I _{cn} (A)
DZ47-63-S	230(220)	1P+N	16,20,25,32,40,50,63	6000
SWM-125-S	400	3P+N	63,80,100,125	

▶ 过电流脱扣特性表

CURRENT RELEASE CHARACTER DIAGRAM

序号 NO.	试验电流 Test current	额定电流 Rated voltage	规定时间 Requested time	预期结果 Result	起始状态 Start station	备注 Remark
A	1.13I _n	I _n ≤ 63A	t ≤ 1h	不脱扣 Don't trip	冷态 Cool	
		I _n > 63A	t ≤ 2h			
B	1.45I _n	I _n ≤ 63A	t < 1h	脱扣 Trip	紧接着A项试验进行 Followed by A test	电流在5S内稳定地上升至规定值 Current ascends the requested value stably in 5s
		I _n > 63A	t < 2h			
C	2.55I _n	I _n ≤ 32A	1s < t < 60s	脱扣 Trip	冷态 Cool	
		I _n > 32A	1s < t < 120s			
D	3I _n 5I _n 10I _n	所有值 B,C,D型	t ≤ 0.1s	不脱扣 Don't trip	冷态 Cool	
E	5I _n 10I _n 20I _n		t < 0.1s	脱扣 Trip	冷态 Cool	

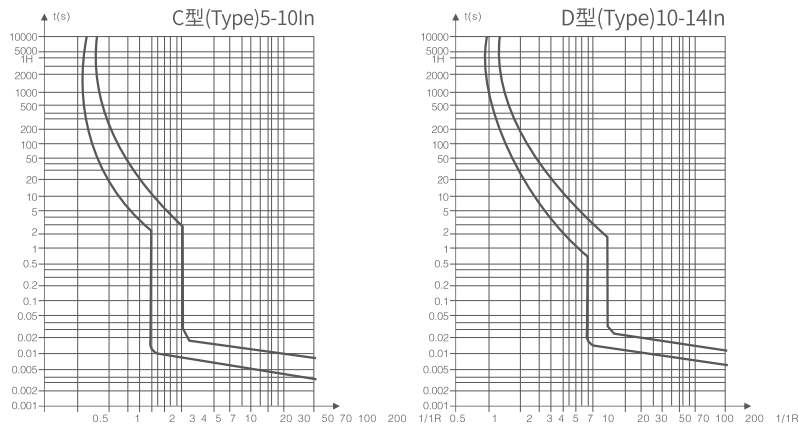
型号含义

TYPE MEANING

DZ	47	-	63	-	S	带延时分励脱扣器	Delay shunt tripping device
						框架等级额定电流	Shell level rated current
						设计序号	Design NO.
						产品代号	Product NO.
SW	M	-	125	-	S	带延时分励脱扣器	Delay shunt tripping device
						框架等级额定电流	Shell level rated current
						断路器	MCB
						企业代号(信基公司)	company code(SINGI)

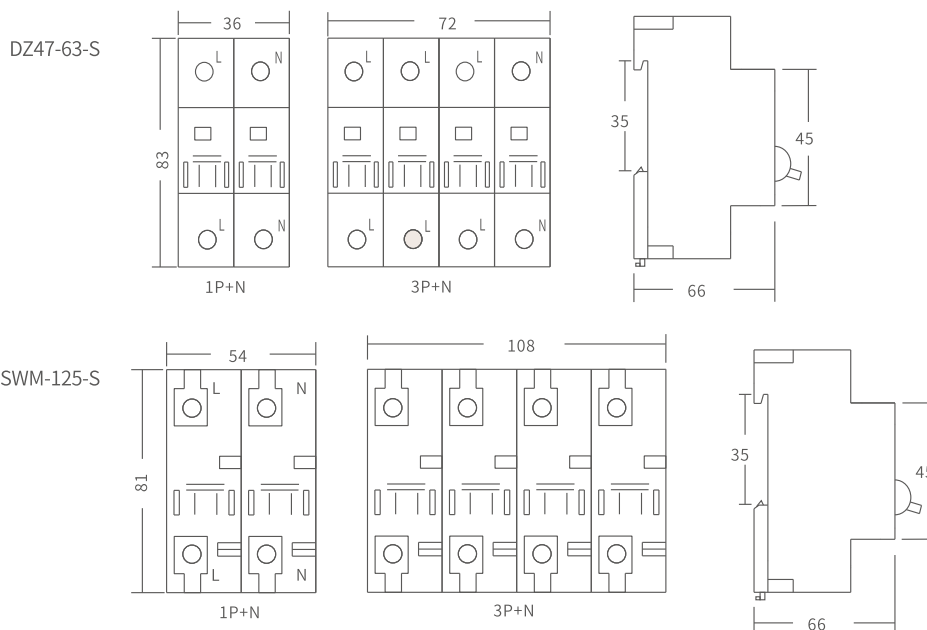
动作特性曲线

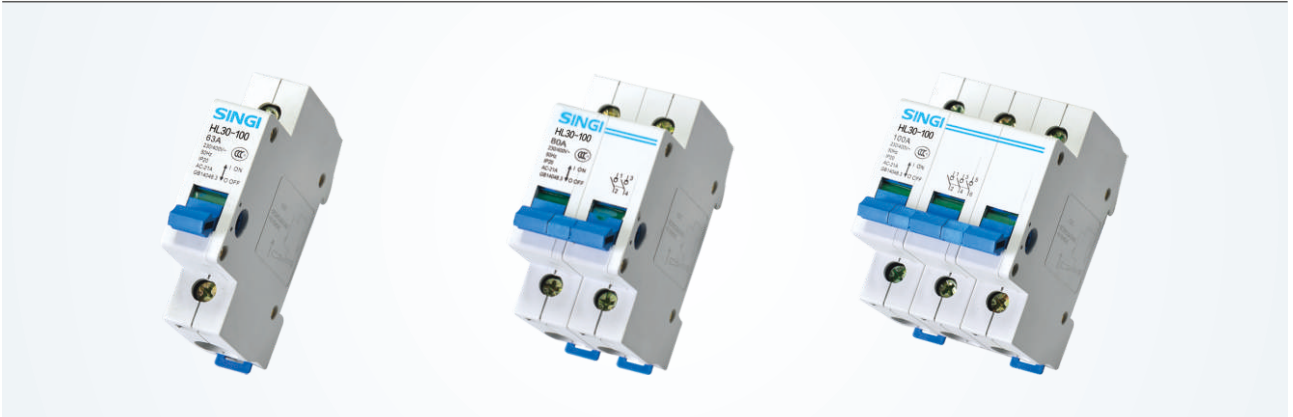
BREAKING CHARACTERISTIC CURVE



外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





▶ 适用范围

APPLICABLE SCOPE

HL30-100系列隔离开关适用于交流50Hz或60Hz, 额定工作电压400V及以下, 额定电流100A及以下的配电和控制回路中, 主要作为终端电器的总开关, 也可用于控制各类电动机, 小功率电器和照明等。具有明显分、断状态指示和状态锁定功能, 超长寿命等优点。产品符合GB14048.3和IEC60947-3标准。

HL30 series isolation switch is suitable of AC 50Hz or 60Hz, rated voltage 400V and below, rate current 100A and below, to be the main switch of the terminal appliance, as well as control the electromotor, small-power appliance and illumination etc. It conforms to the standards GB14048.3 and IEC60947-3

▶ 技术参数

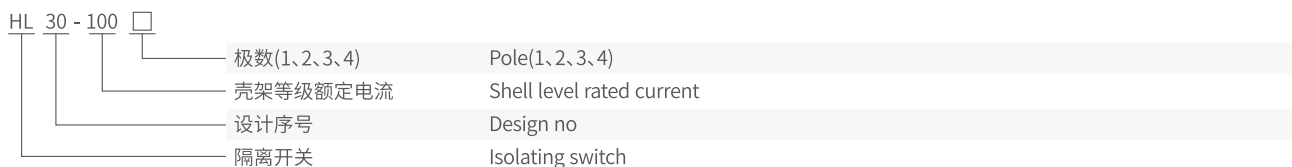
TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	额定电流(A) Rated current(A)	额定通断能力 Rated making and breaking capacity	额定短路分断能力(A) Rated short circuit breaking capacity(A)	短时耐受电流(A) Short time withstand current (A)
230/400V (220/380V)	1,2,3,4	32,63,80,100,125	3Ie, 1.05Ue COSΦ=0.65	1500	2000

注: ①TH35mm标准安装轨安装。 ①On nomal din rail TH35 mm
②接线能力25mm²及以下导线。 ②Wire connecting with 25mm² line and below

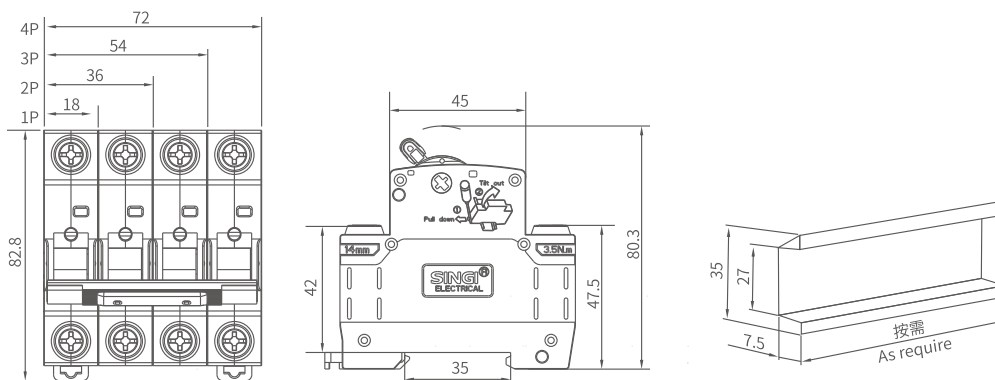
▶ 型号含义

TYPE MEANING



▶ 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





► 适用范围

APPLICABLE SCOPE

HLH30-100(63)系列隔离开关适用于交流50Hz或60Hz, 额定工作电压400V及以下, 额定电流100A及以下的配电和控制回路中, 主要作为终端电器的总开关, 也可用于控制各类电动机, 小功率电器和照明等。具有明显分、断状态指示, 超长寿命等优点。产品符合GB14048.3和IEC60947-3标准。

HLH30-100(63) series isolation switch is suitable of AC 50Hz or 60Hz, rated voltage 400V and below, rate current 100A and below, to be the main switch of the terminal appliance, as well as control the electromotor, small-power appliance and illumination etc. It conforms to the standards GB14048.3 and IEC60947-3

► 技术参数

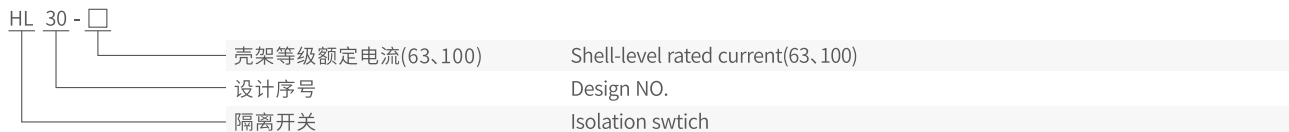
TECHNICAL PARAMETER

额定工作电压(V) Rated voltage(V)	极数 Pole	额定电流(A) Rated current(A)	额定通断能力 Rated making and breaking capacity	额定短路分断能力(A) Rated short circuit breaking capacity(A)	额定短时耐受电流(A) Rated short time withstand current (A)
230/400V (220/380V)	1,2,3,4	32,63,80,100	3Ie, 1.05Ue	1500	1200

注: ①TH35mm标准安装轨安装。 ①On nomal din rail TH35 mm
②接线能力25mm²及以下导线。 ②Wire connecting with 25mm² line and below

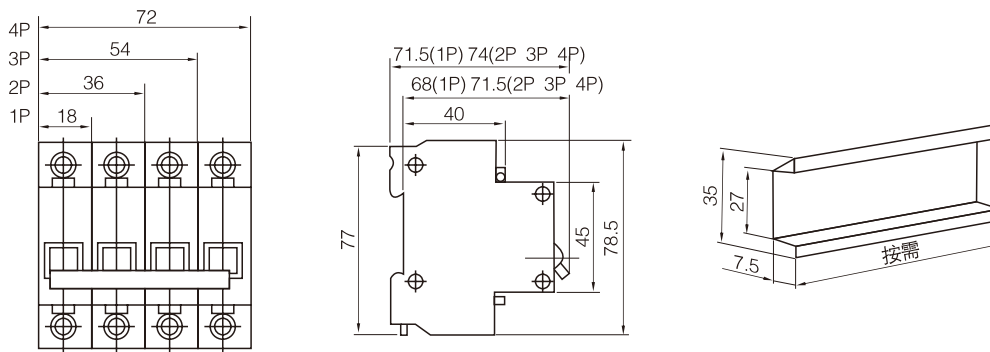
► 型号含义

TYPE MEANING



► 外形及安装尺寸

OUTLOOK AND MOUNTING SIZE





适用范围

APPLICABLE SCOPE

本系列熔断器支持件适用于交流50HZ、额定绝缘电压至690V、约定发热电流至63A，主要用在电气线路中作为尺码至14x51的各种使用类别(gG、aM、aR等)的熔断体的支持件。本系列熔断器支持件具有耐受约定发热电流及预期短路冲击电流至100kA 动热稳定的能力，多相组合后具有隔离电源的功能。带熔断指示灯，灯亮指示熔断体已熔断。

本系列熔断器支持件符合国家标准GB13539.1、GB/T13539.2和国际电工委标准IEC60269-1、IEC60269-2。

This series of fuse support for AC 50HZ, rated insulation voltage to 690V, conventional heating current up to 63A, mainly used in the electrical circuit, which size to 14x51 various using types (gG, aM, aR, etc.) as supports for fuses. The supports in this series of fuse has capacity of keep hot stable when conventional heating current and the expected short-circuit impact current to 100kA, multi-phase combination with a separate power supply function. With a fuse indicator, the lamp indicates that the fuse has been blown. This fuse passed GB13539.1, GB/T13539.2 and IEC60269-1, IEC60269-2

结构特征

STRUCTURE

本系列熔断器支持件由PA尼龙高阻燃材料压制的外壳装上触头和载熔件后，经铆接或焊接而成，均可组成多相结构，封闭式结构，单个支持件具有隔离电源的功能；RT18型支持件均为TH35 mm的导轨式安装。

This series fuse support is made by riveting or welding after fitting with contacts and fuselage on the shell, which was suppressed by PA nylon high flame retardant material, can be composed of multi-phase structure, closed structure, a single support can isolate power; RT18-type support TH35mm rail-type installing.

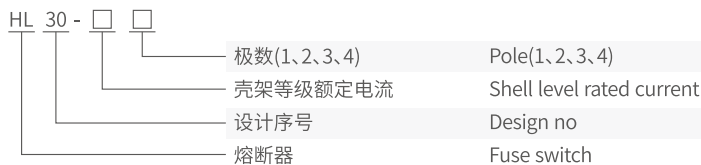
技术参数

TECHNICAL PARAMETER

型号 Type	额定电流(A) Rated Current In(A)	配合熔断器尺寸(mm) Fuse size(mm)	额定绝缘电压(V) Rated insulation volatage(V)	额定发热电流(A) Rated heating current(A)
HG30-32	2,4,6,10,16,20,25,32	10.3 X 38mm	690	32
HG30-63	2,4,6,10,16,20,25,32,40,50,63	14 X 51mm	690	63

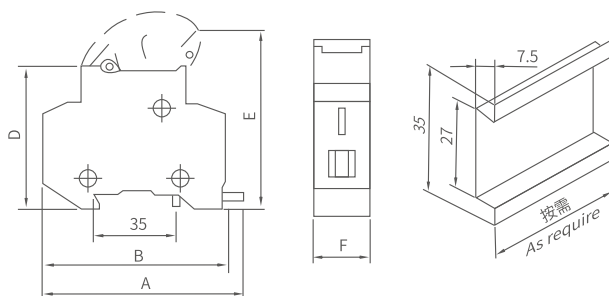
型号含义

TYPE MEANING



外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



尺寸(Size mm)				
A	B	D	E	F
82	78	60	77	18
106	103	80	110	26

RT18圆筒形帽熔断器底座

RT18 CYLINDRICAL CAP FUSE BASE



适用范围

APPLICABLE SCOPE

本系列熔断器支持件适用于交流50HZ、额定绝缘电压至690V、约定发热电流至63A，主要用在电气线路中作为尺寸至14x51的各种使用类别(gG、aM、aR等)的熔断体的支持件。本系列熔断器支持件具有耐受约定发热电流及预期短路冲击电流至100kA 动热稳定的能力，多相组合后具有隔离电源的功能。带熔断指示灯，灯亮指示熔断体已熔断。

This series fuse support is made by riveting or welding after fitting with contacts and fuselage on the shell, which was suppressed by DMC nylon high flame retardant material, can be composed of multi-phase structure, closed structure, a single support can isolate power; RT18-type support Th35 mm rail-type installing.

本系列熔断器支持件符合国家标准GB13539.1、GB/T13539.2 和国际电工委标准IEC60269-1、IEC60269-2。

结构特征

STRUCTURE

本系列熔断器支持件由DMC材料压制的外壳装上触头和载熔件后，经铆接或焊接而成，均可组成多相结构，封闭式结构，单个支持件具有隔离电源的功能；RT18型支持件均为TH35mm的导轨式安装。

This series fuse support is made by riveting or welding after fitting with contacts and fuselage on the shell, which was suppressed by PA nylon high flame retardant material, can be composed of multi-phase structure, closed structure, a single support can isolate power; RT18-type support Th35 mm rail-type installing.

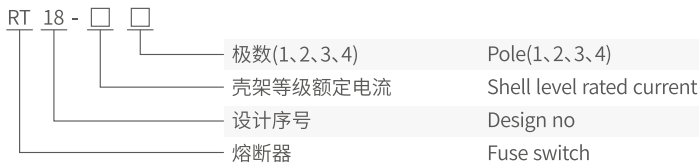
技术参数

TECHNICAL PARAMETER

型号 Type	额定电流(A) Rated Current In(A)	配合熔断器尺寸(mm) Fuse size(mm)	额定绝缘电压(V) Rated insulation volatage(V)	额定发热电流(A) Rated heating current(A)
RT18-32	2,4,6,10,16,20,25,32	10.3 X 38mm	690	32
RT18-63	2,4,6,10,16,20,25,32,40,50,63	14 X 51mm	690	63

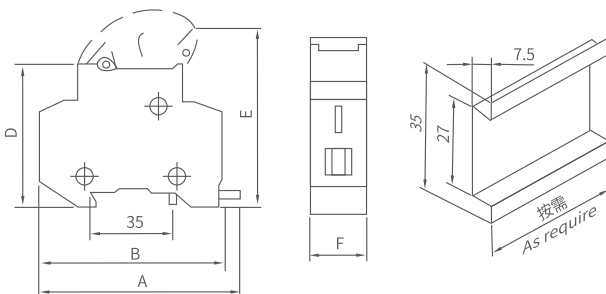
型号含义

TYPE MEANING



外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



尺寸(Size mm)				
A	B	D	E	F
82	78	60	77	18
106	103	80	110	26



特点

FEATURES

- ◎ 装于模块化终端配电箱和其他成套电器箱内, 对用电设备进行插接。
- ◎ 产品系列化、模块化、宽度尺寸模块化。
- ◎ Th35mm标准安装轨安装
- ◎ 符合标准: IEC60884-1 GB2099.1
- ◎ 额定电压: AC 230/400V

- ◎ Installed in the modular terminal distribution box and other sets of electrical appliances, the electrical equipment for plugging.
- ◎ Product serialization, modular, width size modularity.
- ◎ Th35mm standard mounting rail installation.
- ◎ Standard: IEC60884-1 GB2099.1
- ◎ Rated voltage: AC 230/400V

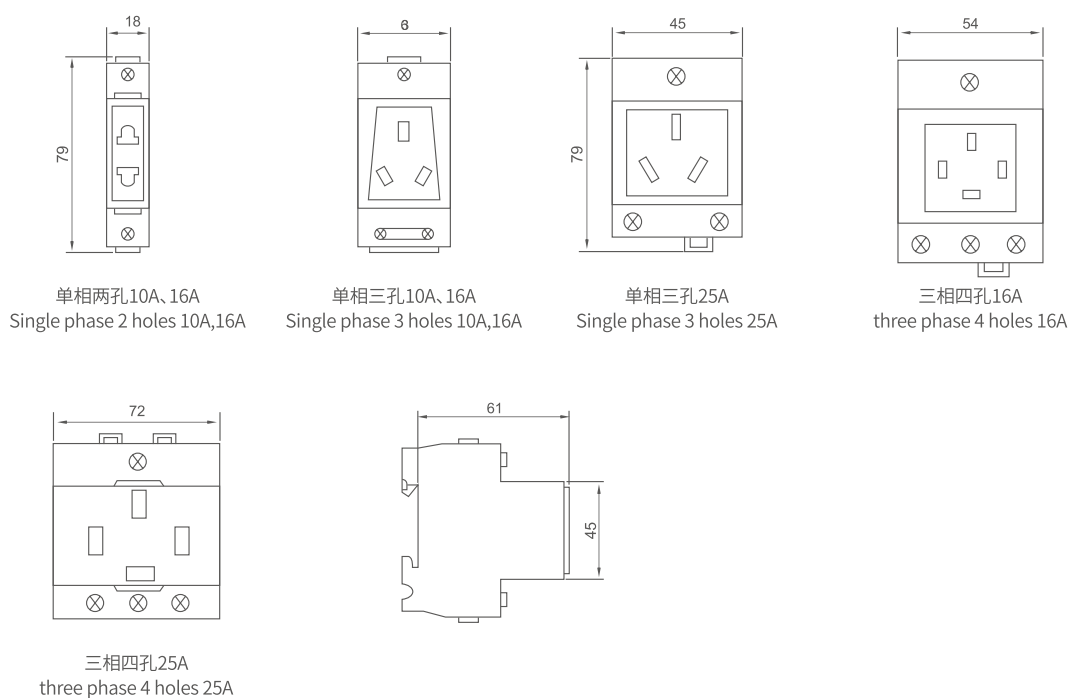
型号含义

TYPE MEANING

AC 30 - □ - □	额定工作电流	Rated Current In
	插孔数(2,3,4)	Hole numbers(2, 3, 4)
	设计代号	Design NO.
	模数化插座	Digital Molded Socket

外形及安装尺寸

OUTLOOK AND MOUNTING SIZE



SG-40L漏电保护开关

SG-40L RESIDUAL CURRENT PROTECT SWITCH



适用范围

APPLICABLE SCOPE

- ◎用于家庭、宾馆等室内，如浴室、厨房等，对配置的电器产品进行漏电保护。
- ◎用于公共场所，如学校、医院、工厂等，对配置的电气设备进行漏电保护。

- ◎For home, hotels and other indoor, such as bathrooms, kitchen, etc., on the configuration of electrical products for residual current protection.
- ◎For public places, such as schools, hospitals, factories, etc., on the configuration of electrical equipment for residual current protection.

特点

FEATURES

- ◎本产品是一款漏电保护开关，对其出线端配置的用电设备提供漏电保护，其采用优质原材料、带电源指示、自由脱扣机构制造而成。一旦配用的电器出现漏电故障，该产品的零序互感器将检测到的信号输入电子线路，当该漏电流大于漏电动作电流值时，电子线路输出信号使脱扣机构动作，切断电源，以达到保护人身和设备的目的。
- ◎本产品按GB16916等国家标准设计，工作原理可靠，对漏电故障反应灵敏，无论是在相线（火线）还是在中性线（零线）均可进行漏电保护，符合广大国内用户需求。

- ◎This product is a residual current protection switch, the outlet of the electrical equipment to provide residual current protection, it used of excellent raw materials, with power instructions, free tripping made to institution. Once the electrical appliances associated with leakage failure, the zero sequence transformer will detect the signal input to the electronic circuit, when the residual current current is greater than the residual current current, the electronic circuit output signal to the trip mechanism action, cut off the power to achieve the purpose of protecting the person and the equipment.
- ◎This product is designed according to GB16916 and other national standards, working principle is reliable, sensitive to residual current failure, whether in the phase line (Fire Wire) or in the neutral line (zero line) can be residual current protection, in line with the needs of the majority of domestic users.

使用环境

USING THE ENVIRONMENT

周围空气温度-5℃~+40℃;相对湿度:40℃时相对湿度不超过50%。

Ambient air temperature between 5°C and 40°C; relative humidity: relative humidity not beyond 50% when 40°C.

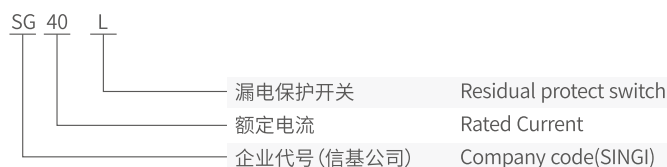
技术参数

TECHNICAL PARAMETER

额定电压 (V) Rated voltage(V)	额定电流 (A) Rated Current In(A)	额定频率 (Hz) Rated frequency(Hz)	额定剩余动作电流 (mA) Rated breaking residual current(mA)	额定剩余不动作电流 (mA) Rated not breaking current(mA)	最大分断时间 (s) Max breaking time(s)
230	40	50	30	15	0.1

型号含义

TYPE MEANING





信行天下·基固利他

以诚信服务天下用户，时时改善、夯实基础、认真践行专注、共生、利他的价值观。

Serve users all over the world with integrity, improve and consolidate the foundation from time to time seriously implement the values of focus, symbiosis and altruism

上海信基电气有限公司

地址: 上海市奉贤区庄行欧洲工业园区航南公路7833号
电话: 021-63457222 传真: 021-63457577

SHANGHAI SINGI ELECTRICAL CO. LTD

Add: European Industrial Zone, Zhuanghang, Fengxian District, Shanghai
Tel : +86-021-63457222 Fax : +86-021-63457577

浙江信基电气股份有限公司

地址: 浙江省乐清市经济开发区纬十二路148号东首
电话: 0577-62773155 0577-62668211
传真: 0577-62772155 邮编: 325600
邮箱: singi@188.com 网站: www.singi.cn

ZHEJIANG SINGI ELECTRICAL LLC

Add : East Of No 148 Wei 12th Road, Yueqing Economic Development Zone, Yueqing City, Zhejiang Province, 325600, China
Tel : +86-577-62053322 Fax : +86-577-62772155
Website : www.singi.com E-mail : singi@188.com P.C. : 325600
