SHENGLONG

Product Selection Manual
产品选型手册

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SHENGLONG

让一度电创造更多GDP

让智能用电使幸福生活更幸福

让智慧能源使美丽中国更美丽

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智能运维及系统
Intelligent Operations and Maintenance System

盛隆电气成立于1979年，是智能电网及智慧能源管理领域的领先企业，致力于为用户提供智慧能源系统规划设计、智能输配电设备制造、电力及能源互联网工程总包、运维服务一体化的行业整体解决方案，帮助用户提高电力及能源系统的安全可靠性及智能化水平，并提高能源使用效率，减少碳排放量。盛隆电气的业务遍布全球50多个国家，在全球30多个国家有销售与服务网络，2013年当选亚洲品牌500强。

Founded in 1979, Shenglong Electric is a leading company in the field of smart grid and intelligent energy management. We are committed to providing clients with comprehensive industry solutions of Intelligent Energy System Planning and Design, Intelligent Transmission and Distribution Equipment Manufacturing, Internet-based Power and Energy Engineering, Procurement, and Construction (EPC) services, and Operations and Maintenance services, helping clients improve the safety, reliability, and intelligence level of power and energy systems, as well as improving energy efficiency and reducing carbon emissions.We operate more than 50 countries and have built a sales and service network in over 30 countries all over the world. We have over 7000 employees, and were honored as Top 500 Asia Brand in 2013.

盛隆电气在中国拥有42个子公司和工厂，2个研究院，在北京、武汉、上海、广州和重庆5个城市建有五大营。北京公司在国门第一高楼“绿地中心”建有国际领先的中国锦智能商务中心，在中关村科技园区建有领先的智能配电及能源互联网科研及产业基地。

Shenglong Electric has 42 subsidiaries and factories, and 2 research institutes in China. We have five core offices in major cities of China including Beijing, Wuhan, Shanghai, Guangzhou, and Chongqing. TheBeijing office, the Intelligent Business center at Greenland Center, which is called the tallest building in the country, has a world-leading smart office system, which are developed by Shenglong. Our Beijing plant, located at the Zhongguancun Technology Park, is a leading research and industrial base for intelligent power distribution and Internet-based energy solutions.

盛隆电气在智能输配电设备、智慧能源管理及元器件、电力工程及能源互联网工程总承包、智能电力运维四大领域有广泛的产品线和解决方案。面对日益增长的能源需求和节能减排的严峻挑战，盛隆电气通过先进的产品和解决方案，帮助客户提高能源使用效率，降低能耗，减少碳排放量，创造良好的社会、经济和环境效益。盛隆电气的产品和解决方案已广泛应用于基础设施、能源、工业、商业、楼宇等领域，如秦山核电站、南水北调、京沪高铁、青藏铁路、武汉地铁、首都机场、北京奥运场馆等国家重点工程，以及斯里兰卡汉班托塔机场、沙特DAJEN油罐区项目、莫桑比克纳卡拉港、苏丹新港、安哥拉洛比托道堆工程、肯尼亚蒙巴萨港等海外重点工程。

Shenglong Electric provides a wide range of product lines and solu-tions in four fields: Intelligent Power Transmission and Distribution Equipment, Intelligent Energy Management and Components, Inter-net-based Power and Energy EPC services, and intelligent Power Operations and Maintenance services.In response to severe chal-lenges of growing energy demand and energy-saving emission reduction, we help our clients to improve their energy efficiency, reducetheir power consumption, decrease their carbon emissions, andcreate beneficial social, economic, and environmental outcomes bymeans of our advanced products and solutions. Our products andsolutions have been widely applied in infrastructure, energy, industrialcommercial, building, and other fields. These include: Qinshan Nuclear Power Plant, South-to-North Water Transfer, Beijing-Shanghai Express Railway, Qinghai-Tibet Railway, Wuhan Metro, Beijing Capital Airport, Beijing Olympic Stadiums, and other key national projects.Our overseas projects include: Sri Lanka-Hambantota Airport, SaudiArabia DAJEN Oil Storage Facilities Project, Mozambique NacalaPort, Sudan New Port, Angola Lobito Road Construction projectKenya Mombasa Port, and others.

盛隆电气一贯重视科技研发及自主创新，中国工程院院士顾国彪先生担任公司首席科学家。公司近几年在智能电网领域获得了200多项国家专利和软件著作权。公司长期坚持走产学研一体化道路，与清华大学、北京大学、中科院电工所等单位有20多年的良好合作关系，并在立足于自主创新的基础上，在技术领域与知名跨国公司如ABB、西门子、施耐德等也有着良好的合作关系。

盛隆电气坚持以人为本，将公司打造为领先的创业平台，在湖北省委的支持下，于2015年创建盛隆大学武汉创业学院。盛隆电气用先进的技术为客户提供产品的同时，也积极承担社会责任，得到了社会的广泛认可。

Shenglong Electric has always attached great importance to scienceand technology research and development and independent innovation.Mr. Gu Guobiao, Academician from Chinese Academy of Engineering.acts as our chief scientist In recent years, we have obtained over 200national patents and software copyrights in the field of smart grid. Wehave long-stayed on the road of strengthening cooperation amongindustries, universities, and research institutes. For more than 20 years.we have built beneficial cooperative relationships with Tsinghua Univer-sity, Peking University, the Institute of Electrical Engineering ChineseAcademy of Science and other institutions. Based on our independentinnovation in the technology field, we also maintain sound cooperativerelationship with other multinational companies such as ABB, Siemens.and Schneider Electric.

Adherence to the people-oriented principle, Shenglong Electric strives to become a leading entrepreneurial platform. With the support of the Hubei Provincial Party Committee, we have established Wuhan Entrepreneurship College, Shenglong University in 2015. We are notonly committed to providing the most technologically advancedproducts to our clients, but also actively fulfill our social responsibilities, and is widely recognized by public.

SV系列户内高压真空断路器
SV series indoor high-voltage vacuum circuit breaker

SV系列真空断路器优秀特色
Excellent feature of SV series vacuum circuit breakers

- 模块化结构
- 结构简单、传动效率高、机械寿命高、易于维护。
- 储能省力、机构自带储能手柄、手动储能方便省力。
- 一次主回路优化整体装配、搭接面少、回路电阻小。
- 生产制造采用自动化生产线、产品一致性好。
- 零部件表面处理满足环保要求。
- Modular mechanism
- Simple structure, high transmission efficiency, long mechanical life, and easy maintenance.
- Energy storage is labor-saving, the mechanism comes with an energy storage handle, and handcart energy storage is convenient and labor-saving.
- Optimize the overall assembly of the main circuit once, with fewer overlapping surfaces and low circuit resistance.
- The production and manufacturing adopt automated production lines, resulting in good product consistency.
- The surface treatment of components meets environmental requirements.

快速选型表
Quick selection table

型号：产品代号
Model: Product code

防跳继电器\合闸闭锁电磁铁\底盘车闭锁电磁铁\机械程序锁 手车式与柜门联锁
间接过电流脱扣器\电动底盘车\固定式联锁方式：转轴联锁，主轴外伸
接地方式：接地排接地\触头接地\接地夹接地
Anti jump relay, closing lock electromagnet, chassis car lock electromagnet, mechanical program lock handcart and cabinet door interlocking indirect overcurrent release, electric chassis car, fixed interlocking method: shaft interlocking, main shaft extension grounding method: grounding bar grounding, contact grounding, grounding clamp grounding

SV 12 – 40 – 40 E 选择附件(optional accessories)

额定工作电压 Rated operating voltage	额定短路开断电流 kA Rated short circuit breaking current kA	额定电流 Rated current (×100A)	安装方式：F:固定式 E:手车式 Installation method: F: fixed type E: handcart type

型号：产品代号
Model: Product code

防跳继电器\合闸闭锁电磁铁\底盘车闭锁电磁铁\机械程序锁 手车式与柜门联锁
间接过电流脱扣器\电动底盘车\固定式联锁方式：转轴联锁，主轴外伸
接地方式：接地排接地\触头接地\接地夹接地
Anti jump relay, closing lock electromagnet, chassis car lock electromagnet, mechanical program lock handcart and cabinet door interlocking indirect overcurrent release, electric chassis car, fixed interlocking method: shaft interlocking, main shaft extension grounding method: grounding bar grounding, contact grounding, grounding clamp grounding

SV 24 – 31 – 12 E 选择附件(optional accessories)

额定工作电压 Rated operating voltage	额定短路开断电流 kA Rated short circuit breaking current kA	额定电流 Rated current (×100A)	安装方式：F:固定式 E:手车式 Installation method: F: fixed type E: handcart type

型号：产品代号
Model: Product code

防跳继电器\合闸闭锁电磁铁\底盘车闭锁电磁铁\机械程序锁 手车式与柜门联锁
间接过电流脱扣器\电动底盘车\固定式联锁方式：转轴联锁，主轴外伸
接地方式：接地排接地\触头接地\接地夹接地
Anti jump relay, closing lock electromagnet, chassis car lock electromagnet, mechanical program lock handcart and cabinet door interlocking indirect overcurrent release, electric chassis car, fixed interlocking method: shaft interlocking, main shaft extension grounding method: grounding bar grounding, contact grounding, grounding clamp grounding

SV 40 – 31 – 12 E 选择附件(optional accessories)

额定工作电压 Rated operating voltage	额定短路开断电流 kA Rated short circuit breaking current kA	额定电流 Rated current (×100A)	安装方式：F:固定式 E:手车式 Installation method: F: fixed type E: handcart type

SV系列户内高压真空断路器
SV series indoor high-voltage vacuum circuit breaker

断路器参数表
Circuit breaker parameter table

SV12真空断路器技术参数
SV12 vacuum circuit breaker technical parameters

项目 Init	单位 Unit	数据 Data			
额定电压 Rated voltage	kV	12			
额定频率 Rated frequency	Hz	50			
额定工频耐受电压 (1min) Rated power frequency withstand voltage(1min)	kV	42			
额定雷电冲击耐受电压 (峰值) Rated lightning impulse withstand voltage(peak)	kV	75			
额定电流 Rated current	A	630	630	630	1250
		1250	1250	1250	1600
		1600	1600	1600	2000
		–	–	2000	2500
		–	–	2500	3150
		–	–	3150	4000
额定短路开断电流 Rated short circuit breaking current	kA	20	25	31.5	40
额定短时耐受电流 Rated short-time withstand current		20	25	31.5	40
额定峰值耐受电流 Rated peak withstand current		50	63	80	100
额定短路关合电流 (峰值) Rated short circuit making current (peak)		50	63	80	100
额定动稳定电流 Rated dynamic stable current		50	63	80	100
额定单个 / 背对背电容器组开断电流 Rated single/back to back capacitor bank breaking current	A	630/400			
额定短路电流持续时间 Rated short circuit current duration	s	4			
额定短路电流开断次数 Rated short-circuit current breaking times	次 times	50 (40kA以上30) 50(40kA and above 30)			
开断时间 / 燃弧时间 Switching time/arcingtime	ms	≤100/≤15			
额定操作顺序 Rated operating sequence		O-0.3s-CO-180s-CO			
额定操作电压 Rated operating voltage	V	AC 110/220 DC 110/220			
额定短路开断电流的直流分量百分数 Percentage of DC component of rated short-circuit breaking current	%	≤40			
机械寿命 mechanical life	次 times	30000			

SV12真空断路器机械特性参数
SV12 vacuum circuit breaker mechanical characteristic parameters

项目 Init	单位 Unit	数据 Data
触头开距 Contact opening distance	mm	10±1
触头压力弹簧行程 Contact pressure spring travel	mm	3.5±0.5
相间中心距 Interphase center distance	mm	210±1.5
分、合闸不同期 Opening and closing different periods	ms	≤2
触头合闸弹跳时间 Contact closing bounce time	ms	≤2
分闸反弹幅值 Opening rebound amplitude	mm	≤2
平均分闸速度(分后6mm) Average opening speed (6mm after opening)	m/s	1.1±0.2
平均合闸速度(合前6mm) Average closing speed (6mm before closing)	m/s	0.6±0.2
分闸时间(额定操作电压下) Opening time (at rated operating voltage)	ms	20-50
合闸时间(额定操作电压下) Closing time (at rated operating voltage)	ms	35-70
主回路电阻 Main loop resistance	μΩ	630A≤50μΩ
		1250A≤45μΩ
		1600A~2000A≤35μΩ
		2500A~4000A≤25μΩ
动静触头允许磨损厚度 Allowable wear thickness of dynamic and static contacts	mm	≤3

操动机构参数
Operating mechanism parameters

项目 Init	单位 Unit	数据 Data
储能电机额定功率 Rated power of energy storage motor	W	90
储能电机额定电压 Rated voltage of energy storage motor	V	AC110/220 DC110/220
储能时间 Energy storage time	s	<15
合闸线圈电压 Closing coil voltage	V	AC110/220 DC110/220
分闸线圈电压 Opening coil voltage	V	AC110/220 DC110/220
合闸线圈电流 Closing coil current	A	1.4(DC220) 2.8 (DC110)
分闸线圈电流 Opening coil current	A	0.7(DC220) 1.4(DC110)

SV系列户内高压真空断路器
SV series indoor high-voltage vacuum circuit breaker

SV24真空断路器技术参数
SV24 vacuum circuit breaker technical parameters

项目 Init			单位 Unit	数据 Data	
额定电压 Rated voltage			kV	24	
额定绝缘水平 Rated insulation level	1min工频耐受电压 1min power frequency withstand voltage	极间、极对地 Between poles, pole to earth	kV	65	
		断口 Crossing isolating break		65	
	额定雷电冲击耐受电压 Rated lightning impulse withstand voltage	极间、极对地 Between poles, pole to earth		125	
		断口 Crossing isolating break		125	
额定频率 Rated frequency			Hz	50	
额定电流 Rated current			A	630	1250
				1250	1600
				–	2000
				–	2500
				–	3150
4s额定短时耐受电流 4s rated short time withstand current			kA	20	25	31.5
额定短路开断电流 Rated short circuit breaking current			kA	20	25	31.5
额定峰值耐受电流 Rated peak withstand current			kA	50	63	80
额定短路关合电流 Rated short circuit making current			kA	50	63	80
额定短路持续时间 Rated short-circuit duration			s	4		
额定异相接地故障开断电流 Rated breaking current at the fault of diferent phases earthed			kA	17.4	21.7	27.4
额定操作顺序 Rated operation sequence				O-0.3s-CO-180s-CO		
额定操作电压 Rated operating voltage			V	DC(AC)220/110		
电气寿命 Electrical endurance				E2级(grade)°		
机械寿命 Mechanical life			次 times	20000		

注：a、额定电流为3150A时，需带强迫风冷
　　b、GB1984-2003电寿命E2级标准执行，短路电流开断次数274次。

Notes: a. The breaker with rated current 3150A must install fan to cool
　　b. As standard of GB1984-2003 the E2 grade electrical endurance shall have 274 times of breaking short circuit current.

SV24真空断路器机械特性参数
SV24 vacuum circuit breaker mechanical characteristic parameters

项目 Init		单位 Unit	数据 Data					
触头开距 Contact opening distance		mm	13±1					
触头超行程 Contact overtravel		mm	4±1					
相间中心距 Interphase center distance		mm	210、275					
允许触头磨损厚度 Permissible abrasion thickness of the contact		mm	3					
平均分闸速度(刚分6mm) Average opening speed (6mm just opening)		m/s	1.1±1.7					
平均合闸速度 Average opening speed		m/s	0.6±1.1					
触头合闸弹跳时间 Jumping time after contact closed		ms	⩽2					
三极合、分闸同期性 Asynchrony of three phase closing, opening		ms	⩽2					
分闸时间 Opening time		ms	⩽50					
合闸时间 Closing time		ms	⩽75					
操动机构操作特性 Operating performances of operating mechanism		85%~110%额定电压 (rated voltage)	可靠合闸Reliably close					
		⩽30%额定电压 (rated voltage)	不得分闸Not open					
主导电回路电阻 Main conductivity loop resistance	额定电流 Rated current	A	630	1250	1600	2000	2500	3150
	固定式 Fixed type	μΩ	⩽50	⩽45	⩽35	⩽35	⩽30	⩽25
	手车式 Handcart style		⩽55	⩽50	⩽40	⩽40	⩽35	⩽30

操动机构参数
Operating mechanism parameters

项目 Init	单位 Unit	数据 Data
额定分闸操作电压 Rated operating voltage for opening	V	DC(AC)220/DC(AC)110
额定合闸操作电压 Rated operating voltage for closing	V	DC(AC)220/DC(AC)110
额定瞬时过电流脱扣动作电流 Rated instantaneous over-curent tripping current	A	5/3.5
储能电机额定电压 Rated voltage for charging motor	V	DC(AC)220/DC(AC)110
储能电机额定输出功率 Rated output power of charging motor	W	70
储能时间 Charging time	s	⩽10
二次回路1min工频耐压 1min power frequency withstand voltage on secondary circuit	V	2000

SV系列户内高压真空断路器
SV series indoor high-voltage vacuum circuit breaker

SV40真空断路器技术参数
SV40 vacuum circuit breaker technical parameters

项目 Init		单位 Unit	数据 Data		
额定电压 Rated voltage		kV	40.5		
额定绝缘水平 Rated insulation level	额定短时工频耐受电压(1min) Rated short-term power frequency withstand voltage (1min)	kV	95		
	额定雷电冲击耐受电压(峰值) Rated lightning impulse withstand voltage (peak)		185		
额定频率 Rated frequency		Hz	50		
额定电流 Rated current		A	630	630	1250
			1250	1250	1600
			–	–	2000
			–	–	2500
			–	–	3150
额定短路开断电流 Rated short circuit breaking current		kA	20	25	31.5
额定短时耐受电流 Rated short-time withstand current			20	25	31.5
额定峰值耐受电流 Rated peak withstand current			50	63	80
4s热稳定电流 4s thermal stable current			20	25	31.5
额定动稳定电流 Rated dynamic stable current			50	63	80
额定短路关合电流 (峰值) Rated short circuit making current (peak)			50	63	80
额定短路持续时间 Rated short-circuit duration		s	4		
机械寿命 mechanical life		次 times	10000		
额定电容器组关合涌流 Rated capacitor bank making inrush current		kA	12.5(频率不大于1000Hz) 12.5 (frequency not exceeding 1000Hz)		
额定单个 / 背对背电容器组开断电流 Rated single/back to back capacitor bank breaking current		A	630/400		
短路开断电流开断次数 Short circuit breaking current breaking times		次 times	20		
二次回路工频耐受电压 Secondary circuit power frequency withstand voltage		V	2000		
额定操作电压 Rated operating voltage		V	AC 110/220 DC 110/220		
额定操作顺序 Rated operating sequence			O-0.3s-CO-180s-CO		
储能时间 Energy storage time		s	≤15		

SV40真空断路器机械特性参数
SV40 vacuum circuit breaker mechanical characteristic parameters

项目 Init	单位 Unit	数据 Data		
触头开距 Contact opening distance	mm	20 ± 2		
接触行程 Contact Travel	mm	6 ± 1		
相间中心距 Interphase center distance	mm	300 ± 1.5		
触头合闸弹跳时间 Contact closing bounce time	ms	≤3		
三相分、合闸不同期性 Three phase opening and closing different periods	ms	≤2		
平均分闸速度[1] Average opening speed	ms	1.4~2.0		
平均合闸速度[2] Average closing speed	ms	0.6~1.3		
分闸时间 Opening time	ms	30~70		
合闸时间 Closing time	ms	20~45		
触头分闸反弹幅值 Contact opening rebound amplitude	mm	≤3		
动静触头允许磨损厚度 Allowable wear thickness of dynamic and static contacts	mm	3		
主导电回路电阻 Main conductivity loop resistance	μΩ	手车式 Handcart style	固定式 Fixed type	额定电流 Rated current
		≤75	≤50	1250A及以下 1250A and below
		≤50	≤40	2500A及以上 2500A and above

1. 平均分闸速度是指断路器触头刚分后12mm的平均速度；
2. 平均合闸速度是指断路器触头合前12mm速度。

1. The average opening speed refers to the average speed of 12mm after the circuit breaker contacts have just opened;
2. The average closing speed refers to the speed of the circuit breaker contact at 12mm before closing.

操动机构参数
Operating mechanism parameters

项目 Init	单位 Unit	数据 Data
储能电机额定功率 Rated power of energy storage motor	W	90
储能电机额定电压 Rated voltage of energy storage motor	V	AC110/220 DC110/220
合闸线圈电压 Closing coil voltage	V	AC110/220 DC110/220
分闸线圈电压 Opening coil voltage	V	AC110/220 DC110/220
合闸线圈电流 Closing coil current	A	1.3(DC220) 2.6 (DC110)
分闸线圈电流 Opening coil current	A	1.3(DC220) 2.6(DC110)

SMT万能式断路器
SMT universal circuit breaker

SMT万能式断路器是基于当今电气系统高性能高可靠要求，新型智能配电要求和能效管理节能增效的要求而开发的系列产品。产品以模块化、数字化、自动化为设计理念，其核心部件智能控制器具有精确选择性保护，能提高供电可靠性，避免不必要的停电。

SMT universal circuit breaker is a series of products developed based on the requirements of high performance and high reliability of today's electrical systems, the requirements of new intelligent distribution and energy efficiency management, energy conservation and efficiency. The product is designed with the concept of modularization, digitalization and automation. Its core component intelligent controller has precise selective protection, which can improve the reliability of power supply and avoid unnecessary power outage.

- 产品分为三种壳架，电流覆盖200A到6300A
- 其核心部件智能控制器具有精确选择性保护，能提高供电可靠性，避免不必要的停电
- 结构紧凑，分断能力高，最高可达120kA，开放式通讯接口可进行“四遥”，满足控制中心和自动化系统的要求
- 上下进线不影响产品性能
- Products are divided into three shell frames, current coverage from 200A to 6300A
- Its core component intelligent controller has precise selective protection, which can improve the reliability of power supply and avoid unnecessary power outage
- Compact structure, high breaking ability, up to 120kA, open communication interface can be carried out "four remote", to meet the requirements of control center and automation system
- The upper and lower wiring does not affect the product performance

断路器的数字化工具将使从设计、配置到运行、维护的全项目周期阶段的工作更高效。

The digital tool of circuit breaker will make the whole project cycle phase from design, configuration to operation and maintenance more efficient.

Product Selector在线选型工具
Product Selector online selection tool

一款省时、精确的产品配置和订购工具
A time－saving, accurate product configuration and ordering tool

设计
Design

EcoStruxure Power Commission
调试软件
Debugging software

一款省时、精确的产品配置和订购工具
A time－saving, accurate product configuration and ordering tool

配置和订购
Configuration and ordering

远程，持续的通知
Remote, continuous notification

运维专家跟踪设备数据，在电力事件和定期维护时接收提醒。
Operations specialists track equipment data and receive alerts during power events and scheduled maintenance.

安装和调试
Installation and commissioning

使用智能控制器操作
Operate with an intelligent controller

参数无级设定，全方位测量与维护
Parameter stepless setting, comprehensive measurement and maintenance

运行和维护
Operation and maintenance

SMT系列万能式断路器
SMT series universal circuit breaker

快速选型表
Quick selection table

产品名称	极数	接线方式	控制器基本类型	控制器增选功能			类型
SMT1=SMT02~20	3P: 3极	S: 水平接线（默认）	M: 普通型	无: 无智能控制器	无: 无附加功能	S1: 4DO，无区域联锁	无: 常规型
SMT2=SMT20~40	4P: 4极	C1:上下垂直	2H: 普通通讯型	T: 差值型接地保护（默认不写）	D: 需量	S2: 3DO,1DI,有区域联锁	AT: 双电源
SMT3=SMT40~63		C2:仅上垂直	3M: 液晶显示	W: 地电流接地保护	U: 电压	S3: 2DO,2DI,有区域联锁	TH: 湿热
		C3:仅下垂直	3H: 液晶通讯无（注3）	E: 漏电保护	P: 功率	S4: 信号单元（M型智能用S4,3M/3H型不可选）	LC: 低温盐雾
			2: Profibus		H: 谐波		
			3: Modbus		UD: 电压+需量		
			4: Devicenet		PD: 功率+需量		
					HD: 谐波+需量		

SMT1	20	N	3P	D	S	AC220V	M	T4	Q1	D	A1	LC

额定电流	分断等级	安装方式	控制电源电压	辅助触头	欠（失）压脱扣器		附件
02: 200A	N: 较高分断型	D: 抽屉式	AC380V (AC400V)	T4: 4开4闭转换	无: 无欠（失）压功能		无: 无增选附件
04: 400A	H: 高分断型	F: 固定式	AC220V (AC230V)	T5: 5开5闭转换	Q1: 助吸式	Q3: 欠压延时	A1: 一锁一钥匙
06: 630A			DC110V DC220V	T6: 6开6闭转换	Q2: 自吸式	1: 延时0.3s	A2: 二锁一钥匙
08: 800A				D4: 4开4闭独立	Q3: 欠压延时	2: 延时0.5s	A3: 三锁二钥匙
10: 1000A				D5: 5开5闭独立	Q4: 零压延时	3: 延时0.7s	A4: 四锁三钥匙
12: 1250A				D6: 6开6闭独立		4: 延时1s	A5: 五锁四钥匙
16: 1600A					**可选电压:**	5: 延时3s	A6: 杠杆二联锁
20: 2000A					Q1: 欠(失)压 AC220V/AC230V	6: 延时5s	A7: 钢缆二联锁
25: 2500A					Q2: 欠(失)压 AC380V/AC400V	组合延时范围（0.3-10.5s）	A8: 钢缆三联锁1
32: 3200A					Q3: 欠(失)压 DC220V	Q4: 零压延时	A9: 钢缆三联锁2
40: 4000A					DC110V	01: 延时0.3s	A10: 合分闸按钮锁
50: 5000A						02: 延时0.5s	A11: 门联锁
63: 6300A						03: 延时0.7s	A12: 三位置信号
						04: 延时1s	A13: ST-IV电源模块
						05: 延时3s	A14: ST201继电器
						组合延时范围（0.3-0.75s）	A15: 外接N相互感器
							A16: 外接地电流互感器
							A17: 外接零序漏电互感器
							A18: 防尘罩
							A19: W1-CM外挂控制模块
							A20: 合闸准备就绪触点

注：

1. 以上壳架智能控制器可选M、3M、2H、3H;
2. 以上壳架标配3M型控制器；
3. 仅3H型控制器需明确通讯协议，默认为Modbus；
4. 以上壳架欠压默认订货为助吸式（延时欠压默认为自吸式），如需其它须订制。

Product name	Number of poles	Wiring mode	Basic type of controller	Optional function of controller			Type
SMT1=SMT02~20	3P: 3-pole	S: Horizontal wiring(Default)	M: Ordinary type	None: No intelligent controller	None: No additional functions	S1: 4DO, no regional interlocking	None: conventional type
SMT2=SMT20~40	4P: 4-pole	C1: Up and down vertical	2H: General communication type	T: Differential grounding protection (not written by default)	D: Demand	S2: 3DO, 1DI, with regional interlocking	AT: dual power supply
SMT3=SMT40~63		C2: Only upper vertical	3M: LCD	W: Grounding current grounding protection	U: Voltage	S3: 2DO, 2DI, with regional interlocking	TH: damp and hot
		C3: lower vertical only	3H: LCD communication None (Note 3)	E: Leakage protection	P: Power	S4: signal unit (S4, 3M/3H for M-type intelligent is not optional)	LC: low temperature salt fog
			2: Profibus		H: Harmonics		
			3: Modbus		UD: voltage+demand		
			4: Devicenet		PD: power+demand		
					HD: harmonic+demand		

SMT1	20	N	3P	D	S	AC220V	M	T4	Q1	D	A1	LC

Rated current	Breaking capacity class	Installation method	Control power supply voltage	Auxiliary contact	Undervoltage release		Accessories
02: 200A	N: Relatively higher type	D: Draw out	AC380V (AC400V)	T4: 4 open and 4 close conversion	None: no undervoltage (loss of voltage) function		None: no additional attachments
04: 400A	H: Higher performance type	F: Fixed	AC220V (AC230V)	T5: 5 open and 5 close conversion	Q1: assistive suction	Q3: Undervoltage delay	A1: One lock and one key
06: 630A			DC110V DC220V	T6: 6 open and 6 close conversion	Q2: self-priming	1: Delay 0.3s	A2: Two locks and one key
08: 800A				D4: 4 open and 4 close independent	Q3: Undervoltage delay	2: Delay 0.5s	A3: Three locks and two keys
10: 1000A				D5: 5 open and 5 closed independent	Q4: Zero voltage delay	3: Delay 0.7s	A4: Four locks and three keys
12: 1250A				D6: 6 open and 6 closed independent		4: Delay for 1s	A5: Five locks and four keys
16: 1600A					Optional voltage	5: Delay for 3s	A6: lever II interlock
20: 2000A					Q1: Undervoltage AC220V/AC230V	6: 5s delay	A7: Wire rope II interlocking
25: 2500A					Q2: Undervoltage AC380V/AC400V	Combined delay range（0.3-10.5s）	A8: Steel cable triple lock 1
32: 3200A					Q3: Undervoltage DC220V	Q4: Zero voltage delay	A9: Steel cable triple lock 2
40: 4000A					DC110V	01: 0.3 s delay	A10: closing and opening button lock
50: 5000A						02: delay 0.5s	A11: Door interlock
63: 6300A						03: Delay 0.7s	A12: Three-position signal
						04: 1 s delay	A13: ST-IV power module
						05: Delay for 3s	A14: ST201 relay
						Combined delay range（0.3-0.75s）	A15: External N-phase transformer
							A16: External grounding current transformer
							A17: External zero-sequence leakage transformer
							A18: Dust cover
							A19: W1-CM plug-in control module
							A20: Closing ready contact

Note:

1. The intelligent controller of the above shell frame can be M, 3M, 2H, 3H;
2. The above shell frame is equipped with 3M controller as standard;
3. Only the 3H controller needs to specify the communication protocol, which is Modbus by default;
4. The under-voltage of the above shell frame is ordered by default as the auxiliary suction type (Delay undervoltage defaults to self-priming), and other products must be ordered if necessary.

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基本配置：智能控制器、辅助开关（4组转换）、二次回路47接线、欠（失）压脱扣器、分励电磁铁、合闸电磁铁、门框、相间隔板、储能电机及抽屉座（固定式不含抽出机构）。

选配附件		规格
欠（失）压脱扣器		工作电压：AC400V、AC230V、DC110V、DC220V 动作时间：瞬时0.3s、0.5s、0.7s、1s、3s、5s组合延时范围（0.3-10.5s）； 延时、零压延时：0.3s、0.5s、0.7s、1s、3s组合延时范围（0.3-0.75s）
辅助开关		转换型：3开3闭、4开4闭、5开5闭、6开6闭 独立型：3开3闭、4开4闭、5开5闭、6开6闭
智能控制器	M	电流型、电能型、谐波型
	3M	电流型、电压型、电能型、谐波型
	2H	电压型、电能型、发电机电能型、通讯
	3H	电压型、电能型、谐波型、发电机电能型、发电机谐波型、通讯
	其他功能	信号单元、需用值功能、触头磨损、故障记忆、合闸次数、时钟(仅3M、3H有)
联锁机构	分闸位置锁	1锁1钥匙、2锁1钥匙、3锁2钥匙、5锁3钥匙
	机械联锁	硬连锁：杠杆2联锁、杠杆3联锁 软联锁：钢缆2联锁、钢缆3联锁1、钢缆3联锁3
其他		分合闸按钮锁、门联锁、防尘罩
外接互感器		N相互感器、漏电互感器、地电流互感器
电源模块		直流模块
继电器模块		继电器模块

注：1. 我司默认二次回路控制电源电压为：电、欠、合、分、智（即储能电机、欠（失）压脱扣器、合闸电磁铁、分励电磁铁、智能控制器）一致。如不一致须注明，并严格按照要求接线。

2. 如开关为3P可选择外接电流互感器N极。

3. 如需要漏电保护需增选。

4. 如须实现“四遥”功能，则须增选附件继电器模块，智能单元须增选信号单元及通讯功能。

Basic configuration: intelligent controller, auxiliary switch (4 groups of conversion), secondary circuit 47 wiring, undervoltage (loss of voltage) release, shunt electromagnet, closing electromagnet, door frame, interphase partition, energy storage motor and drawer base(fixed type without withdrawal mechanism).

Optional accessories		Specifications
Undervoltage release		Working voltage: AC400V, AC230V, DC110V, DC220V Action time: instantaneous 0.3s, 0.5s, 0.7s, 1s, 3s, 5s combined delay range (0.3-10.5s); Delay and zero voltage delay: 0.3s, 0.5s, 0.7s, 1s, 3s combined delay range (0.3-0.75s)
Auxiliary switch		Switching type: 3 open and 3 closed, 4 open and 4 closed, 5 open and 5 closed, 6 open and 6 closed Independent type: 3 open and 3 closed, 4 open and 4 closed, 5 open and 5 closed, 6 open and 6 closed
Intelligent controller	M	Current type, electric energy type, harmonic type
	3M	Current type, voltage type, electric energy type, harmonic type
	2H	Voltage type, electric energy type, generator electric energy type, communication
	3H	Voltage type, electric energy type, harmonic type, generator electric energy type, generator harmonic type, communication
	Other functions	Signal unit, required value function, contact wear, fault memory,closing times, clock (only available for 3M and 3H)
Interlocking mechanism	Opening position lock	1 lock 1 key, 2 lock 1 key, 3 lock 2 key, 5 lock 3 key
	Mechanical interlock	Hard interlock: lever 2 interlock, lever 3 interlock Soft interlocking: wireline 2 interlocking, wireline 3 interlocking 1, wireline 3 interlocking 3
Other		Opening and closing button lock, door interlock, dust cover
External transformer		N-phase transformer, leakage transformer and ground current transformer
Power module		DC module
Relay module		Relay module

Note: 1. By default, the secondary circuit control power supply voltage of our company is: electric, under, closing, opening and intelligent (i.e. energy storage motor, under (loss of) voltage release, closing electromagnet, shunt electromagnet, intelligent controller). If there is any discrepancy, it shall be noted and wired in strict accordance with the requirements.

2. If the switch is 3P, N pole of external current transformer can be selected.

3. If leakage protection is required, additional selection is required.

4. If the "four remotes" function must be realized, the accessory relay module must be added, and the signal unit and communication function must be added to the intelligent unit.

SMT系列万能式断路器
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断路器参数表
Circuit breaker parameter table

选择标准 Selection criteria

			SMT1		SMT2		SMT3
额定电流(A) 40/50℃ Rated current			SMT1 02				
			SMT1 04				
			SMT1 06	SMT1 06			
			SMT1 08	SMT1 08			
			SMT1 10	SMT1 10			
				SMT1 12			
				SMT1 16			
				SMT1 20		SMT2 20	
					SMT2 32	SMT2 25	
					SMT2 36	SMT2 29	
					SMT2 40	SMT2 32	SMT3 40
							SMT3 50
							SMT3 63
使用类别 Type of use			B		B		B
短路分断能力级别 Short circuit breaking capacity level			N	H	N	H	
极限分断能力 Ultimate breaking capacity V AC 50/60 Hz	Icu(kA)	400/440V	65	80	100	100	120
		690V	42	50	65	85	75
运行分断能力 Rated service breaking capacity V AC 50/60 Hz	Ics(kA)	400/440V	50	65	80	100	100
		690V	42	50	65	85	65
短时耐受电流 Rated short-time withstand V AC 50/60 Hz	Icw(kA)1s	400/440V	42	50	80	100	100
		690V	42	40	65	85	65

安装特性 Installation features

使用温度 Service temperature	-25℃~+70℃24h内平均值不超过+35℃(高于+40℃需降容，低于-25℃需定制LC低温产品) The average value within 24 hours of -25℃~+70℃shall not exceed+35℃(the capacity shall be reduced if it is higher than+40℃, and LC low -temperature products shall be customized if it is low er than - 25℃)
使用湿度 Operating humidity	周围空气温度为40℃，大气相对湿度不超过50%，25℃时最大相对湿度不超过90% The ambient air temperature is 40℃ , the atmospheric relative humidity is not more than 50%, and the maximum relative humidity is not more than 90% at 20℃
海拔高度 Altitude	≤2000m(超过2000m需要降容使用) ≤ 2000m (more than 2000m requires derating)
连接方式 Connection mode	水平、垂直 Horizontal and vertical

尺寸 Dimension (mm)H x W x D

	SMT1		SMT2		SMT3
短路分断能力级别 Short circuit breaking capacity level	N	H	N	H	
抽屉式 Draw out 3P	345×275×327	433×375×437	433×435×437	435×440×482	480×788×433
抽屉式 Draw out 4P	345×343×327	433×470×437	433×550×437	435×550×482	480×928×433
固定式 Fixed 3P	310×260×234	402×362×322	402×422×322	In=(1000-2500):398×430×365 In=(2900-3200):398×430×375	-
固定式 Fixed 4P	310×330×234	402×457×322	402×537×322	In=(1000-2500):398×545×365 In=(2900-3200):398×545×375	-

注：SMT2 40 3P尺寸和SMT2 20~32 4P尺寸一致，SMT3 40 4P尺寸和SMT3 50~63 3P尺寸一致。
Note: The size of SMT2 40 3P is consistent with that of SMT2 20~32 4P, and the size of SMT3 40 4P is consistent with that of SMT3 50~63 3P.

重量 weight（kg）

额定电流 Rated current（A）	200~800	800~1600	2000	2500	3200	4000	5000	6300
固定式 Fixed 3P	46	52	48.3	42	67	150	-	-
固定式 Fixed 4P	50.2	57	53.3	41.4	76.7	-	-	-
抽屉式 Draw out 3P	63	62.5	73.3	67	92	131.3	195	227.2
抽屉式 Draw out 4P	81.5	69.8	88.6	78.7	114	200	223.3	223.3

基本特性 Basic characteristics

		SMT1	SMT2	SMT3
极数 Number of poles		3P/4P	3P/4P	3P/4P
额定绝缘电压 Rated insulation voltage	Ui(V)	1000	1000	1000
额定冲击耐受电压 Rated impulse withstand voltage	Uimp(kV)	12	12	12
额定工作电压 Rated operational voltage	Ue(VAC 50/60 Hz)	400/440/690	400/440/690	400/440/690
适用于隔离 Applicable to isolation	IEC60947-2 GB/T14048.2			
污染等级 class of pollution	IEC60947-1	3	3	3

特性 Characteristic

			SMT1		SMT2		SMT3
符合标准IEC60947-2和GB/T14048.2断路器的参数 Conform to IEC60947-2 and GB/T14048.2 circuit breaker parameters							
额定电流 Rated current			200~1000A	200~2000A	3200~4000A	2000~3200A	4000~6300A
使用类别 Type of use			B		B		B
短路分断能力级别 Short circuit breaking capacity level			N	H	N	H	
极限分断能力 Ultimate breaking capacity V AC 50/60 Hz	Icu(kA)	400/440V	65	80	100	100	120
		690V	42	50	65	85	75
运行分断能力 Rated service breaking capacity V AC 50/60 Hz	Ics(kA)	400/440V	50	65	80	100	100
		690V	42	50	65	85	65
短时耐受电流 Rated short-time w ithstand V AC 50/60 Hz	Icw (kA)/1s	400/440V	42	50	80	100	100
		690V	42	40	65	85	65
额定短路接通能力 Rated short-time making capacity V AC 50/60 Hz	Icm(kA)/(峰值) (peak value)	400/AC440V	143	176	220	220	264
		690V	88.2	143	165	187	187
分断 Breaking	(ms)				≤30		
闭合 Close	(ms)				≤60		

根据IEC60947-2和GB/T14048.2标准规定的电气和机械使用寿命
Electrical and mechanical service life according to IEC60947-2 and GB/T14048.2

机械寿命 Mechanical life	有维护 With maintenance	30000		20000		10000
	免维护 Maintenance-free	15000		10000		5000
	操作频率 Operating frequency	60次/小时 60 times/hour				
电气寿命 Electrical life	AC400V	15000(200-630A) 9000(800-1000A)	15000(200-800A) 14000(1000-1600A) 10000(2000A)	15000(2000-2500A) 10000(3200A)	10000(1000-2500A) 8000(2900-3200A)	1500
	AC690V	15000(200-630A) 9000(800-1000A)	15000(200-1250A) 7000(1600A) 5000(2000A)	15000(2000A) 9000(2500A) 5000(3200-4000A)	10000(1000-2500A) 5000(2900-3200A)	800
	操作频率 Operating frequency	20次/小时 20 times/hour				

SMT系列万能式断路器
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智能控制器
Intelligent controller

智能控制器是 SMT系列万能式智能断路器的核心部件，适用于50/60Hz电网，主要用作配电、馈电或发电机保护，使线路和电源设备免受过载、短路、接地、漏电、电流不平衡、过压、欠压、电压不平衡、过频、欠频、逆功率等故障的危害；通过负载监控、需量保护、区域联锁等功能实现电网的正常运行。同时也用作电网节点的电流、电压、功率、频率、电能、需量、谐波等电网参数的测量；故障、报警、操作、电流历史最大值、开关触头磨损情况等运行维护参数的记录。

当电力网络进行通讯组网时，智能控制单元可为电力自动化网络的远程终端实现遥测、遥信、遥控、遥调等。参数无级设定，全方位测量与维护,功能强大,扩展性强,可满足各种功能配置。

Intelligent controller is the core component of SMT series universal intelligent circuit breaker, suitable for 50/60Hz power grid, mainly used for power distribution, feed or generator protection, so that lines and power equipment from overload, short circuit, grounding, leakage, current imbalance, overvoltage, undervoltage, voltage imbalance, over frequency, under frequency, reverse power and other faults; Through load monitoring, demand protection, regional interlocking and other functions to realize the normal operation of the power grid. At the same time, it is also used to measure the current, voltage, power, frequency, electric energy, demand, harmonics and other grid parameters of the grid node. Record operation and maintenance parameters such as failure, alarm, operation, maximum current history, switch contact wear, etc.

When the power network is used for communication networking, the intelligent control unit can realize telemetry, remote communication, remote control and remote adjustment for the remote terminal of the power automation network. Parameter stepless setting, comprehensive measurement and maintenance, powerful, strong scalability, can meet a variety of functional configuration.

智能控制器类型
Intelligent controller type

M

3M

2H

3H

注：1. 3M型智能控制器不具备通讯功能，3H型智能控制器的通讯功能可选择为MODBUS,PROFIBUS−DP等通讯协议。

2. 3H型除了具有3M型所有功能外，同时具有串行通讯接口，通过通讯接口可组成主从结构的局域网系统(以下简称系统)，由1−2台计算机作为主站，若干智能断路器或其它可通讯元件作为从站，系统网络结构如下图所示，针对断路器单元，系统可实现远距离的“四遥”功能：多种电网参数和运行参数的监测，智能断路器当前运行状态监示，各种保护限值参数的调整和下载，智能断路器的分、合操作控制等。系统适用于各种电站、发电厂用电、中、小型变电所，工矿企业、楼宇等配电监控系统建设和改造。

Note: 1. 3M intelligent controller does not have communication function. The communication function of 3H intelligent controller can be selected as MODBUS, PROFIBUS−DP and other communication protocols.

2. In addition to all the functions of 3M type, the 3H type also has a serial communication interface. Through the communication interface, a local area network system with master−SVave structure (hereinafter referred to as the system) can be formed, with 1−2 computers as the master station, and several intelligent circuit breakers or other communicatable elements as the SVave stations. The system network structure is shown in the following figure. For the circuit breaker unit, the system can realize the remote "four remote" functions: monitoring of various grid parameters and operating parameters, The monitoring of the current operation status of the intelligent circuit breaker, the adjustment and download of various protection limit parameters, and the opening and closing operation control of the intelligent circuit breaker. The system is applicable to the construction and transformation of power distribution monitoring systems for various power stations, power plants, medium and small substations, industrial and mining enterprises, buildings, etc.

SMT系列万能式断路器
SMT series universal circuit breaker

智能控制器选型表
Intelligent controller selection table

功能 Function	功能名称 Function name		控制器型号 Controller model			
			M	3M	2H	3H
						
	过载长延时保护（热模拟30min，1600壳架为10min）Overload long time delay protection (thermal simulation 30min, 1600 shell frame 10min)		√（12t）	√（12t）	√（12t）	√（12t）
	短路短延时保护（热模拟15min，1600壳架为5min）Short circuit short time delay protection (thermal simulation 15min, 1600 shell frame 5min)		√	√	√	√
	短路瞬时保护 Short circuit instantaneous protection		√	√	√	√
	接地故障保护 Earth fault protection		–	√	√	√
基本功能 Basic function	电流显示 Current display	光柱格显示 Light column grid display	–	√	–	√
		数码管显示 LED display	√	–	√	–
		液晶显示 LCD display	–	√	–	√
	过载报警 Overload alarm		√	√	√	√
	中性极保护 Neutral pole protection		√	√	√	√
	整定功能 Setting function		√	√	√	√
	试验功能 Test function		√	√	√	√
	MCR功能 MCR function		√	√	√	√
	故障记忆功能 Fault memory function		√	√	√	√
	触头磨损指示 Contact wear indication		–	√	–	√
	热模拟功能 Thermal simulation function		√	√	√	√
	自诊断功能 Self-diagnosis function		√	√	√	√
附加功能 Additional features	通信功能 Communication function		–	–	√	√
	负载监控功能 Load monitoring function		○	○	○	○
	电流不平衡/断相保护 Current unbalance/phase failure protection		○	○	○	○
	ZSI功能 ZSI function		○	○	○	○
	保护/报警 Protection /alarm	电压显示 Voltage display	○	○	√	√
		过载预报警 Overload pre-alarm	–	–	–	–
		需用电流保护 Current protection required				
		过电压保护 Overvoltage protection	–	–	–	–
		低电压保护 Low voltage protection				
		电压不平衡保护 Voltage unbalance protection	–	–	–	–
		过频保护 Overfrequency protection	–	–	–	–
		欠频保护 Underfrequency protection	–	–	–	–
		相序保护 Phase sequence protection				
		逆功率保护 Reverse power protection	–	–	–	–

测量 Measure	电流 Electric current	三相电流Three-phase current	√	√	√	√
		中性极电流 Neutral current	√	√	√	√
		接地电流 Grounding current	√	√	√	√
	电压 Voltage	中性极电流 Neutral current	○	○	√	√
		相电压 Phase voltage	—	—	—	—
		电压不平衡度 Voltage unbalance	—	—	—	—
	功率 Power	有功功率、无功功率、视在功率 Active power, reactive power, apparent power	—	—	—	—
		功率因数 Power factor	—	—	—	—
	频率 Frequency		—	—	—	—
	电能：有功电能、无功电能、视在电能 Electric energy: active electric energy, reactive electric energy, apparent electric energy		—	—	—	—
	相序 Phase sequence		—	—	—	—
	谐波 Harmonic wave		√	—	—	—
	波形捕捉 Waveform capture		—	—	—	—
	需用值：需用电流、需用功率 Required value: required current, required power		—	—	—	—
维护 Maintain	智能型控制器有电时操作次数 Operation times of intelligent controller with power		—	—	—	—
	历史最大电流（控制器显示）Historical maximum current (controller display)		—	—	—	—
	需用电流最大值（控制器显示）Maximum required current (controller display)		—	—	—	—
	脱扣记录（控制器显示）Trip record (controller display)		√ 注4	√	√ 注4	√
	报警记录（控制器显示）Alarm record (controller display)		√	√	√	√
	历史最大、最小电流（通信输出）Historical maximum and minimum current (communication output)		—	—	—	—
	历史最大、最小电压（通信输出）Historical maximum and minimum voltage (communication output)		—	—	—	—
	峰值需用功率（通信输出）Peak required power (communication output)		—	—	—	—
	功率因数最大、最小值（通信输出）Maximum and minimum power factor (communication output)		—	—	—	—
	频率最大、最小值（通信输出）Maximum and minimum frequency (communication output)		—	—	—	—
	故障录波（通信输出）Fault oscillograph (communication output)		—	—	—	—
2路可编程输出功能 2-channel programmable output function			—	—	—	—

注 1：“√”表示基本功能，“○” 表示选择功能，“—”表示无此功能。

注 2：当选择通信功能时，电压显示标配。

注 3：以上控制器有 N/2、N。

注 4：M、2H型智能控制器脱扣记录为1次。

Note 1: "√" means basic function, "○" means selection function, and "–" means no such function.

Note 2: When the communication function is selected, the voltage display is standard.

Note 3: The above controllers have N/2 and N.

Note 4: The tripping record of M and 2H type intelligent controllers is one time.

SMT HU系列高电压等级智能型万能式断路器
SMT HU series high-voltage intelligent universal circuit breaker

快速选型表
Quick selection table

产品名称	接线方式	控制器基本类型	控制器增选功能			类型
SMT1=SMT06~25HU SMT2=SMT20~40HU SMT3=SMT40~75HU	S: 水平接线（默认） C1:上下垂直 C2:仅上垂直 C3:仅下垂直	M: 普通型 3M: 液晶显示 3H: 液晶通讯 无（注3） 2: Profibus 3: Modbus 4: Devicenet	无: 无智能控制器 T: 差值型接地保护（默认不写） W: 地电流接地保护 E: 漏电保护	无: 无附加功能 D: 需量 U: 电压 P: 功率 H: 谐波 UD: 电压+需量 PD: 功率+需量 HD: 谐波+需量	S1: 4DO，无区域联锁 S2: 3DO,1DI,有区域联锁 S3: 2DO,2DI,有区域联锁 S4: 信号单元（M型智能用S4,3M/3H型不可选）	无: 常规型 AT: 双电源 TH: 湿热 LC: 低温盐雾

SMT1	20	HU	3P	D	S	AC220V	M	T4	Q1	D	A1	LC

额定电流	高电压代号	极数	安装方式	控制电源电压	辅助触头	欠（失）压脱扣器		附件
06: 630A 08: 800A 10: 1000A 12: 1250A 16: 1600A 20: 2000A 25: 2500A 32: 3200A 40: 4000A 50: 5000A 63: 6300A 75: 7500A		3P: 3极 4P: 4极	D: 抽屉式 F: 固定式	AC380V (AC400V) AC220V (AC230V) DC110V DC220V	T4: 4开4闭转换 T5: 5开5闭转换 T6: 6开6闭转换 D4: 4开4闭独立 D5: 5开5闭独立 D6: 6开6闭独立	无: 无欠（失）压功能 Q1: 助吸式 Q2: 自吸式 Q3: 欠压延时 Q4: 零压延时 **可选电压:** Q1: 欠(失)压 AC220V/AC230V Q2: 欠(失)压 AC380V/AC400V Q3: 欠(失)压 DC220V DC110V	Q3: 欠压延时 1: 延时0.3s 2: 延时0.5s 3: 延时0.7s 4: 延时1s 5: 延时3s 6: 延时5s 组合延时范围（0.3-10.5s） Q4: 零压延时 01: 延时0.3s 02: 延时0.5s 03: 延时0.7s 04: 延时1s 05: 延时3s 组合延时范围（0.3-0.75s）	A1: 一锁一钥匙 A2: 二锁一钥匙 A3: 三锁二钥匙 A4: 四锁三钥匙 A5: 五锁四钥匙 A6: 杠杆二联锁 A7: 钢缆二联锁 A8: 钢缆三联锁1 A9: 钢缆三联锁2 A10: 合分闸按钮锁 A11: 门联锁 A12: 三位置信号 A13: ST-IV电源模块 A14: ST201继电器 A15: 外接N相互感器 A16: 外接地电流互感器 A17: 外接零序漏电互感器 A18: 防尘罩 A19: W1-CM外挂控制模块 A20: 合闸准备就绪触点

注：

1. 以上壳架智能控制器可选M、3M、3H;
2. 以上壳架标配3M型控制器；
3. 仅3H型控制器需明确通讯协议，默认为Modbus；
4. 以上壳架欠压默认订货为助吸式（延时欠压默认为自吸式），如需其它须订制。

Product name	Wiring mode	Basic type of controller	Optional function of controller			Type
SMT1=SMT06~25HU SMT2=SMT20~40HU SMT3=SMT40~75HU	S: Horizontal wiring(Default) C1: Up and down vertical C2: Only upper vertical C3: lower vertical only	M: Ordinary type 3M: LCD 3H: LCD communication None (Note 3) 2: Profibus 3: Modbus 4: Devicenet	None: No intelligent controller T: Differential grounding protection (not written by default) W: Grounding current grounding protection E: Leakage protection	None: No additional functions D: Demand U: Voltage P: Power H: Harmonics UD: voltage+demand PD: power+demand HD: harmonic+demand	S1: 4DO, no regional interlocking S2: 3DO, 1DI, with regional interlocking S3: 2DO, 2DI, with regional interlocking S4: signal unit (S4, 3M/3H for M-type intelligent is not optional)	None: conventional type AT: dual power supply TH: damp and hot LC: low temperature salt fog

SMT1	20	HU	3P	D	S	AC220V	M	T4	Q1	D	A1	LC

Rated current	High voltage code	Number of poles	Installation method	Control power supply voltage	Auxiliary contact	Undervoltage release		Accessories
06: 630A 08: 800A 10: 1000A 12: 1250A 16: 1600A 20: 2000A 25: 2500A 32: 3200A 40: 4000A 50: 5000A 63: 6300A 75: 7500A		3P: 3-pole 4P: 4-pole	D: Draw out F: Fixed	AC380V (AC400V) AC220V (AC230V) DC110V DC220V	T4: 4 open and 4 close conversion T5: 5 open and 5 close conversion T6: 6 open and 6 close conversion D4: 4 open and 4 close independent D5: 5 open and 5 closed independent D6: 6 open and 6 closed independent	None: no undervoltage (loss of voltage) function Q1: assistive suction Q2: self-priming Q3: Undervoltage delay Q4: Zero voltage delay **Optional voltage** Q1: Undervoltage AC220V/AC230V Q2: Undervoltage AC380V/AC400V Q3: Undervoltage DC220V DC110V	Q3: Undervoltage delay 1: Delay 0.3s 2: Delay 0.5s 3: Delay 0.7s 4: Delay for 1s 5: Delay for 3s 6: 5s delay Combined delay range（0.3-10.5s） Q4: Zero voltage delay 01: 0.3 s delay 02: delay 0.5s 03: Delay 0.7s 04: 1 s delay 05: Delay for 3s Combined delay range（0.3-0.75s）	None: no additional attachments A1: One lock and one key A2: Two locks and one key A3: Three locks and two keys A4: Four locks and three keys A5: Five locks and four keys A6: lever II interlock A7: Wire rope II interlocking A8: Steel cable triple lock 1 A9: Steel cable triple lock 2 A10: closing and opening button lock A11: Door interlock A12: Three-position signal A13: ST-IV power module A14: ST201 relay A15: External N-phase transformer A16: External grounding current transformer A17: External zero-sequence leakage transformer A18: Dust cover A19: W1-CM plug-in control module A20: Closing ready contact

Note:

1. The intelligent controller of the above shell frame can be M, 3M, 3H;
2. The above shell frame is equipped with 3M controller as standard;
3. Only the 3H controller needs to specify the communication protocol, which is Modbus by default;
4. The under-voltage of the above shell frame is ordered by default as the auxiliary suction type (Delay undervoltage defaults to self-priming), and other products must be ordered if necessary.

SMT HU系列高电压等级智能型万能式断路器
SMT HU series high-voltage intelligent universal circuit breaker

断路器参数表
Circuit breaker parameter table

选择标准 Selection criteria					
			SMT1	SMT2	SMT3
额定电流(A) 40/50℃ Rated current			SMT1 06HU		
			SMT1 08HU		
			SMT1 10HU		
			SMT1 12HU		
			SMT1 16HU		
			SMT1 20HU	SMT2 20HU	
			SMT1 25HU	SMT2 25HU	
				SMT2 32HU	
				SMT2 40HU	SMT3 40HU
					SMT3 50HU
					SMT3 63HU
					SMT3 75HU
使用类别 Type of use			B	B	B
极限分断能力 Ultimate breaking capacity V AC 50/60 Hz	Icu(kA)	400V	100	100	150
		690V	65	80	100
		800~1140V	50	50	65
运行分断能力 Rated service breaking capacity V AC 50/60 Hz	Ics(kA)	400V	100	100	150
		690V	65	80	100
		800~1140V	50	50	65
短时耐受电流 Rated short-time withstand V AC 50/60 Hz	Icw(kA)1s	400V	100	100	150
		690V	65	80	100
		800~1140V	50	50	65

安装特性 Installation features	
使用温度 Service temperature	−25℃~+70℃24h内平均值不超过+35℃(高于+40℃需降容，低于−25℃需定制LC低温产品) The average value within 24 hours of −25℃~+40℃shall not exceed+35℃(the capacity shall be reduced if it is higher than+40℃, and LC low −temperature products shall be customized if it is low er than − 25℃)
使用湿度 Operating humidity	周围空气温度为40℃，大气相对湿度不超过50%，20℃时最大相对湿度不超过90% The ambient air temperature is 40℃, and the relative humidity of the atmosphere does not exceed 50%. At 20℃, the maximum relative humidity does not exceed 90%
海拔高度 Altitude	≤2000m(超过2000m需要降容使用) ≤ 2000m (more than 2000m requires derating)
连接方式 Connection mode	水平、垂直 Horizontal and Vertical

尺寸 Dimension (mm)H x W x D

	SMT1	SMT2	SMT3		
额定电流 Rated current (A)	630~2500	2000~4000	4000~5000	6300	7500
抽屉式 Draw out 3P	432×375×449	432×435×464	436×780×473	435×780×489	435×895×489
抽屉式 Draw out 4P	432×470×449	432×550×464	436×895×473	435×896×489	−
固定式 Fixed 3P	402×362×354	402×430×369	397×773×390	400×773×390	400×888×390
固定式 Fixed 4P	402×457×354	402×537×369	397×888×390	400×888×390	−

基本特性 Basic characteristics		SMT1 HU	SMT2 HU	SMT3 HU
极数 Number of poles		3P/4P	3P/4P	3P/4P
额定绝缘电压 Rated insulation voltage	Ui(V)	1140	1140	1140
额定冲击耐受电压 Rated impulse withstand voltage	Uimp(kV)	12	12	12
额定工作电压 Rated operational voltage	Ue(VAC 50/60 Hz)	400/690/800~1140	400/690/800~1140	400/690/800~1140
适用于隔离 Applicable to isolation	IEC60947−2 GB/T14048.2			
污染等级 class of pollution	IEC60947−1	3	3	3

特性 Characteristic					
			SMT1	SMT2	SMT3
符合标准IEC60947−2和GB/T14048.2断路器的参数 Conform to IEC60947−2 and GB/T14048.2 circuit breaker parameters					
额定电流 Rated current			630~2500A HU	2000~4000A HU	4000~7500A HU
使用类别 Type of use			B	B	B
极限分断能力 Ultimate breaking capacity V AC 50/60 Hz	Icu(kA)	400V	100	100	150
		690V	65	80	100
		800~1140V	50	50	65
运行分断能力 Rated service breaking capacity V AC 50/60 Hz	Ics(kA)	400V	100	100	150
		690V	65	80	100
		800~1140V	50	50	65
短时耐受电流 Rated short−time w ithstand V AC 50/60 Hz	Icw (kA)/1s	400V	100	100	150
		690V	65	80	100
		800~1140V	50	50	65
额定短路接通能力 Rated short−time making capacity V AC 50/60 Hz	Icm(kA)/(峰值) (peak value)	400V	220	220	330
		690V	143	187	220
		800~1140V	110	110	143
全分断时间(无附加延时) Full break time (without additional delay)	(ms)			≤30	
闭合 Close	(ms)			≤70	

SMT HU系列高电压等级智能型万能式断路器
SMT HU series high-voltage intelligent universal circuit breaker

根据IEC60947-2和GB/T14048.2标准规定的电气和机械使用寿命
Electrical and mechanical service life according to IEC60947-2 and GB/T14048.2

		SMT1 630~2500A HU	SMT2 2000~4000A HU	SMT3 4000~7500A HU
机械寿命 Mechanical life	有维护 With maintenance	20000	15000	12000
	免维护 Maintenance-free	15000	10000	6000
	操作频率 Operating frequency		≤2000 1次 time/3min >2000 1次 time/6min	
抽屉座机械寿命(次)1次/2min Mechanical life of drawer seat (times) 1 time/2 minutes		1000	1000	200
电气寿命 Electrical life	AC400V	15000(630A~1250A)、 12000(1600A~2000A)、 11000(2500A)	8000(2000A~2500A)、 6000(3200A~4000A)	5000(4000A~5000A)、 3000(6300A)、 2000(7500A)
	AC690V	12500(630A~1250A)、 10000(1600A~2000A)、 8000(2500A)	6000(2000A~2500A)、 3000(3200A~4000A)	3000(4000A~5000A)、 2000(6300A)、 1500(7500A)
	AC800V	5000(630A~2000A)、 4500(2500A)	1000(2000A~4000A)	800(4000A~7500A)
	AC1000~1140V	3000(630A~2000A)、 2000(2500A)	1000(2000A~2500A)、 600(3200A~4000A)	500(4000A~7500A)
	操作频率 Operating frequency		≤2000 1次 time/3min >2000 1次 time/6min	

智能控制器选型表
Intelligent controller selection table

控制器型号 Controller model	M	3M	3H
过载长延时保护 Overload long delay protection	√	√	√
短路短延时保护 Short circuit short delay protection	√	√	√
短路瞬时保护 Short circuit instantaneous protection	√	√	√
接地故障保护 Ground fault protection	√	√	√
电流不平衡保护 Current imbalance protection	–	○	○
功能试验 Functional testing	√	√	√
故障记忆 Fault memory	√	√	√
信号触点输出 Signal contact output	○	○	√
热记忆 Thermal memory	√	√	√
自诊断 Self diagnosis	√	√	√
MCU工作指示 MCU working instructions	–	–	–
电流柱状显示 Current bar display	–	–	–
电流测量 Current measurement	√	√	√
MCR及越限跳闸 MCR and over limit tripping	○	○	○
负载监控 Load monitoring	○	○	○
故障状态指示及数值显示 Fault status indication and numerical display	√	√	√
电压测量 Voltage measurement	○	○	√
功率因数测量 Power factor measurement	–	○	√
功率测量 Power measurement	–	○	○
电能测量 Electricity measurement	–	○	○
通讯功能 Communication function	–	–	√
触头磨损指示 Contact wear indicator	–	○	√
区域联锁 Regional interlocking	–	○	○
谐波测量 Harmonic measurement	–	○	○
电压保护 Voltage protection	–	○	○
操作次数记录 Record of number of operations	–	○	√

注 1：“√”表示基本功能，“○” 表示选择功能，“—”表示无此功能。

Note 1: "√" means basic function, "○" means selection function, and "–" means no such function.

SNS
塑壳断路器

TMD热磁式脱扣单元
TMD Thermal Magnetic Trip Units

ETS电子式脱扣单元
ETS Electronic Trip Units

MIC带剩余电流保护脱扣单元
MIC with the Residual Current Protection Trip Units

全新一代SNS系列塑料外壳式断路器是盛隆电气紧扣新时代电气配电系统的需求，以模块化、智能化为设计理念，打造高品质产品。

产品结构特点：U型触头设计，限流能力强，性能稳定可靠，外观新颖。

全系列断路器Ui达1000V，产品符合加强绝缘（II类）的要求。

The new generation of SNS series molded case circuit breaker is Shenglong Electric closely to the needs of the new era of electrical distribution system, to modular, intelligent design concept, create high quality products.

Product structure features: U-contact design, strong current limiting capability, stable and reliable performance, and novel appearance.

All series of circuit breakers Ui up to 1000V, the products meet the requirements of reinforced insulation (Class II).

SNS热磁式断路器
SNS thermal magnetic circuit breaker

快速选型表
Quick selection table

产品名称	分断等级	脱扣单元额定电流	安装方式	操作方式	电气附件	绝缘附件
	C: 经济型 L: 标准型 M: 较高分断 H: 高分断	SNS63壳架: 10,16,20,25,32,40,50,63 SNS125壳架: 16,20,25,32,40,50,63,80,100,125 SNS250壳架: 100,125,140,160,180,200,225,250 SNS400壳架: 225,250,315,350,400 SNS630壳架: 400,500,630 SNS800壳架: 630,700,800	无: 前连接 R: 后连接 P: 插入式接线	Z:转动手柄操作 P:电动操作	分励 欠压 报警 辅助 (电气附件代号详见样本)	无: 无外部罩壳 W: 端子罩 （零飞弧罩）

SNS 125 M TMD 3P 125 M B P Z 10 I W

壳架等级电流	脱扣单元类型	极数		四极产品N极类型代号	过载报警不脱扣
63A 125A 250A 400A 630A 800A	TMD: 热磁脱扣单元 MA: 电磁脱扣单元	3P: 3极(可不标) 4P: 4极	无: 配电用 M: 电动机保护用	A: N极不安装过电流脱扣单元，且N极始终接通，不与其他三极一起合分 B: N极不安装过电流脱扣单元，且N极与其他三极一起合分 C: N 极安装过电流脱扣单元，且N极与其他三极一起合分 D: N 极安装过电流脱扣单元，且N极始终接通，不与其他三极一起合分	无: 无此功能 I: 过载报警不脱扣，热磁式SNS125、250经济型规格及其他规格的四极断路器且中性极为C、D型无此功能

注： 1. 订过载报警不脱扣时填“I”，当过载报警时，断路器不脱扣，主回路不断开。中性极为C、D型的四极断路器不具有过载报警不脱扣功能。

2. 选型示例：如订购 SNS125M 三极，电动机保护用，额定工作电压为 AC400V, 额定电流为 80A 并带分励、辅助触头、板前接线且要求两台带机械联锁机构，分励额定电压 AC220V。

即写为订：SNS125M TMD 80A M 40 Ue:AC400V，前连接 2 台机械联锁，分励额定电压:AC220V。

Product name	Breaking capacity class	Trip units rated current	Installation mode	Mode of operation	Electrical accessories	Insulation accessories	Special applications
	C: Economical type L: Standard type M: Relatively higher type H: Higher performance type	SNS63 shell frame: 10,16,20,25,32,40,50,63 SNS125 shell frame: 16,20,25,32,40,50,63,80,100,125 SNS250 shell frame: 100,125,140,160,180,200,225,250 SNS400 shell frame: 225,250,315,350,400 SNS630 shell frame: 400,500,630 SNS800 shell frame: 630,700,800	None: Front panel wiring R: Rear panel wiring P: plug-in wiring	Z: manual cranking operation P: motor-driven operation	Shunt release Under voltage release Alarm contact Auxiliary contact (See sample for electrical accessories code)	None: no external cover shell W: Terminal cover (zero flashover)	None: the conventional type TH: humid tropical type LC: low temperature type

SNS 125 M TMD 3P 125 M B P Z 10 I W TH

Shell frame current	Trip units type	Number of poles		Code of N-pole type of four pole circuit breaker	Overload alarm does not trip
63A 125A 250A 400A 630A 800A	TMD: Thermal Magnetic Trip Units MA: Magnetic Trip Units	3P: 3-pole (not marked) 4P: 4-pole	None: Distribution M: Motor protection	A:N-pole is not equipped with over-current release, and N-pole is always on; B:N-pole is not equipped with over-current release, and N-pole is combined with other three poles; C:N-pole is installed with over-current release, and N-pole is combined with other three poles; D:N-pole is installed with over-current release, and N-pole is always on.	None: without this function I: Overload alarm No trip,thermal magnetic SNS 125、250 basic specifications and other specifications of four pole circuit breaker and neutral extremely C, D type without this function

Note: 1. Fill in "I" when the overload alarm can not trip. When overload alarm , the circuit breaker do not trip and the main circuit is not open. Neutral extreme type C, D quadrupole circuit breakers have no overload alarm without tripping function.

2. Type selection example: such as ordering SNS125M three poles, motor protection, rated working voltage is AC400V, rated current is 80A, with shunt release, auxiliary contact, front of the board and required two mechanical interlock mechanism, the rated voltage of the shunt release is AC220V.

Write: SNS125M TMD 80A M 40 Ue: AC400V, front connection to two mechanical interlock, the shunt release rated voltage: AC220V.

SNS热磁式断路器
SNS thermal magnetic circuit breaker

断路器参数表
Circuit breaker parameter table

				SNS63		SNS125				SNS250			SNS400			SNS630			SNS800		
极数 Number of poles				3、4		3、4				3、4			3、4			3、4			3、4		
连接 Connect	固定式 Fixed	前连接 Front connection		■		■				■			■			■			■		
		后连接 Rear connection		■			■			■			■			■			■		
	插入式 Plug-in	后连接 Rear connection		■		■				■			■			■			■		
壳架电流(A) Frame current (A)		40℃		63		125				250			400			630			800		
额定电流(A) Rated current (A)	In	40℃		10/16/20/25/32/40/50/63		16/20/25/32/40/50/63/80/100/125				100/125/140/160/180/200/225/250			225/250/315/350/400			400/500/630			630/700/800		
额定绝缘电压(V) Rated insulation voltage (V)	Ui			1000		1000				1000			1000			1000			1000		
额定冲击耐受电压(kV) Rated impulse withstand voltage	Uimp			8		8				12			12			12			12		
额定工作电压(V) Rated operational voltage (V)	Ue	AC50/60Hz	400V、690V	400V、690V		400V、690V				400V、690V			400V、690V			400V、690V			400V、690V		
额定极限短路分断能力 Rated limit short-circuit breaking capacity	Icu(kA)	AC50/60Hz		L	M	C	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
			400V	36	50	36	50	70	100	50	70	100	50	70	100	50	70	100	65	75	100
			690V	–	–	–	–	20	–	–	20	–	–	30	–	–	30	–	–	30	–
额定运行短路分断能力 Rated operational short-circuit breaking capacity	Ics(kA)	AC50/60Hz		L	M	C	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
			400V	36	36	36	35	50	70	35	50	70	50	70	75	50	70	75	65	75	75
			690V	–	–	–	–	10	–	–	10	–	–	20	–	–	20	–	–	20	–
飞弧距离(mm) Arcing distance (mm)				≥50		≥50				≥50			≥100			≥100			≥100		
隔离适用性 Isolation applicability				适用 Apply		适用 Apply				适用 Apply			适用 Apply			适用 Apply			适用 Apply		
使用类别 Type of use				A		A				A			A			A			A		
电气寿命(次) Electrical life (times)			AC400V	8000		10000				10000			8000			8000			1000		
			AC690V			1500				1000			1000			1000					
机械寿命(次) Mechanical life (times)	免维护 Maintenance-free			20000		20000				20000			10000			10000			10000		
	有维护 With maintenance					40000				40000			20000			20000					
安装/连接 Installation/connection																					
尺寸WxLxH(mm) DimensionW×L×H(mm)	固定式前连接 Fixed front connection	3P/4P		75×132.5×67 100×132.5×67		92×150×92 122×150×92				107×165×107.5 142×165×107.5			150×257×116 198×257×116			182×270×120 240×270×120			210×280×116 280×280×116		
重量(kg) Weight (kg)	固定式前连接 Fixed front connection	3P/4P		0.8/1.07		1.35/1.8				2.5/2.8			5.2/6.9			7.05/9.4			7.05/9.4		

SNS电子式断路器
SNS electronic circuit breaker

快速选型表
Quick selection table

产品名称	分断等级	脱扣单元额定电流	电气附件	绝缘附件
	M: 较高分断 H: 高分断	SNS125壳架: 32(12,14,16,18,20,22,25,28,30,32),63(25,28,32,36,40,45,50,56,60,63),125(50,63,70,75,80,85,90,95,100,125) SNS250壳架: 250(100,112,125,140,150,160,180,200,225,250) SNS400壳架: 400(160,180,200,225,250,280,315,350,375,400) SNS630壳架: 630(250,280,315,350,375,400,450,500,560,630) SNS800壳架: 800(315,350,400,450,500,560,630,700,760,800)	分励 欠压 报警 辅助 (电气附件代号详见样本)	无: 无外部罩壳 W: 端子罩 (零飞弧罩)

SNS	125	M	ETS	3P	125	M	P	Z	10	T1	W	TH
壳架等级电流 125A 250A 400A 630A 800A	电子脱扣单元	极数 3P: 3极(可不标) 4P: 4极	无: 配电用 M: 电动机保护用	安装方式 无: 前连接 R: 后连接 P: 插入式接线	操作方式 Z:转动手柄操作 P:电动操作	特殊功能 B: 过载报警不脱扣 G: 接地保护功能 T1: 通讯分励模块 T2: 通讯状态模块 T3: 通讯四遥模块	特殊应用 无: 常规型 TH: 三防型 LC: 低温型					

注：1. 用户必须确认对本产品技术资料已有详细的了解，并应根据断路器将来使用的场合，按“ 订货规范 ”定货。

2. 如用户订货时对电子式脱扣单元保护参数不作要求，本公司将按“ 电子式脱扣单元出厂整定值 ”配置。

3. LC 低温型订货时请与我司联系。

4. 通讯模块分三种：

T1（通讯分励模块）：遥测 + 遥信 + 通讯控制分励脱扣及干接点控制分励脱扣。

T2（通讯状态模块）：遥测 + 遥信 + 通讯控制分励脱扣 + 分合状态（需加装辅助附件，该附件为通讯模块专用，默认标配 20 辅助，均为单辅，400、630、800 壳架只保留一组辅助触头，如需两组请备注）。

T3（通讯四遥模块）：遥测 + 遥信 + 遥调 + 遥控（需加装电操）+ 分合状态（需加装辅助附件，该附件为通讯模块专用，默认标配电操、20 辅助，均为单辅，400、630、800 壳架只保留一组辅助触头，如需两组请备注）。添加通讯模块 (T2、T3) 需加装辅助附件，通讯模块需用一组辅助触头。400 及以上壳架辅助附件为两组辅助触头，另一组默认去除，如需保留该组辅助触头外接使用需在订单注明，400 壳架以下辅助附件为单组辅助触头，如需外接辅助触点需额外加装一组辅助附件。

Product name	Breaking capacity class	Trip units rated current	Electrical accessories	Insulated accessories
	M: Relatively higher type H: Higher performance type	SNS125 shell frame: 32(12,14,16,18,20,22,25,28,30,32),63(25,28,32,36,40,45,50,56,60,63),125(50,63,70,75,80,85,90,95,100,125) SNS250 shell frame: 250(100,112,125,140,150,160,180,200,225,250) SNS400 shell frame: 400(160,180,200,225,250,280,315,350,375,400) SNS630 shell frame: 630(250,280,315,350,375,400,450,500,560,630) SNS800 shell frame: 800(315,350,400,450,500,560,630,700,760,800)	Shunt release Under voltage release Alarm contact Auxiliary contact (See sample for electrical accessories code)	None: no external cover W: Terminal cover (zero flashover)

SNS	125	M	ETS	3P	125	M	P	Z	10	T1	W	TH
Shell frame current 125A 250A 400A 630A 800A	Electronic Trip Units	Number of poles 3P: 3-pole (optional) 4P: 4-pole	None: Distribution M: Motor protection	Installation mode None: Front panel wiring R: Rear panel wiring P: plug-in wiring	Mode of operation Z:Manual cranking P: Motor-driven operation	Special function B: Overload alarm No trip G: Grounding protection function T1: Communication shunt module T2: Communication states module T3: Communication four-remote module	Special applications None: The conventional type TH: Humid tropical type LC: Low temperature type					

Note: 1. Users must confirm that they have a detailed understanding of the technical data of the product, and should order the goods according to the "Order specification" according to the occasion where the circuit breaker will be used in the future.

2. If the user does not require the protection parameters of the electronic tripping unit when ordering, the company will configure it according to the "factory setting value of the electronic tripping unit".

3. Please contact our company for the LC low-temperature order.

4. Three communication modules:

T1 (communication excitation module): telemetry + remote communication of communication + communication control score excitation deduction and dry contact control score excitation deduction.

T2 (communication status module): telemetry + remote communication + communication control excitation deduction + split state (need to install auxiliary accessories, which is special for communication module, the default standard 20 auxiliary, all single auxiliary, 400,630,800 shell frame only retain one set of auxiliary contacts, please note if two groups).

T3 (communication four remote module): telemetry + remote communication + remote control + remote control + remote control (need to install electric operation) + off and off state (need to install auxiliary accessories, the attachment is special for communication module, default standard distribution operation, 20 auxiliary, are single auxiliary, 400,630,800 shell frame only retain one group of auxiliary contacts, please note for two groups). Add communication modules (T2, T3), add auxiliary accessorized to be installed, and a set of auxiliary touch heads is required for the communication module. The auxiliary accessories of 400 and above shell frame are two groups of auxiliary contacts, and the other group is removed by default. If the auxiliary group is retained, The external use of the contacts should be indicated in the order. The auxiliary accessories below the 400 frame are a single set of auxiliary contacts. If the external auxiliary contacts are required, an additional set of auxiliary accessories should be installed.

SNS电子式断路器
SNS electronic circuit breaker

断路器参数表
Circuit breaker parameter table

				SNS125			SNS250		SNS400		SNS630		SNS800	
极数 Number of poles				3、4			3、4		3、4		3、4		3、4	
连接 Connect	固定式 Fixed	前连接 Front connection		■			■		■		■		■	
		后连接 Rear connection		■			■		■		■		■	
	插入式 Plug-in	后连接 Rear connection		■			■		■		■		■	
额定电流In(A) Rated current (A)		40℃		32/63/125			250		400		630		800	
整定电流Ir1(A) Setting current Ir1(A)	In	40℃		32(12,14,16,18,20,22,25,28,30,32), 63(25,28,32,36,40,45,50,56,60,63), 125(50,63,70,75,80,85,90,95,100,125)			250(100,112,125,140,150, 160,180,200,225,250)		400(160,180,200,225,250, 280,315,350,375,400)		630(250,280,315,350,375, 400,450,500,560,630)		800(315,350,400,450,500, 560,630,700,760,800)	
额定绝缘电压(V) Rated insulation voltage (V)	Ui			1000			1000		1000		1000		1000	
额定冲击耐受电压(kV) Rated impulse withstand voltage (kV)	Uimp			8			8		8		8		8	
额定短时耐受电流 Rated short-time withstand current	Icw (kA)			3			3		5		10		10	
额定工作电压(V) Rated operational voltage (V)	Ue	AC50/60Hz	400V、690V	400V、690V			400V、690V		400V、690V		400V、690V		400V、690V	
额定极限短路分断能力 Rated limit short-circuit breaking capacity	Icu(kA)	AC50/60Hz		M	H		M	H	M	H	M	H	M	H
			400V	50	85		50	85	65	100	65	100	75	100
			690V	20	-		20	-	20	-	20	-	20	-
额定运行短路分断能力 Rated operational short-circuit breaking capacity	Ics(kA)	AC50/60Hz		M	H		M	H	M	H	M	H	M	H
			400V	35	50		35	50	42	65	42	65	50	65
			690V	10	-		10	-	15	-	15	-	15	-
飞弧距离(mm) Arcing distance (mm)				≥50			≥50		≥100		≥100		≥100	
隔离适用性 Isolation applicability				适用 Apply			适用 Apply		适用 Apply		适用 Apply		适用 Apply	
使用类别 Type of use				A			A		B		B		B	
电气寿命(次) Electrical life (times)			AC400V	8000			8000		7500		7500		7500	
			AC690V	1500			1000		1000		1000		500	
机械寿命(次) Mechanical life (times)	免维护 Maintenance-free			20000			20000		10000		10000		10000	
	有维护 With maintenance			40000			40000		20000		20000		20000	
安装/连接 Installation/connection														
尺寸W×L×H(mm) Dimension W×L×H(mm)	固定式前连接 Fixed front connection		3P/4P	92×150×98/122×150×98			107×165×95/142×165×95		150×257×116/198×257×116		182×270×116/240×270×116		210×280×124/280×280×124	
重量(kg) Weight (kg)	固定式前连接 Fixed front connection		3P/4P						5.5/7.1					

SNS带剩余电流保护断路器
SNS Circuit breaker with residual current protection

快速选型表
Quick selection table

产品名称	分断等级	脱扣单元额定电流	四极产品N极类型代号	电气附件	漏电动作电流	特殊应用
	M: 较高分断 H: 高分断	SNS125壳架: 16,20,25,32,40,50,63,80,100,125 SNS250壳架: 100,125,140,160,180,200,225,250 SNS400壳架: 225,250,315,350,400 SNS630壳架: 400,500,630	A: N极不安装过电流脱扣单元，且N极始终接通，不与其他三极一起合分 B: N极不安装过电流脱扣单元，且N极与其他三极一起合分 C: N 极安装过电流脱扣单元，且N极与其他三极一起合分 D: N 极安装过电流脱扣单元，且N极始终接通，不与其他三极一起合分	分励 欠压 报警 辅助 (电气附件代号详见样本)	30mA(非延时性) 100mA 300mA 500mA 1000mA	无: 常规型 TH: 三防型 LC: 低温型

SNS	125	M	MIC3	3P	125	M	B	P	Z	10	I	100mA	W	TH
壳架等级电流 125A 250A 400A 630A	脱扣单元类型 MIC2: 电磁脱扣单元 MIC3: 热磁脱扣单元	极数 3P: 3极(可不标) 4P: 4极	无: 配电用 M: 电动机保护用	安装方式 无: 前连接 R: 后连接 P: 插入式连接	操作方式 Z:转动手柄操作 P:电动操作	漏电报警模块 无: 无此功能 I: 漏电报警脱扣 II: 漏电报警不脱扣	绝缘附件 无: 无外部罩壳 W: 端子罩（零飞弧罩）

注：1. 如选择 A 型漏电特性的产品，要特殊标明。

2. 选型示例：用户在订货时，必须将漏电断路器的型号、规格、壳架等级额定电流、工作电压、极数、附件名称、漏电功能、数量等情况写清楚。

例如订购 SNS400 型漏电断路器、四极复式脱扣单元、附件带分励 230V，漏电脱扣报警，中性极类型为 B，工作电压为400V，额定电流 315A，漏电流 300mA，脱扣时间延时型 0.5s，数量 50 台。

即写为订：SNS400M MIC3 4P 315A B 10 300mA 0.5S 50 台。

product name	Breaking capacity class	Trip units rated current	Code of N-pole type of four pole circuit breaker	Electrical accessories	Leakage action current	Special applications
	M: Relatively higher type H: Higher performance type	SNS125 shell frame: 16,20,25,32,40,50,63,80,100,125 SNS250 Shell frame: 100,125,140,160,180,200,225,250 SNS400 Shell frame: 225,250,315,350,400 SNS630 Shell frame: 400,500,630	A:N-pole is not equipped with over-current release, and N-pole is always on; B:N-pole is not equipped with over-current release, and N-pole is combined with other three poles; C：N-pole is installed with over-current release, and N-pole is combined with other three poles; D:N-pole is installed with over-current release, and N-pole is always on.	Shunt release Under voltage release Alarm contact Auxiliary contact (See sample for electrical accessories code)	30mA (non-delay nature) 100mA 300mA 500mA 1000mA	None: the conventional type TH: humid tropical type LC: low temperature type

SNS	125	M	MIC3	3P	125	M	B	P	Z	10	I	100mA	W	TH
Shell frame current 125A 250A 400A 630A	Trip units type MIC 2: Electromagnetic stripping unit MIC 3: Hot magnetic stripping unit	number of poles 3P: 3 -pole (not marked) 4P: 4-pole	None: Distribution M: Motor protection	Installation mode None: Front panel wiring R: Rear panel wiring P: plug-in wiring	Mode of operation Z:Manual cranking operation P: Motor-driven operation	Leakage alarm module None: without this function I: Leakage alarm tripping II: leakage alarm without tripping	Insulation accessories None: no external cover shell W: terminal cover (Zero flashover)

Note: 1. If the product with type A leakage characteristic is selected, it should be specially marked.

2. Selection example: When ordering, the user must write clearly the type, specification, rating current of the shell frame, working voltage, number of poles, attachment name, leakage function, quantity and other information of the leakage circuit breaker.

For example, order SNS400 type leakage circuit breaker, quadrupole compound trip unit, accessories with shunt 230V, leakage trip alarm, neutral pole type B, working voltage of 400V, rated current 315A, leakage current 300mA, trip time delay type 0.5s, the number of 50 sets.

Write as order: SNS400M MIC3 4P 315A B 10 300mA 0.5S 50 PCS.

SNS带剩余电流保护断路器
SNS Circuit breaker with residual current protection

断路器参数表
Circuit breaker parameter table

				SNS125			SNS250		SNS400		SNS630	
极数 Number of poles				3、4			3、4		3、4		3、4	
连接 Connect	固定式 Fixed	前连接 Front connection		■			■		■		■	
		后连接 Rear connection		■			■		■		■	
	插入式 Plug-in	后连接 Rear connection		■			■		■		■	
额定电流In(A) Rated current (A)		40℃		16/20/25/32/40/50/63/80/100/125			100/125/140/160/180/200/225/250		225/250/315/350/400		400/500/630	
额定绝缘电压(V) Rated insulation voltage (V)	Ui			800			800		800		800	
额定冲击耐受电压(kV) Rated impulse withstand voltage (kV)	Uimp			8			8		8		8	
额定工作电压(V) Rated operational voltage (V)	Ue	AC50Hz	400V	400V			400V		400V		400V	
额定极限短路分断能力 Rated limit short-circuit breaking capacity				M	H		M	H	M	H	M	H
	Icu(kA)	AC50Hz	400V	50	70		50	70	65	70	65	70
额定运行短路分断能力 Rated operational short-circuit breaking capacity				M	H		M	H	M	H	M	H
	Ics(kA)	AC50Hz	400V	35	50		35	50	50	70	50	70
额定剩余动作电流 Rated residual action current	IΔn(A)	AC型剩余电流保护 AC type residual current protection		0.03（只有非延时型）/0.1/0.3/0.5 0.03 (non-delay type only) /0.1/0.3/0.5			0.03（只有非延时型）/0.1/0.3/0.5 0.03 (non-delay type only) /0.1/0.3/0.5		0.1/0.3/0.5		0.3/0.5/1	
		A型剩余电流保护 Type Aresidual current protection		0.03（只有非延时型）/0.1/0.3/0.5 0.03 (non-delay type only) /0.1/0.3/0.5			0.03（只有非延时型）/0.1/0.3/0.5 0.03 (non-delay type only) /0.1/0.3/0.5		0.1/0.3/0.5		0.3/0.5/1	
额定剩余不动作电流 Rated residual non-action current	IΔno(A)			1/2IΔn			1/2IΔn		1/2IΔn		1/2IΔn	
额定剩余短路接通(分断)能力 Rated residual short circuit making (breaking) capacity	IΔm(kA)			1/4Icu			1/4Icu		1/4Icu		1/4Icu	
飞弧距离(mm) Arcing distance (mm)				≥50			≥50		≥100		≥100	
隔离适用性 Isolation applicability				适用 Apply			适用 Apply		适用 Apply		适用 Apply	
使用类别 Type of use				A			A		A		A	
电气寿命(次) Electrical life (times)		AC400V		1500			1000		1000		1000	
机械寿命(次) Mechanical life (times)		免维护 Maintenance-free		8500			7000		4000		4000	
安装/连接 Installation/connection												
尺寸W×L×H(mm) Dimension W×L×H(mm)	固定式前连接 Fixed front connection		3P/4P	92×150×96/122×150×96			107×165×95/142×165×95		150×257×116/198×257×116		210×280×123/280×280×123	
重量(kg) Weight (kg)	固定式前连接 Fixed front connection		3P/4P									

SNS DC系列直流塑壳断路器
SNS DC series DC molded case circuit breakers

快速选型表
Quick selection table

产品型号	脱扣单元额定电流	电气附件	特殊应用
	SNS250DC壳架: 63,80,100,125,140,160,180,200,225,250 SNS315DC壳架: 280,300,315 SNS400DC壳架: 250,315,350,400 SNS630DC壳架: 400,500,630 SNS800DC壳架: 630,700,800	分励 报警 辅助 (电气附件代号详见样本)	无: 常规型 TH: 三防型 LC: 低温型

SNS	250	TM	DC	3P	250	Z	10	M	TH
壳架等级电流	250A 315A 400A 630A 800A	脱扣单元类型 TM: 热磁脱扣单元 MA: 单磁脱扣单元	DC: 直流代号 PV: 光伏专用代号	极数 2P: 2极 3P: 3极		操作方式 Z:转动手柄操作 P:电动操作		接线方式 L: L型接线 M: M型接线	

Product model	Trip units rated current	Electrical accessories	Special applications
	SNS250DCshell frame: 63,80,100,125,140,160,180,200,225,250 SNS315DCshell frame: 280,300,315 SNS400DCshell frame: 250,315,350,400 SNS630DCshell frame: 400,500,630 SNS800DCshell frame: 630,700,800	Shunt release Alarm contact Auxiliary contact (See sample for electrical accessories code)	None: the conventional type TH: humid tropical type LC: low temperature type

SNS	250	TM	DC	3P	250	Z	10	M	TH
Shell frame current	250A 315A 400A 630A 800A	Trip units type TM: Thermal magnetic release unit MA: Single magnetic	DC: Direct-current code PV: Photovoltaic specific code	Number of poles 2P: 2-pole 3P: 3-pole		Mode of operation Z: manual cranking operation P: motor-driven operation		Wiring method L: L-shaped wiring M: M-type wiring	

SNS DC系列直流塑壳断路器
SNS DC series DC molded case circuit breakers

断路器参数表
Circuit breaker parameter table

				SNS DC、PV					SNS DC、PV							
极数 Number of poles				2、3					2、3		2、3		2、3		2、3	
连接 Connect	固定式 Fixed	前连接/后连接 Front connection/Rear connection		■					■		■		■		■	
壳架电流(A) Frame current (A)		40℃		250	315	400			400V		630		630V		800	
额定电流(A) Rated current (A)	In	40℃		63/80/100/125/ 140/160/180/ 200/225/250	280/300/315	250/315/350/400			250/315/350/400		400/500/630		400/500/630		630/700/800	
额定绝缘电压(V) Rated insulation voltage (V)	Ui			1500					1500		1500		1500		1500	
额定冲击耐受电压(kV) Rated impulse withstand voltage	Uimp			12					12		12		12		12	
类型 Type				DC	PV	DC	PV		DC	PV	DC	PV	DC	PV	DC	PV
额定工作电压(V) Rated operational voltage (V)	Ue	AC50/60Hz	2P外形 2P appearance	DC250V、DC500V、DC750V、 DC1000V、DC1500V		DC250V、DC500V、DC750V、 DC1000V、DC1500V			DC250V、DC500V、DC750V、 DC1000V、DC1500V		DC250V、DC500V 、DC750V、 DC1000V、DC1500V		DC250V、DC500V 、DC750V、 DC1000V、DC1500V		DC250V、DC500V 、DC750V、 DC1000V 、DC1500V	
			3P外形 3P appearance	DC1000V、DC1250V 、DC1500V		DC1000V、DC1500V			DC1000V、DC1500V		DC1000V、DC1250V、DC1500V		DC1000V、DC1250V、DC1500V		DC1000V、DC1500V	
额定极限短路分断能力 Rated limit short-circuit breaking capacity	Icu(kA)	AC50/60Hz	2P外形 2P appearance	DC1000V：15 DC1500V：5	DC250V、DC500V：50 DC750V、DC1000V：25 DC1500V：7.5	DC250V、DC500V：25 DC750V、DC1000V：15 DC1500V：10	DC250V、DC500V：50 DC750V、DC1000V：25 DC1500V：10		DC1000V：30 DC1500V：25	DC1000V：40 DC1500V：30	DC1000V：35 DC1500V：25	DC250V、DC500V：50 DC750V、DC1000V：35 DC1500V：25	DC1000V：30 DC1500V：25	DC1000V：40 DC1500V：30	DC250V、DC500V：25 DC750V、DC1000V：15 DC1500V：10	DC250V、DC500V：50 DC750V、DC1000V：25 DC1500V：10
			3P外形 3P appearance	DC1500V：20	DC1000V、DC1250V、 DC1500V：25	DC1000V：30 DC1500V：25	DC1000V：40 DC1500V：30		——	——	DC1000V：30 DC1500V：25	DC1000V：30 DC1500V：25	——	——	DC1000V：30 DC1500V：25	DC1000V：40 DC1500V：30
额定运行短路分断能力 Rated operational short-circuit breaking capacity	Ics(kA)	AC50/60Hz		100%1cu		100%1cu			100%1cu		100%1cu		100%1cu		100%1cu	
飞弧距离(mm) Arcing distance (mm)				≯50		≯100			0		0		0		0	
隔离适用性 Isolation applicability				适用 Apply		适用 Apply			适用 Apply		适用 Apply		适用 Apply		适用 Apply	
使用类别 Type of use				A		A			A		A		A		A	
电气寿命(次) Electrical life (times)				1500		1000			800	500	1500		1500		800	500
机械寿命(次) Mechanical life (times)				20000		15000			15000		20000		20000		15000	
安装/连接 Installation/connection																
尺寸W×L×H(mm) DimensionW×L×H(mm)	固定式前连接 Fixed front connection	2P 3P		73×200×135/107×200×135		130×270×158/182×270×158			2P：106×275×178		130×270×158/182×270×158		2P：106×275×178		130×270×158/182×270×158	
重量(kg) Weight (kg)	固定式前连接 Fixed front connection	2P 3P														

SNS HU系列高电压等级交流断路器
SNS HU series high-voltage AC circuit breakers

快速选型表
Quick selection table

产品名称	脱扣单元类型	脱扣单元额定电流	特殊应用
	TM: 热磁脱扣单元 MA: 电磁脱扣单元	SNS250HU壳架: 16,20,25,32,63,80,100,125,140,160,180,200,225,250 SNS315HU壳架: 280,300,315,320 SNS400HU壳架: 250,315,350,400 SNS630HU壳架: 400,500,630 SNS800HU壳架: 630,700,800	无: 常规型 TH: 三防型 LC: 低温型

SNS	250	TM	HU	3P	250	M	Z	10	TH
壳架等级电流(A)		高电压代号	极数				操作方式	电气附件	
250 315 400 630 800			3P: 3极	无: 配电用 M: 电动机保护用			Z:转动手柄操作 P:电动操作	分励 欠压 报警 辅助 (电气附件代号详见样本)	

注：仅提供板前接线

Product name	Trip units type	Trip units rated current	Special applications
	TM: Thermal Magnetic Trip Units MA: Magnetic Trip Units	SNS250HU shell frame: 16,20,25,32,63,80,100,125,140,160,180,200,225,250 SNS315HU shell frame: 280,300,315,320 SNS400HU shell frame: 250,315,350,400 SNS630HU shell frame: 400,500,630 SNS800HU shell frame: 630,700,800	None: the conventional type TH: humid tropical type LC: low temperature type

SNS	250	TM	HU	3P	250	M	Z	10	TH
Shell frame current(A)		High voltage code	Number of poles				Mode of operation	Electrical accessories	
250 315 400 630 800			3P: 3-pole	None: Distribution M: Motor protection			Z: manual cranking operation P: motor-driven operation	Shunt release Under voltage release Alarm contact Auxiliary contact (See sample for electrical accessories code)	

Note: Only front panel wiring is provided

SNS HU系列高电压等级交流断路器
SNS HU series high-voltage AC circuit breakers

断路器参数表
Circuit breaker parameter table

				SNS HU							SNS HU					
极数 Number of poles				3							3			3		3
连接 Connect	固定式 Fixed	前连接/后连接 Front connection/Rear connection		■							■			■		■
壳架电流(A) Frame current (A)		40℃		250			315				400			630		800
额定电流(A) Rated current (A)	In	40℃		16/20/25/32/63/80/ 100/125/140/160/ 180/200/225/250			280/300/315/320				250/315/350/400			400/500/630		630/700/800
额定绝缘电压(V) Rated insulation voltage (V)	Ui			1150							1250			1250		
额定冲击耐受电压(kV) Rated impulse withstand voltage	Uimp			12							12			12		
额定工作电压(V) Rated operational voltage (V)	Ue	AC50/60Hz	800V、1000V、1140V	AC800		AC1000		AC1140			AC800	AC1000	AC1140	AC800	AC1000	AC1140
额定极限短路分断能力 Rated limit short-circuit breaking capacity	Icu(kA)	AC50/60Hz		50	50(H型)	20	25(H型)	15	20(H型)		50	20	15	50	20	15
额定运行短路分断能力 Rated operational short-circuit breaking capacity	Ics(kA)	AC50/60Hz		35	50(H型)	15	20(H型)	15	15(H型)		37.5	15	15	37.5	15	15
飞弧距离(mm) Arcing distance (mm)				0		0					0			0		
隔离适用性 Isolation applicability				适用 Apply		适用 Apply					适用 Apply			适用 Apply		
使用类别 Type of use				A		A					A			A		
电气寿命(次) Electrical life (times)				1500		1500					1500			1500		
机械寿命(次) Mechanical life (times)				20000		20000					20000			20000		
安装/连接 Installation/connection																
尺寸W×L×H(mm) DimensionW×L×H(mm)	固定式前连接 Fixed front connection	本体 Main body		107×200×135		107×200×135					150×257×156			182×270×158		
		含飞弧罩 Including flying arc cover		107×280×135		107×280×135					150×307×156			182×320×158		
重量(kg) Weight (kg)	固定式前连接 Fixed front connection	3P														

SNX热磁式断路器
SNX thermal magnetic circuit breaker

快速选型表
Quick selection table

产品名称	分断等级	脱扣单元额定电流	安装方式	操作方式	电气附件	绝缘附件	特殊应用
	N: 较高分断型 H: 高分断型 S: 超高分断型	SNX100、160、250壳架: 16,20,25,32,40,50,63,80,100,125,160,200,225,250 SNX400、630壳架: 250,320,350,400,450,500,550,630	无: 固定式前连接 FR: 固定式后连接 PF: 插入式前接线 PR: 插入式后接线 D: 抽出式接线	Z:转动手柄操作 P:电动操作	分励 欠压 报警 辅助 (电气附件代号详见样本)	无: 无外部罩壳 W: 端子罩（零飞弧罩）	无: 常规型 TH: 三防型 LC: 低温型

SNX	100	N	TMD	3P	125	M	B	PF	Z	10	I	W	TH

壳架等级电流	脱扣单元类型	极数		四极产品N极类型代号	过载报警不脱扣
100A 160A 250A 400A 630A	TMD: 热磁脱扣单元 MA: 电磁脱扣单元	3P: 3极 (可不标) 4P: 4极	无: 配电用 M: 电动机保护用	A: N极不安装过电流脱扣单元，且N极始终接通，不与其他三极一起合分 B: N极不安装过电流脱扣单元，且N极与其他三极一起合分 C: N 极安装过电流脱扣单元，且N极与其他三极一起合分 D: N 极安装过电流脱扣单元，且N极始终接通，不与其他三极一起合分	无: 无此功能 I: 过载报警不脱扣

注：1. 订过载报警不脱扣时填“I”，当过载报警时，断路器不脱扣，主回路不断开。中性极为C、D型的四极断路器不具有过载报警不脱扣功能。

2. 选型示例：如订购 SNX100N 三极，电动机保护用，额定工作电压为 AC400V, 额定电流为 80A 并带分励、辅助触头、板前接线且要求两台带机械联锁机构，分励额定电压 AC220V。

即写为订：SNX100N TMD 80A M 40 Ue:AC400V，前连接 2 台机械联锁，分励额定电压:AC220V。

Product name	Breaking capacity class	Trip units rated current	Installation mode	Mode of operation	Electrical accessories	Insulation accessories	Special applications
	N: Higher breaking type H: High breaking type S: Ultra high breaking type	SNX100, 160, 250 shell frames: 16,20,25,32,40,50,63,80,100,125,160,200,225,250 SNX400, 630 shell frame: 250,320,350,400,450,500,550,630	None: Fixed front connection FR: Fixed rear connection PF: plug-in front wiring PR: Plug in rear wiring D: Pull-out wiring	Z: manual cranking operation P: motor-driven operation	Shunt release Under voltage release Alarm contact Auxiliary contact (See sample for electrical accessories code)	None: no external cover shell W: Terminal cover (zero flashover)	None: the conventional type TH: humid tropical type LC: low temperature type

SNX	100	N	TMD	3P	125	M	B	PF	Z	10	I	W	TH

Shell frame current	Trip units type	Number of poles		Code of N-pole type of four pole circuit breaker	Overload alarm does not trip
100A 160A 250A 400A 630A	TMD: Thermal Magnetic Trip Units MA: Magnetic Trip Units	3P: 3-pole (not marked) 4P: 4-pole	None: Distribution M: Motor protection	A:N-pole is not equipped with over-current release, and N-pole is always on; B:N-pole is not equipped with over-current release, and N-pole is combined with other three poles; C：N-pole is installed with over-current release, and N-pole is combined with other three poles; D:N-pole is installed with over-current release, and N-pole is always on.	None: without this function I: Overload alarm No trip

Note: 1. Fill in "I" when the overload alarm can not trip. When overload alarm , the circuit breaker do not trip and the main circuit is not open. Neutral extreme type C, D quadrupole circuit breakers have no overload alarm without tripping function.

2. Type selection example: such as ordering SNX100N three poles, motor protection, rated working voltage is AC400V, rated current is 80A, with shunt release, auxiliary contact, front of the board and required two mechanical interlock mechanism, the rated voltage of the shunt release is AC220V.

Write: SNX100N TMD 80A M 40 Ue: AC400V, front connection to two mechanical interlock, the shunt release rated voltage: AC220V.

SNX热磁式断路器
SNX thermal magnetic circuit breaker

断路器参数表
Circuit breaker parameter table

				SNX100			SNX160				SNX250			SNX400			SNX630		
极数 Number of poles				3、4							3、4			3、4			3、4		
连接 Connect	固定式 Fixed	前连接/后连接 Front connection/Rear connection		■							■			■			■		
	插入式 Plug-in	前连接/后连接 Front connection/Rear connection		■							■			■			■		
	抽出式 Pull-out type			■							■			■			■		
壳架电流(A) Frame current (A)		40℃		100			160				250			400			630		
额定电流(A) Rated current (A)	In	40℃		16/20/25/32/40/50/63/80/100			63/80/100/125/160				160/200/225/250			250/320/350/400/450/500/550/630			250/320/350/400/450/500/550/630		
额定绝缘电压(V) Rated insulation voltage (V)	Ui			1000							1000			1000			1000		
额定冲击耐受电压(kV) Rated impulse withstand voltage	Uimp			8							8			8			8		
额定工作电压(V) Rated operational voltage (V)	Ue	AC50/60Hz	400V、690V	400V、690V							400V、690V			400V、690V			400V、690V		
额定极限短路分断能力 Rated limit short-circuit breaking capacity	Icu=Ics(kA)	AC50/60Hz		N	H	S	N	H	S		N	H	S	N	H	S	N	H	S
			400V	55	100	150	55	100	150		55	100	150	55	100	150	55	100	150
额定运行短路分断能力 Rated operational short-circuit breaking capacity	Icu=Ics(kA)	AC50/60Hz		N	H	S	N	H	S		N	H	S	N	H	S	N	H	S
			690V	25	35	65	25	35	65		25	35	65	35	50	65	35	50	65
飞弧距离(mm) Arcing distance (mm)				0							0			0			0		
隔离适用性 Isolation applicability				适用 Apply							适用 Apply			适用 Apply			适用 Apply		
使用类别 Type of use				A							A			A			A		
电气寿命(次) Electrical life (times)			AC400V	15000							15000			10000			10000		
机械寿命(次) Mechanical life (times)				30000							30000			20000			20000		
脱扣电流设定值 Ir(A) Tripping current setting value Ir (A)				1xIn=(0.7-1) 可调 1xIn=(0.7-1) adjustable							1xIn=(0.7-1) 可调 1xIn=(0.7-1) adjustable			1xIn=(0.7-1) 可调 1xIn=(0.7-1) adjustable			1xIn=(0.7-1) 可调 1xIn=(0.7-1) adjustable		
配电型瞬时短路保护电流设定值 Ii (A) Distribution type instantaneous short circuit protection current setting value Ii (A)				10xIn 不可调 (5-10) In ± 20%(>160A) 10xIn non adjustable (5-10) In ± 20% (>160A)							10xIn 不可调 (5-10) In ± 20%(>160A) 10xIn non adjustable (5-10) In ± 20% (>160A)			10xIn 不可调 (5-10) In ± 20%(>160A) 10xIn non adjustable (5-10) In ± 20% (>160A)			10xIn 不可调 (5-10) In ± 20%(>160A) 10xIn non adjustable (5-10) In ± 20% (>160A)		
电动机型瞬时短路保护电流设定值 (A) Motor type instantaneous short circuit protection current setting value (A)				Ii=12 × In,Ir 不可调 Ii=12 x In, Ir is not adjustable							Ii=12 × In,Ir 不可调 Ii=12 x In, Ir is not adjustable			Ii=12 × In,Ir 不可调 Ii=12 x In, Ir is not adjustable			Ii=12 × In,Ir 不可调 Ii=12 x In, Ir is not adjustable		
安装/连接 Installation/connection																			
尺寸W × L × H(mm) DimensionW × L × H(mm)	固定式前连接 Fixed front connection		2/3P 4P	105 × 161 × 86/140 × 161 × 86							105 × 161 × 86/140 × 161 × 86			140 × 255 × 110/185 × 255 × 110			140 × 255 × 110/185 × 255 × 110		
重量(kg) Weight (kg)	固定式前连接 Fixed front connection		2/3P 4P	2.05/2.4			2.2/2.6				2.4/2.8			6.05/7.90			6.2/8.13		
极间距无 / 有端子扩展器 Pole spacing without/with terminal extender				35/45mm							35/45mm			45/52.5mm 45/70mm			45/52.5mm 45/70mm		
横截面积 (mm^2) Cross section area(mm^2)				300							300			4X240			4X240		

SNX电子式断路器
SNX electronic circuit breaker

快速选型表
Quick selection table

产品名称	分断等级	脱扣单元额定电流	安装方式	操作方式	电气附件	绝缘附件	特殊应用
	N: 较高分断型 H: 高分断型 S: 超高分断型	SNX100: 40(18~40)100(40~100) SNX160: 160(63~160) SNX250: 250(100~250) SNX400: 400(160~400) SNX630: 630(250~630)	无: 固定式前连接 FR: 固定式后连接 PF: 插入式前接线 PR: 插入式后接线 D: 抽出式接线	Z:转动手柄操作 P:电动操作	分励 欠压 报警 辅助 (电气附件代号详见样本)	无: 无外部罩壳 W: 端子罩 （零飞弧罩）	无: 常规型 TH: 三防型 LC: 低温型
SNX	100	N	ETS	3P	125	M	B	PF	Z	10	I	W	TH
壳架等级电流 100A 160A 250A 400A 630A	电子脱扣单元 ETS：拨码型 ETS2：液晶型	极数 3P: 3极 (可不标) 4P: 4极	无: 配电用 M: 电动机保护用	四极产品N极类型代号 A: N极不安装过电流脱扣单元，且N极始终接通，不与其他三极一起合分 B: N极不安装过电流脱扣单元，且N极与其他三极一起合分 C: N 极安装过电流脱扣单元，且N极与其他三极一起合分 D: N 极安装过电流脱扣单元，且N极始终接通，不与其他三极一起合分	过载报警不脱扣 无: 无此功能 I: 过载报警不脱扣			

注： 1. 订过载报警不脱扣时填“I”，当过载报警时，断路器不脱扣，主回路不断开。中性极为C、D型的四极断路器不具有过载报警不脱扣功能。

2. 选型示例：如订购 SNX100N 三极，电子脱扣单元，电动机保护用，额定工作电压为 AC400V, 额定电流为 80A 并带分励、辅助触头、板前接线且要求两台带机械联锁机构，分励额定电压 AC220V。

即写为订：SNX100N ETS 80A M 40 Ue:AC400V，前连接 2 台机械联锁，分励额定电压:AC220V。

Product name	Breaking capacity class	Trip units rated current	Installation mode	Mode of operation	Electrical accessories	Insulation accessories	Special applications
	N: Higher breaking type H: High breaking type S: Ultra high breaking type	SNX100: 40(18~40)100(40~100) SNX160: 160(63~160) SNX250: 250(100~250) SNX400: 400(160~400) SNX630: 630(250~630)	None: Fixed front connection FR: Fixed rear connection PF: plug-in front wiring PR: Plug in rear wiring D: Pull-out wiring	Z: manual cranking operation P: motor-driven operation	Shunt release Under voltage release Alarm contact Auxiliary contact (See sample for electrical accessories code)	None: no external cover shell W: Terminal cover (zero flashover)	None: the conventional type TH: humid tropical type LC: low temperature type
SNX	100	N	ETS	3P	125	M	B	PF	Z	10	I	W	TH
Shell frame current 100A 160A 250A 400A 630A	Electronic release unit ETS: Dialing type ETS2: Liquid crystal type	Number of poles 3P: 3-pole (not marked) 4P: 4-pole	None: Distribution M: Motor protection	Code of N-pole type of four pole circuit breaker A:N-pole is not equipped with over-current release, and N-pole is always on; B:N-pole is not equipped with over-current release, and N-pole is combined with other three poles; C:N-pole is installed with over-current release, and N-pole is combined with other three poles; D:N-pole is installed with over-current release, and N-pole is always on.	Overload alarm does not trip None: without this function I: Overload alarm No trip		

Note: 1. Fill in "I" when the overload alarm can not trip. When overload alarm , the circuit breaker do not trip and the main circuit is not open. Neutral extreme type C, D quadrupole circuit breakers have no overload alarm without tripping function.

2. Type selection example: such as ordering SNX100N three poles, electronic release unit, motor protection, rated working voltage is AC400V, rated current is 80A, with shunt release, auxiliary contact, front of the board and required two mechanical interlock mechanism, the rated voltage of the shunt release is AC220V.

Write: SNX100N ETS 80A M 40 Ue: AC400V, front connection to two mechanical interlock, the shunt release rated voltage: AC220V.

SNX电子式断路器
SNX electronic circuit breaker

断路器参数表
Circuit breaker parameter table

				SNX100			SNX160				SNX250			SNX400			SNX630		
极数 Number of poles				3、4			3、4				3、4			3、4			3、4		
连接 Connect	固定式 Fixed	前连接/后连接 Front connection/Rear connection		■			■				■			■			■		
	插入式 Plug-in	前连接/后连接 Front connection/Rear connection		■			■				■			■			■		
	抽出式 Pull-out type			■			■				■			■			■		
壳架电流(A) Frame current (A)		40℃		100			160				250			400			630		
额定电流(A) Rated current (A)	In	40℃		40/100			160				250			400			630		
额定绝缘电压(V) Rated insulation voltage (V)	Ui			1000			1000				1000			1000			1000		
额定冲击耐受电压(kV) Rated impulse withstand voltage	Uimp			8			8				8			8			8		
额定工作电压(V) Rated operational voltage (V)	Ue	AC50/60Hz	400V、690V	400V、690V			400V、690V				400V、690V			400V、690V			400V、690V		
额定极限短路分断能力 Rated limit short-circuit breaking capacity	Icu=Ics(kA)	AC50/60Hz		N	H	S	N	H	S		N	H	S	N	H	S	N	H	S
			400V	55	100	150	55	100	150		55	100	150	55	100	150	55	100	150
额定运行短路分断能力 Rated operational short-circuit breaking capacity	Icu=Ics(kA)	AC50/60Hz		N	H	S	N	H	S		N	H	S	N	H	S	N	H	S
			690V	25	35	65	25	35	65		25	35	65	35	50	65	35	50	65
额定短时耐受电流 Rated short-term withstand current	Icw(kA)			8kA/1s			8kA/1s				8kA/1s			15kA/1s			15kA/1s		
飞弧距离(mm) Arcing distance (mm)				0			0				0			0			0		
隔离适用性 Isolation applicability				适用 Apply			适用 Apply				适用 Apply			适用 Apply			适用 Apply		
使用类别 Type of use				B			B				B			B			B		
电气寿命(次) Electrical life (times)			AC400V	15000			15000				15000			10000			10000		
机械寿命(次) Mechanical life (times)				30000			30000				30000			20000			20000		
脱扣电流设定值 Ir(A) Tripping current setting value Ir (A)				40:18/20/23/25/32/36/40/; 100:40/45/50/55/63/70/80/90/100/OFF			63/70/80/90/100/110/ 125/150/160/OFF				100/110/125/140/160/175/ 200/225/250/250/OFF			160/180/200/230/250/280/ 320/350/400/OFF			250/280/320/350/400/450/ 500/570/630/OFF		
过载长延时整定时间 tr(s) Overload long delay setting time tr (s)				8/16/32/64/128/256/OFF			8/16/32/64/128/256/OFF				8/16/32/64/128/256/OFF			8/16/32/64/128/256/OFF			8/16/32/64/128/256/OFF		
短路短延时设定值 Isd Tripping current setting value Ir (A)				2/3/4/5/6/7/8/9/10/OFF			2/3/4/5/6/7/8/9/10/OFF				2/3/4/5/6/7/8/9/10/OFF			2/3/4/5/6/7/8/9/10/OFF			2/3/4/5/6/7/8/9/10/OFF		
短路短延时时间设定值 tsd(s) Short circuit short delay time setting value tsd (s)				0.1/0.2/0.3/0.4/OFF			0.1/0.2/0.3/0.4/OFF				0.1/0.2/0.3/0.4/OFF			0.1/0.2/0.3/0.4/OFF			0.1/0.2/0.3/0.4/OFF		
瞬时短路保护电流设定值 Ii(xIr) Instantaneous short-circuit protection current setting value Ii (xIr)				2/4/6/7/8/9/10/11/12/OFF			2/4/6/7/8/9/10/11/12/OFF				2/4/6/7/8/9/10/11/12/OFF			2/4/6/7/8/9/10/11/12/OFF			2/4/6/7/8/9/10/11/12/OFF		
安装/连接 Installation/connection																			
尺寸W×L×H(mm) DimensionW×L×H(mm)	固定式前连接 Fixed front connection		2/3P 4P	105×161×86/140×161×86			105×161×86/140×161×86				105×161×86/140×161×86			140×255×110/185×255×110			140×255×110/185×255×110		
重量(kg) Weight (kg)	固定式前连接 Fixed front connection		2/3P 4P	2.05/2.4			2.2/2.6				2.4/2.8			6.05/7.90			6.2/8.13		
极间距无 / 有端子扩展器 Pole spacing without/with terminal extender				35/45mm			35/45mm				35/45mm			45/52.5mm			45/70mm		
横截面积 (mm^2) Cross section area(mm^2)				300			300				300			4X240			4X240		

SNX电子式液晶断路器
SNX electronic liquid crystal circuit breaker

断路器参数表
Circuit breaker parameter table

		SNX100			SNX160			SNX250			SNX400			SNX630		
壳架等级额定电流 Inm(A)		40/100			160			250			400			630		
极数		3/4														
额定绝缘电压 Ui(V)		1000														
额定冲击耐受电压 Uimp(kV)		8														
额定工作电压 Ue(V)		AC400/AC690														
额定工作频率 (Hz)		50/60														
飞弧距离(mm)		6														
短路分断能力级别		N	H	S	N	H	S	N	H	S	N	H	S	N	H	S
400V额定极限短路分断能力 Icu=Ics(kA)		55	100	150	55	100	150	55	100	150	55	100	150	55	100	150
690V额定运行短路分断能力 Icu=Ics(kA)		25	35	65	25	35	65	25	35	65	35	50	65	35	50	65
使用类别		B类														
额定短时耐受电流 Icw(kA)		8kA/1s									8kA/1s					
机械寿命(次)		30000									30000					
电气寿命(次)AC400V		15000									15000					
额定电流 In(A)		100			160			250			400			630		
脱扣电流设定值 Ir(A)		0:18-40100:40-100			63-160			100-250			160-400			250-630		
过载长延时整定时间 tr(s)		8-256														
短路短延时设定值 Isd		2-10Ir/1.5-10Ir														
短路短延时时间设定值 tsd(s)		0/0.1/0.2/0.3/0.4(产品默认反时限打开，I2t=(10Isd)2tsd，I> 10Ir 时动作特性为定时限)														
瞬时短路保护电流设定值 Ii(xIr)		2-12Ir														
中性线保护 IN		OFF/50%/100%/200%(当该功能打开时，其设定对过载和短路保护有效)														
接地保护动作值Ig		0.2-1.0In														
接地保护动作时间 tg(s)		0/0.1/0.2/0.3/0.4														
过压保护设定值 Uov(V)		Umin-520														
过压保护时间 tov(s)		1-36														
欠压保护设定值 Uuv(V)		100-Umax														
欠压保护时间 tuv(s)		1-36														
缺相保护设定值 Ulv(V)		50-80														
缺相保护设定时间 tlv(s)		0.2-5														
相序保护		0:A/B/C 1:A/B/C														
设定时间(s)		0.3s														
电压不平衡保护 Uun		5%-30%														
电压不平衡保护时间 tun(s)		1-40														
过频保护设定值 (Hz)		Fmin-65														
过频保护时间设定值(s)		0.2-5														
欠频保护设定值 (Hz)		45-Fmin														
欠频保护时间设定值(s)		0.2-5														
外形尺寸W×L×H(mm)	固定式前连接2/3P 4P	105×161×86/140×161×86									140×255×110/185×255×110					
重量 (kg)	固定式前连接2/3P 4P	2.05/2.4			2.2/2.6			2.4/2.8			6.05/7.90			6.2/8.13		
极间距无/有端子扩展器		35/45mm									45/52.5mm 45/70mm					
横截面积(mm^2)		300									4×240					

		SNX100			SNX160			SNX250			SNX400			SNX630		
Rated current of shell frame level Inm (A)		40/100			160			250			400			630		
Number of poles		3/4														
Rated insulation voltage Ui(V)		1000														
Rated impulse withstand voltage Uimp(kV)		8														
Rated operational voltage Ue(V)		AC400/AC690														
Rated operating frequency (Hz)		50/60														
Arcing distance(mm)		6														
Short circuit breaking capacity level		N	H	S	N	H	S	N	H	S	N	H	S	N	H	S
400V Rated limit short-circuit breaking capacity Icu=Ics(kA)		55	100	150	55	100	150	55	100	150	55	100	150	55	100	150
690VRated operational short-circuit breaking capacity Ics(kA)		25	35	65	25	35	65	25	35	65	35	50	65	35	50	65
Type of use		Class B														
Rated short-term withstand current Icw (kA)		8kA/1s									8kA/1s					
Mechanical life (times)		30000									30000					
Electrical life (times)AC400V		15000									15000					
Rated current In(A)		100			160			250			400			630		
Tripping current setting value Ir (A)		0:18-40100:40-100			63-160			100-250			160-400			250-630		
Overload long delay setting time tr (s)		8-256														
Short circuit short delay setting value Isd		2-10Ir/1.5-10Ir														
Short circuit short delay time setting value tsd (s)		0/0.1/0.2/0.3/0.4(Default inverse time limit for product opening，I2t=(10Isd)2tsd，I> 10Ir The time action characteristic is a fixed time limit)														
Instantaneous short-circuit protection current setting value Ii (xIr)		2-12Ir														
Neutral wire protection IN		OFF/50%/100%/200%(When this function is turned on, its setting is effective for overload and short circuit protection)														
Grounding protection action value Ig		0.2-1.0In														
Grounding protection action time tg (s)		0/0.1/0.2/0.3/0.4														
Overvoltage protection setting value Uov (V)		Umin-520														
Overvoltage protection time tov (s)		1-36														
Undervoltage protection setting value Uuv (V)		100-Umax														
Undervoltage protection time tuv (s)		1-36														
Phase loss protection setting value Ulv (V)		50-80														
Phase loss protection setting time tlv (s)		0.2-5														
Phase sequence protection		0:A/B/C 1:A/B/C														
Set time (s)		0.3s														
Voltage imbalance protection Uun		5%-30%														
Voltage imbalance protection time tun (s)		1-40														
Overfrequency protection setting value (Hz)		Fmin-65														
Overfrequency protection time setting value (s)		0.2-5														
Underfrequency protection setting value (Hz)		45-Fmin														
Underfrequency protection time setting value (s)		0.2-5														
External dimensions W×L×H (mm)	Fixed front connection 2/3P 4P	105×161×86/140×161×86									140×255×110/185×255×110					
Weight (kg)	Fixed front connection 2/3P 4P	2.05/2.4			2.2/2.6			2.4/2.8			6.05/7.90			6.2/8.13		
Pole spacing without/with terminal extender		35/45mm									45/52.5mm 45/70mm					
Cross section area (mm^2)		300									4×240					

SNX系列塑料外壳式断路器
SNX series molded case circuit breaker

漏电保护 Vigi 模块
Leakage protection Vigi module

可通过下列方式，为所有三极或四极 SNX100 至 630 断路器提供漏电保护，这些断路器可装磁、热磁或 ETS 3、5 或 6 脱扣单元。

○ 将 Vigi 模块加装在断路器下口，构成 VigiSNX 漏电。

Leakage protection can be provided for all three pole or four pole SNX100 to 630 circuit breakers through the following methods, which can be equipped with magnetic, thermal magnetic, or ETS 3, 5, or 6 trip units.

○ Install the Vigi module at the lower port of the circuit breaker to form the VigiSNX leakage.

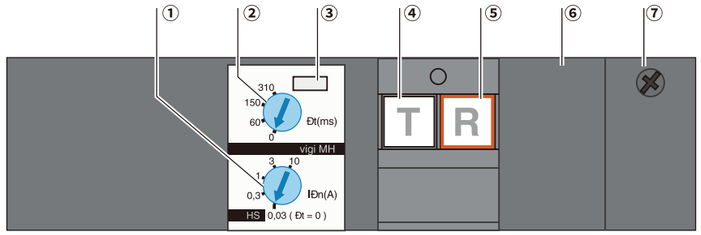
插入式装置
Plug-in device

Vigi 模块可通过安装专用电源联接装置，用于插入式断路器

The Vigi module can be installed with a dedicated power connection device for plug-in circuit breakers

按键功能

Key functions



①灵敏度设置 ②延时设置 (用于选择性漏电保护) ③整定值铅封套

④测试按钮一用来模拟漏电故障，以定期检查漏电保护功能

⑤复位按钮 (漏电故障脱扣后须进行复位) ⑥铭牌 ⑦SDV 辅助触点的位置

①Sensitivity setting ②Delay setting (for selective leakage protection) ③Setting value lead envelope

④Test button 1 is used to simulate leakage faults and regularly check the leakage protection function

⑤Reset button (must be reset after tripping due to leakage fault) ⑥Nameplate ⑦Location of SDV auxiliary contacts

带有 Vigi 漏电保护模块的断路器
Circuit breaker with Vigi leakage protection module

○ 这些断路器的总体特性。

○ Vigi 模块，Vigi 模块可直接安装在断路器下口；实现漏电保护功能。
Vigi 模块能够直接作用于脱扣单元。

○ 灵敏度可调范围为 30mA 至 30A、以及延时设定值可调。

○ The overall characteristics of these circuit breakers.

○ Vigi module, The Vigi module can be directly installed at the lower port of the circuit breaker; Implement leakage protection function.
The Vigi module can directly act on the release unit.

○ The sensitivity can be adjusted from 30mA to 30A, and the delay setting value can be adjusted.

带有漏电保护的 SNX100 至 630 断路器
SNX100 to 630 circuit breakers with leakage protection

加装 Vigi 模块不会改变断路器的特性：

Installing a Vigi module will not change the characteristics of the circuit breaker:

○ 符合标准	○ Compliant with standards
○ 触点指示	○ Contact indication
○ 防护等级：1 级正面绝缘	○ Protection level: Level 1 front insulation
○ 电气特性	○ Electrical characteristics
○ 脱扣单元的特性	○ Characteristics of the release unit
○ 安装和连接模式	○ Installation and Connection Mode
○ 指示、测量和控制附件	○ Indicating, measuring, and controlling attachments
○ 安装和连接附件	○ Install and connect accessories

尺寸和重量 Dimension and weight		SNX100/160/250	SNX400/630
尺寸 Dimension Wx H x D (mm)	3P	105 ×236× 86	140×135×110
	4P	140×236×86	185×355×110
重量 weight（kg)	3P	2.5	8.8
	4P	3.2	10.8

遵循标准
Adhere to standards

○ IEC60947-2，附录 B

○ IEC60255-4 和 IEC60801-2~5，具有抗瞬时过电压，雷电，操作过电压，静电放电，射频干扰的能力。

○ IEC60755，A 级，直流分量的抗干扰能力为 6mA。

○ 基于 VDE 664 标准，可在温度低至 -25℃的情况下运行。

○ IEC60947-2， Appendix B

○ IEC60255-4 and IEC60801-2-5, with the ability to resist instantaneous overvoltage, lightning, operating overvoltage, electrostatic discharge, and radio frequency interference.

○ IEC60755, A-level, the anti-interference ability of the DC component is 6mA.

○ Based on the VDE 664 standard, it can operate at temperatures as low as -25 ℃.

远程指示
Remote indication

加装 Vigi 模块不会改变断路器的特性：

Installing a Vigi module will not change the characteristics of the circuit breaker:

SNX系列塑料外壳式断路器
SNX series molded case circuit breaker

电源
power supply

Vigi 模块可由配电系统自行供电，因而无需任何外部电源。即使在仅 AC 两相供电的情况下，也能够继续运行。

The Vigi module can be powered by the power distribution system itself, so no external power supply is required. Even in the case of only AC two-phase power supply, it can continue to operate.

Vigi 模块的选型
Selection of Vigi modules

型号 Type	Vigi 1.0	Vigi 2.0	Vigi 3.0
极数 Number of poles	3、4	3、4	3、4
SNX-100	■	■	-
SNX-160	■	■	-
SNX-250	-	■	-
SNX-400	-	-	■
SNX-630	-	-	■

保护特性 Protective characteristics			
灵敏度 Sensitivity	固定 Fixed	可调 Adjustable	可调 Adjustable
I △ n(A)	0.3	0.03-0.3-1-3-10	0.3-1-3-10-30
延时是否可调 Delayed whether adjustable	固定 Fixed	可调 Adjustable	可调 Adjustable
延时设定 (ms) Delay setting (ms)	<40	0-60-150-310	0-60-150-310
最大分断时间 (ms) Maximum breaking time (ms)	<40	<40<140<300<800	<40<140<300<800
额定电压交流 50V/60HZ Rated voltage AC 50V/60HZ	200…440	200-440-440...550	200…440-440-550

操作安全
Operation safety

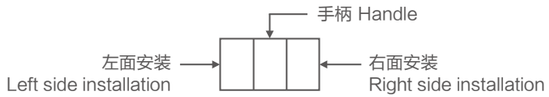
Vigi 模块是一种用户安全型装置，用户需要定期检测（每 6 个月测试一次）。

The Vigi module is a user safety device that requires regular testing (every 6 months).

SNS热磁式断路器
SNS thermal magnetic circuit breaker

电气附件代号与安装方式
Code and installation method of electrical accessories

□ 报警触头 Alarm contact
■ 辅助触头 Auxiliary contact
→ 引线方向 Leader direction
○ 欠压 Under voltage release
● 分励 Shunt release



代号 Code	附件名称 Attachment name	型号 Type / 极数 Number of poles	SNS63		SNS125		SNS250		SNS400		SNS630		SNS800	
			3	4	3	4	3	4	3	4	3	4	3	4
00	无电气附件 No electrical accessories		–		–		–		–		–		–	
08	报警触头 Alarm contact		□		□		□		□		□		□	
10	分励 Shunt release		●		●		●		●		●		●	
20	辅助触头(1NO1NC) Auxiliary contact(1NO1NC)		■		■		■		–		–		–	
	辅助触头(2NO2NC) Auxiliary contact(2NO2NC)		–		–		–		■		■		■	
30	欠压 Under voltage release		○		○		○		○		○		○	
40	分励、辅助触头(1NO1NC) Shunt release、auxiliary contact(1NO1NC)		■●		■●		■●		–		–		–	
	分励、辅助触头(2NO2NC) Shunt release、auxiliary contact(2NO2NC)		–		–		–		■●		■●		■●	
12	分励、辅助触头(2NO2NC) Shunt release、auxiliary contact(2NO2NC)		■●		■●		■●		–		–		–	
50	分励、欠压 Shunt release、under voltage release		○●		○●		○●		○●		○●		○●	
60	二组辅助触头(2NO2NC) Two sets of auxiliary contacts(2NO2NC)		■■		■■		■■		–		–		–	
	二组辅助触头(4NO4NC) Two sets of auxiliary contacts(4NO4NC)		–		–		–		■■		■■		■■	
22	三组辅助触头(3NO3NC) Three sets of auxiliary contacts(3NO3NC)		■■		■■		■■		–		–		–	
23	二组辅助触头(4NO4NC) Two sets of auxiliary contacts(4NO4NC)		■■		■■		■■		–		–		–	
70	辅助触头(1NO1NC)、欠压 auxiliary contact(1NO1NC)、Under voltage release		○■		○■		○■		–		–		–	
	辅助触头(2NO2NC)、欠压 auxiliary contact(2NO2NC)、Under voltage release		–		–		–		○■		○■		○■	
32	欠压、辅助触头(2NO2NC) Under voltage release、auxiliary contact(2NO2NC)		○■		○■		○■		–		–		–	
18	分励、报警触头 Shunt release、alarm contact		□●		□●		□●		□●		□●		□●	
28	辅助触头(1NO1NC)、报警触头 Auxiliary contact(1NO1NC)、alarm contact		■□		■□		■□		–		–		–	
	辅助触头(2NO2NC)、报警触头 Auxiliary contact(2NO2NC)、alarm contact		–		–		–		■□		■□		■□	
38	欠压、报警触头 Under voltage release、alarm contact		○□		○□		○□		○□		○□		○□	
48	分励、辅助触头(1NO1NC)、报警触头 Shunt release、auxiliary contact(1NO1NC)、alarm contact		■□●		■□●		■□●		–		–		–	
	分励、辅助触头(2NO2NC)、报警触头 Shunt release、auxiliary contact(2NO2NC)、alarm contact		–		–		–		■□●		■□●		■□●	
68	二组辅助触头(2NO2NC)、报警触头 Two sets of auxiliary contacts(2NO2NC)、alarm contact		■■□		■■□		■■□		–		–		–	
	二组辅助触头(4NO4NC)、报警触头 Two sets of auxiliary contacts(4NO4NC)、alarm contact		–		–		–		■■□		■■□		■■□	
05	二组辅助触头(3NO3NC)、报警触头 Two sets of auxiliary contacts(3NO3NC)、alarm contact		■■□		■■□		■■□		–		–		–	
78	辅助触头(1NO1NC)、欠压、报警触头 Auxiliary contact (1NO1NC), under voltage, alarm contact		○■□		○■□		○■□		–		–		–	
	辅助触头(2NO2NC)、欠压、报警触头 Auxiliary contact (2NO2NC), under voltage, alarm contact		–		–		–		○■□		○■□		○■□	

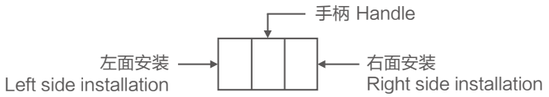
SNS电子式断路器
SNS electronic circuit breaker

电气附件代号与安装方式
Code and installation method of electrical accessories

□ 报警触头 Alarm contact　　○ 欠压 Under voltage release

■ 辅助触头 Auxiliary contact　　● 分励 Shunt release

→ 引线方向 Leader direction



代号 Code	附件名称 Attachment name	型号 Type / 极数 Number of poles	SNS125		SNS250		SNS400		SNS630		SNS800	
			3	4	3	4	3	4	3	4	3	4
00	无电气附件 No electrical accessories		–		–		–		–		–	
08	报警触头 Alarm contact		◻		◻		◻		◻		◻	
10	分励 Shunt release		●		●		●		●		●	
20	辅助触头(1NO1NC) Auxiliary contact(1NO1NC)		■		■		–		–		–	
	辅助触头(2NO2NC) Auxiliary contact(2NO2NC)		–		–		■		■		■	
30	欠压 Under voltage release		○		○		○		○		○	
40	分励、辅助触头(1NO1NC) Shunt release、auxiliary contact(1NO1NC)		● ■		● ■		–		–		–	
	分励、辅助触头(2NO2NC) Shunt release、auxiliary contact(2NO2NC)		–		–		● ■		● ■		● ■	
12	分励、辅助触头(2NO2NC) Shunt release、auxiliary contact(2NO2NC)		■ ●		■ ●		–		–		–	
60	二组辅助触头(2NO2NC) Two sets of auxiliary contacts(2NO2NC)		■ ■		■ ■		–		–		–	
	二组辅助触头(4NO4NC) Two sets of auxiliary contacts(4NO4NC)		–		–		■ ■		■ ■		■ ■	
22	三组辅助触头(3NO3NC) Three sets of auxiliary contacts(3NO3NC)		■ ■		■ ■		–		–		–	
23	二组辅助触头(4NO4NC) Two sets of auxiliary contacts(4NO4NC)		■ ■		■ ■		–		–		–	
70	辅助触头(1NO1NC)、欠压 auxiliary contact(1NO1NC)、Under voltage release		○ ■		○ ■		–		–		–	
	辅助触头(2NO2NC)、欠压 auxiliary contact(2NO2NC)、Under voltage release		–		–		○ ■		○ ■		○ ■	
32	欠压、辅助触头(2NO2NC) Under voltage release、auxiliary contact(2NO2NC)		○ ■		○ ■		–		–		–	
18	分励、报警触头 Shunt release、alarm contact		● ◻		● ◻		● ◻		● ◻		● ◻	
28	辅助触头(1NO1NC)、报警触头 Auxiliary contact(1NO1NC)、alarm contact		■ ◻		■ ◻		–		–		–	
	辅助触头(2NO2NC)、报警触头 Auxiliary contact(2NO2NC)、alarm contact		–		–		■ ◻		■ ◻		■ ◻	
38	欠压、报警触头 Under voltage release、alarm contact		○ ◻		○ ◻		○ ◻		○ ◻		○ ◻	
48	分励、辅助触头(1NO1NC)、报警触头 Shunt release、auxiliary contact(1NO1NC)、alarm contact		● ■ ◻		● ■ ◻		–		–		–	
	分励、辅助触头(2NO2NC)、报警触头 Shunt release、auxiliary contact(2NO2NC)、alarm contact		–		–		■ ● ◻		■ ● ◻		■ ● ◻	
68	二组辅助触头(2NO2NC)、报警触头 Two sets of auxiliary contacts(2NO2NC)、alarm contact		■ ■ ◻		■ ■ ◻		–		–		–	
	二组辅助触头(4NO4NC)、报警触头 Two sets of auxiliary contacts(4NO4NC)、alarm contact		–		–		■ ■ ◻		■ ■ ◻		■ ■ ◻	
05	二组辅助触头(3NO3NC)、报警触头 Two sets of auxiliary contacts(3NO3NC)、alarm contact		■ ■ ◻		■ ■ ◻		–		–		–	
78	辅助触头(1NO1NC)、欠压、报警触头 Auxiliary contact (1NO1NC), under voltage, alarm contact		○ ■ ◻		○ ■ ◻		–		–		–	
	辅助触头(2NO2NC)、欠压、报警触头 Auxiliary contact (2NO2NC), under voltage, alarm contact		–		–		○ ■ ◻		○ ■ ◻		○ ■ ◻	

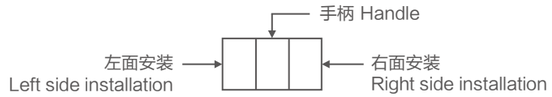
SNS带剩余电流保护断路器
SNS Circuit breaker with residual current protection

电气附件代号与安装方式
Code and installation method of electrical accessories

□ 报警触头 Alarm contact　　○ 欠压 Under voltage release

■ 辅助触头 Auxiliary contact　　● 分励 Shunt release

→ 引线方向 Leader direction



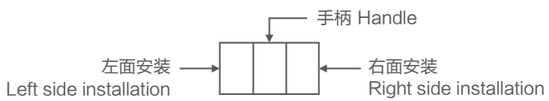
代号 Code	附件名称 Attachment name	型号 Type / 极数 Number of poles	SNS125/250		SNS400		SNS630	
			3极、4极A/D型 3-pole and 4-pole A/D type	4极B/C型 4-pole type B/C	3极、4极A/D型 3-pole and 4-pole A/D type	4极B/C型 4-pole type B/C	3极、4极A/D型 3-pole and 4-pole A/D type	4极B/C型 4-pole type B/C
00	无电气附件 No electrical accessories		–	–	–	–	–	–
08	报警触头 Alarm contact		◻	◻	◻	◻	◻	◻
10	分励 Shunt release		●	●	–	●	–	●
20	辅助触头(1NO1NC) Auxiliary contact(1NO1NC)		■	■	–	–	–	–
	辅助触头(2NO2NC) Auxiliary contact(2NO2NC)		–	–	■	■	■	■
02	辅助触头(2NO2NC) Auxiliary contact(2NO2NC)		■	■	–	–	–	–
30	欠压 Under voltage release		○	○	○	○	○	○
40	分励、辅助触头(1NO1NC) Shunt release、auxiliary contact(1NO1NC)		–	● ■	–	–	–	–
	分励、辅助触头(2NO2NC) Shunt release、auxiliary contact(2NO2NC)		–	–	–	■ ●	–	■ ●
12	分励、辅助触头(2NO2NC) Shunt release、auxiliary contact(2NO2NC)		–	● ■	–	–	–	–
50	分励、欠压 Shunt release、under voltage release		–	–	–	○ ●	–	○ ●
60	二组辅助触头(2NO2NC) Two sets of auxiliary contacts(2NO2NC)		–	■ ■	–	–	–	–
	二组辅助触头(4NO4NC) Two sets of auxiliary contacts(4NO4NC)		–	–	–	■ ■	–	■ ■
22	三组辅助触头(3NO3NC) Three sets of auxiliary contacts(3NO3NC)		–	■ ■	–	–	–	–
23	二组辅助触头(4NO4NC) Two sets of auxiliary contacts(4NO4NC)		–	■ ■	–	–	–	–
70	欠压、辅助触头(1NO1NC) Under voltage release、auxiliary contact(1NO1NC)		–	○ ■	–	–	–	–
	欠压、辅助触头(2NO2NC) Under voltage release、auxiliary contact(2NO2NC)		–	–	–	○ ■	–	○ ■
32	欠压、辅助触头(2NO2NC) Under voltage release、auxiliary contact(2NO2NC)		–	○ ■	–	–	–	–
18	分励、报警触头 Shunt release、alarm contact		–	● ◻	–	◻ ●	–	◻ ●
28	辅助触头(1NO1NC)、报警触头 Auxiliary contact(1NO1NC)、alarm contact		■ ◻	■ ◻	–	–	–	–
	辅助触头(2NO2NC)、报警触头 Auxiliary contact(2NO2NC)、alarm contact		–	–	■ ◻	■ ◻	■ ◻	■ ◻
38	欠压、报警触头 Under voltage release、alarm contact		–	–	–	–	–	–
48	分励、报警触头、辅助触头(1NO1NC) Shunt release、alarm contact、auxiliary contact(1NO1NC)		–	● ■ ◻	–	–	–	–
	分励、报警触头、辅助触头(1NO1NC) Shunt release、alarm contact、auxiliary contact(1NO1NC)		–	–	–	■ ● ◻	–	■ ● ◻
68	二组辅助触头(2NO2NC)、报警触头 Two sets of auxiliary contacts(2NO2NC)、alarm contact		–	■ ■ ◻	–	–	–	–
	二组辅助触头(4NO4NC)、报警触头 Two sets of auxiliary contacts(2NO2NC)、alarm contact		–	–	–	■ ■ ◻	–	■ ■ ◻
05	二组辅助触头(3NO3NC)、报警触头 Two sets of auxiliary contacts(3NO3NC)、alarm contact		–	■ ■ ◻	–	–	–	–
78	欠压、报警触头、辅助触头(1NO1NC) Under voltage release、alarm contact、auxiliary contact(1NO1NC)		–	○ ■ ◻	–	–	–	–

SNS DC系列直流塑壳断路器
SNS DC series DC molded case circuit breakers

电气附件代号与安装方式
Code and installation method of electrical accessories

□ 报警触头 Alarm contact　　● 分励 Shunt release

■ 辅助触头 Auxiliary contact　　→ 引线方向 Leader direction



代号 Code	附件名称 Attachment name	型号 Type / 极数 Number of poles	SNS DC250、315		SNS DC400V/630V	SNS DC400、630、800	
			2	3	2	2	3
00	无电气附件 No electrical accessories		–	–	–	–	–
08	报警触头 Alarm contact						
10	分励 Shunt release						
20	辅助触头 Auxiliary contact						
40	分励、辅助触头 Shunt release, auxiliary contact						
60	二组辅助触头 Two sets of auxiliary contacts						
18	分励、报警触头 Shunt release and alarm contact		–		–	–	
28	辅助触头、报警触头 Auxiliary contact, alarm contact						
48	分励、报警触头、辅助触头 Shunt release, alarm contact, auxiliary contact		–		–	–	
68	二组辅助触头、报警触头 Two sets of auxiliary contacts, alarm contacts		–		–	–	

注：

1、脱扣器方式及内部附件代号首位数字3表示热动-电磁（复式）脱扣器；后两位数字表示内部附件代号，如无附件用00表示。

2、对SNS HU630、SNS DC630中48、规格中辅助触头一对触头（一常开一常闭），68规格中辅助触头为三对触头（即三常开三常闭）。

Note:

1. The first digit 3 of the release method and internal accessory code represents the thermal electromagnetic (compound) release; The last two digits represent the internal attachment code. If there are no attachments, use 00 to indicate.

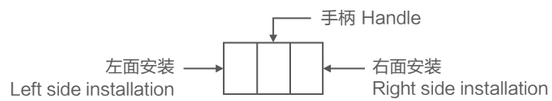
2. For SNS HU630 and SNS DC630, there is one pair of auxiliary contacts (one normally open and one normally closed) in the 48 specifications, and three pairs of auxiliary contacts (i.e. three normally open and three normally closed) in the 68 specifications.

SNS HU系列高电压等级交流断路器
SNS HU series high-voltage AC circuit breakers

电气附件代号与安装方式
Code and installation method of electrical accessories

□ 报警触头 Alarm contact　　● 分励 Shunt release

■ 辅助触头 Auxiliary contact　　→ 引线方向 Leader direction



代号 Code	附件名称 Attachment name	型号 Type / 极数 Number of poles	SNS HU250、315	SNS HU400	SNS HU630、800
			3	3	3
00	无电气附件 No electrical accessories		–	–	–
08	报警触头 Alarm contact				
10	分励 Shunt release				
20	辅助触头 Auxiliary contact				
40	分励、辅助触头 Shunt release, auxiliary contact				
60	二组辅助触头 Two sets of auxiliary contacts				
18	分励、报警触头 Shunt release and alarm contact				
28	辅助触头、报警触头 Auxiliary contact, alarm contact				
48	分励、报警触头、辅助触头 Shunt release, alarm contact, auxiliary contact				
68	二组辅助触头、报警触头 Two sets of auxiliary contacts, alarm contacts				

注：

1、脱扣器方式及内部附件代号首位数字3表示热动-电磁（复式）脱扣器；后两位数字表示内部附件代号，如无附件用00表示。

2、对SNS HU630、SNS DC630中48、规格中辅助触头一对触头（一常开一常闭），68规格中辅助触头为三对触头（即三常开三常闭）。

Note:

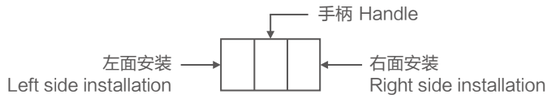
1. The first digit 3 of the release method and internal accessory code represents the thermal electromagnetic (compound) release; The last two digits represent the internal attachment code. If there are no attachments, use 00 to indicate.

2. For SNS HU630 and SNS DC630, there is one pair of auxiliary contacts (one normally open and one normally closed) in the 48 specifications, and three pairs of auxiliary contacts (i.e. three normally open and three normally closed) in the 68 specifications.

SNX系列塑料外壳式断路器
SNX series molded case circuit breaker

电气附件代号与安装方式
Code and installation method of electrical accessories

□ 报警触头 Alarm contact
■ 辅助触头 Auxiliary contact
→ 引线方向 Leader direction
○ 欠压 Under voltage release
● 分励 Shunt release



代号 Code	附件名称 Attachment name	型号 Type	SNX100		SNX160		SNX250		SNX400		SNX630	
		极数 Number of poles	3	4	3	4	3	4	3	4	3	4
00	无电气附件 No electrical accessories		–		–		–		–		–	
08	报警触头 Alarm contact											
10	分励 Shunt release											
20	辅助触头 Auxiliary contact											
30	欠压 Under voltage release											
40	分励、辅助触头 Shunt release, auxiliary contact											
60	二组辅助触头 Two sets of auxiliary contacts											
70	欠压、辅助触头 Under voltage release, auxiliary contact											
18	分励、报警触头 Shunt release and alarm contact											
28	辅助触头、报警触头 Auxiliary contact, alarm contact											
38	欠压、报警触头 Under voltage release, alarm contact											
48	分励、报警触头、辅助触头 Shunt release, alarm contact, auxiliary contact											
68	二组辅助触头、报警触头 Two sets of auxiliary contacts, alarm contacts											
78	欠压、报警触头、辅助触头 Under voltage release, alarm contact, auxiliary contact											

部分业绩
Partial performance

比亚迪汽车集团
Byd Auto Group

TCL空调武汉智能产业园
TCL Air conditioning Wuhan Intelligent Industrial Park

碾盘山水利水电枢纽工程
Nianpanshan Water Conservancy and Hydropower Project

随州传染病医院
Suizhou infectious disease Hospital

荆州东高速服务区
Jingzhou East high-speed service area

湖北交投京港澳高速武汉段
Wuhan Section of Hubei Jiaotou Beijing Hong Kong Macao Expressway

国家能源集团朔黄铁路
National energy group Shuohuang Railway

百威集团
Budweiser Group

雅迪科技（广州）公司
Yadi Technology (Guangzhou) Co., Ltd

南都电源光伏
Nandu Power Supply Photovoltaic

恩施州某污水处理厂
A sewage treatment plant in Enshi Prefecture

中国电建
Power Construction Corporation of China

阳逻港物流园
Yangluo Port logistics Park

人福药业集团
Renfu Pharmaceutical Group

江夏区大桥新区渔牧村
Jiangxia district Bridge New area fishing village

鄂州会展中心
Ezhou Convention and Exhibition Center














盛隆电气鄂州智能制造基地
Shenglong Electric Ezhou Intelligent Manufacturing Base

“南山天樾”专用供电工程项目
"Nanshan Tianyue" dedicated power supply engineering projects

罗山县人民医院
Luoshan County People's Hospital

襄阳市襄城区老年养护中心
Xiangcheng District Elderly Care Center in Xiangyang City

宝工湖北建工项目
Baogong Hubei Construction Engineering Project

七一七研究所幼儿园
717 Research Institute Kindergarten

武汉中法生态城
Wuhan Sino French Ecological City

江汉集团
Jianghan Group

云溪华庭
Yunxi Huating

襄阳高速本部配电室
Xiangyang Expressway Headquarters Distribution Room

京沪高速公路
Beijing Shanghai Expressway

北京市测绘设计研究院
Beijing Institute of Surveying and Mapping Design and Research

中铁建电气化局吉布提项目
China Railway Construction Electrification Bureau Djibouti Project

张家湾小学
Zhangjiawan Primary School

大悟妇幼
Dawu Maternal and Child Health

泉水实验学校三期
Spring Water Experimental School Phase III

中铁十八局
China Railway 18th Bureau

钢都社区卫生服务中心
Steel Capital Community Health Service Center

宝鸡中医院康复住院
Rehabilitation hospitalization at Baoji Traditional Chinese Medicine Hospital

玲珑家园
Linglong Home

澳门山庄
Macau mountain villa

蔡甸新福茂中央广场配电房
Caidian Xinfumao Central Plaza Power Distribution Room

前沿生物技术产业园
Frontier Biotechnology Industrial Park

湖北经济学院
Hubei University of Economics

永泰金蛋二期
Yongtai Golden Egg Phase II

咸宁孙田变电站
Xianning Suntian Substation

中国科学院
Chinese Academy of Sciences

保定城中村改造
Renovation of urban villages in Baoding

智慧工厂奥山郡
Wisdom Factory Aoshan shire

潮南污水一期
Chaonan Sewage Phase I

智慧工厂洪山第四小学
Wisdom Factory Hongshan Fourth Primary School

智慧工厂恺德熙园项目
Wisdom Factory Kaide Xiyuan Project

智慧工厂武穴污水
Wisdom Factory Wuxue Sewage

通信管理局机房改造项目
Communication Management Bureau Computer Room Renovation Project

嘉峪关物资库
Jiayuguan Material Warehouse

中国长江军品事业部施工
Construction of China Yangtze River Military Products Division

中衡设计集团华中总部
Zhongheng Design Group Central China Headquarters

华润武钢总医院配电设备
Distribution equipment of China Resources Wuhan Iron and Steel General Hospital