

Powering future Protecting now

www.chinasuntree.com

Introduction

Suntree exemplifies excellence in the electrical system covering from PV system, Energy Storage System, Intelligent Electrical System, EV Charging System and so on. With a proven legacy of leadership and innovation, We deliver top-tier electrical products and services that redefine the boundaries of quality and technology. After years of development, Suntree Electric Group Co. has covered 9 subsidiary corporations including power generation and transmission, intelligent fire protection, new energy, IoT system, national grid and so on.



17+
History



9+
Sub Industries



4+
Co-laboratories



200+
Series Products



480+
Solutions



90+
Global Support Office

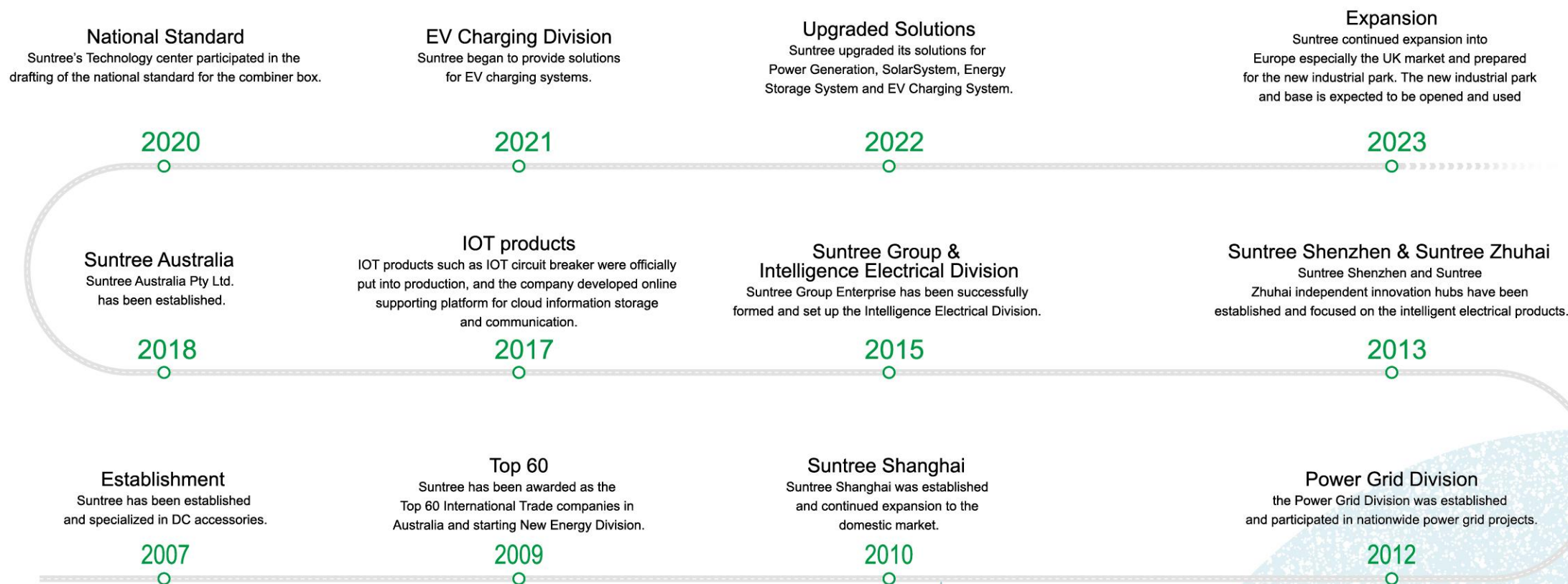


130+
Systematic Distributor



4+
Independent Innovation Center

History



“Commitment to Innovation and Sustainability”

Certificates

Boasting over 300 products copyrights, patents and new product certificated, our commitment to independent innovation drives us forward.

We are honored to be recognized and awarded internationally and domestically.

Sustainable Development

Our 6 long-term commitment:

Climate/Resource/Social Impact/Trust/Equity/Innovation

At Suntree, sustainability is not just a commitment; it's the very essence of our purpose.

We steadfastly forge ahead on our path towards a green and circular future, driven by an unwavering dedication to harnessing the power of the sun and cultivating a sustainable tomorrow.

(Details can be found on Suntree official website)



POWERING FUTURE PROTECTING NOW



Why Choose Suntree



R&D

Innovation Center

At Suntree, our commitment to pioneering solutions is reflected in our steadfast focus on independent innovation. Anchored by four state-of-the-art innovation centers, we drive advancements that redefine the landscape of electrical systems. In our relentless pursuit of excellence, we've forged solid partnerships with internationally acclaimed testing and development hubs, including TUV, UL, CE, among others, ensuring that our products consistently meet and exceed global standards.



Technical Team

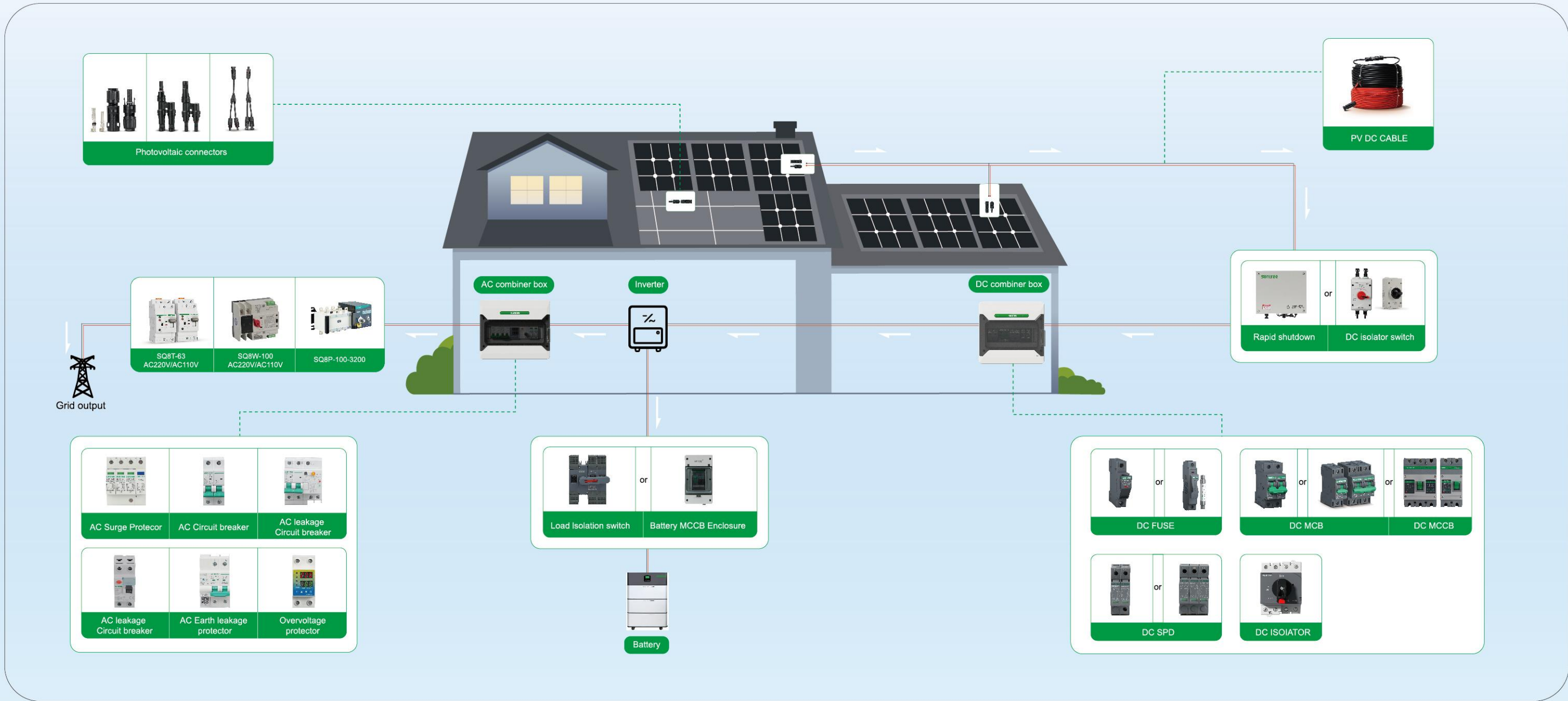
Recognizing that technical expertise is at the heart of our success, Suntree places paramount importance on building a robust technical team. Our team is meticulously structured, with each member contributing to a specific facet of our operations. From quality inspection to research and development, technical support, production, installation, and after-sales service, every aspect is underpinned by a dedicated and specialized team. This meticulous division of labor ensures that each phase of our product life-cycle is handled with precision and care, guaranteeing the highest quality and customer satisfaction.

DC Series

RAPID SHUTDOWN SWITCH	01-02	DC SPD	29-32
DC ISOLATOR SWITCH	03-08	DC MCCB	33-40
DC COMBINER BOX	9-12	DC LOAD ISOLATION SWITCH	41-42
DC FUSE	13-20	DC CABLE SERIES	47-52
DC MCB	21-28	PV CONNECTORS	53-54

AC Series

AC COMBINER BOX	55-56	OVERVOLTAGE PROTECTOR	75-76
AC MCCB	57-60	RESIDUAL CURRENT CIRCUIT BREAKER	77-78
AC MCB	61-62	MTS-MUNAUUL TRANSFER SEITCH	79-82
MTS-AC MCB	63-66	ATS-AUTOMATIC TRANSFER SWITCH	83-96
AC SPD	67-70	AC ISOLATOR SWITC	97-98
AC EARTH LEAKAGE PROTECTOR	71-72	AC LOAD ISOLATION SWITCH	99-100
AUTO RECLOSING-OVER/UNDER VOLATGECIRCUIT BREAKER	73-74	UNIVERSAL CIRCUIT BREAKER	101-104
		WATERPROOF DISTRIBUTION BOX	105-108



MODEL AND SIGNIFICANCE

S	-	ISO	H	/	40	N
Enterprise code		Design Number	Max voltage 1500V		Max current40A	Number of strings 1,2,3,4

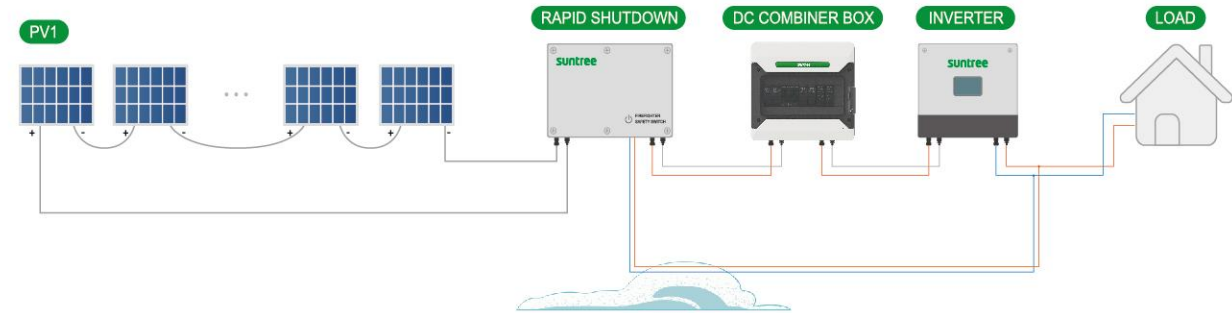
PRODUCT ADVANTAGES

- 1~10 STRINGS AVAILABLE
 - UP TO 40A
 - UP TO 1500V
 - CE CERTIFICATION
 - IP65 PROTECTION & ANTI UV
- APP REMOTE CONTROL
 - SHUTDOWN FEEDBACK SIGNAL
 - AUTO SHUTDOWN EXCEEDING 70C
 - 10000 MECHANICAL LIFE CYCLES
 - LSOLATOR WITH CE,CB,TUV,SAA

DIMENSIONS (mm)

S-ISOH-40-1/S-ISOH-2	S-ISOH-40-3	S-ISOH-40-3: 300*280*115
		S-ISOH-40-4: 350*280*115
		S-ISOH-40-5: 348*270*137
		S-ISOH-40-6: 348*270*137
		S-ISOH-40-7: 348*330*173
		S-ISOH-40-8: 348*330*173
		S-ISOH-40-9: 348*330*195
		S-ISOH-40-10: 348*330*195

PRODUCT ADVANTAGES



RAPID SHUTDOWN

- S-ISOH-40-1
 - S-ISOH-40-2
 - S-ISOH-40-3
 - S-ISOH-40-4
 - S-ISOH-40-5
- S-ISOH-40-6
 - S-ISOH-40-7
 - S-ISOH-40-8
 - S-ISOH-40-9
 - S-ISOH-40-10



ELECTRICAL PARAMETERS

Product Model	S-ISOH-40-1	S-ISOH-40-2	S-ISOH-40-3	S-ISOH-40-4	S-ISOH-40-5	S-ISOH-40-6	S-ISOH-40-7	S-ISOH-40-8	S-ISOH-40-9	S-ISOH-40-10
Number of strings	1	2	3	4	5	6	7	8	9	10
Max DC voltage	1500VDC									
Max DC current	40A									
Parameteres	1500V26A, 1250V32A, 1000V40A, 800V40A, 600V40A									
DC connector	MC4									
Power supply type	AC single phase									
Nominal voltage	230VAC									
Operating voltage	100-270VAC									
Nominal frequency	50 Hz/60 Hz									
Operating Frequency	47-63 HZ									
Nominal current	30mA									
Max current	300mA									
AC connector	Plug-in									
Protection degree	IP65									
Protection level	Class II									
Certification	CE									
Switch according to	EN 60947-3									
Number of operations	>10000									
N. of operations under load	>1500									
Operating temperature	-20°C~70°C									
Temperature sensor trigger	70°C									
Warranty	5 years									
Weight	2950 g	3130 g	3440 g	3950 g	4700 g	5200 g	5800 g	6300 g	6500 g	7000 g

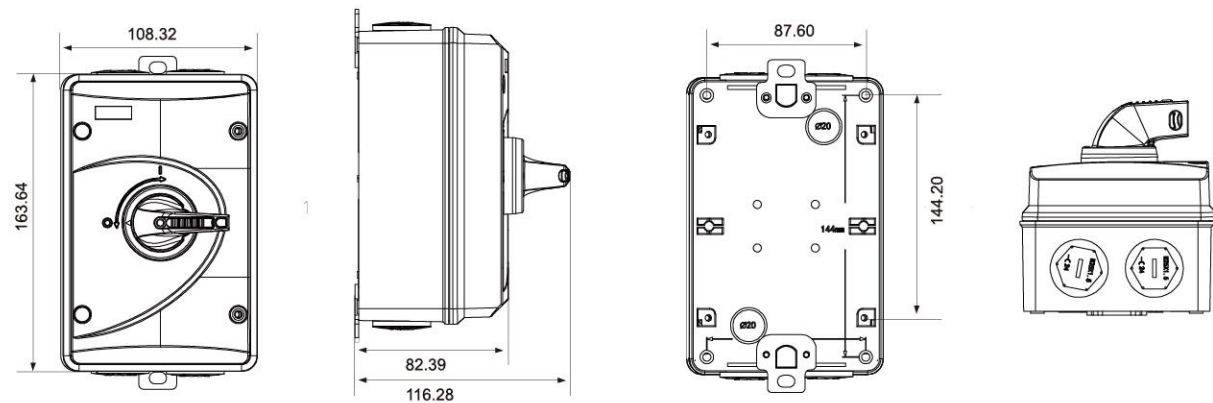
MODEL AND SIGNIFICANCE

S	ISO-40	1000V	H	4	32A	PV	DC1000V
Company Code	Design Number	Rated Voltage	High Voltage	Pole	Pole	PV system	Rated Operational Voltage

PRODUCT ADVANTAGES

- **UV resistance and VO flame retardant material**
- **Contact Silver Plating, silver layer thickness up to the industry's highest standards**
- **Arcing Time in 3 ms**
- **No Polarity**
- **Lockable at OFF position**
- **Plug-in module design**

DIMENSIONS (mm)



DC ISOLATOR SWITCH

- SISO-40/63



ELECTRICAL PARAMETERS

Product Model	SISO-40/63
Pole	2/4
Rated Operational Voltage/Ue(V)	600V-1500V
Rated Operational Current/In(A)	16A-55A
Rated Insulation Voltage/Ui(V)	1500
Rated Impulse withstand Voltage/Uimp(V)	8000
Mechanical Life	10000 times
Electrical Life	3000 times
Fire-retardant Enclosure Level	V0
Device Width x Height (mm)	97.6*179.6
Method of Mounting	wall-mounted
Mounting	Screw fixation
Fastening Torque of Terminals(N.m)	0.5-1.8
Location	Indoor or outdoor
Ambient Temperture	-40°Cto +85°C
Altitude	below 2000m
Pollution Level	III
Installation Class	IP66

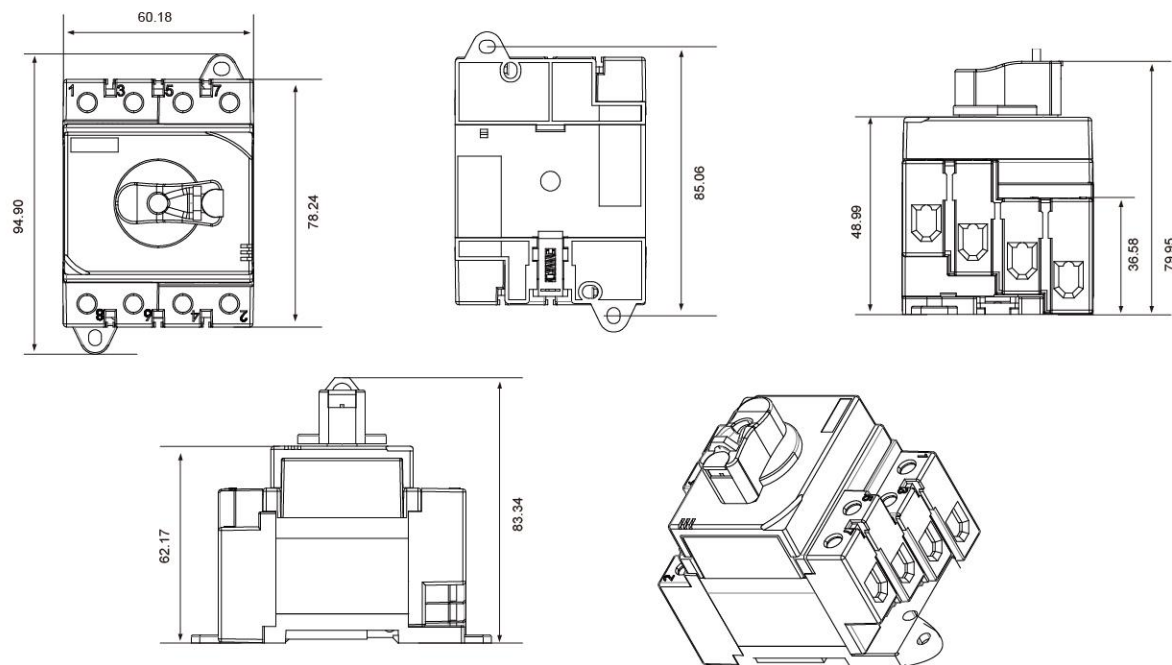
INSTALLATION PRECAUTIONS

- MAXIMUM CABLE SECTION : 4-16mm²
- MC:IP66NW with panel MC4 connector top in and bottom out

PRODUCT ADVANTAGES

- **Non-polarity DC Isolator Switch**
- **Modular design, optional 2-8 levels,Maximum 4 strings**
- **Positive contact or reverse contact optional.**
- **Dynamic sealing design and world class sealing materials guarantee an IP66 protection rate.**
- **Single Hole Mounting, Panel Mounting, Distribution Board, Door Clutch or Enclosure optional.**
- **DC 1500V insulation voltage design, passed IEC/EN60947-3:2009+A1+A2,AS60947.3,UL 5081,GB/T14048.3 test, with TUV, CE, CB, SAA, UL, CCC certifications.**

DIMENSIONS (mm)

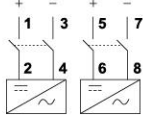
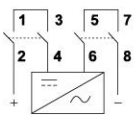
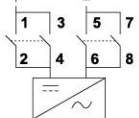
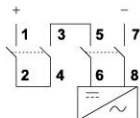


DC ISOLATOR

- SISO-40/MD (1000V)



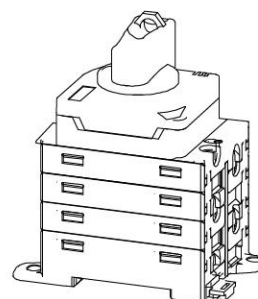
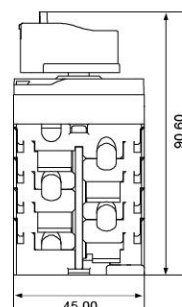
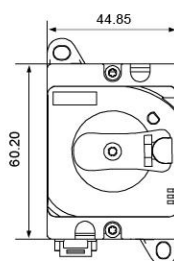
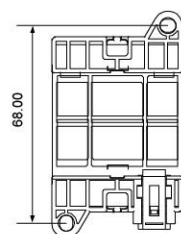
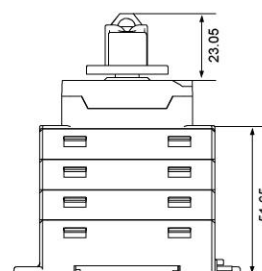
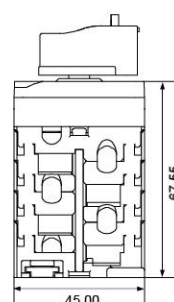
ELECTRICAL PARAMETERS

Product Model		SISO-40MD													
		S1				S2				S3		S4			
DC-PV2	Rated operating voltage (Ue)	≤600V	800V	1000V	1200V	≤600V	800V	1000V	1200V	≤600V		≤600V	800V	1000V	1200V
	Rated Ccurrent(A)	40A	25A	16A	10A	40A	40A	32A	32A	50A		40A	40A	32A	32A
Contacts Wiring graph															
Maximum cable cross sections(incl.jumper)															
Solid or stranded		4-16mm²													
Flexible		4-16mm²													
Flexible (+ multicore cable end)		4-16mm²													
Torque															
Tightening torque terminal screws M4		1.2-1.8Nm													
Tightening torque single hole mounting nut M16		2.0-2.3Nm													
Tightening torque knob screws M3		0.5-0.7Nm													
Switching on or off torque		0.9-1.3Nm													
General parameters															
Knob positions		12 o'clock OFF, 3 o'clock ON (9 o'clock OFF, 12 o'clock ON)													
Electrical Life	Actua	3000 Cycles													
	Standard	300 Cycles													
Mechanical Life	Actua	10000 Cycles													
	Standard	10000 Cycles													
Number of DC poles		2 or 4 (6/8 optional)													
Distance of contacts (per pole)		8mm													
Operation temperature		-40 to +85°C													
Store temperature		-40 to +85°C													
Pollution degree		3													
Overvoltage category		II													
IP rating of shafte and mounting nut		IP20													

PRODUCT ADVANTAGES

- **Non-polarity DC Isolator Switch**
- **Modular design, optional 2-8 levels,Maximum 4 strings**
- **Positive contact or reverse contact optional.**
- **Dynamic sealing design and world class sealing materials guarantee an IP66 protection rate.**
- **Single Hole Mounting, Panel Mounting, Distribution Board, Door Clutch or Encosure optional.**
- **DC 1500V insulation voltage design, passed IEC/EN60947-3:2009+A1+A2,AS60947.3,UL 5081,GB/T14048.3 test, with TUV, CE, CB, SAA, UL, CCC certifications.**

DIMENSIONS (mm)



DC ISOLATOR

- SISO-40/MC (1000V)



ELECTRICAL PARAMETERS

Product Model		SISO-63MD													
		2					4					4T	4B	4S	
DC-PV2	Rated operating voltage (Ue)	600V	800V	1000V	1200V	1500V	600V	800V	1000V	1200V	1500V	600V/800V/1000V/ 1200V/1500V	600V/800V/1000V/ 1200V/1500V	600V/800V/1000V/ 1200V/1500V	
	Rated Ccurrent(A)	50A	40A	25A	18A	10A	50A	40A	25A	18A	10A	50A	50A	50A	
Contacts Wiring graph		+1 +1 - 1 - 1					+1 +1 - 1 - 1 +2 +2 - 2 - 2					+1 +1 +1 +1 - 1 - 1 - 1 - 1	+1 +1 - 1 - 1	+1 +1 +1 - 1 - 1	
Maximum cable cross sections(incl.jumper)															
Solid or stranded		4-16mm²													
Flexible		4-16mm²													
Flexible (+ multicore cable end)		4-16mm²													
Torque															
Tightening torque terminal screws M4		1.2-1.8Nm													
Tightening torque single hole mounting nut M16		2.0-2.3Nm													
Tightening torque knob screws M3		0.5-0.7Nm													
Switching on or off torque		0.9-1.3Nm													
General parameters															
Knob positions		12 o'clock OFF, 3 o'clock ON (9 o'clock OFF, 12 o'clock ON)													
Electrical Life	Actua	3000 Cycles													
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Number of DC poles		2 or 4 (6/8 optional)													
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Operation temperature		-40 to +85°C													
Store temperature		-40 to +85°C													
Pollution degree		3													
Overvoltage category		II													
IP rating of shafte and mounting nut		IP20													

MODEL AND SIGNIFICANCE

S

HLX

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PV

Enterprise oode Design Number PV system

INTRODCUTION AND HIGHLIGHTS

SHLX/PV photovoltaic convergence box is suitable for Inverter maximum input voltage DC550/1500V, the number of PV input road is maximum 24 road. Input 1-2 way, the box can be customised PVC engineering plastics, stainless steel, cold rolled steel, etc., with fire retardant, temperature rise, impact resistance, anti-ultraviolet radiation, protection level of IP65 high-performance materials, the product is strictly in accordance with the "PV convergence equipment specifications" CGC-GF 037: 2014 requirements into the configuration of the item The product is strictly in accordance with the requirements of "PV convergence equipment technical specification" CGC-GF 037:2014 to provide users with a safe, simple, beautiful and applicable PV system products.

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

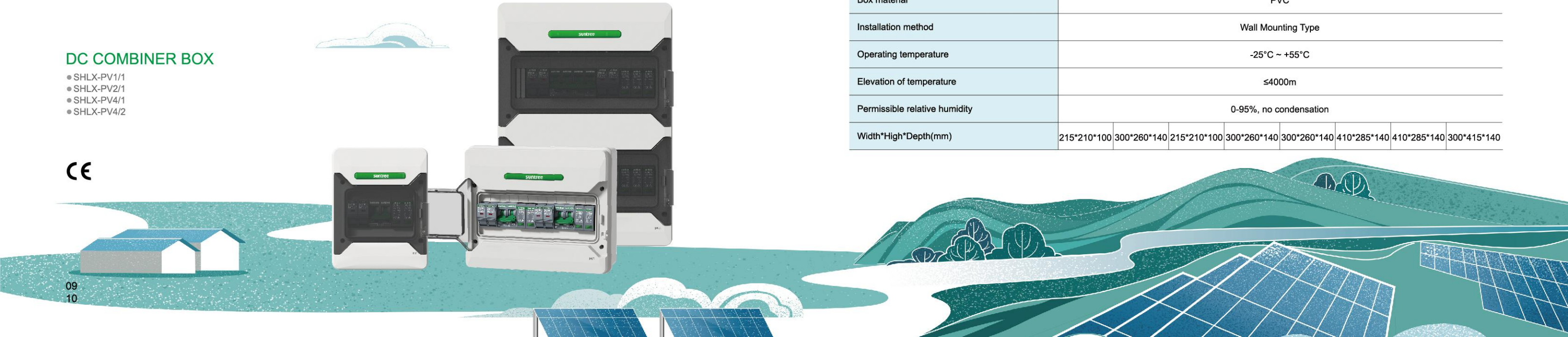
DC COMBINER BOX

- SHLX-PV1/1
- SHLX-PV2/1
- SHLX-PV4/1
- SHLX-PV4/2



ELECTRICAL PARAMETERS

Product Model	SHLX-PV1/1		SHLX-PV2/1		SHLX-PV4/1		SHLX-PV4/2	
System maximum DC Voltage	550V	1500V	550V	1500V	550V	1500V	550V	1500V
Maximum input current for each string	15A							
Maximum input strings	1		2		4		4	
Maximum output switching current	16A/20A		20A/32A		50A/63A		20A/32A	
Number of inverter MPPT	1		1		1		2	
Number of Output strings	1		1		1		2	
Category of test	II Grade protection							
Norminal discharge current	20KA							
Maximum discharge current	40KA							
Voltage Protection Level	2.8KV	3.8KV	2.8KV	3.8KV	2.8KV	3.8KV	2.8KV	3.8KV
Maximum continuous operating voltage Uc	630V	1050V	630V	1050V	630V	1050V	630V	1050V
Poles	2P	3P	2P	3P	2P	3P	2P	3P
Structure Characteristic	Plug-Push Module							
Protection grade	IP65							
Output switch	DC Circuit breaker(Standard)/DC isolation switch(Optional)							
SMC4 Waterproof Connectors	Standard							
PV dc Fuse	Standard							
PV Surge protector	Standard							
Monitoring module	Optional							
Preventing diode	Optional							
Box material	PVC							
Installation method	Wall Mounting Type							
Operating temperature	-25°C ~ +55°C							
Elevation of temperature	≤4000m							
Permissible relative humidity	0-95%, no condensation							
Width*High*Depth(mm)	215*210*100	300*260*140	215*210*100	300*260*140	300*260*140	410*285*140	410*285*140	300*415*140



MODEL AND SIGNIFICANCE

S

HLX

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PV

Enterprise code Design Number PV system

INTRODCUTION AND HIGHLIGHTS

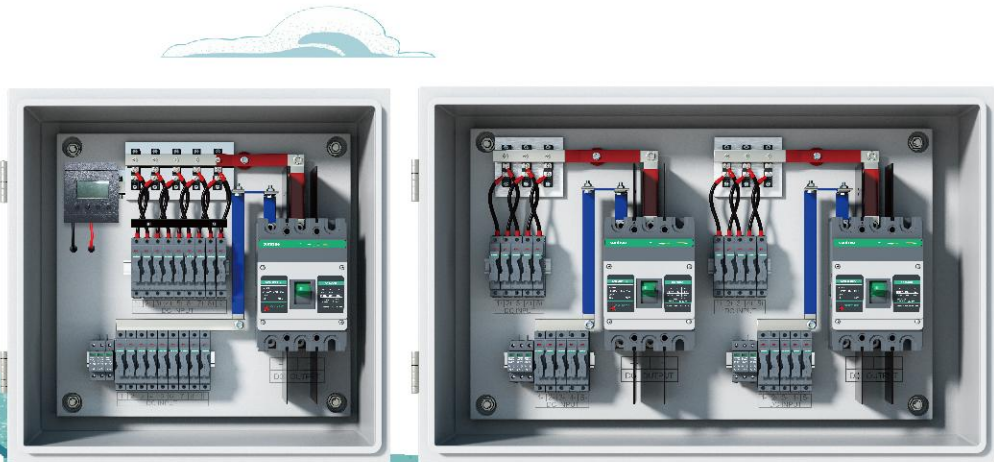
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- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
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- There should be no significant impact and vibration at the installation place

DC COMBINER BOX

- SHLX-PV6/1
- SHLX-PV6/2
- SHLX-PV8/1
- SHLX-PV8/2
- SHLX-PV12/1
- SHLX-PV16/1



ELECTRICAL PARAMETERS

Product Model	SHLX-PV6/1	SHLX-PV6/2	SHLX-PV8/1	SHLX-PV8/2	SHLX-PV12/1	SHLX-PV16/1
System maximum DC Voltage	1500V	1500V	1500V	1500V	1500V	1500V
Maximum input current for each string	15A	15A	20A	20A	20A	20A
Maximum input strings	6	6	8	8	12	16
Maximum output switching current	20A/32A	32A/40A	160A	160A	250A	400A
Number of inverter MPPT	N	2	N	2	N	N
Number of Output strings	1	2	1	2	1	1
Category of test	II Grade protection					
Norminal discharge current	20KA					
Maximum discharge current	40KA					
Voltage Protection Level	3.8KV					
Maximum continuous operating voltage Uc	1050V					
Poles	3P					
Structure Characteristic	Plug-Push Module					
Protection grade	IP65					
Output switch	DC Circuit breaker(Standard)/DC isolation switch(Optional)					
SMC4 Waterproof Connectors	Standard					
PV dc Fuse	Standard					
PV Surge protector	Standard					
Monitoring module	Optional					
Preventing diode	Optional					
Box material	Metal					
Installation method	Wall Mounting Type					
Operating temperature	-25°C ~ +55°C					
Elevation of temperature	≤4000m					
Permissible relative humidity	0-95%, no condensation					
Width*High*Depth(mm)	300*260*140	400*300*160	500*350*190	500*400*190	750*650*200	800*700*220

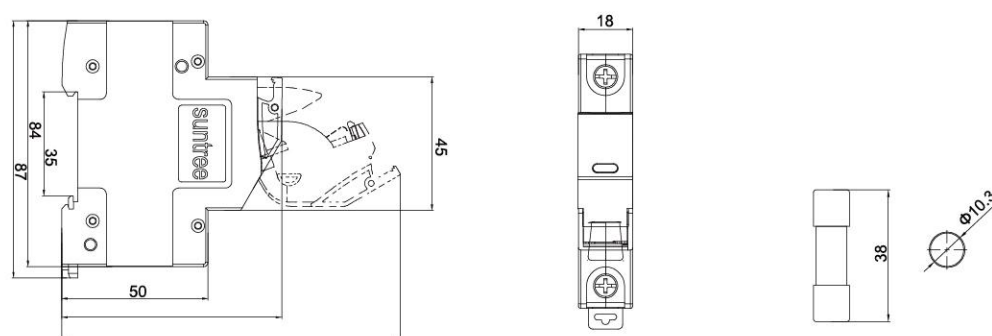
MODEL MEANING

S	RD	-	30
Enterprise code	Design Number		Frame Rated Current

FUNCTION AND SCOPE OF APPLICATION

This series of fused switch-disconnector is a fuse holder specifically designed for the photovoltaic industry. This series of products can incorporate fuses and is used for overcurrent protection in main circuits and equipment with a rated voltage not exceeding DC 1000V, a rated current not exceeding 30A, and a rated short-circuit capacity not exceeding 30kA. Mainly used in energy storage systems, solar photovoltaic combiner boxes, as short circuit and overload protection for solar photovoltaic power generation devices, batteries and other semiconductor equipment.

DIMENSIONS (MM)



DC FUSE

● SRD-30



TECHNICAL PARAMETERS

Model	SRD-30 (Fused switch-disconnector)	
Normative references	IEC/EN60947-1 IEC/EN 60947-3	
Rated insulation voltage (Ui)	1200V	
Rated operational voltage (Ue)	DC1100V	
Rated operating current (Ie)	1A-30A	
Impulse withstands voltage (Uimp)	6kV	
Rated accepted dissipative power	≤4W	
Number of poles	1P	
Rated limited short-circuit current	30KA	
Matched fuse size	φ10×38mm	
Protection class	IP20	
Use category:	PV-0	
Installation Method	35mm DIN rail	
Wiring capacity	1-10mm ²	
Wiring screw/Terminal block torque	M5 / 1.8-2.3N.m	
Stripped wire length	13mm	



Model	SRF-30 (Fuse Link)	
Normative references	EN 60269-1 EN 60269-6	
Rated operational voltage (Ue)	DC1000V	
Rated operating current (Ie)	6A、8A、10A、12A、15A、16A、20A、25A、30A、32A	
Rated accepted dissipative power	≤4W	
Rated limited short-circuit current	20KA	
Matched fuse size	φ10×38mm	
Use category	PV-0	



NORMAL USE AND INSTALLATION CONDITIONS

- Operating temperature -5℃ ~ +40℃
- Altitude: ≤ 2,000m
- Pollution degree: Level 3
- Installation category: Class II, Class III
- Installation method: Installed on the standard guide rail, the standard guide rail should meet the requirements of TH35-7.5 type in JB6525-1992;
- The product should generally be installed vertically, and there should be no significant shock and vibration at the installation place;

CONFORMS TO STANDARD

IEC/EN 60947-1 Low-voltage switchgear and control gear Part 1 General

IEC/EN60947-3 Low-voltage switchgear and control gear Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units

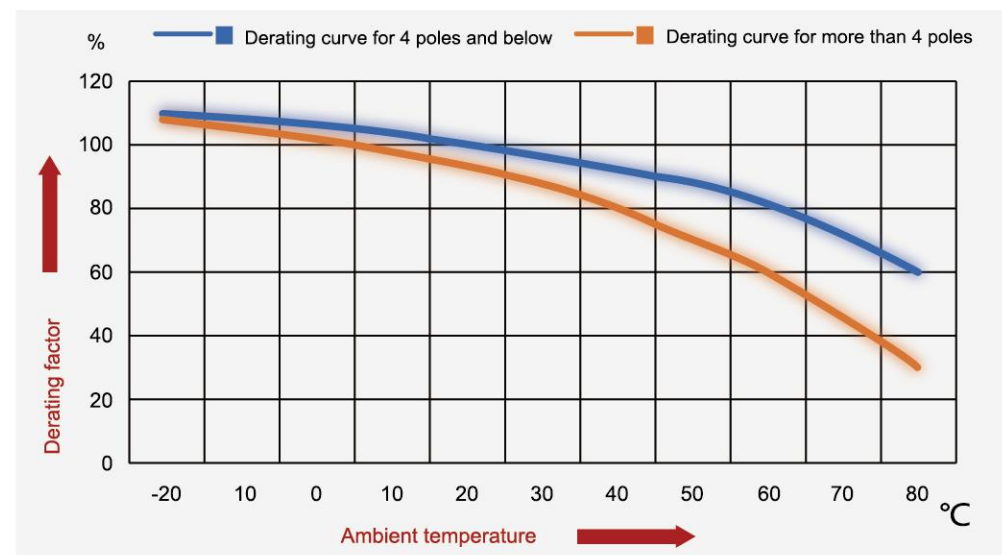
FEATURES

- With indicators, the switch status can be visually determined
- With short circuit and overload protection
- Pluggable, easy core replacement
- V0 flame-retardant case
- Photovoltaic-specific
- Current-carrying parts are made of copper
- DIN rail mounting

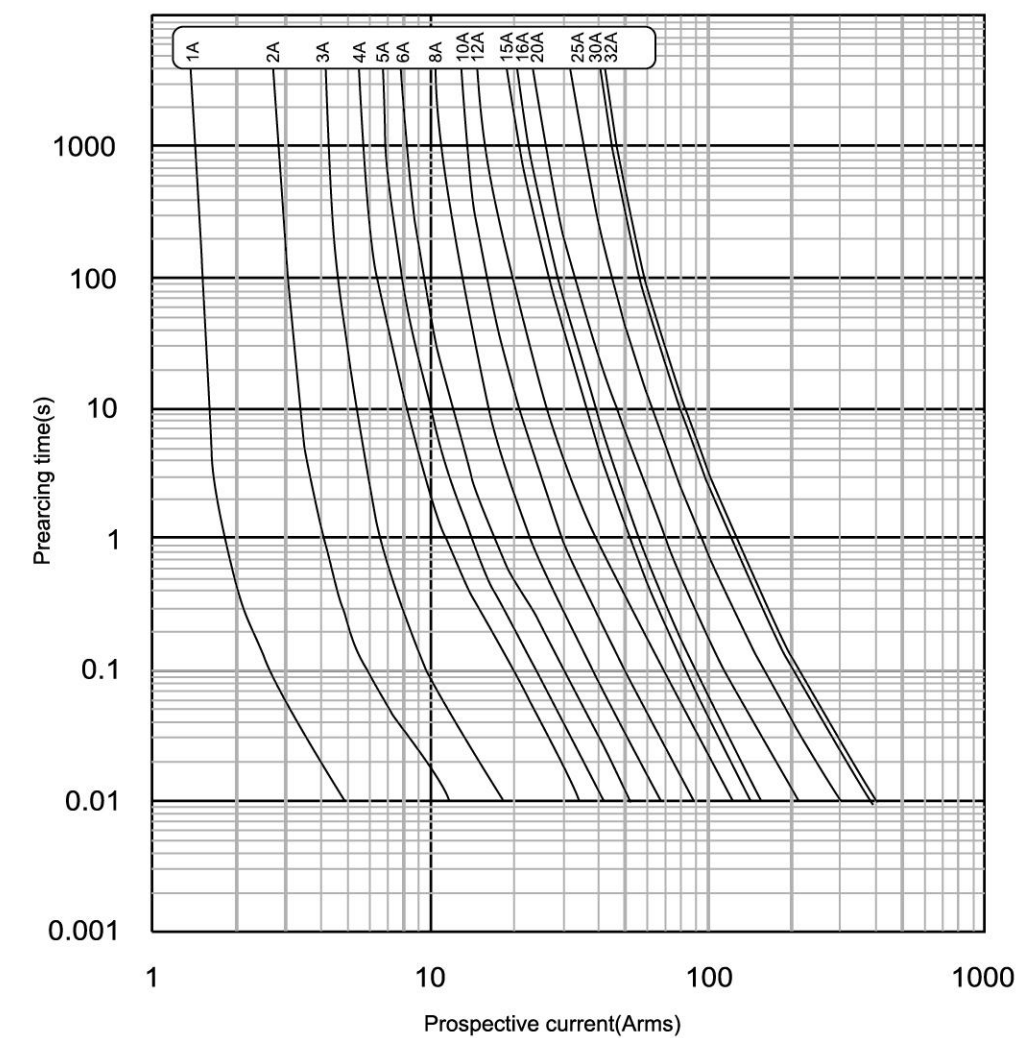
TRANSPORTATION AND STORAGE CONDITIONS

- Temperatures between -25°C and +55°C, up to +70°C for a short period of time (within 24h);
- The relative humidity of the air should not exceed 95% at a temperature of 25°C;
- During transportation, the product should be handled with care, not inverted, and protected from strong impacts as well as rain and snow.

DERATING CURVE



CHARACTERISTIC CURVE



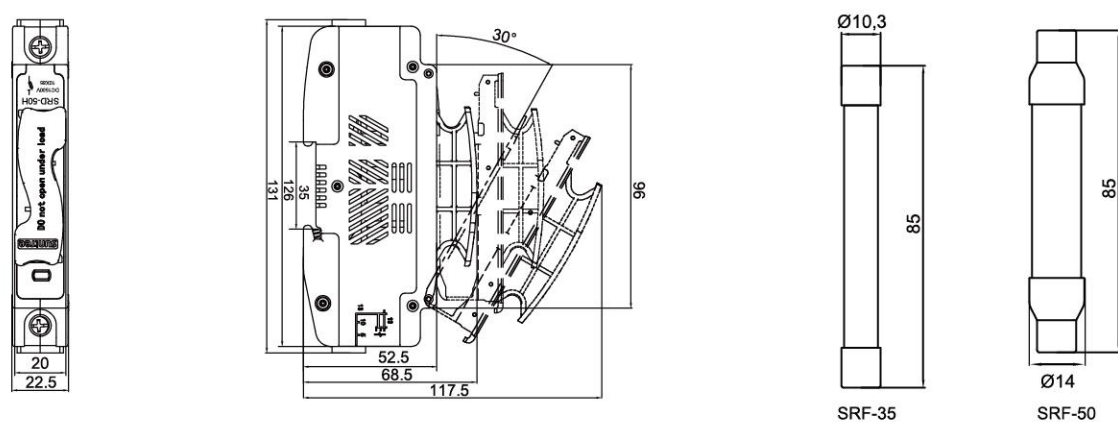
MODEL AND SIGNIFICANCE

S	RD	-	50	H
Company code	Design code of DC fuse-disconnector		Current shell frame	High voltage

GENERAL PARAMETERS

- Suitable for protection of electrical installations against [short-current] and Over current
- Plug-in design
- Indication window and optional remote-signaling contact helps users to know the status of device
- The current-carrying parts are all made of copper, low temperature rise
- Unique shape and high recognition
- The whole machine can pass the salt spray test within 48 hours.

DIMENSIONS (mm)



PHOTOVOLTAIC FUSE SERIES

- SRD-50H



ELECTRICAL PARAMETERS

Product Model	SRD-50H
Pole	1P
Rated Operational Voltage/Ue(V)	1500VDC
Rated Operational Current/In(A)	2A、 3A、 4A、 5A、 6A、 8A、 10A、 12A、 15A、 16A、 20A、 25A、 30A、 32A、 40A、 50A
Ultimate Breaking Capacity/Icu(kA)	20kA
Rated Breaking Capacity/Ics(kA)	20kA
Max. Impulse Current/Iimp(A)	20kA
Fire-retardant Enclosure Level	V0
Device Width x Height (mm)	131*22*94.5
Method of Mounting	DIN RAIL
Mounting	Easy installed and fastening onto 35mm device rail(DIN)
Terminal Capacity	25mm ²
Fastening Torque of Terminals	3N
Location	Indoor or in the Water-proof Box
Ambient Temperture	-40℃ To 85℃
Altitude	≤2000m
Relative Humidity	90%
Pollution Level	2
Installation Class	II/III

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

MODEL AND SIGNIFICANCE

S

Company code

RF

DC fuse isolating switch
Design Number

-

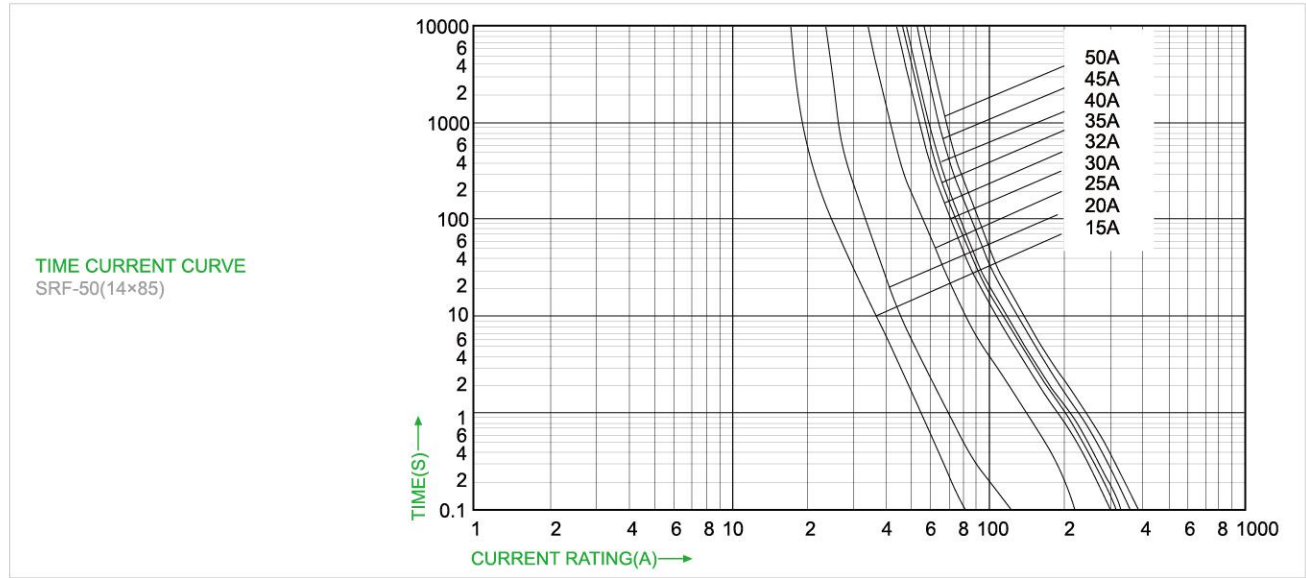
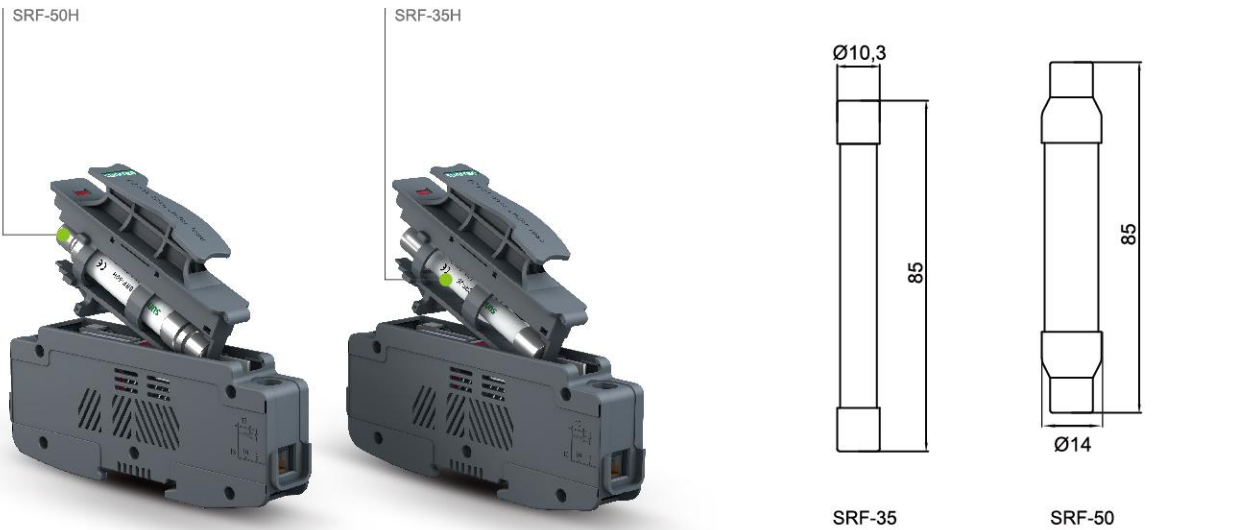
Case grade rated current

H

High voltage

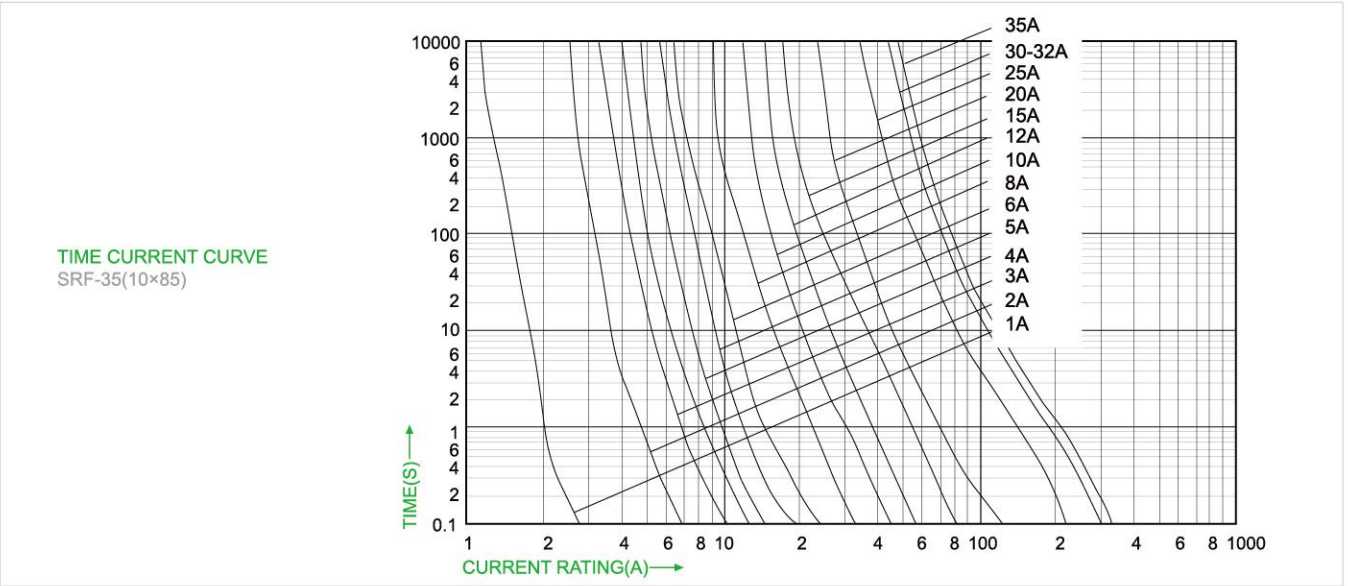
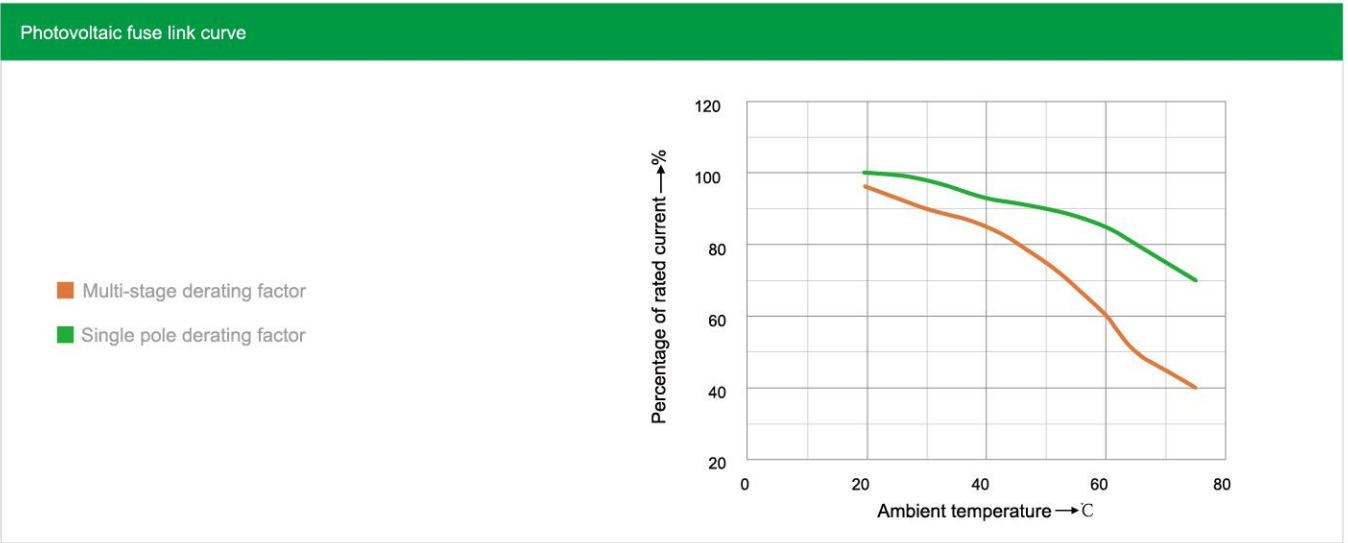
Installation diagram

Dimensions



ELECTRICAL PARAMETERS

Specifications		
Model	SRF-35H	SRF-50H
Rated voltage	1500VDC	1500VDC
Rated working current	1/2/3/4/5/6/8/10/12/15/20/25/30/32/35A	15/20/25/30/32/35/40/45/50A
Rated accepted power dissipation	6W	12W
Size	10mm×85mm	14mm×85mm
Rated ultimate short circuit breaking capacity	20kA	20kA
Reference Standard	EN 60269-1 EN 60269-6	EN 60269-1 EN 60269-6
Protection level	IP20	IP20
Use category	PV-0	PV-0



MODEL AND SIGNIFICANCE

S	L7N	-	63	C32	/2P	II	G	MX+OFI
Suntree code	Design number		Frame size	Rated current	Poles	Rated voltage	Wiring method	Accessories and voltage

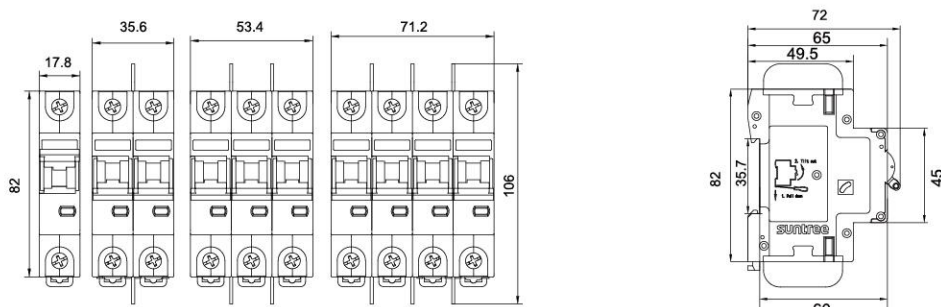
DESIGN NUMBER

- DC non-polarized
- Low temperature rise
- V0 (UL94) flame-retardant materials used for the case
- All current-carrying parts are copper
- ROHS compliant
- Versatile accessory options
- Instrumentation parts are all made of stainless steel

FUNCTION AND SCOPE OF APPLICATION

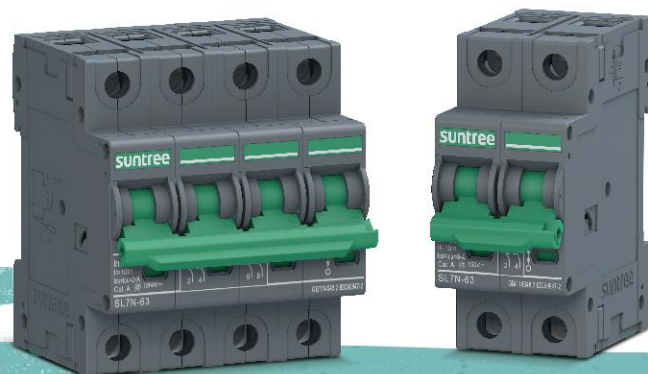
SL7N-63 series PV miniature circuit breaker is a current-limiting circuit breaker with overload and short circuit protection, overload and short circuit protection for DC systems with voltage DC1200V and below. Widely used in DC panels, DC distribution cabinets, DC convergence boxes, distribution box systems for energy storage, PV and wind power stations, and communication distribution box protection systems. It can also be used for infrequent on/off conversion of lines under normal conditions.

MOUNTING DIMENSIONS



DC CIRCUIT BREAKER

- SL7N-63/1P
- SL7N-63/2P
- SL7N-63/3P
- SL7N-63/4P



PRODUCT MODEL

Model	Appearance	Characteristic	Current A	Voltage V	Wiring Method	Optional accessories	Accessory name	Accessory name
SL7N-63	1P	B/C	6	I:15	-	-	OF 20F SD OF+SD	-
SL7N-63	1P			II:24	-			
SL7N-63	1P			III:48	-			
SL7N-63	1P			IV:60	-			
SL7N-63	1P			V:100	-			
SL7N-63	1P			VI:180	H			
SL7N-63	1P		10	Default:250	H			
SL7N-63	2P		20	II:24	H		MX MX+OF OF+MX+OF 20F+MX+OF SD+MX+OF OF+SD+MX OF+SD+MX+OF	I:DC12V II:DC24V-48V III:DC110V-400V IV:AC220V-380V
SL7N-63	2P		25	III:48	H			
SL7N-63	2P		32	IV:125	H			
SL7N-63	2P		40	V:375	G			
SL7N-63	2P		50	Default:500	G			
SL7N-63	2P		63	VI:550	G			
SL7N-63	2P			VII:600	G			
SL7N-63	2P			VIII:800	G			
SL7N-63	3P			Default:750	H			
SL7N-63	3P			I:900	H			
SL7N-63	4P			Default:1000	G		OF+MN SD+MN OF+SD+MN	AC230V AC400V
SL7N-63	4P			I:1200	G			

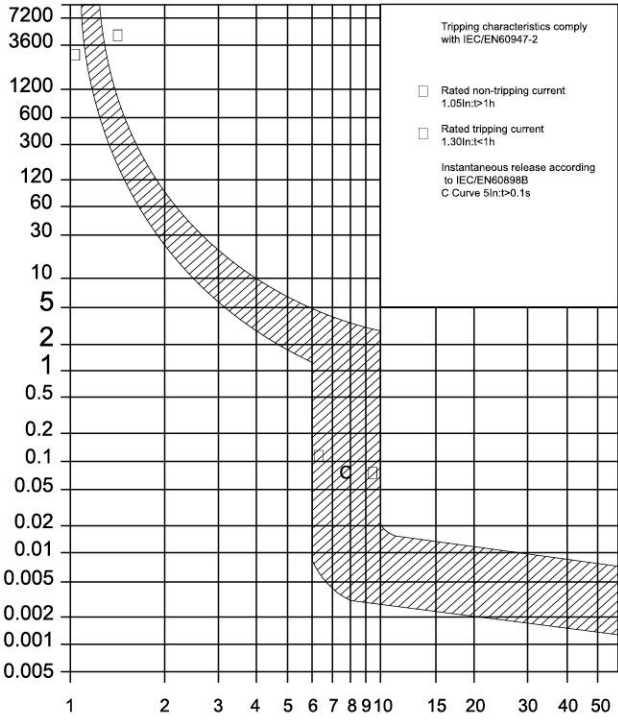
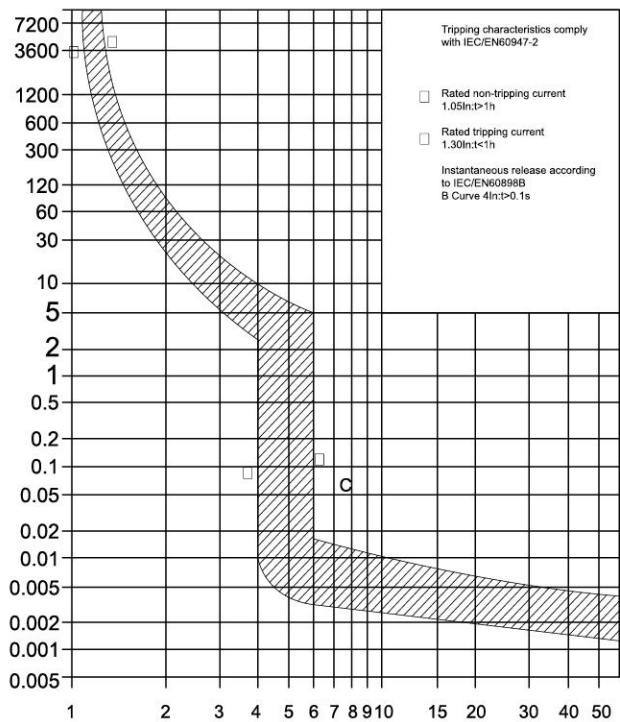
INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

MAIN TECHNICAL PARAMETERS

Items	Technical parameters
Rated insulation voltage (Ui)	1250V
Rated operational voltage (Ue)	DC(1P):15V,24V,48V,60V,100V,180V,250V; DC(2P):24V,48V,125V,375V,500V,550V,600V,800V DC(3P):750V,900V;DC(4P):1000V,1200V
Frame rated current	63A
Different current of the same frame (In)	6A、10A、16A、20A、25A、32A、40A、50A、63A
Number of poles	1P、2P、3P、4P
Rated service short-circuit breaking capacity (Ics)	6kA (2P 800V 4P1200V) 2kA
Rated ultimate short-circuit breaking capacity (Icu)	6kA (2P 800V 4P1200V) 2kA
Mechanical life	20000 times
Electrical life	10000 times (≤DC125V/1P, ≤ DC250V/2P),1500 times (other voltage specifications)
Certificate	CE, IEC, CB,TUV
Suitable for fishbone connector wiring and wire wiring	Suitable for fishbone connector wiring and wire wiring
Rated impulse withstand voltage (Uimp)	6kV
Tripping characteristics	B/C
Release type	Thermomagnetic
Overvoltage level	III
Pollution degree	3
Protection Degrees	IP40;IP20 for wiring port
Moisture resistance	Class II
Relative humidity	≤95%
Standards compliant	IEC 60947-2 GB/T14048.2
Shock resistance	According to IEC60068-2-6
Anti-mechanical shock parameters	According to IEC60068-2-27
Operating ambient temperature	-30℃~70℃
Heat & humidity resistant(IEC 60068-4)	Db type (temperature 55℃, 6 cycles)
Storage ambient temperature	-40℃~85℃
Installation method	DIN
Altitude	≤2000m
Weight	0.12kg/P
Accessories	OF/SD/MX/MN/MX+OF
MX control voltage Us	DC: 12V, 24V, 220V; AC: 110V, 220V, 3380V power supply recommended not less than 75W
MN rated voltage Un	AC220V

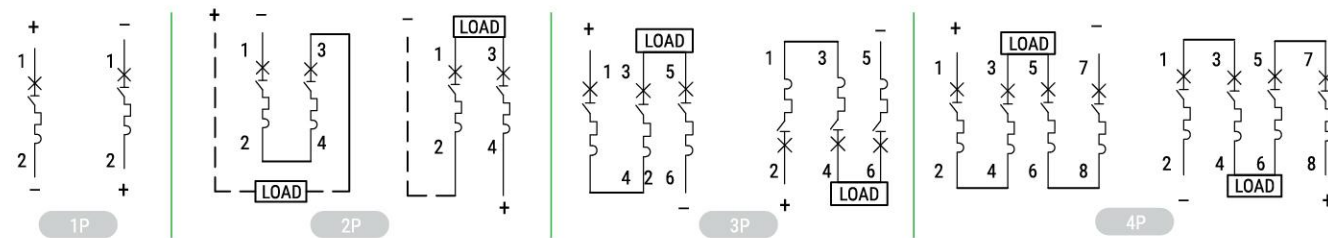
TRIPPING CHARACTERISTICS



PRODUCT POWER CONSUMPTION

NO.	Specification (A)	Power (W)				<g id="Bold">Remarks</g>
		1P	2P	3P	4P	
1	6	0.45	0.72	0.99	1.44	-
2	10	1.15	1.7	2.25	3.4	-
3	16	1.66	2.67	3.68	5.34	-
4	20	1.76	2.78	3.8	5.56	-
5	25	2.5	3.88	5.25	7.75	-
6	32	2.88	4.16	5.44	8.32	-
7	40	4.32	6.24	8.16	12.48	-
8	50	3.65	6.2	8.75	12.4	-
9	63	5.04	8.19	11.34	16.38	-

WIRING METHOD



AUXILIARY, ALARM CONTACTS

Auxiliary contact: An accessory connected to the auxiliary circuit of the switchgear to indicate when the circuit breaker is energized (ON) or de-energized (OFF) Alarm contact: An accessory used to indicate that the circuit breaker is in the state of not tripping (ON or OFF) or tripping. When the alarm contact indicates that the circuit breaker is in the state of tripping, there are three reasons:

- With overload or short circuit faults;
- The shunt release trips;
- Line fault, undervoltage release action

Electrical parameters	Parameter value
Anti-shock function	OF, SD, OF+SD
Rated voltage	250V
Frequency	50/60HZ
Rated current	8A
Rated heating current	8A
Rated operational current	6A/250V AC
	2A/440V AC
	0.5A/230V DC
Rated operational current	2A/110V DC
	4A/60V DC
Rated insulation voltage	250V AC
Minimum operating voltage (per contact)	24C AC/DC
Minimum operating current	50mA AC/DC
Rated peak withstand voltage	1kV
Conditional short circuit current (With 6A back fuse or FAZ-B4-HS)	1kA
Maximum back fuse, overload and short circuit	6A gL/FAZ-4/./B-HS
Mechanical parameters	Parameter value
Installation Method	Installed in switchgear
Protection level (built-in)	IP20
Terminal installation method	Open type
Terminal wiring capability	0.5~1.5mm²
Terminal screw	M3 (Pozidrive Z0)
Screw tightening torque	Maximum 0.8-1.0Nm
B size	9mm
Installation location	Left

UNDervOLTAGE RELEASE

Undervoltage release: Action when the line voltage is lower than a certain voltage (the minimum voltage set by the undervoltage release)

Electrical parameters	Parameter value
Rated voltage Un	230V/400V AC
Frequency	50~60Hz
Switching on voltage	80%Un
Tripping voltage	50%Un
Mechanical parameters	Parameter value
Equipment dimensions	45mm
H	80mm
W	17.5mm(1MU)
Installatio	Quickly installed on the guide rail in accordance with IEC/EN60715
Protection degrees(built-in)	IP20
Terminal installation method	Open type
Terminal wiring capability	0.5~1.5mm²
Terminal protection	Finger and hand protection according to BGV A3.OVE-EN 6
Size B	18mm
Installation location	Left or right
-	-
-	-
-	-
-	-

SHUNT RELEASE

Shunt release: When the rated control power supply voltage Us is between 70% and 110%, the shunt release should reliably trip the circuit breaker

Technical parameters of shunt release	Parameter value	
Electrical parameters	DC12V-24V, DC24~48V	110V~400V
Minimum pulse duration	15ms	15ms
Internal impedance	4.5-5.5Ω	120Ω
Service period	100%	100%
Trip time	<20ms	<20ms
Peak withstand voltage (1.2/50μs)	2.5kV	2.5kV
Electrical life	>4000 operations	>4000 operations
Service limit	9V	70V
Service voltage range	12~48V	110~400V
Channel maximum current consumption	3A	3A
Mechanical parameters		
Equipment dimensions	45mm	45mm
H	80mm	80mm
W	18mm	18mm
Installation Method	Assembly type	Assembly type
Protection degrees(built-in)	IP40	IP40
Terminal installation method (top and bottom)	Open type	Open type
Terminal wiring capability	0.15~0.5mm²	0.15~0.5mm²
Terminal tightening torque	Max 0.8~1N	Maximum 0.8-1N
Size B	18mm	18mm
Installation location	Left or right	Left or right

ORDER SPECIFICATION

- Users are kindly requested to specify the name, model, number of poles and rated current of the circuit breaker when ordering, as well as the quantity of the order.
- Example: SL7N-63 2P DC550V 32A or SL7N-63 NP 2P DC800V 20A
- For special specification products, please consult with us and order. Contact details: 400-021-6828

MODEL AND SIGNIFICANCE

S	L7N	1500	H	1/2/3/4	125A	PV	1500V
Enterprise code	Design Number	Rated Voltage	High Voltage	Pole	Rated Current	PV system	Rated Operational Voltage

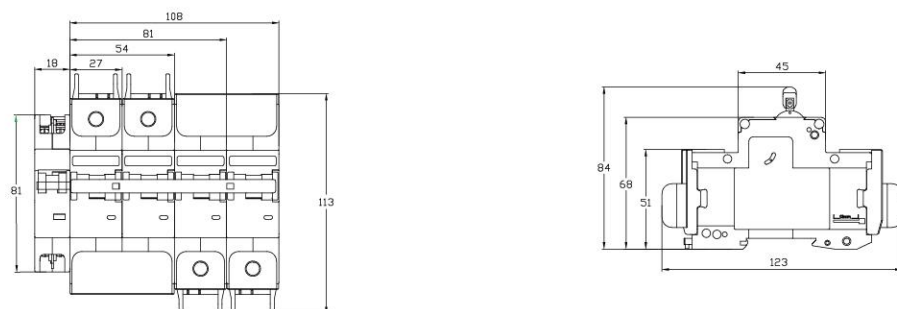
GENERAL PARAMETERS

- Overload protection to avoid more damage to whole system
- Unique mold design have garnered much admiration from many customers
- Aesthetically pleasing design, compact size, lightweight, quick release mechanism, and rail-mounted. The casing and components are made of high-impact resistant and flame-retardant plastic, ensuring excellent and reliable performance.
- High voltage big ampere and small size to save install space and save cost
- Suitable for installation in harsh environments with high temperature and humidity resistance

PRODUCT ADVANTAGES

The SL7N-125D/DH plastic enclosure circuit breaker is a limited current type breaker with overload and short circuit protection, suitable for overload and short circuit protection in DC systems up to 1500V. It is widely used in DC screens, DC distribution cabinets, DC junction boxes, photovoltaic and wind power substations, and communication distribution box protection systems. It can also be used for infrequent on-off switching of circuits under normal conditions.

DIMENSIONS (mm)



DC CIRCUIT BREAKER

- SL7N-125D/1P
- SL7N-125D/2P
- SL7N-125D/3P
- SL7N-125D/4P



ELECTRICAL PARAMETERS

Product Model	SL7N-125D							
Pole	1P	2P	3P	4P	1P	2P	3P	4P
Rated Operational Voltage/Ue(V)	DC48~250V/ DC375V/DC440V /DC600V	DC750V/ DC800V/ DC1000V	DC1200V/ DC1500V	DC1500V	DC48-250V	DC375V/ DC440V/ DC600V	DC750V/ DC800V	DC750V/ DC800V
Rated Operational Current/In(A)	6A、10A、16A、20A、25A、 32A、40A、50A、63A、80A				100A、125A			
Rated Impulse withstand Voltage/Uimp(V)	690V	1250V	1600V		690V	1250V	1600V	
Ultimate Breaking Capacity/Icu(kA)	SL7N-125D 2KA				SL7N-125DH 6KA			
Rated Breaking Capacity/Ics(kA)	SL7N-125D 2KA				SL7N-125DH 6KA			
Max. Impulse Current/Uimp(A)	6KV		8KV		6KV		8KV	
Mechanical Life	30000 TIMES							
Electrical Life	1000 TIMES							
Fire-retardant Enclosure Level	V-0							
Ingress Protection	IP40							
Device Width x Height (mm)	93*27*65.5	93*54*65.5	93*81*65.5	93*108*65.5	93*27*65.5	93*54*65.5	93*81*65.5	93*108*65.5
Method of Mounting	35mm din rail install							
Mounting	Easy installed and fastening onto 35mm device rail(DIN)							
Location	Indoor or in the Water-proof Box							
Ambient Temperture	-40℃-85℃							
Altitude	≤2000m							
Relative Humidity	+50℃ not more than 95%							
Weight(per pole)	0.18kg	0.36kg	0.54kg	0.72kg	0.18kg	0.36kg	0.54kg	0.72kg
Pollution Level	2							
Installation Class	II class or III class							

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

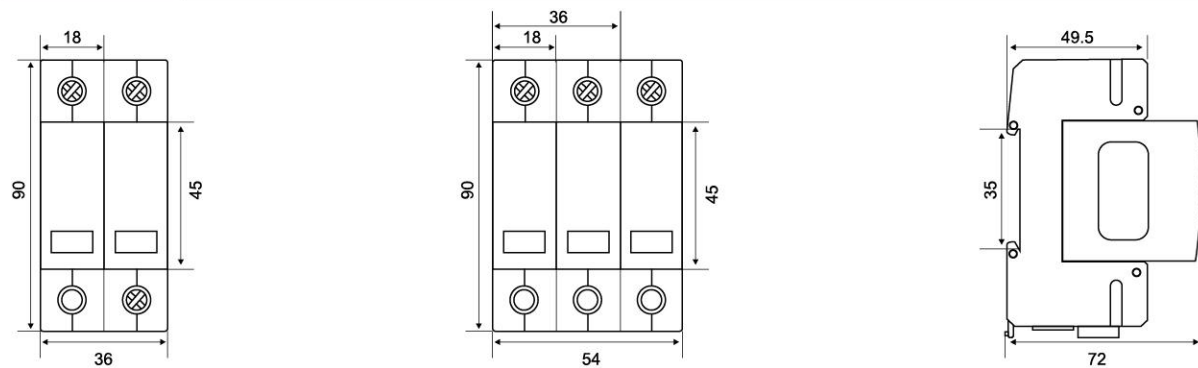
MODEL AND SIGNIFICANCE

S	UP	2	-	H/1	/	□	X
Enterprise code	Surge protector device	Design Number		H:275V/500VDC H1:1000VDC H2:1200VDC H6:600VDC H8:800VDC		Maximum accommodating40kA	Remote sensing

GENERAL PARAMETERS

- Suitable for protection of electrical installations against [transient overvoltage] and [short-current] [lightning strikes] [over-heat]
- Plug-in module design
- Indication window and optional remote-signaling contact helps users to know the status of device

DIMENSIONS (mm)



DC surge protector

- SUP2H-PV/500VDC/2P
- SUP2H6-PV/600VDC/2P
- SUP2H8-PV/800VDC/2P
- SUP2H1-PV/1000VDC/3P
- SUP2H2-PV/1200VDC/3P
- SUP2-PV/1500VDC/3P



ELECTRICAL PARAMETERS

Product Model	SUP2H-PV	SUP2H6-PV	SUP2H8-PV	SUP2H1-PV	SUP2H2-PV	SUP2-PV
Rated Operational Voltage/Ue(V)	48/110/130/150/220 275/300/360/500VDC	600VDC	800VDC	1000VDC	1200VDC	1500VDC
In(kA)8/20	20					
I _{max} (kA)8/20	40					
Pole	2P			3P		
Up(kV)	0.6/1.2/1.6/2.6/2.8	2.8	3	3.6	4	5
Single P size	18*90*72					
Response time	≤25					
Experimental classification	T2 Class					
SPD Type	Pressure limiting type					
Protection Level	IP20					
Insulation shell material	PBT/PA66					
Flame retardant grade	Compliant with UL94 V0					
Mounting	Easy installed and fastening onto 35mm device rail(DIN)					
Ambient Temperture	-40℃~+70℃					
Window indication	Normal: green; Failure: red					
Inspection standards	GB/T18802.2011 IEC61643-31 UL1449 ed2 EN61643-31					

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

MODEL AND SIGNIFICANCE

S	UP	2	-	DC	/		3	1000	X
Enterprise code	Surge protector device	Design Number		PV code DC dedicated		Maximum Discharge Current 50kA(T2)7kA(T1)	Number of Poles	Rated Voltage 500VDC 600VDC 800VDC 1000VDC 1200VDC 1500VDC	Remote sensing

CLASS I•CLASS II•TYPE1•TYPE 2

- LOCATION OF USE:
 - MODE OF PROTECTION:
 - SURGE RATINGS:
 - IEC/EN/UL CATEGORY:
 - PROTECTIVE ELEMENTS:
 - HOUSING:
 - COMPLIANCE:
- STRING BOX,INVERTER**

(DC+)- PE, (DC-)- PE, (DC+)- (DC-)

ITOTAL = 12.5kA (10/350) In= 20kA (8/20) Imax=50kA (8/20)

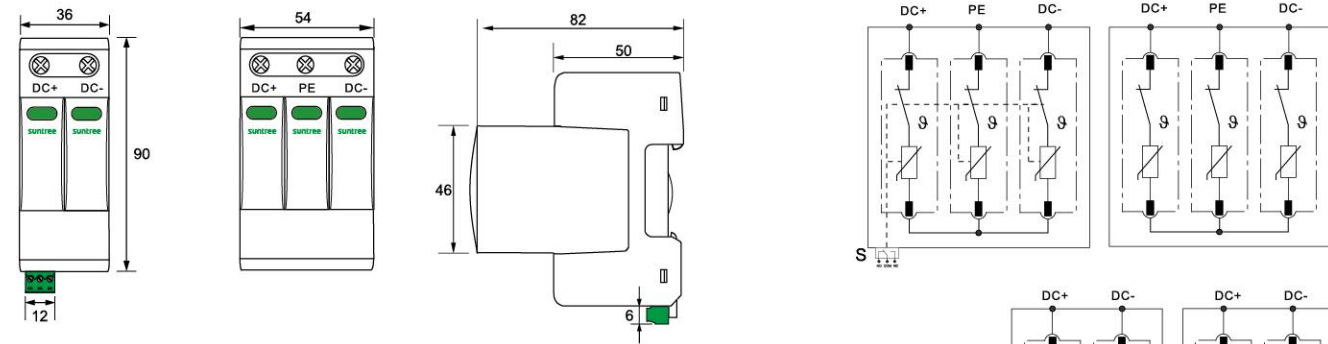
CLASS I+II / TYPE 1+2

HIGH ENERGY MOV

PLUGGABLE DESIGN

IEC 61643-31/EN 61643-31/UL 1449 4TH EDITION

DIMENSIONS - INTERNAL CONFIGURATION



- LEGEND**
- PE PROTECTIVE EARTH
 - S SIGNALING CONTACTS (OPTION)

DC SURGE PROTECTOR

•SUP2-DC/1500VDC

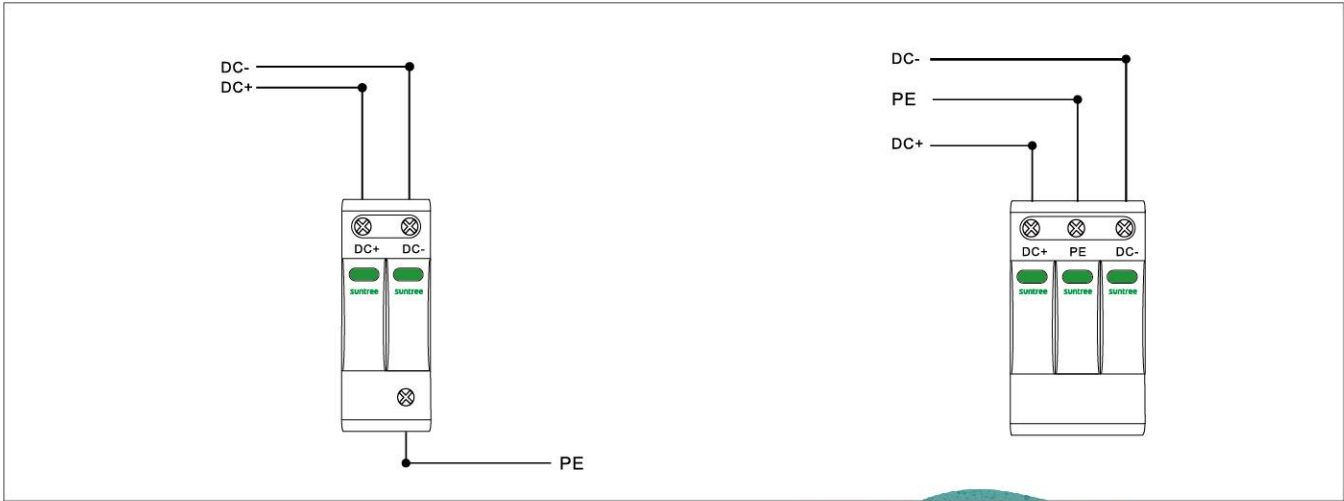


ELECTRICAL PARAMETERS

IEC Electrical						
Maximum Continuous Operating DC Voltage	500V	600V	800V	1000V	1200V	1500V
In(kA)	20	20	20	20	20	20
I _{max} (kA)	50	50	50	50	50	50
I _{imp} (kA)	6.25	6.25	6.25	6.25	6.25	6.25
I _{total} (kA)	12.5	12.5	12.5	12.5	12.5	12.5
Numbers of poles	1P/2P	1P/2P	1P/2P	3P	3P	3P
Protection level (In)Up	2.8	2.8	3.0	4.0	4.4	5.0

Mechanical & Environmental		
Operating Temperature Range	T _a	-40 °F to +158 °F [-40 °C to +70 °C]
Permissible Operating Humidity RH	RH	5%...95%
Atmospheric pressure and altitude		80k Pa ... 106k Pa / -500 m ... 2000 m
Terminal Screw Torque Mmax	M _{max}	39.9 lbf-in [4.5 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded)/4 AWG (Flexible) 35mm² (Solid, Stranded)/25mm² (Flexible)
Mounting		35mm DIN Rail, EN 60715
Degree of Protection		IP20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
Thermal Protection		Yes
Operating State / Fault Indication		Green ok / Red defect
Remote Contacts (RC)		Option
RC Switching Capacity		AC: 250V / 0.5 A; DC: 250V / 0.1 A; 125 V / 0.2 A; 75 V / 0.5 A
RC Conductor Cross Section (max)		16 AWG (Solid)/1.5mm²(Solid)

CONNECTION DIAGRAM



MODEL AND SIGNIFICANCE

SM8	—	250	H	/	PV	DC1500V	250
Company Code	Circuit Breaker	Breaking capacity: 15Ka	PV code:DC dedicated	Rated working voltage: DC1000V / DC1500V	Rated working current: 100/125/160/200/225/250		

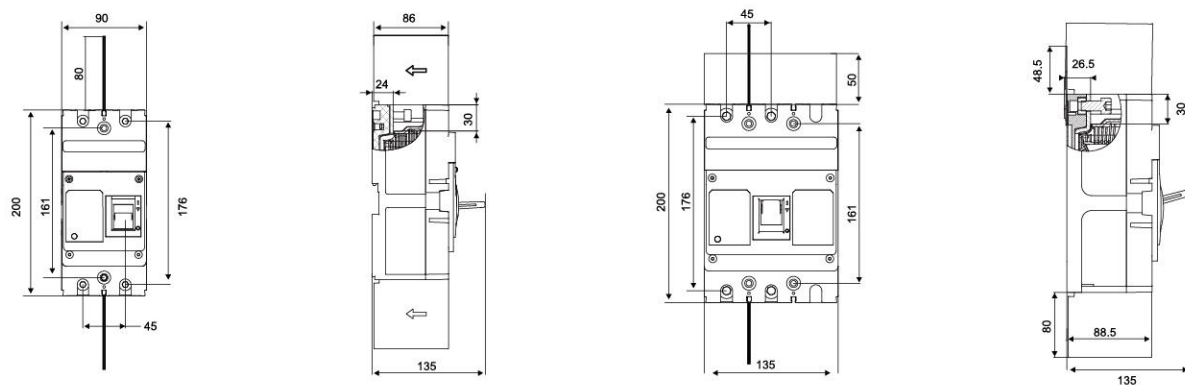
GENERAL PARAMETERS

- Suitable for large solar photovoltaic power plants
- This circuit breaker has overload long delay and short-circuit instantaneous protection functions, which are used to distribute electrical energy and protect the circuit and power equipment from overload, short circuit and other fault hazards
- High current, can be used to protect batteries

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

DIMENSIONS (mm)



DC MCCB

- SM8-250HPV / 2P 1000V
- SM8-250HPV / 3P 1500V



ELECTRICAL PARAMETERS

Product Model	SM8-250HPV / 2P 1000V	SM8-250HPV /3P 1500V
Product name	PV DC MCCB	PV DC MCCB
Rated service voltage Ue	DC1000V 1200V	DC1250V DC1500V
Rated insulation voltage Ui	1500V	1500V
Rated impulse withstand voltage Uimp	12kV	12kV
Numbers of poles	2	3
Trip type	Thermal magnetic (thermal magnetic non adjustable) TMD fixed	
Manufacturing standards	GB14048.2, IEC/EN 60947-2	
Use category	A(PV-1)	
Current shell frame In	250A	
Rated service current Ie	100/125/160/200/225/250/300/320A	100/125/160/200/225/250A
Breaking type	H	
Ultimate short circuit breaking capacity Icu	Ue1000v 15kA	Ue1500v 15kA Ue1250v 20kA
Rated service short-circuit breaking capacity Ics	75%ICU	Ue1500v 15kA Ue1250v 20kA
Current setting Ir	1In	
Instantaneous short circuit protection LiMechanical life	6In (Min1000A)	
Mechanical life	10000Times	
Electrical life	2000Times	
Overall dimensions L×W×H	90×200 × 86mm	135×200 × 135mm
Installation mode	Fixed	
Ingress protection	Wiring terminal: IP20/all sides: IP40	
Relative humidity	Not more than 95% at +50℃	
With wiring polarity requirements or not	NO	
Class of pollution	Level 3	
Service temperature	-40℃ -+75℃	
Operation indications	ON/OFF indication	
Whether the trip is adjustable	NO	
Electrical accessories	Option: shunt/auxiliary/alarm (note: only one set of auxiliary, alarm and shunt can be installed on the left and right side) 2P only on the left side	
Isolating function	Yes	

MODEL AND SIGNIFICANCE

S	M	8	-	400	HPV	/	2	300	400A
Company Code	Product Category	Design Serial Number		Frame Current Level	High Breaking Capacity		Number of Poles	Trip Mode and Accessory Code: Refer to Model Marking	Rated Current: 200, 225, 250, 315, 350, 400

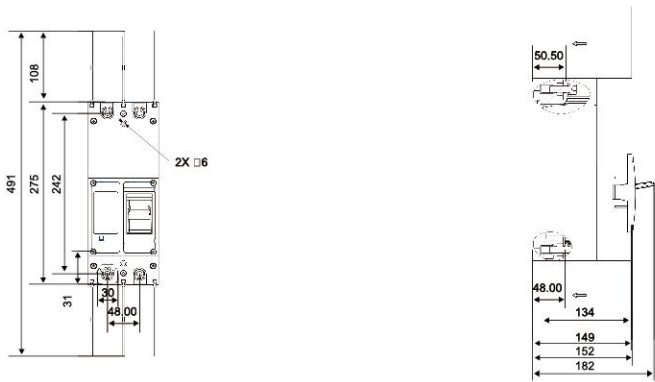
PRODUCT OVERVIEW

The SM8-400HPV/2 DC Molded Case Circuit Breaker is suitable for circuits with a rated voltage of DC1500V and a rated current ranging from 200A to 400A. It is designed for making, breaking, and carrying the rated current, providing reliable protection for circuits and electrical equipment in case of overload and short-circuit conditions. It is widely used in photovoltaic applications in new energy, power, infrastructure, and industrial sectors.

PRODUCT FEATURES

- The circuit breaker has a beautiful appearance, compact size, and high breaking capacity.
- The product has non-polarity for current, providing reliable protection for both forward and reverse connections.
- It can operate reliably within a temperature range of -40°C to +70°C without derating at +50°C.
- Zero arc exposure: Equipped with an arc extinguishing cover and three layers of free metal partition plates, preventing secondary faults caused by arc spraying during breaking
- It has a single-phase DC1500V grounding breaking capacity of 10kA.

DIMENSIONS (mm)



DC MCCB

● SM8-400HPV / 2P 1500V



ELECTRICAL PARAMETERS

Product Model		SM8-400HPV / 2P 1500V		
Frame Rated Current		400A		
Rated Operating Current (In)		200, 225, 250, 315, 350, 400		
Number of Poles		2P		
Rated Operational Voltage (Ue)		DC250V/DC500V	DC750V/DC1000V	DC1000V/DC1500V
Rated Insulation Voltage (Ui)		1500V		
Rated Impulse Withstand Voltage (Uimp)		12kV		
Rated Service Short-Circuit Breaking Capacity (Ics)		100%Icu	100%Icu	100%Icu
Rated Ultimate Short-Circuit Breaking Capacity (Icu)		70	40	20
Mechanical Life	Actual Average Value	15000Times		
	Standard Specified Value	4000Times		
Electrical Life	Actual Average Value	1000Times		
	Standard Specified Value	1000Times		
Isolation Characteristics		Yes		
Standard		According to IEC60947-2 and GB/T14048.2-2020		
Release type		Thermal magnetic type (thermal magnetic non-adjustable)TMD Fixed		
Pollution Degree		2		
Protection Degrees		IP20		
Operational environment temperature		-40°C~+70°C		
Accessories		Internal Accessories: Shunt release, undervoltage release, auxiliary, alarm, auxiliary-alarm		
Warranty Period		18 months		

MODEL AND SIGNIFICANCE

SM8	—	630	H	/	PV	DC1500V	630
Company Code		Circuit Breaker	Breaking capacity: 15Ka		PV code:DC dedicated	Rated working voltage: DC1000V / DC1500V	Rated working current: 400-630A

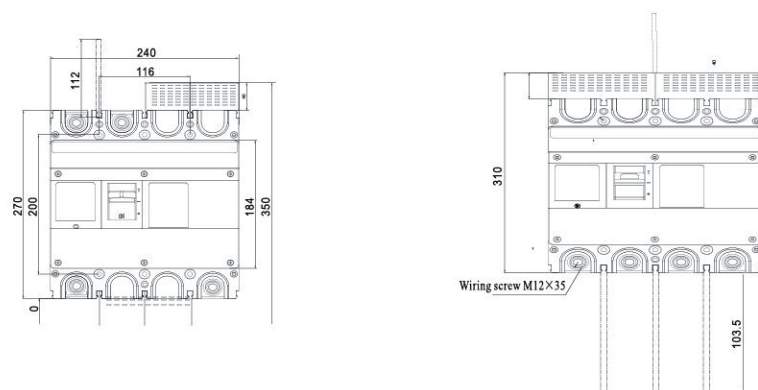
GENERAL PARAMETERS

- Suitable for large solar photovoltaic power plants
- This circuit breaker has overload long delay and short-circuit instantaneous protection functions, which are used to distribute electrical energy and protect the circuit and power equipment from overload, short circuit and other fault hazards
- High current, can be used to protect batteries

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

DIMENSIONS (mm)



DC MCCB

- SM8-630HPV / 4P 1500V



ELECTRICAL PARAMETERS

Product Model	SM8-630HPV /4P 1500V
Product name	PV DC MCCB
Rated operational voltage	DC1500V
Nominal insulation voltage	1500V
Rated impulse voltage	12kV
Pole	4
Type of release	Thermal magnetic type (thermal magnetic not adjustable)
Executive standard	GB14048.2, IEC/EN 60947-2
Use category	A(PV-1)
Case grade current	630A
Rated operational current	400/500/630A
Breaking capacity	H
Rated ultimate short-circuit breaking capacity	Ue1500v 30kA Ue1500v 30kA
Operation breaking capacity	Ue1500v 30kA Ue1500v 30kA
Long delay protection	1In
Instantaneous protection	6In (Min1000A)
Mechanical life	10000times
Electrical life	2000times
Dimensions	Type H:310×240×155mm Type G:350×240×155mm
Installation method	Fixed
Protection level	Wiring port: IP20/all sides: IP40
Relative humidity	+50°C not more than 95%
Whether there are wiring polarity requirements	No
Pollution level	Level 3
Operating temperature	-40°C ~+75°C
Operation instructions	With ON/OFF indication
Whether the release is adjustable	No
Electrical accessories	Optional: shunt/auxiliary/alarm (note: only one set can be installed on the left and right sides of auxiliary, alarm and shunt) 2P only on the left
Isolation function	yes

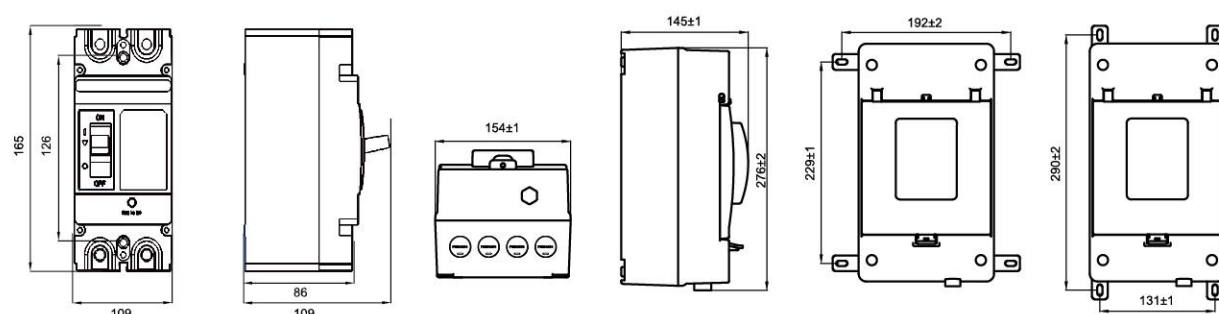
MODEL AND SIGNIFICANCE

S	HXC	-	125/250	PV
Enterprise code	Design Number		Frame current	PV system

PRODUCT ADVANTAGES

- UV resistance enclosure for outdoor installation;
- Locked breaker cover;
- For Battery ESS System;
- Customized AC/DC optional;

DIMENSIONS (mm)



BATTERY BREAKER BOX

- SHXC-125PV
- SHXC-250PV



ELECTRICAL PARAMETERS

Product Model	SHXC-125PV	SHXC-250PV
Pole	2	2
Rated Operational Voltage/Ue(V)	500VDC	500VDC
Rated Operational Current/In(A)	16,20,25,32,40,50,63,80,100,125	125,160,200,225,250
Rated Insulation Voltage/Ui(V)	DC1500V	DC1500V
Ultimate Breaking Capacity/Icu(kA)	20	20
Run Breaking Capacity/Ics(kA)	15	15
Waterproof Protection Level	IP65	
Auto-Closing Time (s)	<0.2s	<0.2s
Tripping Protection Type	Thermal magnetic	
MCCB Electrical Life	2500	2500
MCCB Mechanical life	10000	10000
Material of Enclosure	ABS+PC	ABS+PC
Ingress Protection	All Sides IP40, connection Terminal IP20	
Enclosure size	276x154x145	276x154x145
MCCB size	165x73.5x109	165x73.5x109
Method of Mounting	Top in and bottom out	
Mounting	Easy installed and fastening onto 35mm device rail(DIN)	
Standard	IEC60947-2 /GB / T14048.2	
Location	Indoor or in the Water-proof Box	
Ambient Temperture	-25°C±55°C	-25°C±55°C
Altitude	<2000m	
Pollution Level	Class 3	
Installation Class	III	

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

MODEL AND SIGNIFICANCE

S	GL8N	-	32-500A	H	PV	1/2/3/4/6P	1000/1200/1500VDC
Enterprise code	Design Number		Rated Current	High Voltage	High Voltage	Pole	Rated Voltage

GENERAL PARAMETERS

- Suitable for protection of electrical installations against [transient overvoltage] and [short-current] [lightning strikes] [over-heat]
- Plug-in module design
- Indication window and optional remote-signaling contact helps users to know the status of device

INTRODCUTION AND HIGHLIGHTS

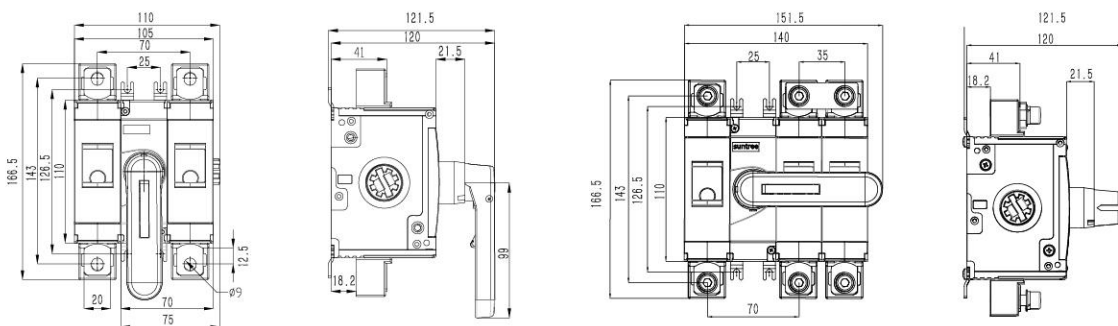
SGL8N-2 isolation switch is suitable for DC power systems. It is mainly installed in low-voltage distribution circuits and serves as the main circuit. It is not frequently connected and disconnected, and plays the role of isolating and breaking lines. It is suitable for energy storage, electric power, construction and other industries, and is used in rated power In DC grid circuits with voltage DC1500V and rated current 32A~500A.

Inside with double magnetic and double arc extinguishing chamber. Power can be discnnected in a compact space. Groove structure can increase crepage distance and reduce the risk of the current leakage. It saves installatin space and cost from 4P to 2P. The oversized terminal block comes standard with 4*20mm copper plated silver.

Comply with standards: IEC 60947-1 IEC 60947-3

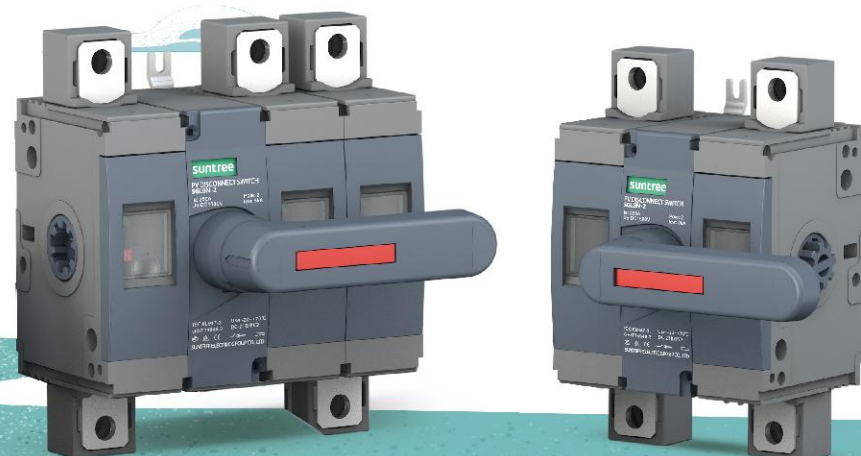
Certificate: CCC 、TUV、CB、CE、ROHS

DIMENSIONS (MM)



LOAD ISOLATORSWITCH

- SGL8N-2/750VDC/1P

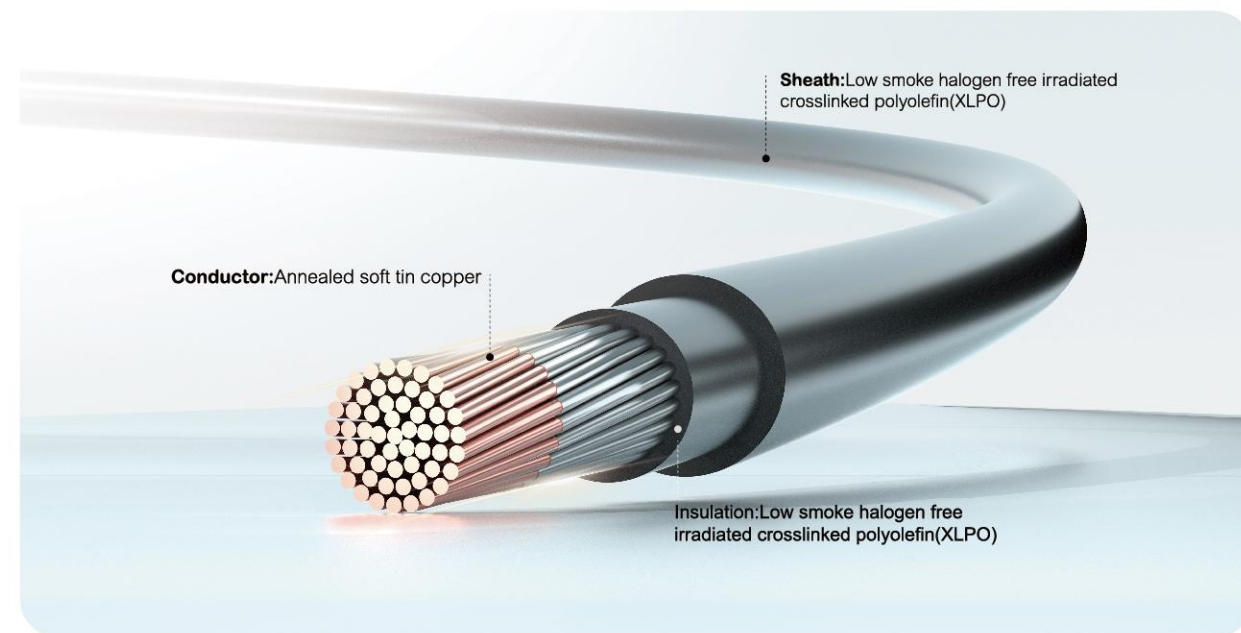


ELECTRICAL PARAMETERS

Product Model		SGL8N-2				
Pole		1P	2P	3P	4P (1 SET)	6P
Rated Operational Voltage/Ue(V)		DC 750V DC 1000V DC 1250V DC 1500V				
Rated Operational Current/In(A)		32A-500A				
In(A) Category	32-100A	PV-1	PV-1/PV-2	-	-	PV-1/PV-2
	125-250A	PV-1	PV-1/PV-2	-	-	PV-1/PV-2
	320A	PV-1	PV-1	PV-2	-	-
	400A	-	-	-	PV-1	-
	500A	-	-	-	PV-1	-
Rated Insulation Voltage/Ui(V)		1600V				
Rated Impulse withstand Voltage/Uimp(V)		12KV				
Short-time withstand current kA		8/1s				
short-circuit making capacity kA		15				
Maximum conductor section mm²		150(2pcs)				
Mechanical Life		10000				
Electrical Life		1000				
Method of Mounting		Screw installation, cabinet door installation				
Mounting		Easy installed and fastening onto 35mm device rail(DIN)				
Fastening Torque of Terminals		10				
Location		Indoor or in the Water-proof Box				
Ambient Temperture		-50℃~+70℃				
Altitude		Less than 2000m				
Pollution Level		3				

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place



Product Characteristics

Technical Parameters

- Rated voltage: U0/U1.0/1.0KV(AC) 1500V(DC)
- Test voltage: AC6.5KV/5min(20°C±0.5)
Or DC15KV/5min(20°C±0.5) without breakdown
- Ambient temperature: -40°C~+90°C
- Conductor maximum temperature: 120°C
- Expected service life: 25 years
- Bending radius: ≥4D

Features and compliance

- Fire resistance: EN 60332-1-2
- Weathering/UV resistance: EN 50289-4-17/ENISO4892
- Halogen determination: EN 50525
- Salt Spray Emission: IEC 61034
- Compliance: ROHS TUV
- Compliance: EN 50218:2014/IEC 60930:2017

Cable structure

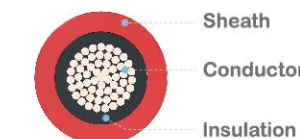
- Conductor: EN 50618 Type 5 tinned copper flexible conductor
- Insulation: 125°C irradiation cross-linked low smoke halogen-free flame retardant polyolefin
- Sheath: 125°C irradiation cross-linked low smoke halogen-free flame retardant polyolefin
- Color: Red or black

DC CABLES

- H1Z2Z2-K



H1Z2Z2-K TUV Single Core Solar Cable EN50618/IEC62930



Structural dimensions and parameters

Model	Specification mm²	Insulation nominal thickness mm	Sheath nominal thickness mm	Approximate outer diameter of finished product mm	Maximum DC resistance of conductor at 20°C Ω/km	Minimum insulation resistance at 90°C m Ω/km
H1Z2Z2-K	1.5	0.7	0.8	4.6	13.7	0.86
H1Z2Z2-K	2.5	0.7	0.8	5.0	8.21	0.69
H1Z2Z2-K	4.0	0.7	0.8	5.55	5.09	0.58
H1Z2Z2-K	6.0	0.7	0.8	6.15	3.39	0.50
H1Z2Z2-K	10	0.7	0.8	7.4	1.95	0.42
H1Z2Z2-K	16	0.7	0.9	8.52	1.24	0.34
H1Z2Z2-K	25	0.9	1.0	10.6	0.795	0.34
H1Z2Z2-K	35	0.9	1.1	12.5	0.565	0.29
H1Z2Z2-K	50	1.0	1.2	14.2	0.393	0.27
H1Z2Z2-K	2X1.5	0.7	0.8	4.6X9.7	13.7	0.86
H1Z2Z2-K	2X2.5	0.7	0.8	5.0X10.5	8.21	0.69
H1Z2Z2-K	2X4.0	0.7	0.8	5.55X11.6	5.09	0.58
H1Z2Z2-K	2X6.0	0.7	0.8	6.15X12.8	3.39	0.50
H1Z2Z2-K	2X10	0.7	0.8	7.4X15.3	1.95	0.42

Reference table for quick selection of carrying capacity

Cross-sectional area mm²	Recommended value of carrying ampacity (A)	Carrying ampacity conversion factor for different ambient temperatures	
Copper conductor	Laying in the air	Ambient temperature °C	Conversion factor
1.5	30	10	1.15
2.5	41	20	1.08
4	55	30	1.0
6	70	40	0.91
10	98	50	0.82
16	132	60	0.71
25	176	70	0.58
35	218	80	0.41
50	276		
2X1.5	24		
2X2.5	33		
2X4.0	44		
2X 6.0	57		
2X 10	79		

Note: Ambient temperature 30°C; conductor maximum temperature 90°C



Product Characteristics

Technical Parameters

- Rated voltage: 600V(AC), 1000V(AC), 2000V(AC)
- Ambient temperature: -40°C~+90°C
- Conductor maximum temperature: 125°C
- Maximum short circuit temperature: ≤250°C/5S
- Expected service life: 25 years
- Bending radius: ≥4D

Features and compliance

- Flame test: UL1581VW-1
- Relative permittivity: UL854
- Stability factor: UL854
- Sunlight resistance: UL2556
- Cold bending test: UL854

Cable structure

- Conductor: Tinned copper flexible conductors in UL4703
- Insulation: 90°C/105°C/125°C irradiation cross-linked low smoke halogen-free flame retardant polyolefin
- Sheath: 90°C/105°C/125°C irradiation cross-linked low smoke halogen-free flame retardant polyolefin
- Color: Red or black

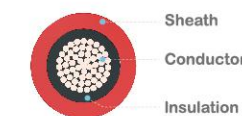
DC CABLES

- PV-UL4703



PV-UL4703

American Standard UL Photovoltaic cable

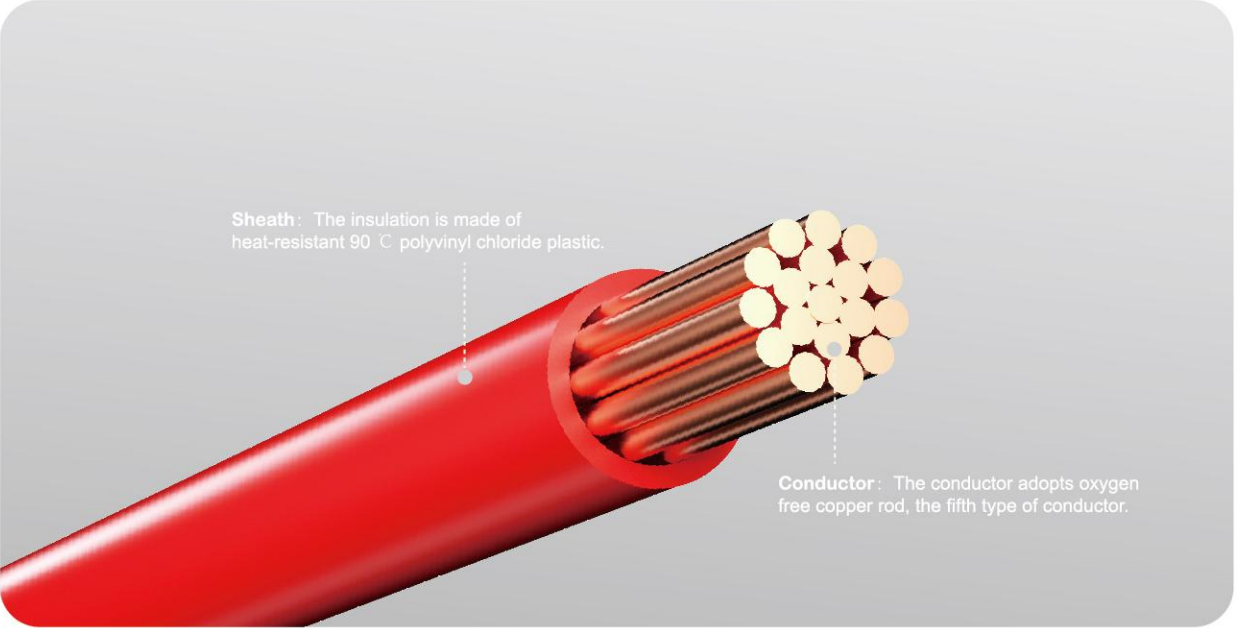


PV-UL4703

Rated voltage	U=600V,1.0KV/2.0KV AC
Ambient temperature	-40°C~+90°C
Specification AWG	12AWG, 10AWG, 9AWG, 8AWG, 7AWG, 6AWG
Test voltage	U=600V 14-10AWG 3KV/1min, 8-6AWG 3.5KV/1min; U=1.0KV/2.0KV 14-10AWG 6KV/1min, 8-6AWG 7.5KV/1min
Conductor maximum temperature	90°C,105°C,125°C

Structural dimensions and parameters

Specification	Cross section	Wire core structure	600V			1000V/2000V			Maximum DC resistance of conductor at 20°C Ω/km
AWG	mm²	Quantity Single Diameter	Inner Insulation Thickness	Outer Insulation Thickness	Outer diameter mm²	Inner Insulation Thickness	Outer Insulation Thickness	Outer diameter mm²	
14	2.08	32/0.28	0.78	0.78	5.05	1.15	0.78	5.80	8.96
12	3.31	49/0.285	0.78	0.78	5.50	1.15	0.78	6.30	5.64
10	5.261	7/0.285	0.78	0.78	6.10	1.15	0.78	6.90	3.546
8	8.367	123/0.285	1.15	0.78	7.70	1.40	0.78	8.20	2.23
6	13.30	197/0.285	1.15	1.15	9.40	1.40	1.15	9.90	1.403



RV
Unshielded electrochemical DC cable



Insulation/Sheath Material	Maximum temperature of conductor ° C	Recommended environmental temperature range ° C	Maximum operating temperature of cable ° C
polyvinyl chloride	90	-20~+50	60

Conductor area/mm²	Insulation thickness specified value/mm	Average Outer Diameter/mm		Minimum insulation resistance at 70°C/(MQ ·km)
		lower limit	limit	
1.5	0.7	2.8	3.4	0.01
2.5	0.8	3.4	4.1	0.009
4	0.8	3.9	4.8	0.007
6	0.8	4.4	5.3	0.006
10	1.0	5.7	6.8	0.0056
16	1.0	6.7	8.1	0.0046
25	1.2	8.4	10.2	0.0044
35	1.2	9.7	11.7	0.0038
50	1.4	11.5	13.9	0.0037
70	1.4	13.2	16.0	0.0032
98	1.6	15.1	18.2	0.0032
120	1.6	16.7	20.2	0.0029
150	1.8	18.6	22.5	0.0029
185	2.0	20.6	24.9	0.0029
240	2.2	23.5	28.4	0.0028

Product Characteristics

Technical Parameters

- Rated voltage: 1000V(DC)
- Ambient temperature: -20°C~+50°C
- Conductor maximum temperature: 90°C
- Maximum operating temperature of cable : 60°C

Compliance

- Reference standards: GB/T5023.3-2008

Cable structure

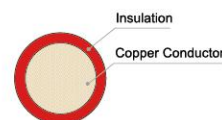
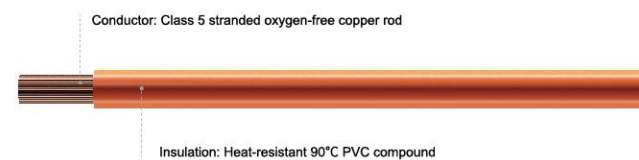
- Conductor: The insulation is made of heat-resistant 90 °C polyvinyl chloride plastic.
- Sheath: The conductor adopts oxygen free copper rod, the fifth type of conductor
- Color: Red or black

DC CABLES

RV

EVS-1000V

Unarmored Electrochemical DC Cable



- Reference Standard: TICW 27-2023
- Rated Voltage: 1000V DC
- Temperature Rating: Max. conductor temperature 90°C under continuous operation
- Standard Colors: Black, Red, Orange

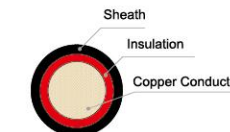
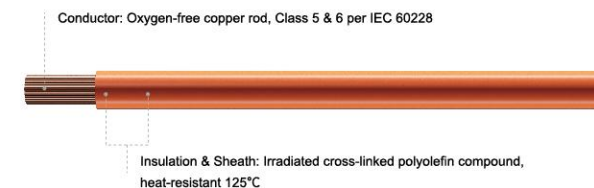
Insulation/Sheath Material	Max. Conductor Temperature °C	Recommended Ambient Temperature Range °C	Max. Operating Temperature °C
PVC	+90	-20~+50	60

ESV-1000V Unarmored Electrochemical DC Cable Parameters

Conductor Size	Conductor Construction	Conductor Diameter mm±0.10	Insulation Thickness mm	Overall Diameter mm ±0.2	DC Resistance at 20°C (Ω/km)	Current Rating at 45°C (A)	Reference Weight KG/KM
4	52/0.30	2.59	1.0	4.69	4.95	43	19.4
6	78/0.30	3.15	1.0	5.25	3.30	55	22.6
10	75/0.40	4.19	1.0	6.29	1.910	79	28.6
16	118/0.40	5.51	1.0	7.61	1.210	105	36.1
25	186/0.40	6.84	1.2	9.34	0.780	138	52.1
35	262/0.40	8.07	1.2	10.57	0.554	169	60.3
50	368/0.40	9.56	1.4	12.46	0.386	211	81.5
70	336/0.50	11.28	1.4	14.18	0.272	269	94.6
95	446/0.50	12.89	1.6	16.19	0.206	328	121.7
120	572/0.50	14.51	1.6	17.81	0.161	391	135.4

ESRZZ-1500V

Electrochemical DC Cable



- Reference Standard: TICW 27-2023
- Rated Voltage: 1000V DC
- Temperature Rating: Max. conductor temperature 125°C under continuous operation
- Standard Colors: Black, Red, Orange

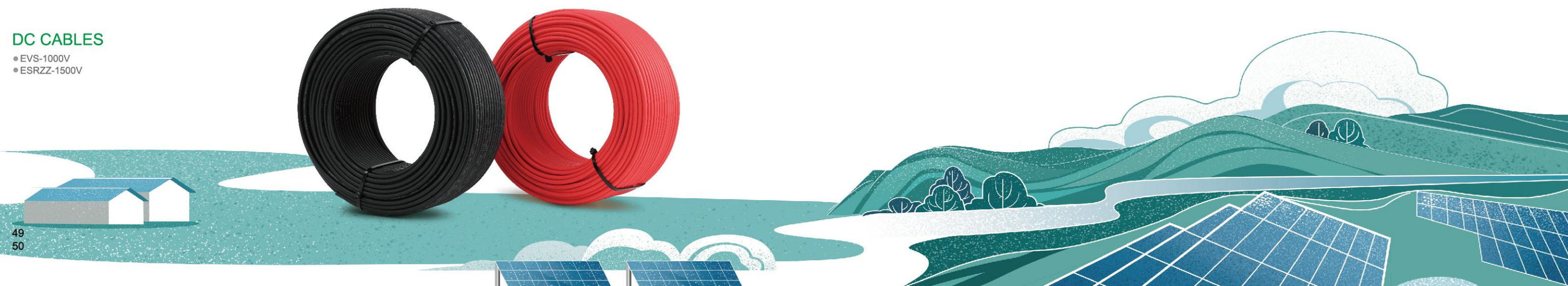
Insulation/Sheath Material	Max. Conductor Temperature °C	Recommended Ambient Temperature Range °C	Max. Operating Temperature °C
PVC	+90	-20~+50	60

ESRZZ-1500V Electrochemical DC Cable Parameters

Model	Specification	Conductor Construction	Conductor Diameter mm ±0.10	Insulation Thickness mm	Sheath Thickness mm	Overall Diameter mm ±0.2	DC Resistance at 20°C (Ω/km)	Current Carrying Capacity at 45°C (A)	Reference Weight KG/KM
ESRZZ	4	205/0.150	2.58	0.8	1.0	6.33	4.95	43	70.07
ESRZZ	6	172/0.20	3.13	0.8	1.0	6.88	3.30	55	90.74
ESRZZ	10	299/0.20	4.19	1.0	1.1	8.54	1.91	79	147.69
ESRZZ	16	469/0.20	5.50	1.1	1.1	10.05	1.21	105	213.60
ESRZZ	25	736/0.20	6.81	1.3	1.2	11.96	0.78	138	319.49
ESRZZ	35	1040/0.20	8.05	1.3	1.3	13.40	0.55	169	426.76
ESRZZ	50	660/0.30	9.60	1.5	1.4	15.55	0.39	211	593.75
ESRZZ	70	938/0.30	11.31	1.5	1.4	17.26	0.27	269	795.21
ESRZZ	95	1242/0.30	12.91	1.5	1.5	19.06	0.21	328	1020.69
ESRZZ	120	1584/0.30	14.49	1.5	1.6	20.84	0.16	391	1271.83

DC CABLES

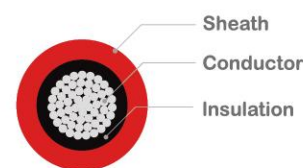
- EVS-1000V
- ESRZZ-1500V



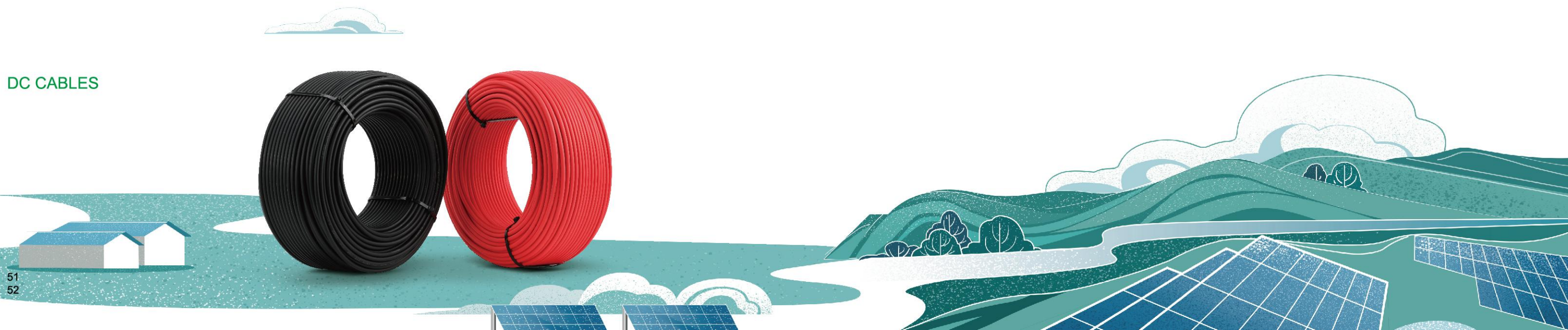


PHOTOVOLTAIC ALUMINUM ALLOY CABLE

Approvals PPP 11029APV1.5KVDC-AL1x4mm²~10mm²



DC CABLES



Technical data

- **Rated voltage:** DC: 1.5KV AC: 0.6/1.0KV
- **Voltage test on completed cable:** AC: 6.5KV DC: 15Kv.5min
- **Ambient temperature:** -40°C~+90°C
- **The expected period of use is 25 years (Ambient temperature: -40°C to +90°C)**
- **High temperature resistance:** EN60216-2
- **Ozone resistance:** EN50396
- **ACID and Alkali resistance:** EN60811-2-1
- **Low temperature resistance:** EN60811-1-4
- **Weathering/Uv-resistance:** EN50289-4-17
- **Ozone resistance at complete cable:** EN60754-1/EN60754-2
- **Test under fire conditions:** EN60332-1-2

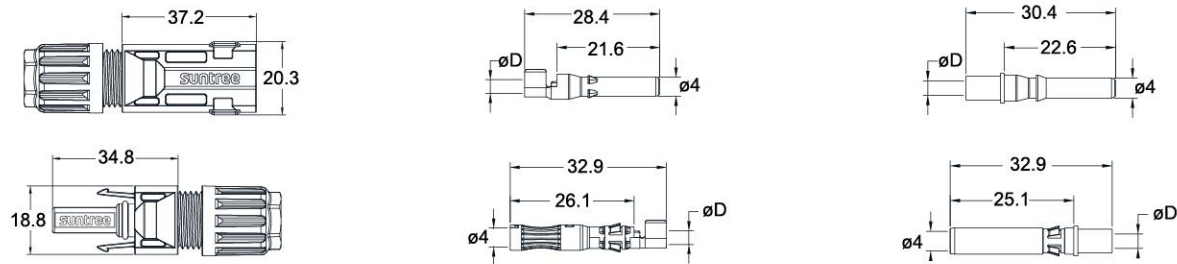
THE STRUCTURE OF CABLE

Cross section (mm ²)	Conductor construction (Φ n/mm±0.015)	Conductor stranded (Φ mm±0.02)	Insulation medium thickness (mm)	Sheath medium thickness (mm)	Cable OD (Φ mm±0.02)	Conductor Dc Resistance (Ω/Km)	Current carrying capacity AT 60°C (A)
4	56x0.3	2.6	0.7	0.8	6.1	7.26	30
6	84x0.3	3.15	0.7	0.8	7.0	4.91	39
10	80x0.4	4.10	0.7	0.8	8.2	2.89	51

PRODUCT CHARACTERISTICS

 IP 68  -40℃~85℃  UL94-V0  UV Resistance

DIMENSIONS (mm)



Order NO.	Part P/N		Cable spec	
	Connector	Terminal	Conductor size	Cable OD(ØD1)
PMCN40-CM-14	PMCN40-CMMM-H PMCN40-CFPM-H	PMCN40-CM-MT14 PMCN40-CM-FT14	AWG14(2.5mm²)	Ø4.5~Ø8.5
PMCN40-CM-12		PMCN40-CM-MT12 PMCN40-CM-FT12	AWG12(4.0mm²)	Ø4.5~Ø8.5
PMCN40-CM-10		PMCN40-CM-MT10 PMCN40-CM-FT10	AWG10(6.0mm²)	Ø4.5~Ø8.5
PMCN40-CM-8		CN40-CM-MT8 CN40-CM-FT8	AWG8(10mm²)	Ø4.5~Ø8.5
PMCN40-CM-01		CN40-CM-MT01 CN40-CM-FT01	AWG10/12/14 (6.0/4.0/2.5mm²)	Ø4.5~Ø8.5

ELECTRICAL PARAMETERS

Rated current:	40A (Stamped Pin) 70A (Lathed Pin)
Rated voltage:	1500V DC
Test Voltage:	8kv(5Hz, 1min)
Contact resistance:	< 0.35 mΩ
Applicable wire specifications:	2.5/4.0/6.0/10.0mm² (14/12/10/8AWG)
Insulation Materials:	PPE
Terminal material:	Copper,Tin plated
Temperature range:	-40℃~85+℃ (IEC)
Overvoltage category pollution degree:	CATIII/2
Degree of protection:	UL94-V0
Flame class:	UL94-V0
Safety class:	II
Insertion force Withdrawal force :	≤50N / ≥50N
Connecting system	Crimp connection

1500V DC PV Connector

PMCN Series



AC Components Series



AC

MODEL AND SIGNIFICANCE

S	HLX	AC	480	H	250A	≤3.2KV
Enterprise code	Design Number	PV system	Rated Voltage	High Voltage	Rated Current	Voltage protection level Up

GENERAL PARAMETERS

- The rated maximum voltage of the system is AC690V.
- The working voltage reaches above 480V;

INTRODCUTION AND HIGHLIGHTS

- Suitable for simultaneous access to multiple string inverters. Each incoming line is protected by a thermal magnetic circuit breaker. The rated voltage reaches AC690V;
- The copper wires are silver-plated, which has lower resistance and lower temperature rise. It is also covered with an insulating sleeve and has strong safety performance;
- All busbars in the box are connected by electroplated or purified busbars to reduce current internal resistance and connection points.

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

AC COMBINER BOX

- SHLX-AC4
- SHLX-AC6
- SHLX-AC8



ELECTRICAL PARAMETERS

Product Model	SHLX-AC		
Product model	SHLX-AC4	SHLX-AC6	SHLX-AC8
Input number	1-4	5-6	7-8
Max input working voltage	AC415V/AC690V/AC800V/AC1000V		
Input working current of each string	0-250A		
Max input working current	250A	400A	630A
Rated working voltage Un (V)	220VAC/400VAC/480VAC/690VAC/800VAC		
Voltage protection level Up	≤3.2KV		
Nominal flow capacity (8/20μs)?	20KA (can be selected according to customer requirements)		
Maximum flow capacity (8/20μs)?	40KA (can be selected according to customer requirements)		
Response time	<25ns		
Fire-retardant Enclosure Level	V0		
Volume (width x height x depth)	800*600*200	800*800*200	800*1000*200
Mounting	Screw fixation		
Location	Indoor or outdoor		
Ambient Temperture	Working temperature: -30~+70℃, humidity 95%, no condensation, no corrosive gas place		
Altitude	≤4000m		
Cabinet material	Hot-dip galvanized steel plate/cold rolled steel/stainless steel/engineering plastics		
Box spraying materials	Outdoor special powder RL7035 (can be customized)		
Box protection level	IP65		
MC4 protection level	IP65		

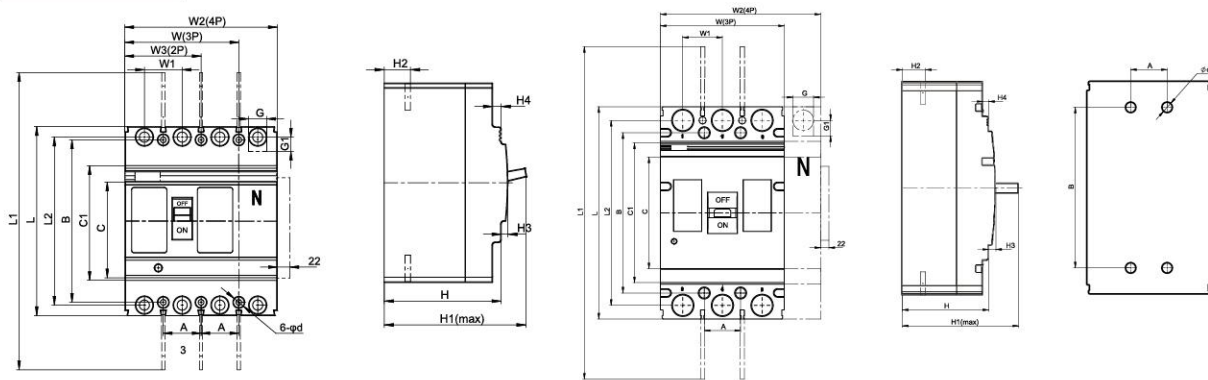
MODEL AND SIGNIFICANCE

S	M8	-	250	H	4	250	415
Enterprise code	Design Number		Rated Voltage	High Voltage	Pole	Rated Current	Rated Operational Voltage

GENERAL PARAMETERS

- Small size, high breaking capacity, short arc distance, and vibration resistance
- The circuit breaker has overload, short circuit, and undervoltage protection functions, which can protect the circuit and power equipment from damage
- Unique mold design, the shell is only owned by our company

DIMENSIONS (MM)



INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

AC MCCB

- SM8-63/400VAC/3P
- SM8-125/415VAC/2P
- SM8-250/690VAC/4P



ELECTRICAL PARAMETERS

Product Model	SM8-63	SM8-125	SM8-250	SM8-400	SM8-630	SM8-800	SM8-1600
Pole	3,4	2,3,4	2,3,4	2,3,4	3,4	3,4	3,4
Rated Operational Voltage/Ue(V)	AC400V	AC415V AC690V	AC415V AC690V	AC415V AC690V	AC415V AC690V	AC415V AC690V	AC400V
Rated Operational Current/In(A)	10/16/20 25/32/40 50/63	16/20/25 32/40/50/63 80/100/125	100/125/160 180/200/225 250	225/250/315 350/400	400/500 630	630/700 800	1000/1250 1600
Frequency(Hz)	50/60Hz						
Rated Insulation Voltage/Ui(V)	AC800V	AC1000V	AC1000V	AC1000V	AC1000V	AC1000V	AC800V
Rated Impulse withstand Voltage/Uimp(V)	8kV	8kV	8kV	8kV	12kV	12kV	8kV
Ultimate Breaking Capacity/Icu(kA)	L 35	L 36	L 36	L 50	L 50	L 50	85
	M 50	M 55	M 55	M 85	M 75	M 75	
	/	H 85	H 85	H 100	H 100	H 100	
	/	690V 20	690V 20	690V 20	690V 20/30/40	690V 15/20/30	/
Rated Breaking Capacity/Ics(kA)	L 22	L 27	L 27	L 35	L 35	L 35	65
	M 35	M 42	M 42	M 65	M 50	M 50	
	/	H 63	H 63	H 75	H 70	H 75	
	/	690V 10	690V 10	690V 15	690V 10/20/25	690V 12.5/15/20	/
Mechanical Life	10000			10000			3000
Electrical Life	10000			2000			500
Method of Mounting	Wall Installation						
Mounting	Easy installed and fastening onto wall with screw						
Location	Indoor or in the Water-proof Box						
Ambient Temperature	-5℃~+50℃						
Altitude	2000M						
Relative Humidity	When the ambient temperature is 40 ℃ , the relative humidity of the atmosphere does not exceed 50%, and higher humidity is allowed at lower temperatures, such as 90% at 20 ℃						

MODEL AND SIGNIFICANCE

S

M

8

-

250/315/400/630/800

HU

/

3

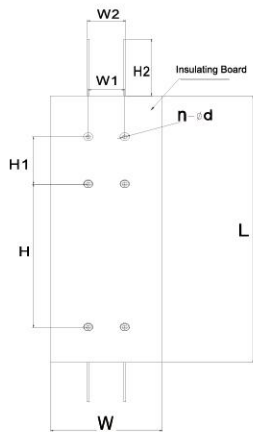
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Enterprise code Product Category Design Serial Number Frame Current Level High Breaking Capacity Number of Poles Trip Code

PRODUCT FEATURES

The SM 8HU series molded case circuit breaker is the latest generation of high-performance circuit breakers developed by our company. This product features significantly enhanced ultimate breaking capacity and voltage withstand capability, making it suitable for power grids with AC voltages ranging from 800V to 1140V. It can be widely used in special applications such as wind power, electric locomotives, mine tunnels, and more.

DIMENSIONS (MM)



Insulated Flooring Installation Dimensions								
Product Model	L	W	H	W1	W2	H1	H2	n-Φd
250/315	300	106	161	35	37	53.3	65	6-Φ4.5
400	257	150	156	16.5	14.5	29	119	4-Φ6
630/800	350	182	200	58	60	60	55	4-Φ7

HIGH VOLTAGE AC MCCB

• SM8-HU

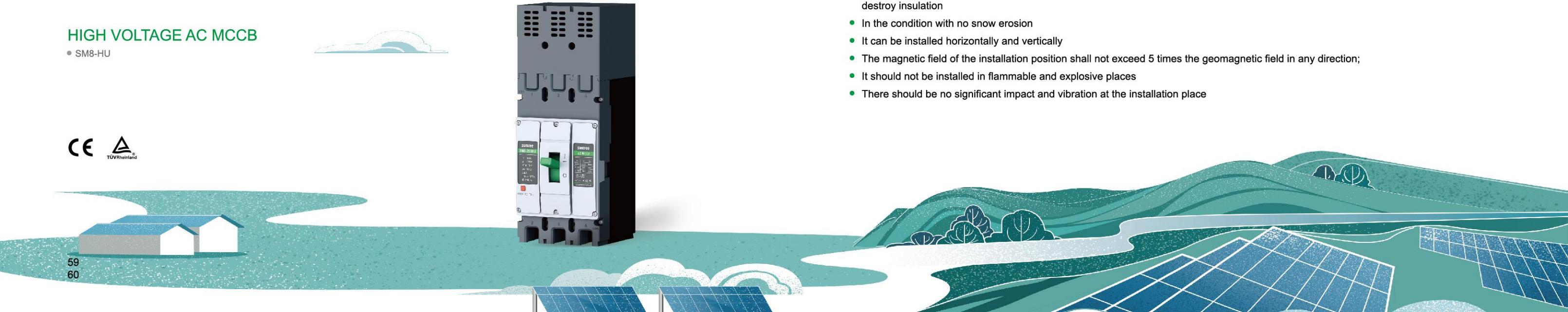


BASIC PARAMETERS

Compliance Standards		IEC60947-2、GB/T14048.2				
Product Specifications		250	315	400	630	800
Number of Poles		3P				
Rated Operating Current In（A）		100、125、140、160 180、200、225、250	280、300、315	250、315、350、400	400、500、630	630、700、800
Rated Insulation VoltageUi(V)		AC 1250V				
Rated Impulse Withstand VoltageUimp(V)		12k				
Arc Distance		≥ 50(0)		≥ 100(0)		
Rated Ultimate Short Circuit Breaking Capacity Icu(kA)	AC800V	36.5		50	50	50
	AC1000V	15		15	15	15
	AC1140V	15		15	15	15
Rated Service Short Circuit Breaking Capacity Ics(kA)	AC800V	36.5		50	50	50
	AC1000V	15		15	15	15
	AC1140V	15		15	15	15
Electrical Life (cycles)		1500	1000	1000	800	500
Mechanical Life (cycles)	Maintenance Free	10000	10000	7000	7000	7000
	Requires Maintenance	15000	15000	10000	10000	10000
Dimensions（Length * Width * Height）		280*107*135(mm)		307*142*156(mm)	320*182*158(mm)	
Reference Ambient Temperature（℃C）		40				

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place



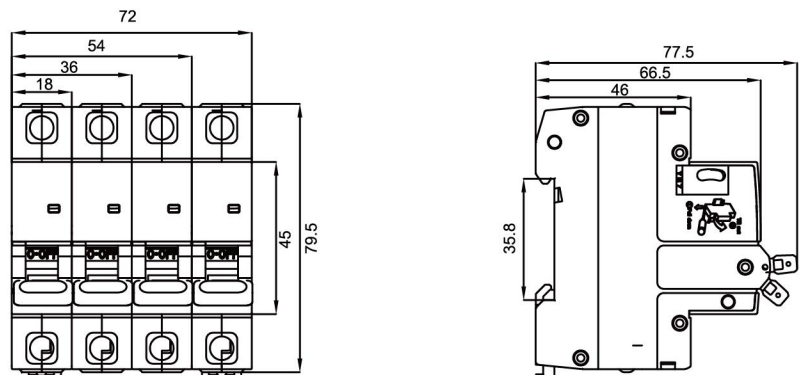
MODEL AND SIGNIFICANCE

S	CB8	-	63A	400	1/2/3/4P	PV
Enterprise code	Design Number		Rated Curvent	Rated Voltage	Pole	PV system

GENERAL PARAMETERS

- Suitable for protection of electrical installations against [short-current] and Over current
- Specially design for solar inverter output
- Indication window and optional remote-signaling contact helps users to know the status of device
- The current-carrying parts are all made of copper, low temperature rise
- Unique shape and high recognition
- The whole machine can pass the salt spray test within 48 hours

DIMENSIONS (MM)



INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

AC MCB

- SCB8-63/230VAC/1P
- SCB8-63/400VAC/2P
- SCB8-63/400VAC/3P
- SCB8-63/400VAC/4P



ELECTRICAL PARAMETERS

Product Model	SCB8-63			
Pole	1P	2P	3P	4P
Rated Operational Voltage/Ue(V)	230/400VAC	400VAC	400VAC	400VAC
Rated Operational Current/In(A)	6,10,16,20,25,32,40,50,63A			
Frequency(Hz)	50/60HZ			
Ultimate Breaking Capacity/Icu(kA)	6kA			
Rated Breaking Capacity/Ics(kA)	6kA			
Max. Impulse Current/Iimp(A)	6kA			
Mechanical Life	20000			
Electrical Life	4000			
Fire-retardant Enclosure Level	V0			
Device Width x Height (mm)	18*79.5*77.5	36*79.5*77.5	54*79.5*77.5	72*79.5*77.5
Method of Mounting	DIN RAIL			
Mounting	Easy installed and fastening onto 35mm device rail(DIN)			
Terminal Capacity	25mm ²			
Fastening Torque of Terminals	3N			
Location	Indoor or in the Water-proof Box			
Ambient Temperture	-5℃ To 50℃			
Altitude	≤2000m			
Relative Humidity	90%			
Weight(per pole)	0.12kg			
Pollution Level	2			
Installation Class	II/III			

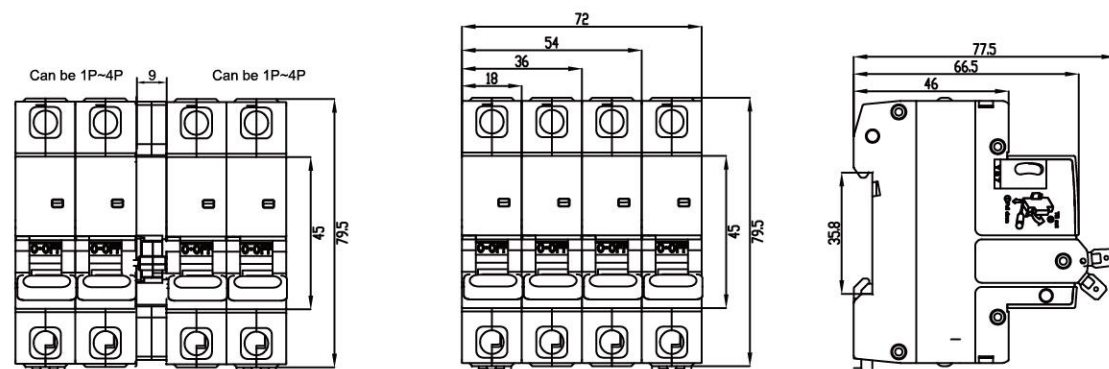
MODEL AND SIGNIFICANCE

SC	B	8	-	63				
Company Code	Product Category	Design Serial Number	Current shell frame	Segment capacity: N(4.5kA) Unexpressed(6kA) H(10kA)	Pole	Rated current :6A, 10A,16A,20A,25A, 32A,40A,50A,63A	MTS: Interlocking accessories	

PRODUCT FEATURES

- The contact indicator window allows for quick identification of the open/close status of the product's internal contacts.
- The flame-retardant housing ensures safer operation
- Current-carrying components are made of pure copper, ensuring low temperature rise.
- Distinctive design with high visual recognition.
- Oversized terminal blocks accommodate 50mm² conductors.
- Advanced arc-extinguishing and current-limiting mechanisms.
- Lift-and-pull terminals provide secure and reliable connections.
- Spring-loaded clamps enable tool-free installation on TH35mm standard rails.

DIMENSIONS (mm)



AC MTS

● SCB8-63MTS



63
64



ELECTRICAL PARAMETERS

Basic specifications and main parameters

Model	SCB8-63MTS	
Number of poles (P)	1	2、 3、 4
Rated current (A)	6、 10、 16、 20、 25、 32、 40、 50、 63	
Rated voltage(V)	AC230/400	AC400
Breaking capacity	SCB8-63H 10000A SCB8-63 6000A SCB8-63N 4500A	
Type of disconnecting device	B type, C type, D type	

Rated current and cross-sectional area of connected conductors

Rated current A	6	10	16	20	25	32	40	50	63
Wire cross-sectional area mm²	1	1.5	2.5		4	6	10		16
Wiring torque N·m	2.0~2.3 for both power supply side and load side								

MECHANICAL AND ELECTRICAL LIFE

Category	Ordinal number	Frequency of operation (times/hour)	Rated current
Electrical life	4000	120	6A-63A
Mechanical life	20000	240	6A-63A

INSTALLATION PRECAUTIONS

- Temperature between -30℃ and +70℃.
- The relative humidity of the air does not exceed 95% at a temperature of 25℃.
- The height of free fall should not exceed 50mm.
- The product should be held lightly during transport, not inverted, and avoid strong collision.
- During transport, it should not be subjected to strong bumps, vibration, fall, and should be protected from rain and snow.

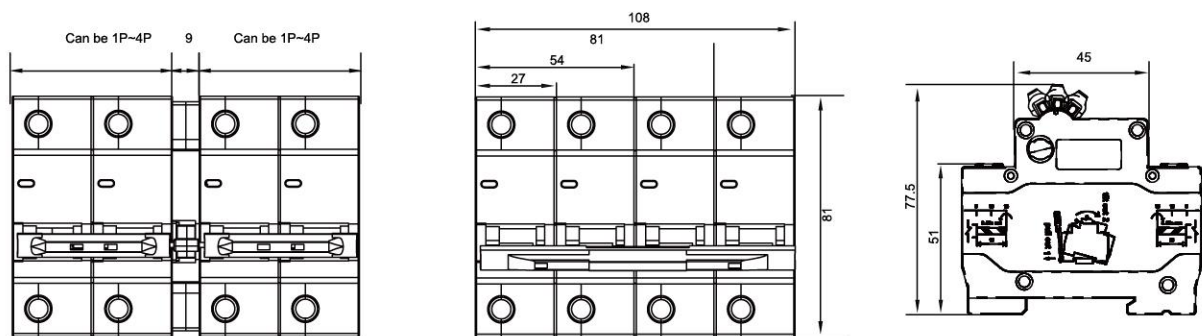
MODEL AND SIGNIFICANCE

SC	B	8	-	125				
Enterprise code	Product Category	Design Number		Frame Current Rating	Breaking capacity: Not specified (6kA), H (10kA)	Poles: 1p,2p,3p,4p	Rated Current Ratings: 40A,50A,63A,80A, 100A,125A	Accessories: MTS

PRODUCT INTRODUCTION

- The contact indicator window allows for quick identification of the open/close status of the product's internal contacts.
- The flame-retardant housing ensures safer operation
- Current-carrying components are made of pure copper, ensuring low temperature rise.
- Distinctive design with high visual recognition.
- Oversized terminal blocks accommodate 50mm² conductors.
- Advanced arc-extinguishing and current-limiting mechanisms.
- Lift-and-pull terminals provide secure and reliable connections.
- Spring-loaded clamps enable tool-free installation on TH35mm standard rails.

DIMENSIONS (mm)



AC MCB

● SCB8-125



ELECTRICAL PARAMETERS

Number of poles	1	2	3	3	4
With neutral wire	N			N	
Frequency Hz	50				
Rated voltage Ue(V)	230		400		
Rated current In(A)	40,50,63,80,100,125,				
Overcurrent instantaneous trip type	10In±20%				
Rated short-circuit breaking capacity Icn(A)	SCB8-125 6000 SCB8-125H 10000				

WORKING ENVIRONMENT

- The surrounding air temperature is not higher than +40°C or lower than -5°C, and its average temperature value in 24h does not exceed +35°C;
- The altitude of the installation place does not exceed 2000m;
- The relative humidity of the air at the installation site does not exceed 50% at a maximum temperature of +40°C. Higher relative humidity may be allowed at lower temperatures. For example up to 90% at +20°C. Special measures should be taken for occasional condensation due to temperature changes;
- Environmental pollution class 2;
- Installation class II or III;
- Installation in a place without shock vibration, rain or snow intrusion;
- Protection class IP20

S	UP1	H	220	2	PV	275
Enterprise Code	Design Number	High Voltage	Rated Voltage	Pole	PV system	Rated Operational Voltage

- Suitable for protection of electrical installations against [transient overvoltage] and [short-current] [lightning strikes] [over-heat]
- Plug-in module design
- Indication window and optional remote-signaling contact helps users to know the status of device

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

Technical drawing of a 100mm wide plate with various hole patterns and dimensions. The drawing includes four vertical sections and a detailed view of the right edge.

- Section 1 (Leftmost):** A single vertical plate with a width of 18mm. It features a central rectangular hole and two circular holes at the top and bottom, each with a cross-hatch pattern.
- Section 2:** A vertical plate with a width of 36mm. It features a central rectangular hole and two circular holes at the top and bottom, each with a cross-hatch pattern.
- Section 3:** A vertical plate with a width of 54mm. It features a central rectangular hole and two circular holes at the top and bottom, each with a cross-hatch pattern.
- Section 4:** A vertical plate with a width of 72mm. It features a central rectangular hole and two circular holes at the top and bottom, each with a cross-hatch pattern.
- Section 5 (Rightmost):** A detailed view of the right edge of the plate, showing a width of 62mm. It includes a central rectangular hole with a width of 50mm and a height of 45mm. The plate has a total height of 90mm. The distance from the top edge to the top of the rectangular hole is 35mm. There are four circular holes, each with a cross-hatch pattern, located at the top and bottom corners of the plate.

- SUP1-40/220VAC/2P



Product Model		SUP1H-40																											
Poles		1P/2P/1P+N/3P/3P+N/4P																											
Rated Operational Voltage Un (V)		230/480 (Customized)																											
Nominal discharge In (8/20μs)kA		5				10				20				30															
Max. Discharge Current Imax (8/20μs)kA		10				20				40				65															
Max. Continuous Working Voltage Uc (V)		150	220	275	320	385	420	480	150	220	275	320	385	420	480	150	220	275	320	385	420	480	150	220	275	320	385	420	480
Protection Level Up (kV)		<1.2	<1.2	<1.4	<1.4	<1.4	<1.4	<2.4	<1.2	<1.2	<1.6	<1.6	<1.6	<1.6	<2.4	<1.2	<1.2	<1.8	<1.8	<1.8	<1.8	<2.4	<1.2	<1.2	<2.0	<2.0	<2.0	<2.0	<2.4
Back-up Fuse		40AgL				40AgL				63AgL				80AgL															
Response Time (ns)		<20																											
Residual Current 75% Uc 1mA		<20pA																											
Test Classification		Class II																											
Protection Level		IP20																											
Ambient Air Temperature (°C)		-40°C~ +80°C																											
Insulating Shell Material		PBT/PA66																											
Flame Resistance Level		V0																											
Mounting		35 mm device rail (DIN)																											
Shell Color		Red																											
Current for Back up Fuse or Breaker		40~80																											
Terminal Capacity (mm²)	Phase line/ Zero line	4~16 Hard Wire																											
	Earth line	4~16 Double Color																											
Test Standard		GB18802.1GB18802.21IEC61643-1IEC61643-21 UL1449 ed.2																											

MODEL AND SIGNIFICANCE

S	UP	2				
Enterprise Code	Design Number	High Voltage	Rated Voltage	Pole	PV system	Rated Operational Voltage

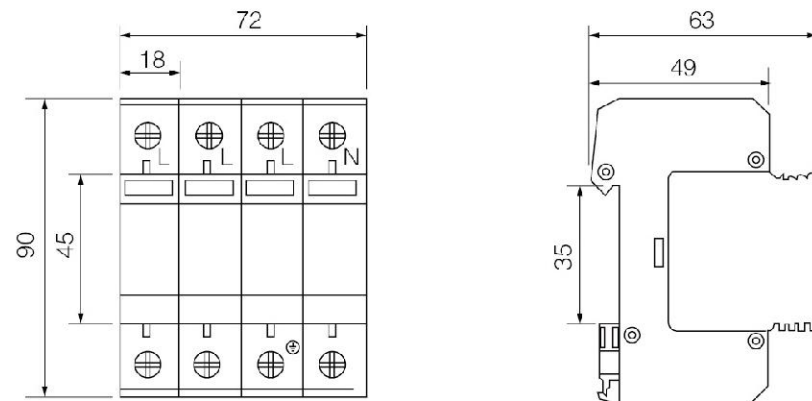
FUNCTION

- Failure release device: The SPD module is equipped with a failure release device. When the protector fails due to overheating or breakdown, The failure release device can automatically disengage it from the grid and give an indication signal.
- Signal Window: When the protector is normal , the signal light shows green, and when it fails, the signal light shows red.
- Remote contact: SPD can be equipped with remote contact. If one or more modules of the protector fail, the contact will close, sending fault information.

PRODUCT BENEFITS

- The voltage continuously applied between the two terminals of the surge protector shall not be greater than the maximum continuous voltage Uc of the surge protector;
- The voltage protection level Up of the surge protector should be less than the shock tolerance limit of the protected equipment;
- Select specifications according to different grounding systems and protection modes.

DIMENSIONS (mm)



AC SURGE PROTECTOR

● SUP2-T1/T2



ELECTRICAL PARAMETERS

Product Model		SUP2-T1/T2							
Poles		1P/2P/1P+N/3P/3P+N/4P							
Rated Operational Voltage Un (V)		230/480 (Customized)							
Nominal discharge In (8/20μs)kA		20				30			
Max. Discharge Current Imax (8/20μs)kA		40				65			
Max. Impulse Current Iimp (10/350us) kA		7KA				7KA			
Max. Continuous Working Voltage Uc (V)		275	320	385	420	275	320	385	420
Protection Level Up (kV)		<2.0	<2.0	<2.0	<2.0	<2.2	<2.2	<2.2	<2.2
Back-up Fuse		80AgL				125AgL			
Response Time (ns)		<20							
Residual Current 75% Uc 1mA		<20uA							
Test Classification		II级							
Protection Level		IP20							
Ambient Air Temperature (℃)		-40℃-+80℃							
Insulating Shell Material		PBT/PA66							
Flame Resistance Level		V0							
Mounting		35 mm device rail (DIN)							
Shell Color		White							
Current for Back up Fuse or Breaker		40~80							
Terminal Capacity (mm²)	Phase line/Zero line	1.5-35 Hard Wire							
	Earth line	1.5-35 Double Color							

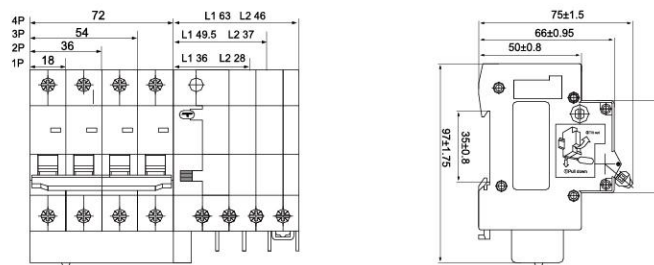
MODEL AND SIGNIFICANCE

S	CB	8	LE	-	63A	
Enterprise code	Product Categories	Design Numvber	Electronic residual current operated circuit breaker		Rated Current	Pole

GENERAL PARAMETERS

- Suitable for protection of electrical installations against [transient overvoltage] and [short-current] [lightning strikes] [over-heat]
- Plug-in module design
- Indication window and optional remote-signaling contact helps users to know the status of device

DIMENSIONS (MM)



INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places

Rated Current and Cross-sectional Area of Connecting Wires						
Rated Current A	6	10	25	32	40/50	63
Wire cross-sectional area mm ²	1	1.5	4	6	10	16
Wiring Tightening Torque N·m	Power supply end and load end both are 2.0~2.3					

AC LEAKAGE CIRCUIT BREAKERS

- SCB8LE-63



ELECTRICAL PARAMETERS

Product Model		SCB8LE-63 RCBO+SPD+OVER/UNDER VOLTAGE PROTECTOR				
Pole	2P			3P		
Rated Operational Voltage/Ui(V)	AC230V			AC400V		
Rated Operational Current/In(A)	6A、 10A、 16A、 20A、 25A、 32A、 40A、 50A、 63A					
Frequency(Hz)	50/60Hz					
Rated Insulation Voltage/Ui(V)	500V					
Rated Impulse withstand Voltage/Uimp(V)	8KV					
Rated Breaking Capacity/Ics(kA)	6					
Max. Discharge Current/Imax (A)	10			10		
Overcurrent Instantaneous Release Type	B、 C、 D					
Rated Residual Operating Current I△nm(A)	30、 50、 100					
Rated Residual Non-operating Current I△nom(A)	15, 25, 50, Customized					
Breaking Time s I△n	<0.1					
Rated Residual Breaking Capacity I△mA	I△mA 2000					
Mechanical Life	20000 Times					
Electrical Life	≥4000					
Device Width x Height (mm)	72*88*21			103*88*21		
Mounting	Easy installed and fastening onto 35mm device rail(DIN)					
Location	Indoor or in the Water-proof Box					
SPD PROTECTION PARAMETERS						
Operating voltage (M)	AC230V			AC400V		
Max. surge current Imax (kA)	10					
Nominal surge current (In (kA)	5					
Response time t (ns)	<25					
Connect the ground terminal to the stranded wire	6mm					
Overcurrent Release Protection Characteristics						
Overcurrent instantaneous release type	Rated current	Test current (A)	Test time	Expected results	Notes	Base temperature
	In(A)					
B, C and D	≤63	1.13In	t≥1h	No tipping		30℃
		1.45In	t≥1h	Tripping	The current rises to the specified value within 5s	
		2.55In	1s<t<60s (for Ins32A)	Tripping		
			1s<t<120s (for Ins32A)			
		3In/5In	t≤0.1s	No tipping	Power on by closing	
		10In			the auxiliary switch	
		5In/10In	t<0.1s	Tripping	Power on by closing	
20In	the axiliary switch					

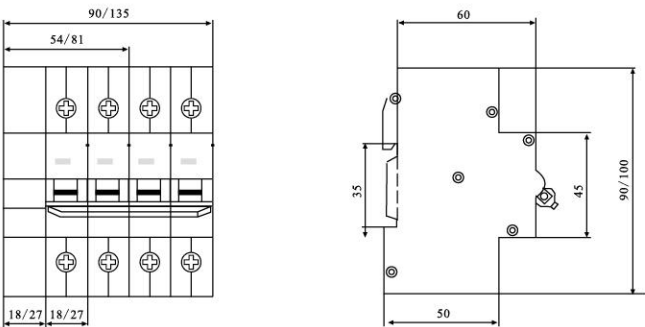
MODEL AND SIGNIFICANCE

S	CB8ZY	230V 400V	2P/4P	80A/125A
Enterprise oode	Design Number	Rated Voltage	Pole	Rated Current

GENERAL PARAMETERS

- Suitable for protection of electrical installations against [transient overvoltage] and [short-current] [lightning strikes] [over-heat]
- Plug-in module design
- Indication window and optional remote-signaling contact helps users to know the status of device

DIMENSIONS (mm)



INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

AUTO RECLOSING-OVER/UNDER VOLATGECIRCUIT BREAKER

- SCB8ZY-80/230VAC/2P
- SCB8ZY-125/400VAC/4P

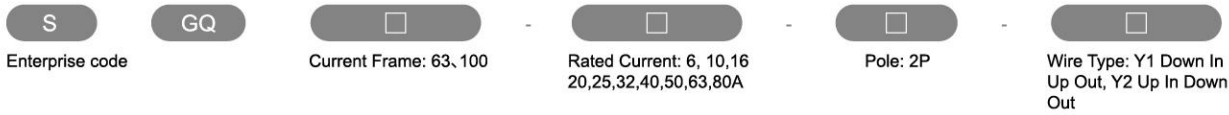
CE



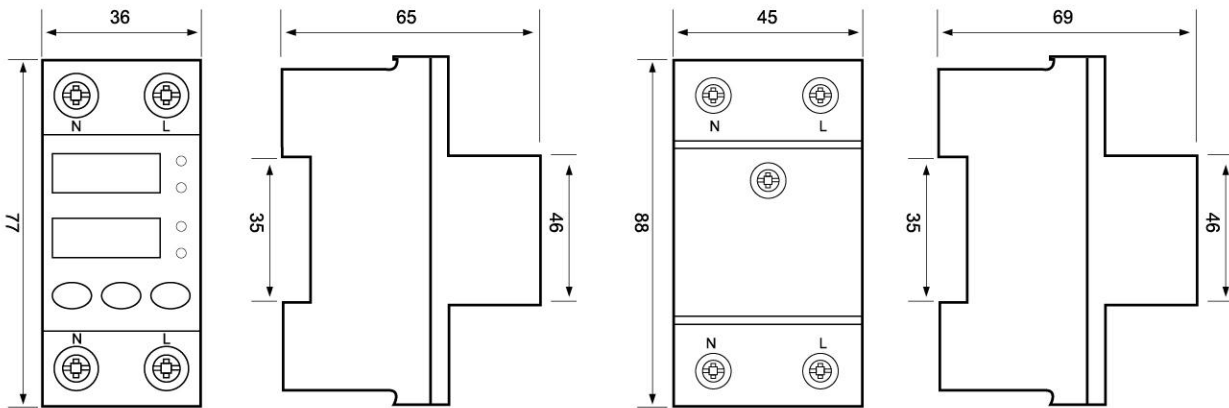
ELECTRICAL PARAMETERS

Model	SCB8ZY-80	SCB8ZY-125
Pole	2P 4P	
Current (A)	16/25/32/40/50/63/80A	100/125A
Rated Operational Voltage/Ue(V)	230V	400V
Rated Operational Current/In(A)	80A	125A
Frequency(Hz)	50Hz/60Hz	
Rated Insulation Voltage/Ui(V)	500V	
Rated Impulse withstand Voltage/Uimp(V)	4kV	
Operation Breaking Capacity/Icu(kA)	7.5kA	6kA
Rated Breaking Capacity/Ics(kA)	10kA	6kA
Trip type	CD	
Restore Operational Voltage (V)	185V~276V	
Control signal voltage	AC220V 50HA	
Turn on delay time	t≥45	
Auto-Closing Time(s)	t≤35	
Mechanical Life	30000	20000
Electrical Life	6000	4000
Device Width x Height (mm)	81*100	135*100
Method of Mounting	DIN Rail Mounted	
Mounting	Easy installed and fastening onto 35mm device rail(DIN)	
Location	Indoor or in the Water-proof Box	
Ambient Temperture	-40℃~+70℃	
Relative Humidity	Less than 95% (+20℃); Less than 50% (+40℃)	
Cross sectional area of Signal cable	0.3mm²	
Signal cable length	50mm (accept customize)	

MODEL AND SIGNIFICANCE



DIMENSIONS (mm)



Auto reset under-over voltage protector with digital display

●SGQ-63



ELECTRICAL PARAMETERS

Product Model	SGQ-63	
Case grade	63	
Rated operating current Ie(A)	6A/10A/16A/20A/25A/32A/40A/50A/63A	
Rated insulation voltage UL	690V	
Rated impulse withstand voltage Uimp	8kV	
Rated working voltage Ue	AC220V/AC110V	
Rated frequency	50/60Hz	
Class	PC class: can be switched on and loaded without generating short-circuit current	
Pole number	2P	4P
Rated short-circuit current Iq	50kA	
Rated Operational Voltage Un (V)	180-240V	380-420V
Short circuit protection device (fuse)	RT16-00-63A	
Rated impulse withstand voltage	8kV	
Control circuit	Rated control voltage Us:AC220V, 50Hz Normal working conditions: 85%Us-110%Us	
Auxiliary circuit	AC220V/110V 50Hz Le=5A	
Contactor change-over time	<50ms	
Operation change-over time	<50ms	
Return change-over time	<50ms	
Power off time	<50ms	
Change-over operation time	<50ms	
Mechanical life	≥8000times	
Electrical life	≥1500 times	
Usage category	AC-31B	

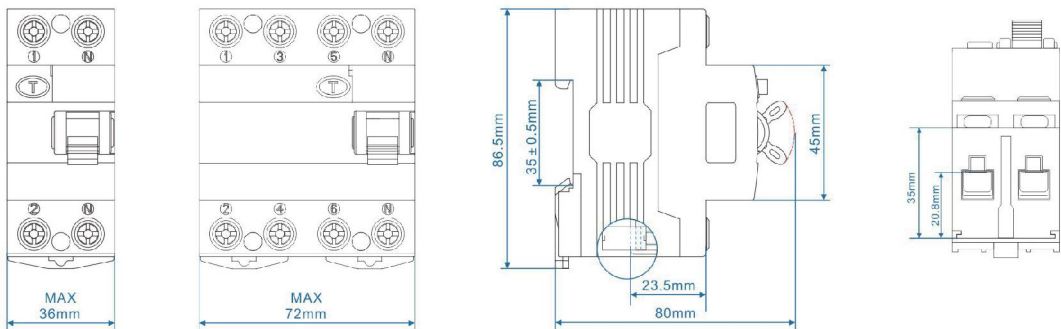
CONSTRUCTION AND FEATURE

- Provides protection against earth fault/leakage current and function of isolation
- High short-circuit current withstand capacity
- Applicable to terminal and pin/fork type busbar connection
- Contact position indication
- Equipped with finger protected connection terminals
- Fire resistant plastic parts endures abnormal heating and strong impact
- Automatically disconnect the circuit when earth fault/ leakage current occurs and exceeds the rated sensitivity
- Independent of power supply and line voltage, and free from external interference, voltage fluctuation

WIRING DIAGRAM



DIMENSIONS (mm)



RESIDUAL CURRENT CIRCUIT BREAKER

• PMB9RL-63



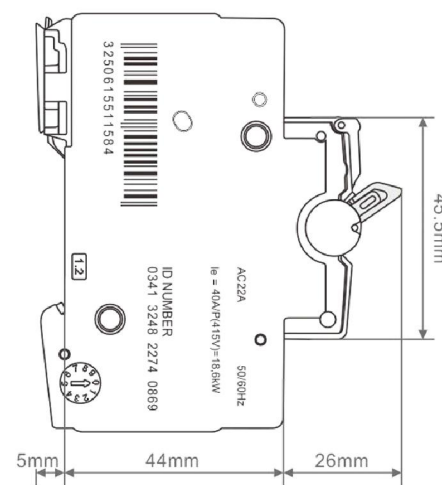
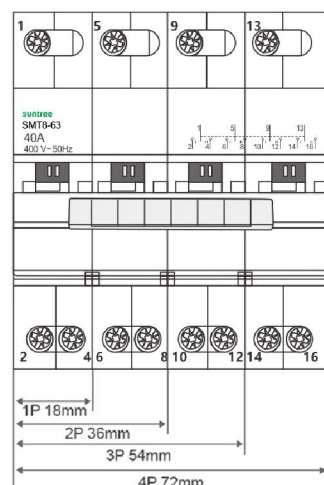
MODEL AND SIGNIFICANCE

S	M	T	8	—	63
Enterprise code	changeover switch	miniature	Design number		Frame current

APPLICATION

SMT8 modular 63A manual changeover switch is an unique solution for the control between two power supplies.t has been developed in order to extend the current range of modular changeover switch to 63A.
It meets our customers' need to have a changeover switch fitted on DIN rail clip and for normal safety application.

OUTLINE AND MOUNTING DIMENSION



ATS-AUTOMATIC TRANSFER SWITCH

● SMT8-63



ELECTRICAL PARAMETERS

Product Model	SMT8-63
Operational voltage(Ue)	230/400V
Thermal current Ith (40℃)	63A
Operational frequency	50/60Hz
Rated insulation voltage(Ui)	1,2,3,4P
Rated insulation voltage(Ui)	500V
Rated impulse withstand voltage Uimp	4kV
Working temperature	-20℃ +50℃
Storage temperature	-40℃ +80℃
Mounting	Mounting

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

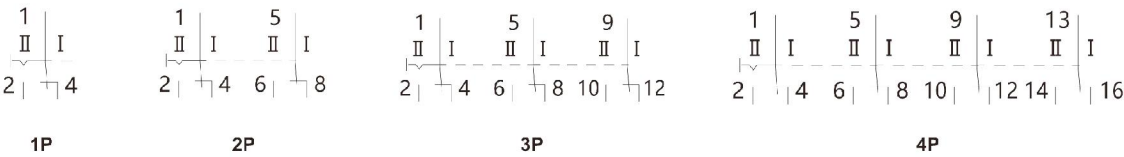
MODEL AND SIGNIFICANCE

S	M	T	8	—	125
Enterprise code	changeover switch	miniature	Design number		Frame current

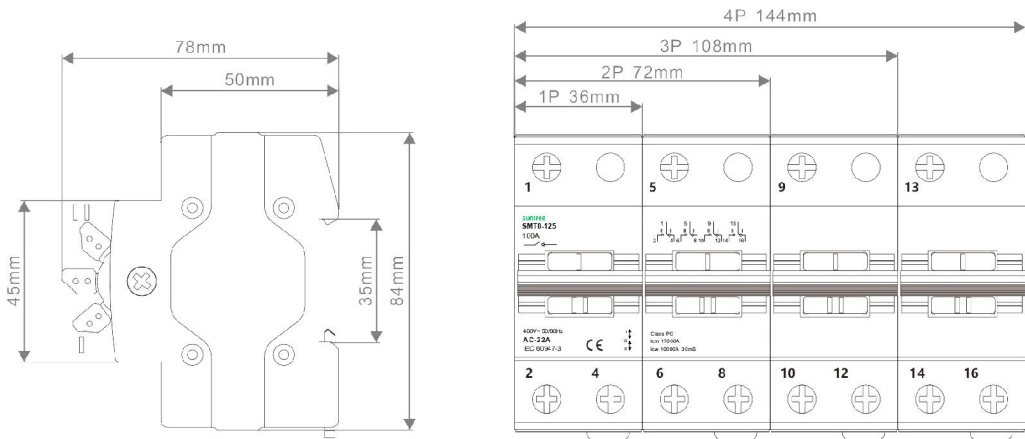
APPLICATION

The Changeover Switch can switch on, Load and break the circuit under normal conditions, using as Switch Disconnectors.

CIRCUIT DIAGRAM



DIMENSIONS (mm)



ATS-AUTOMATIC TRANSFER SWITCH

● SMT8-125



ELECTRICAL PARAMETERS

Product Model	SMT8-125
Rated Voltage	240/415V~
Rated Current	63,80,100,125A
Rated Frequency	50/60Hz
Number of Poles	1,2,3,4P
Contact form	1-0-2
Electrical Life	1500 Cycles
Mechanical Life	8500 Cycles
Protection degree	IP20
Ambient Temperature	-5°C~+40°C
Terminal/Cable size	50mm²
Mounting	On DIN rail EN60715(35mm) by means of fast clip device.

INSTALLATION PRECAUTIONS

- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- It should not be installed in flammable and explosive places
- There should be no significant impact and vibration at the installation place

MODEL AND SIGNIFICANCE

S

Enterprise

Q

Dual power automatic transfer switch

8

Design number

W

Terminal Type Designator

PRODUCT OVERVIEW

Dual power automatic switching switch is a newly developed miniature household power conversion switch. This switch is mainly used to test whether the main or standby power supply is normal. When the normal power supply is abnormal, the backup power supply will immediately start and begin to work, thus ensuring the continuity, reliability and safety of power supply. The product is specifically designed for residential rail installation and is exclusively used with PZ30 distribution boxes.

Dual power automatic transfer switch is suitable for emergency power supply system with 50 or 60Hz, rated 400V AC. ATS is characterized by solid construction, reliable transfer, easy installation and maintenance as well as long service life. It is widely used in a variety of occasions where power outages cannot be sustained, and can be operated both electrically and manually. ATS is composed of TSE and controller.

According to GB/T14048.11, Part 6-1: Multifunction Devices and Switchgear and Controlgear, ATS (Automatic Transfer Switch) is the most suitable low-voltage switchgear and control device that meets the requirements.

NORMAL OPERATION TIME AND INSTALLATION CONDITIONS

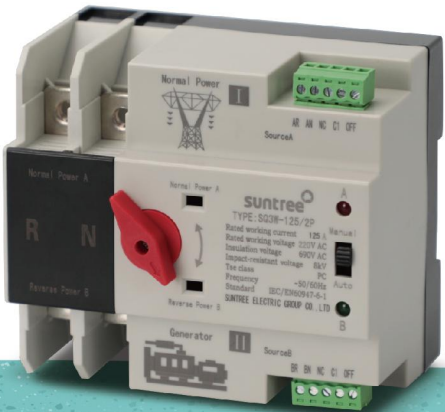
- Ambient air temperature: The maximum temperature should not exceed 40°C, the minimum should not be lower than -5°C, and the average temperature in 24h should not be higher than 35°C.
- Altitude: The altitude of the installation site should not be higher than 2,000m.
- Atmospheric conditions: When the maximum temperature reaches 40°C, the relative humidity of the installation site should not exceed 50%; when the temperature is a minimum of -5°C and the relative humidity is high, for example: The temperature is 25°C, while the relative humidity is 90%. Due to temperature variations, special measures should be taken to deal with occasional condensation on the product surface.
- Pollution degree: The ATS pollution level conforms to GB/T14048.11 designated level 3.
- Installation Category: The installation type of ATS is in accordance with the specified category in GB/T14048.11.
- Installation Conditions: The ATS can be mounted vertically in a control or distribution cabinet.

ELECTRICAL PARAMETERS

Specification	SQ8W-100A		
Rated current Ie(A)	16、20、25	32、40、50、63	80、100
Insulation voltage Ui	AC690V,50Hz		
Rated voltage Ue	AC400V,50Hz		
Level	PC level: Can be fabricated and withstand without short-circuit current		
Use category:	AC-31B		AC-31B
Rod	2P	3P	4P
Weight(kg)	1.7	2.1	2.6
Appliance	Service life 2000 times; manual operation: 5000 times		
Rated short circuit current Iq	50kA		
Short circuit protection device (fuse)	RT16-00-63A		
Rated impulse-withstand voltage	8kV		
Control circuit	Rated control voltage Us: AC220V/50Hz,Normal Operating Condition 85-110%Us		
auxiliary circuit	2 relays, each with two sets of contact converter contact capacity: AC220V/50Hz Ie=5y		
Contactor switching time	<50ms		
Operation transition time	<50ms		
Return transition time	<50ms		
Power off time	<50ms		

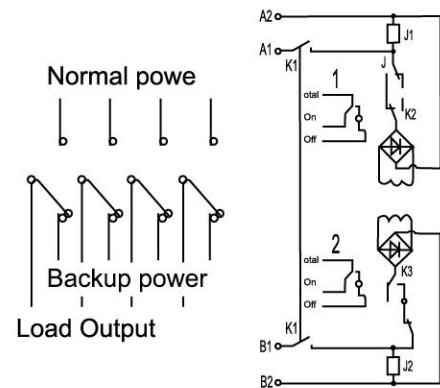
Dual power automatic transfer switch

- SQ8W-100/2P
- SQ8W-100/3P
- SQ8W-100/4P



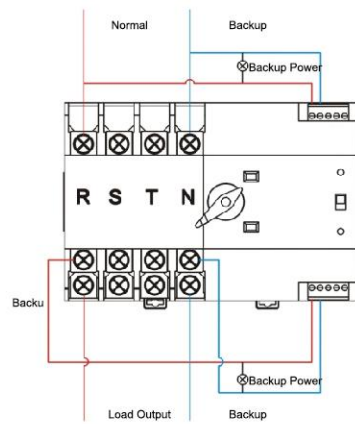
MODEL 100 WIRING DIAGRAM

Internal Wiring Diagram

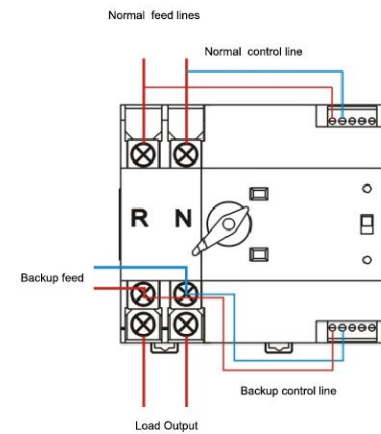


K1: Manual/automatic selector switch
K2, K3: Valve position switches inside the product
J1: Normal 220VA power relay

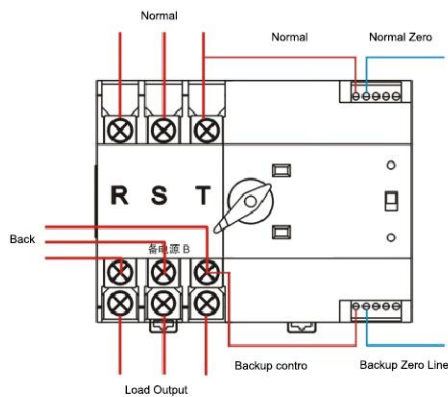
Controller Wiring Diagram



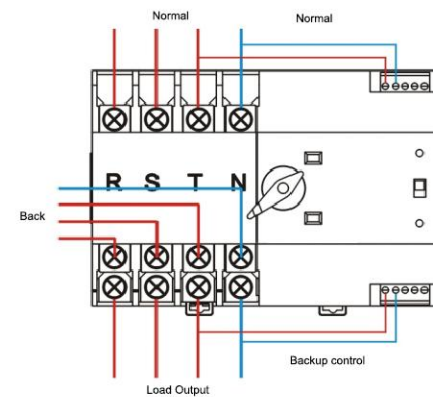
100/2P Wiring Diagram



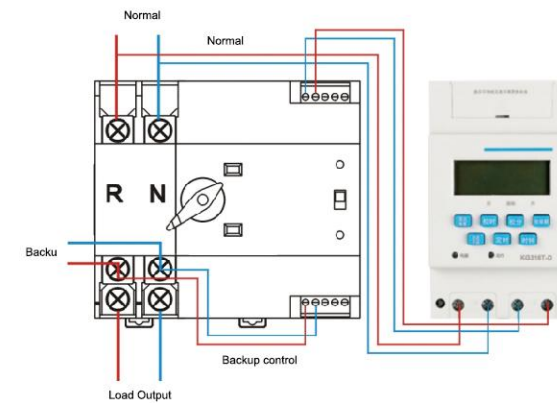
100/3P Wiring Diagram



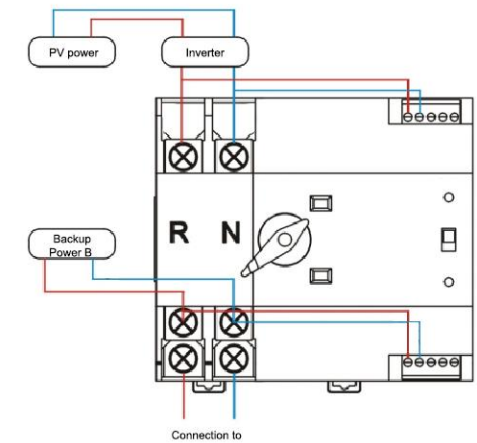
100/4P Wiring Diagram



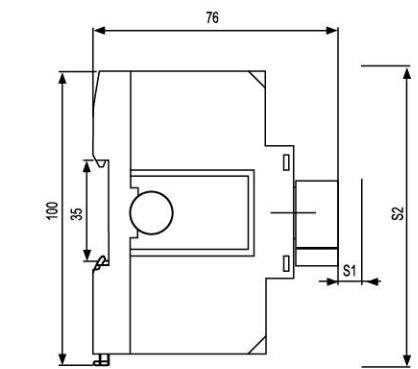
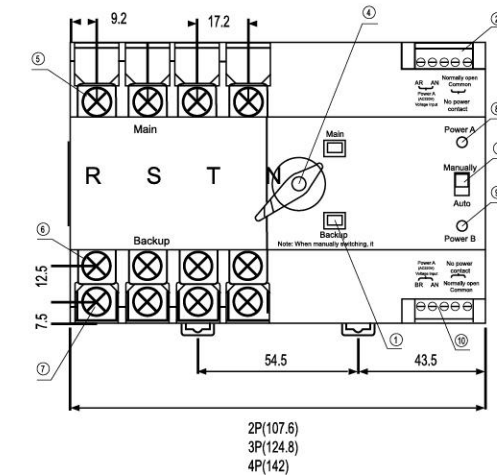
Timing switching wiring method



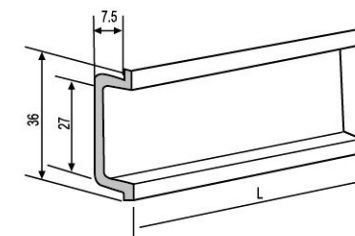
PV inverter-specific wiring



MODEL 100 OUTLINE AND INSTALLATION DIMENSIONS



Safe distance: S1: ≥30mm S2: ≥203mm



- ① Status position indication
- ② Main power terminal and passive signal (AC220V)
- ③ Manually / Auto
- ④ manual handle
- ⑤ Commonly used power side main terminals
- ⑥ Main terminal on the standby power side
- ⑦ Main terminal on load terminal side
- ⑧ power A indicator
- ⑨ Power B indicator
- ⑩ Backup power terminal and passive signal (AC220V)

MODEL AND SIGNIFICANCE

S	Q	8	W	-	63	/	□	□
Company code	Din-rail installation	Product Category: (PC class automatic transfer switch (two stations)	Micro-break type: W	Case grade: 63	Pole No: 2P/3P/4P			Rated working voltage: AC220V AC110V Rated working current: 6A/10A/16A/20A/25A/32A/40A 50A/63A

NORMAL WORKING CONDITIONS

- The installation altitude should not exceed 2000m.
- The upper limit of the ambient temperature is not higher than +40℃, the lower limit is not lower than -5℃, and the 24-hour average value is not more than +35℃.
- The relative humidity of the atmosphere does not exceed 50% when the ambient air temperature is +40℃. At lower temperatures, it can have a higher relative humidity (such as: 90% at +20), but the condensation on the switch surface caused by temperature changes should be considered.
- There is no explosive medium, and the medium does not have gas and dust that is sufficient to corrode and destroy insulation.
- There is no significant shaking and impact vibration.

INSTALLATION

Before installation and use, first check the appearance of the dual power supply product to see if it is damaged during transportation. If there is any damage, please contact the dealer in time. When wiring, please connect the three-phase four-wire of the common and backup power supplies to the incoming terminals of the common and backup circuit breakers respectively. Then connect the two circuit breakers in parallel for the load. If the selected dual power supply is three-pole, the common neutral line and the backup neutral line must be connected to the dedicated terminals (not reversed) or the dual power supply will not work. (Note: During the installation and wiring process, do not forget, short-circuit or open the signal line originally connected to the incoming terminal of the circuit breaker.)

AUTOMATIC TRANSFER SWITCH

● SQ8W-63

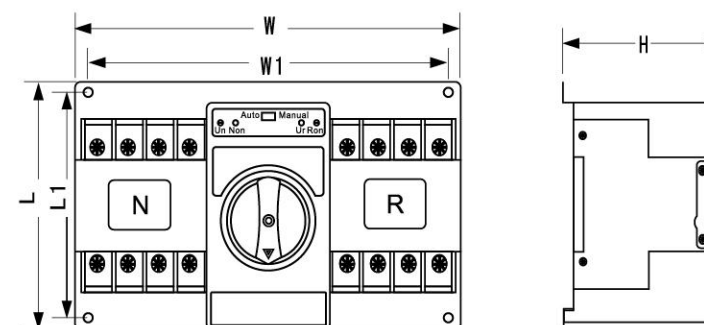
CE



ELECTRICAL PARAMETERS

Product Model	SQ8W-63
Rated operating current Ie(A)	6A/10A/16A/20A/25A/32A/40A/50A/63A
Rated insulation voltage UL	690V
Rated impulse withstand voltage Uimp	8kV
Rated working voltage Ue	AC220V/AC400V
Rated frequency	50/60Hz
Class	PC class: can be switched on and loaded without generating short-circuit current
Pole number	2P/3P/4P
Contactor change-over time	< 1s
Operation change-over time	< 1s
Return change-over time	< 1s
Power off time	< 1s
Change-over operation time	< 1s
Mechanical life	≥8000times
Electrical life	≥1500 times
Usage category	AC-33B

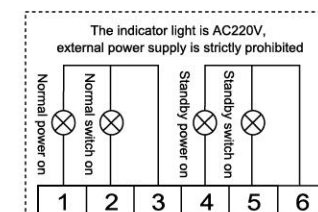
DIMENSIONS (mm)



Specification	W	W1	L	L1	H
2P	150	135	132	120	122
3P	185	165	132	120	122
4P	220	200	132	120	122

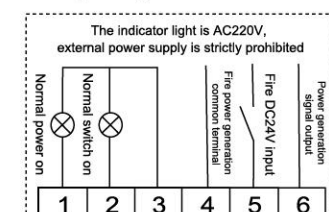
WIRING METHOOD

Basic terminal wiring principle



- Terminals:**
1. Common power indication input
 2. Common closing output
 3. Common common neutral output
 4. Spare power indication output
 5. Spare closing indication output
 6. Spare common neutral output
- Note: When the dual power supply is three-pole
Please connect:
Common neutral to terminal 3
Spare neutral to terminal 6

Wiring principle of fire protection and power generation terminals



- Terminals:**
1. Common closing indication output
 2. Standby closing indication output
 3. Public neutral line output
 4. Fire double-point (DC24V) signal input
 5. Generator signal output
 6. Fire power generation public signal point
- Note: When the dual power supply is three-pole
Please connect: Common standby public neutral line to terminal 3

MODEL AND SIGNIFICANCE

S

Q8P

-

400V

/

100A

Enterprise oodeDesign NumberRated CurrentPoleRated Voltage

GENERAL PARAMETERS

- It adopts double row compound contact, horizontal pull mechanism, micro-motor pre-energy storage and micro-electronic control technology,Reliable mechanical interlocking and electrical interlocking, independent load isolation switch for the actuator, safe and reliable use;
- Adopt zero-crossing technology, which can be forced to zero in emergency (cut off two power supplies at the same time) to meet the needs of fire linkage;The switch of load isolation switch is driven by a single motor, which is reliable and stable, no noise and small impact force;
- The controller drives the motor to pass the current only when the load isolation switch is switched, and the steady state operation does not need to provide the working current, which saves energy significantly.
The load isolation switch is equipped with a mechanical interlock device to ensure the reliable and non-interference of common and standby power supplies;
- With obvious on-off position indication, padlock and other functions, reliable isolation between the power supply and the load;Good safety performance, high degree of automation, high reliability, more than 8000 times of service life;
- Mechatronics design, switch conversion accurate, flexible, smooth, the use of international advanced logic control technology, anti-interference ability, no external interference; With the main power supply, standby power supply; The main power supply is divided, the standby power supply is combined, and the main and standby power supplies are disconnected in three working states (I-0- II).
Easy to install, the control loop is connected by plug terminals; Four operating functions: emergency manual operation, electronic remote control operation, self
Emergency disconnect operation and automatic control operation in dynamic control state.

AUTOMATIC TRANSFER SWITCH

● SQ8P-100A/3P



ELECTRICAL PARAMETERS

Product Model			SQ8P-16~100 SERIES								
Conventional heating current			100A								
Rated current Ie(A)			16A	20A	25A	32A	40A	50A	63A	80A	100A
Rated Insulation Voltage/Ui(V)			690	690	690	690	690	690	690	690	690
Medium strength(M)			3000	3000	3000	3000	3000	3000	3000	3000	3000
Rated Impulse withstand Voltage/Uimp(V)			6	6	6	6	6	6	6	6	6
Rated working current Ie(A)	400V	AC-31	16	20	25	32	40	50	63	80	100
		AC-33	16	20	20	25	32	40	50	63	80
		AC-35	16	20	25	32	40	50	63	80	100
Motor power(400V) KW			8	10	15	15	20	25	30	30	32
Rated short-time withstand current Icw (KARms)0.1S/1S(V)			9/5	9/5	9/5	9/5	9/5	9/5	9/5	9/5	9/5
Rated Breaking Capacity(A Rms)AC33 380V			125	160	200	250	320	400	500	640	800
Rated turn-on Capacity(A Rms)AC33 380V			160	200	250	320	400	500	640	800	1000
Rated short-circuit capacity Icm(kA peak)			17	17	17	17	17	17	17	17	17
Mechanical Life(number of cycles)			10000	10000	10000	10000	10000	10000	10000	10000	10000
Electrical Life	cosΦ=0.65 AC33		2000	2000	2000	2000	2000	2000	2000	2000	2000
Transfer time	I -0- II or II -0- I (S)		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	I -0 or II -0 (S)		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Electrical control energy consumption	220V(AC)(W)		25	25	25	25	25	25	25	25	25
Operating force distance(Nm)			12	12	12	12	12	12	12	12	12
Ambient Temperature			-5℃ ~+35℃								
Altitude			not more than 2000m								

ELECTRICAL PARAMETERS

Product Model			SQ8P-125~1600 SERIES									
Conventional heating current			160A		250A		630A		1000A		1600A	
Rated current Ie(A)			125A	160A	200A	250A	400A	630A	800A	1000A	1250A	1600A
Rated Insulation Voltage/Ui(V)			690	690	690	690	690	690	690	690	690	690
Medium strength(M)			3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
Rated Impulse withstand Voltage/Uimp(V)			8	8	8	8	12	12	12	12	12	12
Rated working current Ie(A)	400V	AC-31	125	160	200	250	400	630	800	1000	1250	1600
		AC-33	125	160	200	250	400	630	800	1000	1250	1600
		AC-35	125	160	200	250	340	536	630	800	1000	1250
Motor power(400V) KW			63	80	100	132	220	280	560	560	560	560
Rated short-time withstand current Icw (KARms)0.1S/1S(V)			20/10	20/10	25/12	25/12	40/20	50/25	90/50	90/50	90/50	90/50
Rated Breaking Capacity(A Rms)AC33 380V			1000	1000	1600	1600	3200	3200	8000	8000	8000	8000
Rated turn-on Capacity(A Rms)AC33 380V			1250	1250	2000	2000	4000	4000	1000	10000	10000	10000
Rated short-circuit capacity Icm(kA peak)			17	17	17	17	30	30	50	50	50	50
Mechanical Life(number of cycles)			10000	10000	10000	10000	5500	5500	4000	4000	4000	3000
Electrical Life	cosΦ=0.65 AC33		1000	1000	1000	1000	500	500	400	400	400	300
Transfer time	I -0- II or II -0- I (S)		1	1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2
	I -0 or II -0 (S)		0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
Electrical control energy consumption	220V(AC)(W)		75	75	75	75	90	90	120	120	120	120
Operating force distance(Nm)			19	19	26	26	39	39	39	39	39	60
Ambient Temperture			-5℃ ~+35℃									
Altitude			not more than 2000m									

ELECTRICAL PARAMETERS

Product Model			SQ8P-800~3200 SERIES						
Conventional heating current			800A	1000A	1250A	1600A	2000A	2500A	3200A
Rated Insulation Voltage/Ui(V)			1000V						
Rated Impulse withstand Voltage/Uimp(V)			12kV						
Rated working voltage Ue(V)			AC400V						
Rated working current Ie(A)	400V	AC-31	800	1000	1250	1600	2000	2500	3200
		AC-33	800	1000	1000	1000	1250	1250	1250
		AC-35	800	1000	1000	1250	2000	2000	2500
Rated Breaking Capacity(A Rms)AC33 380V			10Ie						
Rated turn-on Capacity(A Rms)AC33 380V			8Ie						
Rated limit short-circuit current (kA)			100				120		
Rated short-time withstand current Icw(kA)			26kA		50kA		55kA		
Cconversion time			1.2s				2.4s		
Control supply voltage			AC220V						
Operating force distance(Nm)	Activate (a plan)		400W				600W		
Ambient Temperture	Normal		90W		98W		120W		
Weight (kg)			32	41.05	52.75	55.25	94.05	105.6	121.5

INTRODCUTION AND HIGHLIGHTS

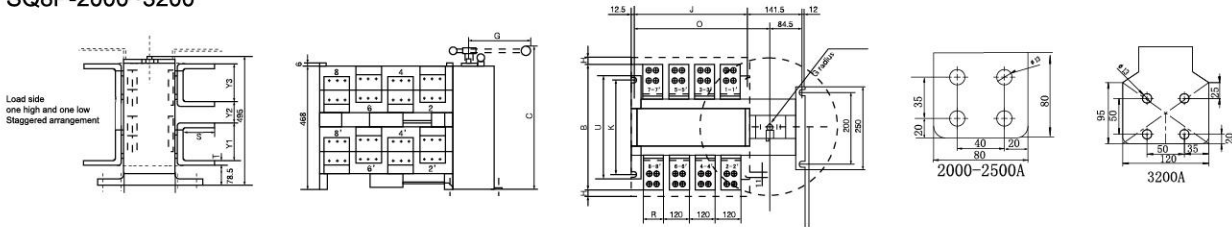
SQ8P automatic transfer switch is a set of switch and logic control in one, without additional controller, truly realize the electromechanical integration of the automatic transfer switch,with voltage detection, frequency detection, voltage loss detection, electrical, mechanical and electrical interlock and other functions, can realize automatic switching, remote control, emergency manual control,operation by the logic controller to various logic commands to manage the motor. The operation of the gearbox is realized, the energy storage of the pull rod spring is opened and closed, the acceleration structure is released instantaneously, the standby power supply is quickly switched on and off or the line is converted, and the safety isolation is realized through the obvious state transformation, which greatly improves the mechanical properties of the electrical properties.

INSTALLATION PRECAUTIONS

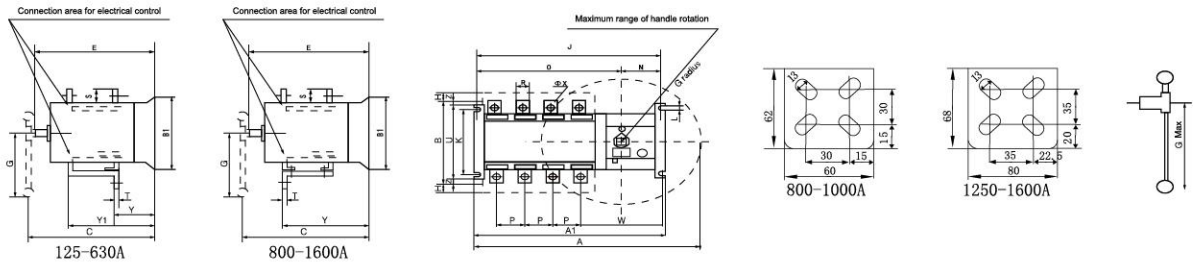
- The installation altitude should not exceed 2000m
- The upper limit of the ambient temperature is not higher than +40℃, the lower limit is not lower than -5℃, and the 24-hour average value is not more than +35℃.
- The relative humidity of the atmosphere is not more than 50% when the ambient air temperature is +40℃, at lower temperatures, there can be a higher relative humidity (such as: +20 can reach 90%), but should be considered due to temperature changes caused by condensation on the switch surface.
- The magnetic field of the installation position shall not exceed 5 times the geomagnetic field in any direction;
- No explosive danger of the medium, and the medium is not enough to corrode and destroy the insulation of gas and dust.
- No significant shaking and shock vibration.

OVERALL AND MOUNTING DIMENSIONS (MM)

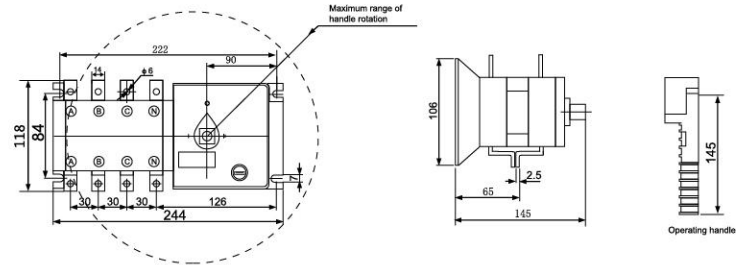
SQ8P-2000~3200



SQ8P-125~1600



SQ8P-100A/4



DIMENSIONS (MM)

In	Overall Dimensions							Mounting Dimensions									Wiring terminal			
	A	A1 Length	B Width	B1	C	E Height	G	J Installation	K Installation	L	N	P	R	S	T	U	W	ΦX	Y	
100A/3	258	232	118	107	170	145	115	222	84	7	90	30	14	18	2.5	106	126	6	65	
100A/4	270	244	118	107	170	145	115	234	84	7	90	30	14	18	2.5	106	126	6	65	
125A/3	292	267	146	142	230	193	155	251	102	7	91	36	20	35	3.5	126	158	9	60	
125A/4	322	300	146	142	230	193	155	284	102	7	9	36	20	25	3.5	126	158	9	60	
160A/3	292	267	146	142	230	193	155	251	102	7	91	36	20	25	3.5	126	158	9	60	
160A/4	322	300	146	142	230	193	155	284	102	7	91	36	20	25	3.5	126	158	9	60	
250A/3	356	305	179	142	240	208	155	287	102	7	91	50	25	30	3.5	135	168	11	60	
250A/4	406	360	179	142	240	208	155	343	102	7	91	50	25	30	3.5	135	168	11	60	
400A/3	487	375	250	220	274	263	189	356	180	9	93	65	32	39	5	220	203	11	82	
400A/4	552	433	250	220	274	263	189	416	180	9	93	65	32	39	5	220	203	11	82	
630A/3	487	375	270	220	274	263	189	356	180	9	93	65	40	49	5	220	203	12	82	
630A/4	552	433	270	220	274	263	189	416	180	9	93	120	40	49	5	220	203	12	82	
800A/3	670	515	353	250	321	308	443	495	220	11	87	120	60	64.5	8	250	207	13	240	
800A/4	760	636	353	250	321	308	443	616	220	11	87	120	60	64.5	8	250	207	12.5	240	
1000A/3	670	515	353	250	321	308	443	495	220	11	87	120	60	64.5	8	250	207	13	240	
1000A/4	760	636	353	250	321	308	443	616	220	11	87	120	60	64.5	8	250	207	12.5	240	
1250A/3	670	515	367	250	321	308	443	495	220	11	87	120	80	68	8	250	207	13	240	
1250A/4	760	636	367	250	321	308	443	616	220	11	8	120	80	68	8	250	207	13	240	
1600A/3	670	515	370	250	321	308	443	495	220	11	87	120	80	69	10	250	207	13	240	
1600A/4	760	636	370	250	321	308	443	616	220	11	87	120	80	69	10	250	207	13	240	

In	Overall Dimensions							Mounting Dimensions									Wiring terminal				
	A	A1 Length	B Width	B1	C	E Height	G	J Installation	K Installation	L	N	P	R	S	T	U	W	ΦX	Y1	Y2	Y3
2000A/3	680	525	405	247	480	467	447	613	215	12	84.5	120	80	112	10	244	204.5	13	87	125	88
2000A/4	800	646	405	247	480	467	447	613	215	12	84.5	120	80	112	10	244	204.5	13	87	125	88
2500A/3	680	525	427	247	480	467	447	613	215	12	84.5	120	80	113	15	244	204.5	13	100	116	100
2500A/4	800	646	427	247	480	467	447	613	215	12	84.5	120	80	113	15	244	204.5	13	100	116	100
3200A/3	680	525	458	247	480	467	447	613	215	12	84.5	120	120	118	15	244	204.5	13	107	109	106
3200A/4	800	646	458	247	480	467	447	613	215	12	84.5	120	120	118	15	244	204.5	13	107	109	106

ELECTRICAL PARAMETERS

Type			SISO-63					
Rated thermalcurrentlth open			A	20	20	32	40	63
Rated thermal currentlth enclosed			A	25	25	32	40	63
Rated insulation voltage Ui			V	690	690	690	690	690
Rated operational currentleAC21A			A	20	25	32	40	63
Making capacityleff	220-440V		A	160	190	220	300	370
	380-440V		A	160	180	200	250	330
	660-690V		A	160	180	200	250	330
			A	80	110	140	170	190
Disconnection property performed up to			V	690	690	690	690	690
Motor Switch	AC3	400V	A	12	16	23	30	37
Motor Switch	AC3	220-440V	KW	3	4	5.5	7.5	11
Direct switching of single motors	380-440V		KW	5.5	7.5	11	15	18.5
	660-690V		KW	5.5	7.5	11	15	18.5
Main Switch	AC23	400V	A	16	20	25	32	45
Motor Switch	AC23A	220-440V	KW	4	5.5	7.5	9	15
Main Switch	AC23B	380-440V	KW	7.5	10	12.5	16	22
Safety Switch		660-690V	KW	5.5	7.5	11	15	18.5
Rated conditional short-circuit current			KWeff	10	10	10	10	10
Max.fuse sizegL(gG)			A	25	35	40	50	63
Mechanical life			×10 ³	200	200	200	200	100
Rated short-time withstand current(1 sec.current)			A	250	300	400	500	600
Operation	Open		-40℃to+60℃					
	enclosed		-40Cto+40℃					
	storage		-50℃Cto+90℃					
Cable cross sections			mm²	05-10				1-25
solid or standard			AMG	20-8(10)				6-4(10)
flexible			mm²	0.5-6				4-16
			AMG	20-10				16-6
			mm²	0.5-6				75-16
Size of terminal screw			AMG	20-10				16-6
				M3.5				M5
Tightening torque			Nm	0.8-1.7				2-4
Auxillary contacts								
Rated insulation voltage Ui			V	690				690
Rated thermal current lth lthe			A	10				10
Switching capacity	AC15	220-240V	A	2.5				2.5
	AC15	380-440V	A	1.5				1.5
Rated conditional short-circuit current			KAoff	3				3
Max.short circuit protectiongL(gG)			A	10				10
Cable cross sections			mm²	0.75-2.5				0.75-2.5
Solid or standard			AWG	14-12				14-12
flexible(+multicore cable end)			mm²	0.75-2.5(1.5)				
			AWG	18-14				18-14

Data according to UI and cUL

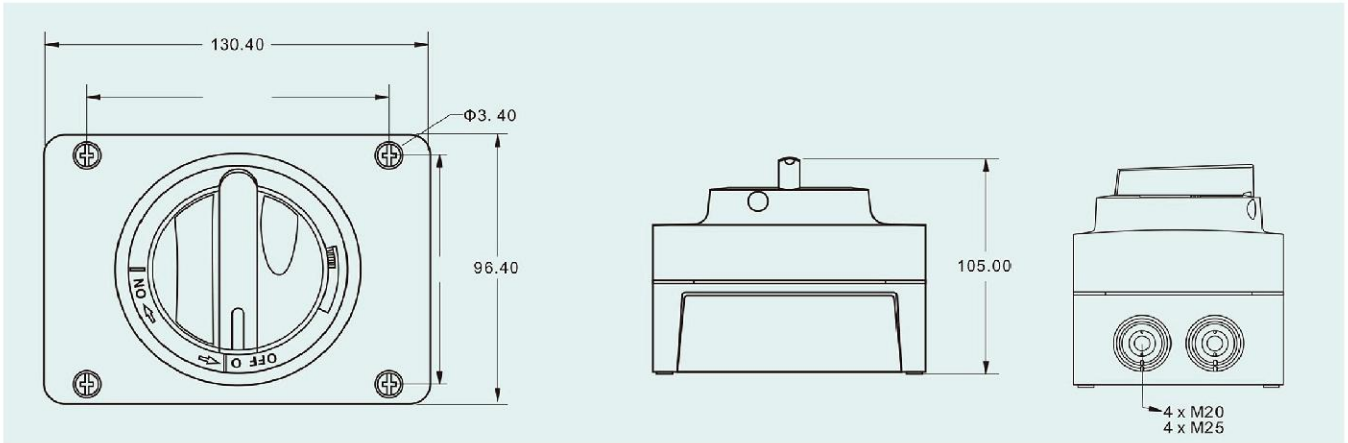
Type						
Rated voltage		V	600	600	600	600
Ampere-Rating "General use"		A	20	25	32	40
DOL-Rating 3-phase	110-120V	HP	1	1.5	2	2
	220-240V	HP	3	5	5	5
	440-480V	HP	7.5	10	10	10
	550-600V	HP	10	10	15	15
Fuse size(RK5) 5KA/600V	110-120V	HP	1	1	1	1
	200-208V	HP	1	2	2	2
	220-240V	HP	2	2	3	3
	Manual Motor Controller	A	40	50	50	70
	Motor Disconnect	A	40	50	50	50
Tightening torque		Nm	1.2-2.3	1.2-2.3	1.2-2.3	1.2-2.3
		lb.inch	11-20	11-20	11-20	11-20

1)Suitable for .earthed-neutral systems, overvoltage category to I, poluion degree 3(standard-industry);Uimp=6kv. Data for other conditions on request

MODEL AND SIGNIFICANCE

S	ISO-40	63	4
Company Code	Design Number	Rated current	Pole

DIMENSIONS (mm)



DC ISOLATOR SWITCH
• SISO-63



MODEL AND SIGNIFICANCE

S

Enterprise code

GL

Design Number

-

☐

Agree on the heating current

3/4

Number of strings 3P,4P

63-3150

Rated current 63-3150A

3/4

Number of strings 3P,4P

F

Auxiliary contact code

B

Wiring method
B: Wiring before the panel
B: Wiring after the panel

☐

Operation mode
Inside the cabinet
Outside the cabinet

COMPLY WITH STANDARDS

International Standards
IEC60947-1(1998) "Low-voltage switchgear and controlgear, Part 1, General Principles"
IEC60947-3(1999) "Low-voltage switchgear and controlgear, switches, isolators, disconnectors and fuse-combination appliances"

National Standards
GB/T14048.1-2000 "Low-voltage switchgear and controlgear, general principles"
GB/T14048.3-2002 "Low-voltage switchgear and controlgear, switches, isolators, disconnectors and fuse-combination appliances"

NORMAL WORKING CONDITIONS

The load isolating switch can work reliably under the following conditions:

- Altitude not exceeding 2000 meters;
- Ambient temperature not higher than 40℃, not lower than -5℃, relative humidity not greater than 95%;
- No explosive hazardous media;
- No rain or snow invasion environment.

Note: If it is expected to be used under the condition of ambient air temperature higher than +40℃ or lower than -5℃~45℃, the user should explain to the manufacturer.

63~3150A LOAD ISOLATION SWITCH

- The load isolation switch is divided into 7 specifications from 63~3150A. It is a modular design basic type with three poles and four poles.
- It is mainly used for circuit connection and disconnection or electrical isolation. It is only used for electrical isolation above 1000A.
- A marking window is set on the front to indicate the contact on and off status.
- Two sets of auxiliary contacts can be equipped.
- Cable insulation cover can be equipped.

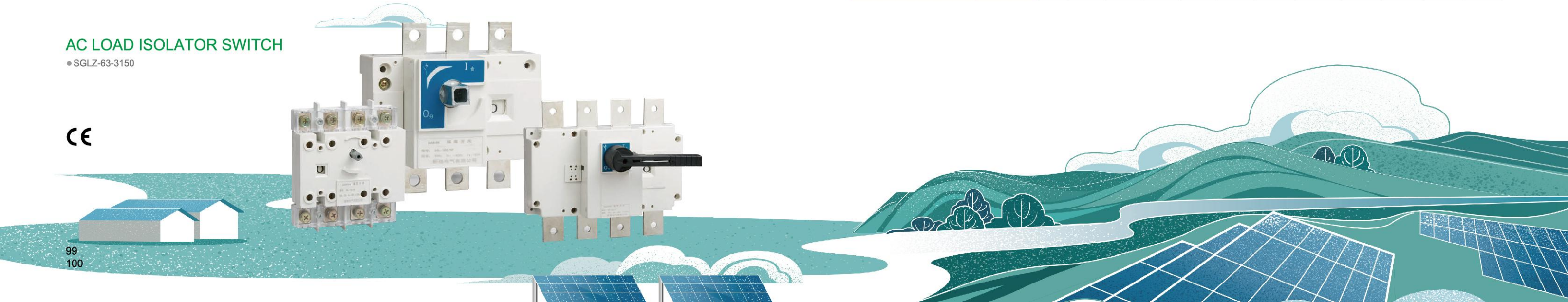
AC LOAD ISOLATOR SWITCH

●SGLZ-63-3150



ELECTRICAL PARAMETERS

Conventional heating current Ith			63A	100A	160A	250A	400A	630A	1000A	1250A	1600A	2000A	2500A	3150A
Rated insulation voltage Ui (V)			750		800	1000								
Dielectric strength (V)			3000			3500								
Rated impulse withstand voltage Uimp (kV)			6		8	12								
Rated operating voltage Ue (V)			AC400、 600											
Rated frequency			50Hz											
Use category			AC-21、 22、 23											
Rated working current Ie(A)	AC440V	AC-21	63	100	160	250	400	630	1000	1250	1600	2000	2500	3150
		AC-22	63	100	160	250	400	630	1000	1250	1600	2000	2500	3150
		AC-23	50	80	160	250	400	630	800	1000	1250	1250	2000	2500
	AC660V	AC-21	63	100	160	250	400	630	1000	1250	1600	2000	2500	3150
		AC-22	63	80	100	200	315	400	630	630	800	1000	1000	1250
		AC-23	40	63	63	125	200	250	250	400	500	/	/	/
Rated making capacity (A)			10Ie											
Rated breaking capacity (A)			8Ie											
Rated short-circuit making capacity Icm (kA)			1.7	1.7	12	17	30	40	70			70		
1s short-time withstand current Icw (kA)			3	3	10	12	20	25	50			50		
Mechanical life (times)			5000	5000	5000		3000		2000			1000		
Electrical life (times)			1000	1000	1000		600		300			/		
Operating torque (N.m)			3.5	3.5	6.5	10	15		27			60		
Weight kg (without handle)	3P		0.32	0.39	0.88	1.6	3.8	4.2	10.5	10.5	16	31	31	42
	4P		0.34	0.41	1.1	2	4.6	5	13	13	20	40	40	49



TECHNICAL DATA

THE RATED CURRENT OF THE CIRCUIT BREAKER	
Frame rating rated current Inm (A)	Rated current In (A)
2000	630, 800, 1000, 1250, 1600, 2000
3200	2000, 2500, 2900, 3200
4000	3200, 3600, 4000
6300	4000, 5000, 6000

THE RATED BREAKING CAPACITY AND RATED SHORT-TIME WITHSTAND CURRENT OF THE CIRCUIT BREAKER			
Frame rating rated current Inm (A)	Rated ultimate short-circuit breaking capacity Icu(kA)/cosΦ	Rated service short-circuit breaking capacity Ics(kA)/cosΦ	Rated short-time withstand current Icw(kA)/cosΦ 1s
	AC400/AC690V	AC400/AC690V	AC400/AC690V
2000	80/50/0.2	65/40/0.2	65/40/0.2
3200(4000)	100/65/0.2	80/50/0.2	80/50/0.2
6300	120/80/0.2	100/65/0.2	100/65/0.2

UNIVERSAL CIRCUIT BREAKER



TECHNICAL DATA

SHORT-CIRCUIT INSTANTANEOUS PROTECTION	
Setting Current Ir _s (A)	$I_{rs}=(1.0I_n\sim 50kA)+OFF\ 2000A$ $I_{rs}=(1.0I_n\sim 75kA)+OFF\ 3200A(4000A)$ $I_{rs}=(1.0I_n\sim 100kA)+OFF\ 6300A$
Operating Characteristic	$\leq 0.85\ I_{rs}$ No operation
	$\geq 1.15\ I_{rs}$ Instantaneous operation (t < 100 ms)

SHORT-CIRCUIT SHORT TIME-DELAY PROTECTION			
Setting Current Ir (A)	(3~10)In+OFF	(L type)	
	(0.4~15)In+OFF	(M, H type)	
Setting Time ts (s)	0.2s, 0.4s	(L type)	
	(0.1s~1.0s)+OFF	(M, H type)	
Operating Characteristic	$\leq 0.9\ I_{rs}$ No operation	When $I\geq 1.1\ I_{rs}$ and $I>8I_{rs}$ Definite-time operation	I - Short-circuit current
	$\geq 1.1\ I_{rs}$ Instantaneous operation	When $I\geq 1.1\ I_{rs}$ and $I>8I_{rs}$ $T=[(8\ I_{r1})^2\ t]/I^2$	

OPERATING PERFORMANCE OF THE CIRCUIT BREAKER				
Operating performance of circuit breaker (times)				
The rated current of the frame size Inm (A)	Number of operating cycles per hour	Non-energized (n)	Energized (n')	Total (n + n')
2000	20	9000	1000	10000
3200(4000)	10	4500	500	5000
6300	5	1500	500	2000

TECHNICAL DATA

OVERLOAD LONG-TIME DELAY PROTECTION			
SFor distribution and motor protection	Setting Current I_r (A)	(0.4~1.0) I_n +OFF (minimum160A)	
	Setting Time t (s)	30s, 60s, 120s, 240s (L type)	
		15s, 30s, 60s, 120s, 240s, 480s+OFF (M, H type)	
	Operating Characteristic	$\leq 1.05I_r$ > 2h No operation	
		$> 1.3I_r$ $T=[(1.5 I_r)^{2*}t]/I^2$ 1 - Overload current	
For generator protection	Setting Current I_r (A)	(0.4~1.25) I_n (minimum160A)	
	Setting Time t (s)	15s, 20s, 30s, 40s, 50s, 60s+OFF (M, H type)	
	Operating Characteristic	$\leq 0.95 I_r$ > 2h No operation	
		$> 1.05 I_r$ $T=[(1.2 I_r)^{2*}t]/I^2$ I - Overload current	

GROUND FAULT AND LEAKAGE PROTECTION (CHOOSE ONE OF THE TWO)			
Ground Fault Protection	Setting Current I_r (A)	(0.2~0.8) I_n +OFF (minimum160A)	
	Setting Time t_o (s)	0.2s, 0.4s, 0.6s, 0.8s+OFF (L type)	
		0.1s, 0.2s, 0.3s, 0.4s+OFF (M, H type)	
	Operating Characteristic	$\leq 0.9 I_{r\phi}$ No Operation	
		$\geq 1.15 I_{r\phi}$ Definite-Time Operation	
Leakage Current Protection	Setting Current $I_{r\epsilon}$ (A)	1.0A, 1.5A, 2.0A, 2.5A, 3.0A, 4.0A, 4.5A, 5.0A	
	Setting Time t_ϵ (s)	0.2s, 0.4s, 0.6s, 0.8s+OFF (L,M, H type)	
	Operating Characteristic	$\leq 0.85 I_{r\epsilon}$ No Alarm	
		$\geq 1.15 I_{r\epsilon}$ Alarm	

TECHNICAL DATA

LOAD MONITORING (TWO METHODS AVAILABLE)				
Two Load Limit Values	Setting Current I_{r4} (A)	Load 1 (I_{c1})	(0.2~1) I_n +OFF (minimum160A)	(M, H type)
		Load 2 (I_{c2})	(0.2~1) I_n +OFF (minimum160A)	(M, H type)
	Operating Characteristic	$\leq 0.9 I_{c1}(I_{c2})$ $> 1.1I_{c2}(I_{c2})$	No Pickup Delayed Pickup	$T1=(1.5 I_{r1})^2/(tL/2)$ $T2=(1.5 I_{r1})^2/(tL/4)$
One Load Limit Value One Load Reclosing	Setting Current I_{rE} (A)	Load 1 (I_{c1})	(0.2~1) I_n +OFF (minimum160A)	(M, H type)
		Load 2 (I_{c2})	(0.2~1) I_n +OFF (minimum160A)	(M, H type)
	Operating Characteristic	$\leq 0.9 I_{c1}(I_{c2})$ $> 1.1I_{c2}(I_{c2})$	No Pickup Delayed Pickup	$T1=(1.5 I_{r1})^2/(tL/2)$ $T2=60s$

UNBALANCE OR PHASE LOSS PROTECTION	
Setting Current δ	40% to 100% + OFF (OFF indicates disengagement, with a step of 1%)
Operating or Alarm Characteristic	Time-delay operation or alarm between 0.98 and 1.08 No operation for $\leq 0.95\delta$ Time-delay operation for $> 1.18\delta$
Delay Time $T\delta$	(0.1 s to 1.0 s) + OFF (OFF indicates alarm only, no tripping, with a step of 0.1 s)
Accuracy	10% (inherent 40 ms)

RS485 COMMUNICATION INTERFACE (EXTERNAL INTERFACE CONVERTER REQUIRED)		
Characteristics	Form	RS485
	Protocol	"Low Voltage Electrical Equipment Data Communication Protocol" V1.0
	Speed	9600 baud rate
	Maximum Number of Users	255
	Telemetry	Telemetry: Grid operating parameter values
Transmission	Teleadjustment	Teleadjustment: Adjusting circuit breaker setting parameter values
	Telecontrol	Telecontrol: Controlling the closing and opening of switches
	Telesignaling	Telesignaling: System monitoring, load curves, parameter checks, various switch quantities, system information, fault information, and various statistical information for fault systems

Note: When I_n = 630A to 800A
 I_n = When I_n = 1000A to 2000A
 I_n = When I_n = 2000A to 3200A

$I \leq 80A$;
 $I \leq 100A$;
 $I \leq 180A$;

I_n = When I_n = 3200A to 4000A
 I_n = When I_n = 4000A to 6300A
I: When the current value is as mentioned above, the intelligent controller does not display the operating current, and the displayed value is 0.

$I \leq 180A$;
 $I \leq 220A$;

MODEL AND SIGNIFICANCE

PM	H4PN	□
Enterprise code	Design Number	Design Serial Number

APPLICATIONS AND SCOPE OF USE

SHXC series power distribution box is waterproof, dustproof, acid-resistant, alkali-resistant, impact-resistant, explosion-proofUV-resistant, insulated and non-conductive.

Widely used in wind power aeneration svstem, outdoor dock, harbor, outdoor power distribution svstem, communication,mechanical equipment, chemical industry, petroleum and other harsh environments.Suitable for harsh conditions and outdoor applications, with a temperature range of -20'c to +70'c and good UV resistance

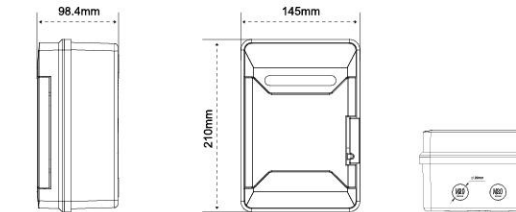
CHARACTERISTIC

- Independent personalized appearance design, using Xinch character "Xiaoxin" as the design elements, so that your power distribution more futuristic sense.
- IP65 waterproof and dustproof, no worry about outdoor use.
- ABS engineering flame retardant plastic box, prevent fire, safer electricity.
- Internal optional terminal block, ground and zero line management is more convenient and beautiful.
- The bottom of the reserve can be knocked down hole design, customers can choose according to their own needs need to open the hole
- Padlock design to prevent others from opening, so as not to cause danger and personal property damage.
- The internal space size is common with most of the products in the market, and can be applied to the installation of common size products.
- Can be opened according to customer requirements.

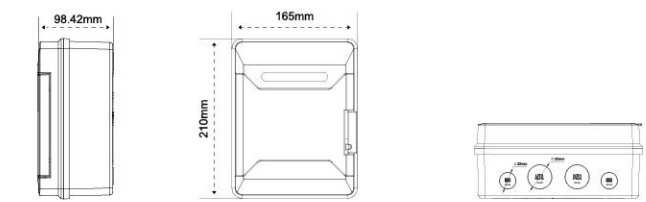
Different specifications of the bottom of the product are designed to install the size, so that the installation is more convenient, do not have to look for instructions everywhere.

DIMENSION DRAWING

PMH4PN



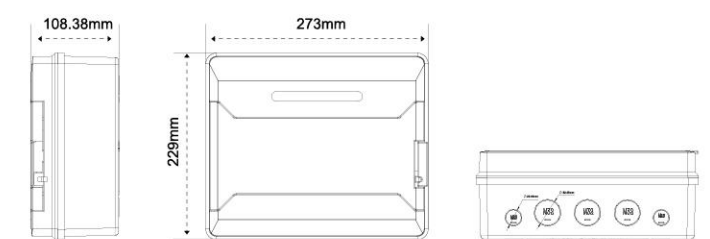
PMH6PN



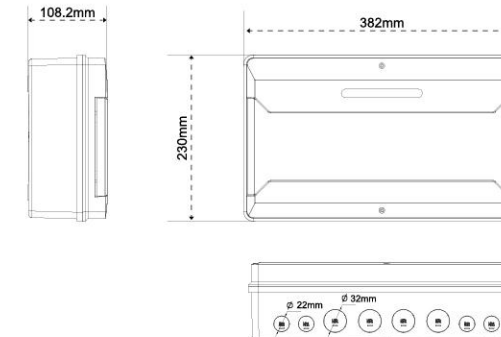
PMH9PN



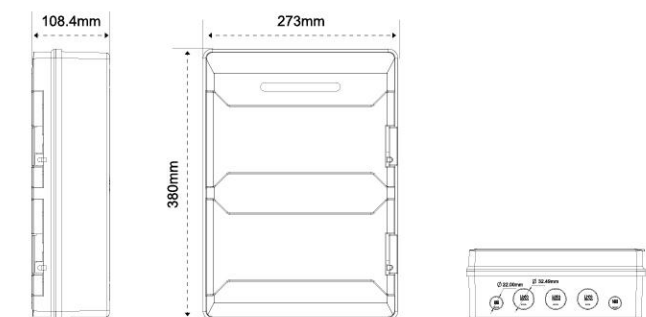
PMH12PN



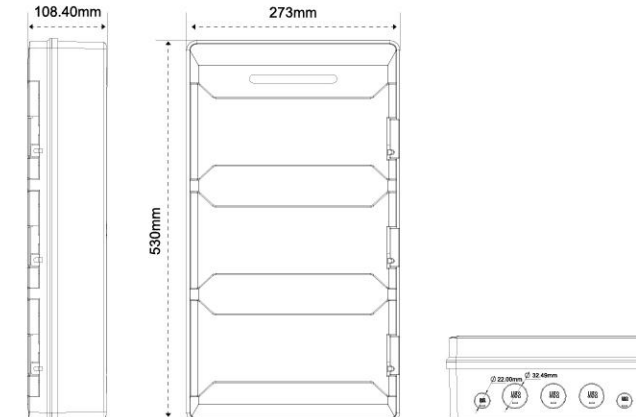
PMH18PN



PMH24PN



PMH36PN



WATERPROOF DISTRIBUTION BOX

- PMH4PN
- PMH6PN
- PMH9PN
- PMH12PN
- PMH18PN
- PMH24PN
- PMH36PN

CE

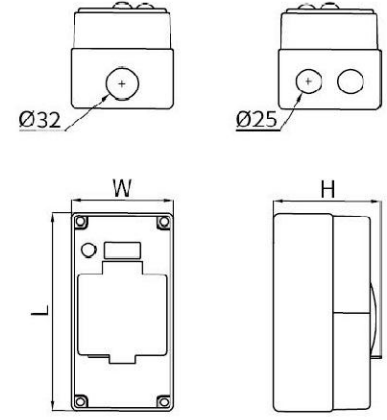
SUMMARY

- Waterproof, dustproof with a protection level of IP66, UV resistant, and a scorching wire temperature of 650 ℃ .
- Holes can be opened according to customer requirements, with complete specifications and convenient installation.

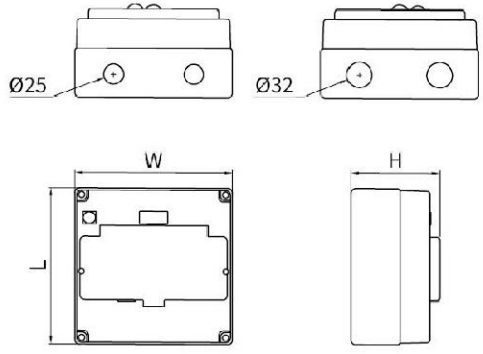
CHARACTERISTIC

- Suitable for special occasions such as waterproof, dustproof and anti-corrosion
- Standard: IEC60670-24 GB/T17466.24

OPEN MOUNTED

Model	L	W	H	Dimension drawing
56CB4N	200	103	109	

CONCEALED MOUNTED

Model	L	W	H	Dimension drawing
56CB8N	199	199	112	

WATERPROOF DISTRIBUTION BOX

- 56CB4N
- 56CB8N

