

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

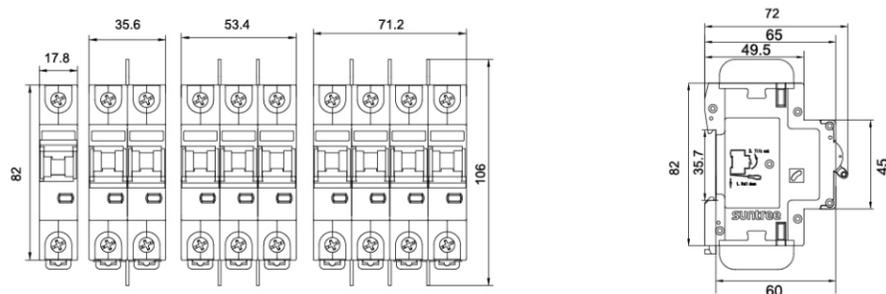
DESIGN NUMBER

- 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

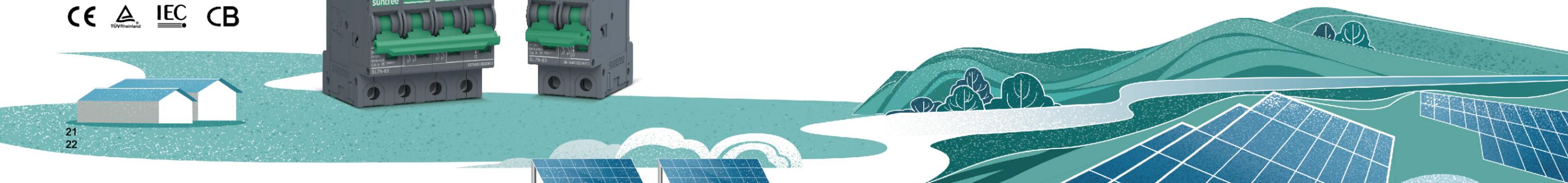


PRODUCT MODEL

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			Default:250	H			
SL7N-63	2P			II:24	H			
SL7N-63	2P			III:48	H			
SL7N-63	2P			IV:125	H			
SL7N-63	2P			V:375	G			
SL7N-63	2P			Default:500	G			
SL7N-63	2P			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			
SL7N-63	4P			I:1200	G			

INSTALLATION PRECAUTIONS

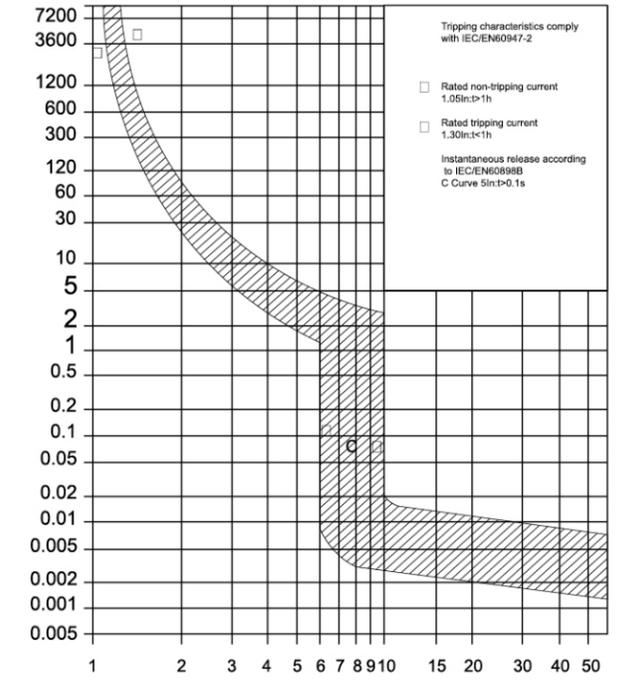
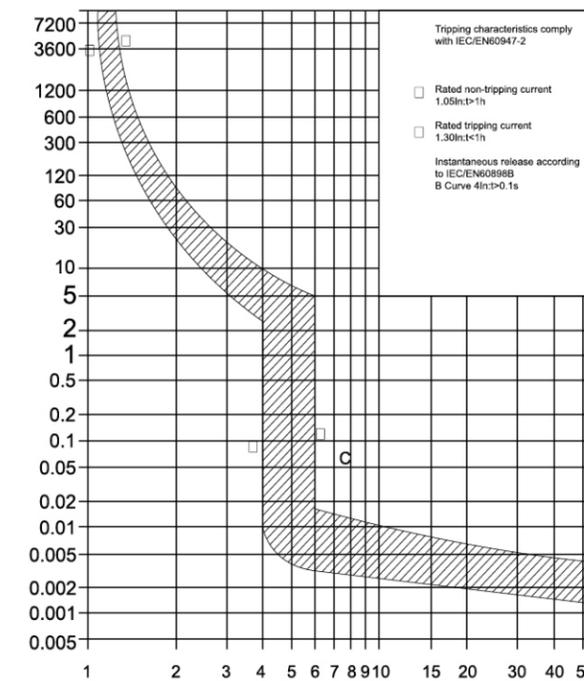
- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5 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 (I _n)	6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A
Number of poles	1P, 2P, 3P, 4P
Rated service short-circuit breaking capacity (I _{cs})	6kA (2P 800V 4P1200V) 2kA
Rated ultimate short-circuit breaking capacity (I _{cu})	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 (U _{imp})	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°C~70°C
Heat & humidity resistant(IEC 60068-4)	Db type (temperature 55°C, 6 cycles)
Storage ambient temperature	-40°C~85°C
Installation method	DIN
Altitude	≤2000m
Weight	0.12kg/P
Accessories	OF/SD/MX/MN/MX+OF
MX control voltage U _s	DC: 12V, 24V, 220V; AC: 110V, 220V, 3380V power supply recommended not less than 75W
MN rated voltage U _n	AC220V

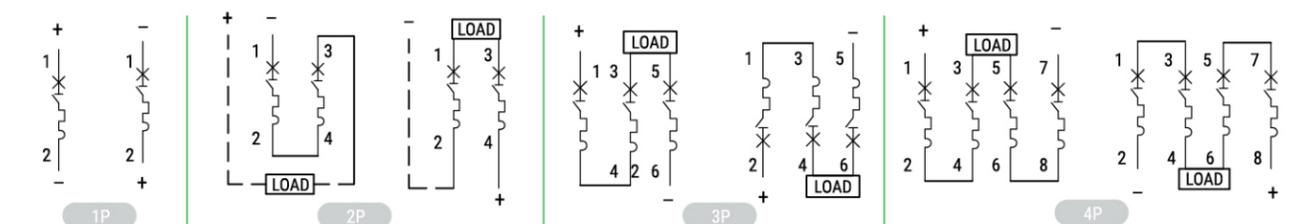
TRIPPING CHARACTERISTICS



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
Rated operational current	0.5A/230V DC
	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	0.5~1.5mm ²
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)
Installation	Quickly installed on the guide rail in accordance with IEC/EN60715
Protection degrees(built-in)	IP20
Terminal installation method	Open type
Terminal wiring capability	0.5~1.5mm ²
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	0.15~0.5mm ²	0.15~0.5mm ²
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

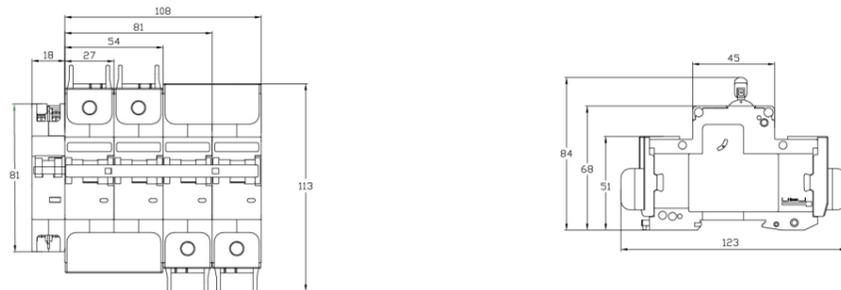
GENERAL PARAMETERS

- 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 DC1000V DC1200V
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°C-85°C							
Altitude	≤2000m							
Relative Humidity	+50°C 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

