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HUMAN·TECHNOLOGY·NATURE

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NATIONAL SERVICE HOTLINE
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Technology
Connects human and nature

SL7N-63

MINIATURE DC CIRCUIT BREAKER

- Short-current interruption overload protection
- 6 kA High breaking capacity
- Reversible wiring, free of incorrect connection
- 63 A Rated working current
- Clearance $\geq 9\text{mm}$, swift arc breaking
- Maze arc-extinguishing room
- U shaped magnetic blowout enhances the extinguish ability
- 7 rivets guarantee wiring reliability
- Busbar makes the wiring safe and beautiful
- Specially designed appearance
- A range of optional accessories, suitable for DC products of PV or energy storage system



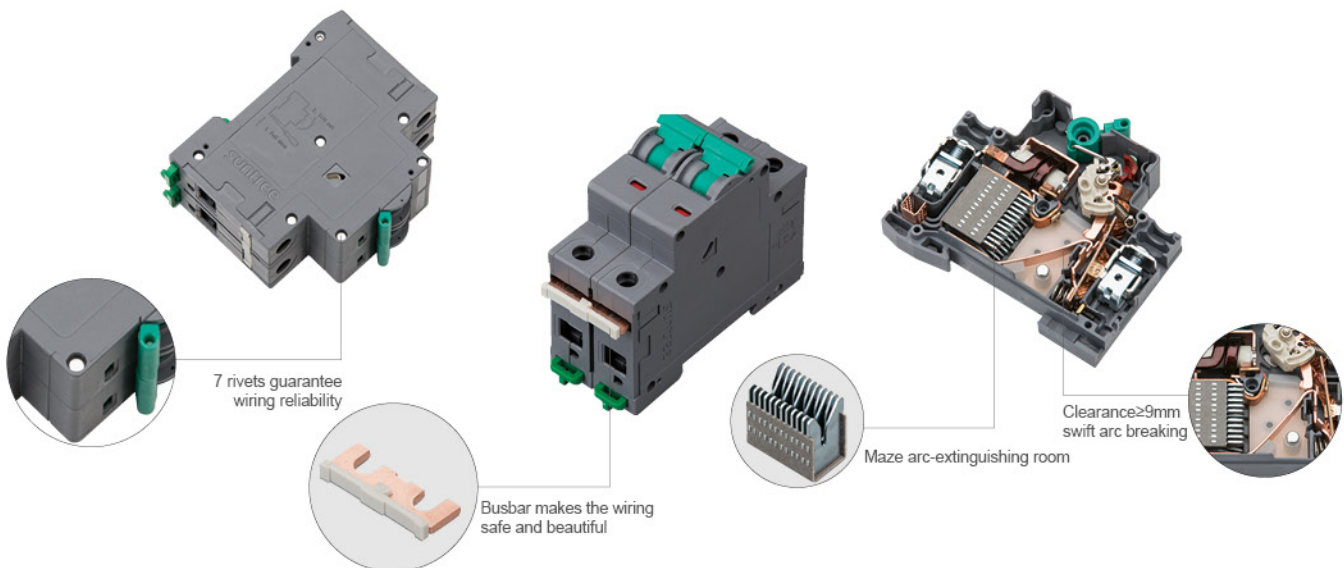
MODEL NUMBER

Model Number	Pole	Trip Characteristic	Current (A)	Voltage	Wiring Mode	Item	Voltage		
SL7N-63	1P	B C	6 10 16 25 32 40 50 63	I:15V	-	Optional Accessory	OF 20F SD OF+SD	-	
				II:24V	-				
				III:48V	-				
				IV:60V	-				
				V:100V	-				
				VI:180V	-				
				rated:250V	-				
	2P			I:24V	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
				II:48V	H				
				III:125V	H				
				IV:375V	H				
				rated:550V	H				
				III:600V	H				
				rated:800V	H				
				I:125V	G				
				II:375V	G				
				rated:550V	G				
				III:600V	G				
	3P			IV:800V	G		OF+MN SD+MN OF+SD+MN		AC230V AC400V
				rated:750V	H				
				I:800V	H				
	4P			rated:750V	G				
				I:800V	G				
				I:800V	H				
				rated:1000V	H				
				II:1200V	H				
				I:800V	G				
	rated:1000V			G					
II:1200V	G								

Suntree Model Number	Shell Frame Current	Rated Current	Pole	Rated Voltage	Wiring Mode	Accessory and Voltage
SL7N	-63	C32	2P	II	G	MX+OF I

SL7N-63 C32/4PIIGMX+OFI

DC Miniature Circuit Breaker 2P 40 A 600 V; C curve; up-out and down-in; DC12V MX+OF accessory



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MINIATURE DC CIRCUIT BREAKER



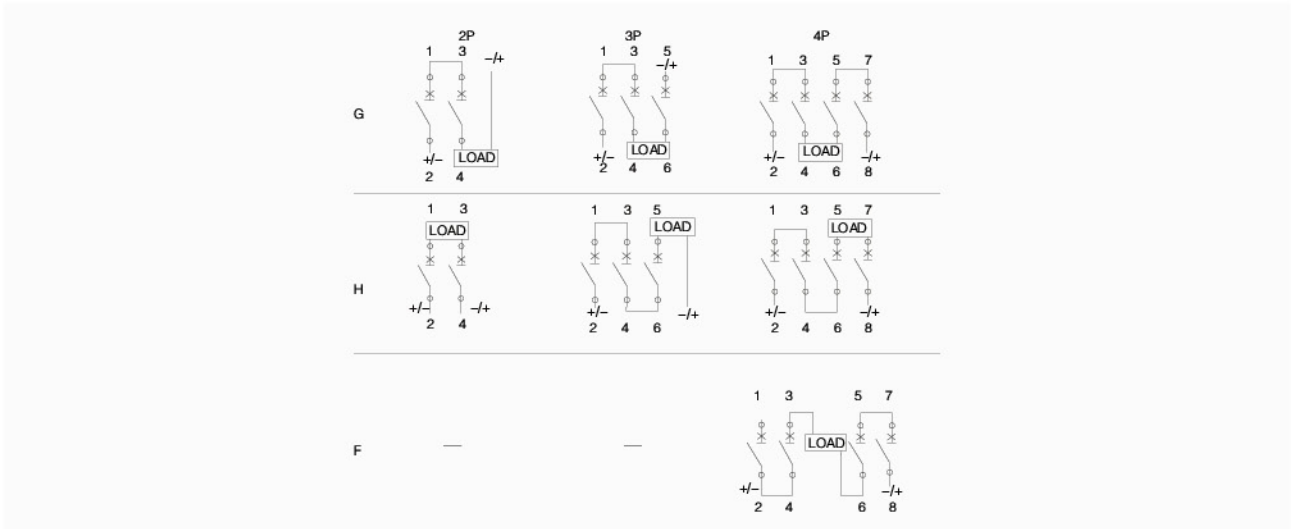
PARAMETERS

Item	Parameter
Rated Insulation Voltage (Ui)	1250 V
Rated Operational Voltage (Ue)	DC(1P):15V,24V,48V,60V,100V,180V,250V ; DC(2P):24V,48V,125V,375V,550V,600V,800V DC(3P):750V,800V ; DC(4P):800V,1000V 1200V
Rated Shell Frame Current	63 A
Current (In)	6 A 10 A 16 A 20 A 25 A 32 A 40 A 50 A 63 A
Pole	1P 2P 3P 4P
Rated Short Circuit Breaking Capacity (Ics)	6 kA/H
Rated Ultimate Short Circuit Breaking Capacity (Icu)	6 kA/H
Mechanical Life	20000 times
Electrical Life	<DC125 V/1P or <DC250 V/2P: 10000 times; other voltage: 1500 times
Certification	
Fishbone Busbar and Wire Connector	YES
Rated Impulse Withstand Voltage (Uimp)	6 kV
Trip Characteristics	B/C
Trip Type	thermo-magnetic
Overvoltage Category	III
Pollution Degree	3
Protection Degree	IP40; IP20 (seam)
Damp Heat Resistance	type 2
Relative Humidity	≤95%
Standard	IEC 60947-2 GB/T 14048.2
Vibration Resistance	According to IEC60068-2-6
Mechanical Shock Resistance	According to IEC60068-2-27
Working Temperature	-30°C to 70°C
Damp Heat Resistance (IEC 60068-4)	Db (6 cycles at 55°C)
Storage Temperature	-40°C to 85°C
Installation	DIN
Altitude	≤2000
Weight	0.12 kg/P
Accessory	OF/SD/MX/MN/MX+OF
MX Us	DC:12V, 24V, 220V; AC:110V,220V,380V; Power Supply recommended over 75W
MN Un	AC 220 V AC 380 V

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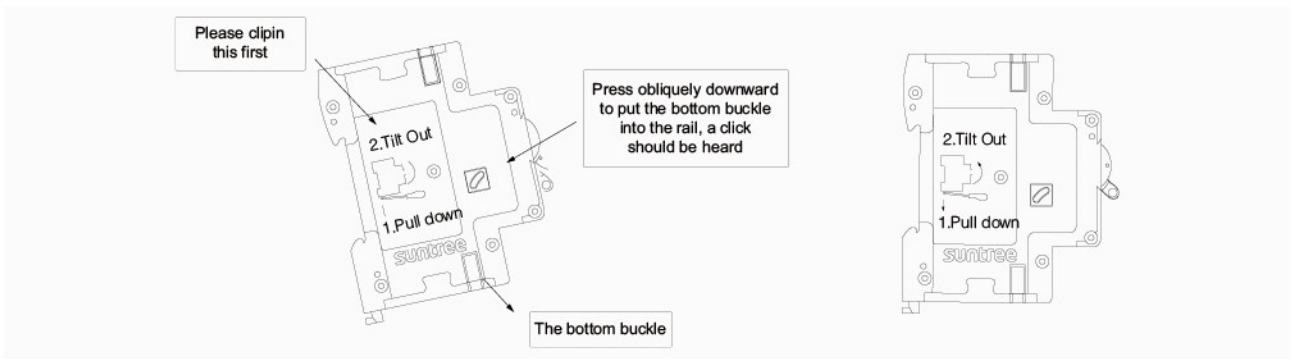
MINIATURE DC CIRCUIT BREAKER

WIRING

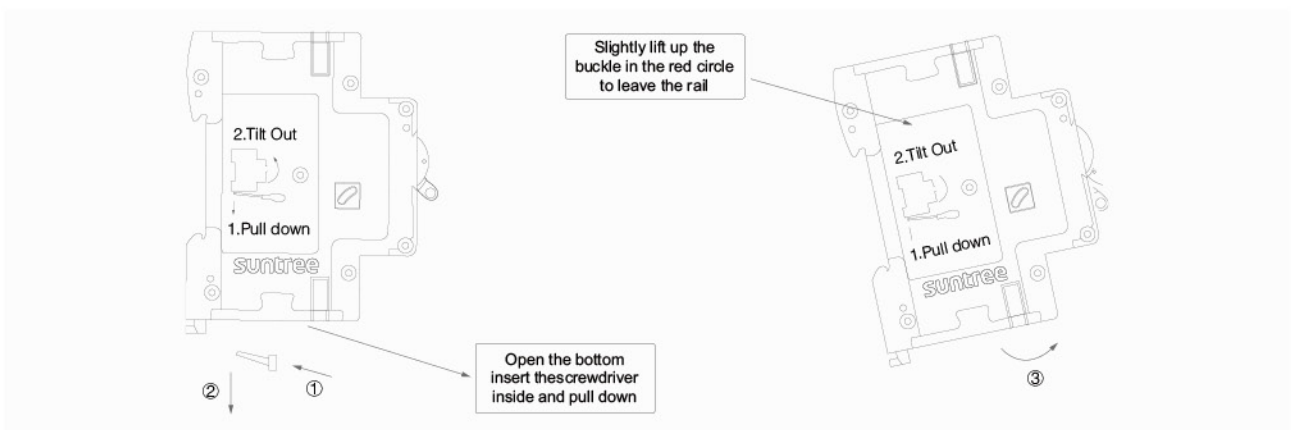


INSTALLATION

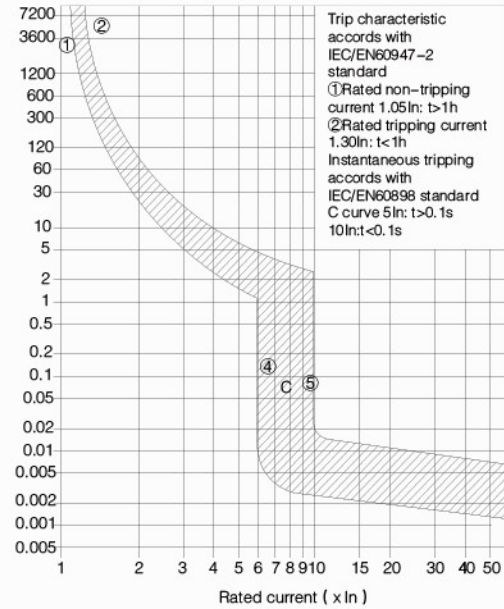
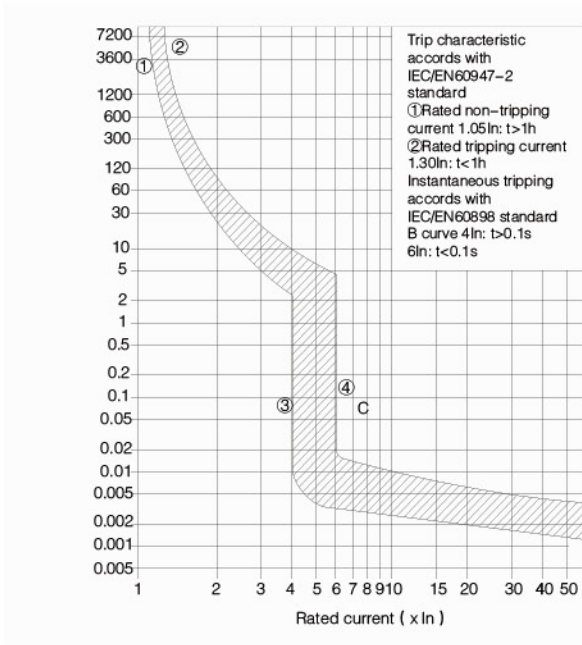
This product is installed with 35 mm DIN rail. No additional tool needed, simply buckle the product into the rail. Please put the upper hook of the bottom into the rail first, making the product angled about 30°. Then press down to buckle it. When you finish, the product should be vertical as shown in the right picture.






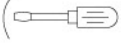
DISMANTLING



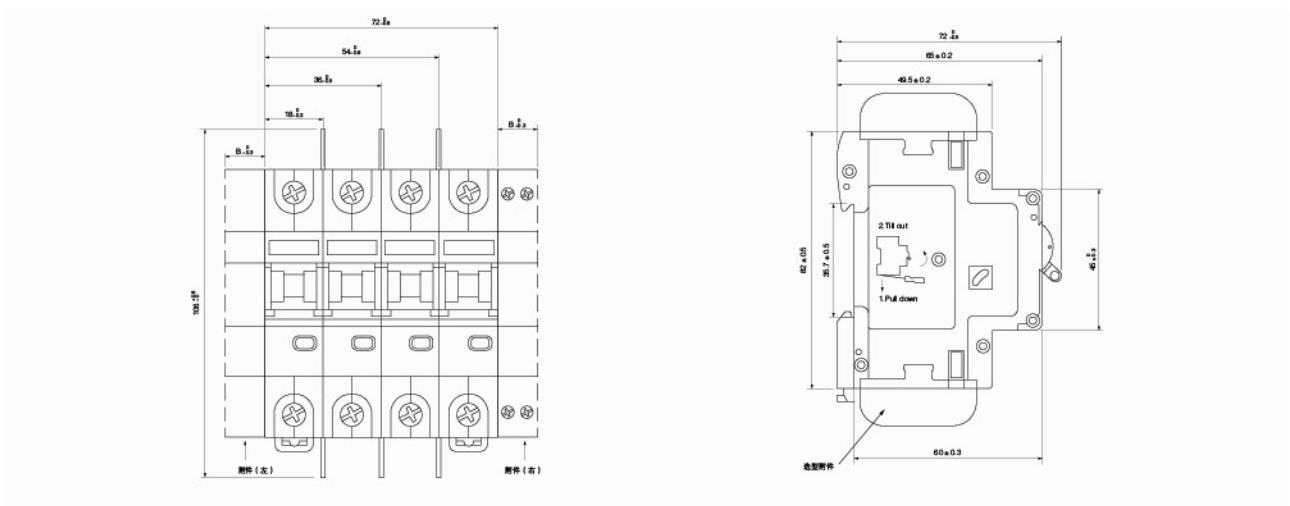
TRIP CHARACTERISTIC



WIRING CAPACITY

project name	diagram
Wiring tool 	
Wiring Capacity (mm ²) 	1-25 mm (mm ²)
Tightening torque (Nm) 	2-2.3 Nm (Nm)

APPEARANCE AND MOUNTING DIMENSION



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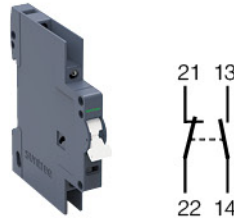
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AUXILIARY CONTACT AND ALARM CONTACT

Auxiliary contact: Accessory connected in the auxiliary circuit of switch apparatus, which indicates whether the circuit breaker is on or off

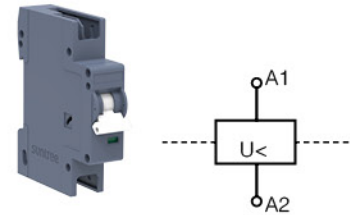
Alarm contact: Accessory to indicate whether the circuit breaker is in trip state (Trip) or not (ON or OFF). When it says Trip, there may be three causes:

- overload or short circuit fault;
- shunt release tripping;
- line fault, undervoltage release activated



UNDERVOLTAGE RELEASE

Undervoltage release: act when the line voltage is lower than the setting voltage.

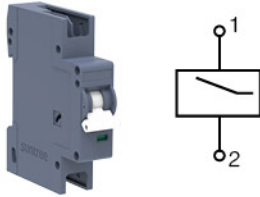


Mechanical Parameter	Value
Contact	OF、SD、OF+SD
Rated Voltage	250V
Frequency	50/60Hz
Rated Current	8A
Rated Thermal Current	8A
Rated Working Current	6A/250V AC 2A/440VAC
Rated Working Current	0.5A/230V DC 2A/110V DC 4A/60V DC
Rated Insulation Voltage	250V AC
Minimum Operating Voltage (per contact)	24V AC/DC
Minimum Operating Current	50mA AC/DC
Rated Peak Withstand Voltage	1 kV
"Conditional Short-circuit Current (with 6A backup fuse or FAZ-B4-HS)"	1 kA
Max Backup Fuse, Overload and Short-circuit	6 A gL/FAZ-4./B-HS
Mechanical Parameter	Value
Installation	in switch apparatus
Protection Degree (built-in)	IP20
Terminal Installation	Open
Terminal Wiring Capacity	0.5–1.5 mm ²
Terminal Screw	M3 (Pozidrive Z0)
Screw Tightening Torque	max: 0.8–1.0 Nm
B Size	9 mm
Installation Side	left

Mechanical Parameter	Value
Rated Voltage (Un)	230V/400V AC
Frequency	50–60 Hz
Cut-in Voltage	80%Un
Tripping Voltage	50%Un
Mechanical Parameter	Value
Dimensions	45 mm
Height	80 mm
Width	17.5 mm (1MU)
Installation	Quick installation on rail (IEC/ EN60715)
Protection Degree (built-in)	IP20
Terminal Installation	Open/Lifting
Terminal Wiring Capacity	0.5–1.5 mm ²
Terminal Protection	finger and hand touch protection meet the BGV A3.OVE-EN 6 standard
B Size	18 mm
Installation Side	left or right

SHUNT RELEASE

When the voltage is at 70% to 110% of the rated control supply voltage, the shunt release shall reliably trip the circuit breaker.



Shunt Release Parameter	Value	
Electrical Parameter	DC12 V DC24–48 V	110–400 V
Minimum Pulse Duration	15 ms	15 ms
Internal Impedance	2 Ω	120 Ω
Duty Cycle	100%	100%
Tripping Time	<20 ms	<20 ms
Peak Withstand Voltage (1.2/50 μ s)	2.5 kV	2.5 kV
Electrical Life	> 4000 times	> 4000 times
Operating Limit	10 V	10 V
Working Voltage	12–48 V	110–400 V
Maximum Circuit Current Consumption	3 A	3 A
Outflow Time at Maximum Current Consumption	10 ms	10 ms
Operating Limit	9 V	9 V
Working Voltage	12–48 V	110–400 V
Maximum Circuit Current Consumption	3 A	3 A
Outflow Time at Maximum Current Consumption	2 ms	2 ms
Mechanical Parameter		
Dimensions	45 mm	45 mm
Height	80 mm	80 mm
Width	18 mm (1MU)	18 mm (1MU)
Installation	Adhesion	Adhesion
Protection Degree (built-in)	IP40	IP40
Terminal Installation (upper and lower)	Open/Lifting	Open/Lifting
Terminal Wiring Capacity	0.15–0.5 mm ²	0.15–0.5 mm ²
Screw Tightening Torque	max: 0.8–1 N	max: 0.8–1 N
B Size	18 mm	18 mm
Installation Side	left or right	left or right