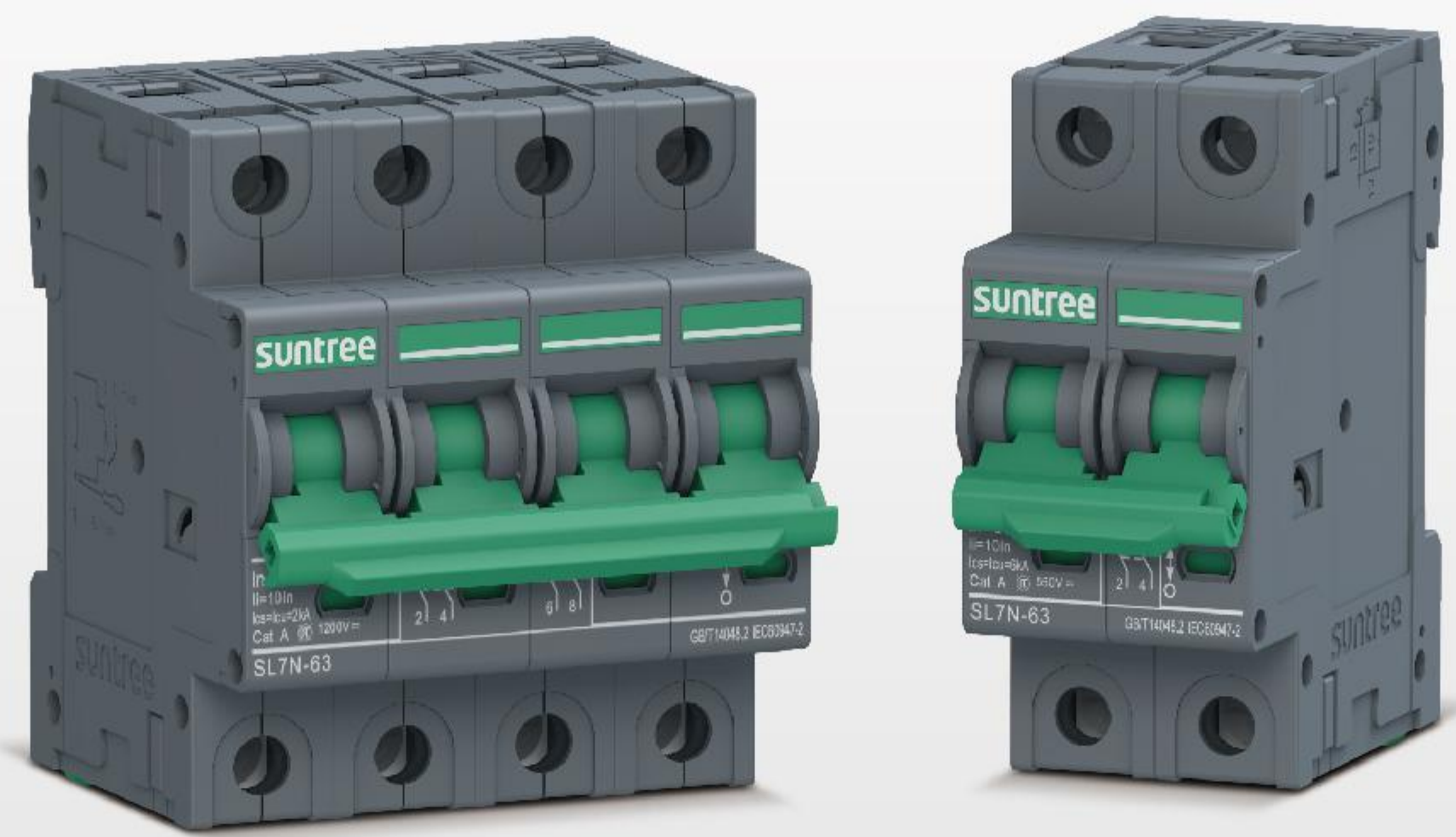


SL7N-63

DC CIRCUIT BREAKER



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

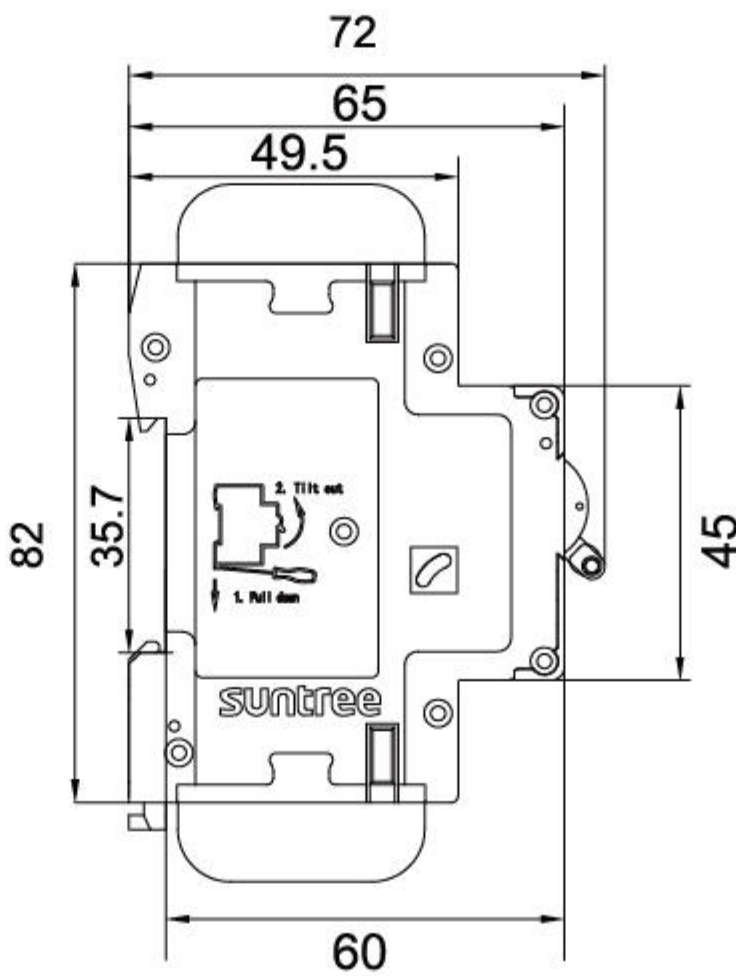
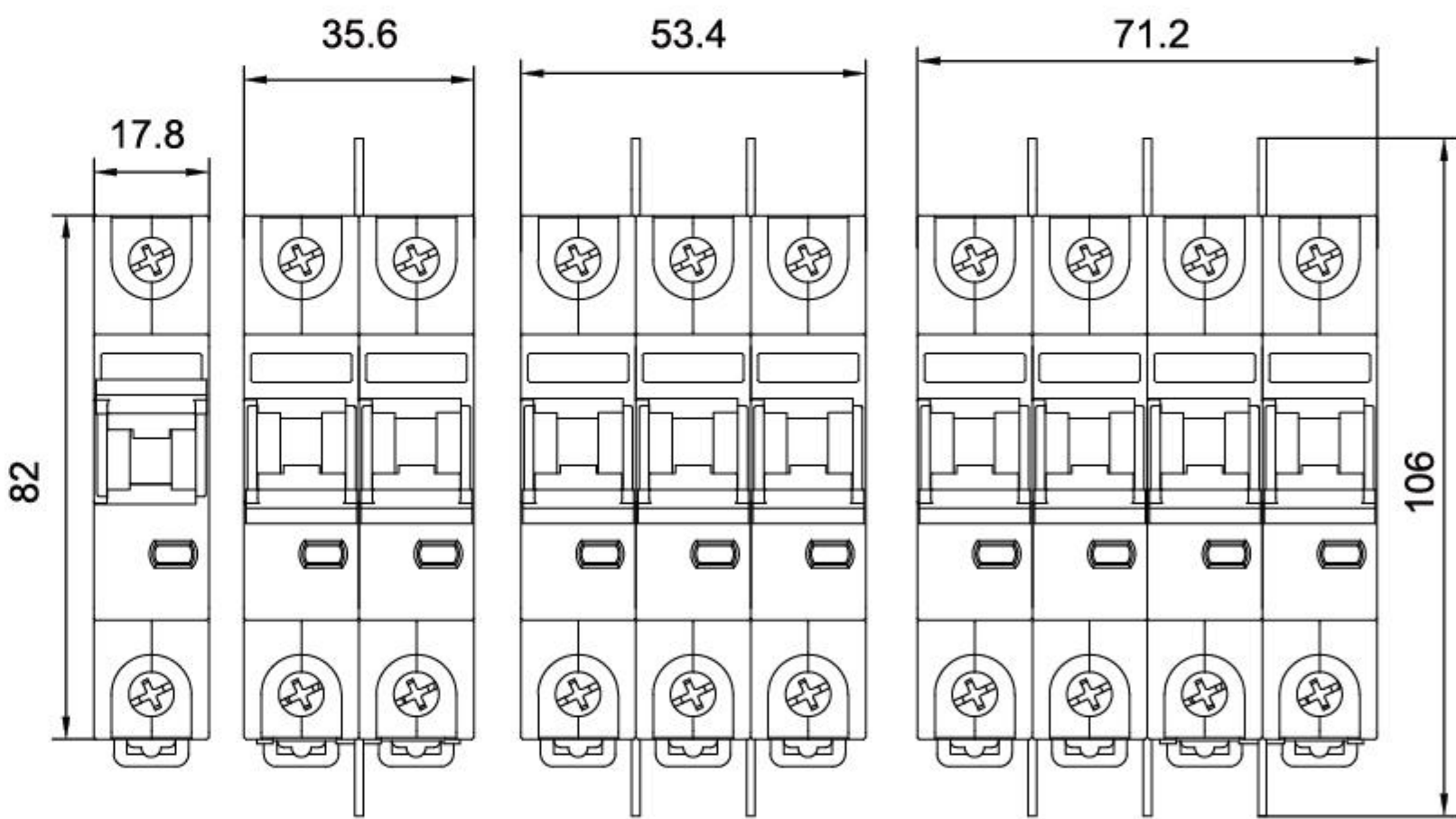
FUNCTION AND SCOPE OF APPLICATION

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.

MODEL AND SIGNIFICANCE

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

DIMENSION (MM)



PRODUCT MODEL

Model	Appearance	Characteristic	Current A	Voltage V	Wiring Method	Optional accessories	Accessory name	Accessory name
SL7N-63	1P	BIC	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		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	2P			Default:750	H			
SL7N-63	2P			I:900	H			
SL7N-63	3P		4P	Default:1000	G		OF+MN SD+MN OF+SD+MN	AC230V AC400V
SL7N-63	3P			I:1200	G			
SL7N-63	4P							
SL7N-63	4P							

INSTALLATION PRECAUTIONS

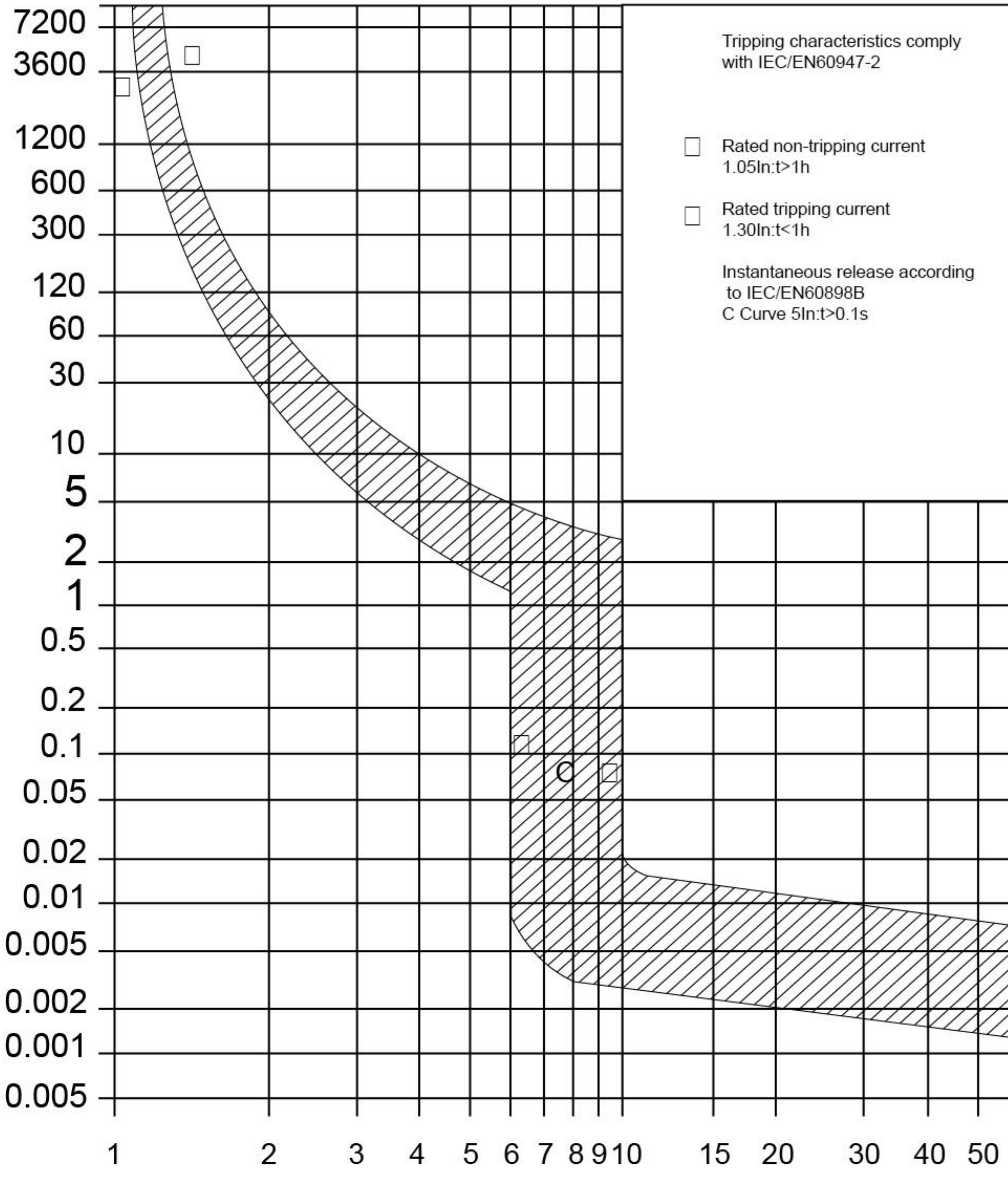
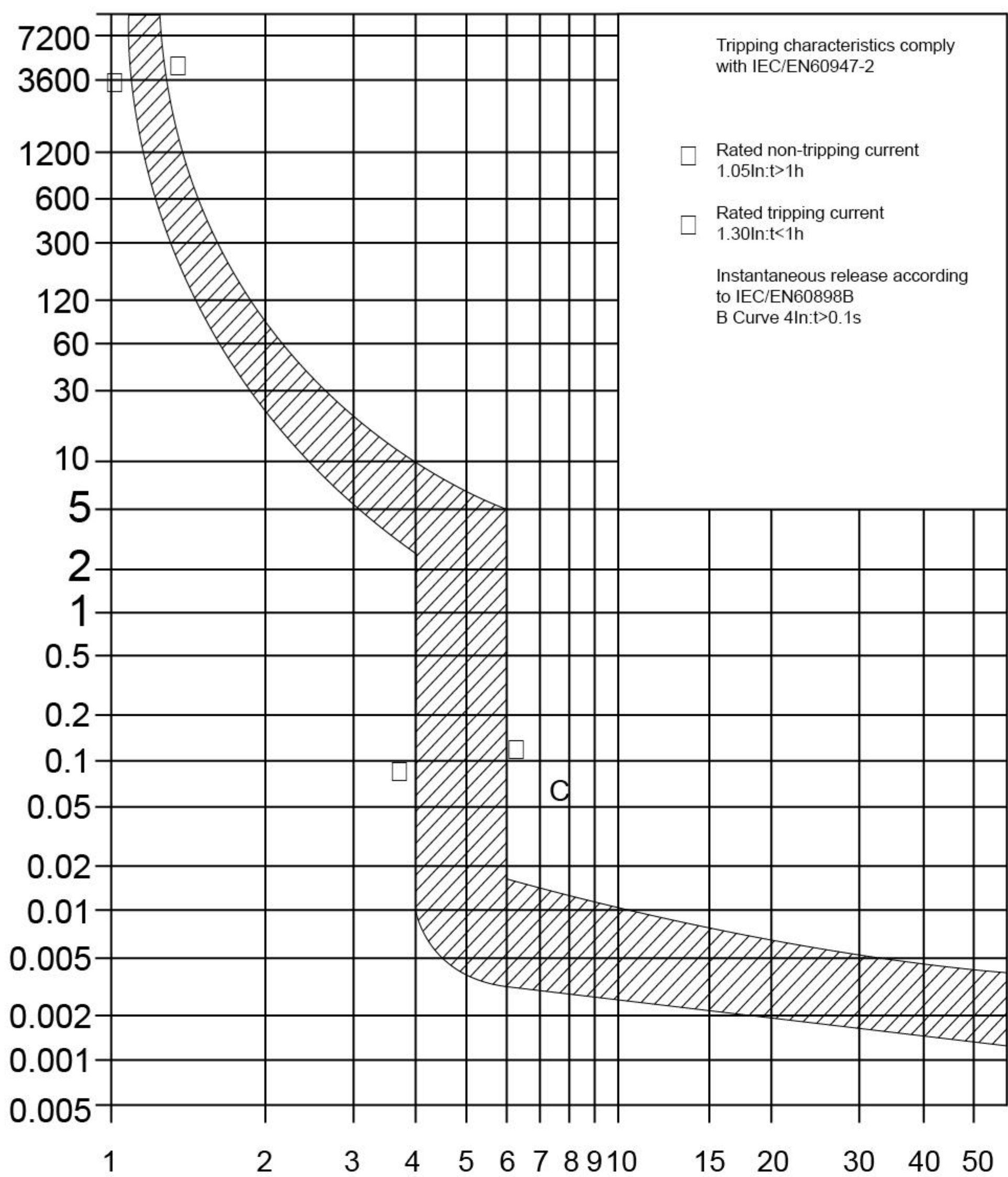
- In a medium without explosion risk and free of gases and dust(including conductive dust) sufficient to corrode metal and destroy insulation
- In the condition with no snow erosion
- It can be installed horizontally and vertically
- The magnetic field of the installation position shall not exceed 5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

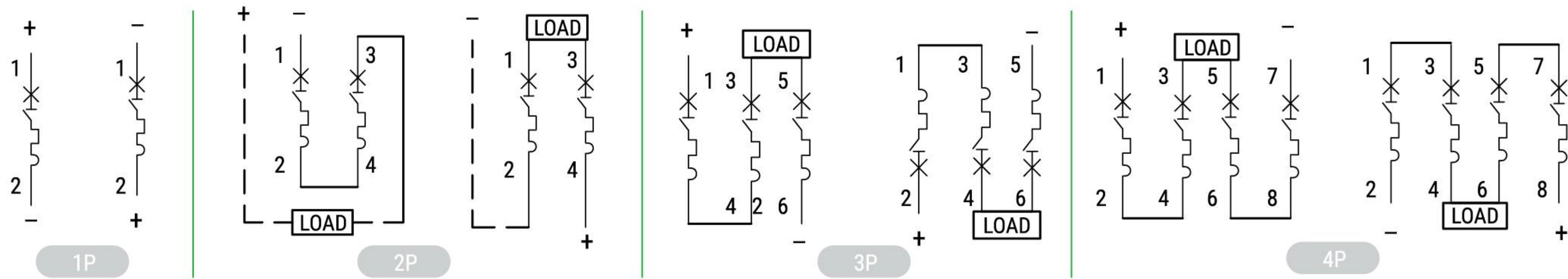
TRIPPING CHARACTERISTICS



PRODUCT POWER CONSUMPTION

NO.	Specificati	Power (W)				I="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	50mAAC/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☎

