

# PV Solar Dedicated DC Circuit Breaker



The handle connecting rod material you can choose stainless steel, or plastic materials

arc extinguish system, non-polarity



Busbar can be set up in advanced, nice looking and practical



## SL7 Non-Polarity DC circuit breaker



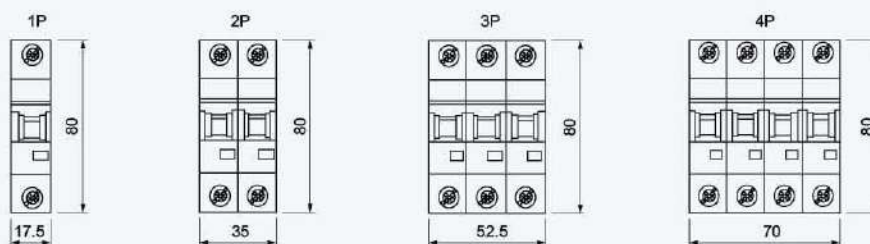
SL7 PV DC breaker supplementary protectors are designed to provide overcurrent protection within appliances or electrical equipment, where a branch circuit protection is already provided or not required. Devices are designed for direct current (DC) control circuit applications.



### Specifications

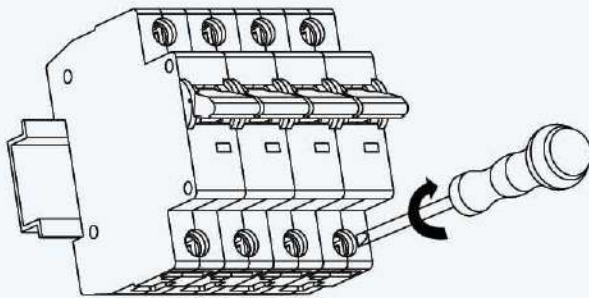
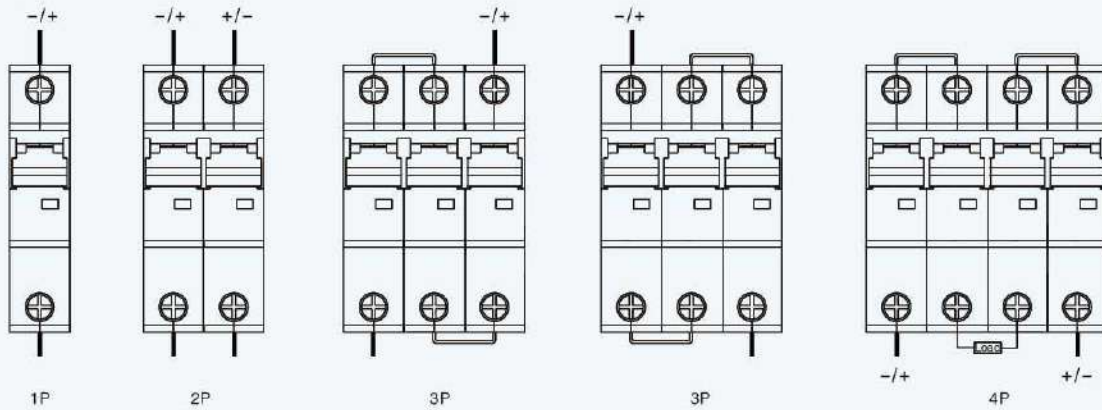
SL7 PV Series Circuit Breaker		SL7-63			
Frame degree rated current (A)		63			
Electrical performance					
Ue Rated operating voltage (V DC)		2P: DC440V DC550V DC800V 4P:DC800V DC1000V DC1200V			
Rated Current In (A)		6-10-16-20-25-32-40-50-63			
Rated insulation voltage Ui (V DC)		2P: 800V 4P: 1200V			
Rated Impact voltage Uimp (kV)		4			
Ultimate breaking capacity Icu (kA)		6	6	6	6
Run breaking capacity Ics (%Icu)		75%	75%	75%	75%
Curve type		C			
Trip type		Thermal-magnetic			
MECHANICAL	Actual average value	20000			
	Standard value	8500			
ELECTRIC	Actual average value	2500			
	Standard value	1500			
Control and indication					
Shunt release (SHT)		Option			
Undervoltage release (UNT)					
Auxiliary contact (AX)					
Alarm contact (AL)					
Connection and installation					
Wiring capacity (mm <sup>2</sup> )		In≤32A, 1~25 mm <sup>2</sup> , I≥40A, 10~35mm <sup>2</sup>			
Ambient temperature (°C)		-20~70			
Altitude		≤2000			
Relative humidity		≤95%			
Pollution Level		3			
Installation Environment		No obvious shock and vibration			
Installation category		Class III			
Installation		DIN Standard rail			
Dimensions(W)x(H)x(Deep)	W	17.5	35	52.5	70
	H	80	80	80	80
	Deep	71	71	71	71
Weight (kg)		0.12	0.24	0.36	0.48

### Dimensions(mm)



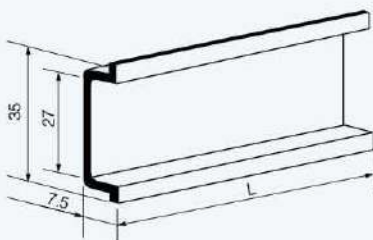
# SL7 Non-Polarity DC circuit breaker

## Wiring diagram

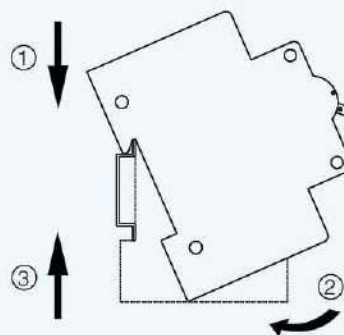


Rated current (A)	Sectional area of wire(mm <sup>2</sup> )	Tightening torque of connecting wire(N.m)
1, 2, 3, 4, 5, 6	1	Both the power side and load side are 2.0
10	1.5	
16, 20	2.5	
25	4	
32	6	
40, 50	10	
63	16	

## Installation diagram



TH35-7.5 Mounting Din-Rail





## SL7 Polarity DC circuit breaker



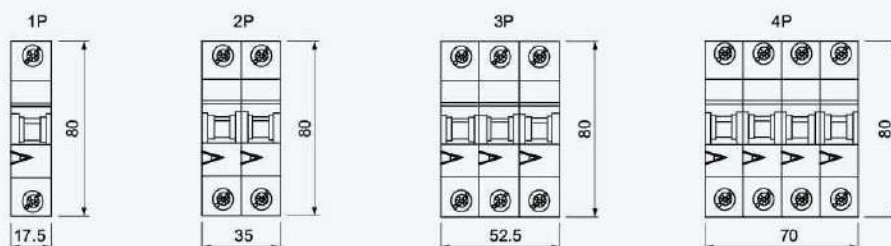
SL7 PV DC breaker supplementary protectors are designed to provide overcurrent protection within appliances or electrical equipment, where a branch circuit protection is already provided or not required. Devices are designed for direct current (DC) control circuit applications.



### Specifications

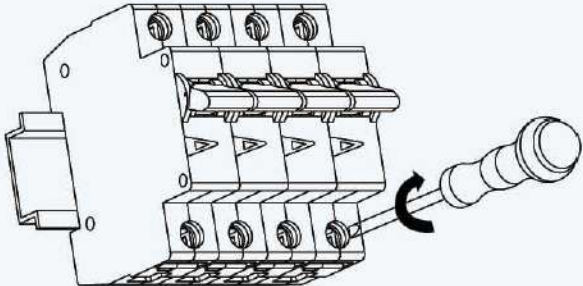
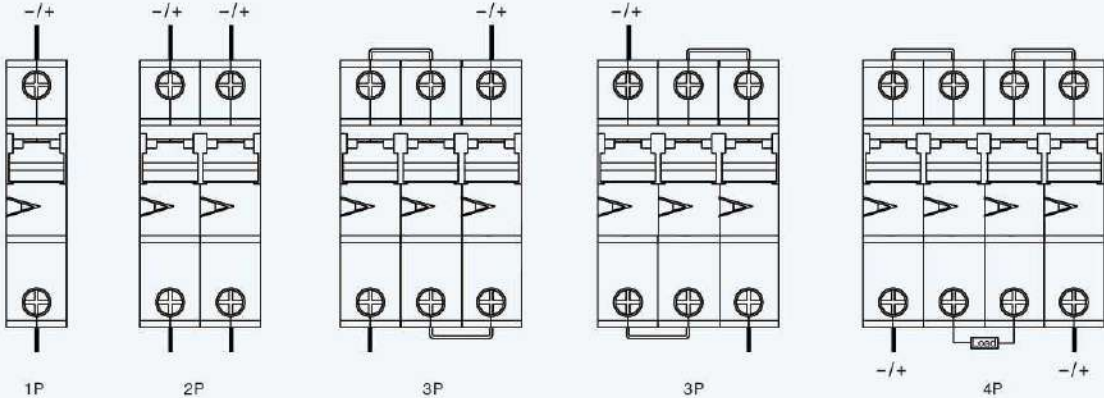
SL7 PV Series Circuit Breaker		SL7-63			
Frame degree rated current (A)		63			
Electrical performance					
Ue Rated operating voltage (V DC)		2P: DC440V DC550V DC800V 4P:DC800V DC1000V DC1200V			
Rated Current In (A)		6-10-16-20-25-32-40-50-63			
Rated insulation voltage Ui (V DC)		2P: 800V 4P: 1200V			
Rated Impact voltage Uimp (kV)		4			
Ultimate breaking capacity Icu (kA)		6	6	6	6
Run breaking capacity Ics (%Icu)		75%	75%	75%	75%
Curve type		C			
Trip type		Thermal-magnetic			
MECHANICAL	Actual average value	20000			
	Standard value	8500			
ELECTRIC	Actual average value	2500			
	Standard value	1500			
Control and indication					
Shunt release (SHT)		Option			
Undervoltage release (UNT)					
Auxiliary contact (AX)					
Alarm contact (AL)					
Connection and installation					
Wiring capacity (mm <sup>2</sup> )		In≤32A, 1~25 mm <sup>2</sup> , I≥40A, 10~35mm <sup>2</sup>			
Ambient temperature (°C)		-20~70			
Altitude		≤2000			
Relative humidity		≤95%			
Pollution Level		3			
Installation Environment		No obvious shock and vibration			
Installation category		Class III			
Installation		DIN Standard rail			
Dimensions(W)x(H)x(Deep)	W	17.5	35	52.5	70
	H	80	80	80	80
	Deep	71	71	71	71
Weight (kg)		0.12	0.24	0.36	0.48

### Dimensions(mm)



# SL7 Polarity DC circuit breaker

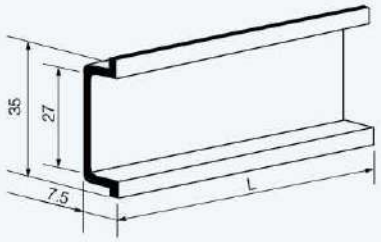
## Wiring diagram



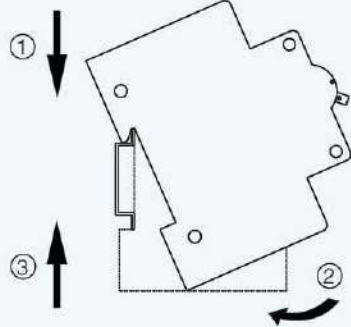
Rated current (A)	Sectional area of wire(mm <sup>2</sup> )	Tightening torque of connecting wire(N.m)
1, 2, 3, 4, 5, 6	1	Both the power side and load side are 2.0
10	1.5	
16, 20	2.5	
25	4	
32	6	
40, 50	10	
63	16	



## Installation diagram



TH35-7.5 Mounting Din-Rail



# PV DC Products

# Suntree

## SCB2 Polarity DC circuit breaker



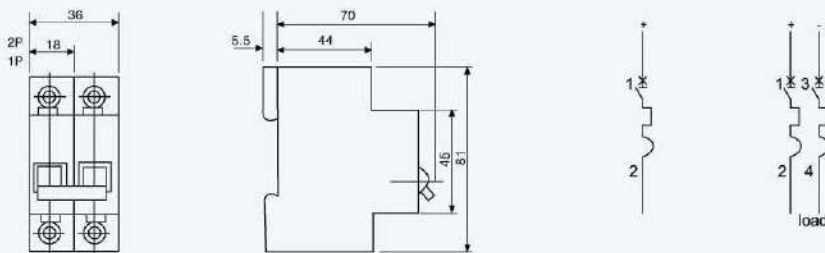
SCB2 PV DC breaker supplementary protectors are designed to provide overcurrent protection within appliances or electrical equipment, where a branch circuit protection is already provided or not required. Devices are designed for direct current (DC) control circuit applications.



### Specifications

SCB2 PV Series Circuit Breaker		SCB2-63			
Frame degree rated current (A)		63			
Electrical performance					
Ue rated operating voltage (V DC)		DC24V DC48V			
Rated current In (A)		6-10-16-20-25-32-40-50-63			
Rated insulation voltage Ui (V DC)		800V			
Rated impact voltage Uimp (kV)		4			
Ultimate breaking capacity Icu (kA)		6	6	6	6
Run breaking capacity Ics (%Icu)		75%	75%	75%	75%
Curve type		C			
Trip type		Thermal-magnetic			
Mechanical	Actual average value	20000			
	Standard value	8500			
Electric	Actual average value	2500			
	Standard value	1500			
Control and indication					
Shunt release (SHT)		Option			
Undervoltage release (UNT)					
Auxiliary contact (AX)					
Alarm contact (AL)					
Connection and installation					
Wiring capacity (mm <sup>2</sup> )		In ≤ 32A, 1~25 mm <sup>2</sup> , I ≥ 40A, 10~35mm <sup>2</sup>			
Ambient temperature (°C)		-20~70			
Altitude		≤ 2000			
Relative humidity		≤ 95%			
Pollution level		3			
Installation environment		No obvious shock and vibration			
Installation category		Class III			
Installation		DIN Standard rail			

### Dimensions(mm)



## SM1-PV DC Breaker Non-Polarity



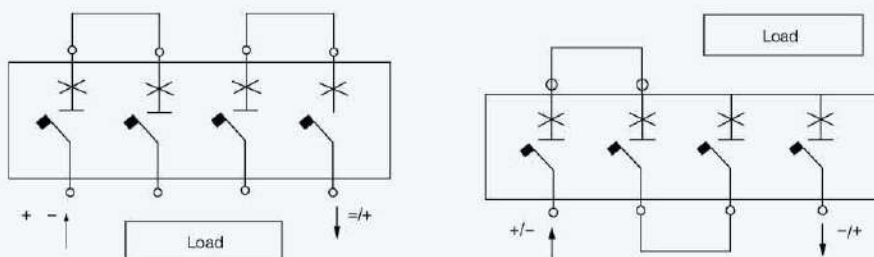
- Reliable protection at high ambient temperatures
- Loadable: string protection up to
  - 125 size: 63A, 80A, 100A, 125A
  - 250 size: 160A, 200A, 225A, 250A
  - 400 size: 320A, 400A
- Tested: Ultimate short circuit breaking capacity Icu of 25kA according to IEC IEC60947-2
- Fast: reclosable for minimum standstill times
- Safe: reliable disconnecter properties, switching under load
- Approval: Provided on request



### Specifications

Rated Current In (A)	125: 63A, 80A, 100A, 125A, 250: 160A, 200A, 225A, 250A, 400: 320A, 400A
U <sub>e</sub> Rated operating voltage (VDC)	3P 750V 4P DC1000V
Rated insulation voltage U <sub>i</sub> (VDC)	DC1000V
Rated Impact voltage U <sub>imp</sub> (kV)	8KV
Ultimate breaking capacity I <sub>cu</sub> (kV)	25KV
Trip type	Thermal-magnetic
Ambient temperature (°C)	-20°C ~70°C
Altitude	2000M
Installation	Fixed, plug-in
Accessories	Auxiliary, Alarm, Shunt release, Manually operated and electric operation

### Wiring diagram



- Protection and Isolation wiring
- The load should be  $\leq$  DC1000V

The connection considered for a network in which the middle point of the supply source is earthed  
 In this case the breaker protects and isolates the load

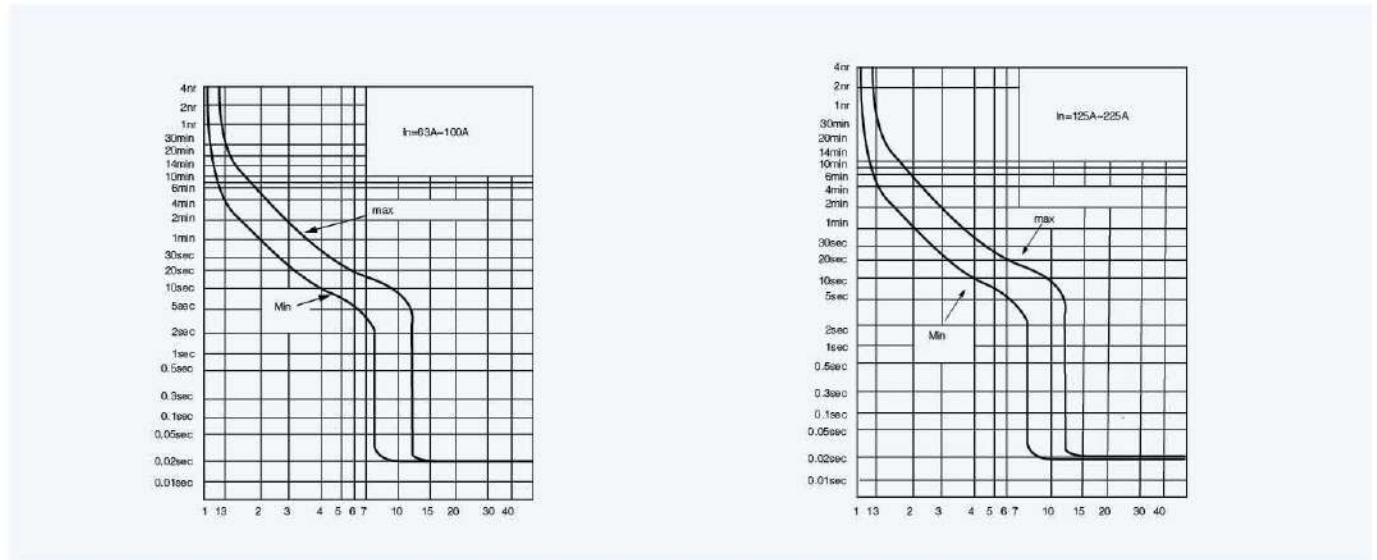
- Protection and Isolation wiring
- The load should be  $\leq$  DC1000V

The Negative pole (-) could be earthed, but in both cases the breaker protects and isolates the load

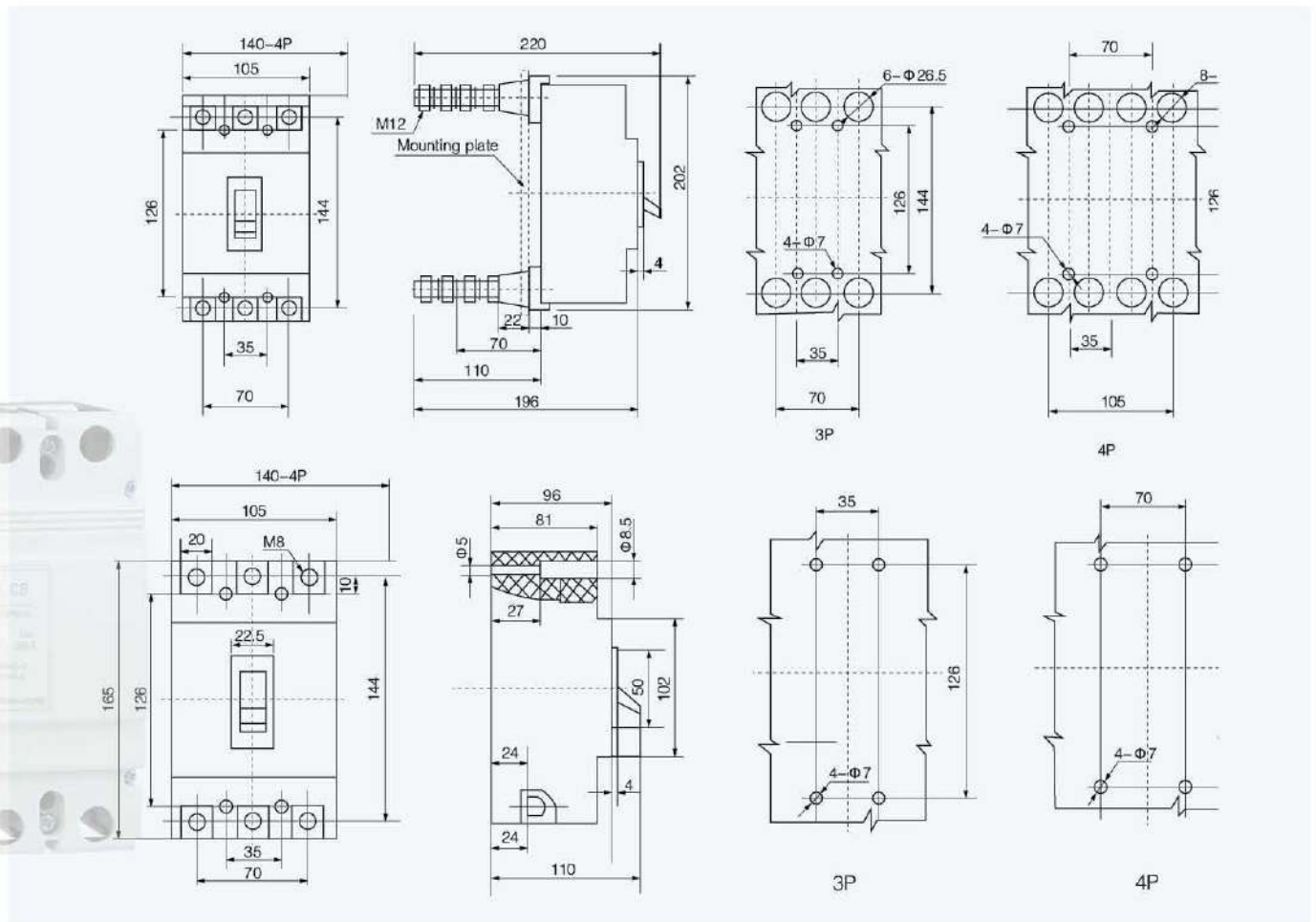




### Curve chart



### Installation dimensions



\*400A installation dimensions please contact manufacturers

\*Customizable isolating switch, the model is SM1G-PV