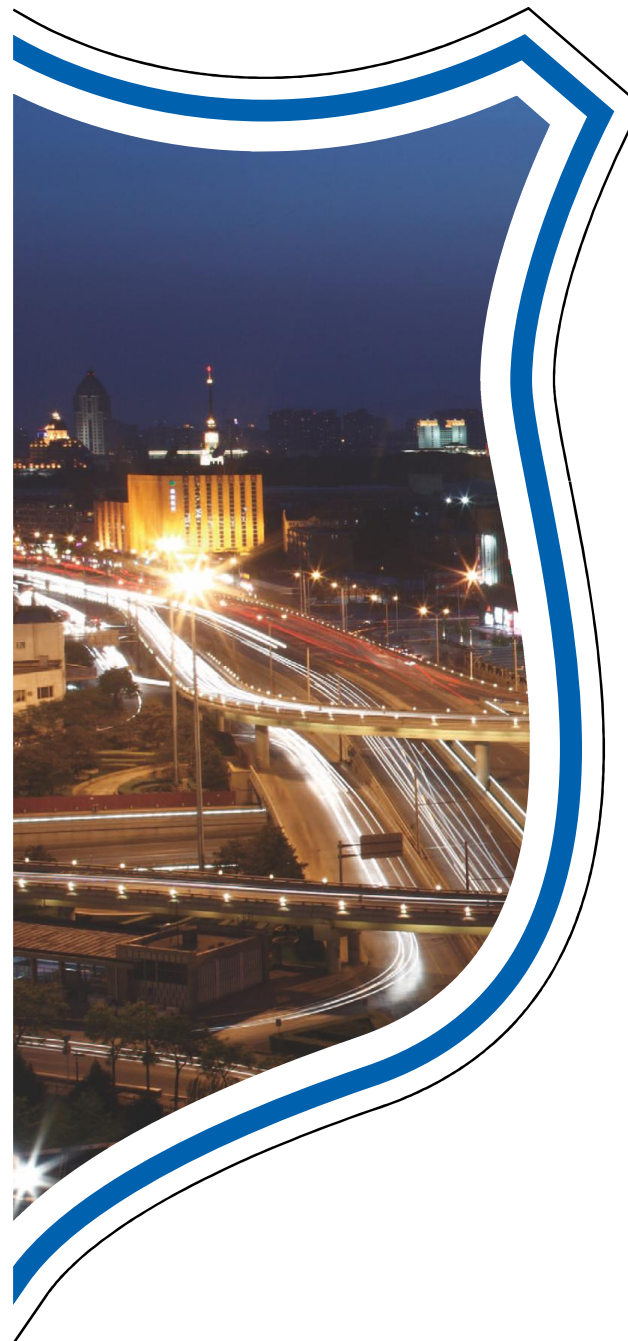




**SNDQI**

**低压配电系列**

**样本手册**



**SNDQI ELECTRICAL CO.,LTD.**

Add: Yueqing City north Baixiang town bridge industrial zone

Wenzhou Zhejiang, China

Mob: 86-18357785687



## Function

- Protect function: Overload, short circuit

## Technical specification

- Standard: IEC/EN60947-2, GB14048.2
- Frame current (Im) : 63A
- Rated current(In) : 6, 10, 16, 20, 25, 32, 40, 50, 63A
- Rated voltage (Ue) : 250V(1P), 500V(2P), 1000V(4P)
- Rated impulse voltage(Ui): 500V
- Pole: 1P, 2P, 4P
- Trip curve: B, C
- Rated impulse withstand voltage (Uimp) : 4kV
- Mechanical life: 10000 time
- Electrical life : 1500 time
- Rated short-circuit breaking capacity (Icu) : 4.5, 6kA
- Rated operating breaking capacity (Ics) : 4.5, 6kA

## Main feature

- High cost performance, breaking capacity up to 6kA
- Product serialization, provide customers with a variety of choices
- Beautiful appearance, new upgrade, can seamlessly replace the original old C45 circuit breaker products

## Normal Operating Conditions and Installation Condition

- The ambient air temperature: -5~+40°C , Average not more than +35°C within 24 hours
- Altitude(m):Not exceed 2000 meters
- Protection degree:IP20
- Mounting: On Din rail TH35-7.5 mounting rail installation

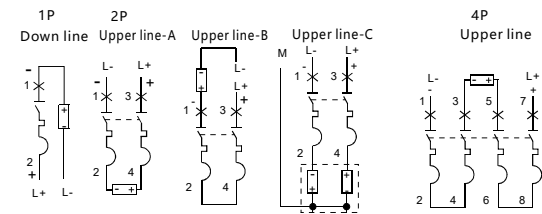
## Copper wire connection

Rated current(In)	Copper wire connection ( mm <sup>2</sup> )
6A	1
10, 13A	1.5
16, 20A	2.5
25A	4
32A	6
40A	10
50, 63	16
80A	25
100A	35
125A	50

## Character

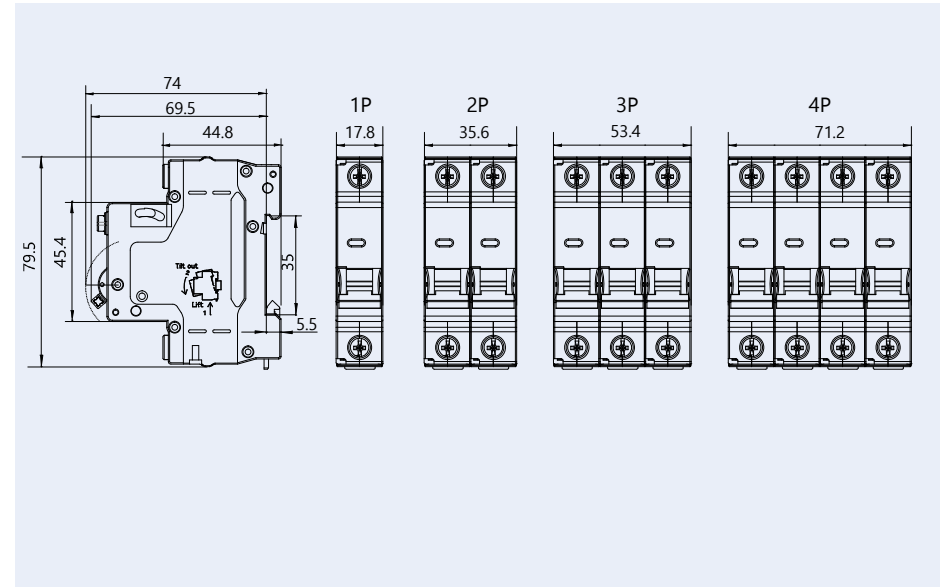
Test	Type	Test Current	Initial State	Trip or non-trip time	expected result
a	C	1.05In	Cold state	t≤1h	No Trip
b	C	1.3In	followed by experiment a	t<1h	Trip
c	C	2.55In	Cold state	1s<t<60s(In≤32A) 1s<t<120s(In>32A)	Trip
d	C	8In	Cold state	t≤0.2s	No Trip
e	C	12In	Cold state	t<0.2s	Trip

## wiring diagram



**wiring instructions :** 1 L+:positive pole, L-: negative pole; 2 +: breaker positive, -: Breaker negative;  
 3 : Load; 4 Dc power supply "L-" ground connection, Positive and negative power system neutral pole "M" grounding;

## Dimensions





## Function

- Protect function: Overload, short circuit

## Technical specification

- Standard: IEC/EN60947-2, GB14048.2
- Frame current (Im) : 80A
- Rated current(In) : 6, 10, 16, 20, 25, 32, 40, 50, 63, 80A
- Rated voltage (Ue) : 250V(1P), 500V(2P), 1000V(4P)
- Rated impulse voltage(Ui): 500V
- Pole: 1P, 2P, 4P
- Trip curve: B, C
- Rated impulse withstand voltage (Uimp) : 4kV
- Mechanical life: 10000 time
- Electrical life :2000 time
- Rated short-circuit breaking capacity (Icu) : 6, 10kA
- Rated operating breaking capacity (Ics) : 6, 7.5kA

## Main feature

- Breaking capacity up to 10kA, strong attachment applicability
- Combined terminal with finger contact protection and red and green safety indication, higher safety
- Current limiting contact system, improve product life
- The shell and key parts are made of flame retardant, high temperature and impact resistant plastics
- Modular design, maximum rated current up to 80A
- Novel and unique appearance, complete certificate

## Normal Operating Conditions and Installation Condition

- The ambient air temperature:-5~+40°C , Average not more than +35°C within 24 hours
- Altitude(m):Not exceed 2000 meters
- Protection degree:IP20
- Mounting: On Din rail TH35-7.5 mounting rail installation

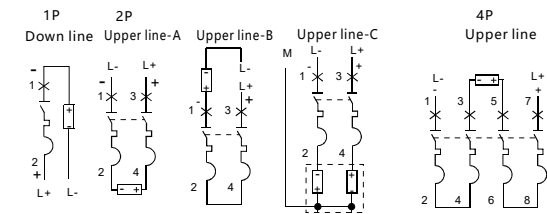
## Copper wire connection

Rated current(In)	Copper wire connection (mm <sup>2</sup> )
6A	1
10, 13A	1.5
16, 20A	2.5
25A	4
32A	6
40A	10
50, 63	16
80A	25
100A	35
125A	50

## Character

Test	Type	Test Current	Initial State	Trip or non-trip time	expected result
a	C	1.05In	Cold state	t≤1h	No Trip
b	C	1.3In	followed by experiment a	t<1h	Trip
c	C	2.55In	Cold state	1s<t<60s(In≤32A) 1s<t<120s(In>32A)	Trip
d	C	8In	Cold state	t≤0.2s	No Trip
e	C	12In	Cold state	t<0.2s	Trip

## wiring diagram

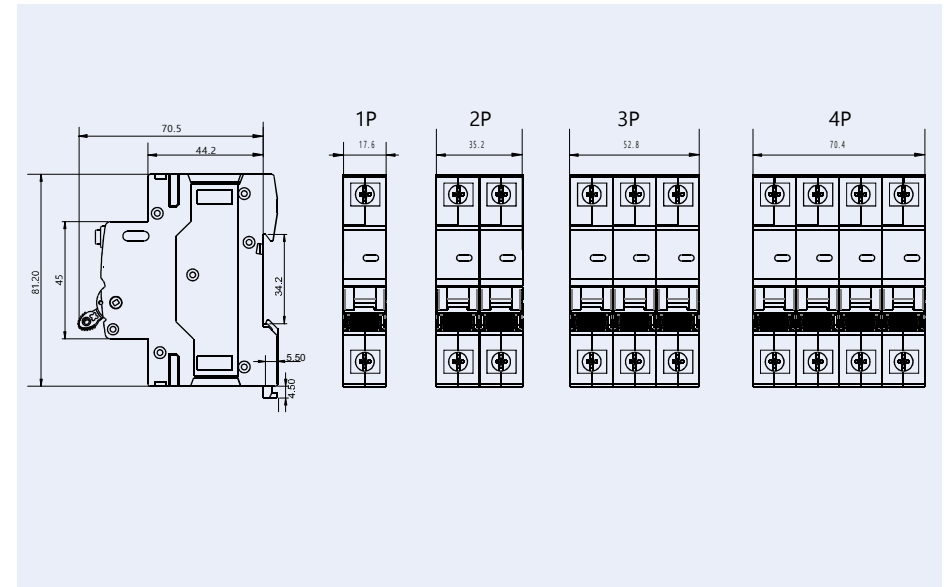


**wiring instructions :** 1 L+:positive pole, L-: negative pole; 2 +: breaker positive, -: Breaker negative;

3-4: Load; 4 Dc power supply "L-" ground connection, Positive and negative

power system neutral pole "M" grounding;

## Dimensions





## Function

- Protect function: Overload, short circuit

## Technical specification

- Standard: IEC/EN60947-2, GB14048.2
- Frame current (Im) : 125A
- Rated current(In) : 32, 40, 50, 63, 80, 100, 125A
- Rated voltage (Ue) : 250V(1P), 500V(2P), 1000V(4P)
- Rated impulse voltage(Ui): 500V
- Pole: 1P, 2P, 4P
- Trip curve: B, C
- Rated impulse withstand voltage (Uimp) : 4kV
- Mechanical life: 10000 time
- Electrical life :2000 time
- Rated short-circuit breaking capacity (Icu) : 6, 10kA
- Rated operating breaking capacity (Ics) : 6, 7.5kA

## Main feature

- Modular design, maximum rated current up to 125A
- Current limiting contact system, improve product life
- Unique shape, breaking capacity up to 10kA
- The shell and key parts are made of flame retardant, high temperature and impact resistant plastics

## Normal Operating Conditions and Installation Condition

- The ambient air temperature:-5~+40°C , Average not more than +35°C within 24 hours
- Altitude(m):Not exceed 2000 meters
- Protection degree:IP20
- Mounting: On Din rail TH35-7.5 mounting rail installation

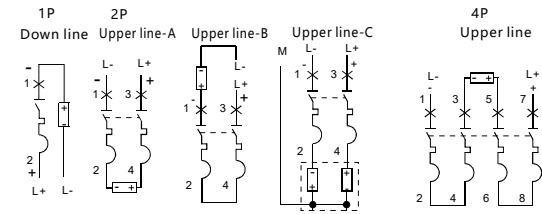
## Copper wire connection

Rated current(In)	Copper wire connection (mm <sup>2</sup> )
6A	1
10, 13A	1.5
16, 20A	2.5
25A	4
32A	6
40A	10
50, 63	16
80A	25
100A	35
125A	50

## Character

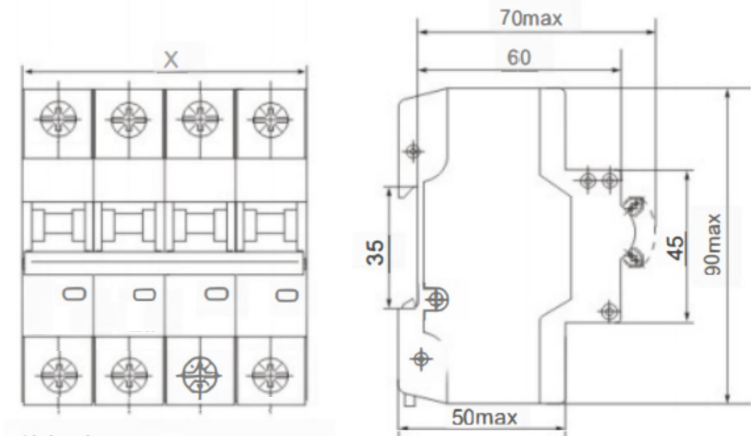
Test	Type	Test Current	Initial State	Trip or non-trip time	expected result
a	C	1.05In	Cold state	t≤1h	No Trip
b	C	1.3In	followed by experiment a	t<1h	Trip
c	C	2.55In	Cold state	1s<t<60s(In≤32A) 1s<t<120s(In>32A)	Trip
d	C	8In	Cold state	t≤0.2s	No Trip
e	C	12In	Cold state	t<0.2s	Trip

## wiring diagram



**wiring instructions :** 1 L+:positive pole, L-: negative pole; 2 +: breaker positive, -: Breaker negative;  
 3-□-: Load; 4 Dc power supply "L-" ground connection, Positive and negative power system neutral pole "M" grounding;

## Dimensions



其中X为 : 54max(1P+N, 2P)  
90max(3P+N, 4P)



## Function

- Protect function: Overload, short circuit

## Technical specification

- Standard: IEC/EN60947-2, GB14048.2
- Frame current (Im) : 80A
- Rated current(In) : 32, 40, 50, 63, 80A
- Rated voltage (Ue) : 400V(1P), 800V(2P), 1200V(4P)
- Rated impulse voltage(Ui): 600V
- Pole: 1P, 2P, 4P
- Trip curve: B, C
- Rated impulse withstand voltage (Uimp) : 4kV
- Mechanical life: 10000 time
- Electrical life :2000 time
- Rated short-circuit breaking capacity (Icu) : 6, 10kA
- Rated operating breaking capacity (Ics) : 6, 7.5kA

## Main feature

- Modular design, maximum rated current up to 125A
- Current limiting contact system, improve product life
- Unique shape, breaking capacity up to 10kA
- The shell and key parts are made of flame retardant, high temperature and impact resistant plastics

## Normal Operating Conditions and Installation Condition

- The ambient air temperature:-5~+40°C , Average not more than +35°C within 24 hours
- Altitude(m):Not exceed 2000 meters
- Protection degree:IP20
- Mounting: On Din rail TH35-7.5 mounting rail installation

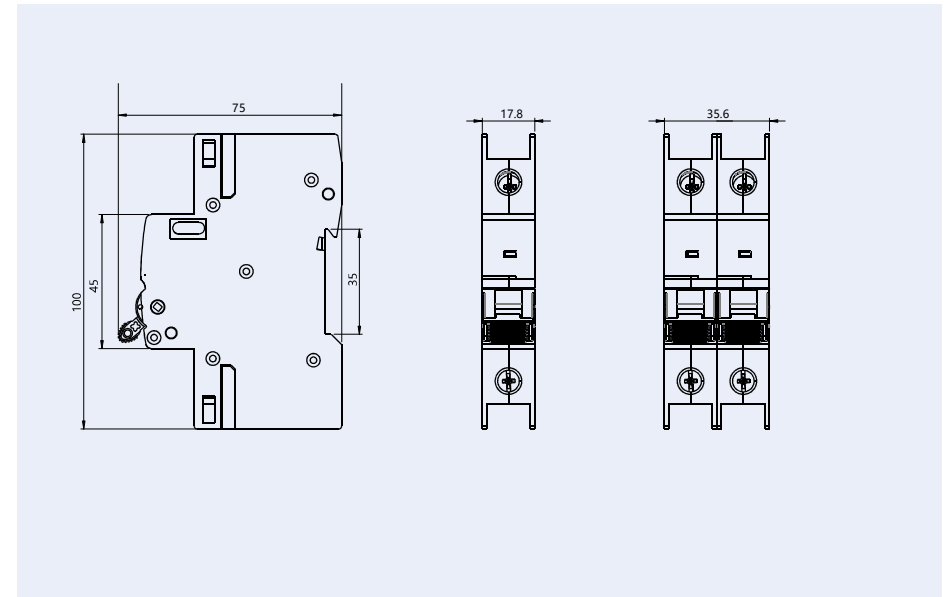
## Copper wire connection

Rated current(In)	Copper wire connection (mm <sup>2</sup> )
6A	1
10, 13A	1.5
16, 20A	2.5
25A	4
32A	6
40A	10
50, 63	16
80A	25
100A	35
125A	50

## Character

Test	Type	Test Current	Initial State	Trip or non-trip time	expected result
a	C	1.05In	Cold state	t≤1h	No Trip
b	C	1.3In	followed by experiment a	t<1h	Trip
c	C	2.55In	Cold state	1s<t<60s(In≤32A) 1s<t<120s(In>32A)	Trip
d	C	8In	Cold state	t≤0.2s	No Trip
e	C	12In	Cold state	t<0.2s	Trip

## Dimensions





### Function

The product ensures reliable action against sinusoidal AC residual current, pulsed DC residual current, AC residual sinusoidal current (up to 1000Hz), pulsed DC residual current, and smooth DC residual current, whether applied suddenly or increased slowly.

### Technical specification

- Standard: IEC62423, IEC61009.1, GB22794, GB16917.1
- Frame current (Im) : 80A
- Rated current(In) : 6, 10, 16, 25, 32, 40, 50, 63, 80A
- Rated voltage (Ue) : 230V(1P+N), 400V(3P+N)
- Rated impulse voltage(Ui): 500V
- Pole: 1P+N, 3P+N
- Trip curve: B, C
- Rated residual operating current (IΔn) : 30, 100, 300mA
- Direct current current flow as sensitivity (IΔndc) : 0.5~2 IΔn
- Remaining action type: Type B
- Rated impulse withstand voltage (Uimp) : 4kV
- Mechanical life: 20000 time
- Electrical life : 6000 time
- Rated short-circuit breaking capacity (Icn) : 4.5, 6kA

### Main feature

- Modular design, maximum rated current up to 80A
- Both L and N poles have overload protection functions
- More comprehensive leakage protection to maximize reliability and safety

### Normal Operating Conditions and Installation Condition

- The ambient air temperature:-5~+40°C , Average not more than +35°C within 24 hours
- Altitude(m):Not exceed 2000 meters
- Protection degree:IP20
- Mounting: On Din rail TH35-7.5 mounting rail installation

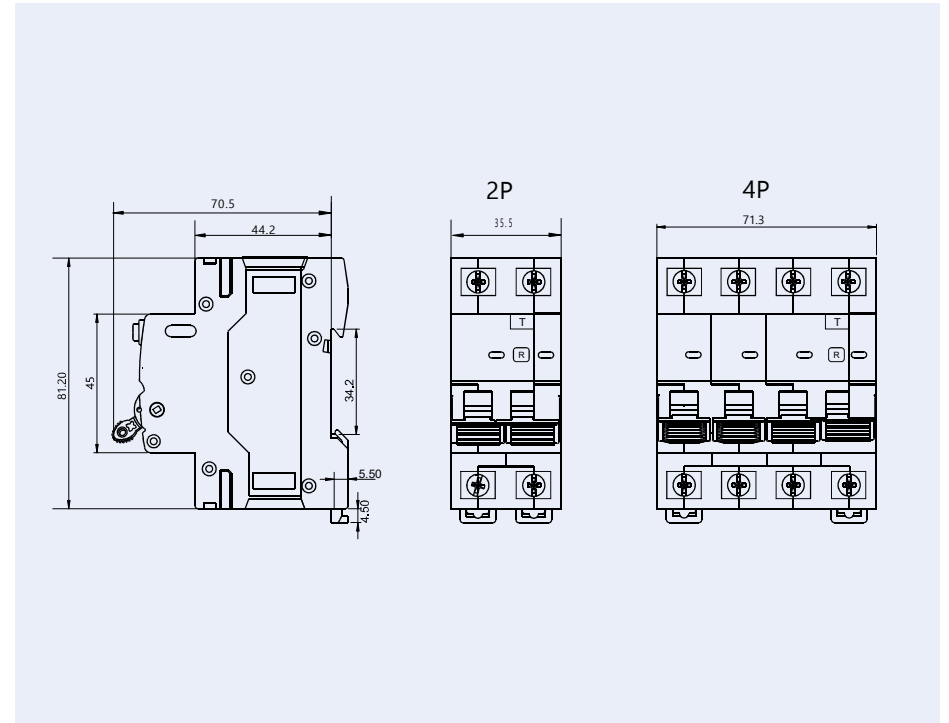
### Copper wire connection

Rated current(In)	Copper wire connection (mm <sup>2</sup> )
6A	1
10, 13A	1.5
16, 20A	2.5
25A	4
32A	6
40A	10
50, 63	16
80A	25
100A	35
125A	50

### 脱扣特性

项目	类型	试验电流	起始状态	脱扣或不脱扣时间	预期测试结果
a	B, C, D	1.13In	Cold state	t≤1h	No Trip
b	B, C, D	1.45In	followed by experiment a	t<1h	Trip
c	B, C, D	2.55In	Cold state	1s<t<60s(In≤32A) 1s<t<120s(In>32A)	Trip
d	B	3In	Cold state	t≤0.1s	No Trip
	C	5In			
	D	10In			
e	B	5In	Cold state	t<0.1s	Trip
	C	10In			
	D	15In			

### Dimensions





### Function

The product ensures reliable action against sinusoidal AC residual current, pulsed DC residual current, AC residual sinusoidal current (up to 1000Hz), pulsed DC residual current, and smooth DC residual current, whether applied suddenly or increased slowly.

### Technical specification

- Standard: IEC62955、IEC61009.1
- Frame current (Im) : 80A
- Rated current(In) : 6、10、16、25、32、40、50、63、80A
- Rated voltage (Ue) : 230V(1P+N), 400V(3P+N)
- Rated impulse voltage(Ui): 500V
- Pole: 1P+N、3P+N
- Trip curve: B、C
- Rated residual operating current (IΔn) : 30mA
- Direct current current flow as sensitivity (IΔndc) : 6mA
- Remaining action type: Type B
- Rated impulse withstand voltage (Uimp) : 4kV
- Mechanical life: 20000 time
- Electrical life : 6000 time
- Rated short-circuit breaking capacity (Icn) : 4.5、6kA

### Main feature

- Modular design, maximum rated current up to 80A
- Both L and N poles have overload protection functions
- More comprehensive leakage protection to maximize reliability and safety

### Normal Operating Conditions and Installation Condition

- The ambient air temperature:-5~+40°C , Average not more than +35°C within 24 hours
- Altitude(m):Not exceed 2000 meters
- Protection degree:IP20
- Mounting: On Din rail TH35-7.5 mounting rail installation

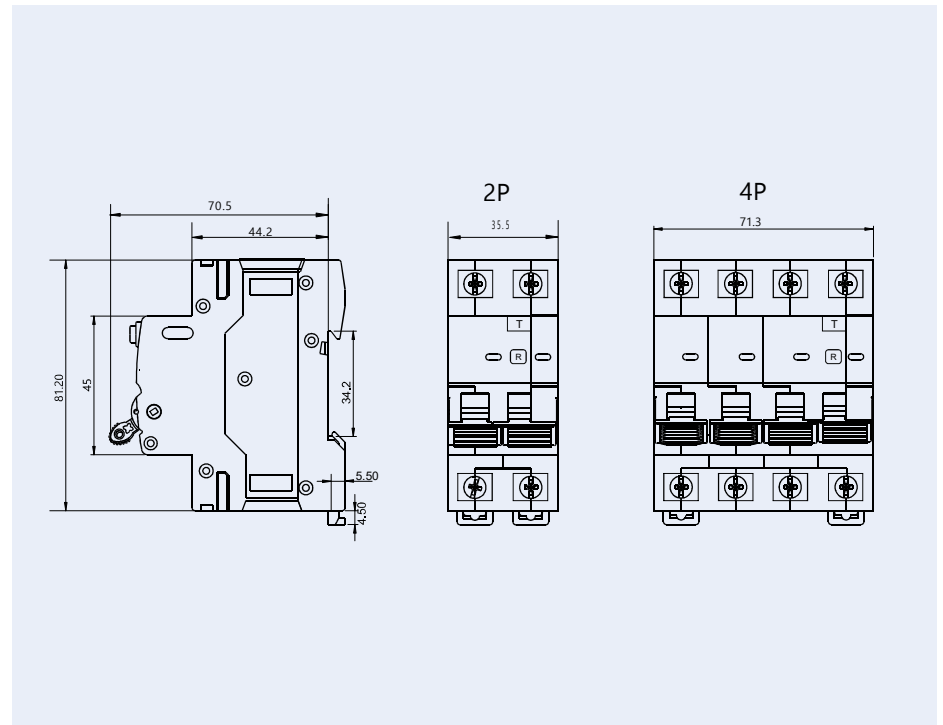
### Copper wire connection

Rated current(In)	Copper wire connection (mm <sup>2</sup> )
6A	1
10、13A	1.5
16、20A	2.5
25A	4
32A	6
40A	10
50、63	16
80A	25
100A	35
125A	50

### 脱扣特性

项目	类型	试验电流	起始状态	脱扣或不脱扣时间	预期测试结果
a	B、C、D	1.13In	Cold state	t≤1h	No Trip
b	B、C、D	1.45In	followed by experiment a	t<1h	Trip
c	B、C、D	2.55In	Cold state	1s<t<60s(In≤32A) 1s<t<120s(In>32A)	Trip
d	B	3In	Cold state	t≤0.1s	No Trip
	C	5In			
	D	10In			
e	B	5In	Cold state	t<0.1s	Trip
	C	10In			
	D	15In			

### Dimensions





### Function

The product ensures reliable action against sinusoidal AC residual current, pulsed DC residual current, AC residual sinusoidal current (up to 1000Hz), pulsed DC residual current, and smooth DC residual current, whether applied suddenly or increased slowly.

### General

- Standard: IEC62423, IEC61008.1, GB22794, GB16916.1
- Frame current (Im) : 100A
- Rated current(In) : 16, 25, 32, 40, 63, 80, 100A
- Rated voltage (Ue) : 230V(2P), 400V(4P)
- Rated impulse voltage(Ui): 500V
- Rated operating frequency:50/60Hz
- Pole: 2P, 4P
- Rated residual operating current (IΔn) : 30, 100, 300mA
- Direct current current flow as sensitivity (IΔndc) : 0.5~2IΔn
- Remaining action type: Type B
- Rated impulse withstand voltage (Uimp) : 4kV
- Mechanical life: 10000 time
- Electrical life :6000 time
- Rated short-circuit breaking capacity (Icn) : 6, 10kA

### Main feature

- Breaking capacity up to 10kA, maximum rated current 100A
- More comprehensive leakage protection to maximize reliability and safety

### Normal Operating Conditions and Installation Condition

- The ambient air temperature:-5~+40°C , Average not more than +35°C within 24 hours
- Altitude(m):Not exceed 2000 meters
- Protection degree:IP20
- Mounting: On Din rail TH35-7.5 mounting rail installation

### Copper wire connection

Rated current(In)	Copper wire connection (mm <sup>2</sup> )
6A	1
10, 13A	1.5
16, 20A	2.5
25A	4
32A	6
40A	10
50, 63	16
80A	25
100A	35
125A	50

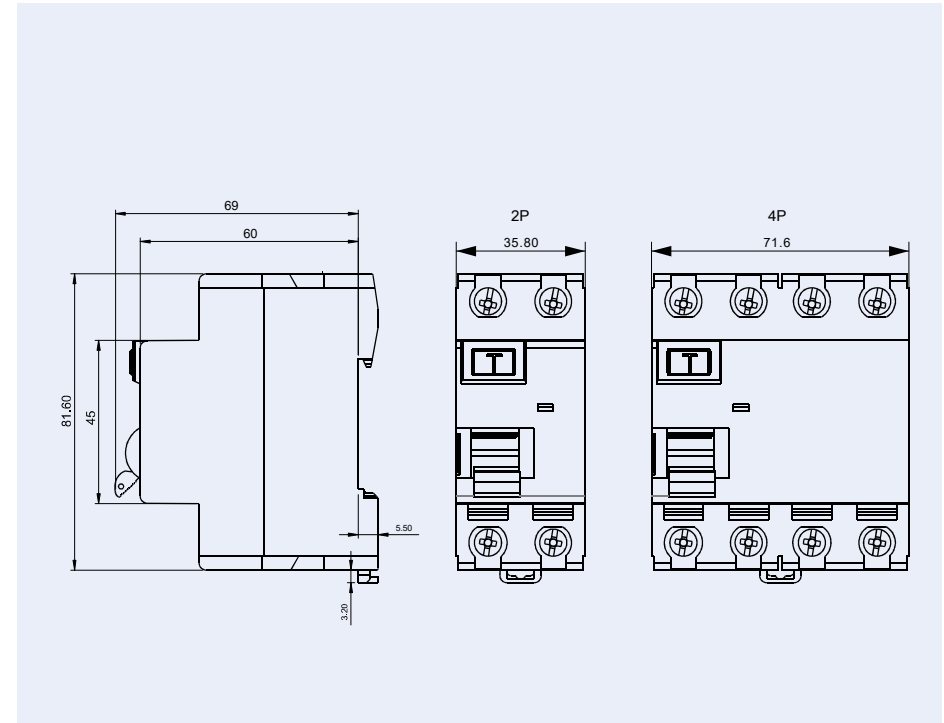
### Remaining current operation time

rated current In(A)	Rated residual action current IΔn (mA)	Residual current breaking time(s)		
		IΔn	2IΔn	5IΔn
16, 25, 40, 63	30, 100, 300	0.1	0.08	0.04

### Copper wire connection

	Rated residual action current IΔn (mA)									
	6A	10, 13A	20, 16A	25A	32A	40A	50, 63A	80A	100A	125A
Connecting copper wire (mm <sup>2</sup> )	1	1.5	2.5	4	6	10	16	25	35	50

### Dimensions







### Function

The product ensures reliable action against sinusoidal AC residual current, pulsed DC residual current, AC residual sinusoidal current (up to 1000Hz), pulsed DC residual current, and smooth DC residual current, whether applied suddenly or increased slowly.

### General

- Standard: IEC62955, IEC61008.1, GB16916.1
- Frame current (Im) : 100A
- Rated current(In) : 16, 25, 32, 40, 63, 80, 100A
- Rated voltage (Ue) : 230V(2P), 400V(4P)
- Rated impulse voltage(Ui): 500V
- Rated operating frequency:50/60Hz
- Pole: 2P, 4P
- Rated residual operating current (IΔn) : 30mA
- Direct current current flow as sensitivity (IΔndc) : 6mA
- Remaining action type: Type EV
- Rated impulse withstand voltage (Uimp) : 4kV
- Mechanical life: 10000 time
- Electrical life :6000 time
- Rated short-circuit breaking capacity (Icn) : 6, 10kA

### Main feature

- Breaking capacity up to 10kA, maximum rated current 100A
- More comprehensive leakage protection to maximize reliability and safety

### Normal Operating Conditions and Installation Condition

- The ambient air temperature:-5~+40°C , Average not more than +35°C within 24 hours
  - Altitude(m):Not exceed 2000 meters
  - Protection degree:IP20
- Mounting: On Din rail TH35-7.5 mounting rail installation

### Copper wire connection

Rated current(In)	Copper wire connection ( mm <sup>2</sup> )
6A	1
10, 13A	1.5
16, 20A	2.5
25A	4
32A	6
40A	10
50, 63	16
80A	25
100A	35
125A	50

### Remaining current operation time

rated current In(A)	Rated residual action current IΔn (mA)	Residual current breaking time(s)		
		IΔn	2IΔn	5IΔn
16, 25, 40, 63	30, 100, 300	0.1	0.08	0.04

### Copper wire connection

	Rated residual action current IΔn (mA)									
	6A	10, 13A	20, 16A	25A	32A	40A	50, 63A	80A	100A	125A
Connecting copper wire (mm <sup>2</sup> )	1	1.5	2.5	4	6	10	16	25	35	50

### Dimensions

