YCUNION

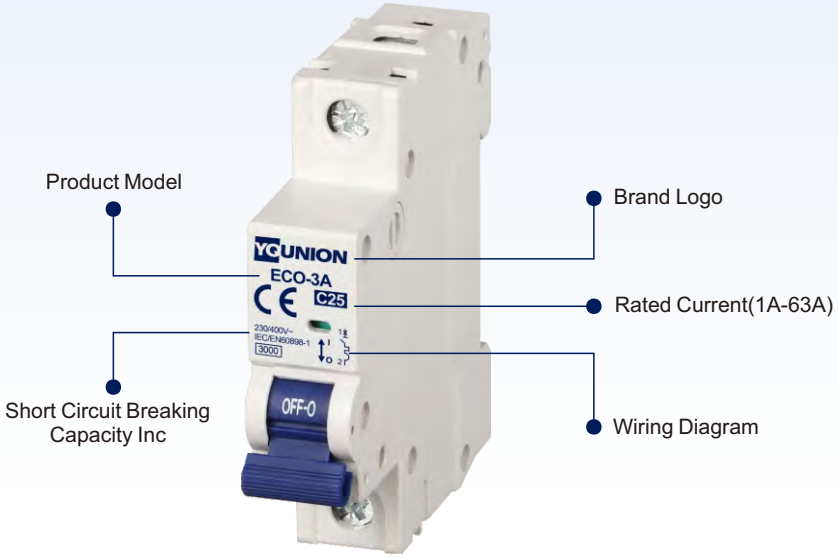
MCB & RCCB & RCBO

Miniature Circuit Breaker
Residual Current Circuit Breaker
Residual Current Circuit Breaker With Overcurrent Protection

UNION ELECTRICS

CONTENTS

MCB(ECO-3A/4.5A)



Product advantage

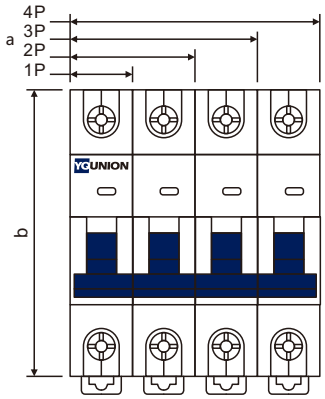
- High frame level 1P+N double breaking point(18mm width, module up to 63A),high breaking capacity(up to 4.5kA).
- Terminal with error protected terminal blocks,and higher safety with contact position indicating window.
- Current limited contact system,magnetic blow-out type arc extinguishing device,can avoid products and equipment from large short circuit current, and improve the arc extinguishing ability of products, then make sure the enhancement of breaking capacity.
- The shell and funcion keys are all made by PA66 nylon which with high flame retardant,high temperature resistance,impact resistant plastics.
- Innovative appearance,reasonable structure and with multiple patent protection.

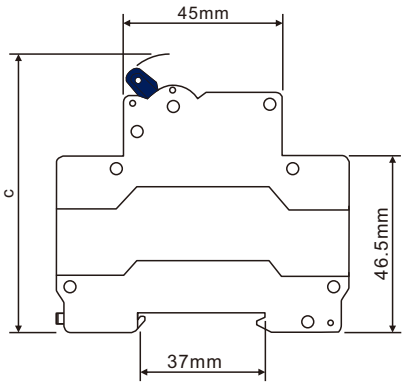
Model meaning

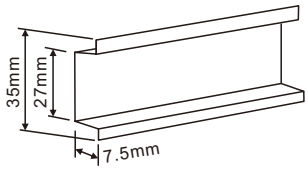
ECO – □ □

- Design code
- Breaking capacity operating
- Enterprise code

Outline dimension





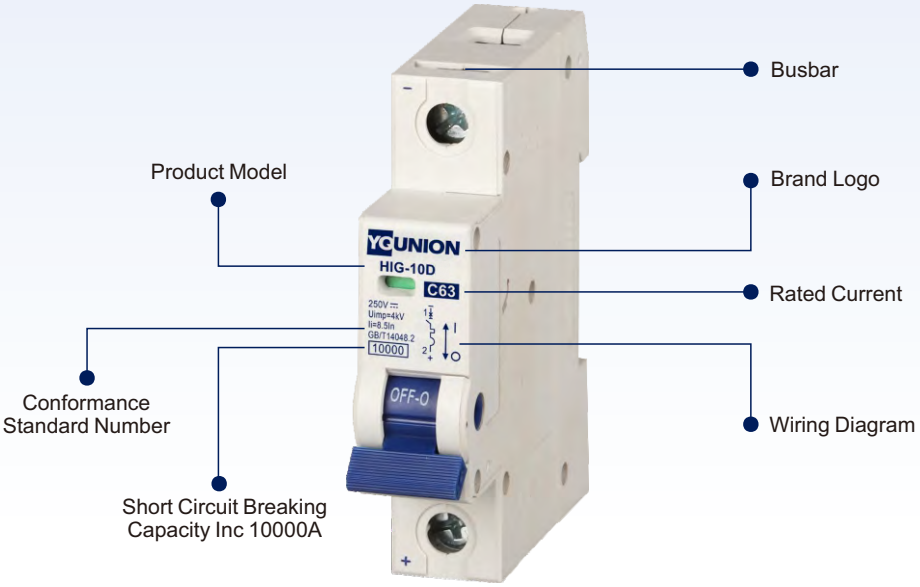


Technical Parameters

Product model				ECO-3/4.5A			
Pole number				1P	2P	3P	4P
Shelf rated current		A		63			
Technical parameters							
Rated working voltage		Ue	VAC	230/400	400	400	400
Rated current		In	A	1 2 3 4 6 10 16 20 25 32 40 50 63			
Rated insulation voltage		Ui	V	500			
Rated impulse withstand voltage		Uimp	kV	4			
Type				-			
Breaking capacity operating		Icn	kA	3/4.5			
Breaking capacity force		Ics %Icn		100%/75%			
Curve type				B C D			
Release type				Thermomagnetic			
Service life (O~CO)	Mechanical	Actual average		20000			
		Standard value		8500			
	Electrical	Actual average		10000			
		Standard value		1500			
Control and indication							
Auxiliary contact				□			
Alarm contact				□			
Shunt release				□			
Under release				□			
Voltage release				□			
Connection and installation							
Protection grade	All sides			Ip40			
	Connection port			Ip20			
Handle lock				ON/OFF Position			
Connection ability		mm²		1~35			
Ambient temperature		℃		-30~+70			
Humidity and heat resistance				Level 2			
Altitude		m		≤2000			
Relative humidity of air				+20 ≤95% +40 ≤50%			
Pollution grade				3			
Installation environment				Without significant vibration and impact			
Installation category				II class			
Installation mode				35mm DIN rail			
Shape dimensions(mm) W*H*D		a		17	34	51	68
		b		78	78	78	78
		c		79	79	79	79
Weight(g)		g		80	160	240	320

■Standard settings □Optiona /None

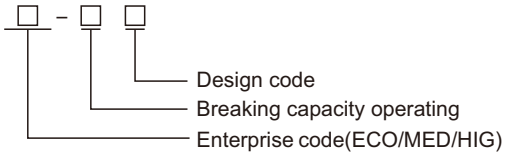
MCB(HIG-10D)



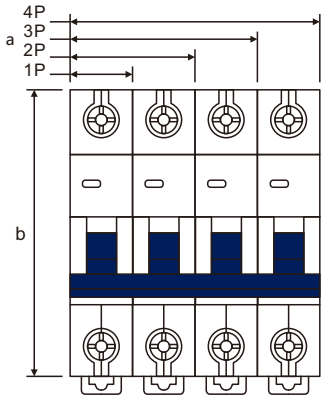
Product advantage

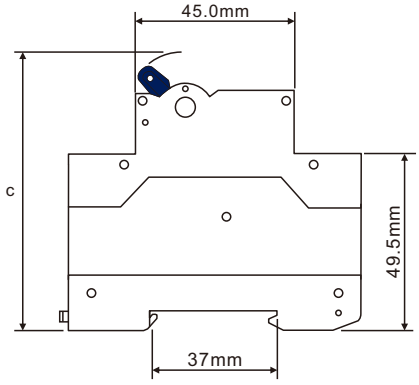
- High frame level 1P+N double breaking point(18mm width, module up to 63A),high breaking capacity(10kA).
- Terminal with error protected terminal blocks,and higher safety with contact position indicating window.
- Current limited contact system,magnetic blow-out type arc extinguishing device,can avoid products and equipment from large short circuit current, and improve the arc extinguishing ability of products, then make sure the enhancement of breaking capacity.
- The shell and funcion keys are all made by PA66 nylon which with high flame retardant,high temperature resistance,impact resistant plastics.
- Innovative appearance,reasonable structure and with multiple patent protection.

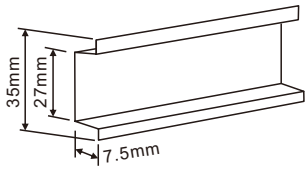
Model meaning



Outline dimension





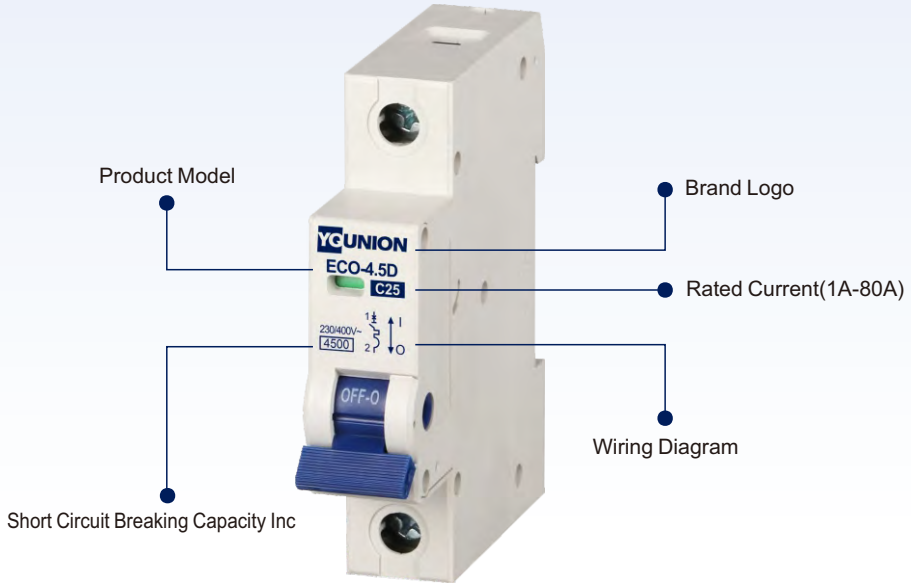


Technical Parameters

Product model				HIG-10D			
Pole number				1P	2P	3P	4P
Shelf rated current		A		63			
Technical parameters							
Rated working voltage		Ue	VAC	230/400	400	400	400
Rated current		In	A	1 2 3 4 6 10 16 20 25 32 40 50 63			
Rated insulation voltage		Ui	V	500			
Rated impulse withstand voltage		Uimp	kV	4			
Type				-			
Breaking capacity operating		Icn	kA	10			
Breaking capacity force		Ics %Icn		100%/75%			
Curve type				B C D			
Release type				Thermomagnetic			
Service life (O~CO)	Mechanical	Actual average		20000			
		Standard value		8500			
	Electrical	Actual average		10000			
		Standard value		1500			
Control and indication							
Auxiliary contact				□			
Alarm contact				□			
Shunt release				□			
Under release				□			
Voltage release				□			
Connection and installation							
Protection grade	All sides			Ip40			
	Connection port			Ip20			
Handle lock				ON/OFF Position			
Connection ability		mm²		1~35			
Ambient temperature		℃		-30~+70			
Humidity and heat resistance				Level 2			
Altitude		m		≤2000			
Relative humidity of air				+20 ≤95% +40 ≤50%			
Pollution grade				3			
Installation environment				Without significant vibration and impact			
Installation category				II class			
Installation mode				35mm DIN rail			
Shape dimensions(mm) W*H*D		a		17. 8	36. 5	53. 4	71. 2
		b		82	82	82	82
		c		79	79	79	79
Weight		g		90	180	270	360

■Standard settings □Optiona /None

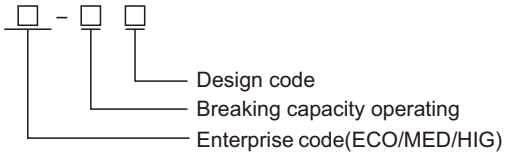
MCB(ECO-4.5D/MED-6D)



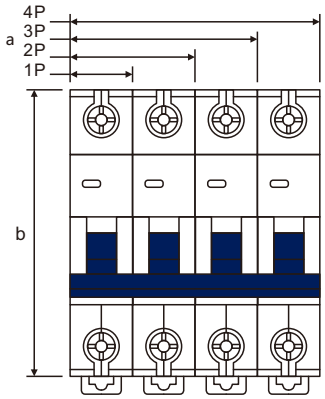
Product advantage

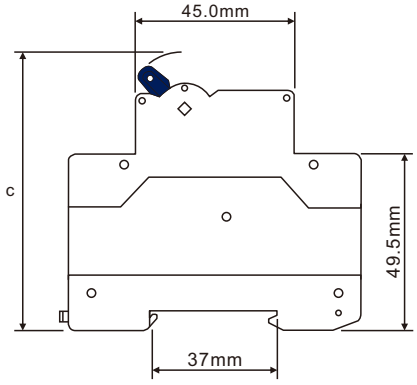
- High frame level 1P+N double breaking point(18mm width, module up to 80A),high breaking capacity(up to 4.5kA,6kA).
- Terminal with error protected terminal blocks,and higher safety with contact position indicating window.
- Current limited contact system,magnetic blow-out type arc extinguishing device,can avoid products and equipment from large short circuit current, and improve the arc extinguishing ability of products, then make sure the enhancement of breaking capacity.
- The shell and funcion keys are all made by PA66 nylon which with high flame retardant,high temperature resistance,impact resistant plastics.
- Innovative appearance,reasonable structure and with multiple patent protection.

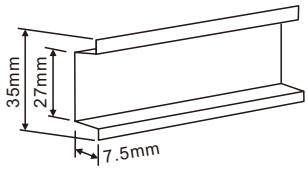
Model meaning



Outline dimension





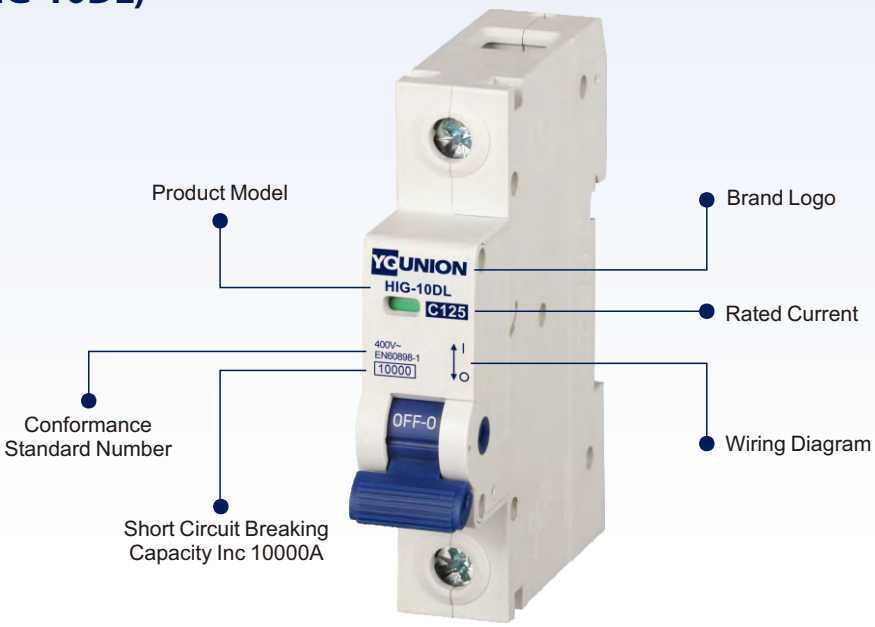


Technical Parameters

Product model				ECO-4.5D/MED-6D			
Pole number				1P	2P	3P	4P
Shelf rated current		A		63			
Technical parameters							
Rated working voltage		Ue	VAC	230/400	400	400	400
Rated current		In	A	1 2 3 4 6 10 16 20 25 32 40 50 63 80			
Rated insulation voltage		Ui	V	500			
Rated impulse withstand voltage		Uimp	kV	4			
Type				-			
Breaking capacity operating		Icn	kA	4.5/6			
Breaking capacity force		Ics %Icn		100%/75%			
Curve type				B C D			
Release type				Thermomagnetic			
Service life (O~CO)	Mechanical	Actual average		20000			
		Standard value		8500			
	Electrical	Actual average		10000			
		Standard value		1500			
Control and indication							
Auxiliary contact				□			
Alarm contact				□			
Shunt release				□			
Under release				□			
Voltage release				□			
Connection and installation							
Protection grade	All sides			Ip40			
	Connection port			Ip20			
Handle lock				ON/OFF Position			
Connection ability		mm²		1~35			
Ambient temperature		℃		-30~+70			
Humidity and heat resistance				Level 2			
Altitude		m		≤2000			
Relative humidity of air				+20 ≤95% +40 ≤50%			
Pollution grade				3			
Installation environment				Without significant vibration and impact			
Installation category				II class			
Installation mode				35mm DIN rail			
Shape dimensions(mm) W*H*D		a		17. 8	36. 5	53. 4	71. 2
		b		82	82	82	82
		c		79	79	79	79
Weight		g		90	180	270	360

■Standard settings □Optiona /None

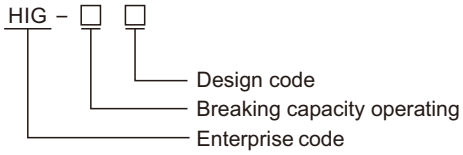
MCB(HIG-10DL)



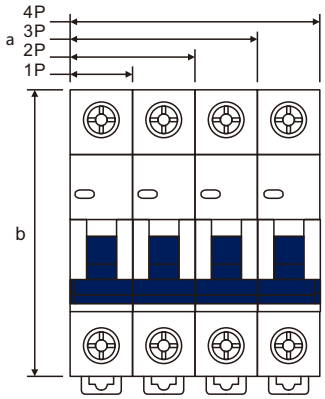
Product advantage

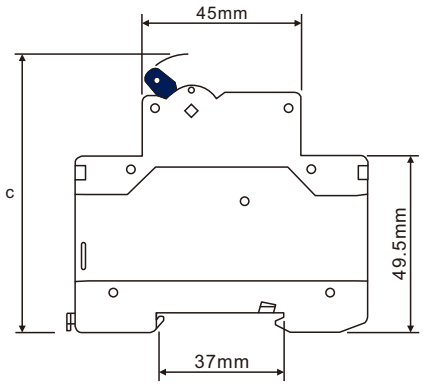
- MBH series circuit breaker is suitable for AC 50Hz, rated voltage 400V and below, rated current to 125A circuit for overload, short circuit protection, can also be usedas a line infrequent operation conversion.
- The circuit breaker is suitable for commercial office buildings and residential houses;
- Meet the GB10963.1, IEC60898-1 standard.

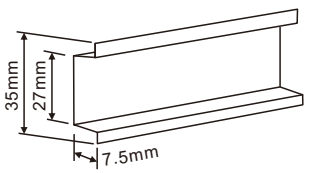
Model meaning



Outline dimension





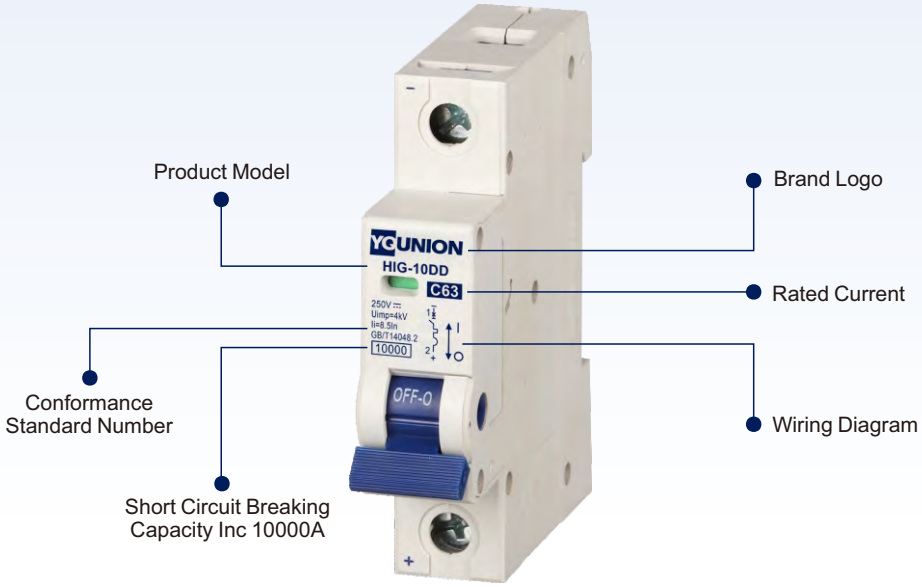


Technical Parameters

Product model				HIG-10DL			
Pole number				1P	2P	3P	4P
Shelf rated current		A		125			
Technical parameters							
Rated working voltage		Ue	VAC	230/400	400	400	400
Rated current		In	A	80 100 125			
Rated insulation voltage		Ui	V	500			
Rated impulse withstand voltage		Uimp	kV	4			
Type				/			
Breaking capacity operating		Icn	kA	10			
Breaking capacity force		Ics %Icn		100%/75%			
Curve type				B C D			
Release type				Thermomagnetic			
Service life (O~CO)	Mechanical	Actual average		20000			
		Standard value		8500			
	Electrical	Actual average		10000			
		Standard value		1500			
Control and indication							
Auxiliary contact				□			
Alarm contact				□			
Shunt release				□			
Under release				□			
Voltage release				□			
Connection and installation							
Protection grade	All sides			Ip40			
	Connection port			Ip20			
Handle lock				ON/OFF Position			
Connection ability		mm²		1~35			
Ambient temperature		℃		-30~+70			
Humidity and heat resistance				Level 2			
Altitude		m		≤2000			
Relative humidity of air				+20 ≤95% +40 ≤50%			
Pollution grade				3			
Installation environment				Without significant vibration and impact			
Installation category				II class			
Installation mode				35mm DIN rail			
Shape dimensions(mm) W*H*D		a		18	36	54	72
		b		85	85	85	85
		c		79	79	79	79
Weight		g		120	240	360	480

■Standard settings □Optiona /None

MCB(HIG-10DD)



General

- Rated voltage up to 1000V, Rated current up to 63A;
- Protection of circuits against overload currents;
- Protection of circuits against short-circuit currents;
- MBD-10DC circuit-breakers are used in communication systems and PV DC systems.

Model meaning

HIG – □ □ □

- DC code
- Design code
- Breaking capacity operating
- Enterprise code

Features

- Excellent breaking capacity;
- Double connection function of lead wire and bus bar;
- Stored energy operation, fast closing, long service life;
- Convenient installation, disassembly;
- Contact on-off indication, higher security;
- Green environmental protection and energy saving.

Operating conditions

- Ambient temperature:-35℃~+70℃(Refer to 5.3)
- The atmosphere condition:≤95%
- Pollution degree:II
- Altitude:≤2000m(if exceed 2000m,Refer to 5.4)

Technical data

- Classification

  1.Rate Current In: 1A,2A,3A,4A,6A,10A,13A,16A,20A,25A,32A,40A,50A,63A

  2.Number of poles: 1P,2P,4P

  3.Tripping curves: C Type,(7~10)In

- Electrical and mechancial life
  a. Electrical life: > 1500
  b. Mechancial life: > 20,000
- Rated impulse withstand voltage Uimp:4KV
  (28-32)℃ ambient temperature over-current protection feat ures.

Test	Test current	Initial state	Time limit for tripping or not tripping	Expected result	Remarks
a	1.05In	Cold state	t≤1h	Not tripping	The current is rising within 5s
b	1.30In	Right after test number a	t < 1h	Tripping	
c	7In	Cold state	t≤0.2s	Not tripping	
d	10In	Cold state	t < 0.1s	Tripping	

Note: The terminology"Cold state"means that the test is performed at the base calibration temperature with no load prior to the test.

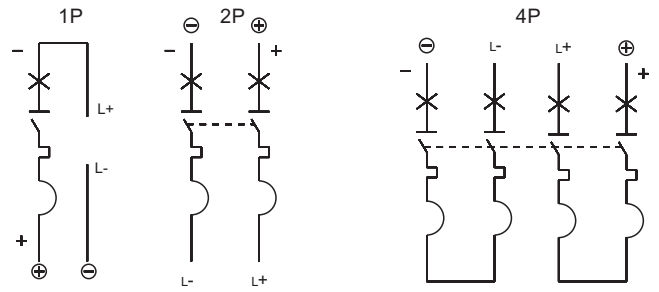
Temperature derating

Rated current (A)	Temperature compensation coefficient under various operational temperature.											
	-35℃	-30℃	-20℃	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃	70℃
1	1.3	1.26	1.23	1.19	1.15	1.11	1.05	1	0.96	0.93	0.88	0.83
2	2.6	2.52	2.46	2.38	2.28	2.2	2.08	2	1.92	1.86	1.76	1.66
3	3.9	3.78	3.69	3.57	3.42	3.3	3.12	3	2.88	2.79	2.64	2.49
4	5.2	5.04	4.92	4.76	4.56	4.4	4.16	4	3.84	3.76	3.52	3.32
6	7.8	7.56	7.38	7.14	6.84	6.6	6.24	6	5.76	5.64	5.28	4.98
10	13.2	12.7	12.5	12	11.5	11.1	10.6	10	9.6	9.3	8.9	8.4
13	17.16	16.51	16.25	15.6	14.95	14.43	13.78	13	12.48	12.09	11.57	10.92
16	21.12	20.48	20	19.2	18.4	17.76	16.96	16	15.36	14.88	14.24	13.44
20	26.4	25.6	25	24	23	22.2	21.2	20	19.2	18.6	17.8	16.8
25	33	32	31.25	30	28.75	27.75	26.5	25	24	23.25	22.25	21
32	42.56	41.28	40	38.72	37.12	35.52	33.93	32	30.72	29.76	28.16	26.88
40	53.2	51.2	50	48	46.4	44.8	42.4	40	38.4	37.2	35.6	33.6
50	67	65.5	63	60.5	58	56	53	50	48	46.5	44	41.5
63	83.79	81.9	80.01	76.86	73.71	70.56	66.78	63	60.48	58.9	55.44	52.29

Altitude derating

Tripping type	Rated current In (A)	Current correction factor			For example
		≤2000	2000~3000m	≥3000m	
C	1,2,3,4,6,10,13, 16,20,32,40,50,63	1	0.9	0.8	Rated current of 10A products rated current derating 2500m:0.9×10=9A

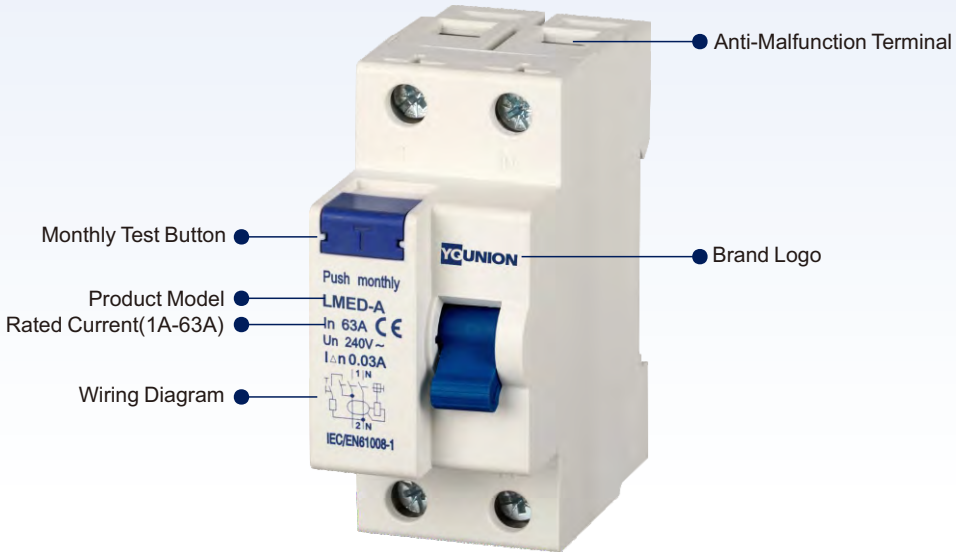
- DC application wiring diagram shown in Figure 2



Wiring diagram description:

1. ⊕ Positive ⊖ Negative
2. L+ Load positive L- Load negative
3. Prohibit power reversed
4. Rated voltage: 1P:250V, 2P:500V, 4P:1000V
5. Strictly forbidden to remove the four poles products of sealing plug wiring operation.

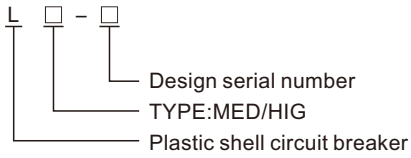
RCCB(LMED-A)



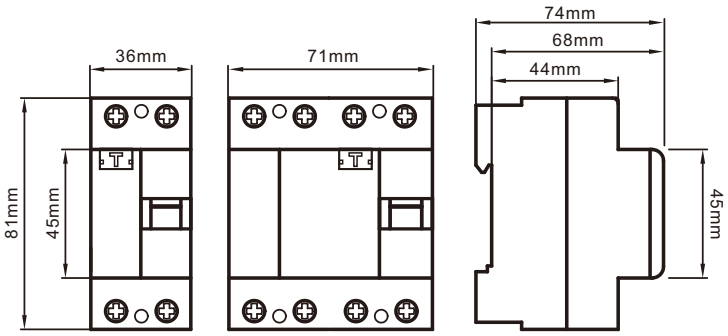
Product advantage

- Ambient air temperature: ambient air temperature -5 degrees -40 degrees, average no more than 35 degrees within 24 hours.
- Altitude: the altitude of the installation site does not exceed 2000m.
- Atmospheric conditions: The relative humidity of the air at the installation site does not exceed 50% at a maximum temperature of 40 degrees, and the relative humidity does not exceed 90% at a minimum temperature of not more than 20%.
- Installation method: using standard Din-rail installation.
- Pollution level: Level II.
- Installation conditions: The external magnetic field of the installation site should not exceed 5 times of the geomagnetic field in any direction. The leakage circuit breaker is generally installed vertically, the handle is upwardly connected to the power supply position, and the installation site should have no significant impact and vibration.
- Wiring method: tighten the wiring with screws.

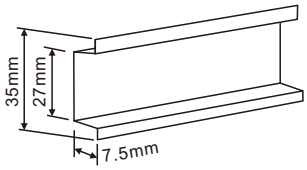
Model meaning



Outline dimension



Installation



Technical Parameters

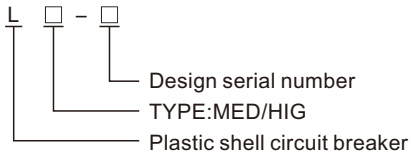
Type				LMED-A/LHIG-A
No of poles				2,4
Type				Eletronic/Electro-Magnetic
Rated current	In	A		25,32,40,63
Rated residual current	IΔ	Ma		30,100, 300
Tripping range	IΔ	Ma		0,5-1 x IΔn
Rated frequency		Hz		50-60
Type class				AC/A/S
Rated voltage	Ue	V	Ac	240
Rated insulation voltage	Ui	V		500
Rated impulse withstand voltage	Uimp	Kv		4.5
Rated short circuit capacity		A		6000
Electrical life	Ope.	V	230	4000
Mechanical life	Ope.			20000
Degree of protection				IP 20(IP 40)
Ambient operational temperature		℃		-25/+70
Storage temperature		℃		-40/+75
Fixing (en 60715)				35mm DIN rail
Connection cross section (min/max)		mm^2		1,5-35

RCCB(LMED-B)

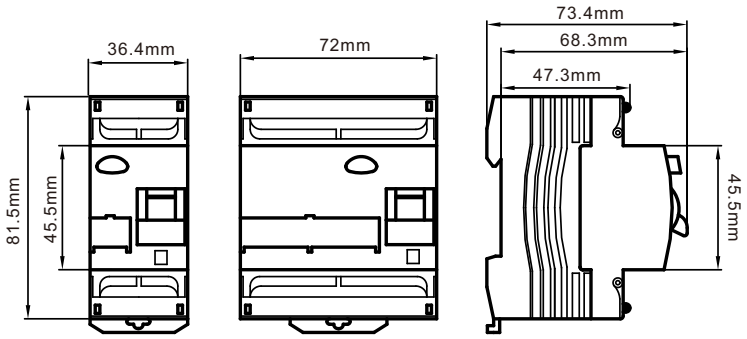
Product advantage

- Ambient air temperature: ambient air temperature -5 degrees -40 degrees, average no more than 35 degrees within 24 hours.
- Altitude: the altitude of the installation site does not exceed 2000m.
- Atmospheric conditions: The relative humidity of the air at the installation site does not exceed 50% at a maximum temperature of 40 degrees, and the relative humidity does not exceed 90% at a minimum temperature of not more than 20%.
- Installation method: using standard Din-rail installation.
- Pollution level: Level II.
- Installation conditions: The external magnetic field of the installation site should not exceed 5 times of the geomagnetic field in any direction. The leakage circuit breaker is generally installed vertically, the handle is upwardly connected to the power supply position, and the installation site should have no significant impact and vibration.
- Wiring method: tighten the wiring with screws.

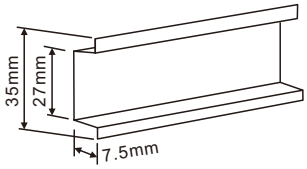
Model meaning



Outline dimension



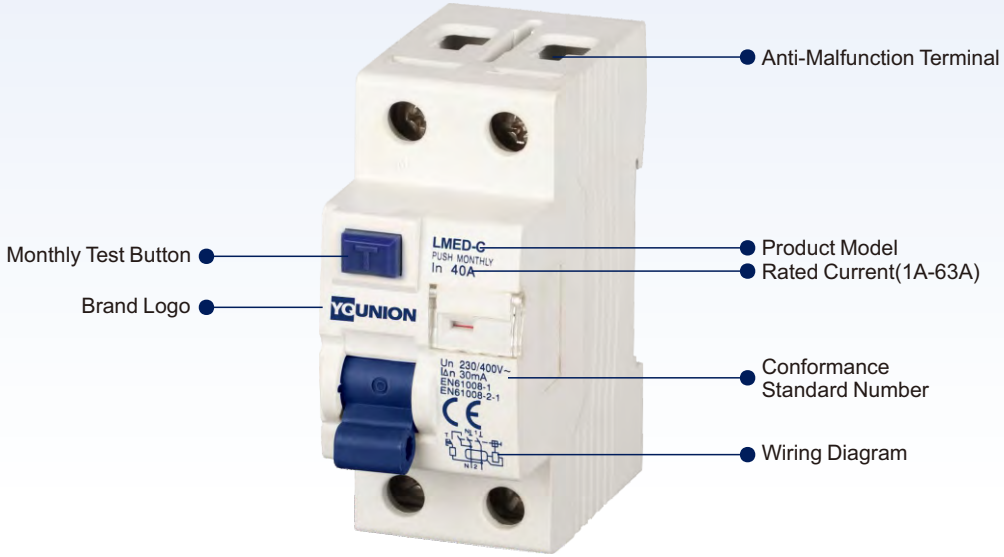
Installation



Technical Parameters

Type				LMED-B/LHIG-B
No of poles				2,4
Type				Eletronic/Electro-Magnetic with LED
Rated current	In	A		25,32,40,63
Rated residual current	IΔ	Ma		30,100, 300
Tripping range	IΔ	Ma		0,5-1 x IΔn
Rated frequency		Hz		50-60
Type class				AC/A/S
Rated voltage	Ue	V	Ac	240
Rated insulation voltage	Ui	V		500
Rated impulse withstand voltage	Uimp	Kv		4.5
Rated short circuit capacity		A		6000
Electrical life	Ope.	V	230	4000
Mechanical life	Ope.			20000
Degree of protection				IP 20(IP 40)
Ambient operational temperature		℃		-25/+70
Storage temperature		℃		-40/+75
Fixing (en 60715)				35mm DIN rail
Connection cross section (min/max)		mm^2		1,5-35

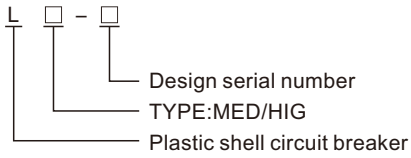
RCCB(LMED-C)



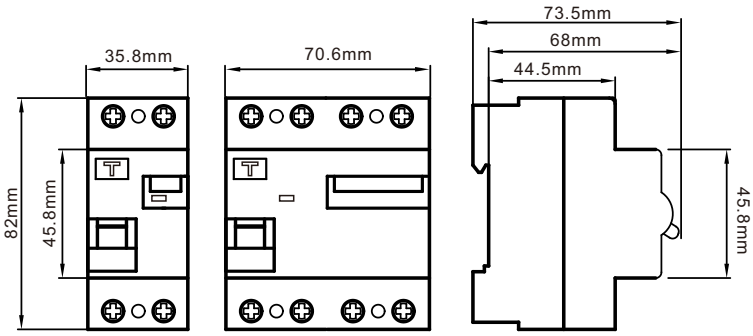
Product advantage

- Ambient air temperature: ambient air temperature -5 degrees -40 degrees, average no more than 35 degrees within 24 hours.
- Altitude: the altitude of the installation site does not exceed 2000m.
- Atmospheric conditions: The relative humidity of the air at the installation site does not exceed 50% at a maximum temperature of 40 degrees, and the relative humidity does not exceed 90% at a minimum temperature of not more than 20%.
- Installation method: using standard Din-rail installation.
- Pollution level: Level II.
- Installation conditions: The external magnetic field of the installation site should not exceed 5 times of the geomagnetic field in any direction. The leakage circuit breaker is generally installed vertically, the handle is upwardly connected to the power supply position, and the installation site should have no significant impact and vibration.
- Wiring method: tighten the wiring with screws.

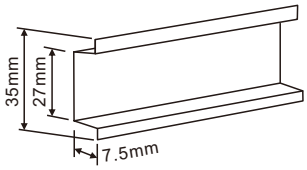
Model meaning



Outline dimension



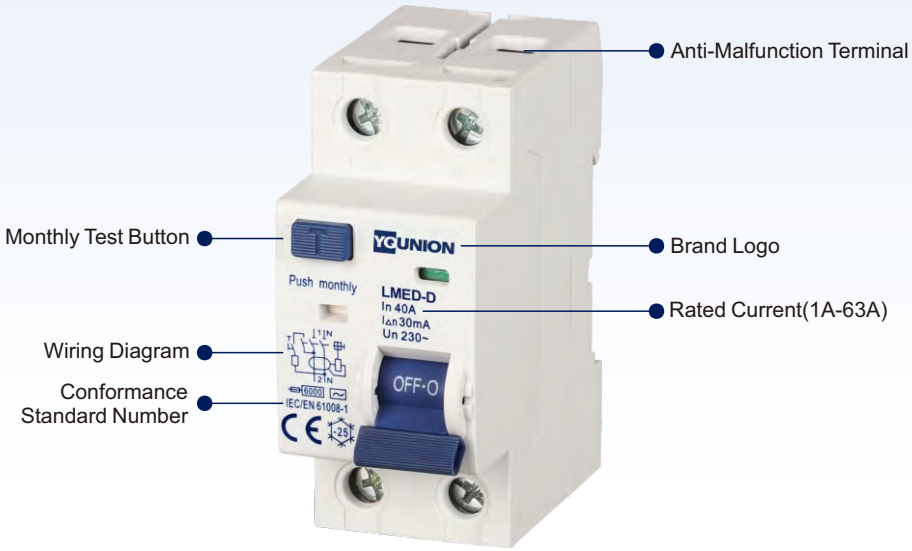
Installation



Technical Parameters

Type				LMED-C/LHIG-C
No of poles				2,4
Type				Eletronic/Electro-Magnetic
Rated current	In	A		25,32,40,63
Rated residual current	IΔ	Ma		30,100, 300
Tripping range	IΔ	Ma		0,5-1 x IΔn
Rated frequency		Hz		50-60
Type class				AC/A/S
Rated voltage	Ue	V	Ac	240
Rated insulation voltage	Ui	V		500
Rated impulse withstand voltage	Uimp	Kv		4.5
Rated short circuit capacity		A		6000
Electrical life	Ope.	V	230	4000
Mechanical life	Ope.			20000
Degree of protection				IP 20(IP 40)
Ambient operational temperature		℃		-25/+70
Storage temperature		℃		-40/+75
Fixing (en 60715)				35mm DIN rail
Connection cross section (min/max)		mm^2		1,5-35

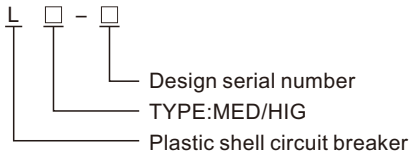
RCCB(LMED-D)



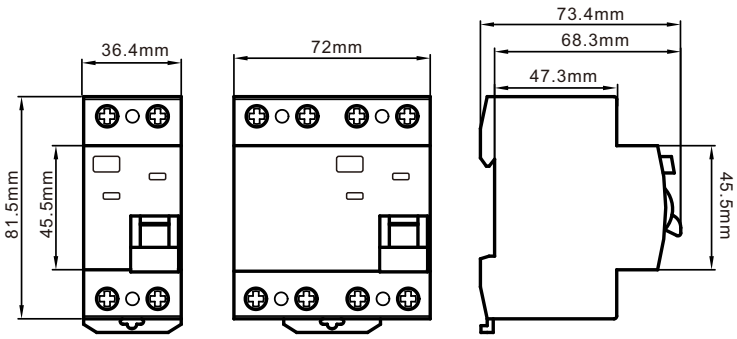
Product advantage

- Ambient air temperature: ambient air temperature -5 degrees -40 degrees, average no more than 35 degrees within 24 hours.
- Altitude: the altitude of the installation site does not exceed 2000m.
- Atmospheric conditions: The relative humidity of the air at the installation site does not exceed 50% at a maximum temperature of 40 degrees, and the relative humidity does not exceed 90% at a minimum temperature of not more than 20%.
- Installation method: using standard Din-rail installation.
- Pollution level: Level II.
- Installation conditions: The external magnetic field of the installation site should not exceed 5 times of the geomagnetic field in any direction. The leakage circuit breaker is generally installed vertically, the handle is upwardly connected to the power supply position, and the installation site should have no significant impact and vibration.
- Wiring method: tighten the wiring with screws.

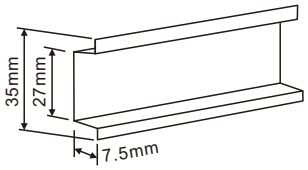
Model meaning



Outline dimension



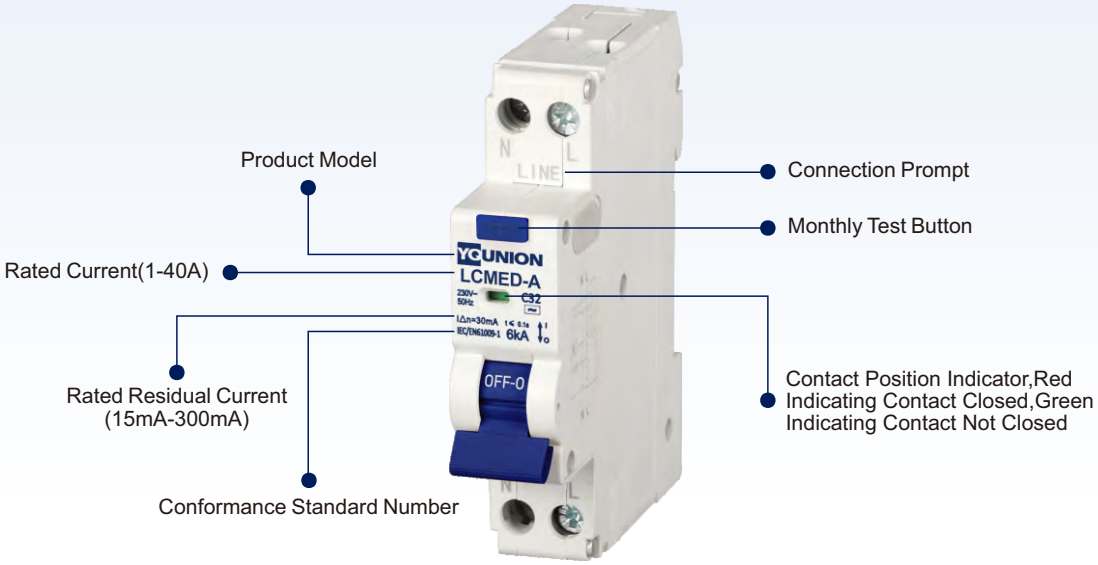
Installation



Technical Parameters

Type				LMED-D/LHIG-D
No of poles				2,4
Type				Eletronic/Electro-Magnetic
Rated current	In	A		25,32,40,63,80,100
Rated residual current	IΔ	Ma		30,100, 300
Tripping range	IΔ	Ma		0,5-1 x IΔn
Rated frequency		Hz		50-60
Type class				AC/A/S
Rated voltage	Ue	V	Ac	240
Rated insulation voltage	Ui	V		500
Rated impulse withstand voltage	Uimp	Kv		4.5
Rated short circuit capacity		A		6000
Electrical life	Ope.	V	230	4000
Mechanical life	Ope.			20000
Degree of protection				IP 20(IP 40)
Ambient operational temperature		℃		-25/+70
Storage temperature		℃		-40/+75
Fixing (en 60715)				35mm DIN rail
Connection cross section (min/max)		mm^2		1,5-35

RCBO(LCMED-A Electronic)



Product advantage

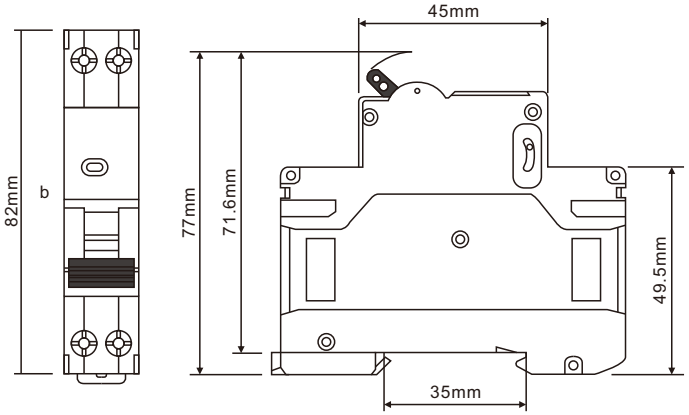
- High frame level 1P+N double breaking point(18mm width, module up to 40A),high breaking capacity(up to 6kA).
- Terminal with error protected terminal blocks,and higher safety with contact position indicating window.
- Current limited contact system,magnetic blow-out type arc extinguishing device,can avoid products and equipment from large short circuit current, and improve the arc extinguishing ability of products, then make sure the enhancement of breaking capacity.
- The shell and funcion keys are all made by PA66 nylon which with high flame retardant,high temperature resistance,impact resistant plastics.
- Innovative appearance,reasonable structure and with multiple patent protection. The products with overload,short circuit,leakage protection functions.

Model meaning

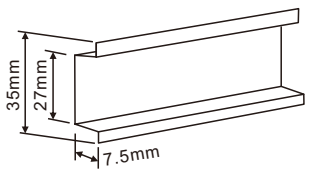
LC □ – □

- Design serial number
- TYPE:MED
- Plastic shell circuit breaker

Outline dimension



Installation

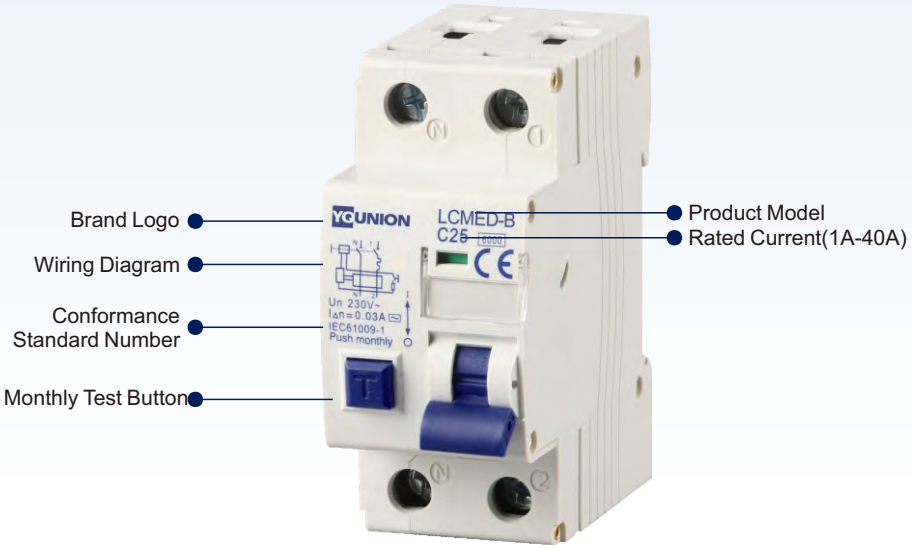


Technical Parameters

Product model				LCMED-A
Pole number				1P+N
Shelf rated current		A		40
Technical parameters				
Rated working voltage		Ue	VAC	230
Rated current		In	A	1 2 3 4 6 10 16 20 25 32 40
Rated residual current		I△n	mA	15 30 50 100 200 300
Type class				A/AC
Rated insulation voltage				500
Rated impulse withstand voltage		Uimp	kV	4
Type				/
Breaking capacity operating		Icn	kA	6
Breaking capacity force		Ics %Icn		100%
Curve type				B C
Release type				Thermomagnetic
Service life (O~CO)	Mechanical	Actual average		20000
		Standard value		8500
	Electrical	Actual average		10000
		Standard value		1500
Control and indication				
Auxiliary contact				□
Alarm contact				□
Shunt release				□
Under release				□
Voltage release				□
Connection and installation				
Protection grade	All sides			Ip40
	Connection port			Ip20
Handle lock				ON/OFF Position
Connection ability		mm^2		1~10
Ambient temperature		℃		-30~+70
Humidity and heat resistance				Level 2
Altitude		m		≤2000
Relative humidity of air				+20 ≤95% +40 ≤50%
Pollution grade				3
Installation environment				Without significant vibration and impact
Installation category				II class
Installation mode				35mm DIN rail
Shape dimensions(mm) W*H*D		a		18
		b		82
		c		71.6
Weight		g		118

■Standard settings □Optiona /None

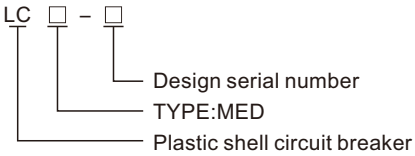
RCBO(LCMED-B Electronic/Electro-Magnetic)



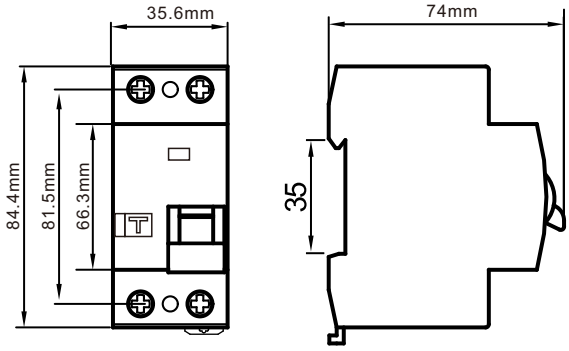
Product advantage

- LCMED-B residual current circuit breaker (hereinafter referred to as residual current circuit breaker) is mainly used in the circuit of alternating current 50Hz, rated voltage 240V, rated current 40A.
- Residual current circuit breaker can quickly cut off the fault power supply in a very short time, protect the safety of the person and the electrical equipment, and has the function of overload Short Circuit Protection. It is also suitable for switching off electrical installations and lighting circuits infrequently under normal conditions, especially for industrial and commercial lighting distribution systems.
- Compliance Standard: IEC / EN 61009-1.

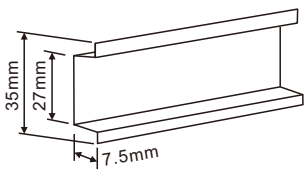
Model meaning



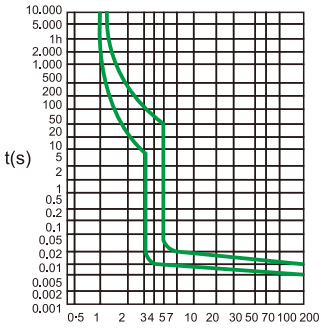
Outline dimension



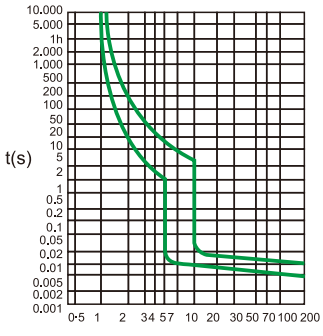
Installation



Characteristic Curve

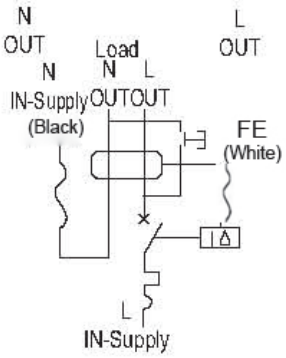


I/In
B curve



I/In
C curve

Wiring Diagram



Overload Current Protection Characteristics

Test procedure	Type	Test current	Intital state	Tripping or Non-tripping Time limit	Expected result	Remark
a	B,C	1.13In	cold	t≥1h	no tripping	
b	B,C	1.45In	after test	t<1h	tripping	Current in 5s up to stable value
c	B,C	2.55	cold	1s<t<60s(In≤32A) 1s<t<120s(In>32A)	tripping	
d	B,C	3In	cold	t≥1.0s	no tripping	Turn on the closed auxiliary switch to open the current
		5In				
		10In				
e	B,C	3In	cold	t<0.1s	tripping	Turn on the closed auxiliary switch to open the current
		5In				
		10In				

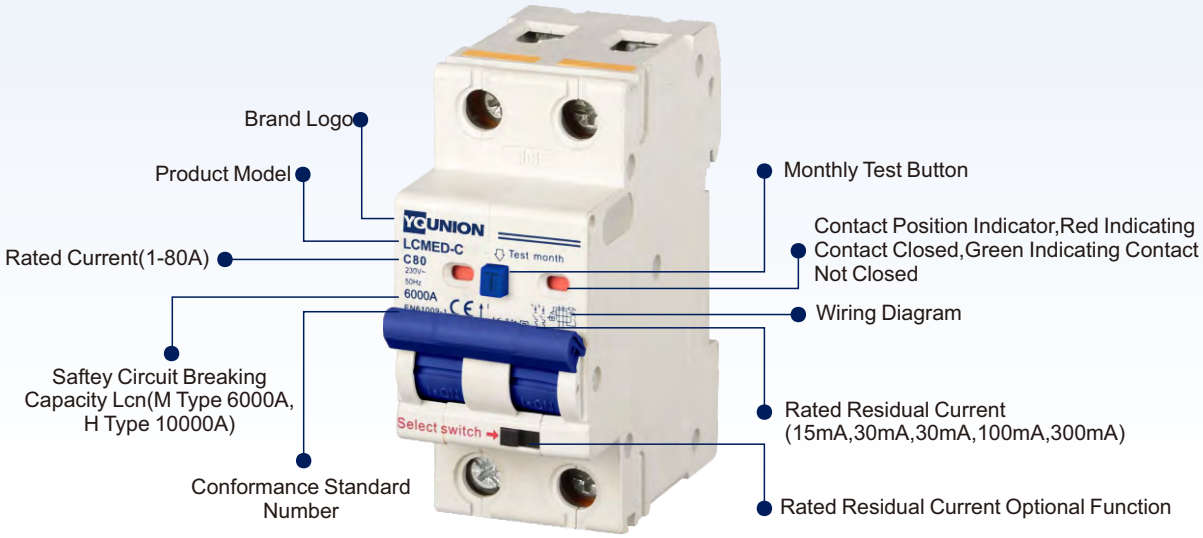
The terminology"cold state"refes to that no load is carried before testing at the reference setting temperature.

Residual Current Action Breaking Time

Type	In/A	I△n/A	Residual current(I△)is corresponding to the following breaking time(s)					
			I△n	2 I△n	5 I△n	5A,10A,20A,50A,100A,200A,500A	I△t	
general type	any value	any value	0.3	0.15	0.04	0.04	0.04	Max break–time

The general type RCBO whose current I△n is 0.03mA or less can use 0.25A in stead of 5 I△n.

Adjustable RCBO(LCMED-C 2P Electronic)



The main technical parameters

- The main techniacl parameters accord with GB16917-1 standard parameters.
- Rated breaking capacity 10KA. • Mechanical life 20000 times. • Electrical life 10000 times.
- With residual current protection,short circuit protection,overload protection,leakage tripping function can be put into use,exit with short circuit.
- Overload protecion tripping window indication function,leakage protection can enter the locking state when the power is not allowed to be cut off or when the fault is over hauled,the protector loses the leakage protection tripping function.
- Material with V-0 grade flame-retardant property is selected.

Product advantage

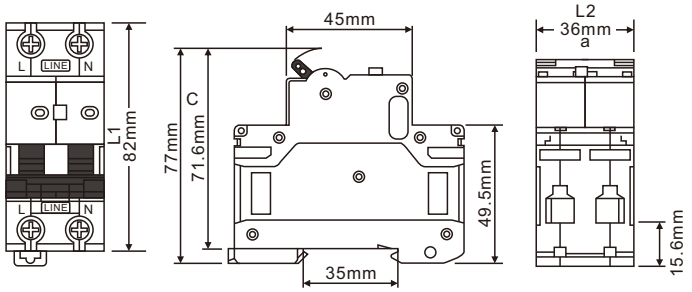
- High breaking capacity,shrong practicability of accessories.
- Combined terminal with touch protection and red and green safety indication.higher safety
- Current limiting contact system to avoid short circuit current of products and equipment,Increase the service life of monthly equipment.
- Shell and some functional parts are inported and exported high flame retardant,hightemperature resistance,impact resistant plastics made o.
- The appearance is beautiful,the volume is small,the width is only 36mm.
- Leakage function may withdraw,suitable each kind of place.
- May make the rated leakoge action current adjustable.
- L pole N pole to have the overload protection function.

Model meaning

LC □ – □

- Design serial number
- TYPE:MED
- Plastic shell circuit breaker

Outline dimension



Applications


Electricity meter box

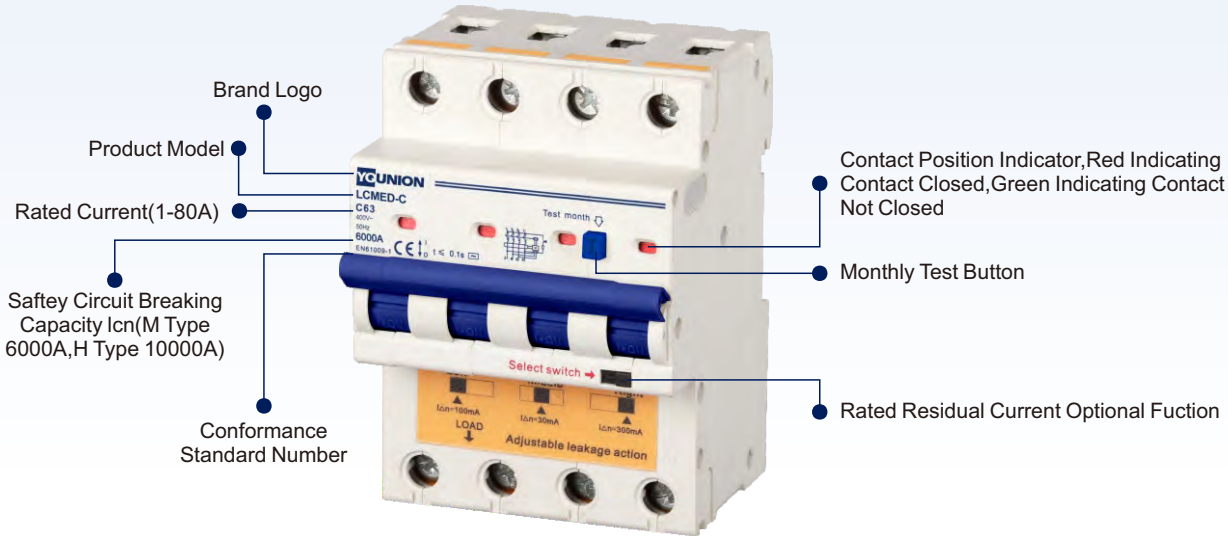

Distribution box

Technical Parameters

Product model				LCMED-C
Pole number				2P
Shelf rated current		A		80
Technical parameters				
Rated working voltage		Ue	VAC	230
Rated current		In	A	1 2 3 4 6 10 16 20 25 32 40 50 63 80
Rated residual current		I△n	mA	10 15 30 50 100 200 300(Can select residual current)
Type class				A/AC
Rated insulation voltage				500
Rated impulse withstand voltage		Uimp	kV	4
Type				M/H
Breaking capacity operating		Icn	kA	6/10
Breaking capacity force		Ics %Icn		100%/70%
Curve type				B C D
Release type				Thermomagnetic
Service life (O~CO)	Mechanical	Actual average		20000
		Standard value		8500
	Electrical	Actual average		10000
		Standard value		1500
Control and indication				
Auxiliary contact				□
Alarm contact				□
Shunt release				□
Under release				□
Voltage release				□
Connection and installation				
Protection grade	All sides			Ip40
	Connection port			Ip20
Handle lock				ON/OFF Position
Connection ability		mm^2		1~35
Ambient temperature		℃		-30~+70
Humidity and heat resistance				Level 2
Altitude		m		≤2000
Relative humidity of air				+20 ≤95% +40 ≤50%
Pollution grade				3
Installation environment				Without significant vibration and impact
Installation category				II class
Installation mode				35mm DIN rail
Shape dimensions(mm) W*H*D		a		36
		b		82
		c		72.6
Weight		g		210.5

■Standard settings □Optiona /None

Adjustable RCBO(LCMED-C 4P Electronic)



UNB2LE series leakage circuit breaker is suitable for AC 50HZ60HZ rated voltage AC400.415V, rated current to 80A circuit, as personal shock,equipment leakage protection, and has overload, short circuit, leakage protection function, and can be customized with over- voltage protection,Leakage action current adjustable product, also can be used as the line of infrequent conversion.

Product advantage

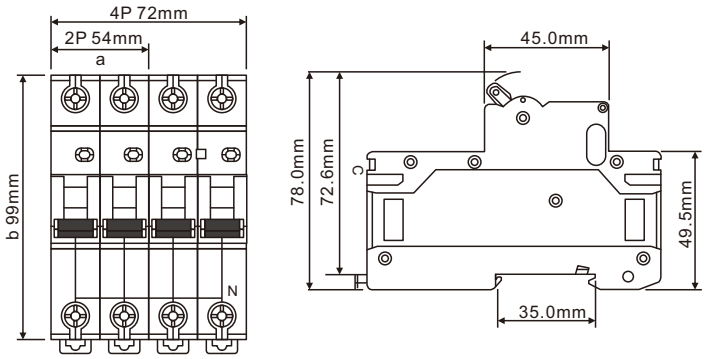
- Ambient air temperature: ambient air temperature average not exceeding 35 degrees and degrees within 24H.
- Altitude: altitude of installation site not exceeding 2000m.
- Atmospheric conditions: The air relative humidity of the installation place does not exceed 50% 4 at the maximum temperature of 40 hours above 20:00 the relative humidity does not exceed 90%.
- Installation method: adopt standard guideway installation(TH35-7.5).
- Pollution class: III class
- Installation condition: installation place The external magnetic field should not exceed 5 times the geomagnetic field in any direction, Leakage circuit breaker is generally installed vertically, the handle is connected to the power supply position, and there should be no significant impact and vibration in the installation place.
- Connection mode: screw connection.

Model meaning

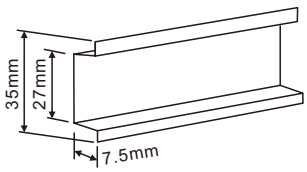
LC □ – □

- Design serial number
- TYPE:MED
- Plastic shell circuit breaker

Outline dimension



Installation



Technical Parameters

Product model				LCMED-C
Pole number				4P
Shelf rated current		A		80
Technical parameters				
Rated working voltage		Ue	VAC	400
Rated current		In	A	1 2 3 4 6 10 16 20 25 32 40 63 80
Rated residual current		I△n	mA	10 15 30 50 100 200(Can select residual current)
Type class				A/AC
Rated insulation voltage				500
Rated impulse withstand voltage		Uimp	kV	4
Type				M/H
Breaking capacity operating		Icn	kA	6/10
Breaking capacity force		Ics %Icn		100%/70%
Curve type				B C
Release type				Thermomagnetic
Service life (O~CO)	Mechanical	Actual average		20000
		Standard value		8500
	Electrical	Actual average		10000
		Standard value		1500
Control and indication				
Auxiliary contact				□
Alarm contact				□
Shunt release				□
Under release				□
Voltage release				□
Connection and installation				
Protection grade	All sides			Ip40
	Connection port			Ip20
Handle lock				ON/OFF Position
Connection ability		mm^2		1~35
Ambient temperature		℃		-30~+70
Humidity and heat resistance				Level 2
Altitude		m		≤2000
Relative humidity of air				+20 ≤95% +40 ≤50%
Pollution grade				3
Installation environment				Without significant vibration and impact
Installation category				II class
Installation mode				35mm DIN rail
Shape dimensions(mm) W*H*D		a		72
		b		99
		c		72.6
Weight		g		462.5

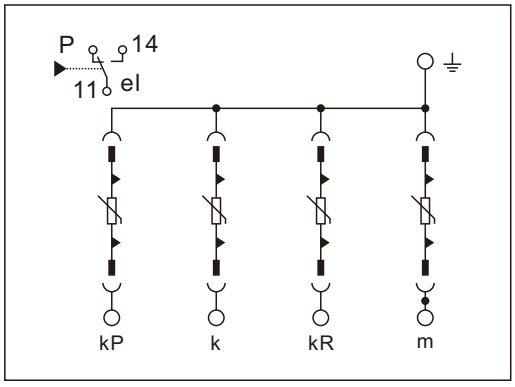
■Standard settings □Optiona /None

UN-A15/A25

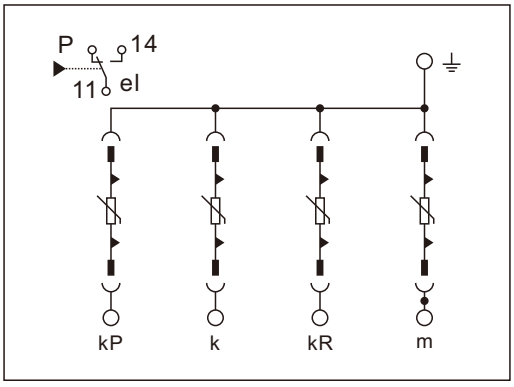
Product advantage

- Multilayer spark gap deviceIntegrated surge protector unit
- Highest to withstand 50kA(10/350us)lightning shock
- Action response time is less than 100ns

L1、L2、L3、N、PE(4+0 circuit)



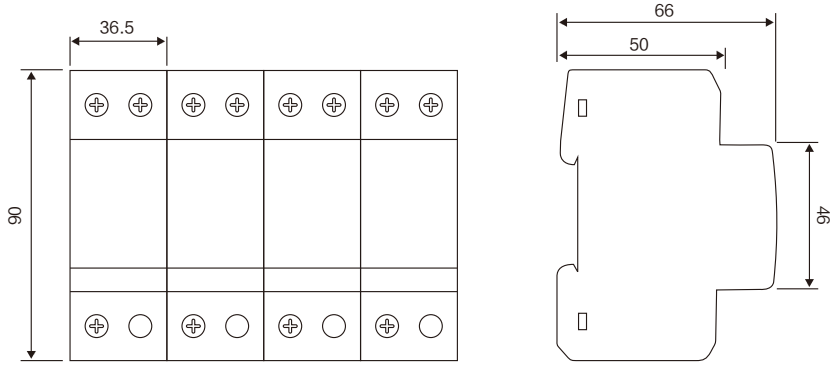
L1、L2、L3、N、PE(3+1 circuit)



Technical Parameters

		UN-A15				UN-A25			
IEC TYPE		I, T1				I, T1			
SPD TYPE		Swtich type				Swtich type			
SPECS		1P	2P	3P	4P	1P	2P	3P	4P
Nominal voltage(Un)		220V AC		380V AC		220V AC		380V AC	
Maximum Continuous Operating Voltage(Uc)	L-N	275V AC	275V AC	385V AC	385V AC	275V AC	275V AC	385V AC	385V AC
	N-PE	275V AC	275V AC	·····	385V AC	275V AC	275V AC	·····	385V AC
	L-PEN	275V AC	·····	385V AC	·····	275V AC	·····	385V AC	·····
Nominal Discharge Current(In)8/20 μ s	L-N	15kA				25kA			
Maximum Discharge Cureent(Imax)8/20 μ s	N-PE	15kA				25kA			
Voltage Protection Level(Up)8/20 μ s	L-N	1.8kV				2.0kV			
	N-PE	1.8kV				2.0kV			
Short-circuit Current Rating(Iscpv)		25kA				25kA			
Response Time	L-N	⩽25ns				⩽25ns			
Back-up protection for SCB option		WRSCB-100				WRSCB-100			
Indication		Green:Normal Red:Failure				Green:Normal Red:Failure			
Connection cross-section		4-35mm²				4-35mm²			
Din Rail Installation		35mm(EN50022/DIN46277-3)				35mm(EN50022/DIN46277-3)			
Temperature range		-40~70℃				-40~70℃			
Shell Material		Plastic toUL91V-00				Plastic toUL91V-0			
Protect Rating		Ip20				Ip20			
Standard		IEC 61643-1 / GB18802.1				IEC 61643-1 / GB18802.1			
Remote communication alarm		Open/Close Contact Terminals				Open/Close Contact Terminals			
Remote communication wiring		Maximum 1.5mm single/flexible wire				Maximum 1.5mm single /flexible wire			

Outline dimension



UN-B80/B100

Product advantage

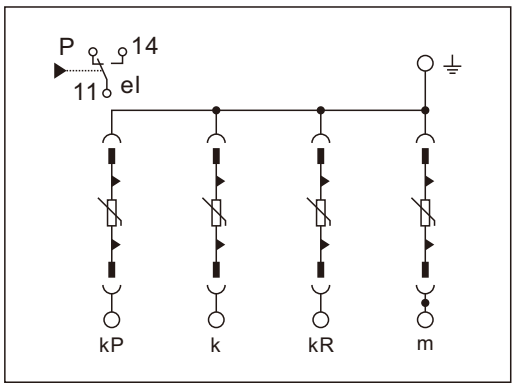
Picture 1

- Consistent pluggability(even for N/PEspark gap)
- Own developed technology to manufacture MOV
- Thermal disconnect device for each individual connector
- Optical,mechanical status indicationfor the individual arresters
- Din rail mountable (35 mm)

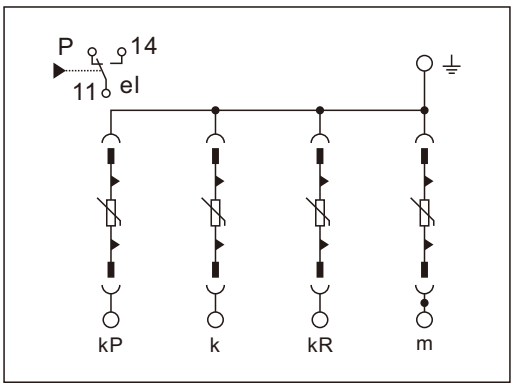
Picture 2

- With or without floating remote indication contact
- Suitable for almost all networkconfigurations
- More stable structure and support larger current

L1、L2、L3、N、PE(4+0 circuit)



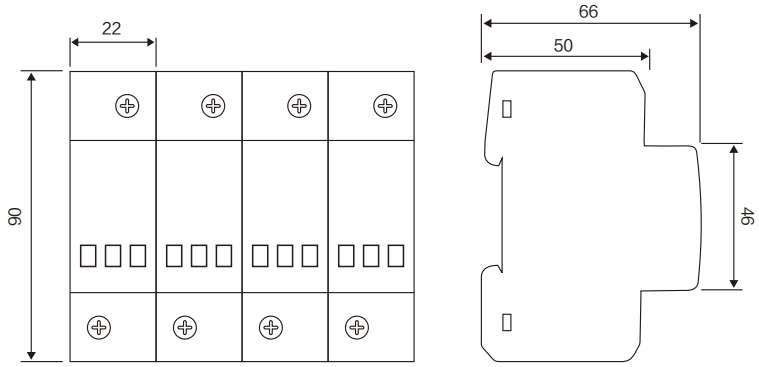
L1、L2、L3、N、PE(3+1 circuit)



Technical Parameters

		UN-B80				UN-B100		
IEC TYPE		II, T2				II, T2		
SPD TYPE		Limiting Voltage				Limiting Voltage		
SPECS		1P	2P	3P	4P	4P	1+NPE	3+NPE
Nominal voltage(Un)		220V AC		380V AC		380V AC	220V AC	380V AC
Maximum Continuous Operating Voltage(Uc)	L-N	275V AC	275V AC	385V AC	385V AC	385V AC	275V AC	385V AC
	N-PE	275V AC	275V AC	.....	385V AC	385V AC	255V AC	255V AC
	L-PEN	275V AC	.....	385V AC	.....	.....	.....	.....
Nominal Discharge Current(In)8/20 μ s	L-N	40kA				60kA		
Maximum Discharge Cureent(Imax)8/20 μ s	N-PE	80kA				100kA		
Voltage Protection Level(Up)8/20 μ s	L-N	2.5kV				2.5kV		
	N-PE	2.5kV				2.5kV		
Short-circuit Current Rating(Iscpv)		25kA				25kA		
Response Time	L-N	⩽25ns				⩽25ns		
Back-up protection for SCB option		WRSCB-100				WRSCB-100		
Indication		Green:Normal Red:Failure				Green:Normal Red:Failure		
Connection cross-section		4-35mm²				4-35mm²		
Din Rail Installation		35mm(EN50022/DIN46277-3)				35mm(EN50022/DIN46277-3)		
Temperature range		-40~70℃				-40~70℃		
Shell Material		Plastic toUL91V-00				Plastic toUL94V-0		
Protect Rating		Ip20				Ip20		
Standard		IEC 61643-1 / GB18802.1				IEC 61643-1 / GB18802.1		
Remote communication alarm		Open/Close Contact Terminals				Open/Close Contact Terminals		
Remote communication wiring		Maximum 1.5mm single/flexible wire				Maximum 1.5mm single /flexible wire		

Outline dimension



UN-C40

Product advantage

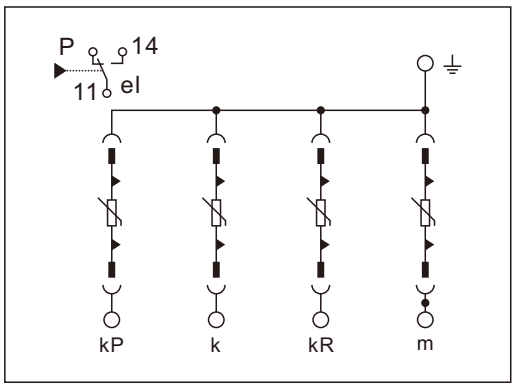
Picture 1

- Consistent pluggability(even for N/PEspark gap)
- Own developed technology to manufacture MOV
- Thermal disconnect device for each individual connector
- Optical,mechanical status indicationfor the individual arresters
- Din rail mountable (35 mm)

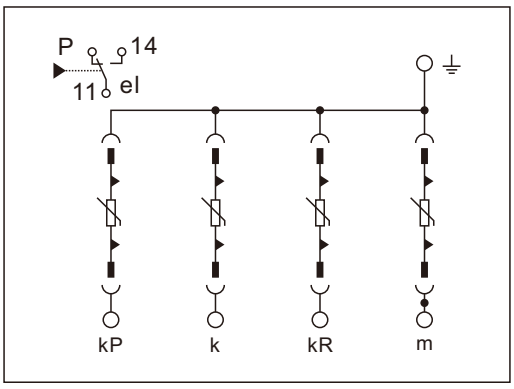
Picture 2

- With or without floating remote indication contact
- Suitable for almost all networkconfigurations
- More stable structure and support larger current

L1、L2、L3、N、PE(4+0 circuit)



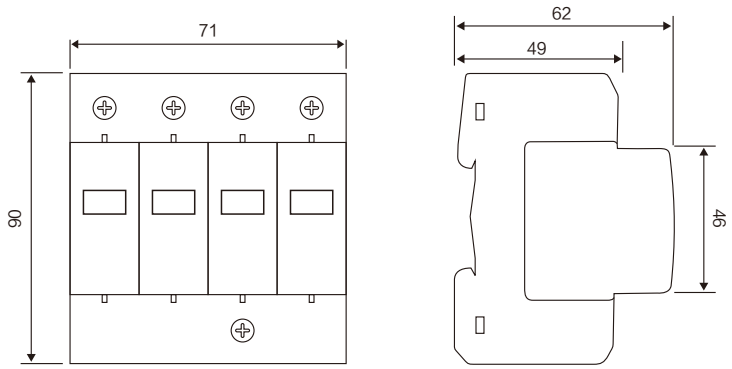
L1、L2、L3、N、PE(3+1 circuit)



Technical Parameters

		UN-C40						
IEC TYPE		II, T1				II, T1		
SPD TYPE		Limiting Voltage				Limiting Voltage		
SPECS		1P	2P	3P	4P	4P	1+NPE	3+NPE
Nominal voltage(Un)		220V AC		380V AC		380V AC	220V AC	380V AC
Maximum Continuous Operating Voltage(Uc)	L-N	275V AC	275V AC	385V AC	385V AC	385V AC	275V AC	275V AC
	N-PE	275V AC	275V AC	.....	385V AC	385V AC	255V AC	255V AC
	L-PEN	275V AC	.....	385V AC	.....	.....	.....	.....
Nominal Discharge Current(In)8/20 μ s	L-N	20kA				20kA		
Maximum Discharge Cureent(Imax)8/20 μ s	N-PE	40kA				40kA		
Voltage Protection Level(Up)8/20 μ s	L-N	1.8kV				1.8kV		
	N-PE	1.8kV				1.5kV		
Short-circuit Current Rating(Iscpv)		25kA				25kA		
Response Time	L-N	⩽25ns				⩽25ns		
Back-up protection for SCB option		WRSCB-40				WRSCB-40		
Indication		Green:Normal Red:Failure				Green:Normal Red:Failure		
Connection cross-section		4-35mm²				4-35mm²		
Din Rail Installation		35mm(EN50022/DIN46277-3)				35mm(EN50022/DIN46277-3)		
Temperature range		-40~70℃				-40~70℃		
Shell Material		Plastic toUL91V-00				Plastic toUL94V-0		
Protect Rating		Ip20				Ip20		
Standard		IEC 61643-1 / GB18802.1				IEC 61643-1 / GB18802.1		
Remote communication alarm		Open/Close Contact Terminals				Open/Close Contact Terminals		
Remote communication wiring		Maximum 1.5mm single/flexible wire				Maximum 1.5mm single /flexible wire		

Outline dimension

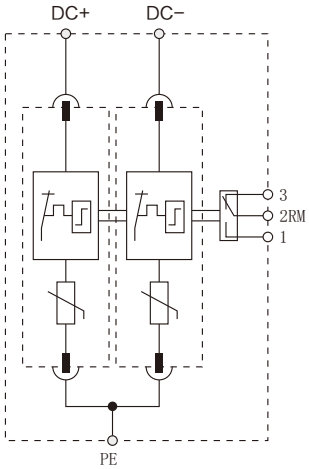


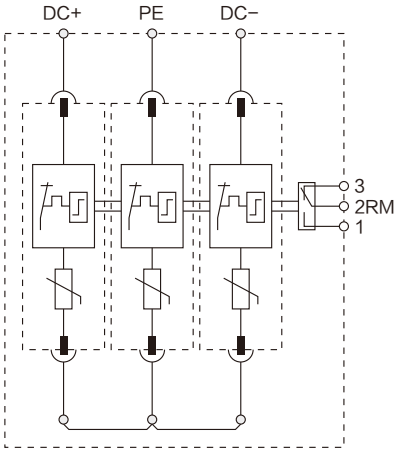
UN-T2-DC

For installation at LPZ OA-1 or higher, protecting d.c power supply system from surge damages. Applied in pluggable SPD Class I+II(Class B+C) for various d.c.power supply system. Designed according to IEC 61643-1/GB 18802.1.

Product advantage

- Pluggable module, easy for installation and main tenance
- High discharge capacity, quick response
- Double thermal disconnection devices,provide more reliable protection
- Multifunctional terminals for connection of conductorsand busbars
- Green window will change when fault occurs,also provide remote alarm terminal



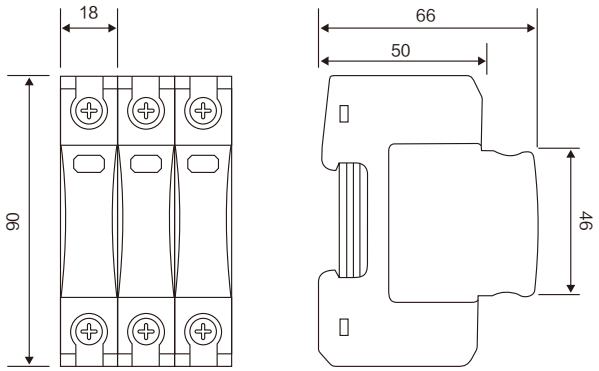


Technical Parameters

Type	UN-T2-DC / 2P	UN-T2-DC / 3P
Rated voltage (max.continuous a.c.voltage) [U_c]	800VDC / 1000VDC / 1200VDC	
Nominal discharge current (8/20) [I_n]	20kA	
Maximum discharge current [Imax]	40kA	
Voltage protection level [U_p]	3.2kV / 4.0kV / 4.4kV	
Response time [t_A]	≤25ns	
Max.backup fuse	125A gL/gG	
Operating temperature range [T_{up}]	-40 ...+60	
Cross-sectional area	1.5mm^2~2.5mm^2 solid / 35mm^2 flexible	
Mounting on	35mm DIN rail	
Enclosure material	Purple (module) / light gray (base) thermoplastic,UL94-V0	
Dimension	1 mods	
Test standards	IEC 61643-1; GB 18802.1; YD/T 1235.1	
Certification	CE ROHS ISO9001 CQC TUV	
Type of remote signalling contact	Switching contact	
Switching capacity a.c	250V / 0.5A	
Switching capacity d.c	250V / 0.1A; 125v/0.2A; 75v/0.5A	
Cross-sectional area for remote signalling contact	Max. 1.5mm^2 solid / flexible	

Type	WR-T1T2-DC / 2P	WR-T1T2-DC / 3P
Packing unit	1pc(s)	1pc(s)
Weight	206g	283g

Outline dimension



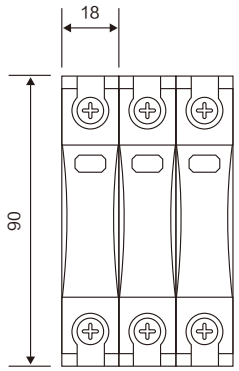
UN-T1T2-DC

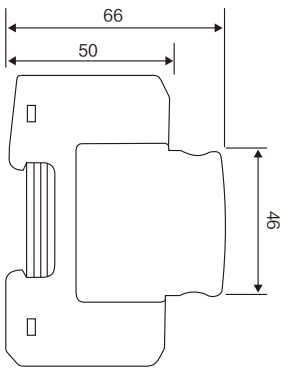
For installation at LPZ OB-1 or higher, protecting d.c power supply system from surge damages. Applied in pluggable SPD Class II(Class C) for various d.c.power supply system. Designed according to IEC 61643-1/GB 18802.1.

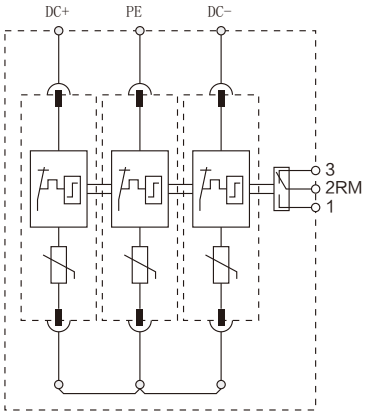
Product advantage

- Pluggable module, easy for installation and main tenance
- High discharge capacity, quick response
- Double thermal disconnection devices,provide more reliable protection
- Multifunctional terminals for connection of conductorsand busbars
- Green window will change when fault occurs,also provide remote alarm terminal

Outline dimension







Technical Parameters

Type	UN-T1T2-DC
Rated voltage (max.continuous a.c.voltage) [U_c]	800VDC / 1000VDC / 1200VDC
Lightning impulse current (10/350) [I_{imp}]	7kA
Nominal discharge current (8/20) [I_n]	20kA
Maximum discharge current [Imax]	50kA
Voltage protection level [U_p]	4.2kV / 4.5kV / 5.0kV
Follow current extinguishing capability at U_c [I_f]	32A fuse will not be triggered at 2kA_{rms} 255V
Response time [t_A]	≤100ns
Max.backup fuse(L)	200A gL/gG
Max.backup fuse(L-L')	125A gL/gG
TOV voltage	355V / 5sec
Operating temperature range (parallel wiring) [T_{up}]	-40 ...+80
Operating temperature range (through wiring) [T_{us}]	-40 ...+60
Cross-sectional area	35mm^2 solid / 50mm^2 flexible
Mounting on	35mm DIN rail
Enclosure material	Purple (module) / light gray (base) thermoplastic,UL94-V0
Dimension	2 mods
Test standards	IEC 61643-1; GB 18802.1; YD/T 1235.1
Certification	CE ROHS ISO9001 CQC TUV
Type of remote signalling contact	Switching contact
Switching capacity a.c	250V / 0.5A
Switching capacity d.c	250V / 0.1A; 125v/0.2A; 75v/0.5A
Cross-sectional area for remote signalling contact	Max. 1.5mm^2 solid / flexible

Type	WR-T1T2-DC / 3P
Packing unit	1pc(s)
Weight	288g

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