

# Modular Din Rail Series

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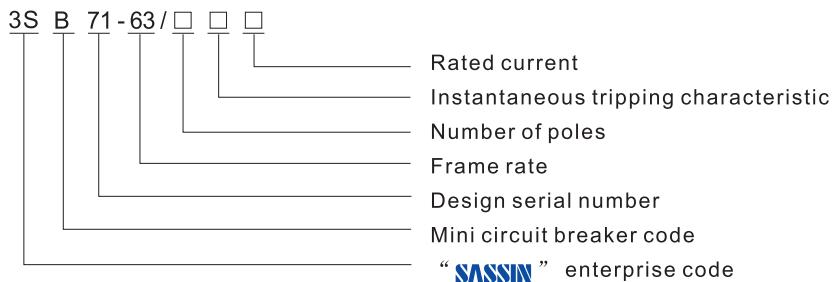


## ■ Application

3SB71-63 mini circuit breaker is current-limiting and high-breaking capacity breaker with double protection of overload and short circuit. It applies to circuit of AC 50Hz, rated voltage 400V and below and rated current 63A and below. It can also be used for infrequent switch over of circuit operation under normal conditions.

The enclosure is made of fire-retardant and high strength engineering plastic with excellent electric performance. Standard: IEC 60898-1

## ■ Types and meanings



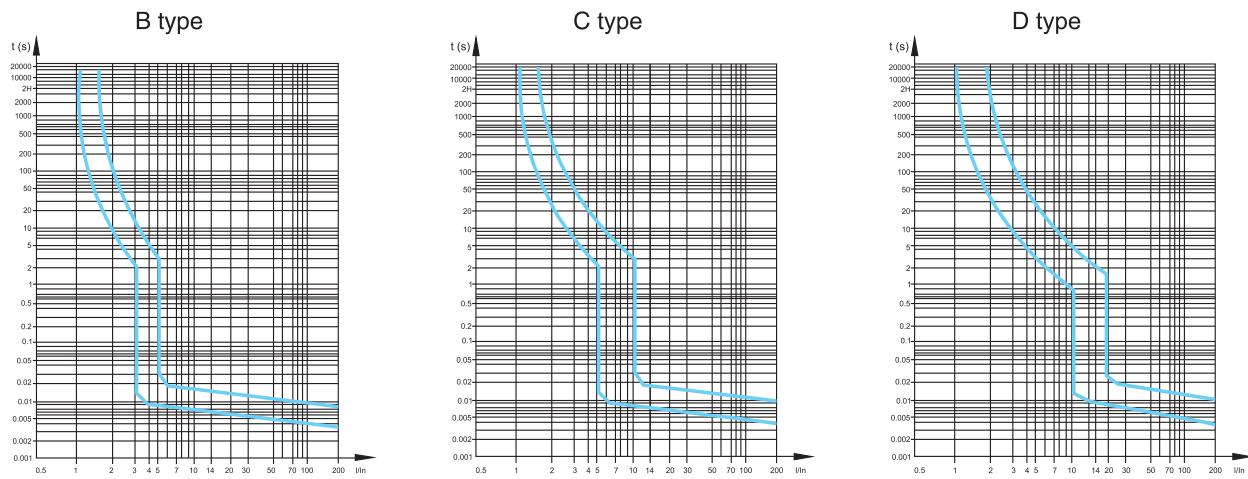
## ■ Normal application and installation conditions

- Ambient temperature: Breaker can work normally in ambient air condition of -5°C ~ +40°C (except special order)
- Altitude: Breaker can work normally with installation altitude of within 2000m.
- Anti-pollution grade breaker is grade II.
- Installation category: III.
- Installation place: Breaker can be installed on the din rail or installed horizontally, vertically.
- Environment protection: Sufficient consideration of environmental protection factors has been taken in design and manufacture of the breaker by adopting retrievable and naturally degradable materials as components.

## ■ Main technical parameters

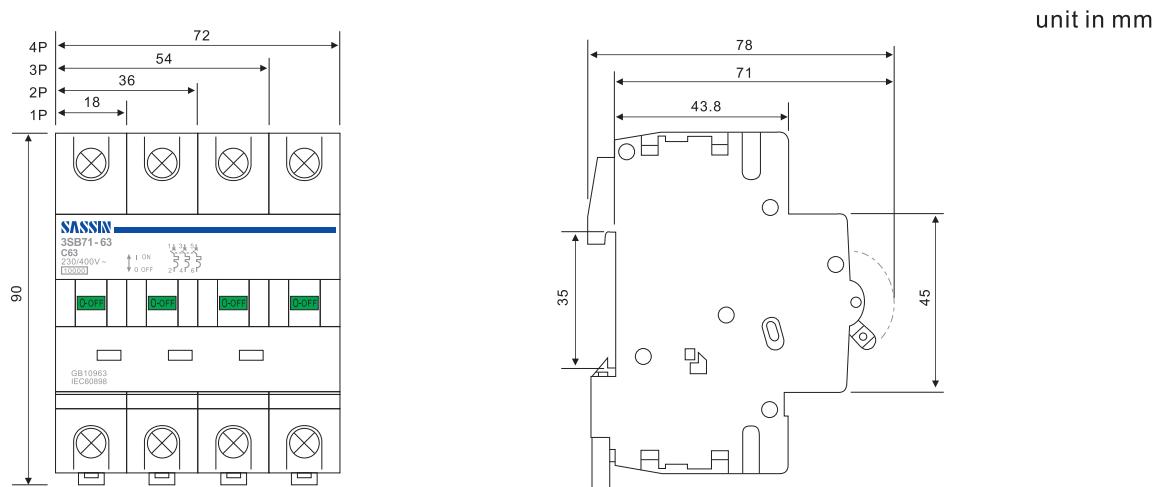
Breaker	3SB71-63		
Number of poles	1P, 2P, 3P, 4P		
Rated current (In)	A	6, 10, 16, 20, 25, 32, 40, 50, 63	
Rated frequency	Hz	50/60Hz	
Rated operating voltage (Ue)	V	230/400	
Rated service short circuit breaking capacity (Ics) (O-t-O-t-CO) (O-t-CO-t-CO)	kA	7.5	
Rated short circuit breaking capacity (Icn) (O-t-CO)	kA	10	
Operating cycles	Per hour	Times	240 ( $I_n \leq 32A$ ) 120 ( $I_n > 32A$ )
	Electrical Life	Times	4000
	Mechanical Life	Times	20000
Conventional non-tripping current (Int)	1.13In	h	$\geq 1$
Conventional tripping current (It)	1.45In	h	<1
	2.55In	s	$1 < t < 60$ ( $I_n \leq 32A$ ) $1 < t < 120$ ( $I_n > 32A$ )
Instantaneous tripping type		B	C D
Instantaneous non-tripping current	$t \geq 0.1s$	3In	5In 10In
Instantaneous tripping current	$t < 0.1s$	5In	10In 20In
Protection level	IP20		
Installation mode	DIN rail plug-in		
Connection mode	Terminal with clip		
Ambient air temperature	Min/Max	°C	-5/+40
Altitude	Max	m	$\leq 2000$
Leading wire	Min/Max	mm <sup>2</sup>	1/25
Screw torque		N · m	2
Outline dimensions (length X width X height)	1P	mm	90 x 18 x 78
	2P	mm	90 x 36 x 78
	3P	mm	90 x 54 x 78
	4P	mm	90 x 72 x 78

## ■ Over-current tripping characteristic



## ■ Outline and installation dimensions

3SB71-63 is installed on DIN rail terminal and can be connected with wire of less than 25mm<sup>2</sup>.



Product outline and installation dimensions diagram

## ■ Order instructions

- type and specification of mini circuit breaker
- rated current and number of poles of mini circuit breaker
- quantity

E.g.: order 3SB71-63 3-pole circuit breaker. Type C, rated current 20A, quantity 1000 sets.

Order as: 3SB71-63/3P C20, 1000 sets.



**3SB71G Main Switch**

## ■ Application

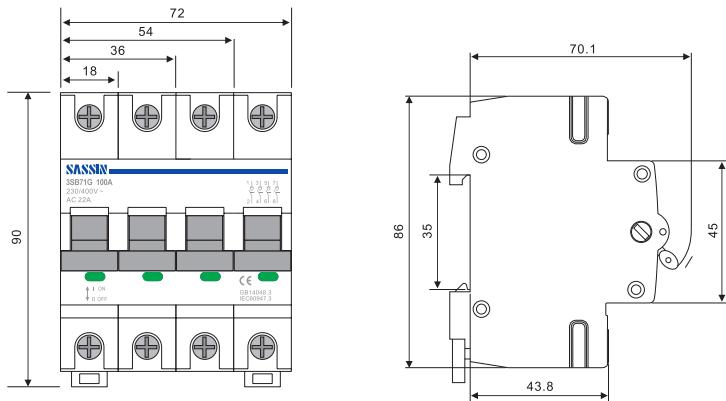
3SB71G main switch is designed to accept cable-in/cable-out connections as well as busbar connection. It can be used as an isolating switch. The switch disconnector is capable of switching both resistive and inductive loads.

The product conforms to IEC60947-3.

## ■ Specifications

Rated voltage (V)	230/400 50/60Hz
Rated current (A)	32,63,100
Poles	1,2,3,4
Utilization category	AC-22A
Rated insulation voltage	500V
Electric life	1500 times (with load)
Mechanical life	8500 times (without load)

## ■ Dimensions



## 3SB71L Residual Current Circuit Breaker with Overload Protection (RCBO)



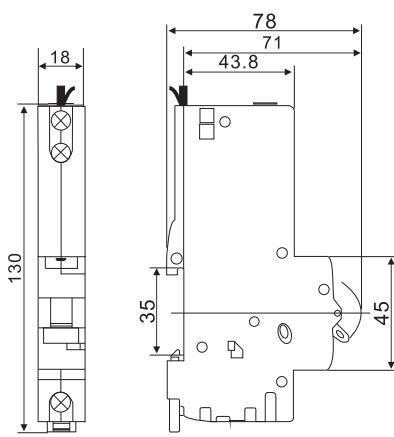
### ■ Application

3SB71L-50 residual current-operated circuit breaker is a RCBO type with indicator. It applies to circuit of AC 50Hz, rated voltage 230V and rated current 50A or below. It is used to protect people in case of ground fault and protect electrical installations against overload or short circuit. It is manufactured according to standard:IEC61009-1.

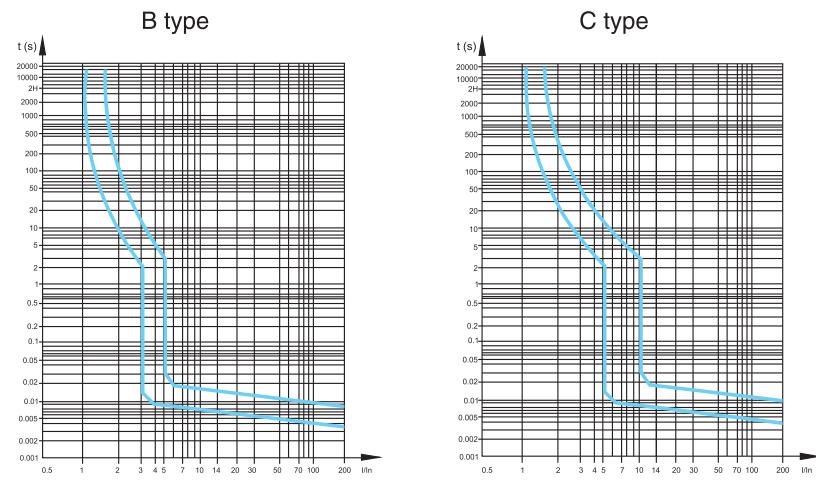
### ■ Main technical parameters:

Rated operating voltage	Un	AC230V
Rated current	In	6, 10, 16, 20, 25, 32, 40, 50A
Residual current	IΔn	30mA
Rated short-circuit capacity	Icn	10kA
Residual making and breaking capacity	IΔm	10kA
Selectivity class		3
Tripping characteristic		B, C
Poles		1+N(1 module)
Electrical endurance		4000 times
Mechanical endurance		20000 times
Leading wire Min/Max		1/25mm <sup>2</sup>
Nuisance tripping resistance		200A, 8/20 μ s
Ambient temperature		-5°C~+40°C

### ■ Dimensions



### ■ Over-current tripping characteristic



## 3SB71F-63 Shunt Release Circuit Breaker

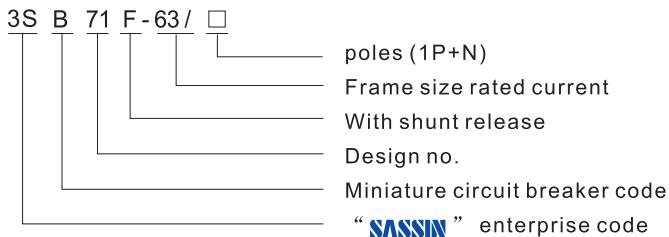


### ■ Application

3SB71F-63 Mini Circuit Breaker with function of Shunt Release, is applicable to circuit of AC 50 HZ or 60 HZ, rated working voltage 230V, rated current up to 63A, for remote controlling and breaking circuit, protecting circuit when overload or short circuit take place, and also for switching over circuit infrequently. It is widely used together with IC Prepaid Tariff Meter for controlling making and breaking contact of the circuit at present.

This mini circuit breaker which is advanced in international market complies with IEC 60898-1 standard.

### ■ Type and meanings



### ■ Main specifications and technical parameters

1. **Main specifications** : rated current of the circuit breaker  $I_n$ : 6A、10A、20A、25A、32A、40A、50A、63A.

#### 2. Technical parameters

2.1 Type C is often provided for instantaneous release of circuit breaker, other types can be ordered specially.

2.2 Breaking capacity of circuit breaker is up to 10kA.

2.3 Over-current protection characteristic of circuit breaker (table 1)

	Rated current	Initial state	Test current	Stipulated time	Expected result
All specifications	All specifications	Cold state	1.13 $I_n$	$t \geq 1h$	No tripping
All specifications	All specifications	Immediately following test "1"	1.45 $I_n$	$t < 1h$	Tripping
$I_n \leq 32$	cold state	2.55 $I_n$	1s < $t \leq 60s$	Tripping	
$I_n > 32$			1s < $t \leq 120s$		
All specifications	cold state	5 $I_n$	$t \geq 0.01s$	No tripping	
		10 $I_n$	$t < 0.1s$	Tripping	

#### 2.4 Shunt release characteristic (table 2)

Type	Tripping voltage	Tripping time	Interval of repeated operation
3SB71F-63	230V	$1 < 0.1s$	$3 \geq min$

## 2.5 Mechanical and electrical life

**Electrical life:** 4000 times,  $\cos \phi = 0.85-0.9$

**Mechanical life:** 10000 times. ( 9000 times of them are directly controlled by manual operations, operational frequency is 240 times per hour for  $I_n \leq 25A$ , 120 times per hour for  $I_n > 25A$ ; 1000 times are controlled by shunt release to switch on and off, each interval  $\geq 3$  min. )

The Circuit breaker can be connected with leading wire with sectional area less than  $16mm^2$  the sectional area of leading wire should be selected according to table 3 when used.

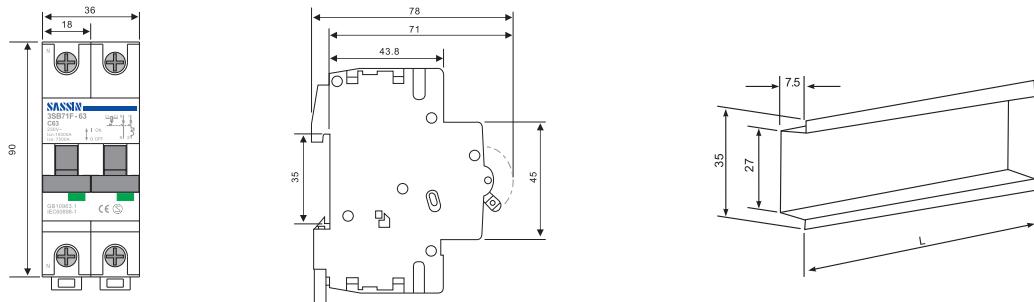
Rated current $I_n$ (A)	Nominal sectional area of copper leading wire( $mm^2$ )
6	1
10	1.5
16, 20	2.5
25	4
32	6
40, 50	10
63	16

## ■ Structure features:

The circuit breaker, with an overload protection pole and an on-off neutral pole, as well as shunt release fitting, has following features:

1. On-off neutral pole is switched on earlier and off later than overload protection pole.
2. High rated breaking capacity is up to 10KA.
3. Operational fitting of the circuit breaker is energy-storing type freely release fitting, whose contact points close promptly. It conquers disadvantageous influence caused by slow speed of manually operating handle and enhances useful of product greatly. Contact can only stay in close or open position in normal working condition.
4. Two connection methods: leading wire and busbar connection.
5. Driving elements of shunt release consists of electro-magnetic release and so on.
6. The enclosure and parts are made of imported high fire-retardant, high temperature resistant and impact resistant plastic.

## ■ Dimensions of appearance and installation (unit in mm)



## ■ Order instructions

1. Following descriptions of circuit breaker should be involved when making an order

1.1 Type and specification ; 1.2 Rated current ; 1.3 Type of shunt release (type C)

1.4 Poles (1P+N); 1.5 Quantity

2. Example:

Order 3SB71F-63 shunt release circuit breaker, rated current: 20A, instantaneous release: type C, poles: 1P+N, quantity: 50 set.

Order as: 3SB71F-63/1P+N, C20, 50 sets.

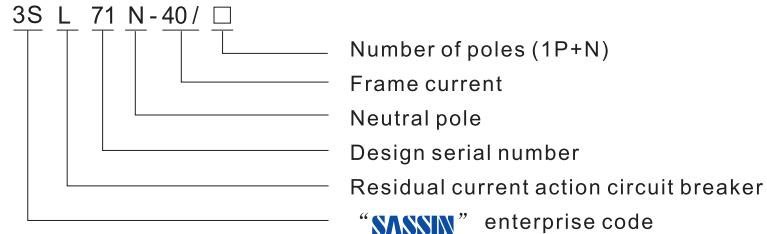
## 3SL71N-40 RCBO



### ■ Application

3SL71N-40 residual current-operated circuit breaker is a RCBO type with indicator. It applies to circuit or AC 50Hz/60hz, rated voltage 230V and rated current up to 40A, it can protect the circuit against overload and short circuit, it can also be used for infrequent switch over electric device and illumination circuit. The product conforms to IEC/EN 61006-1 and RoHS.

### ■ Type and meanings



### ■ Normal application and installation conditions

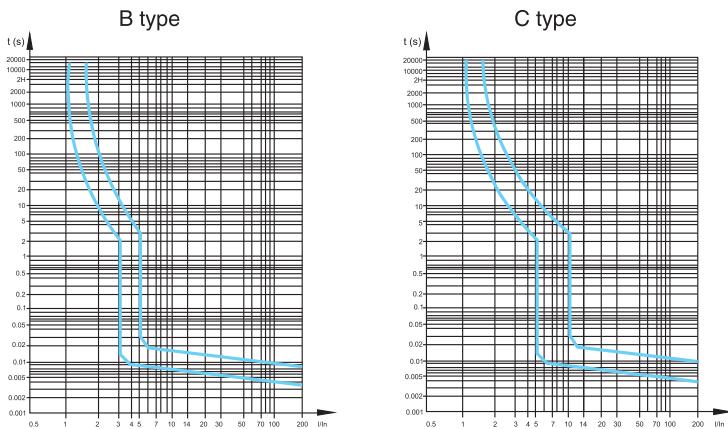
1. Ambient atmosphere temperature:
  - 1.1 Ambient atmosphere temperature Max.:+40°C
  - 1.2 Ambient atmosphere temperature Min.:+40°C
  - 1.3 The average of ambient atmosphere temperature in 24h: $\leq$  +35°C
2. Altitude: the Breaker can work under altitude not exceed 2000m.
3. Atmosphere condition:
 

When the highest ambient temp. is +40°C, relative humidity should not exceed 50%.  
At lower temperature, higher relative humidity can be allowed, but not exceed 95%.
4. Anti-pollution grade is grade 2.
5. Installation category: III
6. Installation place: Breaker can be installed on the din rail or installed horizontally,vertically.

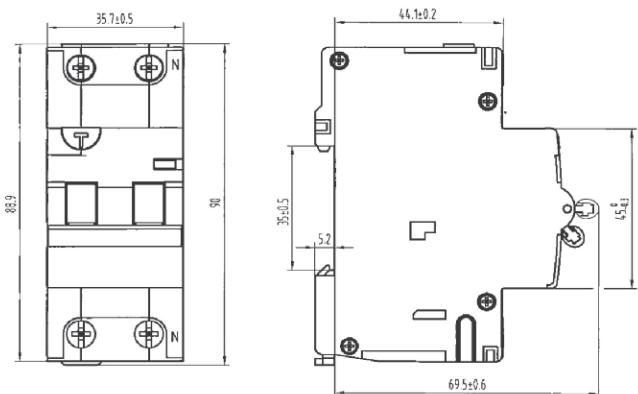
### ■ Main technical parameters

Breaker	3SL71N-40	
Number of poles	1P+N	
Rated current	A 6,10,16,20,25,32,40	
Rated residual action current	A 0.03	
Product type	Type AC	Type A
Rated frequency	Hz	50(60)
Rated voltage	V	230
Rated short circuit breaking capacity (Icn)	A	6000
Rated limited short circuit current (IΔm)	A	6000
Operating cycles	Electrical life: 2000 Times $\cos \Phi=0.85\sim0.9$	
	Mechanical life: 2000 Times ( $I_n \leq 25A$ ), 1000 Times ( $I_n > 25A$ )	
	Per hour: Times 240 ( $I_n \leq 25A$ ) Times 120( $I_n > 25A$ )	
Conventional non-tripping current Int	1.13In $t \leq 1h$	
Conventional tripping current it	1.45In	$t < 1h$
	2.55In	$1s < t < 60s$ ( $I_n \leq 32$ ) $1s < t < 120s$ ( $I_n > 25A$ )
Instantaneous tripping type	B	C
Instantaneous non-tripping current	$t \geq 0.01s$ 3In 5In	
Instantaneous tripping current	$t < 0.1s$ 5In 10In	
Protection level	IP20	
Installation mode	TH35-7.5 DIN rail	

## ■ Over-current tripping characteristic



## ■ Outline and installation dimensions



## ■ Order instructions

Instantaneous tripping type	Number of Poles	Rated residual action current $I \triangle n$	Rated Current(A)	Order Specification	Order Specification
B	1P+N	30mA	6A	3SL71N-40-B6-30mA	3SL71N-40-B6-30mAC
			10A	3SL71N-40-B10-30mA	3SL71N-40-B10-30mAC
			16A	3SL71N-40-B16-30mA	3SL71N-40-B16-30mAC
			20A	3SL71N-40-B20-30mA	3SL71N-40-B20-30mAC
			25A	3SL71N-40-B25-30mA	3SL71N-40-B25-30mAC
			32A	3SL71N-40-B32-30mA	3SL71N-40-B32-30mAC
			40A	3SL71N-40-B40-30mA	3SL71N-40-B40-30mAC
C	1P+N	30mA	6A	3SL71N-40-C6-30mA	3SL71N-40-C6-30mAC
			10A	3SL71N-40-C10-30mA	3SL71N-40-C10-30mAC
			16A	3SL71N-40-C16-30mA	3SL71N-40-C16-30mAC
			20A	3SL71N-40-C20-30mA	3SL71N-40-C20-30mAC
			25A	3SL71N-40-C25-30mA	3SL71N-40-C25-30mAC
			32A	3SL71N-40-C32-30mA	3SL71N-40-C32-30mAC
			40A	3SL71N-40-C40-30mA	3SL71N-40-C40-30mAC

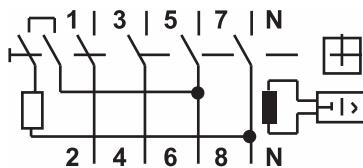


**NEW**

## ■ Application

3SL52 series residual current action circuit breaker (without over-current protection) applies to circuit of AC 50/60Hz, rated voltage 2-pole 230V, 4-pole 230/400V and rated current up to 63A, for household and similar application location with performance characteristic irrelevant to line voltage. It is used for protection of electric shock and fire risk.

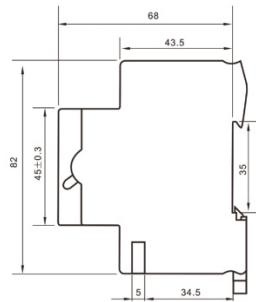
## ■ Connection diagrams



## ■ Types and meanings

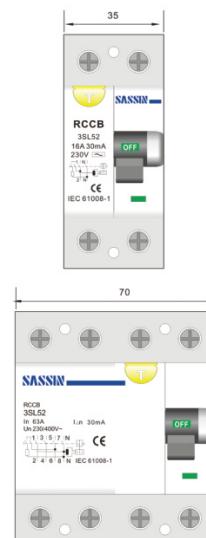
Types (AC,A)  
Rated current In / Rated residual operating currents  $I_{\Delta n}$   
No. of poles  
Design serial number  
Residual current action circuit breaker  
“**SASSIN**” enterprise code

## ■ Dimensions



## ■ Main technical parameters

Breaker	3SL52	
Number of poles	2, 4	
Rated current In (A)	10 16 25 32 40 50 63	
Rated frequency (Hz)	50 (60)	
Rated operating voltage Ue (V)	230,400	
Rated short circuit breaking capacity Im (A)	630 1000	
Rated limited short circuit current Icn (A)	6000	
Rated residual action current I $\triangle$ n (mA)	30 100 300	
Mechanical life (times)	10000	
Protection level	In20	
Weight (kg)	2P	0.216
	4P	0.344



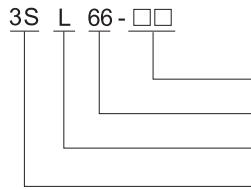


**3SL66 RCCB**

## ■ Application

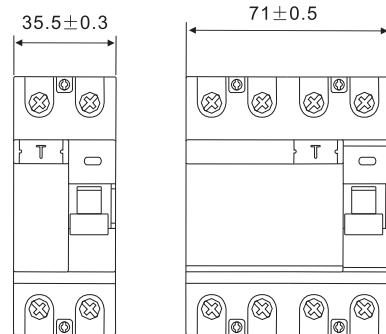
3SL66 series residual current action circuit breaker is newly developed by SASSIN, which applies to circuit of AC 50/60Hz, rated voltage to 400V and rated current up to 100A. Residual current action circuit breaker ( RCCB ) is used at household and similar application locations for protection of electric shock without over-current protection .

## ■ Types and meanings



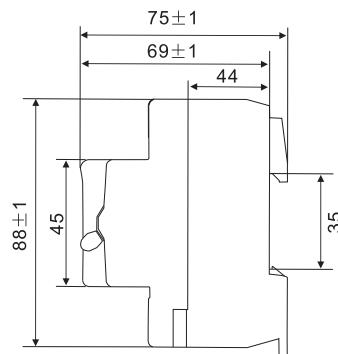
Frame current 63 type and 100 type  
Design serial number  
Residual current action circuit breaker  
“**SASSIN**” enterprise code

## ■ Dimensions



## ■ Specifications

Standard compliance: IEC 61008  
Number of poles: 2-pole and 4-pole  
Rated voltage: 2P 230V 4P 230/400V  
Frequency: 50/60Hz  
Rated current In: 25, 40, 63, 80A, 100A  
Rated residual action current  $I_{\Delta n}$ : 30, 100, 300mA  
Performance characteristic: type AC, type A  
Action range: 0.5-1.0  $I_{\Delta n}$   
Action time:  $1 I_{\Delta n} \geq 100ms$   $5 I_{\Delta n} \geq 40ms$   
Surge current capacity: 3000A (8/20  $\mu s$  surge current test)  
                            200A (0.5 $\mu s$  /100 kHz ringing wave test)  
Rated making and breaking capacity  $I_m$ : 1000A  
Rated residual making and breaking capacity  $I_{\Delta m}$ : 1000A  
Rated limited short circuit current  $I_{cn}$ : 6000A  
Rated limited residual short circuit current  $I_{\Delta n}$ : 6000A  
Electrical life: Not less than 5000 times  
Installation mode: 35mm Din rail installation



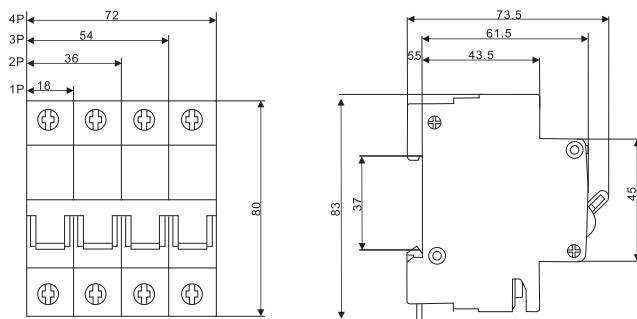


**3SB1-63N Mini Circuit Breaker**

## ■ Application

3SB1-63N is an upgraded MCB based on 3SB1-63, a busbar terminal is added to the MCB to adapt to the busbar installation. The modified profile is much more appealing to customers.

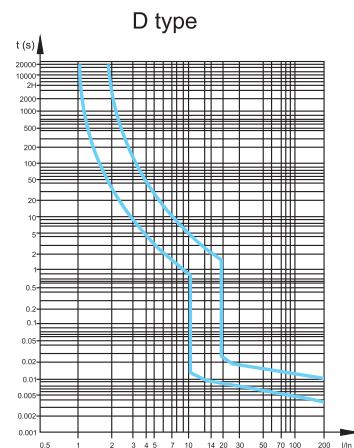
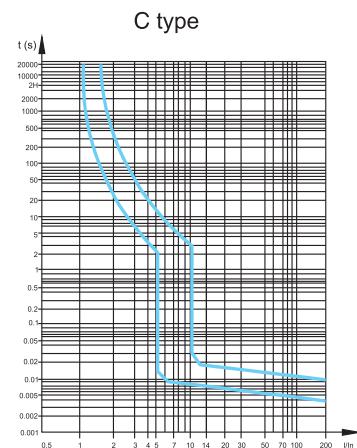
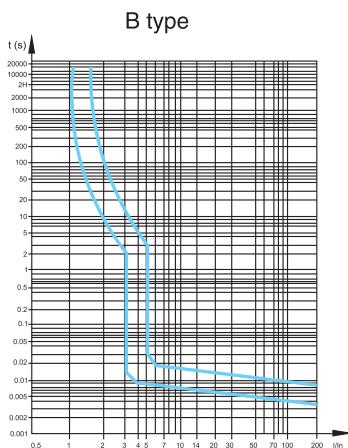
## ■ Dimensions



## ■ Specifications

Character	Rated current (A)	Poles (P)	Rated Voltage (V)	Breaking capacity (A)
B, C, D	1, 3, 6, 10, 16, 20, 25, 32, 40	1, 2, 3, 4	230V(1P)/ 400V(2P, 3P, 4P)	6000
	50, 63			4500

## ■ Characteristic Curve





**3SB1-63 Mini circuit Breaker**

## ■ Application

3SB1-63 is by far the most widely used MCB for breaking capacity between 3,000A to 4,500A. The MCB is reliable and economic because of the large volume of production.

The product is to protect cable and equipment against overload and short circuit. standards: IEC 60898-1.

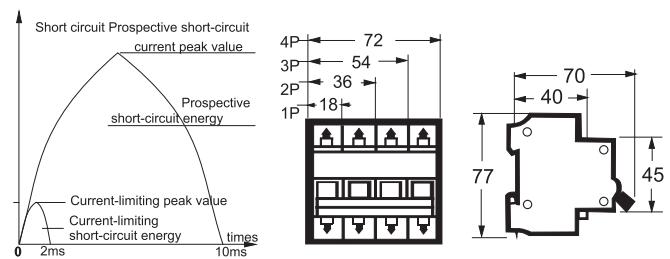
## ■ Breaking capacity

3SB1-63				
Standard	Rated current(A)	Pole	Voltage (V)	Breaking capacity(A)
IEC60898	1 to 40	1	230	6000
		2,3,4	400	6000
	50 to 63	1	230	4500
		2,3,4	400	4500

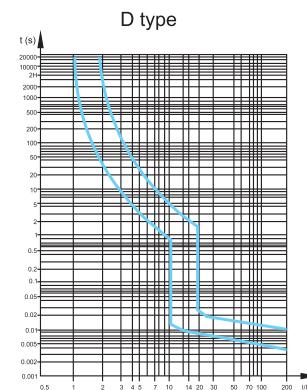
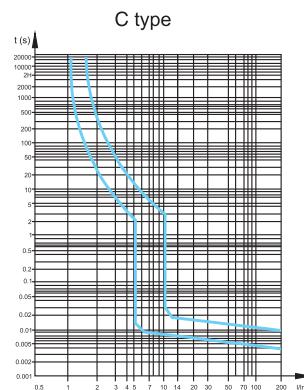
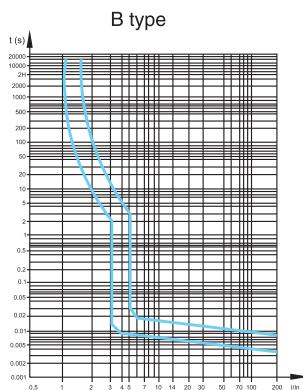
## ■ Specifications

Rated Voltage: 230/400V
Rated Current: 6,10,16,20,25,32,40,50,63A
No. of poles: 1,2,3,4, 3+N
Tripping curve: B, C, D
Standard: IEC60898
Electrical life: $\geq 6000$ operations
Mechanical life:(O-C) no less than 20000 operations

## ■ Dimensions



## ■ Characteristic Curve





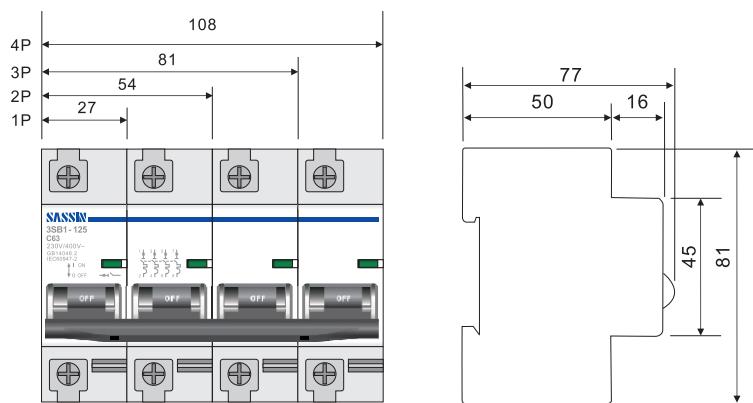
## ■ Application

3SB1-125 mini circuit breaker is used in AC 50Hz or 60Hz, single phase 230/240V, three phase 400/415V to protect the circuit against overload and short circuit. It can be used in lighting and motor circuit. It can also be used for infrequent switch on and off of the lighting and equipment under normal condition. The breaking capacity is 10kA according to IEC60947-2.

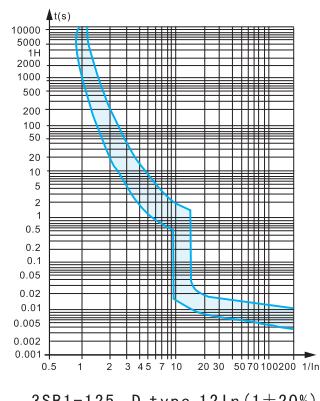
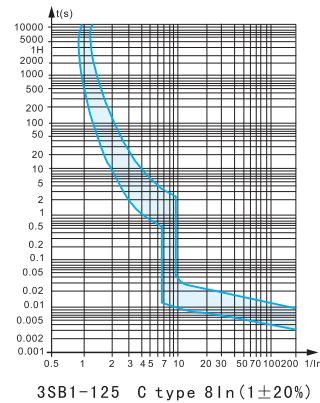
## ■ Specifications

Character	Rated current (A)	Pole number (P)	Rated voltage (V)	Breaking capacity (A)	
				In: ≤100 A	In: 125 A
C,D	63, 80, 100, 125	1	130	20000	10000
			230/240	10000	6000
			400/415	4000	3000
		2, 3, 4	230/240	20000	10000
			400/415	10000	6000
			440	6000	6000

## ■ Dimensions



## ■ Characteristic Curve



## 3SB1S-63 Shunt Release Circuit Breaker



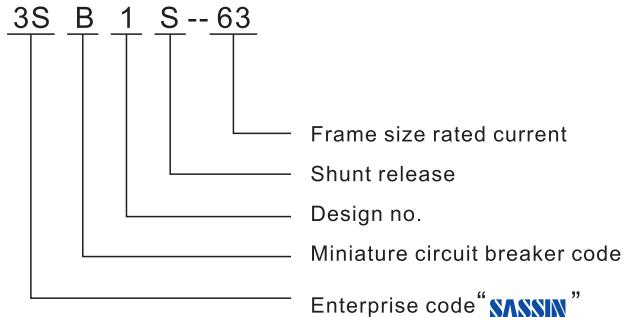
### ■ Application

3SB1S-63 Shunt Release Circuit breaker is applicable to circuit of A.C. 50 HZ or 60HZ, rated working voltage 230V, rated current up to 63A, for remote controlling and breaking circuit or controlling and breaking circuit by automatic signal, at the same time, for protecting against overload and short circuit. It can also be used for infrequent operational changeover of circuit.

The circuit breaker which is advanced in international market complies with IEC 60898-1:2002 standard.

### ■ Main specifications and technical parameters

#### 1 Type and definition



2 Main specifications 6A 10A 16A 20A 25A 32A 40A 50A 63A.

3 Breaking capacity up to 6000A.

4 Shunt release's life more than 4000 times.

5 Shunt release's coils can withstand 3000V (1.2μs /50μs) impulse voltage.

6 Over-current protection characteristic of circuit breaker refers to 3SB1 miniature circuit breaker.

7 Characteristics of shunt release

Operation voltage AC 230V

Operation scope: When supply voltage of shunt release (measured during tripping) remains between 70% and 110% of rated control supply voltage (AC, rated frequency), the shunt release shall trip and make the circuit breaker break under all working conditions of device.



## ■ Application

3SB1L-N RCBO is used for the protection against electrical leakage in the circuit of 50Hz or 60Hz, rated voltage 240V/415V. When there is an electric shock or the residual current of the circuit exceeds the threshold value, the RCBO can cut off the power within the time of 0.1s to protect the personal safety and prevent the equipment from the fault result by the residual current. It can also protect the circuit against overload and short circuit. It conforms to IEC61009 standard.

## ■ Specifications

Pole No.	Rated Voltage (V)	Rated current (A)	Leakage action current (mA)	Leakage dead current (mA)	Leakage action time (s)
1P+N 2P 2line	230	1,2,3,4,6,10,16,20, 25,32,40,50,63	30, 100	15, 50	<0.1
3	400				
3P 4line	230/400				

## ■ Wiring Diagram & Operation Principle

Single-pole double line	Double-pole double line	Triple-pole triple line	Triple-pole four line	Four-pole four line
3SB1L-N 1/2	3SB1L-N 2/2	3SB1L-N 3/3	3SB1L-N 3/4	3SB1L-N 4/4

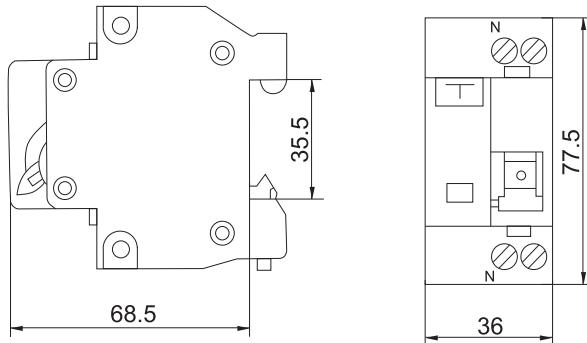
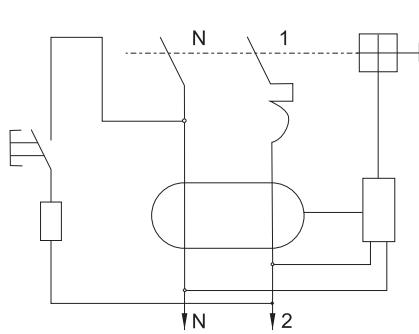
## 3SB28LE-32 RCBO



### ■ Overload Tripping Characteristics

Testing current(A)	Rated voltage(A)	Limited time	Pre-engage result	Start situation	Note
1.13In	all	$t \geq 1h$	non-trip	cold state	The current rise steadily to a fixed value within 5s
1.45In		$t < 1h$	trip	hot state	
2.55In	all	$1s \leq t \leq 60s$	trip	cold state	Open the supplementary switch, connect the power
5In		$t \leq 0.1s$	non-trip	cold state	
10In	all	$t > 0.1s$	trip	cold state	

### ■ Dimensions



3SB28L

Rated current(A)	Pole	Rated voltage(V)	Rated current of frame current(A)	Rated leakage operating current(mA)	Rated leakage non-operating current(mA)	Rated leakage breaking time(S)	Breaking capacity(A)
6,10,16, 20,25,32	1P+N	230	20	30	15	$\leq 0.1$	4500



**3SL18 RCCB**

## ■ Application

The 3SL18 RCCB provides the functions of isolation, switching and earth leakage protection of electrical circuits. It has a residual current operated electromagnetic release which operates without any auxiliary source of supply to open a circuit automatically in the case of an earth leakage fault between phase and earth that greater than or equal to a threshold of 10mA, 30mA, 100mA, 300mA or 500mA.

Compliance with standard IEC61008;

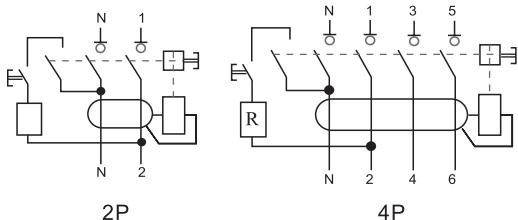
Current rated:16A to 100A;

Voltage rated:2 poles:240V minimum voltage:102V AC,maximum voltage:264V AC,  
4 poles:415V minimum voltage(ph/N):102V AC, maximum voltage(ph/N):264V AC,

## ■ Specifications

TYPE		3SL18
Number of Poles		2P 4P
Rated current In	A	16 25 40 63 80 100
Rated residual action current IΔn	mA	10 30 100 300 500
Rated frequency	Hz	50
Rated voltage	V	230/400
Rated limited short circuit current Inc	A	6000
Protection level		IP20
Product type		Type A, Type AC

## ■ Operation Diagram



## Modular Signal Lamp



3SB1D-L



3SB1D-N

### ■ Application

The Modular Signal is applicable to circuit with rated voltage 230V- and frequency 50/60Hz for visual indication and signaling.

### ■ Construction & Feature

- Low service duration, minimum power consumption
- Compact design in modular size
- Easy installation

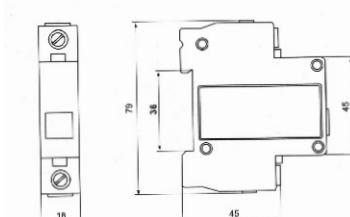
### ■ Construction & Feature

- Rated voltage: 230V AC
- Rated frequency: 50/60Hz
- Colour: red, green, yellow
- Connection terminal: pillar terminal with clamp
- Connection capacity: rigid conductor 10mm<sup>2</sup>
- Installation:
- On symmetrical DIN rail
- Panel mounting

### ■ 3SB1D-L signal lamp

- Max power: 0.6W
- Illumination: LED
- Service duration: 30,000 hours

### ■ Overall & installation dimensions



### ■ 3SB1D-N signal lamp

- Max power: 1.2W
- Illumination: Neon bulb
- Service duration: 15,000 hours

## 3SB1 Mini Circuit Breaker Accessories



S2: Shunt Release

U2+O2: Over/under Voltage Release

OF: Auxiliary Contact

SD: Auxiliary Alarm

- Contact capacity:
- AC: Un=400V In=3A  
Un=230V In=6A
- DC: Un=125V In=1A  
Un=48V In=2A  
Un=24V In=6A

- Dielectric strength: 2000V/1min
- Electro-mechanical endurance: ≤5000
- Mounted on the left side of the MCB  
3SB1-63 & 3SB1-63N, indicating "ON", "OFF" status of combined MCB.



## ■ Application

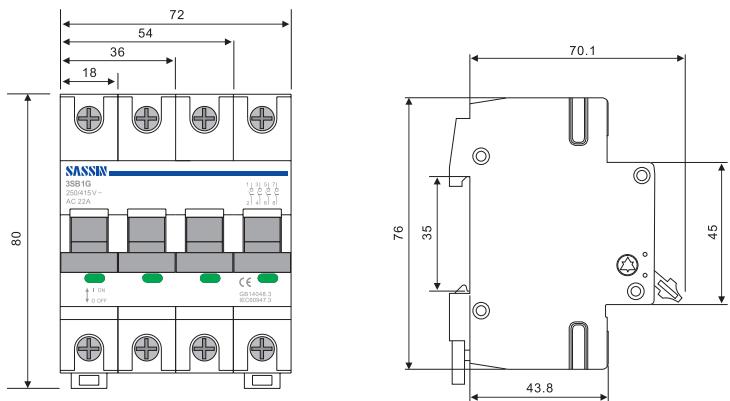
3SB1G main switch is designed to accept cable-in/cable-out connections. It may be used as an isolating switch. The switch disconnected is capable of switching both resistive and inductive loads.

The product conforms to IEC60947-3.

## ■ Specifications

Rated voltage (V)	230/415 50/60Hz
Rated current (A)	32,63,100
Poles	1,2,3,4
Utilization category	AC-22A
Rated insulation voltage	500V
Electric life	1500 times
Mechanical life	8500 times

## ■ Dimensions





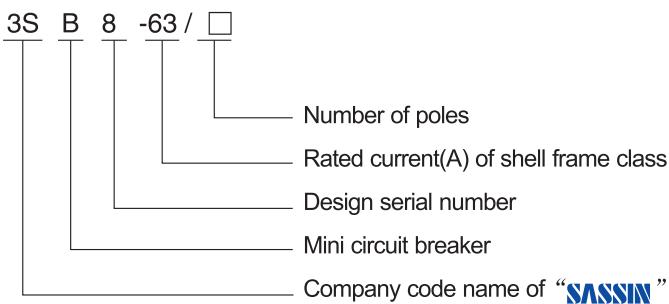
## ■ Application

3SB8-63 series mini circuit breaker is the new product developed by our company. This series MCB has reliable performance, precise protection property, high breaking capacity, and small volume.

3SB8-63 series mini circuit breakers are mainly applied to the AC 50Hz/60Hz circuit with rated voltage 230/400V, rated current up to 63A. This series mini circuit breakers can provide circuits of modern buildings with overload and short-circuit protections, and can also be used for operating and isolating the circuit infre-quently under normal case.

3SB8-63 series MCB conforms to the standards of IEC/EN60898-1.

## ■ Types and meanings



## ■ Normal application and installation conditions

### 3.1 Ambient atmosphere temperature:

3.1.1 Ambient atmosphere temperature Max.:+40°C;

3.1.2 Ambient atmosphere temperature Min.:-5°C;

3.1.3 The average of ambient atmosphere temperature in 24h: $\leqslant +35^{\circ}\text{C}$ .

3.2 Altitude:the breaker can work under altitude not exceed 2000m.

### 3.3 Atmosphere condition:

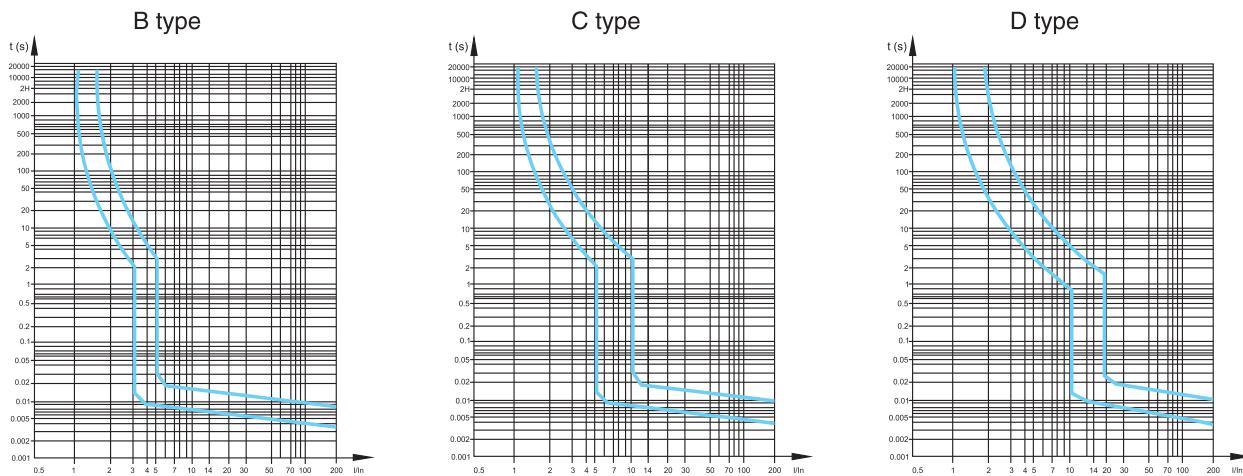
When the highest ambient temp.is +40°C,relative humidity should not exceed 50%.At lower temperature,higher relative humidity cam be allowed.(e.g.relative humdity can be 90% at +20°C)

3.4 Anti-polltion grade:Grade 2.

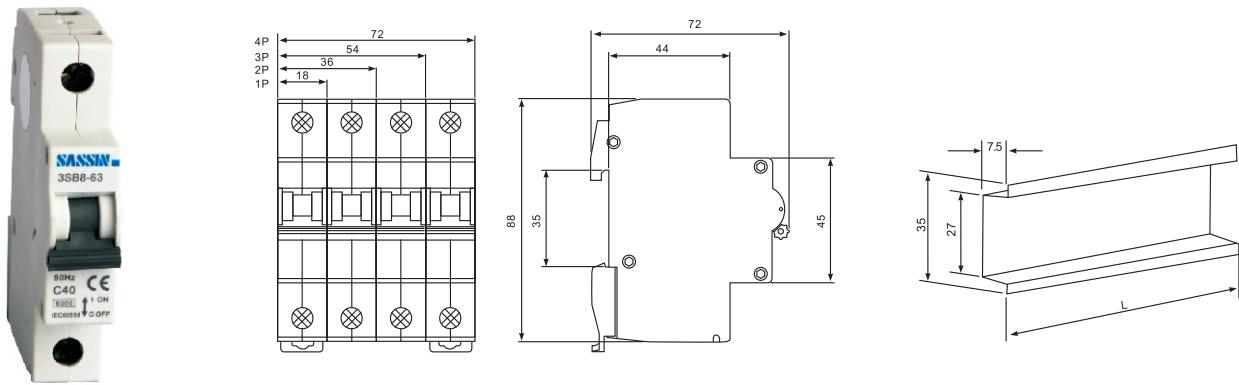
3.5 Installation category:Grade II and III.

3.6 Mounting position: the breaker can be mounted in rail of TH35-7.5 steel. The slant angle should not exceed 5° between mounting face of the breaker and vertical direction.

### ■ Performance curve of over-current release



### ■ Outline and installation dimensions



Mounting rail dimension

### ■ Order instructions

6.1 Type, Specification and Name of product

E.g. 3SB8-63 series mini circuit breaker

6.2 Instantaneous tripping type

E.g. Type C

6.3 Rated current:

E.g. 20A

6.4 Poles:

E.g. 3P

6.5 Quantity of order

E.g. 10000 PCS

6.6 Example for order

E.g. 3SB8-63/3P series mini circuit breaker C20, 10000 PCS.

## 3SB66 DPN Circuit Breaker



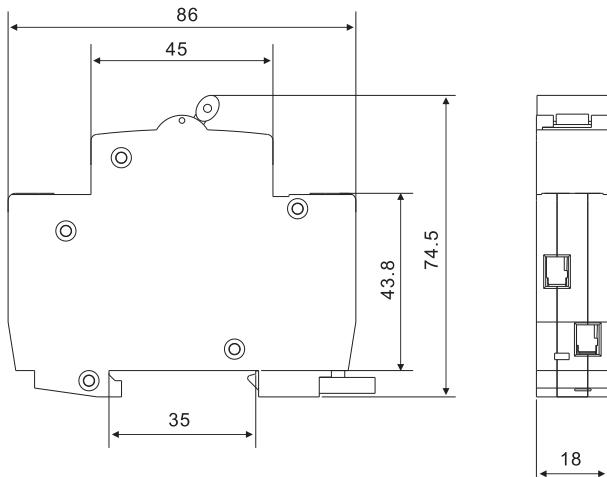
### ■ Application

3SB66 miniature circuit breaker applies to locations such as industrial, commercial, high rise and civil residence with AC 230V and below for terminal distribution protection (overload and short circuit protection), can also be used to infrequent making and breaking operations. This breaker complies with standards of IEC 60898.

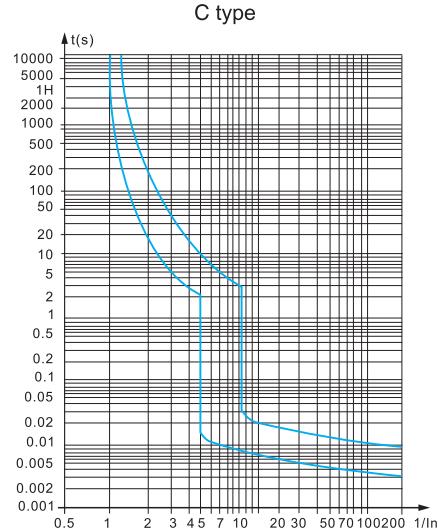
### ■ Specifications

Rated voltage:	AC 230V
Rated frequency:	50Hz/60Hz
Rated current:	6, 10, 16, 20, 25, 32, 40A
Number of poles:	1P+N
Tripping characteristic:	B,C
Rated ultimate short circuit breaking capacity (Icu):	6000A
Rated service short circuit breaking capacity (Ics):	6000A
Mechanical life:	20000 times

### ■ Dimensions



### ■ Characteristic Curve





**3SB6 Miniature Circuit Breaker**

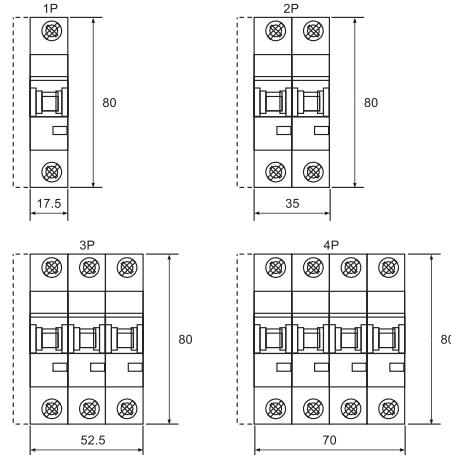
## ■ Application

A new range 10kA with main switch, DPN, RCBO, RCCB and accessories provides you with a full solution of circuit protection with high breaking capacity and reliable performance. This range is most suitable for high level market.

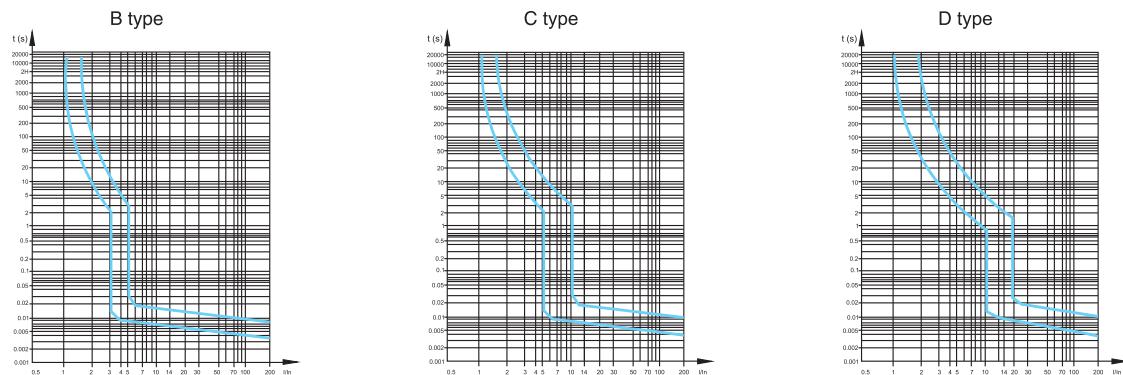
## ■ Specifications

Conform to standard of electrical	IEC60898
Rated operating voltage (Ue) and Frequency	230V/400V; 50/60Hz
Rated current	0.5,1,2,4,6,10,16,20,25,32,40,50,63
Rated breaking capacity	10kA IEC60898 15kA IEC60947
Instantaneous tripping type	B,C,D
Max. fuse that can be connected to	100Ag1(>10kA)
Working ambient temperature	-5 to +40°C
Electrical life	≥8000 time switching operation
Technical life	≥20000 times switching operation

## ■ Dimensions



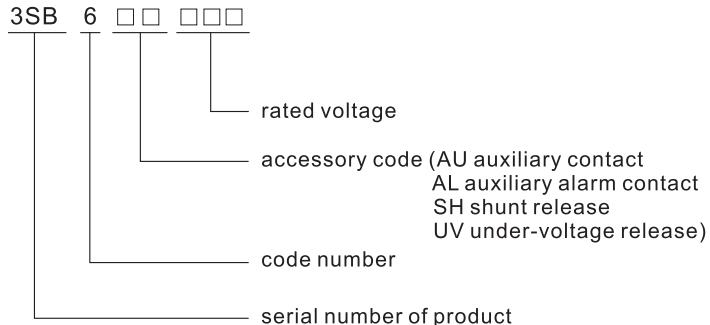
## ■ Performance curve of release



## 3SB6 Mini Circuit Breaker Accessorie



### ■ Type instruction



### ■ 3SB6 AL technical parameters

Application category	Ue(V)	Ie(A)	number of contacts
AC-13	230	6	1NO+1NC
	400	2	
DC-13	60	4	1NO+1NC
	110	2	
	220	0.5	



### ■ 3SB6 AU technical parameters

Application category	Ue(V)	Ie(A)	number of contacts
AC-12	230	2	2 sets of changeover contacts
	230	1	
	110	0.5	

### ■ 3SB6 SH technical parameters

Rated control power voltage ( $U_s$ ) of shunt release 3SB6 SH is AC 50Hz, 24V to 110V, 110V to 400V, DC 24V to 60V, 110V to 220V. When applied power voltage is within range of 70% to 110%, shunt release can act reliably to make the breaker break.

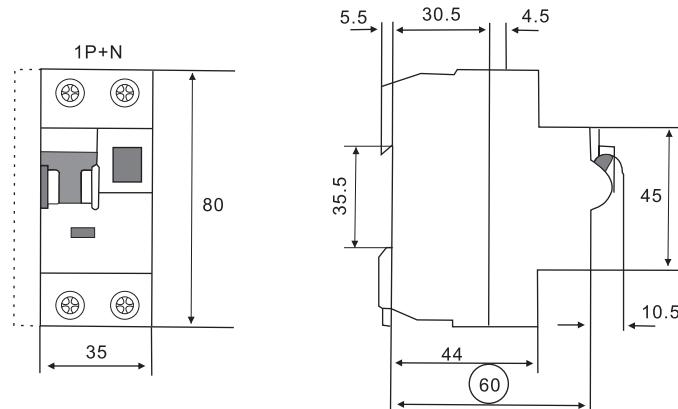
## 3SB6L RCBO



### ■ Electrical

Number of poles	1P+N
Rated current( In)	6, 10, 16, 20, 25, 32, 40
Rated working voltage (Ue)	230V 50Hz
Rated service short circuit breaking capacity( Ics)	10 kA
Rated residual action current (IΔn)	30mA, 100mA, 300mA
Rated residual no-action current (IΔno)	15mA, 50mA, 150mA
Breaking time IΔ=IΔn	≤0.1S
IΔ=5 IΔn	≤0.04S
Instantaneous tripping type	C, D

### ■ Dimensions



## 3SB18 Mini Circuit Breaker



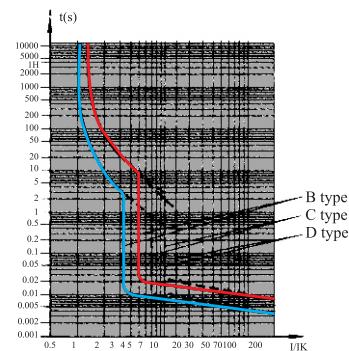
### ■ Application

3SB18 mini circuit breaker is capable of breaking a faulty current to 6,000A. They are mainly suitable for overload and short circuit protection in the circuit of AC 50Hz/60Hz, 240V/415V supply.

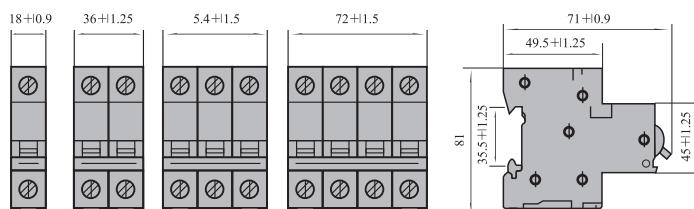
### ■ Specifications

Character	Standard	Rated current (A)	Poles (P)	Rated Voltage (V)	Breaking capacity (A)
B	IEC60898	1, 2, 3, 4, 5, 6,	1	230/240	6000
C		10, 16, 20, 25,			
D		32, 40, 50, 63A	2,3,4	400/415	6000

### ■ Characteristic Curve



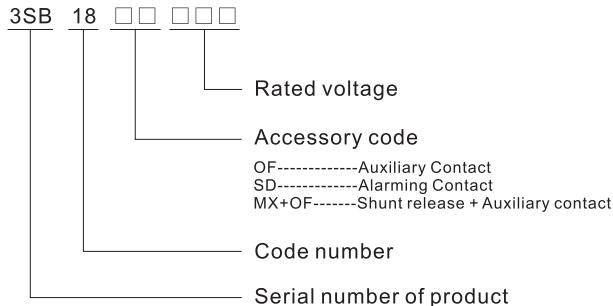
### ■ Dimensions



## 3SB18 Mini Circuit Breaker Accessorie



### ■ Type Instruction



### ■ Function and standard complied of the accessory of the circuit breaker

The name, code, and function of the 3SB18 is included in the FORM I

FORM I

Name of the Accessory	Code	Function	Standard
Auxiliary contact	OF	Provide the auxiliary signal; control the auxiliary circuit.	IEC60947-5-1:1997
Alarming contact	SD	Alarming signal provided when the MCB break as to the error of the protected circuit	IEC60947-2:1999
Shunt release + Auxiliary contact	MX+OF	Remote and break the electric line; Control the auxiliary line though the auxiliary contact	IEC60947-1:1999



### ■ Main technical Specification

1)Technical specification of the auxiliary contact and the alarming contact FORM II

FORM II

Name of Accessory	Rated Current(A)			NO. of contactors per group	Installation Diagram
	AC:380V	AC:220V	DC:110V		
Auxiliary contact	3	6	1	----NO ----NC	
Alarming contact	3	6	1	----NO ----NC	

2)Technical specification of the shunt release and the shunt release + auxiliary breaker FORM III

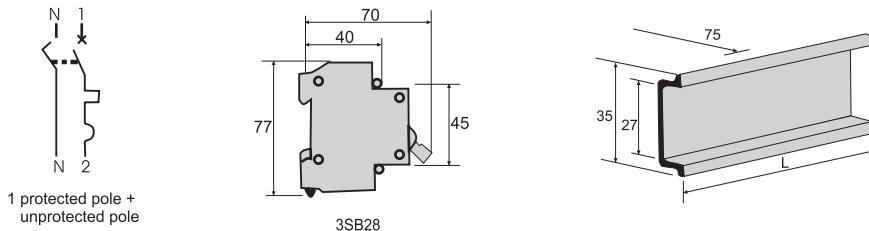
FORM III

Name of Accessory	Rated Insulated Voltage Ui	Rated Controlling Voltage Us	Release Power lost (W or VA)	Pick-up Voltage	Installation Diagram
shunt release + auxiliary breaker	415V	AC/DC: 220~380V 110-220V	240	(0.7~1.1)Us	
		AC/DC: 24~48V	120		

## 3SB28“Phase+Neutral”Circuit Breaker



### Dimensions



## 3SB6G Main Switch



### Structure Characteristics

Two-function connected wire terminal with indicator for contact status hand lock, lock diameter 6mm

### Application

The product is applicable to protect line-conductor and overload, and short-circuit of small sealed motors. It is mainly for protection of circuits with AC 220V and 50Hz/60Hz, and for unfrequent conversion under normal conditions as well. Its action can be up to two pole with its only one pole volume and be used as a leakage breaker by assembling with leakage. It is produced as per EN60898, IEC60898, IEC60947-2 standards.

### Technical data

1. Current rating: 1, 2, 3, 4, 6, 10, 16, 20, 25, 32A
2. Voltage rating: 220 / 240V AC;
3. Breaking capacity to EN 60898: 4500A
4. Number of operating cycles(O-C): 20000
5. Tripping characteristics: B curve, C curve.

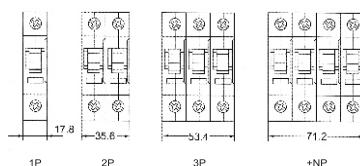
### Usage

It's used for industry, commerce and residence circuit as main switch. The product Complies with IEC60947-3.

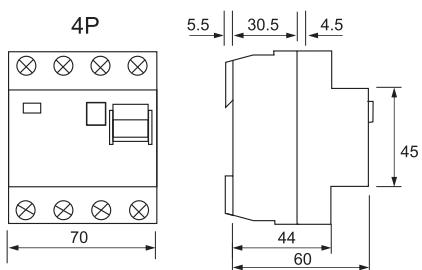
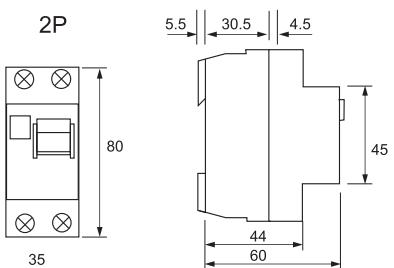
### Specification

Rated voltage	240 / 415V 50 / 60Hz
Rated current	40,63,80,100
Poles	1,2,3,4
Making or breaking capacity	1.25In; 1.1Ue

### Dimensions



## 3SL6 RCCB



### ■ Electrical

Design according to	IEC 61008 (EN61008)
Tripping time	undelayed min.10 ms delay min.40 ms delay with selective disconnecting function
Rated voltage	230 / 400V; 50Hz
Rated tripping current	10, 30, 100, 300, 500mA
Rensitivity	AC and pulsating DC
Ratedshort	10KA with 63A gL back-upfuse
Circuitstrength	10KA with 80A gL (F-80 and -863) 6 KA (rated current 63A) with 63A gL
Maximum back-up fuse for	63 A gL
Short circuit protection	80 A gL (F-80 and -863)
Maximum back-up fuse for	25 A gL (F-25 and -40A)
Overload protection	40 A gL (F-80A)
Resistance to climatic conditions	according to IEC 61008
Degree of protection	built-in switch IP 40
Electrical life	≤4.000 operating cycles
Mechanical life	≤20.000 operating cycles

### ■ Mechanical

Frame size	45mm
Socket size	80mm
Device width	35mm (2mod.), 70mm (4mod.)
Mounting	quick fastening with 2 lock-in Positions on DIN rail En50022
Upper and lower terminals	open mouthed / lift terminals
Terminal protection	finger and hand touch safe, VBG 4, OVE-EN 6
Terminal capacity	1- 25 mm <sup>2</sup>
Busbar thickness	0.8 - 2mm

## 3SB2 Mini Circuit Breaker



### ■ Application

3SB2 series miniature circuit breaker has characteristics of small size, light weight, and excellent performance. They are mounted in the illuminating distribution board and used in guesthouses, block of flats, high buildings, squares, airports, railway stations, plants and enterprises etc, in AC circuits 240V (single pole) up to 415V(3 pole) 50Hz for protection of overload, short circuit and for circuit change-over in lighting system. Breaking capacity is 3KA.

The items comply with standards of IEC60947-2&NEMA

### ■ Series Specification

Pole number	Rated current(A)	Rated voltage(V)	Rated making and breaking capacity (kA)		Setting temperature of protective characteristics
			IEC	NEMA	
1P	6,10,15,20,30, 40,50,60	AC12	—	5	40°C
		AC120/240	—	5	
		AC240/415	3	—	
2P	6,10,15,20,30, 40,50,60	AC120/240	—	5	40°C
		AC240/415	3	—	
3P		AC240/415	3	—	
3SB2-S M6			6		40°C



**3SQL Mini Circuit Breaker**

## ■ Application

3SQL series plug-in type miniature circuit breakers have the features of small size, light weight, novel structure, and facile installation etc. These circuit breakers are installed in the illuminating distribution board, mainly used in hotels, apartments, high buildings, plazas, airports, railway stations, and enterprises etc. They work in the circuit of AC 60HZ, 120V for single phase, or 240V for three phases, which could be the protection of overload and short circuit and for unfrequent on-and-off switch. The breaking capacity is 6KA.

## ■ The parameter of technology as follows:

Pole of number	Rated current (A)	Rated voltage (V)	Rated breading capacity (KA)	Setting temperature of protection characteristics
1P	10、15、20、25 30、40、50、60	AC120/240	6	40°C
2P	10、15、20、25 30、40、50、60	AC120/240	6	40°C
3P	10、15、20、25 30、40、50、60	AC240	6	40°C



**3SCH9 Mini Contactor**

### ■ Application

3SCH9 mini AC contactor mainly applies to circuit of AC 50Hz (or 60Hz), rated working voltage up to 400V, rated working current up to 63A to control household electric appliances and low inductive reactance load and micro inductive reactance load of similar usage, it can also be used to control household motor load of which the controlling power needs to be relatively decreased.

This product applies to places such as household, hotels, apartments, etc to realize the automation of large-scale produced household electric appliances. Its main performances comply with standards of IEC1095 .

### ■ Rated operating currents and power ratings

Specification	3SCH9-32(40)	3SCH9-63
Poles	2P,4P	4P
Current	2P:20,24,32,(40)A 4P:20,24,32A	4P:20,24,40,63A
Contact	2NO,4NO	4NO
Coil	AC/DC、220V/230V	



**3SCH8 Mini Contactor**

## ■ Range

3SCH8 AC Contact or (Contact or for short) is mainly designed for AC 50Hz or 60Hz circuits with 230V rated operating voltage. In AC-1/AC-7a application usage, rated operating voltage up to 230V, rated operating current up to 63A, it functions as long distance breaking and circuit controlling device.

This product is mainly applied to house-hold appliances or low inductance loading and household motor loading control used for the similar purpose.

## ■ Specifications

Model	3SCH8-20(25)	3SCH8-25	3SCH8-63	3SCH8-63
Poles	1P 2P	3P 4P	1P 2P	3P 4P
Current	10,16,20,(25)A	10,16,20,25A	25, 32, 40, 63A	25, 32, 40, 63A
Contact	1NO, 2NO	3NO, 4NO, 4NC, 2NO2NC	1NO, 2NO, 2NC	3NO, 4NO, 4NC, 2NO2NC
Coil	AC、50Hz/60Hz、220V/230V、127V、110V、36V、24V			

## ■ Normal working and installation conditions

- 1.Ambient temperature:-5°C to +40°C, the average temperature no more than +35°C in 24 hours.
- 2.Altitude :no more than 2,000m.
- 3.Atmospheric condition: the relative humidity of the installation place should be no more than 50% when the maximum temperature is +40°C; if under a lower temperature, a higher relative humidity is allowed. The monthly minimum average temperature in the most humid month should not exceed +25°C and the monthly maximum average relative humidity of this month no more than 90%. In addition, the dew on the surface of products caused by temperature variation should be taken into consideration.
- 4.Degree of pollution:class II .
- 5.Installation category:class II .
- 6.Installation mode:use mounting rait of "Top Cap" section TH35-7.5 mould.

Types of contactor and relevant data (see table1)

Type	Rated insulation voltage(V)	Rated operating voltage(V)	Rated heating current(A)	Rated operating current(A)	Control power(kW)
AC-1.AC7a AC7b	500	230	63	63\25	13\3.8
AC-1.AC7a AC7b	500	230	40	40\15	8.4\2.4
AC-1.AC7a AC7b	500	230	32	32\12	6.5\1.9
AC-1.AC7a AC7b	500	230	25	25\8.5	5.4\1.5
AC-1.AC7a AC7b	500	230	20	20\7	4\1.2

### Operating Condition

Under the environmental temperature of -5°C~+40°C, puts rated controlling power voltage (Ue) on the coil of contactor so as to make it heat to ready state, and the contactor will close under any voltage in the range of 85%~110%. The voltage releasing will neither higher than 75% Ue nor lower than 20% (Ue).

Switching on and segmenting ability (see table2)

Type	Switching on and segmenting condition			Pick-up time(s)	Interval(s)	Operation frequency
	Ic/Ie	Ur/Ue	cos φ			
AC-1,AC-7a	1.5	1.05	0.8	0.05	10	50
AC-7b	8	1.05	0.45	0.05	10	50

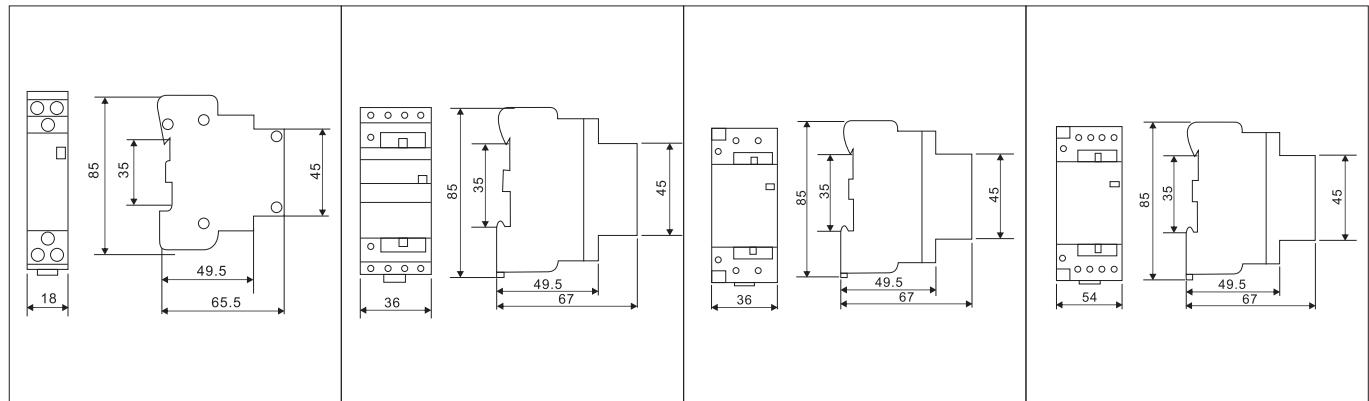
Operating performance (see table3)

Type	On condition			Segment condition			Pick-up time(s)	Interval(s)	Operation frequency
	Ic/Ie	Ur/Ue	cos φ	Ic/Ie	Ur/Ue	cos φ			
AC-1	1.0	1.05	0.8	1.0	1.05	0.8	0.05	10	6000
AC-7a	1.0	1.05	0.8	1.0	1.05	0.8	0.05	10	30000
AC-7b	6.0	1.0	0.45	1.0	0.17	0.45	0.05	10	30000

Mechanical Life: $\leq 1 \times 10^5$ Times.

Electrical Life: $\leq 3 \times 10^4$ Times.

### ■ Outline dimensions and installation size



## Relay



3SHC18A

### ■ 3SHC18A

- ▶ Contact capacity : 16A 250V AC
- ▶ Time range : per week or per day cycle
- ▶ Rated voltage : AC 220V 50/60Hz 85%~110%
- ▶ Programmable : 8 times/week or day
- ▶ Set up times : 30m/per time 48 times
- ▶ Certificate : CE



3SE8

### ■ 3SE8

- ▶ Contact capacity: 16A 220V AC
- ▶ Time range: 7 minutes
- ▶ Coil voltage: 110/230V AC
- ▶ Minimum setting unit: 0.5minutes
- ▶ Set up times: 1M, 1.5M, 2M, 2.5M, 3M, 3.5M, 4.5M, 5M, 5.5M, 6M, 6.5M, 7M
- ▶ Certificate: CE



ALC18

### ■ ALC18

- ▶ Contact capacity: 16A 220V AC
- ▶ Time range: 20 minutes
- ▶ Coil voltage: 110/230V AC
- ▶ Minimum setting unit: 0.5minutes
- ▶ Set up times: 0.5M, 5M, 10M, 15M, 20M
- ▶ Certificate: CE



**3SU1 Surge Protector**

### ■ Weather protected

3SU1 surge protection device (SPD) is compound with two thunderbolt protection chips, one normal chip and a spare chip in the module. When the normal chip comes across thunder stroke or aging deterioration, the spare chip will be put into service automatically, meanwhile, sending signal to alarm.

### ■ Technical parameters

Max. continuous working voltage	Uc	275V/320V/385V/420V~50Hz/60Hz			
Nominal release current (8/20)	In	5kA	8kA	15kA	20kA
Max. release current (8/20)	max	8kA	15kA	40kA	65kA
Voltage protection level	Up	1.0KV/1.2KV/1.5KV/1.8KV/2.0KV			
Response time	tA	$\leq 25\text{ns}$			
Operating temperature range		-40°C+80°C			
Cross-section of mounting wire		Min. 1.5mm <sup>2</sup> solid wire, Max. 35mm <sup>2</sup> strand wire/25mm <sup>2</sup> solid wire			
Case material		Fire retardant reinforcement PA66, PC, PBT, fire retardant level VO			
Protection level		C, D			

## BT Bell transformer



BT-16



BT8-8

### ■ Application

Applicable to circuit with rated voltage 230V~and rated frequency 50/60Hz, used to power electric bell of extra low voltage.

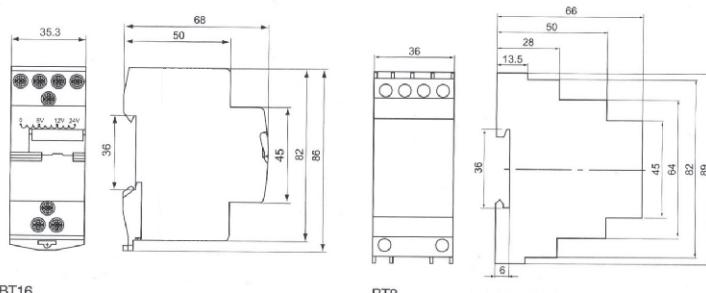
### ■ Construction and Feature

- Safe electrical separation between primary and secondary circuit
- Provides extra low voltage up to 24V
- Low temperature rising
- High output accuracy
- Extra overload capacity up to 25% within 24 hours

### ■ Technical Data

- Rated input voltage:230V AC
- Rated output voltage:
  - BT16:8,12,16,24V
  - BT:4,6,8,12,16,24V
- Rated frequency:50/60Hz
- Rated power output:8VA
- Consumption:1.15W
- Service period :continuous operating
- Pollution class:2
- Connection terminals :pillar terminal with clamp
- Connection capacity :rigid conductor 10mm<sup>2</sup>
- Installation:
  - On symmetrical DIN rail
  - Panel mounting
- Terminal Connection Height :H=15.5mm

### ■ Overall& Installation Dimensions



BT16

BT8

## JVB Electric Bell



### ■ Application

The electric bell is suitable for audible signaling for intermittent use only in domestic and commercial installations.

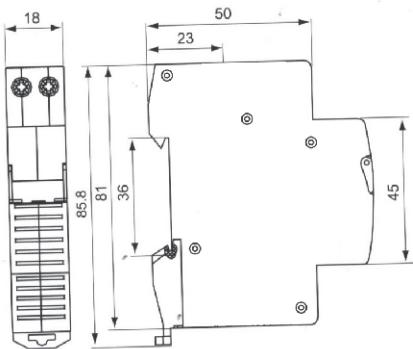
### ■ Construction and Feature

- Elegant appearance, compact size and easy installation
- Low consumption
- Product with rated current up to 24V AC to be powered by bell transformer 3SU213.

### ■ Technical Data

- Rated voltage: 8, 12, 24, 230V AC
- Rated frequency: 50/60Hz
- Rated mode :intermittent
- Connection terminal :pillar terminal with clamp
- Connection capacity :rigid conductor 10mm<sup>2</sup>
- Installation:
  - On symmetrical DIN rail
  - Panel mounting
- Terminal Connection Height :H=15.5mm

### ■ Overall& Installation Dimensions



## Full-automatic over-voltage/under-voltage protector



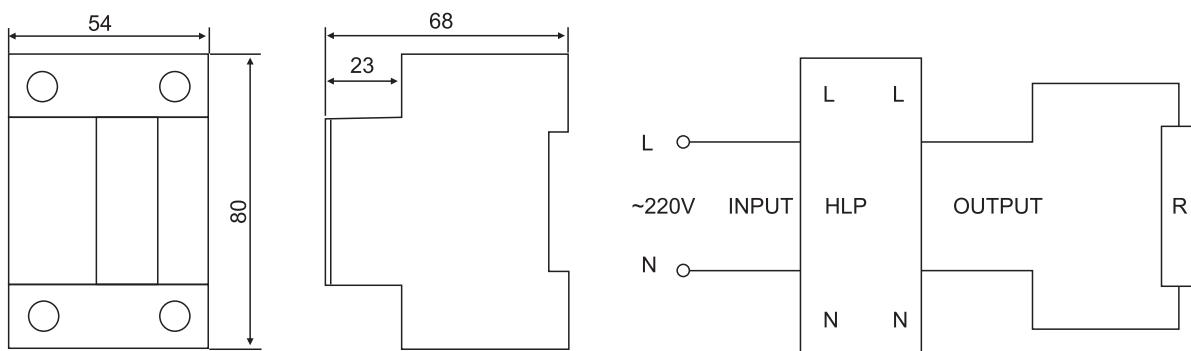
### ■ Main Technical Specifications

1. Rated AC voltage 220V and frequency 50Hz/60Hz
2. Max Passing Current 20A, 32A, 40A
3. Max. Loading power 4.4kVA, 6.6kVA, 8.8kVA
4. Over-voltage action cut-off value  $>255\pm5\text{VAC}$
5. Normal-voltage action cut-off value 175-260VAC
6. Under-voltage action cut-off value  $<180\pm5\text{VAC}$
7. Electricity transmitting delay after cut-off 2~3 minutes
8. Self power consumption  $\geq 2\text{W}$
9. Mechanical life  $\geq 100000$  times
10. Dimension 80 × 53.5 × 69.5mm (Length × Width × Height)

### ■ Features

Due to the uptight electricity supply, inadequate power supply and unstable voltage of part area in domestic and foreign countries, great inconvenience is caused to the use of electric power in the family then directly affected the safety of using electricity at home. To tackle this situation, we organized a strong research and development team and successfully developed the latest generation of automatic over/under voltage protection 3SL15N! It solves the problem of electricity safety in the family directly and effectively, and protects the power control reasonably of power lines to the secondary circuit and prevents from the damage of electrical appliances resulting from various factors!

The 3SL15N complies with modular design standards. The circuit boards of products adopt imported electronic components with reliable performance. When the power situation is unstable, its protection function will be automatically activated. Once the voltage exceeds the limited range of products, it will automatically cut off so as to protect the safety of electrical equipment and persons. When the voltage returns to normal, it will be automatically connected to restore power supply. So all operations are automatic. The four LED indicators on the panel show very intuitive work states, first indicator (red) is shinning to show that product is in the state of over voltage, power can break automatically, and the second indicator (green) is shinning when power is in normal supply, the third indicator (red) is shinning when under voltage state, when the fourth indicator (yellow) is shinning, power of product re-supply for 2-3 minutes.



## Full-automatic over-voltage/under-voltage protector 3SL15



### ■ Main Technical Specifications

1. Rated AC voltage 220V and frequency 50Hz
2. Max Passing Current 20A, 32A, 40A
3. Max. Loading power 4.4KVA, 6.6KVA, 8.8KVA
4. Over-voltage action cut-off value 260-270VAC
5. Over-voltage recovery value 248±5VAC
6. Under-voltage action cut-off value 180±5VAC
7. Under-voltage recovery value 170±5VAC
8. Electricity transmitting delay after cut-off 2~3 minutes
9. Action delayed time 1~6 seconds
10. Self power consumption ≥ 2W
11. Dimension 80 ×50 ×66.5mm (Length×Width×Height)

### ■ Features

3SL15 household full-automatic over-voltage /under-voltage delay protector is a new generation of household electrical equipment protector made by our company.

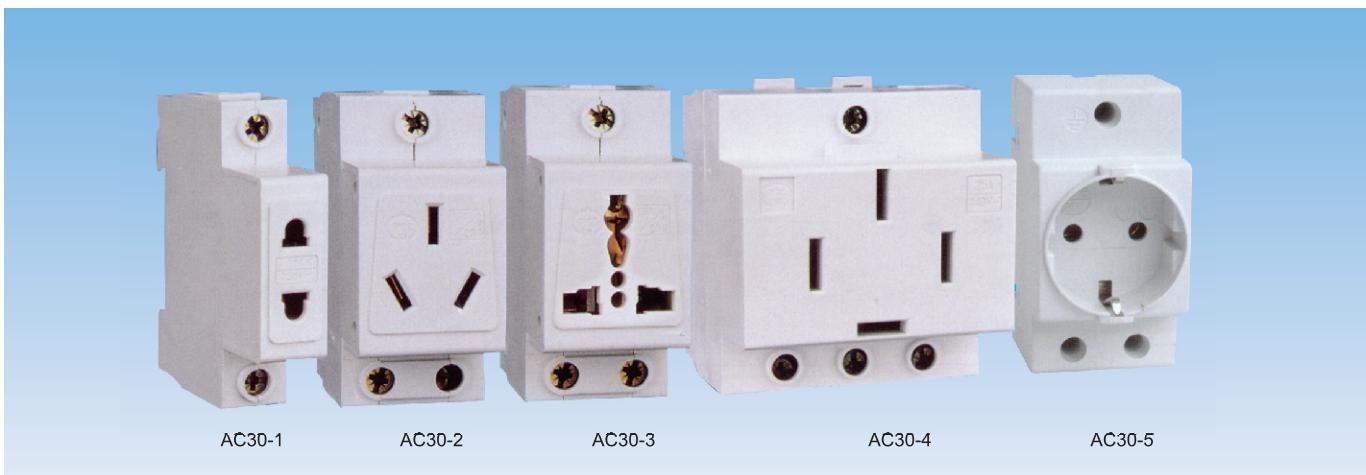
It is of excellent and reliable performance and can work normally under abnormal voltage. If the voltage exceeds protector action value the protector will cut off the power quickly so as to protect the electrical equipment. When the power supply voltage returns to normal value the protector will automatically connect the power supply. All these functions will be fulfilled automatically without manual operation.

Double color LED on the panel can indicate the working status of protector. The power is supplied normally when the indicator light is green. The protection function starts and cuts off the power when the indicator is red.

This series of product is of compact structure and beautiful appearance. The installation can be connected with MCB.

- Full-automatic over-voltage /under-voltage protection
- Input power delayed output
- Automatic recovery
- High voltage network protector
- Reliable work and long service life

## Modular Socket



## 3SWH Series Weather Protected Isolating Switches



3SWH1

### ■ Weather protected

The 3SWH Series of weather protected isolating switches cover wide range of switches suitable for virtually any external application, including single, double and triple pole switches from 20 to 80 Amps. The base mounted mechanism provides easier termination and more wiring room. Switch dimensions are 165mm × 82mm with an overall height of 85mm.

### ■ Isolating switches

Fixed Earth and Neutral connector bars with dual clamping screws per tunnel provide equal stripping lengths and secure clamping for all cables. Terminal bore size 5×6.6mm.

A safety feature for mounting switches to metal structures is the insulating caps that cover base mounting screws to totally protect them from any live cables.

Products Available	Phase & Voltage	IP Rating
3SWH1-20	20A 250V Single pole surface switch. Terminals accommodate 16mm <sup>2</sup> cable. M Rating220.	
3SWH1-35 3SWH1-63	35A/63A 250V Single pole. Terminals accommodate 16mm <sup>2</sup> cable. M Rating220.	
3SWH1-20A-16 3SWH1-35A-16 3SWH1-63A-25	Single phase 250V conduit: φ25mm	
3SWH2-20A-16 3SWH2-35A-16 3SWH2-63A-25	Double phase 440V conduit: φ25mm	
3SWH3-20A-16 3SWH3-35A-16 3SWH3-63A-25	Double phase 440V conduit: φ25mm	
3SWH3-55A-25 3SWH3-63A-25 3SWH3-80A-25	Double phase 440V conduit: φ32mm	
3SWH2-20	20A 440V Double Poles. Terminals accommodate 16mm <sup>2</sup> cables. M Rating 180.	56
3SWH2-35	35A 440V Double Poles. Terminals accommodate 16mm <sup>2</sup> cables. M Rating 180.	
3SWH2-63	63A 440V Double Poles. Terminals accommodate 25mm <sup>2</sup> cables. M Rating 160.	
3SWH3-20	20A 440V Triple Poles. Terminals accommodate 16mm <sup>2</sup> cables. M Rating 180.	
3SWH3-35	35A 440V Triple Poles. Terminals accommodate 16mm <sup>2</sup> cables. M Rating 180.	
3SWH3-55	55A 440V Triple Poles. Terminals accommodate 16mm <sup>2</sup> cables. M Rating 160.	
3SWH3-55-32CE	55A 440V Triple Pole. with 32mm conduit entry at each end. Terminals accommodate 25mm <sup>2</sup> cables. M Rating 160.	
3SWH3-63-32CE	63A 440V Triple Pole. with 32mm conduit entry at each end. Terminals accommodate 25mm <sup>2</sup> cables. M Rating 160.	
3SWH3-80-32CE	80A 440V Triple Pole. with 32mm conduit entry at each end. Terminals accommodate 25mm <sup>2</sup> cables. M Rating 150.	