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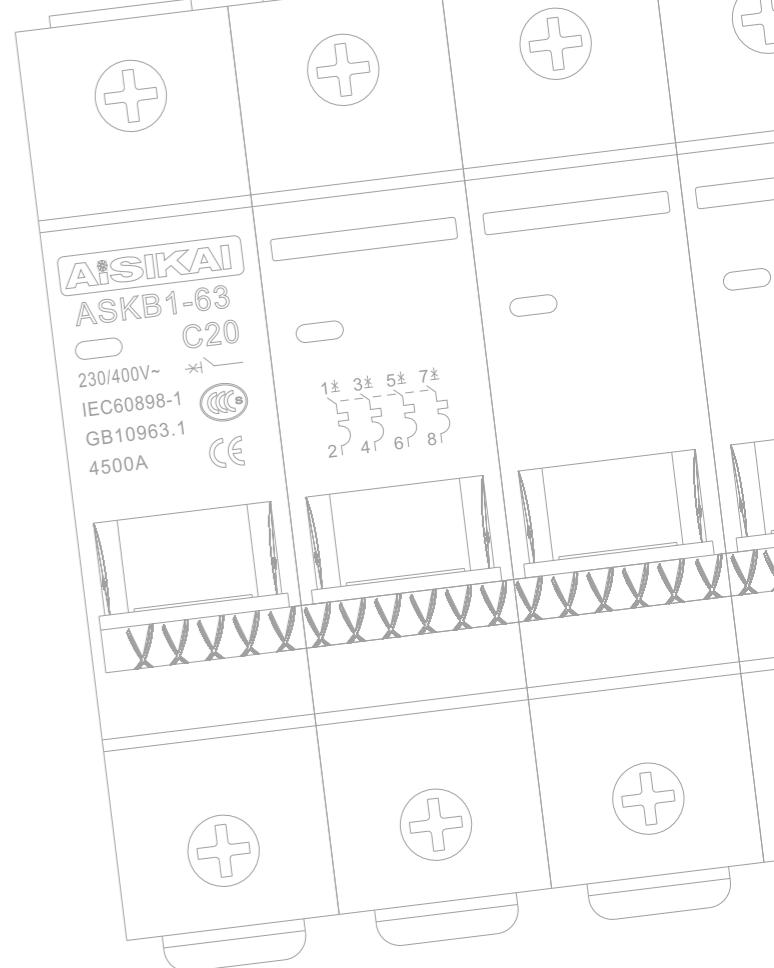


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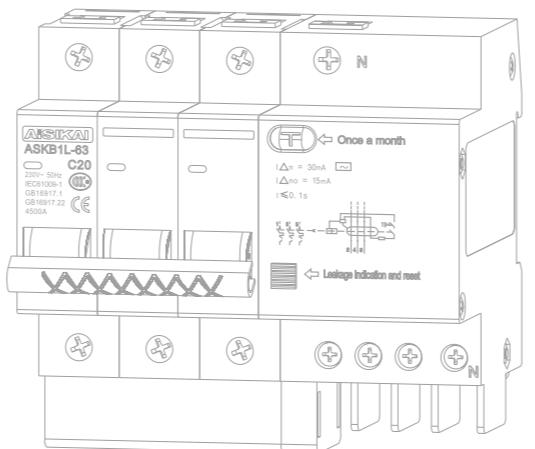


Contact

AiSIKAI®



MINIATURE CIRCUIT BREAKERS SELECTION GUIDE



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COMPANY PROFILE

Since established in 2007, JIANGSU AISIKAI ELECTRIC CO.,LTD has been committed to the R&D, manufacture and marketing of the high-quality low voltage electric switch. Our product line covers level I、II、III power distribution field . We are awarded as the " National High Tech Enterprise " and " Contract-respecting and Promise-keeping Enterprise " and own UKAS ISO9001 Quality Management System Certification , the European Certification CE and SGS Global Qualified Supplier Certification . So far , We have several invention patents , utility model patent,appearance patent All products have Chinese Compulsory Certification CCC . From 2014 , we have been recognized as " Yangzhou City Engineering Technology Center"and" Chinese Adopting International Standard Unit". "QUALITY 、 SERVICES 、 REPUTATION 、 INNOVATION " is AISIKAI company everlasting enterprise development concepts , we actively pursue progress , always standing inthe customer's point of view and improvement, we believe, AISIKAI IN your support and love, will flourish, vibration of wings and fly!





MINIATURE CIRCUIT BREAKERS



MCB

MINIATURE CIRCUIT BREAKERS

ASKB1 series miniature Circuit Breaker(MCB) is the new generation Products with Compact structure which is based on market demand. Here also has residual current miniature circuit breaker, electronic over-voltage and under-voltage miniature circuit breaker and prepaid meter used miniature circuit breaker which all derived from normal type MCB. ASKG2 is a new type Miniature Isolating switch which is same shell as ASKB1 MCB. ASKB1 MCB and ASKG2 Isolating switch can work together.

ASKB2 series is smaller than ASKB1 series, which is more suit for house using to protect overload and short circuit



Application



ASKB1L SERIES
63A:3A-63A
125A:63A-125A
Poles:1P+N,2P,3P,3P+N,4P

Residual current operated MCB

ASKB1-63GQ SERIES
63A:3A-63A
Poles:1P+N,3P+N

overvoltage and undervoltage protection MCB

ASKB1-63S SERIES
63A:16A-63A
125A:63A-100A
Poles:1P+N,3P+N

Prepaid meter used MCB

GB10963.1、IEC60898-1

Functional derivation



ASKB1 SERIES
63A: 3A-63A
125A: 63A-125A
Poles: 1P, 2P, 3P, 4P



Ultra-thin household MCB

ASKB2 SERIES
32A:6A-32A
Poles:1P+N



ASKB2L SERIES
32A:6A-32A
Poles:1P+N

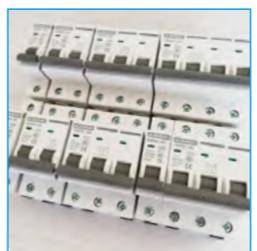
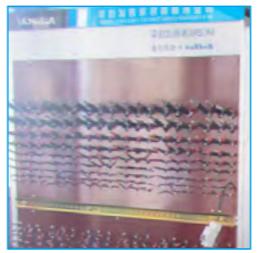


ASKG2 SERIES
63A:16A-63A
125A:63A-125A
Poles:1P,2P,3P,4P

Structural derivation

Wide application range

ASKB series mini circuit breakers conform to IEC/GB standards and have passed the national compulsory CCC certification. It can be applied to the third level distribution network system with rated working voltage below AC400V and rated current below 125A. It has the functions of short circuit protection, overload protection, control and isolation.



Arc extinguishing system Safe and reliable

The arc extinguishing system of ASKB series miniature circuit breakers consists of arc guide plate, arc partition wall and arc extinguishing chamber. The arc is transferred from contact to arc angle within 1ms and the whole arc extinguishing is completed within 4ms.

Clear identification

Carefully designed opening and closing indicator window, it is easy to know the state of close or open via color red and green.

Various optional accessories

ASKB series miniature circuit breakers can be equipped with abundant accessories to meet the functional requirements of various industry customers.

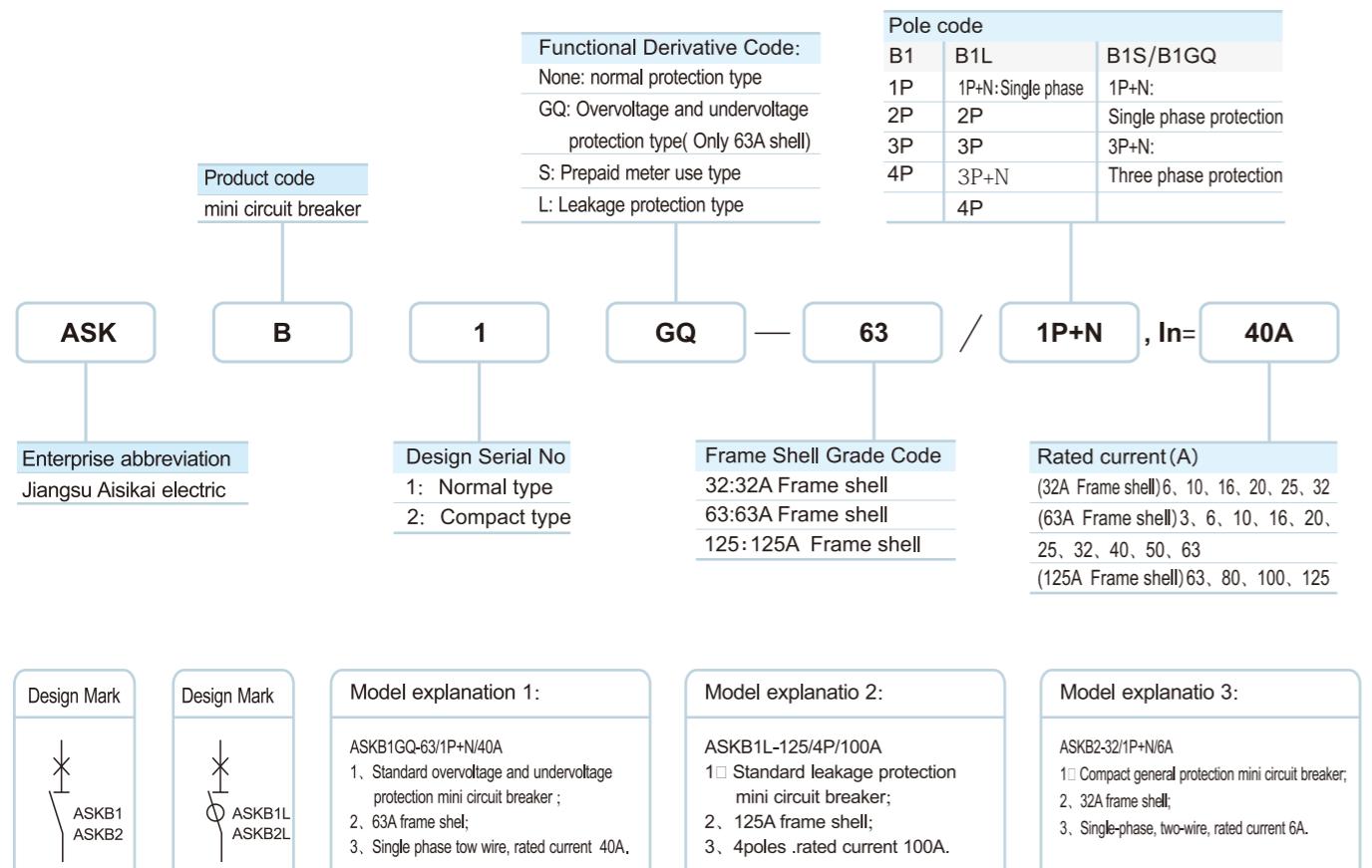
Overvoltage and undervoltage Release: MN+MV

Shunt release: MX+OF

Auxiliary contact: OF

Alarm contact: SD

ASKB series Miniature circuit breaker selection Table



Certification



ASKB1 Series normal type Mini Circuit Breakers

Product Overview



Classify

- ASKB1-63 series high-segment miniature circuit breaker has the characteristics of advanced structure, reliable performance, high breaking capacity and Compact appearance. The shell and other parts are made of impact resistant and high flame retardant materials. Used in places with AC 50Hz or 60Hz, rated working voltage below 400V and rated current below 125A. It is mainly used for lighting of office buildings, residential buildings and similar buildings, overload and short circuit protection of distribution wires and equipment, It can also control the opening and closing of electrical devices and lighting lines in normal conditions. Three new products, overvoltage protection type, prepaid meter special type and residual current protection type, are derived from the addition of different functional components in the interior.

Classification by rated current (A) of overcurrent release

63 frame shell: 3, 6, 10, 16, 20, 25, 32, 40, 50, 63A;
125 frame shell: 63, 80, 100, 125;

Classification by Instantaneous release type

Type C: Protecting Inductive Load and High Lighting System
Release characteristics: Instantaneous release range (5–10) In
Type D: Protection of high inductive loads and impact loads with large starting currents (e.g. motors, transformers, etc.)
Release characteristics Instantaneous release range (10–16) In

Classification by using function

Normal type (63 frame shell, 125A frame shell)
Overvoltage and undervoltage type(GQ type, 63A frame shell)
Prepaid meter use type(S type, 63 frame shell, 125A frame shell)
Leakage protection type(L type, 63 frame shell, 125 frame shell)

Performance advantages

- Innovative design of high breaking structure, up to 10KA
- Design of shell ventilation groove, active heat dissipation, reducing temperature rise
- Composite high conductive material, longer service life
- Ergonomic operation design, anti-skid handle easy to operate

Install and use conditions:



GB10963.1、IEC60898-1

Category	Requirement
Temperature	-5°C- +40 °C, 24H average not more than +35 °C
Altitude	<2000m
Atmospheric conditions	In the +40 °C conditions, the average humidity not more than 50%, Relative humidity does not exceed 90% when the average temperature of the wettest month does not exceed +20 C.
Install type	II / III
Class of pollution	II
Installation	Installed vertically or horizontally with YH35-7.5 Standard Guide rail.
Installation conditions	The inclination between the installation surface and the vertical surface shall not exceed 5 degrees, and there shall be no significant impact and vibration at the installation site.
Connection method	Screw down the wiring
Incoming line method	normal type mcb : Up-in and bottom out or Bottom-in and up out; leakage type mcb : Up-in and bottom out

ASKB1 Mini circuit breaker(Normal type)

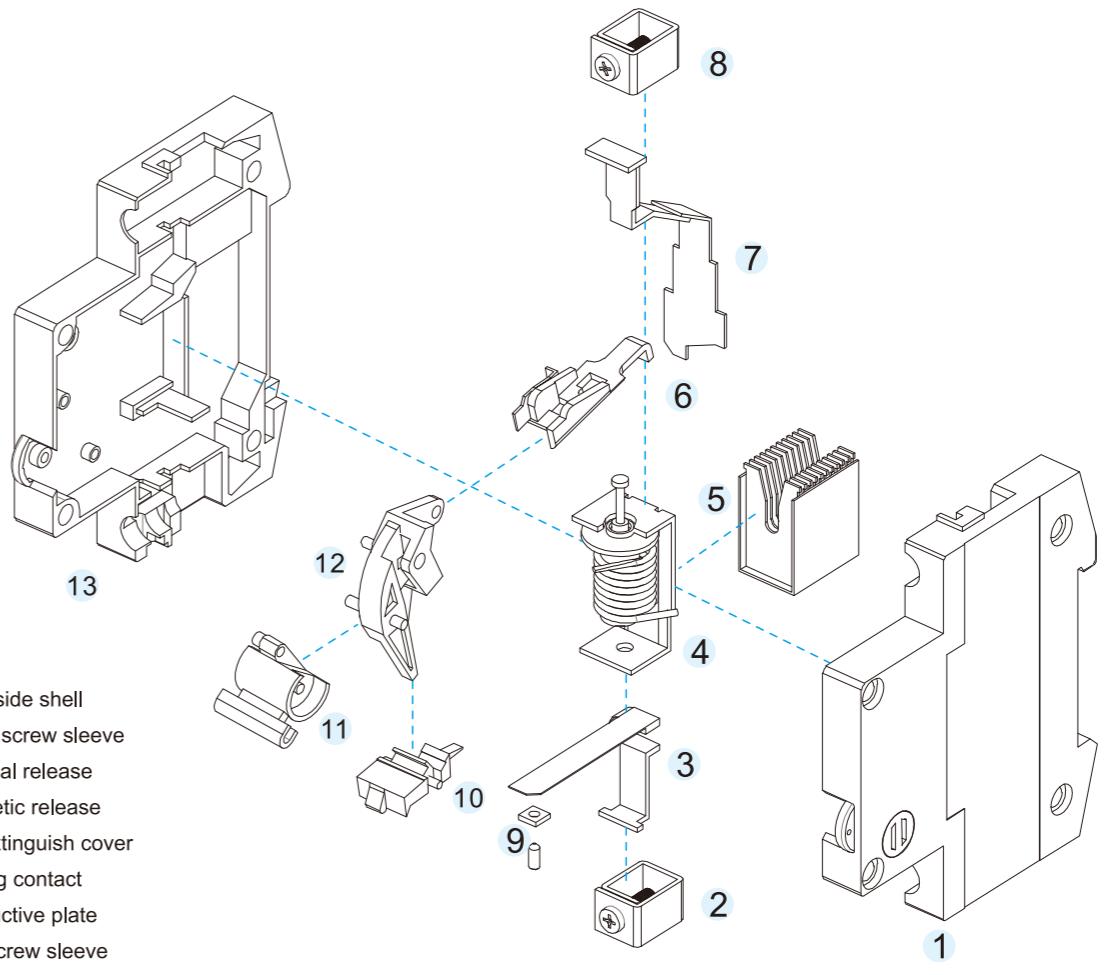
Product Overview

- ASKB1 Mini circuit breaker is suitable for AC 50Hz or 60Hz, rated working voltage below 400V, rated current below 125A, Mainly used in office buildings, residential buildings and similar building lighting, distribution lines and equipment overload, short circuit protection, it can also control the opening and closing of electrical devices and lighting lines infrequently.

Main technical parameters

63A Frame shell		
General distribution protection		
Pole	1P	2P
Electrical properties		3P
Function		
Rated frequency	f (Hz)	50
Rated working voltage	Ue (V AC)	230/400 400 400 400
Rated current	In (A)	3, 6, 10, 16, 20, 25, 32, 40, 50, 63
Impulse withstand voltage	Uiimp (kV)	4
Instantaneous release type		
Rated short-circuit capacity cu(kA)	L type	4.5
	H type	6
release type		
Service life	(0~C)	Mechanical life 20000
		Electrical life 6000
Control and indication		
Optional accessories(Multiple choice)		Alarm contact SD, Auxiliary contact OF, Either Shunt release MX+OF or over-voltage /under-voltage release MN+MV
Connection and installation		
Protection level	Ip20	
Handle lock	None	
Wiring capability	(mm²)	1~25
Using ambient temperature	(°C)	-5~+40
Humid heat resistance		
Altitude	(m)	< 2000
Air relative humidity	At +20°C, not exceed 95%, and +40 °C, not exceed 50%	
Pollution level	2	
Installation environment	Place without significant vibration or shock	
Installation category	III	
Installation mode	DIN standard rails	
Outline dimensions(mm)	a	18 36 54 72
L*W*H	b	80.5
	c	76 78

Introduction of Main Structure



1. Right side shell
2. Outlet screw sleeve
3. Thermal release
4. Magnetic release
5. Arc Extinguish cover
6. Moving contact
7. Conductive plate
8. Inlet screw sleeve
9. Regulating screw
10. Tripping linkage
11. Open/close handle
12. Crescent plate
13. Left side shell

●Structure overview	●Operating mode	●Magnetic release	●Thermal release	●Arc extinguishing cover
ASKB1 mini circuit breaker realizes the open and close of the circuit by manually operating the On/ Off handle. When the circuit is short-circuit or seriously overloaded, magnetic release promotes the action of free release mechanism, and the main contact disconnects the main circuit. When the circuit is overloaded, the thermal release actuates the free release mechanism, completes the opening, disconnects the main circuit, and realizes the purpose of protecting the distribution line.	Mini circuit breaker is Integral structure, Precision combination of internal parts. Switch on or off by manual operation.	The coil of the magnetic release is connected in series with the main circuit. When the circuit is short-circuit or seriously overloaded, the magnetic release relies on electromagnetic induction to produce magnetic force, which makes the armature absorb in an instant and drives the free release mechanism to move the main contact to disconnect the main circuit. When the main circuit is overloaded, the heat element of the thermal release makes the metal sheet bend, promotes the action of the free release mechanism, and completes the protective switch-off.	The thermal release is connected in series with the main circuit. When main circuit is in overload, the thermal element of the thermal release is heated due to the increase of the current, which makes the bimetal sheet bend. The automatic release mechanism is driven to operate within a certain period of time to complete the protective switch-off.	The mini circuit breaker adopts multi-layer overlapping arc-extinguishing cover, which is installed under the contacts. Each arc-extinguishing plate is 60 degree angle to the horizontal surface. During the breaking, the arc is quickly introduced into the arc-extinguishing cover by relying on the dual functions of induction force of electromagnetic field and air flow, so as to achieve rapid arc-extinguishing.

Main technical parameters

125A frame shell		
General distribution protection		
Pole	1P	2P
Electrical properties		3P
Function		4P
Short-circuit protection\ overload protection\ Isolation/control		
Rated frequency	f	(Hz)
Rated working voltage	Ue	(V AC)
Rated current	In	(A)
Impulse withstand voltage	Uimp	(kV)
Instantaneous release type	C/D	
Rated short-circuit capacity Icu(kA)	10	
Release type	Thermal magnetic	
Service life	(0~C)	Mechanical life
		20000
		Electrical life
		6000
Control and indication		
Optional accessories(Multiple choice) Alarm contact SD, Auxiliary contact OF, Either Shunt release MX+OF or over-voltage /under-voltage release MN+MV		
Connection and installation		
Protection level	Ip20	
Handle lock	None	
Wiring capability	(mm ²)	1~50
Using ambient temperature	(°C)	-5~+40
Humid heat resistance	2-class	
Altitude	(m)	≤ 2000
Air relative humidity	At +20°C, not exceed 95%, and +40 °C, not exceed 50%	
Pollution level	2	
Installation environment	Place without significant vibration or shock	
Installation category	III	
Installation mode	DIN standard rails	
Outline dimensions(mm)	a	27
L*W*H	b	54
	c	81
		80.5
		78.5

ASKB1GQ Overvoltage and undervoltage protection mini circuit breaker

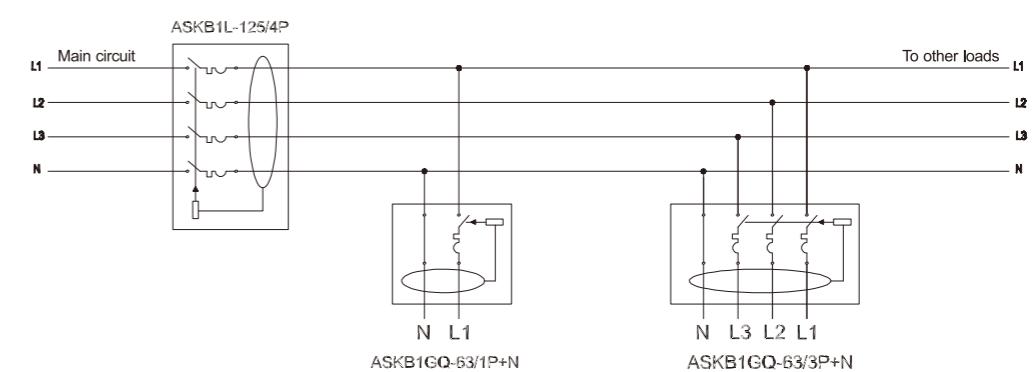
Product overview

- ASKB1GQ over-voltage and under-voltage protection mini circuit breaker adds voltage detection circuit which is based on ASKB1-63 normal type. It can avoid the damage of electrical appliances caused by unstable circuit voltage and provide security. It is suitable for 50Hz, rated working voltage AC 230V/400V and rated current 63A. It can be used to protect short circuit, overload and over-voltage of lighting distribution system lines. It can also control the opening and closing of electrical devices and lighting lines infrequently under normal conditions.

Main technical parameters

ASKB1GQ series		
Pole	1P+N(one pole two wire)	3P+N(three poles four wire)
Electrical properties	Short-circuit protection\ overload protection\ Over-voltage protection\ under-voltage protection\ Isolation/control	
Function	50	
Rated frequency	f	(Hz)
Rated working voltage	Ue	(V AC)
Oversupply and under voltage protection range	(V AC)	Under voltage: 170V ± 10% Over voltage: 280V ± %
Rated current	In	(A)
Instantaneous release type	63 frame shell (16, 20, 25, 32, 40, 50, 63)	
Rated short-circuit capacity Icu(kA)	L	4.5
	H	6
Release type	Thermal magnetic+Electronic release:	
Service life	(0~C)	Mechanical life
		20000
		Electrical life
		6000
Connection and installation		
1P+N outline size is detailed in ASKB1-63/2P data, and 3P+N outline size is detailed in ASKB1-63/4P data.		

Electrical diagram



ASKB1S prepaid meter use mini circuit breaker

Product overview

- ASKB1S prepaid meter use mini circuit breaker is composed of ASKB1 type and control signal release device. It has signal under-voltage and delay excitation release function. It is suitable for AC 50Hz, rated working voltage 230/400V, rated current to 125A, the line is controlled by remote control or automatic signal control, and it also protects the line from overload and short circuit. It can be used as an infrequent conversion of lines, and is widely used in IC prepaid watt-hour meters to control on or off.

Main technical parameters

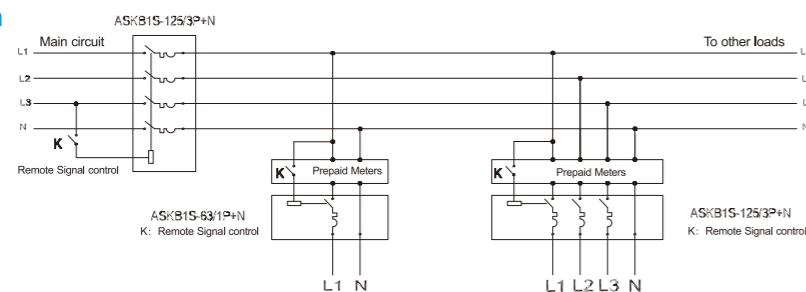
ASKB1S series		
Pole	1P+N(one pole two wire)	3P+N(three poles four wire)
Electrical properties		
Function	Short-circuit protection\ overload protection\ Over-voltage protection \ under-voltage protection\ Isolation\control	
Rated frequency f (Hz)	50	
Rated working voltage Ue (V AC)	230	400
Overvoltage and under voltage protection range US (V AC)	230	
Rated current In (A)	63 frame shel (3, 6, 10, 16, 20, 25, 32, 40, 50, 63) 125 frame shel (63, 80, 100, 125)	C/D
Instantaneous release type	L	See the corresponding ASKB1 current specifications for details.
Rated short-circuit capacity Icu(kA)	H	See the corresponding ASKB1 current specifications for details.
Release type	Thermal+Electronic release	
Service life (0~C)	Mechanical life	20000
	Electrical life	6000
Connection and installation		
1P+N outline size is detailed in ASKB1-63/2P data, and 3P+N outline size is detailed in ASKB1-63/4P data.		

Note: Parameters without indication, see the corresponding parameter of the current frame ASKB1 2P/4P data.

Working Principle

- When using, Adding control voltage to the signal control release of circuit breaker through the signal input terminal. Means that the signal voltage can be supplied by the remote control circuit in the prepaid meter. Then push the breaker handle to the closed position to connect the circuit. When the overload fault occurs, the overload current bends the thermo-bimetallic elements, and the overload tripper acts to promote the reset of the locking mechanism, then the breaking line can be realized; When the short-circuit fault occurs, the short-circuit current causes the instantaneous tripper to act, pushes the locking mechanism to reset, and realizes the interruption function.

Electrical diagram



ASKB1L series leakage protection mini circuit breaker

Product overview

- ASKB1L leakage protection mini circuit breaker is composed of ASKB1 common type and leakage tripper. It is the latest type of current action electronic leakage circuit breaker. Its main components include zero-sequence current transformer, electronic detection board, tripper and micro-breaker. Used in AC 50 Hz, rated working voltage 230, 400 V, rated current 125 A lighting and distribution system lines. It can protect the line from overload, short circuit and leakage.

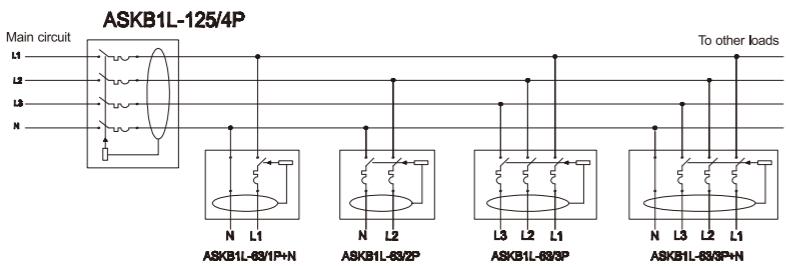
Main technical parameters

63A frame		
General distribution protection (IEC/EN 61009-1; GB 16917.1)		
Pole	1P+N	2P
Electrical properties	3P	3P+N
Function	4P	Short-circuit protection\ overload protection\ Leakage protection\ Isolation\control
Residual current type	AC type (ensure release of residual sinusoidal AC current applied suddenly or rising slowly)	
Rated frequency f (Hz)	50	
Rated working voltage Ue (V AC)	230	230
Rated residual operating current IΔn (mA)	400	
Rated current In (A)	Default setting 30mA(Non-action current 15mA), Customizable 50, 100, 200, 300mA	
Instantaneous release type	3, 6, 10, 16, 20, 25, 32, 40, 50, 63	
Rated residual on and off capacity A	C/D	
Rated short-circuit capacity Icu(kA)	L	2000
	H	4.5
Release type	H	
Service life (0~C)	Mechanical life	6
	Electrical life	Thermal magnetic
Control and Instruction	20000	
Optional accessories(Multiple choice)	6000	
Connection and installation	Alarm contact SD, Auxiliary contact OF	
Protection level	Ip20	
Wiring capability (mm²)	1-25	
Using ambient temperature (°C)	-25~+60	
Humid heat resistance	2-class	
Altitude (m)	< 2000	
Air relative humidity	At +20°C, not exceed 95%, and +40 °C, not exceed 50%	
Pollution level	2	
Installation environment	Place without significant vibration or shock	
Installation category	III	
Installation mode	DIN standard rails	
Outline dimensions(mm)	a 1-32A	45
L*W*H	a 40-63A	63
	b	90
	c	99
		117
		135
		96
		78

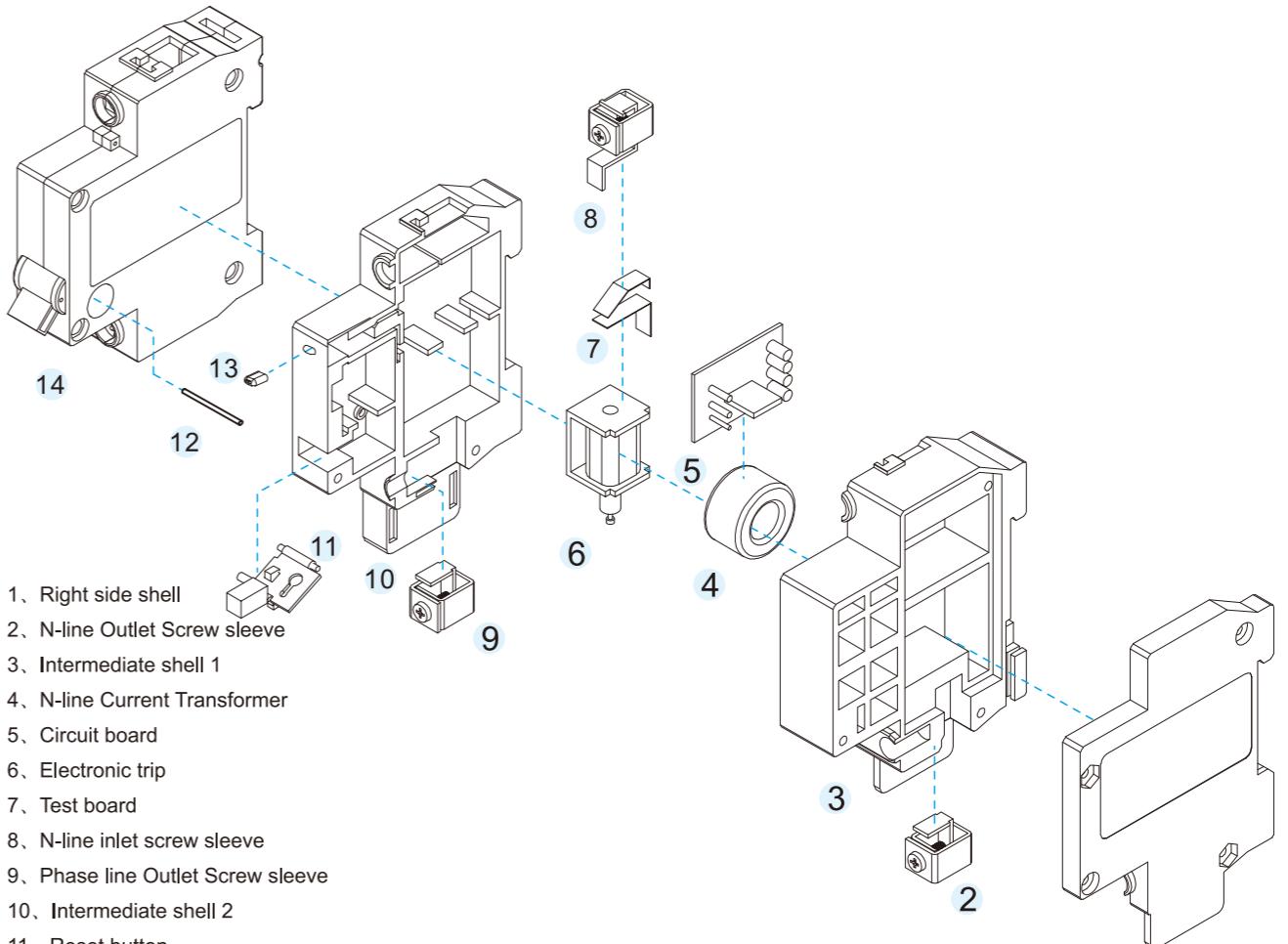
Main technical parameters

125A frame		
General distribution protection (IEC/EN 61009-1; GB 16917.1)		
Pole	1P+N	2P
Electrical properties		3P
Function		3P+N
Residual current type		4P
Rated frequency f	(Hz)	50
Rated working voltage Ue	(V AC)	230 230 400 400 400
Rated residual operating current IΔn	(mA)	Default setting 50mA(Non-action current 25mA), Customizable 30, 100, 150, 200, 300mA
Rated current In	(A)	50, 63, 80, 100
Instantaneous release type	C/D	
Rated residual on and off capacity A	2000	
Rated short-circuit capacity Icu	kA	10
Release type	Thermal magnetic	
Service life (0~C)	Mechanical life	20000
	Electrical life	6000
Control and Instruction		
Optional accessories(Multiple choice)		
Alarm contact SD, Auxiliary contact OF		
Connection and installation		
Protection level	Ip20	
Wiring capability (mm²)	1-25	
Using ambient temperature (°C)	-25~+60	
Humid heat resistance	2-class	
Altitude (m)	< 2000	
Air relative humidity	At +20°C, not exceed 95%, and +40 °C, not exceed 50%	
Pollution level	2	
Installation environment	Place without significant vibration or shock	
Installation category	III	
Installation mode	DIN standard rails	
Outline dimensions(mm)	a	54
L*W*H	b	113
	c	78.5

Electrical diagram



Introduction of Main Structure



- 1. Right side shell
- 2. N-line Outlet Screw sleeve
- 3. Intermediate shell 1
- 4. N-line Current Transformer
- 5. Circuit board
- 6. Electronic trip
- 7. Test board
- 8. N-line inlet screw sleeve
- 9. Phase line Outlet Screw sleeve
- 10. Intermediate shell 2
- 11. Reset button
- 12. Linkage rod
- 13. Test button
- 14. ASKB1

●Structure overview	●Operating mode	●Circuit board	●Electronic release	●Test button
Leakage protection mini circuit breaker is composed of ASKB1 and leakage detection mechanism. Manual operation for On/Off.	Leakage mini circuit breaker realizes circuit on or off by manual operation of open or close handle. When the circuit is short-circuited or overloaded, the magnetic or thermal trippers drive the free tripping mechanism, and the main contacts disconnect the main circuit to protect the distribution line. When leakage occurs, the current vector of the N-line current transformer is not equal to zero. The circuit board amplifies the voltage signal of the transformer, drives the action of the electronic tripper, and drives the tripping mechanism of ASKB1 through the linkage bar to realize the tripping protection.	which can sensitively detect the milliampere level signal emitted by N-line transformer, then the signal is amplified after analysis and processing., High Power Control by Low Power to drive electronic release operation.	Electronic release is the main action part of the leakage protection mechanism, When the amplified signal of circuit board reaches the voltage of driving tripper, it acts immediately. The linkage bar drives the tripping mechanism of ASKB1 and disconnects the main circuit to protect the distribution line.	Test button is set on the leakage min circuit breaker. After pressing the button, the driving circuit of the electronic release is turned on, and the release immediately acts to drive the relevant mechanism to realize the opening, which is used to test the working state of the leakage type circuit breaker regularly.

AKSB1 Series Overcurrent Release Characteristic Table

ASKB1-63A

Test current(A)	Rated current(A)	Rated time	Expected results	Initial status	Note
1.13In	All values	T≤1h	Not release	Ambient temperature status	Current rises steadily to the specified value within 5 seconds.
1.45In	All values	T≤1h	Release	Ambient temperature status	Close the auxiliary switch to turn on the power supply
2.55In	In≤32A	1s < T < 60S	Release	Ambient temperature status	Close the auxiliary switch to turn on the power supply
2.55In	In≤32A	1s < T < 120S	Release	Ambient temperature status	Close the auxiliary switch to turn on the power supply
5In (C)	All values	T≤0.1S	Not release	Ambient temperature status	Close the auxiliary switch to turn on the power supply
10In (C)	All values	T < 0.1S	Release	Ambient temperature status	Close the auxiliary switch to turn on the power supply
10In (C)	All values	T≤0.1S	Not release	Ambient temperature status	Close the auxiliary switch to turn on the power supply
14In (C)	All values	T < 0.1S	Release	Ambient temperature status	Close the auxiliary switch to turn on the power supply

ASKB1-125A

Test current(A)	Rated current(A)	Rated time	Expected results	Initial status	Note
1.05In	In=63	T≤1h	Not release	Ambient temperature status	
1.05In	In > 63	T < 2h	Not release	Ambient temperature status	
1.30In	In=63	T < 1h	Release	Following the preceding test	Current rises steadily to the specified value within 5 seconds.
1.30In	In > 63	T < 2h	Release	Following the preceding test	
8In	In > 63	T≤0.2S	Not release	Ambient temperature status	
12In	In > 63	T < 0.2S	Release	Ambient temperature status	

ASKB1GQ-63A

Test current(A)	Rated current(A)	Rated time	Expected results	Initial status	Note
1.13In	All values	1≥In	Not release		
1.45In	All values	1≤1 In	Release		(a) test after 5S to current regulations
2.55In	≤32	1S < t < 60S	Release	Ambient temperature status	
	> 32	1S < t < 120S			
5In (C型)	All values	t≥0.1S	Not release		Close the auxiliary switch to turn on the power supply
10In (C型)	All values	t < 0.1S	Release		
10In (D型)	All values	t≥0.1S	Not release		
14In (D型)	All values	t < 0.1S	Release		

ASKB1L-63A

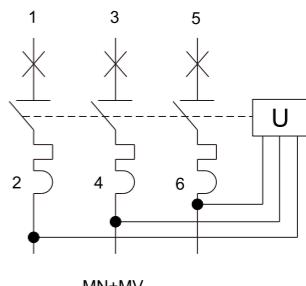
Test current(A)	Rated current(A)	Rated time	Expected results	Initial status	Note
1.13In	6-63	1≥In	Not release	Ambient temperature status	
1.45In	6-63	1≤1 In	Release	follow preceding	The current rises steadily to the specified value within 5S.
2.55In	6-63	1S < t < 60S	Release		In≤32
		1S < t < 120S	Release	Ambient temperature status	In > 32
5In		t≥0.1S	Not release	C	
10In	6-63	t < 0.1S	Release		
10In		t≥0.1S	Not release		
16In		t < 0.1S	Release	D	

Remarks: Ambient temperature status mean No load before test in ambient temperature

Optional Accessories - ASKB1 Series

Over-voltage and under-voltage tripper: MN+MV

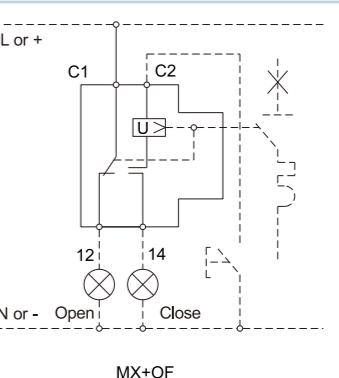
Shunt release (MX+MV) : For main circuit automatic protect in case of over/under voltage
Under-voltage protection value: 170V ± 10% (153-187V)
Over-voltage protection value: 280V ± 5% (266-294V)
Assembly: Installed on the right side of the circuit breaker
Application: The main circuit has been over/under-voltage is to carry out automatic protection
Width: 18mm



MINIATURE CIRCUIT BREAKERS
ASKB1 SERIES

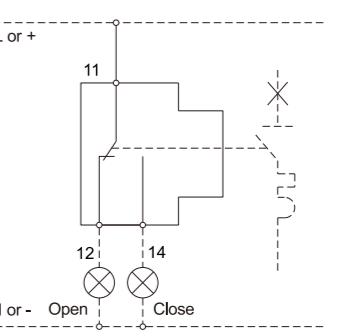
Shunt release: MX+OF

Shunt release (MX+OF) : Used for remote control release
Release voltage: DC24V and AC220/380V
Assembly: Installed on the right side of the circuit breaker
Application: remote control the breaking of the circuit
Width: 18mm



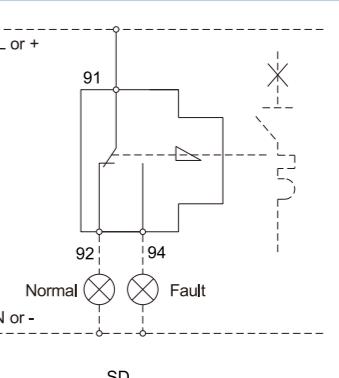
Auxiliary contact: OF

Auxiliary contact (OF) : Used to indicate the status of the circuit breaker
Assembly: Installed on the left side of the circuit breaker
Application: Used to indicate the on-off state of the circuit
Width: 9mm



Alarm contact: SD

Alarm contact (SD) : Used to indicate the disconnection state of circuit breaker when trip of fault
Assembly: Installed on the left side of the circuit breaker
Application: Indicate the fault alarm of equipment
Width: 9mm



ASKB2 series Mini circuit breaker

Product overview



- ASKB2 series home circuit breakers are suitable for commercial office buildings, residential buildings and general industrial terminal distribution lines. Provide overload and short-circuit protection, also use for infrequently switch. Use in AC 50/60Hz, rated voltage 230V, rated current 32A.
 - The circuit breaker adopts innovative design of "phase line + N line", Can disconnect phase line and neutral line at the same time, use safely, it avoids the personal and fire hazards caused by the reverse connection between phase line and neutral line or the high ground potential caused by neutral line when using unipolar circuit breaker. The compact shape design makes it only 18 mm thick. Meet the high standard requirement of components volume for household distribution boxes. It has a high breaking ability and adopts modular design. It can be used in conjunction with a variety of accessories to meet customers' requirements.
- Standard: GB10963.1, IEC60898-1

Classify

Classification by rated current (A) of overcurrent release

32 frame shell: 6、10、16、20、25、32A

Classification by Instantaneous release type

Type B: Protecting Pure Resistive Load and Low Sensitive Lighting System

Release characteristics: Instantaneous release range (3-5) In

Type C: Protecting Inductive Load and High Lighting System

Release characteristics: Instantaneous release range (5-10) In

Classification by using function

Normal type (Overload, Short Circuit, Isolation and Control Functions)

Leakage protection type (L type, Overload, Short Circuit, Isolation and Control Functions)

Performance advantages

- Innovative "Phase Line + N Line" design structure, width 18MM, saving 50% assembly space
- Design of shell ventilation groove, active heat dissipation, reducing temperature rise
- Composite high conductive material, longer service life
- Ergonomic operation design, anti-skid handle easy to operate

Install and use conditions:

Application



GB10963.1、IEC60898-1

Category	Requirement
Temperature	-5°C~+40°C, 24H average not more than +35°C
Altitude	<2000m
Atmospheric conditions	In the +40 °C conditions, the average humidity not more than 50%, Relative humidity does not exceed 90% when the average temperature of the wettest month does not exceed +20 °C.
Install type	II / III
Class of pollution	II
Installation	Installed vertically or horizontally with YH35-7.5 Standard Guide rail.
Installation conditions	The inclination between the installation surface and the vertical surface shall not exceed 5 degrees, and there shall be no significant impact and vibration at the installation site.
Connection method	Screw down the wiring
Incoming line method	normal type mcb : Up-in and bottom out or Bottom-in and up out; leakage type mcb : Up-in and bottom out

ASKB2 min circuit breaker

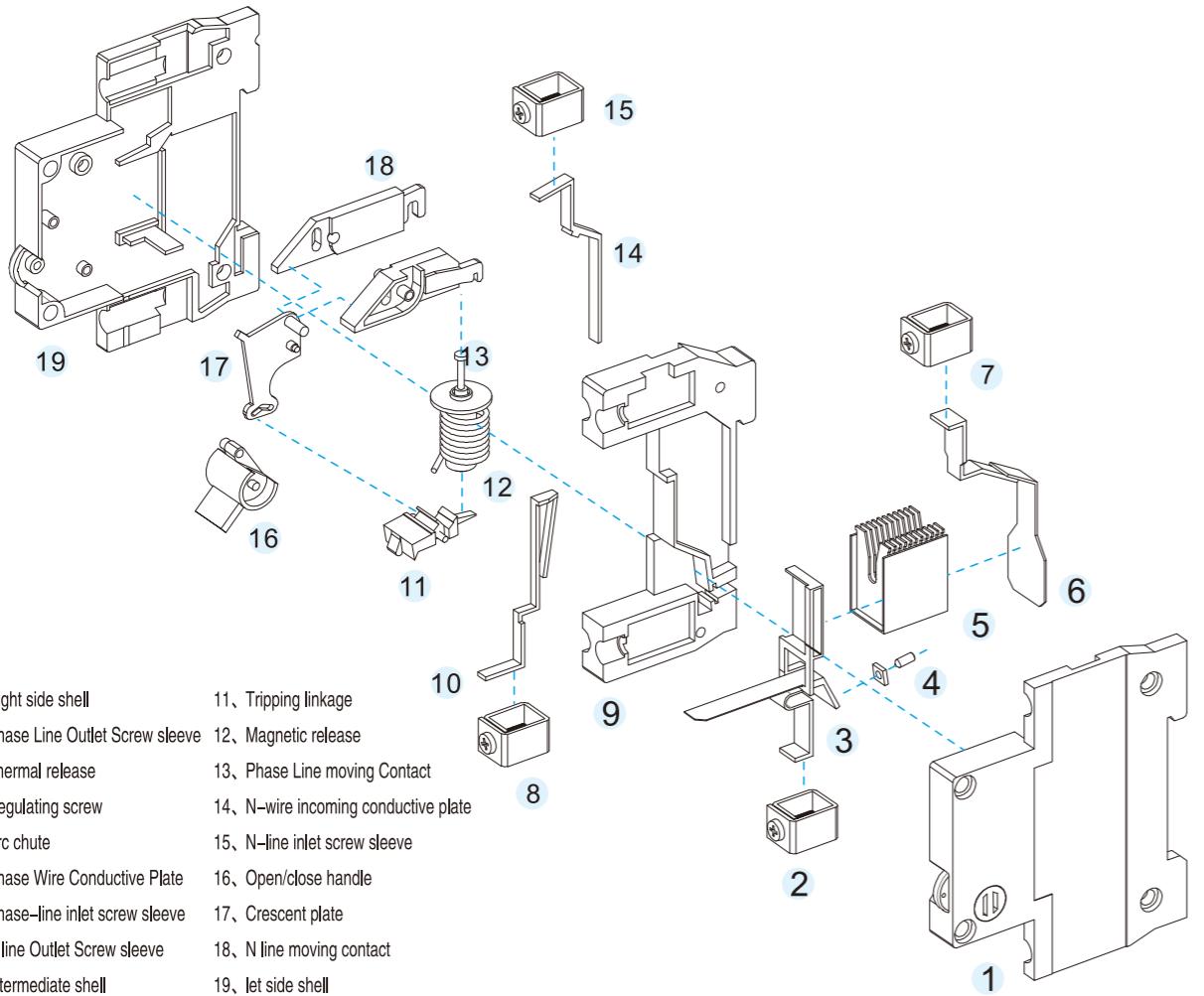
Product overview

- ASKB2 mini circuit breaker, suitable for single-phase residential lines with AC 50Hz or 60Hz, rated voltage 230V or less, to protect electric lines from overload or short circuit. High breaking capacity, Small volume (width only 18 mm) Zero and Fire Line close and open at the same time, Avoid causing fire or personal injury. It is suitable for the field of civil residence.

Main technical parameters

32A frame		General distribution protection		
Pole		1P+N(Single-phase double wire. Zero and Fire Line close and open at the same time)		
Electrical properties		Short- circuit protection\ overload protection \isolation/control		
Rated frequency	f (Hz)		50	
Rated working voltage	Ue (V AC)		230	
Rated current	I _n (A)		6、10、16、20、25、32	
Impulse withstand voltage	U _{imp} (kV)		4	
Instantaneous release type			B/C	
Rated short-circuit capacity Icu(kA)			3	
Release type		Thermal magnetic		
Service life (0~C)	Mechanical life		20000	
	Electrical life		4000	
Control and indication		No optiona		
Optional accessories(Multiple choice)				
Connection and installation				
Protection level		IP20		
Handle lock		None		
Wiring capability (mm ²)		1~25		
Using ambient temperature (°C)		-5~+40		
Humid heat resistance		2-class		
Altitude (m)		< 2000		
Air relative humidity		At +20°C, not exceed 95%, and +40 °C, not exceed 50%		
Pollution level		2		
Installation environment		Place without significant vibration or shock		
Installation category		III		
Installation mode		DIN standard rails		
Outline dimensions(mm)	a		18	
	b		81	
L*W*H	c		76	

Introduction of Main Structure



● Structure overview	● Operating mode	● Magnetic release	● Thermal release	● Arc extinguishing cover
ASKB1 mini circuit breaker is integral structure, precision combination of internal parts. Switch on or off by manual operation.	Mini circuit breaker realizes the open and close of the circuit by manually operating the On/Off handle. When the circuit is short-circuit or seriously overloaded, magnetic release promotes the action of free release mechanism, and the main contact disconnects the main circuit. When the circuit is overloaded, the thermal release actuates the free release mechanism, completes the opening, disconnects the main circuit, and realizes the purpose of protecting the distribution line.	The coil of the magnetic release is connected in series with the main circuit. When the circuit is short-circuit or seriously overloaded, the magnetic release relies on electromagnetic induction to produce magnetic force, which makes the armature absorb in an instant and drives the free release mechanism to move the main contact to disconnect the main circuit. When the main circuit is overloaded, the heat element of the thermal release makes the metal sheet bend, promotes the action of the free release mechanism, and completes the protective switch-off.	The thermal release is connected in series with the main circuit. When the main circuit is in overload, the thermal element of the thermal release is heated due to the increase of the current, which makes the bimetal sheet bend. The automatic release mechanism is driven to operate within a certain period of time to complete the protective switch-off.	The mini circuit breaker adopts multi-layer overlapping arc-extinguishing cover, which is installed under the contacts. Each arc-extinguishing plate is 60 degree angle to the horizontal surface. During the breaking, the arc is quickly introduced into the arc-extinguishing cover by relying on the dual functions of induction force of electromagnetic field and air flow, so as to achieve rapid arc-extinguishing.

ASKB2L leakage protection mini circuit breaker

Product overview

● ASKB2L Leakage Protection Mini Circuit Breaker is suitable for lines of AC 50Hz, rated voltage 230V, rated current below 32A. Used for indirect contact protection, Over-current protection for buildings. It can also provide protection against fires caused by grounding faults that persist due to inactive current protection devices. Leakage circuit breakers with over-voltage protection can also protect against over-voltage rise caused by power grid faults. This series of residual current operated circuit breakers have been increasingly used as backup protection for grounding faults and direct and indirect contact shocks in low voltage distribution systems.

Main technical parameters

125A frame			
General distribution protection (IEC/EN 61009-1; GB 16917.1)			
Pole		1P+N(Single-phase double wire. Zero and Fire Line close and open at the same time)	
Electrical properties		Short-circuit protection\overload protection\Leakage protection\Isolation/control	
Function		AC type (ensure release of residual sinusoidal AC current applied suddenly or rising slowly)	
Residual current type		Default setting 30mA(Non-action current 15mA)	
Rated frequency	f (Hz)	50	
Rated working voltage	Ue (V AC)	230	
Rated residual operating current	I _{Δn} (mA)	C/D	
Rated current	I _n (A)	6, 10, 16, 20, 25, 32	
Instantaneous release type		2000	
Rated residual on and off capacity		3	
Rated short-circuit capacity	I _{cu} kA	Thermal magnetic	
Service life	(0~C)	Mechanical life	
		20000	
		6000	
Control and Instruction			
Optional accessories(Multiple choice)			
None			
Connection and installation			
Protection level			
Wiring capability	(mm ²)	IP20	
Using ambient temperature	(°C)	1~25	
Humid heat resistance		-25~+60	
Altitude	(m)	2-class	
Air relative humidity		≤ 2000	
At +20°C, not exceed 95%, and +40 °C, not exceed 50%		2	
Pollution level			
Installation environment			
Place without significant vibration or shock			
Installation category		III	
Installation mode			
Outline dimensions(mm)	a	DIN standard rails	
b		36	
c		81	
L*W*H		76	