

DECLARATION
No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form by any means electronic, mechanical, photocopying, recording, or otherwise without prior permission of Aisikai. All rights reserved.
This company reserve power or revision of product specification described in this manual without notice. Before ordering, please consult local agent for the latest specification of product.



AISIKAI-2019MCBSG-V1.0

© AISIKAI ELECTRIC COPYRIGHT

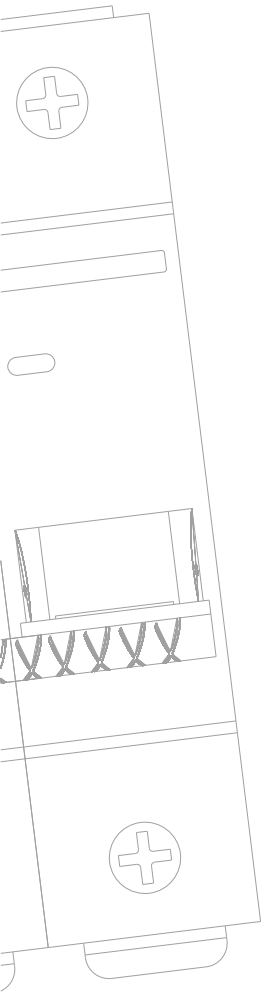
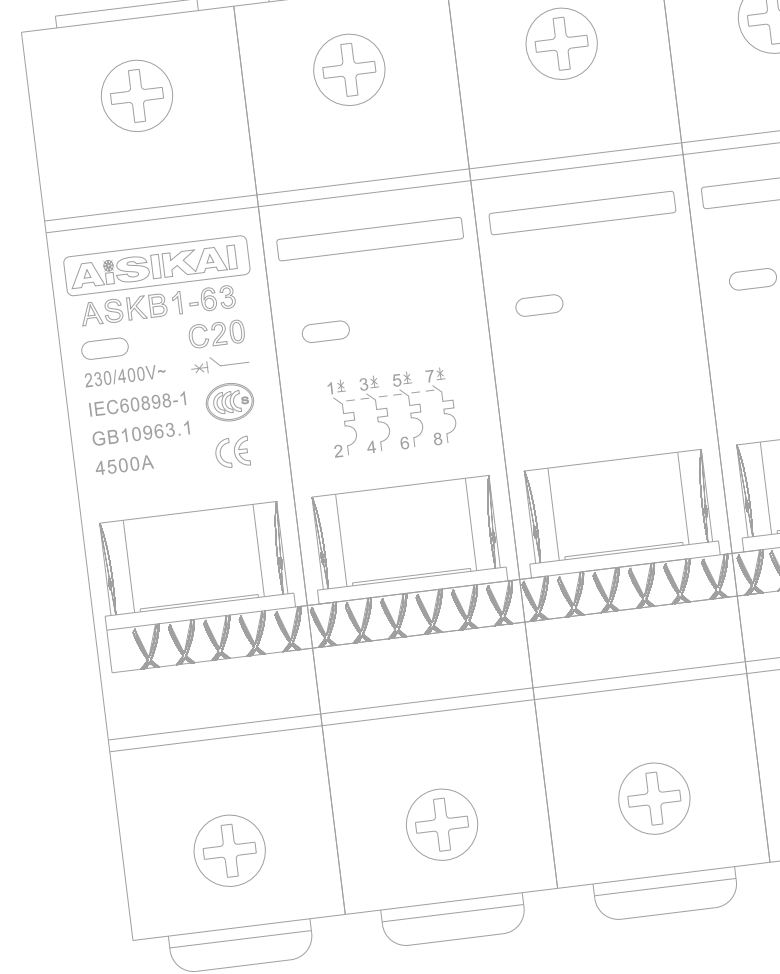


Wechat

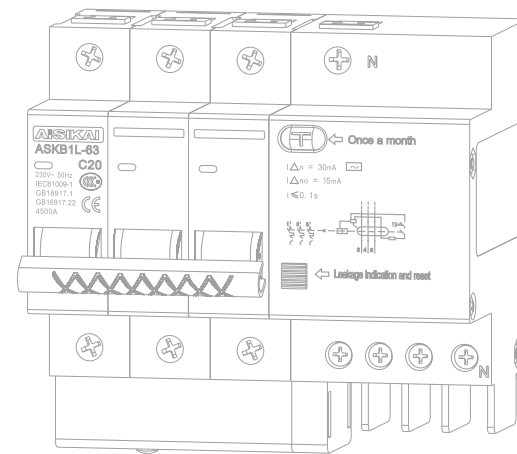


Contact

AiSIKAI[®]



MINIATURE CIRCUIT BREAKERS SELECTION GUIDE



JIANGSU AISIKAI ELECTRIC CO.,LTD
www.aisikai.cc

YANGZHOU AISIKAI AUTOMATION TECHNOLOGY CO.,LTD
www.aisikai.org

Tel: +86-514-83872777 83872888

Fax: +86-514-83872000

Free Service Telephone: 800-828-6568

E-mail: aisikai@aisikai.cc

Factory Add: NO.5 Chuangye Road, Chenji Industrial Zone,
Yizheng City, Jiangsu Province China

JIANGSU AISIKAI ELECTRIC CO.,LTD

PRODUCTS CONTENTS

03	Product overview
05	ASKB series Miniature Circuit Breaker selection table
07	ASKB1 series General Protected Miniature Circuit Breaker main technical parameters
10	ASKB1GQ series Overvoltage and Undervoltage Protection Miniature Circuit Breaker main technical parameters
11	ASKB1S series Prepaid Meter use type Miniature Circuit Breaker main technical parameters
12	ASKB1L Series Leakage Protection Miniature Circuit Breaker main technical parameters
15	ASKB1 overcurrent release Characteristic table
18	ASKB2 series General Protected Miniature Circuit Breaker main technical parameters
20	ASKB2L Series Leakage Protection Miniature Circuit Breaker main technical parameters

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 in the 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

AiSIKAI[®]

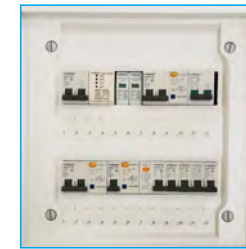
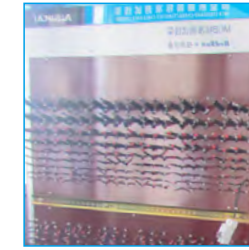


MCB

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



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

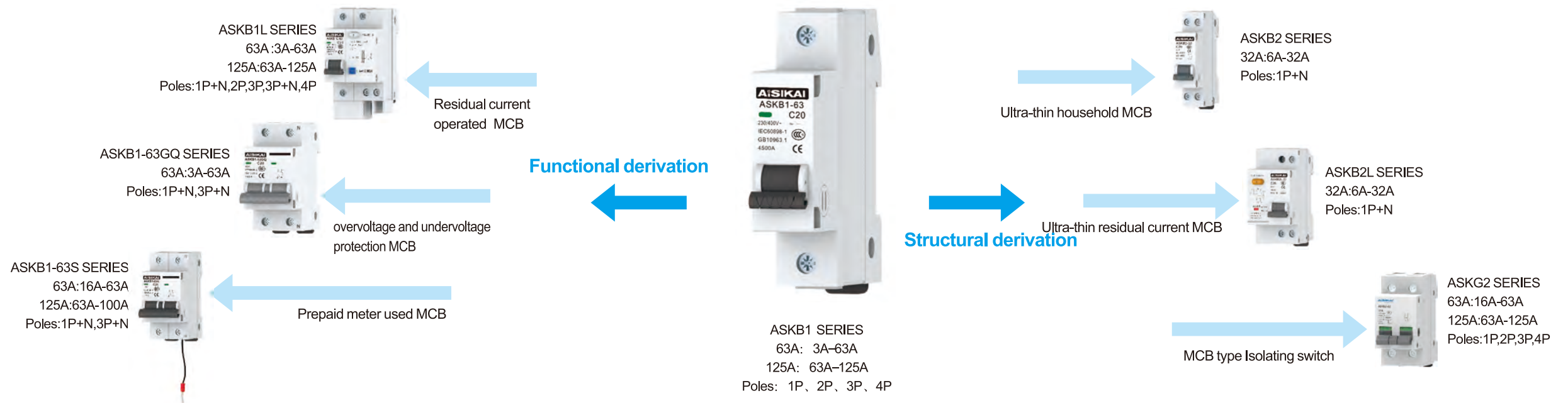
Carefully designed opening and closing indicator window, it is easy to know the state of close or open via color red and green.

Various optional accessories

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

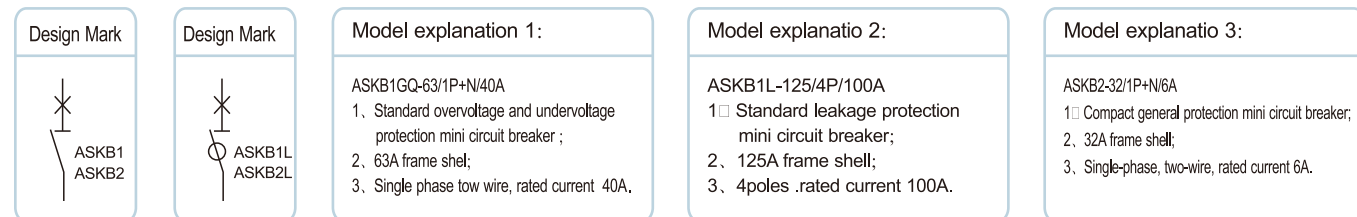
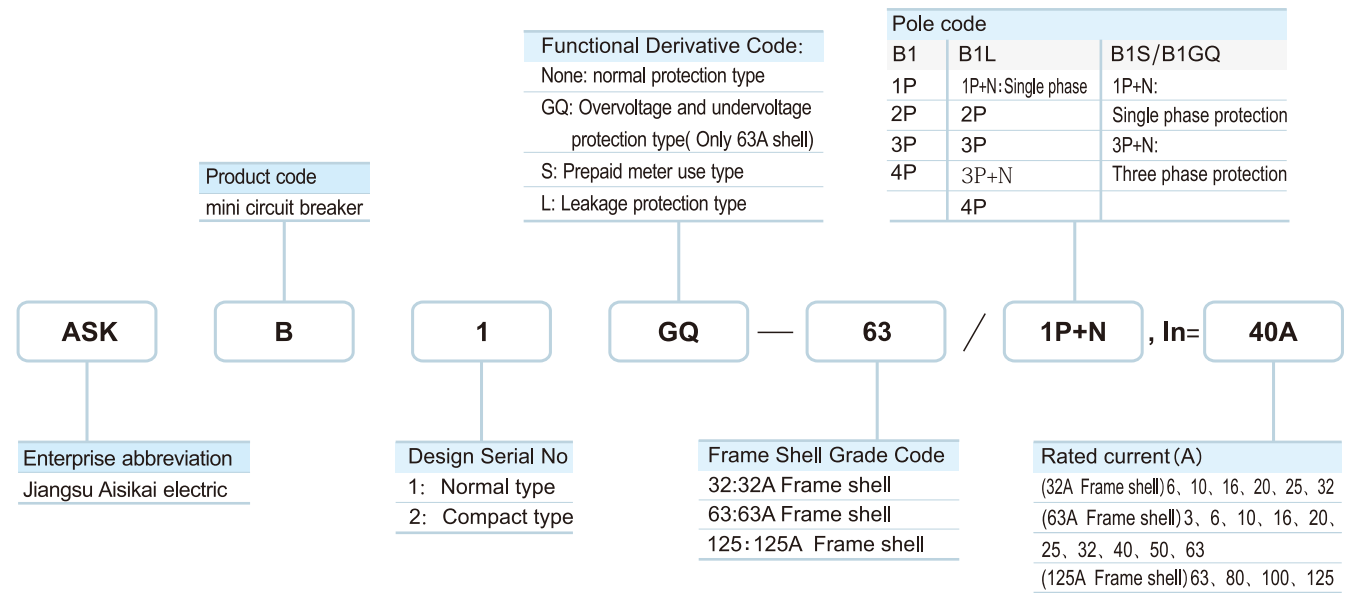
- Overvoltage and undervoltage Release: MN+MV
- Shunt release: MX+OF
- Auxiliary contact: OF
- Alarm contact: SD

Application



GB10963.1、IEC60898-1

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

Application



GB10963.1、IEC60898-1

Install and use conditions:


Category	Requirement
Temperature	-5℃-+40℃, 24H average not more than +35℃
Altitude	<2000m
Atmospheric conditions	In the +40℃ 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℃.
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)

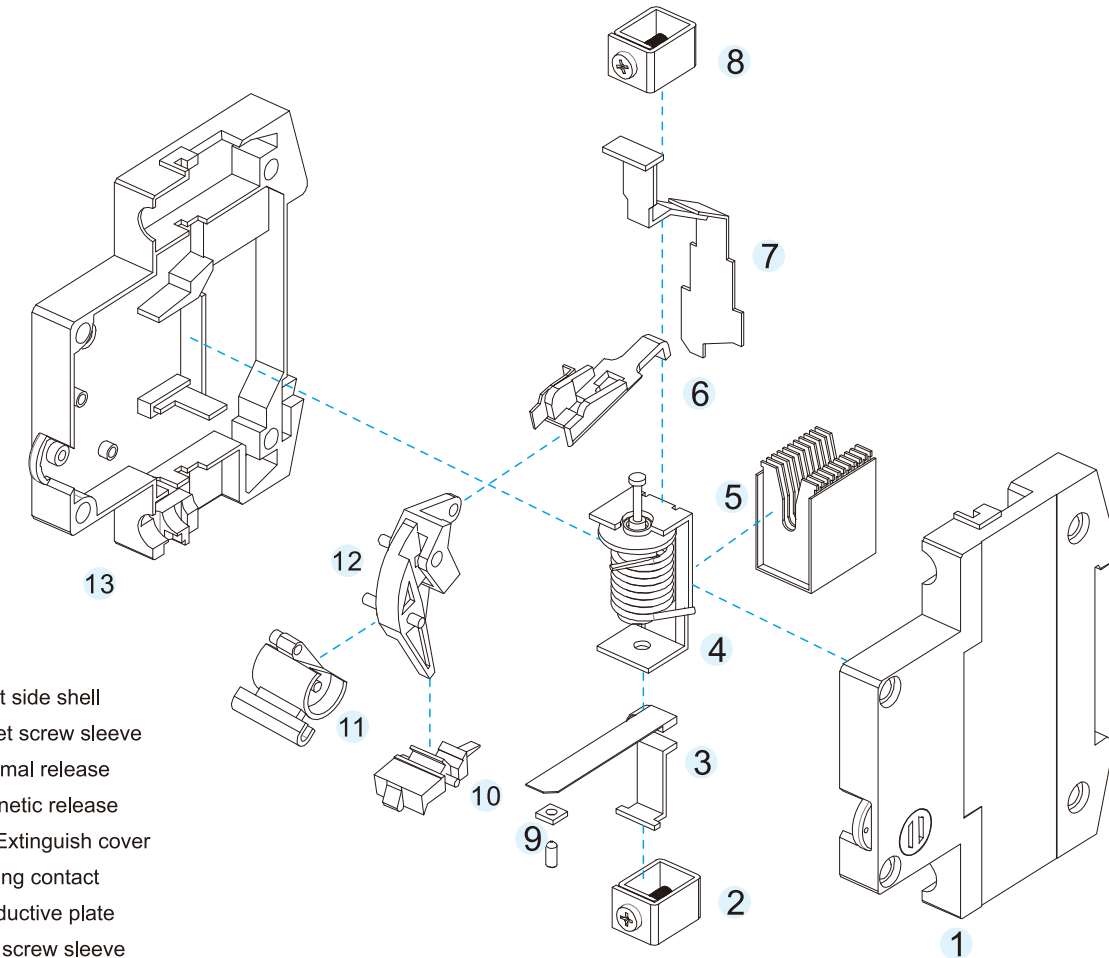
Product Overview

- 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	3P	4P
Electrical properties		Short-circuit protection\ overload protection\ Isolation/control			
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	Uimp (kV)	4			
Instantaneous release type		C/D			
Rated short-circuit capacitycu(kA)	L type	4.5			
	H type	6			
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)	1~25			
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) L*W*H	a	18	36	54	72
	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、let side shell

● 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 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	3P	4P
Electrical properties		Short-circuit protection\ overload protection\ Isolation/control			
Function					
Rated frequency	f (Hz)	50			
Rated working voltage	Ue (V AC)	230	400	400	400
Rated current	In (A)	63、80、100、125			
Impulse withstand voltage	Uimp (kV)	4			
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) L*W*H	a	27	54	81	108
	b	80.5			
	c	73.5	78.5		

ASKB1GQ Overvoltage and undervoltage protection mini circuit breaker

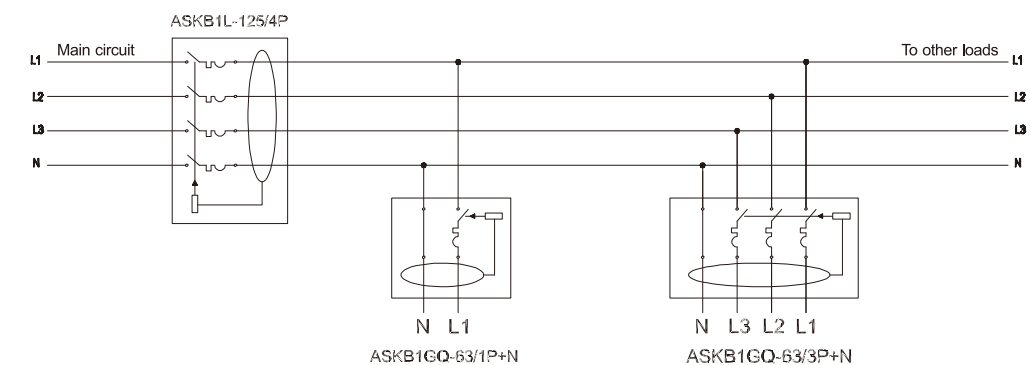
Product overview

- 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			
Rated frequency	f (Hz)	50	
Rated working voltage	Ue (V AC)	400	
Overvoltage and under voltage protection range (V AC)		Under voltage: 170V ± 10% Over voltage: 280V ± %	
Rated current	In (A)	63 frame shell (16、20、25、32、40、50、63)	
Instantaneous release type		C/D	
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)
Instantaneous release type			C/D
Rated short-circuit capacity Icu(kA)	L		See the corresponding ASKB1 current specifications for details.
	H		See the corresponding ASKB1 current specifications for details.
Release type			
Thermalmagnetic+Electronic release			
Service life	(O~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.

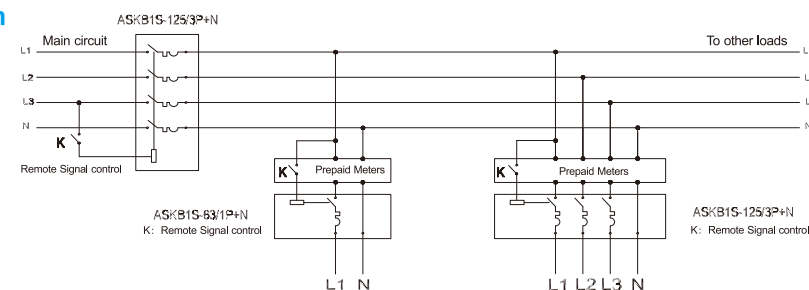
Note: Parameters without indication, see the corresponding parameter of the current frame ASKB1 2P/4P data.

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.

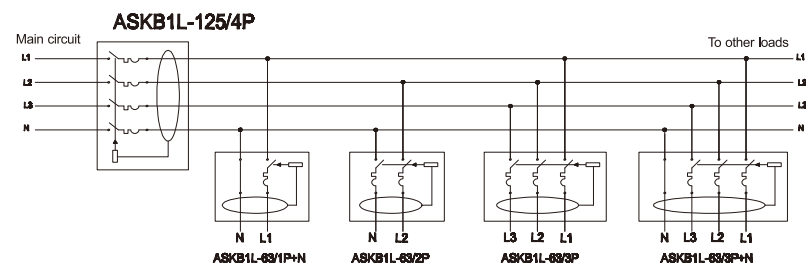
Main technical parameters

63A frame							
General distribution protection (IEC/EN 61009-1; GB 16917.1)							
Pole		1P+N	2P	3P	3P+N	4P	
Electrical properties							
Function							
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	400	400	400
Rated residual operating current	I Δ n	(mA)	Default setting 30mA(Non-action current 15mA) ,Customizable 50、100、200、300mA				
Rated current	In	(A)	3、6、10、16、20、25、32、40、50、63				
Instantaneous release type			C/D				
Rated residual on and off capacity	A		2000				
Rated short-circuit capacity Icu(kA)	L		4.5				
	H		6				
Release type							
Thermal magnetic							
Service life	(O~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		(mm ²)	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) L*W*H	a	1-32A	45	63	90	99	117
		40-63A	54	72	103	117	135
	b	96					
	c	76	78				

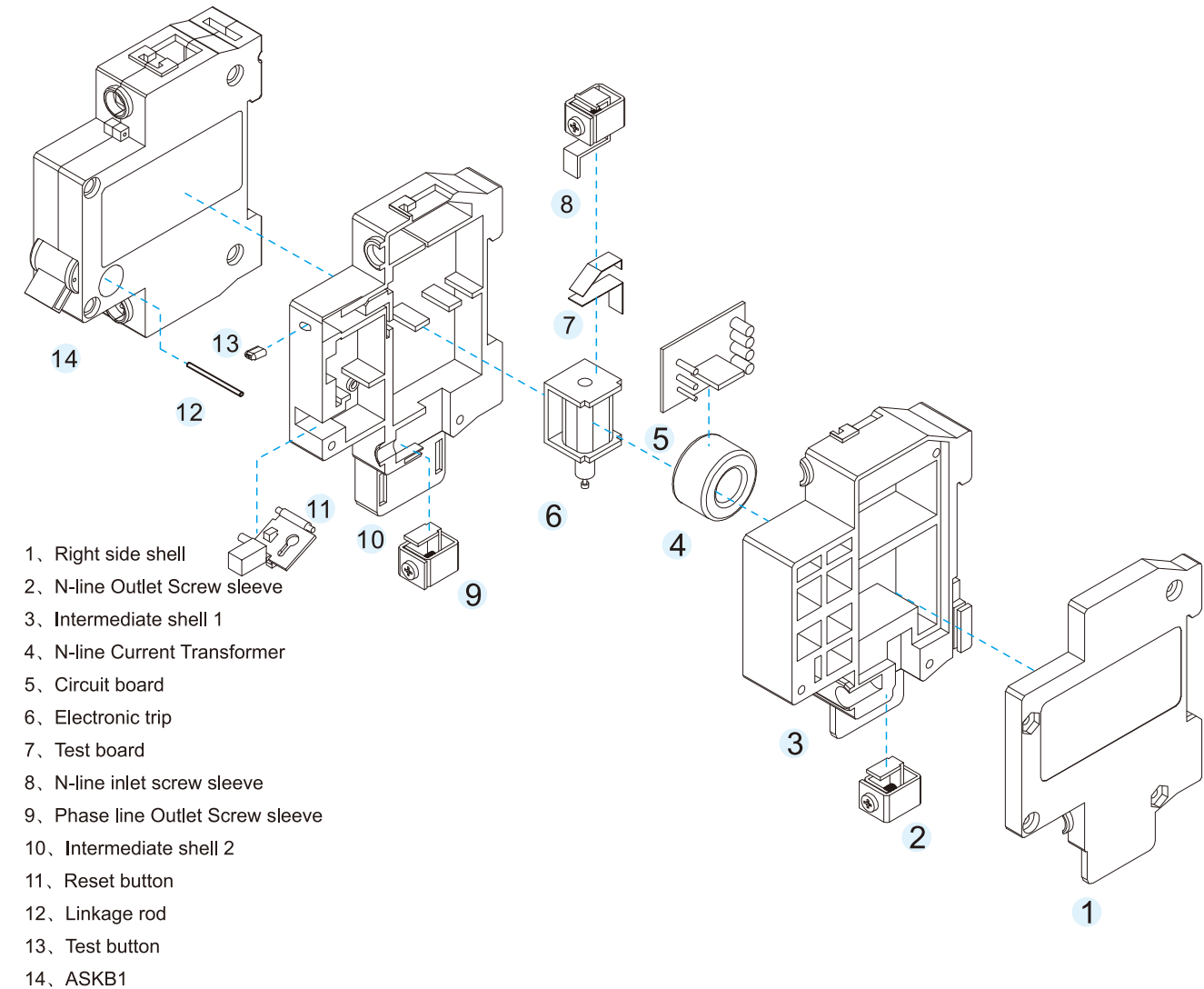
Main technical parameters

125A frame							
General distribution protection (IEC/EN 61009-1; GB 16917.1)							
Pole		1P+N	2P	3P	3P+N	4P	
Electrical properties							
Function: 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	400	400	400
Rated residual operating current	I _{Δn}	(mA)	Default setting 50mA(Non-action current 25mA), Customizable 30、100、150、200、300mA				
Rated current	I _n	(A)	50、63、80、100				
Instantaneous release type			C/D				
Rated residual on and off capacity	A		2000				
Rated short-circuit capacity	I _{cu}	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、Auiliary contact OF							
Connection and installation							
Protection level: Ip20							
Wiring capability	(mm ²)		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	b	c	a	b	c	
L*W*H	54	81	108	108	135	113	
						78.5	

Electrical diagram



Introduction of Main Structure



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

ASKB1L-63A

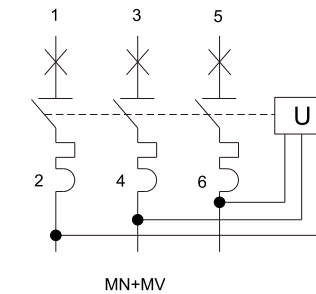
Test current(A)	Rated current(A)	Rated time	Expected results	Initial status	Note	
1.13In	6-63	1 ≥ In	Not release	Ambient temperature status		
1.45In	6-63	1 ≤ 1 In	Release	follow preceding	The current rises steadily to the specified value within 5S.	
2.55In	6-63	1S < t < 60S	Release	Ambient temperature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

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

Optional Accessories - ASKB1 Series

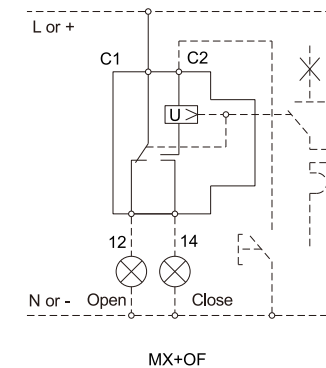
Over-voltage and under-voltage tripper: MN+MV

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



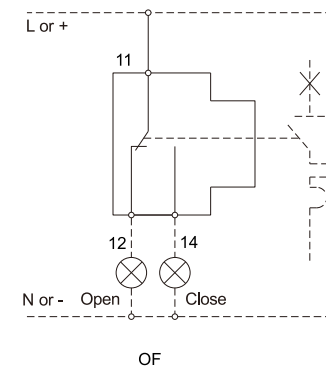
Shunt release: MX+OF

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



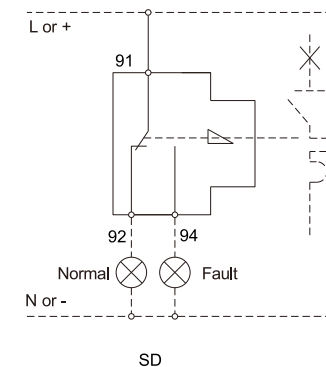
Auxiliary contact: OF

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:

Category	Requirement
Temperature	-5℃- +40 ℃, 24H average not more than +35 ℃
Altitude	<2000m
Atmospheric conditions	In the +40 ℃ 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 ℃.
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

Application



civil use commercial use Industrial use


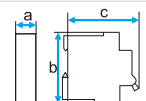
GB10963.1、IEC60898-1

ASKB2 min circuit breaker

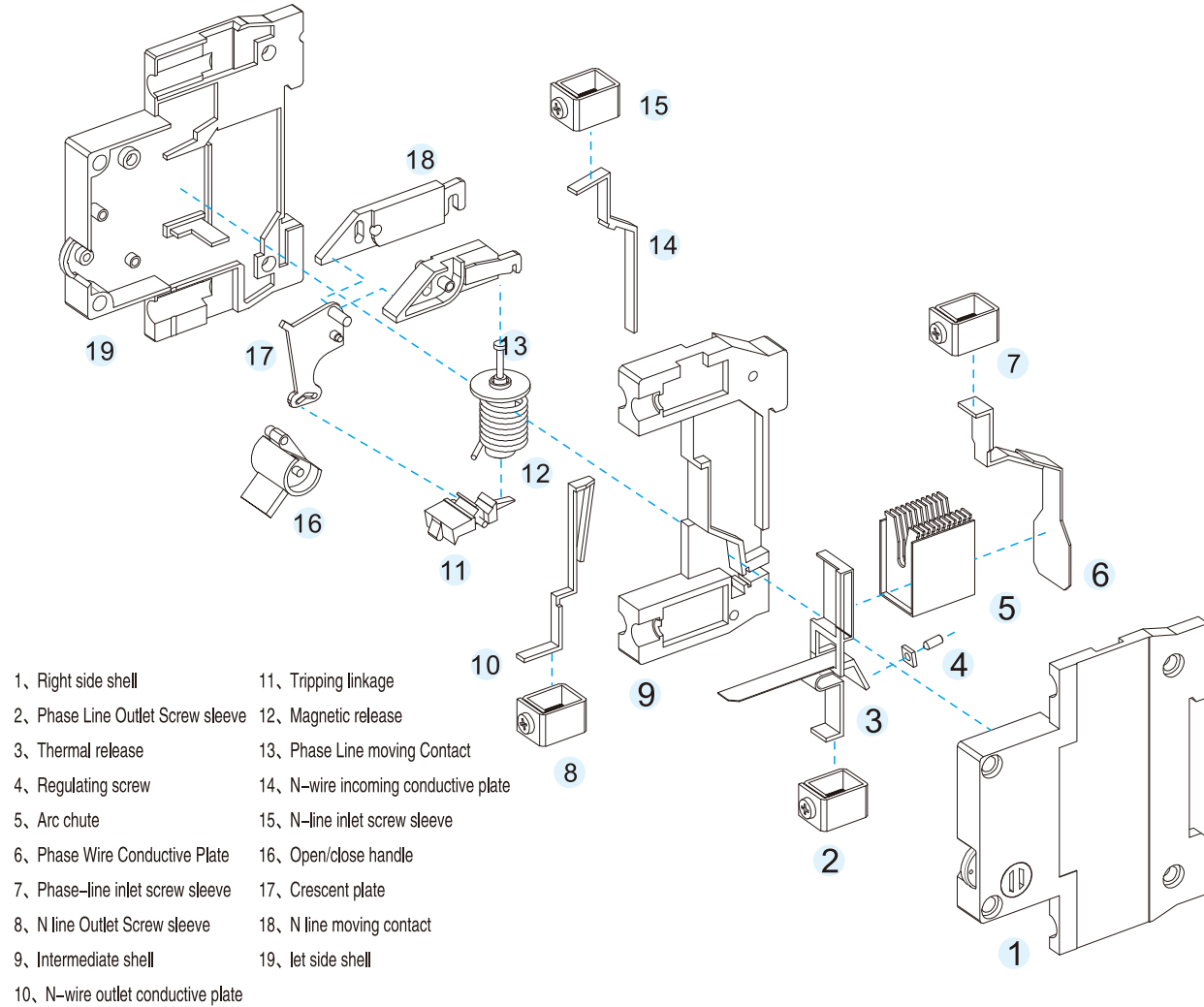
Product overview

- 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		
Function		Short- circuit protection\ overload protection \Isolation/control
Rated frequency	f (Hz)	50
Rated working voltage	Ue (V AC)	230
Rated current	In (A)	6、10、16、20、25、32
Impulse withstand voltage	Uimp (kV)	4
Instantaneous release type		B/C
Rated short-circuit capacityIcu(kA)		3
Release type		Thermal magnetic
Service life (0~C)	Mechanical life	20000
	Electrical life	4000
Control and indication		
Optional accessories(Multiple choice)		No optiona
Connection and installation		
Protection level		Ip20
Handle lock		None
Wiring capability	(mm ²)	1~25
Using ambient temperature	(℃)	-5~+40
Humid heat resistance		2-class
Altitude (m)		< 2000
Air relative humidity		At +20℃, not exceed 95%, and +40 ℃, 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 b c
L*W*H		18 81 76

Introduction of Main Structure



- 1、Right side shell
- 2、Phase Line Outlet Screw sleeve
- 3、Thermal release
- 4、Regulating screw
- 5、Arc chute
- 6、Phase Wire Conductive Plate
- 7、Phase-line inlet screw sleeve
- 8、N line Outlet Screw sleeve
- 9、Intermediate shell
- 10、N-wire outlet conductive plate
- 11、Tripping linkage
- 12、Magnetic release
- 13、Phase Line moving Contact
- 14、N-wire incoming conductive plate
- 15、N-line inlet screw sleeve
- 16、Open/close handle
- 17、Crescent plate
- 18、N line moving contact
- 19、let side shell

●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 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		
Function		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)
Rated working voltage	Ue	(V AC)
Rated residual operating current	IΔn	(mA)
Rated current	In	(A)
Instantaneous release type		C/D
Rated residual on and off capacity	A	2000
Rated short-circuit capacity	Icu	kA
Release type		Thermal magnetic
Service life	(0-C)	Mechanical life
		Electrical life
Control and Instruction		
Optional accessories(Multiple choice)		None
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
		b
L*W*H		c
		36
		81
		76