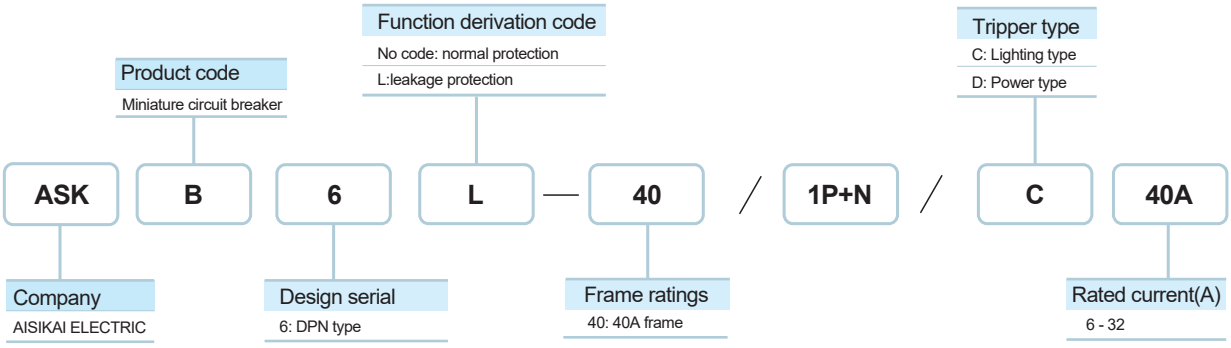
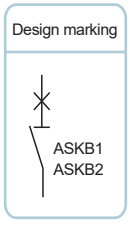
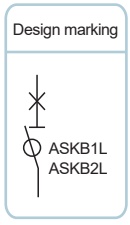
ASKB6 MINIATURE CIRCUIT BREAKER SELECTION TABLE



Frame Classification:

Normal type(40A frame)
Leakage protection type(L type, 40A frame)





Model definition 1:

ASKB6- 40 / 2P / 40A
1. compact normal protection type MCB;
2. 40A frame;
3. 2 poles, rated current 40A.

Model definition 2:

ASKB6L- 40 / 1P+N / 40A
1. compact leakage protection type MCB;
2. 40A frame;
3. single phase two lines, rated current 40A.

QUALIFICATION DOCUMENTS


CCC


CCC


CCC


CCC


CCC


CE


ISO

ASKB6 NORMAL PROTECTION MINIATURE CIRCUIT BREAKER

OVERVIEW

- ASKB6 series household miniature circuit breakers are suitable for the end power distribution lines of office buildings, residences and general industrial use. ASKB2 can protect lines against overload and short-circuit, and provide functions of isolation and control. Under normal conditions, MCB can also be used in infrequent on-off control of electrical devices and lighting lines. The MCB are suitable for AC 50/60Hz, rated voltage below 230V, rated current below 40A.

  The MCB adopts the innovative "phase line+ N line" design, which can cut off the phase and neutral lines at the same time, achieving higher safety performance and avoiding personal and fire hazards caused by reverse wiring of the phase and neutral lines or high neutral-to-ground potential when using single-pole circuit breakers. The compact design makes its thickness only 18mm, which fully meets the high standard requirements for component volume of household distribution box. MCB has high breaking capacity, adopts modular design, and can be used with a variety of accessories to meet customers' requirements for other additional functions.

CLASSIFICATION

- **Classified by the over-current tripper rated current(A)**

  Frame 40： 3, 6, 10, 16, 20, 25, 32, 40

- **Classified by instantaneous tripper type**

  B type: protect pure resistive load and low-inductive lighting system
  tripping characteristic: instantaneous trip range(3-5)In

  C type: protect inductive load and high-inductive lighting system
  tripping characteristic: instantaneous trip range(5-10)In

FEATURES

- Innovative "phase line+ N line" structural design. Thickness only 18mm. Save 50% space
  Shell with ventilation slot design, active heat dissipation, reduce temperature rise
  Composite high conductive material. Longer service life
  Ergonomic operation design, non-slip handle for easy operation

APPLICATIONS

Civil　Commercial　Industrial

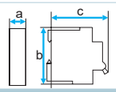
STANDARDS

GB10963.1、IEC60898-1

NORMAL OPERATIONAL CONDITIONS AND INSTALLATION METHODS

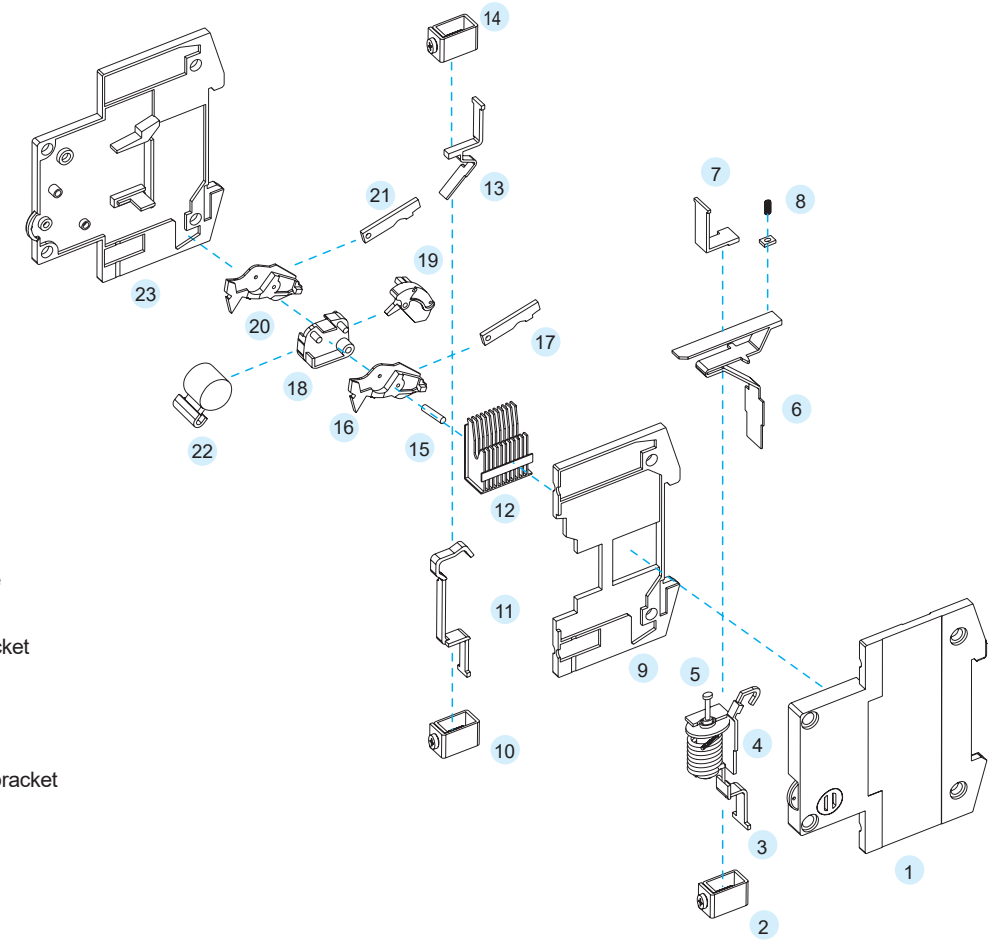
Category	Requirement
Operational temperature	Between -5℃ and +40℃. The average value in 24 hours does not exceed +35℃.
Altitude	Lower than 2000 meters.
Operational humidity	The relative humidity at +40℃ shall not exceed 50%. Higher relative humidity is allowed at lower temperature. The average maximum relative humidity is 90% in the most humid month
Installation level	The installation level is Ⅱ,Ⅲ.
Pollution level	Level 2
Installation method	Install vertically or horizontally. Use YH35-7.5 standard DIN rail.
Installation conditions	The inclination of the mounting surface to the vertical surface does not exceed 5 degrees. Use environment should be without strong impact and vibration.
Wiring method	Fasten the wires using screws.
Wire inlet method	Wiring reversely is acceptable for normal type. Wiring reversely is prohibited for leakage type.

MAIN TECHNICAL PARAMETERS

63 Frame				
General power distribution protection				
No. of poles				1P+N: single phase two lines, N line is involved in breaking
Electrical performance				
Functions				Short-circuit protection, overload protection, isolation, control
Rated frequency	f	(Hz)		50
Rated operational voltage	Ue	(V AC)		230
Rated current	In	(A)		6, 10, 16, 20, 25, 32, 40
Impulse withstand voltage	Uimp	(kV)		4
Instantaneous tripping type				C/D
Rated short-circuit capacity	Icu	(kA)	L	Icu=Ics=4
			H	Icu=Ics=6
Tripper type				Thermomagnetic
Service life	(0 ~ C)	Mechanical service life		20000
		Electrical service life		8000
Control and indication				
Optional accessories(multiple options available)				None
Connection and installation				
Protection level				IP20
Handle lock				None
Wiring capacity	(mm²)			1~25
Operational temperature	(℃)			-5 ~ +40
Resistance to heat and humidity				2
Altitude	(m)			⩽2000
Air relative humidity				Not exceed 95% at +20℃; not exceed 50% at +40℃
Pollution level				2
Installation environment				Without strong impact and vibration
Installation category				Ⅲ
Installation method				DIN standard rail
Outline dimensions Width*Height*Depth (mm)			a	18
			b	83
			c	76

OVERVIEW

1. Right side shell
2. Phase line outlet screw set
3. Thermal tripper
4. Fixed contact
5. Tripper
6. Thermal bimetal component
7. Conductive plate
8. Adjustment screw
9. Middle shell
10. Wiring frame part
11. Tripper linkage plate
12. Arc extinguishing cover
13. Phase moving contact
14. Neutral line inlet wiring frame
15. Shaft
16. Live line moving contact bracket
17. Live line moving contact
18. Indication device
19. Crescent plate
20. Neutral line moving contact bracket
21. Neutral line moving contact
22. Handle
23. Base shell



Structure overview	Working method	Magnetic tripper	Thermal tripper	Arc extinguishing cover
Normal protection type miniature circuit breaker is one-piece structure, which is made of precise combination of internal parts. The left and right shells enclose the operating mechanism, moving/fixed contacts, thermal tripper, magnetic tripper, and arc extinguishing cover. Manual operation is used for open/close operation.	The manual operation on the open/close handle makes the phase lines and neutral line switch on/off simultaneously, realizing the on-off of the circuit. When the circuit is short-circuited or seriously overloaded, the magnetic tripper pushes the free tripping mechanism into action, breaking the phase lines and neutral line of the main circuit. When the circuit is overloaded, the thermal tripper pushes the free tripping mechanism into action, breaking the phase lines and neutral line of the main circuit to realize the protection of the distribution lines.	The coil of the magnetic tripper is connected in series with the main circuit. When the circuit is short-circuited or seriously overloaded, the magnetic tripper generate magnetic force due to electromagnetic induction, instantly making the armature pull in, pushing the free tripping mechanism into action and the main contact breaks the main circuit.	The coil of the thermal tripper is connected in series with the main circuit. When the circuit is overloaded, the thermal component of the thermal tripper heats up due to the increasing current, bending the bimetal strip, pushing the free tripping mechanism into action within a certain period of time and completing the protection breaking.	MCB adopts multi-layer stacked arc extinguishing cover. Its mounting position is below the contact. Each piece of arc extinguishing plate is at an angle of 60 degrees from the horizontal plane. In the breaking process, through the electromagnetic field induction force and the air flow, the arc is instantly imported into the arc extinguishing cover, realizing rapid arc extinguishing.