


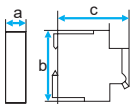


ASKB6L LEAKAGE PROTECTION MINIATURE CIRCUIT BREAKER

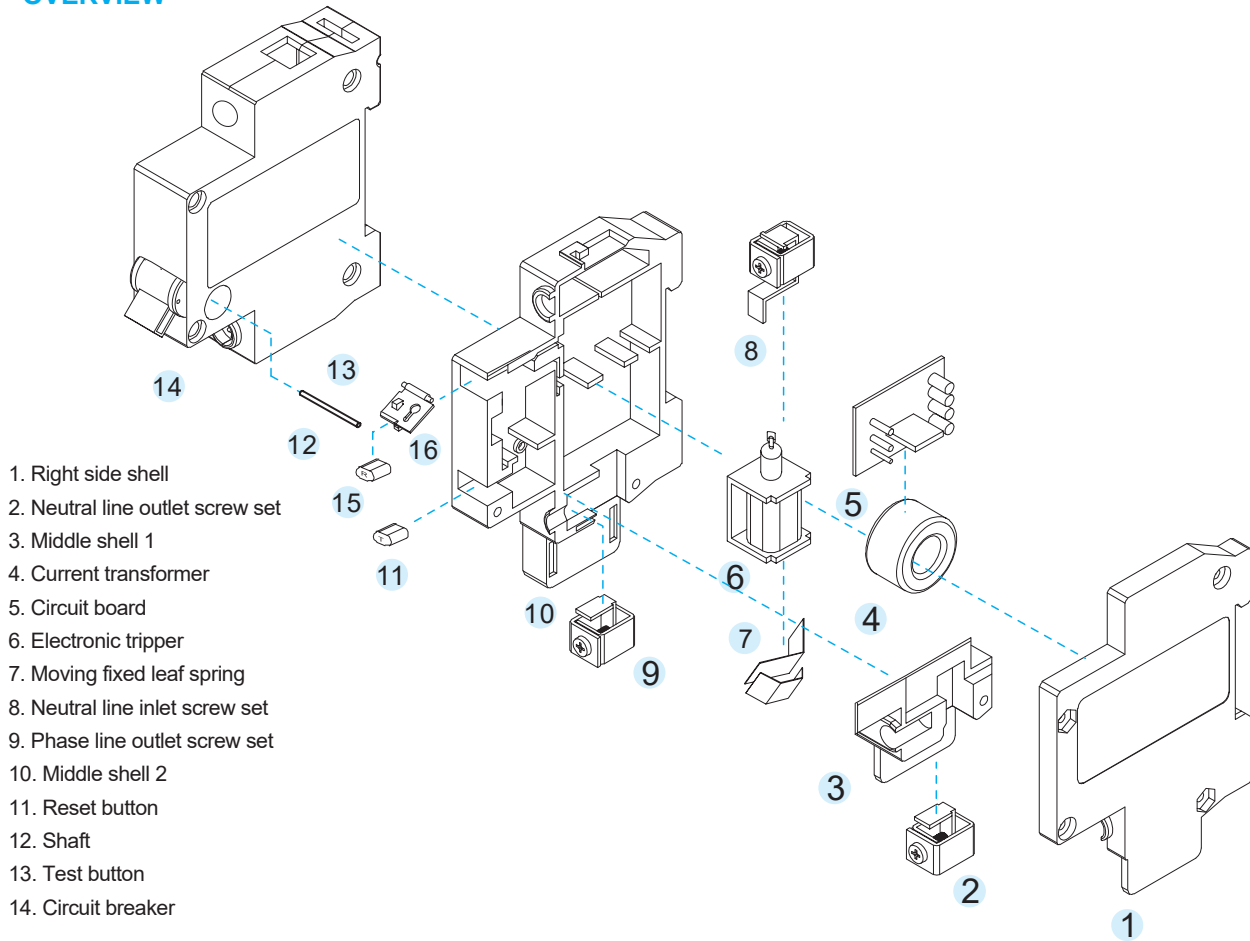
OVERVIEW

- ASKB6L leakage protection type miniature circuit breaker is suitable for lines of AC 50Hz, rated operational voltage 230V, rated current below 32A, used for indirect contact protection for people, and over-current protection for buildings and lines for similar purposes. ASKB6L also provide protection against fires caused by persistent ground faults due to the inaction of the over-current protection devices. Leakage circuit breakers with over-voltage protection also protect against excessive voltage increases due to grid faults. This series of residual current-action circuit breakers have been increasingly used in low-voltage distribution systems as backup protection for ground faults and direct contact and indirect contact electric shocks.

MAIN TECHNICAL PARAMETERS

63 Frame			
General power distribution protection (IEC/EN 61009-1; GB 16917.1)			
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	
Residual current type		AC type(ensure tripping for sudden applied or slowly rising residual sinusoidal AC currents)	
Rated frequency	f	(Hz)	50
Rated operational voltage	Ue	(V AC)	230
Rated residual action current	$I\Delta n$	(mA)	Default 30mA(non-action current 15mA).
Rated current	In	(A)	6, 10, 16, 20, 25, 32, 40
Instantaneous tripping type		C/D	
Rated residual making and breaking capacity	Im	(A)	2000
Rated short-circuit capacity	Icu	(kA)	L
		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)		Not available	
Connection and installation			
Protection level		IP20	
Wiring capacity	(mm ²)	1~25	
Operational temperature	(°C)	-25 ~ +60	
Resistance to heat and humidity		2	
Altitude	(m)	≤ 2000	
Air relative humidity		Not exceed 95% at +20 °C ; not exceed 50% at +40 °C	
Pollution level		2	
Installation environment		Without strong impact and vibration	
Installation category		III	
Installation method		DIN standard rail	
Outline dimensions		a	36
Width*Height*Depth		b	92
(mm)		c	76

OVERVIEW



1. Right side shell
2. Neutral line outlet screw set
3. Middle shell 1
4. Current transformer
5. Circuit board
6. Electronic tripper
7. Moving fixed leaf spring
8. Neutral line inlet screw set
9. Phase line outlet screw set
10. Middle shell 2
11. Reset button
12. Shaft
13. Test button
14. Circuit breaker

Structure overview	Working method	Circuit board	Electronic tripper	Test button
<p>Leakage protection type miniature circuit breaker is modular structure, which is made of ASKB6 normal MCB body on the left and leakage detection mechanism on the right. The main components include circuit board, current transformer, electronic, etc. The left and right parts are tightly fixed together. Manual operation is used for open/close operation.</p>	<p>Miniature circuit breakers achieve the on-off of the circuit through the manual operation on the open/close handles. When the circuit is short-circuited or overloaded, the magnetic tripper or thermal tripper pushes the free tripping mechanism into action and the main contact breaks the main circuit, realizing the protection of the distribution lines. When there is a leakage situation, the current vector sum through the N line current transformer is not equal to zero. The circuit board amplifies the transformer voltage signal, driving the electronic tripping into action, pushing the tripping mechanism in ASKB6 normal type body through the linkage rod to achieve the breaking protection.</p>	<p>The main components use the bidirectional thyristor, which can sensitively detect the milliamp signal from the N-line transformer, and then analyze and process the signal to amplify the signal, relying on the principle of low power control of high power to drive the electronic tripper acts.</p>	<p>The electronic tripper is the main action component of the leakage protection mechanism. After the signal amplified by the circuit board reaches the required voltage to drive the tripper, it acts immediately, driving the linkage rod to drive the tripping mechanism in ASKB6 normal type to break the main circuit for the purpose of protecting the distribution lines.</p>	<p>Leakage protection miniature circuit breaker has test button. When the test button is pressed down, the driving circuit of the electronic tripper is turned on. The tripper acts immediately, driving the relevant mechanism to realize the breaking. It is used for periodic testing of the operating condition of leakage type circuit breakers.</p>