

JXB8LE-63 Series Residual Current Circuit Breaker With Over Current Protection

Application

JXB8LE-63 series residual current circuit breaker are mainly used in circuit, of AC50/60Hz, rated voltage up to 230V, rated current up to 63A for protection of personal electric shock hazard with overload protection and short circuit protection,also can infrequently switchover electric equipment and iluminating line under normal conditions, especially suitable for industrial and commercial lighting distribution system.

Conformity with the standard IEC61009-1.

Normal Operation Conditions

- Ambient air temperature
Ambient air temperature ranges from-5°C to 40°C ,not exceeding 35°C averagely in 24 hours.
- Location:Installation location can not exceed 2000 meters above sea level
- Air conditions
Relative humidity in the installation place can not exceed 50% when the air reaches the highest temperature 40,the average minimum temperature when it is the wettest can not exceed 20°C. Relative humidity not exceed 90%.
- Installing categories: Class II Class III .
- Installation Pollution Grade: grade II .
- Installing type: Mounted by standard rail track
- Installing condition: Installation location of the external magnetic field strength should not be in any direction to magnetic field strength of more than 5 times.
- Wiring: Tighten the screws to compress the wire.

Classification

- Rated current:6,10,16,20, 25, 32, 40, 50, 63(A)
- Poles: 1P+N,2P,3P,3P+N,4P
- Type of instantaneous release: B, C, D.

Construction Characteristic & Operating Principle

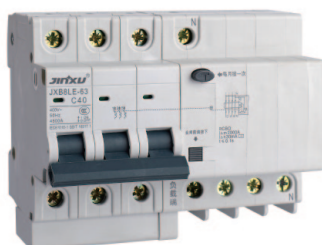
Pull the handle of the leakage circuit breakers to the ON position, through mechanical contacts to static contact agencies to promote reliable contact with the circuit. When the circuit with overload fault, overload current bimetal bend and push the latch locking mechanism makes the mechanical reset, the moving contacts quickly left the static contact,so that to achieve sub-line functions; when short-circuit fault occurs , the short-circuit current make instantaneous release action, pushing the lock mandrel core mechanical action to achieve the lock breaking function;

when leakage and electric shock occurs, the signal from zero sequence sensor makes the thyristor akage release core action ounter push the circuit breaker trip to cut off the power leakage circuit breaker a short time, thereby achieve leakage protection.

Structural Features

Small, tight structure, price is better than similar products
Housing and some functional parts are made of high fire-resistant,heat resistant,impact resistant material. Directly with the zero wire installation,avoid the electric shock hazard which caused by zero line connection errors.

- Using the latest circuit design and high-performance electronic components, has strong ability to withstand when the impact of current and surge of over-voltage .
- Mounted by standard rail track, convenient and save time.



JXB8LE-63 Series Residual Current Circuit Breaker With Over Current Protection

Main Technical Parameter

Type	JXB8LE-63		
Pole	1P+N, 2P	3P, 3P+N, 4P	
Rated current (A)	6,10,16,20,25,32,40,50,63		
Rated voltage (V)	230	400	
Rated short circuit breaking capacity $I_{cn}(kA)$	6-32A :6 / 40-63: 4.5		
Rated residual making/breaking capacity $I_{\Delta m}(A)$	2000		
Rated residual action current $I_{\Delta n}(A)$	0.03,0.05,0.1,0.3		
Rated residual non-action current $I_{\Delta no}(A)$	0.5 $I_{\Delta n}$		

Applicable Conducting Wire

Rated current(A)	1-6A	10A	16,20A	25A	32A	40,50A	63A
Norminal cross section of wire mm ²	1	1.5	2.5	4	6	10	16

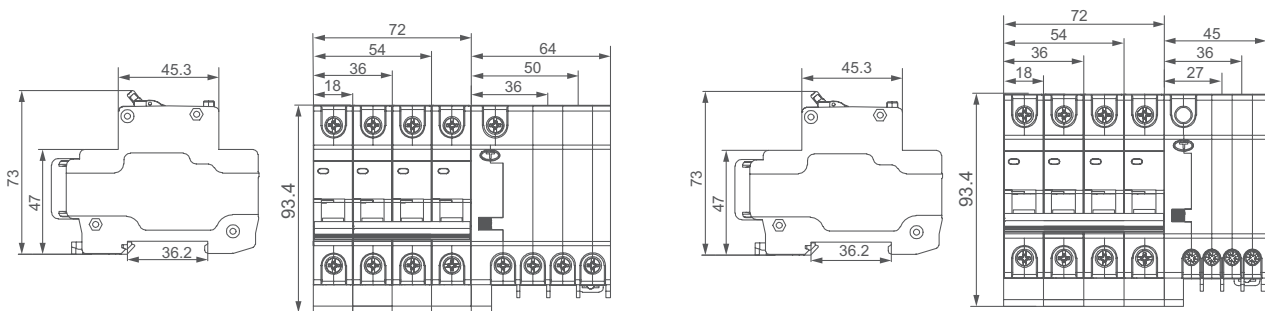
Residual Current Breaking Time

$I_n(A)$	$I_{\Delta n}(A)$	Breaking time(s) when equals to rating following					
		$I_{\Delta n}$	$2I_{\Delta n}$	$5I_{\Delta n}$	5,10,20,50,100,200,500 ^a (A)	$I_{\Delta t}^b$	
6-63	0.03, 0.05, 0.1, 0.3	0.1	0.06	0.04	0.04		0.04

The Over-current Protection Property

Ambient temperature	Initial status	Test current	Test time	Expected result	Note
30±2°C	Cold position	1.13 I_n	$t \geq 1h$	Non-release	-
	Carried out immediately after previous test	1.45 I_n	$t < 1h$	Release	-
	Cold position	2.55 I_n	1s< t <60s ($I_n \leq 32A$)	Release	Current smoothly rises to specified value within 5s
	Cold position	2.55 I_n	1s< t <120s ($I_n > 32A$)	Release	
-5~+40°C	Cold position	3 I_n	$t \leq 0.1s$	Non-release	Type B
	Cold position	5 I_n	$t < 0.1s$	Release	Type B
	Cold position	5 I_n	$t \geq 0.1s$	Non-release	Type C
	Cold position	10 I_n	$t < 0.1s$	Release	Type C
	Cold position	10 I_n	$t \geq 0.1s$	Non-release	Type D
	Cold position	20 I_n	$t < 0.1s$	Release	Type D

Dimension



JXB8LE-63 large shell

JXB8LE-63 small shell