

JXB1LE-125 Series Earth Leakage Circuit Breaker

Application

JXB1LE-125 Earth Leakage Circuit Breaker (ELCB) is mainly used in the distribution line with AC50/60Hz rated insulation voltage 600V, rated operating voltage up to 380V(400V) and below; rated current from 63A to 125A, rated operating capacity of no more than 6000A, make the earth leakage protection and there is overload and short-circuit protection, and also it is used for infre-quent on-off and changeover operation Its performance and compliance conforms with IEC60947-2 standard.



Products

- Classification: 1P+N; 2P; 3P; 3P+N; 4P
- Rated Current: 63A, 80A, 100A, 125A
- Rated operating voltage: 230V/400V
- Wiring: with pole clamp terminals
- Tripping Type: the circuit breaker trip type is motor protection type
- Installation: DIN rail embedded
- Operation: manual operation
- Protection functions: not only with earth leakage protection, but also performance on the long delay overload protection and instantaneous short-circuit protection

Normal Using Conditions

- Ambient temperature:
 - a. Does not exceed +40 °C
 - b. not less than -5°C,
 - c. In 24h the average does not exceed +35 °C.
- Installation site altitude not exceeding 2000 meters
- Atmospheric relative humidity does not exceed 50% at the highest temperature +40 °C .
When low humidity can have a high temperature, such as in the wettest month average temperature does not exceed +25 °C, the monthly relative humidity less than 90%, and allows when temperature changing, there is condensation on the surface of the circuit breaker
- The breaker's using place: Pollution Degree 3
- Breaker's installation category: usually category A

Technical Data

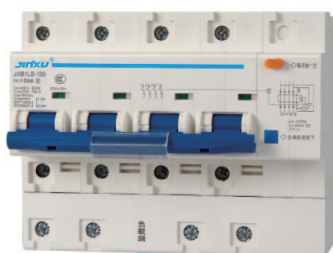
- Residual current protection features
 - a. Rated residual operating current: $I = 30\text{mA}$ or 50mA ; 100mA or 300mA ,
 - b. Rated residual non-operating current : 15mA or 25mA ; 50mA or 150mA
 - c. Rated residual operating current maximum breaking time: 0.1S
 - d. Rated residual operating and breaking capability: 2000A
- Over-current tripping characteristics
- Over-current tripping characteristic of the circuit breaker, on the condition of the normal installation of $30 \pm 2^\circ\text{C}$ ambient temperature, shall comply with the requirements under Table 1

Table 1 Over-current tripping characteristics

Disconnect the power distribution characteristics of inverse time breaker				
Ambient temperature	Test current	Test time		Expected result
$30 \pm 2^\circ\text{C}$	$I_n \leq 63\text{A}$	$I_n \leq 63\text{A}$	$63\text{A} < I_n \leq 63\text{A}$	Non-release
		< 1h	< 2h	
	$1.3I_n$	< 1h	< 2h	Release

Inverse time of breaker tripping operation time should be consistent with "DZ58 MCCB equivalent test parameter table"

Instantaneous operating characteristics shall conform to Table 2



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Table 2 Instantaneous operating characteristics

Initial status	Test current	Test time	Expected result
Cold position	$12I_n \pm 20\%$	$t < 0.2s$	Instantaneous trip

When short-circuit current is equal to 80% of the instantaneous trip test setting current, the trip should be no action, the current duration time $t < 0.2s$; the test current is equal to 120% of the short-circuit setting current, the tripping time $t < 0.2s$

Note: Instantaneous tripping can be carried out at any temperature

Rated short circuit breaking capacity is shown in Table 3

Table 3 Short circuit breaking capacity

Rated current(A)	Rated short breaking capacity (A)	COS Φ
$63 \leq I_n \leq 125$	6000	0.65~0.70

Applicable Conducting Wire

Table 4

Rated Current (A)	63	80	100	125
Conducting wire(mm ²)	16	25	35	50

Mechanical and Electrical Life

Breaker at the rated voltage requirements, operating and breaking the rated currents, power factor is 0.65-0.7 to operate the frequency test by the cycle 240 times per hour, and its mechanical and electrical life is 4000 times.

Outline & Installation Dimension(mm)

