Residual Current Operated Circuit Breaker

DZ47LE-63

1. Application

DZ47LE-63 is applicable to a line of AC 50Hz/60Hz, rated voltage 230V for single pole two-wire, 2-pole or 400V for 3-pole, 3-pole 4-wire, 4-pole and rated current up to 40A. It can protect the line and motor from overload and short circuit. It can also be used for infrequent line conversion and infrequent motor start. It conforms with the standards of IEC61009.



2. Specification

2.1 Main Technical Parameter						
Туре	DZ47LE-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 Icn(KA)	6-32A :6 / 40-63: 4.5					
Rated residual making/breaking capacity I \triangle m(A)	2000					
Rated residual action current I \triangle n(A)	0.03,0.05,0.1,0.3					
Rated residual non-action current I∆no(A)	0.5I∆n					

2.2 Applicable conducting wire

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

2.3 Residual current breaking time

In(A) I∆n(A)	Breaking time(s) when equals to rating following					
	I⊠II(A)	l∆n	2l∆n	5l∆n	5,10,20,50,100,200,500ª(A)	I∆t [⊳]
6-63	0.03, 0.05, 0.1, 0.3	0.1	0.06	0.04	0.04	0.04

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2.4 The over-current protection property

Ambient Temperature	Initial Status	Test Current	Expected Result	Expected Result	Note	
30±°C	Cold position	1.13ln	t≥1h	Non-release	-	
	Carried out immediately after previous test	1.45In	t< 1h	Release	-	
	Cold position	2.55In	1s < T < 60S(IN≤32A)	Release	Current smoothly rises to specified value within 5s	
	Cold position	2.55In	1s < T < 120S(IN>32A)	Release		
-5~+40°C	Cold position	3In	t≥0.1s	Non-release	Туре В	
	Cold position	5In	t<0.1s	Release	Туре В	
	Cold position	5In	t ≥ 0.1s	Non-release	Туре С	
	Cold position	10In	t < 0.1s	Release	Туре С	
	Cold position	10In	t≥0.1s	Non-release	Туре D	
	Cold position	20In	t<0.1s	Release	Туре D	

3. Installation

3.1 Normal working condition

The maximum ambient temperature should be -5° C < T < +40 $^{\circ}$ C, average temperature should be \leq 35 $^{\circ}$ C at 24h. The altitude of installation place should not exceed 2000m. The relative humidity should not exceed 50% at 40 $^{\circ}$ C, it permits higher relative humidity when at a higher temperature, the average maximum relative humidity should not exceed 90% at maximum humidity month, and this month's average minimum temperature does not exceed +25 $^{\circ}$ C, and it should take consideration on the product's surface for temperature change.

3.2 Installation condition

The Mini Circuit Breaker is installed by standard mounting rail; the Mini Circuit Breaker is upright installation, knob upwards is switch on position. The installation place is not of obviously impact and librate.

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3.3 Dimension

