Residual Current Operated Circuit Breaker

DZ30LE-32

1. Application

DZ30LE-32 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 conver-sion and infrequent motor start. It conforms with the standards of IEC61009.



2. Specification

2.1 Main Technical Parameter						
Туре	DZ30LE-32					
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 $I riangle m(A)$	2000					
Rated residual action current I∆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						
		l∆n	2l∆n	5l∆n	5,10,20,50,100,200,500ª(A)	l∆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	3ln	t≥0.1s	Non-release	Туре В	
	Cold position	5ln	t<0.1s	Release	Туре В	
	Cold position	5In	t ≥ 0.1s	Non-release	Туре С	
	Cold position	10ln	t < 0.1s	Release	Туре С	
	Cold position	10ln	t≥0.1s	Non-release	Type 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

