

Residual Current Circuit Breaker with Overcurrent Protection

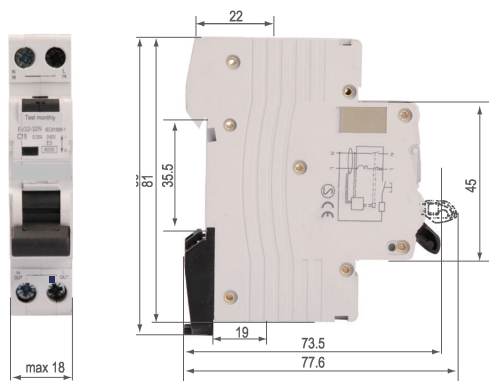
Construction and Feature

- ◆ Operating mechanism adopt double contact with DPN form, N pole opening first, then breaking.
- ◆ Leakage protection adopt electronic type integrated circuit, Contact ON/OFF state display.
- ◆ Trigger has middle-position function and a clamshell to put tags in and characteristic stripes on both sides.
- ◆ Provides protection against earth fault/leakage current, short-circuit, overload, and function of isolation.

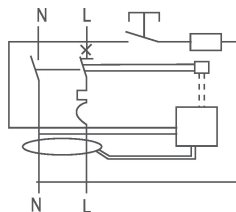
Technical Data

- ◆ Residual current characteristics: AC, A
- ◆ Pole No.: 1P+N
- ◆ Tripping curve: B, C
- ◆ Rated short-circuit breaking capacity: 6kA
- ◆ Rated current (A): 6, 10, 16, 20, 25, 32
- ◆ Rated voltage: 240V
- ◆ Rated frequency: 50Hz
- ◆ Rated residual operating current(A): 0.03
- ◆ Tripping duration: instantaneous $\leq 0.1s$
- ◆ Electro-mechanical endurance: 4000 cycles
- ◆ Diameter of screw d(mm): M4
- ◆ Degree of protection: IP20
- ◆ Fastening torque: 1.2N.m
- On symmetrical DIN rail 35mm
- Terminal Connection Height: $H_1=19mm$ $H_2=22mm$

Overall & Installation Dimensions



Wiring Diagram



Overload Current Protection Characteristics

Test Procedure	Type	Test Current	Initial State	Tripping or Non-tripping Time Limit	Expected Result	Remark
A	B, C	1.13I _n	cold	t ≤ 1h	no tripping	
B	B, C	1.45I _n	after test a	t < 1h	tripping	Current in the 5 s in the increase of stability
C	B, C	2.55I _n	cold	1s < t < 60s	tripping	
D	B	3I _n	cold	t ≥ 0.1s	no tripping	Turn on the auxiliary switch to close the current
	C	5I _n				
E	B	5I _n	cold	t < 0.1s	tripping	Turn on the auxiliary switch to close the current
	C	10I _n				

The terminology "cold state" refers to that no load is carried before testing at the reference setting temperature.

Residual Current Action Breaking Time

Type	In/A	I _{Δn} /mA	Residual Current (I _Δ) Is Corresponding To The Following Breaking Time (S)				
AC type	any value	any value	I _n	2I _n	5I _n	5A, 10A, 20A, 50A, 100A, 200A, 500A	
A type	any value	>0.01	1.4I _n	2.8I _n	7I _n		
A type	any value	>0.01	2I _n	4I _n	10I _n		
D	B		0.3	0.15	0.04	0.04	Max Break-time

The general type RCBO whose current I_{Δn} is 0.03mA or less can use 0.25A instead of 5I_{Δn}.