

Residual Current Circuit Breaker with Overcurrent Protection

Ev32-40 10KA Series



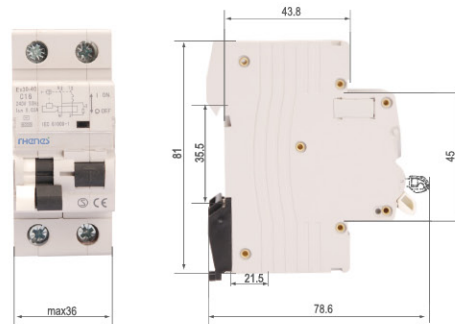
Construction and Feature

- ◆ Provides protection against earth fault/leakage current, short-circuit, overload, and function of isolation
- ◆ Provides complementary protection against direct contact by human body
- ◆ Effectively protects electric equipment against insulating failure
- ◆ Provides comprehensive protection to household and commercial distribution systems

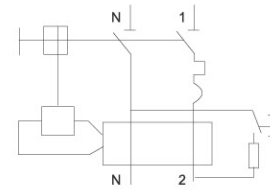
Technical Data

- ◆ Type: Electro-magnetic type
- ◆ Residual current characteristics: AC A
- ◆ Pole No.: 1P+N
- ◆ Tripping curve: B, C, D
- ◆ Rated short-circuit capacity: 10kA
- ◆ Rated current (A): 1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40
- ◆ Rated voltage: 240V AC
- ◆ Rated frequency: 50/60Hz
- ◆ Rated residual operating current(mA): 0.03, 0.1, 0.3
- ◆ Tripping duration: Instantaneous $\leq 0.1s$
- ◆ Electro-mechanical endurance: 4000 cycles
- ◆ Connection terminal: pillar terminal with clamp
- ◆ Connection capacity: Rigid conductor 16mm²
Terminal connection height: 21.5mm
- ◆ Installation: On symmetrical DIN rail 35mm
Panel mounting
Wiring Diagram

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, D	1.13In	cold	$t \geq 1h$	no tripping	
b	B, C, D	1.45In	after test a	$t < 1h$	tripping	Current in the 5s in the increase of stability
c	B, C, D	2.55In	cold	$1s < t < 60s$	tripping	
d	B	3In	cold	$t \geq 0.1s$	no tripping	Turn on the auxiliary switch to close the current
	C	5In				
	D	10In				
e	B	5In	cold	$t < 0.1s$	tripping	Turn on the auxiliary switch to close the current
	C	10In				
	D	20In				

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	$I_{\Delta n}/A$	Residual Current (I_{Δ}) Is Corresponding To The Following Breaking Time (S)				
AC type	any value	any value	In	2In	5In	5A, 10A, 20A, 50A, 100A, 200A, 500A	
A type	any value	> 0.01	1.4In	2.8In	7In		
			0.3	0.15	0.04	0.04	Max Break-time

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