Residual Current Circuit Breaker with Overcurrent Protection

Application

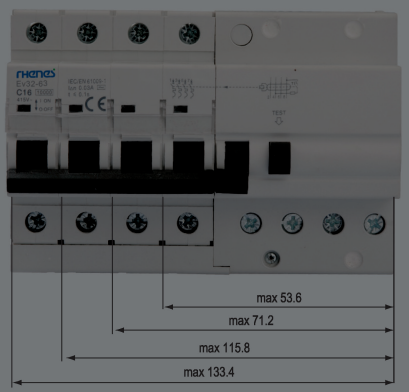
Ev32-63 is applicable to residual operating current with rated voltage 230V/400V, frequency 50/60HZ and rated current up to 63A. It is used to perform the human electricity shock protection as well as over current protection and short circuit protection for line equipment in building or similar locations, it also can provide the protection against the fire danger caused by the fault current that is resulted from the electric equipment damage.

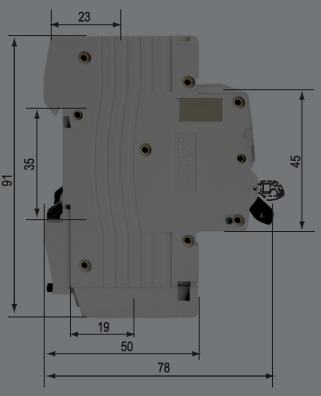
The circuit breaker is applicable for kinds of fields such as the industry, commerce, high rise building, civil building, etc.

Technical Data

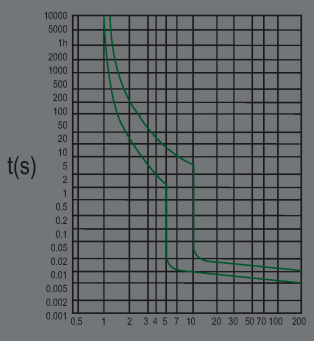
- Pole No.: 1P+N, 2P, 3P, 3P+N, 4P
- Residual current characteristics: AC, A
- Rated current (A): 1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63
- Tripping curve: B, C, D
- Rated short-circuit capacity: 6kA
- Rated voltage: 230/400V AC
- Rated frequency: 50/60Hz
- Rated residual operating current(A): 0.03, 0.1, 0.3
- Tripping duration: instantaneous≤0.1s
- Electro-mechanical endurance: 4000 cycles
- Terminal Connection Height: H1=19mm, H2=23mm

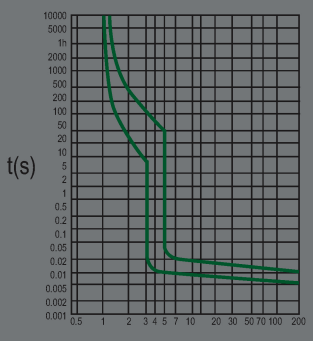
Overall & Installation Dimensions

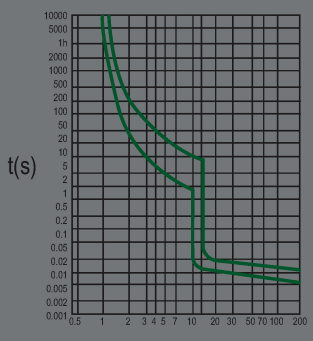




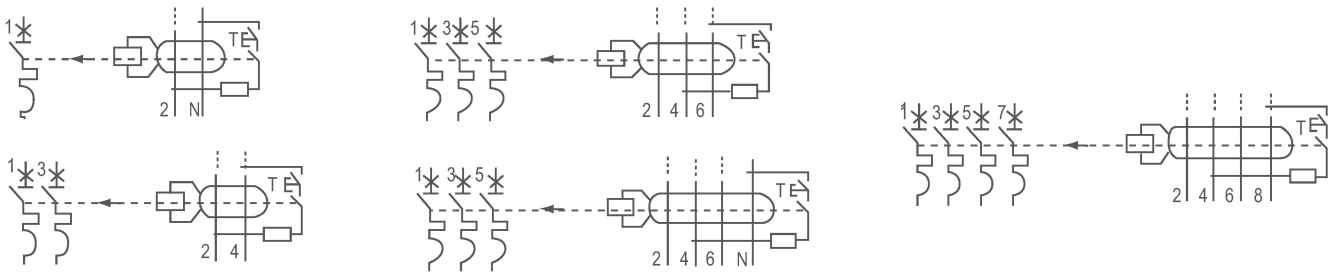
Characteristic Curve







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≥1h	no tripping	
B	B, C, D	1.45In	after test a	t<1h	tripping	Current in the 5 s in the increase of stability
C	B, C, D	2.55In	cold	1s<t<60s(In≤32A) 1s<t<120s(In>32A)	tripping	
D	B	3In	cold	t≥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” refes to that no load is carried before testing at the reference setting temperature.

Residual Current Action Breaking Time

Type	In/A	I△n/A	Residual Current (I△) Is Corresponding To The Following Breaking Time (S)					
			I△n	2 I△n	5 I△n	5A,10A,20A,50A,100A,200A,500A	I△t	
General type	any value	any value	0.3	0.15	0.04	0.04	0.04	Max Break-time

The general type RCBO whose current I△n is 0.03mA or less can use 0.25A instead of 5I△n.