



Ev31-125 2P



Ev31-125 4P



Ev51-63 2P



Ev51-63 4P

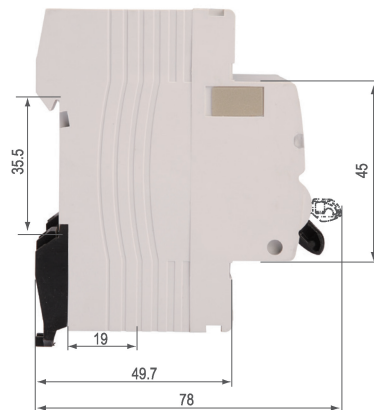
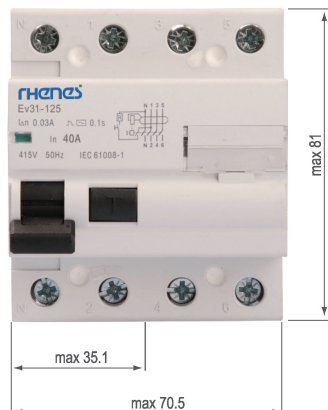
## Construction and Feature

- ◆ Elegant appearance; cover and handle in arc shape make comfortable operation.
- ◆ Contact position indicating window
- ◆ Transparent cover designed to carry label.
- ◆ In case of overload to protect circuit, RCCB handle trips and stays at central position, which enables a quick solution to the faulty line. The handle cannot stay in such position when operated manually.
- ◆ Provides protection against earth fault/leakage current and function of isolation.
- ◆ High short-circuit current withstand capacity
- ◆ Applicable to terminal and pin/fork type busbar connection
- ◆ Equipped with finger protected connection terminals
- ◆ Fire resistant plastic parts endures abnormal heating and strong impact
- ◆ Automatically disconnect the circuit when earth fault/leakage current occurs and exceeds the rated sensitivity.
- ◆ Independent of power supply and line voltage, and free from external interference, voltage fluctuation.

## Technical Data

- ◆ Mode: electro-magnetic type & electronic type ( $\leq 30\text{mA}$ )
- ◆ Residual current characteristics: A, AC, G, S, B
- ◆ Pole No.: 2, 4
- ◆ Rated making and breaking capacity: 500A( $I_n=25\text{A}, 40\text{A}$ ) or 630A( $I_n=63\text{A}$ )
- ◆ Rated current(A): 25, 40, 63, 80, 100, 125
- ◆ Rated voltage: AC 230(240)/400(415)
- ◆ Rated frequency: 50/60Hz
- ◆ Rated residual operating current  $I_{\Delta n}(\text{A})$ : 0.01, 0.03, 0.1, 0.3, 0.5
- ◆ Rated residual non operating current  $I_{\Delta no}$ :  $0.5I_{\Delta n}$
- ◆ Rated conditional short-circuit current  $I_{nc}$ : 6kA, 10kA
- ◆ Rated conditional residual short-circuit Current  $I_{\Delta c}$ : 6kA, 10kA
- ◆ Residual tripping current range:  $0.5I_{\Delta n} \sim I_{\Delta n}$
- ◆ Terminal Connection Height: 19mm
- ◆ Electro-mechanical endurance: 4000 cycles
- ◆ Connection capacity: Rigid conductor  $25\text{mm}^2$
- Connection terminal: Screw terminal
- Pillar terminal with clamp
- ◆ Fastening torque: 2.0Nm
- ◆ Installation:
  - On symmetrical DIN rail 35mm
  - Panel mounting
- ◆ Protection class: IP20

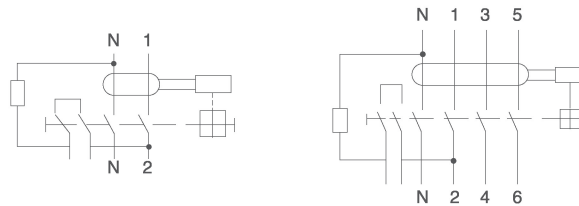
## Overall & Installation Dimensions



# Ev31-125 & Ev51-63 Series

## Residual Current Circuit Breaker

### Wiring Diagram



### Residual Current Action Breaking Time

Type	$I_n/A$	$I_{\Delta n}/A$	Residual Current ( $I_{\Delta}$ ) Is Corresponding To The Following Breaking Time (S)				
			$I_{\Delta n}$	$2 I_{\Delta n}$	$5 I_{\Delta n}$	5A, 10A, 20A, 50A, 100A, 200A, 500A	
General type	any value	any value	0.3	0.15	0.04	0.04	Max Break-time
S type	$\geq 25$	$>0.03$	0.5	0.2	0.15	0.15	Max Break-time
			0.13	0.06	0.05	0.04	Min non-driving time
G type	any value	any value	0.5	0.2	0.15	0.15	Max Break-time
			0.01	0.01	0.01	0.01	Min Non-driving time

### Residual Current Operated Circuit Breaker Tripping Current Range

Type	Tripping current $I_{\Delta}/A$		
AC	$0.5I_{\Delta n} < I_{\Delta} < I_{\Delta n}$		
A	Lagging Angle	$I_{\Delta n} \leq 0.01A$	$I_{\Delta n} \leq 0.01A$
	0°	$0.35I_{\Delta n} \leq I_{\Delta} \leq 1.4I_{\Delta n}$	$0.35I_{\Delta n} \leq I_{\Delta} \leq 2I_{\Delta n}$
	90°	$0.25I_{\Delta n} \leq I_{\Delta} \leq 1.4I_{\Delta n}$	$0.25I_{\Delta n} \leq I_{\Delta} \leq 2I_{\Delta n}$
	135°	$0.11I_{\Delta n} \leq I_{\Delta} \leq 1.4I_{\Delta n}$	$0.11I_{\Delta n} \leq I_{\Delta} \leq 2I_{\Delta n}$

### The Frequency is different from the 50/60Hz(B type)

Frequency(Hz)	Residual non operating current	Residual operating current
150	$0.5I_{\Delta n}$	$2.4I_{\Delta n}$
400	$0.5I_{\Delta n}$	$6I_{\Delta n}$
1000	$I_{\Delta n}$	$14I_{\Delta n}$