Ev31-63-B Residual current operated circuit Breaker

Construction and Feature:

- Elegant appearance; cover and handle in arc shape make comfortable operation.
- Contact position indicating window
- Transparent cover designed to carry label.
- 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 fi nger 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 fl uctuation.

Offers protection against earth leakage faults. As follow:

- Alternating
- Unidirectional pulsating with phase angle mode
- Multi-frequency
- high-frequency 1KHz
- Direct without ripple
- Two-phase rectified
- Three-phase rectified

Technical Parameters:

- Standard: GB/T 22794 IEC/EN62423 GB/T 16916.1 IEC/EN61008-1
- Rated operating voltage (Ue): AC 240/415
- Rated insulation voltage (Ui): 500V
- Rated operating current (In): 16A、25A、32A、40A、63A
- Rated residual operating current (I△n):0.03A、0.1A、0.3A
- Rated conditional short-circuit current Inc : 10KA
- **Rated conditional residual short-circuit Current I △ c: 10kA**

◆Rated switching and breaking capacity (Im)：In≤40A：500A In=63A：630A

◆Poles No:1P+N/3P+N

◆Pollution degree : 2

◆Ambient air temperature: -5℃ -40℃

◆ Electro-mechanical endurance: 4000 cycles

◆ Connection capacity: Rigid conductor 25mm2

Connection terminal:Screw terminal
Pillar terminal with clamp

◆ Fastening torque: 2.0Nm

◆ Installation:

On symmetrical DIN rail 35mm
Panel mounting

◆ Protection class: IP20

Residual Current Action Breaking Time:

Type	In A	I△n A	Residual Current (I△) is corresponding to the following breaking time (S)				
			2 I△n	4 I△n	10 I△n	5A、10A、20A、50A、100A、200A[a]	Remarks
General type	Any value	Any value	0.3	0.15	0.04	0.04	Max Break-time
S type	≥25	> 0.030	0.5	0.2	0.15	0.15	Max Break-time
			0.13	0.06	0.05	0.04	Min non-driving time

Tripping Current Range:

Type	Tripping current I△/A		
AC	0.5I△n<I△<I△n		
A	Lagging Angle	I△n>0.01A	I△n≤0.01A
	0°	0.35I△n≤I△≤1.4I△n	0.35I△n≤I△≤2I△n
	90°	0.25I△n≤I△≤1.4I△n	0.25I△n≤I△≤2I△n
	135°	0.11I△n≤I△≤1.4I△n	0.11I△n≤I△≤2I△n

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

Frequency(Hz)	Residual non operating current	Residual operating current
150	0.5I△n	2.4I△n
400	0.5I△n	6I△n
1000	I△n	14I△n

According to the smooth DC residual current trip range (**B type meets the following requirements, the following requirements should also be met)**

a) When the smooth residual current of the rated residual operating current (I△n) or the smooth DC residual current of 10mA (whichever is greater) is superimposed on the rated residual AC residual current, the B-type RCCB should operate, and the AC tripping The current should be less than or equal to IΔn;

b) When the smooth DC residual current of 0.4 times the rated residual operating current (I△n) or the smooth DC residual current of 10 mA (whichever is greater) is superimposed on the residual current of the pulsating DC, the B-type RCCB should act, for I△ The RCCB of n>0.01A, the

tripping current should be no more than 1.4 I△n, or RCCB of I△n≤0.01, should not be greater than 2 I△n;

c) Stable and increased pulsating DC residual current generated by the two relative rectifier circuits, B type RCCB should operate in the range of 0.5I △ n to 22 I △ n (the trip time is shown in the table above);

d) Three symmetrical pulsating DC residual currents generated by the relative rectifier circuit, B type RCCB should operate in the range of 0.5I △ n to 22 I △ n (the trip time is shown in the table above);

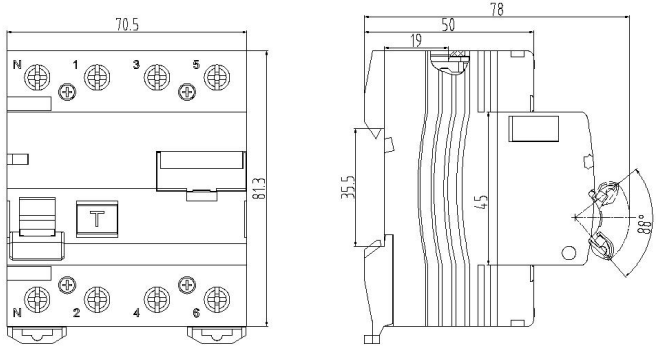
e) For smooth increase of smooth DC residual current, B-type RCCB should operate in the range of 0.5I△n to 22I△n (see the table for tripping time)

Warning:

◆Installed by qualified electricians.

◆The RCCB can not protect against the danger of electric shock which caused by contacting the two line of protect circuit simultaneously.

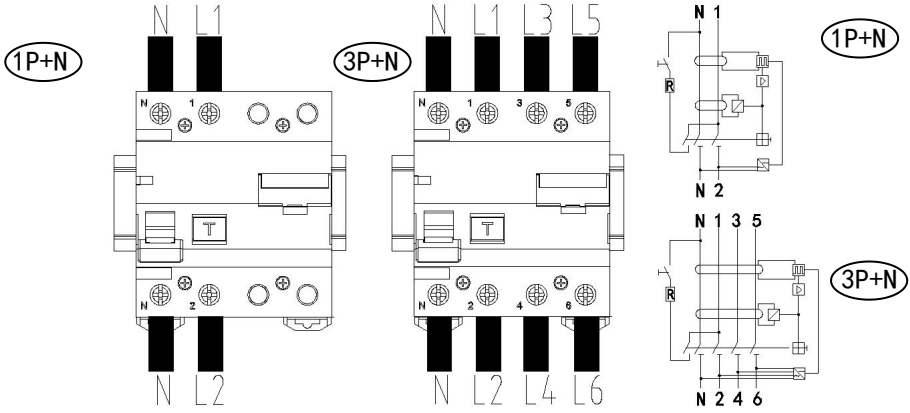
Outline dimension:

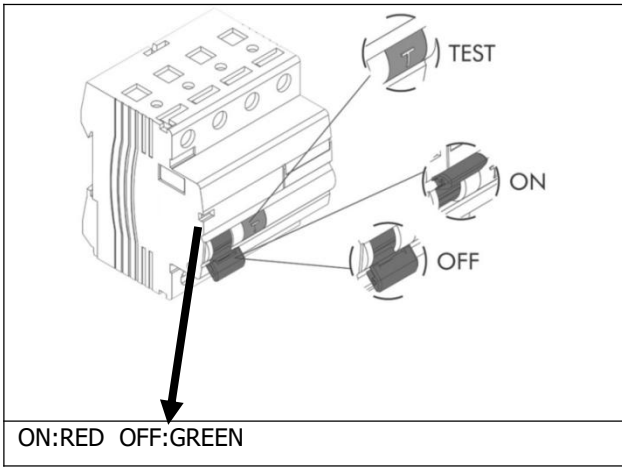


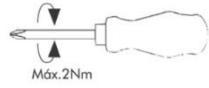
Wiring:

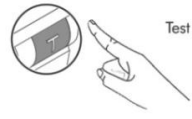
◆Standard mounting guide rail

◆Wiring height:19mm

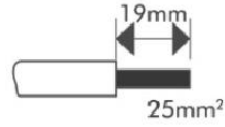








Once every month



Finished picture (3P+N and 1P+N):