

⚠ Before installation, wiring, operation, maintenance and inspection of the device, be sure to read the operating instructions carefully to ensure proper operations.

Customer Center - Quick Response Service, Excellent technical support  
 TEL. 82-1644-5481 | Home page. www.lselectric.co.kr  
 Specifications in this instruction manual are subject to change without notice due to continuous products development and improvement.

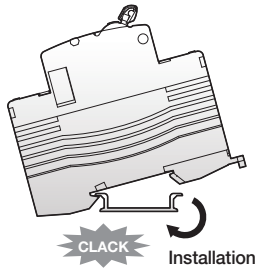
Address: LS Tower, 127, LS-ro, 14119, KOREA

## 1. Ratings

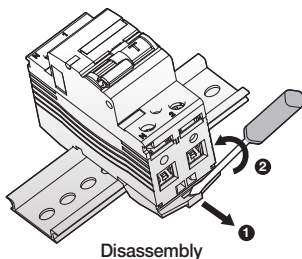
Type	RKN		RKN-b	
	Rated Current	25, 32, 40, 63A		63AF 20, 40, 63A
Rated Voltage	1P+N: 240V AC, 3P+N: 415V AC			
Operating Current	30, 100, 300mA			
Non Operating Current	15, 50, 150mA			
Operation Type	A / AC		A / AC	AC
Conditional short circuit capacity	6kA		10kA	
Mount	On 35mm DIN-Rail			
Terminal	Lug Type (Cable up to 16mm <sup>2</sup> )		Dual Type (Lug & Screw)	
Standard	SEMKO CB IEC61008-1			

## 2. Installation

### 1) Installation and Disassembly



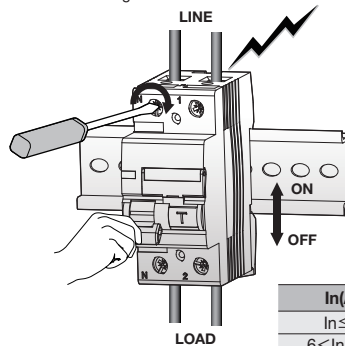
Installation



Disassembly

### 2) Connection

※ Caution against insulation



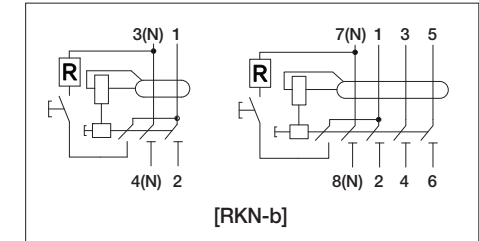
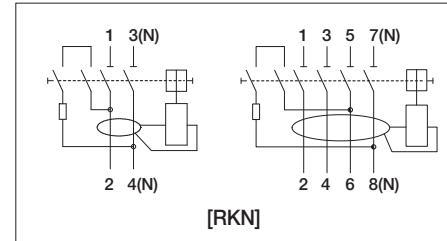
- ▶ Terminal screw
  - 63AF: M5
  - 100AF: M6
- ▶ Torque
  - M5: 2.0N·m
  - M6: 2.5N·m

In(A)	Wiring Capability
$In \leq 6$	1mm <sup>2</sup>
$6 < In \leq 13$	1.5mm <sup>2</sup>
$13 < In \leq 20$	2.5mm <sup>2</sup>
$20 < In \leq 25$	4mm <sup>2</sup>
$25 < In \leq 32$	6mm <sup>2</sup>
$32 < In \leq 50$	10mm <sup>2</sup>
$50 < In \leq 63$	16mm <sup>2</sup>
$63 < In \leq 80$	25mm <sup>2</sup>
$80 < In \leq 100$	35mm <sup>2</sup>

\* Reference : IEC 61008-1

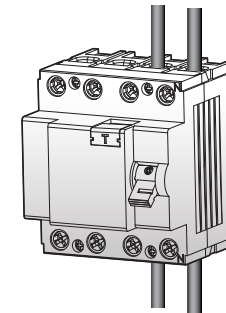
## 3. Operation

### 1) Circuit Diagram



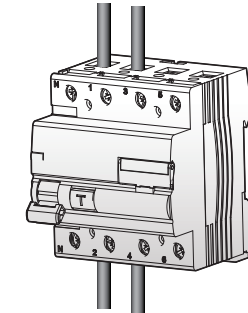
### 2) Connection

If you are using a 4P product as a 2P product, refer to the figure below.

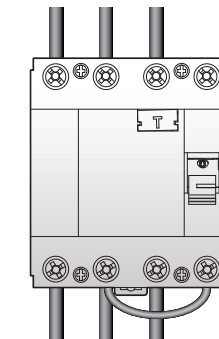


[RKN]

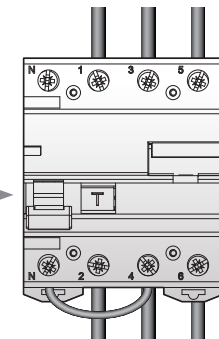
Operating in 3phase network (without neutral N)



[RKN-b]



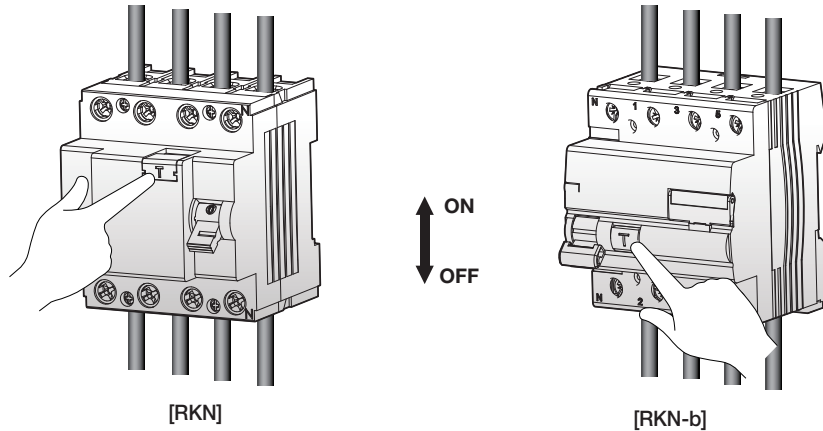
[RKN]



[RKN-b]

### 3) Functional Test

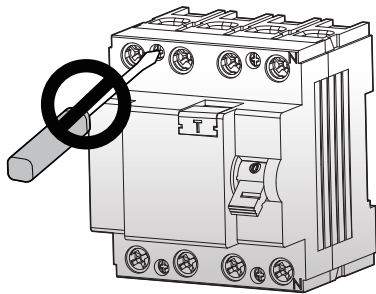
For functional test with supply voltage applied, switch the handle to ON position. Then press the test push button. The RCCB must trip immediately (the handle returns to OFF position). The functional test should be performed in regular monthly intervals.



### 4) Rated short-circuit withstand capacity

- 6000A, Can be used in combination with 63A circuit breaker, can also be used instead of a fuse.
- 10000A, 63A frame can be used in combination with 63A circuit breaker, can also be used instead of a fuse.
- 100A frame can be used in combination with 100A circuit breaker, can also be used instead of a fuse.

### 5) Do not open the breaker



⚠ The Warranty Lapses!!

### 4. Safety Precaution

⚠ **DANGER** : Offending against the message will result in death or serious injury.

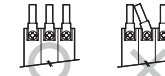
⚠ **CAUTION** : Offending against the message will result in minor injury or physical damage.

#### ⚠ **DANGER**

- 1) Turn off the upstream circuit breaker before installing or service to prevent electric shocks and burns due to short circuit.
- 2) Do not touch any live naked terminals. It makes an electric shocks.
- 3) Do not touch two live lines simultaneously. The circuit breaker does not operate even if an electric shock occurs.

#### ⚠ **CAUTION**

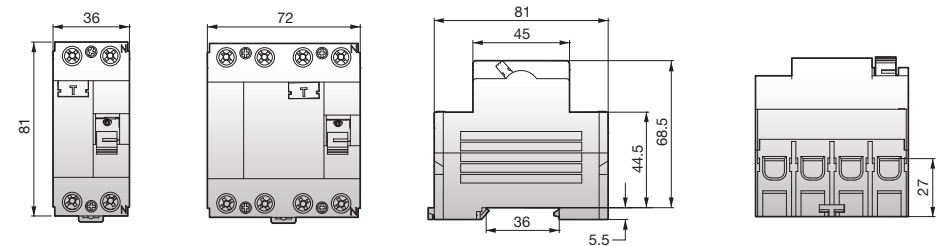
- 1) Do not install the circuit breaker in place of environment with shock, high temperature, humidity, dust, corrosive gases, excessive vibration, etc. to prevent fire accidents and malfunction of the device.
- 2) Use the breaker in a range of the rated voltage and current shown on the name plate. Or it may cause malfunction.
- 3) Each terminal or conductor pole should be connected parallel as shown below.



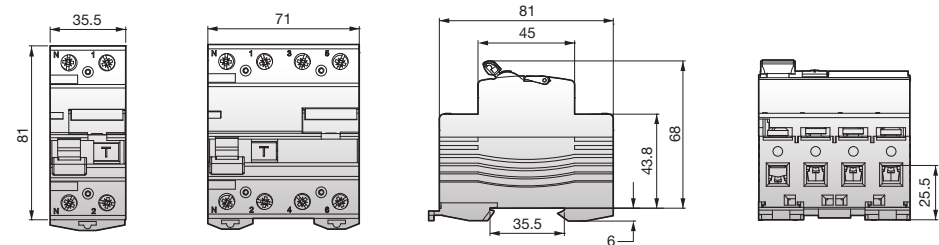
- 4) Be sure to ground the ground terminals of electrical devices.
- 5) When the circuit breaker trips of it self, remove the cause and turn the handle on. Or else, it may lead to the fire accident.
- 6) Do not modify the device unless it is permitted.
- 7) When the device become useless, it should be dispose of them as an industrial waste.
- 8) In order to fix MCB in DIN-Rail, Install fixing bracket on the both MCB side, After wiring.

### 5. Dimension

#### 1) RKN



#### 2) RKN-b 63AF



#### 3) RKN-b 100AF

