#### YCB9-63R series Miniature Circuit Breaker OPERATION INSTRUCTION

Standard: IEC 60898-1



Before installing and using this product, please read this manual carefully and pay more attention to safety.

# YCB9-63R series 15KA Miniature Circuit Breaker Instruction

## 1.General

YCB9-63R Series Miniature circuit breaker is applicable to protecting from overload and short circuit in the circuit of AC 50/ 60Hz, Rated voltage 230/400V rated current 63A, it also can be used in switch the infrequent operation of the circuit under normal conditions. It's mainly used in industry, commerce, high-rise buildings and residential houses and so on.

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## 2.Operating conditions

2.1 Circumstance temperature -5°C~+40°C, average temperature within 24h not exceeding +35°C.

2.2 Altitude above sea level less than 2000m.
2.3 Humidity not exceeding 50% at 40°C and not exceeding 90% at 25°C.

2.4 Pollution class 2.

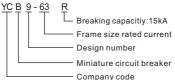
2.5 Installation class II or III.

2.6 Installation method DIN Rail mounting type.

2.7 Product shall be installed at the place where there shall be no severe impact and vibration.

2.8 The product should locate in the places where there are no obvious impact and shake.

# 3. Type designation



3.1 The basic specifications and main technical parameters of the circuit breaker are shown in Table 1; The overcurrent protection characteristics are shown in Table 2.

Table 1

|   | _   | Table I |
|---|---|---------|
| Ui  | 500V  |         |
| Number of poles                           | 1P/2P   | 3P/4P   |
| Rated trequency Hz                        | 50/60   |         |
| Rated voltage Ue                          | AC230V/400V   | AC400V  |
| Rated Current In                          | 1A,2A,3A,4A,6A,8A,10A,13A,<br>16A,25A,32A,40A,50A,63A |         |
| Thermo-magnetic release characteristic    | B/C/D   |         |
| Rated short circuit breaking capac1ty Icn | 15kA  |         |

| Remarks                                       | current<br>Increase<br>steadily<br>within5s |                              |   | Turn on the power<br>supply by closing<br>the auxiliary switch | Turn on the power<br>supply by closing<br>the auxiliary switch |
|---|---|------------------------------|---|--|--|
| Testing<br>env1ronment<br>temperature         | 30°C~ 35°C                                  |                              |   |  |  |
| Expected<br>result                            | Not tripping                                | Tripping                     | Tripping  | N ot tripping  | Tripping   |
| Time limit<br>for tripping<br>or not tripping | t≤1h  | t<1h                         | 1s <t<60s<br>(In≤32A)<br/>1s<t<120s<br>(In&gt;32A)<br/>(In&gt;32A)</t<120s<br></t<60s<br> | t≤0.1s   | t<0.1s   |
| Initial status                                | cold state                                  | Right after<br>test number a | cold state  | cold state   | cold state   |
| Test<br>estcurrent                            | 1.13In                                      | 1.45In                       | 2.55  | 3In<br>5In<br>10In   | 5ln<br>10ln<br>20ln  |
| Test  | BCD   | BCD                          | BCD   | BCD  | BCD  |
|   | a   | q                            | o   | р  | Ð  |

Note: The terminology "Cold state"means that the test is performed at the base calibration temperature with no load prior to the test.

Table 2

### 3.2 Mechanical and Electrical lifeshown in Table 3 Table 3

| Item                 | Times | Operation Frequency times/h | Rated current(A) |
|----------------------|-------|-----------------------------|------------------|
| Electrical life 1000 | 10000 | 240                         | 1~32             |
|                      | 10000 | 120                         | 40 ~ 63          |
| Mechanical life      | 20000 | 240                         | 1~63             |

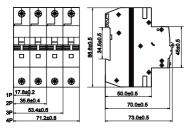
#### 3.3 Wire connection

Before installation, check whether technical parameter of the circuit breaker is in conformity with user's requirement. The conductor of power supply shall be connected to the up terminal of circuit breaker. During installation, the tightening torque is max 2.5N·m. The sectional area of connecting wire can refer to Table 4.

Table 4

| conductor cross section S m |                                 |
|-----------------------------|---------------------------------|
| 1                           |                                 |
| 1.5                         |                                 |
| 2.5                         |                                 |
| 4                           |                                 |
| 6                           |                                 |
| 10                          |                                 |
| 16                          |                                 |
|                             | 1<br>1.5<br>2.5<br>4<br>6<br>10 |

## 4. Overall and mounting dimensions



### 5. Ordering instruction

5.1 When ordering, the customer shall indicate the product type, tripping curve, rated current, number of poles, accessories and quantity of the circuit breaker. For example: YCB9-63R C25 3P 880pcs. 5.2 Customers can negotiate separately if you have special requirements.



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