

# YCB9-80M series


Miniature Circuit Breaker

OPERATION INSTRUCTION

Standard: IEC 60898-1

**CNC**

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

## **YCB9-80M series**

### **Miniature Circuit Breaker Instruction**

#### **1 General**

YCB9-80M miniature circuit breaker(circuitbreaker) is applicable to the circuit with AC50Hz/60Hz, rated voltage of no more than 400V,and rated current up to 63 A for over load protection and short circuit protection. This product can be applied to various places such as industrial, commercial, tall buildings, and residential houses.

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#### **2 Operating conditions**

2.1 Ambient air temperature  $-25^{\circ}\text{C}\sim+60^{\circ}\text{C}$

2.2 Altitude:  $\leq 2000\text{m}$ .

2.3 Air conditions: At mounting site, relative humidity not exceed 50% at the maximum temperature of  $+40^{\circ}\text{C}$ . For the wettest month, the maximum relative humidity averaged shall be 90% while the lowest temperature averaged in that month is  $+20^{\circ}\text{C}$ , special measures should be taken to occurrence of condensation.

2.4 The installation category is II, III.

2.5 The circuit breaker shall be installed on DIN rail EN 60715 (35mm), which shall meet the A1.1 TH 35-7.5 steel mounting rail requirements.

2.6 Pollution grade: 2

2.7 Mounting conditions: inclination between mounting plane and vertical plane not exceed  $+5^{\circ}$ .

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

### 3 Basic parameters

#### 3.1 Type designation

YC B 9 - 80M



3.2 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

Ui	Number of poles	Rated frequency Hz	Rated voltage Ue	Rated Current In (A)	Thermo-magnetic release characteristic	Rated short circuit breaking capacity Icn
500V	1P/2P	50/60	AC230V/ 400V	6, 10, 16, 20, 25, 32, 40, 50, 63, 80	B/C/D	6kA, 10kA
	3P/4P		AC400V			

Table 2

Test Type	Testing current	Initial state	Time limit for tripping or not tripping	Expected result	Testing environment temperature	Remarks
a	BCD 1.13In	Cold state	$t \leq 1\text{h}$	Not tripping	30°C~35°C	Current is rising within 5s
b	BCD 1.45In	Right after test a	$t < 1\text{h}$	Tripping		
c	BCD 2.55In	Cold state	$1\text{s} < t < 60\text{s} (I_n \leq 32A)$ $1\text{s} < t < 120\text{s} (I_n > 32A)$	Tripping		
d	B C D 3In 5In 10In	Cold state	$t \leq 0.1\text{s}$	Not tripping		Turn on the power supply by closing the auxiliary switch
e	B C D 5In 10In 14In	Cold state	$t < 0.1\text{s}$	Tripping		

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

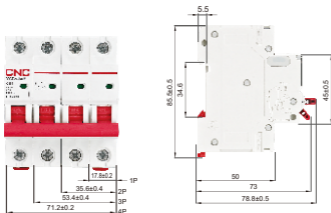
### 3.4 Wire connection

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

Rated current In A	Conductor cross section S mm <sup>2</sup>
6	1
10	1.5
16, 20	2.5
25	4
32	6
40, 50	10
63	16
80	25

## 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:

YCB9-80M C25 1P 180pcs.

5.2 Customers can negotiate separately if you have special requirements.



# CERTIFICATE

Product Model: YCB9-80M series

Standard: IEC 60898-1

Inspector : **CNC001**

Production date: Printed on the product  
or package.

This product is qualified according  
to the delivery inspection

A vertical red rectangular logo with the letters 'CNC' in white, positioned on the right side of the page.

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## CNC ELECTRIC

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