

# YCB9-80 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.

## YCB9-80 series

### Miniature Circuit Breaker Instruction

#### General

YCB9-80 miniature circuit breaker(circuit breaker) is applicable to the circuit with AC 50Hz/60Hz, rated voltage of no more than 400V, and rated current up to 80 A for overload 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

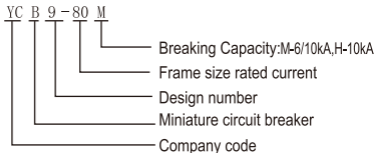
2.1 Ambient air temperature  $-25^{\circ}\text{C}\sim+60^{\circ}\text{C}$

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°C. For the wettest month, the maximum relative humidity averaged shall be 90% while the lowest temperature averaged in that month is +20°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  $\pm 5^\circ$ .

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

### 3.1 Type designation



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	Thermo-magnetic release characteristic	Rated short circuit breaking capacity Icn
500V	1P/2P	50/60	AC230V/400V	6A,10A,16A,20A,25A,32A,40A,50A,63A,80A	B/C/D	6kA/10kA
	3P/4P		AC400V			

Table 2

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

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

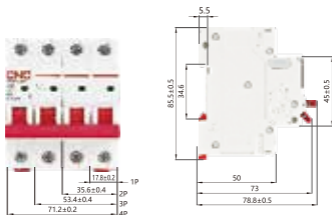
### 3.4 Wire connection

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: YCB9-80

Standard: IEC 60898-1

Inspector: CNC 001

Production date: Printed on the product  
or package.

This product is qualified according  
to the delivery inspection

**CNC**

YCB9-80 series

## CNC ELECTRIC

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