NB7
Miniature Circuit Breaker

1. General

The NB7 series miniature circuit breaker is applicable to the circuit with an alternating current of 50Hz, rated voltage of 240/415V, and rated current up to 63A for overload protection and short circuit protection, and also for not-frequent operational transformation in the circuit under normal condition.
This product can be applied to various places such as industrial, commercial, and tall buildings, and residential houses.
The product meets the standards of IEC60898-1.

2. Type designation

N B 7

- 7 — Design number
- B — Miniature circuit breaker
- N — Company code

3. Technical data

3.1 Main specifications

3.1.1 Graded according to the rated current In: 1A, 2A, 3A, 4A, 6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A;

3.1.2 Classified as follows according to the type of instantaneous release: type B (3-5)In, type C (5-10)In, type D ((10-16)In;

3.1.3 Categorized as follows according to the number of poles:

a. Single pole
b. Two poles
c. Three poles
d. Four poles

3.2 Technical parameters

3.2.1 For the rated short circuit breaking capacity, see Table 1

Table 1

Rated current In (A)	Number of poles	Rated voltage Ue (V)	Rated short circuit capacity Icn (A)
B, C type: 1～40	1	240/415	6000
	2, 3, 4	415	
B, C type: 50 63	1	240/415	4500
	2, 3, 4	415	
D type: 1～63	1	240/415	
	2, 3, 4	415	

3.2.2 Mechanical/electrical Life

a. Electrical life: not less than 4,000 times
b. Mechanical life: not less than 10,000 times

3.2.3 For the over current protection characteristics, see Table 2

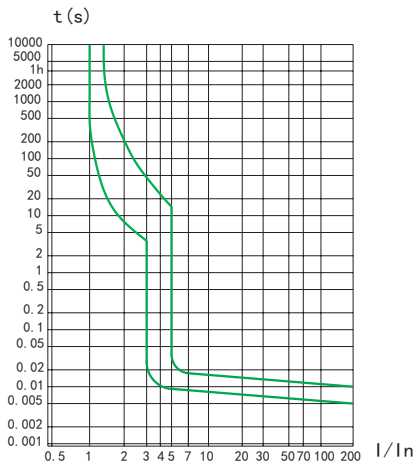
Table 2

Test	Type	Test current	Initial state	Time limit for tripping or not tripping	Expected result	Test environment temperature	Remarks
a	B, C, D	1.13 In	Cold state	t≤1h	Not tripping	30℃～35℃	The current is rising within 5s
b	B, C, D	1.45 In	Right after test number 1	t<1h	Tripping		
c	B, C, D	2.55 In	Cold state	1s<t<60s (In≤32A) 1s<t<120s (In>32A)	Tripping		
d	B	3In	Cold state	t≤0. 1s	Not tripping		The power supply is turned on by closing the auxiliary switch
	C	5In					
	D	10In					
e	B	5In	Cold state	t<0.1s	Tripping		The power supply is turned on by closing the auxiliary switch
	C	10In					
	D	16In					

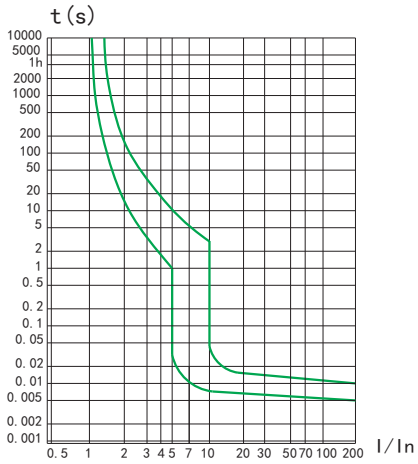
Note: The terminology “Cold state” means that the test is performed at the base calibration temperature with no load prior to the test.

3.2.4 For the tripping performance diagram, see Fig 1

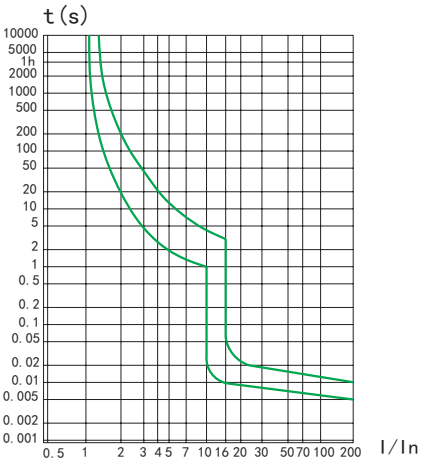
B Type



C Type



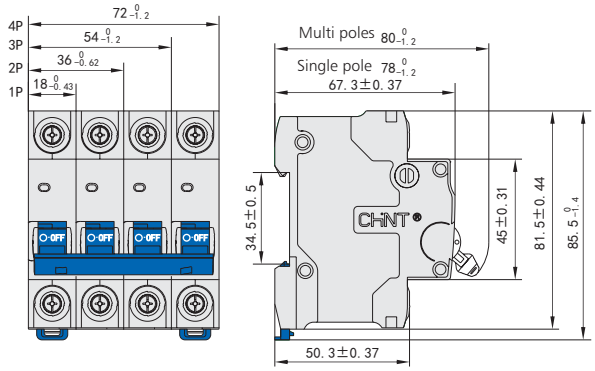
D Type



3.2.5 Wiring: good for connection of leads of less than 25mm^2 (see Table 3); wiring method: screw hold-down with a toque of 2N·m

Rated current In (A)	Nominal cross-sectional area of the copper conductor (mm^2)
1~6	1
10	1.5
16, 20	2.5
25	4
32	6
40, 50	10
63	16

4. Overall and mounting dimensions (mm)



5. Ordering information

5.1 When ordering the goods, the user shall indicate the following items:

5.1.1 Types and names of products, for example, NB7 miniature circuit breaker;

5.1.2 Instantaneous tripping type and rated current, for example, C25;

5.1.3 Number of poles: for example, 2P;

5.1.4 Amount on order, for example, 50 units;

5.2 Example for ordering: 50 units of the NB7 series miniature circuit breakers, 2P, C25.