

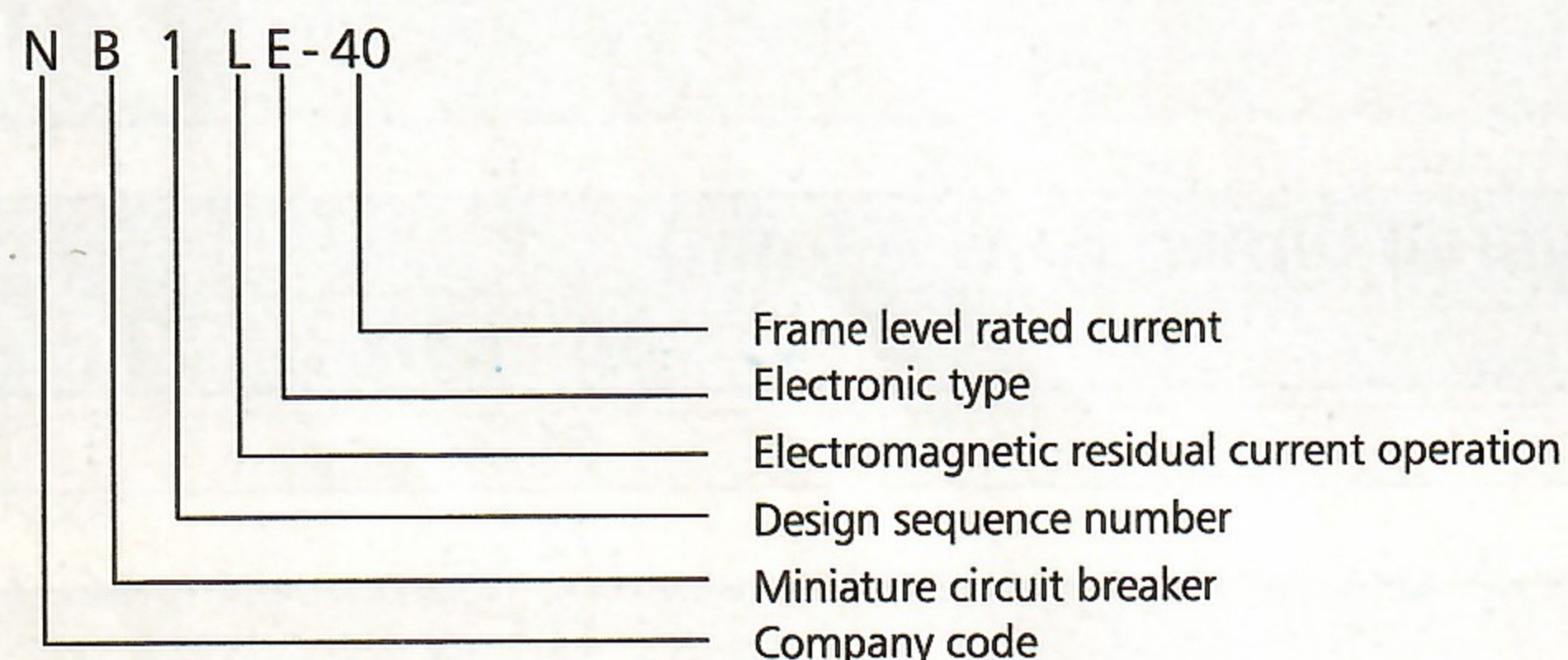
CE

NB1LE-40 Residual Current Operated Circuit Breaker with over-current protection (Electronic)

1. General

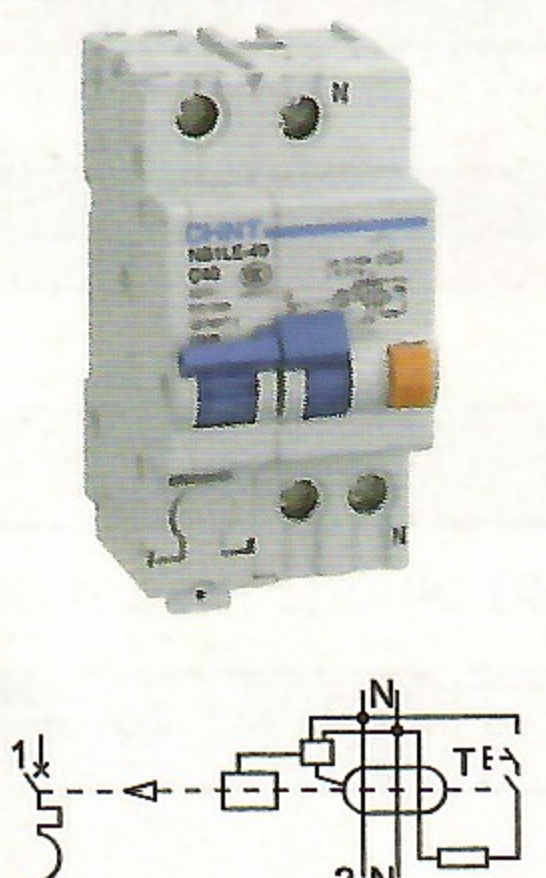
- 1.1 Certificates: CE;
- 1.2 Electric ratings: up to 40A, 230V/1P+N, 2P, 400V/3P, 3P+N, 4P, AC50/60Hz;
- 1.3 Tripping characteristics: C;
- 1.4 I_{cn} : 6000A
- 1.5 Rated residual current operated making & breaking capacity $I_{\Delta m}$: 500A ;
- 1.6 Rated residual non-operated current $I_{\Delta no}$: $0.5I_{\Delta n}$;
- 1.7 Rated insulation voltage U_i : 500 V;
- 1.8 Rated impulse withstand voltage U_{imp} : 6000 V;
- 1.9 Life (operations):
 - a. Electric life: 2000, $\cos \phi = 0.85 \sim 0.9$
 - b. Mechanical life: 2000
 - c. Operating frequency: 240/h ($I_n \leq 25A$), 120/h ($I_n > 25A$)
- 1.10 Standard: IEC/EN 61009-1.

2. Type Designation

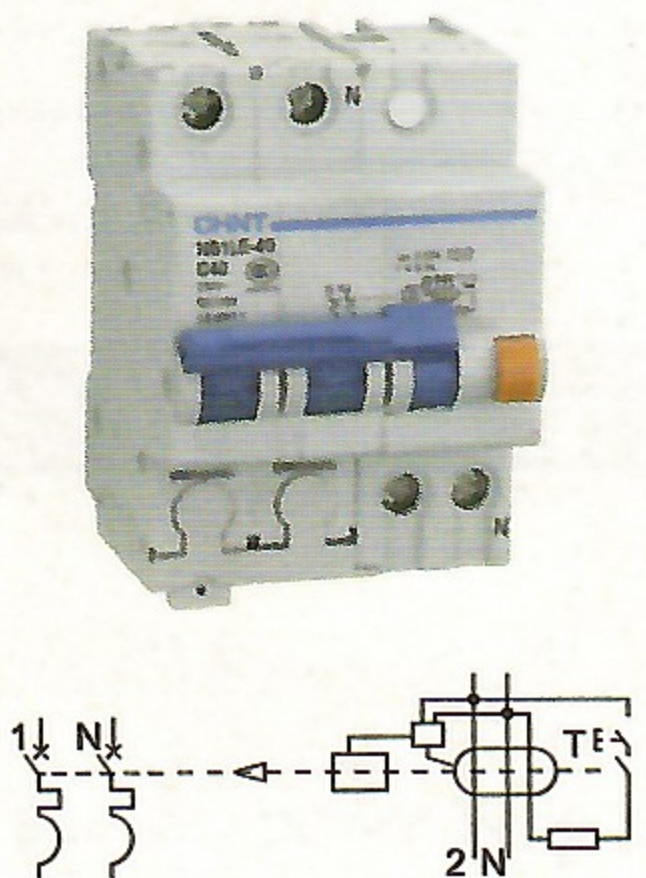


2. Technical Data

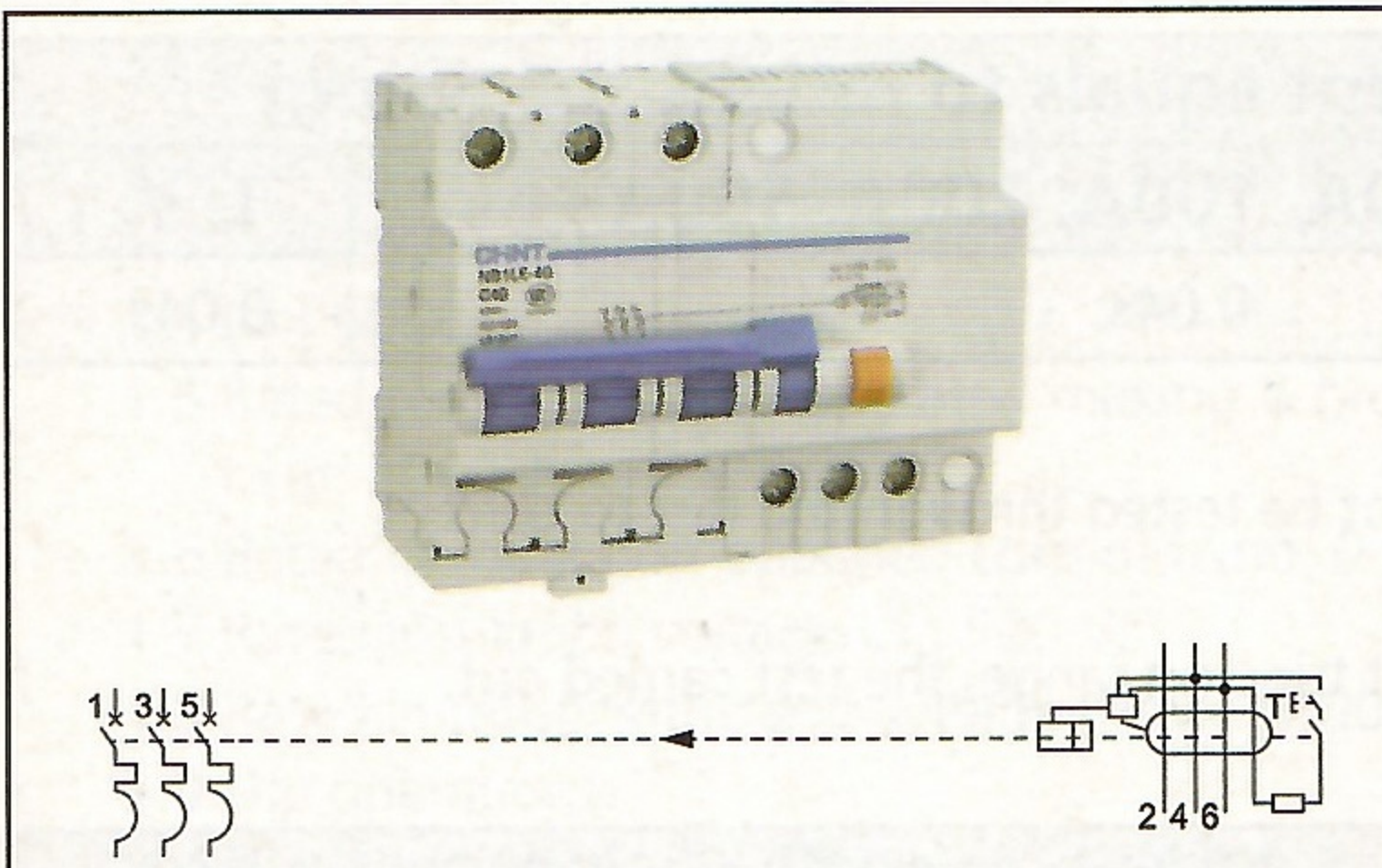
★ NB1LE-40, Curve C, 1P+N

	I_n (A)	$I_{\Delta n}$ (mA)	CTN	Order Code
	6	30	60	142601
	10	30	60	142602
	16	30	60	142603
	20	30	60	142604
	25	30	60	142605
	32	30	60	142606
	40	30	60	142607

★ NB1LE-40, Curve C, 2P

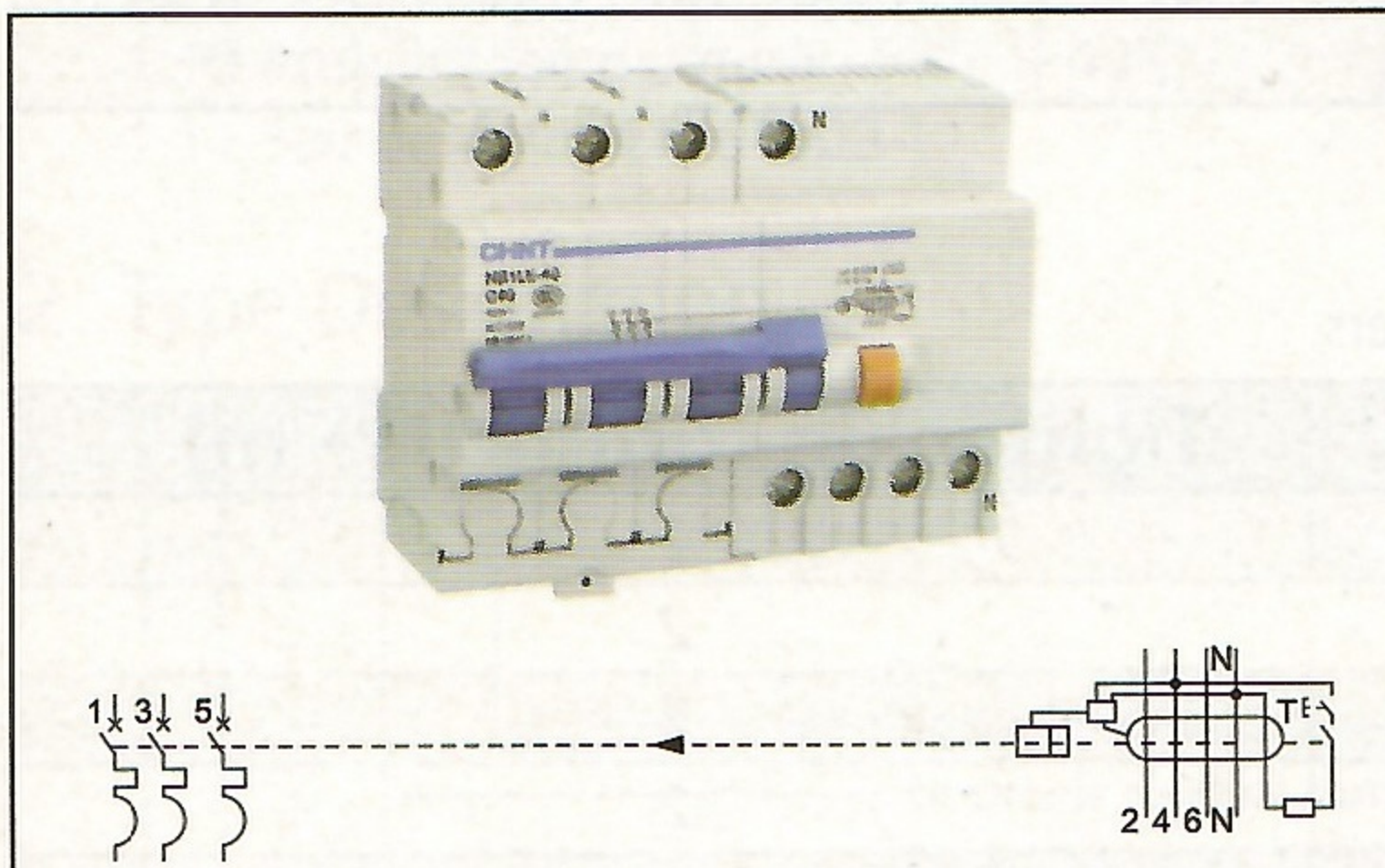
	I_n (A)	$I_{\Delta n}$ (mA)	CTN	Order Code
	6	30	48	142608
	10	30	48	142609
	16	30	48	142610
	20	30	48	142611
	25	30	48	142612
	32	30	48	142613
	40	30	48	142614

★ NB1LE-40, Curve C, 3P



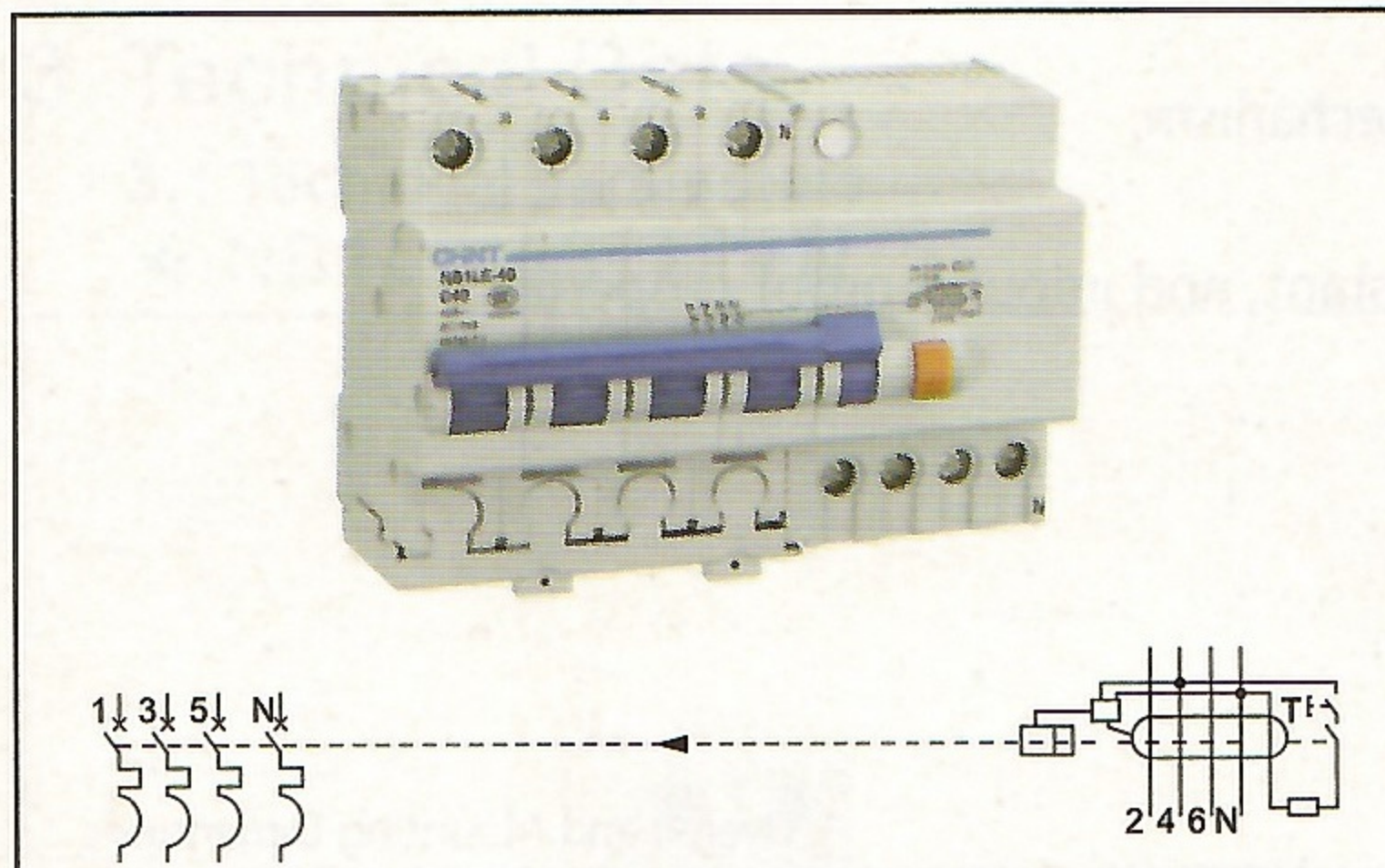
In (A)	I Δ n (mA)	CTN	Order Code
6	30	24	142615
10	30	24	142616
16	30	24	142617
20	30	24	142618
25	30	24	142619
32	30	24	142620
40	30	24	142621

★ NB1LE-40, Curve C, 3P+N



In (A)	I Δ n (mA)	CTN	Order Code
6	30	24	142622
10	30	24	142623
16	30	24	142624
20	30	24	142625
25	30	24	142626
32	30	24	142627
40	30	24	142628

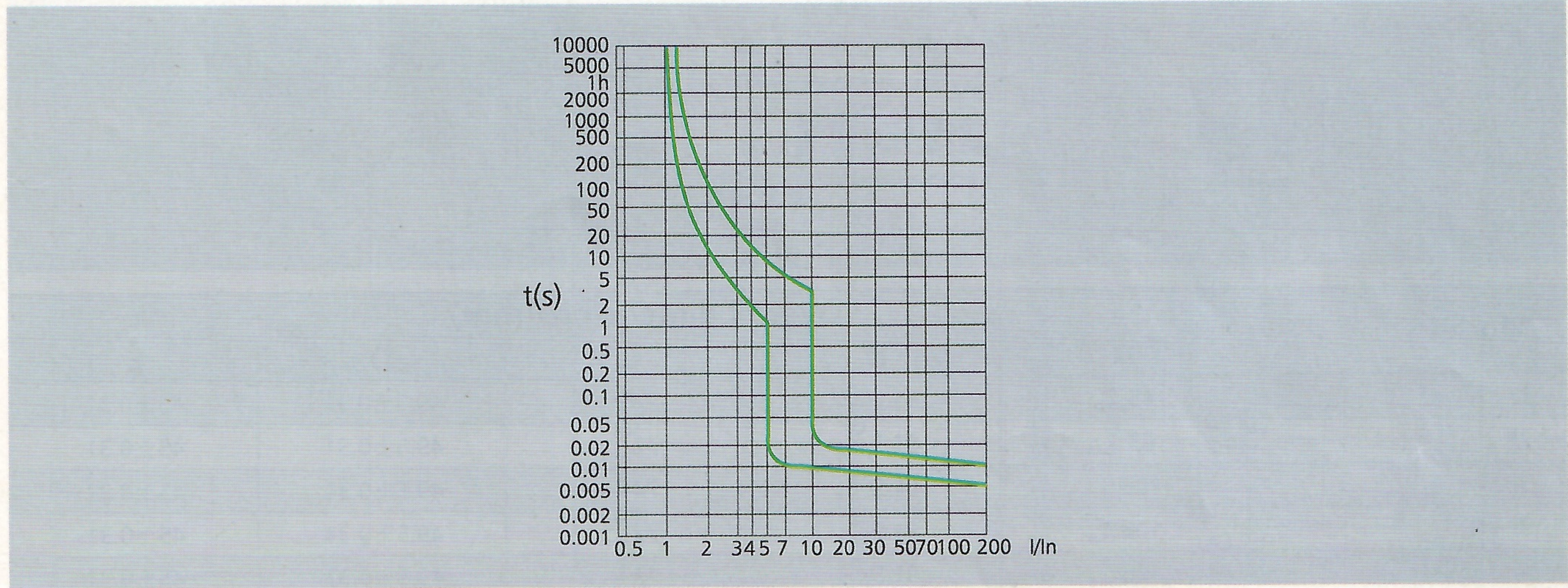
★ NB1LE-40, Curve C, 4P



In (A)	I Δ n (mA)	CTN	Order Code
6	30	24	142629
10	30	24	142630
16	30	24	142631
20	30	24	142632
25	30	24	142633
32	30	24	142634
40	30	24	142635

Curves

C curve



3.2 Breaking time of residual current

In (A)	IΔn (A)	Breaking time when the residual current equals to ratings following)				
		IΔn	2IΔn	5IΔn	5A, 10A, 20A, 50A, 100A, 200A, 500A ^a	IΔt ^b
6~40	0.03, 0.1, 0.3	0.1s	0.05s	0.04s	0.04s	0.04s

Note:

- a. Current ratings beyond the lower limit of over-current instantaneous tripping range will not be tested through the test to current of 5A, 10A, 20A, 50A, 100A, 200A, 500A;
- b. When I Δ t equals to current ratings at the lower limit of C or D instantaneous over-current tripping range, the test carried out.

3.3 Please refer to table below for temperature compensation correction.

Temperature	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃
Temperature compensation coefficient	1.20	1.15	1.10	1.05	1.00	0.95	0.90	0.85

3. Wiring

The suitable conductors should be used for connection, see table below for relative parameters.

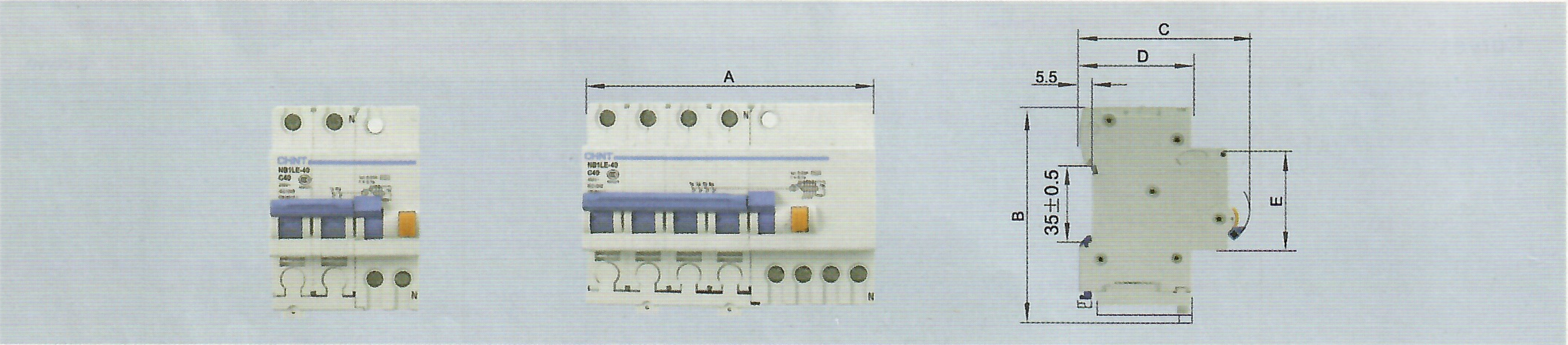
Rated current In (A)	Nominal cross section area (mm²)	Tightening torque (N · m)
≤10	1.5	2
16, 20	2.5	2
25	4	2
32	6	2
40	10	2

4. Features

- 4.1 Service life of product has been greatly enhanced through specially designed releasing mechanism;
- 4.2 Compact design;
- 4.3 Enclosure and functional parts made of imported plastics with flame-retardant, heat-resistant, and impulse-proof properties;
- 4.4 Much higher breaking capacity;
- 4.5 Reliable and safe operation. Cost-effective;
- 4.6 Convenient mounting thanks to rail mounting mode;
- 4.7 Strong capability of anti-vibration and impulse.

5. Overall and Mounting Dimensions

Overall and Mounting Dimensions



Model	Overall dimensions(mm)				
	A	B	C	D	E
1P+N	45 ⁰ _{-0.62}	91.5 ⁰ _{-1.4}	77 ⁰ _{-1.2}	49.5±0.31	45±0.31
2P	63 ⁰ _{-0.74}	91.5 ⁰ _{-1.4}	77 ⁰ _{-1.2}	49.5±0.31	45±0.31
3P	108 ⁰ _{-1.4}	91.5 ⁰ _{-1.4}	77 ⁰ _{-1.2}	49.5±0.31	45±0.31
3P+N	108 ⁰ _{-1.4}	91.5 ⁰ _{-1.4}	77 ⁰ _{-1.2}	49.5±0.31	45±0.31
4P	126 ⁰ _{-1.6}	91.5 ⁰ _{-1.4}	77 ⁰ _{-1.2}	49.5±0.31	45±0.31