

THB1-63L Series, 15kA Miniature Circuit Breaker

1 Overview

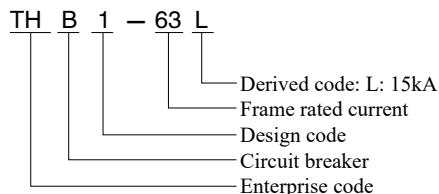


THB1-63L moulded case circuit breaker (hereinafter referred to as circuit breaker) is a new product developed by the company. The product features with reliable performance, accurate protection characteristics, small size, artistic appearance and novel design. The circuit breaker is used in the AC 50/60Hz power line facilities and electrical equipment with the rated voltage AC230V/400V and with the rated current up to 63A in buildings and similar places for overcurrent protection, it is also used for infrequent on-off operation. The product conforms to IEC60947-2 standard.

2 Product Features

- 2.1 Breaking capacity up to 15kA.
- 2.2 The product has exquisite and artistic appearance.
- 2.3 With accurate and table protection characteristics.
- 2.4 Dual terminals on both sides are suitable for busbar bar, single-core conductor and terminal clamp wiring.
- 2.5 The wiring screws, high torque and firm wiring of the composite groove can realize quick wiring.
- 2.6 Any power supply inlet direction.

3 Type Designation



4 Main Technical Parameters

Product name	THB1-63L	
Electrical characteristics		
Number of poles	1P, 2P, 4P, 3P	
Frame current (A)	Inm	63
Rated current (A)	In	6-63
Rated voltage (V)	Ue	230-400
Rated insulation voltage (V)	Ui	500
Rated impulse withstand voltage (kV)	Uimp	6
Rated operating short circuit breaking capacity (kA)	Ics	7.5
Rated ultimate short circuit breaking capacity (kA)	Icu	15
Pollution degree		2
Instantaneous trip characteristic		C/D
Electrical accessories and mechanical accessories		■
Mechanical characteristics		
Electrical life (times)		1000
Mechanical life (times)		2000
Protection grade		IP20
Reference setting temp.		30

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Other characteristics	
Max. wiring capacity	25
Terminal ultimate torque N.m	4
Indicator window	■
Inlet method	Top and bottom



5 Technical Parameters

THB1-63L Miniature Circuit Breaker has the following functions

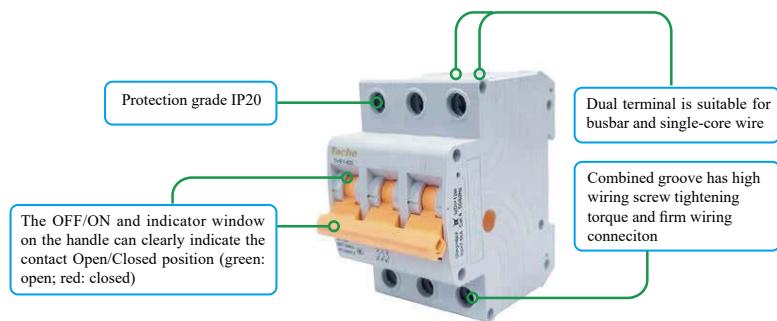
- ◆ Short circuit protection
- ◆ Overload protection
- ◆ Isolation function
- ◆ With different types (aux., aux. alarm, overvoltage, and undervoltage) of accessories configured

Model

Type	1P		2P	
Rated current (In)	Tripping Curve		Tripping Curve	
	C	D	C	D
6A	THB1-63L 1P C6	THB1-63L 1P D6	THB1-63L 2P C6	THB1-63L 2P D6
10A	THB1-63L 1P C10	THB1-63L 1P D10	THB1-63L 2P C10	THB1-63L 2P D10
16A	THB1-63L 1P C16	THB1-63L 1P D16	THB1-63L 2P C16	THB1-63L 2P D16
20A	THB1-63L 1P C20	THB1-63L 1P D20	THB1-63L 2P C20	THB1-63L 2P D20
25A	THB1-63L 1P C25	THB1-63L 1P D25	THB1-63L 2P C25	THB1-63L 2P D25
32A	THB1-63L 1P C32	THB1-63L 1P D32	THB1-63L 2P C32	THB1-63L 2P D32
40A	THB1-63L 1P C40	THB1-63L 1P D40	THB1-63L 2P C40	THB1-63L 2P D40
50A	THB1-63L 1P C50	THB1-63L 1P D50	THB1-63L 2P C50	THB1-63L 2P D50
63A	THB1-63L 1P C63	THB1-63L 1P D63	THB1-63L 2P C63	THB1-63L 2P D63
Width mm	17.8		35.6	

Note: If single magnetic type is required, please specify the "Single magnetic type" after the Model.

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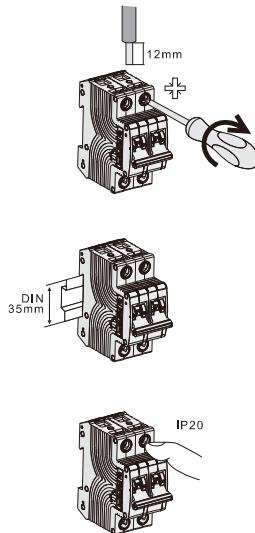


Type	3P		4P	
Rated current (In)	Tripping Curve		Tripping Curve	
	C	D	C	D
6A	THB1-63L 3P C6	THB1-63L 3P D6	THB1-63L 4P C6	THB1-63L 4P D6
10A	THB1-63L 3P C10	THB1-63L 3P D10	THB1-63L 4P C10	THB1-63L 4P D10
16A	THB1-63L 3P C16	THB1-63L 3P D16	THB1-63L 4P C16	THB1-63L 4P D16
20A	THB1-63L 3P C20	THB1-63L 3P D20	THB1-63L 4P C20	THB1-63L 4P D20
25A	THB1-63L 3P C25	THB1-63L 3P D25	THB1-63L 4P C25	THB1-63L 4P D25
32A	THB1-63L 3P C32	THB1-63L 3P D32	THB1-63L 4P C32	THB1-63L 4P D32
40A	THB1-63L 3P C40	THB1-63L 3P D40	THB1-63L 4P C40	THB1-63L 4P D40
50A	THB1-63L 3P C50	THB1-63L 3P D50	THB1-63L 4P C50	THB1-63L 4P D50
63A	THB1-63L 3P C63	THB1-63L 3P D63	THB1-63L 4P C63	THB1-63L 4P D63
Width mm	53.4		71.2	

Note: If single magnetic type is required, please specify the "Single magnetic type" after the Model.

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Main Features



AC working frequency (Hz)	AC50/60	
Breaking capacity Ics (kA)	7.5	
Ultimate breaking capacity Icn (kA)	15	
Operating voltage Ue (V)	1P	230
	2P	400
	3P, 4P	400
Insulation voltage Ui(V)	AC	500
Pollution degree	2	
Impulse voltage Uimp(kV)	6	
Thermal trip	Reference setting temp.	30°C
Magnetic trip	C curve	8In±20% (C type release)
	D curve	12In±20% (D type release)
Current limit grade	3	

Other parameters

Protection grade	IP20	
Life (O-C)	Electrical life	10000 times
	Mechanical life	20000 times
Ambient temp.	-5°C~+40°C	
Installaiton altitude	Not exceed 2000m	
Installation category	Class II, III	
Installation method	Standard rail TH35-7.5(GB/T 19334)	

Weight (g)

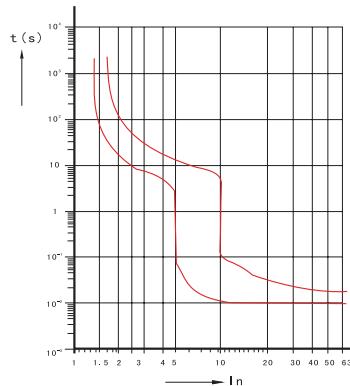
Circuit breaker	THB1-63L		
1P	121		
2P	245		
3P	366		
4P	488		

Wiring connection

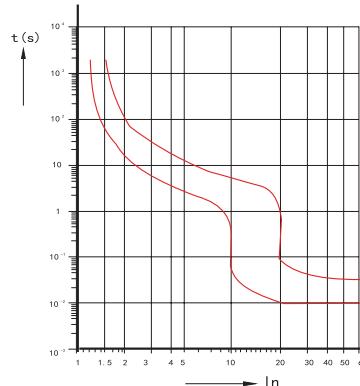
Screw size	Rated torque	Ultimate torque	National standard rated torque	Wiring capacity
M5	2.5N·m	4N·m	2N·m	25mm ² and below

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6 Characteristic Curve

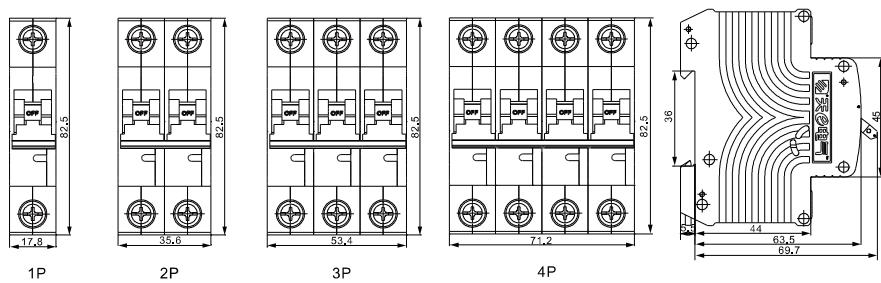


C characteristic curve



D characteristic curve

7 Outline and Installation Dimensions



8 Order Specification

Please specify the following when ordering circuit breaker:

- ◆ Product model and name, such as THB1-63L Miniature Circuit Breaker
- ◆ Type and rated current of instantaneous release, such as C32 (rated current is 32A for the lighting protection type)
- ◆ Number of poles of circuit breaker, such as 3 poles
- ◆ Order qty.

Order example: THB1-63L 3P C32 100 unit (THB1-63L Miniature Circuit Breaker, 3 poles, C type, rated current 32A, 100 units)