

## TGB3(H)-63 Series, 6(10)KA MCB

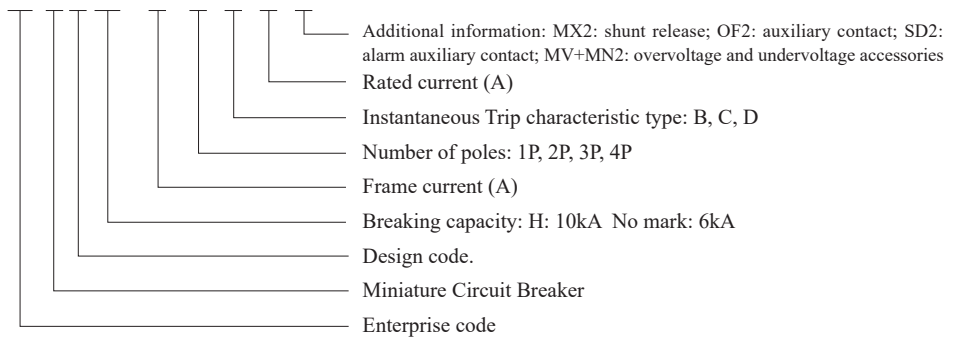


### 1 Overview

TGB3(H)-63 miniature circuit breaker is used in the 50/60Hz power line with rated voltage 230/400V and rated current up to 63A in household and similar places for overload and short circuit protection and suitable for infrequent breaking and making operation, especially suitable for industrial and commercial lighting distribution systems.

### 2 Type Designation

**TG B 3 H - 63 1P C 16 OF2**



### 3 Technical Parameters

#### 3.1 The main technical parameters of the product (see Table 1)

Table 1

Product name	TGB3-63	TGB3H-63
Certificate	CE	CE
<b>Electrical characteristics</b>		
Number of poles	1P,2P,3P,4P	1P,2P,3P,4P
Rated frequency (Hz)	50/60	50/60
Frame current (A) Inm	63	63
Rated current (A) In	1,2,3,4,5,6,10,16,20,25,32,40,50,63	1,2,3,4,5,6,10,16,20,25,32,40,50,63
Rated voltage (V) Ue	AC230/400(1P) AC400(2P,3P,4P)	AC230/400(1P) AC400(2P,3P,4P)
Rated insulation voltage (V) Ui	690	690
Rated impulse withstand voltage (kV) Uimp	4	4
Rated short-circuit breaking capacity (kA) Ics	6	7.5
Rated short-circuit breaking capacity (kA) Icn	6	10
Instantaneous trip characteristics	B,C,D	B,C,D
Trip form	Thermal magnetic trip	Thermal magnetic trip
Pollution degree	2	2
Electrical and mechanical accessories	MV+MN2 (overvoltage and undervoltage), OF2 (auxiliary), SD2 (alarm), MX2 (shunt)	MV+MN2 (overvoltage and undervoltage), OF2 (auxiliary), SD2 (alarm), MX2 (shunt)
<b>Mechanical properties</b>		
Electrical life	10,000 times	10,000 times
Mechanical life	20,000 times	20,000 times
Protection grade	IP20	IP20
Indicator window	Contact status indication	Contact status indication
<b>Normal operation conditions and installation characteristics</b>		
Ambient temperature	-35°C ~ +70°C	-35°C ~ +70°C
Installation site altitude	≤ 2,000 meters	≤ 2,000 meters
Terminals	Fixed with screw	Fixed with screw
Maximum wiring capacity	25mm <sup>2</sup>	25mm <sup>2</sup>
Maximum limit torque N·m	2.5	2.5
Installation category	Class II, III	Class II, III
Installation method	TH35-7.5 steel mounting rail	TH35-7.5 steel mounting rail
Incoming method	Top inlet and bottom inlet	Top inlet and bottom inlet

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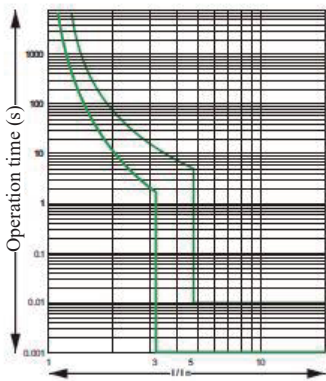
## 3.2 Action performance of circuit breaker overcurrent release (see Table 2)

Table 2

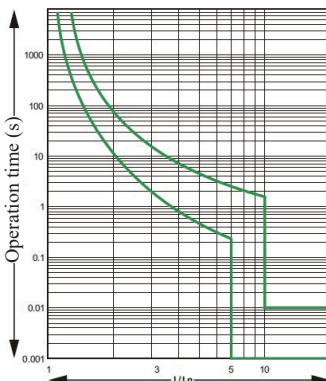
No.	Rated current $I_n$ (A)	Start state	Test current (A)	Specified time	Expected results	Remarks
a	1-63A	Cold state	$1.13 I_n$	$t \leq 1h$	Not trip	
b	1-63A	Hot state	$1.45 I_n$	$t < 1h$	Trip	Immediately after a) test, the current increases to the specified value within 5s.
c	$\leq 32$	Cold state	$2.55 I_n$	$1s < t < 60s$	Trip	
	$> 32$			$1s < t < 120s$	Trip	
d	1-63A	Cold state	$3I_n$ (B type)	$t \leq 0.1s$	Not trip	Turn on the auxiliary switch for making current
			$5I_n$ (C type)			
			$10I_n$ (D type)			
e	1-63A	Cold state	$5I_n$ (B type)	$t < 0.1s$	Trip	Turn on the auxiliary switch for making current
			$10I_n$ (C type)			
			$14I_n$ (D type)			

Note: The cold state refers to the temperature 30°C without load before the test.

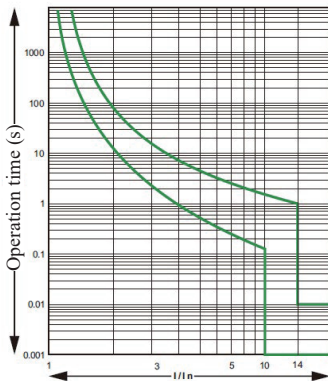
## 3.3 Protection characteristic curve of circuit breaker



B type protection characteristic curve



C type protection characteristic curve



D type protection characteristic curve

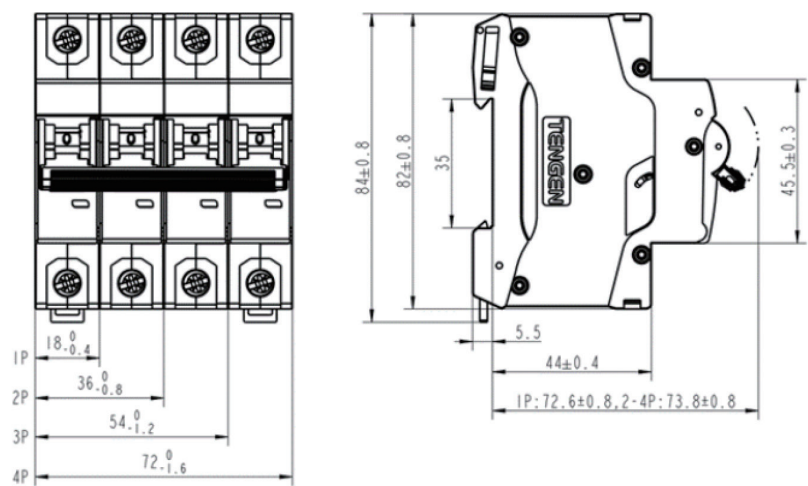
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**3.4 Wiring:** Suitable for wire connection of 25mm<sup>2</sup> and below (see Table 3). The wiring method is that the wire is fixed with screws according to the tightening torque 2.5N·m.

Table 3

Rated current (A)	Nominal cross area of copper wire (mm <sup>2</sup> )
1, 2, 3, 4, 5, 6	1
10	1.5
16, 20	2.5
25	4
32	6
40, 50	10
63	16

### 4 Outline and Installation Dimensions



### 5 Ordering Notice

- 5.1 Please specify the product model and specification, and the type, rated current, number of poles, and order quantity of the instantaneous release when ordering.
- 5.2 Order example: TGB3(H) series miniature circuit breaker, breaking capacity 10kA, C-type instantaneous release, rated current 32A, two-pole, 1,000 units.  
Specified as: TGB3H-63 C32 2P 1,000 units