

TGB3Z-63 (H) Miniature Circuit Breaker

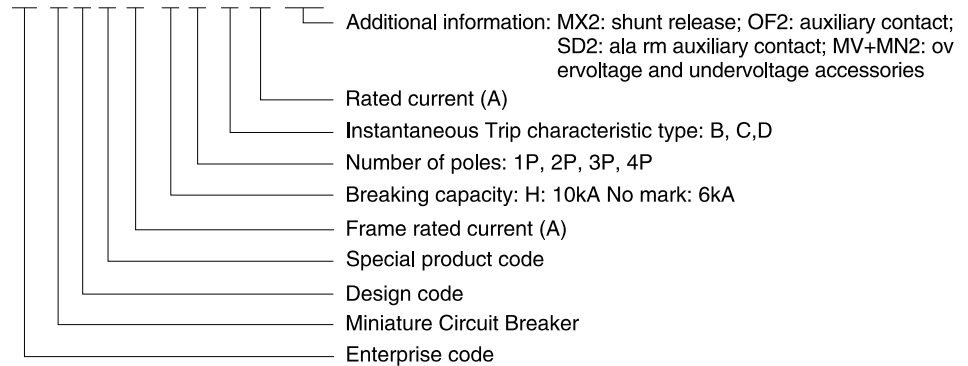


1 Product overview

TGB3Z-63 (H) miniature circuit breaker is used in the AC 50/60Hz power line with rated voltage 230 / 400V and rated current up to 63A in power line facilities and electrical equipment 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 Z-63 H 1P C 63 OF2



3 Product parameters

3.1 Main technical parameters (Table 1)

Table 1

Product name	TGB3Z-63	TGB3Z-63H
Standards	IEC60947-2、GB/T14048.2	IEC60947-2、GB/T14048.2
Certificate	CCC、CB、CE、RoHS	CCC、CB、CE、RoHS
Electrical characteristics		
Number of poles	1P、2P、3P、4P	1P、2P、3P、4P
Rated frequency (Hz)	50/60	50/60
Frame current (A) I_{nm}	63	63
Rated current (A) I_n	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) U_e	AC230 (1P)、AC400 (2P、3P、4P) DC80 (1P)、DC125 (2P)	AC230 (1P)、AC400 (2P、3P、4P) DC80 (1P)、DC125 (2P)
Rated insulation voltage (V) U_i	1000	1000
Rated impulse withstand voltage (kV) U_{imp}	6	6
Rated short-circuit breaking capacity (kA) I_{cs}	6	7.5
Rated short-circuit breaking capacity (kA) I_{cu}	6	10
Instantaneous trip characteristics	B、C、D	B、C、D
Trip form	Thermal magnetic trip	Thermal magnetic trip
Pollution level	3	3
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)
Mechanical properties		
Electrical life	10000	10000
Mechanical life	20000	20000
Protection grade	IP20	IP20
Indicator window	Contact status indication	Contact status indication
Normal operation conditions and installation characteristics		
Ambient temperature	-35℃ ~ +70℃	-35℃ ~ +70℃
Installation site altitude	≤ 2000m	≤ 2000m
Terminals	Fixed with screw	Fixed with screw
Maximum wiring capacity	25mm ²	25mm ²
Maximum limit torque Nm	2.5	2.5
Installation category	Class II, III	Class II, III
Installation method	35mm standard rail	35mm standard rail
Incoming method	Upper and lower	Upper and lower

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4 Product parameters

Main performance(Table 1)

Tripping characteristics(Table 2)

Table 1

Rated current I_n (A)	Number of poles	Rated voltage U_e (V)	Frequency (Hz)	Instantaneous trip characteristics	Rated short-circuit capacity
1、2、3、 4、5、6、 10、16、 20、25、 32、40、 50、63	1	AC:230 DC:80	50 or 60	B Curve: $4I_n \pm 20\%$ C Curve: $8I_n \pm 20\%$ D Curve: $12I_n \pm 20\%$	AC(alternating current) : TGB3Z-63 $I_{cs}=I_{cu}=6kA$; TGB3Z-63H $I_{cs}=7.5kA$ $I_{cu}=10kA$ 。 DC(direct current): TGB3Z-63 $I_{cs}=I_{cu}=6kA$; TGB3Z-63H $I_{cs}=I_{cu}=10kA$ 。
	2	AC:400 DC:125			
	3	AC:400			
	4				

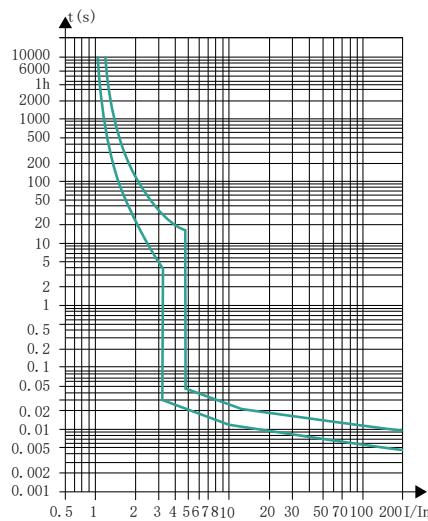
Trip characteristics

Table 2

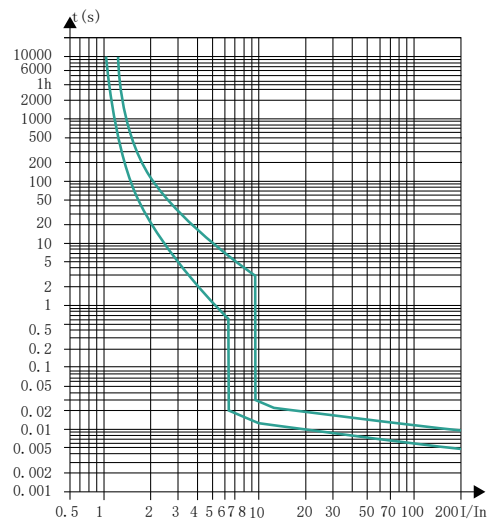
Test	Release form	Rated current of release I_n (A)	Test current	Initial state	Specified time	Expected results	Remarks
a	B、C、D	≤ 63	$1.05I_n$	Cold state	$t \geq 1h$	Not trip	
b	B、C、D	≤ 63	$1.3I_n$	Immediately after a) test	$t < 1h$	Trip	The current increases to the specified value within 5s.
c	B	≤ 63	$4I_n \pm 20\%$	Cold state	$t \leq 0.2s$	Trip	Turn off the auxiliary switch for making current
	C		$8I_n \pm 20\%$				
	D		$12I_n \pm 20\%$				

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

(3) Protection characteristic curve of circuit breaker

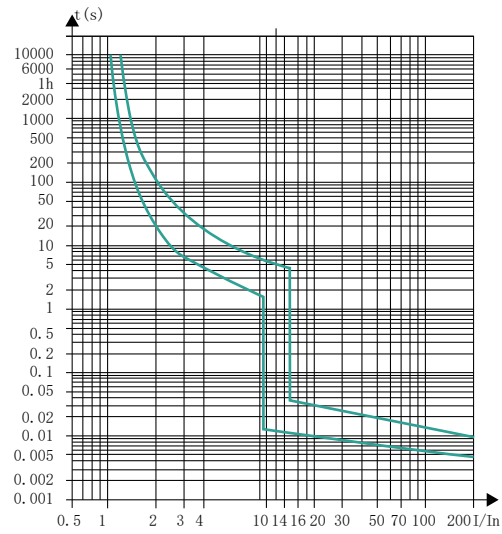


B Curve: thermal / electromagnetic protection characteristic protection curve



C Curve: thermal / electromagnetic protection characteristic protection curve

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D Curve: thermal / electromagnetic
protection characteristic protection curve

5 Outline and installation dimensions

