


Circuit Protectors

CP51B, 52B, 53B


50A frame size circuit protectors

250V AC 0.3A to 50A
65V DC 0.3A to 50A

■ Features

- Available with ratings from 0.3A to 50A.
- Conforms to IEC Standards. (Conforms to CE markings.)
-  and TÜV approved.
- Rated breaking capacity of 1,500A at 240V AC.
- Stud terminals used.

■ Standards

 (File No.E96846)
TÜV (IEC)(R9750278)

■ Accessories

● Auxiliary switch (Type W)

This switch is used for ON-OFF lamp indicator or control circuit.

● Alarm switch (Type K)

This switch can be connected to a warning lamp or buzzer to indicate when the circuit protector has been tripped.

Auxiliary and alarm switch for low level circuit are also available on request. (Type W1, K1)

Ratings of auxiliary and alarm switches

Standard type (Type W, K)

250V AC	Resistive load: 3A Inductive load: 2A
125V AC	Resistive load: 3A Inductive load: 2A
30V DC	Resistive load: 3A Inductive load: 2A

Minimum permissible load

Low level circuit (Type W1, K1)

24V DC	1mA
12V DC	2mA
6V DC	5mA



■ Specifications

Type	CP51B	CP52B	CP53B
Pole	1-pole	2-pole	3-pole
Rated insulation voltage (Ui)	250V AC 50/60Hz, 65V DC		
Rated operational voltage (Ue)	240V AC, 60V DC		
Rated current	0.3, 0.5, 0.75, 1, 2, 3, 5, 7.5, 10, 15, 20, 25, 30, 40, 50A		
Rated breaking capacity	1500A at 240V AC 1000A at 60V DC		
Operating characteristic	Long time delay, Medium time delay Short time delay, Instantaneous tripping		
Tripping mechanism	Hydraulic-magnetic		
Ambient temperature	-10°C to +60°C		
Electrical durability	10000 operations		
Terminals	Main circuit Auxiliary circuit	Round stud Soldering	
Accessories	Auxiliary switch (W, W1) Alarm switch (K, K1)	Available Available	
Mass (Approx.)	80g	180g	280g

Main contact	Auxiliary switch/W	Alarm switch/K
ON		
OFF		
TRIP		

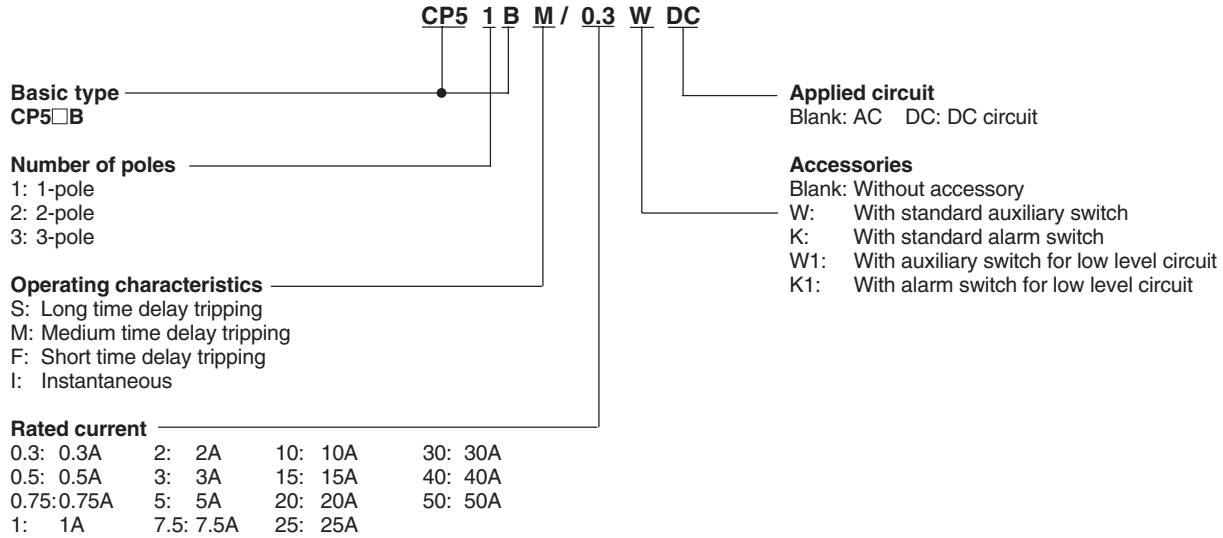
■ Versions

	Operating characteristic	CP51B (1-pole) Type	CP52B (2-pole) Type	CP53B (3-pole) Type
Applied circuit AC	Long time Medium time Short time Instantaneous	CP51BS/□ CP51BM/□ CP51BF/□ CP51BI/□	CP52BS/□ CP52BM/□ CP52BF/□ CP52BI/□	CP53BS/□ CP53BM/□ CP53BF/□ CP53BI/□
Applied circuit DC	Long time Medium time Short time Instantaneous	CP51BS/□DC CP51BM/□DC CP51BF/□DC CP51BI/□DC	CP52BS/□DC CP52BM/□DC CP52BF/□DC CP52BI/□DC	CP53BS/□DC CP53BM/□DC CP53BF/□DC CP53BI/□DC
With standard auxiliary switch	Long time Medium time Short time Instantaneous	CP51BS/□W CP51BM/□W CP51BF/□W CP51BI/□W	CP52BS/□W CP52BM/□W CP52BF/□W CP52BI/□W	CP53BS/□W CP53BM/□W CP53BF/□W CP53BI/□W
Applied circuit DC	Long time Medium time Short time Instantaneous	CP51BS/□WDC CP51BM/□WDC CP51BF/□WDC CP51BI/□WDC	CP52BS/□WDC CP52BM/□WDC CP52BF/□WDC CP52BI/□WDC	CP53BS/□WDC CP53BM/□WDC CP53BF/□WDC CP53BI/□WDC
With standard alarm switch	Long time Medium time Short time Instantaneous	CP51BS/□K CP51BM/□K CP51BF/□K CP51BI/□K	CP52BS/□K CP52BM/□K CP52BF/□K CP52BI/□K	CP53BS/□K CP53BM/□K CP53BF/□K CP53BI/□K
Applied circuit DC	Long time Medium time Short time Instantaneous	CP51BS/□KDC CP51BM/□KDC CP51BF/□KDC CP51BI/□KDC	CP52BS/□KDC CP52BM/□KDC CP52BF/□KDC CP52BI/□KDC	CP53BS/□KDC CP53BM/□KDC CP53BF/□KDC CP53BI/□KDC
With auxiliary switch for low level circuit	Long time Medium time Short time Instantaneous	CP51BS/□W1 CP51BM/□W1 CP51BF/□W1 CP51BI/□W1	CP52BS/□W1 CP52BM/□W1 CP52BF/□W1 CP52BI/□W1	CP53BS/□W1 CP53BM/□W1 CP53BF/□W1 CP53BI/□W1
Applied circuit DC	Long time Medium time Short time Instantaneous	CP51BS/□W1DC CP51BM/□W1DC CP51BF/□W1DC CP51BI/□W1DC	CP52BS/□W1DC CP52BM/□W1DC CP52BF/□W1DC CP52BI/□W1DC	CP53BS/□W1DC CP53BM/□W1DC CP53BF/□W1DC CP53BI/□W1DC
With alarm switch for low level circuit	Long time Medium time Short time Instantaneous	CP51BS/□K1 CP51BM/□K1 CP51BF/□K1 CP51BI/□K1	CP52BS/□K1 CP52BM/□K1 CP52BF/□K1 CP52BI/□K1	CP53BS/□K1 CP53BM/□K1 CP53BF/□K1 CP53BI/□K1
Applied circuit DC	Long time Medium time Short time Instantaneous	CP51BS/□K1DC CP51BM/□K1DC CP51BF/□K1DC CP51BI/□K1DC	CP52BS/□K1DC CP52BM/□K1DC CP52BF/□K1DC CP52BI/□K1DC	CP53BS/□K1DC CP53BM/□K1DC CP53BF/□K1DC CP53BI/□K1DC

Note : □ Enter the rated current in the □ mark of the type number. 0.3A: 0.3, 0.5A: 0.5 ----- 50A: 50

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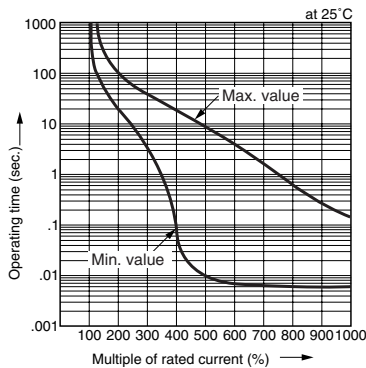
■ Type number nomenclature



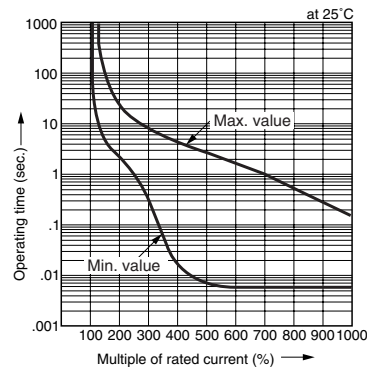
■ Characteristic curves

AC circuit

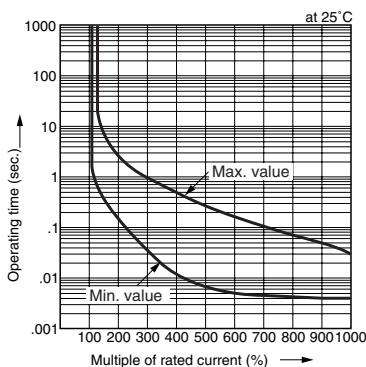
Long time delay (S)



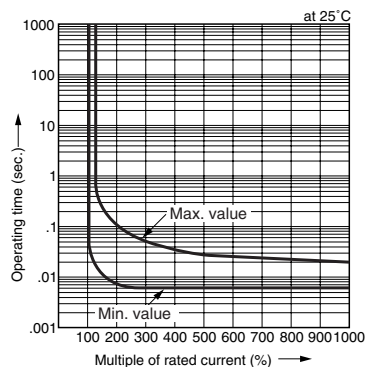
Medium time delay (M)



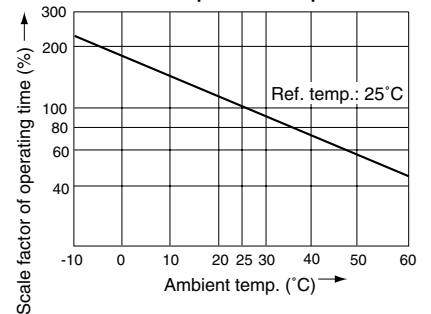
Short time delay (F)



Instantaneous (I)



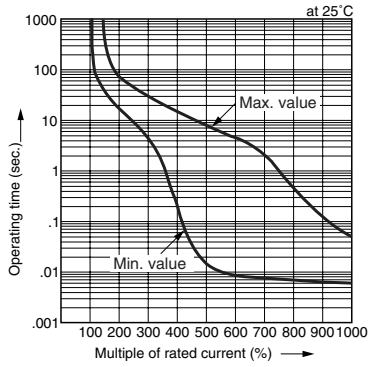
Ambient temperature compensation



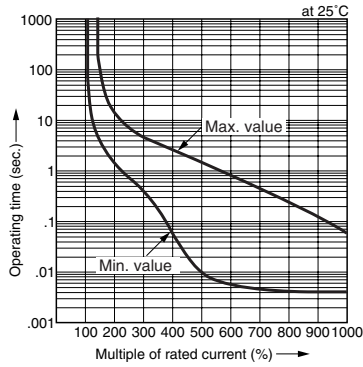
■ Characteristic curves

DC circuit

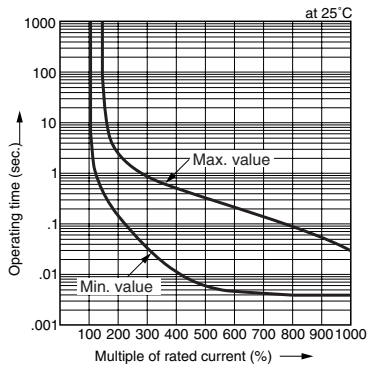
Long time delay (S)



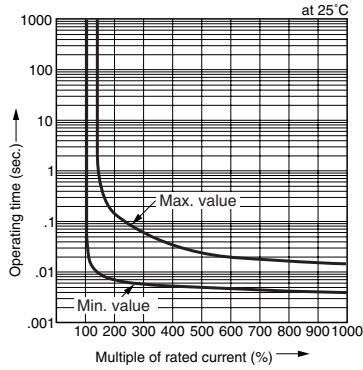
Medium time delay (M)



Short time delay (F)



Instantaneous (I)



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■ Dimensions, mm

