


Circuit Protectors

CP31P, 32P, 33P


CP-P circuit protectors

250V AC 0.3A to 25A
65V DC 0.3A to 25A


■ Description

CP-P circuit protectors are ideal for electronic circuit protection. The space required per pole is approximately 30% less than that for CP-E models allowing significant space savings. Application at any one of 12 rated currents in the range 0.3A to 25A is possible. CP-P circuit protectors have been approved by  and TÜV Standards.

■ Features

- The mounting space is approximately 30% less than that required with CP-E models, and the width per pole has been reduced by approximately 15%.
- Conforms to IEC Standards. (Conforms to CE markings.)
-  and TÜV approved.
- Operated with an easy-to-use toggle handle.
- Male tab soldering, and right angle terminals are available.

■ Standards

 (File No.E96846)
TÜV (IEC)(R9750278)

■ Accessories

● Auxiliary switch (Type W)

This switch is used for indicator lamp 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 switches for low level circuit are also available on request. (Type W1, K1)

Ratings of auxiliary and alarm switches

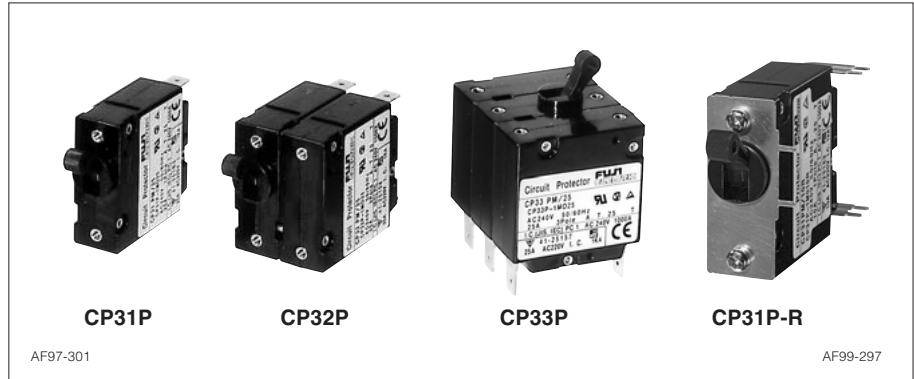
Standard type (Type W, K)

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

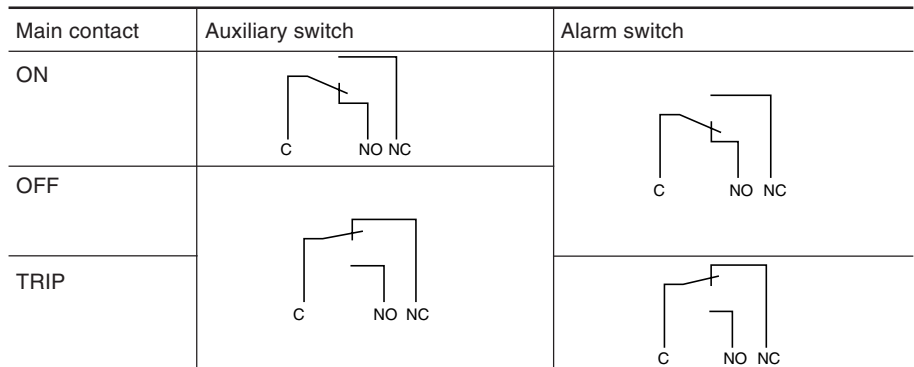
For low level circuit (Type W1, K1)

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



■ Specifications

Type	CP31P	CP32P	CP33P	CP31P-R
Pole	1-pole	2-pole	3-pole	1-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, 25A			
Rated breaking capacity	1000A 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	Tab Soldering		Right angle Right angle
Accessories	Auxiliary switch (W, W1) Alarm switch (K, K1)	Available Available		
Mass (Approx.)	40g	85g	130g	40g



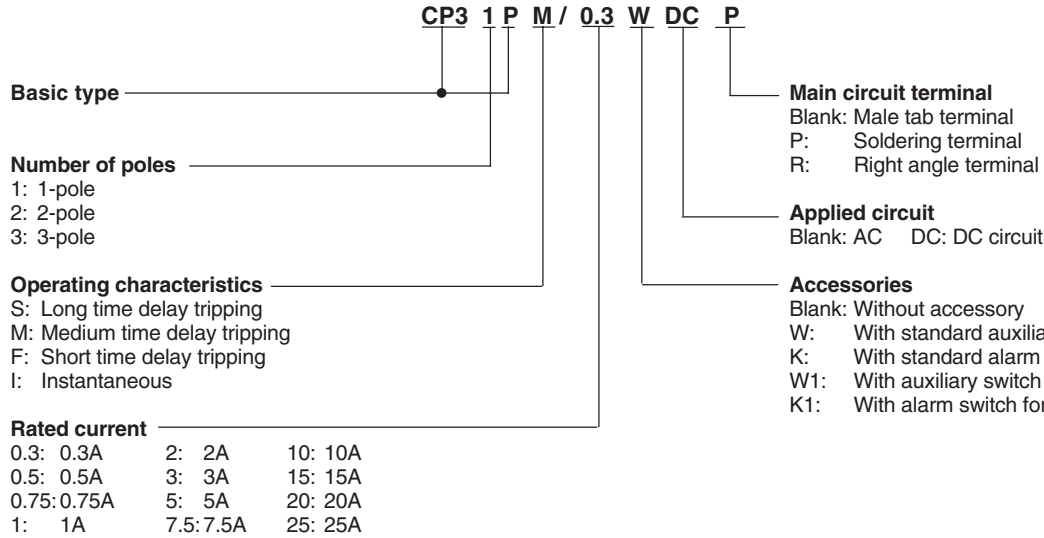
■ Versions

	Operating characteristic	CP31P (1-pole) Type	CP32P (2-pole) Type	CP33P (3-pole) Type
Applied circuit AC	Long time Medium time Short time Instantaneous	CP31PS/□ ■ CP31PM/□ ■ CP31PF/□ ■ CP31PI/□ ■	CP32PS/□ ■ CP32PM/□ ■ CP32PF/□ ■ CP32PI/□ ■	CP33PS/□ ■ CP33PM/□ ■ CP33PF/□ ■ CP33PI/□ ■
Applied circuit DC	Long time Medium time Short time Instantaneous	CP31PS/□DC ■ CP31PM/□DC ■ CP31PF/□DC ■ CP31PI/□DC ■	CP32PS/□DC ■ CP32PM/□DC ■ CP32PF/□DC ■ CP32PI/□DC ■	CP33PS/□DC ■ CP33PM/□DC ■ CP33PF/□DC ■ CP33PI/□DC ■
With standard auxiliary switch	Long time Medium time Short time Instantaneous	CP31PS/□W ■ CP31PM/□W ■ CP31PF/□W ■ CP31PI/□W ■	CP32PS/□W ■ CP32PM/□W ■ CP32PF/□W ■ CP32PI/□W ■	CP33PS/□W ■ CP33PM/□W ■ CP33PF/□W ■ CP33PI/□W ■
Applied circuit DC	Long time Medium time Short time Instantaneous	CP31PS/□WDC ■ CP31PM/□WDC ■ CP31PF/□WDC ■ CP31PI/□WDC ■	CP32PS/□WDC ■ CP32PM/□WDC ■ CP32PF/□WDC ■ CP32PI/□WDC ■	CP33PS/□WDC ■ CP33PM/□WDC ■ CP33PF/□WDC ■ CP33PI/□WDC ■
With standard alarm switch	Long time Medium time Short time Instantaneous	CP31PS/□K ■ CP31PM/□K ■ CP31PF/□K ■ CP31PI/□K ■	CP32PS/□K ■ CP32PM/□K ■ CP32PF/□K ■ CP32PI/□K ■	CP33PS/□K ■ CP33PM/□K ■ CP33PF/□K ■ CP33PI/□K ■
Applied circuit DC	Long time Medium time Short time Instantaneous	CP31PS/□KDC ■ CP31PM/□KDC ■ CP31PF/□KDC ■ CP31PI/□KDC ■	CP32PS/□KDC ■ CP32PM/□KDC ■ CP32PF/□KDC ■ CP32PI/□KDC ■	CP33PS/□KDC ■ CP33PM/□KDC ■ CP33PF/□KDC ■ CP33PI/□KDC ■
With auxiliary switch for low level circuit	Long time Medium time Short time Instantaneous	CP31PS/□W1 ■ CP31PM/□W1 ■ CP31PF/□W1 ■ CP31PI/□W1 ■	CP32PS/□W1 ■ CP32PM/□W1 ■ CP32PF/□W1 ■ CP32PI/□W1 ■	CP33PS/□W1 ■ CP33PM/□W1 ■ CP33PF/□W1 ■ CP33PI/□W1 ■
Applied circuit DC	Long time Medium time Short time Instantaneous	CP31PS/□W1DC ■ CP31PM/□W1DC ■ CP31PF/□W1DC ■ CP31PI/□W1DC ■	CP32PS/□W1DC ■ CP32PM/□W1DC ■ CP32PF/□W1DC ■ CP32PI/□W1DC ■	CP33PS/□W1DC ■ CP33PM/□W1DC ■ CP33PF/□W1DC ■ CP33PI/□W1DC ■
With alarm switch for low level circuit	Long time Medium time Short time Instantaneous	CP31PS/□K1 ■ CP31PM/□K1 ■ CP31PF/□K1 ■ CP31PI/□K1 ■	CP32PS/□K1 ■ CP32PM/□K1 ■ CP32PF/□K1 ■ CP32PI/□K1 ■	CP33PS/□K1 ■ CP33PM/□K1 ■ CP33PF/□K1 ■ CP33PI/□K1 ■
Applied circuit DC	Long time Medium time Short time Instantaneous	CP31PS/□K1DC ■ CP31PM/□K1DC ■ CP31PF/□K1DC ■ CP31PI/□K1DC ■	CP32PS/□K1DC ■ CP32PM/□K1DC ■ CP32PF/□K1DC ■ CP32PI/□K1DC ■	CP33PS/□K1DC ■ CP33PM/□K1DC ■ CP33PF/□K1DC ■ CP33PI/□K1DC ■

Notes : □ Enter the rated current in the □ mark of the type number. 0.3A: 0.3, 0.5A: 0.5 ----- 25A: 25
 ■ Enter the main circuit terminal in the ■ mark.

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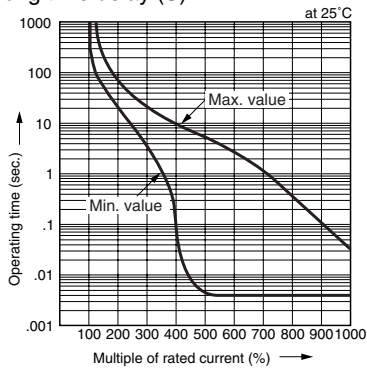
■ Type number nomenclature



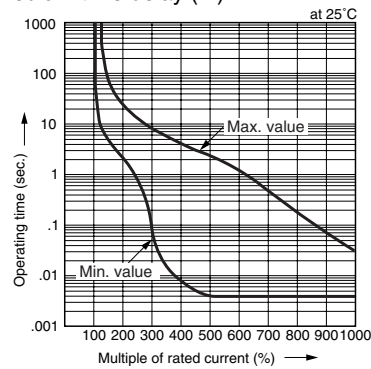
■ Characteristic curves

AC circuit

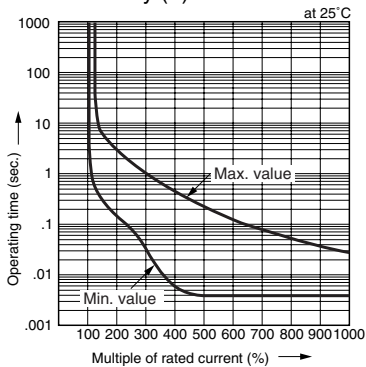
Long time delay (S)



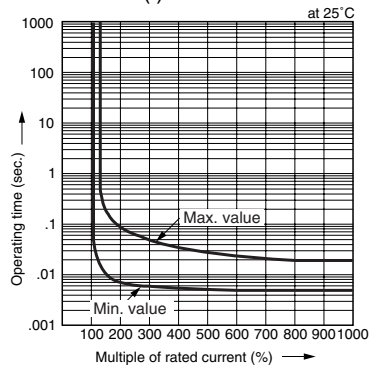
Medium time delay (M)



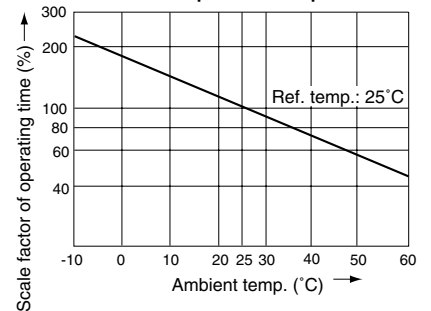
Short time delay (F)



Instantaneous (I)



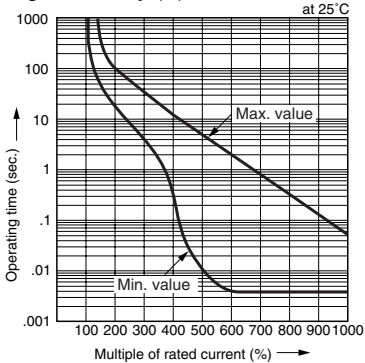
Ambient temperature compensation



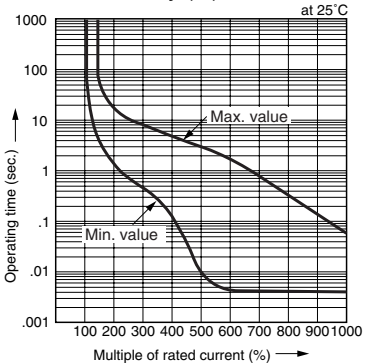
■ **Characteristic curves**

DC circuit

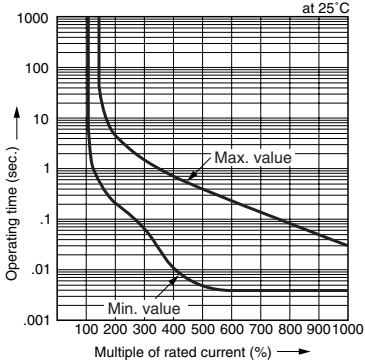
Long time delay (S)



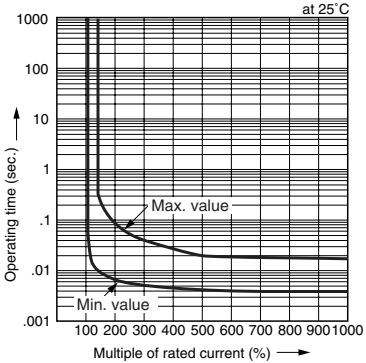
Medium time delay (M)



Short time delay (F)



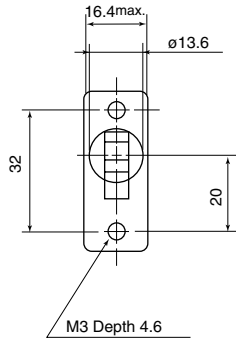
Instantaneous (I)



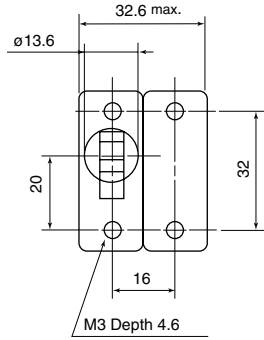
Circuit Protectors CP31P, 32P, 33P

■ Dimensions, mm

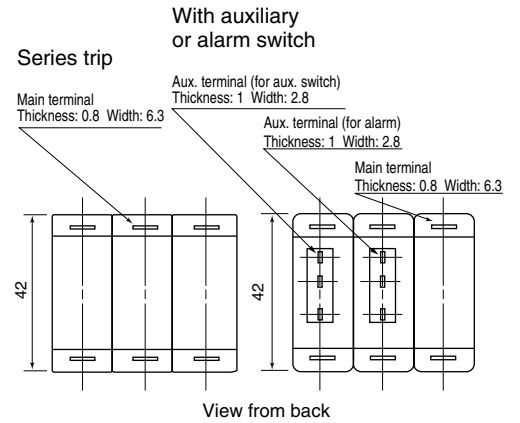
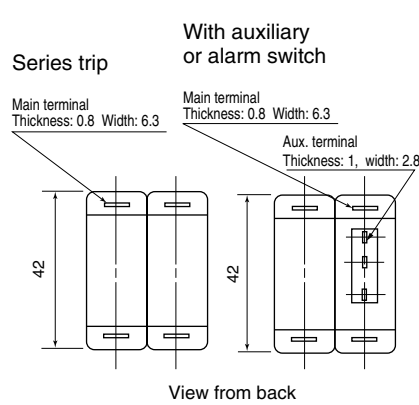
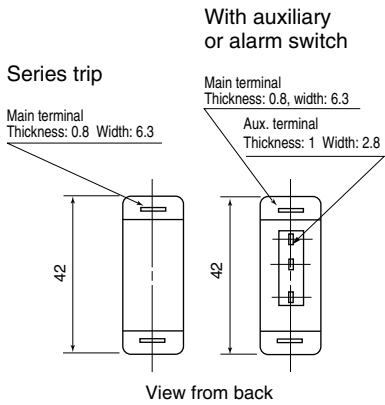
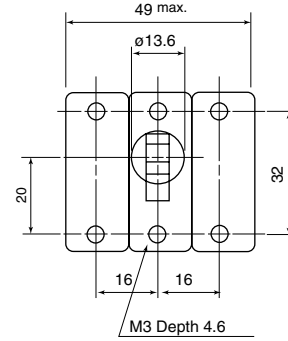
1-pole



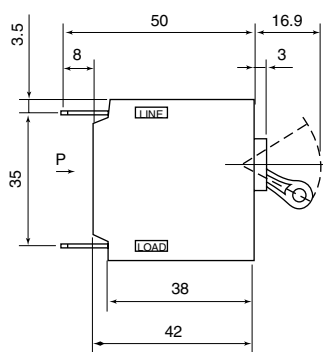
2-pole



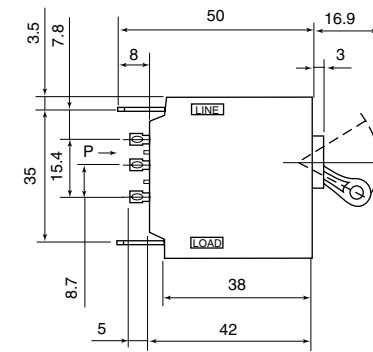
3-pole



Series trip

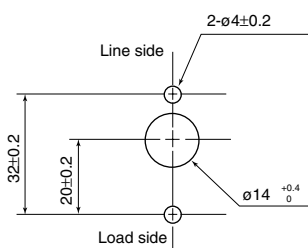


With auxiliary or alarm switch

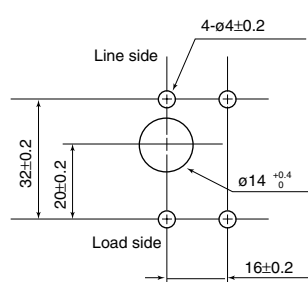


Panel drilling

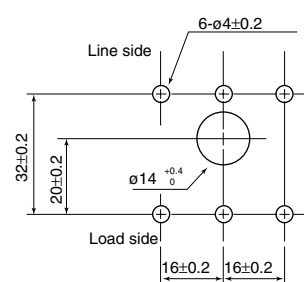
1-pole



2-pole

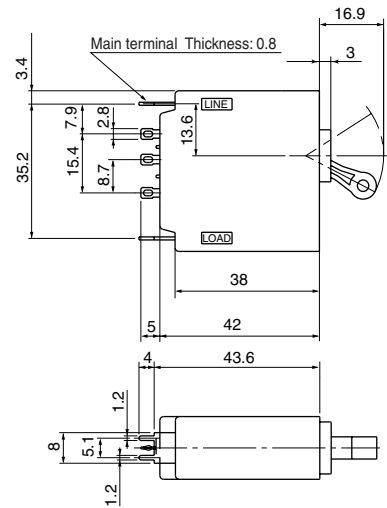


3-pole

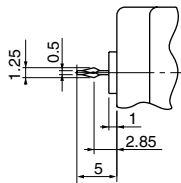


■ Dimensions, mm

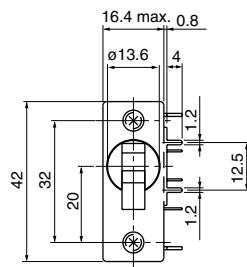
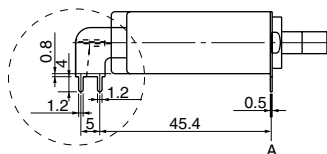
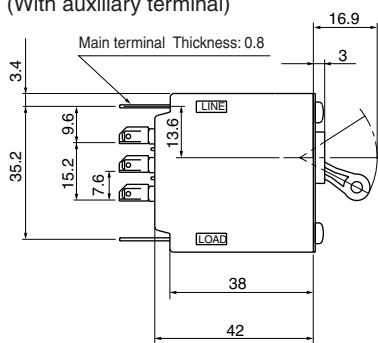
Soldering terminal
(With auxiliary terminal)



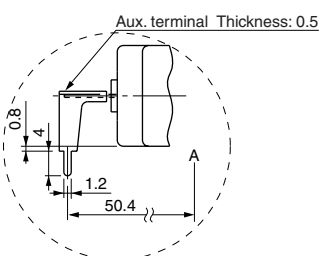
Aux. terminal



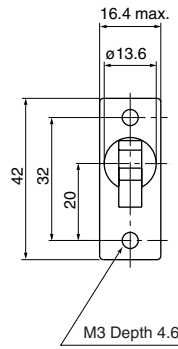
Right angle terminal
(With auxiliary terminal)



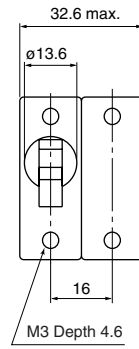
Aux. terminal (Enlarged)



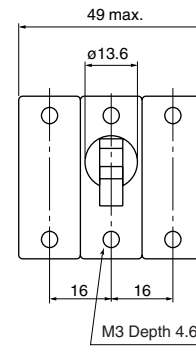
1-pole



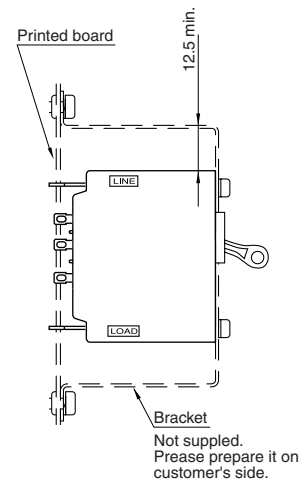
2-pole



3-pole



Panel drilling (1-pole)



Panel drilling

