CURRENT MONITOR RELAYS

AC Plug-in
CO Series Overcurrent

- ◆ Monitors AC single phase currents for overcurrent conditions

- ◆ Three separate current monitoring ranges covering 0.1 - 10 amperes

- ◆ External CT can be used to extend ranges

- ◆ Adjustable Pick-up Setting with either Fixed or Adjustable Drop-out Setting

- ◆ Adjustable time delay of 0.1-10 seconds on pick-up

- ◆ LED indicates output relay status

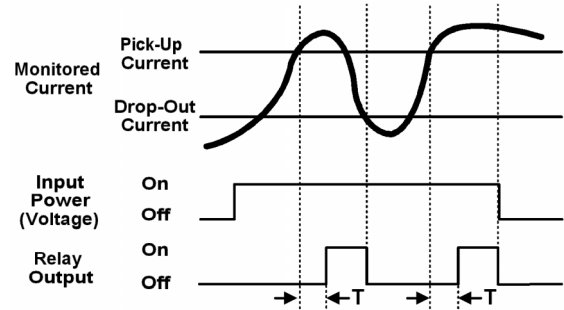- ◆ Choice of compact 8 Pin SPDT or 11 Pin DPDT plug-in case

- ◆ 10A output contacts

- ◆ c**UL**us CE

  UL LISTED
  (with appropriate socket)

The CO Series is used to detect an overcurrent condition. The pick-up current setting is user-adjustable within one of three ranges as shown in the Product Selection Table below. An external current transformer can be used to extend the range beyond 10 amperes.

Choose between a fixed drop-out current setting at 95% of the selected pick-up setting or an adjustable drop-out setting of 50-95% of the selected pick-up setting. The relay will energize when the monitored AC current is above the pick-up setting for a period longer than the adjustable time delay of 0.1-10 seconds. This delay prevents nuisance tripping caused by inrush currents. It will de-energize when the monitored AC current is below the drop-out setting.

8 Pin SPDT Plug-in

Pick-up Setting	Drop-Out Setting	Input Voltage	Current Range Monitored	Product Number	Wiring/ Socket
Adjustable	Fixed (At 95% of Pick-Up)	24V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COP01A68 COP05A68 COP10A68	8 Pin **70169-D**
		120V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COP01A62 COP05A62 COP10A62	
Adjustable	Adjustable (From 50-95% of Pick-Up)	24V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COKP01A68 COKP05A68 COKP10A68	
		120V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COKP01A62 COKP05A62 COKP10A62	**Diagram 21**

11 Pin DPDT Plug-in

Pick-up Setting	Drop-Out Setting	Input Voltage	Current Range Monitored	Product Number	Wiring/ Socket
Adjustable	Fixed (At 95% of Pick-Up)	24V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COP01A28 COP05A28 COP10A28	11 Pin **70170-D**
		120VAC	0.1 - 1A 0.5 - 5A 1 - 10A	COP01A22 COP05A22 COP10A22	
Adjustable	Adjustable (From 50-95% of Pick-Up)	24V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COKP01A28 COKP05A28 COKP10A28	
		120V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COKP01A22 COKP05A22 COKP10A22	**Diagram 22**

MACROMATIC

Sockets & Accessories–Page 16   **Application Data**–Page 21
Dimensions–Page 21

Application Data

Input Voltage Tolerance:
AC Operation: +10/-15% of nominal at 50/60 Hz.

Load (Burden):
Less than 5VA

Current Settings:
Pick-up: Adjustable throughout current range monitored
Drop-out: Fixed at 95% of pick-up setting (COP Series); or
           Adjustable from 50-95% of pick-up setting (COKP
           Series)

Temperature:
-28° to 55° C (-20° to 131° F)

Response Times:
Pick-up: Adjustable 0.1-10 seconds
Drop-out: Fixed 100ms

Output Contacts:
10A Resistive @ 240V AC/30V DC, 1/2HP @ 240V AC (N.O.),
1/3HP @ 240V AC (N.C.)

Life:
Mechanical: 10,000,000 operations
Full Load: 100,000 operations

Indicator LED: Green when Input Voltage is applied;
Red Flashing when in time delay; and Red Steady when
Relay is energized.

Reset: Automatic. Contact Macromatic for information
on a product with a latching function--the relay remains
energized even after the current drops below the drop-
out setting until a remote N.C. button is opened.

Mounting:
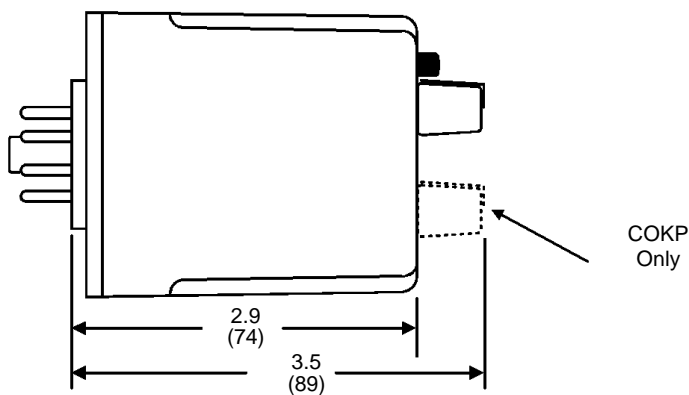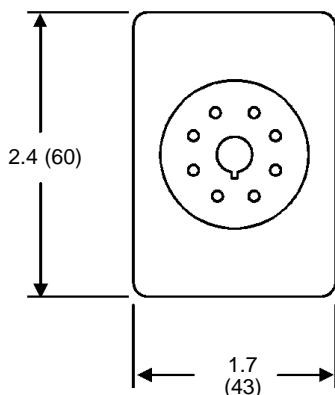Requires an 8 or 11 pin octal socket--see page 16.

Approvals:

File #E109466

with appropriate
Macromatic socket
File #E109466

Dimensions

2.4 (60)

1.7
(43)

2.9
(74)

3.5
(89)

COKP
Only

All dimensions are inches
(millimeters)