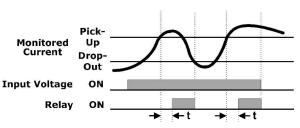
# **CURRENT SENSING RELAYS**

# **CO SERIES OVERCURRENT**

AC PLUG-IN

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 pickup 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 (t) 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.

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

# DPDT 11 Pin Plug-in

Pick-up Setting	Drop-Out Setting	Input Voltage	Current Range Monitored	Product Number	Wiring/ Socket	
Adjustable (Across Monitored	Fixed (At 95% of Pick-Up)	24V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COP01A28 COP05A28 COP10A28	11 Pin <b>70170D</b> MONITORED	
Range)		120V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COP01A22 COP05A22 COP10A22		
Adjustable (Across Monitored	Adjustable (From 50-95% of Pick-Up)	24V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COKP01A28 COKP05A28 COKP10A28	2 <sup>1</sup> /111/107 ~ V ~ ~	
Range)		120V AC	0.1 - 1A 0.5 - 5A 1 - 10A	COKP01A22 COKP05A22 COKP10A22	DIAGRAM 22	

Application Data & Dimensions–Page 21 Sockets & Accessories–Pages 80 & 81



- 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





800-238-7474 www.macromatic.com sales@macromatic.com

# **CURRENT SENSING RELAYS**

CM, CO & CU SERIES

AC PLUG-IN

**APPLICATION DATA & DIMENSIONS** 

#### **APPLICATION DATA**

### Input Voltage Tolerance:

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

#### Load (Burden):

Less than 5VA

### Current Settings:

#### CM & CO Series

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

#### CU Series

Pick-up: Fixed at 5% above adjustable drop-out setting Drop-out: Adjustable throughout current range monitored

#### Response Times:

#### CM Series Pick-up: Fixed 100ms

Pick-up.	FIXED TOUTIS
Drop-out:	Fixed 100ms
CO Series	
Pick-up:	Adjustable 0.1-10 seconds
Drop-out:	Fixed 100ms
CU Series	
Pick-up:	Fixed 100ms
Drop-out:	Adjustable 0.1-10 seconds

## Output Contacts:

10A @ 240V AC/30V DC, 1/2HP @ 120/240V AC (N.O.), 1/3HP @ 120/240V AC (N.C.)

#### Life:

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

#### Temperature:

-28° to 55° C (-18° to 131° F)

Indicator LED: Green when Input Voltage is applied; Red when Relay is energized

Reset: Automatic

#### Mounting:

Requires an 8 or 11 pin octal socket--see page 80.

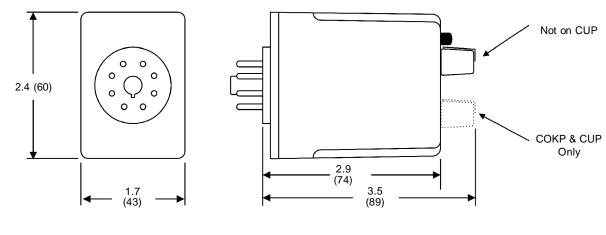
Approvals:





Low Voltage & EMC Directives EN60947-1, EN60947-5-1 with appropriate socket File #E109466

DIMENSIONS



All dimensions are inches (millimeters)