

OPERATION

The CMI Series AC OVER CURRENT Monitor Relay operates in the **FAIL-SAFE MODEL** as the relay is energized (pick-up) when the monitored AC current is normal. The relay de-energizes (Drop-out) when the monitored current rises above the preset trip point or the control voltage is removed. When current is initially applied, a time delay begins. This inhibits the over current sensors while high inrush currents are present. The delay is field adjustable and is set so the delay period is slightly longer than the inrush time of the motor. If the monitored current is above the preset trip point when the delay elapses, the relay de-energizes. (Figure 1) If the current drops to the normal run current of the motor prior to the completion of the delay period, the relay remains energized until the current rises above the trip point, which indicates an abnormal condition. At that time the relay deenergizes and remains locked-out until the reset button is pressed or the control voltage is interrupted, and re-applied. (Figure 2) A typical application is for conveyor jam up detection.

An External CT may be used to extend the range of the Current Monitor.



FAIL SAFE DETECTION OF MOTOR JAM UPS

AC Over Current Monitor

SPECIFICATIONS

CONTROL VOLTAGE	24 or 120 VAC, 50/60 Hz	
TRIP POINTS	Pick-up	See Order Information
	Drop-out	Press Reset Button or Restore Control Voltage
OUTPUT	DPDT, 10 Amps @ 120 VAC, Resistive	
TIME DELAY	0.2 to 10 SEC, Adjustable On Motor Starting	
OPERATING TIME	50 mSEC (After Initial Delay has Timed Out)	
CURRENT WITHSTAND	20 Times Nominal for 1 Second	
ISOLATION	2500 Volts Between Input and All Other Terminals	
INDICATOR	Glow on Normal Current	
RESET	Manual, Press Button or Interrupt Control Voltage	
RESET TIME	100 mSEC After Lock-Out	
TEMPERATURE RATING	Operate	32° to 131°F (0° to +55°C)
	Storage	-49° to 185°F (-45° to +85°C)
ENCLOSURE	Lexan Surface Mounted; #8-32 Screw Terminals	
WEIGHT	11 oz.	

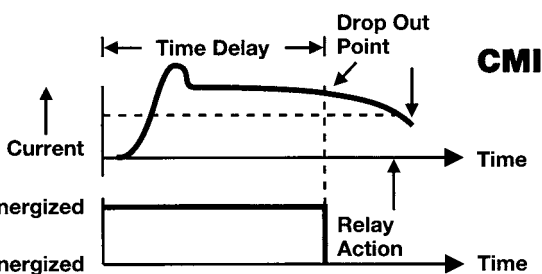


FIGURE 1

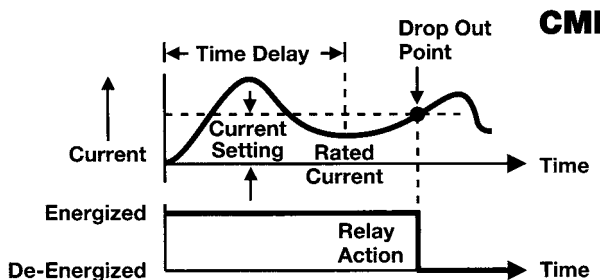
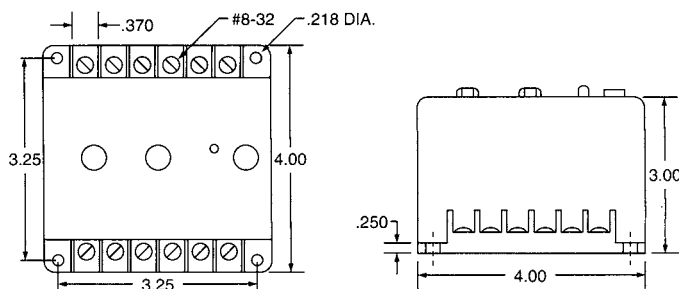
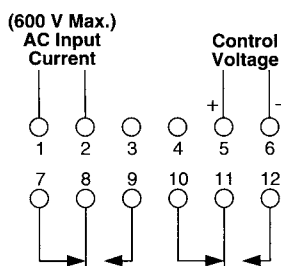


FIGURE 2

DIMENSIONS (INCHES)



WIRING



MODEL NUMBER

MODEL NUMBER	CMI		A	S	E	
CONTROL VOLTAGE						
24 Volts		24				
120 Volts		120				
CURRENT TRIP POINTS						
0.05 to 0.25 amp adj.						.25
0.2 to 1 amp adj.						1
1.0 to 5.0 amps adj.						5
2.0 to 10 amps adj.						10
4.0 to 20 amps adj.						20