

# OSI PROGRAMMABLE SETPOINT RELAY MODEL CRD-020

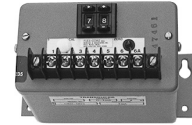
## RANGES UP TO 20A AC CURRENT INPUT

### FEATURES

- Programmable set-point relay setting for input current, threshold levels, over- and under-current operation.
- Internal DIP-switch to set the current ranges of either 0-5, 0-10, 0-15, or 0-20 Amperes, and the relay mode for under- or over-current operation.

- Lid-mounted two-digit numerical push-button switch calibrated as percent of full-scale with a threshold range of 1-99 percent.
- Red LED lamp lights to indicate when threshold level has been obtained.

5 YEAR WARRANTY



### INPUT AND RELAY OPERATION SETTINGS

INPUT RANGE	INTERNAL SWITCH POSITIONS							
	1	2	3	4	5	6	7	8
	UNDER CURRENT*							
5	ON	ON						ON
10	ON	ON						ON
15	ON	ON				ON		
20	ON	ON			ON			ON
	OVER CURRENT**							
	1	2	3	4	5	6	7	8
	5			ON	ON			
10			ON	ON				ON
15			ON	ON		ON		
20			ON	ON	ON			ON

Highlighted area indicates Factory Setting. Unit is shipped from the factory with a 0-5 Amp input and in an over-current relay mode. The set point relay can be set to provide any one of the four current ranges and modes of operation.

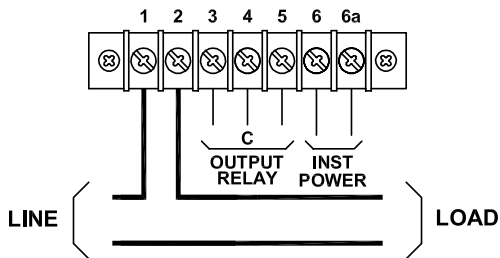
\*The output relay will energize when instrument power is applied and the current is above the set point threshold. It will remain in a "Fail Safe" mode until either the input current drops below the set point threshold or instrument power is removed.

### OPERATION OF THE OUTPUT RELAY AND LED

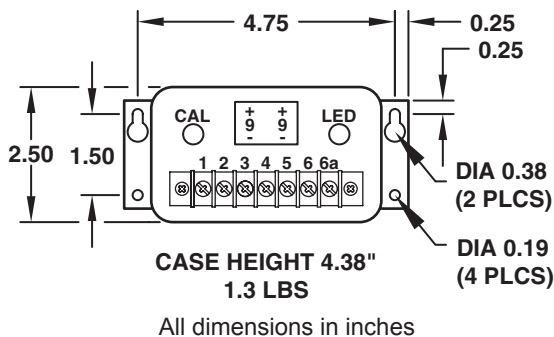
MODE OF OPERATION	OUTPUT TERMINAL CONNECTIONS & LED OPERATION							
	UNDER-CURRENT*				OVER-CURRENT**			
	3	4	5	LED	3	4	5	LED
INST. POWER OFF	N/C	Com	N/O	OFF	N/C	Com	N/O	OFF
INST. POWER ON	N/C	Com	N/O	ON	N/O	Com	N/C	OFF
INST. PWR. ON CURRENT BELOW SET POINT	N/C	Com	N/O	ON	N/O	Com	N/C	OFF
INST. PWR. ON CURRENT ABOVE SET POINT	N/O	Com	N/C	OFF	N/C	Com	N/O	ON

\*\* The output relay will energize when instrument power is applied and will remain in a "Fail Safe" mode until either the instrument power is removed or the input current exceeds the set point threshold level.

## CONNECTION DIAGRAMS



## CASE DIMENSIONS



## SPECIFICATIONS

- INPUT**
- Current Ranges..... See Table
  - Current Detection...5A Range.....Current at 80mA
  - 10A Range.....Current at 160mA
  - 15A Range.....Current at 200mA
  - 20A Range.....Current at 220mA
  - Burden ..... Any Range.....0.5VA Max.
  - Over-current ..... Any Range, continuous .....25Aac
  - transient.....50Aac (10s/Hr)
  - transient.....250Aac (1s/Hr)
  - Frequency..... 50-425Hz, 60Hz Nom.
  - Set Point (Digital)..... 01-99%, 01 minimum
  - Hysteresis .....±1 Digit

- DIELECTRIC TEST**
- Input/Output/Case..... 1500Vac
  - Internal Program Switch.....8-Position DIP-switch

**INSTRUMENT POWER** .....85-135Vac, 50-400Hz, 2.5VA

- OUTPUT**
- Relay..... Form C, SPDT
  - Rating.....120Vac, 3A
  - Response Time to 90%...5A Range..... 200ms
  - 10A Range..... 250ms
  - 15A Range..... 350ms
  - 20A Range..... 550ms

**ACCURACY** ..... Setpoint ±2 digits

- PHYSICAL**
- Mechanical Operations .....1 Million