

# DC SETPOINT RELAY

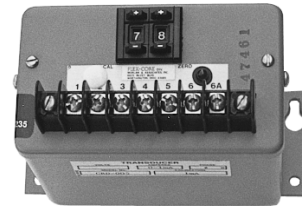
## DC SETPOINT RELAY

**MODEL CRD-005**

### PROGRAMMABLE AS A PERCENT OF RANGE

#### FEATURES

- Programmable settings for either current or voltage input, threshold levels and over or under relay alarms
- Internal DIP switches may be set for either 0 - 1mAdc or 0 - 10Vdc, and may be set for under alarm or over alarm relay operation.
- Lid mounted two digit numerical push-button switch calibrated as percent of full-scale with a threshold range of 01 - 99 percent.
- Red LED lamp lights to indicate when threshold level has been obtained.
- Highlighted area indicates Factory Setting. Unit is set at factory for the 0-1mA input and in the over range alarm mode.



#### INPUT AND RELAY OPERATION SETTINGS

INPUT RANGE	INTERNAL SWITCH POSITIONS							
	1	2	3	4	5	6	7	8
<b>UNDER CURRENT*</b>								
0-1mA	ON	ON			ON	ON		
0-10Vdc	ON	ON				ON		
<b>OVER CURRENT**</b>								
0-1mA*			ON	ON	ON	ON		
0-10Vdc			ON	ON		ON		

#### OPERATIONS MODE

##### \*Under Range Alarm

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.

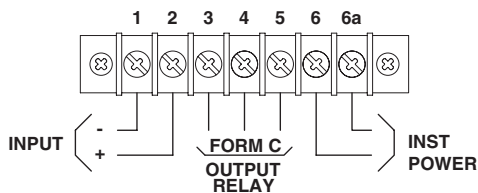
##### \*\*Over Range Alarm

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.

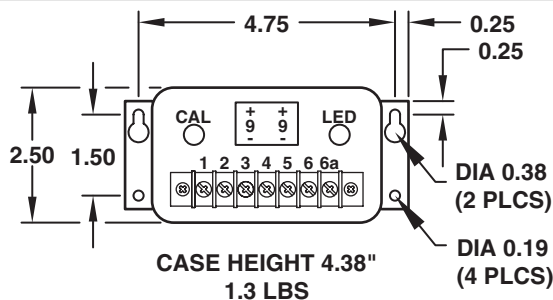
#### OPERATION OF THE OUTPUT RELAY AND LED

OUTPUT TERMINAL CONNECTIONS & LED OPERATION								
MODE OF OPERATION	UNDER RANGE*				OVER RANGE**			
	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 INPUT BELOW SET POINT	N/C	Com	N/O	ON	N/O	Com	N/C	OFF
INST PWR ON INPUT ABOVE SET POINT	N/O	Com	N/C	OFF	N/C	Com	N/O	ON

#### CONNECTION DIAGRAM



#### CASE DIMENSIONS



#### SPECIFICATIONS

##### INPUT

Current ..... 1mA<sub>dc</sub>  
 Burden ..... 1K Ohm  
 Voltage ..... 0-10V<sub>dc</sub>  
 Burden ..... 10K Ohms  
 Resolution ..... + 1 Digit  
 Hysteresis ..... + 1 Digit  
 Response Time ..... 10 milliseconds  
 Set Point (Digital) ..... 01 - 99 %, 01 minimum  
 Dielectric Test ..... (Input to Output and Case) ..... 1500Vac

##### OUTPUT

**ACCURACY** ..... **Setpoint + 2 digits**  
 Relay ..... Form C, SPDT  
 Rating ..... 120Vac, 3 Amps  
 Mechanical Operations ..... 1 Million  
 Temperature Effect .... (-10°C to +60°C) ..... +0.1%/°C  
 Instrument Power ..... 85-135Vac, 50-400Hz, 2.5VA

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**CURRENT RELAYS**