

# MODEL 279

## DC Current Monitor

- Adjustable Hysteresis and Trip Points
- Automatic or Manual Reset
- Remote Adjust and Reset Available
- 5-Year Unconditional Warranty



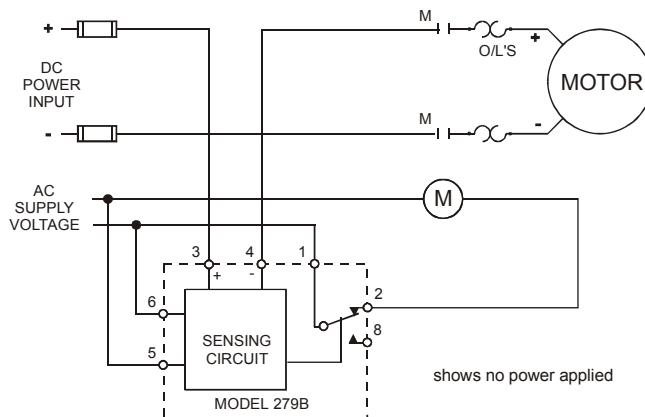
### DESCRIPTION

The **Model 279 DC Current Monitor** is a single set-point DC current monitor. It can sense either 1-10 Amps DC (24VAC or 120VAC) or 0.1-1 Amps DC (120VAC).

The standard version, the Model 279B, has a screwdriver adjustable trip and hysteresis setting on top of the device. The hysteresis setting adjusts from 0% to 100%, and can be set fully clockwise for manual reset operation. A remote adjust version, the Model 279C, has a remote trip adjustment and a remote reset button.

The Model 279B plugs into a standard 8-pin socket, while the Model 279C plugs into a standard 11-pin socket. An LED indicator is provided on both versions to indicate when the relay is energized (i.e. current is above the trip setting).

### TYPICAL APPLICATION - Model 279B



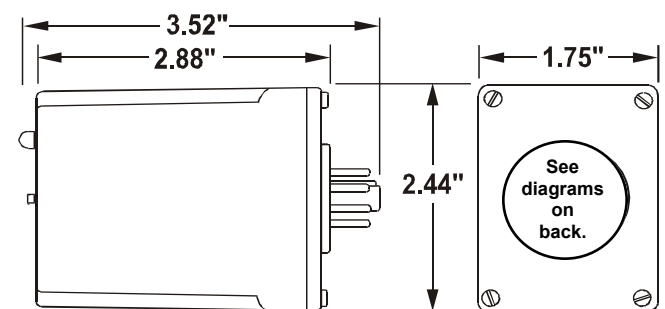
### SPECIFICATIONS

Model	279B-24 279C-24	279B-120 279C-120	279BA-120 279CA-120
Current range	1-10 Amps		0.1-1 Amps
Supply voltage	24VAC	120VAC	120VAC
Input frequency	50 - 60Hz		
Maximum current	15 Amps continuous		
Maximum surge current	100A for 100ms		
Power consumption	5.3W	2.5W	
Transient protection	2500 VRMS for 10ms		
Hysteresis adjustment	0% to 100%		
Reset	Automatic or Manual		
Repeat accuracy	1% maximum		
Output contacts	SPDT 10A at 240VAC resistive		
Expected relay life	Mech: 10 million operations Elec: 100,000 operations at rated load		
Operating temperature	-20° to +131° F		
Humidity tolerance	0-97% w/o condensation		
Mounting	* socket sold separately		
Case material	ABS plastic		
Weight	7.5 oz.		

\*For 279B units, order 8-pin socket number 51X120

For 279C units, order 11-pin socket number 51X16

### DIMENSIONS



(dimensions have tolerance of  $\pm 0.06$ )


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# MODEL 279

# DC Current Monitor

READ ALL INSTRUCTIONS BEFORE INSTALLING, OPERATING OR SERVICING THIS DEVICE.  
KEEP THIS DATA SHEET FOR FUTURE REFERENCE.

## GENERAL SAFETY

POTENTIALLY HAZARDOUS VOLTAGES ARE PRESENT AT THE TERMINALS OF THE MODEL 279.  
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.  
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

## Installation Instructions

### INSTALLATION

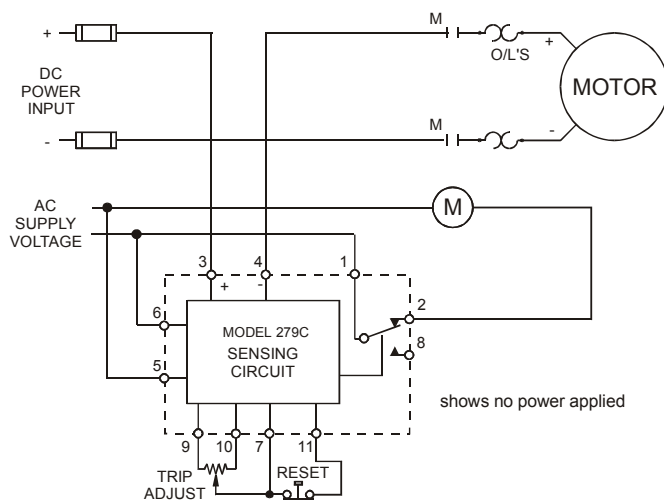
Using the **Model 279 DC Current Monitor** pin drawings (contacts shown in the de-energized condition), connect operating voltage, current input, and load wiring to the socket. **Be sure to observe DC current polarity.**

The Model 279's internal relay will energize when the input current rises above the trip setting. The LED indicator will illuminate whenever the relay is energized.

Apply the AC supply voltage for a 15 minute warm-up period before making the trip adjustments.

**Note:** When installing the **Model 279 DC Current Monitor** in areas of high humidity or contamination, the manufacturer recommends that the base area and all exposed metal parts of the socket be coated liberally with a good quality silicone grease, such as Dow Corning DC-4 or DC-4X. Insert the unit into the socket and wipe off excess grease from around the base. This will prevent the entrance of moisture and other contaminants into the base and socket area.

### TYPICAL APPLICATIONS - Model 279C



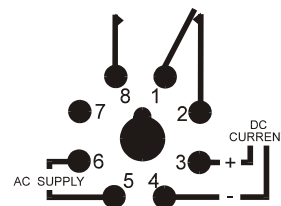
### ADJUSTMENT

The **Model 279 DC Current Monitor** is screwdriver adjustable. The most accurate calibration is to apply the current level at which the unit is to trip, then adjust the relay to be energized.

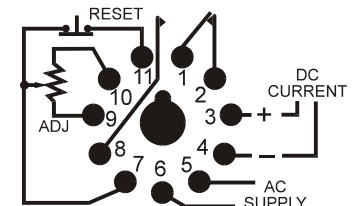
An alternate method is to turn the trip adjust fully clockwise and apply normal operating current, at 0% hysteresis. Adjust the trip adjust counter-clockwise until the relay just trips, then adjust clockwise until the relay resets. This results in the Model 279 tripping on relatively small current changes.

The hysteresis (*dead band*) adjustment determines at what current level the Model 279 resets. For example; if 3 amps is applied and the Model 279 is set to trip at 5 amps with a 20% dead band, after tripping the current must drop at least 1 amp before the Model 279 can reset.

### PIN DIAGRAMS



Model 279B



Model 279C

### WARRANTY

This product is warranted to be free from defects in materials and workmanship, and is covered by our exclusive **5-year Unconditional Warranty**. Should this device fail to operate for any reason, we will repair it for five years from the date of manufacture. For complete warranty details, see the *Terms and Conditions of Sales* page in the front section of the Time Mark catalog or contact Time Mark at 1-800-862-2875.

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