



**HORSEPOWER RATED**

# HIGH CURRENT TIMING RELAY

## LOW COST OPEN CONSTRUCTION

### 10 AMPERE CONTACTS 1/3HP RATED

#### Series 683B - INTERVAL ON

##### CMOS DIGITAL CIRCUITRY

- Environment Protected
- Small Size – 3.625" x 2.125" x 1 1/16"
- Sealed Relay
- Lightweight – approximately 2.5 oz.
- No False Operate
- Rugged 4 hole mounting
- Enclosed Relay SPDT or DPDT
- Transient Protected to 6000V

Application of power simultaneously starts timing of the preset interval and turns the load ON. At the end of the timed period the N/O load contact opens, turning OFF the load. Power to the timer must be applied continuously throughout the time period. Removal of power causes the timer to reset to T = 0. A new cycle can start by re-application of input voltage.

Control the timing of high power electric heaters, FHP motors, lamps, transformers and other high current loads rated less than 10 amps Resistive. CMOS digital circuitry is combined with a high current relay rated at 10 amps. P/C board and components are covered with a moisture resistant coating. Wiring terminals are ¼ quick connect. Available in all standard voltages and frequencies. Fixed or adjustable timing from .1 seconds to 24 hours.

### TIMING DIAGRAM



### SPECIFICATIONS

1. Repeat Accuracy:  $\pm 0.25\%$
2. Combined Effect of Temperature and Voltage upon Repeat Accuracy:  $\pm 2\%$
3. Reset Time: 150 ms.
4. Operating Voltage Tolerance:  $\pm 20\%$
5. Load Current: 10 Amps Resistive at 120/240VAC or 28VDC  
1/3HP@120VACor240VAC
6. Dielectric Strength: 1500 VRMS
7. Insulation Resistance: 100 Megohms Min.
8. Input Transient Protection: 3000V 120V UNITS, 6000V 240V units
9. Temperature Ambients: Operating -40°C to +70°C Storage -55°C to + 85°C
10. Humidity-Operating: 95% Relative
11. Linearity(Option A or D ):  $\pm 5\%$  Minimum from 10% to 90% of range
12. Timing Tolerance:  $\pm 9\%$  + Tolerance of Rt Std.,  $\pm 5\%$  Special (Fixed)

### HOW TO ORDER 683(N) – (T) (V) (P)

SERIES	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
683B SPDT	P = 0.1 - 5 SEC. 1 = 0.1 - 10 SEC. L = 0.2 - 20 SEC. J = 0.3 - 30 SEC. M = 0.6 - 60 SEC. 2 = 1 - 100 SEC. K = 1.2 - 120 SEC. F = 2 - 180 SEC. E = 3 - 300 SEC. 3 = 10 - 1000 SEC.	1 = 12VDC 2 = 24VDC 3 = 48VDC 4 = 24VAC 5 = 120VAC 6 = 240VAC 7 = 110VDC	O - CUSTOMER SUPPLIES OWN POTENTIOMETER OR RESISTOR A - POTENTIOMETER SUPPLIED AS A LOOSE PIECE *C - FACTORY FIXED W - POTENTIOMETER WITH WHEEL ON BOARD
683BB DPDT	4 = 0.1 - 10 MIN. G = 0.3 - 30 MIN. H = 0.6 - 60 MIN. 5 = 1 - 100 MIN. V = 3 - 300 MIN. 6 = 10 - 1000 MIN. D = 1 - 24 HRS.		

*\* For Fixed Time Specify The Value In  
Seconds, Minutes, Or Hours*

**MADE IN USA**

**EXAMPLE P/N: 683B-360** This is a SPDT INTERVAL ON 10A Rated Relay Output Solid State Timer with an adjustable 10 – 1000 second DELAY and an INPUT VOLTAGE of 240 VAC. The time adjust potentiometer or resistor will be supplied by the customer.

American Control Products / Precision Timer  
a division of Prime Technology  
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### TECHNICAL BULLETIN

### OPEN SOLID STATE TIMER

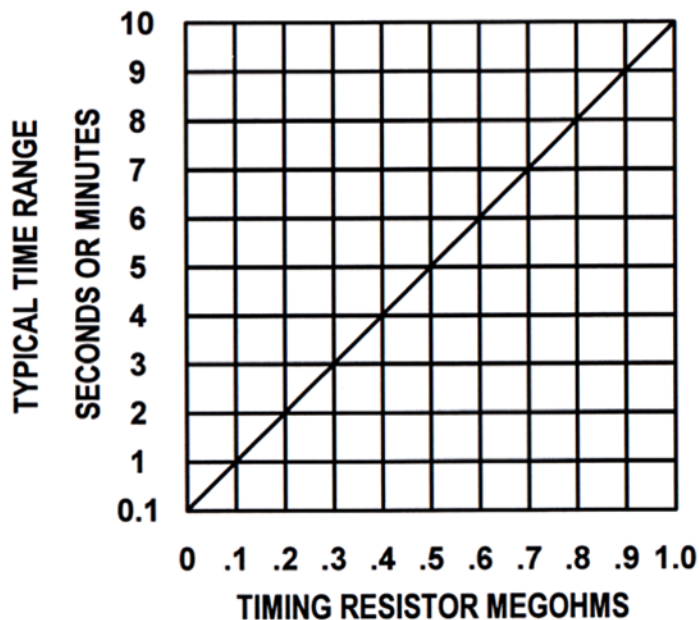
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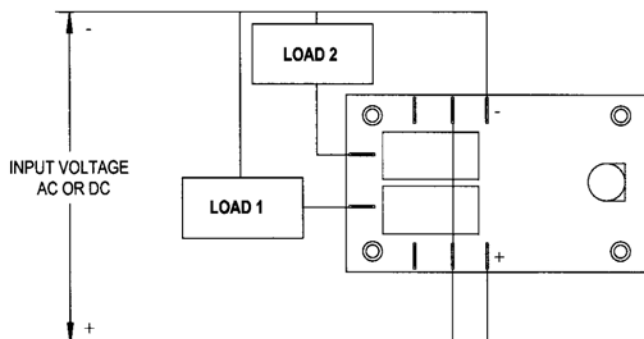
**683B**

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## TYPICAL CALIBRATION RESISTANCE VS TIME

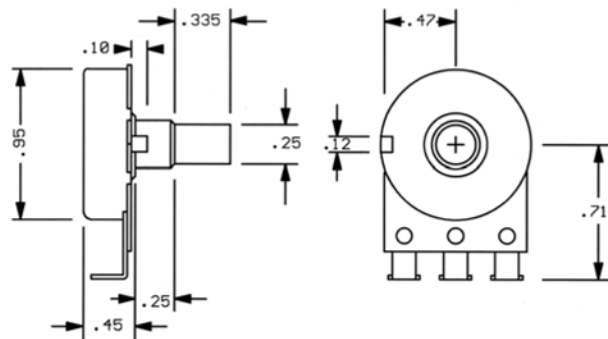


## TYPICAL WIRING

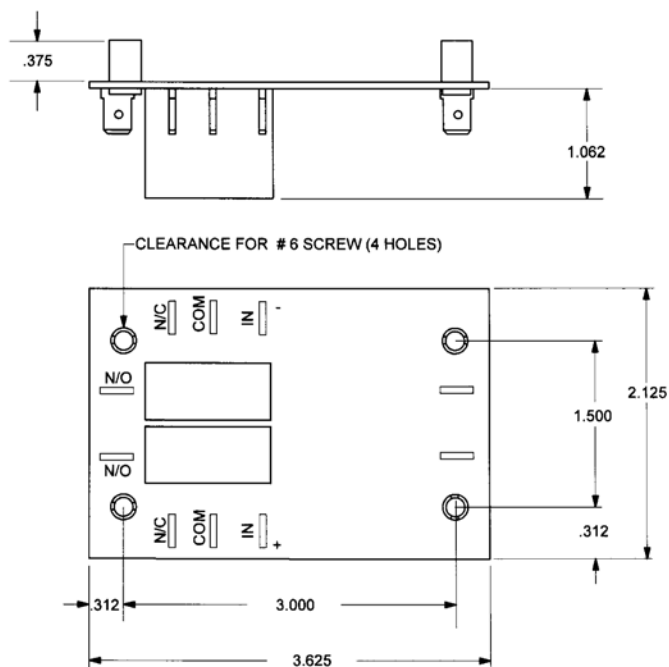


## ACCESSORIES AVAILABLE FROM STOCK

CONTROL POTENTIOMETERS (OPTION A)  
ORDER P/N PM-1M 1 MEGOHM  $\pm 20\%$



## OUTLINE DRAWING



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## SOLID STATE TIMING MODULE

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