



HORSEPOWER RATED

HIGH CURRENT TIMING RELAY

LOW COST OPEN CONSTRUCTION

10 AMPERE CONTACTS 1/3HP RATED

Series 681B - ON DELAY

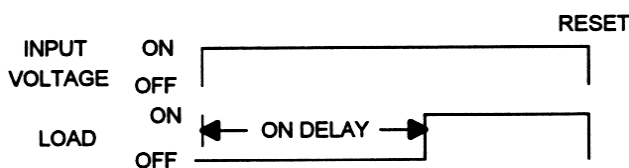
CMOS DIGITAL CIRCUITRY

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

Input power when applied starts the ON delay timing. When the preset time delay has run out, the on board relay is energized and the load is turned ON. The load will remain ON until the input power is removed. Power must be applied during timing and after time out, or as long as necessary to keep the load energized. Momentary loss of power during timing will not cause momentary actuation of the load. Remove the input voltage to reset.

Control the timing of high power electric heaters, FHP rated motors, lamps, transformers and other high current loads rated less than 10 amps Resistive. CMOS digital circuitry is combined with high current output relay contacts. 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@120VAC or 240VAC
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 681(N) – (T) (V) (P)

SERIES	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
681B SPDT 681BB DPDT	P = 0.1 - 5 SEC.	1 = 12VDC	O - CUSTOMER SUPPLIES OWN POTENTIOMETER OR RESISTOR A - POTENTIOMETER SUPPLIED AS A LOOSE PIECE *C - FACTORY FIXED W - POTENTIOMETER WITH WHEEL ON BOARD <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%; text-align: center;"> <i>* For Fixed Time Specify The Value In Seconds, Minutes, Or Hours</i> </div>
	1 = 0.1 - 10 SEC.	2 = 24VDC	
	L = 0.2 - 20 SEC.	3 = 48VDC	
	J = 0.3 - 30 SEC.	4 = 24VAC	
	M = 0.6 - 60 SEC.	5 = 120VAC	
	2 = 1 - 100 SEC.	6 = 240VAC	
	K = 1.2 - 120 SEC.	7 = 110VDC	
	F = 2 - 180 SEC.		
	E = 3 - 300 SEC.		
	3 = 10 - 1000 SEC.		
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.			

MADE IN USA

EXAMPLE P/N: 681BB-34W This is a DPDT ON DELAY 10A Rated Relay Output Solid State Timer with an adjustable 10 – 1000 second DELAY and an INPUT VOLTAGE of 24 VAC. The time adjust potentiometer with wheel is on the P/C board.

AMERICAN CONTROL PRODUCTS

A DIV. OF PRECISION TIMER CO., INC.
47 WESTBROOK INDUSTRIAL PARK ROAD
WESTBROOK, CT. 06498

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TECHNICAL BULLETIN

OPEN SOLID STATE TIMER

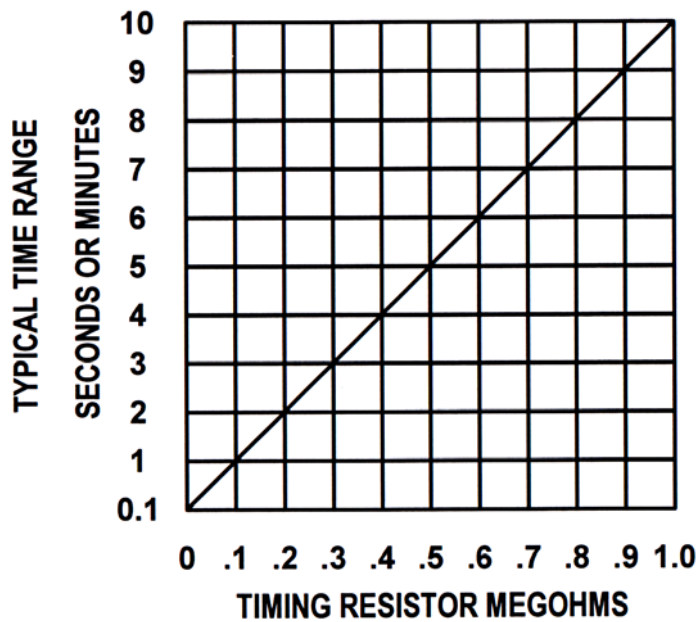
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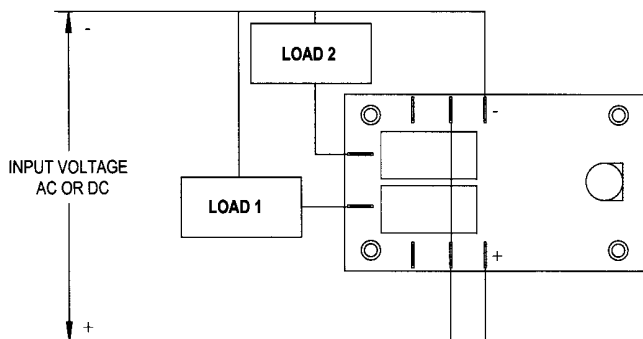
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REV

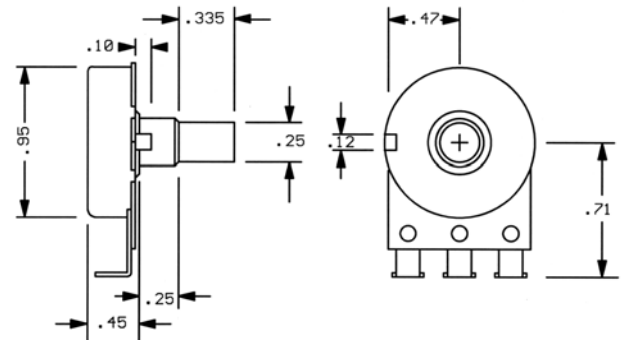
TYPICAL CALIBRATION RESISTANCE VS TIME



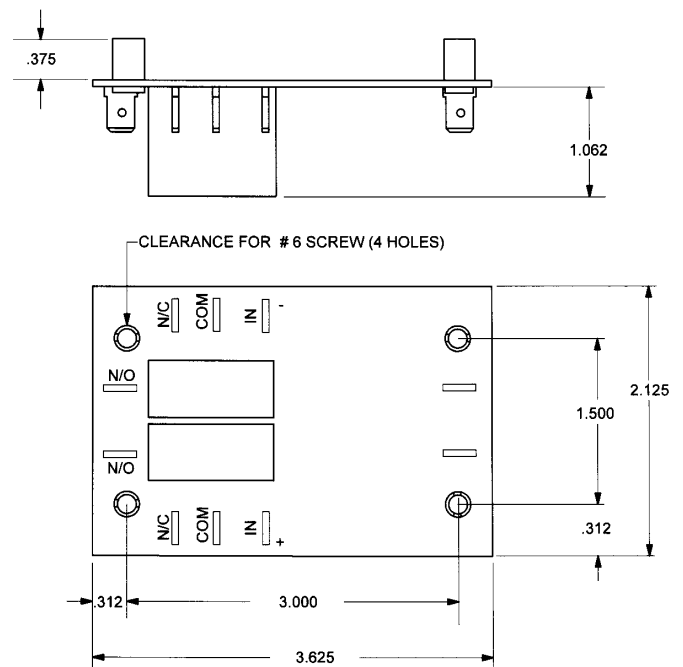
TYPICAL WIRING



ACCESSORIES AVAILABLE FROM STOCK CONTROL POTENTIOMETERS (OPTION A) ORDER P/N PM-1M 1 MEGOHM ± 20%



OUTLINE DRAWING



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SOLID STATE TIMING MODULE

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REV