

HORSEPOWER RATED

HEAVY CURRENT TIMING RELAY

LOW COST OPEN CONSTRUCTION

30 AMPERE CONTACTS 2HP RATED

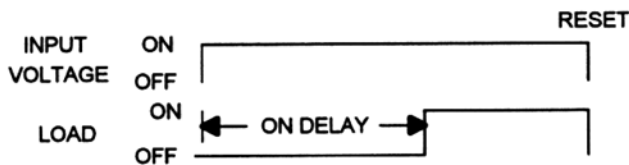
Series 681E - ON DELAY

- Environment Protected
- Sealed Relay
- No False Operate
- Switches 3600W @120V, 7200W @ 240V
- SPDT Relay Output
- Small Size – 3.625"x 2.125" x 1 9/16"
- Lightweight – approximately 3 oz.
- CMOS Digital Circuitry
- Transient Protected to 6000V
- 30 Amp Load Rating

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, HP rated motors, lamps, transformers and other high current loads rated less than 30 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: 30 Amps General Purpose at 120/240VAC or 28VDC
1HP@120VAC, 2HP@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 681E – (T) (V) (P)

SERIES	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
681E	P = 0.1 - 5 SEC.	1 = 12VDC	O - CUSTOMER SUPPLIES OWN POTENTIOMETER OR RESISTOR A - POTENTIOMETER SUPPLIED AS LOOSE PART *B - RESISTOR INSTALLED ON TERMINALS *C - FACTORY FIXED R - POTENTIOMETER WITH THRU SHAFT S - POTENTIOMETER WITH SCREWDRIVER SLOT
	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.			

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

MADE IN USA

EXAMPLE P/N: 681E-340 This is an ON DELAY 30A Rated Relay Output Solid State Timer with an adjustable 10 – 1000 second DELAY and an INPUT VOLTAGE of 24 VAC. The customer will supply the time adjust potentiometer or resistor.



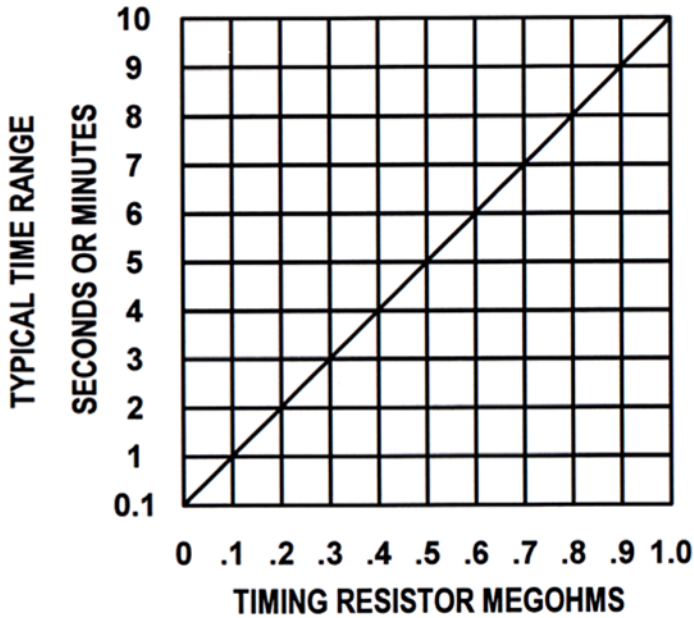
American Control Products / Precision Timer
a division of Prime Technology
344 Twin Lakes Road
North Branford, CT 06471
Telephone: (203) 481-5721
Fax: (203) 481-8937
Email: sales@primetechnology.com
www.primetechnology.com

TECHNICAL BULLETIN

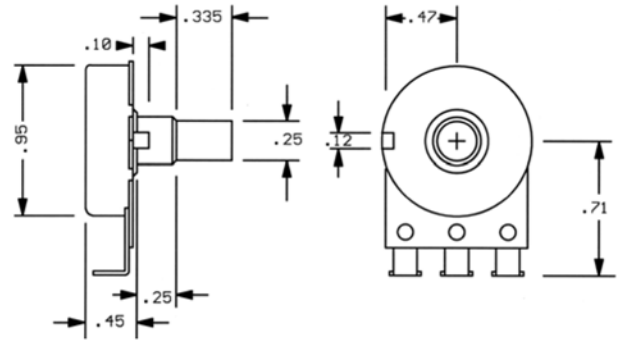
OPEN SOLID STATE TIMER

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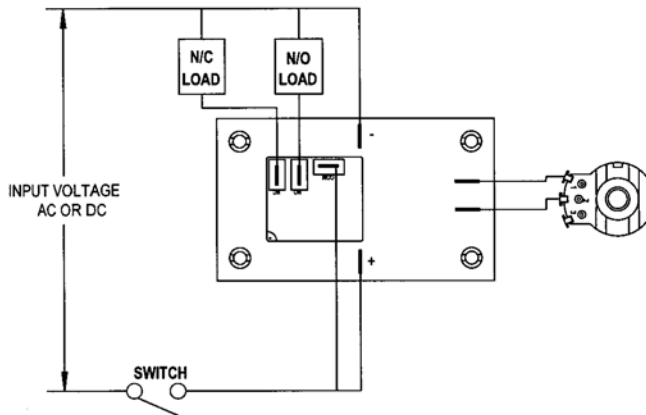
TYPICAL CALIBRATION RESISTANCE VS TIME



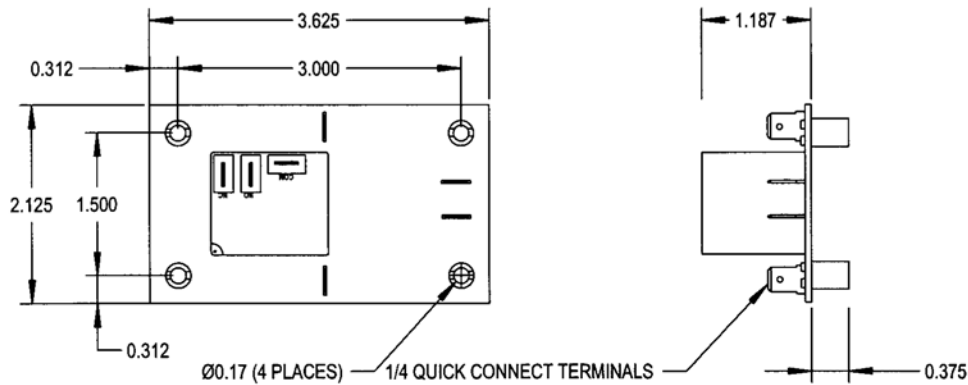
ACCESSORIES AVAILABLE FROM STOCK
CONTROL POTENTIOMETERS (OPTION A)
ORDER P/N PM-1M 1 MEGOHM ± 20%



TYPICAL WIRING



OUTLINE DRAWING



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TECHNICAL BULLETIN

SOLID STATE TIMING MODULE

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