

HORSEPOWER RATED

HEAVY CURRENT TIMING RELAY

COOL DOWN TIMER LOW COST OPEN BOARD CONSTRUCTION

30 AMPERE 2HP RATED

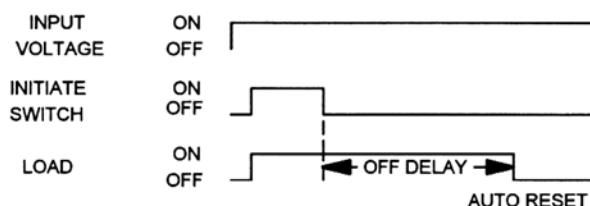
Series 682E – OFF DELAY

SOLID STATE CMOS DIGITAL CIRCUITRY

- Environment Protected
- Sealed Relay
- No False Operate
- Enclosed Relay SPDT
- Small Size – 2.437" x 3.962" x 1.5"
- Lightweight – approximately 2.5 oz.
- Rugged 4 Hole Mounting
- Transient Protected to 6000V

To operate input voltage is applied continuously. A normally open initiate switch closure causes the load contact to close, energizing the load. Timing will start when the initiate switch opens. At the end of the preset delay time period the load is turned OFF. A new cycle of operation can then be started via the initiate switch re-closure. Should the initiate switch be re-closed during the preset time delay period, timing will stop, but the load will remain energized. When the initiate switch is re-opened, the preset delay will be re-triggered. When the delay time has reached time out, the load will be de-energized, and the timer is reset. This timer is commonly referred to as the "COOL DOWN TIMER". 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 on Repeat Accuracy: $\pm 2\%$ of Setting
3. Reset Time: 150 ms.
4. Operating Voltage Tolerance: $\pm 20\%$
5. Load Current: 30 Amps Resistive at 120/240VAC or 28VDC, 1 HP@ 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): $\pm 5\%$ Minimum from 10% to 90% of range
12. Timing Tolerance: $\pm 9\%$ + Tolerance of Rt Std., $\pm 5\%$ Special (Fixed)

HOW TO ORDER 682E – (T) (V) (P)

SERIES	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
682E	P = 0.1 - 5 SEC.	1 = 12VDC	O - CUSTOMER SUPPLIES OWN POTENTIOMETER OR RESISTOR A - POTENTIOMETER SUPPLIED AS LOOSE PART *C - FACTORY FIXED W - POTENTIOMETER WITH WHEEL
	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.		
			<p><i>* For Fixed Time Specify The Value In Seconds, Minutes, Or Hours</i></p> <p>MADE IN USA</p>

EXAMPLE P/N: 682E-32C/240SEC This is a SPDT OFF DELAY 30A Rated Timer with a fixed 240 second delay and an INPUT VOLTAGE of 24 VDC. The delay time is factory fixed.

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

SOLID STATE TIMING MODULE

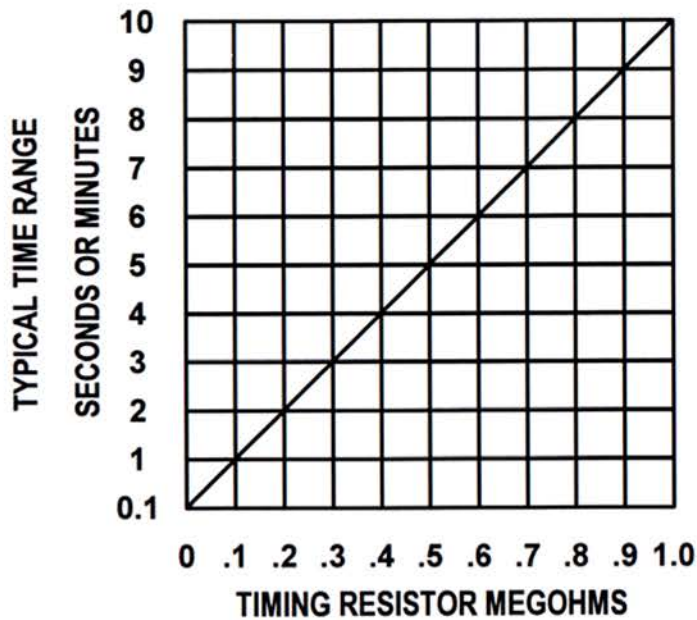
PAGE 1
OF 2

DATE
11-7-03

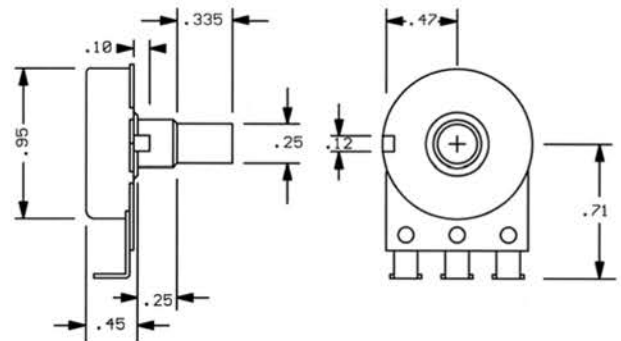
682E

REV

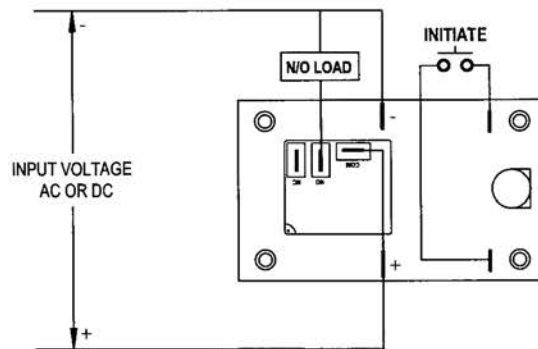
TYPICAL CALIBRATION RESISTANCE VS TIME



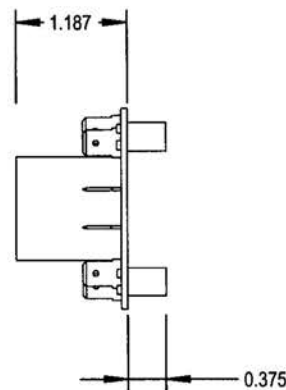
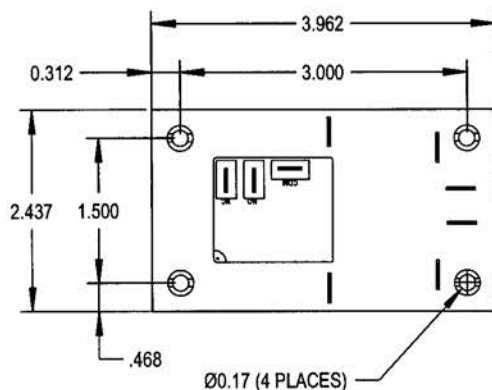
ACCESSORIES AVAILABLE FROM STOCK
CONTROL POTENTIOMETERS (OPTION A)
ORDER P/N PM-1M 1 MEGOHM \pm 20%



TYPICAL WIRING



OUTLINE DRAWING



MADE IN USA

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

SOLID STATE TIMING MODULE

PAGE 2
OF 2

DATE
11-7-03

682E

REV

PRIME
TECHNOLOGY