



**HORSEPOWER RATED**

# HEAVY CURRENT TIMING RELAY

COOL DOWN TIMER

ENCAPSULATED MODULE

**30 AMPERE, SPDT, 2 HP RATED**

## Series 842E – OFF DELAY

SOLID STATE

CMOS DIGITAL CIRCUITRY

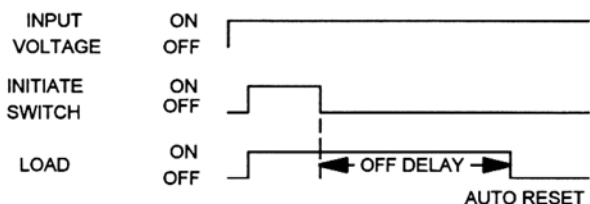


- Environment Protected
- Tamper Proof
- No False Operate
- Small Size – 2" x 3" x 1.35"
- Lightweight – approximately 2.5 oz.
- Rugged
- Transient Protected to 6000V

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 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 internal components are encapsulated in a flame retardant molded housing, fitted with quick connect wiring terminals. 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:  $\pm 2\%$  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, 2 HP@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)
13. Contacts: SPDT Standard, SPST/NO Optional

**842E – (T) (V) (P)**

**HOW TO ORDER 842AE – (T) (V) (P)**

SERIES	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
<b>842E</b> (SPDT)	P = 0.1 - 5 SEC.	1 = 12VDC	O - CUSTOMER SUPPLIES OWN POTENTIOMETER OR RESISTOR A - POTENTIOMETER SUPPLIED AS LOOSE PART *B - EXTERNALLY INSTALLED RESISTOR *C - FACTORY FIXED INTERNAL D - TRIMMER POTENTIOMETER INSTALLED ON TERMINALS R - INTERNAL POTENTIOMETER WITH THRU SHAFT S - INTERNAL 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.		
<b>842AE</b> (SPST/NO)	4 = 0.1 - 10 MIN.		* For Fixed Time Specify The Value In Seconds, Minutes, Or Hours
	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: 842EA-32C/240SEC** This is an OFF DELAY 30A SPST/NO Rated Timer with a fixed 240 second delay and an INPUT VOLTAGE of 24 VDC. The delay time is internally 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

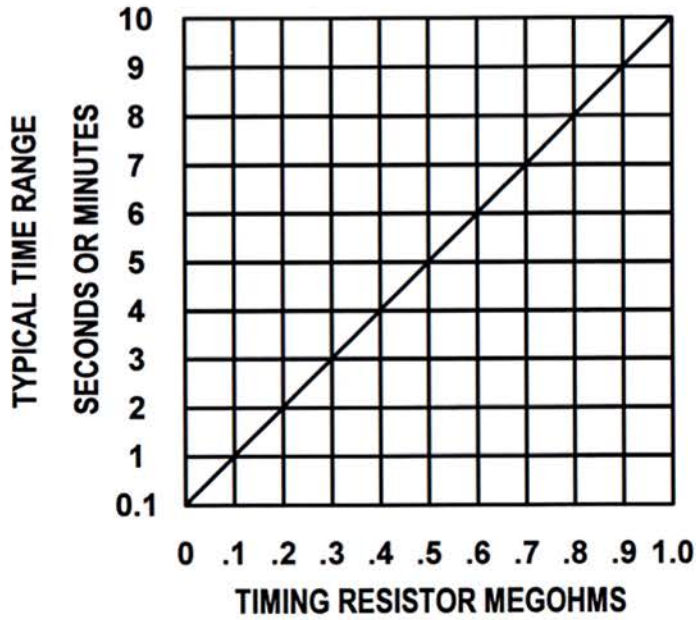
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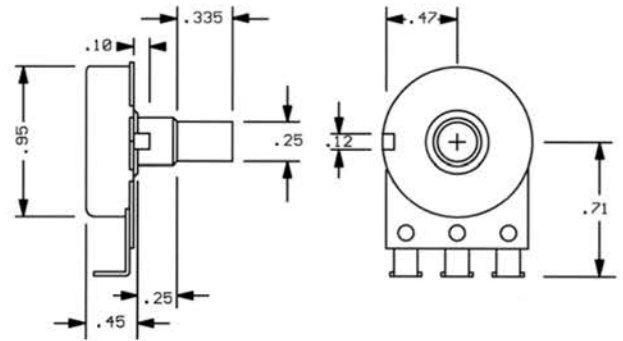
**842E**

REV  
C

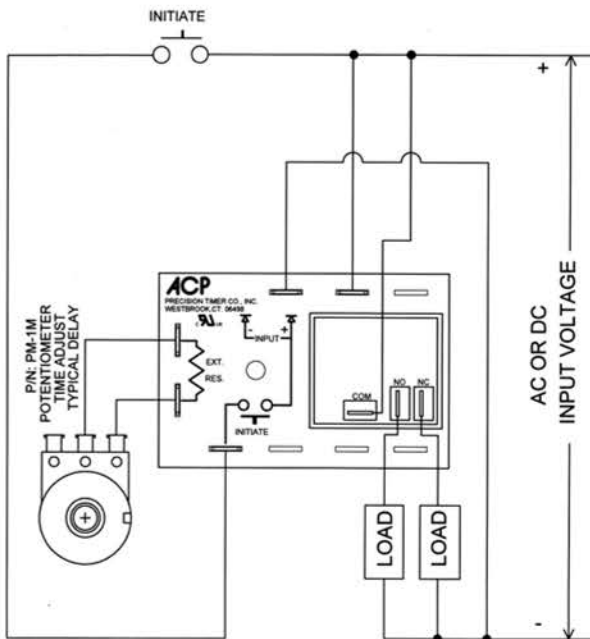
## TYPICAL CALIBRATION RESISTANCE VS TIME



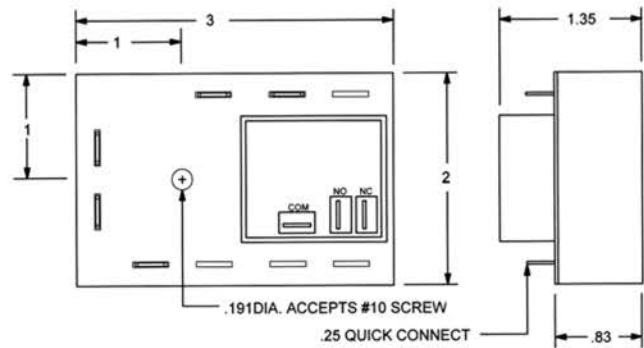
ACCESSORIES AVAILABLE FROM STOCK  
CONTROL POTENTIOMETERS (OPTION A)  
ORDER P/N PM-1M 1 MEGOHM  $\pm$  20%



## TYPICAL WIRING



## OUTLINE DRAWING



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