

HORSE POWER RATED

# HIGH CURRENT TIMING MODULE

FULLY SOLID STATE ENCAPSULATED  
 RATED TO 15 AMPERE / 1HP  
**Series 647 - PERCENT**  
 CMOS DIGITAL CIRCUITRY

**UL** **SP**  
 E98340 LR46938

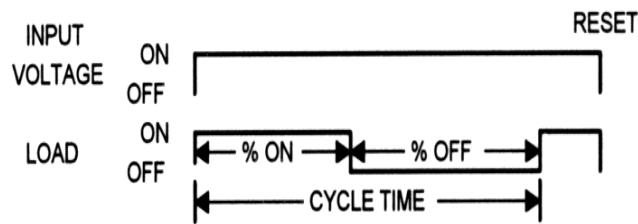
- Life Expectancy –unlimited
- Environment Protected
- Tamper Proof
- No False Operate
- Switches 1800W @120V, 3600W @ 240V
- Small Size – 2" x 2" x 15/16"
- Lightweight – approximately 2.5 oz.
- Rugged
- Transient Protected to 6000V
- Choice of 5, 10, 15 Amp. Load Rating

Output is an adjustable duration of ON time within each cycle of fixed time. Repeats continuously while energized. Removal of power causes the timer to reset.

Control the timing of high power electric heaters, motors, lamps, transformers and other high current loads rated less than 15 amps (150 amps inrush). CMOS digital circuitry is combined with a high current solid state switch. 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 cycle timing from 5 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: Steady State – 80 ma. Min., 5 Amps, 10 Amps, or 15 Amps Max.
- 6 Voltage Drop: 2.5V Typical at 15 Ampere
7. Leakage Current: 7 ma. max.
8. Dielectric Strength: 1500 VRMS
9. Insulation Resistance: 100 Megohms Min.
10. Input Transient Protection: 3000V 120V UNITS, 6000V 240V units
11. Temperature Ambients: Operating  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$  Storage  $-55^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
12. Humidity-Operating: 95% Relative
13. Linearity(Option A or D) :  $\pm 5\%$  Minimum from 10% to 90% of range
14. Isolation Output Switch to Bracket: 2500 VRMS
15. Maximum Inrush: 10 Times Rated Load Current

## HOW TO ORDER 647(I) - (T) (V) (P)

SERIES	(I) = CURRENT	(T) = CYCLE TIME	(V)=VOLTAGE	(P) = OPTIONS
647	A = 5 AMP B = 10 AMP C = 15 AMP	P - 5 SEC. 1 - 10 SEC. L - 20 SEC. J - 30 SEC. M - 60 SEC. 2 - 100 SEC. K - 120 SEC. F - 180 SEC. E - 300 SEC. 3 - 1000 SEC. 4 - 10 MIN. G - 30 MIN. H - 60 MIN. 5 - 100 MIN. V - 300 MIN. 6 - 1000 MIN. D - 24 HRS.	4 = 24VAC 5 = 120VAC 6 = 240VAC	O - CUSTOMER SUPPLIES OWN DUAL GANGED POTENTIOMETER OR RESISTOR E - DUAL GANGED POTENTIOMETER IS SUPPLIED
	<b>MADE IN USA</b>			

**EXAMPLE P/N: 647C-15E/** This is a PERCENT 15A Rated Solid State Timer with a 10 second cycle time ( equivalent to 30 FPM) and an INPUT voltage of 120 VAC. The dual ganged potentiometer is supplied.

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

PHONE: (860)399-6253  
 EMAIL: info@precisiontimer.com

FAX: (860)399-5619  
 Web Site: precisiontimer.com

## TECHNICAL BULLETIN

### SOLID STATE TIMING MODULE

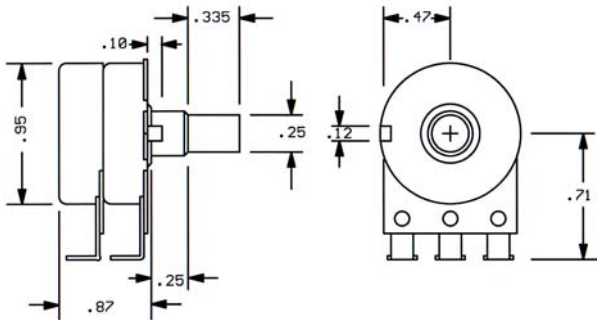
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**647**

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## ACCESSORIES – AVAILABLE FROM STOCK

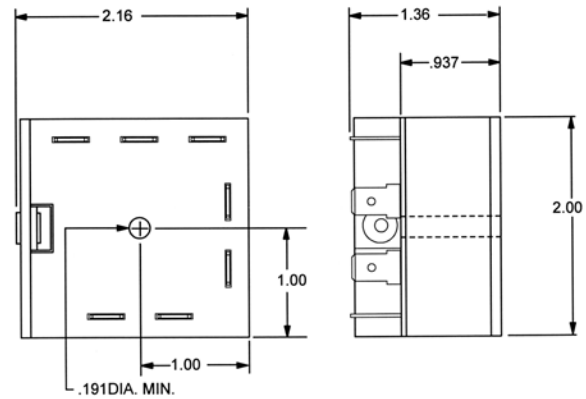
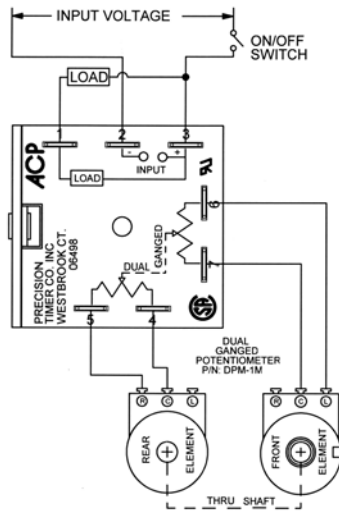


### DUAL POTENTIOMETER

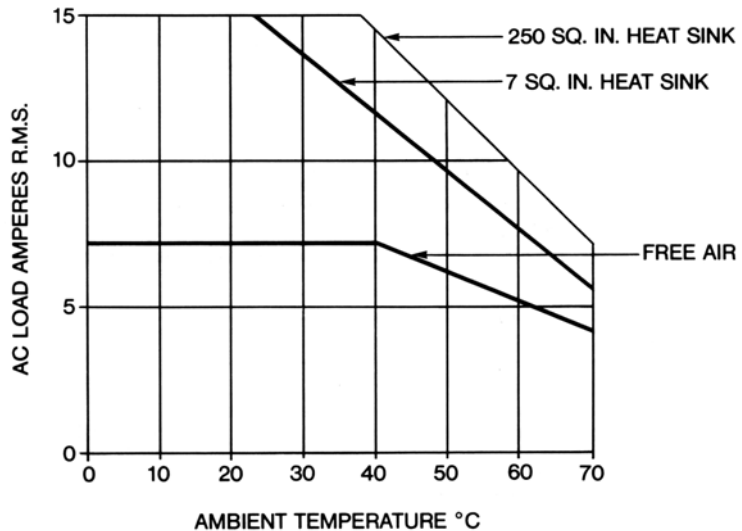
Order P/N: DPM – 1M    1 Megohm ±20%

### OUTLINE DRAWING

#### TYPICAL WIRING



#### TYPICAL DERATING



Current Designation	HORSEPOWER	
	120 V	240V
A	1/8	1/6
B	1/4	1/2
C	1/3	1

**NOTE:** Thermal joint compound is necessary to insure proper heat transfer from the Timing Module mounting surface to the heat sink.

**MADE IN USA**

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