HORSE POWER RATED

HIGH CURRENT TIMING MODULE

FULLY SOLID STATE ENCAPSULATED

RATED TO 15 AMPERE / 1HP

E98340 LR46938

Series 648G – RETRIGGERABLE ONE SHOT

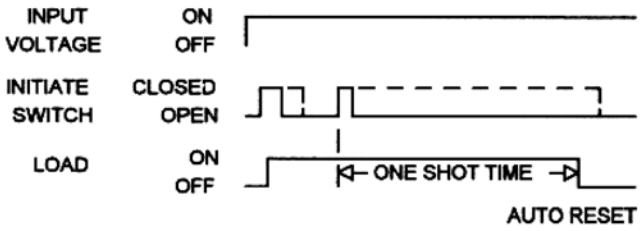
CMOS DIGITAL CIRCUITRY

- **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**

Input power is applied continuously. The first closure, momentary or sustained, of a normally open isolated initiate switch closure will simultaneously start the time delay turn the load ON. When the initiate switch is re-closed during timing, a new delay is started without affecting the load. Upon completion of the preset delay the load turns OFF and the delay time is reset to T = 0.

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 or adjustable timing from .1 seconds to 24 hours.

TIMING DIAGRAM



SPECIFICATIONS

1. Repeat Accuracy: ± 0.25%
2. Combined Effect of Temperature and Voltage upon Repeat Accuracy: ±2%
3. Reset Time: 150 ms.
4. Operating Voltage Tolerance: ± 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°C to +70°C Storage -55°C to +70°C
12. Humidity-Operating: 95% Relative
13. Linearity(Option A or D): ±5% Minimum from 10% to 90% of range
14. Timing Tolerance: ±9% + Tolerance of Rt Std., ±5% Special (Fixed)
15. Maximum Allowable Bracket Temperature: 80°C
16. Isolation Output Switch to Bracket: 2500 VRMS
17. Maximum Inrush: 10 Times Rated Load Current

HOW TO ORDER 648G(I) – (T) (V) (P)

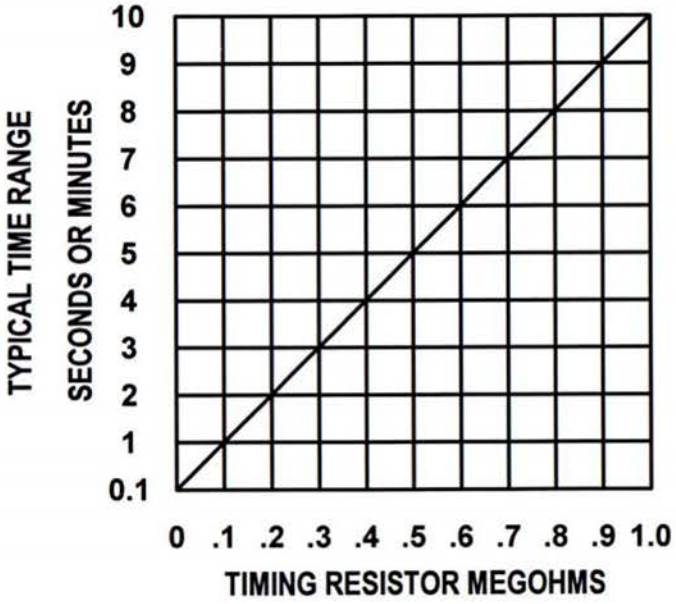
SERIES	(I) = CURRENT	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
648G	A = 5 AMP B = 10 AMP C = 15 AMP	P = 0.1 - 5 SEC. 1 = 0.1 - 10 SEC. L = 0.2 - 20 SEC. J = 0.3 - 30 SEC. M = 0.6 - 60 SEC. 2 = 1 - 100 SEC. K = 1.2 - 120 SEC. F = 2 - 180 SEC. E = 3 - 300 SEC. 3 = 10 - 1000 SEC. 4 = O.1 - 10 MIN. G = 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.	4 = 24VAC 5 = 120VAC 6 = 240VAC	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 ** For Fixed Time Specify The Value In Seconds, Minutes, Or Hours* **MADE IN USA**

EXAMPLE P/N: 648GA-D4C/6M This is a RETRIGGERABLE ONE SHOT 5 AMP Rated Solid State Timer with an fixed 6 minute DELAY and an INPUT VOLTAGE of 24 VAC. The delay time is factory fixed internal.

PRIME TECHNOLOGY

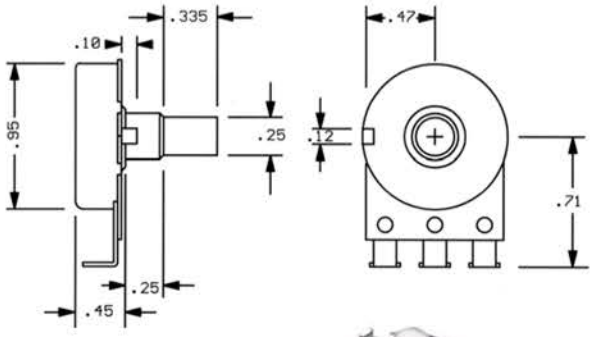
American Control Products / Precision Timer
a division of Prime Technology
344 Twin Lakes Road
North Branford, CT 06471
Telephone: (203) 481-5721
Fax: (203) 481-8937
Email: sales@primetechnology.com
www.primetechnology.com

CALIBRATION RESISTANCE VS TIME

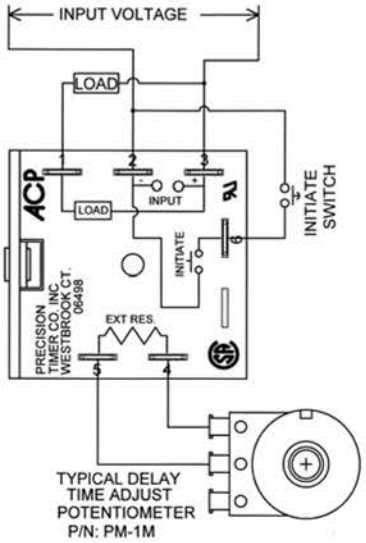


ACCESSORIES – AVAILABLE FROM STOCK

ORDER P/N: **PM – 1M 1 MEGOHM ± 20%**
PM – 100K 100 KOHM ± 20%



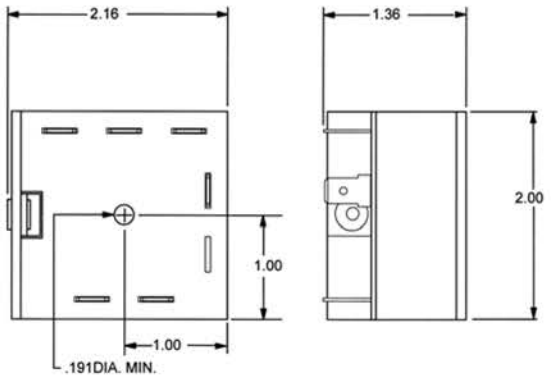
TYPICAL WIRING



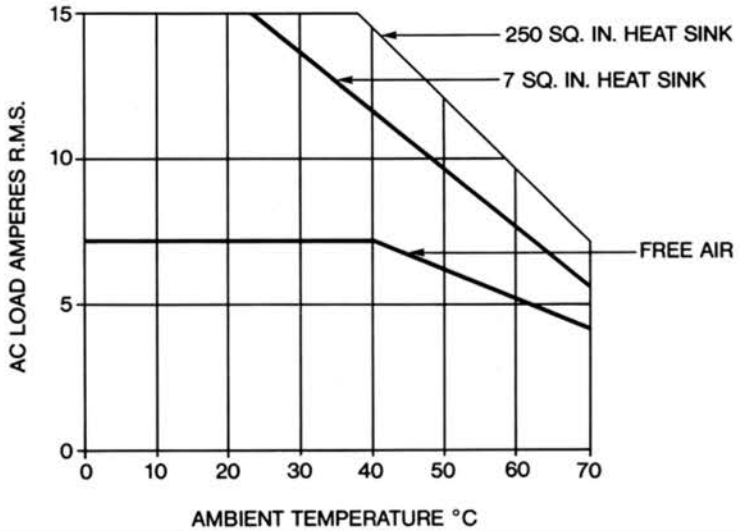
Current Designation	HORSEPOWER	
	120 V	240V
A	1/8	1/6
B	1/4	1/2
C	1/3	1

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

OUTLINE DRAWING



TYPICAL DERATING



MADE IN USA

PRIME TECHNOLOGY

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