

HIGH CURRENT TIMING MODULE

FULLY SOLID STATE ENCAPSULATED

RATED TO 15 AMPERE / 1HP

Series 644G - ONE SHOT

CMOS DIGITAL CIRCUITRY



- **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.

LR46938

- **Transient Protected to 6000V**
- Choice of 5, 10, 15 Amp. Load Rating

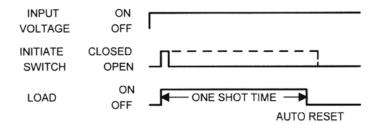
HORSE POWER RATED

adjustable timing from .1 seconds to 24 hours.

Input power is applied continuously. A normally open isolated initiate switch closure simultaneously starts timing of the preset delay time and causes the solid state load switch to turn the load ON. At the end of the preset delay period, the load turns OFF. Should a sustained initiate switch closure be used to start timing it is necessary to open this circuit to permit reset of the timer before the next cycle can occur. 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

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 644G(I) - (T)(V)(P)

SERIES	(I) = CURRENT	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
644G	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 = 0.1 - 10 MIN. G = 0.3 - 30 MIN. H = 0.6 - 60 MIN. 5 = 1 - 100 MIN. V = 3 - 300 MIN. 0 = 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: 644GA-D4C/6M This is a ONE SHOT 5 AMP Rated Solid State Timer with a fixed 6 minute DELAY and an INPUT VOLTAGE of 24 VAC. The delay time is factory fixed internal.

OF



American Control Products / Precision Timer a division of Prime Technology 344 Twin Lakes Road North Branford, CT 06471 Telephone: (203) 481-5721

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TECHNICAL BULLETIN SOLID STATE TIMING MODULE

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644G

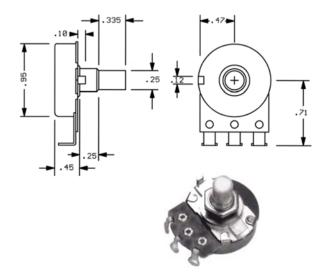
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CALIBRATION RESISTANCE VS TIME

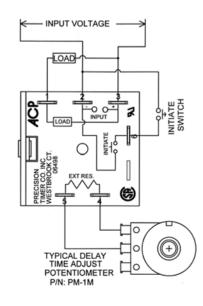
10 9 8 7 6 5 4 3 2 1 0.1 0.1 1.2 .3 .4 .5 .6 .7 .8 .9 1.0 TIMING RESISTOR MEGOHMS

ACCESSORIES - AVAILABLE FROM STOCK

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



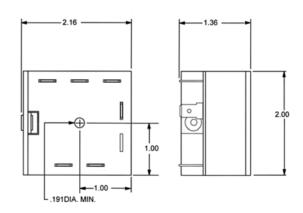
TYPICAL WIRING



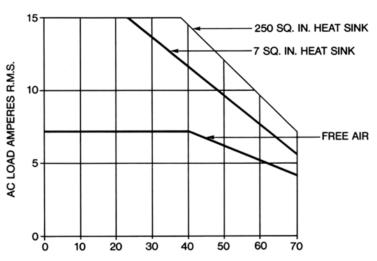
Current	HORSEPOWER		
Designation	120 V	240V	
A	1/8	1/6	
В	1/4	1/2	
С	1/3	1	

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



AMBIENT TEMPERATURE °C

MADE IN USA



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SOLID STATE TIMING MODUL	SOLID	STATE	TIMING	MODULE
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