



# TIMING MODULE

**RU** **SP**  
E75633 LR46938

FULLY SOLID STATE ENCAPSULATED  
ONE AMPERE LOAD RATING

## Series M603 - INTERVAL ON CMOS DIGITAL CIRCUITRY

- Life Expectancy –unlimited
- Environment Protected
- Tamper Proof
- No False Operate
- Small Size – 2"x 2" x 53/64"
- Lightweight – approximately 2.5 oz.
- Rugged

Application of power simultaneously initiates timing of the preset interval and turns ON the load. At the end of the timed period the timer's switch opens, turning the load OFF. Power to the timer must be applied continuously throughout the timing period. Removal of power causes the timer to reset. The next cycle can then be initiated by application of power.

Control the timing of valves, SFHP motors, lamps, relays, magnetic line starters, and actuators rated less than 1 ampere (10 amps inrush). CMOS digital circuitry, with solid state output switching. P/C boards 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:  $\pm 0.1\%$  or 16 ms. Whichever is greater
2. Combined Effect of Temperature and Voltage upon Repeat Accuracy:  $\pm 1\%$
3. Reset Time: 150 ms.
4. Operating Voltage Tolerance:  $\pm 20\%$
5. Load Current: Steady State – 8 ma. Min., 1 Ampere Max.
6. Voltage Drop: 1.5V Typical at 1 Ampere
7. Leakage Current: 5 ma.
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):  $\pm 5\%$  Minimum from 10% to 90% of range
14. Timing Tolerance:  $\pm 9\%$  + Tolerance of Rt Std.,  $\pm 5\%$  Special (Fixed)

### HOW TO ORDER M603 – (T) (V) (P)

SERIES	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
M603	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.		
	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.			

*\* For Fixed Time Specify The Value In Seconds, Minutes, Or Hours*

**MADE IN USA**

**EXAMPLE P/N: M603-450** This is an INTERVAL ON 1A Rated Solid State Timer with an adjustable .1 – 10 minute DELAY and an INPUT VOLTAGE of 120 VAC. The customer will supply the time adjust potentiometer or resistor.

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  
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www.primetechnology.com



### TECHNICAL BULLETIN

### SOLID STATE TIMING MODULE

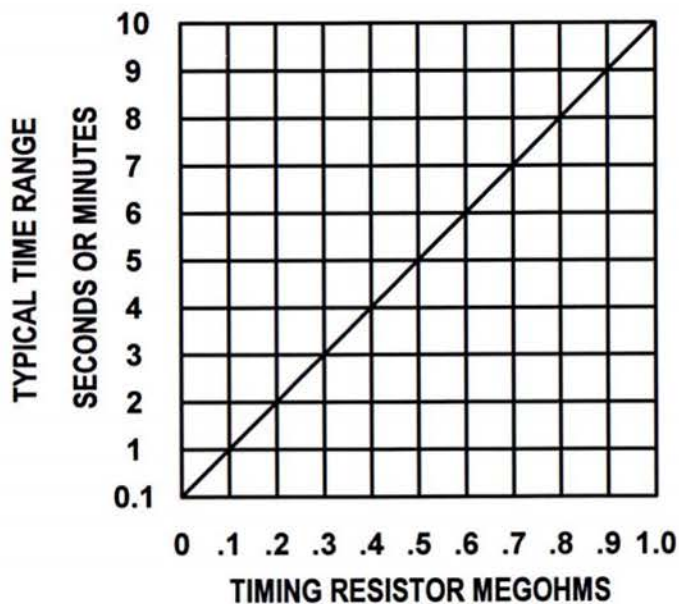
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**M603**

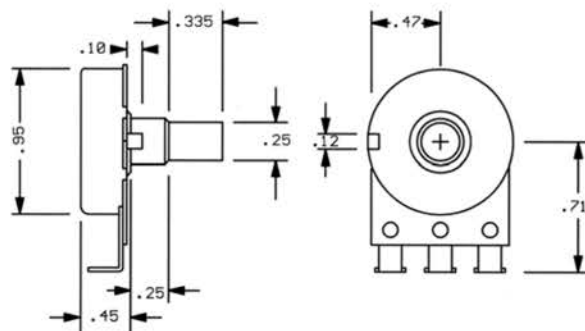
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## CALIBRATION RESISTANCE VS TIME

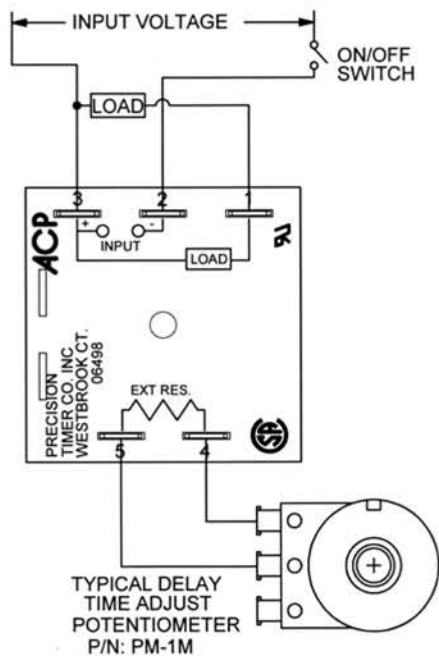


## ACCESSORIES – AVAILABLE FROM STOCK

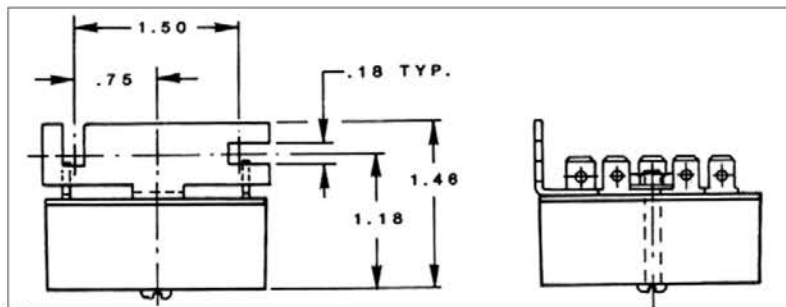
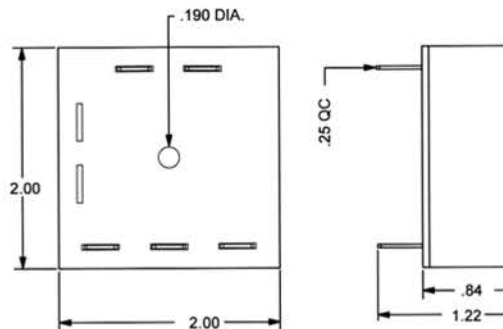
ORDER P/N: PM – 1M 1 MEGOHM ± 20%  
 PM – 100K 100 KOHM ± 20%



## TYPICAL WIRING



## OUTLINE DRAWING



Order bracket mount model as: M603BM – (T) (V) (P)

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