

HORSE POWER RATED

# HIGH CURRENT TIMING MODULE

FULLY SOLID STATE ENCAPSULATED  
RATED TO 15 AMPERE / 1HP



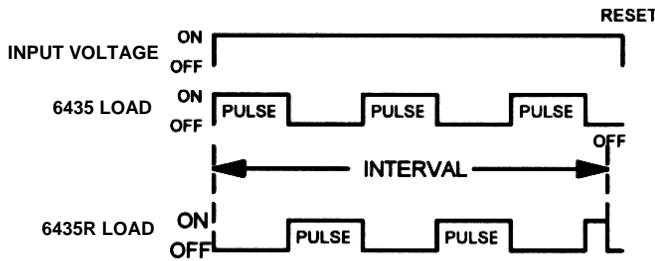
## Series 6435 - PULSED INTERVAL CMOS DIGITAL CIRCUITRY

- 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

Application of input voltage starts the ON/OFF (T1/T1) timing of the load. The ON and OFF times are equal. The ON/OFF cycling of the load will continue during the preset INTERVAL time period (T2). When the INTERVAL time is done the load turns off and holds. Removal of input voltage causes reset. The ON/OFF time (T1) and the INTERVAL time (T2) are independently adjustable. This unit is available with the OFF/ON cycling of the load, see the table below.

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:  $\pm 0.25\%$
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°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)
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 6435(I) - (T1) (T2) (V) (P1) (P2)  
6435(I) R (T1) (T2) (V) (P1) (P2)

SERIES	(I) = CURRENT	(T1) = PULSE TIME	(T2) = INTERVAL TIME	(V)=VOLTAGE	(P1) = PULSE TIME OPTION (P2) = INTERVAL TIME OPTION
6435 LOAD ON FIRST	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.	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 = 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
6435(I)R LOAD OFF FIRST		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.	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: 6435C-145CO/8S This is a PULSED INTERVAL 15A Rated Solid State Timer with a fixed second pulse Time and an adjustable .1 – 10 minute INTERVAL time. The INPUT VOLTAGE of 120 VAC. The customer will supply the INTERVAL time adjustment potentiometer. The PULSE time is factory fixed internal.

**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

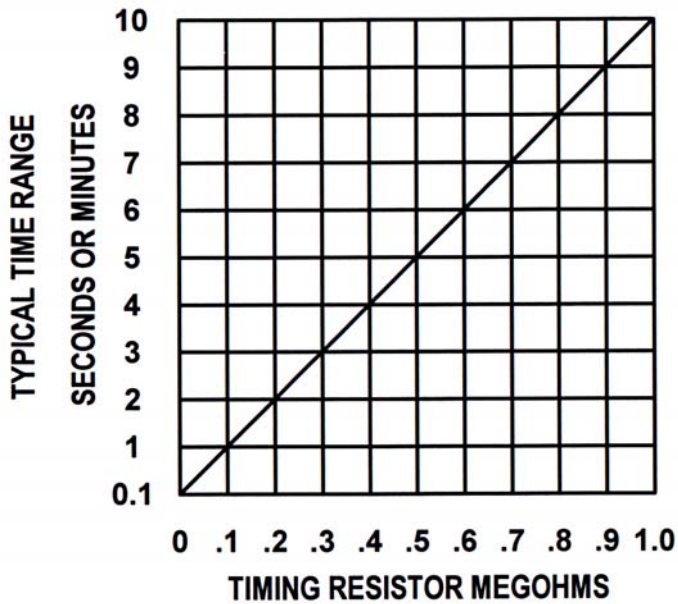
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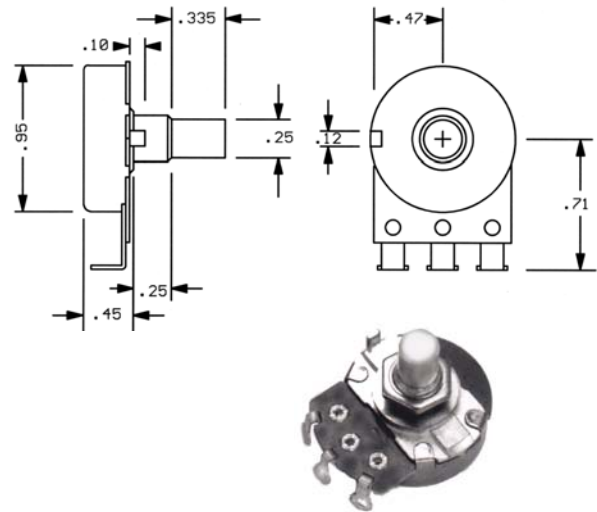
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## CALIBRATION RESISTANCE VS TIME

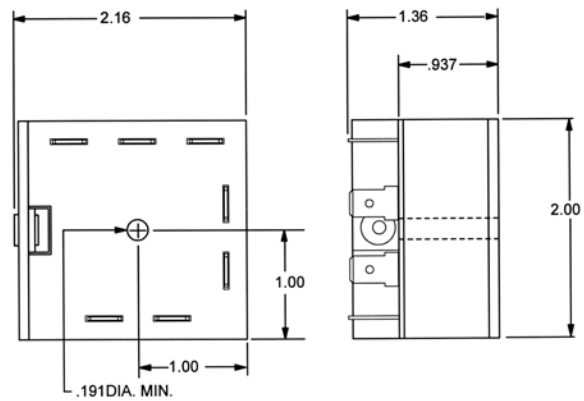


## ACCESSORIES – AVAILABLE FROM STOCK

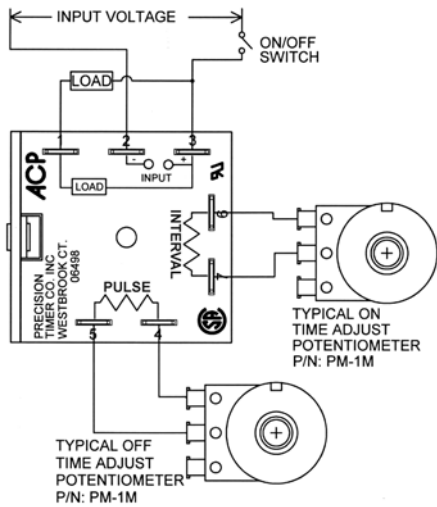
ORDER P/N: **PM – 1M 1 MEGOHM ± 20%**  
**PM – 100K 100 KOHM ± 20%**



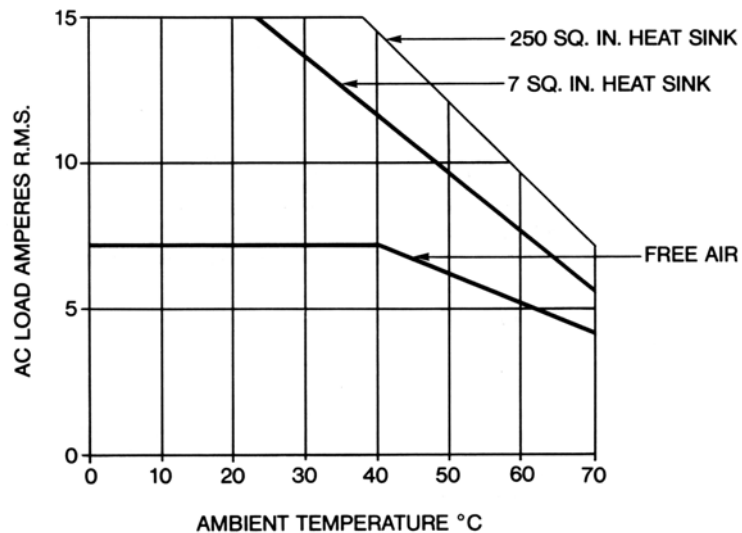
## OUTLINE DRAWING



## 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.

AMBIENT TEMPERATURE °C

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