



HORSE POWER RATED

HIGH CURRENT TIMING MODULE

FULLY SOLID STATE ENCAPSULATED
RATED TO 15 AMPERE / 1HP

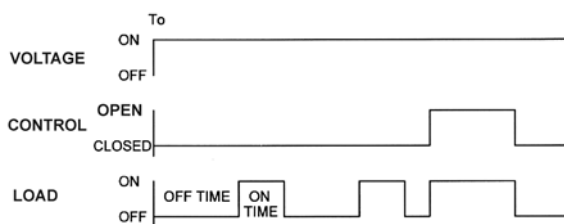


Series 646S - RECYCLE /CONTROL ON CONTINUOUS CMOS DIGITAL CIRCUITRY

- 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

Control switch is used to select between output ON continuous, or recycling OFF – ON
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 $+70^{\circ}\text{C}$ Storage -55°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. 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 646S(I) - (V) /T OFF T ON **

| SERIES | (I) = CURRENT | (V)=VOLTAGE |
|--------|---------------|-------------|
| 646S | A = 5 AMP | 4 = 24VAC |
| | B = 10 AMP | 5 = 120VAC |
| | C = 15 AMP | 6 = 240VAC |

**** Specify The Time Value In
SECONDS, MINUTES, HOURS
Between 1 Second & 24 Hours**

MADE IN USA

EXAMPLE P/N: 646SC-5/14M60S This is a RECYCLE/CONTROL ON CONTINUOUS 15A Rated Solid State Timer with a preset 14 minute OFF Time and A preset 60 second ON time. The INPUT VOLTAGE is 120 VAC.

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

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TECHNICAL BULLETIN

SOLID STATE TIMING MODULE

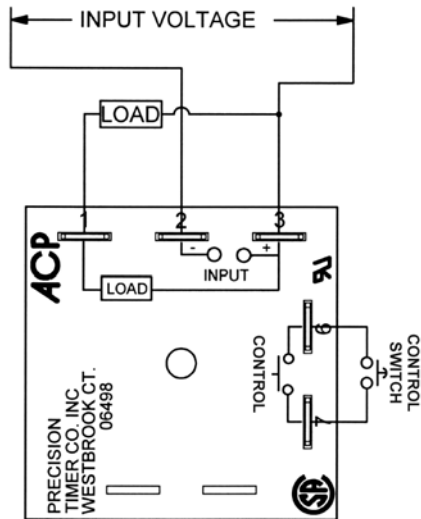
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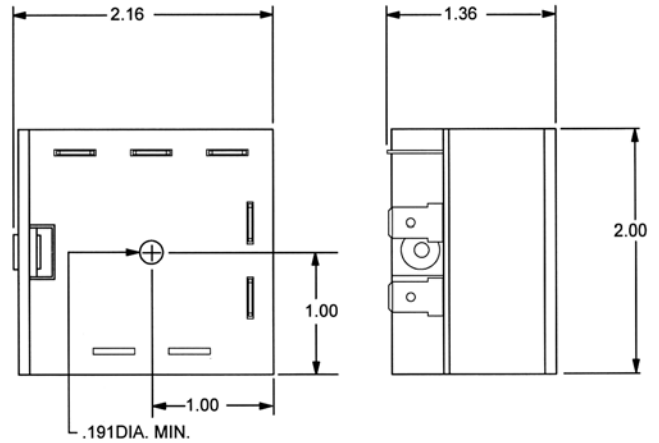
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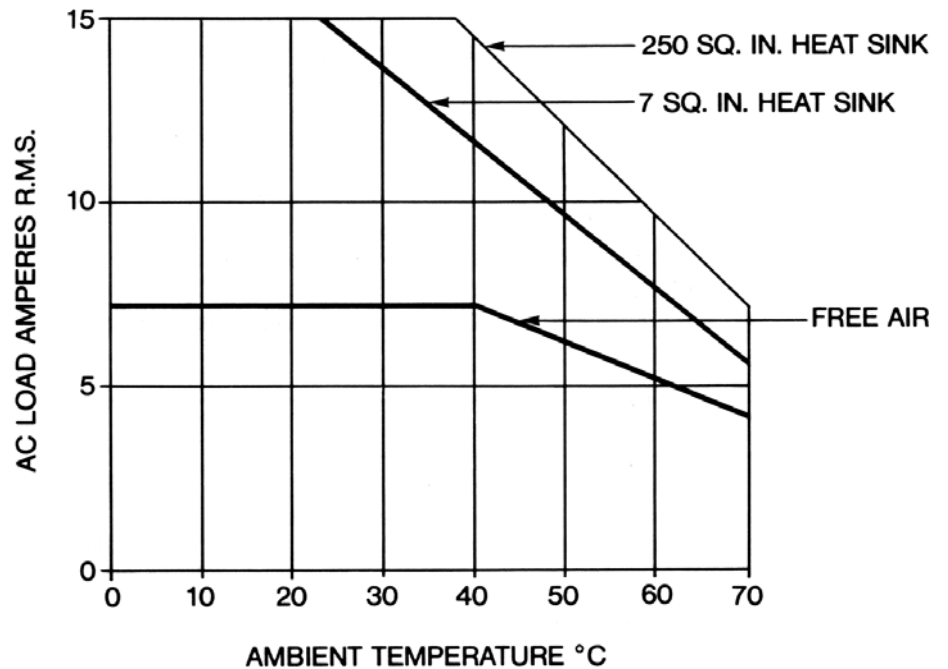
TYPICAL WIRING



OUTLINE DRAWING



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.

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