

HORSEPOWER RATED

HIGH CURRENT TIMING RELAY

MISSING PULSE DETECTOR

LOW COST OPEN BOARD CONSTRUCTION

30 AMPERE

2HP RATED

Series 688E – RETRIGGERABLE ONE SHOT

SOLID STATE

CMOS DIGITAL CIRCUITRY

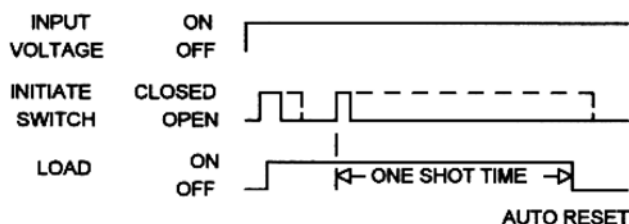
- Environment Protected
- Tamper Proof Relay
- No False Operate
- Enclosed Relay SPDT

- Small Size – 2.437" x 3.962" x 1.5"
- Lightweight – approximately 2.5 oz.
- Rugged 4 Hole Mounting
- Transient Protected to 6000V

To operate input voltage is applied continuously. A normally open initiate switch closure (either momentary or maintained) causes the load contact to close, energizing the load and start timing. At the end of the preset delay time period the load is turned OFF. Re-closing the initiate switch during timing causes a new timing period to re-start while not affecting the load contact. The load remains energized until there are no timing interrupts and the preset delay has fully elapsed. This timer is often referred to as a "MISSING PULSE DETECTOR".

Control the timing of high power electric heaters, HP motors, lamps, transformers and other high current loads rated less than 30 amps Resistive. CMOS digital circuitry is combined with high current output relay rated at 30 amps. P/C board and components are covered with a moisture resistant coating. Wiring terminals are ¼ quick connect. 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: $\pm 2\%$ of Setting
3. Reset Time: 150 ms.
4. Operating Voltage Tolerance: $\pm 20\%$
5. Load Current: 30 Amps Resistive at 120/240VAC or 28VDC,
1HP@ 120VAC. 2HP@ 240VAC
6. Dielectric Strength: 1500 VRMS
7. Insulation Resistance: 100 Megohms Min.
8. Input Transient Protection: 3000V 120V UNITS, 6000V 240V UNITS
9. Temperature Ambients: Operating -40°C to +70°C Storage -55°C to +85°C
10. Humidity-Operating: 95% Relative
11. Linearity(Option A): $\pm 5\%$ Minimum from 10% to 90% of range
12. Timing Tolerance: $\pm 9\%$ + Tolerance of Rt Std., $\pm 5\%$ Special (Fixed)

HOW TO ORDER 688E – (T) (V) (P)

SERIES	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
688E	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. 6 = 10 - 1000 MIN. D = 1 - 24 HRS.	1 = 12VDC 2 = 24VDC 3 = 48VDC 4 = 24VAC 5 = 120VAC 6 = 240VAC 7 = 110VDC	O - CUSTOMER SUPPLIES OWN POTENTIOMETER OR RESISTOR A - POTENTIOMETER SUPPLIED AS LOOSE PART *C - FACTORY FIXED W - ON BOARD POTENTIOMETER WITH WHEEL <div>* For Fixed Time Specify The Value In Seconds, Minutes, Or Hours</div>

MADE IN USA

EXAMPLE P/N: 688E-34C/240SEC This is a SPDT, Relay Output RETRIGGERABLE ONE SHOT Solid State 30A Rated Timer with a fixed 240 second delay and an INPUT VOLTAGE of 24 vac. The delay time is factory fixed.

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

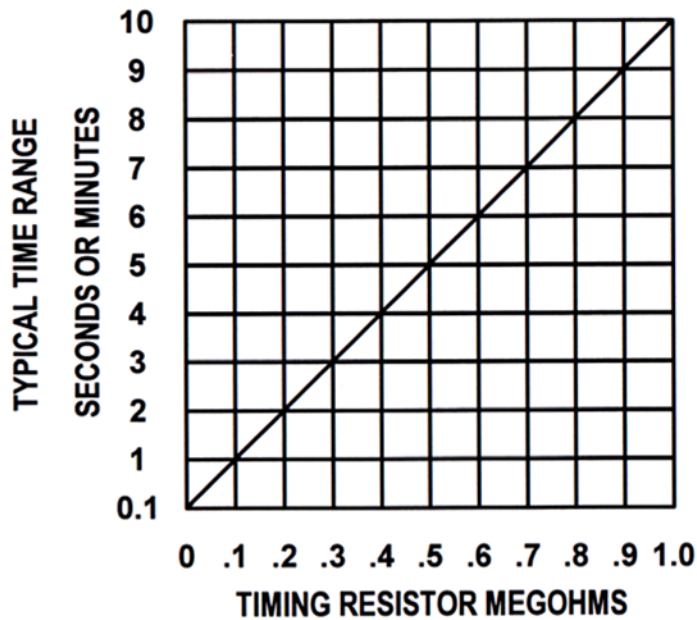
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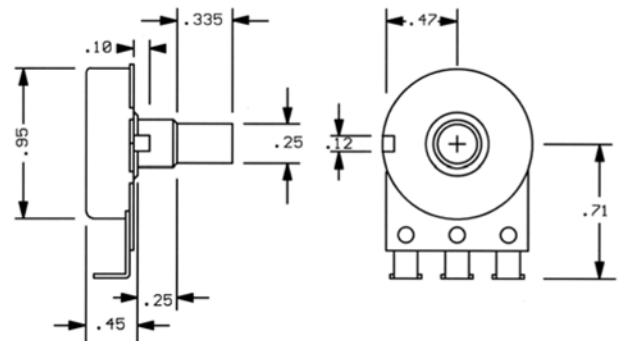
688E

REV

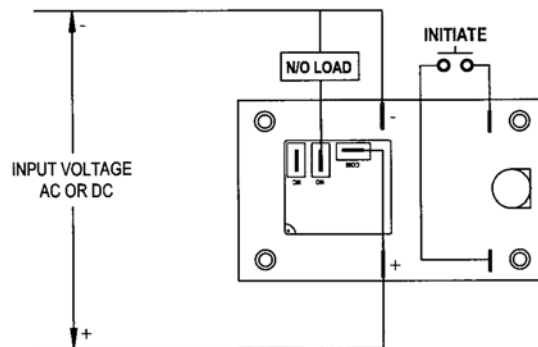
TYPICAL CALIBRATION RESISTANCE VS TIME



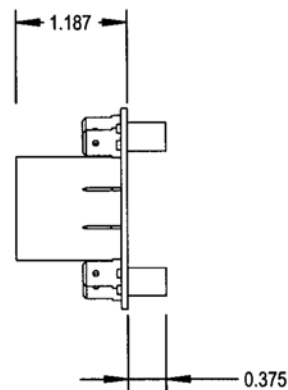
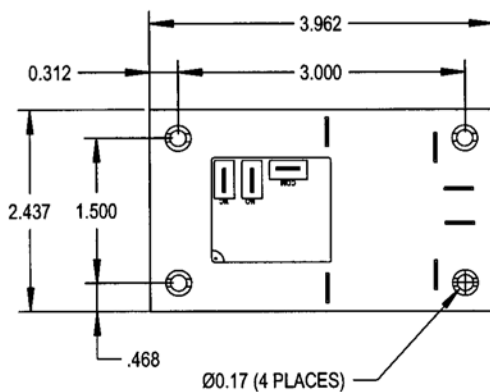
ACCESSORIES AVAILABLE FROM STOCK
CONTROL POTENTIOMETERS (OPTION A)
ORDER P/N PM-1M 1 MEGOHM \pm 20%



TYPICAL WIRING



OUTLINE DRAWING



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688E

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