

HORSEPOWER RATED

HEAVY CURRENT TIMING RELAY

LOW COST OPEN CONSTRUCTION

30 AMPERE CONTACTS 2 HP RATED

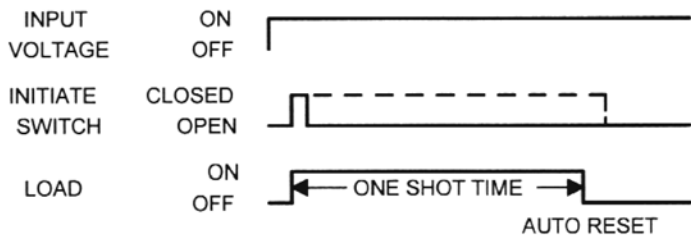
Series 684E – ONE SHOT

- Environment Protected
- Sealed Relay
- No False Operate
- Switches 3600W @ 120VAC, 7200w @ 240VAC
- SPDT Relay Output
- Small Size – 3.625" x 2.125" x 1 9/16"
- Lightweight – approximately 3 oz.
- CMOS Digital Circuitry
- Transient Protected to 6000V
- 30 Amp Resistive Rating

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. A new cycle of operation can then be started immediately upon re-closure of the initiate switch. Should the initiate switch be re-closed during timing there is no affect to the preset delay period. Reset is automatic at the end of the timing period as long as the initiate switch is open.

Control the timing of high power electric heaters, HP rated motors, lamps, transformers and other high current loads rated less than 30 amps Resistive. CMOS digital circuitry is combined with a high current output relay. P/C board and internal components are encapsulated in a flame retardant molded housing, and 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: $\pm 2\%$ of Setting
3. Reset Time: 150 ms.
4. Operating Voltage Tolerance: $\pm 20\%$
5. Load Current: 30 Amps Resistive at 120/240VAC or 28VDC,
1 HP @ 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 or D): $\pm 5\%$ Minimum from 10% to 90% of range
12. Timing Tolerance: $\pm 9\%$ + Tolerance of Rt Std., $\pm 5\%$ Special (Fixed)

HOW TO ORDER 684E – (T) (V) (P)

SERIES	(T) = TIME RANGE	(V)=VOLTAGE	(P) = OPTIONS
684E	P = 0.1 - 5 SEC.	1 = 12VDC	O - CUSTOMER SUPPLIES OWN POTENTIOMETER OR RESISTOR A - POTENTIOMETER SUPPLIED AS LOOSE PART *C - FACTORY FIXED INTERNAL D - TRIMMER POTENTIOMETER INSTALLED ON BOARD <div style="border: 1px solid black; padding: 5px; text-align: center;"> <i>* For Fixed Time Specify The Value In Seconds, Minutes, Or Hours</i> </div>
	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.	7 = 110VDC	
	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.			

MADE IN USA

EXAMPLE P/N: 684E-47D This is a ONE SHOT 30A Rated Timer with an adjustable .1-10 MINUTE delay and an INPUT VOLTAGE of 110 VDC. The trimmer potentiometer is installed on board.

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

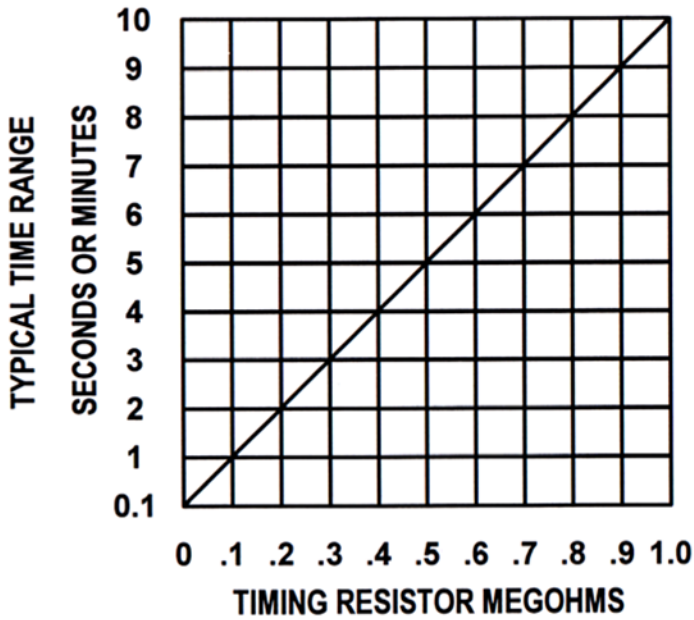
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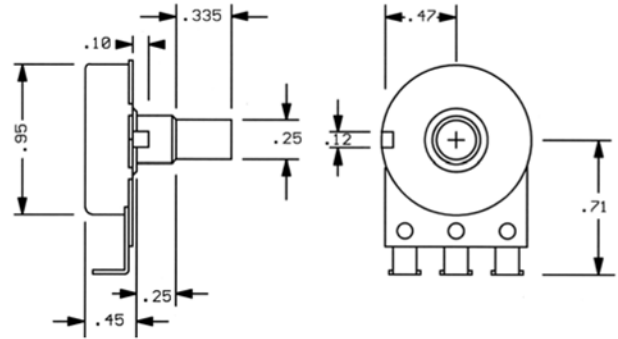
684E

REV

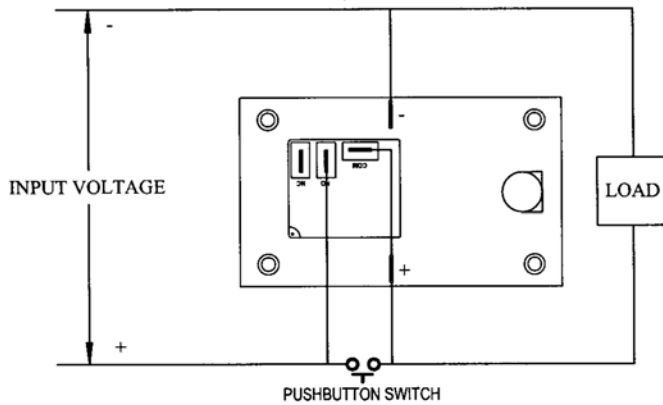
TYPICAL CALIBRATION RESISTANCE VS TIME



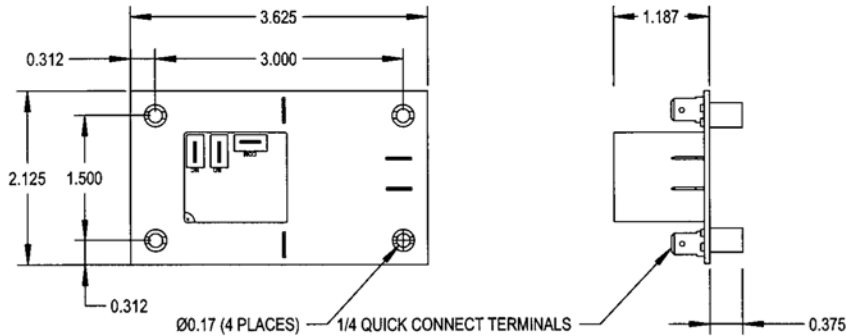
ACCESSORIES AVAILABLE FROM STOCK
CONTROL POTENTIOMETERS (OPTION A)
ORDER P/N PM-1M 1 MEGOHM ± 20%



TYPICAL WIRING



OUTLINE DRAWING



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