

Timing Mode: **DELAY ON MAKE**  
 Category: **SOLID STATE TIMER**  
 Series: **THCU-E**

**CUBE SOLID STATE, UNIVERSAL AC/DC WIDE VOLTAGE, DIPSWITCH**



**THCU Timer**

THCU is a universal AC/DC voltage solid state timer in a compact 2" x 2" configuration. This unit features wide operating voltages: 19 to 265 VAC and 10 to 120 VDC.

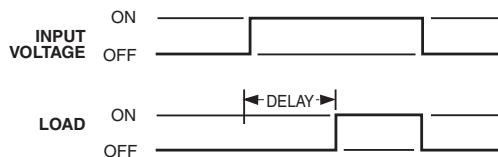
THCU-E offers three time ranges: 0.1 second to 102.3 seconds in 0.1-second increments, 1 second to 1023 seconds in 1-second increments, or 10 to 10230 seconds in 10-second increments. Ten-position binary dipswitch is easy to program.

Advanced digital circuitry provides this timing module with unsurpassed accuracy and reliability.

Available with factory-fixed time as THCU-C.

**Timing Mode**

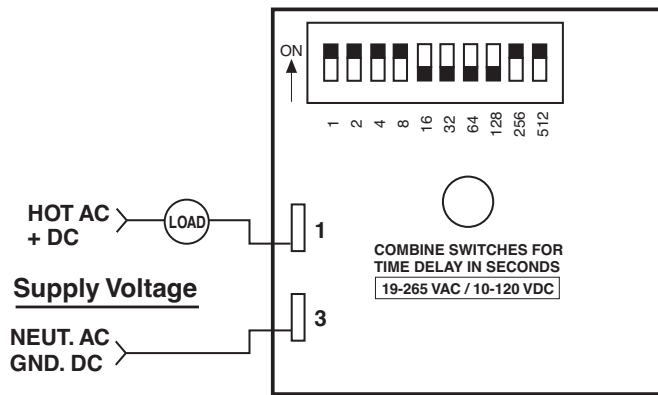
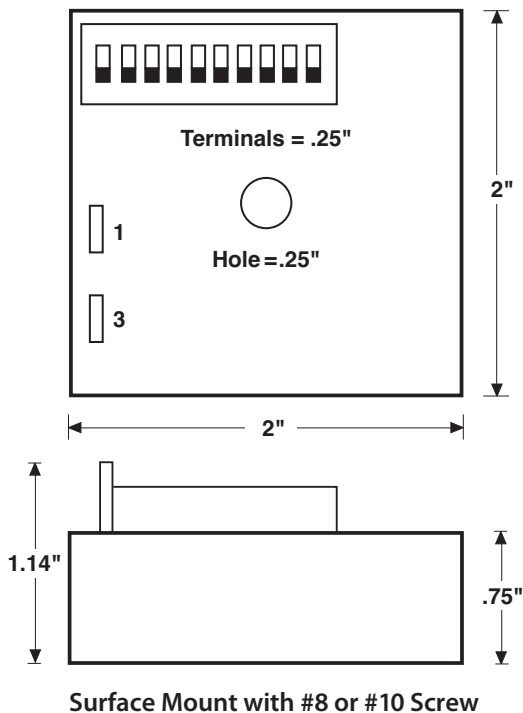
Application of input voltage to the timer starts the time delay.  
 At the end of the delay period, the load is energized.  
 To reset, remove the input voltage to the timer.



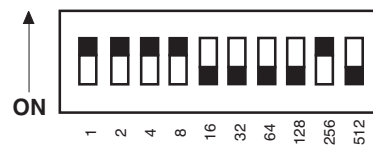
**FEATURES**

- Wide and universal operating voltage in a single unit: operates from 19-265 VAC and 10-120 VDC
- Operates at 50/60Hz
- DC polarity independent
- Precise timing accuracy in three ranges:
  - 0.10 to 102.3 seconds in 0.1-second increments
  - 1 to 1023 seconds in 1-second increments
  - 10 to 10230 seconds in 10-second increments
- Easy to program with 10-position binary dipswitch
- Digital timing accuracy
- Time setting accuracy of  $\pm 5\%$  of set point
- Repeatability of  $\pm 0.1\%$
- Extremely low off-state leakage current
- Fixed time periods available
- Eliminates contactor "hum"
- Compact, easy to hook up, in-line installation
- Vertical mounting option available with MB-1 Bracket
- Totally encapsulated for protection from harsh environments
- 100% Operational testing before shipping
- - RoHS compliance available

## DIMENSIONS AND TIME RANGE SELECTION



To set a time period simply add up the selected switches in the "on" position for the total delay in seconds.



$$1+2+4+8+256 = 271 \text{ seconds of delay}$$

## SPECIFICATIONS

- Repeat Accuracy:**  $\pm 0.1\%$  under fixed conditions
- Time Range:** 0.1–102.3 seconds in 0.1-sec. increments  
1–1023 seconds in 1-sec. increments  
10–10230 seconds in 10-sec. increments
- Reset Time:** 25 milliseconds after timing cycle  
200 milliseconds during timing cycle
- Timing Tolerance:**  $\pm 10\%$  max  $\pm 5\%$  typical
- Operating Voltage:**  
19-265 VAC/10-120 VDC  
50/60Hz
- Mode of Operation:** Delay on Make
- Storage Temperature:**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Operating Temperature:**  $-25^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$

- Transient Protection:** 18 joules varistor
- Voltage Drop in "On" State:**  
4 volts max / 3 volts nominal @ 1 amp peak
- Output Leakage Current in "Off" State:**  
6.4 mA @ 265 VAC  
3.3 mA @ 120 VAC  
1.6 mA @ 48 VAC  
1.0 mA @ 24 VAC
- Switching Current:**  
1 Amp steady state max.  
10 mA min.  
10 Amps inrush

## OPTIONS SELECTION

Mode of Operation	Series	Input Voltage	Time Ranges	Time Adjustment Method
Delay On Make	THC Standard Size (2" x 2")	U 19-265 VAC 10-120 VDC	<b>VARIABLE TIME PERIODS</b>	<b>E</b> Variable, Dipswitch <b>C</b> Fixed Time THCU060SC = 60 seconds fixed
			<b>102S3</b> 0.1 to 102.3 sec. (in 0.1 sec. increments) <b>1023</b> 1 to 1023 sec. (in 1 sec. increments) <b>10230</b> 10 to 10230 sec. (in 10 sec. increments)	

EXAMPLE THC U 1023 E Time range 1 to 1023 seconds in 1-second increments

Specifications subject to change without notice.