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 ±5% of set point
- Repeatability of ± 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 compliant
Repeat Accuracy: ±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: ±10% max ±5% typical
Operating Voltage:
- 19-265 VAC/10-120 VDC
- 50/60Hz
Mode of Operation: Delay on Make
Storage Temperature: -40°C to +85°C
Operating Temperature: -25°C to +65°C
Transient Protection: 18 joules varister
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

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 seconds of delay

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**OPTIONS SELECTION**

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<th>Series</th>
<th>Input Voltage</th>
<th>Time Ranges</th>
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<td>Delay On Make</td>
<td>THC</td>
<td>U 19-265 VAC</td>
<td>10283 0.1 to 102.3 sec. (in 0.1 sec. increments)</td>
<td>E Variable, Dipswitch</td>
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<tr>
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<td>10-120 VDC</td>
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**EXAMPLE**

THCU060SC = 60 seconds fixed

Specifications subject to change without notice.