

# Delay On Make (Operate) TMV8000/TSU2000 Uni-Timer Timing Module



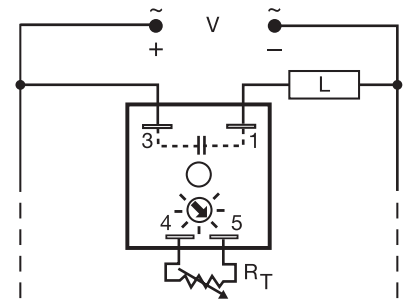
- Operates From 24 ... 240 V AC/DC
- Knob or Ext. Adjust Time Delays
- Delays from 0.1 ... 8 m
- Totally Solid State - Encapsulated
- 1 A Steady - 10 A Inrush
- Two Terminal Series Connection with Load

**Description**  
UNI-TIMER is truly the universal timer. Two models cover all the popular voltages and time delays. Available with knob or external adjust time delay. Its simple two terminals can easily be connected in series with a relay coil, contactor coil, solenoid, lamps, small motor, etc., to delay their energization.

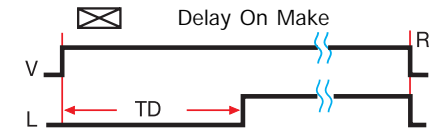
**Operation**  
Upon application of input voltage, the time delay begins. The output is de-energized before and during the time delay. At the end of the time delay, the output is energized and remains energized until input voltage is removed.

**Reset:** Removing input voltage resets the time delay and output.

Approvals:



Load may be connected to terminal 3 or 1. TMV has knob adjustment. TSU has external adjustment terminals 4 & 5.



V = Voltage L = Load R = Reset  
TD = Time Delay — = Undefined time

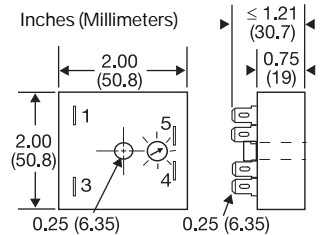
Input	Time Delay	Adjustment	Part Number
24 ... 240 V AC/DC	5 ... 480 s	External	TSU2000
24 ... 240 V AC/DC	0.1 ... 8 m	Knob	TMV8000

## Technical Data

Time Delay	
Type	Analog circuitry
Range	5 ... 480 s (TSU2000) 0.1 ... 8 m (TMV8000)
Repeat Accuracy	+/-2%
Tolerance (Factory Calibration)	≤ +/-10%
Recycle Time	≤ 100 ms
Input	
Voltage	24 ... 240 V AC/DC +/-20%
Line Frequency	50 ... 60 Hz
Output	
Type	Solid State
Form	Normally Open, open during timing
Maximum Load Current	1 A steady state, 10 A inrush at 55°C
Minimum Holding Current	≤ 40 mA
Voltage Drop	≅ 2.5 V at 1 A
Protection	
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000 V RMS terminals to mounting surface
Insulation Resistance	≥ 100 MΩ
Mechanical	
Mounting	Surface mount with one #10 (M5 x 0.8) screw
Package	2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)
Termination	0.25 in. (6.35 mm) male quick connect terminals
Environmental	
Operating Temperature	-20°C ... +70°C
Storage Temperature	-30°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 2.4 oz (68 g)

Time Delay*	
Seconds	R <sub>T</sub> Megohm
5	0.0
85	0.5
163	1.0
240	1.5
320	2.0
400	2.5
480	3.0

\* When selecting an external R<sub>T</sub> add at least 20% for tolerance of unit and the R<sub>T</sub>.



TMV has the knob and dial. TSU has terminals 4 & 5.

## Accessories

Mounting bracket  
P/N: P1023-6

External adjust potentiometer  
P/Ns:  
P1004-12 (fig A)  
P1004-12-X (fig B)

Female quick connect  
P/N:  
P1015-64 (AWG 14/16)

Plug-on adjustment module  
P/N:  
VTP4S

Quick connect to screw adaptor  
P/N: P1015-18

Versa-knob  
P/N: P0700-7

DIN rail adaptor  
P/N: P1023-20

DIN rail P/Ns:  
C103PM (Al)  
17322005 (Steel)

See accessory pages at the end of this section.