

## VTM4 series

### One Shot (Latching Interval) Timing Module

- One shot (latching interval) timing mode
- Reliable solid state timing circuitry.
- Excellent transient protection.
- Compact design.
- Flame retardant, solvent resistant housing.

File E60363

File LR33434

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

#### Timing Mode

One Shot (Latching Interval).

#### Timing Specifications

**Timing Ranges:** 0.5 to 10 / 3 to 60 sec.; 0.5 to 10 / 3 to 60 min.

**Timing Adjustment:** External resistor or potentiometer. An external resistance of 1 megohm is required to obtain the maximum time for all ranges. To determine the actual resistance needed to obtain the required time delay, use the following formula:

$$R_t = \left( \frac{T_{req} - T_{min}}{T_{max} - T_{min}} \right) \times 1,000,000 \text{ ohms}$$

**Accuracy:** Repeat Accuracy:  $\pm 1\%$

**Overall Accuracy:**  $\pm 2\%$  at R = 1 megohm.

**Reset Time:** 50 ms, max.

#### Output Switch Data

**Arrangement:** Solid state 1 Form A (SPST-NO).

**Rating:** 1A, inductive, at nominal operating voltage.

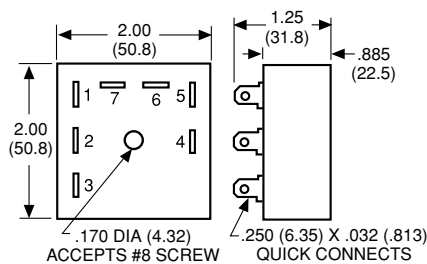
**Expected Electrical Life:** 100,000,000 operations at rated load.

#### Initial Dielectric Strength

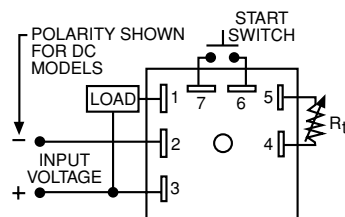
**Between Terminals and Mounting:** 3,000VAC rms.

**Between Input and Output:** 1,500VAC rms.

#### Outline Dimensions



#### Wiring Diagram



An external resistance of 1 megohm is required to obtain the maximum time for all ranges. To determine the actual resistance needed to obtain the required time delay, use the following formula:

$$R_t = \left( \frac{T_{req} - T_{min}}{T_{max} - T_{min}} \right) \times 1,000,000 \text{ ohms}$$

#### Input Data @ 25°C

**Voltage:** ( $\pm 10\%$ ): 12 VAC/VDC, 24VAC/VDC, 120 VAC/VDC.

**Power Requirement:** 4W, with rated load.

**Transient Protection:** Non-repetitive transients of the following magnitudes will not cause spurious operation of affect function and accuracy.

Operating Voltage	<0.1 ms	<1 ms
12, 24 VAC/VDC	860V*	208V*
120 VAC/VDC	2,580V	2,150V*

\* Min. source impedance of 100 ohms.

**Current Drain:** Less than 5mA.

#### Environmental Data

**Temperature Range:** Storage: -40°C to +85°C.

**Operating:** -40°C to +65°C.

#### Mechanical Data

**Mounting:** Panel mount with one #8 screw.

**Termination:** 0.250 in (6.35) quick connect terminals.

**Weight:** 4 oz. (112g) approximately.

#### Ordering Information

##### VTM4

**Series VTM4**  
One Shot  
(Latching Interval)  
Timing Module

##### A

**Input Voltage**  
A = 120VAC/VDC  
E = 24VAC/VDC  
Q = 12VAC/VDC

##### CD

**Time Range**  
CD = 0.5 - 10 sec.  
DD = 3 - 60 sec.  
FD = 0.5 - 10 min.  
GD = 3 - 60 min.

#### Authorized distributors are likely to stock the following:

None at present.