



# VTM1 series

## On-Delay Timing Module

- On-delay 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

On-Delay.

### 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: ±1%

Overall Accuracy: ±2% at R = 1 megohm.

**Reset Time:** 100 ms, max., before time-out; 10 ms, max., after time-out.

### Output Switch Data

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

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

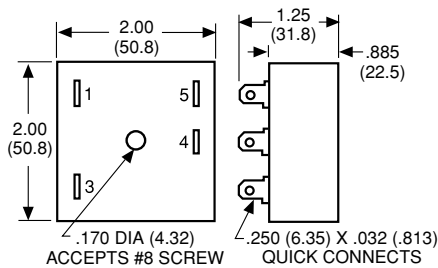
**Expected Electrical Life:** 10,000,000 operations at rated load.

### Initial Dielectric Strength

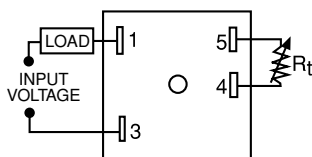
**Between Terminals and Mounting:** 3,000VAC rms.

**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:** 12 VAC/VDC, 24VAC/VDC, 120 VAC/VDC.

**Power Requirement:** 3W, max.

**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 ohm.

### 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:** 3 oz. (84g) approximately.

### Ordering Information

VTM1	A	CD
Series VTM1 On-Delay Timing Module	<b>Input Voltage</b> A = 120VAC/VDC E = 24VAC/VDC Q = 12VAC/VDC	<b>Time Range</b> 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:

VTM1ECD  
VTM1EDD