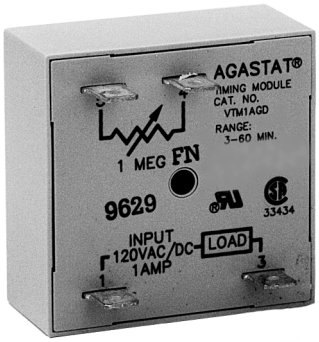
VTM1 series

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.

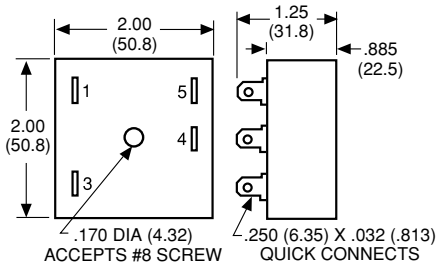
Output Switch Data

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.

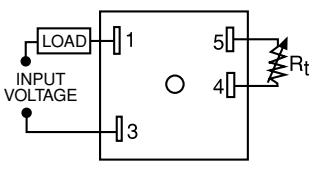
Initial Dielectric Strength

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

VTM1ECD
VTM1EDD