

VTM1 Series, On-Delay, Timing Module



Product Facts

- On-delay timing mode
- Reliable solid state timing circuitry
- Excellent transient protection
- Compact design
- Flame retardant, solvent resistant housing
- File E60363, File LR33434



Timing Specifications

Timing Mode — On-Delay

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

Timing Range Selection — Screwdriver select via recessed 8-position selector dial.

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:

$$R_T = \frac{(T_{REQ} - T_{MIN})}{T_{MAX} - T_{MIN}} \times 1,000,000 \text{ ohms}$$

Accuracy —

Repeat Accuracy — $\pm 1\%$
Overall Accuracy — $\pm 2\%$ 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.

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 $+85^{\circ}\text{C}$

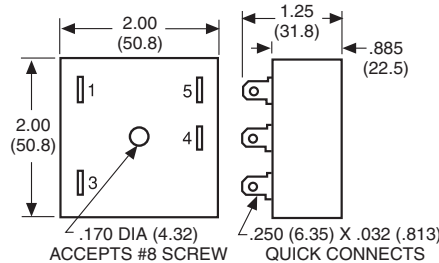
Operating — -40°C to $+65^{\circ}\text{C}$

Mechanical Data

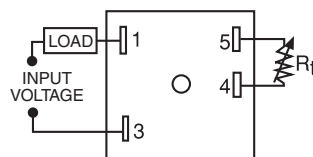
Mounting — Panel mount with one #8 screw.

Termination — 0.250 in (6.35) quick connect terminals.

Weight — 3 oz. (84g) approximately



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:

$$R_T = \frac{(T_{REQ} - T_{MIN})}{T_{MAX} - T_{MIN}} \times 1,000,000 \text{ ohms}$$

Ordering Information

VTM1

Series VTM1
On-Delay
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.

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.

Authorized distributors are likely to stock the following:

VTM1ECD
VTM1EDD