



# Delay on Make (Series Load)

## Q1D Series

### FEATURES

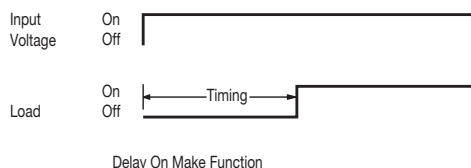
- 100% functionally tested
- Time delay from 1 to 1023 seconds in 1 second increments
- Universal input voltage 24 to 240 VAC/DC
- Solid state digital timing
- Low cost
- Compact size
- Superior transient protection
- Flame-retardant and solvent-resistant polyester thermoplastic housing
-   File #E65038

Allows user to accurately set delay times up to 1023 seconds without time consuming trial and error adjustments.

**Operating Logic:** Upon application of input voltage, the delay starts. At the end of the time delay, the load is energized. Reset is accomplished by removing input voltage. Set the delay time by switching the appropriate combination of time values to the ON position.

*Note: The load may be located on either side of the line*

### LOGIC FUNCTION DIAGRAM



### ORDERING INFORMATION

TIME RANGE	24 to 240 VAC/DC $\pm 10\%$
1 to 1023 sec.	Q1D-01024-31M

Reset time, during timing	125 ms
Reset time, after timeout	10 ms
Min. load	10mA or 1 VA, whichever is greater
Max. leakage current	2 mA
Voltage drop at 1 A	3.3 V max.
Power consumption, during timing	0.25 VA max.
Power consumption, after timeout	3.3 VA max.
Peak 1 cycle surge	20 A
Protection	30j. MOV

### SPECIFICATIONS

#### TIME DELAY

**Adjustment:** 10 position DIP switch

**Range:** 1 to 1023 seconds in one second increments. Zero time setting is undefined.

**Repeatability:**  $\pm 0.5\%$  (0.25% typical) at constant temperature

**Accuracy:**  $\pm 10\%$  of set time  $+0.25$  second

#### INPUT

**Operating Voltage:** 24 to 240 VAC/DC  $\pm 10\%$  (on voltage must be full-wave rectified)

**Frequency:** 50/60 Hz

#### OUTPUT

**Type:** Solid state, normally open series load

**Rating:** 1 A steady state max.

**Life:** 100,000,000 operations

#### PROTECTION

**Transient Voltage:** 30 joule metal oxide varistor

**Dielectric Breakdown:** 3000 VAC, RMS, terminals to mounting

**Insulation Resistance:** 100 megohms min. between terminals and case

#### MECHANICAL

**Termination:** .25" x .032" male fast-on terminals

**Mounting:** Surface mount with one #8 screw

#### ENVIRONMENTAL

**Storage Temperature:**  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$

**Operating Temperature:**  $-40^{\circ}\text{C}$  to  $65^{\circ}\text{C}$

**Humidity:** 95% relative

