

Q SERIES DIGITAL ENCAPSULATED TIME DELAY MODULES

FEATURES

- C/MOS Digital Circuitry
- Time Delays To 1000 Minutes
- No First Cycle Effect
- Fully Solid State And Encapsulated
- .5% Repeat Accuracy
- Seven Different Modes Of Operation
- Output Rated at 1 Ampere Continuous, 10 Amperes Inrush
- Fixed Or Adjustable Time Delays
- Small Size

SPECIFICATIONS

1. Time Delay.

- 1.1 Type: C/MOS digital circuitry
- 1.2 Range: From .05 seconds to 1000 minutes. Fixed delays available.
- 1.3 Repeat accuracy: $\pm 5\%$ under fixed conditions
- 1.4 Setting accuracy: $\pm 10\%$
- 1.5 Reset time: 50 milliseconds maximum
- 1.6 Recycle time: 100 milliseconds during timing, 50 milliseconds after timing
- 1.7 Time delay vs. voltage and temperature: $\pm 2\%$

2. Input.

- 2.1 Operating voltage: 24, 120 & 230 VAC, 12 & 24/28 VDC
- 2.2 Tolerance: $\pm 20\%$ of nominal
- 2.3 Frequency: 50 - 60 Hertz

3. Output.

- 3.1 Type: Solid state
- 3.2 Form: SPST
- 3.3 Rating: 1 ampere (20mA minimum) - 10 amperes inrush
- 3.4 Life: 100,000,000 operations minimum under full load

4. Protection.

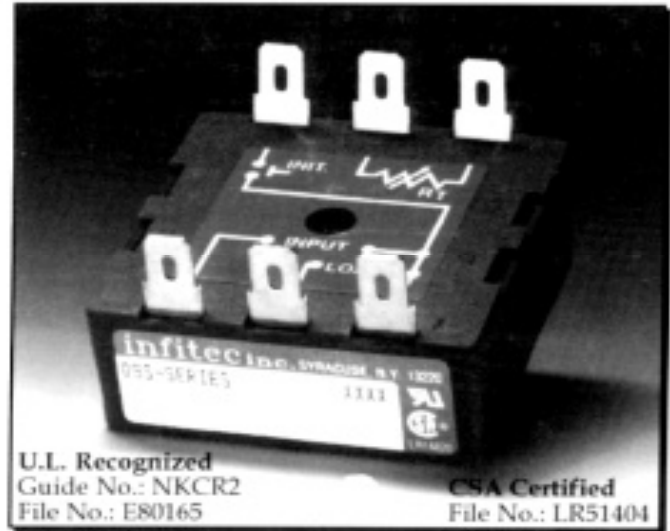
- 4.1 Transient: ± 1500 volts for 150 microseconds
- 4.2 Polarity: DC units are reverse polarity protected
- 4.3 Dielectric breakdown: 1500 volts RMS minimum

5. Mechanical.

- 5.1 Mounting: One #8 or #10 screw
- 5.2 Termination: 1/4" quick connect terminals
- 5.3 Style: Surface mount encapsulated

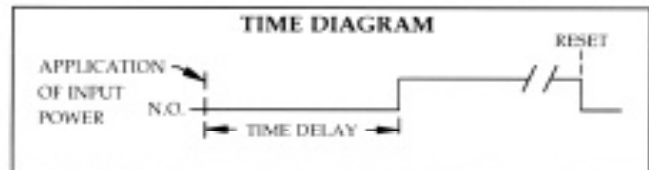
6. Environmental.

- 6.1 Operating temperature: -20°C to $+80^{\circ}\text{C}$
- 6.2 Storage temperature: -30°C to $+85^{\circ}\text{C}$
- 6.3 Humidity: 95% relative non-condensing



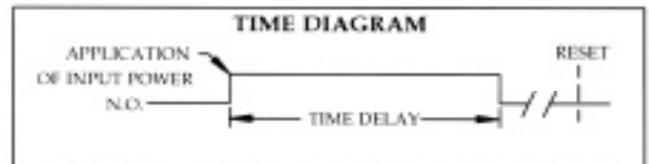
MODE OF OPERATION - SERIES DELAY ON MAKE - QMS, QMSA

Upon application of power to the input terminals, the time delay begins. At the completion of the pre-selected time delay, the output contact transfers. Reset is accomplished by removal of input power. There is no false output when reset during timing.



INTERVAL - QIS

Upon application of power to the input terminals, the output contact immediately transfers and the time delay begins. At the completion of the pre-selected time delay, the output contact reverts to its original position. Reset is accomplished by removal of input power.



SINGLE SHOT - QSS

Power must be applied to the input at all times prior to and during timing. Upon closure of the initiate switch (momentary or maintained) the output contact transfers and the time delay begins. At the completion of the pre-selected delay period, the output contact reverts to its original position. Removal of input power will reset the control.

