

## KKR SERIES MEDIUM/HIGH POWER TIMING CONTROLS

### FEATURES

- C/MOS Digital Circuitry
- Time Delays To 1000 Minutes
- No First Cycle Effect
- .5% Repeat Accuracy
- Wide Voltage Selection 24-230 VAC, 12-28 VDC
- Available In Medium Or High Power Output Ratings
- Outputs Available Isolated Or Non-Isolated
- No Heatsinking Required
- Encapsulated To Withstand Harshesht Environments
- Six Modes Of Operation

### 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
- 1.7 Time delay vs. voltage and temperature:  $\pm 5\%$

#### 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: Electromechanical relay
- 3.2 Form: SPDT
- 3.3 Rating: Medium power - 10 amperes, 1/4 hp @ 125 VAC  
High power - 20 amperes, 1 hp @ 125 VAC  
**Note:** Available with isolated or non-isolated contacts
- 3.4 Life: Medium power =  
Electrical - full load - 1,000,000 operations  
Mechanical - 10,000,000 operations  
High power =  
Electrical - full load - 100,000 operations  
Mechanical - 10,000,000 operations

#### 4. Protection.

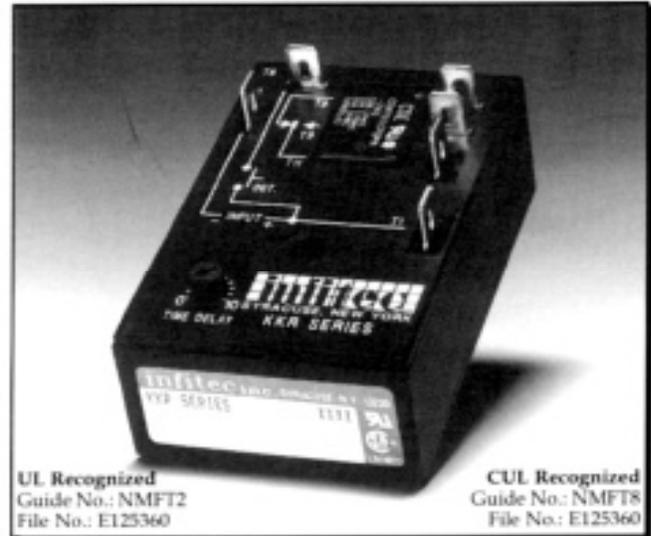
- 4.1 Transient:  $\pm 1500$  volts for 150 microseconds
- 4.2 Polarity: DC units are reverse polarity protected
- 4.3 Dielectric breakdown: 1500 volts RMS minimum

#### 5. Mechanical.

- 5.1 Mounting: .250 dia. hole (#10 screw clearance)
- 5.2 Termination: 1/4" quick connect terminals
- 5.3 Style: Surface mount encapsulated

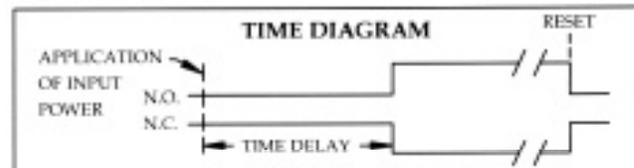
#### 6. Environmental.

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



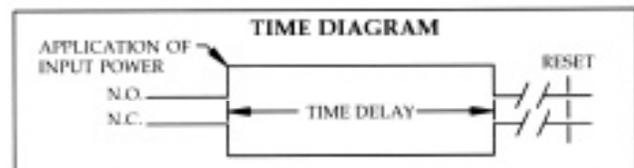
### MODE OF OPERATION - SERIES DELAY ON MAKE - KMKR

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



### INTERVAL - KIKR

Upon application of power to the input terminals, the output contacts immediately transfer and the time delay begins. At the completion of the pre-selected time delay, the output contacts revert to their original position. Reset is accomplished by removal of input power.



### SINGLE SHOT - KSKR

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 contacts transfer and the time delay begins. At the completion of the pre-selected time delay, the output contacts revert to their original position. Removal of input power will reset the control.

