



P.O. Box 2956 • Syracuse • New York • 13220  
 Phone: (315) 433-1150 Fax: (315) 433-1521  
 Toll Free US & Canada (800) 334-0837  
 Email: sales@infitec.com

# DBIS \ DBRS SERIES DIGITAL ENCAPSULATED IN-LINE TIME DELAY MODULES

## FEATURES

- C/MOS Digital Circuitry
- Time Delays From 0.05 Seconds To 1000 Minutes
- No First Cycle Effect
- Fully Solid State And Encapsulated
- 0.5% Repeat Accuracy
- Interval, Delay On Break Or Recycle Timing
- Output Rated at 1 Ampere Continuous, 10 Amperes Inrush
- Fixed, Local Or Externally Adjustable Time Delays
- In-Line, Series Connection With Load
- UL/cUL Pending

## SPECIFICATIONS

### 1. Time Delay.

- 1.1 Type: C/MOS digital circuitry
- 1.2 Range: From 0.05 seconds to 1000 minutes.  
 Fixed delays available (see time delay chart)
- 1.3 Repeat accuracy:  $\pm 0.5\%$  under fixed conditions
- 1.4 Setting accuracy:  $\pm 10\%$
- 1.5 Recycle time: 400 milliseconds
- 1.6 Time delay vs. voltage and temperature:  $\pm 2\%$

### 2. Input.

- 2.1 Operating voltage: 24, 120 & 230 VAC
- 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 amp steady state, (10 amp inrush, 40 mA. min.)
- 3.4 Life: 100,000,000 operations minimum under full load

### 4. Protection.

- 4.1 Transient:  $\pm 1500$  volts for 150 microseconds
- 4.2 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

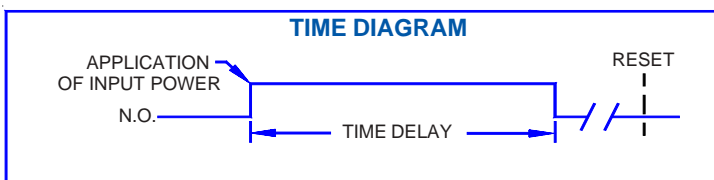
### 6. Environmental.

- 6.1 Operating temperature:  $-20^{\circ}\text{C}$  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

### INTERVAL - DBIS

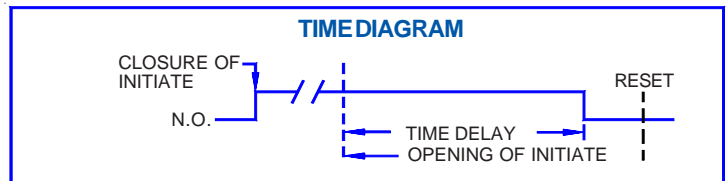
Upon application of power to the input terminals, the output immediately energizes and the time delay begins. At the completion of the pre-selected time delay, the output reverts to its original position. Reset is accomplished by removal of input power.



### DELAY ON BREAK - DBIS

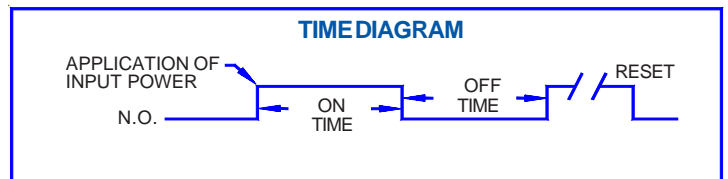
(SEE CONNECTION DIAGRAM)

Power must be applied to the input at all times prior to and during timing. Upon closure of the initiate switch, the load energizes and remains energized if no further action is taken. When the initiate switch is opened, the time delay begins. At the completion of the pre-selected delay period the load de-energizes and the control resets. Closure of initiate during timing will reset the delay period. Removal of input power will reset the control.



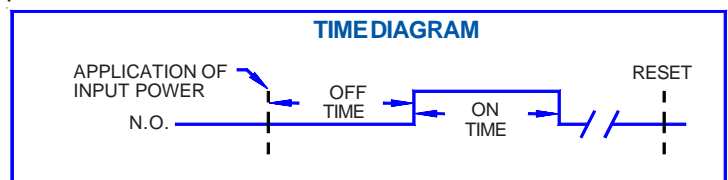
### ON/OFF RECYCLE - DBRS\_\_1

Upon application of power to the input terminals, the **ON** delay begins and the output contact transfers. Upon completion of the **ON** delay, the output contact reverts back to its original position and the **OFF** delay begins. Upon completion of the **OFF** delay, the output contact again transfer and the cycle repeats. Reset is accomplished by removal of input power.

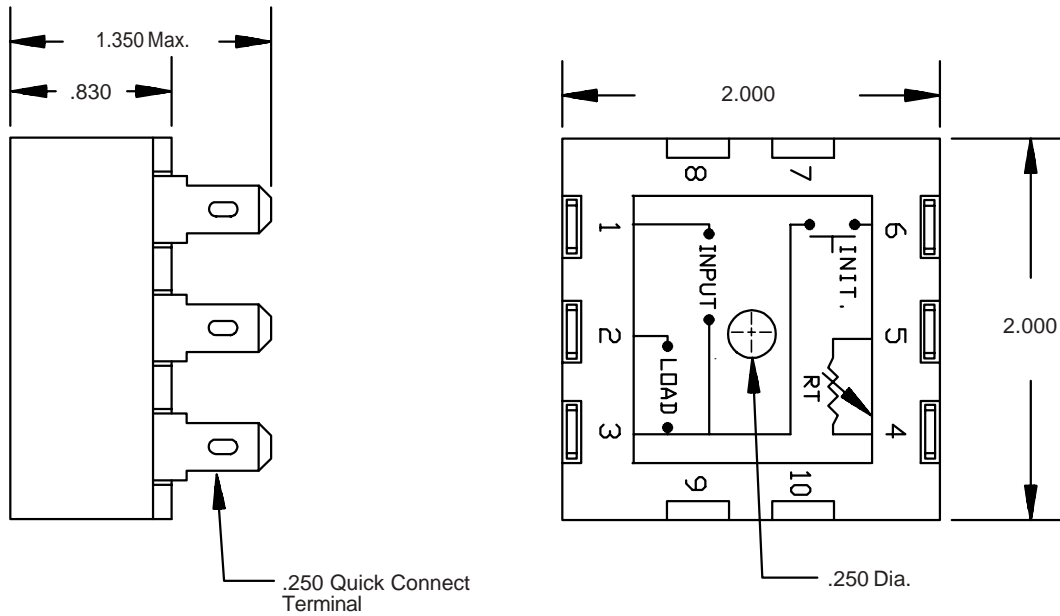


### OFF/ON RECYCLE - DBRS\_\_2

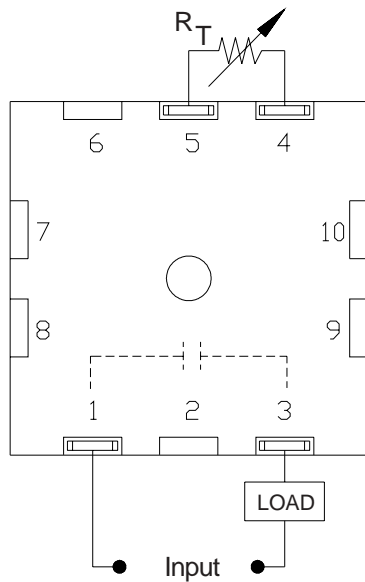
Upon application of power to the input terminals, the **OFF** delay begins. Upon completion of the **OFF** delay, the output contact transfers and the **ON** delay begins. Upon completion of the **ON** delay, the output contact reverts back to its original position and the cycle repeats. Reset is accomplished by removal of input power.



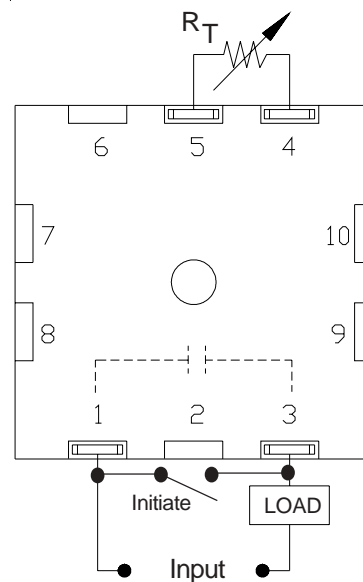
# DIMENSIONS



# CONNECTION DIAGRAMS



INTERVAL TIMING (DBIS)  
OR  
RECYCLE (DBRS)



DELAY ON BREAK  
TIMING (DBIS)

# ORDERING INFORMATION

SERIES	INPUT VOLTAGE	ADJUSTMENT	CYCLE	TIME DELAY RANGE
DBIS DBRS	4 - 24 VAC 5 - 120 VAC 6 - 230 VAC	0 - Local Adjust 1 - Fixed 2 - External Adjust	DBR ONLY	See Time Delay Range Chart  (Note: For DBRS only 1st & 2nd delays are equal)
			1 - On Time First 2 - Off Time First	