



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

B SERIES BINARY DIGITAL ENCAPSULATED TIME DELAY MODULES

FEATURES

- C/MOS Digital Circuitry
- Time Delays To 170.5 Minutes (3 ranges)
- No First Cycle Effect
- Fully Solid State And Encapsulated
- 0.5% Repeat Accuracy
- Eight Different Modes Of Operation
- Output Rated at 1 Ampere Continuous, 10 Amperes Inrush
- Rocker Type Time Delay Adjustment Switches For Positive Switch Settings
- Small Size
- UL/cUL Recognized

SPECIFICATIONS

1. Time Delay.

- 1.1 Type: C/MOS digital circuitry
- 1.2 Range: Three ranges available. Setting of the delay is accomplished via a 10 position dip switch located on the controls top surface. The required delay is selected by the addition of individual switch delays set in the ON position. (See ordering information)
- 1.3 Repeat accuracy: $\pm 0.5\%$ 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 amp steady state, (10 amp inrush, 20 mA. min.)
- 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.

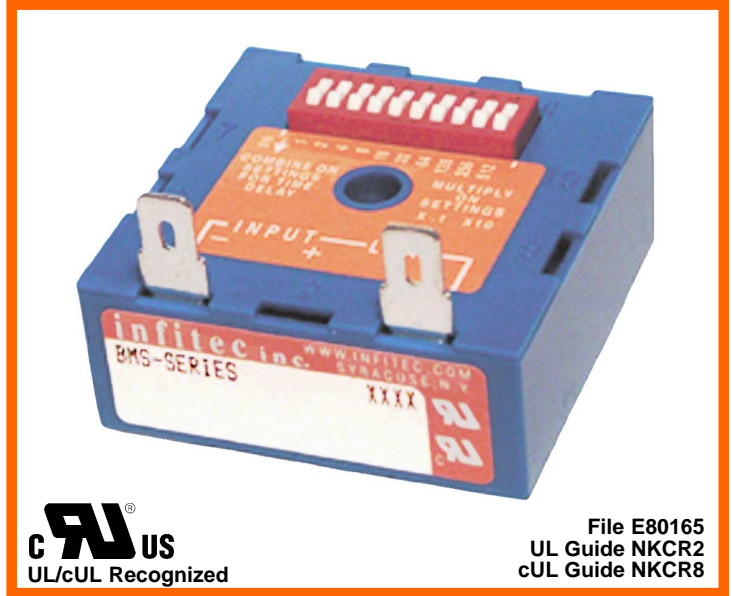
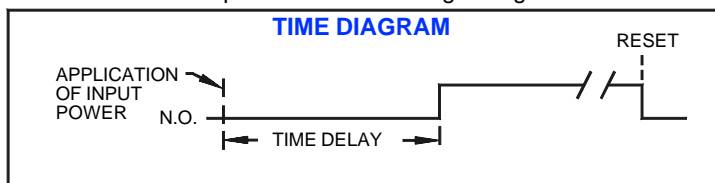
- 5.1 Mounting: One #8 or #10 screw
- 5.2 Termination: 1/4" quick connect terminals
- 5.3 Style: Surface mount encapsulated

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 - BMS

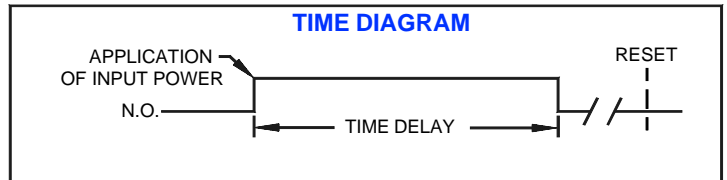
Upon application of power to the input terminals, the time delay begins. At the completion of the pre-selected time delay, the output contact transfers. Reset is accomplished by removal of input power. There is no false output when reset during timing.



File E80165
 UL Guide NKCR2
 cUL Guide NKCR8

Interval - BIS

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.

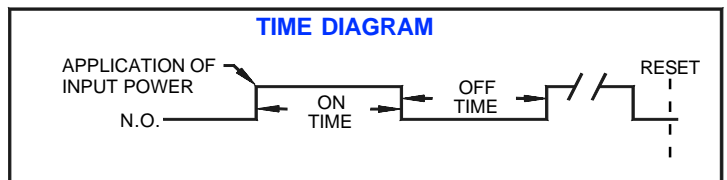


On/Off Recycle - BRS

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

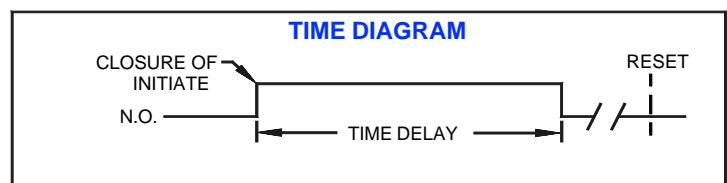
Off/On Recycle - BRS

This is the inverse of ON/OFF RECYCLE above, and diagram below.



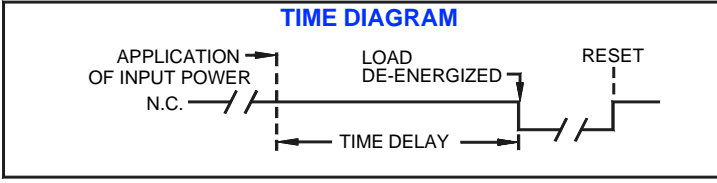
Single-Shot - BSS

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.



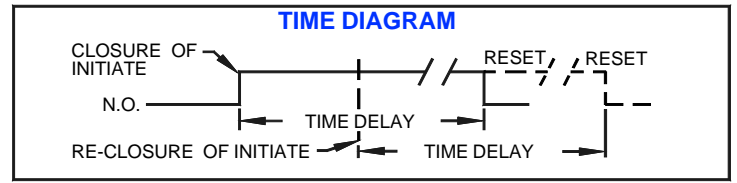
Delay On Make, Normally Closed - BCS

The output is in a normally closed state. Upon application of power to the input terminals, the output contact transfers and the time delay begins. At the completion of the time delay the output contact drops out. Removal of input power from terminal 3 resets the delay and the output contact reverts to its original closed position.



Retriggerable One-Shot - BOS

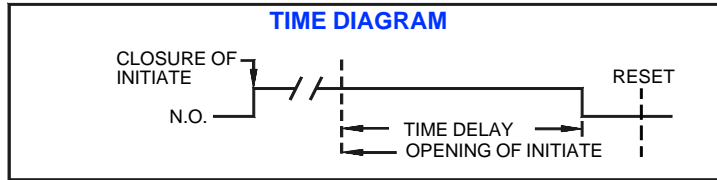
Power must be applied to the input at all times prior to and during timing. Upon closure of the initiate switch (momentary or maintained) the output contact transfers and the time delay begins. At the completion of the pre-selected delay period, the output contact reverts to its original position. **NOTE:**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



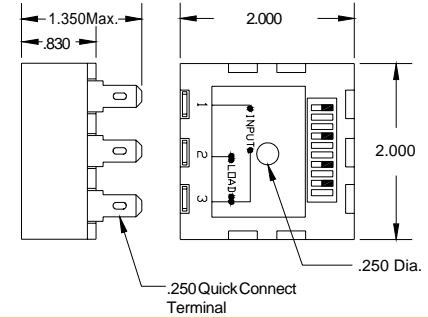
Delay On Break - BBS/BTS*

Power must be applied to the input at all times prior to and during timing. Upon closure of the initiate switch, the output contact transfers and remains transferred 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 output contact reverts to its original position. Closure of initiate during timing will reset the delay period. Removal of input power will reset the control.

* **BTS** is the same except it is trailing edge triggered. Load energizes when initiate switch is opened.

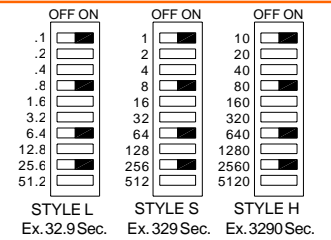


DIMENSIONS

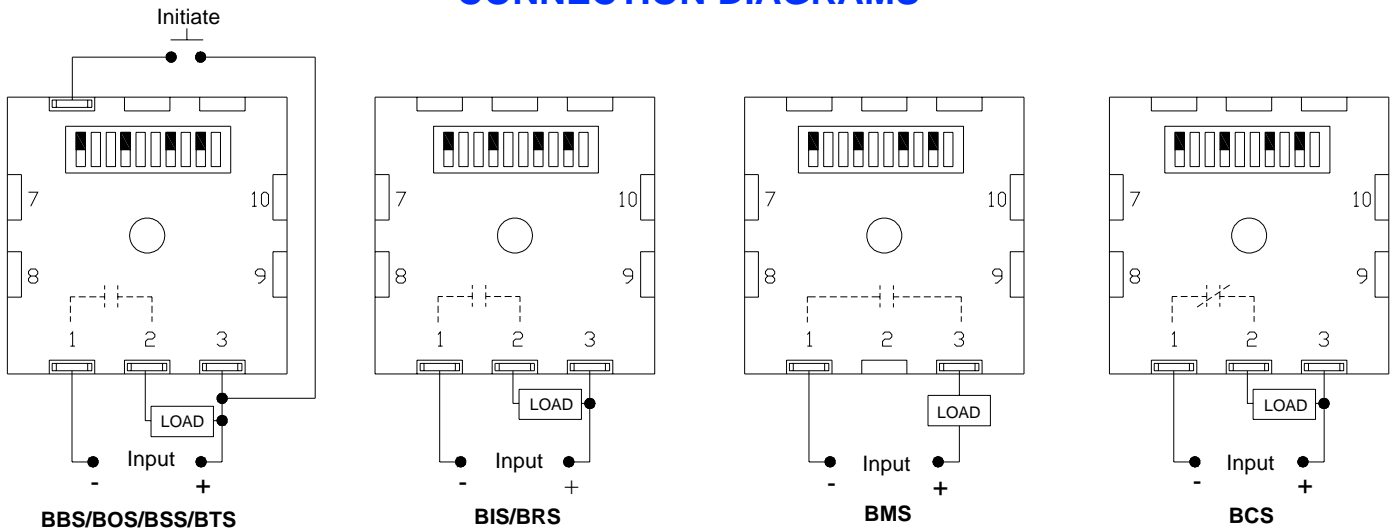


DELAY SETTINGS

Combine "ON" switches to set time delay.



CONNECTION DIAGRAMS



ORDERING INFORMATION

SERIES	INPUT VOLTAGE	CYCLE	TIME DELAY RANGE
BBS	1 - 12 VDC	BRS SERIES ONLY 1 - On Time First 2 - Off Time First	L - Low Range, 0.1 to 102.3 Seconds S - Standard Range, 1 to 1023 Seconds H - High Range, 10 to 10230 Seconds
BCS	2 - 24/28 VDC		
BIS	4 - 24 VAC		
BMS	5 - 120 VAC		
BOS	6 - 230 VAC		
BRS			
BTS			