



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

BRR SERIES BINARY DIGITAL PLUG-IN RECYCLING TIME DELAY RELAY



UL
 UL/cUL Recognized

File E80165
 UL Guide NKCR2
 cUL Guide NKCR8

FEATURES

- Microcontroller Based Circuitry
- Switch Selectable Delays to 620 Minutes In 8 Ranges
- No First Cycle Effect
- Wide Voltage Selection: 24-230 VAC, 12-110 VDC
- 10 Ampere DPDT Output Rating
- 8 Pin, 11 Pin, Stab/Square Base Plug-in Termination
- Rocker Type Time Delay Adjustment Switches for Positive Switch Settings
- UL/cUL Recognized, CE Mark

SPECIFICATIONS

1. Time Delay

- 1.1 Type: Microcontroller Based Circuitry
- 1.2 Range: Eight Ranges Available
 - 1 - 0.2 to 6.2 Seconds in 0.2 Second Increments
 - 2 - 1 to 31 Seconds in 1 Second Increments
 - 3 - 2 to 62 Seconds in 2 Second Increments
 - 4 - 0.2 to 6.2 Minutes in 0.2 Minute Increments
 - 5 - 1 to 31 Minutes in 1 Minute Increments
 - 6 - 2 to 62 Minutes in 2 Minute Increments
 - 7 - 10 to 310 Minutes in 10 Minute Increments
 - 8 - 20 to 620 Minutes in 20 Minute Increments

Five Switches to Set the ON Time, and Five Switches to Set the OFF Time. The Count Is Binary.

- 1.3 Repeat Accuracy: $\pm 0.1\%$ Under Fixed Conditions
- 1.4 Setting Accuracy: $\pm 2\%$
- 1.5 Reset Time: 200 Milliseconds Maximum
- 1.6 Recycle Time: 100 Milliseconds During Timing
200 Milliseconds After Timing
- 1.7 Time Delay vs. Voltage and Temperature: $\pm 2\%$

2. Input

- 2.1 Operation Voltage: 24, 120, & 230 VAC
12, 24/28, & 110 VDC
- 2.2 Tolerance: $\pm 20\%$ of Nominal
- 2.3 Frequency: 50-60 Hertz

3. Output

- 3.1 Type: Electromechanical Relay
- 3.2 Form: DPDT
- 3.3 Rating: 10 Amperes Resistive @ 30 VDC, 120/240 VAC
- 3.4 Life: Electrical - Full Load - 100,000 Operations
Mechanical - 10,000,000 Operations

4. Protection

- 4.1 Electrical Fast Transient Immunity: IEC 61000-4-4
- 4.2 Surge Immunity: IEC 61000-4-5
- 4.3 Dips, Shorts, Interruptions Immunity: IEC61000-4-11
- 4.4 Polarity: DC Units Are Reverse Polarity Protected
- 4.5 Dielectric Breakdown: 1500 Volts RMS Mimimum

5. Mechanical

- 5.1 Mounting: Plug-in
- 5.2 Termination: Octal (8 Pin), Magnal (11 Pin), or 11 Pin Stab/Square Base Plug-In

6. Environmental

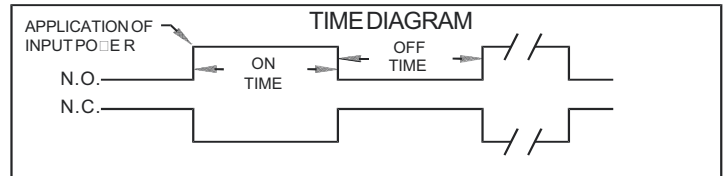
- 6.1 Operating Temperature: -20°C to $+85^{\circ}\text{C}$
- 6.2 Storage Temperature: -30°C to $+85^{\circ}\text{C}$

MODE OF OPERATION ON/OFF RECYCLE

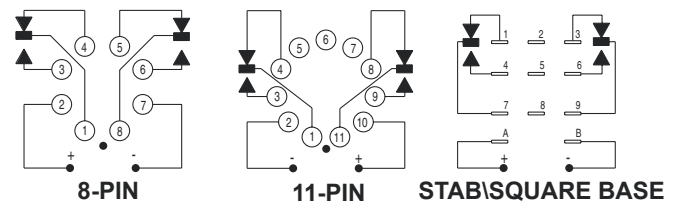
SERIES BRR

Upon application of power to the input terminals, the ON delay begins and the output contacts transfer. Upon completion of the ON delay, the output contacts revert to their original position and the OFF delay begins. Upon completion of the OFF delay, the output contacts again transfer and the cycle repeats. Reset is accomplished by removal of input power.

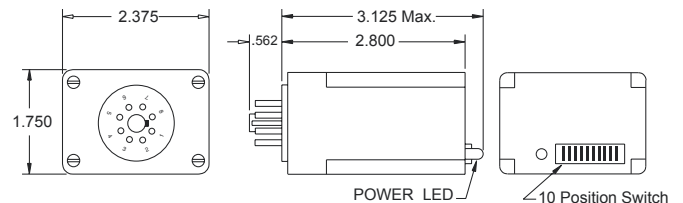
OFF/ON RECYCLE - Opposite of ON/OFF recycle.



CONNECTION DIAGRAMS



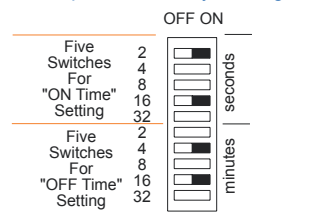
DIMENSIONS



ORDERING INFORMATION

SERIES	BASE STYLE	INPUT VOLTAGE	CYCLE	ON TIME	OFF TIME
BRR	1 - Octal Plug-In (8 Pin)	1 - 12 VDC	1 - On Time First	1 - .2 - 6.2 Seconds	1 - .2 - 6.2 Seconds
		2 - 24/28 VDC	2 - Off Time First	2 - 1 - 31 Seconds	2 - 1 - 31 Seconds
	2 - 11 Pin Plug-In	3 - 110 VDC		3 - 2 - 62 Seconds	3 - 2 - 62 Seconds
		4 - 24 VAC		4 - .2 - 6.2 Minutes	4 - .2 - 6.2 Minutes
		5 - 120 VAC		5 - 1 - 31 Minutes	5 - 1 - 31 Minutes
		6 - 230 VAC		6 - 2 - 62 Minutes	6 - 2 - 62 Minutes
3 - 11 Pin Stab/Square Base			7 - 10 - 310 Minutes	7 - 10 - 310 Minutes	
			8 - 20 - 620 Minutes	8 - 20 - 620 Minutes	

Example Time Delay Settings



Example: 18 seconds ON, 20 minutes OFF