



# CR series

## Recycle Time Delay Relay

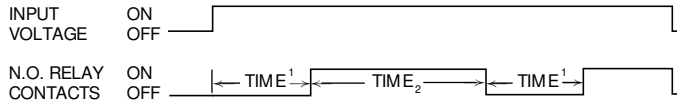
- Individual ON and OFF time adjustment knobs
- 10A output relay with DPDT contacts
- Various models time from 0.1 to 180 sec.

File E22575

File LR15734

### Timing Mode

**Recycle timing** – First delay period begins when input voltage is applied. At the end of the first delay, or “off” period, the relay will operate and the second delay, or “on” period, begins. When the second delay period ends, the relay de-energizes. This recycling sequence will continue until input voltage is removed. When input voltage is removed, the relay will de-energize.



### Timing Specifications

**Timing Ranges:** From 0.1 to 180 sec.  
**Timing Adjustment:** Knob adjustable.  
**Tolerance (for AC units add ±1/2 cycle 60 Hz.):** -0%, +20% of max. specified at high end of timing range; min. specified, or less, at low end.  
**Delta Time (for AC units add ±1 cycle 60 Hz.):** ±10%.  
**Repeatability (for AC units add ±1 cycle 60 Hz.):** ±2%.  
**Release Time:** 60ms, typ.; 100 ms, max.

### Contact Data @25°C

**Arrangements:** 2 Form C (DPDT).  
**Material:** Silver-cadmium oxide alloy.  
**Rating:** 10 A @30VDC or 277VAC, resistive; 1/2 HP @250VAC; 1/3 HP @120VAC.  
**Expected Mechanical Life:** 10 million operations.  
**Expected Electrical Life:** 100,000 operations, min., at rated load.

### Initial Dielectric Strength

**Between Open Contacts:** 500V rms, 60 Hz.  
**Between All Other Conductors:** 500V rms, 60 Hz.

### Input Data @25°C

**Voltage:** 120VAC and 24VDC.  
**Power Requirement:** AC Types: Typically less than 3 VA.  
 DC Types: Typically less than 3 W.

**Transient Protection:** Yes.  
**Reverse Voltage Protection:** Yes.  
**Input Voltages & Limits @25°C**

Voltage Type	Nominal Voltage	Minimum Voltage	Maximum Voltage
AC	120	105	130
DC	24	20	32

**Note:** DC voltage must be filtered (5% p-p ripple max. at nom. voltage). AC models will operate on 50 or 60 Hz.

### Environmental Data

**Temperature Range:** Storage: -55°C to +85°C.  
 Operating: -10°C to +55°C.

### Mechanical Data

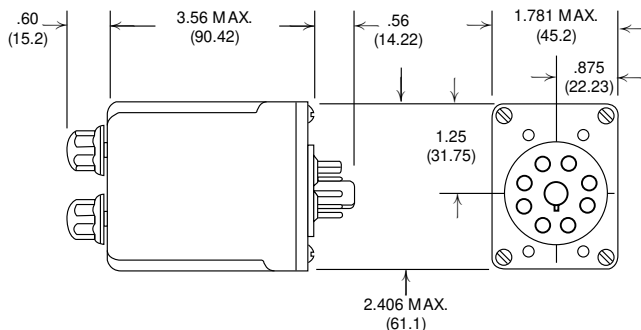
**Termination:** Octal plug.  
**Enclosure:** White plastic case with dial scales for reference only.  
**Sockets:** Fits either 27E122 or 27E891 (snap-on) 8-pin screw terminal sockets.  
**Weight:** 6 oz. (170g) approximately.

**Ordering Information – Boldface items listed below are normally maintained in stock for immediate delivery.**

AC Types	Voltage	Time	Part Number
	120VAC	0.1 to 10 Sec.	<b>CRB-48-70010</b>
		0.3 to 30 Sec.	<b>CRB-48-70030</b>
		0.6 to 60 Sec.	<b>CRB-48-70060</b>
		1.8 to 180 Sec.	<b>CRB-48-70180</b>

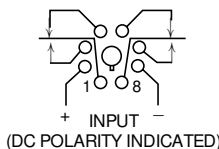
DC Type	Voltage	Time	Part Number
	24VDC	1.8 to 180 Sec.	<b>CRD-48-30180</b>

### Outline Dimensions



### Wiring Diagram – Bottom View

(pins numbered clockwise from keyway)



**Fig.1**  
8 Pin

**\*\* Note:** Input polarity for DC operation. For most reliable operation on AC, connect high side to “+” and low side to “-”.