

# Cube Timers – Delay on Operate

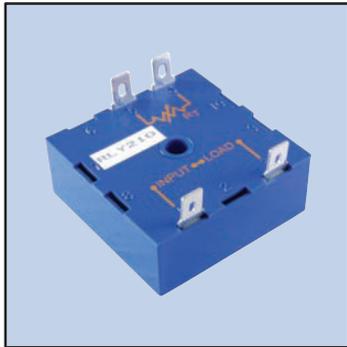
## RLY210 Series



External Resistor Adjustable,  
AC or DC, Delay on Operate,  
Solid State, Universal Cube Timer.

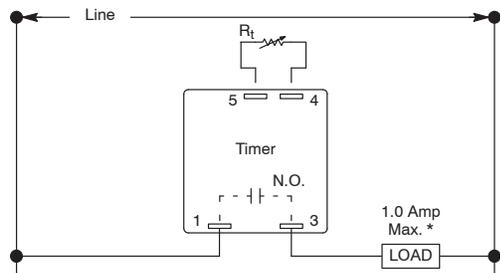
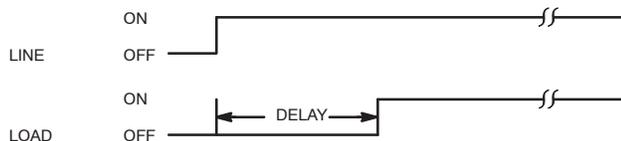
### Features

- 2 x 2 Industry Standard Package
- 19–264 Volts AC or DC Operation
- 12 to 480 Seconds Timing Range
- ±2% Repeat Accuracy
- .250" Quick Connect Terminals
- Encapsulated Construction



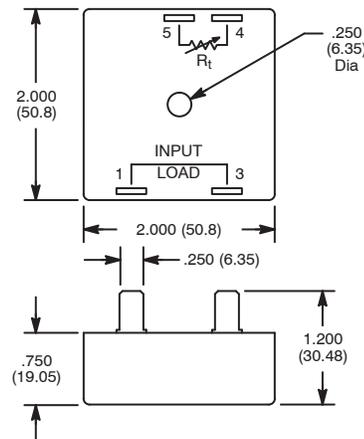
### OPERATION

**DELAY ON OPERATE**– The delay period begins when input voltage is applied. At the end of the delay period, the relay will operate and will not release until input voltage is removed. Reset occurs when input voltage is reapplied.



\* For higher current applications connect a switching relay in series with timer in place of load.

### D66



### Potentiometer Timing

Potentiometer Value (Ohms)	Approx. Timing Range (Sec.)	Potentiometer Value (Ohms)	Approx. Timing Range (Sec.)
100K	12 to 18	1.0M	12 to 150
250K	12 to 40	2.5M	12 to 300
500K	12 to 70	5.0M	12 to 480

### Fixed Resistor Timing

Resistor Value (Ohms)	Approx. Time * (Sec.)	Resistor Value (Ohms)	Approx. Time * (Sec.)	Resistor Value (Ohms)	Approx. Time * (Sec.)
25	12	87	42	312	150
27	13	97	47	354	170
29	14	104	50	375	180
33	16	116	56	395	190
35	17	125	60	479	230
37	18	145	70	510	245
41	20	150	72	531	255
45	22	166	80	625	300
50	24	179	86	729	350
54	26	197	95	791	380
62	30	218	105	864	415
66	32	260	125	968	465
72	35	291	140	1.0K	480
79	38				

\* Approximate – Actual time value will depend on tolerance of resistor.

### External Resistance Selection:

The delay period is set by placing resistance across designated pins or terminals. The resistor or potentiometer should be a 1/4W or larger. To determine the resistor value required for a specific time delay, use the following formula:

$$R_{ext} = \frac{T_{des}}{T_{max}} \times 1000$$

$R_{ext}$  = Resistance value required to obtain  $T_{des}$  (in K ohms)

$T_{des}$  = Desired time delay

$T_{max}$  = Maximum delay period of the timer

## Ratings and Specifications

**Operating Voltage Range (Line):** 19–264 V DC or AC (50/60Hz)

**Switch Configuration:** Solid State, SPST

**Switching Current (Load):** 40mA Amp min., 1 Amp max.

**Timing Adjustment Range:** 12 to 480 seconds

**External Timing Resistance:** See Tables

**Repeat Accuracy:** ±2%

**Expected Life (Electrical):** 100,000,000 operations @ rated load

**Operating Temperature:** –20° to +65°C

**Storage Temperature:** –30° to +85°C

**Dielectric Breakdown Voltage Between All Elements:** 1500V<sub>rms</sub>

**Transient Protection:** 1500 V for 150µs

**Mounting:** One #8 or #10 Screw