

# PROGRAMMABLE | MULTI-RANGE

## TR-6 SERIES TIME RANGER™

### APPLICATION DATA

**Voltage Tolerance:**

AC Operation: 20.4 – 264V at 50/60 Hz  
 DC Operation: 10.2 – 137.5V

**Load (Burden):**

Maximum of 3 VA for all voltages

**Setting Accuracy:**

Maximum Setting (Adjustable): +5%, -0%  
 Minimum Setting (Adjustable): +0%, -50%

**Repeat Accuracy** (constant voltage and temperature):

±0.1% or ±50ms, whichever is greater

**Reset Time:**

Functions Triggered with Input Voltage: 0.1 Seconds  
 Functions Triggered with Control Switch: 0.04 Seconds

**Start-up Time:**

(Time from when power is applied until unit is timing)  
 0.05 Seconds

**Maintain Function Time:**

(Time unit continues to operate after power is removed)  
 0.01 Seconds

**Temperature:**

Operating: -28 ° to 65°C (-18° to 150°F)  
 Storage: -40 ° to 85°C (-40° to 185°F)

**Triggering Off Delay, Single Shot or Watchdog Units:**

Timing sequence must be initiated only after input voltage is applied to unit. Minimum required trigger switch closure time is 0.1 seconds.

**Compatibility:**

Using a solid state switch to initiate the time sequence is acceptable.

**Output Contacts:**

DPDT 10A @ 240V AC/30V DC,  
 1/2HP @ 120/240V AC (N.O.), 1/3HP @ 120/240V AC (N.C.)  
 B300 & R300 (N.O.); AC15 & DC13

**Life:**

Mechanical: 10,000,000 operations  
 Full Load: 100,000 operations

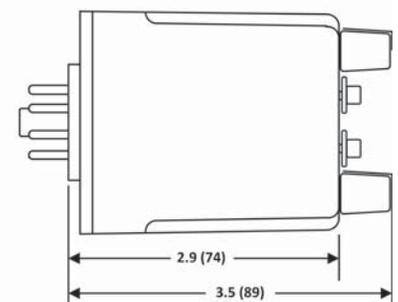
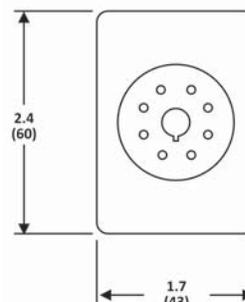
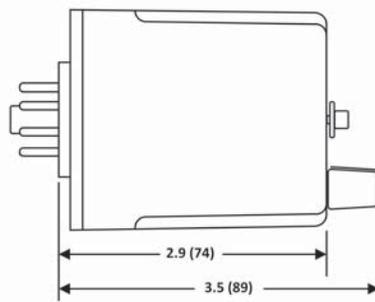
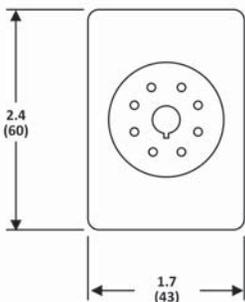
**Approvals:**



### DIMENSIONS

TR-602, TR-605, TR608, TR609, TR-613, TR-615, TR-616,  
 TR-617, TR-618 & TR-619

TR-631-TR-651, TR-661 & TR-665



All Dimensions in  
 Inches (Millimeters)

# PROGRAMMABLE | MULTI-RANGE TRUE OFF DELAY

## TR-6 SERIES TIME RANGER™

### APPLICATION DATA

#### Voltage Tolerance:

AC Operation: +10/-15% of nominal at 50/60 Hz  
DC Operation: +10/-15% of nominal

#### Load (Burden):

Maximum of 2 VA for all voltages. These products draw a brief inrush current on power-up of 1A to charge the internal circuitry.

#### Setting Accuracy:

Maximum Setting (Adjustable): +5%, -0%  
Minimum Setting (Adjustable): +0%, -50%

#### Repeat Accuracy (constant voltage and temperature):

> 2 Seconds Delay ±0.1%  
0.1 - 2 Seconds Delay ±2%

#### Reset Time: 0.1 Seconds

#### Start-up Time:

(Time from when power is applied until unit is timing)  
120 & 240V units 0.05 Seconds  
12, 24 & 48V units 0.08 Seconds

#### Maintain Function Time:

(Time unit continues to operate after power is removed)  
0.01 Seconds for all units

#### Temperature:

12-120V Input Voltage: -28° to 65°C (-18° to 150°F)  
240V Input Voltage: -28° to 50°C (-18° to 122°F)

#### Compatibility:

Using a solid state switch to initiate the time sequence is acceptable.

#### Output Contacts:

DPDT 10A @ 240V AC; 8A @ 28V DC,  
1/2 HP @ 240V AC, 1/4HP @ 120V AC  
B300 & R300

#### Life:

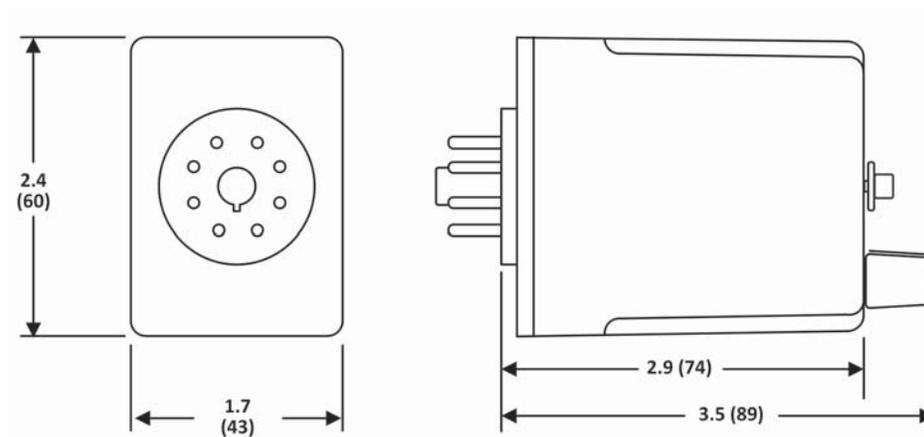
Mechanical: 2,000,000 operations  
Full Load: 100,000 operations

**IMPORTANT:** These relays are shipped from the factory in the OFF state. A shock to the relay during shipping or installation may cause it to change to the ON state. It is recommended that input voltage be applied to the product for at least 0.1 second and removed to cycle the unit to the OFF state prior to use in the application. Please note that it will take as long as the OFF Delay setting to reset the unit once input voltage has been removed.

#### Approvals:



### DIMENSIONS



All Dimensions in Inches (Millimeters)