

# PROGRAMMABLE | MULTI-RANGE

## DIGITAL-SET | TD-7 SERIES TIME RANGER™



- ◆ Pushbutton Thumbwheels for digital set of time delay
- ◆ 50ms - 999 hour programmable time range
- ◆ Uses industry-standard 8 or 11 pin octal sockets
- ◆ 10A DPDT output contacts
- ◆ LED indicates timing mode and time out conditions

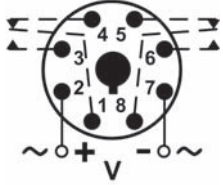
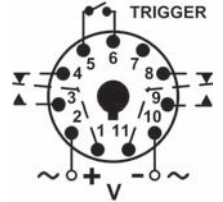


with appropriate socket

The TD-7 series of time delay relays offer an easy and accurate way to select any time delay between 50ms and 999 hours. Programming is accomplished by using a pushbutton thumbwheel to select one of seven built-in time ranges and three pushbutton thumbwheels to digitally set the time delay required. This method provides a greater setting accuracy than is found on other units with an analog potentiometer. An LED indicates timing mode and time out condition.

Multi-function versions available.

### Single Function Products

FUNCTION ■	INPUT VOLTAGE	PRODUCT NUMBER	WIRING/SOCKETS
<b>ON DELAY</b> <b>A</b>	120V AC/DC 12V AC/DC 24V AC/DC 240V AC	TD-70222 TD-70226 TD-70228 TD-70221	8 PIN OCTAL <b>70169-D</b>  <b>DIAGRAM 1</b>
<b>INTERVAL ON</b> <b>B</b>	120V AC/DC 12V AC/DC 24V AC/DC 240V AC	TD-70522 TD-70526 TD-70528 TD-70521	
<b>FLASHER</b> (OFF 1st) <b>E</b>	120V AC/DC 12V AC/DC 24V AC/DC 240V AC	TD-70822 TD-70826 TD-70828 TD-70821	
<b>OFF DELAY</b> <b>C</b>	120V AC/DC 12V AC/DC 24V AC/DC 240V AC	TD-71622 TD-71626 TD-71628 TD-71621	11 PIN OCTAL <b>70170-D</b>  <b>DIAGRAM 2</b>
<b>SINGLE SHOT</b> <b>D</b>	120V AC/DC 12V AC/DC 24V AC/DC 240V AC	TD-71522 TD-71526 TD-71528 TD-71521	

■ See "Definitions of Timing Functions".

Sockets & Accessories available



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**800.238.7474**

[WWW.MACROMATIC.COM](http://WWW.MACROMATIC.COM)

[SALES@MACROMATIC.COM](mailto:SALES@MACROMATIC.COM)

Build your Time Delay Relays with the [Online Product Builder](#)

# TD-7 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):

3 VA

### Setting Accuracy:

±1% of set time or ±50ms, whichever is greater.

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

±0.1% of set time or ±0.02 seconds, whichever is greater.

### Reset Time:

On Delay/Interval/Flasher: 0.1 Seconds

Functions with Control Switches: 0.04 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 149°F)

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

### Insulation Voltage:

2,000 volts

### Output Contacts:

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

### Life:

Mechanical: 10,000,000 operations

Full Load: 100,000 operations

### Compatibility:

Using a solid state switch to initiate the time sequence is acceptable. See [www.macromatic.com/leakage](http://www.macromatic.com/leakage) or contact Macromatic for information regarding leakage current limits and other solid state design considerations.

### Initiating Units with Control Switch Triggers:

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

### LED:

Red LED. Refer to instruction sheet provided with product to determine code for relay & timing status.

### Approvals:



File #E109466



File #LR45565

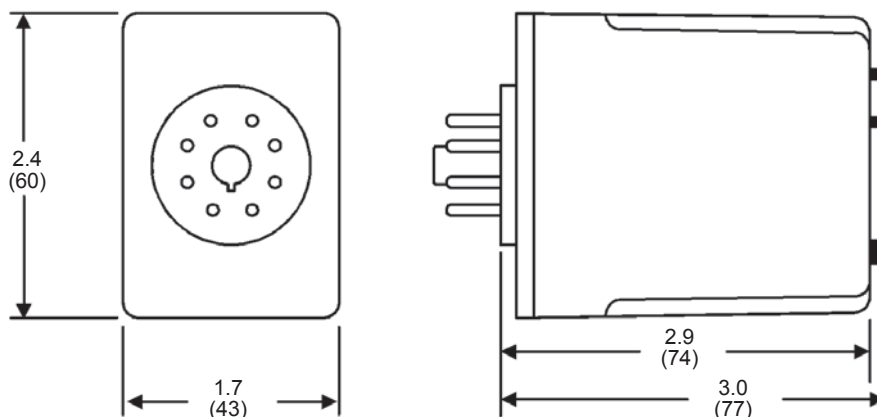


Low Voltage &  
EMC Directives  
EN60947-1, EN60947-5-1



IND. CONT. EQUIP  
5007  
with  
appropriate  
socket  
File #E109466

## DIMENSIONS



All Dimensions in  
Inches (Millimeters)