


TIME DELAY RELAYS

TIME RANGER™ DIGITAL-SET PROGRAMMABLE MULTI-RANGE PLUG-IN



Multi-Function

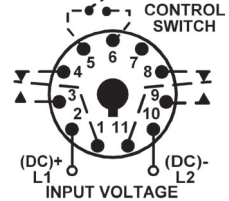
Single-Function

- ◆ Available in either selected Single-Function or Multi-Function versions (with ten user-selectable modes)
- ◆ Pushbutton Thumbwheels for digital set of time delay & function (TD-781 series only)
- ◆ 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

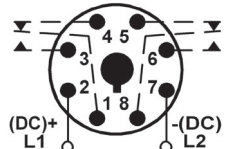
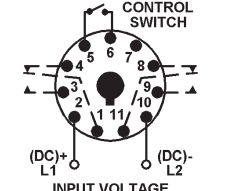
The TD-7 series of time delay relays offer an easy and accurate way to select any time delay between 50ms & 999 hours. Programming is accomplished by using a pushbutton thumbwheel to select one of seven built-in time ranges and three pushbutton thumbwheels to digitally set the time delay required. This 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.

The TD-7 series comes in two versions: selected single function products or a multi-function product. The TD-781 multi-function unit has a fifth pushbutton thumbwheel to select one of ten built-in functions.

Multi-Function Product

FUNCTION ■	INPUT VOLTAGE	PRODUCT NUMBER	WIRING/ SOCKETS
MULTI-FUNCTION (10 Functions in One Unit)	120V AC/DC 12V AC/DCC 24V AC/DC 240V AC	TD-78122 TD-78126 TD-78128 TD-78121	11 PIN OCTAL 70170-D  DIAGRAM 121

Single Function Products

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

■ See Pages 52 & 53 for definitions & explanations of Timing Functions.

Sockets & Accessories—Pages 81 & 82 Application Data & Dimensions—Page 69



800-238-7474

www.macromatic.com
sales@macromatic.com

TIME DELAY RELAYS

TIME RANGER™ DIGITAL-SET PROGRAMMABLE MULTI-RANGE PLUG-IN APPLICATION DATA & DIMENSIONS

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 time 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)

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:

Do not use a solid state switch to initiate the timing sequence-
problems with leakage current could occur. Contact Macro-
matic Controls for additional information.

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

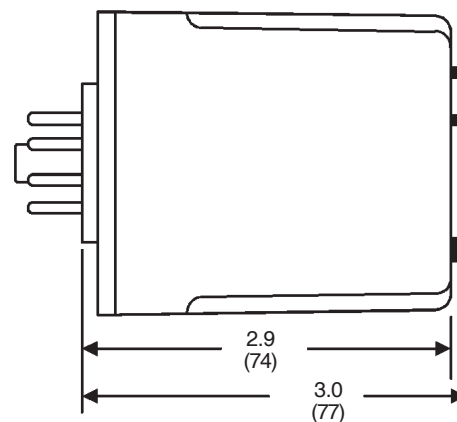
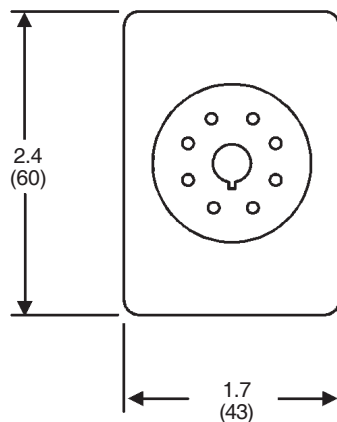


Low Voltage &
EMC Directives
EN60947-1, EN60947-5-1



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

DIMENSIONS



All Dimensions in
Inches (Millimeters)