# PROGRAMMABLE | MULTI-RANGE

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

The TD-781 Series offers an easy and accurate way to select a function and any time delay between 10ms 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. These units have a fifth pushbutton thumbwheel to select one of ten built-in functions. An LED indicates timing mode and time out condition.

Single-function versions available.

#### **Multi-Function Product**

FUNCTION ■	INPUT VOLTAGE	PRODUCT NUMBER	WIRING/ SOCKETS
MULTI-FUNCTION	120V AC/DC	TD-78122	11 PIN OCTAL
_(10 Functions in One Unit)	12V AC/DC	TD-78126	70170-D
A On Delay	24V AC/DC	TD-78128	2
B Interval On	240V AC	TD-78121	TRIGGER
C Off Delay *			5 6 7
■ Single Shot *			¥ 1 4 8 Y
Flasher (OFF 1st)			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Flasher (ON 1st)			1 11/2
G On/Off Delay *			~°+ -°~
			٧.
J Watchdog *			
Triggered On Delay *			DIAGRAM 121

- See "Definitions of Timing Functions".
- \* These are the only functions requiring use of the Control Switch shown in Wiring Diagrams above.

Sockets & Accessories available



- Ten user-selectable modes in one unit
- Pushbutton Thumbwheels for digital set of time delay & function
- ◆ 10ms 999 hour programmable time range
- Uses industry-standard 11 pin octal socket
- ◆ 10A DPDT output contacts
- LED indicates timing mode and time out conditions











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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.

+10/-15% of nominal. DC Operation:

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.

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

#### 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

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 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:

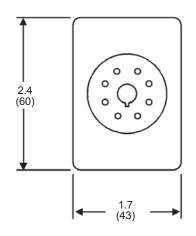


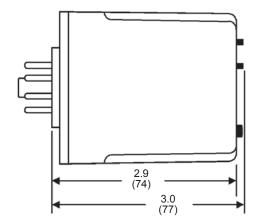


Low Voltage & **FMC Directives** EN60947-1, EN60947-5-1

LISTED D. CONT. EQUII 50U7 with appropriate File #E109466

## DIMENSIONS





All Dimensions in Inches (Millimeters)