PROGRAMMABLE | MULTI-RANGE OFF DELAY, SINGLE SHOT & WATCHDOG TR-6 SERIES TIME RANGER TM

FUNCTION ■	INPUT VOLTAGE 50/60Hz.	PRODUCT NUMBER	WIRING/ SOCKETS
OFF DELAY	120V AC/DC	TR-61622	11 PIN OCTAL
Control Switch Trigger	12V AC/DC	TR-61626	70170-D
C	24V AC/DC	TR-61628	TRIGGER
	240V AC	TR-61621	
SINGLE SHOT	120V AC/DC	TR-61522	V -45 6 7 8 V
Control Switch Trigger	12V AC/DC	TR-61526	A 13, 0 3 1
D	24V AC/DC	TR-61528	11 11/
	240V AC	TR-61521	
WATCHDOG	120V AC/DC	TR-61322	~°+ _v -°~
Control Switch Trigger	12V AC/DC	TR-61326	1377.
(Retriggerable	24V AC/DC	TR-61328	DIAGRAM 2
Single Shot)	240V AC	TR-61321	
OFF DELAY	120V AC/DC	TR-61922	11 PIN OCTAL
Power Trigger	12V AC/DC	TR-61926	70170-D
С	24V AC/DC	TR-61928	+ POWER + P-
_	240V AC	TR-61921	I A SOLIN
SINGLE SHOT	120V AC/DC	TR-61722	= 4 ⁵ 6 7 8 =
Power Trigger	12V AC/DC	TR-61726	- 1-3/ 0 19-1 -
D	24V AC/DC	TR-61728	1111
_	240V AC	TR-61721	
WATCHDOG	120V AC/DC	TR-61822	~b+v-b~
Power Trigger	12V AC/DC	TR-61826	* MUST BE SAME VOLTAGE AS INPUT VOLTAGE
(Retriggerable	24V AC/DC	TR-61828	
Single Shot)	240V AC	TR-61821	DIAGRAM 4

■ See "Definitions of Timing Functions".

TIMING RANGES

Select one of the 16 built-in time ranges by setting the rotary switch per a chart on the unit and adjust within that range using the knob on top:

TR-613, 615, 616, 617, 618 & 619 SERIES

Dial Setting	Timing Range	
Α	0.1 - 0.25 Sec.	
В	0.2 - 0.5 Sec.	
С	0.3 - 1 Sec.	
D	0.5 - 2 Sec.	
E	1 - 4 Sec.	
F	2 - 8 Sec.	
G	4 - 15 Sec.	
Н	8 - 30 Sec.	
I	15 - 60 Sec.	
J	30 - 120 Sec.	
K	1 - 4 Min.	
L	2 - 8 Min.	
М	4 - 15 Min.	
N	8 - 30 Min.	
0	15 - 60 Min.	
Р	30 - 120 Min.	

Sockets & Accessories available

Build your Time Delay Relays with the Online Product Builder



- Each unit has 16 timing ranges built-in
- Selecting a range is easy using a rotary switch (no math is required or DIP switches to set)
- Timing ranges up to 2 hours
- Uses industry-standard 11 pin octal sockets
- 10A DPDT output contacts











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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):

2 VA

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:

On Delay/Interval/Repeat Cycle/Delayed Interval: 0.1 Seconds

Off Delay/Single Shot/Watchdog/

Triggered Delayed Interval: 0.04 Seconds

Start-up Time:

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

120 & 240V units 0.05 Seconds 0.08 Seconds 12, 24 & 48V units

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)

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. See www.macromatic.com/leakage or contact Macromatic for information regarding leakage current limits and other solid state design considerations.

Output Contacts:

(All TR-6 Series Products except TR-606 True Off Delay)

DPDT 10A @ 240V AC/30V DC,

1/2HP @ 120/240V AC (N.O.), 1/3HP @ 120/240V AC (N.C.)

B300 & R300; AC15 & DC13

(TR-606 True Off Delay)

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

B300 & R300

10,000,000 operations (2,000,000 operations on Mechanical:

TR-606 Series only)

Full Load: 100,000 operations

IMPORTANT FOR TR-606 SERIES ONLY: 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:

(All TR-6 Series Products except TR-606 True Off Delay)





(TR-606 True Off Delay only)

File #E109466

(All TR-6 Series Products)

Low Voltage & **EMC Directives** EN60947-1. EN60947-5-1



DIMENSIONS

