NON-PROGRAMMABLE | OFF DELAY, SINGLE SHOT, **WATCHDOG & SINGLE SHOT FALLING EDGE**

TR-5 SERIES

		IN OUTKIES	
FUNCTION ■ ▲	INPUT VOLTAGE 50/60Hz.	PRODUCT NUMBER **	WIRING/ SOCKETS ▲
OFF DELAY Control Switch Trigger	120V AC/DC 12V DC	TR-51622-** TR-51626-**	11 PIN OCTAL 70170-D
C C	24V AC/DC 240V AC	TR-51628-** TR-51621-**	TRIGGER
SINGLE SHOT Control Switch Trigger	120V AC/DC 12V DC 24V AC/DC	TR-51522-** TR-51526-** TR-51528-**	45 6 7 8 ¥
D	240V AC	TR-51521-**	1111
WATCHDOG Control Switch Trigger	120V AC/DC 12V DC	TR-51322-** TR-51326-**	~°+ _v -°~
(Retriggerable Single Shot)	24V AC/DC 240V AC	TR-51328-** TR-51321-**	DIAGRAM 2
SINGLE SHOT	120V AC/DC	TR-52222-**	
FALLING EDGE Control Switch Trigger	12V DC 24V AC/DC	TR-52226-** TR-52228-**	
H	240V AC	TR-52221-**	
OFF DELAY Power Trigger	120V AC/DC 12V DC 24V AC/DC 240V AC	TR-51922-** TR-51926-** TR-51928-** TR-51921-**	11 PIN OCTAL 70170-D
SINGLE SHOT	120V AC/DC	TR-51722-**	+ POWER
Power Trigger	12V DC 24V AC/DC 240V AC	TR-51726-** TR-51728-** TR-51721-**	3\ \(\begin{pmatrix} \ 8 \\ \ 2 \\ \ \ \ \ \ \ \ \ \ \ \ \ \
WATCHDOG Power Trigger	120V AC/DC 12V DC	TR-51822-** TR-51826-**	MUST BE SAME VOLTAGE AS INPUT VOLTAGE
(Retriggerable Single Shot)	24V AC/DC 240V AC	TR-51828-** TR-51821-**	DIAGRAM 4

- See "Definitions of Timing Functions".
- Complete Product Number using two-digit Code from Table below.
- 8 Pin SPDT versions of these functions (except Single Shot Falling Edge) are available.

TIME DELAYS

TR-5 Series Products have three time delay options:

- Onboard Adjustable Time Delay--complete Product Number by adding two-digit Code from Table at right, i.e., TR-51622-05 is an Off Delay with a time delay range of 0.1-10 seconds.
- Onboard Fixed Time Delay--replace two-digit Code with suffix "F" followed by delay [0.1 ... 100] followed by (S) seconds, (M) minutes or (H) hours, i.e., TR-51622-F5S is an Off Delay with a time delay fixed at 5 seconds.
- Remote Time Delay--Selected TR-5 Series products can be built with two terminals for remote adjustable or fixed time delays. See www.macromatic.com/remote for information.

"" TIMING RANGE	IABLE
Time Delay Range	Code
0.05 - 5 Sec.	04
0.1 - 10 Sec.	05
0.3 - 30 Sec.	07
0.6 - 60 Sec.	08
1.2 - 120 Sec.	09
1.8 - 180 Sec.	10
3 - 300 Sec.	12
0.1 - 10 Min.	22
0.3 - 30 Min.	15
0.6 - 60 Min.	16
1.2 - 120 Min.	17

** TIMING DANGE TARLE

Sockets & Accessories available

Build your Time Delay Relays with the Online Product Builder



- Onboard & remote adjustable or fixed time delays from 0.05 seconds to 2 hours
- Uses industry-standard 11 pin octal sockets
- 10A DPDT output contacts









with appropriate



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TR-5 SERIES

Non-Programmable

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

Setting Accuracy:

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

Fixed Time Delay: ±2% or 50ms, whichever is greater

Repeat Accuracy (constant voltage and temperature):

±0.1% or ± 0.04 seconds, whichever is greater

Reset Time:

Input Voltage (All Functions) 0.100 Seconds Triggered Functions only 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 for all units

Temperature: Operating: -28° to 65°C (-18° to 149°F)

Storage: -40° to 85°C (-40° to 185°F)

Output Contacts:

(All TR-5 Series Products except TR-506 & TR-546) 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-506 & TR-546) DPDT 10A @ 240V AC; 8A @ 28V DC, 1/2 HP @ 240V AC, 1/4HP @ 120V AC B300 & R300

Life:

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

on TR-506 & TR-546 Series only)

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.

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 0.05 seconds.

IMPORTANT FOR TR-506 & TR-546 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-5 Series Products except TR-506 & TR-546)





(TR-506 & TR-546 only)



(All TR-5 Series Products)

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



DIMENSIONS

