

# TRS SERIES





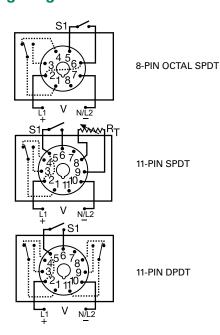


8-PIN



11-PIN

# Wiring Diagram



### **Description**

The TRS Series combines an isolated, 10A electromechanical, relay output with analog timing circuitry. False trigger of the TRS Series by a transient is unlikely because of the complete isolation of the circuit from the line prior to initiation. The initiate contact is common to one side of the line and may be utilized to operate other loads. Installation is easy due to the TRS's industry standard 8 or 11-pin plug-in base wiring.

#### Operation (Single Shot)

Input voltage must be applied to the input before and during timing. Upon momentary or maintained closure of the initiate switch (leading edge triggered), the output energizes for a measured interval of time. At the end of the delay, the output de-energizes. Opening or reclosing the initiate switch during timing has no affect on the time delay. Applying input voltage with the initiate switch closed will energize the load and begin the time delay.

Reset: Reset occurs when the time delay is complete and the initiate switch is opened. Loss of input voltage resets the time delay and output.

#### **Features & Benefits**

FEATURES	BENEFITS	
Complete isolation of circuit from line	No false trip due to transients	
Industry standard octal plug connection	Eliminates need for special connectors	
Isolated, 10A, SPDT or DPDT output contacts	Allows control of loads for AC or DC voltages	
Analog circuitry	Repeat accuracy + / - 2%	

# **Ordering Information**

MODEL	INPUT VOLTAGE	ADJUSTMENT	OUTPUT FORM	TIME TOLERANCE	TIME DELAY
TRS120A2X300	120VAC	Knob	8-Pin, Octal, SPDT	+ / - 20%	7 - 300s
TRS120A2Y10	120VAC	Knob	8-Pin, Octal, SPDT	+ / - 10%	0.1 - 10s
TRS24D7Z10	24VDC/28VDC	External	11-Pin, SPDT no potentiometer	+/-5%	0.1 - 10s

If you don't find the part you need, call us for a custom product 800-843-8848

# TRS SERIES

#### Accessories



#### **BZ1 Front Panel Mount Kit**

Provides an easy method of through-the-panel mounting of 8- or 11-pin plug-in timers, flashers, and other controls.



#### NDS-8 Octal 8-pin Socket

8-pin 35mm DIN rail or surface mount. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail. Uses PSC8 hold-down clips.



#### NDS-11 11-pin Socket

11-pin 35mm DIN rail or surface mount. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail. Uses PSC11 hold-down clips.



#### **PSC8 or PSC11 Hold-down Clips**

Securely mounts plug-in controls in any position. Provides protection against vibration. Use PSC8 with NDS-8 Octal Socket or PSC11 with NDS-11 Socket. Sold in sets of two.



#### P1011-6 Octal Socket for UL listing\*

8-pin surface mount socket with binder head screw terminals. Rated 10A @ 600VAC.



#### P0700-7 Versa-Knob

Designed for 0.25 in (6.35 mm) shaft of Versa-Pot. Semi-gloss industrial black finish.

#### Selection Guides

R <sub>T</sub> Selection Chart				
Time Delay*				
Range	R <sub>T</sub>			
Seconds	Megohm			
0.051	1.0			
0.052	2.0			
0.053	3.0			
0.15	5.0			
0.110	3.0			
130	1.5			
160	3.0			
2120	2.0			
2180	3.0			
7240	1.5			
7300	2.0			
7360	2.0			
7420	3.0			
7480	3.0			
7600	5.0			

When selecting an external R<sub>T</sub> add at least 15...30% for tolerance of unit and the R<sub>T</sub>.

External R <sub>T</sub> P/N Selection Table			
VALUE	PART NUMBER*		
1M ohm	P1004-16		
1.5M ohm	P1004-15		
2M ohm	P1004-14		
3M ohm	P1004-12		
5M ohm	P1004-13		
1M ohm	P1004-16-X		
1.5M ohm	P1004-15-X		
2M ohm	P1004-14-X		
3M ohm	P1004-12-X		
5M ohm	P1004-13-X		

<sup>\*</sup> Externally adjustable potentiometers. Numbers with additional "-X" include two pre-soldered 8" wire leads with ¼" female quick-connect terminals (for clockwise increase).

### **Specifications**

#### **Time Delay**

Type Analog circuitry Range 0.05s - 10m in 15 adjustable ranges or fixed Repeat Accuracy ±2% or 20ms, whichever is greater

Fixed Time Tolerance & **Setting Accuracy** ±5. 10. or 20% **Initiate Time** < 70ms **Reset Time** ≤ 75ms **Recycle Time** ≤ 250ms

Time Delay vs Temp. & Voltage ≤±10% Input

Voltage 24/28 or 110VDC; 24, 120, or 230VAC **Tolerance** 

24VDC/AC -15% - 20% 110 to 230VAC/DC -20% - 10% **AC Line Frequency** 50/60 Hz **Power Consumption** ≤ 3.25W Output

Type Electromechanical relay **Form** Isolated SPDT or DPDT

10A resistive @ 120/240VAC & 28VDC; Rating

1/3 hp @ 120/240VAC Mechanical - 1 x 107; Electrical - 1 x 106

Protection > 100 MO

Insulation Resistance Isolation Voltage ≥ 1500V RMS between input & output terminals **Polarity** DC units are reverse polarity protected

Mechanical

Life

Mounting Plug-in socket **Termination** 

Octal 8-pin plug-in or 11-pin plug-in **H** 60.7 mm (2.39"); **W** 45.2 mm (1.78") **Dimensions** 

**D** 91.6 mm (3.62")

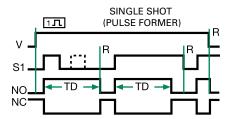
#### **Environmental**

Operating/Storage

**Temperature** -20° to 65°C/-30° to 85°C Weight

 $\approx$  6 oz (170 g)

## **Function Diagram**



V = Voltage

S1 = Initiate Switch

NO = Normally

Open Contact

NC = Normally

**Closed Contact** 

TD = Time Delay

R = Reset

<sup>\*8-</sup>pin models UL listed when used in combination with P1011-6 socket only.

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# Littelfuse:

TRS24D7Z10 TRS120A2Y10 TRS120A2X300