

TRM SERIES



*8-pin models UL listed when used in combination with P1011-6 socket only.



8-PIN



11-PIN

Description

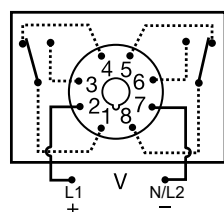
The TRM Series is a combination of analog electronic circuitry and electromechanical relay output. It provides input to output isolation with a wide variety of input voltages and time ranges. Standard plug-in base wiring, fast reset, rugged enclosure, and good repeat accuracy make the TRM a select choice in any OEM application.

Operation (Delay-on-Make)

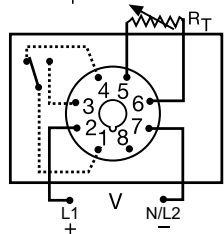
Upon application of input voltage, the time delay begins. The output is de-energized before and during the time delay. At the end of the time delay, the output relay energizes and remains energized until input voltage is removed.

Reset: Removing input voltage resets the time delay and output.

Wiring Diagram



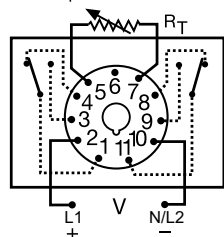
8-pin octal DPDT



8-pin octal SPDT

V = Voltage

R_T is used when external adjustment is ordered. Relay contacts are isolated.



11-pin DPDT

Features & Benefits

FEATURES	BENEFITS
Electronic circuitry with electromechanical relay	Repeat Accuracy + / - 2%
Isolated 10A, SPDT or DPDT output contacts	Allows control of loads for AC or DC voltages.

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.

Ordering Information

MODEL	INPUT VOLTAGE	ADJUSTMENT	OUTPUT	TIME TOLERANCE	TIME DELAY
TRM120A2X30	120VAC	Knob	Octal, DPDT	+/- 20%	1 - 30s
TRM120A2Y120	120VAC	Knob	Octal, DPDT	+/- 10%	2 - 120s
TRM120A2Y180	120VAC	Knob	Octal, DPDT	+/- 10%	2 - 180s
TRM24A8Y5	24VAC	External	Octal, SPDT without potentiometer	+/- 10%	0.1 - 5s
TRM24D1X10	24VDC/28VDC	Fixed	Octal, DPDT	+/- 20%	10s
TRM24D1X2	24VDC/28VDC	Fixed	Octal, DPDT	+/- 20%	2s

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

TRM SERIES

Accessories



P1011-6 Octal Socket for UL listing*

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



P1004-13, P1004-13-X Versa-Pot

Panel mountable, industrial potentiometer recommended for remote time delay adjustment.



P0700-7 Versa-Knob

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

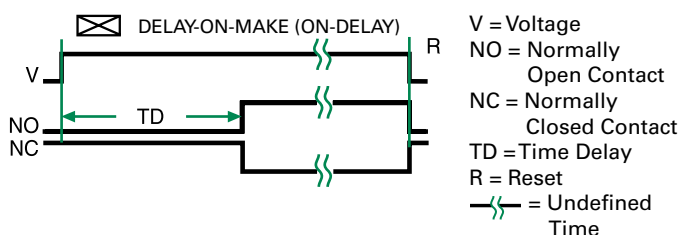
Selection Guides

R _T Selection Chart	
Time Delay*	
Range	R _T
Seconds	Megohm
0.05...1	1.0
0.05...2	2.0
0.05...3	3.0
0.1...5	5.0
0.1...10	3.0
1...30	1.5
1...60	3.0
2...120	2.0
2...180	3.0
7...240	1.5
7...300	2.0
7...360	2.0
7...420	3.0
7...480	3.0
7...600	5.0

External R _T 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

* When selecting an external R_T add at least 15...30% for tolerance of unit and the R_T.

Function Diagram



Specifications

Time Delay

Type

Range

Repeat Accuracy

Fixed Time Tolerance &

Setting Accuracy

Reset Time

Recycle Time

Analog circuitry

50ms - 10m in 15 adjustable ranges or fixed

±2% or 20 ms, whichever is greater

±5, 10, or 20%

≤ 50ms

After timing: ≤ 20ms

During timing: 0.1% of max. time delay or

75ms, whichever is greater

Time Delay vs Temp.

& Voltage

Input

Voltage

Tolerance

24VDC/AC

110 to 230VAC/DC

AC Line Frequency

Power Consumption

Output

Type

Form

Rating

≤±10%

24 or 110VDC; 24, 120, or 230VAC

-15% - 20%

-20% - 10%

50/60 Hz

≤ 2.25W

Electromechanical relay

Isolated DPDT or SPDT

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

1/3 hp @ 120/240VAC

Mechanical - 1 x 10⁷; Electrical - 1 x 10⁶

Life

Protection

Isolation Voltage

Insulation Resistance

Polarity

Mechanical

Mounting

Dimensions

Termination

Environmental

Operating/Storage

Temperature

Weight

≥ 1500V RMS between input & output terminals

≥ 100 MΩ

DC units are reverse polarity protected

Plug-in socket

H 91.6 mm (3.62"); **W** 60.7 mm (2.39");

D 45.2 mm (1.78")

Octal 8-pin or 11-pin plug-in

-20° to 65°C / -30° to 85°C

≈ 6 oz (170 g)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

[TRM24D1X10](#) [TRM120A2X30](#) [TRM24D1X2](#) [TRM120A2Y120](#) [TRM120A2Y180](#) [TRM24A8Y5](#)