Time Delay Relays Dedicated - Delay-on-Make



TRM SERIES







Wiring Diagram



V = Voltage

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

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

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.

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

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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	RT	
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	

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 P1004-14-X 2M ohm 3M ohm P1004-12-X P1004-13-X 5M ohm

External R_T P/N Selection Table

 * When selecting an external R_{T} add at least 15...30% for tolerance of unit and the R_{T} .

Function Diagram



V = Voltage NO = Normally Open Contact NC = Normally Closed Contact TD = Time Delay R = Reset $-\sqrt{-} = Undefined$ Time

Specifications

Time Delay Type Range Repeat Accuracy Fixed Time Tolerance & Setting Accuracy Reset Time Recycle Time

Time Delay vs Temp. & Voltage Input Voltage Tolerance 24VDC/AC 110 to 230VAC/DC AC Line Frequency Power Consumption Output Type Form Rating

Life

Protection Isolation Voltage

Insulation Resistance Polarity Mechanical Mounting Dimensions

Termination Environmental Operating/Storage Temperature Weight 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

≤±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

 \geq 1500V RMS between input & output terminals \geq 100 M Ω 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)