

Time Delay Relays

DELAY-ON-MAKE

TRM Series



Description

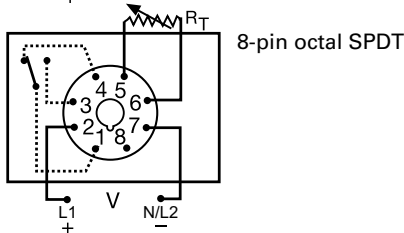
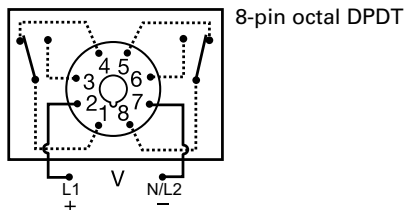
The TRM series is a combination of digital electronic circuitry and electromechanical relay output. It provides input to output isolation with a wide variety of input voltages and time ranges. Standard plug-in base wiring, fast reset, rugged enclosure, and good repeat accuracy make the TRM a select choice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



V = Voltage

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

Features & Benefits

FEATURES	BENEFITS
Electronic circuitry with electromechanical relay	Repeat Accuracy +/- 2 %
Isolated 8 A, SPDT or DPDT output contacts	Allows control of loads with independent voltage sources.

Ordering Information

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

Time Delay Relays

DELAY-ON-MAKE

Accessories



OT08PC 8-pin Octal Socket for UL listing*
8-pin 35 mm DIN-rail or surface mount. Rated at 10 A @ 600 V ac. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail.



OT11PC Octal Socket for UL listing*
11-pin surface & DIN rail mountable. Rated for 10 A @ 300 V ac



P1011-6 Octal Socket for UL listing*
8-pin surface mount socket with binder head screw terminals. Rated 10 A @ 600 V ac.



P1004-95, P1004-95-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.



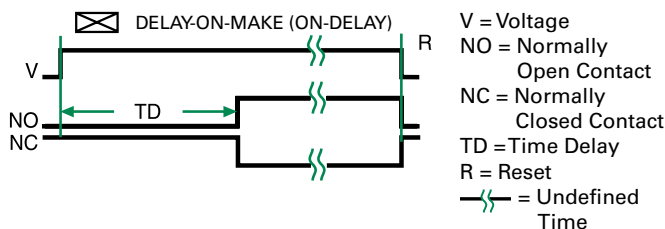
C103PM (AL) DIN Rail
35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.

Selection Guide

External R _T P/N Selection Table	
VALUE	PART NUMBER**
100K ohm	P1004-95
100K ohm	P1004-95-X

**Externally adjustable potentiometers. Numbers with additional "-X" include two pre-soldered 8" wire leads with 1/4" female quick-connect terminals (for clockwise increase).

Function Diagram



Specifications

Time Delay

Type

Digital circuitry

Range

See "Ordering Information" table

Repeat Accuracy

±2 %

Fixed Time Tolerance & Setting Accuracy

±5, 10, or 20 %

Reset Time

≤ 50 ms

Recycle Time

After timing: ≤ 20 ms

During timing: 0.1 % of max. time delay or 75 ms, whichever is greater

Time Delay vs Temp. & Voltage Indicator

≤ ±5 %

LED glows after time delay; relay is energized

Input

Voltage

24 V dc; 24, 120 V ac

Tolerance

-15 % -20 %

24 V dc/ac

-20 % -10 %

120 V ac

AC Line Frequency

50/60 Hz

Power Consumption

≤ 3.25W

Output

Type

Electromechanical relay

Form

Isolated DPDT or SPDT

Rating

8 A resistive @ 120/240 V ac;

1/3 hp @ 120/240 V ac

Mechanical - 1 x 10⁷; Electrical - 1 x 10⁶

Life

Protection

Isolation Voltage

≥ 1500 V rms between input & output terminals

Insulation Resistance

≥ 100 MΩ

Polarity

Dc units are reverse polarity protected

Mechanical

Mounting

Plug-in socket

Dimensions

H 44.45 mm (1.75"); **W** 60.33 mm (2.38");

D (with socket) 104.78 mm (4.13")

Octal 8-pin or 11-pin plug-in

Termination

Environmental

Operating/Storage

Temperature

-20 °C to 65 °C / -30 °C to 85 °C

Weight

≈ 4 oz (113 g)

Safety Marks

UL (socket required)*

UL 508 (E57310)

*UL Listed when used with Part Number OT08-PC or RB08-PC manufactured by Custom Connector Corp.

Note: Manufacturer's recommended screw terminal torque for the OT series sockets is 12 in-lbs.

Disclaimer Notice – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at www.littelfuse.com/product-disclaimer.