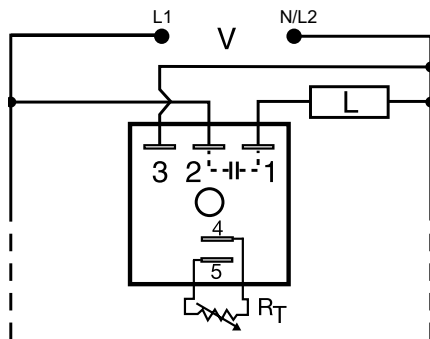


## TSD2 SERIES

### Interval Timer



### Wiring Diagram



$R_T$  is used when external adjustment is ordered.

### Description

The TSD2 Series is designed for more demanding commercial and industrial applications where small size and accurate performance are required. The factory calibration for fixed time delays is within 1% of the target time delay. The repeat accuracy, under stable conditions, is 0.1% of the time delay. The TSD Series is rated to operate over an extended temperature range. Time delays of 0.1 seconds to 100 hours are available. The output is rated 1A steady and 10A inrush. The modules are totally solid state and encapsulated to protect the electronic circuitry.

### Operation (Interval)

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

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

### Features & Benefits

FEATURES	BENEFITS
<b>Microcontroller based</b>	Repeat Accuracy +/- 0.1%, +/- 1% time delay accuracy
<b>Extended temperature range</b>	Rated to 75°C operating temperature to withstand high heat applications.
<b>Compact, low cost design</b>	Allows flexibility for OEM applications
<b>1A Steady solid-state output, 10A inrush</b>	Provides 100 million operations in typical conditions.
<b>Totally solid state and encapsulated</b>	No moving parts to arc and wear out over time and encapsulated to protect against shock, vibration, and humidity

### Accessories



#### P1004-95, P1004-95-X Versa-Pot

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



#### P1023-6 Mounting bracket

The 90° orientation of mounting slots makes installation/removal of modules quick and easy.



#### P0700-7 Versa-Knob

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



#### P1015-64 (AWG 14/16) Female Quick Connect

These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.



#### P1015-18 Quick Connect to Screw Adapter

Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.

### Ordering Information

MODEL	INPUT VOLTAGE	ADJUSTMENT	TIME DELAY
TSD2411S	120VAC	Fixed	1s
TSD24145S	120VAC	Fixed	45s
TSD241600S	120VAC	Fixed	600s
TSD2434	120VAC	Onboard	1 - 100m

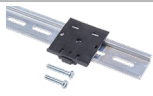
If you don't find the part you need, call us for a custom product 800-843-8848

## TSD2 SERIES

### Accessories

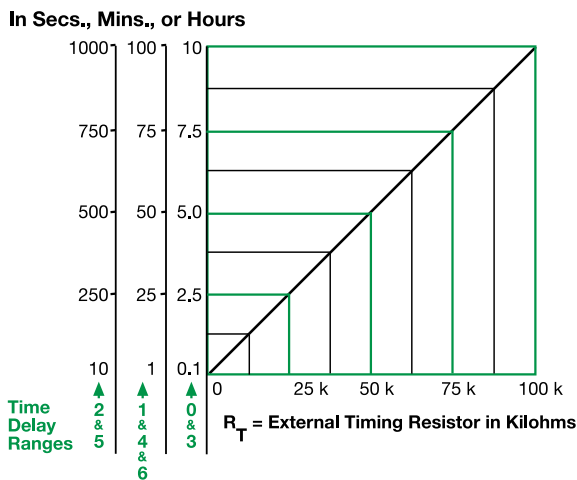


**C103PM (AL) DIN Rail**  
35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.



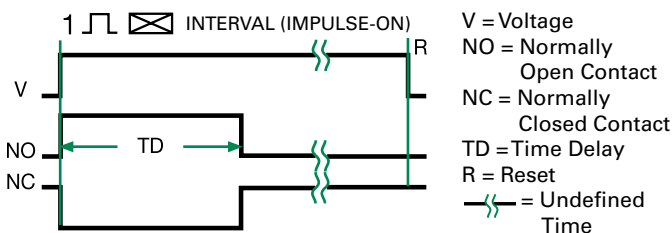
**P1023-20 DIN Rail Adapter**  
Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.

### External Resistance vs. Time Delay



This chart applies to externally adjustable part numbers. The time delay is adjustable over the time delay range selected by varying the resistance across the  $R_T$  terminals; as the resistance increases the time delay increases. When selecting an external  $R_T$ , add the tolerances of the timer and the  $R_T$  for the full time range adjustment.  
**Examples:** 1 to 50 S adjustable time delay, select time delay range 1 and a 50 K ohm  $R_T$ . For 1 to 100 S use a 100 K ohm  $R_T$ .

### Function Diagram



### Specifications

<b>Time Delay Range</b>	0.1s - 100h in 7 adjustable ranges or fixed
<b>Repeat Accuracy Tolerance (Factory Calibration)</b>	±0.1% or 20ms, whichever is greater
<b>Reset Time</b>	≤ ±1%
<b>Time Delay vs. Temperature &amp; Voltage</b>	≤ 150ms
<b>Input Voltage</b>	≤ ±1%
<b>Tolerance</b>	24, 120, or 230VAC
<b>AC Line Frequency</b>	±20%
<b>Power Consumption</b>	50/60 Hz
<b>Output Type</b>	≤ 2VA
<b>Form</b>	Solid state
<b>Maximum Load Current</b>	NO, closed during timing
<b>Off State Leakage Current</b>	1A steady state, 10A inrush at 60°C
<b>Voltage Drop</b>	≈ 5mA @ 230VAC
<b>Protection Circuitry</b>	≈ 2.5V @ 1A
<b>Dielectric Breakdown</b>	Encapsulated
<b>Insulation Resistance</b>	≥ 2000V RMS terminals to mounting surface
<b>Mechanical Mounting</b>	≥ 100 MΩ
<b>Dimensions</b>	Surface mount with one #10 (M5 x 0.8) screw <b>H</b> 50.8 mm (2"); <b>W</b> 50.8 mm (2"); <b>D</b> 30.7 mm (1.21")
<b>Termination</b>	0.25 in. (6.35 mm) male quick connect terminals
<b>Environmental Operating/Storage Temperature</b>	-40° to 75°C / -40° to 85°C
<b>Humidity</b>	95% relative, non-condensing
<b>Weight</b>	≈ 2.4 oz (68 g)

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Time Delay & Timing Relays](#) category:*

*Click to view products by [Littelfuse](#) manufacturer:*

Other Similar products are found below :

[5NO30](#) [614-11B-0A2](#) [614-11B-0A3](#) [614-11B-0A4](#) [614-11B-0A6](#) [614-11B-0A8](#) [614-11C-0A1](#) [614-11C-0A2](#) [614-11C-0A5](#) [614-11Q-0A3](#) [614-11Q-0A6](#) [614-11T-0A3](#) [614-11T-0A6](#) [614-11T-0A7](#) [614-12B-4A1](#) [614-12C-400](#) [614-12Q-400](#) [614-12T-600](#) [614-22T-4A1](#) [614-43B-400](#) [614-43C-100](#) [614-43F-200](#) [614-43Q-0A2](#) [614-43Q-100](#) [614-43Q-600](#) [614-43T-0A9](#) [614-43T-600](#) [614-43U-400](#) [614-43U-4A1](#) [614-43U-6A2](#) [615-21T-200](#) [655-11T-100](#) [655-11U-500](#) [655-12T-300](#) [655-22T-400](#) [655-22T-600](#) [CUA-41-30001](#) [CUA-41-30030](#) [CUA-41-70180](#) [CUA-41-71038](#) [CUA-42-30005](#) [CUA-42-30010](#) [CUA-42-30120](#) [CUA-42-70120](#) [CUA-99-72502](#) [CUC-41-30030](#) [CUF-42-30010](#) [CUH-41-31006](#) [7012AFX](#) [7012GD](#)