

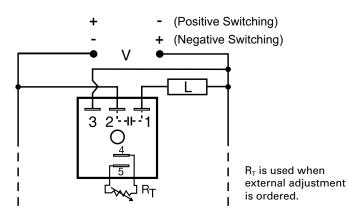
Interval Timer



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Wiring Diagram



Ordering Information

MODEL	INPUT VOLTAGE	ADJUSTMENT	TIME DELAY	SWITCHING MODE	
TSD6113SP	12VDC	Fixed	3s	Positive	
TSD61115SP	12VDC	Fixed	15s	Positive	
TSD6113SN	12VDC	Fixed	3s	Negative	
TSD6310.8SN	24VDC	Fixed	0.8s	Negative	
TSD631380SP	24VDC	Fixed	380s	Positive	
TSD6320P	24VDC	External	0.1 - 10s	Positive	

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

Description

The TSD6 Series offers total solid-state, interval timing for 12 or 24VDC applications. This series provides either negative or positive switching. The TSD6 Series is designed for more demanding commercial and industrial applications where small size and accurate performance is 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 TSD6 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 energizes 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 the output.

Features & Benefits

FEATURES	BENEFITS		
Microcontroller based	Repeat Accuracy + / - 0.1%, + / -1% time delay accuracy		
Extended temperature range	Rated to 75°C operating temperature to withstand high heat applications.		
Compact, low cost design	Allows flexiblility for OEM applications		
1A Steady solid-state output, 10A inrush	Provides 100 million operations in typical conditions.		
Totally solid state and encapsulated	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





P0700-7 Versa-Knob

P1023-6 Mounting bracket

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

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

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



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.







Accessories



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.



C103PM (AL) DIN Rail

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

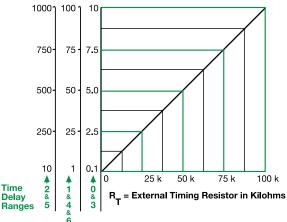


P1023-20 DIN Rail Adapter

Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.

External Resistance vs. Time Delay



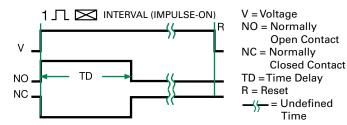


This chart applies to externally adjustable part numbers.

The time delay is adjustable over the time delay range selected by varying the resistance across the $R\tau$ terminals; as the resistance increases the time delay increases.

When selecting an external RT, add the tolerances of the timer and the RT for the full time range adjustment. **Examples:** 1 to 50 S adjustable time delay, select time delay range 1 and a 50 K ohm RT. For 1 to 100 S use a 100 K ohm RT.

Function Diagram



Specifications

Time Delay Range **Repeat Accuracy** Tolerance (Factory Calibration) $\leq \pm 1\%$ **Reset Time** ≤ 150ms Time Delay vs. Temperature & Voltage ≤ ±1% Input Voltage 12 or 24VDC Tolerance ±15% **DC Ripple** ±10% **Power Consumption** $\leq 1W$ Output Type Solid state, positive or negative switching Form NO, closed during timing **Maximum Load Current** 1A steady state, 10A inrush at 60°C **Off State Leakage Current** ≅ 1mA ≅ 1.0V @ 1A **Voltage Drop** Protection Circuitry **Dielectric Breakdown Insulation Resistance** Polarity Mechanical Mounting Dimensions

terminals Environmental **Operating/Storage** Temperature Humidity Weight

0.1s - 100h in 7 adjustable ranges or fixed ±0.1% or 20ms, whichever is greater

Termination

Encapsulated ≥ 2000V RMS terminals to mounting surface $\geq 100 \text{ M}\Omega$ Units are reverse polarity protected

Surface mount with one #10 (M5 x 0.8) screw **H** 50.8 mm (2"); **W** 50.8 mm (2"); **D** 30.7 mm (1.21") 0.25 in. (6.35 mm) male quick connect

-40° to 75°C / -40° to 85°C 95% relative, non-condensing ≈ 2.4 oz (68 g)