

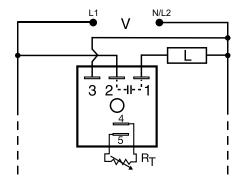
TSD3411S

Recycling Timer





Wiring Diagram



 $R_{\scriptscriptstyle T}$ is used when external adjustment is ordered.

Description

The TSD3411S is a solid-state ON/OFF recycling timer with the on time always equal to the off time. When time delay is changed by the RT, both the ON and the OFF periods are changed. The TSD 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 TSD3411S 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 (Recycling Flasher - ON Time First)

Upon application of input voltage, the output energizes and the T1, ON time begins. At the end of the ON time, the output de-energizes and the T2 OFF time begins. At the end of the OFF time, the output energizes and the cycle repeats as long as input voltage is applied.

Reset: Removing input voltage resets the output and time delays, and returns the sequence to the T1 ON time.

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

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



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.



P1023-6 Mounting bracket

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



C103PM (AL) DIN Rail

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



P0700-7 Versa-Knob

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



P1023-20 DIN Rail Adapter

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



P1015-64 (AWG 14/16)

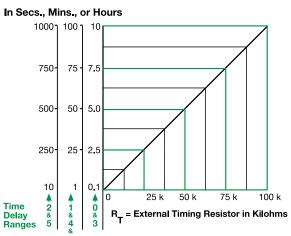
Female Quick Connect

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



TSD3411S

External Resistance vs. Time Delay



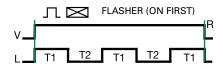
This chart applies to externally adjustable part numbers.

The time delay is adjustable over the time delay range selected by varying the resistance across the RT 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



V = Voltage L = LoadT1 = ONTimeT2 = OFFTime T1 ≅ T2 R = Reset

ON time plus OFF time equals one complete flash.

Specifications

Time Delay

Range 0.1s - 100h in 7 adjustable ranges **Repeat Accuracy** ±0.1% or 20ms, whichever is greater

Tolerance

(Factory Calibration) ≤ ±1% **Reset Time** ≤ 150ms

Time Delay vs. Temperature

& Voltage ≤ ±1%

Input

Voltage 24, 120, or 230VAC

Tolerance ±20% **AC Line Frequency** 50/60 Hz **Power Consumption** $\leq 2VA$

Output

Type Solid state

Maximum Load Current 1A steady state, 10A inrush at 60°C

≅ 5mA @ 230VAC **Off State Leakage Current** ≈ 2.5V @ 1A **Voltage Drop**

Circuitry Encapsulated

Dielectric Breakdown ≥ 2000V RMS terminals to mounting surface

Insulation Resistance $\geq 100 \ M\Omega$

Mechanical

Protection

Mounting Surface mount with one #10 (M5 x 0.8) screw

Dimensions H 50.8 mm (2"); **W** 50.8 mm (2");

D 30.7 mm (1.21")

Termination 0.25 in. (6.35 mm) male quick connect

terminals

Environmental

Operating/Storage

-40° to 75°C / -40° to 85°C **Temperature** Humidity 95% relative, non-condensing

Weight $\approx 2.4 \text{ oz } (68 \text{ g})$

单击下面可查看定价,库存,交付和生命周期等信息

>>Littelfuse(美国力特)