

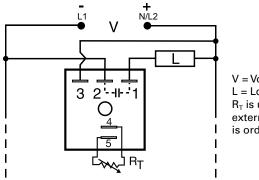
# **KSD3 SERIES**

# **Recycling Flasher**

# $(\in \mathbf{A})$



## Wiring Diagram



V = Voltage L = LoadR<sub>T</sub> is used when external adjustment is ordered.

## Description

The KSD3 Series Digi-Timer is a cost effective approach for ON/OFF recycling applications. The on time is equal to the off time. An adjustment of the  $R_{\tau}$  will change the time delays of both on and off times. This series is designed for general purpose commercial and industrial applications where a small, cost effective, reliable, solid-state timer is required. The factory calibration for fixed time delays is within 5% of the target time delay. The repeat accuracy, under stable conditions, is 0.5% of the selected time delay. This series is designed for popular AC and DC voltages. Time delays of 0.1 seconds to 1000 minutes are available in 6 ranges. 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 ON time.

### Operation (Recycling Flasher - OFF Time First)

Upon application of input voltage, the T2 OFF time begins. At the end of the OFF time, the T1 ON time begins and the load energizes. At the end of the ON time the load de-energizes, and the cycle repeats until input voltage is removed.

Reset: Removing input voltage resets the output and time delays and the sequence to the OFF time.

## Features & Benefits

FEATURES	BENEFITS		
Microcontroller based	Repeat Accuracy + / - 0.5%, + / -5% time delay accuracy		
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		

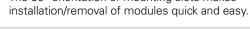
## Accessories



P1004-95, P1004-95-X Versa-Pot Panel mountable, industrial potentiometer

recommended for remote time delay adjustment.

### P1023-6 Mounting bracket The 90° orientation of mounting slots makes





## P0700-7 Versa-Knob Designed for 0.25 in (6.35 mm) shaft of

Versa-Pot. Semi-gloss industrial black finish.

## **Ordering Information**

MODEL	INPUT VOLTAGE	ADJUSTMENT	TIME DELAY	OPERATING SEQUENCE
KSD3120A	12VDC	External	0.1 - 10s	ON time first
KSD3310.1SA	24VDC	Fixed	0.1s	ON time first
KSD3415MA	120VAC	Fixed	5m	ON time first
KSD3432A	120VAC	Onboard	10 - 1000s	ON time first

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







## Accessories



## 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.



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

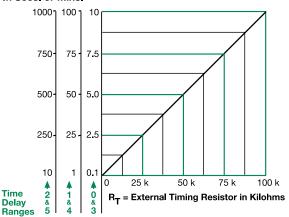


# P1023-20 DIN Rail Adapter

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

## **External Resistance vs. Time Delay**

#### In Secs. or Mins.



#### 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 tie delay increases.

When selecting an external R<sub>T</sub>, add the tolerances of the timer and the R<sub>T</sub> for the full time range adjustment.

 $\mbox{Examples:}\ 1\ to\ 50\ S\ adjustable\ time\ delay,\ select\ time\ delay\ range\ 1\ and\ a\ 50\ K\ ohn\ R_T.$  For 1 to 100 S use a 100 K ohn  $R_T.$ 

# **Specifications**

**Time Delay** Range **Repeat Accuracy** Tolerance ( **Factory Calibration**) **Reset Time** Time Delay vs. Temperature & Voltage Input Voltage Tolerance AC Line Frequency **Power Consumption** Output Type **Maximum Load Current OFF State Leakage Current Voltage Drop DC Operation** Protection Circuitry **Dielectric Breakdown** Insulation Resistance Polarity **Mechanical** Mounting Dimensions

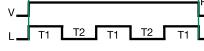
Termination

#### **Environmental**

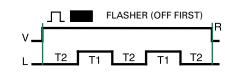
**Operating/Storage** Temperature Humidity Weight

## **Function Diagrams**





ON time plus OFF time equals one complete flash.



0.1s - 1000m in 6 adjustable ranges or fixed ±0.5% or 20ms, whichever is greater

 $\leq \pm 5\%$ ≤ 150ms

 $\leq \pm 10\%$ 

24 or 120VAC; 12 or 24VDC +20%50/60 Hz  $AC \le 2VA; DC \le 1W$ 

Solid state 1A steady state, 10A inrush at 60°C AC ≈ 5mA @ 230VAC; DC ≈ 1mA AC ≈ 2.5V @ 1A; DC ≈ 1V @ 1A Negative switching only

Encapsulated ≥ 2000V RMS terminals to mounting surface  $\geq 100 \text{ M}\Omega$ DC 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 terminals

-40° to 60°C / -40° to 85°C 95% relative, non-condensing  $\approx 2.4 \text{ oz} (68 \text{ q})$ 



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)