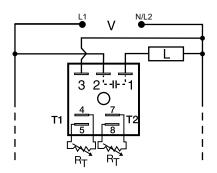
# Littelfuse Expertise Applied | Answers Delivered

### KSDR SERIES





### **Wiring Diagram**



V = Voltage L = Load

R<sub>T</sub> is used when external adjustment is ordered.

### **Ordering Information**

MODEL	INPUT VOLTAGE	T1 ON TIME	FIRST DELAY	T2 OFF TIME
KSDR40A0	120VAC	0.1 - 10s	On time	0.1 - 10s
KSDR42A4	120VAC	10 - 1000s	On time	1 - 100m

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

### **Description**

The KSDR Series offers independent time adjustment of both delay periods. The KSDR Series is recommended for air drying, automatic oiling, life testing, chemical metering, and automatic duty cycling. 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  $\pm\,5\%$  of the target delay. The repeat accuracy, under stable conditions, is 0.5% of the selected time delay. This series is designed for input voltages of 24, 120 or 230VAC. 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 - 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 T1 ON time.

### Operation (Recycling - 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 T1, T2 begins and the load de-energizes. This cycle repeats until input voltage is removed.

**Reset:** Removing input voltage resets the output and the sequence to T2 OFF time.

### **Features & Benefits**

FEATURES	BENEFITS		
Microcontroller based	Repeat Accuracy + / -0.5%, Factory calibration + / - 5%		
1A steady, 10A inrush solid-state output	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		
Wide operating temperature range: -40° to 75°C	Reliable in demanding commercial and industrial applications		
Compact, low cost design measuring 2 in. (50.8mm) square	Allows flexiblility for OEM applications		

### KSDR SERIES

### **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 guick and easy.



### P0700-7 Versa-Knob

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



P1015-13 (AWG 10/12), P1015-64 (AWG 14/16), P1015-14 (AWG 18/22) 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

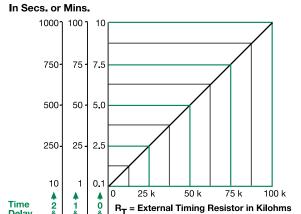
35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.



### 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**

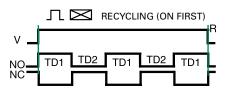


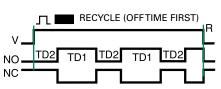
This chart applies to externally adjustable part numbers. The time delay is adjustable over the time delay range selected by varying the resistance across the  $R_T$  terminals; as the resistance increases the tie delay increases.

When selecting an external  $R_{T_{\rm s}}$  add the tolerances of the timer and the  $R_{T_{\rm s}}$  for the full time range adjustment.

**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 ohm  $R_T$ .

### **Function Diagrams**





V = Voltage

NO = Normally Open Contact

NC = Normally Closed

Contact TD1,TD2 = Time Delay

R = Reset

### **Specifications**

### **Time Delay**

Range 0.1s - 1000m in 6 ranges

±0.5% or 20ms, whichever is greater Repeat Accuracy

**Tolerance** 

(Factory Calibration)  $\leq \pm 5\%$ **Reset Time** ≤ 150ms

Time Delay vs Temp.

& Voltage  $\leq \pm 10\%$ 

Input

Voltage 24, 120, or 230VAC

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

Output

Type Solid state

Rating 1A steady state, 10A inrush at 60°C

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

**Protection** 

Circuitry Encapsulated

Dielectric Breakdown ≥ 2000V RMS terminals to mounting surface

**Insulation Resistance**  $\geq 100~M\Omega$ 

Mechanical Mounting

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

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

**D** 30.7 mm (1.21")

0.25 in. (6.35 mm) male quick connect terminals **Termination** 

**Environmental** 

Operating/Storage

**Temperature** -40° to 75°C / -40° to 85°C 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

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