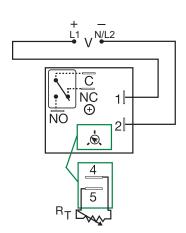
KRDI SERIES





Wiring Diagram



V = Voltage

C = Common, Transfer Contact

NO = Normally Open

NC = Normally Closed

A knob is supplied for adjustable units, or RT terminals 4 & 5 for external adjust. See external adjustment vs time delay chart.

Relay contacts are isolated.

Description

The KRDI Series is a compact time-delay relay measuring only 2 in. (50.8 mm) square. Its solid-state timing circuit provides excellent repeat accuracy and stability. Encapsulation protects against shock, vibration, and humidity. The KRDI Series is a cost effective approach for OEM applications that require small size, isolation, reliability, and long life.

Operation (Interval)

Upon application of input voltage, the time delay begins. The output relay 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 | |
|--|---|--|
| Compact, low cost design measuring 2 in. (50.8mm) square | Allows flexiblility for OEM applications | |
| Microcontroller based | Repeat Accuracy + / - 0.5%, Factory calibration + / - 5% | |
| Isolated, 10A, SPDT output contacts | Allows control of loads for AC or DC voltages | |
| Encapsulated | Protects 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 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) **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 |
|-----------|---------------|--------------|------------|
| KRDI120 | 12VDC | Onboard knob | 0.1 - 10s |
| KRDI121 | 12VDC | Onboard knob | 1 - 100s |
| KRDI122 | 12VDC | Onboard knob | 10 - 1000s |
| KRDI2110S | 24VAC/VDC | Fixed | 10s |
| KRDI2160S | 24VAC/VDC | Fixed | 60s |
| KRDI220 | 24VAC/VDC | Onboard knob | 0.1 - 10s |
| KRDI320 | 24VDC | Onboard knob | 0.1 - 10s |
| KRDI420 | 120VAC | Onboard knob | 0.1 - 10s |
| KRDI424 | 120VAC | Onboard knob | 1 - 100m |

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



KRDI 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.

Specifications

Time Delay

Range 0.1s - 100m in 5 adjustable ranges or fixed Repeat Accuracy ±0.5% or 20ms, whichever is greater

Tolerance

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

Time Delay vs Temp.

& Voltage $\leq \pm 5\%$

Input

Voltage 12, 24 or 110VDC; 24, 120 or 230VAC

Tolerance

12VDC & 24VDC/AC -15% - 20% 110VDC, 120VAC or 230VAC -20% - 10% AC Line Frequency/DC Ripple $50/60 \text{ Hz} / \le 10\%$ **Power Consumption** $AC \le 2VA$; $DC \le 2W$

Output

Type Isolated relay contacts

SPDT Form

Rating (at 40°C) 10A resistive @ 125VAC;

5A resistive @ 230VAC & 28VDC;

1/4 hp @ 125VAC

Max. Switching Voltage 250VAC

Life (Operations) Mechanical - 1 x 107; Electrical - 1 x 105

Protection

Circuitry Encapsulated

≥ 1500V RMS input to output Isolation Voltage

Insulation Resistance $\geq 100 \ M\Omega$

Polarity DC units are reverse polarity protected

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")

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

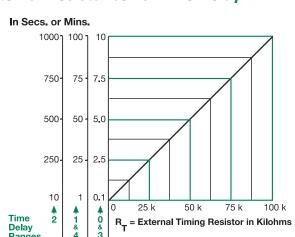
Environmental

Operating/Storage

Temperature -20° to 60°C / -40° to 85°C Humidity 95% relative, non-condensing

Weight $\approx 2.6 \text{ oz } (74 \text{ g})$

External Resistance vs. Time Delay



This chart applies to externally adjustable part numbers.

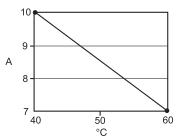
The time delay is adjustable over the time delay range selected by varying the resistance across the RT terminals; as the resistance increases the time delay increases.

= External Timing Resistor in Kilohms

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.

Output Current/Ambient Temperature

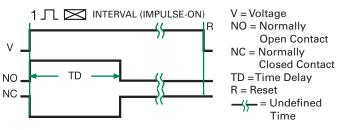


Function Diagram

Time

Delay

Ranges



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