

Recycling (Flasher) KRD3 Digi-Timer Time Delay Relay



- Compact Time Delay Relay
- Digital High Accuracy Circuitry
- Full 10 A SPDT Output Contacts
- Knob or External Adjust or Fixed Delay
- Delays from 200 ms ... 100 m
- Input Voltages from 12 ... 120 V

Description

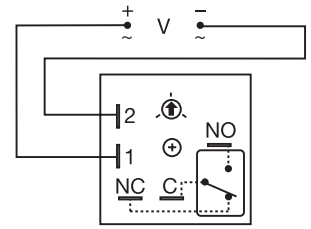
The KRD3 Series measures only 2 in. (50.8 mm) square. Its solid state digital timing circuit provides excellent repeat accuracy and stability. Encapsulation protects against shock, vibration, and humidity. The KRD3 Series is a cost effective approach for OEM applications that require small size, isolation, reliability, and long life.

Operation

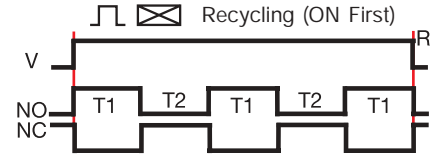
Upon application of input voltage, the output relay is energized and the ON time begins. At the end of the ON time, the output de-energizes and the OFF time begins. At the end of the OFF time, the output relay is energized and the cycle repeats as long as input voltage is applied. The OFF time may be the first delay in some recycling timers.

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

■ Approvals:



Relay contacts are isolated. Dashed lines are internal connections.



V = Voltage R = Reset T1 = ON Time
T2 = OFF Time NO = Normally Open
NC = Normally Closed

Ordering Table

| KRD3 Series | X Input | X Adjustment | X Time Delay * | X Operating Sequence |
|-------------|-----------------|--------------------------|--------------------|----------------------|
| | -1 - 12 V DC | -1 - Fixed | -0 - 0.2 ... 10 s | -A - ON Time First |
| | -2 - 24 V AC/DC | -2 - Knob Adjustment | -1 - 1 ... 100 s | -B - OFF Time First |
| | -4 - 120 V AC | -3 - External Adjustment | -2 - 10 ... 1000 s | |
| | -5 - 110 V DC | | -3 - 0.1 ... 10 m | |
| | | | -4 - 1 ... 100 m | |

Example P/N: **KRD3421A** Fixed - **KRD34110MB**

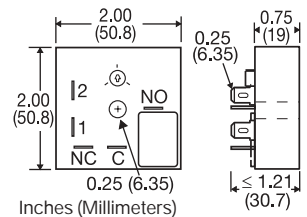
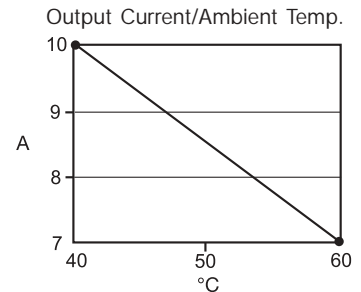
* If Fixed Delay is selected, insert delay [0.2 ... 1000] followed by (S) sec. or [0.1 ... 100] (M) min.

| Desired Time Delay* | | R _T |
|---------------------|----------------|---|
| Seconds | Minutes | |
| 0 | 1 2 3 4 | Megohm |
| 0.2 | 1 10 100 | 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 |
| 1 | 10 100 1000 | |
| 2 | 20 200 2000 | |
| 3 | 30 300 3000 | |
| 4 | 40 400 4000 | |
| 5 | 50 500 5000 | |
| 6 | 60 600 6000 | |
| 7 | 70 700 7000 | |
| 8 | 80 800 8000 | |
| 9 | 90 900 9000 | |
| 10 | 100 1000 10000 | |

* When selecting an external R_T add at least 20% for tolerance of unit and the R_T.

Technical Data

| Time Delay | |
|--------------------------------------|---|
| Type | Digital integrated circuitry |
| Range | 0.2 s ... 100 m in 5 adjustable ranges or fixed |
| Repeat Accuracy | +/-0.5 % |
| Tolerance (Factory Calibration) | ≤ +/-10% |
| Recycle Time | ≤250 ms |
| Time Delay vs. Temperature & Voltage | ≤ +/-5% |
| Input | |
| Voltage | 12, 24 or 110 V DC; 120 V AC; 24 V AC/DC |
| Tolerance | 12 V DC & 24 V DC/AC: -15% ... +20% 110 V DC & 120 V AC: -20% ... +10% |
| Line Frequency | 50 ... 60 Hz |
| Power Consumption | 12, 24 V DC: ≤ 0.65 W; 110 V DC: ≤ 2 VA |
| Output | |
| Type | Isolated relay contacts |
| Form | Single pole double throw (SPDT) |
| Rating (at 40°C) | 10 A resistive at 125 V AC 5 A resistive at 30 V DC; 1/4 hp at 125 V AC |
| Life | Mechanical -- 1 x 10 ⁷ Electrical -- 1 x 10 ⁵ for 10 A at 120 V AC |
| Protection | |
| Circuitry | Encapsulated |
| Isolation Voltage | ≥ 1500 V RMS input to output |
| Insulation Resistance | ≥ 100 MΩ |
| Polarity | DC units are reverse polarity protected |
| Mechanical | |
| Mounting | Surface mount with one #10 (M5 x 0.8) screw |
| Package | 2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm) |
| Termination | 0.25 in. (6.35 mm) male quick connect terminals |
| Environmental | |
| Operating Temperature | -20°C ... +60°C |
| Storage Temperature | -40°C ... +85°C |
| Humidity | 95% relative, non-condensing |
| Weight | ≅ 2.6 oz (74 g) |



Accessories

Female quick connect



P/N: P1015-64 (AWG14/16)

Quick connect to screw adaptor

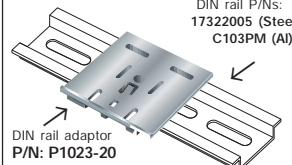


P/N: P1015-18

Mounting bracket
P/N: P1023-6



DIN rail P/Ns: 17322005 (Steel) C103PM (Al)
DIN rail adaptor
P/N: P1023-20



See accessory pages at the end of this section.