

Recycling (Pulse Generator) KRDR Digi-Timer Time Delay Relay



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- Compact Time Delay Relay
- Full 10 A SPDT Output Contacts
- Onboard Adjustment or Fixed Time Delay
- Delays from 100 ms...1000 m in 6 Ranges
- Input Voltages from 120...230V in 6 Ranges
- +/-0.5% Repeat Accuracy
- +/-5% Factory Calibration

Approvals:

Description

The KRDR 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 KRDR Series is a cost effective recycling timer for OEM applications that require small size, isolation, reliability, and long life.

Operation (ON Time First)

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

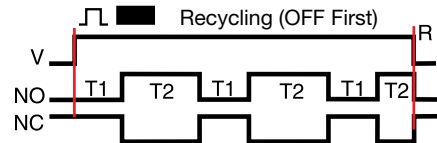
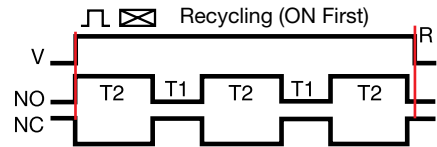
Reset: Removing input voltage resets the output and the time delays, and returns the sequence to the ON time.

Operation (OFF Time First)

Upon application of input voltage, the T1 OFF time begins. At the end of the OFF time, the T2 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.

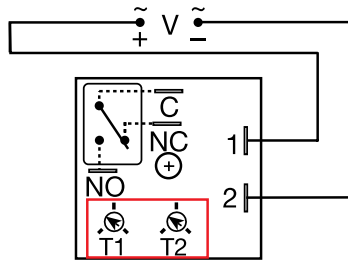
Reset: Removing input voltage resets the output and the sequence to the OFF time.

Function



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

Connection



T1 = OFF Time T2 = ON Time

A knob is supplied for adjustable units. Dashed lines are internal connections.

Ordering Table

| KRDR Series | X Input | X Adjustments | X T2, ON Time * | X Operating Sequence | X T1, OFF Time * |
|-------------|----------|-----------------------------------|--------------------|----------------------|--------------------|
| -1 | 12 V DC | -1 - Both Times Fixed | -0 - 0.1 ... 10 s | -A - ON Time First | -0 - 0.1 ... 10 s |
| -2 | 24 V AC | -2 - Both Times Adj. | -1 - 1 ... 100 s | -B - OFF Time First | -1 - 1 ... 100 s |
| -3 | 24 V DC | -3 - ON Time Adj. | -2 - 10 ... 1000 s | | -2 - 10 ... 1000 s |
| -4 | 120 V AC | OFF Time Fixed | -3 - 0.1 ... 10 m | | -3 - 0.1 ... 10 m |
| -5 | 110 V DC | -4 - ON Time Fixed, OFF Time Adj. | -4 - 1 ... 100 m | | -4 - 1 ... 100 m |
| -6 | 230 V AC | | -5 - 10 ... 1000 m | | -5 - 10 ... 1000 m |

* If Fixed Delay is selected, insert delay [0.1 ... 999] followed by (S) sec. or (M) min.

Example P/N: KRDR421A1 = 120 V AC, ON Time and OFF Time Onboard Adjustable, with ON Time from 1 to 100 seconds, ON Time First Operation, with OFF Time from 1 to 100 seconds

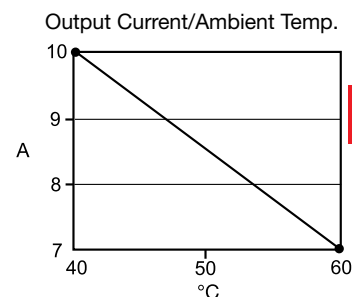
Fixed- KRDR631B0.5S = 230 V AC, ON Time Onboard Adjustable from 1 to 100 seconds, OFF Time First Operation, with OFF Time

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Dedicated
timers

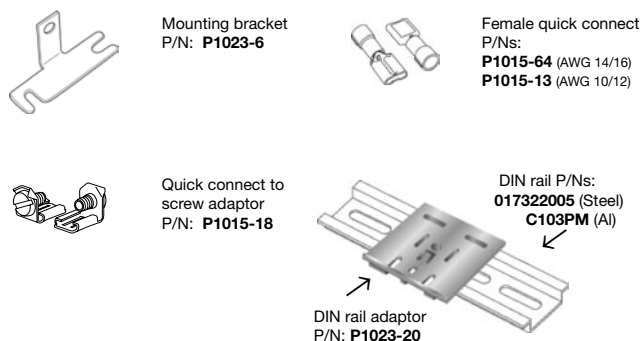
Technical Data

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|--|--|
| Time Delay Range Repeat Accuracy Tolerance (Factory Calibration) Reset Time Time Delay vs. Temperature & Voltage | 0.1 s ... 1000 m in 6 adjustable ranges or fixed +/-0.5 % or 20 ms, whichever is greater ≤ +/-5% ≤ 150 ms ≤ +/-5% |
| Input Voltage Tolerance AC Line Frequency/DC Ripple Power Consumption | 12, 24 or 110 V DC; 24, 120 or 230 V AC -15% ... +20% -20% ... +10% 50 ... 60 Hz / ≤ 10% AC ≤ 2 VA; DC ≤ 2 W |
| Output Type Form Rating (at 40°C) Max. Switching Voltage Life (Operations) | Isolated relay contacts Single pole double throw (SPDT) 10 A resistive at 125 V AC 5 A resistive at 230 V AC & 28 V DC; 1/4 hp at 125 V AC 250 V AC Mechanical -- 1×10^7 ; Electrical -- 1×10^5 |
| Protection Circuitry Isolation Voltage Insulation Resistance Polarity | Encapsulated ≥ 1500 V RMS input to output ≥ 100 MΩ DC units are reverse polarity protected |
| Mechanical Mounting Package Termination | Surface mount with one #10 (M5 x 0.8) screw 2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm) 0.25 in. (6.35 mm) male quick connect terminals |
| Environmental Operating/Storage Temperature Humidity Weight | -20°C ... +60°C/-40°C ... +85°C 95% relative, non-condensing ≅ 2.6 oz (74 g) |



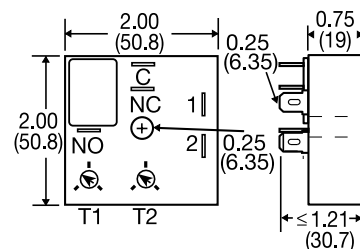
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Accessories



See accessory pages for specifications.

Mechanical View



Inches (Millimeters)

T1 = OFF time T2 = ON time
 A knob is supplied for adjustable time delays