

## Recycling (Flasher) KRD3 Digi-Timer Time Delay Relay



- Compact Tim
- Digital H
- Full 1
- Knob o
- Delays fr
- Input Volt

**Obsolete Specification**  
 Redesigned product is available  
 see new specifications at:  
[www.ssac.com/standard/standard.htm](http://www.ssac.com/standard/standard.htm)



### Description

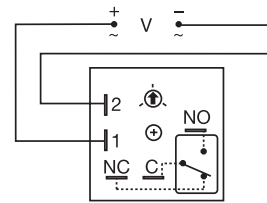
The KRD3 Series measures only 2 in. (50.8 mm) square. Its solid state digital timing circuit provides excellent repeat accuracy and stability. Encapsulation protects against shock, vibration, and humidity. The KRD3 Series is a cost effective approach for OEM applications that require small size, isolation,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

### Operation

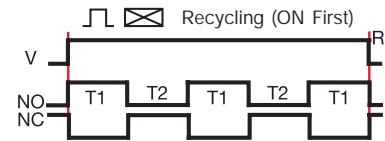
Upon application of input voltage, the output relay is energized and the ON time begins. At the end of the ON time, the output de-energizes and the OFF time begins. At the end of the OFF time, the output relay is energized and the cycle repeats as long as input voltage is applied. The OFF time may be 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	Input	Adjustment	Time Delay *	Operating Sequence
X	-1 - 12 V DC	X	-0 - 0.2 ... 10 s	X
	-2 - 24 V AC/DC	-1 - Fixed	-1 - 1 ... 100 s	-A - ON Time First
	-4 - 120 V AC	-2 - Knob Adjustment	-2 - 10 ... 1000 s	-B - OFF Time First
	-5 - 110 V DC	-3 - External Adjustment	-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.

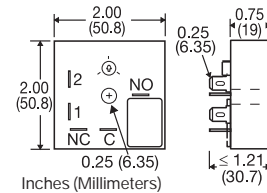
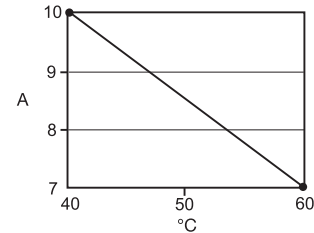
Desired Time Delay*		R <sub>T</sub>			
Seconds	Minutes				
0	1	2	3	4	Megohm
0.2	1	10	0.1	1	0.0
1	10	100	1	10	0.1
2	20	200	2	20	0.2
3	30	300	3	30	0.3
4	40	400	4	40	0.4
5	50	500	5	50	0.5
6	60	600	6	60	0.6
7	70	700	7	70	0.7
8	80	800	8	80	0.8
9	90	900	9	90	0.9
10	100	1000	10	100	1.0

\* When selecting an external R<sub>T</sub> add at least 20% for tolerance of unit and the R<sub>T</sub>.

### 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 <sup>7</sup> Electrical -- 1 x 10 <sup>5</sup> 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)

Output Current/Ambient Temp.



### Accessories

Female quick connect



P/N:

P1015-64 (AWG 14/16)

Quick connect to screw adaptor

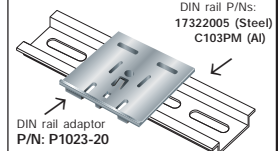


P/N:

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.