

Delay On Make (Operate) KRDM Digi-Timer Time Delay Relay



■ Compact
■ Digital
■ Full
■ Knob
■ Delays
■ Input Volt

Obsolete Specification
Redesigned product is available
see new specifications at:
www.ssac.com/standard/standard.htm

TEN YEAR
WARRANTY

■ Compact
■ Digital
■ Full
■ Knob
■ Delays
■ Input Volt

Fixed Delay
100 m
12 ... 120 V

Description

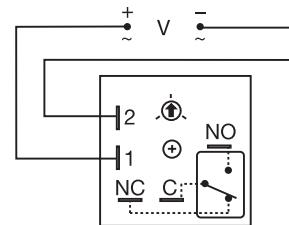
The KRDM Series is a compact time delay relay measuring only 2 in. (50.8 mm) square. Its solid state digital timing circuit provides excellent repeat accuracy and stability. Encapsulation protects against shock, vibration, and humidity. The KRDM Series is a cost effective approach for OEM applications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

Operation

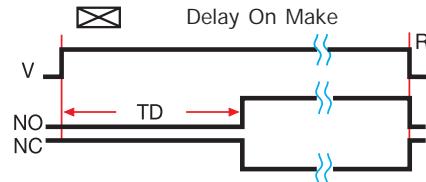
Upon application of input voltage, the time delay begins. The output is de-energized before and during the time delay. At the end of the time delay, the output relay is energized and remains energized until input voltage is removed.

Reset: Removing input voltage resets the time delay and output.

■ Approvals:



Relay contacts are isolated. Dashed lines are internal connections.



V = Voltage TD = Time Delay R = Reset
NO = Normally Open NC = Normally Closed
— = Undefined time

Ordering Table

KRDM Series	X	X	X
Input	Adjustment	Time Delay *	
1 - 12 V DC	1 - Fixed	0 - 0.2 ... 10 s	
2 - 24 V AC/DC	2 - Knob	1 - 1 ... 100 s	
3 - 24 V DC	Adjustment	2 - 10 ... 1000 s	
4 - 120 V AC	3 - External	3 - 0.1 ... 10 m	
5 - 110 V DC	Adjustment	4 - 1 ... 100 m	

Time Delay *

- 0 - 0.2 ... 10 s
- 1 - 1 ... 100 s
- 2 - 10 ... 1000 s
- 3 - 0.1 ... 10 m
- 4 - 1 ... 100 m

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

Example P/N: KRDM421 Fixed - KRDM4120S

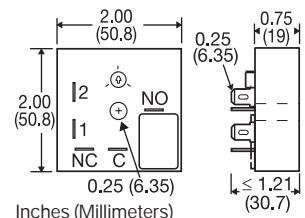
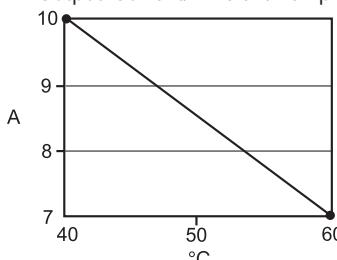
Technical Data

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 or 110 V DC; 120 V AC; 24 V AC/DC
Tolerance	12 V DC & 24 V AC/DC 110 V DC & 120 V AC
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 -- 1×10^7 Electrical -- 1×10^5 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)

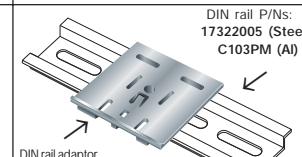
RT Selection Chart					
Desired Time Delay*					RT
Seconds		Minutes			
0	1	2	3	4	Megohm
0.2	1	10	0.1	1	0.0
1	10	100	1	10	0.1
2	20	200	2	20	0.2
3	30	300	3	30	0.3
4	40	400	4	40	0.4
5	50	500	5	50	0.5
6	60	600	6	60	0.6
7	70	700	7	70	0.7
8	80	800	8	80	0.8
9	90	900	9	90	0.9
10	100	1000	10	100	1.0

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

Output Current/Ambient Temp.



Accessories

 P/N: P1015-64 (AWG 14/16)	 P/N: P1015-18
 P/N: P1023-6	 DIN rail P/Ns: 17322005 (Steel) C103PM (Al)
	See accessory pages at the end of this section.