

Recycling (Pulse Generator) TDR Digi-Set Time Delay Relay



- Switch Setable Time Delays - Both Times Adjustable
- 0.1 s ... 2.8 h in 3 Ranges
- Digital Circuitry +/-0.1% Repeat Accuracy
- 10 A DPDT Isolated Relay Contacts
- Octal Plug-in Base Connection

Description

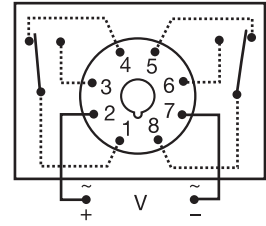
The TDR Series of time delay relays are comprised of digital circuitry and a separate oscillator to provide high accuracy and stability. The ON and OFF delays are selected by means of ten binary switches, which allow the setting of the desired delay the first time and every time. Full 10 A isolated DPDT output contacts.

Operation

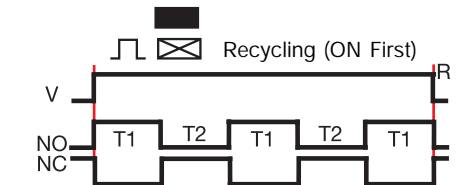
Upon application of input voltage, the output relay is energized and the ON time begins. At the end of the ON time, the output de-energizes and the OFF time begins. At the end of the OFF time, the output relay is energized and the cycle repeats as long as input voltage is applied. The OFF time may be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

Reset: Removing input voltage resets the output and 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

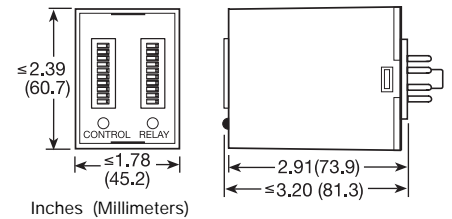
TDR Series	X Input	X Operating Sequence	X ON Time	X OFF Time
	1 - 12 V DC *	A - ON Time First B - OFF Time First	1 - 0.1 ... 102.3 s in 0.1 s increments	1 - 0.1 ... 102.3 s in 0.1 s increments
	2 - 24 V AC		2 - 1 ... 1023 s in 1 s increments	2 - 1 ... 1023 s in 1 s increments
	3 - 24 V DC		3 - 10 ... 10,230 s in 10 s increments	3 - 10 ... 10,230 s in 10 s increments
	4 - 120 V AC			
	5 - 110 V DC			
	6 - 230 V AC			

Example P/N: **TDR4A12** *Control status LED not available on 12 V DC units.

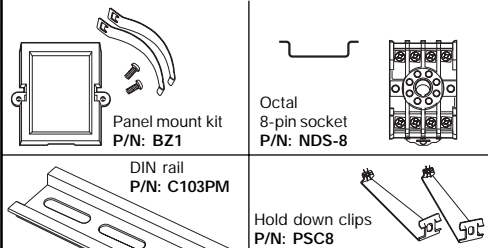
Technical Data

Time Delay		
Type		Digital integrated circuitry
Range**		0.1 ... 102.3 s in 0.1 s increments 1 ... 1023 s in 1 s increments 10 ... 10,230 s in 10 s increments
Repeat Accuracy		+/-0.1%
Setting Accuracy		+/-2%
Reset Time		≤ 150 ms
Recycle Time		≤ 500 ms
Time Delay vs. Temperature & Voltage		+/-5%
Input		
Voltage		12, 24, or 110 V DC; 24, 120, or 230 V AC
Tolerance	12 V DC & 24 V DC/AC	-15% ... + 20%
	110 ... 230 V AC/DC	-20% ... +10%
Line Frequency		50 ... 60 Hz
Output		
Type		Electromechanical relay
Form		Double pole double throw (DPDT)
Rating		10 A resistive, 1/3 Hp at 240 V AC
Life		Mechanical -- 1 x 10 ⁷ Full Load -- 1 x 10 ⁶
Protection		
Isolation Voltage		≥ 1500 V RMS input to output
Mechanical		
Mounting		Plug-in socket
Package		3.2 x 2.39 x 1.78 in. (81.3 x 60.7 x 45.2 mm)
Termination		Octal plug (8 Pin)
Environmental		
Operating Temperature		-20°C ... +60°C
Storage Temperature		-30°C ... +85°C
Weight		≅ 6 oz (170 g)

0.1...102.3		1...1023		10...10,230	
OFF	ON	OFF	ON	OFF	ON
0.1	1	1	10	10	10
0.2	2	2	20	20	20
0.4	4	4	40	40	40
0.8	8	8	80	80	80
1.6	16	16	160	160	160
3.2	32	32	320	320	320
6.4	64	64	640	640	640
12.8	128	128	1280	1280	1280
25.6	256	256	2560	2560	2560
51.2	512	512	5120	5120	5120
6.3 S		544 S		3000 S	



Accessories



See accessory pages at the end of this section.

**For CE approved applications, power must be removed from the unit when a switch position is changed.