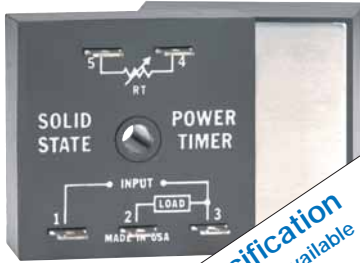


Recycling (Flasher) THD3 Digi-Power Timing Module



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

- High Load Capacity 20 A, 200 A Inrush
- Excellent Accuracy to Digital Circuitry
- Good Performance and Temperature
- Fixed or Adjustable Delays From 0.1 s ... 1000 m
- Encapsulated Fully Solid State
- Exact Equal ON and OFF Delays

Description

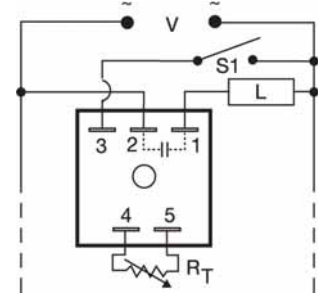
Digi-Power solid state timers combine stable C/MOS digital circuitry with high current solid state outputs of 6, 10, or 20 A. The small package with metallized mounting ensures efficient operation with a high dielectric. The THD3 Series is ideal for replacing those troublesome mechanical type timers that arc, wear, and eventually fail.

Operation

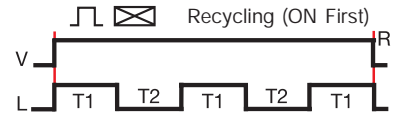
Upon application of input voltage, the output is energized and the ON time begins. At the end of the ON time, the output de-energizes and the OFF time begins. At the end of the OFF time, the output is energized and the cycle repeats as long as input voltage is applied. The OFF time may be the first delay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

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

Approvals:



R_T is used when external adjustment is ordered.



V = Voltage R = Reset L = Load
S1 = Initiate Time T1 = ON Time
T2 = OFF Time

Ordering Table

THD3 Series	Output Rating	Input	Adjustment	Operating Sequence	Time Delay *
X	A - 6 A	X	1 - Fixed	X	0 - 0.1 ... 10 s
	B - 10 A		2 - External Adjust	A - ON Time First	1 - 1.0 ... 100 s
	C - 20 A			B - OFF Time First	2 - 10 ... 1000 s
					3 - 0.1 ... 10 m
					4 - 1 ... 100 m
					5 - 10 ... 1000 m

Example P/N: **THD3B42A0**
Fixed - **THD3A41A60M**

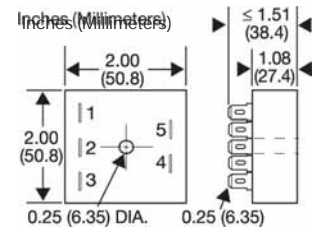
*If Fixed Delay is selected, insert delay [0.1...1000] followed by (S) secs. or (M) mins.

Technical Data

Time Delay	
Type	Digital integrated circuitry
Range	0.1 s ... 1000 m in 6 adjustable ranges or fixed
Adjustment	Single variable resistor changes both the ON & OFF times equally
Repeat Accuracy	+/-0.5%
Tolerance (Factory Calibration)	+/-1%
Linearity	≤ +/-2% for 10% to 100% of range
Time Delay vs. Temperature & Voltage	≤ +/-2%
Input	
Voltage	24, 120, or 230 V AC
Tolerance	+/-20%
Line Frequency	50 ... 60 Hz
Output	
Type	Solid state
Rating	Output Steady State Inrush**
	A 6 A 60 A
	B 10 A 100 A
	C 20 A 200 A
Minimum Load Current	100 mA
Voltage Drop	≅ 2.5 V at rated current
Leakage	8.6 mA at 230 V AC; 4.5 mA at 120 V AC; 0.9 mA at 24 V AC
Protection	
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000 V RMS terminals to mounting surface
Insulation Resistance	≥ 100 MΩ
Mechanical	
Mounting **	Surface mount with one #10 (M5 x 0.8) screw
Termination	0.25 in. (6.35 mm) male quick connect terminals
Environmental	
Operating/ Storage Temperature	-40°C ... +60°C / -40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 3.9 oz (111 g)

Desired Time Delay*	Seconds						R _T Megohm
	0	1	2	3	4	5	
0.1	1	10	0.1	1	10	0.0	
1	10	100	1	10	100	0.5	
2	20	200	2	20	200	1.0	
3	30	300	3	30	300	1.5	
4	40	400	4	40	400	2.0	
5	50	500	5	50	500	2.5	
6	60	600	6	60	600	3.0	
7	70	700	7	70	700	3.5	
8	80	800	8	80	800	4.0	
9	90	900	9	90	900	4.5	
10	100	1000	10	100	1000	5.0	

* When selecting an external R_T add at least 11% for tolerance of unit and the R_T.



Accessories

<p>Female quick connect</p> <p>P/N: P1015-64 (AWG 14/16)</p>	<p>External adjust potentiometer</p> <p>P/Ns: P1004-13 (fig A) P1004-13-X (fig B)</p>
<p>Quick connect to screw adaptor</p> <p>P/N: P1015-18</p>	<p>Plug-on adjustment module</p> <p>P/N: VTP(X)(X)</p>
<p>Versa-knob</p> <p>P/N: P0700-7</p>	

See accessory pages at the end of this section.

Time Delay	VTP P/N
0 - 0.1 ... 10 s	VTP5C
1 - 1 ... 100 s	VTP5G
2 - 10 ... 1000 s	VTP5K
3 - 0.1 ... 10 m	VTP5N
4 - 1 ... 100 m	VTP5P
5 - 10 ... 1000 m	VTP5R

**Must be bolted to a metal surface using the included heat sink compound. The maximum mounting surface temperature is 90°C. Inrush: Non-repetitive for 16 ms.