

Delay On Make (Operate) TH1 Series Power Timing Module



10 YEAR WARRANTY

- High Current 20 A with 200 A Inrush
- Solid State No Wear or Arcing
- Totally Encapsulated
- Fixed or Adjustable Delays From 0.1 ... 600 s

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

Description

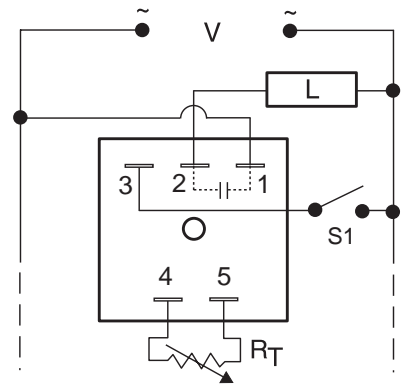
The TH1 Power Module is a solid state relay and timer combined into one compact, easy-to-use control. This highly reliable device eliminates the need for a separately purchased solid state relay.

Operation

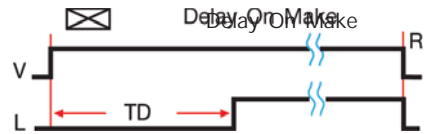
Upon application of input voltage, the time delay begins. The output is de-energized before and during the time delay. At the end of the time delay, the output is energized and remains energized until input voltage is removed.

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

Approvals:



RT is used when external adjustment is ordered.



V = Voltage L = Load S1 = Initiate Switch
TD = Time Delay R = Reset
— = Undefined time

Ordering Table

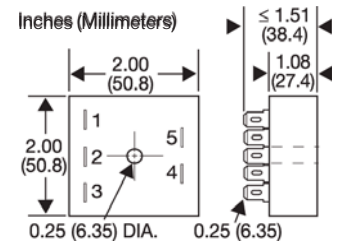
TH1 Series	X Output Rating	X Input	X Adjustment	X Time Delay *	
	A - 6 A	2 - 24 V AC	1 - Fixed	1 - 0.1 ... 3 s	*If fixed delay is selected, insert delay [0.1 ... 600] in seconds.
	B - 10 A	4 - 120 V AC	2 - External Adjust	2 - 0.5 ... 60 s	
	C - 20 A	6 - 230 V AC		3 - 2 ... 180 s	
				4 - 5 ... 600 s	

Example P/N: TH1B223 Fixed - TH1C410.1

Desired Time Delay*				
Seconds				
1	2	3	4	Me
0.1	0.5	2	5	
0.5	10	30	60	
1.0	20	60	120	
1.5	30	90	180	
2.0	40	120	240	
2.5	50	150	300	
3.0	60	180	360	
			420	
			480	
			540	
			600	

Technical Data

Time Delay	
Type	Analog circuitry
Range	0.1 ... 600 s in 4 adjustable ranges or fixed
Repeat Accuracy	+/-2% under fixed conditions
Tolerance (Factory Calibration)	≤ +/-10%
Time Delay vs. Temperature and Voltage	≤ +/-10%
Recycle Time	≤ 100 ms
Input	
Voltage	24, 120, or 230 V AC
Tolerance	+/-15%
Line Frequency	50 ... 60 Hz
Output	
Type	Solid state
Form	Normally Open, open during timing
Maximum Load Currents	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	≅ 2.0 V at rated current
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
Package	2 x 2 x 1.51 in. (50.8 x 50.8 x 38.4 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	≅ 3.9 oz (111 g)



Accessories

Female quick connect P/N: P1015-64 (AWG 14/16)		External adjust potentiometer P/N: P1004-XX	
Quick connect to screw adaptor P/N: P1015-18		Plug-on adjustment module P/N: VTP(X)(X)	
Versa-knob P/N: P0700-7			

See accessory pages at the end of this section.

**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.

Time Delay	VTP P/N	Fig. A P/N	Fig. B P/N
1 - 0.1 ... 3 s	VTP4B	P1004-12	P1004-12-X
2 - 0.5 ... 60 s	VTP4F	P1004-12	P1004-12-X
3 - 2 ... 180 s	VTP4J	P1004-12	P1004-12-X
4 - 5 ... 600 s	VTP5N	P1004-13	P1004-13-X