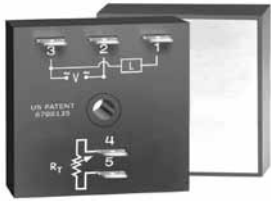


Delay On Make THD1 Digi-Power Power Timing Module



- High Load Currents up to 20 A, 200 A Inrush
- Fixed or Adjustable Delays From 0.1 s ... 1000 m
- +/-0.5% Repeat Accuracy
- +/-1% Factory Calibration
- 24, 120, or 230 V AC
- Metallized Mounting Surface for Efficient Heat Transfer
- Totally Solid State and Encapsulated

Approvals:

Accessories

B External adjust potentiometer
P/Ns:
P1004-95 (fig A)
P1004-95-X (fig B)

Female quick connect
P/Ns:
P1015-64 (AWG 14/16)
P1015-13 (AWG 10/12)

Quick connect to screw adaptor
P/N: P1015-18

Versa-knob
P/N: P0700-7

See accessory pages for specifications.

Description

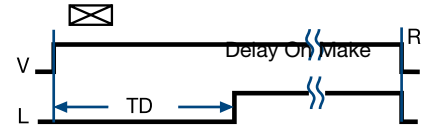
The THD Series combines accurate timing circuitry with high power solid state switching. It can switch motors, lamps, and heaters directly without a contactor. You can reduce labor, component cost, and increase reliability with these small, easy-to-use, Digi-Power timers.

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 energizes and remains energized until input voltage is removed.

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

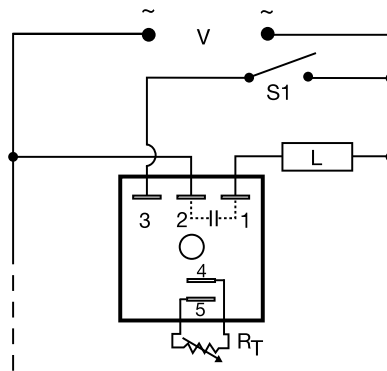
Function



V = Voltage L = Load TD = Time Delay
R = Reset

— = Undefined time

Connection



R_T is used when external adjustment is ordered.
Dashed lines are internal connections.
S1 = Optional Low Current Initiate Switch

Available Models-

THD1A413S	THD1A6110S	THD1A615S
THD1B410.5S	THD1B420	THD1C230
THD1C415M	THD1C430	THD1C433
THD1C610.1S	THD1C6110S	

Don't see what you need? Call us for a minimum quantity and price quote!

Ordering Table

THD1 Series	X Output Rating	X Input	X Adjustment	X Time Delay *
	A - 6 A	2 - 24 V AC	1 - Fixed	0 - 0.1 ... 10 s
	B - 10 A	4 - 120 V AC	2 - External Adjust	1 - 1.0 ... 100 s
	C - 20 A	6 - 230 V AC	3 - Onboard Adjust	2 - 10 ... 1000 s
				3 - 0.1 ... 10 m
				4 - 1 ... 100 m
				5 - 10 ... 1000 m

Example P/N: **THD1B223** Fixed - **THD1C410.1S**

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

Delay On Make

THD1 Digi-Power

Power Timing Module

Dedicated
timers

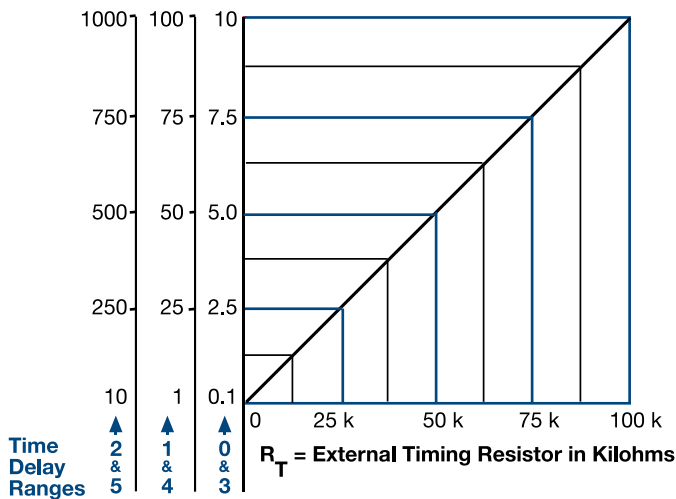
Technical Data

Time Delay	0.1 s ... 1000 m in 6 adjustable ranges or fixed		
Range	+/-0.5% or 20 ms, whichever is greater		
Repeat Accuracy	≤ +/-1%		
Tolerance (Factory Calibration)	≤ 150 ms		
Recycle Time	≤ +/-2%		
Time Delay vs. Temperature & Voltage			
Input	24, 120, or 230 V AC		
Voltage	+/-20%		
Tolerance	50 ... 60 Hz		
Line Frequency	≤ 2 VA		
Power Consumption			
Output	Solid state		
Type	Normally Open, open during timing		
Form	Output	Steady State	Inrush**
Maximum Load Current	A	6 A	60 A
	B	10 A	100 A
	C	20 A	200 A
	**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.		
Minimum Load Current	100 mA		
Voltage Drop	≅ 2.5 V at rated current		
OFF State Leakage Current	≅ 5 mA at 230 V AC		
Protection	Encapsulated		
Circuitry	≥ 2000 V RMS terminals to mounting surface		
Dielectric Breakdown	≥ 100 MΩ		
Insulation Resistance			
Mechanical	Surface mount with one #10 (M5 x 0.8) screw		
Mounting **	0.25 in. (6.35 mm) male quick connect terminals		
Termination			
Environmental	-40°C ... +60°C / -40°C ... +85°C		
Operating/Storage Temperature	95% relative, non-condensing		
Humidity	≅ 3.9 oz (111 g)		
Weight			

5

External Resistance vs Time Delay

In Secs. or Mins.



This chart applies to externally adjustable part numbers.

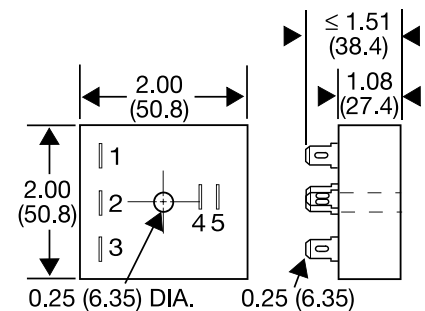
The time delay is adjustable over the time delay range selected by varying the resistance across the R_T terminals; as the resistance increases the time delay increases.

When selecting an external R_T , add the tolerances of the timer and the R_T for the full time range adjustment.

Examples: 1 to 50 S adjustable time delay, select time delay range 1 and a 50 K ohm R_T . For 1 to 100 S use a 100 K ohm R_T .

Mechanical View

Fixed & External Adjust



Onboard Adjust

