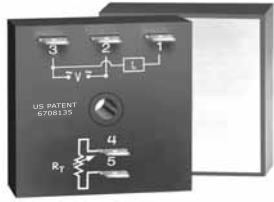


Interval (Single Pulse On Operate) THD2 Digi-Power Power Timing Module



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- 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:

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.

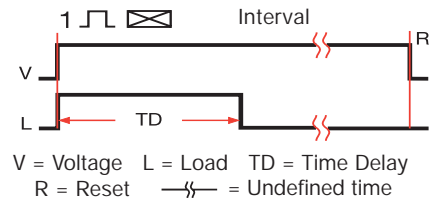
Operation

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

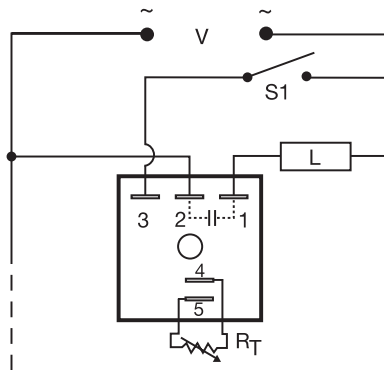
Reset:

Removing input voltage resets the time delay and the output.

Function

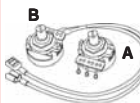


Connection



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

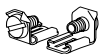
Accessories



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.

Ordering Table

THD2 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: THD2A620 Fixed – THD2C410.1S

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

Interval (Single Pulse On Operate)

THD2 Digi-Power Power Timing Module

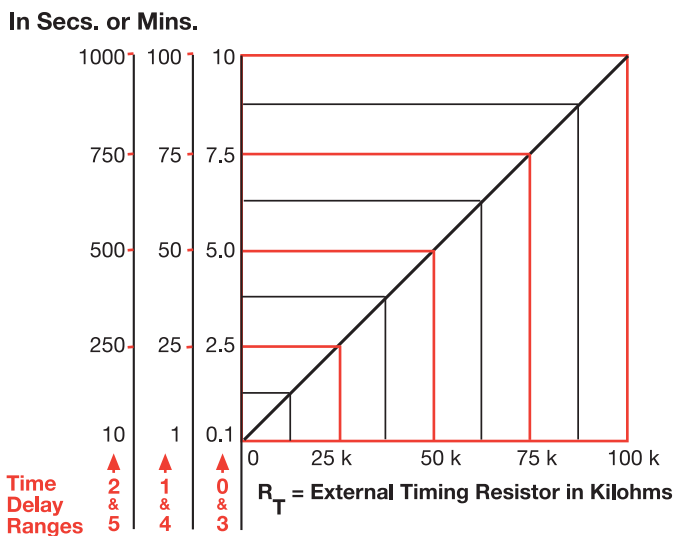
Technical Data

Time Delay			
Range	0.1 s ... 1000 m in 6 adjustable ranges or fixed		
Repeat Accuracy	+/-0.5% or 20 ms, whichever is greater		
Tolerance (Factory Calibration)	≤ +/-1%		
Reset Time	≤ 150 ms		
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		
Form	Normally Open, closed during timing		
Maximum Load Current	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		
OFF State Leakage Current	≅ 5 mA at 230 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)		

**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.

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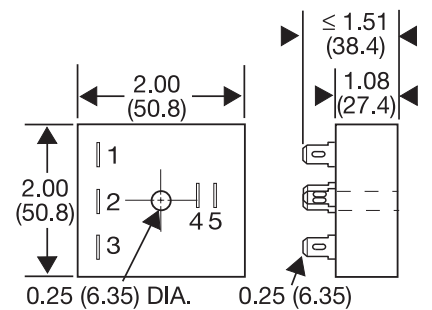
External Resistance vs Time Delay



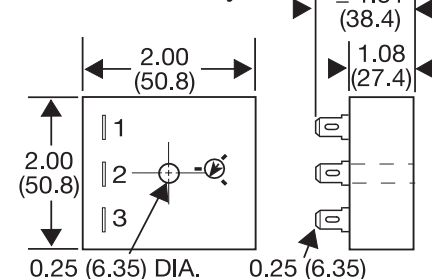
This chart applies to externally adjustable part numbers.
 The time delay is adjustable over the time delay range selected by varying the resistance across the R_T terminals; as the resistance increases the time delay increases.
 When selecting an external R_T , add the tolerances of the timer and the 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



Inches (Millimeters)