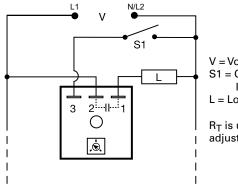


## THD1B410.5S





## Wiring Diagram



V = Voltage S1 = Optional Low Current Initiate Switch L = Load

R<sub>T</sub> is used when external adjustment is ordered.

## Description

The THD1B410.5S 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, timers.

### Operation (Delay-on-Make)

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.

### **Features & Benefits**

FEATURES	BENEFITS
Microcontroller based	Repeat Accuracy + / - 0.5%, Factory calibration + / - 1%
Compact, low cost design	Allows flexiblility for OEM applications and reduces labor and component costs
High load currents up to 20A, 200A inrush	Allows direct operation of motors, lamps, and heaters directly without a contactor
Totally solid state and encapsulated	No moving parts to arc and wear out over time and encapsulated to protect against shock, vibration, and humidity
Metalized mounting surface	Facilitates heat transfer for high current applications

### Accessories



#### P1004-95, P1004-95-X Versa-Pot

Panel mountable, industrial potentiometer recommended for remote time delay adjustment.



**P0700-7 Versa-Knob** Designed for 0.25 in (6.35 mm) shaft of Versa-Pot. Semi-gloss industrial black finish.



# P1015-13 (AWG 10/12), P1015-64 (AWG 14/16) Female Quick Connect

These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.



**P1015-18 Quick Connect to Screw Adapter** Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.



### Time Delay Relays Dedicated - Delay-on-Make



### Specifications

THD1 SERIES

### Time Delay

Range **Repeat Accuracy** Tolerance (Factory Calibration) **Recycle Time** Time Delay vs Temp. & Voltage Input Voltage Tolerance Line Frequency **Power Consumption** Output Туре Form **Maximum Load Current** 

Minimum Load Current Voltage Drop OFF State Leakage Current Protection Circuitry Dielectric Breakdown Insulation Resistance Mechanical Mounting \*\* Dimensions

Termination Environmental Operating/Storage Temperature Humidity Weight 0.1s - 1000m in 6 adjustable ranges or fixed ±0.5% or 20ms, whichever is greater ≤ ±1% ≤ 150ms

 $\leq \pm 2\%$ 

24, 120, or 230VAC ±20% 50/60 Hz ≤ 2VA

Solid state NO, open during timing

Output	Steady State	Inrush**
А	6A	60A
В	10A	100A
С	20A	200A
100mA		
≅ 2.5V@rat	ed current	
≅ 5mA@23	OVAC	
Encapsulated ≥ 2000V RMS ≥ 100 MΩ	s terminals to moun	ting surface
	nt with one #10 (M5 .0"); <b>W</b> 50.8 mm (2.	

H 50.8 mm (2.0"); ₩ 50.8 mm (2.0"); D 38.4 mm (1.51") 0.25 in. (6.35 mm) male quick connect terminals

-40° to 60°C / -40° to 85°C 95% relative, non-condensing ≅ 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 16ms.

## **External Resistance vs. Time Delay**

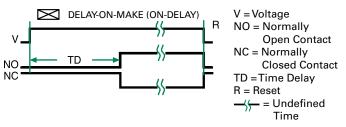


This chart applies to externally adjustable part numbers. The time delay is adjustable over the time delay range selected by varying the resistance across the  $\mathsf{R}_{\mathsf{T}}$  terminals; as the resistance increases the tie delay increases.

When selecting an external  $\mathsf{R}_T$  , add the tolerances of the timer and the  $\mathsf{R}_T$  for the full time range adjustment.

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

### **Function Diagram**



单击下面可查看定价,库存,交付和生命周期等信息

>>Littelfuse(美国力特)