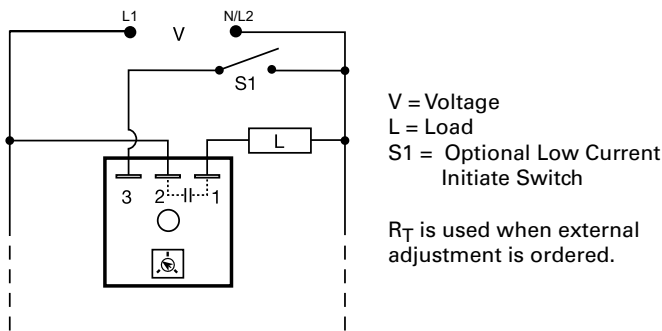


THD2 SERIES



Wiring Diagram



Description

The THD2 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 (Interval)

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.

Features & Benefits

FEATURES	BENEFITS
Microcontroller based	Repeat Accuracy + / - 0.5%, Factory calibration + / - 1%
High load currents up to 20A, 200A inrush	Allows direct control of motors, lamps and heaters 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 in high current applications
Compact, low cost design	Allows flexibility for OEM applications and reduces labor and components costs

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.

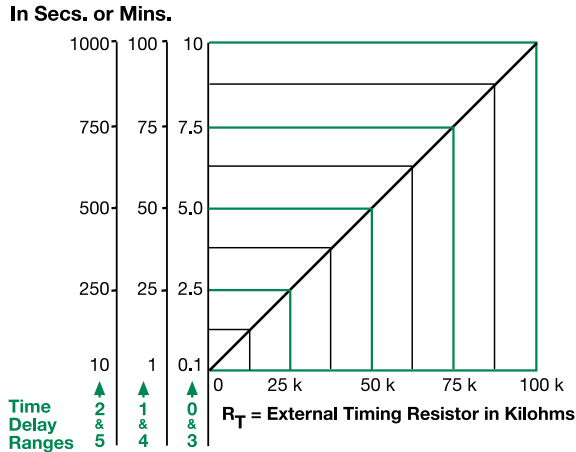
Ordering Information

MODEL	OUTPUT RATING	INPUT VOLTAGE	ADJUSTMENT	TIME DELAY
THD2C420	20A	120VAC	External	0.1 - 10s
THD2C423	20A	120VAC	External	0.1 - 10m
THD2C433	20A	120VAC	Onboard	0.1 - 10m
THD2C620	20A	230VAC	External	0.1 - 10s
THD2C633	20A	230VAC	Onboard	0.1 - 10m

If you don't find the part you need, call us for a custom product 800-843-8848

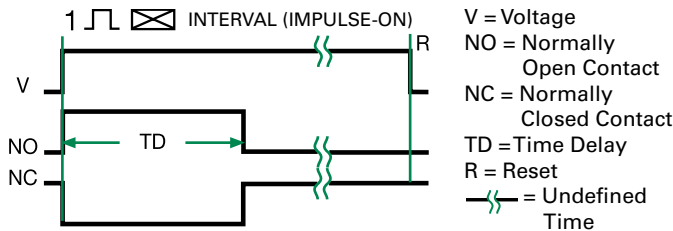
THD2 SERIES

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 .

Function Diagram



Specifications

Time Delay Range	0.1s - 1000m in 6 adjustable ranges or fixed		
Repeat Accuracy Tolerance (Factory Calibration)	±0.5% or 20ms, whichever is greater		
Reset Time	≤ 150ms		
Time Delay vs Temp. & Voltage	≤ ±2%		
Input Voltage	24, 120, or 230VAC		
Tolerance	±20%		
AC Line Frequency	50/60 Hz		
Output Type	Solid state		
Form	NO, closed during timing		
Maximum Load Current	Output	Steady State	Inrush**
	A	6A	60A
	B	10A	100A
	C	20A	200A
Minimum Load Current	100mA		
Voltage Drop	≈ 2.5V at rated current		
OFF State Leakage Current	≈ 5mA @ 230VAC		
Protection	Encapsulated		
Circuitry	≥ 2000V RMS terminals to mounting surface		
Dielectric Breakdown	≥ 100 MΩ		
Insulation Resistance	Surface mount with one #10 (M5 x 0.8) screw		
Mechanical	H 50.8 mm (2"); W 50.8 mm (2");		
Mounting**	D 38.4 mm (1.51")		
Dimensions	0.25 in. (6.35 mm) male quick connect terminals		
Termination			
Environmental			
Operating/Storage Temperature	-40° to 60°C / -40° to 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 16ms.