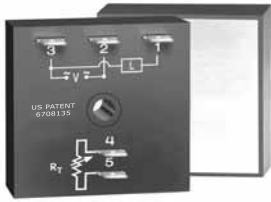


Interval (Impulse - ON) TH2 Series Power Timing Module



5

- High Load Current Capacity up to 20 A, 200 A Inrush
- Fixed or Adjustable Time Delays From 0.1 ... 600 s in 4 ranges
- +/-2% Repeat Accuracy
- +/-5% Factory Calibration
- Metallized Mounting Surface for Efficient Heat Transfer
- Solid State & Encapsulated

Approvals:

Description

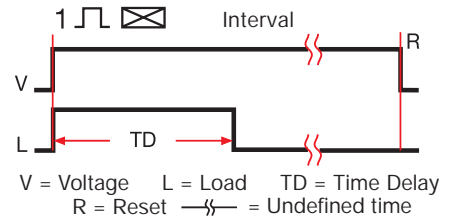
The TH2 is the combination of a timer and a solid state relay into one easy-to-use solid state molded module. When mounted to a metal surface, the TH2 Series can switch load currents up to 20 A steady state with 200 A inrush. The TH2 replaces a timer and contactor at a competitive price.

Operation

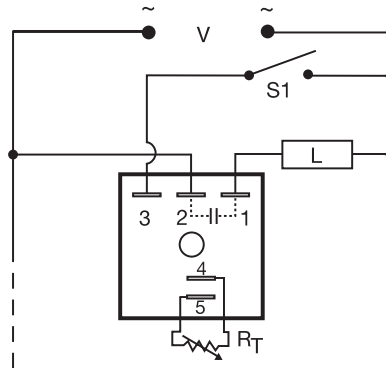
Upon application of input voltage, the time delay begins. The output energizes during the time delay. At the end of the time delay, the output de-energizes and remains de-energized until input voltage is removed.

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

Function

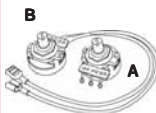


Connection



R_T is used when external adjustment is ordered.
Dashed lines are internal connections.
S1 is an optional low current initiate switch.

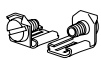
Accessories



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

TH2 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
	B - 10 A	4 - 120 V AC	2 - External Adjust	2 - 0.5 ... 60 s
	C - 20 A	6 - 230 V AC	3 - Onboard Adjust	3 - 2 ... 180 s
				4 - 5 ... 600 s

Example P/N: **TH2C422** Fixed – **TH2A410.5**

* If Fixed Delay is selected, insert delay [0.1 ... 600] in seconds.

Interval (Impulse - ON)

TH2 Series

Power Timing Module

Technical Data

Time Delay													
Range	0.1 s ... 600 s in 4 adjustable ranges, or fixed												
Repeat Accuracy	+/-2% or 20 ms, whichever is greater												
Tolerance (Factory Calibration)	≤ +/-5%												
Time Delay vs. Temperature and Voltage	≤ +/-10%												
Reset Time	≤ 150 ms												
Input													
Voltage	24, 120, or 230 V AC												
Tolerance	+/-15%												
Line Frequency	50 ... 60 Hz												
Power Consumption	≤ 2 VA												
Output													
Type	Solid state												
Form	Normally Open, closed during timing												
Maximum Load Currents	<table border="1" style="display: inline-table;"> <tr> <td>Output</td> <td>Steady State</td> <td>Inrush**</td> </tr> <tr> <td>A</td> <td>6 A</td> <td>60 A</td> </tr> <tr> <td>B</td> <td>10 A</td> <td>100 A</td> </tr> <tr> <td>C</td> <td>20 A</td> <td>200 A</td> </tr> </table>	Output	Steady State	Inrush**	A	6 A	60 A	B	10 A	100 A	C	20 A	200 A
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												
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)												

**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.

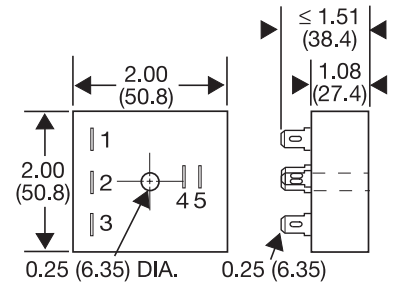
5

R _T Selection Chart				
Desired Time Delay*				R _T
Seconds				
1	2	3	4	Kohms
0.1	0.5	2	5	0
0.3	6	20	60	10
0.6	12	38	120	20
0.9	18	55	180	30
1.2	24	73	240	40
1.5	30	90	300	50
1.8	36	108	360	60
2.1	42	126	420	70
2.4	48	144	480	80
2.7	54	162	540	90
3.0	60	180	600	100

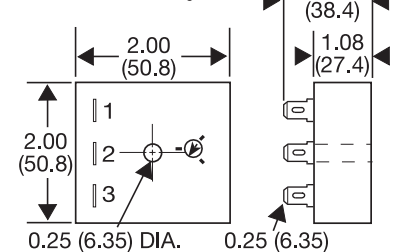
* When selecting an external R_T add at least 15% for tolerance of unit and the R_T.

Mechanical View

Fixed & External Adjust



Onboard Adjust



Inches (Millimeters)