



INSTALLATION INSTRUCTIONS

THL-8 SERIES ENCAPSULATED TIME DELAY RELAYS

March, 2016 Rev A

901-0000-320

DANGER!



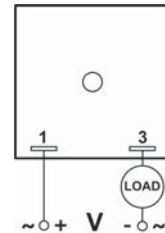
Potentially hazardous voltages are present. Electrical shock can cause death or serious injury. Installation should be done by qualified personnel following all National, State & Local Codes.



**BE SURE TO REMOVE ALL POWER SUPPLYING THIS EQUIPMENT BEFORE CONNECTING OR DISCONNECTING WIRING.
READ INSTRUCTIONS BEFORE INSTALLING OR OPERATING THIS DEVICE. KEEP FOR FUTURE REFERENCE.**

WIRING

Wire the unit per the connection diagram on the top of the time delay relay or as shown at right. Using a solid state switch to initiate the time sequence is acceptable. See www.macromatic.com/leakage or contact Macromatic for information regarding leakage current limits and other solid state design considerations.



SETTING THE TIME DELAY

See back (page 2).

Function	Series	Operation	Timing Chart
ON DELAY Delay on Operate	THL-8	Upon application of input voltage, the time delay (t) begins. At the end of the time delay (t), the output is energized. Input voltage must be removed to reset the time delay relay & de-energize the output.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>INPUT VOLTAGE</p> </div> <div> <p>OUTPUT</p> </div> </div>

W134N5345 Campbell Drive ♦ Menomonee Falls, WI 53051
800.238.7474 ♦ Fax 262.781.4433 ♦ www.macromatic.com ♦ tech-support@macromatic.com

SETTING THE TIME DELAY

All THL-8 Series products come with a specific single time delay range as indicated on the nameplate and by the suffix to the Product Number. Setting the time delay is accomplished through the use of a 10-position DIP-switch. Each position on the DIP-switch is marked with a time increment. The required delay (t) is selected by moving the switch of each increment to the ON position and adding their corresponding values. See examples shown at right.

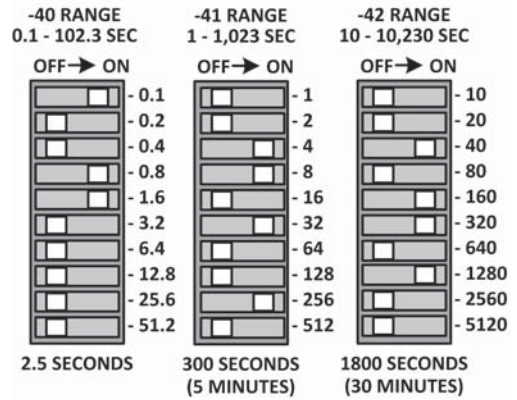
**TIMING RANGE TABLE	
COMPLETE PRODUCT NUMBER USING TWO DIGIT CODE BELOW: i.e., THL-8024U-40	
Time Delay Range	Code
0.1 - 102.3 Sec.	40
1 - 1,023 Sec.	41
10 - 10,230 Sec.	42

TROUBLESHOOTING

If the unit fails to operate properly, check that all connections are correct per the connection diagram on the product. One or more of the DIP switches must be set to the ON position to achieve a time delay with this unit. Ensure solid state switching devices controlling this unit do not create off-state leakage current. Do not connect voltage directly across terminals 1 and 3, a load is required.

If problems continue, visit our website at www.macromatic.com for more information. Or contact Macromatic at 800-238-7474 for assistance.

BINARY SWITCH OPERATION



COMBINE FOR TOTAL TIME IN SECONDS

Warranty

All catalog-listed THL-8 Series Encapsulated Time Delay Relays manufactured by Macromatic are warranted to be free from defects in workmanship or material under normal service and use for a period of five (5) years from date of manufacture.

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