

# INSTALLATION INSTRUCTIONS THL-8 SERIES ENCAPSULATED TIME DELAY RELAYS

December, 2020 Rev B 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.



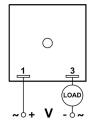
BE SURE TO REMOVE ALL POWER SUPPLYING THIS EQUIPMENT BEFORE CONNECTING OR DISCONNECTING WIRING.
READ INSTRUCTIONS BEFORE INSTALLING OR OPERATING THIS DEVICE. KEEP FOR FUTURE REFERENCE.

#### **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.	INPUT VOLTAGE	
			ОИТРИТ	t

Macromatic Industrial Controls, Inc. • 2201 Corporate Drive • Waukesha, WI 53189 For product information and technical support go to www.macromatic.com/contact

#### 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.

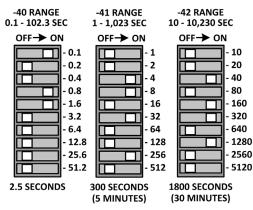
**TIMING RANGE T	TABLE
COMPLETE PRODUCT N	UMBER
USING TWO DIGIT CODE	BELOW:
i.e., THL-8024U-4	10
Time Delay Range 0.1 - 102.3 Sec. 1 - 1,023 Sec. 10 - 10,230 Sec.	40 41 42

#### **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.