COLUMBUS ELECTRIC

a division of TPI Corporation

LINE VOLTAGE THERMOSTAT – "L" SERIES

APPLICATION

The Columbus Electric "L" Series thermostats are designed for use as temperature operating or regulating controls only.

The coiled capillary sensing element fixed to the top of the enclosure allows for area temperature regulation of heating or cooling applications. Where control failure could result in personal injury or loss of property, an approved backup temperature limiting control or an advisory alarm system should be used to warn of control failure.

SPECIFICATIONS

ELECTRICAL RATING 22 A Resistive @ 125/250/277 Vac. 50VA @ 24VAC 1/4 HP @ 120 Vac. 1/2 HP @ 250 Vac.

TEMPERATURE RANGE Setting Range.....70°F TO 140°F 21°C TO 60°C DIFFERENTIAL

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ADDITIONAL INFORMATION

- Purpose of Control: Operating Control
- Construction of Control: Independently Mounted Control.
- Type 1 Action
- Pollution Degree: PD2
- Impulse Voltage: 4000 V
- For use with conduit, flex cable, or other wiring methods.



▲CAUTION



- Installation must be performed by an experienced, qualified service person.
- High Voltage Disconnect power supply before servicing
- Haute tension Déconnectez l'alimentation avant l'entretien
- Risk of Electric Shock More than one disconnect switch may be required to de-energize the device before servicing.
- Risque de choc électrique Plusieurs interrupteurs de déconnexion peuvent être nécessaires pour mettre l'appareil hors tension avant l'entretien.
- Wire nut or otherwise insulate any unused conductors.
- All wiring must conform to state and local codes.

SAFETY INFORMATION

- Disconnect all power before installing or servicing.
- Be certain that the electrical load that is to be controlled does not exceed the thermostat rating.
- This thermostat is intended for permanent installation and must be installed in accordance with the National Electric Code (NEC) and all state and local codes.
- Use copper conductors only.

INSTALLATION INSTRUCTIONS

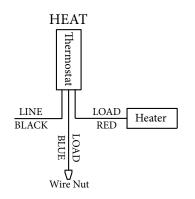
- Locate the thermostat where it will be exposed to an average temperature of the controlled area. Do not mount near windows, doors or direct sunlight.
- Remove the thermostat cover. Position the enclosure base with the wiring hole oriented as desired. Fasten the base to the wall with 2-3 screws (supplied by others) through the keyhole slots provided. Care should be taken when installing mounting screws near the copper cappilary tube.
- 3. The thermostat may be installed using conduit, flex cable or other approved wiring methods. All fittings and materials used should be approved for the application and should be installed in accordance with instructions.
- 4. Complete the wiring by attaching the thermostat leads in accordance to the applicable wiring diagram using wire nuts (provided). A green ground wire is provided to attach the line and equipment ground to the thermostat. After connections are made, all wires should be pushed back into the enclosure and made clear of cover.
- 5. Insure the capillary is positioned into the slot of base and secure the front cover to the base with the captive screw provided.

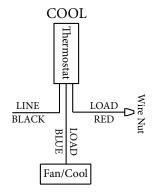
OPERATION

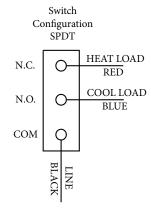
After installation and wiring, check operation in the following manner: 1) Adjust the thermostat set point to about 10 degrees (below for heat or 10 degrees above for cool) room temperature. 2) Restore power. 3) Slowly raise/lower the set point of the thermostat. When the thermostat reaches near room temperature, the operating unit should come on.

Since the thermostat may be affected by the installers hands, allow the necessary amount of time after handling before performing operation check. The "L Series" thermostats are factory calibrated and require no field adjustments. Changing the calibration will void the warranty. Do not bend or damage the sensing bulb as this will affect operation of the unit. Do not kink or form the capillary tube any less than 1/8" radius.

WIRING DIAGRAMS







- For Supply Connections, Use 12 AWG or larger wires rated for at least 90°C (194°F)
- For Earth Connections, Use 12 AWG or larger wires rated for at least 90°C (194°F)