

Limitation of Liability

It is understood and agreed that seller's liability whether in contract, in tort, under warranty, in negligence or otherwise shall not exceed the return of the amount of the purchase paid by the purchaser and under no circumstances shall seller be liable for special, indirect or consequential

damages. The price stated for the equipment is consideration in limiting seller's ability. No action, regardless of form, arising out of the transactions may be brought by purchaser more than one year after the cause of action has occurred.

Warranty

1. Antunes Controls products are guaranteed to be free from mechanical and electrical defects for a period of one year from date of shipment under normal use and service provided installation is made in accordance with manufacturer's recommendations.
2. Parts deemed defective shall be repaired or replaced at manufacturer option and at manufacturer's expense but shall not include foreign or federal excise taxes, state or municipal sale or use taxes, all such taxes not limited to the foregoing being responsibility of the purchaser.
3. No charge for travel and/or mileage will be allowed to the purchaser.
4. Antunes Controls reserves the right to make changes in design or make any improvements on any products. The right is always reserved to modify our equipment because of new technology, underwriter's requirements and/or government regulations.
5. The following are not covered under warranty:
 - a. Failure from neglect, abuse, careless handling and mis-application of unit.
 - b. Failure to observe guidelines for installation or improper voltage hook-up.
 - c. Failure caused by improper maintenance. (See maintenance guidelines found in the operation instructions.)
 - d. Unless specifically allowed by Antunes Controls, no other charges may be included under warranty.

High Limit Controller

Model HLC/Hi Limit

INSTALLATION INSTRUCTIONS

Specifications:

- ◆ **Sensor Type:** 100K Thermistor (Dual) - Length (15 ft.)
 Other lengths available upon request.
- ◆ **Accuracy:** +/-3°F of Set Point
- ◆ **Power Input:** 24 Vac, 120 Vac
- ◆ **Control Operation:** High Limit - Opens on Temperature Rise
- ◆ **Output Ratings:** One - 8 Amp SPST Relay (Resistive Load)
- ◆ **Adjustable Temperature Range:**
 High Limit: 180° to 300°F
 100° to 220°F
- ◆ **Ambient Operating Temperature:** -30° to 140°F
- ◆ **Connections:** 1/4" Quick Connects,
- ◆ **Package:** Aluminum "C" Bracket
 Full Enclosure w/conduit knockout (optional)
- ◆ **Fault Indication LED**



This control is compact and easily installed. Please read these instructions carefully to assure correct installation. Prior to being put into operation, check all wiring and function of unit.

This unit approved to U.L. 353 and applicable parts of U.L. 991

TEMPERATURE CONTROLLERS • TEMPERATURE DISPLAYS • AIR PRESSURE SWITCHES • GAS SWITCHES
 • CUSTOM ELECTRONIC CONTROLS • SUBSYSTEMS ENGINEERING AND MANUFACTURING • TIMERS

Dimensional Drawings

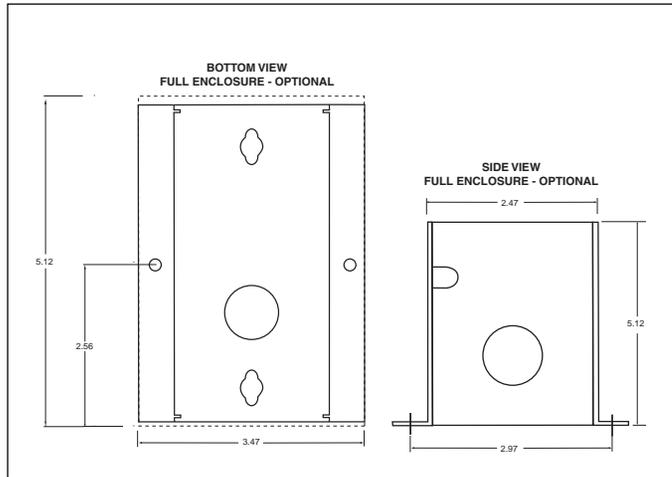


Figure 1 Mounting Template

Unit Operation:

High limit

When power is applied, the high limit relay will energize into the normally closed position. If the high limit set point is exceeded then the relay will de-energize opening the circuit. The high limit relay can only be reset when the temperature has dropped below the set point and the manual reset button (on the front label) is depressed. The high limit has a visual alarm LED, which is located in the upper right corner.

Fault Indication: When the LED is "ON" the unit is latched and in a safe condition (relay open). It can only be reset when the fault condition is cleared.

Fault Conditions: Over temperature (compared to setpoint).
Open or shorted sensor.
Any on-board component failure.

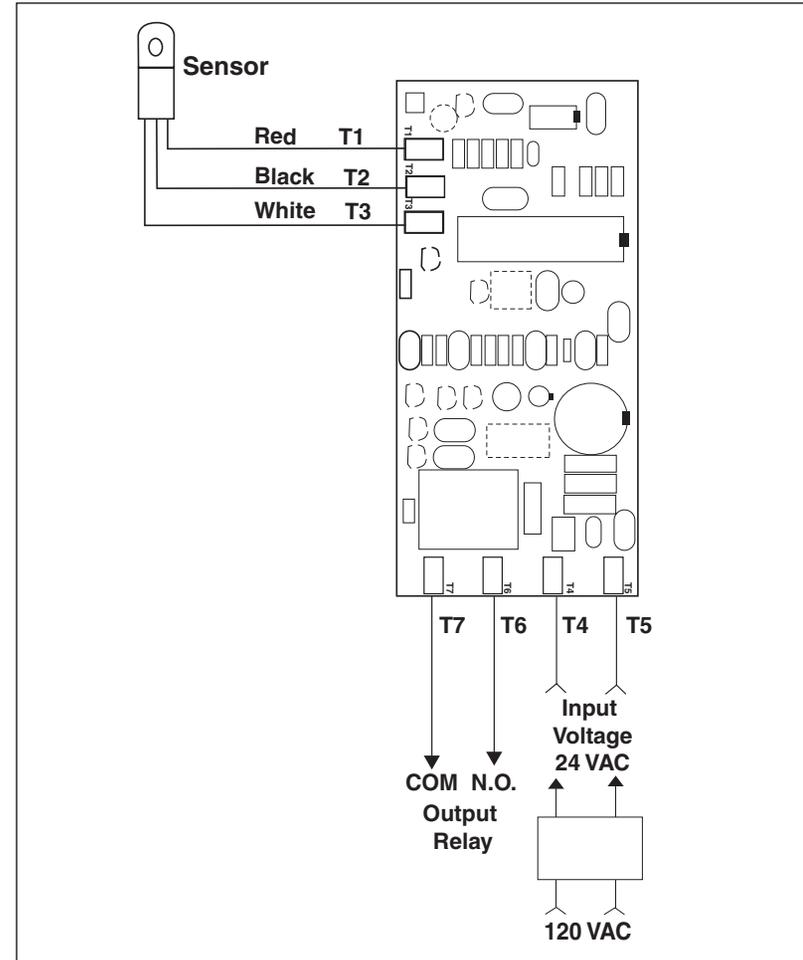


Figure 2- Wiring Diagram

Connections:

Thermistor Input - T1, T2 & T3 (100K ohm @ 25°C)

Power Input - T4 & T5 (24-120 VAC)

High Limit Relay - T6 (N.O.), T7 (COM)

Installation Note: For optimum accuracy the sensor must be mounted with a minimum of two feet of cable at the sensor lug end being exposed to the same temperature as the sensor lug.