

TEMPERATURE CONTROLLER TIMER WITH MANUAL RESET

MODEL TFH

INSTALLATION INFORMATION

SPECIFICATIONS

SENSOR TYPE: Thermistor
Length (10 Ft.)

ACCURACY: +/- 3°F of Set Point

POWER INPUT: 24 Vac
120 Vac or 230 Vac (Optional)

CONTROL OPERATION:
LOW LIMIT – Closes on Rise
HIGH LIMIT – Opens on Rise

OUTPUT RATINGS:
Two - 8 Amp SPDT Relays
(Resistive Load)

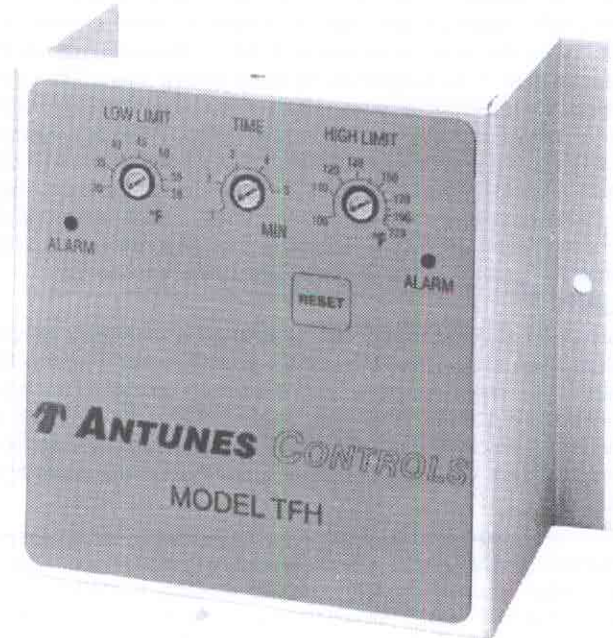
TEMPERATURE RANGE:
LOW LIMIT: 30° to 58°F
HIGH LIMIT: 100° to 220°F

TIME DELAY RANGE:
1 to 5 Minutes

OPERATING TEMPERATURE:
-30° TO 140°F (-35° TO 60°C)

CONNECTIONS: 1/4" Quick Connects
6" Wire Leads (Optional)

PACKAGE: Aluminum 5.1"L x 5.9"W x 3.1"D
"C" Bracket
Enclosure w/conduit knockout (Optional)



THIS CONTROL IS COMPACT AND EASILY INSTALLED. PLEASE READ THIS FOLDER CAREFULLY TO ASSURE CORRECT INSTALLATION. PRIOR TO BEING PUT INTO OPERATION, CHECK ALL WIRING AND FUNCTION OF UNIT.

CONNECTIONS

Thermistor Input – T9 & T10

(100 Kohm @ 25°C)

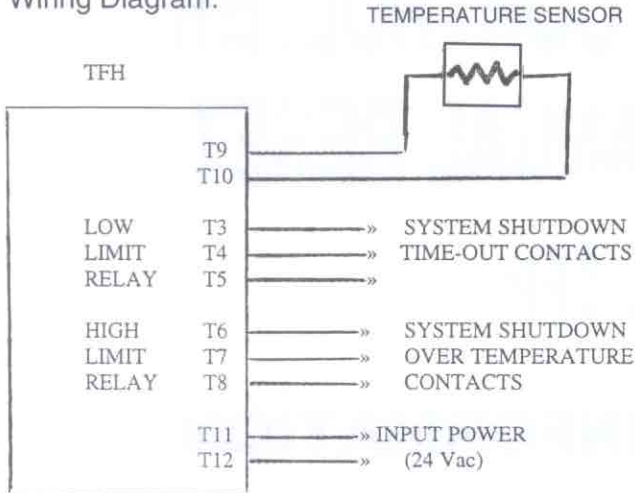
Power Input – T11 & T12

(24 Vac)

LOW LIMIT Relay – T3 (N.O.), T4 (COM.) & T5 (N.C.)

HIGH LIMIT Relay – T6 (N.O.), T7 (COM.) & T8 (N.C.)

Wiring Diagram:



Unit Operation:

LOW LIMIT / TIMER

After Power is applied to the TFH, the TFH checks the temperature of the Thermistor Sensor to verify that it's temperature is below the LOW LIMIT set-point potentiometer. If the thermistor temperature is below the LOW-LIMIT temperature then an internal timer is reset and activated. While the timer is activated it will continuously check the thermistor to see if its temperature rises above the LOW LIMIT set-point for longer than the time set on the TFH's TIME potentiometer, then the unit's Low Limit Relay will be activated (energized) and latched. NOTE: ONCE THE LOW LIMIT RELAY HAS LATCHED ONLY THE REMOVAL OF INPUT POWER WILL RESET THE TFH'S LOW LIMIT / TIMER CIRCUITRY. If the thermistor temperature rises above the LOW LIMIT set-point before the timer has "timed - out" i.e. Limit Relay activated, then the Timer is held in reset state until the thermistor temperature drops below the LOW LIMIT set-point and the timer circuit again is then re-activated. The TFH has a visual front panel indicator for when Low Limit Relay has been activated (lit). This indicator is located on the left hand side of the front panel.

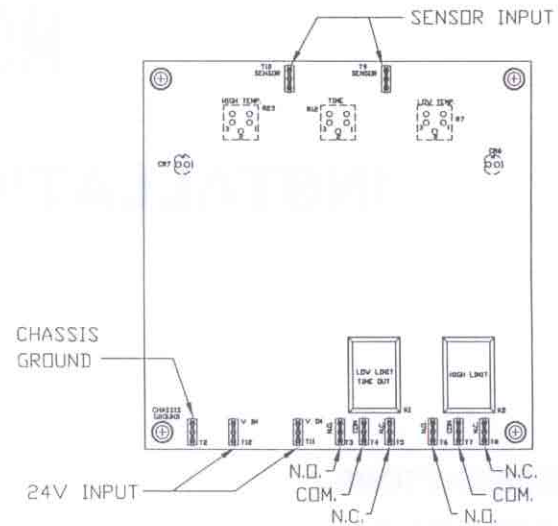
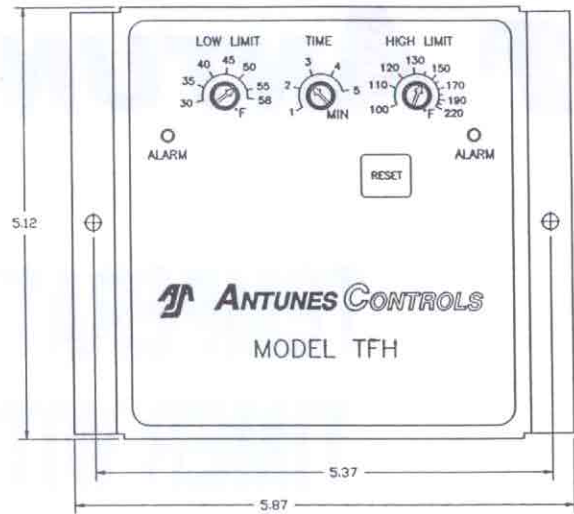
HIGH LIMIT

The HIGH LIMIT circuitry of the TFH checks for a thermistor temperature above the HIGH LIMIT set-point potentiometer. If the sensor temperature rises above the HIGH LIMIT potentiometer then the High Limit Relay is DE-ENERGIZED. This relay is normally activated (energized) when Power is applied and is de-activated only if the thermistor temperature exceeds the HIGH LIMIT set-point potentiometer. Once the High Limit Relay is de-activated it will stay de-activated even if the thermistor temperature drops below the HIGH LIMIT set-point. The High Limit Relay can only be re-activated if first the sensor temperature is below the HIGH LIMIT set-point and then the RESET button, on the TFH's front panel, is depressed. The De-activation of the High Limit Relay also results in the right side indicator becoming activated (lit).

LIMITATION OF LIABILITY. It is understood and agreed that seller's liability whether in contract, in tort, under any warranty, in negligence or otherwise shall not exceed the return of the amount of the purchase price paid by purchaser and under no circumstances shall seller be liable

special, indirect or consequential damages. The price stated for the equipment is a consideration in limiting seller's liability. 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 accrued.

FRONT VIEW



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