



Engineering Services & Products Company

1395 John Fitch Blvd.
South Windsor, CT 06074
1-800-245-9881



Corrosive Environment Thermostat

CR2147_TH 15 HM

The CR2147_TH 15 HM thermostat is designed to provide precise control of heating, cooling, and ventilation systems. A nickel plated copper sensing tube is mounted on the side of the watertight ABS plastic enclosure. **Warning: The sensor tube is fragile. Do not bend sharply (minimum radius 1 inch).** The adjustable dial allows the thermostat to be recalibrated. This Corrosive Environment Thermostat is designed to withstand moisture and gases found in corrosive agricultural buildings. The CR2147_TH 15 HM will provide accurate temperature with long life in livestock confinement buildings, greenhouses, and warehouses.

ELECTRICAL RATINGS

• Volts AC 50/60 Hz	120V	240V
• Full load amps (inductive)	12A	10A
• Locked rotor amps	48A	36A
• Full load amps (resistive)	16A	16A
• VA Pilot Duty (VA/watts)	125	125

SPECIFICATIONS

- Temperature Range: 40°-104° F (4° - 40° C)
- One SPDT switch: Not suitable for load transfer.
- Sensing Element: Nickel plated copper
- Differential: 2.5° F (1.4° C)
- Enclosure: Watertight ABS plastic meets Nema 4x and NEC Article 547-4 requirements when used with an appropriate conduit connection (not included).

INSTALLATION

1. Remove knockout located on bottom of enclosure for conduit connection (Figure 1). A moisture-proof conduit or cable connector is required.
2. Mount TH 15 HM_CR-2147 using flanges on outside of plastic enclosure.
3. Remove cover of enclosure for wiring.
4. Connect wires to appropriate terminals (heating or cooling) as shown in Figure 2.
5. Check wiring and set dial to 104° F.
6. Connect power supply. Heating unit should come on (or cooling should remain off). Turn dial down to 40° F. Heating unit should shut off (or cooling turn on) as dial passes current room temperature. Turn dial back to 100° F. Heating should again turn on (or cooling off).
7. Replace cover.
8. Set dial to desired temperature.

To remove the knockout on the bottom of the control, break through the groove in several places with a screwdriver.

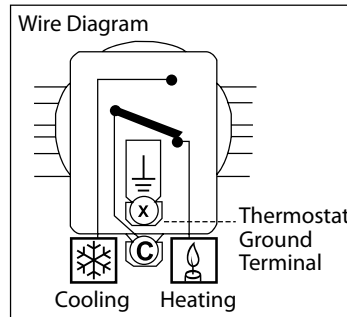
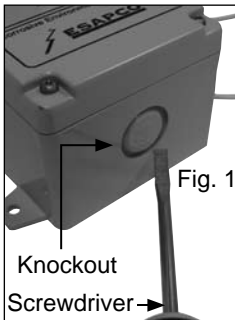
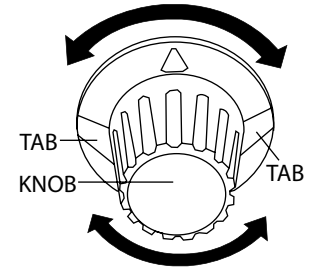


Fig. 2

CALIBRATION

Often mechanical thermostats lose calibration. If this happens to the CR2147_TH 15 HM, the adjustable knob allows the thermostat to be recalibrated. To recalibrate, follow these steps:

1. Place accurate thermometer next to stainless steel sensor. Allow thermometer to reach room temperature (1/2 hour to be safe) and be sure to keep hands away from sensor to prevent inadvertent heating.
2. Turn dial to 40° F.
3. Turn dial clockwise and stop when the component clicks. This point is what the thermostat reads as the current room temperature.
4. When the temperature from the thermometer is higher than the temperature from the thermostat, turn knob portion clockwise to endstop and turn with the tabs the white arrow clockwise as far as required. You can do the same when the temperature from the thermometer is lower only then turn the knob portion and the tabs counter clockwise.
5. To check the recalibration, turn the dial counterclockwise until click is heard. The white arrow should point to the same temperature as that on the thermometer. If not, repeat steps 3 & 4 until the white arrow and click are at the temperature on the thermometer. **NOTE: A thin coating of petroleum jelly or equivalent should be maintained at the point of contact between the lid of the enclosure and the control knob.**



WARRANTY: ESAPCO warrants to the original purchaser only that the CR2147_TH 15 HM control will provide normal service for eighteen (18) months from date of manufacture if properly installed, used, and maintained in accordance with instructions from ESAPCO. This warranty does not apply to a control that as been altered or repaired without ESAPCO authorization. All claims, under this warranty must be submitted in writing to ESAPCO within fifteen (15) days of the occurrence upon which the claim is base. The control or component forming the basis for the claim must be returned with the claim at customer's expense and ESAPCO will repair or replace the control or component free of charge and return to customer FOB to supplier's address. **THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED AND ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY EXCLUDED. IN NO EVENT SHALL ESAPCO BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER.** WARNING: ESAPCO products are designed and manufactured to provide reliable performance, and are guaranteed to be 100% free of defects. However, even reliable products will experience occasional failures, and this possibility should be recognized by the user. If these products are used in a system where failure could result in loss or injury, the user should provide an adequate backup and/or ventilation system or acknowledge willingness to accept the risk of such loss or injury.