HRC THERMOSTAT WITH HONEYWELL CONTROL

Installation & Maintenance Information

IF 1234

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

APPLICATION

Crouse-Hinds HRC85 Explosion Proof, Heavy Duty Thermostat may be used in heating only systems, cooling only systems, combination heat-cool systems (system change-over means must be provided), or as a series 60 controller for valves or motors.

The HRC85 Thermostat is suitable for use in Class I, Groups C,D; Class II, Groups E,F,G and Class III hazardous (classified) locations as defined by the National Electrical Code (NEC).

LOCATION

Locate the thermostat about five feet above the floor where it will be affected only by the average temperature of the room. These thermostats are mounted vertically.

INSTALLATION

CAUTION

1. This product should only be installed by a qualified electrician.
2. Disconnect power supply before connecting wiring to prevent electrical shock and equipment damage.
3. All wiring must comply with local codes and ordinances.
4. Always conduct a thorough checkout when installation in complete.

MOUNTING AND WIRING

All wiring must comply with local codes and ordinances.

1. Loosen the four explosion proof housing cover screws and remove the cover and thermostat combination.
2. After selecting a location, mount the explosion proof housing on the wall. See Figs. 1 and 2.

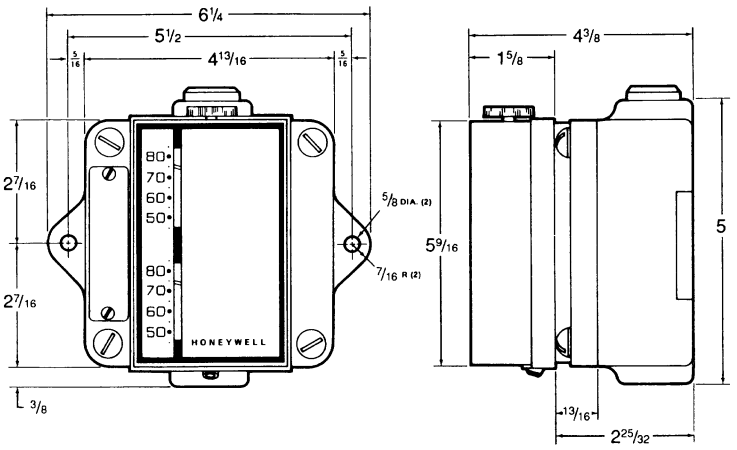

Figure 1 - Mounting Dimensions

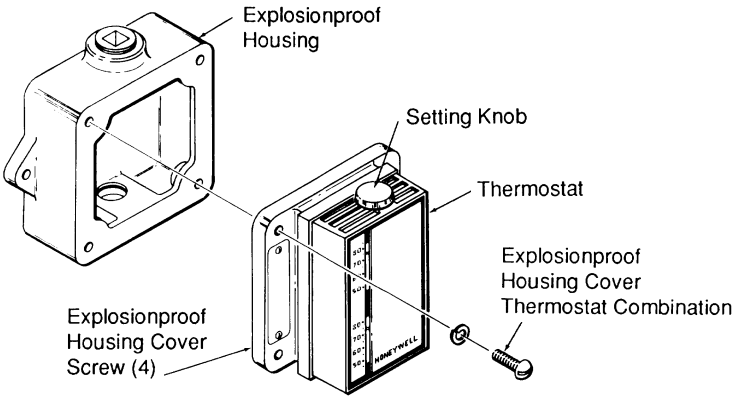

Figure 2 - Mounting HRC85

3. The explosion proof housing is tapped for 3/4 inch conduit. Run the conduit between the explosion proof housing, the power source, and the controlled equipment. Leave six to eight inches of wire in the box to make thermostat connections.
4. Connect wires to the terminals on the back of the thermostat. See Figs. 3-7 for typical wiring hookups.

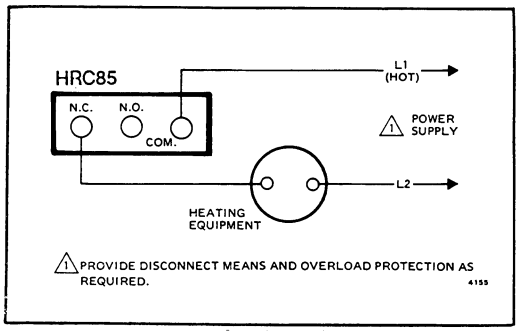

Figure 3 - HRC85 in heating only application.

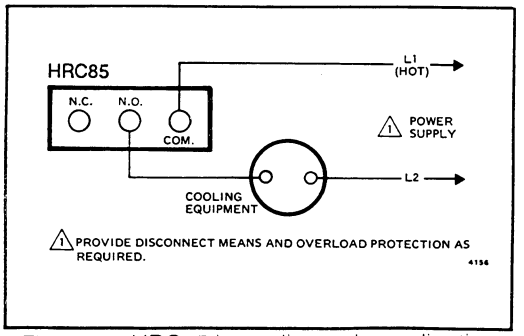

Figure 4 - HRC85 in cooling only application.

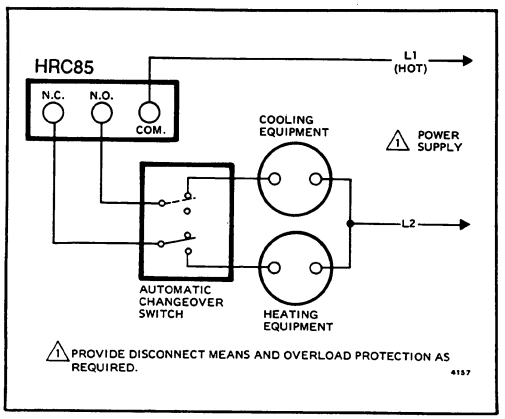

Figure 5 - HRC85 in heat-cool control for separate heating and cooling equipment.

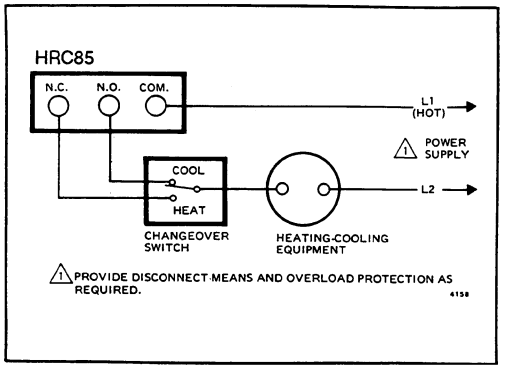

Figure 6 - HRC85 in heat-cool control for combination heating-cooling equipment.

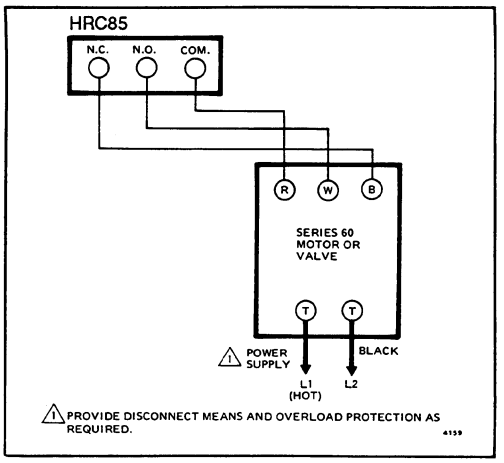

Figure 7 - HRC85 used as a series 60 control. 3-wire, line voltage, two position control.

ALTITUDE CALIBRATION

This thermostat was calibrated at the factory for accuracy at 1,000 feet above sea level. It may be necessary to reset the thermostat for the altitude of your locality. If you do not know your altitude, consult your local U.S. Weather Bureau or Public Library.

To remove cover, use setpoint knob to loosen screw beneath cover and pull cover off.

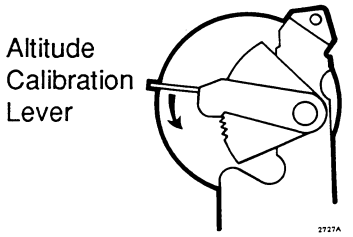

Figure 8 - Altitude calibration

Each notch on the calibration mechanism represents 2,000 feet. If you are above sea level use the chart to determine how far to move the indicator:

Elevation (in ft.)	Indicator	Elevation (in ft.)	Indicator
0 to 2,000	Leave as is	4,000 to 6,000	Move down 2 notches
2,000 to 4,000	Move down 1 notch	6,000 and above	Move down 3 notches

TO LOCK

After altitude adjustment is complete, replace the cover and cover set screw. Move the setpoint indicator to the desired temperature setting. Remove the setpoint knob to lock the setpoint.

CAUTION

Check for dirt, grit or other foreign material on the mating surfaces of the cover and device body. Be certain that each surface is wiped completely clean before reassembling. Surfaces must seat fully against each other to provide a proper explosionproof seal.

CHECKOUT

After the thermostat is installed and wired, operate it manually to make certain it is connected properly. Checkout will depend on type of hookup and controlled equipment. For cooling control check, turn the setting knob to move the indicator down the scale. This initiates a call for cooling and the cooling equipment should respond. For heating control check, turn the setting knob to move the indicator up the scale. This initiates a call for heat, and the heating equipment should respond. For heating/cooling control, check both heating and cooling as described above. For series 60 control check, cycle the equipment through the HRC85 and make sure it functions as intended.

CAUTION

If the thermostat is controlling a compressor, allow at least two minutes between on cycles to equalize internal pressure. Rapid cycling might damage compressor and overload electrical circuit.

CAUTION

When servicing controlled equipment the power supply MUST be disconnected before opening explosion proof box, or the explosion proof feature of the box will be defeated.

COOPER
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