



AT-Series - Ambient Thermostat

1 Application

The AT thermostat is designed for use as a cost-effective control thermostat for ambient sense freeze protection and temperature maintenance applications.

2 Ratings/ Specifications

Electrical rating	10A @ 120 V AC / 5A @ 240 V AC
Switch type	SPST ²
Control temperature range	-50 °C to 85 °C (-58 °F to 185 °F)
Max. exposure temperature	38 °C (100 °F) above set point temp. Control characteristics: "open on rise"
Differential	±0.6 °C (±1 °F) ³
Construction	304SS
T-Rating	T5 (100 °C/212 °F)

Certifications/ Approvals



Canadian Standards Association¹
Ordinary Locations
Hazardous Locations

Class I, Division 1 and 2, Groups B, C & D

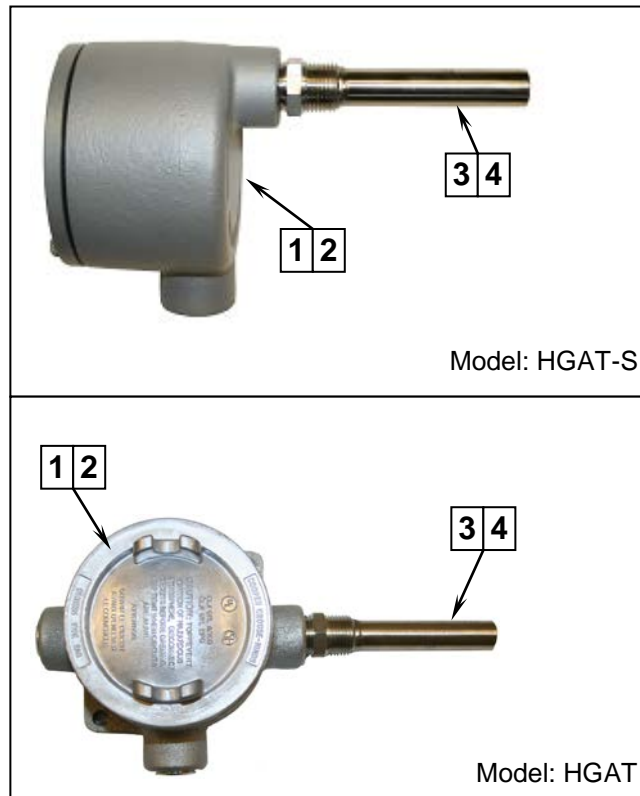
3 Product Reference Legend

Catalogue Number	Temperature Setting
AT-10	+10 °C (+50 °F)
AT-20	+20 °C (+68 °F)
AT-30	+30 °C (+86 °F)
AT-40	+40 °C (+104 °F)
AT-50	+50 °C (+122 °F)
AT-X	Customer Specified ≤85 °C (≤185 °F)

4 Notes

- For electrically hazardous (classified) locations, thermostat must be terminated in an explosion proof electrical junction box with ratings for area classification (included).
- The National Electric Code, Article 427-56(b) states: "temperature-controlled switching devices which do not have an "off" position shall not be required to open all ungrounded conductors and shall not be permitted to serve as the disconnecting means." The AT Thermostat has no "off" position and therefore may be used for switching one conductor of a two-phase heating circuit.
- Depending on application and rate of temperature change.

5 Product Specifications



1. Junction Box (Cl. I, Div.1, Gr. B, C & D)
2. Wire Termination Block (inside JB)
3. Temperature Sensor
4. Lead wires 16 AWG (not shown)

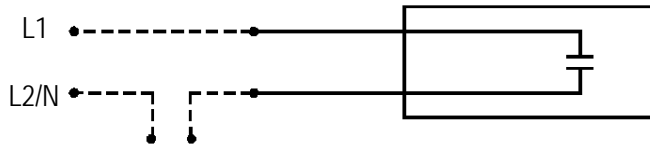
Notice:

- Do Not install the heater directly to the AT thermostat housing.
- A conduit seal fitting shall be installed within 18" of AT thermostat housing junction box.
- The AT thermostats are factory pre-set to operate at the specified temperature. Set-point adjustments are possible in the field – see "Set point adjustments" procedures on next page.

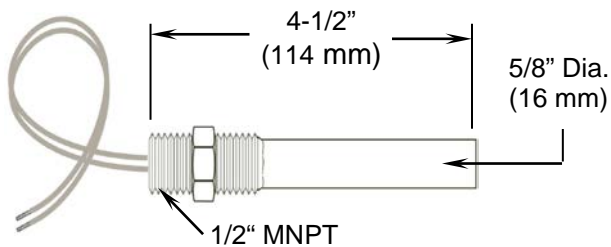


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6 Typical Wiring Diagram



7 AT-Series Thermostat Dimensions



8 Set point adjustments

The AT thermostat leaves the factory set as stamped at its product label.

Any changes of the set point temperature should be made in the following manner:

1. Connect test light or other device suitable for determining on-off continuity of the AT thermostat control.
2. Allow thermostat to thermally stabilize each time it has been adjusted.
3. Turn adjusting screw counter clockwise in small increments until desired control temperature set point is reached.

Notes:

- Counter clockwise rotations of the adjusting screw INCREASES temperature set point.
- Clockwise rotations of the adjusting screw DECREASES temperature set point.
- Do not expose AT thermostat unit to more than 38 °C (100 °F) above set point temperature.
- Do not turn adjusting screw more than 7 full revolutions in either direction from room temperature.

- Removal of adjusting screw may also render AT thermostat inoperative.
- System vibration can cause contact bounce.
- Physical external shock such as accidentally dropping the AT thermostat on a concrete floor may change the set point temperature.
- The adjustment rate is approximately 33 °C (90°F) per revolution of the screw.
- If sized and paired with an INTERTEC CP ...THERM heater, the heater may overheat at an increased set point temperature. Please contact INTERTEC before increasing the set point temperature.