



# iO-HPA Heat Pump Alert Installation Instructions

## INTRODUCTION

The iO-HPA Heat Pump Alert is designed to provide an audible warning when a heat pump that uses electric auxiliary heat fails and the system is only operating on the auxiliary heat source. This easy-to-install device can save excessive energy costs and provide early warning that the heat pump requires immediate service.

## HOW IT WORKS

The iO-HPA is designed to detect heat pump system failure by monitoring the hot gas (discharge) refrigerant line coming into the indoor unit when the system is in the heating mode. If the thermostat is calling for heat and the hot gas (discharge) line temperature remains below 100° F for more than 19 minutes, a buzzer will sound warning that the compressor is not producing heat and that the system is utilizing the auxiliary electric heat to maintain the space temperature. There is a switch on the iO-HPA to silence the buzzer but service by your local HVAC dealer should not be delayed.

## WARNING

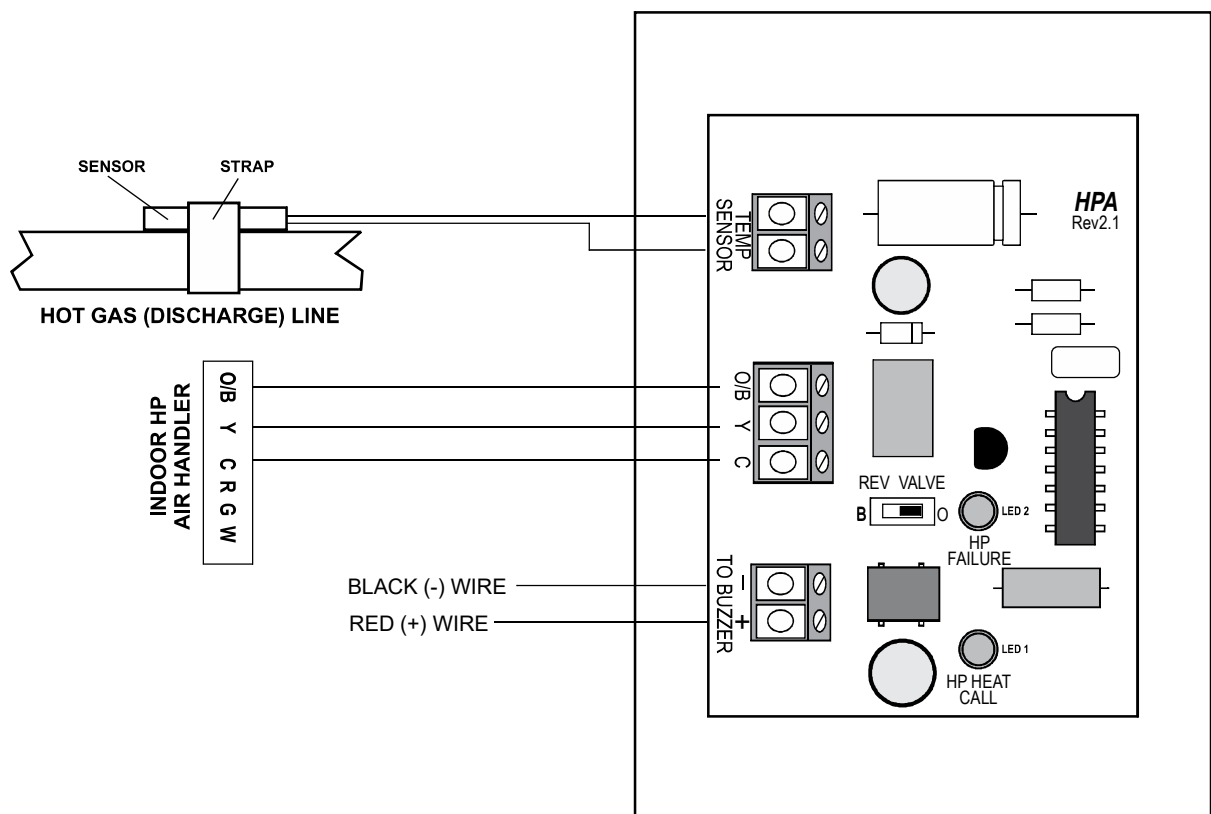
Improper wiring of the iO-HPA to the heat pump can cause electrical shock and equipment damage. Disconnect electrical power to the heat pump before installation. Installation of this product must be in compliance with all local codes and is not a substitute for annual service.

## INSTALLATION

1. Find a convenient location either on the outside of the air handler cabinet or on a flat surface near the air handler where the iO-HPA Heat Pump Alert can be easily mounted, wired and accessed. There are two, 3/16" mounting holes on the enclosure base. Align the base where it will be located and mark the hole locations. Depending on the mounting surface, it may be necessary to pre-drill pilot holes before securing the base to the surface using appropriate mounting hardware.
2. Once the enclosure is secured to the mounting surface, gently squeeze the sides of the cover to release it from the base. The cover has two factory supplied wire leads that will be attached to the buzzer terminals after all other wiring is done.
3. Use 18-2 thermostat wire and strip 1/8" insulation off the ends and land them to the reversing valve 'O' or 'B', 'Y' and 'C' terminals on the Heat Pump Alert. Snug the wires on the terminal block but don't over tighten. Land the other ends to the 'O' or 'B', 'Y' and 'C' (24V Common) terminals on the indoor unit terminals. Set the REV VALVE selector switch on the printed circuit board to match the reversing valve type on the equipment. 'O' = RV energized in cool. 'B' = RV energized in heat.
4. Use 18-2 thermostat wire and strip 1/8" insulation off the ends and land them to the Temp Sensor terminals. Snug the wires on the terminal block but don't over tighten.

5. Mount the temperature sensor on the hot gas (discharge) line coming into the indoor unit and make sure it's not on a brazed fitting. Secure the sensor using the supplied Velcro strap.
6. Use wire nuts and secure the sensor leads to the ends of the thermostat wire landed on the Temp Sensor terminals. These wires are not polarity sensitive.
7. Make sure all wires do not obstruct closure of the cover.
8. Land the factory RED wire lead from the cover to the Plus (+) buzzer terminal and land the factory BLACK wire lead from the cover to the Minus (-) buzzer terminal.
9. Snap the cover back on the base and reapply power to the system. Make sure alarm switch is in AUTO mode.

### TYPICAL WIRING DIAGRAM



10. The iO-HPA Heat Pump Alert comes with a label that should be placed next to the device. The label has space for the name of the contractor and contact information.

**If this alarm goes off that means  
your heat pump has failed.  
Switch the button to silence and  
call your HVAC contractor.**