# Overview

- Two sensors in one easily installed package: a solid state low temperature cut-out and an averaging 1000.0 Ω platinum temperature detector (RTD).
- Low temperature cut-out device that replaces the traditional labor intensive vapor filled devices. The Chill-OutTM Combination Sensor has two sensors in one reducing installed costs
- Environmentally friendly "Green Design" uses solid state sensor construction, eliminating potential leaks and disposal issues with traditional refrigerant vaporfilled capillaries that could harm the environment.
- Solid state design and rugged 3/8" diameter tubing eliminate concerns of gas leaks or kinking of the capillary commonly encountered during the installation of traditional vapor filled devices.
- Mount in any direction—unit is sensitive to temperature changes in any orientation.
- Status LED: (green / red) multifunctional LED. Indicates power on and fault.
- Easily formed aluminum or highly flexible galvanized armor (PVC coated) plenum-rated sensor case.
- Manual reset: selectable latching and non-latching, remote reset may be used with latching mode.
- High and low power relays and adjustable setpoint control circuitry self contained in rugged housing.
- Detachable sensor probe for easy installation.
  Sensor can be mounted to back of enclosure or side.
- Fail-safe relays change state if power is lost and on startup.
- UL60730 Listed File E211718.



## Specifications

**Low Limit Cut-out:** Accuracy  $\pm$  0.9°F ( $\pm$  0.5°C) sensitive over any 12" area. Set Point adjustable on control board via dipswitches from 30°F to 44°F (-1.1°C to 6.7°C)

Averaging RTD:  $1000\Omega$  nominal at 0°C 0.00385 curve accuracy Class B

**Operating temperature:** -50°F to 176°F (-45.5°C to 80°C).

(Operating temperature for sensor -50°F to 176°F (-45.5°C to 80°C)).

Electronics inside enclosure 18°F to 122°F (-7.8°C to 50°C)

**Sensor sheath:** Bendable aluminum or Galvanized flexible Steel PVC coated UL 94V-0 and plenum rated.

**Enclosure:** Clear polycarbonate, flame retardant, tested to UL 94-5VA. Suitable for HVAC applications.

**Power requirement:** 24V ±5V AC or DC 200mA. Insulation Resistance: 10 Megohms minimum at 100 VDC, Sensor to Case.

**Installation:** Unit is fully functional while mounted in any direction; Horizontal installation not required. All connections to the board are made using easy-to-connect pluggable terminal blocks.

Relay Ratings: See relay ratings on page 2

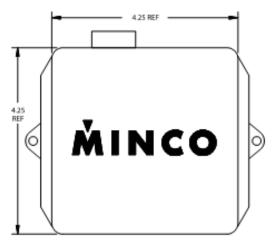


# Specification and order options

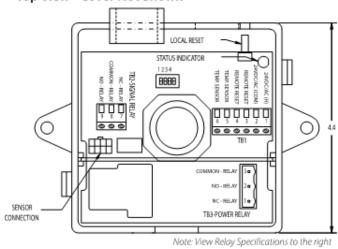
| AS570                              | Model number                                      |  |  |
|------------------------------------|---|--|--|
| PF                                 | Element Type:                                     |  |  |
|                                    | PF = $1000 \Omega$ RTD (0.00385 Platinum)         |  |  |
| 8A                                 | ·   |  |  |
| OA .                               | Case Type & Case Length L in feet (8 = 8.0 feet). |  |  |
|                                    | (0 = 0.0 feet).                                   |  |  |
|                                    | Available Options:                                |  |  |
|                                    | 8A = Aluminum (0.375 Aluminum Tube)               |  |  |
|                                    | 17B = Galvanized (0.53 Galvanized                 |  |  |
|                                    | Armor, PVC Coated)                                |  |  |
|                                    | 25A = Aluminum (0.375 Aluminum Tube)              |  |  |
|                                    | 25B = Galvanized (0.53 Galvanized                 |  |  |
|                                    | Armor, PVC Coated)                                |  |  |
|                                    | 50B = Galvanized (0.53 Galvanized                 |  |  |
|                                    | Armor, PVC Coated)                                |  |  |
|                                    | TO ORDER CHILL-OUT ONLY, WITHOUT                  |  |  |
|                                    | OPTIONAL TRANSMITTER, STOP HERE.                  |  |  |
|                                    | TO ORDER WITH OPTIONAL                            |  |  |
|                                    | TRANSMITTER, ADD THE FOLLOWING                    |  |  |
|                                    | ORDER INFORMATION.                                |  |  |
| 111                                | Transmitter (Optional):                           |  |  |
|                                    | 111 = TT111 (4 - 20 mA)                           |  |  |
| Α                                  | Transmitter Temp Range:                           |  |  |
|                                    | A = 20 to 120°F                                   |  |  |
|                                    | (See Minco Range Code Guide for other             |  |  |
|                                    | options - www.minco.com/rangecode)                |  |  |
| AS570PF8A111A = Sample part number |   |  |  |



#### **Enclosure Box**



### Top View - Cover Not Shown



**Relay Specifications** 

| Contact    | Normally Open |         | Normally Closed |         |
|------------|---------------|---------|-----------------|---------|
| AC Motor   | 120 VAC       | 240 VAC | 120 VAC         | 240 VAC |
| Voltage    |               |         |                 |         |
| AC Full    | 12            | 8       | 6               | 3       |
| Load Amp   |               |         |                 |         |
| AC Locked  | 96            | 48      | 36              | 18      |
| Rotor Amp  |               |         |                 |         |
| Pilot Duty | 125VA         | 125VA   | 125VA           | 125VA   |

#### **Approvals and Certifications**

UL Listed:

File E211718

CE Certified:

Safety - EN60730

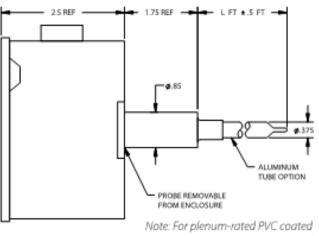
Immunity - EN61000-4-3, EN61000-4-6

Emissions - EN61000-6-3, EN60730-1, EN55011

Group 1

Class B, FCC Part 15 Subpart B Class

## Enclosure - Aluminum or Galvanized Armor



Note: For plenum-rated PVC coated galvanized steel armor, OD is 0.531\*

# **Standard Ordering Options**

#### Standard Model Options\*

| Model      | Description                      |
|------------|----------------------------------|
| AS570PF8A  | Aluminum Probe; 8.0 feet;        |
|            | 1000 Ω RTD (0.00385 Platinum)    |
| AS570PF8B  | Galvanized Armor Probe; 8 feet;  |
|            | 1000 Ω RTD (0.00385 Platinum)    |
| AS570PF17A | Aluminum Probe; 17 feet;         |
|            | 1000 Ω RTD (0.00385 Platinum     |
| AS570PF17B | Galvanized Armor Probe; 17 feet; |
|            | 1000 Ω RTD (0.00385 Platinum)    |
| AS570PF25A | Aluminum Probe; 25 feet;         |
|            | 1000 Ω RTD (0.00385 Platinum     |
| AS570PF25B | Galvanized Armor Probe; 25 feet; |
|            | 1000 Ω RTD (0.00385 Platinum     |
| As570PF50A | Aluminum Probe; 50 feet;         |
|            | 1000 Ω RTD (0.00385 Platinum     |
| AS570PF50B | Galvanized Armor Probe; 50 feet; |
|            | 1000 Ω RTD (0.00385 Platinum)    |

<sup>\*</sup> Other models available on special order

