

# Chill-Out™ Combination Sensor

## Overview

- Two sensors in one easily installed package: a solid state low temperature cut-out ("Freeze Stat") and an averaging resistance temperature sensor.
- Digital alarm signal to RTU, PLC or an electronic control; 24VAC-powered.
- Solid state design and rugged 3/8" diameter tubing eliminate concerns of gas leaks or kinking the capillary during installation.
- Mount in any direction — horizontal installation is not required.
- Easily formed aluminum or ultra flexible plenum-rated PVC coated galvanized steel armor sensor case.
- Relay and control circuitry self contained in rugged housing. Mounts on either side of enclosure with a locknut (included).
- Failure detection feature — relay changes state if power is lost
- 4 to 20 mA temperature loop output available with optional Temptan™ (ordered separately — see Section 5 for more information)

## Specifications

**Switching temperature:** 38°F factory pre-set, user adjustable from 30°F to 44°F.

**Accuracy:** ±0.9°F (±0.5°C) typical.

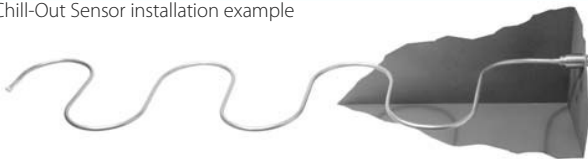
**Power requirement:** 24V AC or DC.

**Relay contact:** User specified  
Standard relay, SPDT (2" x 4" utility box)  
0.3 A at 125 VAC, Max. Voltage 125 VAC, or  
1A at 30 VDC, Max. Voltage 110 VDC

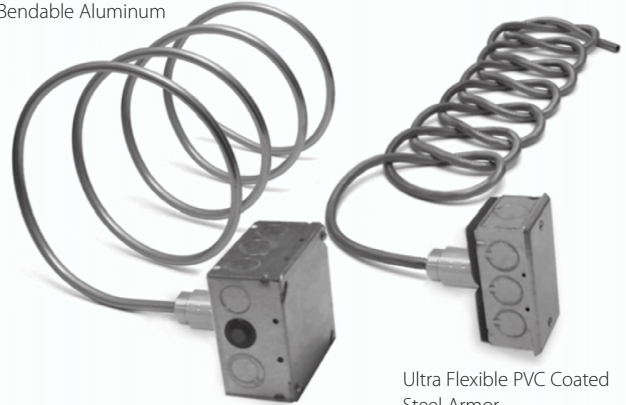
Optional power relay, DPST (4" x 4" utility box)  
25 A at 277 VAC  
25 A at 120 VAC  
1 HP at 120 VAC  
2 HP at 277 VAC

**Sensor case length:** 10 feet standard, lengths up to 50 feet available by special order.

**Connection:** AWG 18 leadwires.  
Chill-Out Sensor installation example



Bendable Aluminum



Ultra Flexible PVC Coated Steel Armor

## Specification and order options

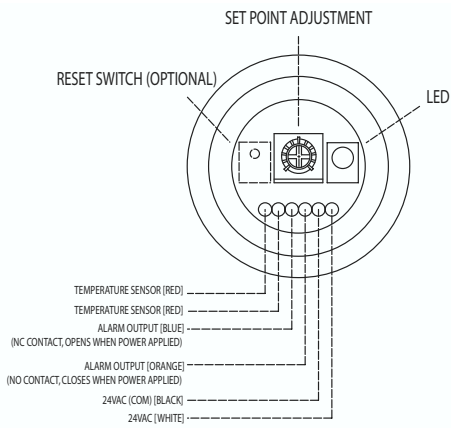
AS103759	Model number
PF	Element Type: PF = 1000 Ω RTD (0.00385 Platinum)
38	Switching Temperature: 38°F Specify 30 to 44°F
N	Relay reset option: N = Non-latching (auto reset) L = Latching (manual reset) E = Latching (panel mounted reset) Note: option 'E' requires enclosure 'L'
10	Case length: 10 feet
A	Case type: A = Aluminum B = Brass
1	Relay Rating: 1 = 0.3A 2 = 25A, VAC powered controller/coil 3 = 25A, VDC powered controller/coil Note: option 2 or 3 requires enclosure 'L'
S	Enclosure: N = No enclosure S = Standard utility box (2" x 4") L = Large utility box (4" x 4") W = Weatherproof utility box (2" x 4")
AS103759PF38N10A1S = Sample part number	

## Order Replacement Relays

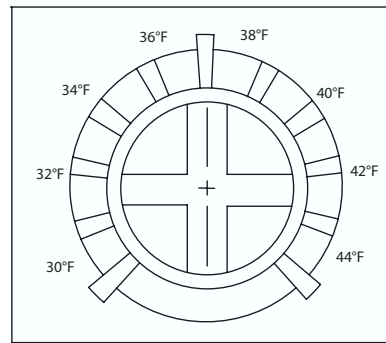
Model number	External Relay
AC103779	25A 24VAC Coil
AC103780	25A 24VDC Coil

Specifications subject to change

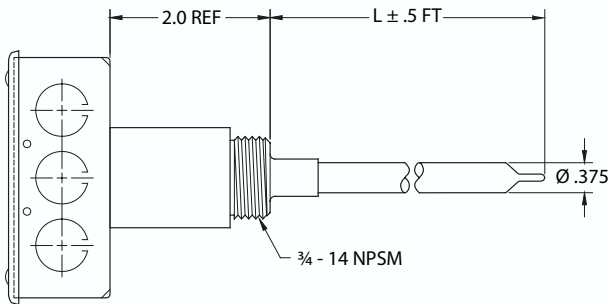
## Chill-Out Sensor Interface



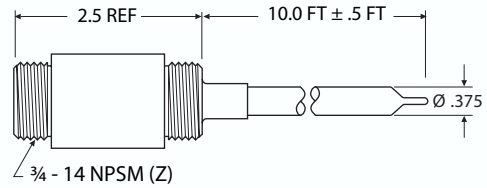
## Setpoint Adjustment



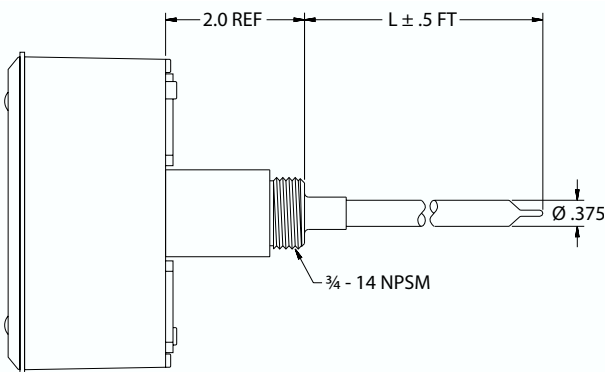
## Standard and Large Utility Boxes



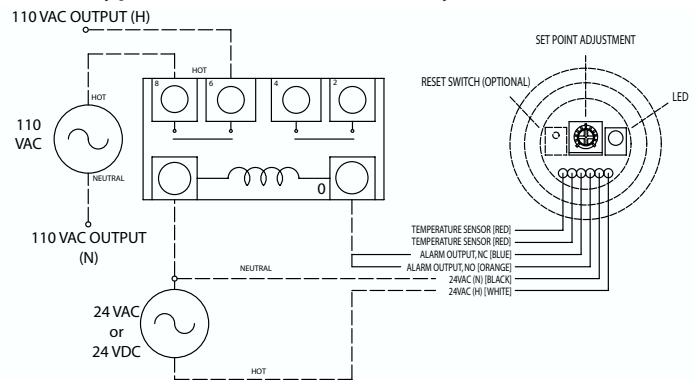
## No Enclosure



## Weatherproof Utility Box



## Typical Installation with Relay



Specify and order products at:  
[www.minco.com/sensors\\_config](http://www.minco.com/sensors_config)

Specifications subject to change

