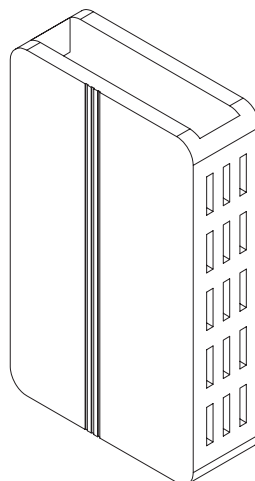


# Installer's Guide

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## Room Humidity Sensor

*Used with 3 - 10 Ton High Efficiency  
Packaged Unit with Dehumidification Coil  
Option*



### Model Number

BAYSENS036A

### Used With

THC036A\*\*\*\*\*2\* THC092A\*\*\*\*\*2\*  
THC048A\*\*\*\*\*2\* THC102A\*\*\*\*\*2\*  
THC060A\*\*\*\*\*2\* THC120A\*\*\*\*\*2\*

# Preface and Warnings and Cautions

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## Overview of Manual

**Note:** *One copy of this document ships inside the control panel of each unit and is customer property. It must be retained by the unit's maintenance personnel.*

This booklet describes proper installation, operation, and maintenance procedures for air cooled systems. By carefully reviewing the information within this manual and following the instructions, the risk of improper operation and/or component damage will be minimized.

It is important that periodic maintenance be performed to help assure trouble free operation. A maintenance schedule is provided at the end of this manual. Should equipment failure occur, contact a qualified service organization with qualified, experienced HVAC technicians to properly diagnose and repair this equipment.

## Hazard Identification

Warnings and Cautions appear at appropriate sections throughout this manual. Read these carefully.

### WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

### CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

### CAUTION

Indicates a situation that may result in equipment or property-damage- only accidents.

## Model Number Description

All products are identified by a multiple-character model number that precisely identifies a particular type of unit. Its use will enable the owner/operator, installing contractors, and service engineers to define the operation, specific components, and other options for any specific unit.

When ordering replacement parts or requesting service, be sure to refer to the specific model number and serial number printed on the unit nameplate.

## Inspection

Inspect the shipping carton and its contents. Check for concealed damage before it is stored or used. If damaged, it should be reported to, and claims made against the transportation company. Replace damaged parts with authorized parts only.

Compare the order number on the shipping label with the accessory identification information on the ordering and shipping documents to verify that the correct accessory has been received.

## Parts List

1 - Room Humidity Sensor

## General

### Room humidity sensor location

Proper location of the room humidity sensor is important to insure accurate measurement of representative air samples. Place the sensor in an area of the room that has good air circulation. Mount the sensor on a flat interior surface, approximately 54 in. (1.4 m) from the floor.

Avoid locating the sensor:

- In areas blanketed by air from diffusers.
- On surfaces with an uncooled or unheated area behind them, such as an outside wall or the

wall of an unoccupied store room.

- Near heat sources, such as radiant heat from the sun, heat from appliances, or heat from concealed pipes or chimneys.
- In areas subject to draft.
- Behind doors, draperies, or in corners.
- On walls having excessive vibration.
- In corrosive environments such as swimming pools or hospital rooms.

# Installation

## Mounting the room humidity sensor

The room humidity sensor consists of two parts: the base and the cover. To remove the cover, grasp it near the top and pull it away from the base. To replace the cover, align it with the sides of the base and press it directly toward the wall until it snaps into place.

To mount the room humidity sensor directly to drywall or plaster:

1. With the cover removed, feed the controller wires through the rectangular opening in the sensor base. Position the back of the base over the wire entry in the wall. Make sure the base is level.
2. Mark the centers of the two oblong mounting holes, then lay the base aside. At each of the marked locations, drill a 3/16 in. (5 mm) diameter hole approximately 1 in. (25 mm) deep and insert the plastic anchors. Fully seat the anchors.
3. Feed the controller wires throughout the base and fasten the base to the wall with the supplied mounting screws.
4. To connect the controller wires to the terminals on the sensor, see "Wiring" on page 4.

To mount the room humidity sensor to an electrical junction box:

1. With the cover removed, secure the humidity sensor directly to a vertical 2 in. x 4 in. (51 mm x 102 mm) junction box.
2. Feed the controller wires through the rectangular opening in the sensor base. Use two #6-32 screws to fasten the base to the threaded mounting holes of the junction box.
3. To connect the controller wires to the terminals on the sensor, refer to Figure 2.

## Wiring

Connect the controller wires to the terminals on the humidity sensor as follows.

1. Remove the blue terminal block by carefully pulling it off the circuit board.
2. Locate the (+) and (-) terminal markings on the board.
3. Attach the supply voltage to the (+) lead.
4. Attach the signal wire to the (-) lead.
5. Refer to Figure 2 for unit connections
6. Replace the terminal block on the circuit board and apply power to the unit.

7. Check for appropriate output signal using a digital volt meter (DVM) set on the dc milliamperes connected in series with the (-) terminal.

**Note:** Analog input wire must be 18-gauge shielded twisted pair. Cut back and tape the shield at the sensor. Ground the shield at the controller.

## CAUTION Equipment Malfunction

Do not run sensor wires and ac power wires together in the same conduit or wire bundle. This may cause malfunction due to electrical noise.

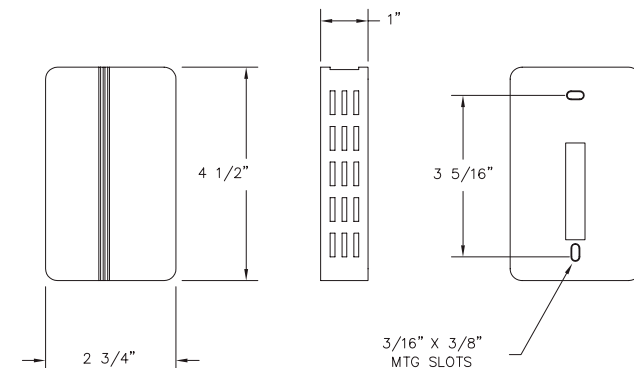


Figure 1.

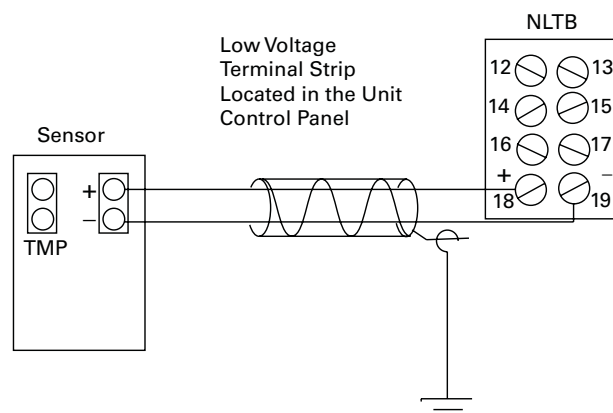


Figure 2. ReliaTel sensor wiring

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Literature Order Number	ACC-SVN03A-EN
Date	02/07
Supersedes	ACC-SVN03A-EN (04/03)
Stocking Location	Electronic Only

The manufacturer has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.