# Outdoor Mount Temperature Sensor Installation Instructions

This document covers the operation and installation instructions for the following Condair Digital Humidity Controllers:

| Part #: | Description: |
|---|---|
| 1510142 | 0-10V Digital Wall Humidistat |
| 2520259 | On/Off Digital Wall Humidistat |
| 2520266 | 0-10V Digital Duct Humidistat pkg. |
| 2520273 | On/Off Digital Duct Humidistat pkg. |
| 2548731 | Digital Wall ON/OFF Humidistat pkg. |
| 2548732 | Digital Duct ON/OFF Humidistat pkg. |

## Installation

Outside air probes must be installed on a flat vertical surface protected from direct sunlight and rain.

- The cable gland must face downwards.
- To install the sensor, remove cover
- Place seal and washer below the long mounting screw. Securely fix it to wall.
- Thread wires through cable gland or conduit connector
- Connect the wires, normally 18ga unshielded twisted pair, according to the wiring diagram to the measuring circuit in the cover:
- Tighten cable gland
- Assemble the cover with the base plate. Make sure the seal in the seal grove of the cover is not damaged and in place.
- Tighten the four screws of the cover with moderate torque to complete the installation.

## Technical Specification

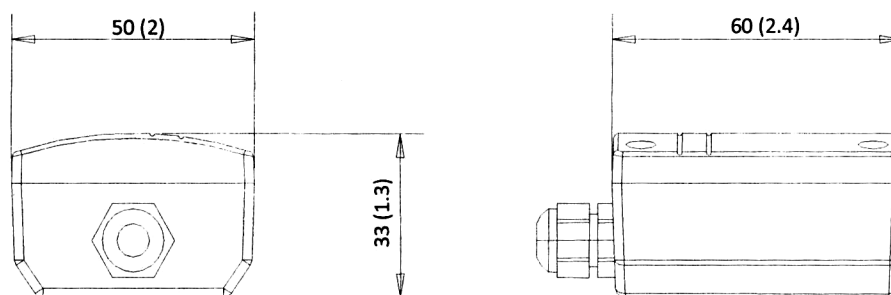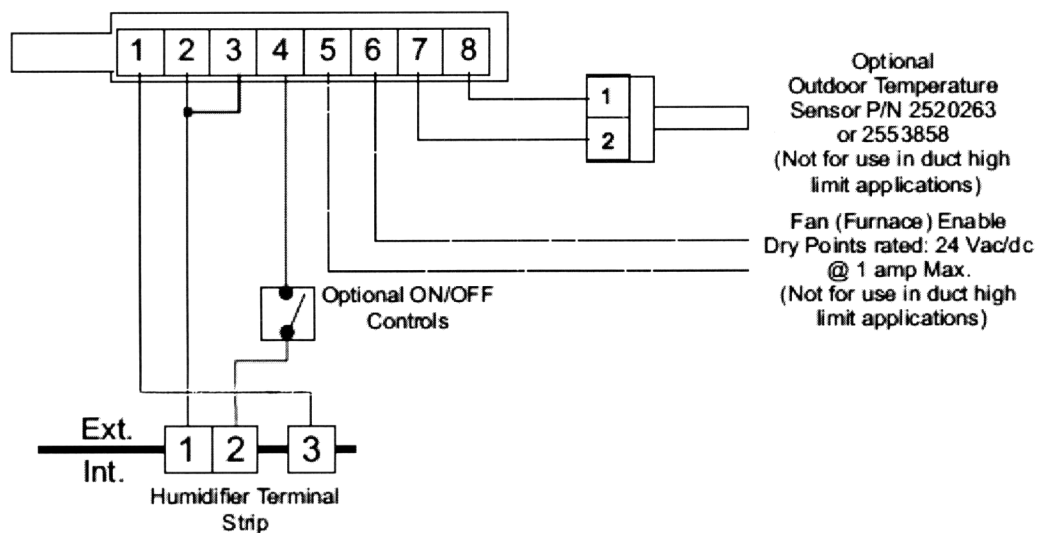| Sensing Probe | Thermistor: | NTC |
|---|---|---|
| | Accuracy: -40...0°C (-40...32°F): | 0.5 C |
| | 0...50°C (32...122°F): | 0.2 C |
| | 50...100°C (122...212°F): | 0.5 C |
| Connection | Terminal Connectors | For wire AWG 24...12 |
| Environment | Operation | To IEC 721-3-3 |
| | Temperature | -40...100°C (-40...212°F) |
| | Humidity | <95% R.H. non-condensing |
| | | |
| Standards | $C \epsilon$ conform according to EMC Standard 89/336/EEC EMEI Standard 73/23/EEC | EN 61 000-6-1/ EN 61 000-6-3 |
| | Product standards Automatic electrical controls for household and similar use Special requirement on temperature dependent controls | EN 60 730 –1 EN 60 730 – 2 - 9 |
| | Degree of Protection | IP65 to EN 60 529 |
| | Safety Class | III (IEC 60536) |
| Housing | Material | Fire proof PC + ABS plastic |
| | Dimensions Cover: (H x W x D) | 33 x 60 x 50 mm (1.3 x 2.4 x 2 in) |
| | Weight (including package) | 80 g (2.8 oz) |



Figure 1: Dimensions

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# Wall and Duct ON/OFF HUMIDISTAT
# WIRING DIAGRAM

Use for NH-EL, RH Series, NHRS, GSTC/GSP, SETC/SEP, MHTC, AIRFOG, and HP with:

| Part # | Description |
|---|---|
| 2548731 | Digital ON/OFF Wall Humidistat |
| 2548732 | Digital ON/OFF Duct Humidistat |
| 2520263 | Outdoor Temperature Sensor |
| 2553858 | Outdoor Mount Temperature Sensor |

Warning: Failure to wire the humidity transducer in accordance with wiring diagram could permanently damage the electronics. Such errors will void the warranty.
Cabling between transducers and unit should be shielded 18 AWG



Optional
Outdoor Temperature
Sensor P/N 2520263
or 2553858
(Not for use in duct high
limit applications)

Fan (Furnace) Enable
Dry Points rated: 24 Vac/dc
@ 1 amp Max.
(Not for use in duct high
limit applications)

Optional ON/OFF Controls

Ext.
Int.
Humidifier Terminal Strip

Humidistat - Relay Timing Chart

(Humidity Demand)
Fan Relay
Humidifier Relay

10 sec.    90 sec.

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WD Digital ON/OFF Humidistat
INSTALLATION INSTRUCTION/WIRING DIAGRAM
DIAGRAM NUMBER    2548733    REV. E
DATE  October 30, 2018