

## Outdoor Mount Temperature Sensor Installation Instructions

This document covers the operation and installation instructions for the following Condair outdoor mount temperature sensor:

| Kit No. | Description |
|---------|-------------|
|---------|-------------|

|         |                                  |
|---------|----------------------------------|
| 2553858 | Outdoor Mount Temperature Sensor |
|---------|----------------------------------|

The Condair COT temperature sensor can be used together with the following Condair Digital Humidity Controllers:

| Part No. | Description |
|----------|-------------|
|----------|-------------|

|         |                               |
|---------|-------------------------------|
| 2597928 | 0-10V Digital Wall Humidistat |
|---------|-------------------------------|

|         |                                |
|---------|--------------------------------|
| 2520259 | On/Off Digital Wall Humidistat |
|---------|--------------------------------|

|         |                                    |
|---------|------------------------------------|
| 2597929 | 0-10V Digital Duct Humidistat pkg. |
|---------|------------------------------------|

|         |                                     |
|---------|-------------------------------------|
| 2520273 | On/Off Digital Duct Humidistat pkg. |
|---------|-------------------------------------|

|         |                                     |
|---------|-------------------------------------|
| 2597934 | Digital Wall ON/OFF Humidistat pkg. |
|---------|-------------------------------------|

|         |                                     |
|---------|-------------------------------------|
| 2597935 | Digital Duct ON/OFF Humidistat pkg. |
|---------|-------------------------------------|

The humidity controller used together with COT temperature sensor reads the outdoor air temperature measured by the COT temperature sensor and reduces the humidity control set point during cold weather operation to prevent condensation on windows and building structures.

### 1 – Installation Instructions

#### Location:

The COT temperature sensor must be installed on a flat vertical surface protected from direct sunlight and rain.

#### Installation:

Refer to the installation overview in section 2.

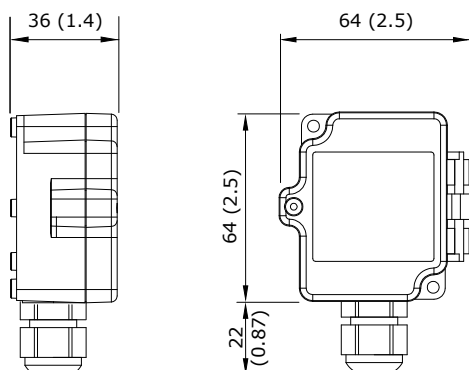
1. The cable gland must face downwards.
2. To install the sensor, remove cover.
3. Place seal and washer below the long mounting screw. Securely fix it to wall.
4. Thread wires through cable gland or conduit connector
5. Connect the wires, normally 18 ga unshielded twisted pair, according to the wiring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

## 2 – Installation overview

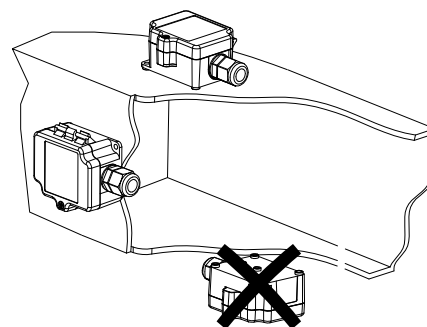


**COT**  
**2553858**

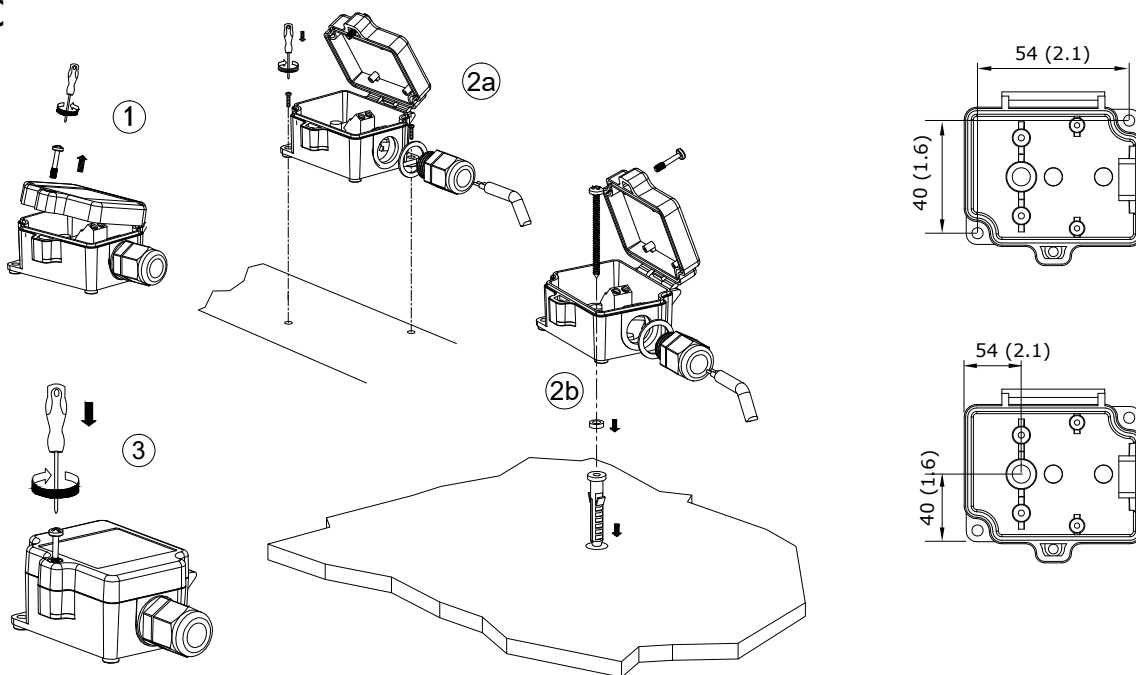
**A** mm (inch)



**B**

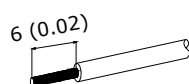
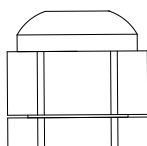


**C**



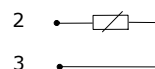
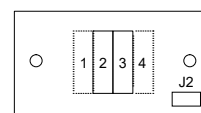
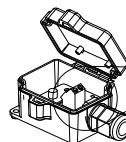
**i**

**AMC-1**



**D**

**SOD-Tn**



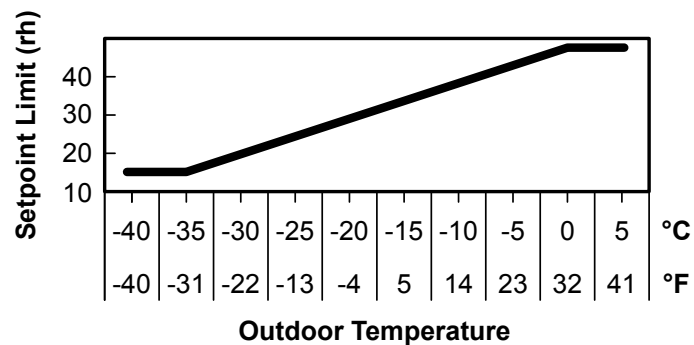
For Wiring Schematic:  
Get the Condair  
Sensor Connect App



### 3 – Product Specification

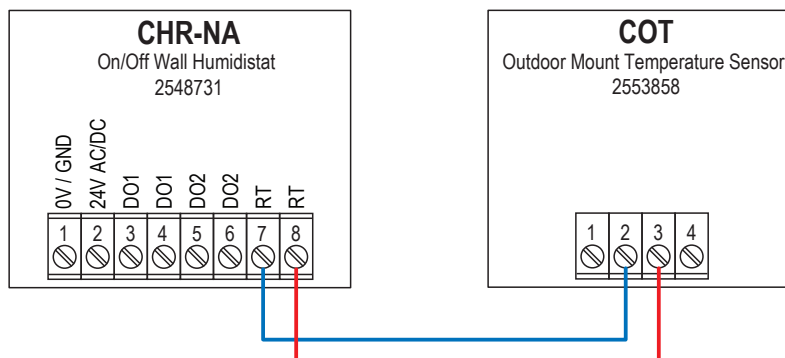
|               |                                                                                                                                            |                                                                                    |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Sensing Probe | Thermistor:<br>Accuracy: -40...0°C (-40...32°F):<br>0...50°C (32...122°F):<br>50...100°C (122...212°F):                                    | NTC<br>0.5C<br>0.2C<br>0.5C                                                        |
| Connection    | Terminal Connectors                                                                                                                        | For wire AWG 24...12                                                               |
| Standards     | Conforms according to<br>EMC Standard 89/336/EEC<br>EMEI Standard 73/23/EEC                                                                | EN 61 000-6-1/EN 61 000-6-3                                                        |
|               | Product Standards<br>Automatic electrical controls for household and similar use<br>Special requirements on temperature dependent controls | EN 60 730 – 1<br><br>EN 60 730 – 2- 9                                              |
|               | Degree of protection                                                                                                                       | IP 65 to EN 60 529                                                                 |
|               | Safety Class                                                                                                                               | III (IEC 60536)                                                                    |
| Environment   | Operation<br>Temperature<br>Humidity                                                                                                       | IEC 721-3-3<br>-40...100°C (-40...212°F)<br><95 %rH not condensing                 |
| General       | Materials<br>Dimensions   Cover: (HxWxD)<br>Weight (including package)                                                                     | Fire proof PC + ABS plastic<br>33 X 60 X 50 mm (1.3 x 2.4 x 2 in)<br>80 g (2.8 oz) |

#### Setpoint Versus Outdoor Temperature



### 4 - Wiring Diagrams

#### Wiring diagram COT-CHR-NA



Wiring diagram COT-RCC-NA

