

# Outdoor Temperature Sensor Installation Instructions

This sensor can be mounted directly onto the fresh air intake of the ventilation duct. The humidity controller reads the outdoor temperature and reduces the humidity control setpoint during cold weather operation to prevent condensation on windows and building structures.

For use with the following Nortec 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	Nortec Digital Wall ON/OFF Humidistat pkg.
2548732	Nortec Digital Duct ON/OFF Humidistat pkg.

## Installation Instructions

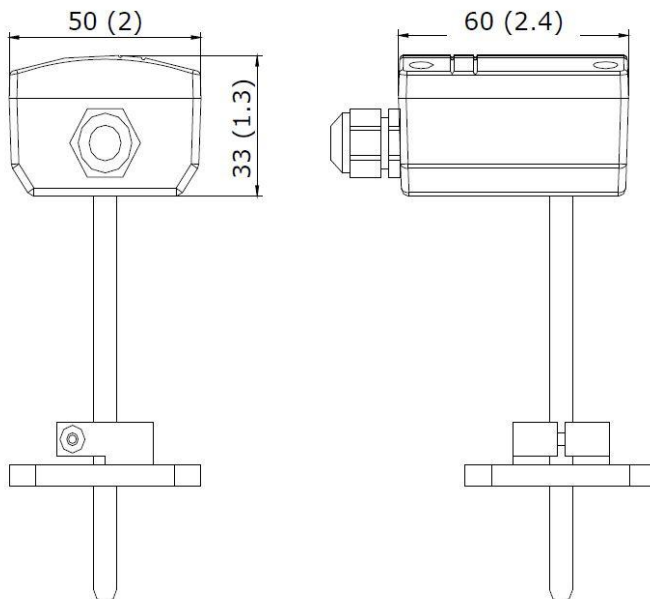
1. Locate the temperature sensor near the fresh air intake. This will ensure accurate representation of the outdoor air temperature.
2. Open the housing by removing the 4 screws securing the housing together.
3. Push the probe through the center hole and tighten the 2 mounting screws.
4. Drill a 3/8" (8mm) hole in the duct and insert the probe into the air stream.
5. Secure the sensor to the duct using 2 sheet-metal screws.
6. Connect the signal wires to the sensor terminal strip. Connect the plug from the temperature probe to the PCB board.
7. Close the cover and secure using the 4 screws removed in step 2.

## Technical Specification

Sensing Probe	Thermistor Type	10 k $\Omega$ NTC, Curve 24
	Range	-40° to 212° F (-40° to 100°C)
	Accuracy	$\pm$ 0.2 K at 77°F (25°C)
Environment	Ambient Temperature	-40° to 158° F (-40° to 70°C)
	Humidity	< 95% RH
Housing Materials	Cover	Fire proof ABS plastic
	Mounting Plate	Fire proof ABS plastic
	Sensor Probe	Stainless Steel

All Dimensions in mm (in.)

### Dimension



### Mounting Plate

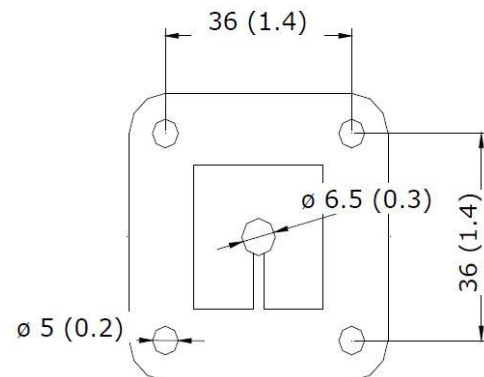


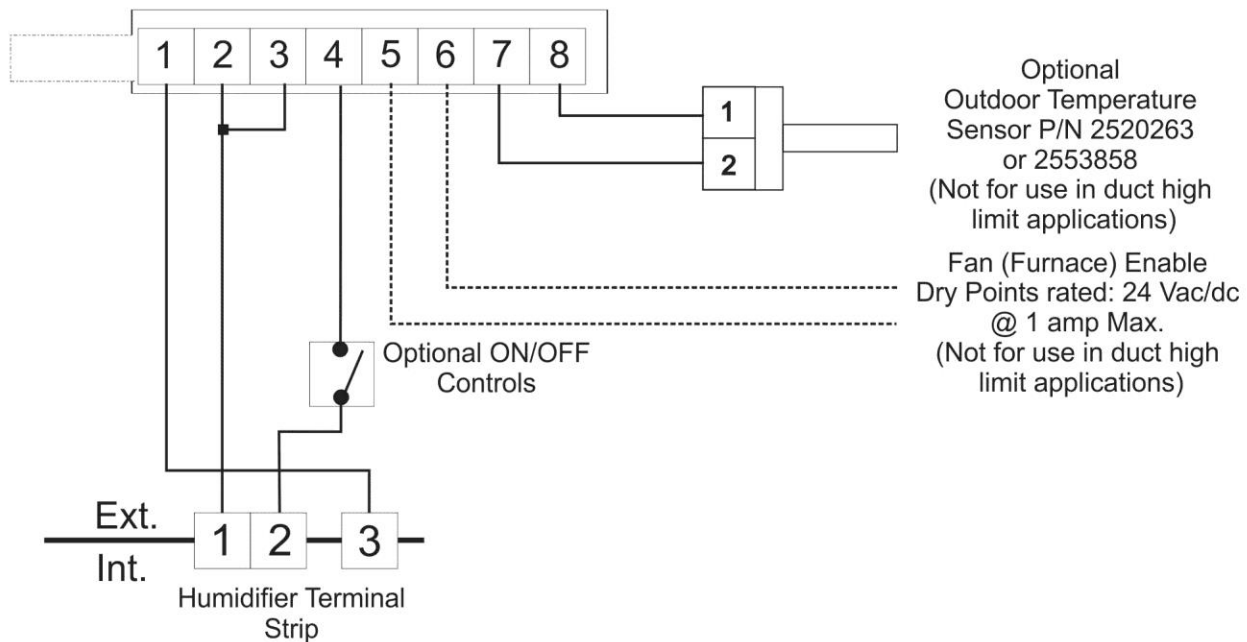
Figure 1: Dimensions

# NORTEC 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



Humidistat - Relay Timing Chart

