ENERGY SOLUTIONS

Installation Guide

Title:

Space Temperature And Humidity Sensor Placement During Installation

OVERVIEW

The space temperature and humidity sensors are used as control points for the Flō unit. It is critical that the sensors are installed correctly for optimum performance.

Space Sensor Controller Connections

- 1. Determine the mounting location for the sensors specified for your project.
- 2. Before connecting the sensors, use the unit's main power disconnect to turn the unit **OFF**.
- 3. Install the sensors. Refer to the installation instructions provided with the sensors, project documentation or controller manual.
- **NOTE:** Do not earth ground any sensor commons. This will damage the controller.
- 4. Once the sensors are installed, use a multimeter to verify that no shorts exist between earth ground.
- 5. Once the installation is complete and connections have been verified, use the unit's main power disconnect to turn the Flō **ON**.
- 6. After the unit starts and the controller boots up, use the controller to verify the readings.

Interior Column Installation (Recommended)

Interior column installation is preferred because it most accurately represents the space conditions.

Mount the space humidity and temperature sensors on an interior column in a central location within the zone. The sensors are to be located away from doors, windows, vents, supply air, heaters, appliances, refrigerated cases and outside walls that could affect the sensor readings.

It is important that the sensors are not obstructed by shelving or product as this will negatively influence the accuracy of the readings. *See Figure 1.*

Mount the sensors 5 to 7 feet above the floor as this represents space conditions at the customer comfort level.

It is especially important that these sensors are not located directly in the supply air stream.



NOTE: For all applications, to accurately calculate and control the space dew point, the space humidity sensor and temperature sensor must be mounted together as close to the same height as possible. *See Figure 1 and 2.*

Interior Wall Installation (Optional)

If an interior column is not available, the space humidity and temperature sensors can be mounted on an interior wall within the zone. The sensors are to be located away from doors, windows, vents, supply air, heaters, appliances, refrigerated cases and outside walls that could affect the sensor readings.

It is important that the sensors are not obstructed by shelving or product. *See Figure 2.*

Mount the sensors 5 to 7 feet above the floor as this represents space conditions at the customer comfort level. Ensure that all wall mounted sensors are insulated behind the sensor.



Figure 2. Interior Wall Installation