

Humidity Settings

The TS200H or TS250H ship with the WM700 wiring module installed, which has two (2) additional relays: dh (dehumidify) and hu (humidify). These relays can be connected to a dehumidifier and/or a humidifier to control each separately as needed.

To configure humidity settings, go to: **Admin > Thermostat Configuration > Humidity Settings > Control Mode** in your Pelican Web App.

Control Mode allows you to set the type of humidity control being used.

- **None:** The thermostat will track humidity, but will not control the humidity level in the space.
- **Humidify:** If the humidity drops below the thermostat's humidity setting, the thermostat will energize the Hu terminal to bring on a humidifier.
- **Dehumidify:** If the humidity drifts above the thermostat's humidity setting, the thermostat will energize the Dh terminal to bring on a dehumidifier.
- **Full Control:** If the humidity drops below the thermostat's humidity setting, the thermostat will energize the Hu terminal to bring on a humidifier. And if the humidity drifts above the thermostat's humidity setting, the thermostat will energize the Dh terminal to bring on a dehumidifier.
- **Cool Only:** If the humidity drifts above the thermostat's humidity setting, the thermostat will energize the cooling cycle to dehumidify the space. When dehumidifying with the cooling coil, the thermostat will cool the space until the space temperature reaches 70°F or the thermostat's humidity setting, whichever comes first.
- **Cool + Dehumidify:** In addition to the standard dehumidification option, the Cool + Dehumidify option combines the cool-only mode with the DH output signal. This makes it easy to energize cooling and open a hot-gas bypass valve in units with this function. In addition, when this mode is active, the cooling is adjusted to allow the space temperature to fall four 4°F below the cool setting or 70°F, whichever is lower.

In all cases, you can define a "Safe Range" from 0 to 100% for monitoring purposes. By setting a safe humidity alarm range, if the humidity level exceeds this range, an automated Alarm Notification will be generated.

If you select the Control Mode of "Dehumidify" and set a Maximum Humidity Setpoint, the thermostat will call for dehumidification any time the humidity goes above the setpoint. This includes a 15-minute hysteresis to keep from rapidly cycling on and off. Therefore, once the signal is energized, it will stay on for at least 15 minutes. When it is de-energized it will stay off for at least 5 minutes.

NOTE: When dehumidifying with the cooling coil, the thermostat will cool the space until the space temperature reaches 70°F or the thermostat's humidity setting, whichever comes first.

NOTE: Heat always overrides compressor-based dehumidification (i.e., If heat is active it will not switch over to cooling mode to dehumidify until the heat is satisfied). The compressor short cycle timer is always active so you will get a four (4) minute delay between heat and dehumidification.