



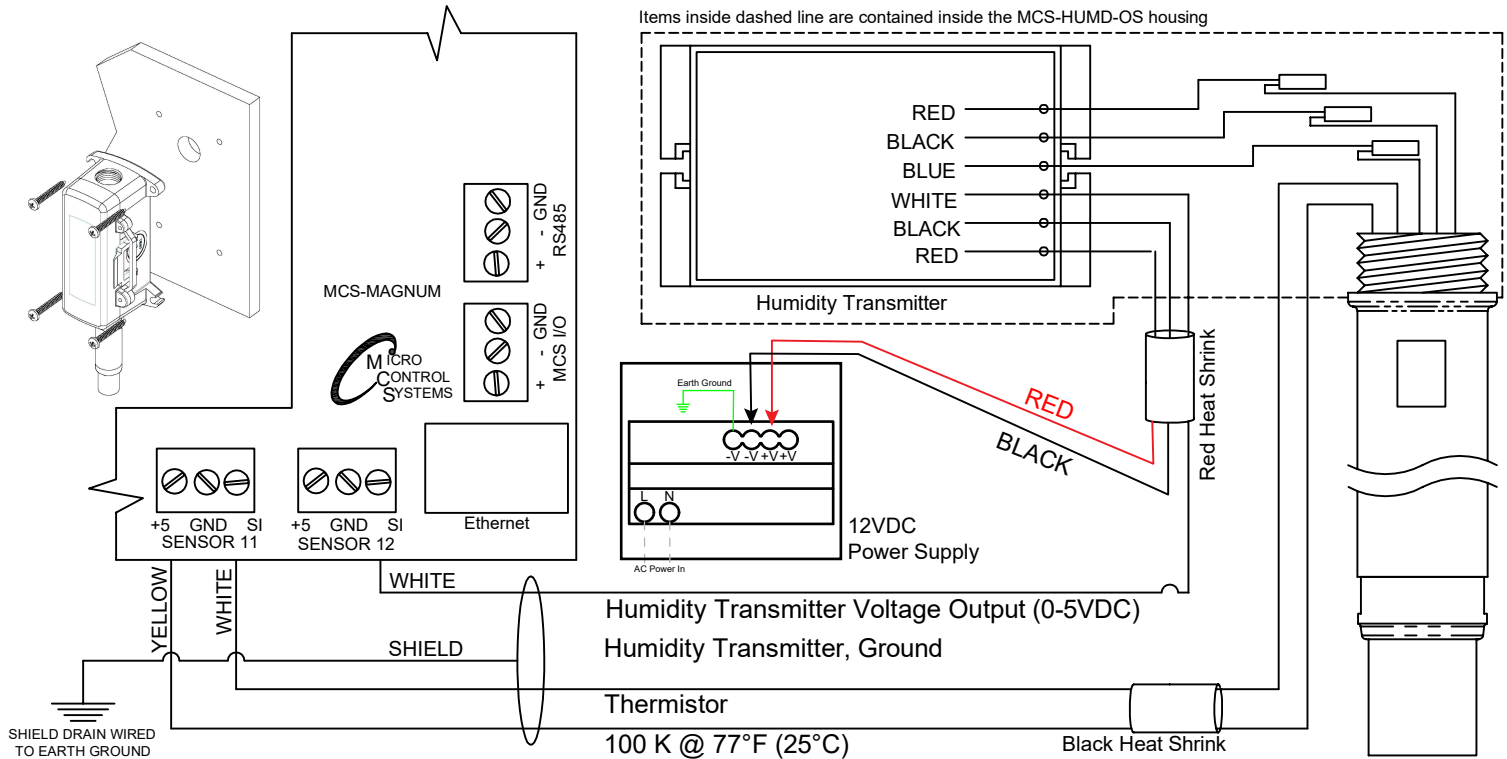
MCS-HUMD-OS

Outside Air Humidity and Temperature Sensor

Installation & Operation Instructions

Installation & Wiring

Mount in a permanently shaded area away from windows and doors. Do not mount in direct sunlight. Mount with the sensor probe pointed down. Drill a hole large enough for your sensor cable through your mounting surface. Mount the unit to the surface with the wiring knock out centered over the wiring hole. Pull the wiring into the unit and terminate using sealant filled connectors. Best practice is to caulk the wiring hole after the wiring is installed. Be sure that the foam on the back of the unit makes a good tight seal.



Humidity Diagnostics

Possible Problems:

- * Unit will not operate
- * Humidity reading in software appears to be off more than specified accuracy

Possible Solutions:

- * Check power supply / controller voltage supply
- * Disconnect transmitter from controller and check wires for proper operation with a meter
- * Confirm the sensor input is set up in the MCS-MAGNUM as HUMD-OS type
- * If available, check the sensor against a calibrated control such as a hygrometer
- * Use the 0 to 5V signal formula to calculate the output at the transmitter with a meter (%RH = V/0.05)
- * Determine if the sensor is exposed to an external source different from the measured environment, for example, a draft

Temperature Diagnostics

Possible Problems:

- * Controller reports incorrect temperature

Possible Solutions:

- * Confirm the sensor input is set up in the MCS-MAGNUM as MCS-T100
- * Verify that the sensor wires are not physically shorted or open
- * Check wiring for proper termination
- * Measure the temperature at the temperature sensor's location using an accurate temperature standard. Disconnect the temperature sensor wires and measure the temperature sensor's resistance with an ohmmeter. Compare the temperature sensor's resistance to the temperature sensor table on MCS-T100-XX specification sheet. If the measured resistance is different from the temperature table by more than 5%, call MCS technical support.

Filter Care

A sintered filter protects the humidity sensor from various airborne particles and may need periodic cleaning. To do this, gently unscrew the filter from the probe, rinse the filter in warm soapy water and rinse until clean. A nylon brush may be used if necessary. Gently replace the filter by screwing it back into the probe. The filter should screw all the way into the probe, or at the most having only one or two threads showing. Hand tighten only. If a replacement filter is needed, call MCS.

5580 Enterprise Pkwy, Fort Myers, FL 33905 USA
 Office: 239-694-0089 - Fax: 239-694-0031
 www.mcscontrols.com - support@mcscontrols.com

Revision - 2023-01-04