AZC-C1050-HU

HUMIDITY CONTROLLER

DESCRIPTION

The AZC-C1050-HU humidity controller is designed to control the relative humidity in a room or duct. Both humidification and dehumidification sequences are available. The built-in microprocessor offers precise digital control to maximize performance. The available control sequences are fully configurable, either locally or remotely with free software. The AZC-C1050-HU uses proportional-integral (PI) control loops to optimize humidity control and offers a variety of functions such as outdoor temperature reset for the humidification set point, unoccupied mode set point offsets, safety limits and more.

FEATURES

- Humidification setpoint varies according to the outside temperature
- Stand-alone or networked (up to 127 nodes)
- Outside temperature and proof of fan data can be received
- through the network
- Fan restart sequence during unoccupied mode available when networked
- Remote configuration and visualization with FREE AirZoe Focus software
- Proportional-integral (PI) control loops maximize performance
- 2 digital outputs and 1 analog output equipped with resettable fuses
- Configurable sequence for supply humidity modulating upper limit
- Configurable dehumidification sequence activated by digital output or network communication to rooftop controller

TECHNICAL SPECIFICATIONS

- **Supply:** 24 VAC ±10%, 50/60 Hz, Class 2
- **Power:** 2 VA (consumption), 32 VA (input)
- **Inputs:**
    - Outside air – thermistor 10K
    - Return/room humidity – 0-5 / 0-10 VDC
    - Supply humidity – 0-5 / 0-10 VDC
    - Proof of fan – dry contact
- **Digital outputs:** 2 triac outputs, 10-30 VAC source or sink, 300 mA max (resettable fuse)
- **Analog output:** 1 output 0-10 VDC / 2-10 VDC, 40 mA max (resettable fuse)
- **Indication lights (LED):** State of each output / Communication / Power / State of microprocessor
- **Microprocessor:** PIC18F6722, 8 bits, 40 MHz, 128KB FLASH memory
- **Casing:** Molded ABS, UL94-HB
- **Communication:** Modbus RTU (RS485), up to 127 nodes
- **Baud Rates:** 9600, 19200, 38400, 57600, 76800, 115200
- **Connection:** Removable screw-type terminal blocks (max 16 AWG)
- **Dimensions:** 6.2" x 5.2" x 2.5" (157mm x 132mm x 64mm)
- **Weight:** 0.85 lbs (0.39 kg)
- **Environment:** -4 to 122 oF (-20 to 50 oC) Non-Condensing
- **Certification:** UL916 Energy Management Equipment, CAN/CSA-C22.2, RoHS, FCC part 15: 2012 class B