

Description

The ProLon C1000 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 C1000 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 ProLon 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 $\pm 10\%$, 50/60 Hz

Consumption: 2 VA (typ), 32 VA (max)

Inputs: Outside air – thermistor 10K
Return/room humidity – 0-5 VDC
Supply humidity – 0-5 VDC
Proof of fan – dry contact

Digital outputs: 2 triac outputs, 10-30 VAC source or dry contact, 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

Communication: Modbus RTU (RS485), up to 127 nodes

Baud Rates: 9600, 19200, 38400, 57600, 76800, 115200

Wiring: Removable screw-type terminal blocks (max 16 AWG) and RJ45 modular jacks

Dimensions: 157 mm x 133 mm (6.2" x 5.2")

Environment: 0-50 °C (32-122 °F) Non-Condensing