

Description

The ProLon C1000 VAV series zone controllers are designed for variable air volume zoning systems. The built-in microprocessor offers precise digital control to maximize performance. The outputs and control sequences are all fully configurable, either locally or remotely, using free software or from the digital room sensor. A remote actuator (floating or modulating) connects to the C1000 VAV for damper control. When in a network, the C1000s can share information such as the occupancy state, the demand, the supply temperature and more.



Features

- Proportional integral (PI) control loops maximize performance
- Designed to use single or multiple outboard damper actuators (floating / modulating)
- Up to 4 digital outputs and 1 analog output, all protected with resettable fuses
- Supports Modbus, BACnet and Lon protocols
- Remote monitoring and configuration with FREE ProLon Focus software
- Stand-alone or networked (up to 127 nodes)
- Configurable sequences for radiant floor and duct heater
- Works with or without a flow sensor
- Monitoring and configuration from a digital sensor
- Quick and easy installation using detachable numbered terminal blocks
- Possibility of multiple actuator control
- FlexiZone system facilitates multiple zone management by evaluating the average weighted demand of the zones using customized groups

Technical Specifications

Supply: 24 VAC \pm 10%, 50/60 Hz

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

Inputs: Room – thermistor 10K
 Duct – thermistor 10K
 Setpoint – potentiometer 0-10K
 External clock – dry contact
 Override – dry contact
 Digital room sensor

Flow sensor: 0-3000 ft/min

Digital outputs: 4 triac outputs, 10-30 VAC source or dry contact, 300 mA max (resettable fuse), ON/OFF or pulsed, heating/cooling

Analog output: 0-10 VDC, 40 mA max (resettable fuse), modulating, ON/OFF or pulsed, heating/cooling

Indication lights (LED): State of each output / Communication / Power / State of microprocessor

Casing: Molded ABS

Microprocessor: PIC18F6722, 8 bits, 40 MHz, 128KB FLASH memory

Communication: 1x Modbus RTU (RS485), BACnet MS/TP (RS485) up to 127 nodes or Lon TP/FT-10 port and 1 RS485 port for digital sensor or computer interface

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

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

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

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