

Description

The ProLon VC1000 series VAV 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. When in a network, the VC1000s can share information such as the occupancy state, the demand, the supply temperature and more.



Features

- Proportional integral (PI) control loops maximize performance
- 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), 5 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, 750 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: Modbus RTU (RS485), BACnet MS/TP (RS485) or Lon TP/FT-10, up to 127 nodes

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

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

Dimensions: 228 mm x 145 mm (8.9" x 5.7")

Environment: 0-50 °C (32-122 °F)