



Datasheet

Zone Controller (PL-VC2000)

Description

The ProLon VC2000 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. The on-board brushless actuator provides electronic feedback on damper position. When in a network, the VC2000s can share information such as the occupancy state, the demand, the supply temperature and more.

Features

- Proportional integral (PI) control loops maximize performance
- Precise control of the Belimo actuator using Halomo® technology
- 1 digital output and 1 analog output, both protected with resettable fuses
- Supports Modbus and BACnet protocols
- Remote monitoring and configuration with FREE ProLon Focus software
- Standalone or networked (up to 127 nodes)
- Configurable sequences for radiant floor and duct heater
- Analog input can monitor discharge air, occupancy, CO2 levels and more
- 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 ±10%, 50/60 Hz, Class 2
- **Power:** 3 VA (Typ Consumption), 5 VA (Max Consumption), 24 VA (Input)
- **Inputs:** 1 general purpose analog input supporting 3 types of input signals (0-5V, 4-20mA and thermistor), as well as an RS485 communication port for a digital zone temperature sensor
- **Flow sensor:** 0-2 inches of H2O (optional)
- **Digital output:** 1 triac 10-30 VAC dry contact, 300 mA max (resettable fuse), ON/OFF or pulsed, heating or cooling
- **Analog output:** 0-10 VDC, 40 mA max (resettable fuse), modulating, ON/OFF or pulsed, heating or cooling
- **Indication lights (LED):** State of each output / Communication / Power / State of microprocessor
- **Casing:** Molded ABS, UL94-HB
- **Microprocessor:** PIC18F6722, 8 bits, 40 MHz, 128KB FLASH memory
- **Communication:** 1 RS485 network port (Modbus RTU or BACnet MS/TP - up to 127 nodes), and 1 RS485 port for digital sensor or computer interface.
- **Baud rates:** 9600, 19200, 38400, 57600, 76800, 115200
- **Connection:** Removable screw-type terminal blocks (16 AWG max)
- **Dimensions:** 5" x 5" x 3" (127 mm x 127 mm x 77 mm)
- **Weight:** 1.15 lbs (0.5 kg)
- **Environment:** 32-122 °F (0-50 °C) Non-Condensing
- **Certification:** UL916 Energy Management Equipment, CAN / CSA-C22.2, FCC part 15: 2012 class B, RoHS
- **Actuator:** Belimo® with Halomo® technology, 45 in-lb
Minimum Spindle Length: 37 mm / 1.5 in (Belimo LM)
Spindle Diameter Range: 6-20 mm / 0.25-0.75 in (Belimo LM)

Spindle length	Spindle diameter