

UNIT VENTILATOR TERMINAL UNIT CONTROLLER

OVERVIEW

The HVAC building automation controls market requires a flexible and economical DDC controller that provides optimum zone control for packaged unit ventilator applications.

Efficient Building Automation Corporation's Circon™ **SCC-310-UVC** comes complete with easy-to-configure unit ventilator control software, combined with a cost-effective hardware platform to provide exceptional flexibility. Configurable for a variety of applications, the SCC-310-UVC is all you need in a 13 point unit ventilator DDC controller.

APPLICATIONS

The SCC-310-UVC can be used in any packaged two or four-pipe unit ventilator application. It maintains a constant zone temperature through configurable, sequenced control of the supply fan, heating source, cooling source, and an optional outdoor air damper and exhaust air damper or fan. Optional secondary terminal or perimeter heating control increases application flexibility.

To optimize energy usage with minimal impact on comfort, an internal schedule allows the SCC-310-UVC to adapt its control sequence to occupied, unoccupied or standby setpoints, and implement demand limiting from a supervisory control source.

A versatile side loop provides three styles of control for a wide range of equipment including unit heater, baseboard heater, exhaust fan, lighting, maintaining space or duct static pressure, and more. The side loop together with other unused I/O can save the cost of additional controllers for simple applications.

EBAC's free Windows® based configuration software for the SCC-310-UVC is fully compatible with Echelon® Corporation's LNS® and Tridium® Inc.'s Niagara^{AX}®.

ORDERING INFORMATION

Part number: 10-0431



FEATURES

- LonMark Certified, with easy-to-use LNS plug-ins for seamless integration into interoperable LonWorks® networks
- Fast and easy-to-use Tridium Niagara^{AX} wizards for seamless integration into interoperable Niagara networks
- Easily mounts directly inside unit ventilator enclosure
- 5 relay and 2 analog outputs simplify connecting to a variety of digital, floating and analog-controlled actuators for standard unit ventilators
- 5 resistive inputs for space temperature (required), supply air temperature, mixed air temperature, setpoint adjust, fan, filter window and occupancy sensors
- Analog input enables demand control ventilation or dehumidification control
- Side loop provides independent control for additional simple HVAC equipment
- Onboard soft clock, scheduling, and trending to decrease costs and increase flexibility
- Transmits alarms for local or remote annunciation



SPECIFICATIONS

I/O CAPABILITY

6 Inputs: Five 10 kΩ thermistor, Precon curve: Type II model 24 or Type III model 3, or dry contact
 One voltage, 0-10 VDC

2 Analog Outputs: 0-10 VDC, maximum drive of 100 mA per output

5 Digital Outputs: Dry contact relay: 2.0 A maximum at 24 VAC or 24 VDC

COMMUNICATIONS

Transceiver: Echelon Free Topology Transceiver (FTT-10A @ 78 kbps)

Wire Type: AWG22 to AWG16 stranded (use twisted pair wiring and copper conductors for network)

Neuron®: 3150, 10 MHz

POWER SUPPLY

Controller: 2.0 A, 24 VAC, 50-60 Hz, or 24 VDC

Fuse: 2.5 A slow-blow (Bussman GMD-2.0A, Littelfuse 23902.0A)

Rectifier: Half-wave

MECHANICAL

Operating Temperature: 32°F to 122°F (0°C to 50°C)

Relative Humidity: 5% to 95% RH (non-condensing)

Weight: 15 oz. (420 grams)

Enclosure Dimensions: 0.8" x 5" x 5.8" (20.3mm x 127mm x 147mm)

Enclosure Material: Metal

Mounting: Four sheet metal screws, optional DIN rail adaptor (part # 50-0550)

AGENCY LISTINGS AND REGULATORY COMPLIANCE

Class II device (when powered by a class II supply)

CSA 22.2 #205-M1983, #950-M89

UL916 certification for Energy Management Equipment

Part 15, Class B of the FCC Rule for Radio Frequency Devices

EMC Directive 89/336/EEC

LonMark 3.4 Certified, Functional Profile: 8505 Space Comfort Controller



EFFICIENT BUILDING AUTOMATION CORPORATION

401 – 8342 130th Street, Surrey BC, Canada V3W 8J9

Telephone: +1 604.248.4404 Facsimile: +1 604.248.4405

Website: www.circon.com



Specifications subject to change without notice.

Circon™ is a trademark of Efficient Building Automation Corporation. Echelon®, LonWorks®, Neuron®, and LNS® are trademarks of Echelon Corporation registered in the United States and other countries. Windows® is a trademark of Microsoft Corporation registered in the United States and other countries. LonMark® and the LonMark logo are managed, granted and used by LonMark International under a license granted by Echelon Corporation. Tridium® and NiagaraAX® are trademarks of Tridium Inc. registered in the United States and other countries.

DOCUMENT # 80-0420 / REVISION 2.0 / PRINTED IN CANADA