

GENERAL PURPOSE TERMINAL UNIT CONTROLLER

OVERVIEW

The HVAC building automation controls market requires a flexible and economical DDC controller that provides multiple independent control loops for different types of equipment in diverse HVAC applications.

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

APPLICATIONS

The SCC-310-GPC can be used for many HVAC applications. Typical uses for its four independent control loops include: unit heater or baseboard heater control, exhaust fan control, lighting control, Variable Volume and Temperature (VVT[®]) zone control, space static or duct pressure control, and more.

Through flexible configuration options, the control loops provide schedule only, two position, VVT zone damper control sequencing, or proportional-integral (PI) control. To allow chaining of multiple zone damper control loops that share a common source of heating and cooling, the SCC-310-GPC includes a zone arbitrator to ensure the highest priority request for tempered air is sent to the rooftop unit.

Four independent schedules allow control loops to adapt setpoints to occupied or unoccupied time periods.

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

ORDERING INFORMATION

Part number: 10-0436



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 equipment
- Four independent control loops allow schedule only, two position, PI or VVT zone damper control sequencing for flexible control of simple HVAC equipment
- 5 relay and 2 analog outputs simplify connecting to a variety of a variety of digital, floating and analog-controlled equipment
- 5 resistive inputs
- An analog voltage input allows monitoring and control of static or duct pressure, light or air quality levels
- Combines with a UHC-320 as the RTU controller to implement a powerful VVT solution
- 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



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



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