FULLY PROGRAMMABLE SPACE COMFORT CONTROLLER

OVERVIEW
The HVAC building automation controls market requires a flexible, economical, fully programmable DDC controller that provides optimum zone control for terminal unit applications.

Efficient Building Automation Corporation’s Circon™ SCC-310-PRG is a complete controller, with easy-to-configurable functional blocks, combined with the power of Circon BASIC programming language to provide exceptional flexibility. On-board relays and full programmability to meet virtually any terminal unit application, the SCC-310-PRG is all you need in a 13 point DDC controller.

APPLICATIONS
The SCC-310-PRG can be used to implement tailored control applications for unique or custom terminal unit designs when configurable-only controllers do not meet your needs. Flexible schedule, alarm, trend, actuator, optimum start and PI blocks can be used to quickly create effective control and monitoring solutions.

Along with the configurable control blocks and the input/output points, EBAC’s powerful Circon BASIC programming language can be used to implement more complicated control sequences. Circon BASIC is flexible and powerful, allowing the user to create tailored control sequences for packaged air handlers, heat pumps, fan coil units, packaged rooftop A/C units, unit ventilators or any custom terminal unit HVAC mechanical design.

EBAC’s no-cost Windows®-based configuration software for the SCC-310-PRG and the Circon BASIC Compiler are fully compatible with Echelon Corporation’s LNS® and Tridium® Inc.’s Niagara®AX platforms.

ORDERING INFORMATION
Part number: 10-0437

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
→ Fully programmable with flexible and easy-to-use Circon BASIC programming language
→ Easily mounts directly inside terminal unit enclosure
→ 5 relay outputs and 2 analog outputs simplify connecting to a variety of digital, floating and analog-controlled actuators
→ 5 resistive inputs for space temperature (required), supply air temperature, mixed air temperature, setpoint adjust, fan, filter window and occupancy sensors
→ Voltage input enables demand control ventilation or dehumidification control
→ PI, optimum start and actuator functional blocks, onboard soft clock, scheduling and trending decrease costs and increase flexibility
→ Transmits alarms for local or remote annunciation
# SPECIFICATIONS

## I/O CAPABILITY

| Inputs          | 6 Inputs: Five 10 kΩ thermistor, Precon curve: Type II model 24 or Type III model 3, or dry contact  
|-----------------|-----------------------------------------------
| Outputs         | One voltage, 0-10 VDC  
| Analog Outputs  | 2  
| Digital Outputs | 5  
| Maximum Drive   | 0-10 VDC, maximum drive of 100 mA per output  
| Drive           | 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, Littlefuse 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)
- 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: 8500 SCC-Generic

## EFFICIENT BUILDING AUTOMATION CORPORATION

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