

# 15 POINT PROGRAMMABLE CONTROLLER

## OVERVIEW

The HVAC building automation controls market requires a flexible, economical, fully programmable DDC controller that provides optimum zone control for virtually any terminal unit application such as: Rooftop Units, Fan Coil Units, Heat Pumps, Unit Ventilators and simple Air Handlers.

The Circon™ **SCC-410** combines easy-to-configure I/O with the power of the Circon Catalyst® graphical programming tool to provide exceptional application flexibility.

## APPLICATIONS

The SCC-410 can be used to implement tailored control applications for unique or custom terminal unit designs when configurable-only controllers do not meet your needs.

EBAC's powerful and easy to use Circon Catalyst graphical programming environment can be used to implement your most complicated control sequences. Circon Catalyst includes over 150 function blocks with support to create your own custom blocks.

With native support for Modbus via the RS-485 port, the SCC-410 can connect to industry-standard Modbus devices such as expansion I/O modules, sensors, utility meters, VFDs and more.

EBAC's Windows-based configuration software for the SCC-410 and the Circon Catalyst programming tool are available at no charge, and are fully compatible with Echelon's LNS® platform.

## ORDERING INFORMATION

Part number: 10-0460



## FEATURES

- LonMark compliant, with easy-to-use LNS plug-in for seamless integration into interoperable LonWorks® networks
- Powerful, industry-leading 32-bit ARM processor
- Fully programmable with flexible and easy-to-use Circon Catalyst® programming tool; with support for floating point and structured SNVTs
- High performance LonTalk stack with support for over 200 network variables (including 64 dynamic) as well as 64 address table entries
- Easily mounts directly inside terminal unit enclosure
- RS-485 port with support for Modbus RTU protocol
- 5 relay outputs and 3 analog outputs simplify connecting to a variety of digital, floating and analog-controlled actuators
- 5 resistive inputs connects to a variety of sensors for space temperature, outside air, supply air temperature, mixed air temperature, setpoint adjust, fan, filter, window and occupancy sensors
- 2 voltage inputs enables demand control ventilation and dehumidification control



## SPECIFICATIONS

### I/O CAPABILITY

7 Inputs:	Four 10 kΩ thermistor, Precon curve: Type II model 24 or Type III model 3, or dry contact One 1 kΩ RTD or dry contact Two voltage, 0-10 VDC
3 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

### HARDWARE

Processor:	ARM9 @ 400MHz
Memory:	64 MB Flash, 64MB RAM
EIA-709 (LonTalk) Port:	TP/FT-10 @ 78 kbps
Serial Ports:	1 RS-485 port (Modbus RTU master)

### POWER SUPPLY

Controller:	2.0 A, 24 VAC, 50-60 Hz, or 24 VDC
Fuse:	2.0 A slow-blow (Bussmann GMD-2.0A, Littelfuse 23902.0A)
Rectifier:	Half-wave

### MECHANICAL

Operating Temperature:	32°F to 122°F (0°C to 50°C)
Operating Humidity:	5% to 95% RH (non-condensing)
Weight:	15 oz. (420 grams)
Enclosure Dimensions:	1.0" x 5.6" x 6.1" (25.4mm x 142.2mm x 155.6mm)
Enclosure Material:	Metal
Mounting:	Four sheet metal screws

### AGENCY LISTINGS AND REGULATORY COMPLIANCE

Class II device (when powered by a class II supply)  
 CSA(C US) 22.2 #205-M1983, #950-M89  
 Part 15, Class B of the FCC Rule for Radio Frequency Devices  
 EMC Directive 89/336/EEC



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