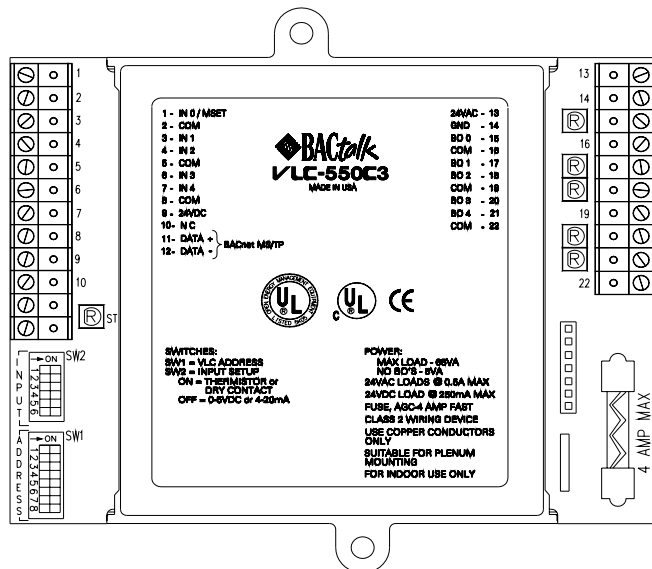




VLC-550C3

Programmable VisualLogic® Controller



Features & Application Highlights

- **Capable** Five 10-bit inputs and five binary outputs.
- **Interoperable** Fully BACnet-compliant on MS/TP LAN at up to 76.8 Kbps.
- **Versatile** Fully programmable for heat pumps, air conditioning units, and general purpose control applications.
- **Reliable** Extensive onboard filtering, with all program data backed up in nonvolatile EEPROM.
- **Fast** Internal logic loop of 100 msec.

The Alerton® BACtalk® VLC-550C3 is a high-performance, fully programmable logic controller designed for control of heat pumps, AC units, and other terminal unit applications. The VLC-550C3 is part of Alerton's complete BACtalk product line in total compliance with ANSI/ASHRAE Standard 135-1995, BACnet. As a native BACnet controller, it requires no proprietary chip sets to integrate seamlessly with your BACnet system.

The VLC-550C3 communicates using the standard BACnet protocol on a BACnet MS/TP LAN, which operates at up to 76.8 Kbps. The VLC-550C3 can also operate as a stand-alone controller. Its design includes support for Alerton's BACtalk Microset™, an intelligent wall sensor unit offering convenient data display and setpoint adjustment.

All VLC-550C3 control logic is programmed with Alerton's easy-to-learn graphical programming language, VisualLogic. This self-documenting software's complete

function library enables you to implement entirely flexible control strategies. A single VLC-550C3 can contain numerous algorithm loops that control various parts or multiple pieces of equipment. Nonvolatile EEPROM stores all program data.

The VLC-550C3 is built for high-speed processing, with an internal logical loop time of 100 msec. Programmable timers also maintain a resolution of 100 msec. High-resolution, 10-bit analog inputs are field adjustable for thermistor/dry contact or 0-5 VDC/4-20 mA.

CMOS circuitry, a four layer circuit board with separate ground plane, and extensive hardware, software, and power-supply filtering ensure reliable and stable operation. The CMOS processor uses an internal watchdog, and power supply voltage is monitored to provide automatic shutdown and data backup.

Product Number

VLC-550C3

VLC-550C3 SPECIFICATIONS

Power 24 VAC @ 5 VA min., plus binary output loads (65 VA max). Utilizes a half-wave rectifier, which allows multiple VLCs to be powered from a single transformer. One leg of 24 VAC connects to earth (panel) ground.

Inputs Five inputs with 10-bit resolution. Input 0 can be used for a BACtalk® Microset™. Inputs 1–4 are switch-selectable for thermistor/dry contact or 0–5 VDC/4–20 mA signals.

Binary Outputs Five outputs, each rated at 24 VAC, 0.5 A. The outputs utilize hot-switched triacs, which have a common connection to the fused 24 VAC supply.

24VDC Output Up to 250 mA of 24VDC power is provided to power transducers or other devices.

Processor Motorola CMOS processor with ROM and RAM.

EEPROM Provides non-volatile program and data storage.

Max. Dimensions 4.9" (125mm) H X 5.00" (127mm) W X 1.4" (36mm) D.

Terminations Removable header-type screw terminals accept 14–24 AWG wire.

Environmental 32–158°F (0–70°C). 0–95% RH, non-condensing.

Communications BACnet MS/TP LAN up to 76.8 Kbps.

BACnet Conformance Conformance Class 3. See Protocol Implementation Conformance Statement (PICS).

Ratings

- Listed Underwriters Laboratory for Open Energy Management Equipment (PAZX) under the UL Standard for Safety 916.
- EMC Directive 89/336/EEC (European CE Mark).
- FCC Part 15, Subpart J, Class A.

Specifications subject to change without notice.

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