

Features and highlights

- **Capable**
Eight 10-bit inputs, five binary outputs, and three 8-bit analog outputs.
- **Interoperable**
BACnet-compliant on MS/TP LAN at up to 76.8 Kbps.



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- **Versatile**
Fully programmable for central plant systems, air handling units, other control and process equipment.
- **Reliable**
Extensive on-board filtering, with all program data backed up in nonvolatile flash memory.
- **Fast**
Internal logic loop of 100 msec.



The Alerton® BACtalk® VLC-853 is a versatile, high-performance BACnet-compliant field controller designed for control of central plant systems, air handling units, large terminal units, and similar control and process equipment. As a native BACnet controller, the VLC-853 integrates seamlessly with your BACnet system. It communicates at up to 76.8 Kbps on a BACnet MS/TP LAN or can operate as a stand-alone controller.

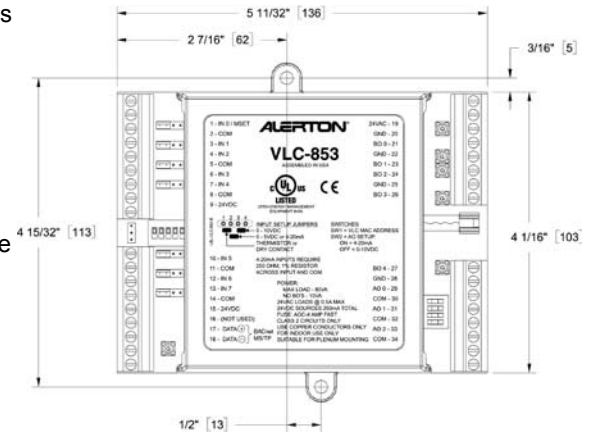
All VLC-853 control logic is programmed with Alerton's easy-to-learn graphical programming language, VisualLogic®. Programming and setup data is stored in nonvolatile flash memory, ensuring stable and reliable operation. The VLC-853 supports the Alerton Microset™ and Microset II intelligent wall sensors, which offer convenient data display, setpoint adjustment, and technician access to equipment setup parameters.

The VLC-853 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, 0–5 VDC/4–20 mA or 0–10 VDC. Analog outputs are switch-selectable for 4–20 mA or 0–10 VDC. For equipment monitoring, an on-board LED for each binary output indicates ON/OFF status, and a separate LED indicates communication activity on the MS/TP LAN.

Technical Data

- **Power** 24 VAC @ 10 VA min., plus binary output loads (80 VA max). Utilizes a half-wave rectifier, which allows a single transformer to power multiple VLCs. One leg of 24 VAC connects to earth (panel) ground.
- **Inputs** 8 universal inputs with 10-bit resolution. Input 0 can be used for a BACtalk Microset. Inputs 1–7 are jumper-selectable for thermistor/dry contact, 0–5 VDC/4–20 mA or 0–10 VDC.
- **Binary Outputs** 5 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.
- **Analog Outputs** 3 outputs with 8-bit resolution. Each is switch-selectable for 0–10 VDC or 4–20 mA. 4–20 mA outputs are sourced by the VLC. Connected loads must return to the VLC ground. 4–20 mA max. load resistance is 1,000 ohms. 0–10 VDC min. load resistance is 500 ohms.
- **24VDC Outputs** Two terminals provide up to 100 mA (total) of 24 VDC to power transducers or other devices.
- **Processor & memory** Motorola AZ60 processor with on-board flash memory. Flash memory provides nonvolatile program and data storage, and allows for encrypted updates to the program for future product enhancements.
- **Max. Dimensions** 4.9" (125mm)H x 5.4" (136mm)W x 1.4" (36mm)D.
- **Terminations** Removable header-type screw terminals accept 14–24 AWG wire. An additional header is provided for easy connection to MS/TP for testing.
- **Environmental** 0–158 deg. F (-17–70 deg. C). 0–95% RH, non-condensing.
- **Communications** BACnet MS/TP LAN up to 76.8 Kbps.
- **BACnet Conformance** An application specific controller (ASC); tested and approved by BTL. See Protocol Implementation Conformance Statement (PICS).



• Ratings

Listed Underwriters Laboratory for Open Energy Management Equipment (PAZX) under the UL Standard for Safety 916; listing includes both U.S. and Canadian certification

EMC Directive 89/336/EEC (European CE Mark)

FCC Part 15, Subpart J, Class A



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Ordering information

Item number	Description
VLC-853	8 inputs, 5 binary triac outputs, 3 analog outputs
VLC-853-C	VLC-853 field controller with available custom DDC

Specifications subject to change without notice