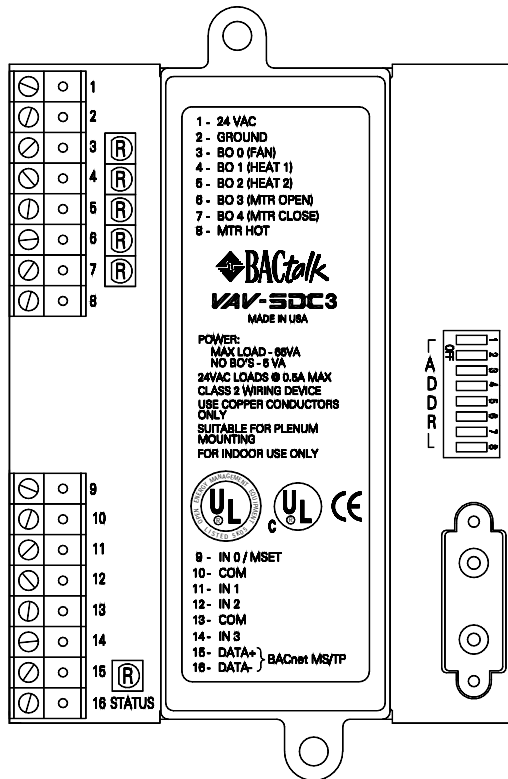




VAV-SDC3™

Programmable VisualLogic® Controller



Features & Application Highlights

- **Capable** Four 10-bit inputs and five binary outputs.
- **Interoperable** Fully BACnet-compliant on MS/TP LAN at up to 76.8 Kbps.
- **Versatile** Factory-loaded, completely programmable control logic can be field-modified.
- **Reliable** Extensive onboard filtering, with all program data backed up in non-volatile EEPROM.
- **Accurate** Factory calibrated at multiple velocity points and field-adjustable during balancing.

The Alerton® BACtalk® VAV-SDC3 controller is a versatile BACnet terminal unit device that provides pressure-independent control of any single-duct variable air volume (VAV) box. The VAV-SDC3 is part of Alerton's complete BACtalk product line in 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, and communicates at up to 76.8 Kbps on a BACnet MS/TP LAN.

The VAV-SDC3 operates with the Alerton BACtalk Microset™, Microtouch™ or wallplate sensors. The BACtalk Microset wall unit is an intelligent zone sensor with a digital display and simple push-button controls. It functions as both a tenant control center and field service tool, which enables a technician to view and change variables within the VAV-SDC3.

The BACtalk VAV-SDC3 contains an integral airflow sensor to provide pressure-independent operation of the VAV box. Each airflow sensor is factory-calibrated at

multiple velocity points. Minimum, maximum and reheat airflows can be entered either at a Microset wall unit or a BACtalk for Windows operator terminal. A technician can adjust the calibration in the field during balancing to compensate for slight variations in box installation and type.

All control algorithms are factory-loaded into EEPROM and can be field-modified. The VAV-SDC3 can execute control algorithms independently of other equipment. All calibration, programming and operator-entered setup data is stored in non-volatile EEPROM for further assurance of stable, reliable and independent operation.

The BACtalk VAV-SDC3 is your complete answer to control of all single-duct VAV boxes in a BACnet environment. With integral flow sensor and programming flexibility, the VAV-SDC3 provides every option for precision VAV box control.

Product Number

VAV-SDC3

VAV-SDC3 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	4 universal inputs with 10-bit resolution. Input 0 can be used for a BACtalk® Microset™. Inputs 1–3 support thermistor/dry contact.
Binary Outputs	5 outputs, each rated at 24 VAC, 0.5 A. Three outputs utilize hot-switched triacs. Two outputs utilize negative switching triacs for damper motor control. All outputs have a common connection to the fused 24 VAC supply.
Pressure Sensor	0–1.25 inches water column differential pressure sensor.
Processor & Memory	Motorola CMOS processor with ROM and RAM. EEPROM provides non-volatile program and data storage.
Max. Dimensions	5.2" (132mm) H X 3.3" (84mm) 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	<ul style="list-style-type: none"> • 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.

Specifications subject to change without notice.

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© Alerton Technologies, Inc. • 6670 185th Ave. NE, Redmond, WA 98052 USA • Phone (425) 869-8400 • Fax (425) 869-8445