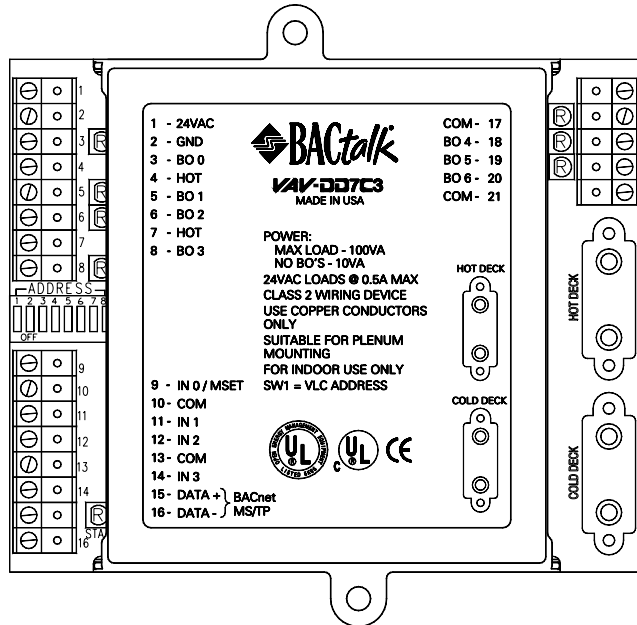




# VAV-DD7C3

Programmable VisualLogic® Controller



## Features & Application Highlights

- **Capable** Four 10-bit inputs, four ground-switched binary outputs and three hot-switched 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-DD7C3 controller is a versatile BACnet-compliant terminal unit device that provides pressure-independent control of any dual-duct variable air volume (VAV) box. The VAV-DD7C3 adds three hot-switched outputs to the four ground-switched triacs available with the VAV-DDC3. The additional output configuration makes it the ideal controller for applications with auxiliary equipment.

The VAV-DD7C3 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. It communicates at up to 76.8 Kbps on a BACnet MS/TP LAN.

The VAV-DD7C3 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 pushbutton 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-DD7C3.

The BACtalk VAV-DD7C3 has two integral airflow sensors, which provide pressure-independent operation of the VAV box. Each airflow sensor is factory-calibrated

at multiple velocity points. Additional inputs can be used to monitor discharge air or other field inputs. Minimum, maximum and reheat airflows for the hot and cold ducts 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-DD7C3 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-DD7C3 is your complete answer to control of all dual-duct VAV boxes in a BACnet environment. With its integral flow sensors and output flexibility, the VAV-DD7C3 provides every option for quality VAV box control.

**Product Number**

**VAV-DD7C3**

**VAV-DD7C3****SPECIFICATIONS**

<b>Power</b>	24 VAC @ 10 VA min., plus binary output loads (100 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.
<b>Inputs</b>	4 universal inputs with 10-bit resolution. Input 0 can be used for a BACtalk® Microset™. Inputs 1–3 support thermistor/dry contact.
<b>Binary Outputs</b>	7 outputs, each rated 24 VAC, 0.5 A. 4 are ground-switched triacs for damper motor control. 3 are hot-switched triacs for auxiliary equipment control.
<b>Pressure Sensor</b>	0–1.25 inches water column differential pressure sensor.
<b>Processor</b>	Motorola CMOS processor with ROM and RAM.
<b>EEPROM</b>	Provides non-volatile program and data storage.
<b>Max Dimensions</b>	5.2" (132mm) H X 3.3" (84mm) W X 1.4" (36mm) D.
<b>Terminations</b>	Removable header-type screw terminals accept 14–24 AWG wire.
<b>Environmental</b>	32–158°F (0–70°C). 0–95% RH, non-condensing.
<b>Communications</b>	BACnet MS/TP LAN up to 76.8 Kbps.
<b>BACnet Conformance</b>	Conformance Class 3. See Protocol Implementation Conformance Statement (PICS).
<b>Ratings</b>	<ul style="list-style-type: none"> <li>Listed Underwriters Laboratory for Open Energy Management Equipment (PAZX) under the UL Standard for Safety 916. Listing includes U.S. and Canadian certification.</li> <li>EMC Directive 89/336/EEC (European CE Mark).</li> <li>FCC Part 15, Subpart J, Class A.</li> </ul>

*Specifications subject to change without notice.*

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