VAV-DD

Features and highlights

- **Capable**
  Four 10-bit inputs and four binary outputs.
- **Interoperable**
  Fully BACnet-compliant on MS/TP LAN at up to 76.8 Kbps.

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- **Versatile**
  Factory-loaded, completely programmable control logic can be field-modified.
- **Reliable**
  AZ60 processor and extensive on-board filtering, with all program data backed up in nonvolatile flash memory.
- **Accurate**
  Factory calibrated at multiple velocity points and field-adjustable during balancing.

The Alerton® BACtalk® VAV-DD controller is a versatile, BACnet-compliant field controller that provides pressure-independent control of any dual-duct variable air volume (VAV) box. As a native BACnet controller, the VAV-DD integrates seamlessly with your BACnet system, communicating at up to 76.8 Kbps on a BACnet MS/TP LAN. The VAV-DD-F includes a filter to reduce dust contamination.

The VAV-DD features four 10-bit inputs and four binary outputs. It supports the Alerton Microtouch™, as well as the Microset™ and Microset II intelligent wall sensors, which offer convenient data display, setpoint adjustment, and technician access to equipment setup parameters.

The VAV-DD contains two integral airflow sensors 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 using a Microset wall unit or BACtalk operator workstation software. An on-board LED indicates the status of BACnet communications.

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

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LTBT-VAV-DD Rev. 0003

VAV-DD

Technical Data

- **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** 4 outputs, each rated 24 VAC, 0.5 A for damper motor control. Outputs utilize negative (ground) switching triacs, which have common connection to the fused 24VAC supply.
- **Pressure Sensor** 0–1.25 inches water column differential pressure sensor.
- **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.
- **Dimensions** 5.20" (132mm) H x 3.30" (84mm) W x 1.40" (36mm) D.
- **Terminations** Removable header-type screw terminals accept 14–24 AWG wire.
- **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** ASC level device; tested and approved by BTL. See Protocol Implementation Conformance Statement (PICS).

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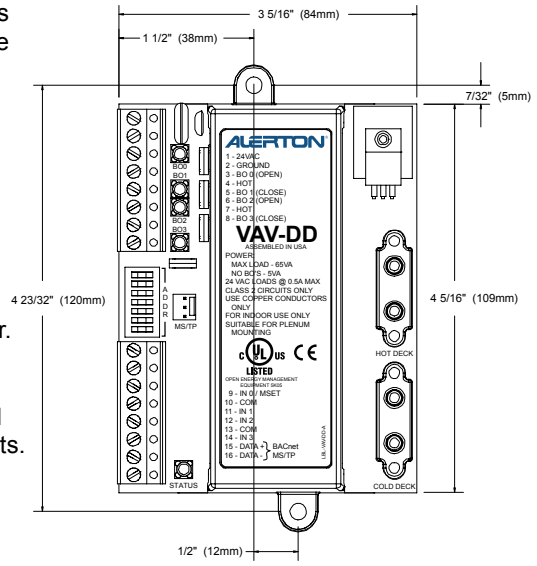
- **Ratings**

  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



Ordering Information

Item number	Description
VAV-DD	Field controller for dual-duct VAV box applications
VAV-DD-C	VAV-DD field controller with available custom DDC

Specifications subject to change without notice

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