



HVAC CONTROLS

DVC-V322 VAV Controller

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개요 :

The DVC-V322 is a fully programmable, Native BACnet™ Advanced Application Controller that communicates on an RS-485 LAN using the BACnet MS/TP protocol. This controller is specifically designed for VAV applications and supports the Delta BACstat and LINKnet I/O. The damper actuator assembly is available with or without position feedback. Additional inputs and outputs can be configured as required.



주요 특징 :

- Supports 4 BACstat network sensors on LINKnet for room sensing and control or 2 Delta Field Modules on LINKnet for I/O expansion
- Integrated housing with damper assembly for easy, cost effective installation
- Reliable industry standard actuator (with optional position feedback)
- True differential pressure sensor
- Completely programmable in GCL+
- Application database can be flash loaded over the network
- Controller firmware can be flash loaded over the network
- Supports Modbus capability via flash loading in the field
- Supports flash loading Modbus upgrades via hardware key
- Derived Network Addressing (DNA) for simple integration into a standard network architecture
- Service port

Application :

The DVC-V322 is an application-specific controller for VAV and includes an actuator and true differential pressure sensor with integrated housing.

The fully programmable DVC-V322 allows GCL+ programs and BACnet objects to be tailored to any VAV application.

Specification :

BACnet Device Profile

BACnet Advanced Application Controller (B-AAC)

Inputs - External

3 Universal inputs - 10 bit
(supporting 0-5v, 0-10v, 10kΩ, 4-20mA)

Inputs - Internal

- 1 Actuator position feedback input (optional)
- 1 Air flow input

Flow sensor, true differential pressure - 0 to 1" H₂O (0 - 248.8 Pa)

Outputs - External

- 2 Binary triac outputs & 2 analog outputs (0-10 VDC)
- LED status indication of each output

Outputs - Internal

2 Binary outputs for damper open and close

Siemens

44 in-lbs. (nominal torque) Less than 35db (A) noise level

Belimo

35 in-lbs. (nominal torque) Less than 35db (A) noise level

Differential Pressure

0 to 1" H₂O (0 - 248.8 Pa)

Tubing

Flow sensor tubing must be 5/32" inside diameter

Device Addressing

Set via DIP switch and jumpers, or software setup



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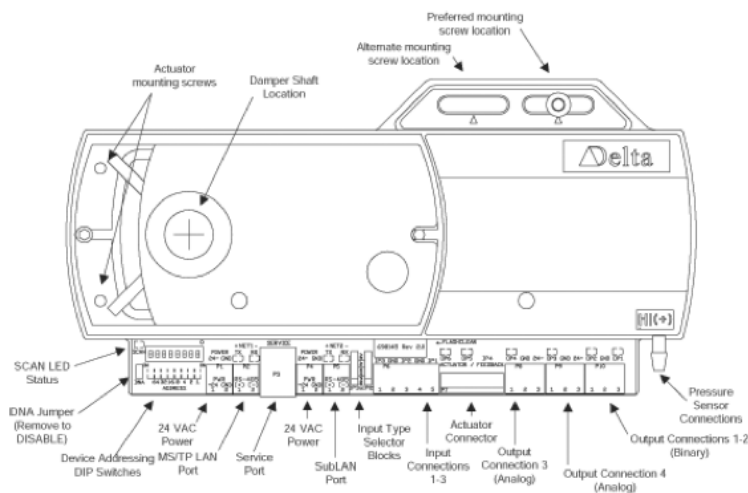
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Board Layout Diagram :



Accessories

| | |
|------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| RPT-768—Delta Network Repeater for BACnet MS/TP | DVC-V322AF**—Analog Board (2AO's, 2BO's), DP |
| TRM-768—Delta Network Terminator for BACnet MS/TP | Sensor for Flow, Integrated Housing, Siemens Actuator, Actuator Feedback |
| CON-768—Delta Network Converter | DVC-V322AF-UL864 (same as previous, but adds UL 864 Listing) |
| 481199—Siemens Actuator Shaft Insert, 3/8", 24 per package | The Siemens actuator is the default, append "B" to select the Belimo actuator. -B—Belimo Actuator |

Ordering

| | |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Order the Delta VAV controller with the desired options according to the following product numbers: | BACnet Firmware is the default, append "V2" to select V2 Micro Firmware. -*V2—V2 Firmware |
| DVC-V322—Analog Board (2AO's, 2BO's), DP Sensor for Flow, Integrated Housing | For Dual Duct application append "DD". -DD—Dual Duct** (separate sensor for flow, integrated housing and actuator) |
| DVC-V3322A—Analog Board (2AO's, 2BO's), DP Sensor for Flow, Integrated Housing, Siemens Actuator | |
| DVC-V322A-UL864 (same as previous, but adds UL 864 Listing) | * Note: Not all features described in this document are available when this option is selected. ** Note: Actuator Feedback is NOT available when ordering the -DD option. |

Specification :

Technology

32-bit processor
1 MB (8 megabit) Flash memory
127 KB SRAM memory for database LED indication of CPU and SCAN status

Communications Ports

Main LAN (NET1)
BACnet MS/TP @ 9600, 19200, 38400 or 76800 bps (default) (maximum of 99 devices per BACnet MS/TP segment)

SubLAN (NET2)
Delta LINKnet @ 76800 bps (maximum 4 devices on LINKnet, with no more than 2 DFM devices)

Connectors

Removable screw-type terminal connectors

Wiring Class

Class 2

Power

24 VAC with LED status
15 VA (not including output loading)

Ambient

32° to 131 °F (0 to 55 °C)
10 - 90% RH (non-condensing)

Dimensions

9 3/8 x 4 3/4 x 3 1/8 in. (23.9 x 12.0 x 8.0 cm) with housing
1.85 lb. (840 g) with housing and actuator

Compliance

CE
FCC

Listings

UL 916 Listed C-UL Listed BTL Listed
UL 864 Listed (DVC-V304A-UL864 and DVC-V304AF-UL864 only)