



# HVAC CONTROLS

DVC-V304 VAV Controller

HVAC CONTROLS

2

HVAC CONTROLS

개요 :

The DVC-V304 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 :

- Supports 4 BACstat network sensors on LINKnet for room The DVC-V304 is an application-specific controller for VAV and includes an actuator and true differential pressure sensor with integrated housing.
- The fully programmable DVC-V304 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" H<sub>2</sub>O (0 - 248.8 Pa)

Outputs - External

4 Binary triac outputs

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" H<sub>2</sub>O (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



# HVAC CONTROLS

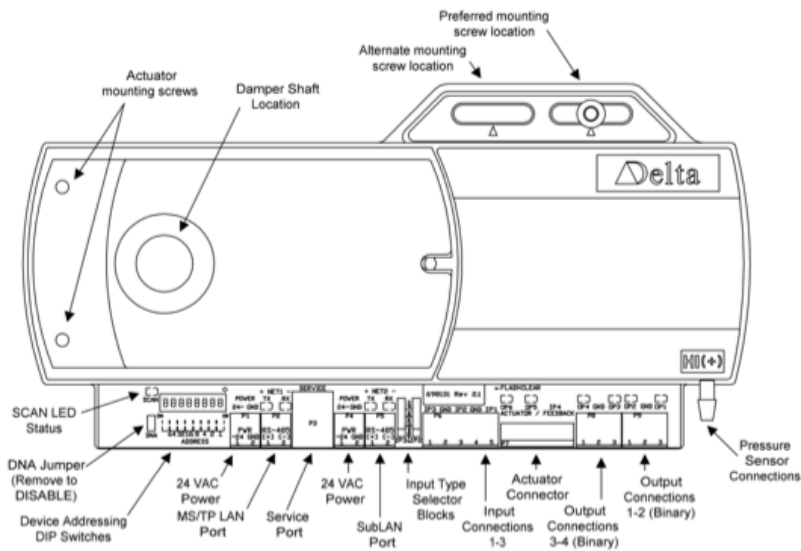
HVAC CONTROLS

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2

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## Board Layout Diagram :



## Accessories

RPT-768—Delta Network Repeater for BACnet MS/TP

TRM-768—Delta Network Terminator for BACnet MS/TP

CON-768—Delta Network Converter

481199—Siemens Actuator Shaft Insert, 3/8", 24 per package

## Ordering

Order the Delta VAV controller with the desired options according to the following product numbers:

DVC-V304—Binary Board (4BO's), DP Sensor for Flow, Integrated Housing

DVC-V304A—Binary Board (4BO's), DP Sensor for Flow, Integrated Housing, Siemens Actuator

DVC-V304A-UL864 (same as previous, but adds UL864 Listing)

DVC-V304AF\*\*—Binary Board (4BO's), DP Sensor for Flow, Integrated Housing, Siemens Actuator, Actuator Feedback DVC-V304AF-UL864 (same as previous, but adds UL864 Listing)

The Siemens actuator is the default, append "B" to select the Belimo actuator.  
-B—Belimo Actuator

BACnet Firmware is the default, append "V2" to select V2 Micro Firmware.  
-\*V2—V2 Firmware

For Dual Duct application append "DD".  
-DD—Dual Duct\*\* (separate sensor for flow, integrated housing and actuator)

\* 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)