

# VAV-P

## Variable Air Volume Controller with Pressure Pickup

With over 20 years in the industry, Computrols has established a solid reputation as a leader in automation systems from hardware to software. For VAV applications, Computrols provides the most flexible products available. The VAV-P provides a conveniently small package when you need airflow measurement, but are controlling air flow through external means.

### Product Highlights

#### Convenient Package

Small enclosure allows you to easily mount controller directly to VAV boxes.

#### Easily Addressable

Two decimal rotary switches (0-9) allow simple addressing – no hex, no binary.

#### Removable Screw Terminals

Allows for quick replacement.

#### Status Indicators

Bright on-board LEDs assist in troubleshooting.

#### Precise Pressure Measurement

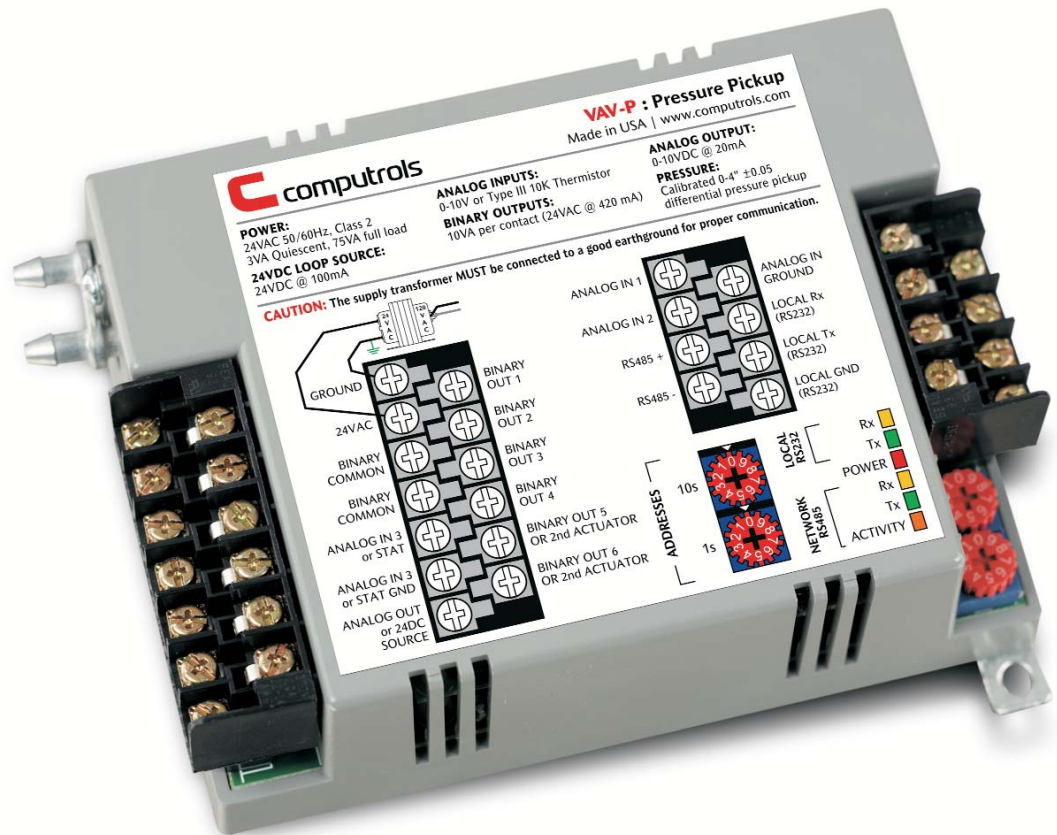
0-4" pressure pickup provides accurate control for sensitive low-volume applications.

#### Flexible Sensor Capability

Supports 10K Type III thermistors or a selection of digital display wall stats.

#### Orientation Independent

Unlike many VAV controllers, our controller and pressure pickup can be mounted in any orientation without loss of accuracy.



## Hardware Specifications

Power Supply Input	24VAC $\pm$ 20% 50/60Hz Class 2 transformer
Power Requirements	2VA Quiescent, 75VA full load
Analog Input Types	<b>Three total:</b> Configurable for either resistance (10K Type III thermistor), or voltage 0-10VDC input. Analog In 3 is configurable for use with MN-S3-700 display stat option.
Analog Output Types	One selectable voltage source output as either 0-10VDC @20mA max analog output, or as fixed 24VDC @100mA max loop source.
Binary Output Types	Four 24VAC triac controlled outputs, increasable to 6 outputs (420 mA max per output).
Velocity Pressure Input	<p><b>Operating Range:</b> 0.00 to 4.00 in. of W.C.  <b>Control Range:</b> 0.01 to 4.00 in. of W.C.  <b>Accuracy:</b> <math>\pm</math>5% @ 1.00 in. of W.C.  <b>Sensor Type:</b> Factory calibrated Micromachine silicon sensor (differential pressure).  <b>Indication:</b> Negative velocity pressure indication provided.  <b>Tubing Connections:</b> Barb fittings for 0.170" I.D. FRPE polyethylene tubing or 1/4" O.D./0.125 I.D. tygon tubing (high and low pressure taps).  <b>Tubing Length:</b> 5 feet (1.52 m) maximum each tube.</p>
Electrical Connections	Pluggable terminal blocks, capable of accommodating 14-22 AWG wire.
Communication Ports	RS485 and RS232 communication ports.
Microprocessor	Intel 386EX, 25MHz, 1 MB Flash ROM, 512k RAM, Real Time Clock with 10yr + Lithium battery backup.
Dimensions	5-3/4" W x 7-1/4" L x 2-1/2" H
Ambient Limits	<p><b>Operating Temperature:</b> 32 to 158 °F  <b>Shipping and Storage:</b> -40 to 160 °F  <b>Humidity:</b> 5 to 95% RH, non-condensing</p>
Enclosure	Surface mount. Conforms to NEMA-1 requirements. Meets UL94-5V flammability for plenum application use.

## Hardware Specifications (continued)

Agency Compliance	<p>E195258 UL 916 (PAZX)          Energy Management Equipment          Canadian Standard C22.2 No. 205-M1983          E231285 UL 61010C-1 (QUYZ)          Electrical Process Control Equipment          Canadian Standard C22.2 No. 1010          CE IEC 61010-1 (1990) with Amendments 1 (1992) and 2 (1995)</p>
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## Parts and Accessories

Part Number	Description
VAV-P	VAV controller with pressure pickup - no actuator.
MN-S3-700	LCD room temperature sensor (200 feet maximum distance from controller).
MN-S3-HT	LCD room temperature and humidity sensor (200 feet maximum distance from controller).
MN-S4	LCD room temperature sensor (200 feet maximum distance from controller) with 3-speed fan control.
MN-COMM	Commissioning program for the MN series wall stats.
ST-S3E	Space temperature sensor.
ST-S3E-XA	Space temperature sensor with set point adjustment.
ST-D3-XH	Duct temperature sensor.
VP1	Voltage to pressure transducer (3-15 PSI).
PV3	Differential pressure transmitter (Specify 0-1", 0-2", or 0-5" W.C.)
DCM24-44	0-10VDC 44 in.-lb. actuator mfg. by Delta.