# **ComfortPoint** CP-VAV(UNITARY CONTROLLER)

### **DATA SHEET**

## **Trademark Information**

ComfortPoint<sup>TM</sup> is a trademark of Honeywell International Inc. BACnet<sup>TM</sup> is a trademark of ASHRAE Inc.

## GENERAL

- Native BACnet series of controllers
- CP-VAV firmware 2.5 is based on B-AAC BACnet profile
- · Outstanding performance with 32 bit technology
- Uses standard VAV application or flexible custom programming
- Built-in Real Time Clock
- Connects to one of three BACnet MS-TP channels of a ComfortPoint Open Plant Controller (CPO-PC-6A)
- · Fully integrated with ComfortPoint Open Manager
- Flexible and easy configuration with ComfortPoint Open Studio and quick VAV Balancing with ComfortPoint Open online tool

### Attention

 Note: Due to Product renovation & technology upgrade, the specifications given in this data sheet may subject to change. Please contact your regional product management for current updates.

## FEATURES

### Freely Programmable Native BACnet<sup>®</sup> Controller

CP-VAV is a freely programmable native BACnet<sup>®</sup> controller.

### **Onboard Input and Outputs**

CP-VAV comes with base 21 input and outputs with an integrated air flow Sensor.

### **VAV Applications**

ComfortPoint Open Studio tool comes with predefined VAV Applications which can be downloaded to CP-VAV. The Tool allows spare points programming as per user needs.

#### **Programming and Balancing**

CP-VAV can be programmed using ComfortPoint Open Studio. Balancing is done via ComfortPoint Open Online which allows online discovery of VAV devices on the Bacnet MSTP channel.

### Easy installation

The ComfortPoint Open plant Controllers have a built in BACnet router which eliminates the need for additional BACnet<sup>®</sup> routers for the system. ComfortPoint Open Manager can access all MSTP Unitary controllers via CPO-PC-6A BACnet<sup>®</sup> router.

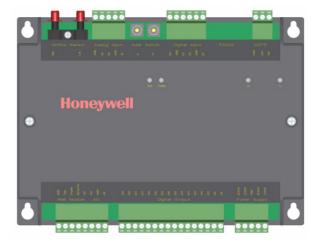
### Peer to Peer communication

CP-VAV can communicate and share points with CP-VAV and CP-SPC over MSTP network.

### **Flexible mounting options**

DIN-rail or wall mounting.

## **CP-VAV FRONT VIEW**



## **SPECIFICATIONS**

### **Electrical Data**

### **Operating Voltage**

24 VAC ± 20%, 7VA

### **Housing Material**

ABS Plastic

### Mounting

- DIN rail
- Wall mounting

### **Protection Class**

• IP20

### CPU

 Processor: ColdFire<sup>®</sup>; 5225x, 64 MHz, 32-Bit High Performance processor

### Memory

- 1 MB Flash
- 64 KB RAM
- Battery Backup: Gold Capacitor battery for data backup upto 72 hours

### **Real Time Clock**

Built-in Real Time Clock

### Integrated I/Os

### **Digital Output**

• 8 DOs (Triac output)

### **Digital Input**

- 4 potential-free contact Digital inputs
- 2 out of 4 DIs can be used as Pulse Input @ 15 Hz for Energy Meter Totalization Applications

### Analog Output

• 3 AOs, 0 -10 Vdc

### Analog Input

 AI 1, AI 2, AI 3, AI 4 and AI6 are universal, and can be used as 0-10Vdc, NTC 20K, PT1000 and Potential Free contact Digital Inputs. AI 5 can not be used as PT1000, but can be used as 0-10Vdc, NTC 20K and Potential Free contact Digital Inputs. AI 4, AI 5 and AI 6 also can be used as wall module inputs.

#### Attention

Note: Airflow sensor is available for only CP-VAV.

### Resolution

• 12 Bit A/D

### Types of input signals

- NTC 20 k ohms (-50 to +150 deg.C)
- PT1000 (-50 to +150 deg.C)
- 0 to +10 V 0(4) to 20 mA (with an external resistor of 499 ohms + or -0.25%)
- Potential Free Contact (Digital Input)
- Wall Module Connection (Only to predefined terminals)

### Environmental

### Temperature

- Operation:0 ~ 50°C;
- Storage: -20 ~ +70 °C

### Ambient Humidity (operation and storage)

5 to 93% relative humidity, non-condensing

### Certifications

• CE

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- BTL
- UL 916
- FCC Part15, Subpart B, Class B

### **Hardware Interfaces**

### **MSTP Port 1**

- Supports 9.6, 19.2, 38.4 and 76.8 Kbps
- Connects to MSTP network with maximum 30 BACnet devices per network
- 3x screw terminal, removable
- 2 service LEDs

#### Models

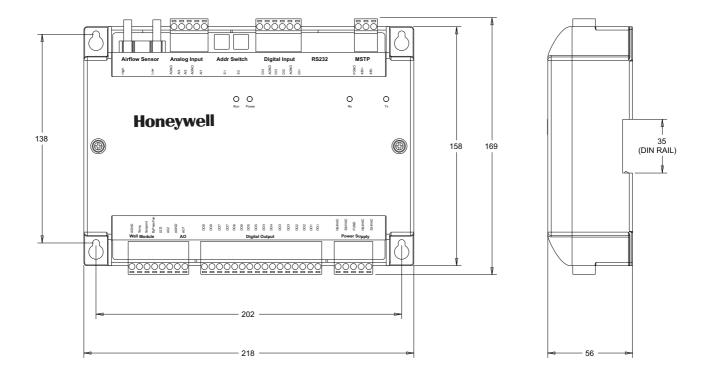
· CP-VAV: 21 points on board

### **Reset Button**

### Controller Addressing

· Two Rotary Hex switch to set CP-VAV MAC Address

## DIMENSIONS



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## Honeywell

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