



SmartVu™ Controls Version 3.X for Applied Rooftop Gas Heat/Electric Cooling and Electric Heat/Electric Cooling Units with PIC 6.1 Hardware

Integration Guide

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INTRODUCTION

General

The Carrier SmartVu™ control system is a product integrated control for select Carrier rooftop units, including:

- Carrier 48/50K applied rooftop units with Puron Advance™ refrigerant (R-454B).
- Carrier 48/50V applied rooftop units with Puron Advance™ refrigerant (R-454B).

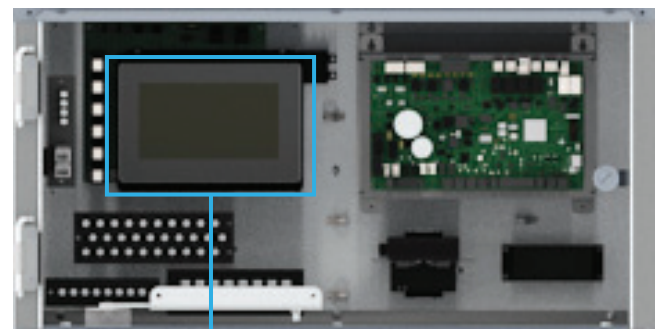
This document provides instruction on integrating Carrier SmartVu™ controls with PIC 6.1 hardware and version 3.X software into the following building automation system (BAS) protocols and communicating sensors:

- Carrier Comfort Network (CCN).
- BACnet MS/TP.
- BACnet IP.
- Rnet (not available if BACnet MS/TP is used on software version 3.X).

Wiring

Communication wiring is field provided and installed. Communication wiring connections are made in the unit control box. The unit control box location varies by unit model and size. Refer to the unit installation instructions for control box location and wiring access details.

Most communication wiring connections are made at the SmartVu touchscreen display in the control box. See Fig. 1 for SmartVu touchscreen display locations, Fig. 2 for port layout, and Table 1 for port details.



48/50K and 48/50V
SmartVu™ Touchscreen Display

**Fig. 1 — SmartVu™ Display Locations
on 48/50K and 48/50V Units**

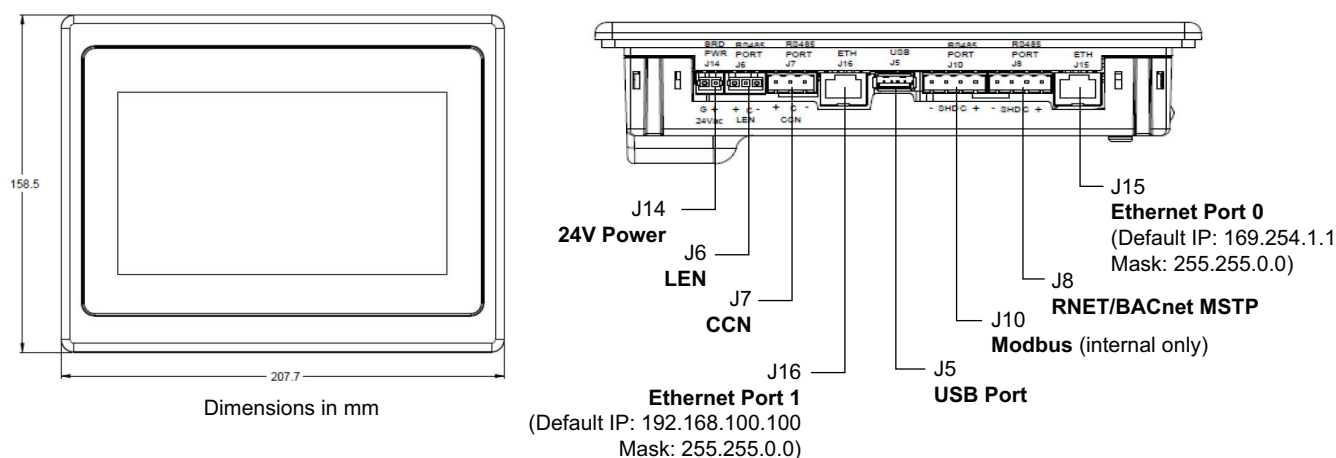


Fig. 2 — Carrier SmartVu™ Touchscreen Display Interface and Connections

Table 1 — SmartVu Display Port Connections

CONNECTOR	TYPE/ PINOUT	FUNCTION
J5	TYPE A	USB-1: Firmware/Software Upgrade
J6	+	RS485-1: LEN System Internal I/O Boards
	C	
J7	+	RS485-2: CCN (factory connected to CCN comm board)
	C	
J8	SHD	RS485-4: BACnet MS/TP or RNET (not both) NOTE: Requires a field-supplied connector.
	C	
	+	
J10	SHD	RS485-3: Modbus (internal VFD, ECM, and airflow measuring communication, not for BAS use)
	C	
	+	
J14	G	24vac Power
	+	
J15	RJ45	Ethernet 0
J16	RJ45	Ethernet 1

Signal Noise

Avoid running communication wires next to power wires or the controller's relay output wires. Other sources of noise can include:

- Spark igniters
- Radio transmitters
- Variable speed drives
- Large electric motors
- Generators
- Relays
- Transformers
- Induction heaters
- Large contactors (i.e., motor starters)
- Video display devices
- Lamp dimmers
- Fluorescent lights
- Parallel runs with power lines
- Other electronic devices

These can be sources of noise that can affect signal quality. If noise is a problem and you cannot move the wiring, use ferrite clamp-on chokes on the cabling to improve signal quality.

Control Interface

Configuring the SmartVu control for network communication can be done from the touchscreen display or with a PC using VNC Viewer software. Refer to the unit installation instruction (SI) for details on control operation, navigation, and VNC Viewer configuration.

Communication configuration is done from the Controller Config Menu.

Control Password

User access level or higher is required to configure the control for communications. See the Table 2 for the SmartVu Passwords. Refer to the unit installation instruction (SI) for details on login.

NOTE: The screens required for communication status and configuration are hidden with basic access. Login with user access or higher is required to show the communication screens.

Table 2 — Control Access Levels

ACCESS LEVEL	PASSWORD	DESCRIPTION
Basic	None	Access level at initial start-up or after a timeout has expired. Provides view only access to select setpoints and settings. Not all screens will be viewable. Basic access can disable the unit.
User	1111	Intermediate access to adjust setpoints and settings and access most screens. User can enable/disable the unit, enable component and system tests, and acknowledge alarms.
Service		The service password is not required for communication configuration. Contact your local Carrier Service or Applied Sales office if the service password is required.

Software Version

This document is based on software version 3.X. It is recommended to update to the latest software version prior to setting up unit communication.

IMPORTANT: Software versions prior to 2.4.0 may use different network point instances and point names. Contact your Carrier applied sales office to obtain a software version specific network points list.

The software version is listed on the Login screen under App Version. See Fig. 3 for Login screen layout.

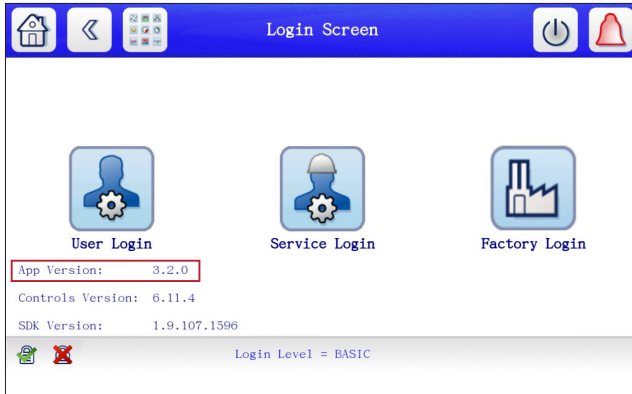


Fig. 3 — Typical Login Screen

Communication Configuration Report

Once communication configuration is complete, fill out Appendix B – Network Communication Report and Appendix C – Unit Communication Report to record the unit communication configurations. A copy of the communication reports should be saved for record and a copy provided to the customer. It is also a good practice to save a copy of the unit communication report in the unit control box.

CARRIER COMFORT NETWORK (CCN)

CCN Wiring

All units with SmartVu controls can be connected to a CCN communication bus. See Table 3 for CCN wire specification.

Table 3 — CCN Wiring Specification

DESCRIPTION	Shielded, 3 conductor cable with drain wire, CM or CMP rated (as needed)
CONDUCTOR	Minimum 20 AWG, stranded copper (tin plated)
INSULATION	PVC (polyvinyl chloride), PVC/ nylon, vinyl, Teflon, or polyethylene
COLOR CODE	Red/White/Black
SHIELDING	Aluminum/polyester 100% foil shield
JACKET	PVC (polyvinyl chloride), PVC/ nylon, vinyl, Teflon, or polyethylene
TEMPERATURE	–4°F to 140°F (–20°C to 60°C) or higher, if required by application
VOLTAGE	Cable voltage must match the application

The CCN bus connection is made at a terminal board with screw terminals next to the touchscreen display in the control box. See Fig. 4 for CCN terminal board location.



Fig. 4 — 48/50V CCN Terminal Board Location

CCN devices are connected to the communication bus in a daisy chain arrangement. The positive pin of each system element communication connector must be wired to the positive pins of the CCN devices on either side of it. The negative and signal ground pins of each system element must also be wired in the same manner. See Fig. 5. for a typical daisy chain CCN bus wiring arrangement.

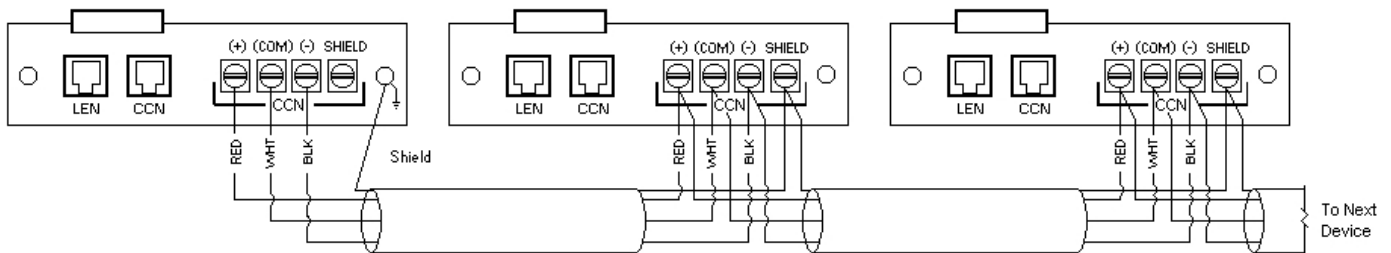


Fig. 5 — Typical CCN Bus Wiring

When connecting to a CCN communication bus, it is important that a color-coding scheme be used for the entire network to simplify the installation. It is recommended that red be used for the signal positive, black for the signal negative, and white for the signal ground. Use a similar scheme for cables containing different colored wires.

At each system element, the shields of its communication bus cables must be tied together. If the communication bus is entirely within one building, the resulting continuous shield must be connected to a ground at one point only. If the communication bus cable exits from one building and enters another, the shields must be connected to grounds at the lightning suppressor in each building where the cable enters or exits the building (one point per building only).

To connect the CCN wiring to the network:

1. Turn off power to the unit and unit controller.
2. Partially cut, then bend and pull off approximately 3 in. of the outer jacket of the cable(s). Do not nick the inner insulation.
3. Strip about 1/4 in. of the inner insulation from each wire.
4. Connect the red wire to (+) terminal, the white wire to COM terminal, and the black wire to the (–) terminal on the CCN terminal board (substitute appropriate colors for different colored cables).
5. Make sure that the wires are electrically isolated and make sure no more than 1/8-in. of the bare wire is exposed.
6. Connect the cable shield to the SHIELD terminal on the CCN terminal board or to a ground (if at the start or end of a bus or segment in a building. Twist both shields together if part of a daisy chain.

IMPORTANT: A shorted CCN bus cable will prevent some routines from running and may prevent the unit from starting. If abnormal conditions occur, disconnect the CCN bus. If conditions return to normal, check the CCN connector and cable. Run new cable if necessary. A short in one section of the bus can cause problems with all system elements on the bus.

Communication Configuration

CCN Communication configuration is done from the Controller Config screen, which will only show with user or higher access level. To access the Controller Config screen:

1. From the Home screen, press the login icon (🔑) to access the Login screen.
2. Login with the user access password (1111).
3. Press the unlock button (🔓) to accept the login and return to the Home screen.
4. From the Home screen, press the link for the Main Menu (☰).
5. From the Main Menu, press the Controller Config icon (⚙️) to go to the Controller Config screen.
NOTE: If the controller config screen does not show, then login may have failed. Try login again.
6. From the Controller Config screen, press the CCN configuration icon (📶) to go to the CCN Configuration screen. See Fig. 6 for the configuration screen layout.
7. Adjust the CCN configuration as needed. See Table 4 for CCN configuration parameters.
8. Once configuration is complete, click on the save icon (💾) to save configuration changes.

NOTE: A controller reboot may be required for some configuration changes to take effect.

9. Reboot or power cycle the controller.

CCN Configuration	
Primary BAS Protocol	CCN
CCN Address	1
CCN Bus	0
Baud Rate	9600
Broadcast Alerts	No
Schedule Number	0
Global Schedule Broadcast	OFF
Broadcast ACK	OFF
Time Broadcast	OFF

Fig. 6 — Typical CCN Configuration Screen

Table 4 — CCN Communication Configurations

NAME	DESCRIPTION
Primary BAS Network	Selects the BAS occupancy control. ^a NOTE: This configuration must be set to CCN to use a CCN schedule. If the primary BAS networks is set to None or CCN, then the local schedule must be set to a schedule number other than 0 to follow a configured schedule. Schedule 0 is occupied 24/7.
CCN Address	Selects the address of the device. NOTE: This address must be different from all other devices on the bus.
CCN Bus	Selects the network bus number.
Baud Rate	Selects the communication rate. Selectable between 9600, 19200, and 38400. NOTE: All devices on a bus should have the same baud rate.
Broadcast Alerts	When selected On, broadcasts the unit alerts and alarms to the CCN network.
Schedule Number	Selects the schedule number. NOTE(S): • Must change from 0 to a valid schedule number (1 or higher) for CCN schedule functionality. Otherwise the controller will be “always occupied.” • Global schedule broadcasters must have a schedule set between 65 and 99.
Global Schedule Broadcast	When selected On, the control broadcasts its schedule. NOTE: One, and only one, global schedule broadcaster is allowed per network. All other devices must have global schedule broadcast set to off.
Broadcast ACK	When selected On, the control acknowledges a time broadcast. NOTE: One, and only one, broadcast acknowledger is required per CCN bus. The time broadcaster cannot be the acknowledger.
Time Broadcast	When selected On, the control broadcast the unit time and date on the CCN bus once per minute. NOTE: Only one time broadcaster is allowed per bus.

NOTE(S):

- a. The network occupant point is not available with CCN.

Airside Linkage

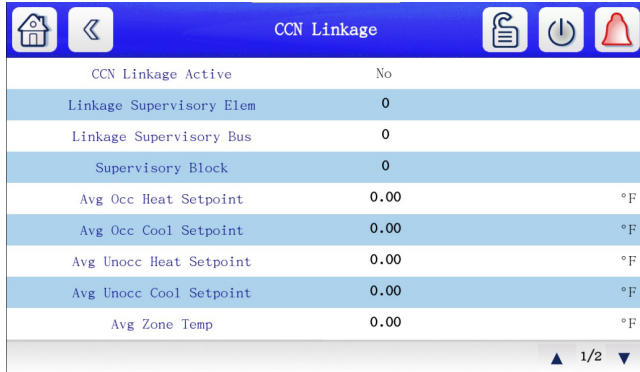
Units with SmartVu ART 3.X software can serve as an air source for a CCN Airside Linkage system. Airside Linkage is a proprietary communication method for data sharing between Carrier RTUs and Carrier VAV/VVT CCN controls to create a more efficient and effective system.

NOTE: The cool/heat demand source must be configured for SPT for the unit to control to the Linkage average zone temperature and the Linkage average cooling and heating setpoints.

Linkage Status

Linkage status information can be found on the CCN Linkage screen. To access the CCN Linkage screen:

1. From the Home screen, press the link for the Main Menu ().
2. From the Main Menu, press the Status icon () to go to the Status screen.
3. From the Status screen, press the Linkage Info icon to go to the Linkage Info screen
4. From the Linkage Info Screen, press the CCN Linkage icon () to go to the CCN Linkage Status screen (see Fig. 7).



CCN Linkage	
CCN Linkage Active	No
Linkage Supervisory Elem	0
Linkage Supervisory Bus	0
Supervisory Block	0
Avg Occ Heat Setpoint	0.00 °F
Avg Occ Cool Setpoint	0.00 °F
Avg Unocc Heat Setpoint	0.00 °F
Avg Unocc Cool Setpoint	0.00 °F
Avg Zone Temp	0.00 °F

Fig. 7 — CCN Linkage Status Screen

Network Points

See Appendix A For CCN network points for software version 3.X. Contact your Carrier applied sales offices to obtain network points for older software versions.

NOTE: Not all network points will be available for every unit. Point availability will vary by model, unit type, size, and configuration.

BACNET MS/TP

Communication Wiring

All units with SmartVu controls can be connected to a BACnet MS/TP bus. See Table 5 for BACnet MS/TP wire specification.

Table 5 — BACnet MS/TP Wiring Specification

DESCRIPTION	Single twisted pair, low capacitance, CL2P, 22 AWG (7x30), TC foam FEP, plenum rated cable
CONDUCTOR	22 or 24 AWG stranded copper (tin plated)
INSULATION	Foamed FEP
COLOR CODE	Black/White
SHIELDING	Aluminum/Mylar shield with 24 AWG TC drain wire
JACKET	SmokeGard (SmokeGard PVC) • 0.021 in. (0.5334 mm) wall • 0.175 in. (4.445 mm) O.D. Halar (E-CTFE) • 0.010 in. (0.254 mm) wall • 0.144 in. (3.6576 mm) O.D.
RATING	CMP rated
TEMPERATURE	SmokeGard: 167°F (75°C) Halar: -40 to 302°F (-40 to 150°C)
VOLTAGE	300 vac, power limited
MAXIMUM LENGTH	2000 ft (610 m)

The BACnet MS/TP bus connection is made at the SmartVu touchscreen display at port J8. See Fig. 2 for SmartVu port layout and Table 1 for J8 port details.

NOTE: The J8 connector is field supplied. This connector can be either a Phoenix 1757035, Wago 231-304/026-000 or other equivalent connector.

The BACnet MS/TP device are connected to the communication bus in a daisy chain arrangement. The positive pin of each system element communication connector must be wired to the positive pins of the system elements on either side of it. The negative and signal ground pins of each system element must also be wired in the same manner. Wiring connections for BACnet MS/TP should be made at the J8 plug on the SmartVu display. See Fig. 8 for typical daisy chain MS/TP bus wiring arrangement.

The SmartVu control is locally biased. Do not use the SmartVu on a network segments with network biased equipment. Use a TERM485 on the last device on the networked biased segment of the network. The TERM485 device contains both the “end-of-line” resistor and a network biasing resistor.

NOTE: Do not use BACnet router “end-of-line” switches that add network biasing or “end-of-line” termination resistors. Use a termination resistor (e.g., TERM485) at the router when it is at the beginning or the end of a network segment.

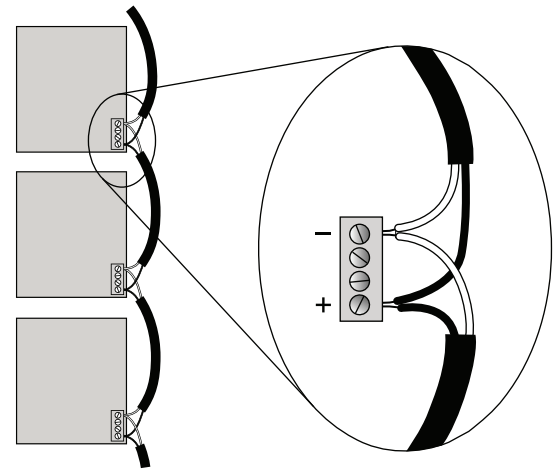


Fig. 8 — Typical BACnet MS/TP Bus Wiring

To connect the BACnet MS/TP wiring to the network:

1. Turn off power to the unit and unit controller.
2. Remove the plug from the J8 port on the touchscreen display.
3. Partially cut, then bend and pull off approximately 1 in. of the outer jacket of the cable(s). Do not nick the inner insulation.
4. Strip about 1/4 in. of the inner insulation from each wire.
5. Connect the white wire to (+) terminal and the black wire to the (-) terminal on the plug (substitute appropriate colors for different colored cables). Make sure that the wires are electrically isolated and make sure no more than 1/8 in. of the bare wire is exposed.
6. If the unit is the first or last node on the network, a termination resistor of 120 ohms should be wired across positive and negative terminals.
7. Connect the cable shield to the SHIELD terminal on the plug or to a ground (if at the start or end of a bus or segment in a building. Twist both shields together if part of a daisy chain. Do not connect the shield to the ground for the control power.
8. Re-insert the plug to the J8 port on the touchscreen display.

Serial Port Configuration

For units with software 3.X, the J8 serial port must be configured for BACnet for BACnet MS/TP communication prior to setting the BACnet communication configuration. To set the J8 serial port for BACnet MS/TP:

1. From the Home screen, press the login icon (🏠) to access the Login screen.
2. Login with the user access password (1111).
3. Press the unlock button (🔓) to accept the login and return to the Home screen.
4. From the Home screen, press the link for the Main Menu (📁).
5. From the Main Menu, press the Controller Config icon (⚙️) to go to the Controller Config screen.
NOTE: If the controller config screen does not show, then login may have failed. Try login again.
6. From the Controller Config screen, press the Port Setting icon (🔌) to go to the Port Setting Screen
7. Press the up/down arrows to pull down the drop down menu and click on “BACnet” to configure the J8 port to BACnet MS/TP (see Fig 9).
8. Press the save button on the bottom left of the screen to save the configuration.
9. A reboot is required to configure the J8 serial port to BACnet. Press the reboot button at the bottom of the screen to reboot the controller.

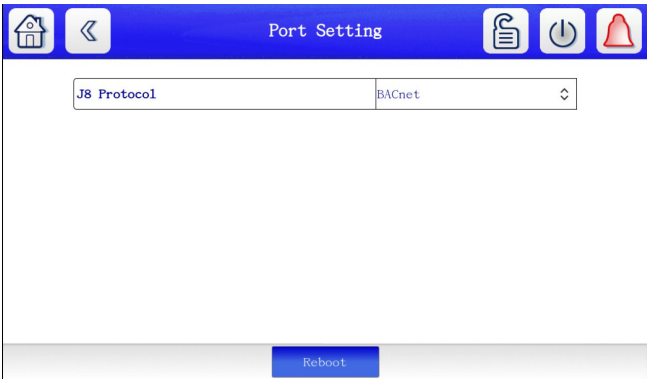


Fig. 9 — Configure Serial Port J8 to BACnet MS/TP

Once the serial port is configured for BACnet, BACnet MS/TP communication configuration must be configured on the BACnet Config screen. To setup BACnet MS/TP communication:

1. From the Home screen, press the login icon (🏠) to access the Login screen.
2. Login with the user access password (1111).
3. Press the unlock button (🔓) to accept the login and return to the Home screen.
4. From the Home screen, press the link for the Main Menu (📁).
5. From the Main Menu, press the Controller Config icon (⚙️) to go to the Controller Config screen.
NOTE: If the controller config screen does not show, then login may have failed. Try login again.
6. From the Controller Config screen, press the BACnet configuration icon (🔌) to go to the BACnet Configuration screen. See Fig. 10 for BACnet config screen layout.
7. On the BACnet Config screen, verify that the BACnet Interface is set to BACnet MS/TP and the Serial Port Config is set to J8 BACnet MS/TP. If not, repeat the serial port configuration steps above.
8. Adjust the BACnet configuration as needed. See Table 6 for BACnet configuration parameters.
9. Once configuration is complete, click on the save icon (💾) to save configuration changes before leaving the screen.

NOTE: A controller reboot may be required for some configuration changes to take effect. Press the Reboot button at the bottom of the screen to initiate a reboot.

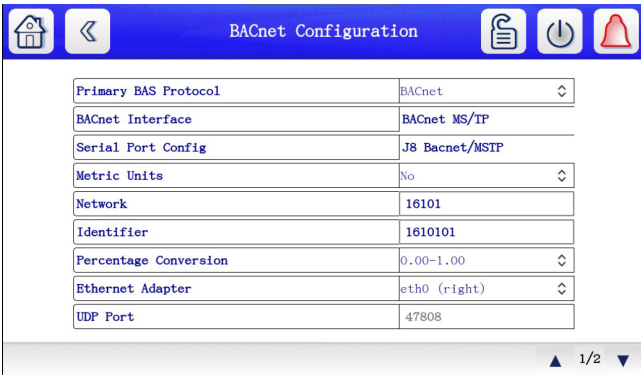


Fig. 10 — Typical BACnet Configuration Screen (BACnet MS/TP)

Table 6 — BACnet MS/TP Communication Configurations

NAME	DESCRIPTION
Primary BAS Network	Selects the BAS occupancy control. NOTE: This configuration must be set to BACnet to use a BACnet occupancy schedule or the Network Occupancy point. ^{a,b}
BACnet Interface	Displays the communication type. Must display BACnet MS/TP for BACnet MS/TP communication. NOTE: This configuration is automatically set to BACnet MS/TP when the J8 serial port configuration is set to BACnet.
Serial Port Config	Indicates the configuration of the J8 port. NOTE: This configuration must be set to BACnet for BACnet MS/TP communication. This configuration is set on the Port Setting screen.
MS/TP MAC Address	Assigns the desired MAC address for your network segment. Each device on the segment must have a unique MAC address. NOTE: A best practice is for MAC addresses to be sequential on a segment.
MS/TP Baud Rate	Assign desired baud rate for the network. The maximum number of nodes per segment is determined by the baud rate. 32 nodes are allowed on a 76,800 baud network and 16 nodes are allowed on a 38,400 baud network.
Max Masters	Recommended to be set at 127 on most networks.
MS/TP Max Info Frames	Recommended to be set no higher than 20.
Metric Units	Selects the units type. Selectable between "No" for imperial units and "Yes" for metric units.
Network	Selects the network or subnet of the device. NOTE: This network must match the main network number for MS/TP.
Identifier	Selects the address of the device. The identifier does not need to be adjusted after the MAC address is assigned. NOTE: This address must be different from all other devices on the bus.
Percentage Conversion	Selects the method of communicating percentages. Selectable between 0.00-1.00 for decimal or 0-100 for percentage. NOTE: this configuration should be set to 0.00-1.00 for i-Vu systems.

NOTE(S):

- If network values are not broadcast every 10 minutes (default network input timeout, service adjustable up to 30 minutes), the system will assume network communication loss.
- Occupancy must be re-broadcast to restart unit occupancy after a power cycle.

Network Points

See Appendix A for BACnet network points for software version 3.X. Contact your Carrier applied sales offices to obtain network points for older software versions.

NOTE: Not all network points will be available for every unit. Point availability will vary by model, unit type, size, and configuration.

BACNET IP

Communication Wiring

All units with SmartVu controls can be connected to a BACnet IP bus. See Table 7 for BACnet IP wire specification.

Table 7 — BACnet IP Cable Specification

DESCRIPTION	CAT5e or higher Ethernet cable
RATING	CM or CMP rated, as required
MAXIMUM LENGTH	328 ft (100 m)

The BACnet IP cable connection is made at the SmartVu touch-screen display at Ethernet 0 (J15) or Ethernet 1 (J16). See Fig. 2 for SmartVu port layout and Table 1 for ethernet port details. The Ethernet cable can be plugged into the SmartVu control while the controller is powered. Ethernet pass through is not supported.

Communication Configuration

BACnet IP Communication configuration is done from the Controller Config screen, which will only show with user or higher access level. To access the Controller Config screen:

- From the Home screen, press the login icon (🔑) to access the Login screen.
- Login with the user access password (1111) .
- Press the unlock button (🔓) to accept the login and return to the Home screen.
- From the Home screen, press the link for the Main Menu (☰).
- From the Main Menu, press the Controller Config icon (⚙️) to go to the Controller Config screen.

NOTE: If the controller config screen does not show, then login may have failed. Try login again.

- From the Controller Config screen, press the Gateway/DNS icon (🌐) to go to the Gateway/DNS IP configuration screen. See Fig. 11 for Gateway IP screen and Fig. 12 for DNS IP screen layout.

Gateway IP	
Gateway 1 IP	0.0.0.0/0
GW1 Dest/Mask	0.0.0.0/16
	Not Applied
Status	applied successfully
Gateway 2 IP	192.168.100.1
GW2 Dest/Mask	0.0.0.0/16
	Not Applied
Status	applied successfully

Fig. 11 — Typical Gateway IP Configuration Screen

DNS IP	
DNS IP 1	0.0.0.0
DNS IP 2	0.0.0.0
	Not Applied
Status	applied successfully

Fig. 12 — Typical DNS IP Configuration Screen

- Adjust the Gateway and DNS configuration as needed. See Table 8 for Gateway/DNS IP configuration parameters.
NOTE: Only Gateway IP 2 and DNS IP 2 are utilized.
- Once configuration is complete, click on the dropdown that says “Not Applied” and select “Applied” to save configuration changes before leaving the screen. Verify the status changes applied successfully.
- Press the Back button twice (⏮) to go back to the Controller Config screen.
- From the Controller Config screen, press the ethernet configuration icon (🌐) to go to the Ethernet Configuration screen. See Fig. 13-14 for Ethernet Screen layout.

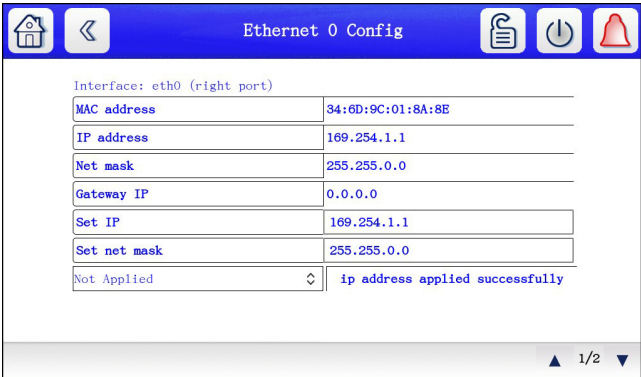


Fig. 13 — Typical Ethernet 0 Configuration Screen

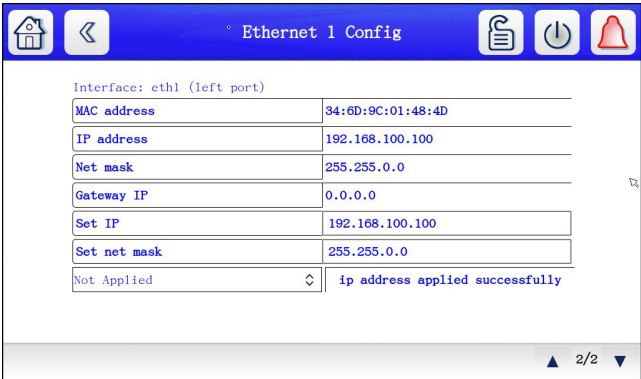


Fig. 14 — Typical Ethernet 1 Configuration Screen

- Adjust the Ethernet configuration as needed. See Table 9 for Ethernet configuration parameters.
- Once configuration is complete, click on the dropdown that says “Not Applied” and select “Apply” to save configuration changes before leaving the screen. Verify the status changes applied successfully.
- Press the Back button twice (⏮) to go back to the Controller Config screen.

- From the Controller Config screen, press the BACnet configuration icon (🏠) to go to the BACnet Configuration screen. See Fig. 15 for BACnet configuration screen layout.

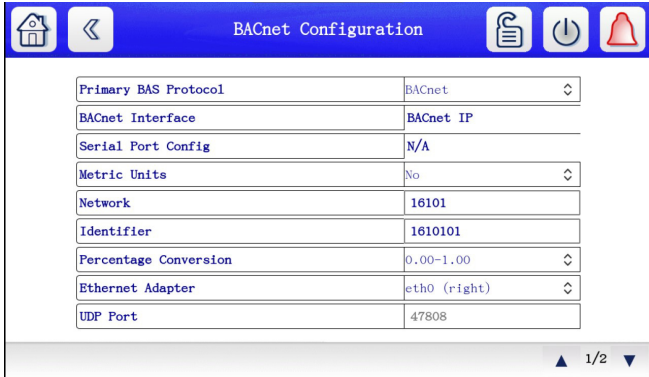


Fig. 15 — Typical BACnet IP Configuration Screen (BACnet IP)

- Adjust the BACnet configuration as needed. See Table 10 for BACnet configuration parameters.

IMPORTANT: The BACnet Enable configuration is automatically set to BACnet IP when the J8 Serial Port Config is set to None or Rnet.

- Once configuration is complete, click on the save icon (💾) to save configuration changes before leaving the screen.

NOTE: After the IP configuration and selection for BACnet IP are made the PIC must be rebooted for the IP configurations to be applied. After a reboot, ping the controller. When you can ping the controller successfully and find the BACnet device or PIC at that IP, check to make sure the identity sent to a “Who is” command is the same. Otherwise, wait until the PIC is pinged and responds as a BACnet device as the assigned IP on either ethernet connector (it may be necessary to cycle the power). Proceed with BACnet discovery over that ethernet connector.

Table 8 — Gateway/DNS IP Configurations

NAME	DESCRIPTION
Gateway 2 IP	Selects the gateway IP address.
Gateway 2 Mask	Selects the gateway 2 subnet mask. The gateway setting can allow both ports to be pinged from one ethernet connector, but not from the other, when the same subnets are used for both eth0 and eth1.
DNS IP 2	Selects the domain name service IP address.

Table 9 — Ethernet IP Configurations

NAME	DESCRIPTION
Set IP	Selects the control IP address.
Set Net Mask	Selects the control subnet mask.

Table 10 — BACnet IP Communication Configurations

NAME	DESCRIPTION
Primary BAS Network	Selects the BAS occupancy control. NOTE: This configuration must be set to BACnet to use a BACnet occupancy schedule or the Network Occupancy point. ^{a,b}
BACnet Interface	Displays the communication type. Must display BACnet IP for BACnet IP communication. NOTE: This configuration is automatically set to BACnet IP when the J8 serial port configuration is set to None or Rnet.
Metric Units	Selects the units type. Selectable between "No" for imperial units and "Yes" for metric units.
Percentage Conversion	Selects the method of communicating percentages. Selectable between 0.00-1.00 for decimal or 0-100 for percentage. NOTE: This configuration should be set to 0.00-1.00 for i-Vu systems.
Ethernet Adapter	Selects which ethernet port to use for BACnet IP. Selectable between Ethernet 0 (right side if touchscreen) or Ethernet 1 (bottom of touchscreen).
UDP Port	Selects the user datagram protocol for BACnet. Default UDP port for BACnet is 47808.
BACnet Mgmt Device	Selects the BACnet management device. Selectable between None, Foreign Device, and BACnet Broadcast Management Device (BBMD).
BBMD Address	Selects the BBMD address.
BBMD Time to Live	Selects how long a device can stay registered (in seconds) with the BBMD.

NOTE(S):

- If network values are not broadcast every 10 minutes (default network input timeout, service adjustable up to 30 minutes), the system will assume network communication loss.
- Occupancy must be re-broadcast to restart unit occupancy after a power cycle.

Airside Linkage

Units with SmartVu ART 3.X software can serve as an air source for an Open Airside Linkage system. Airside Linkage is a proprietary communication method for data sharing between Carrier RTUs and VAV/VVT Open controls to create a more efficient and effective system.

NOTE: The cool/heat demand source must be configured for SPT for the unit to control to the Linkage average zone temperature and the Linkage average cooling and heating setpoints.

Linkage Status

Linkage status information can be found on the Open Linkage screen. To access the Open Linkage screen:

- From the Home screen, press the link for the Main Menu ().
- From the Main Menu, press the Status icon () to go to the Status screen.
- From the Status screen, press the Linkage Info icon to go to the Linkage Info screen
- From the Linkage Info Screen, press the Open Linkage icon () to go to the Open Linkage Status screen (see Fig. 16).

BACnet Linkage Active	No
Airside Linkage Validity	No
ASL Percent Display Sel	Off
ASL Occupancy State	2.00
ASL Space Temperature	80.00 °F
ASL Occupancy space temp	80.00 °F
ASL Space Humidity	0.00 %
ASL Space IAQ	0.00 PPM
ASL Occ Cool Setpoint	70.00 °F

Fig. 16 — Open Linkage Status Screen

Network Points

See Appendix A for BACnet network points for software version 3.X. Contact your Carrier applied sales offices to obtain network points for older software versions.

NOTE: Not all network points will be available for every unit. Point availability will vary by model, unit type, size, and configuration.

Network Input Timeout

The network input timeout (default 10 minutes, service adjustable up to 30 minutes) will determine communication loss and will revert to local inputs if the network values are not written within the network timeout time.

Network Occupancy

The network occupancy point can only be used with BACnet communication. The network occupancy must be written after a power cycle to resume occupancy.

RNET

Communication Wiring

Units with SmartVu control can be connected to an Rnet if BACnet MS/TP communication is not being utilized. See Table 11 for Rnet wire specification. Refer to the ZS sensor installation guide or the Equipment Touch installation guide for additional wiring and details.

Table 11 — Rnet Wiring Specification

Description	4 conductor, shielded or unshielded, CMP, plenum rated cable.
Conductor	22 AWG (7x0096) bare copper
Insulation	Low-smoke PVC (or equivalent)
Color code	Black, white, green, red
Shielding	If shielded, Aluminum/Mylar shield (100% coverage) with TC drain wire
Listing	UL: NEC CL2P, or better
Temperature	32–167°F (0–75°C)
Voltage	300 Vac, power limited
Maximum length	500 feet (152 meters)

An accessory Rnet Harness Kit (accessory part number CRRNETPH001A00) is available to provide 12V power for ZS sensors and a quick connect terminal in the plug panel. See the Rnet Harness Kit accessory installation guide for details.

Without the accessory Rnet power harness, the Rnet connection is made at the SmartVu touchscreen display at port J8. See Fig. 2 for SmartVu port layout and Table 1 for J8 port details.

NOTE: The J8 connector is field supplied. This connector can be either a Phoenix 1757035, Wago 231-304/026-000 or other equivalent connector.

An external 12V power supply is required for ZS sensors. 24V power is available in the control panels at terminal block 4 (TB4) terminals R and C (24VAC) and terminal block 5 (TB5) terminal 10 (24VDC) to power an Equipment Touch device. See Fig. 17 for typical PCI 6.1 Rnet sensor wiring arrangement without the Rnet harness accessory.

TO CONNECT RNET WIRING TO THE PIC 6.1

1. Turn off power to the unit and unit controller.
2. Remove the plug from the J8 port on the touchscreen display.
3. Partially cut, then bend and pull off approximately 1 in. of the outer jacket of the cable(s). Do not nick the inner insulation.
4. Strip about 1/4 in. of the inner insulation from each wire.
5. Connect the white wire to (+) terminal and the black wire to the (–) terminal on the plug (substitute appropriate colors for different colored cables). Make sure that the wires are electrically isolated and make sure no more than 1/8 in. of the bare wire is exposed.
6. If the unit is the first or last node on the network, a termination resistor of 120 ohms should be wired across positive and negative terminals.
7. Connect the cable shield to the SHIELD terminal on the plug or to a ground (if at the start or end of a bus or segment in a building. Twist both shields together if part of a daisy chain. Do not connect the shield to the ground for the control power.
8. Re-insert the plug to the J8 port on the touchscreen display.

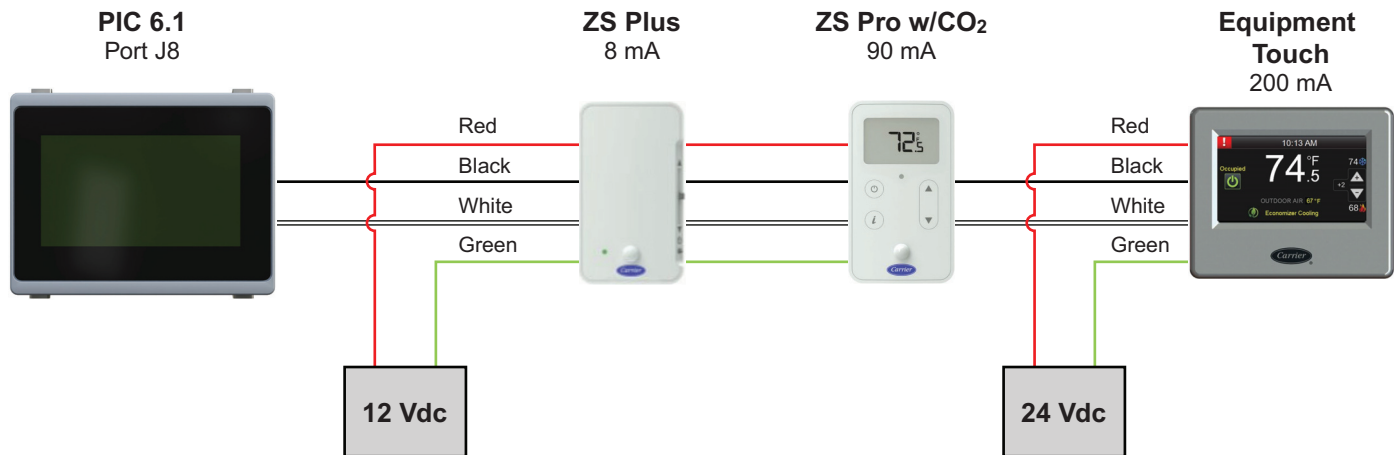


Fig. 17 — PIC 6.1 Typical Rnet Wiring

Serial Port Configuration

For units with software 3.X, the J8 serial port must be configured for Rnet prior to setting using an Equipment Touch or setting the Zone Sensor communication configuration. To see the J8 serial port to Rnet:

- 1. From the Home screen, press the login icon (🔒) to access the Login screen.
- 2. Login with the user access password (1111).
- 3. Press the unlock button (🔓) to accept the login and return to the Home screen.
- 4. From the Home screen, press the link for the Main Menu (☰).
- 5. From the Main Menu, press the Controller Config icon (⚙️) to go to the Controller Config screen.

NOTE: If the controller config screen does not show, then login may have failed. Try login again.

- 6. From the Controller Config screen, press the Port Setting icon (🔌) to go to the Port Setting Screen
- 7. Press the up/down arrows to pull down the drop down menu and click on “Rnet” to configure the J8 port to Rnet (see Fig. 18).
- 8. Press the save button on the bottom left of the screen to save the configuration.
- 9. A reboot is required to configure the J8 serial port to Rnet Press the reboot button at the bottom of the screen to reboot the controller.

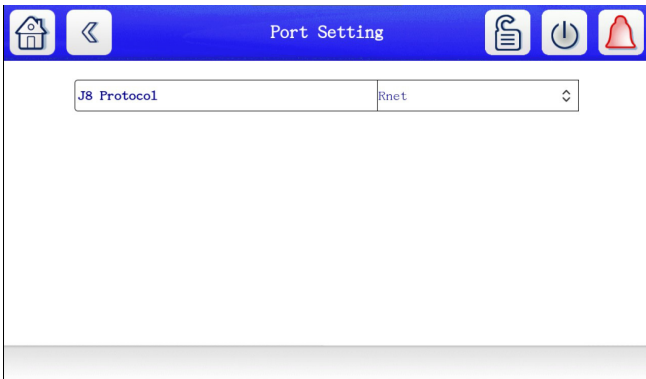


Fig. 18 — Serial Port Configuration Screen (Rnet)

Equipment Touch Communication Configuration

Software 3.3 and later supports Equipment Touch. System Touch is not supported with 3.X software. After the serial port has been configured for Rnet, the Equipment Touch needs to be enabled in the Equipment Config screen. The Equipment Touch does not need to be addressed. To enable the Equipment Touch:

- 1. From the Home screen, press the link for the Main Menu (☰).
- 2. From the Main Menu, press the System Config icon (⚙️) to go to the System Config screen.
- 3. From the System Config screen, press the Equipment Config icon (🔌) to go to the Equipment Config screen.
- 4. On the Equipment Config screen, set Equip and Sys Touch to enable.
- 5. Press the save button on the bottom left of the screen to save the configuration.
- 6. A reboot is required to enable the Equipment Touch. Press the reboot button at the bottom of the screen to reboot the controller.

Zone Sensor Communication Configuration

Rnet communication configuration is done from the Controller Config screen, which will only show with user or higher access level. To access the Controller Config screen:

- 1. From the Home screen, press the login icon (🔒) to access the Login screen.
- 2. Login with the user access password (1111).
- 3. Press the unlock button (🔓) to accept the login and return to the Home screen.
- 4. From the Home screen, press the link for the Main Menu (☰).
- 5. From the Main Menu, press the Controller Config icon (⚙️) to go to the Controller Config screen.

NOTE: If the controller config screen does not show, then login may have failed. Try login again.

- 6. From the Controller Config screen, press the Zone Sensor Config icon (🔌) to go to the Zone Sensor Config screen. Note: the Zone Sensor Config icon is on the second page of the Controller Config screen. Press the down arrow on the bottom right of the screen to get to the second page. See Fig. 19 for Zone Sensor Config screen layout.
- 7. On the Zone Sensor Config Screen, verify the Rnet port is set to “J8”. If the Rnet port shows N/A, repeat the serial port configuration steps.
- 8. Set the addresses for sensor index 1-5. Setting the address to -1 disables the sensor index. See Table 12 for Zone Sensor configuration parameters. In Fig. 19, sensor 1 is enabled and set to address 1, sensor 2 is enabled and set to address 3, and sensor 3 is enabled and set to address 5. Sensors 4 and 5 are disabled.
- 9. Use Zone Sensor Config screens 2-6 to select the sensors and the system behavior for temperature, relative humidity, CO₂, motion, and space temperature offset readings. See Fig. 20 for sensor temperature configuration screen example.
- 10. Once configuration is complete, click on the save icon (💾) to save configuration changes before leaving the screen.
- 11. Power cycle or reboot the controller to ensure the configuration changes take effect.

NOTE: A controller reboot may be required for some configuration changes to take effect. Make all required configuration changes prior to rebooting, to reduce rebooting frequency. Press the Reboot button at the bottom of the screen to initiate a reboot.

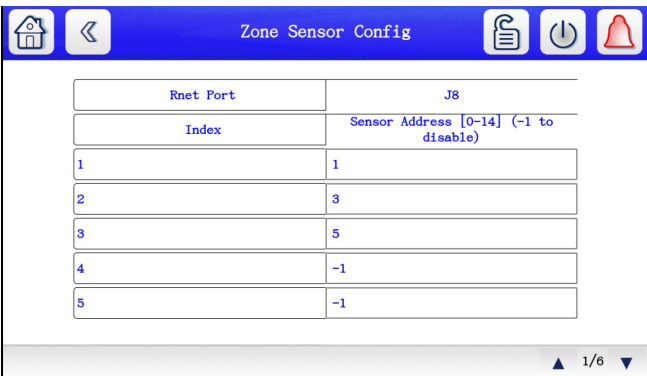


Fig. 19 — Zone Sensor Configuration Screen

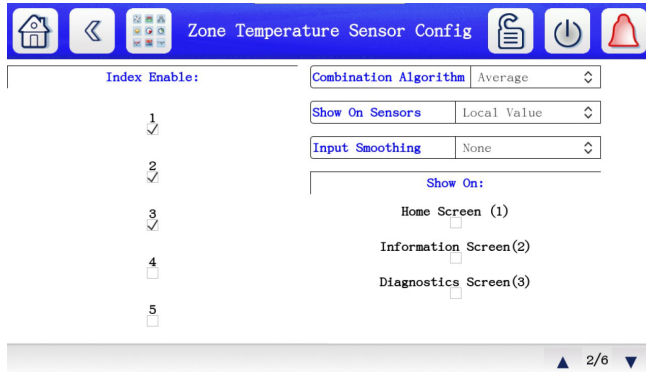


Fig. 20 — Zone Temperature Sensor Configuration Screen

Table 12 — Zone Sensor Configurations

NAME	DESCRIPTION
Serial Port Config	Selects the configuration of the J8 port. NOTE: This configuration must be set to MODBUS_J8_RNET for Rnet sensors. IMPORTANT: Do not use MODBUS_J8_MODBUS, MSTP_J8_MODBUS, or RNET_J8_MSTP configurations.
Sensor Address	Enter the sensor address for the associated sensor index. The sensor address can be 0-14 and must match the address dip switch setting on the sensor. Every sensor on the Rnet must have a different address. NOTE: Enter -1 to disable the sensor.
Index Enable	Selects if the system will use the indexed sensor reading for temperature, humidity, CO ₂ , space temperature offset, and motion. Check below the sensor index number to use the sensor value and uncheck to not use the sensor value. NOTE: The sensor functions are listed at the top of the screen.
Combination Algorithm	When using more than one sensor, this configuration determines what value the system uses: Minimum – the lowest sensor value. Maximum – the highest sensor value. Average – average of all of the sensor values.
Show on Sensors	Indicates what value the local sensor will display. Local value – shows the local sensor value. Calculated – shows the system calculated value from the combination algorithm.
Input Smoothing	If the raw value from the sensor(s) changes frequently, you can select one of the following options to send out an average of readings. None – raw output. Minimum – average of the last 2 readings. Medium – average of the last 5 readings. Maximum – average of the last 9 readings.

Zone Sensor Status

Zone sensor readings are shown on the Zone Sensor Inputs screen. To access the Zone Sensor Inputs screen:

1. From the Home screen, press the link for the Main Menu ().
2. From the Main Menu, press the Inputs icon () to go to the Inputs screen.
3. From the Inputs screen, press the Zone Sensor Inputs icon () to go to the Zone Sensor Inputs screen.
4. The input values from all of the active sensors are displayed on this screen. Any value showing N/A indicates an inactive sensor value (see Fig. 21).

Zone Sensor	1	2	3	4	5	System
Zone Temperature	N/A	N/A	N/A	N/A	N/A	0.0
Zone SPT0	N/A	N/A	N/A	N/A	N/A	0.0
Zone Humidity	N/A	N/A	N/A	N/A	N/A	0.0
Zone CO2	N/A	N/A	N/A	N/A	N/A	0.0
Zone Motion	N/A	N/A	N/A	N/A	N/A	0.0

Fig. 21 — Zone Sensor Input Screen

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X)

NOTE: Refer to the enumerations column for text strings that are communicated as analog, binary, or multi-state values. The text strings are not directly available via BACnet.

BACNET AND CCN NETWORK POINTS

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Air Pressures	Building Pressure (BP)	AIRPRESS_BP	AV	3	0	0	0	IN_H2O	Yes	No	
	Return Pressure (RP)	AIRPRESS_RAP	AV	1	0	-1	1	IN_H2O	Yes	No	
	Supply Pressure (SP)	AIRPRESS_SDP	AV	2	0	0	0	IN_H2O	Yes	No	
Air Temperatures	Cooling Coil Temp (CCT)	RFGTEMP_CCT	AV	293	0	0	0	DEGREE_F	Yes	No	
	DX Leaving Air Temp (DXLAT)	AIRTEMP_DXLAT	AV	15	0	0	0	DEGREE_F	Yes	No	
	Effective SAT Control Point (SAT CP)	AIRTEMP_EFF_CP	AV	14	0	0	0	DEGREE_F	Yes	No	
	ERV Wheel Leaving Air Temp (WLAT)	AIRTEMP_WLAT	AV	8028	0	0	0	DEGREE_F	Yes	No	
	Exhaust Air Temp (EXAT)	AIRTEMP_EXAT	AV	11	0	0	0	DEGREE_F	Yes	No	
	Mixed Air Temp (MAT)	AIRTEMP_MAT	AV	10	0	0	0	DEGREE_F	Yes	No	
	Outside Air Dew Point (OADP)	AIRTEMP_OADP	AV	120	0	0	0	DEGREE_F	Yes	No	
	Outside Air Temp (OAT)	AIRTEMP_OAT	AV	9	0	0	0	DEGREE_F	Yes	No	
	Return Air Temp (RAT)	AIRTEMP_RAT	AV	6	0	0	0	DEGREE_F	Yes	No	
	Space Temp (SPT)	AIRTEMP_SPT	AV	7	0	0	0	DEGREE_F	Yes	No	
	Space Temp Offset (SPTO)	AIRTEMP_SPTO	AV	8	0	0	0	DEGREE_F	Yes	No	
	Supply Air Temp (SAT)	AIRTEMP_SAT	AV	4	0	0	0	DEGREE_F	Yes	No	
	Supply Air Temp Reset (SATR)	AIRTEMP_SATO	AV	5	0	0	0	DEGREE_F	Yes	No	
Alarms	Alarm Reset	ALARMRST_RST_ALM	BV	1	0	0	1	NO_UNIT	Yes	Yes	0=NO, 1=YES
Alert Configurations	BP High Limit	ALERTCFG_BP_HLMT	AV	35	0.1	0	0.15	IN_H2O	Yes	Yes	
	BP Low Limit	ALERTCFG_BP_LLMT	AV	34	-0.1	-0.15	0	IN_H2O	Yes	Yes	
	Cool/Heat OAT Lockout Alert	ALERTCFG_LOCK_OUT	BV	4	0	0	0	NO_UNIT	Yes	Yes	0=OFF, 1=ON
	ERV Filter Change Time	ERVCFG_FCHNG	AV	8044	2000	168	8760	HOURS	Yes	Yes	
	ERV Filter Source	ERVCFG_FLTSC	AV	8043	1	0	2	NO_UNIT	Yes	Yes	0=NONE, 1=TIMER, 2=SWITCH
	ERV Frost Alert Limit	ALERTCFG2_ERV_ALRT	AV	45	35	25	40	DEGREE_F	Yes	Yes	
	FDD Alerts Enable	ALERTCFG_T24ENAB	BV	5	1	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Final Filter Change Reminder	ALERTCFG_POSTFL	AV	59	2880	0	43200	NO_UNIT	Yes	Yes	
	Final Filter Change Time	FFLTCHG	AV	614	2000	168	8760	HOURS	Yes	Yes	
	Final Filter Press Limit	FFLTLM	AV	616	1.5	0.5	5	IN_H2O	Yes	Yes	
	Final Filter Source	FFLTSRC	AV	615	0	0	3	NO_UNIT	Yes	Yes	0=NONE, 1=TIMER, 3=MEASURING
	IAQ High Limit	ALERTCFG_IAQ_HLMT	AV	40	1200	0	5000	PARTS_PER_MILLION	Yes	Yes	
	Minimum OA CFM Limit	ALERTCFG_ECMINCFM	AV	56	0	0	0	CFM	Yes	Yes	
	OAD Fault Detect Gap	OADCFG_FLTGAP	AV	57	5	2	100	PERCENT	Yes	Yes	
	OAD Fault Detect Time	OADCFG_FLTTIME	AV	58	240	60	600	SECONDS	Yes	Yes	
	OAT High Limit	ALERTCFG_OAT_HLMT	AV	39	150	0	0	DEGREE_F	Yes	Yes	
	OAT Low Limit	ALERTCFG_OAT_LLMT	AV	38	-40	0	0	DEGREE_F	Yes	Yes	
	Pre-Filter Change Time	ALERTCFG_MAINFLT	AV	41	2000	168	8760	HOURS	Yes	Yes	
	Pre-Filter Press Limit	GENUNIT_PREFLTR_LIM	AV	43	1.5	0.5	5	IN_H2O	Yes	Yes	

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Alert Configurations (cont)	Pre-Filter Source	GENUNIT_PREFLTR_SRC	AV	42	0	0	3	NO_UNIT	Yes	Yes	0=NONE, 1=TIMER, 2=SWITCH, 3=MEASURING
	RAP High Limit	RAP_HILIM	AV	632	1	0	1	IN_H2O	Yes	Yes	
	RAP Low Limit	RAP_LOLIM	AV	631	0.4	-1	1	IN_H2O	Yes	Yes	
	RARH High Limit	ALERTCFG_RARH_HT	AV	31	100	0	100	PERCENT	Yes	Yes	
	RARH Low Limit	ALERTCFG_RARH_LT	AV	30	0	0	100	PERCENT	Yes	Yes	
	RAT High Occu Limit	ALERTCFG_RATHLMT0	AV	27	90	-40	245	DEGREE_F	Yes	Yes	
	RAT High Unoc Limit	ALERTCFG_RATHLMTU	AV	28	100	-40	245	DEGREE_F	Yes	Yes	
	RAT Low Occu Limit	ALERTCFG_RATLLMT0	AV	26	60	-40	245	DEGREE_F	Yes	Yes	
	RAT Low Unoc Limit	ALERTCFG_RATLLMTU	AV	29	40	-40	245	DEGREE_F	Yes	Yes	
	Reset Final Filter Hours	GENUNIT_FFLT_RST	AV	626	0	0	0	NO_UNIT	Yes	No	0=NO, 1=YES
	Reset Pre-Filter Hours	GENUNIT_FLTR_RST	BV	167	0	0	0	NO_UNIT	Yes	Yes	0=NO, 1=YES
	SAT High Limit	ALERTCFG_SAT_HTMP	AV	37	130	105	160	DEGREE_F	Yes	Yes	
	SAT High Occu Limit	ALERTCFG_SATHLMT0	AV	23	130	105	160	DEGREE_F	Yes	Yes	
	SAT High Unoc Limit	ALERTCFG_SATHLMTU	AV	25	130	105	160	DEGREE_F	Yes	Yes	
	SAT Low Limit Alert	ALERTCFG_SAT_LTMP	AV	36	45	0	50	DEGREE_F	Yes	Yes	
	SAT Low Occu Limit	ALERTCFG_SATLLMT0	AV	22	40	0	45	DEGREE_F	Yes	Yes	
	SAT Low Unoc Limit	ALERTCFG_SATLLMTU	AV	24	40	0	45	DEGREE_F	Yes	Yes	
	SP High Limit	ALERTCFG_SP_HLMT	AV	33	2	1.5	2.2	IN_H2O	Yes	Yes	
	SP Low Limit	ALERTCFG_SP_LLMT	AV	32	0.1	0	0.5	IN_H2O	Yes	Yes	
	SPRH High Limit	ALERTCFG_SPRHHL	AV	16	80	0	100	PERCENT	Yes	Yes	
	SPRH Low Limit	ALERTCFG_SPRHLL	AV	17	20	0	100	PERCENT	Yes	Yes	
	SPT High Occu Limit	ALERTCFG_SPTHLMT0	AV	19	85	-10	245	DEGREE_F	Yes	Yes	
	SPT High Unoc Limit	ALERTCFG_SPTHLMTU	AV	21	100	-10	245	DEGREE_F	Yes	Yes	
	SPT Low Occu Limit	ALERTCFG_SPTLLMT0	AV	18	60	-10	245	DEGREE_F	Yes	Yes	
	SPT Low Unoc Limit	ALERTCFG_SPTLLMTU	AV	20	45	-10	245	DEGREE_F	Yes	Yes	
Analog Inputs	3rd Party IAQ Reset Modulation	ANALOGIN_IAQOPRST	AV	116	0	0	0	PERCENT	Yes	No	
	Avg Zone Damper Position (ZDP)	ANALOGIN_ZDP	AV	126	0	0	0	PERCENT	Yes	No	
	Comp A1 Speed Feedback	ANALOGIN_CMPA1SPD	AV	131	0	0	0	HZ	Yes	No	
	Comp A2 Speed Feedback	ANALOGIN_CMPA2SPD	AV	132	0	0	0	HZ	Yes	No	
	Comp B1 Speed Feedback	ANALOGIN_CMPB1SPD	AV	133	0	0	0	HZ	Yes	No	
	Comp B2 Speed Feedback	ANALOGIN_CMPB2SPD	AV	134	0	0	0	HZ	Yes	No	
	Demand/Limit Input Modulation	ANALOGIN_DLC	AV	146	0	0	0	PERCENT	Yes	No	
	EAD 3rd Party Modulation	ANALOGIN_EAD3P	AV	633	0	0	0	PERCENT	Yes	No	
	EAD Position Feedback	ANALOGIN_EADFDBK	AV	618	0	0	0	PERCENT	Yes	No	
	ERV Bypass 1 Position Feedback	ANALOGIN_ERVBPOS1	AV	612	0	0	0	PERCENT	Yes	No	
	ERV Bypass 2 Position Feedback	ANALOGIN_ERVBPOS2	AV	613	0	0	0	PERCENT	Yes	No	
	ERV Wheel Speed Feedback	ANALOGIN_ERVSPD	AV	734	0	0	0	PERCENT	Yes	No	
	EXF 3rd Party Modulation	ANALOGIN_EF3P_CMD	AV	114	0	0	0	PERCENT	Yes	No	
	EXF Speed Feedback	ANALOGIN_EFSPD	AV	140	0	0	0	PERCENT	Yes	No	
	EXV A1 Feedback	ANALOGIN_EXV_A1	AV	141	0	0	100	PERCENT	Yes	No	

APPENDIX A – BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Analog Inputs (cont)	EXV A2 Feedback	ANALOGIN_EXV_A2	AV	142	0	0	100	PERCENT	Yes	No	
	EXV B1 Feedback	ANALOGIN_EXV_B1	AV	143	0	0	100	PERCENT	Yes	No	
	EXV B2 Feedback	ANALOGIN_EXV_B2	AV	144	0	0	100	PERCENT	Yes	No	
	HGRH Valve Feedback	ANALOGIN_HMD	AV	129	0	0	0	PERCENT	Yes	No	
	IDF 3rd Party Modulation	ANALOGIN_SF3P_CMD	AV	115	0	0	0	PERCENT	Yes	No	
	IDF Speed Feedback	ANALOGIN_IDFSPD	AV	138	0	0	0	PERCENT	Yes	No	
	IDF Speed RPM Feedback	ANALOGIN_IDFRPM	AV	139	0	0	0	RPM	Yes	No	
	Indoor Air Quality Feedback	ANALOGIN_IAQ	AV	117	0	0	0	PARTS_PER_MILLION	Yes	No	
	OAD 3rd Party Modulation	ANALOGIN_OD3P_CMD	AV	113	0	0	0	PERCENT	Yes	No	
	OAD Position Feedback	ANALOGIN_DAMPPOS	AV	127	0	0	0	PERCENT	Yes	No	
	ODF 1 Speed Feedback	ANALOGIN_ODF1SPD	AV	135	0	0	0	HZ	Yes	No	
	ODF 2 Speed Feedback	ANALOGIN_ODF2SPD	AV	136	0	0	0	HZ	Yes	No	
	ODF 3 Speed Feedback	ANALOGIN_ODF3SPD	AV	137	0	0	0	HZ	Yes	No	
	Outdoor Air CFM	ANALOGIN_OACFM	AV	111	0	0	0	CFM	Yes	No	
	Outdoor Air CFM Reset Modulation	ANALOGIN_OACFMRST	AV	112	0	0	0	CFM	Yes	No	
	Outdoor Air Enthalpy (OAE)	ANALOGIN_OA_ENTH	AV	149	0	0	0	BTU_LB	Yes	No	
	Outdoor Air Quality (OAQ)	ANALOGIN_OAQ	AV	118	2000	0	0	PARTS_PER_MILLION	Yes	No	
	Outdoor Air RH (OARH)	ANALOGIN_OARH	AV	119	0	0	0	PERCENT	Yes	No	
	Pre/Final Filter Press Drop	ANALOGIN_FILTERPD	AV	148	0	0	0	IN_H2O	Yes	No	
	RAD Position Feedback	ANALOGIN_DAMPPOS2	AV	128	0	0	0	PERCENT	Yes	No	
	Return Air Enthalpy (RAE)	ANALOGIN_RA_ENTH	AV	150	0	0	0	BTU_LB	Yes	No	
	Return Air RH (RARH)	ANALOGIN_RARH	AV	121	0	0	0	PERCENT	Yes	No	
	RTF 3rd Party Modulation	ANALOGIN_RF3P_CMD	AV	634	0	0	0	PERCENT	Yes	No	
	RTF Speed Feedback	ANALOGIN_RFSPD	AV	695	0	0	0	PERCENT	Yes	No	
	Space RH (SPRH)	ANALOGIN_SPRH	AV	124	0	0	0	PERCENT	Yes	No	
Analog Outputs	Comp A1 Command	ANALGOUT_CMPA1CMD	AV	99	0	0	0	PERCENT	Yes	No	
	Comp A2 Command	ANALGOUT_CMPA2CMD	AV	100	0	0	0	PERCENT	Yes	No	
	Comp B1 Command	ANALGOUT_CMPB1CMD	AV	101	0	0	0	PERCENT	Yes	No	
	Comp B2 Command	ANALGOUT_CMPB2CMD	AV	102	0	0	0	PERCENT	Yes	No	
	EAD Position Command	ANALGOUT_EADCMD	AV	617	0	0	0	PERCENT	Yes	No	
	ERV Bypass Position Command	ANALGOUT_ERVBPCMD	AV	611	0	0	0	PERCENT	Yes	No	
	ERV WheelSpeed Command	ANALGOUT_ERVCMD	AV	733	0	0	0	PERCENT	Yes	No	
	EXF Speed Command	ANALGOUT_EFCMD	AV	97	0	0	0	PERCENT	Yes	No	
	EXV A1 Command	ANALGOUT_EXVA1CMD	AV	107	0	0	0	PERCENT	Yes	No	
	EXV A2 Command	ANALGOUT_EXVA2CMD	AV	108	0	0	0	PERCENT	Yes	No	
	EXV B1 Command	ANALGOUT_EXVB1CMD	AV	109	0	0	0	PERCENT	Yes	No	
	EXV B2 Command	ANALGOUT_EXVB2CMD	AV	110	0	0	0	PERCENT	Yes	No	
	Heat Capacity Command	ANALGOUT_HEATCMD	AV	94	0	0	0	PERCENT	Yes	No	
	HGRH Valve 1 Command	ANALGOUT_HMV	AV	95	0	0	100	PERCENT	Yes	No	
	HGRH Valve 2 Command	ANALGOUT_HMV2	AV	96	0	0	100	PERCENT	Yes	No	
	IDF Speed Command	ANALGOUT_IDFCMD	AV	103	0	0	0	PERCENT	Yes	No	
	OAD Position Command	ANALGOUT_DAMP2CMD	AV	92	0	0	0	PERCENT	Yes	No	
	ODF 1 Command	ANALGOUT_ODF1CMD	AV	104	0	0	0	PERCENT	Yes	No	
	ODF 2 Command	ANALGOUT_ODF2CMD	AV	105	0	0	0	PERCENT	Yes	No	
	ODF 3 Command	ANALGOUT_ODF3CMD	AV	106	0	0	0	PERCENT	Yes	No	
	RAD Position Command	ANALGOUT_DAMP2CMD2	AV	93	0	0	0	PERCENT	Yes	No	
	RTF Speed Command	ANALGOUT_RFCMD	AV	694	0	0	0	PERCENT	Yes	No	

APPENDIX A – BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
BACnet	Airside Linkage Validity	BACNET_ASL_Link_VValidity	BV	608	0	0	1	NO_UNIT	Yes	Yes	0=NO, 1=YES
	ASL Air Source Mode	BACNET_ASL_Air_Src_Mode	AV	601	0	0	0	NO_UNIT	Yes	Yes	
	ASL Cooling Required	BACNET_ASL_Cooling_Req	AV	602	0	0	0	NO_UNIT	Yes	Yes	
	ASL Damper Position	BACNET_ASL_Damper_Pos	AV	596	0	0	0	PERCENT	Yes	Yes	
	ASL Heating Required	BACNET_ASL_Heating_Req	AV	603	0	0	0	NO_UNIT	Yes	Yes	
	ASL Maximum Airflow	BACNET_ASL_Max_Airflow	AV	597	0	0	0	CFM	Yes	Yes	
	ASL Occ Cool Setpoint	BACNET_ASL_Occ_CStpoint	AV	592	70	55	0	DEGREE_F	Yes	Yes	
	ASL Occ Cooling Required	BACNET_ASL_Occ_Coolg_Req	AV	604	0	0	0	NO_UNIT	Yes	Yes	
	ASL Occ Heat Setpoint	BACNET_ASL_Occ_HStpoint	AV	593	80	-40	0	DEGREE_F	Yes	Yes	
	ASL Occ Heating Required	BACNET_ASL_Occ_Heatg_Req	AV	605	0	0	0	NO_UNIT	Yes	Yes	
	ASL Occupancy SPT	BACNET_ASL_Occ_Spce_Temp	AV	589	80	-40	0	DEGREE_F	Yes	Yes	
	ASL Occupancy State	BACNET_ASL_Occupcy_State	AV	588	2	0	0	NO_UNIT	Yes	Yes	
	ASL Optimal Start	BACNET_ASL_Optimal_Start	AV	606	0	0	0	NO_UNIT	Yes	Yes	
	ASL Outside Air Temp	BACNET_ASL_OutsideAirTem	AV	598	80	-40	0	DEGREE_F	Yes	Yes	
	ASL Percent Display Sel	BACNET_ASL_Percent_Displ	BV	609	0	0	1	NO_UNIT	Yes	Yes	
	ASL Space Humidity	BACNET_ASL_Space_Humdity	AV	590	0	0	0	PERCENT	Yes	Yes	
	ASL Space IAQ	BACNET_ASL_Space_IAQ	AV	591	0	0	0	PARTS_PER_MILLION	Yes	Yes	
	ASL Supply Air Pressure	BACNET_ASL_Suply_AirPres	AV	600	0	0	0	IN_H2O	Yes	Yes	
	ASL Supply Air Temp	BACNET_ASL_Suply_AirTemp	AV	599	0	-40	0	DEGREE_F	Yes	Yes	
	ASL Unocc Cool Setpoint	BACNET_ASL_Unocc_CStpnt	AV	594	80	-40	0	DEGREE_F	Yes	Yes	
	ASL Unocc Heat Setpoint	BACNET_ASL_Unocc_HStpnt	AV	595	80	-40	0	DEGREE_F	Yes	Yes	
	BACnet Linkage Active	BACNET_ASL_Link_Active	BV	607	0	0	1	NO_UNIT	Yes	Yes	0=NO, 1=YES
	Linkage Active	LINKAGE	AV	628	0	0	1	NO_UNIT	No	No	0=NO, 1=YES
Communicating Sensors	Local Sched Occ Request	BACNET_loc_occ	AV	295	0	0	1	NO_UNIT	No	No	
	Metric Unit	BACNET_bacunit	BV	641	0	0	1	NO_UNIT	Yes	Yes	0=NO, 1=YES
	Operation Status Color	BACNET_ALC_COLOR	MV	27	14	0	15	NO_UNIT	No	No	1=Gray, 2=Red, 3=DarkBlue, 4=LightBlue, 5=Green, 6=LightGreen, 7=Yellow, 8=Orange, 9=Red, 10=White, 13=Coral, 14=Charcoal, 15=Purple
	Percentage conversion	BACNET_perc_bac	AV	740	0	0	1	NO_UNIT	Yes	Yes	0=0.00-1.00, 1=0-100
	Value of Prime variable	BACNET_ALC_PRIME	AV	573	0	0	0	NO_UNIT	No	No	
	Equip and System Touch Enable	EQUIPTOUCHEN	BV	642	1	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	ET Cool SPTO	ETCOOLSPTO	AV	776	0	0	0	DEGREE_F	Yes	Yes	
	ET Heat SPTO	ETHEATSPTO	AV	777	0	0	0	DEGREE_F	Yes	Yes	
	ET Humidity	ETSPRH	AV	1904	0	0	0	PERCENT	Yes	Yes	
	ET Momentary Cool	ETMOMCOOL	AV	778	0	0	0	DEGREE_F	Yes	Yes	

APPENDIX A – BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Communicating Sensors (cont)	ET Momentary Heat	ETMOMHEAT	AV	779	0	0	0	DEGREE_F	Yes	Yes	
	ET SPTO	ETNETSPTO	AV	773	0	0	0	DEGREE_F	Yes	Yes	
	ET Temp	ETSPT	AV	1902	0	0	0	DEGREE_F	Yes	Yes	
	Occupied Standby ZS Sensor	ZS_OCCSB	AV	367	0	0	0	NO_UNIT	Yes	Yes	
	ST Humidity	STSPRH	AV	8022	0	0	0	PERCENT	Yes	Yes	
	ST Temp	STSPT	AV	8023	0	0	0	DEGREE_F	Yes	Yes	
Cooling Configurations	Comp OAT Lock	SERVICE1_CMPOATL	AV	492	60	-20	70	DEGREE_F	Yes	Yes	
	Cool Comfort Trending	SVCOUT_CMTRNDAC	BV	8	0	0	0	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Cool Heat Gap Config	COOLCFG_GAP_CLHT	AV	193	5	2	10	DEGREE_F	Yes	Yes	
	Cool Tempered Venting	COOLCFG_TMPDVNT	BV	7	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Cool Trend Level	COOLCFG_CLTREND	AV	191	0.2	0.1	5	DEGREE_F	Yes	Yes	
	Cool Trend Time	COOLCFG_CLTNDTM	AV	192	2	1	5	MINUTES	Yes	Yes	
	Cool/Heat Demand Source	COOLCFG_DEMAND	AV	186	3	0	5	NO_UNIT	Yes	Yes	0=NONE, 2=RAT, 3=SPT, 4=OAT, 5=TSTAT
	SAT High Deadband	COOLCFG_SATHI_DB	AV	483	5	2.5	10	DEGREE_F	Yes	Yes	
	SAT Lo Deadband	COOLCFG_SATLO_DB	AV	482	10	5	15	DEGREE_F	Yes	Yes	
	SAT Reset Limit	COOLCFG_RSTLMIT	AV	190	10	0	20	DEGREE_F	Yes	Yes	
	SAT Reset Ratio	COOLCFG_RSTRTIO	AV	189	3	0	10	DEGREE_F	Yes	Yes	
	TC Start Cool Factor	SERVICE_TCSTCOOL	AV	194	0	0	60	NO_UNIT	Yes	Yes	
	Vent Deadband	COOLCFG_SPLYDB	AV	187	15	10	30	DEGREE_F	Yes	Yes	
	100% OA Cool SAT	COOLSTP_HODACLSP	AV	296	73	45	75	DEGREE_F	No	No	
	100% OA High Cool SAT	COOLSTP_HODAHCL	AV	200	70	45	75	DEGREE_F	Yes	Yes	
Cooling Setpoints	100% OA Low Cool SAT	COOLSTP_HODALCL	AV	199	75	45	75	DEGREE_F	Yes	Yes	
	Hi Cool On DB	COOLCFG_DOHICLON	AV	203	2	0.5	20	DEGREE_F	Yes	Yes	
	Hi Cool SAT	COOLSTP_SAHICLSP	AV	198	55	45	75	DEGREE_F	Yes	Yes	
	Lo Cool Off DB	COOLCFG_DOLOCLOF	AV	202	1	0.5	2	DEGREE_F	Yes	Yes	
	Lo Cool On DB	COOLCFG_DOLOCLOF	AV	201	1	0	2	DEGREE_F	Yes	Yes	
	Lo Cool SAT	COOLSTP_SALOCCLSP	AV	197	65	45	75	DEGREE_F	Yes	Yes	
	Occ Cooling Setpoint	COOLSTP_CLSP_OCC	AV	195	73	50	100	DEGREE_F	Yes	Yes	
	SAT Reset Source	COOLCFG_TPCTLRST	AV	188	0	0	5	NO_UNIT	Yes	Yes	0=NONE, 1=RAT, 2=SPT, 3=OAT, 4=ANALOG, 5=SETPOINT
	Unocc Cooling Setpoint	COOLSTP_CLSP_UNO	AV	196	80	50	100	DEGREE_F	Yes	Yes	
	VAV Cool Off DB	COOLCFG_DOVAVCOF	AV	206	2	1	25	DEGREE_F	Yes	Yes	
	VAV Cool On DB	COOLCFG_DOVAVCON	AV	205	3.5	0	25	DEGREE_F	Yes	Yes	
	VAV Cooling SAT	COOLSTP_VAVCLSP	AV	204	55	45	75	DEGREE_F	Yes	Yes	
	Vent SAT	COOLSTP_SPLYAVSP	AV	207	70	45	75	DEGREE_F	Yes	Yes	

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Dehumidification Configurations	Dehum Demand Source	DHUMCFG_DMD_SRC	AV	208	3	0	8	NO_UNIT	Yes	Yes	0=NONE, 1=HSTAT, 2=RARH, 3=SPRH
	Dehum Supplemental Heat	DHUMCFG_SUPPHEAT	BV	10	0	0	0	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	OA Dehum Enable	OADCFG_OADHUMEN	BV	17	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Occupied Free Dehum	DHUMCFG_OFDHUMEN	BV	18	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Unoccupied Dehum	DHUMCFG_UNOCENAB	BV	9	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Unoccupied Free Dehum	DHUMCFG_UFDHUMEN	BV	19	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
Dehumidification Setpoints	Dehum CCT	DHUMSTP_CCTSTP	AV	218	50	45	60	DEGREE_F	Yes	Yes	
	Dehum DP	DHUMSTP_DHUMDPSP	AV	687	55	45	65	DEGREE_F	Yes	No	
	Dehum DP Off DB	DHUMCFG_DLOS_OFF	AV	674	5	1	20	DEGREE_F	Yes	No	
	Dehum DP On DB	DHUMCFG_DLOS_ON	AV	675	0	0	20	DEGREE_F	Yes	No	
	Dehum RH	DHUMSTP_DHUMRHSP	AV	215	55	40	100	PERCENT	Yes	Yes	
	Dehum RH Off DB	DHUMCFG_RLOS_OFF	AV	217	5	1	20	PERCENT	Yes	Yes	
	Dehum RH On DB	DHUMCFG_RLOS_ON	AV	216	5	0	20	PERCENT	Yes	Yes	
Discrete Inputs	A1 Oil Level Switch Feedback	DISCIN_VSOLSWA	BV	57	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Cir A HPS Switch Feedback	DISCIN_HPSA	BV	39	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Cir B HPS Switch Feedback	DISCIN_HPSB	BV	40	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	COFS Feedback	DISCIN_CNDOSW	BV	33	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Comp A1 Feedback	DISCIN_CMPFBKA1	BV	35	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Comp A2 Feedback	DISCIN_CMPFBKA2	BV	36	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Comp B1 Feedback	DISCIN_CMPFBKB1	BV	37	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Comp B2 Feedback	DISCIN_CMPFBKB2	BV	38	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Dehumidify Switch Feedback	DISCIN_DEHUMSW	BV	34	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Demand/Capacity Limit 1 Feedback	DISCIN_DLS1	BV	45	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Demand/Capacity Limit 2 Feedback	DISCIN_DLS2	BV	46	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Emergency Shutdown Feedback	DISCIN_SHTDWNWSW	BV	29	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	ERV Filter Status Switch Feedback	DISCIN_ERVFSS	BV	44	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	ERV Frost Switch Feedback	DISCIN_ERV_FRST	BV	42	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	ERV Motion Sensor Feedback	DISCIN_WHEEL_ST	BV	43	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Discrete Inputs (cont)	Fire Shutdown Switch Feedback	DISCIN_FIRESW	BV	25	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Heat Alarm Feedback	DISCIN_HT_ALARM	BV	32	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Heat Limit Switch Feedback	DISCIN_HTCOLMSW	BV	643	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Hi Cool Input (Y2) Feedback	DISCIN_TSTAT_Y2	BV	22	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Hi Heat Input (W2) Feedback	DISCIN_TSTAT_W2	BV	24	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Hydronic Freeze Switch Feedback	DISCIN_FRZSW	BV	51	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	IAQ Switch Feedback	DISCIN_IAQSW	BV	53	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	IGC IDF Switch Feedback	DISCIN_IGCFANSW	BV	47	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Indoor Dissipation Board Feedback	DISCIN_INRFLK	BV	58	0	0	1	NO_UNIT	Yes	No	0=NORMAL, 1=ALARM
	Indoor Fan Input (G) Feedback	DISCIN_TSTAT_G	BV	20	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Indoor Fan Limit Switch Feedback	DISCIN_IDF_LSM	BV	31	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Lo Cool Input (Y1) Feedback	DISCIN_TSTAT_Y1	BV	21	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Lo Heat Input (W1) Feedback	DISCIN_TSTAT_W1	BV	23	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	OAQ Switch Feedback	DISCIN_OAQSW	BV	54	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Outdoor Dissipation Board Feedback	DISCIN_OUTRFLK	BV	59	0	0	1	NO_UNIT	Yes	No	0=NORMAL, 1=ALARM
	Phase Monitor	DISCIN_PMR_STAT	BV	28	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Pre-Filter Status Switch Feedback	DISCIN_PFPSS	BV	48	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Pre-Filter Switch Feedback	DISCIN_FILTSTAT	BV	30	0	0	1	NO_UNIT	Yes	No	0=CLEAN, 1=DIRTY
	Remote Switch Feedback	DISCIN_RESW	BV	41	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	Smoke Evac Switch Feedback	DISCIN_EVACSW	BV	50	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Smoke Press Switch Feedback	DISCIN_PRESSSW	BV	49	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Smoke Purge Switch Feedback	DISCIN_SMKPRGSW	BV	26	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
Discrete Outputs	A1 Digital Relay Command	DISCOUT_CMPRELA1	BV	61	0	0	1	NO_UNIT	Yes	No	0=OPEN, 1=CLOSE
	A1 Safe Stop Command	DISCOUT_VSCA1_SS	BV	445	1	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Aux Relay Command	DISCOUT_AUXRLY	BV	83	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	CCH A Command	DISCOUT_CCHRA	BV	70	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Discrete Outputs (cont)	CCH B Command	DISCOUT_CCHRB	BV	71	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Compressor A1 Command	DISCOUT_CPA1	BV	60	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Compressor A2 Command	DISCOUT_CPA2	BV	62	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Compressor B1 Command	DISCOUT_CPB1	BV	64	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Compressor B2 Command	DISCOUT_CPB2	BV	65	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	ERV Wheel Command	DISCOUT_ERVWHEEL	BV	74	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	EXF 1 Relay Command	DISCOUT_PEA	BV	87	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	EXF 2 Relay Command	DISCOUT_PEB	BV	88	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	EXF 3 Relay Command	DISCOUT_PEC	BV	89	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Fan Auto Address Relay Command	DISCOUT_AUTOADDR	BV	90	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Heat Relay 1 Command	DISCOUT_STGHEAT1	BV	75	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Heat Relay 2 Command	DISCOUT_STGHEAT2	BV	76	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Heat Relay 3 Command	DISCOUT_STGHEAT3	BV	77	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Heat Relay 4 Command	DISCOUT_STGHEAT4	BV	78	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Heat Relay 5 Command	DISCOUT_STGHEAT5	BV	79	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Heat Relay 6 Command	DISCOUT_STGHEAT6	BV	80	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Humidi-MiZer Reheat Valve Command	DISCOUT_HMS	BV	72	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	IDF VFD Bypass Relay Command	DISCOUT_IDFBYREL	BV	66	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	ODF 1 Relay Command	DISCOUT_ODF1	BV	67	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	ODF 2 Relay Command	DISCOUT_ODF2	BV	68	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	ODF 3 Relay Command	DISCOUT_ODF3	BV	69	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	ZD Override Relay Command	DISCOUT_ZDOR	BV	82	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
EnergyX Configurations	ERV Byp Damper Override	ERVCFG_ERVBPOVR	BV	649	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	ERV Check Type	ERVCFG_CHKTYPE	AV	260	1	0	2	NO_UNIT	Yes	Yes	FUTURE
	ERV Defrost Mode Time	ERVCFG_DFMDTM	AV	8042	15	1	60	MINUTES	Yes	Yes	
	ERV Defrost OAT Thresh	ERVCFG_ERVDFOAT	AV	698	26	20	40	DEGREE_F	Yes	Yes	
	ERV Enthalpy Tolerance	ERVCFG_ENTTOL	AV	262	2	0	2	BTU_LB	Yes	Yes	
	ERV Fan Damper Min Pos	ERVCFG_ERVMINPS	AV	265	10	0	100	PERCENT	Yes	Yes	
	ERV Frost EXAT DP Off	ERVCFG_ERVEXATD	AV	699	2	-10	10	DEGREE_F	Yes	Yes	

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
EnergyX Configurations (cont)	ERV Frost Prevention	ERVCFG_ERVFROST	AV	705	0	0	1	NO_UNIT	Yes	Yes	FUTURE
	ERV OAE Cool Limit	ERVCFG_ERVOAECL	AV	737	0	0	2	BTU_LB	Yes	Yes	
	ERV OAE Heat Limit	ERVCFG_ERVOAEHT	AV	738	0	0	2	BTU_LB	Yes	Yes	
	ERV OAE Lockout	ERVCFG_ERVOAELK	BV	640	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	ERV OAT Cool Limit	ERVCFG_ERVOACL	AV	735	75	50	100	DEGREE_F	Yes	Yes	
	ERV OAT Heat Limit	ERVCFG_ERVOAHT	AV	736	75	50	100	DEGREE_F	Yes	Yes	
	ERV OAT Lockout	ERVCFG_ERVOALK	BV	639	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	ERV Off Enthalpy DB	ERVCFG_OFFENTDB	AV	269	0.5	0	2	BTU_LB	Yes	Yes	
	ERV Off Temp DB	ERVCFG_OFFTMPDB	AV	268	5	0	10	DEGREE_F	Yes	Yes	
	ERV Wheel Defrost Speed	ERVCFG_ERVDEFRS	AV	701	20	0	100	PERCENT	Yes	Yes	
	ERV Wheel EXF Min Speed	ERVCFG_ERVEFMIN	AV	267	10	0	100	PERCENT	Yes	Yes	
Equipment Configurations	3rd Party EXF/RTF Input Config	RELIEF3P	AV	635	0	0	2	NO_UNIT	Yes	Yes	0=NONE, 1=RETURN FAN, 2=EXHAUST FAN
	3rd Party IDF/SPSR Input Config	SPR3PIDF	AV	8025	0	0	2	NO_UNIT	Yes	Yes	0=NONE, 1=THIRD-PARTY IDF MOD, 2=THIRD-PARTY SPR
	3rd Party Reheat Enable	EQUIPCFG_RH3PEN	BV	108	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Altitude	EQUIPCFG_ALTITUDE	AV	572	0	-1000	60000	FEET	Yes	Yes	
	Auto Restart	UNITCFG_AUTRST	BV	207	0	0	1	NO_UNIT	Yes	Yes	0=OFF, 1=ON
	Aux Relay Config	EQUIPCFG_AUXRELAY	AV	256	0	0	2	NO_UNIT	Yes	Yes	0=NONE, 1=ALARM STATUS, 2=OCCUPANCY STATUS
	BP/3rd Party EAD Input Config	SIO3AI10	AV	636	0	0	2	NO_UNIT	Yes	Yes	0=NONE, 1=3RD PARTY EAD, 2=BP
	Demand/Capacity Analog Config	EQUIPCFG_DMDLIM	BV	93	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Demand/Capacity Switch	EQUIPCFG_DMDRSTEN	BV	122	0	0	0	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Emergency Shutdown Input	EQUIPCFG_SHTDWNEN	BV	99	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	EXF 3rd Party Modulation Input	EQUIPCFG_EF3PEN	BV	107	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Exhaust Fan (EXF)	EQUIPCFG_EFEN	BV	116	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Fire Shutdown Switch	EQUIPCFG_FIRESWEN	BV	113	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Humidistat Input	EQUIPCFG_HUMSWEN	BV	96	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	IAQ/3rd Party OAD Input	EQUIPCFG_IAQOREN	BV	125	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	IAQ/OAD Input Config	EQUIPCFG_SIO1AI10	AV	257	0	0	5	NO_UNIT	Yes	Yes	0=NONE, 1=IAQ SENSOR, 2=THIRD-PARTY OAD MOD, 3=THIRD-PARTY OAD RESET, 4=THIRD-PARTY OA CFM RESET

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Equipment Configurations (cont)	IAQ/OAQ Switch Input Config	EQUIPCFG_SIO3DI7	AV	574	0	0	2	NO_UNIT	Yes	Yes	0=NONE, 1=IAQ SWITCH, 2=OAQ SWITCH
	IDF 3rd Party Modulation Input	EQUIPCFG_SF3PEN	BV	105	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	IDF Limit Switch Input	SWTCHCFG_IDFSWINV	AV	684	0	0	0	NO_UNIT	Yes	No	0=DISABLE, 1=ENABLE
	Limiting/SAT Reset Input Config	EQUIPCFG_SIO3AI06	AV	8037	0	0	2	NO_UNIT	No	Yes	0=NONE, 1=DEMAND/CAPACITY LIMIT, 2=SAT RESET
	OAD 3rd Party Mod Input	EQUIPCFG_OAD3PEN	BV	109	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Pre-Filter Status Switch Input	EQUIPCFG_FILTSWEN	BV	97	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Remote Switch Config	EQUIPCFG_RESWEN	AV	255	0	0	2	NO_UNIT	Yes	Yes	0=NONE, 1=REMOTE SHUTDOWN, 2=OCCUPANCY SWITCH
	RTF 3rd Party Modulation Input	RF3PEN	BV	630	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Smoke Evacuation Switch	EQUIPCFG_EVACEN	BV	114	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Smoke Pressurization Switch Input	EQUIPCFG_PRESSEN	BV	115	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Smoke Purge Switch Input	EQUIPCFG_PURGEEN	BV	94	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Thermostat Inputs	EQUIPCFG_TSTATEN	BV	95	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	ZD Override Relay Output	EQUIPCFG_ZDOREN	BV	100	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
Exhaust Fan Configurations	EXF Control Config	EFCFG_CONTROL	AV	235	0	0	3	NO_UNIT	Yes	Yes	0=NONE, 1=OAD MAPPING, 2=THIRD-PARTY, 3=BP
	EXF Max Speed	EFCFG_MAXSPD	AV	237	50	20	100	PERCENT	Yes	Yes	
	EXF Min Speed	EFCFG_MINSPD	AV	236	10	0	100	PERCENT	Yes	Yes	
	EXF OAD Pos 1	EFCFG_DAMPPOS1	AV	240	50	0	100	PERCENT	Yes	Yes	
	EXF OAD Pos 2	EFCFG_DAMPPOS2	AV	241	100	0	100	PERCENT	Yes	Yes	
	EXF OAD Position 1	EFCFG_PEOAD1	AV	242	25	0	100	PERCENT	Yes	Yes	
	EXF OAD Position 2	EFCFG_PEOAD2	AV	243	50	0	100	PERCENT	Yes	Yes	
	EXF OAD Position 3	EFCFG_PEOAD3	AV	244	75	0	100	PERCENT	Yes	Yes	
	EXF OAD Position 4	EFCFG_PEOAD4	AV	245	100	0	100	PERCENT	Yes	Yes	
	EXF OAD Position 5	EFCFG_PEOAD5	AV	246	100	0	100	PERCENT	Yes	Yes	
	EXF OAD Position 6	EFCFG_PEOAD6	AV	247	100	0	100	PERCENT	Yes	Yes	
	EXF Smoke Evacuation Speed	EFCFG_EXFEVAC	AV	249	0	0	100	PERCENT	Yes	Yes	
	EXF Smoke Purge Speed	EFCFG_EXFPURGE	AV	248	0	0	100	PERCENT	Yes	Yes	
Free Cooling Configurations	Changeover Select	FRECLCFG_CHNGSEL	AV	278	0	0	3	NO_UNIT	Yes	Yes	0=NONE, 1=DIFF DRY BULB, 2=OAE, 3=DIFF ENTH
	Diff Dry Bulb Threshold	FRECLCFG_DIFFDBTH	AV	282	0	0	10	DEGREE_F	Yes	Yes	
	Diff Enthalpy Threshold	FRECLCFG_DIFFENTH	AV	279	0.5	0	2	BTU_LB	Yes	Yes	

APPENDIX A – BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Free Cooling Configurations (cont)	Dry Bulb Chngeover (OAT)	FRECLCFG_DRYBLB	BV	132	1	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Free Cool Time Guard	FRECLCFG_FCOOL_TG	AV	473	5	0	30	MINUTES	Yes	Yes	
	OADP Limit Check	FRECLCFG_DEWLIM	BV	133	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	OADP Threshold	FRECLCFG_DEWLIMTH	AV	281	55	50	62	DEGREE_F	Yes	Yes	
	OAT Dry Bulb Threshold	FRECLCFG_DRYBLBTH	AV	280	75	-40	120	DEGREE_F	Yes	Yes	
	Occ Free Cool	FRECLCFG_FREECLEN	BV	130	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Unocc Free Cooling	FRECLCFG_UFC	BV	131	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
Heating Configurations	Add Heat Comfort Trend	SVCOUT_CMTRNDAH	BV	136	0	0	0	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Heat Tempered Cooling	HEATCFG_HTEMPCL	BV	135	0	0	0	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Heat Tempered Cooling DB	HEATCFG_HEATTTDB	AV	306	0	0	0	DEGREE_F	Yes	Yes	
	Heat Tempered Venting	HEATCFG_HTMPDVNT	BV	134	0	0	0	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Heat Trend Level	HEATCFG_HTTREND	AV	307	0.1	0.1	5	DEGREE_F	Yes	Yes	
	Heat Trend Time	HEATCFG_HTTNDTM	AV	308	120	30	600	SECONDS	Yes	Yes	
	Occupied Heating Type	HEATCFG_OCHTTYPE	AV	637	0	0	2	NO_UNIT	Yes	Yes	0=ALWAYS, 1=ONE CYCLE, 2=UNTIL COOLING
Heating Setpoints	TC Start Heat Factor	SERVICE_TCSTHEAT	AV	311	0	0	60	NO_UNIT	Yes	Yes	
	100% OA High Heat SAT	HEATSTP_HODAHHT	AV	318	85	65	125	DEGREE_F	Yes	Yes	
	100% OA Low Heat SAT	HEATSTP_HODALHT	AV	317	75	65	125	DEGREE_F	Yes	Yes	
	Hi Heat On DB	HEATCFG_DOHIHTON	AV	321	2	0.5	20	DEGREE_F	Yes	Yes	
	Hi Heat SAT	HEATSTP_SAHHTSP	AV	316	95	60	135	DEGREE_F	Yes	Yes	
	Lo Heat Off DB	HEATCFG_DOLOHTOF	AV	320	1	0.5	2	DEGREE_F	Yes	Yes	
	Lo Heat On DB	HEATCFG_DOLOHTON	AV	319	1	0	2	DEGREE_F	Yes	Yes	
	Lo Heat SAT	HEATSTP_SALOHTSP	AV	315	85	60	135	DEGREE_F	Yes	Yes	
	Occ Heating Setpoint	HEATSTP_HTSP_OCC	AV	313	68	50	100	DEGREE_F	Yes	Yes	
	Occupied Heating	HEATCFG_HEAT_EBL	BV	137	1	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
Indoor Fan Configurations	Unocc Heating Setpoint	HEATSTP_HTSP_UNO	AV	314	60	50	100	DEGREE_F	Yes	Yes	
	Hi Cool IDF Speed	IDFCFG_IDFCSPD2	AV	328	100	0	100	PERCENT	Yes	Yes	
	Hi Heat IDF Speed	IDFCFG_IDFHSPD2	AV	333	100	0	100	PERCENT	Yes	Yes	
	IDF Control	IDFCFG_OPSELECT	AV	322	1	0	8	NO_UNIT	Yes	Yes	0=CV, 1=SAV, 2=THIRD-PARTY, 3=SP
	IDF Evacuation Speed	IDFCFG_IDFEVAC	AV	336	34	0	100	PERCENT	Yes	Yes	
	IDF Pressurization Speed	IDFCFG_IDFPRESS	AV	335	34	0	100	PERCENT	Yes	Yes	
	IDF PURGE Speed	IDFCFG_IDFPURGE	AV	334	34	0	100	PERCENT	Yes	Yes	
	IDF Ramp Down Time Cofig	IDFCFG_RMPDN	AV	680	30	30	120	SECONDS	Yes	No	
	IDF Ramp Up Time Config	IDFCFG_RMPUP	AV	681	30	30	120	SECONDS	Yes	No	
	Indoor Fan Max Speed	IDFCFG_IDFMXSPD	AV	325	100	0	100	PERCENT	Yes	Yes	
	Indoor Fan Min Speed	IDFCFG_IDFMNSPD	AV	324	34	0	100	PERCENT	Yes	Yes	
	Lo Cool IDF Speed	IDFCFG_IDFCSPD1	AV	326	66	0	100	PERCENT	Yes	Yes	
	Lo Heat IDF Speed	IDFCFG_IDFHSPD1	AV	332	66	0	100	PERCENT	Yes	Yes	

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Indoor Fan Configurations (cont)	Med Cool IDF Speed	IDFCFG_IDFMCSPD	AV	327	88	0	100	PERCENT	Yes	Yes	
	Occupied Fan	IDFCFG_OCCUCCFG	AV	337	0	0	1	NO_UNIT	Yes	Yes	0=DEMAND, 1=CONTINUOUS
	Occupied Standby Fan	IDFCFG_OCCSBCFG	AV	749	1	0	1	NO_UNIT	Yes	Yes	0=DEMAND, 1=CONTINUOUS
	SAV High Cool Cap Thresh	IDFCFG_SAVHCCTH	AV	331	90	0	100	PERCENT	Yes	Yes	
	SAV Low Cool Cap Thresh	IDFCFG_SAVLCCTH	AV	329	70	0	100	PERCENT	Yes	Yes	
	SAV Med Cool Cap Thresh	IDFCFG_SAVMCCTH	AV	330	75	0	100	PERCENT	Yes	Yes	
	SAV Mode Selection	IDFCFG_SAVTYPE	AV	323	0	0	1	NO_UNIT	Yes	Yes	0=DEMAND, 1=CAPACITY
	SDP Reset Sensor Max	IDFCFG_SDPRMAX	AV	676	3	2.5	3.5	IN_H2O	Yes	No	
	SDP Reset Sensor Min	IDFCFG_SDPRMIN	AV	677	0	0	0.5	IN_H2O	Yes	No	
	SDP Reset Time	IDFCFG_SDPRTIME	AV	341	15	5	30	MINUTES	Yes	Yes	
	SDP Reset ZDP Threshold	IDFCFG_SDPRZDP	AV	342	85	40	100	PERCENT	Yes	Yes	
	SP Reset Limit	IDFCFG_SDPRLMIT	AV	288	0.75	0	3	IN_H2O	Yes	No	
	SP Reset Ratio	IDFCFG_SDPRTIO	AV	340	0.2	0	3	IN_H2O	Yes	Yes	
	SP Reset Source	IDFCFG_SDPRS	AV	339	0	0	5	NO_UNIT	Yes	Yes	0=NONE, 1=RAT, 2=SPT, 4=THIRD-PARTY, 5=ZPD
Indoor Fan Setpoints	Unoccupied Fan	IDFCFG_UNOCCFG	AV	338	0	0	1	NO_UNIT	Yes	Yes	0=NONE, 1=DEMAND
	Air Flow Setpoint	IDFSTP_AIRFLOW	AV	345	1200	0	50000	CFM	Yes	Yes	
	CO2 Level	IDFSTP_CO2LVL	AV	343	2000	0	2000	PARTS_PER_MILLION	Yes	Yes	
	Supply Pressure	IDFSTP_DUCTSET	AV	344	1	0.5	3	IN_H2O	Yes	Yes	
Limiting Configurations	Zone Pressure	IDFSTP_ZPSETPT	AV	287	0.05	-0.25	0.25	IN_H2O	Yes	No	
	Analog Limit Mode	DMDLMCFG_AICLSEL	AV	221	0	0	2	NO_UNIT	Yes	Yes	0=HEAT & COOL, 1=HEAT ONLY, 2=COOL ONLY
	Capacity Limit Enable	DMDLMCFG_DMDCPEN	AV	305	0	0	1	NO_UNIT	No	No	
	Capacity Limit Source	DMDLMCFG_CAPLMSRC	AV	222	0	0	3	NO_UNIT	Yes	Yes	0=NONE, 1=SETPOINT, 2=ANALOG, 3=SETPOINT
	Cool Capacity Limit S1	COOLSTP_CAPLIMS1	AV	224	50	0	100	PERCENT	No	Yes	
	Cool Capacity Limit S2	COOLSTP_CAPLIMS2	AV	225	0	0	100	PERCENT	Yes	Yes	
	Cool Demand Limit S1	COOLSTP_DMDLIMS1	AV	226	4	0	10	DEGREE_F	Yes	Yes	
	Cool Demand Limit S2	COOLSTP_DMDLIMS2	AV	227	6	0	10	DEGREE_F	Yes	Yes	
	Demand Limit Enable	DMDLMCFG_DMDLMEN	AV	304	0	0	1	NO_UNIT	No	No	
	Demand Limit Source	DMDLMCFG_DMDLMSRC	AV	220	0	0	3	NO_UNIT	Yes	Yes	0=NONE, 1=SETPOINT, 2=ANALOG, 3=SETPOINT
	Demand Switch Enable	DMDLMCFG_DLSWSEN	BV	91	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Dmd Reset Cool Adjust	COOLSTP_DMDRSTCL	AV	233	4	0	10	DEGREE_F	Yes	Yes	
	Dmd Reset Heat Adjust	HEATSTP_DMDRSTHT	AV	234	4	0	10	DEGREE_F	Yes	Yes	
	Heat Capacity Limit S1	HEATSTP_CAPLIMS1	AV	229	50	0	100	PERCENT	Yes	Yes	
	Heat Capacity Limit S2	HEATSTP_CAPLIMS2	AV	230	0	0	100	PERCENT	Yes	Yes	
	Heat Demand Limit S1	HEATSTP_DMDLIMS1	AV	231	4	0	10	DEGREE_F	Yes	Yes	

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Limiting Configurations (cont)	Heat Demand Limit S2	HEATSTP_DMDLIMS2	AV	232	6	0	10	DEGREE_F	Yes	Yes	
	Max Cool Capacity	COOLSTP_CLCAPSTP	AV	223	100	0	100	PERCENT	Yes	Yes	
	Max Heat Capacity	HEATSTP_HTCAPSTP	AV	228	100	0	100	PERCENT	Yes	Yes	
Modes	CF 1 Mode	MDESTS_ODF1MDN	AV	712	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=DP_OPT, 3=DP_LOW, 4=DP_LOW, 5=DP_HIGH, 6=DT_HIGH
	CF 2 Mode	MDESTS_ODF2MDN	AV	713	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=DP_OPT, 3=DP_LOW, 4=DP_LOW, 5=DP_HIGH, 6=DT_HIGH
	CF 3 Mode	MDESTS_ODF3MDN	AV	714	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=DP_OPT, 3=DP_LOW, 4=DP_LOW, 5=DP_HIGH, 6=DT_HIGH
	Circuit A Mode	MDESTS_CIRCAMDN	AV	706	0	0	0	NO_UNIT	Yes	No	1=NORMAL, 2=TEST
	Circuit B Mode	MDESTS_CIRCBMDN	AV	707	0	0	0	NO_UNIT	Yes	No	1=NORMAL, 2=TEST
	Comp A1 Mode	MDESTS_CMPA1MDN	AV	708	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=FLD_TEMP, 3=DP_HIGH, 4=DP_LOW, 5=SP_HIGH, 6=SP_LOW, 7=DT_HIGH, 8=MOTTMPHI, 9=FLDTMPHI, 10=INVTMPHI, 11=RCTTMPHI, 12=OILVISLO, 13=MOTCURHI, 14=CMPSURGE, 15=MODE_MAX, 16=DP_HIGHF, 17=SP_LOWF

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Modes (cont)	Comp A2 Mode	MDESTS_CMPA2MDN	AV	709	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=FLD_TEMP, 3=DP_HIGH, 4=DP_LOW, 5=SP_HIGH, 6=SP_LOW, 7=DT_HIGH, 8=MOTTMPHI, 9=FLDTMPHI, 10=INVTMPHI, 11=RCTTMPHI, 12=OILVISLO, 13=MOTCURHI, 14=CMPSURGE, 15=MODE_MAX, 16=DP_HIGHF, 17=SP_LOWF
	Comp B1 Mode	MDESTS_CMPB1MDN	AV	710	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=FLD_TEMP, 3=DP_HIGH, 4=DP_LOW, 5=SP_HIGH, 6=SP_LOW, 7=DT_HIGH, 8=MOTTMPHI, 9=FLDTMPHI, 10=INVTMPHI, 11=RCTTMPHI, 12=OILVISLO, 13=MOTCURHI, 14=CMPSURGE, 15=MODE_MAX, 16=DP_HIGHF, 17=SP_LOWF
	Comp B2 Mode	MDESTS_CMPB2MDN	AV	711	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=FLD_TEMP, 3=DP_HIGH, 4=DP_LOW, 5=SP_HIGH, 6=SP_LOW, 7=DT_HIGH, 8=MOTTMPHI, 9=FLDTMPHI, 10=INVTMPHI, 11=RCTTMPHI, 12=OILVISLO, 13=MOTCURHI, 14=CMPSURGE, 15=MODE_MAX, 16=DP_HIGHF, 17=SP_LOWF

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)
BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Modes (cont)	Demand Determination	MDESTS_DMD_DET	AV	290	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=LOW COOL, 2=MED COOL, 3=HIGH COOL, 4=VAV Cool, 5=LOW HEAT, 6=HIGH HEAT, 7=VENTILATION, 8=DOAS VENTILATION, 9=FORCED, 10=DOAS COOL, 11=DOAS HEAT, 12=COOL TEMPERED VENT, 13=HEAT TEMPERED VENT
	ERV Check Status	MDESTS_ERVCHECK	BV	138	0	0	1	NO_UNIT	Yes	No	0=FALSE, 1=TRUE
	Exhaust Fan Mode Number	MDESTS_EFMDN	AV	640	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=SDP_NOM, 3=SDP_HIGH, 4=SDP_LOW, 5=CO2_NOM, 6=CO2_LOW, 7=CTRL_FLUID, 8=SST_LOW, 9=ST_LOW, 10=FLOW_NOM, 11=BP_NOM, 12=BP_HIGH, 13=BP_LOW, 14=TRACK, 15=ON, 16=OA_EACFM
	EXV A1 Mode Number	MDESTS_EXVA1MN	AV	638	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=APPROACH, 3=SUBCOOL, 4=LIQ_LVL, 5=SSH, 6=SSH_LOW, 7=DSH_LOW, 8=DST_LOW, 9=DST_HI, 10=SST_LOW, 11=SST_HI, 12=MODE_MAX, 13=DT_HI, 14=SSH_HI, 15=DOP_LOW, 16=SURGE_HI

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Modes (cont)	EXV A2 Mode Number	MDESTS_EXVA2MN	AV	639	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=APPROACH, 3=SUBCOOL, 4=LIQ_LVL, 5=SSH, 6=SSH_LOW, 7=DSH_LOW, 8=DST_LOW, 9=DST_HI, 10=SST_LOW, 11=SST_HI, 12=MODE_MAX, 13=DT_HI, 14=SSH_HI, 15=DOP_LOW, 16=SURGE_HI
	EXV B1 Mode Number	MDESTS_EXVB1MN	AV	689	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=APPROACH, 3=SUBCOOL, 4=LIQ_LVL, 5=SSH, 6=SSH_LOW, 7=DSH_LOW, 8=DST_LOW, 9=DST_HI, 10=SST_LOW, 11=SST_HI, 12=MODE_MAX, 13=DT_HI, 14=SSH_HI, 15=DOP_LOW, 16=SURGE_HI
	EXV B2 Mode Number	MDESTS_EXVB2MN	AV	690	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=APPROACH, 3=SUBCOOL, 4=LIQ_LVL, 5=SSH, 6=SSH_LOW, 7=DSH_LOW, 8=DST_LOW, 9=DST_HI, 10=SST_LOW, 11=SST_HI, 12=MODE_MAX, 13=DT_HI, 14=SSH_HI, 15=DOP_LOW, 16=SURGE_HI

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)
BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Modes (cont)	Heater Mode	MDESTS_HEATRMDN	AV	716	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=SAT, 2=RAT, ZONE, 3=MAT, 4=EXTERNAL, 5=MANUAL0, 6=SAT, 7=RAT, 8=ZONE, 9=MAT, 10=EXTERNAL, 11=MANUAL
	Indoor Fan Mode	MDESTS_IDFMDNUM	AV	715	0	0	0	NO_UNIT	Yes	No	1=NONE, 2=MANUAL, 3=SDP_NOM, 4=SDP_HIGH, 5=SDP_LOW, 6=CO2_NOM, 7=CO2_LOW, 8=CTLFLUID, 9=SST_LOW, 10=ST_LOW, 11=FLOW_NOM, 12=BP_NOM, 13=BP_HIGH, 14=BP_LOW, 15=TRACK, ON
	OAD Mode	MDESTS_ECONMNUM	AV	717	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=MANUAL, 2=AMB_FLOW, 3=MNAIRQLY, 4= NOM_TRAC, 5=SAT, 6=IAQ_OVR, 7=AMBFLWSW

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Modes (cont)	Operational State	MDESTS_OP_STATE	AV	291	0	0	0	NO_UNIT	Yes	No	0=NONE, 1=FREE COOLING, 2=MECH COOLING, 3=INTEGRATED COOLING, 4= HEAT TEMPERED COOLING, 5=2-STAGE HEATING, 6=MOD HEATING, 7=ELECTRIC HEATING, 8=HYDRONIC HEATING, 9=DEHUM HEATING, 10=DEHUM VENT, 11=DEHUM COOL, 12=FAN ONLY, 13=SMOKE PRESS, 14=SMOKE EVAC, 15=SMOKE PURGE, 16=FIRE SHUTDOWN, 17=COOL TEMPERED VENT, 18=HEAT TEMPERED VENT, 19=OIL RECOVERY, 20=HZMR PURGE, 21=HZMR RECHARGE, 22=COOLING PREVENTED, 23=HEATING PREVENTED, 24=RECYCLE, 25=TEST, 26=EMERGENCY, 27=OA DEHUM
	Reheat Oil Purge	MDESTS_DHUMPURG	BV	139	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	Temp Compensated Start	MDESTS_MODETCST	BV	177	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=ON
Network Inputs	IAQ Switch NET	DISCIN_IAQSWNET	BV	663	0	0	1	NO_UNIT	Yes	Yes	0=OPEN, 1=CLOSE
	Net 3rd Party EAD	ANALOGIN_EAD3PNET	AV	641	0	0	0	PERCENT	Yes	Yes	
	Net 3rd Party EXF	ANALOGIN_EF3P_NET	AV	353	0	0	0	PERCENT	Yes	Yes	
	Net 3rd Party IDF	ANALOGIN_SF3P_NET	AV	355	0	0	0	PERCENT	Yes	Yes	
	Net 3rd Party OAD	ANALOGIN_OD3P_NET	AV	354	0	0	0	PERCENT	Yes	Yes	
	Net 3rd Party RF	ANALOGIN_RF3P_NET	AV	642	0	0	0	PERCENT	Yes	Yes	
	Net Building Pressure	AIRPRESS_BPNET	AV	352	0	0	0	IN_H2O	Yes	Yes	
	Net IAQ OAD Pos Reset	ANALOGIN_IAQORNET	AV	351	0	0	0	PERCENT	Yes	Yes	
	Net IAQ Reset	ANALOGIN_IAQRNET	AV	358	0	0	0	PARTS_PER_MILLION	Yes	Yes	
	Net Indoor Air Quality	ANALOGIN_IAQNET	AV	357	0	0	0	PARTS_PER_MILLION	Yes	Yes	
	Net OA CFM Reset	ANALOGIN_OCFMRNET	AV	350	0	0	0	CFM	Yes	Yes	
	Net OAT	AIRTEMP_OATNET	AV	362	0	0	0	DEGREE_F	Yes	Yes	
	Net Outdoor Air CFM	ANALOGIN_OACFMNET	AV	349	0	0	0	CFM	Yes	Yes	
	Net Outdoor Air Quality	ANALOGIN_OAQNET	AV	356	0	0	0	PARTS_PER_MILLION	Yes	Yes	
	Net RARH	ANALOGIN_RARHNET	AV	348	0	0	0	PERCENT	Yes	Yes	
	Net SP Reset	ANALOGIN_SPSR_NET	AV	364	0	-1	5	IN_H2O	Yes	Yes	
	Net Space Temp Offset	AIRTEMP_SPTONET	AV	361	0	0	0	DEGREE_F	Yes	Yes	
	Net SPRH	ANALOGIN_SPRHNET	AV	347	0	0	0	PERCENT	Yes	Yes	
	Net SPT	AIRTEMP_SPTNET	AV	360	0	0	0	DEGREE_F	Yes	Yes	
	Net Zone Damper Position	ANALOGIN_ZDPNET	AV	365	0	0	0	PERCENT	Yes	Yes	

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Network Inputs (cont)	Network G	NETIN_G_NET	BV	145	0	0	1	NO_UNIT	Yes	Yes	0=OFF, 1=ON
	Network HSTAT	NETIN_HSTATNET	BV	146	0	0	1	NO_UNIT	Yes	Yes	0=OFF, 1=ON
	Network Input Timeout	SERVICE_NETINTO	AV	500	10	1	30	MINUTES	Yes	Yes	
	Network OARH	ANALOGIN_OARHNET	AV	8035	0	0	0	PERCENT	Yes	Yes	
	Network Occupancy	GENUNIT_NETOCC	AV	363	2	0	2	NO_UNIT	Yes	Yes	0=Normal, 1=Occupied Standby
	Network Supply Pressure	AIRPRESS_SDP_NET	AV	359	0	0	0	IN_H2O	Yes	Yes	
	Network W1	NETIN_W1_NET	BV	143	0	0	1	NO_UNIT	Yes	Yes	0=OFF, 1=ON
	Network W2	NETIN_W2_NET	BV	144	0	0	1	NO_UNIT	Yes	Yes	0=OFF, 1=ON
	Network Y1	NETIN_Y1_NET	BV	141	0	0	1	NO_UNIT	Yes	Yes	0=OFF, 1=ON
	Network Y2	NETIN_Y2_NET	BV	142	0	0	1	NO_UNIT	Yes	Yes	0=OFF, 1=ON
	OAQ Switch NET	DISCIN_OAQSWNET	BV	664	0	0	1	NO_UNIT	Yes	Yes	0=OPEN, 1=CLOSE
	Occupied Standby Net	OCCSBNET	AV	366	2	0	2	NO_UNIT	Yes	Yes	0=UNOCCUPIED, 1=OCCUPIED, 2=NOT USED
	Static Pressure Stpt Rst	ANALOGIN_SPSR	AV	145	0	-1	5	IN_H2O	Yes	No	
	Bld Pressure Deadband	OADCFG_OABPORDB	AV	398	0.01	0	0.05	IN_H2O	Yes	Yes	
OA Damper Configurations	Bld Pressure Override En	OADCFG_OABPOREN	AV	396	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Bld Pressure Threshold	OADCFG_OABPORTH	AV	397	0.02	0	0.2	IN_H2O	Yes	Yes	
	IAQ High Level	OADCFG_IAQHIG	AV	760	2000	400	5000	PARTS_PER_MILLION	Yes	Yes	
	IAQ Low Level	OADCFG_IAQLOW	AV	761	400	400	5000	PARTS_PER_MILLION	Yes	Yes	
	IAQ Max Position	OADCFG_IAQMAXP	AV	762	50	20	100	PERCENT	Yes	Yes	
	IAQ Min Position	OADCFG_IAQMINP	AV	763	10	0	100	PERCENT	Yes	Yes	
	IAQ OA CFM Reset	OADCFG_IAQCFMRS	AV	392	0	-40000	0	CFM	Yes	Yes	
	IAQ Override Conf	OADCFG_IAQOCFG	AV	369	0	0	2	NO_UNIT	Yes	Yes	0=NONE, 1=OVER THRESHOLD, 2=UNDER THRESHOLD
	IAQ Override Deadband	OADCFG_IAQODB	AV	384	200	100	1000	PARTS_PER_MILLION	Yes	Yes	
	IAQ Override Position	OADCFG_IAQOPOS	AV	385	50	0	100	PERCENT	Yes	Yes	
	IAQ Override Threshold	OADCFG_IAQOTH	AV	383	1200	400	2000	PARTS_PER_MILLION	Yes	Yes	
	IAQ Pre-Occ Purge	OADCFG_IAQPOP	BV	149	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	IAQ Purge Duration	OADCFG_IAQPDUR	AV	386	15	5	60	MINUTES	Yes	Yes	
	IAQ Purge Hi Temp Pos	OADCFG_IAQPHITP	AV	391	35	0	100	PERCENT	Yes	Yes	
	IAQ Purge Lo Temp Pos	OADCFG_IAQPLOTP	AV	390	10	0	100	PERCENT	Yes	Yes	
	IAQ Purge Lockout	OADCFG_IAQPLOCK	AV	387	50	35	70	DEGREE_F	Yes	Yes	
	IAQ Purge OAT Hi Lockout	OADCFG_IAQPRGHL	AV	389	95	85	115	DEGREE_F	Yes	Yes	
	IAQ Purge OAT Lo Lockout	OADCFG_IAQPRGLL	AV	388	45	0	50	DEGREE_F	Yes	Yes	

APPENDIX A – BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
OA Damper Configurations (cont)	IAQ Reset Source	OADCFCG_IQRESET	AV	382	0	0	3	NO_UNIT	Yes	Yes	0=NONE, 1=IAQ SWITCH, 2=IAQ SENSOR, 3=THIRD-PARTY
	IAQ Switch OAD Pos Reset	FRECLCFG_IAQOADS	AV	283	-10	-100	0	PERCENT	Yes	Yes	
	IAQ Vent Standby Demand	OADCFCG_IQSBVEN	BV	148	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	IDF Vent Speed 1	IDFCFG_VENTSPD1	AV	374	34	0	100	PERCENT	Yes	Yes	
	IDF Vent Speed 2	IDFCFG_VENTSPD2	AV	375	50	0	100	PERCENT	Yes	Yes	
	IDF Vent Speed 3	IDFCFG_VENTSPD3	AV	376	70	0	100	PERCENT	Yes	Yes	
	IDF Vent Speed 4	IDFCFG_VENTSPD4	AV	377	90	0	100	PERCENT	Yes	Yes	
	Min OAD Control Point	OADCFCG_MINOADCP	AV	372	75	0	100	PERCENT	Yes	Yes	
	OA Damper Vent Pos 1	OADCFCG_OADPOS1	AV	378	40	0	100	PERCENT	Yes	Yes	
	OA Damper Vent Pos 2	OADCFCG_OADPOS2	AV	379	30	0	100	PERCENT	Yes	Yes	
	OA Damper Vent Pos 3	OADCFCG_OADPOS3	AV	380	25	0	100	PERCENT	Yes	Yes	
	OA Damper Vent Pos 4	OADCFCG_OADPOS4	AV	381	10	0	100	PERCENT	Yes	Yes	
	OACFM Setpoint	OADCFCG_CFMSP	AV	399	780	0	20000	CFM	Yes	Yes	
	OAD Max Position	OADCFCG_MAXPOS	AV	371	100	0	100	PERCENT	Yes	Yes	
	OAD Min Position	OADCFCG_MINPOS	AV	370	10	0	100	PERCENT	Yes	Yes	
	OAD Smoke Evac Speed	OADCFCG_OADEVAC	AV	373	0	0	100	PERCENT	Yes	Yes	
	OAD Unoccupied DOAS Pos	OADCFCG_UCHODAPos	AV	643	0	0	100	PERCENT	Yes	Yes	
	OAQ Check	FRECLCFG_ODAIRQ	BV	147	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	OAQ Lockout	FRECLCFG_ODAIRQTH	AV	395	1300	1000	2000	PARTS_PER_MILLION	Yes	Yes	
	Purge Long Duration	OADCFCG_PRGLONG	AV	394	60	10	60	MINUTES	Yes	Yes	
	Purge Short Duration	OADCFCG_PRGSHORT	AV	393	20	5	30	MINUTES	Yes	Yes	
Refrigerant Pressures	Vent OA CFM Min CP	VOACFM_MINCP	AV	691	40000	0	40000	CFM	Yes	Yes	
	Ventilation Control	OADCFCG_ECONCTRL	AV	368	0	0	6	NO_UNIT	Yes	Yes	0=NONE, 1=IDF MAPPING, 2=THIRD-PARTY FULL, 3=THIRD-PARTY VENT, 5=OA CFM, 6=IAQ MAPPING
	Cir A Discharge Pressure	RFGPRESS_DPA	AV	402	0	0	0	PSIG	Yes	No	
	Cir A Suction Pressure	RFGPRESS_SPA	AV	400	0	0	0	PSIG	Yes	No	
Refrigerant Temperatures	Cir B Discharge Pressure	RFGPRESS_DPB	AV	403	0	0	0	PSIG	Yes	No	
	Cir B Suction Pressure	RFGPRESS_SPB	AV	401	0	0	0	PSIG	Yes	No	
	A1 Superheat Temp	RFGTEMP_SSHA1	AV	408	0	0	0	DEGREE_F	Yes	No	
	A2 Superheat Temp	RFGTEMP_SSHA2	AV	409	0	0	0	DEGREE_F	Yes	No	
	B1 Superheat Temp	RFGTEMP_SSHB1	AV	410	0	0	0	DEGREE_F	Yes	No	
	B2 Superheat Temp	RFGTEMP_SSHB2	AV	411	0	0	0	DEGREE_F	Yes	No	
	Discharge Line Temp A1	RFGTEMP_DGTA1	AV	755	0	0	0	DEGREE_F	Yes	No	
	Discharge Line Temp B1	RFGTEMP_DGTB1	AV	756	0	0	0	DEGREE_F	Yes	No	
	Oil Sump Temp	RFGTEMP_OILTSMPTA	AV	416	0	0	0	DEGREE_F	Yes	No	
	Saturated Discharge CirA	RFGTEMP_SDTA	AV	406	0	0	0	DEGREE_F	Yes	No	
	Saturated Discharge CirB	RFGTEMP_SDTB	AV	407	0	0	0	DEGREE_F	Yes	No	
	Saturated Suction A	RFGTEMP_SSTA	AV	404	0	0	0	DEGREE_F	Yes	No	
	Saturated Suction B	RFGTEMP_SSTB	AV	405	0	0	0	DEGREE_F	Yes	No	
	Suction Gas Temp Cir A1	RFGTEMP_SGTA1	AV	412	0	0	0	DEGREE_F	Yes	No	
	Suction Gas Temp Cir A2	RFGTEMP_SGTA2	AV	413	0	0	0	DEGREE_F	Yes	No	

APPENDIX A – BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Refrigerant Temperatures (cont)	Suction Gas Temp Cir B1	RFGTEMP_SGTB1	AV	414	0	0	0	DEGREE_F	Yes	No	
	Suction Gas Temp Cir B2	RFGTEMP_SGTB2	AV	415	0	0	0	DEGREE_F	Yes	No	
Relief Fan Setpoints	Building Pressure	EFSTP_EFBPSPT	AV	250	0.05	0.03	0.25	IN_H2O	Yes	Yes	
	RP Setpoint	SFAN_RF_PRSTP	AV	651	0	-1	1	IN_H2O	Yes	Yes	
Return Fan Configurations	Delta CFM Reset Ratio	SFAN_RF_DCFRR	AV	645	10000	1	100000 0	IN_H2O	Yes	Yes	
	RTF BP Override Offset	RFCFG_BPOFFSET	AV	764	0.01	0.01	0.03	IN_H2O	Yes	Yes	
	RTF BP Override Time	BPOVRTM	AV	8024	30	5	60	SECONDS	Yes	Yes	
	RTF BP Reset RAD Critical Position	RFCFG_BPRADPOS	AV	765	20	0	100	PERCENT	Yes	Yes	
	RTF Building Press Reset	RFCFG_BPRESET	AV	766	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	RTF Control Config	SFAN_RF_CONFIG	AV	644	0	0	8	NO_UNIT	Yes	Yes	0=NONE, 1=RP, 2=THIRD-PARTY, 4=FLOW TRACKING, 5=IDF MAPPING
	RTF Dissipation Speed	RFCFG_DSSPATN	AV	664	100	0	100	PERCENT	Yes	Yes	
	RTF IDF Speed 1	RFCFG_RFIFSPD1	AV	659	34	0	100	PERCENT	Yes	Yes	
	RTF IDF Speed 2	RFCFG_RFIFSPD2	AV	660	50	0	100	PERCENT	Yes	Yes	
	RTF IDF Speed 3	RFCFG_RFIFSPD3	AV	661	67	0	100	PERCENT	Yes	Yes	
	RTF IDF Speed 4	RFCFG_RFIFSPD4	AV	662	84	0	100	PERCENT	Yes	Yes	
	RTF IDF Speed 5	RFCFG_RFIFSPD5	AV	663	100	0	100	PERCENT	Yes	Yes	
	RTF Max Speed	RFCFG_MAXSPD	AV	655	50	20	100	PERCENT	Yes	Yes	
	RTF Min Speed	RFCFG_MINSPD	AV	654	10	0	100	PERCENT	Yes	Yes	
	RTF Smoke Evacuation Speed	RFCFG_RTFEVAC	AV	665	100	0	100	PERCENT	Yes	Yes	
	RTF Smoke Pressurization Speed	RFCFG_RTFPRESS	AV	666	0	0	100	PERCENT	Yes	Yes	
	RTF Smoke Purge Speed	RFCFG_RTFPURGE	AV	667	100	0	100	PERCENT	Yes	Yes	
	RTF Speed 2	RFSPD2	AV	656	58	0	100	PERCENT	Yes	Yes	
	RTF Speed 3	RFSPD3	AV	657	72	0	100	PERCENT	Yes	Yes	
	RTF Speed 4	RFSPD4	AV	658	86	0	100	PERCENT	Yes	Yes	
	SA/RA CFM Reset Max	SFAN_RF_SRCRX	AV	647	0	0	100000 0	CFM	Yes	Yes	
	SA/RA CFM Reset Min	SFAN_RF_SRCRM	AV	646	0	0	10000	CFM	Yes	Yes	
	SA/RA Delta CFM	SFAN_RF_SARA	AV	652	0	0	0	CFM	Yes	Yes	
Runtimes	CCH A Minutes	RUNTIME_CCHRA_RT	AV	453	0	0	0	NO_UNIT	No	No	
	CCH A Start Count	RUNTIME_CCHRA_SC	AV	454	0	0	0	NO_UNIT	No	No	
	CCH B Minutes	RUNTIME_CCHRB_RT	AV	456	0	0	0	NO_UNIT	No	No	
	CCH B Start Count	RUNTIME_CCHRB_SC	AV	457	0	0	0	NO_UNIT	No	No	
	Comp A1 Minutes	RUNTIME_COMPA1RT	AV	417	0	0	0	NO_UNIT	No	No	
	Comp A1 Start Count	RUNTIME_COMPA1SC	AV	418	0	0	0	NO_UNIT	No	No	
	Comp A2 Minutes	RUNTIME_COMPA2RT	AV	420	0	0	0	NO_UNIT	No	No	
	Comp A2 Start Count	RUNTIME_COMPA2SC	AV	421	0	0	0	NO_UNIT	No	No	
	Comp B1 Minutes	RUNTIME_COMPB1RT	AV	423	0	0	0	NO_UNIT	No	No	
	Comp B1 Start Count	RUNTIME_COMPB1SC	AV	424	0	0	0	NO_UNIT	No	No	
	Comp B2 Minutes	RUNTIME_COMPB2RT	AV	426	0	0	0	NO_UNIT	No	No	
	Comp B2 Start Count	RUNTIME_COMPB2SC	AV	427	0	0	0	NO_UNIT	No	No	
	EAD Minutes	RUNTIME_EAD_RT	AV	622	0	0	0	MINUTES	No	No	

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Runtimes (cont)	EAD Start Count	RUNTIME_EAD_SC	AV	623	0	0	0	NO_UNIT	No	No	
	EXF Minutes	RUNTIME_EFAN_RT	AV	441	0	0	0	NO_UNIT	No	No	
	EXF Start Count	RUNTIME_EFAN_SC	AV	442	0	0	0	NO_UNIT	No	No	
	Final Filter Hours	GENUNIT_FFLT_RT	AV	625	0	0	0	HOURS	Yes	No	
	Heat Minutes	RUNTIME_SHEAT_RT	AV	444	0	0	0	NO_UNIT	No	No	
	Heat Start Count	RUNTIME_SHEAT_SC	AV	445	0	0	0	NO_UNIT	No	No	
	HGRH Valve Minutes	RUNTIME_HMVLV_RT	AV	447	0	0	0	NO_UNIT	No	No	
	HGRH Valve Start Count	RUNTIME_HMVLV_SC	AV	448	0	0	0	NO_UNIT	No	No	
	Humidi-MiZer Start Count	RUNTIME_HUMPUSC	AV	465	0	0	0	NO_UNIT	No	No	
	IDF Minutes	RUNTIME_IDF_RT	AV	438	0	0	0	NO_UNIT	No	No	
	IDF Start Count	RUNTIME_IDF_SC	AV	439	0	0	0	NO_UNIT	No	No	
	OAD Minutes	RUNTIME_DAMP_RT	AV	450	0	0	0	NO_UNIT	No	No	
	OAD Start Count	RUNTIME_DAMP_SC	AV	451	0	0	0	NO_UNIT	No	No	
	ODF 1 Minutes	RUNTIME_CND1_RT	AV	429	0	0	0	NO_UNIT	No	No	
	ODF 1 Start Count	RUNTIME_CND1_SC	AV	430	0	0	0	NO_UNIT	No	No	
	ODF 2 Minutes	RUNTIME_CND2_RT	AV	432	0	0	0	NO_UNIT	No	No	
	ODF 2 Start Count	RUNTIME_CND2_SC	AV	433	0	0	0	NO_UNIT	No	No	
	ODF 3 Minutes	RUNTIME_CND3_RT	AV	435	0	0	0	NO_UNIT	No	No	
	ODF 3 Start Count	RUNTIME_CND3_SC	AV	436	0	0	0	NO_UNIT	No	No	
	Oil Purge Cir A Count	RUNTIME_OILACYSC	AV	459	0	0	0	NO_UNIT	No	No	
	Oil Purge Cir B Count	RUNTIME_OILBCYSC	AV	460	0	0	0	NO_UNIT	No	No	
	Pre-Filter Hours	SERVICE1_M_FILTER	AV	298	0	0	0	HOURS	No	No	
	Pre-Filter Minutes	GENUNIT_FILT_RT	AV	466	0	0	0	NO_UNIT	Yes	No	
	RTF Minutes	RUNTIME_RFAN_RT	AV	619	0	0	0	NO_UNIT	No	No	
	RTF Start Count	RUNTIME_RFAN_SC	AV	620	0	0	0	NO_UNIT	No	No	
Sensor Configurations	BP Sensor Input	EQUIPCFG_BPEN	BV	466	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	EXAT Sensor Input	EQUIPCFG_EXATEN	BV	102	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	MAT Sensor	EQUIPCFG_MATEN	BV	459	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	OAQ Sensor Input	EQUIPCFG_OAQEN	BV	467	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Occupied Standby Allowed	OCCSB_EN	BV	92	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Occupied Standby Entry Time	OCCSTNDT	AV	258	5	5	30	MINUTES	Yes	Yes	
	RARH Sensor Input	EQUIPCFG_RARHEN	BV	461	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	Return Pressure Sensor Input	EFCFG_RAP_EN	BV	469	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	SAT Offset	EQUIPCFG_SATOEN	BV	463	0	0	0	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	SAT Sensor Input	EQUIPCFG_SATEN	BV	462	0	0	0	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	SP Reset Input	EQUIPCFG_SPSREN	BV	106	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	SP Sensor Input	EQUIPCFG_SDPEN	BV	465	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	SPRH Sensor	EQUIPCFG_SPRHEN	BV	458	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
Sensor Configurations (cont)	SPT Occupancy Override Allowed	UNITCFG_OCCUOVER	AV	583	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	SPT Occupancy Override Time	UNITCFG_OCC_OT	AV	259	2	0	4	HOURS	Yes	Yes	
	SPT Offset Input	EQUIPCFG_SPTOFFEN	BV	457	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	SPT Offset Scaling	SPTOLOC_SCA	AV	767	10	1	10.01	DEGREE_F	Yes	Yes	
	SPT Sensor Input	EQUIPCFG_SPTEN	BV	456	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
	WLAT Sensor Input	EQUIPCFG_WLATEN	BV	652	0	0	1	NO_UNIT	Yes	Yes	0=DISABLE, 1=ENABLE
States	Circuit A State	STATES_CIRCASTN	AV	718	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	Circuit B State	STATES_CIRCBSTN	AV	719	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	Comp A1 State	STATES_CMPA1STN	AV	720	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	Comp A2 State	STATES_CMPA2STN	AV	721	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	Comp B1 State	STATES_CMPB1STN	AV	722	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
States (cont)	Comp B2 State	STATES_CMPB2STN	AV	723	0	0	0	NO_UNIT	No	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	ERV Defrost State	STATES_ERVDFMD	BV	665	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	EXF State	STATES_EFSTN	AV	670	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	EXV A1 State	STATES_EXVA1STN	AV	668	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	EXV A2 State	STATES_EXVA2STN	AV	669	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	EXV B1 State	STATES_EXVB1STN	AV	692	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	EXV B2 State	STATES_EXVB2STN	AV	693	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	Free Cooling Available	STATES_OKTOFRCL	BV	176	0	0	0	NO_UNIT	Yes	No	0=YES, 1=NO

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
States (cont)	Free Dehum Status	STATES_OKTOFDHM	BV	180	0	0	0	NO_UNIT	Yes	No	0=DISABLE, 1=ENABLE
	Heater State	STATES_HEATRSTN	AV	729	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	HGRH State	STATES_RHTSTNUM	AV	728	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	IDF State	STATES_IDFNUM	AV	727	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	OAD State	STATES_ECONNUM	AV	730	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	ODF 1 State	STATES_ODF1STN	AV	724	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	ODF 2 State	STATES_ODF2STN	AV	725	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX

APPENDIX A — BACNET AND CCN NETWORK POINTS (SOFTWARE 3.X) (cont)

BACNET AND CCN NETWORK POINTS (cont)

CATEGORY	DESCRIPTION	OBJECT NAME	TYPE	INSTANCE	DEFAULT	MIN	MAX	UNITS	CCN POINT?	WRITE?	ENUMERATION
States (cont)	ODF 3 State	STATES_ODF3STN	AV	726	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
	Pre-Occ Purge State	STATES_PURGEACT	BV	178	0	0	1	NO_UNIT	Yes	No	0=OFF, 1=ON
	RTF State	STATES_RFNUM	AV	732	0	0	0	NO_UNIT	Yes	No	0=OFF, 1=NOT_RDY, 2=READY, 3=STARTING, 4=RUNNING, 5=STOPPING, 6=DISABLE, 7=TRIPOUT, 8=MAX
Status	CCN Linkage Active	LINK_ACT	BV	140	0	0	0	NO_UNIT	No	No	0=NO, 1=YES
	Current Cooling Capacity	HCSTATUS_CAPACT	AV	286	0	0	0	PERCENT	No	No	
	Current Heating Request	HCSTATUS_HEATREQ	AV	284	0	0	0	PERCENT	Yes	No	
	Effective Cooling Temp	GENUNIT_CSP_EFF	AV	774	78	55	95	DEGREE_F	Yes	Yes	
	Effective Heating Temp	GENUNIT_HSP_EFF	AV	775	65	40	80	DEGREE_F	Yes	Yes	
	Effective Max Cool Capacity	GENUNIT_SMAXCCAP	AV	567	0	0	100	PERCENT	Yes	No	
	Effective Max Heat Capacity	GENUNIT_SMAXHCAP	AV	568	0	0	100	PERCENT	Yes	No	
	Filter Status	FILTER_STATUS	AV	297	0	0	1	NO_UNIT	No	No	0=CLEAN, 1=DIRTY
	Heat/Cool Status	GENUNIT_HEATCOOL	MV	292	0	1	3	NO_UNIT	No	No	1=NONE, 2=COOL, 3=HEAT
	IDF Feedback Status	IDFFDBK_STATUS	BV	6	1	0	1	NO_UNIT	Yes	No	0=DISABLE, 1=ENABLE
	Occupancy Source	STATES_OCCSRNUM	AV	731	0	0	0	NO_UNIT	Yes	No	0=DefaultSchedule, 1=LocalSchedule, 2=BMSSchedule, 3=RemoteSwitch, 4=TimedOverride, 5=Linkage, 6=Forced, 7=MotionSensing
	Occupancy Status	GENUNIT_OCCUPIED	BV	570	0	0	1	NO_UNIT	Yes	No	0=UNOCCUPIED, 1=OCCUPIED
	Occupied Standby	OCCSB	BV	179	0	0	0	NO_UNIT	Yes	No	0=NORMAL, 1=OCCUPIED STANDBY
	SAT Control Point	COOLSTP_ACTV_SP	AV	527	0	0	0	DEGREE_F	Yes	No	
	Time Until Next Occupied	STATES_MINTILOC	AV	516	0	0	0	MINUTES	Yes	No	

APPENDIX B — NETWORK COMMUNICATION REPORT

The communication details are to be recorded by the installing contractor or controls contractor that configures the unit for communication. A copy of the communication details should be saved for record and shared with the customer. It may also be beneficial to store a copy in the unit control panel.

PROJECT INFORMATION

Project Name	_____	Controls Installer	_____
Address	_____	Contact Name	_____
City	_____	Contact Phone	_____
State/Providence	_____ Zip Code	Contact Email	_____

Building Automation System

Make	_____	Model	_____	Version	_____
Communication Type	☐ CCN	☐ BACnet MS/TP	☐ BACnet IP	☐	_____

Communication Details

APPENDIX C — UNIT COMMUNICATION REPORT

UNIT INFORMATION

Model Number _____
Unit Tag/Name _____

Serial Number _____
Unit Location _____

CCN Communication

NAME	CONFIGURATION
Primary BAS Network	CCN
CCN Address	
CCN Bus	
Baud Rate	
Broadcast Alerts	On / Off
Schedule Number	
Global Schedule Broadcast	
Broadcast ACK	On / Off
Time Broadcast	On / Off

BACnet MS/TP Communication

NAME	CONFIGURATION
Primary BAS Network	BACnet
BACnet Enable	MS/TP
Serial Port Config	MS/TP
Metric Units	On / Off
Network	
Identifier	
Percentage Conversion	0.00-1.00 / 0-100%

BACnet IP Communication

NAME	CONFIGURATION
Gateway 2 IP	
Gateway 2 Mask	
Set IP	
Set Net Mask	
Primary BAS Network	BACnet
BACnet Enable	BACnet IP
Metric Units	On / Off
Percentage Conversion	0.00-1.00 / 0-100%
Ethernet Adapter	Eth0 / Eth 1
UDP Port	
BACnet Mgmt Device	None / Foreign Device / BBMD
BBMD Address	
BBMD Time to Live	
MAC Address	