Demand Control Ventilation (DCV) Packages

Network

Note: The board will reboot when altering certain factory settings.

Communication Module (Optional)

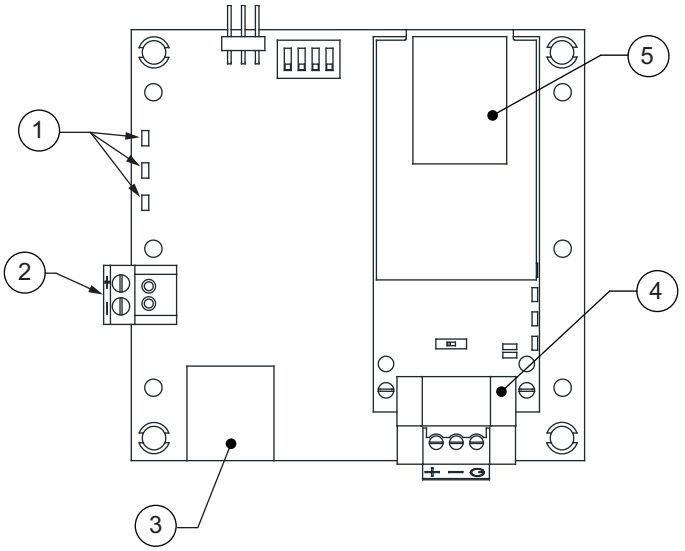
The Communication Module, PN: **SCADA**, is included in all CASlink equipped panels. It obtains operational data from various connected components. This communication wiring is either RS-485 shielded twisted pair wiring or RJ45 Cat 5 Ethernet wiring.

BACnet

BACnet IP or BACnet MS/TP (**Figure 1**) compatibility can be implemented with this package through a Protocessor, which is a BTL listed embedded Gateway configured to give a Building Management System access to monitor and/or control a list of BACnet objects. The Protocessor is mounted and factory rewired inside the Electrical Control Panel (ECP). Field connections to the Building Management System (BMS) are shown on wiring schematics.

The Protocessor is preconfigured at the factory to use the field protocol of the Building Management System in the specific jobsite. BACnet objects can only be accessed through the specified port and protocol.

Figure 1 - BACnet



1. Status LEDs
   - Green - Data Out
   - Yellow - Data In
   - Red - Power On
2. Power Supply 24V AC/DC
3. Cat 5 Cable to MUA Board.
4. Field RS485 Connection for BACnet MS/TP
5. Field Ethernet Connection for BACnet IP

Changing Device Instance, MAC, Baud Rate

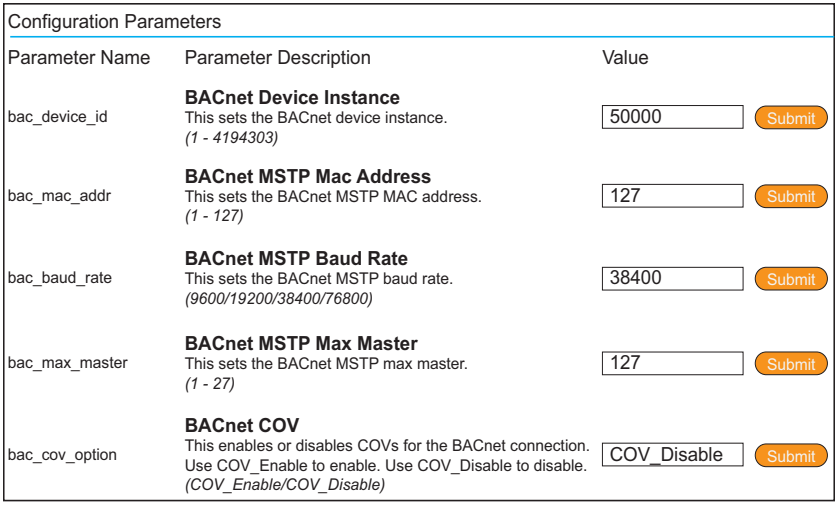
Some applications may require that the Protocessor have a specific Device Instance, the default device instance is 50,000. To change the Device Instance, you must access the Web Configurator by connecting a computer to the Ethernet port of the Protocessor. The computer used must be assigned a static IP address of 192.168.1.xxx and a subnet mask of 255.255.255.0.

To access the Web Configurator, type the IP address of the Protocessor in the URL of any web browser. The default IP address of the Protocessor is 192.168.1.24. Once the landing page has loaded, if required, log in using “admin” for the username and password. If the default “admin” password does not work, the gateway should have a printed password on the module’s Ethernet port.

Go to the main configuration page, select “Configure” from the left-hand menu. Select “Profile Configuration”, the window shown in **Figure 2** should appear.

The MAC address and Baud Rate, used by BACNET MTSP, are editable. The MAC address default is 127 and the Baud Rate default is 38400.

Figure 2 - Configuration Parameters Page



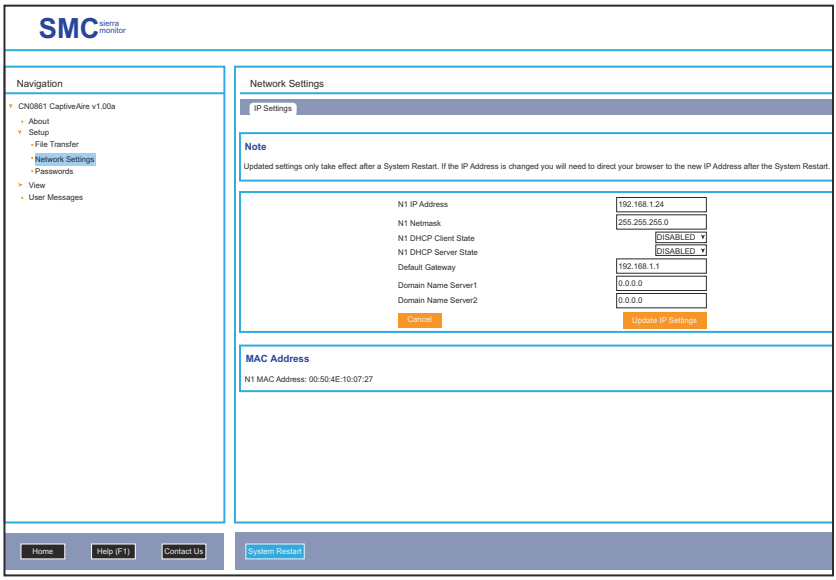
If any changes are made, click on the submit button for each individual change. Each individual change will require the system to restart.

Changing the IP Address

Some BACnet IP applications may require changing the IP address of the Protocessor. In order to change the IP address, go to the internal server by typing the default IP address of the Protocessor, 192.168.1.24, in the URL field of any web browser. The computer used must have a static IP address of 192.168.1.xxx. Click on the “Diagnostics and Debugging” button on the lower right corner.

Click on “Setup” from the left-hand side menu and select “Network Settings.” The window shown in **Figure 3** will appear. You can now modify the IP address to whatever is required in the application. Once the IP address has been modified, click on “Update IP Settings.”

Figure 3 - Network Settings Page

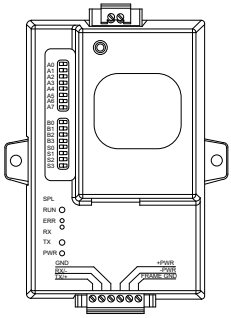


After you have updated the IP settings, you will be prompted to restart the system. You can do so by clicking on the “System Restart” button at the bottom of the screen. Any time after this, you will have to type the new IP address of the Protocessor on the URL to gain access to the Web Configurator.

LonWorks

LonWorks compatibility (**Figure 4**) can be implemented on control packages through the ProtoNode, a LonMark certified external Gateway configured to give a Building Management System access to monitor and/or control a list of Network Variables. The ProtoNode is mounted and factory prewired inside the Electrical Control Panel. Refer to schematics connections to the Building Management System are shown.

Figure 4 - LonWorks



Commissioning on a LonWorks Network

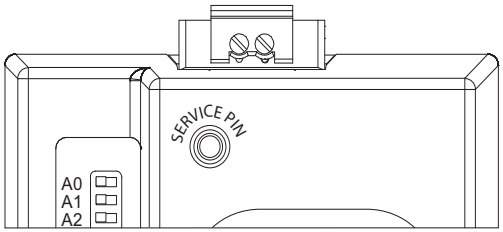
During the commissioning process by the LonWorks administrator (using a LonWorks Network Management Tool), the user will be prompted to hit the Service Pin in the ProtoNode. This pin is located in the front face, and it can be pressed by inserting a small screwdriver and tilting it towards the LonWorks Port. Refer to **Figure 5** for location of the “Service Pin.”

If an XIF file is required, it can be obtained by following these steps:

1. Set your computer’s static IP address to 192.168.1.xxx with a subnet mask of 255.255.255.0.
2. Run a Cat 5 connection from the ProtoNode’s Ethernet port to your computer.
3. On any web browser’s URL field, type 192.168.1.24/fserver.xif

The web browser should automatically download the fserver.xif file or let you save it on your computer. Save it as fserver.xif.

Figure 5 - LonWorks Service Pin



NOTE: **Insert Small Screwdriver. Tilt Toward LonWorks Port To Activate Service Pin.**

Demand Control Ventilation Points

ID	BACnet Name	BACnet Type	LonWorks Name	Function	Description
1	Temperature Sensor 1	AI (Analog Input)	nvoTempSensor1	Monitor	Deg_F
2	Temperature Sensor 2	AI	nvoTempSensor2	Monitor	Deg_F
3	Temperature Sensor 3	AI	nvoTempSensor3	Monitor	Deg_F
4	Temperature Sensor 4	AI	nvoTempSensor4	Monitor	Deg_F
5	Temperature Sensor 5	AI	nvoTempSensor5	Monitor	Deg_F
6	Temperature Sensor 6	AI	nvoTempSensor6	Monitor	Deg_F
7	Temperature Sensor 7	AI	nvoTempSensor7	Monitor	Deg_F
8	Temperature Sensor 8	AI	nvoTempSensor8	Monitor	Deg_F
9	Temperature Sensor 9	AI	nvoTempSensor9	Monitor	Deg_F
10	Temperature Sensor 10	AI	nvoTempSensor10	Monitor	Deg_F
11	Temperature Sensor 11	AI	nvoTempSensor11	Monitor	Deg_F
12	Temperature Sensor 12	AI	nvoTempSensor12	Monitor	Deg_F
13	Temperature Sensor 13	AI	nvoTempSensor13	Monitor	Deg_F
14	Temperature Sensor 14	AI	nvoTempSensor14	Monitor	Deg_F
15	Temperature Sensor 15	AI	nvoTempSensor15	Monitor	Deg_F
16	Temperature Sensor 16	AI	nvoTempSensor16	Monitor	Deg_F
17	Temperature Sensor 17	AI	nvoTempSensor17	Monitor	Deg_F
18	Temperature Sensor 18	AI	nvoTempSensor18	Monitor	Deg_F
19	Temperature Sensor 19	AI	nvoTempSensor19	Monitor	Deg_F
20	Temperature Sensor 20	AI	nvoTempSensor20	Monitor	Deg_F
21	Temperature Sensor 21	AI	nvoTempSensor21	Monitor	Deg_F
22	Temperature Sensor 22	AI	nvoTempSensor22	Monitor	Deg_F
23	Temperature Sensor 23	AI	nvoTempSensor23	Monitor	Deg_F
24	Temperature Sensor 24	AI	nvoTempSensor24	Monitor	Deg_F
25	Temperature Sensor 25	AI	nvoTempSensor25	Monitor	Deg_F
26	Temperature Sensor 26	AI	nvoTempSensor26	Monitor	Deg_F
27	Temperature Sensor 27	AI	nvoTempSensor27	Monitor	Deg_F
28	Temperature Sensor 28	AI	nvoTempSensor28	Monitor	Deg_F
29	Temperature Sensor 29	AI	nvoTempSensor29	Monitor	Deg_F
30	Temperature Sensor 30	AI	nvoTempSensor30	Monitor	Deg_F
31	Temperature Sensor 31	AI	nvoTempSensor31	Monitor	Deg_F
32	Temperature Sensor 32	AI	nvoTempSensor32	Monitor	Deg_F
33	Temperature Zone 1	AI	nvoTempZone1	Monitor	Deg_F
34	Temperature Zone 2	AI	nvoTempZone2	Monitor	Deg_F
35	Temperature HMI 1	AI	nvoTempHMI1	Monitor	Deg_F
36	Temperature HMI 2	AI	nvoTempHMI2	Monitor	Deg_F
37	Temperature HMI 3	AI	nvoTempHMI3	Monitor	Deg_F
38	Temperature HMI 4	AI	nvoTempHMI4	Monitor	Deg_F
39	Humidity HMI 1	AI	nvoRelHumHMI1	Monitor	No-Units
40	Humidity HMI 2	AI	nvoRelHumHMI2	Monitor	No-Units
41	Humidity HMI 3	AI	nvoRelHumHMI3	Monitor	No-Units
42	Humidity HMI 4	AI	nvoRelHumHMI4	Monitor	No-Units
43	ECMOutput1	AI	nvoECMOutput1	Monitor	No-Units
44	ECMOutput2	AI	nvoECMOutput2	Monitor	No-Units
45	ECMOutput3	AI	nvoECMOutput3	Monitor	No-Units
46	ECMOutput4	AI	nvoECMOutput4	Monitor	No-Units
47	VDCOutput	AI	nvoVDCOutput	Monitor	No-Units
48	VFD Frequency Exhaust 1	AI	nvoFreq_Exh1	Monitor	Hz
49	VFD Frequency Exhaust 2	AI	nvoFreq_Exh2	Monitor	Hz
50	VFD Frequency Exhaust 3	AI	nvoFreq_Exh3	Monitor	Hz
51	VFD Frequency Exhaust 4	AI	nvoFreq_Exh4	Monitor	Hz
52	VFD Frequency Exhaust 5	AI	nvoFreq_Exh5	Monitor	Hz
53	VFD Frequency Exhaust 6	AI	nvoFreq_Exh6	Monitor	Hz
54	VFD Frequency Exhaust 7	AI	nvoFreq_Exh7	Monitor	Hz
55	VFD Frequency Exhaust 8	AI	nvoFreq_Exh8	Monitor	Hz
56	VFD Frequency Supply 1	AI	nvoFreq_Sup1	Monitor	Hz
57	VFD Frequency Supply 2	AI	nvoFreq_Sup2	Monitor	Hz
58	VFD Amperage Exhaust 1	AI	nvoAmps_Exh1	Monitor	Amps

Demand Control Ventilation Points

ID	BACnet Name	BACnet Type	LonWorks Name	Function	Description
59	VFD Amperage Exhaust 2	AI	nvoAmps_Exh2	Monitor	Amps
60	VFD Amperage Exhaust 3	AI	nvoAmps_Exh3	Monitor	Amps
61	VFD Amperage Exhaust 4	AI	nvoAmps_Exh4	Monitor	Amps
62	VFD Amperage Exhaust 5	AI	nvoAmps_Exh5	Monitor	Amps
63	VFD Amperage Exhaust 6	AI	nvoAmps_Exh6	Monitor	Amps
64	VFD Amperage Exhaust 7	AI	nvoAmps_Exh7	Monitor	Amps
65	VFD Amperage Exhaust 8	AI	nvoAmps_Exh8	Monitor	Amps
66	VFD Amperage Supply 1	AI	nvoAmps_Sup1	Monitor	Amps
67	VFD Amperage Supply 2	AI	nvoAmps_Sup2	Monitor	Amps
68	VFD Power Usage Exhaust 1	AI	nvoKWs_Exh1	Monitor	KW
69	VFD Power Usage Exhaust 2	AI	nvoKWs_Exh2	Monitor	KW
70	VFD Power Usage Exhaust 3	AI	nvoKWs_Exh3	Monitor	KW
71	VFD Power Usage Exhaust 4	AI	nvoKWs_Exh4	Monitor	KW
72	VFD Power Usage Exhaust 5	AI	nvoKWs_Exh5	Monitor	KW
73	VFD Power Usage Exhaust 6	AI	nvoKWs_Exh6	Monitor	KW
74	VFD Power Usage Exhaust 7	AI	nvoKWs_Exh7	Monitor	KW
75	VFD Power Usage Exhaust 8	AI	nvoKWs_Exh8	Monitor	KW
76	VFD Power Usage Supply 1	AI	nvoKWs_Sup1	Monitor	KW
77	VFD Power Usage Supply 2	AI	nvoKWs_Sup2	Monitor	KW
78	VFD Fault Exhaust 1	AI	nvoVFDFaultExh1	Monitor	No-Units
79	VFD Fault Exhaust 2	AI	nvoVFDFaultExh2	Monitor	No-Units
80	VFD Fault Exhaust 3	AI	nvoVFDFaultExh3	Monitor	No-Units
81	VFD Fault Exhaust 4	AI	nvoVFDFaultExh4	Monitor	No-Units
82	VFD Fault Exhaust 5	AI	nvoVFDFaultExh5	Monitor	No-Units
83	VFD Fault Exhaust 6	AI	nvoVFDFaultExh6	Monitor	No-Units
84	VFD Fault Exhaust 7	AI	nvoVFDFaultExh7	Monitor	No-Units
85	VFD Fault Exhaust 8	AI	nvoVFDFaultExh8	Monitor	No-Units
86	VFD Fault Supply 1	AI	nvoVFDFaultSup1	Monitor	No-Units
87	VFD Fault Supply 2	AI	nvoVFDFaultSup2	Monitor	No-Units
88	Zone1-FansONbyProving	BI (Binary Input)	nvoZ1ONbyProving	Monitor	No-Units
89	Zone1-FansONbyBypass	BI	nvoZ1ONbyBypass	Monitor	No-Units
90	Zone1-FansONbyIO1HighSpeed	BI	nvoZ1ONbyIO1High	Monitor	No-Units
91	Zone1-FansONbyMaxAir	BI	nvoZ1ONbyMaxAir	Monitor	No-Units
92	Zone1-FansONbyTemperature	BI	nvoZ1ONbyTemp	Monitor	No-Units
93	Zone1-FansONbyOccupancy	BI	nvoZ1ONbyOcc	Monitor	No-Units
94	Zone1-FansONbyBMS	BI	nvoZ1ONbyBMS	Monitor	No-Units
95	Zone1-FansONbyIO1	BI	nvoZ1ONbyIO1	Monitor	No-Units
96	Zone1-FansONbyButton	BI	nvoZ1ONbyButton	Monitor	No-Units
97	Zone1-FansONbyHRC	BI	nvoZ1ONbyHRC	Monitor	No-Units
98	Zone1-FansONbyWash	BI	nvoZ1ONbyWash	Monitor	No-Units
99	Zone1-FansONbyBMSPrep	BI	nvoZ1ONbyBMSPrep	Monitor	No-Units
100	Zone1-FansONbyButtonPrep	BI	nvoZ1ONbyBuPrep	Monitor	No-Units
101	Zone1-FansONbyTemperaturePrep	BI	nvoZ1ONbyTePrep	Monitor	No-Units
102	Zone2-FansONbyProving	BI	nvoZ2ONbyProving	Monitor	No-Units
103	Zone2-FansONbyBypass	BI	nvoZ2ONbyBypass	Monitor	No-Units
104	Zone2-FansONbyIO1HighSpeed	BI	nvoZ2ONbyIO1High	Monitor	No-Units
105	Zone2-FansONbyMaxAir	BI	nvoZ2ONbyMaxAir	Monitor	No-Units
106	Zone2-FansONbyTemperature	BI	nvoZ2ONbyTemp	Monitor	No-Units
107	Zone2-FansONbyOccupancy	BI	nvoZ2ONbyOcc	Monitor	No-Units
108	Zone2-FansONbyBMS	BI	nvoZ2ONbyBMS	Monitor	No-Units
109	Zone2-FansONbyIO1	BI	nvoZ2ONbyIO1	Monitor	No-Units
110	Zone2-FansONbyButton	BI	nvoZ2ONbyButton	Monitor	No-Units
111	Zone2-FansONbyHRC	BI	nvoZ2ONbyHRC	Monitor	No-Units
112	Zone2-FansONbyWash	BI	nvoZ2ONbyWash	Monitor	No-Units
113	Zone2-FansONbyBMSPrep	BI	nvoZ2ONbyBMSPrep	Monitor	No-Units
114	Zone2-FansONbyButtonPrep	BI	nvoZ2ONbyBuPrep	Monitor	No-Units
115	Zone2-FansONbyTemperaturePrep	BI	nvoZ2ONbyTePrep	Monitor	No-Units
116	Zone1-LightsONbyWash	BI	nvoZ1L_ONbyWash	Monitor	No-Units
117	Zone1-LightsONbyBypass	BI	nvoZ1L_ONbyBypas	Monitor	No-Units

Demand Control Ventilation Points

ID	BACnet Name	BACnet Type	LonWorks Name	Function	Description
118	Zone1-LightsONbyBMS	BI	nvoZ1L_ONbyBMS	Monitor	No-Units
119	Zone1-LightsONbyButton	BI	nvoZ1L_ONButton	Monitor	No-Units
120	Zone1-LightsONbyOccupied	BI	nvoZ1L_ONbyOcc	Monitor	No-Units
121	Zone1-LightsONbyIO	BI	nvoZ1L_ONbyIO1	Monitor	No-Units
122	Zone1-LightsONbyFansButton	BI	nvoZ1L_ONbyFansB	Monitor	No-Units
123	Zone1-LightsONbyFansAutomatic	BI	nvoZ1L_ONbyAuto	Monitor	No-Units
124	Zone2-LightsONbyWash	BI	nvoZ2L_ONbyWash	Monitor	No-Units
125	Zone2-LightsONbyBypass	BI	nvoZ2L_ONbyBypas	Monitor	No-Units
126	Zone2-LightsONbyBMS	BI	nvoZ2L_ONbyBMS	Monitor	No-Units
127	Zone2-LightsONbyButton	BI	nvoZ2L_ONButton	Monitor	No-Units
128	Zone2-LightsONbyOccupied	BI	nvoZ2L_ONbyOcc	Monitor	No-Units
129	Zone2-LightsONbyIO	BI	nvoZ2L_ONbyIO1	Monitor	No-Units
130	Zone2-LightsONbyFansButton	BI	nvoZ2L_ONbyFansB	Monitor	No-Units
131	Zone2-LightsONbyAutomatic	BI	nvoZ2L_ONbyAuto	Monitor	No-Units
132	ErrorCOREBoard1	AI	nvoErrCORE1	Monitor	No-Units
133	ErrorCOREBoard2	AI	nvoErrCORE2	Monitor	No-Units
134	ErrorCOREBoard3	AI	nvoErrCORE3	Monitor	No-Units
135	ErrorCOREBoard4	AI	nvoErrCORE4	Monitor	No-Units
136	ErrorCOREBoard5	AI	nvoErrCORE5	Monitor	No-Units
137	ErrorCOREBoard6	AI	nvoErrCORE6	Monitor	No-Units
138	ErrorCOREBoard7	AI	nvoErrCORE7	Monitor	No-Units
139	ErrorCOREBoard8	AI	nvoErrCORE8	Monitor	No-Units
140	ErrorCOREBoard9	AI	nvoErrCORE9	Monitor	No-Units
141	ErrorCOREBoard10	AI	nvoErrCORE10	Monitor	No-Units
142	ErrorCOREBoard11	AI	nvoErrCORE11	Monitor	No-Units
143	ErrorCOREBoard12	AI	nvoErrCORE12	Monitor	No-Units
144	ErrorCOREBoard13	AI	nvoErrCORE13	Monitor	No-Units
145	ErrorCOREBoard14	AI	nvoErrCORE14	Monitor	No-Units
146	ErrorCOREBoard15	AI	nvoErrCORE15	Monitor	No-Units
147	PercentClogged_PCU1_Filter1	AI	nvoPcntClgF1PCU1	Monitor	No-Units
148	PercentClogged_PCU1_Filter2	AI	nvoPcntClgF2PCU1	Monitor	No-Units
149	PercentClogged_PCU1_Filter3	AI	nvoPcntClgF3PCU1	Monitor	No-Units
150	PercentClogged_PCU1_Filter4	AI	nvoPcntClgF4PCU1	Monitor	No-Units
151	PercentClogged_PCU1_Filter5	AI	nvoPcntClgF5PCU1	Monitor	No-Units
152	CloggedFilter_PCU1	BI	nvoCLogFiltPCU1	Monitor	No-Units
153	MissingFilter_PCU1	BI	nvoMissFiltPCU1	Monitor	No-Units
154	72HourCloggedFilter_PCU1	BI	nvo72hrClogPCU1	Monitor	No-Units
155	CloggedPCU_PCU1	BI	nvoClogPCU1	Monitor	No-Units
156	DoorMissing_PCU1	BI	nvoMissDoorPCU1	Monitor	No-Units
157	NeedCalibration_PCU1	BI	nvoNeedCalibPCU1	Monitor	No-Units
158	24HourCloggedFilter_PCU1	BI	nvo24HrClogPCU1	Monitor	No-Units
159	ESPDoorMissing_PCU1	BI	nvoESPDoorPCU1	Monitor	No-Units
160	ESPDrainClogged_PCU1	BI	nvoESPDrainPCU1	Monitor	No-Units
161	PercentClogged_PCU2_Filter1	AI	nvoPcntClgF1PCU2	Monitor	No-Units
162	PercentClogged_PCU2_Filter2	AI	nvoPcntClgF2PCU2	Monitor	No-Units
163	PercentClogged_PCU2_Filter3	AI	nvoPcntClgF3PCU2	Monitor	No-Units
164	PercentClogged_PCU2_Filter4	AI	nvoPcntClgF4PCU2	Monitor	No-Units
165	PercentClogged_PCU2_Filter5	AI	nvoPcntClgF5PCU2	Monitor	No-Units
166	CloggedFilter_PCU2	BI	nvoCLogFiltPCU2	Monitor	No-Units
167	MissingFilter_PCU2	BI	nvoMissFiltPCU2	Monitor	No-Units
168	72HourCloggedFilter_PCU2	BI	nvo72hrClogPCU2	Monitor	No-Units
169	CloggedPCU_PCU2	BI	nvoClogPCU2	Monitor	No-Units
170	DoorMissing_PCU2	BI	nvoMissDoorPCU2	Monitor	No-Units
171	NeedCalibration_PCU2	BI	nvoNeedCalibPCU2	Monitor	No-Units
172	ESPDoorMissing_PCU2	BI	nvo24HrClogPCU2	Monitor	No-Units
173	ESPDrainClogged_PCU2	BI	nvoESPDoorPCU2	Monitor	No-Units
174	24HourCloggedFilter_PCU2	BI	nvoESPDrainPCU2	Monitor	No-Units
175	PercentClogged_PCU3_Filter1	AI	nvoPcntClgF1PCU3	Monitor	No-Units
176	PercentClogged_PCU3_Filter2	AI	nvoPcntClgF2PCU3	Monitor	No-Units

Demand Control Ventilation Points

ID	BACnet Name	BACnet Type	LonWorks Name	Function	Description
177	PercentClogged_PCU3_Filter3	AI	nvoPcntClgF3PCU3	Monitor	No-Units
178	PercentClogged_PCU3_Filter4	AI	nvoPcntClgF4PCU3	Monitor	No-Units
179	PercentClogged_PCU3_Filter5	AI	nvoPcntClgF5PCU3	Monitor	No-Units
180	CloggedFilter_PCU3	BI	nvoCLogFiltPCU3	Monitor	No-Units
181	MissingFilter_PCU3	BI	nvoMissFiltPCU3	Monitor	No-Units
182	72HourCloggedFilter_PCU3	BI	nvo72hrClogPCU3	Monitor	No-Units
183	CloggedPCU_PCU3	BI	nvoClogPCU3	Monitor	No-Units
184	DoorMissing_PCU3	BI	nvoMissDoorPCU3	Monitor	No-Units
185	NeedCalibration_PCU3	BI	nvoNeedCalibPCU3	Monitor	No-Units
186	24HourCloggedFilter_PCU3	BI	nvo24HrClogPCU3	Monitor	No-Units
187	ESPDoorMissing_PCU3	BI	nvoESPDoorPCU3	Monitor	No-Units
188	ESPDrainClogged_PCU3	BI	nvoESPDrainPCU3	Monitor	No-Units
189	DCVFireZone1	BI	nvoDCVFireZ1	Monitor	No-Units
190	DCVAuxFaultZone1	BI	nvoDCVAuxFaultZ1	Monitor	No-Units
191	DCVFuseFaultZone1	BI	nvoDCVFuseZ1	Monitor	No-Units
192	DCVKTSZone1	BI	nvoDCVKTSZ1	Monitor	No-Units
193	DCVProvingFaultZone1	BI	nvoDCVPrvngFltZ1	Monitor	No-Units
194	DCVMUAInterlockErr1Zone1	BI	nvoDCVIntlk1ErZ1	Monitor	No-Units
195	DCVMUAInterlockErr2Zone1	BI	nvoDCVIntlk2ErZ1	Monitor	No-Units
196	DCVBrokenTempSensorZone1	BI	nvoDCVBrokSensZ1	Monitor	No-Units
197	DCVMissingTempSensorZone1	BI	nvoDCVMisSensZ1	Monitor	No-Units
198	DCVOverloadZone1	BI	nvoDCVOvload1Z1	Monitor	No-Units
199	DCVOverload2Zone1	BI	nvoDCVOvload2Z1	Monitor	No-Units
200	DCVPCUFaultZone1	BI	nvoDCVPCUFaultZ1	Monitor	No-Units
201	DCVLightsEnergizedFaultZone1	BI	nvoDCVLigEnFltZ1	Monitor	No-Units
202	DCVLightsDeenergizedFaultZone1	BI	nvoDCVLigDnFltZ1	Monitor	No-Units
203	DCVSurfactantLowZone1	BI	nvoDCVSurfLowZ1	Monitor	No-Units
204	DCVCheckAppliancePilotsZone1	BI	nvoDCVChkPltsZ1	Monitor	No-Units
205	DCVFireZone2	BI	nvoDCVFireZ2	Monitor	No-Units
206	DCVAuxFaultZone2	BI	nvoDCVAuxFaultZ2	Monitor	No-Units
207	DCVFuseFaultZone2	BI	nvoDCVFuseZ2	Monitor	No-Units
208	DCVKTSZone2	BI	nvoDCVKTSZ2	Monitor	No-Units
209	DCVProvingFaultZone2	BI	nvoDCVPrvngFltZ2	Monitor	No-Units
210	DCVMUAInterlockErr1Zone2	BI	nvoDCVIntlk1ErZ2	Monitor	No-Units
211	DCVMUAInterlockErr2Zone2	BI	nvoDCVIntlk2ErZ2	Monitor	No-Units
212	DCVBrokenTempSensorZone2	BI	nvoDCVBrokSensZ2	Monitor	No-Units
213	DCVMissingTempSensorZone2	BI	nvoDCVMisSensZ2	Monitor	No-Units
214	DCVOverload1Zone2	BI	nvoDCVOvload1Z2	Monitor	No-Units
215	DCVOverload2Zone2	BI	nvoDCVOvload2Z2	Monitor	No-Units
216	DCVPCUFaultZone2	BI	nvoDCVPCUFaultZ2	Monitor	No-Units
217	DCVLightsEnergizedFaultZone2	BI	nvoDCVLigEnFltZ2	Monitor	No-Units
218	DCVLightsDeenergizedFaultZone2	BI	nvoDCVLigDnFltZ2	Monitor	No-Units
219	DCVSurfactantLowZone2	BI	nvoDCVSurfLowZ2	Monitor	No-Units
220	DCVCheckAppliancePilotsZone2	BI	nvoDCVChkPltsZ2	Monitor	No-Units
221	ModbusFaultCode	AI	nvoModbusFltCode	Monitor	No-Units
222	PrepTimeButtonZone1	BV (Binary Value)	nvoPrepButtonZ1/nviPrepButtonZ1	Monitor/Control	No-Units
223	FansONButtonZone1	BV	nvoFansButtonZ1/nviFansButtonZ1	Monitor/Control	No-Units
224	WashButtonZone1	BV	nvoWashButtonZ1/nviWashButtonZ1	Monitor/Control	No-Units
225	LightsButtonZone1	BV	nvoLightButtonZ1/nviLightButtonZ1	Monitor/Control	No-Units
226	MaxAirZone1	BV	nvoMaxAirZ1/nviMaxAirZ1	Monitor/Control	No-Units
227	PrepTimeButtonZone2	BV	nvoPrepButtonZ2/nviPrepButtonZ2	Monitor/Control	No-Units
228	FansONButtonZone2	BV	nvoFansButtonZ2/nviFansButtonZ2	Monitor/Control	No-Units
229	WashButtonZone2	BV	nvoWashButtonZ2/nviWashButtonZ2	Monitor/Control	No-Units
230	LightsButtonZone2	BV	nvoLightButtonZ2/nviLightButtonZ2	Monitor/Control	No-Units
231	MaxAirZone2	BV	nvoMaxAirZ2/nviMaxAirZ2	Monitor/Control	No-Units

COREBoard Faults

Fire system faults can be monitored with AI 132 - ErrorCOREBoard1. If multiple faults are active, the highest priority fault will be shown, starting with Fire. Up to 15 separate CORE boards can be monitored, using AI 132 through AI 146.

Fault Name	Code
Invalid Activation	1
Water Solenoid	2
Appliance Solenoid	3
Aux Input	4
Internal Micro	5
Surfactant Pump	6
Supervised Loop	7
Ground Fault	8
Surfactant Low	9
Battery Voltage Low	10
AC Power Failure	11
Tamper Switch	12
Test Mode	13
Interlock Network	14
Interlock Hood	15
Interlock PCU	16
Fire	17
Drain Solenoid	18
Release Solenoid	19
Gas Cylinder	20
Pressure Switch Fault	21
Primary Release Solenoid	22
Secondary Release Solenoid	23