

## Envision BACnet Variables

The variables will be listed with the point type and instance preceding the variable name.

### Analog Input (Type 0)

0:1 Space Temp	[Read only, shows the space temperature]
0:2 Discharge Air Temp	[Read only, field mounted sensor unless supplied as a factory special]
0:3 Effective Clg Setpt	[Read only, shows the active cooling setpoint]
0:4 Effective Htg Setpt	[Read only, shows the active heating setpoint]
0:5 Space Humidity	[Read]
0:6 Water Coil Temp	[Read, shows the refrigerant temperature at its coldest, for predictive freeze condition detection]
0:7 Low Temp Limit	[Read, shows the water coil low temp limit that will result in unit shutdown.]
0:8 ECM Cmd Output	[Read, shows the commanded speed (0-100%) of the ECM Blower]
0:9 Alarms Enumerated	[Read only, 0=no alarms, 1=condensate alarm, 2=Compressor Hi Discharge Pressure alarm, 3=Compressor low Suction Pressure alarm, 4=Freeze protection alarm, 8=Faulty Freeze Sensor alarm, 9=Loss of Charge]
0:10 AO2 Value	[Read, shows the output value (0-100%) of AO2]

### Analog Output (Type 1)

1:1 Space Setpoint	[Write, Raise and lower the heating and cooling setpoints from a single command point(volatile, reverts to 'uncommanded' after power outage).]
1:2 ECM Fan Ovrđ	[Write, allows network direct control of the ECM blower speed (volatile, reverts to 'uncommanded' after power outage)]
1:3 AO2 Override	[Write, allows network direct control of the Analog Output 2, volatile, reverts to 'uncommanded' after power outage)]
1:4 Space temp Ovrđ	[Write, allows the network to send space temperature values to the heat pump controller, volatile, these will supersede any temperature sensor connected to the space temperature Analog Input.]

## Analog Value (Type 2)

2:1 Occupied Cool	[Write, Cooling setpoint in Occupied mode]
2:2 Unoccupied Cool	[Write, Cooling setpoint in Unoccupied mode]
2:3 Occupied Heat	[Write, Heating setpoint in Occupied mode]
2:4 Unoccupied Heat	[Write, Heating setpoint in Unoccupied mode]
2:5 Temporary Occ Time	[Write, set the duration of the temporary occupancy timer which is initiated by pressing the button on the zone sensor]
2:6 Remote Setpt Span	[Write, sets the offset range that the setpoint knob on the zone sensor may apply to the effective Htg/Clg setpoints]
2:7 Remote Setpt Bias	[Write, biases the entire readjust range of the remote setpoint adjust to allow zeroing from the network.]
2:8 Space Temp Offset	[Write, Adds an offset to the Space Temp value for calibration]
2:9 Dehumidify Setpt	[Write, sets the humidity value that will cause the heat pump to enter passive dehumidification]
2:10 Low Temp Limit Adj	[Write, sets the low water coil temperature limit for shutdown]
2:11 Fan Only Speed	[Write, Sets the fan speed selected by ECM switch 1.]
2:12 Medium Fan	[Write, Sets the fan speed selected by ECM switch 2.]
2:13 High Fan	[Write, Sets the fan speed selected by ECM switch 3.]

### **Binary Input (Type 3)**

3:1 Fan Cmd Status	[Read, show the commanded condition of the Fan Output, Inactive=Off, Active=On]
3:2 Comp Cmd Status	[Read, show the commanded condition of the Compressor Output, Inactive=Off, Active=On]
3:3 Comp Hi Capacity Cmd	[Read, show the commanded condition of the 'Hi Capacity' Compressor control, Inactive=Off, Active=On.]
3:4 Reversing Valve	[Read, show the commanded condition of the Reversing Valve Output, Inactive =Heating, Active =Cooling]
3:5 Accessory 1 Output	[Read, Shows the commanded value of the X1 (Accessory 1) output, Inactive=Off, Active=On]
3:6 Accessory 2 Output	[Read, Shows the commanded value of the X2 (Accessory 2) output, Inactive=Off, Active=On t]
3:7 Dirty Filter BI-12	[Read, show the contact status of BI-12 (Dirty Filter) , Inactive=Off, Active=On]
3:8 Alarm Status	[Read, shows the in alarm/out of alarm status, Inactive=Off, Active=On]
3:9 BO5 Output	[Read, shows the BO5 (electric heat) output value, Inactive=Off, Active=On]
3:10 BO9 Output	[Read, shows the BO9 output value, Inactive=Off, Active=On]

### **Multistate Input (Type 13)**

13:1 Effective Occupancy	[Read, show the prevailing occupancy status of the heatpump 1=Occupied, 2=Unoccupied, 3=Bypass, 255=Invalid]
13:2 Mode Status	[Read, Shows unit status as Auto or Shutdown, 1=Auto, 7=Shutdown]

### **Multistate Output (Type 14)**

14:1 Occupancy Command	[Write, Control the occupancy mode of the heatpump. 1=Occupied, 2=Unoccupied, 3=Bypass, 255=Invalid]
14:2 Fan Command (G)	[Write, allows a network command equivalent of a thermostatic 'G' call]
14:3 Compressor Cmd (Y1)	[Write, allows a network command equivalent of a thermostatic 'Y1' call]
14:4 Compressor Cmd (Y2)	[Write, allows a network command equivalent of a thermostatic 'Y2' call]
14:5 Reversing Vlv Cmd (O)	[Write, allows a network command equivalent of a thermostatic 'O' call]
14:6 Emergency Override	[Write, provide rapid shutdown of the heatpump for fire,etc. 1=Normal, 5=Shutdown]
14:7 Alarm Reset	[Write, Reset lock-out 'manual reset' alarms. Alarm conditions must be cleared before a reset can succeed. This variable should be commanded 'On' for 20 seconds, then returned to the 'Off' condition. 1=Off, 2=On]
14:8 Emergency Heat BO5	[Write, allows a network command for emergency heat, also allows the network to stop automatic emergency heat.]
14:9 BO9	[Write, allow network control of spare output BO9. 1 = Off, 2=On.]
14:10	Dehum Cmd

### **Multistate Value (Type 15)**

15:1 SW1	[Write, ECM Switch 1 selection command. 2 selects it.]
15:2 SW2	[Write, ECM Switch 2 selection command. 2 selects it.]
15:3 SW3	[Write, ECM Switch 3 selection command. 2 selects it.]
15:4 DehumEnaDis	[Write, Enable (value of 2) or disable (value of 1) the passive dehumidification.]
15:5 SensorSel	[Write, a value of 1 sets it for the TAXXJ02, a 2 selects the TAXXA01.]
15:6 FanCycling	[Write, a 1 is continuous fan, a 2 is cycled fan operation.]