

BACnet Points for Single Compressor Water-to-Air Console Units Utilizing the FX10 Controller



All volatile (Output) type points will revert to the uncommanded values after a power interruption. These have no limit on the number of writes in a lifetime. The nonvolatile (Value) type points have their values stored in flash memory and they retain their values through a power outage. These have a limited life-time number of write cycles, about 2,000,000. Excessive writes to these will cause controller failure.

Depending on the type of BAS that you are using to integrate the controllers, you will either have an uncommanded value of 254 or 255 for the multistate inputs, outputs and values. For the BAS systems that show 254 as the uncommanded value, you will read/write a “0” for the “Off” command and “1” for the “On” command. For the BAS that shows 255 you will read/write a “1” for the “Off” command and a “2” for the “On” command.

<i>Analog Inputs</i>	<i>Read/Write</i>	<i>Description</i>
AI1 Space Temperature	Read	Shows the sensor value connected to terminals RS and AIC on the terminal board.
AI2 Discharge Air	Read	Shows value of field mounted sensor unless supplied as a factory special.
AI3 Effective Clg Setpt	Read	Shows the effective cooling setpoint.
AI4 Effective Hgt Setpt	Read	Shows the effective heating setpoint.
AI5 Alarms	Read	Shows the current alarm status of the heat pump. Refer to the Alarms table for a description of each enumeration.

Warning: Reverts to "Uncommanded" after a power cycle. These are volatile memory and allow unlimited writes.

<i>Analog Outputs</i>	<i>Read/Write</i>	<i>Description</i>
AO1 Space Setpoint	Write	Adjust the midpoint value between Effective Clg Setpt and Effective Htg Setpt, raises or lowers both from a single command.
AO2 Space Temp Override	Write	Allows for the space temp to be overridden, this will supersede any space sensor connected to the analog input.

Warning: These are written in Flash memory and have about 2,000,000 write cycles. Should only be written to by manual writes or through a scheduled writes, not by the automated reset process. EXCESSIVE WRITES WILL CAUSE CONTROLLER FAILURE, THIS WILL NOT BE COVERED

<i>Analog Values</i>	<i>Read/Write</i>	<i>Description</i>
AV1 Occupied Cool	Read/Write	Occupied cooling setpoint, nonvolatile.
AV2 Unoccupied Cool	Read/Write	Unoccupied cooling setpoint, nonvolatile.
AV3 Occupied Heat	Read/Write	Occupied heating setpoint, nonvolatile.

AV4	Unoccupied Heat	Read/Write	Unoccupied heating setpoint, nonvolatile.
AV5	Max Hgt Setpt	Read/Write	The upper limit that the heating setpoint may be adjusted to.
AV6	Min Clg Setpt	Read/Write	The lower limit that the cooling setpoint may be adjusted to.
AV7	Remote Setpt Max	Read/Write	Allows for adjustment of the sensor setpoint shift value on the plus side.
AV8	Remote Setpt Min	Read/Write	Allows for adjustment of the sensor setpoint shift value on the negative side.
AV9	Space Sensor Calibrate	Read/Write	Allows for adjustment to the zone sensor input, used to calibrate the zone temp reading on the network.
AV10	Compr Differential	Read/Write	Allows for adjustment to the compressor call deadband.

Warning: If your uncommanded value is 254 then the numeric values listed below will be 1 less than what is described.

<i>Multistate Input</i>	<i>Read/Write</i>	<i>Description</i>	
MI1	Mode Status	Read	Shows the current mode of the heatpump. 1=Auto (Normal), 7=Off(Shutdown)
MI2	Effective Occupancy	Read	Shows the current occupancy status of the heatpump. 1=Occupied, 2=Unoccupied, 3=Bypass(Temporary Occupancy)
MI3	Comp/Fan Prove	Read	Shows the contact status of digital input 6. Requires field installed current relay. 1=Off, 2=On
MI4	Dirty Filter Input	Read	Shows the contact status of digital input 12. Requires field installed current relay. 1=Off, 2=On
MI5	Fan Cmd Status	Read	Shows the commanded status of the fan. 1=Off, 2=On
MI6	Compr Cmd Status	Read	Shows the commanded status of compressor. 1=Off, 2=On
MI7	Rev Valve Status	Read	Shows the commanded position of the reversing valve. 1=Heating, 2=Cooling

PROSSWAC-02 Alarm Table	
#	Description
0	No Alarm
1	Condensate Detected
2	Compressor High Discharge Pressure
3	Compressor Low Suction Pressure
4	Freeze Protection
8	Faulty Freeze Sensor Alarm