

AboveAir Technologies Standard BACnet Points List

Analog variables

| BMS Address | Variable name | Description | Min | Max | Read/Write |
|-------------|--------------------------|--|---------|--------|------------|
| 1 | CoolValve_AnalogOut | Analog Output to Cooling Valve | -999.9 | 999.9 | R |
| 2 | Comp1_AnalogOut | Analog Output to Compressor 1 | -999.9 | 999.9 | R/W |
| 3 | Comp2_AnalogOut | Analog Output to Compressor 2 | -999.9 | 999.9 | R/W |
| 4 | Condenser_AnalogOut | Analog Output to Condenser Fan | -999.9 | 999.9 | R |
| 5 | CondValve_AnalogOut | Analog Output to Condenser Valve | -999.9 | 999.9 | R |
| 6 | Economizer_AnalogOut | Analog output to Economizer Damper | -999.9 | 999.9 | R |
| 7 | Fan_AnalogOut | Analog Output to Supply Air Fan | -999.9 | 999.9 | R |
| 8 | Freecool_AnalogOut | Analog Output to Freecooling Valve | -999.9 | 999.9 | R |
| 9 | Heater1_AnalogOut | Analog Output to Heater 1 | -999.9 | 999.9 | R |
| 10 | HgRht_AnalogOut | Analog Output to Hot Gas Reheat Valve | -999.9 | 999.9 | R |
| 11 | Humidifier_AnalogOut | Analog Output to Humidifier | -999.9 | 999.9 | R |
| 12 | Preheat_AnalogOut | Analog Output to Preheater | -999.9 | 999.9 | R |
| 14 | Cooling_P | Proportional term for cooling SAT PID control | 0 | 3276.7 | R/W |
| 15 | CO2_P | Proportional term for CO2 damper PID control | 0 | 3276.7 | R/W |
| 16 | Economizer_P | Proportional term for economizer PID control | 0 | 3276.7 | R/W |
| 17 | TempReset_SetP | Temp Reset Set Point VAV Reset Temp | 32.0 | 100.0 | R/W |
| 18 | Fan_P | Proportional term for supply fan PID control | 0 | 3276.7 | R/W |
| 20 | Freecool_P | Proportional term for freecool valve PID control | 0 | 3276.7 | R/W |
| 21 | Reheat_P | Proportional term for reheat SAT PID control | 0 | 3276.7 | R/W |
| 22 | HeadP_P | Proportional term for refrigerant head pressure PID control | 0 | 3276.7 | R/W |
| 24 | HeatPump_P | Proportional term for heat pump SAT PID control | 0 | 3276.7 | R/W |
| 26 | Heating_P | Proportional term for heating SAT PID control | 0 | 3276.7 | R/W |
| 28 | Humidifier_P | Proportional term for humidifier SAT PID control | 0 | 3276.7 | R/W |
| 30 | Preheat_P | Proportional term for preheat PID control | 0 | 3276.7 | R/W |
| 31 | CO2_SetPoint | Damper CO2 point | 0 | 2000.0 | R/W |
| 33 | SuctionP_P | Proportional term for refrigerant suction pressure PID control | 0 | 3276.7 | R/W |
| 34 | Temp_SetP | Temp Set Point (Single Set Point) | 32.0 | 100.0 | R/W |
| 35 | SAT_SetPoint | Current supply air temperature requirement (calculated set point - not adjustable) | -3276.8 | 3276.7 | R |
| 36 | Cool_SetPoint | Set point for cooling operation (Dual Set Points) | 50.0 | 95.0 | R |
| 37 | High_SAT_Reset | High supply air reset value (VAV system with reset) | -999.9 | 999.9 | R/W |
| 43 | Fan_SetPoint | Set point for fan operation (% of 0-10V signal, ppm CO2, or "wg static pressure) | 0 | 2500.0 | R/W |
| 44 | Freecool_SetPoint | Condenser water temp where freecooling is available | 0 | 65.0 | R/W |
| 45 | HeadPressure_SetPoint | Set point (psig) for head pressure control | 250.0 | 600.0 | R/W |
| 46 | Humidify_SetPoint | Humidify Set Point (for humidifier operation) | 35.0 | 75.0 | R/W |
| 47 | Heat_SetPoint | Heat Set Point (Dual Set Points) | 50.0 | 95.0 | R |
| 49 | Low_SAT_Reset | Low Temp - High SAT | 0 | 100.0 | R/W |
| 51 | Unocc_Deh_SetPoint | Unoccupied Heating Set Point | 0 | 99.9 | R/W |
| 52 | Unocc_Hum_SetPoint | Unoccupied Cooling Set Point | 0 | 99.9 | R/W |
| 53 | HumidityAlarm_HighSetPt | Humidity High Alarm Set Point | 0 | 100.0 | R/W |
| 54 | TempAlarm_HighSetPt | Temperature High Alarm Set Point | 0 | 100.0 | R/W |
| 55 | Dehumidify_SetPoint | Set point for dehumidification (Dual Set Points) | 30.0 | 75.0 | R/W |
| 56 | HumidityAlarm_LowSetPt | Humidity Low Alarm Set Point | 0 | 100.0 | R/W |
| 57 | TempAlarm_LowSetPt | Temperature Low Alarm Set Point | 0 | 100.0 | R/W |
| 58 | Hum_SetP | Humidity Set Point (Single Set Point) | 32.0 | 100.0 | R/W |
| 59 | SuctionPressure_SetPoint | Set point (psig) for suction pressure control | 90.0 | 160.0 | R/W |
| 60 | Unocc_Cool_SetPoint | Unoccupied Cooling Set Point | 0 | 99.9 | R/W |
| 61 | Unocc_Heat_SetPoint | Unoccupied Heating Set Point | 0 | 99.9 | R/W |
| 62 | CO2_Value | Measured CO2 reading (ppm) | -3276.8 | 3276.7 | R |
| 63 | HeadP1_Value | Measured circuit 1 liquid line pressure (psig) | -3276.8 | 3276.7 | R |
| 64 | HeadP2_Value | Measured circuit 2 liquid line pressure (psig) | -3276.8 | 3276.7 | R |
| 65 | MixedH_Value | Measured mixed air relative humidity (%RH) | -3276.8 | 3276.7 | R |
| 66 | MixedT_Value | Measured mixed air temperature (deg F or deg C) | -3276.8 | 3276.7 | R |
| 68 | OAH_Value | Measured outside air temperature (deg F or deg C) | -3276.8 | 3276.7 | R |
| 69 | OAT_Value | Measured outside air temperature (deg F or deg C) | -3276.8 | 3276.7 | R |
| 70 | SpaceT_Value | Measured space temperature (deg F or deg C) | -3276.8 | 3276.7 | R |
| 71 | SuctionP1_Value | Measured circuit 1 suction line pressure (psig) | -3276.8 | 3276.7 | R |
| 72 | SuctionP2_Value | Measured circuit 2 suction line pressure (psig) | -3276.8 | 3276.7 | R |
| 73 | SupplyH_Value | Measured supply air relative humidity (%RH) | -3276.8 | 3276.7 | R |
| 74 | SupplyT_Value | Measure supply air temperature (deg F or deg C) | -3276.8 | 3276.7 | R |
| 75 | StaticP_Value | Measured static pressure (in wg) | -3276.8 | 3276.7 | R |
| 76 | CondWaterT_Value | Condenser Water Temperature | -3276.8 | 3276.7 | R |
| 77 | SpaceH_Value | Measured space relative humidity (%RH) | -3276.8 | 3276.7 | R |

Integer variables

| BMS Address | Variable name | Description | Min | Max | Direction |
|-------------|----------------------|--|--------|-------|-----------|
| 1 | Cooling_D | Derivative term for cooling PID control | 0 | 999 | R/W |
| 2 | Cooling_I | Integral term for cooling PID control | 0 | 999 | R/W |
| 4 | Economizer_D | Derivative term for economizer PID control | 0 | 999 | R/W |
| 5 | Economizer_I | Integral term for economizer PID control | 0 | 999 | R/W |
| 7 | Fan_D | Derivative term for supply fan PID control | 0 | 999 | R/W |
| 8 | Fan_I | Integral term for supply fan PID control | 0 | 999 | R/W |
| 13 | HeadP_D | Derivative term for refrigerant head pressure PID control | 0 | 999 | R/W |
| 14 | HeadP_I | Integral term for refrigerant head pressure PID control | 0 | 999 | R/W |
| 16 | HeatPump_D | Derivative term for heat pump PID control | 0 | 999 | R/W |
| 17 | HeatPump_I | Integral term for heat pump PID control | 0 | 999 | R/W |
| 19 | Heating_D | Derivative term for heating PID control | 0 | 999 | R/W |
| 20 | Heating_I | Integral term for heating PID control | 0 | 999 | R/W |
| 22 | Humidifier_D | Derivative term for humidifier PID control | 0 | 999 | R/W |
| 23 | Humidifier_I | Integral term for humidifier PID control | 0 | 999 | R/W |
| 25 | Preheat_D | Derivative term for preheat PID control | -32768 | 32767 | R/W |
| 26 | Preheat_I | Integral term for preheat PID control | -32768 | 32767 | R/W |
| 28 | SuctionP_D | Derivative term for refrigerant suction pressure PID control | -32768 | 32767 | R/W |
| 29 | SuctionP_I | Integral term for refrigerant suction pressure PID control | -32768 | 32767 | R/W |
| 31 | AirflowAlarm_Delay | Delay before airflow alarm is active | 10 | 360 | R/W |
| 32 | Min_Off_Bw_T | Minimum off time between starts of multiple compressor stages | 60 | 360 | R/W |
| 33 | Min_Off_T | Minimum compressor off time | 60 | 600 | R/W |
| 34 | Min_On_T | Minimum compressor on time | 60 | 600 | R/W |
| 35 | CondValveMod_Delay | Delay before condenser water valve begins modulating | 0 | 999 | R/W |
| 36 | CondValveComp_Delay | Delay between condenser water valve call and compressor activation | 0 | 999 | R/W |
| 37 | Condenser_Delay | Delay between condenser initiation and compressor activation | 0 | 999 | R/W |
| 38 | Pump_Delay | Delay between pump initiation and compressor activation | -32768 | 32767 | R/W |
| 39 | EvapDamper_Delay | Delay for damper opening | 10 | 360 | R/W |
| 40 | Freezestat_Delay | Delay before freezestat shuts system down | 0 | 600 | R/W |
| 41 | Heat_Purge_t | Heat Purge Time | 10 | 180 | R/W |
| 42 | HeatStage_Delay | Delay between heat stages | 5 | 999 | R/W |
| 43 | LowPressAlarmDelay_t | Delay after compressor start before low refrigerant pressure alarm | 30 | 600 | R/W |
| 44 | Economizer_CompDelay | Delay for mechanical cooling | 0 | 600 | R/W |
| 45 | CO2_I | Integral term for CO2 damper PID control | 0 | 999 | R/W |
| 46 | CO2_D | Differential term for CO2 damper PID Control | 0 | 999 | R/W |
| 48 | Reheat_I | Integral term for reheat SAT PID control | -32768 | 32767 | R/W |
| 49 | Reheat_D | Derivative term for heating PID loop | -32768 | 32767 | R/W |

Digital variables

| BMS Address | Variable name | Description | Min | Max | Direction |
|-------------|----------------------|--|-----|-----|-----------|
| 1 | mAirflowAlarm_On | Airflow alarm is active | 0 | 1 | R |
| 2 | mC1HighPress_On | Compressor 1 high pressure alarm is active | 0 | 1 | R |
| 3 | mC1LowPress_On | Compressor 1 low pressure alarm is active | 0 | 1 | R |
| 4 | mC2HighPress_On | Compressor 2 high pressure alarm is active | 0 | 1 | R |
| 5 | mC2LowPress_On | Compressor 2 low pressure alarm is active | 0 | 1 | R |
| 6 | mCondensateAlarm_On | High condensate alarm | 0 | 1 | R |
| 7 | mDirtyFilterAlarm_On | Dirty filter alarm on | 0 | 1 | R |
| 8 | mFreezestat_On | Freezestat alarm active | 0 | 1 | R |
| 9 | GLOBAL_ALARM | Global (general) alarm | 0 | 1 | R |
| 10 | mHighCO2Alarm | High CO2 alarm | 0 | 1 | R |
| 13 | mHighHumAlarm | High humidity alarm | 0 | 1 | R |
| 14 | mHighTempAlarm | High temperature alarm | 0 | 1 | R |
| 17 | mLifeSafetyAlarm_On | Fire and/or smoke alarm active | 0 | 1 | R |
| 20 | mLowHumAlarm | Low humidity alarm | 0 | 1 | R |
| 21 | mLowTempAlarm | Low temperature alarm | 0 | 1 | R |
| 22 | mCO2_Alarm | CO2 sensor failure alarm | 0 | 1 | R |
| 23 | mCondWaterT_Alarm | Condenser water temperature sensor failure | 0 | 1 | R |
| 24 | mLiquidP1_Alarm | Circuit 1 head pressure sensor failure | 0 | 1 | R |
| 25 | mLiquidP2_Alarm | Circuit 2 head pressure sensor failure | 0 | 1 | R |
| 27 | mMixedH_Alarm | Mixed air humidity sensor failure | 0 | 1 | R |
| 28 | mMixedT_Alarm | Mixed air temperature sensor failure | 0 | 1 | R |
| 29 | mOAH_Alarm | Outdoor air humidity sensor failure | 0 | 1 | R |
| 30 | mOAT_Alarm | Outdoor air temperature sensor failure | 0 | 1 | R |
| 32 | mSpaceH_Alarm | Space humidity sensor failure | 0 | 1 | R |
| 33 | mSpaceT_Alarm | Space temperature sensor failure | 0 | 1 | R |
| 34 | mSuctionP1_Alarm | Circuit 1 suction pressure sensor failure | 0 | 1 | R |

| BMS Address | Variable name | Description | Min | Max | Direction |
|-------------|-----------------------|--|-----|-----|-----------|
| 35 | mSuctionP2_Alarm | Circuit 2 suction pressure sensor failure | 0 | 1 | R |
| 36 | mSupplyH_Alarm | Supply humidity sensor failure | 0 | 1 | R |
| 37 | mSupplyT_Alarm | Supply temperature sensor failure | 0 | 1 | R |
| 38 | CoolValve_En | Chilled Water Valve Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 39 | Comp1_En | Compressor 1 Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 40 | Comp2_En | Compressor 2 Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 41 | Condenser_En | Condenser Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 42 | CondValve_En | Condenser Valve Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 43 | Economizer_En | Airside Economizer Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 44 | FanOut_En | Aux Fan output 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 45 | Freecool_En | Water Side Economizer Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 46 | Heater1_En | Heater 1 Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 47 | Heater2_En | Heater 2 Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 50 | HgRht_En | Hot Gas Reheat 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 51 | Defrost_On | Unit is in defrost cycle | 0 | 1 | R/W |
| 52 | Humidifier_En | Humidifier Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 53 | EvapDamper_En | Damper Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 54 | Preheat_En | Preheat Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 55 | Pump_En | Pump Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 56 | System_En | System Enable 0 = Off, 1 = Auto | 0 | 1 | R/W |
| 57 | AlarmRelay1_On | 1 = On, 0 = Off | 0 | 1 | R/W |
| 58 | FanOut_On | 1 = On, 0 = Off | 0 | 1 | R/W |
| 59 | CoolValve_On | 1 = On, 0 = Off | 0 | 1 | R/W |
| 60 | Comp1_On | 1 = On, 0 = Off | 0 | 1 | R/W |
| 61 | Comp2_On | 1 = On, 0 = Off | 0 | 1 | R/W |
| 62 | Condenser_On | 1 = On, 0 = Off | 0 | 1 | R |
| 63 | CondValve_On | 1 = On, 0 = Off | 0 | 1 | R |
| 64 | Economizer_On | 1 = On, 0 = Off | 0 | 1 | R |
| 65 | Fan_On | 1 = On, 0 = Off | 0 | 1 | R |
| 66 | Freecool_On | 1 = On, 0 = Off | 0 | 1 | R |
| 67 | Heater1_On | 1 = On, 0 = Off | 0 | 1 | R |
| 68 | Heater2_On | 1 = On, 0 = Off | 0 | 1 | R |
| 71 | HgRht_On | 1 = On, 0 = Off | 0 | 1 | R |
| 72 | HPRevValve_On | 1 = On, 0 = Off | 0 | 1 | R |
| 73 | Humidifier_On | 1 = On, 0 = Off | 0 | 1 | R |
| 74 | EvapDamper_On | 1 = On, 0 = Off | 0 | 1 | R |
| 75 | Preheat_On | 1 = On, 0 = Off | 0 | 1 | R/W |
| 76 | Pump_On | 1 = On, 0 = Off | 0 | 1 | R |
| 77 | CompressorLockout_On | 1 = On, 0 = Off | 0 | 1 | R |
| 78 | CondenserDelay_On | 1 = On, 0 = Off | 0 | 1 | R |
| 79 | CondValveDelay_On | 1 = On, 0 = Off | 0 | 1 | R/W |
| 80 | CoolMode | Unit is in Cool Mode | 0 | 1 | R/W |
| 81 | CondenserES_Okay | Optional cond fan end switch closed | 0 | 1 | R |
| 82 | CondValveES_Okay | Optional condenser valve end switch closed | 0 | 1 | R/W |
| 83 | EvapDamperES_Okay | Optional damper end switch closed | 0 | 1 | R |
| 84 | DehumidifyMode | Unit is in dehumidify mode | 0 | 1 | R |
| 85 | Fan_Delay_On | Fan start delay | 0 | 1 | R |
| 86 | HeatMode | Unit is in heat mode | 0 | 1 | R |
| 87 | HumidifyMode | Unit is in humidify mode | 0 | 1 | R |
| 88 | PumpDelay_On | Comp Start Delay | 0 | 1 | R |
| 89 | PumpStatus_Okay | Pump Status Signal Active | 0 | 1 | R |
| 90 | ReheatMode | Unit is in reheat mode | 0 | 1 | R |
| 91 | RemoteStopStart_On | Digital Input On | 0 | 1 | R |
| 92 | System_On | System 0 = Off, 1 = On | 0 | 1 | R |
| 93 | Unoccupied_Setback_On | 1 = On, 0 = Off | 0 | 1 | R |
| 102 | RESET_ALARMS | Request to reset/clear alarm memories | 0 | 1 | R/W |
| 103 | RESET_BUZZER | Request to switch off the buzzer | 0 | 1 | R/W |
| 104 | Off_by_Superv | 1 = shut down unit via BMS | 0 | 1 | R/W |