

Analog Outputs				
Variable Name	Description	BMS Address	Read/Write	Point Availability
Comp1_AnalogOut	% Analog Output to Compressor 1	AV 1	R	Standard
Comp3_AnalogOut	% Analog Output to Compressor 3	AV 2	R	Dual Circuit Units
Condenser_AnalogOut	% Analog Output to Condenser	AV 3	R	Standard
Economizer_AnalogOut	% Analog output to Economizer Damper	AV 4	R	Requires Economizer Option
ERW_AnalogOut	% Analog out to ERW	AV 5	R	Requires ERW Option
Exhaust_AnalogOut	% Analog output to Exhaust Fan	AV 6	R	Requires Exhaust or ERW Option
Fan_AnalogOut	% Analog Output to Supply Air Fan	AV 7	R	Standard
Heater1_AnalogOut	% Analog Output to Heater 1	AV 8	R	Requires Heat Option
HgRht_AnalogOut	% Analog Output to Hot Gas Reheat Valve	AV 9	R	Standard

Sensor Readings				
Variable Name	Description	BMS Address	Read/Write	Point Availability
T_MA_Value	Mixed Air Temperature	AV 10	R	Standard
H_MA_Value	Mixed Air Humidity	AV 11	R	Standard
DP_MA_Value	Mixed Air Dew Point	AV 12	R	Standard
P_Head1_Value	Head Pressure Circuit 1	AV 13	R	Standard
P_Head2_Value	Head Pressure Circuit 2	AV 14	R	Dual Circuit Units
T_DX_Value	Coil Leaving Air Temperature	AV 15	R	Standard
T_EA_Value	Exhaust Air Temperature	AV 16	R	Requires ERW Option
T_OA_Value	Outdoor Air Temperature	AV 17	R	Requires ERW or Economizer Option
H_OA_Value	Outdoor Air Humidity	AV 18	R	Requires Enthalpy ASE Option
T_PH_Value	Preheat Temperature	AV 19	R	Requires Preheat Option
R_RA_Value	Return Air Temperature	AV 20	R	Requires ERW Option
T_SA_Value	Supply Air Temperature	AV 21	R	Standard
P_SP_Value	Static Pressure (Supply Control)	AV 22	R	Standard VAV, Optional Neutral
P_EA_Value	State Pressure (Exhaust Control)	AV 23	R	Requires Exhaust Static Option
T_Space_Value	Space Temperature	AV 24	R	Standard Primary Ctrl
H_Space_Value	Space Humidity	AV 25	R	Optional Primary Ctrl
A_CO2_Value	CO2 (Space or Return)	AV 26	R	Optional

MC-9000N Neutral Control Set Points				
Variable Name	Description	BMS Address	Read/Write	Point Availability
DewPoint_SetPoint	Dew Point Set Point for Dehumidification Operation	AV 40	W	Standard
DesignCoolLAT_SetPoint	Design Leaving Air Temperature off of Cooling Coil	AV 41	W	Standard
Fan_SetPoint	Fan Set Point (0-100% of output, in w.g., or CO2 options)	AV 42	W	Standard
HeadPressure_SetPoint	Head Pressure Set Point	AV 43	W	Standard
CoolSwitch_SetPoint	Cooling Enable Set Point (OA or MA Mode Select)	AV 44	W	Optional, MA or OA Mode Select
HeatSwitch_SetPoint	Heating Enable Set Point (OA or MA Mode Select)	AV 45	W	Optional, MA or OA Mode Select
CO2_SetPoint	CO2 Set Point	AV 46	W	Requires CO2 Option
Cool_SetPoint	Leaving Air Temperature Cooling Set Point	AV 47	W	Standard
Heat_SetPoint	Leaving Air Temperature Heating Set Point	AV 48	W	Standard
SAT_SetPoint	Active Supply Air Temp Requirement	AV 51	R	Standard
Preheat_SetPoint	Preheat Set Point	AV 52	W	Requires Preheat Option

MC-9000P Primary Control Set Points				
Variable Name	Description	BMS Address	Read/Write	Point Availability
Primary_CoolSAT_SetPt	Min Cooling Supply Air Temperature for Reset Schedule	AV 31	W	Standard
Primary_CoolSAT_Neutral_SetPt	Neutral Cooling Supply Air Temperature for Reset Schedule	AV 32	W	Standard
Primary_Cool_ControlBand	Space Temperature Reset Band between Neutral and MinCooling SAT	AV 33	W	Standard
Primary_HeatSAT_SetPt	Max Heating Supply Air Temperature for Reset Schedule	AV 34	W	Standard
Primary_HeatSAT_Neutral_SetPt	Neutral Heating Supply Air Temperature for Reset Schedule	AV 35	W	Standard
Primary_Heat_ControlBand	Space Temperature Reset Band between Neutral and Max Heating SAT	AV 36	W	Standard
DewPoint_SetPoint	Dew Point Set Point for Dehumidification Operation	AV 40	W	Standard
DesignCoolLAT_SetPoint	Design Leaving Air Temperature off of Cooling Coil	AV 41	W	Standard
Fan_SetPoint	Fan Set Point (0-100% of output)	AV 42	W	Standard
HeadPressure_SetPoint	Head Pressure Set Point	AV 43	W	Standard
CoolSwitch_SetPoint	Cooling Enable Set Point (OA or MA Mode Select)	AV 44	W	Optional, MA or OA Mode Select
HeatSwitch_SetPoint	Heating Enable Set Point (OA or MA Mode Select)	AV 45	W	Optional, MA or OA Mode Select
CO2_SetPoint	CO2 Set Point	AV 46	W	Requires CO2 Option
Cool_SetPoint	Space Cooling Set Point	AV 47	W	Standard
Heat_SetPoint	Space Heating Set Point	AV 48	W	Optional, BMS or MA/OA Mode Select
Setpoint_Deadband	Deadband Between Cooling & Heating for Auto Switch Over	AV 49	W	Standard
Auto_HeatSetPoint	Heating Set Point (Auto Heat/Cool Switch Over)	AV 50	R	Standard
SAT_SetPoint	Active Supply Air Temp Requirement	AV 51	R	Standard
Preheat_SetPoint	Preheat Set Point	AV 52	W	Requires Preheat Option
Unocc_Cool_SetPoint	Unoccupied Cooling Set Point	AV 53	W	Standard
Unocc_Heat_SetPoint	Unoccupied Heating Set Point	AV 54	W	Standard
HumidityAlarm_HighSetPt	Space Humidity High Alarm Set Point	AV 55	W	Requires Space Humidity Option
HumidityAlarm_LowSetPt	Space Humidity Low Alarm Set Point	AV 56	W	Requires Space Humidity Option
TempAlarm_HighSetPt	Space Temperature High Alarm Set Point	AV 57	W	Standard
TempAlarm_LowSetPt	Space Temperature Low Alarm Set Point	AV 58	W	Standard

MC-9000V VAV Control Set Points				
Variable Name	Description	BMS Address	Read/Write	Point Availability
VAV_DesignOut_T	MA or OA Temp For Design Condition (Reset Schedule)	AV 37	W	Standard
VAV_Reset_T	MA or OA Temp for High SAT Reset Temperature (Reset Schedule)	AV 38	W	Standard
VAV_HighReset_T	High Supply Air Temperature (Reset Schedule)	AV 39	W	Standard
DewPoint_SetPoint	Dew Point Set Point for Dehumidification Operation	AV 40	W	Standard
DesignCoolLAT_SetPoint	Design Leaving Air Temperature off of Cooling Coil	AV 41	W	Standard
Fan_SetPoint	Fan Set Point (in w.g.)	AV 42	W	Standard
HeadPressure_SetPoint	Head Pressure Set Point	AV 43	W	Standard

CoolSwitch_SetPoint	Cooling Enable Set Point (OA or MA Mode Select)	AV 44	W	Optional, MA or OA Mode Select
HeatSwitch_SetPoint	Heating Enable Set Point (OA or MA Mode Select)	AV 45	W	Optional, MA or OA Mode Select
CO2_SetPoint	CO2 Set Point	AV 46	W	Optional
Cool_SetPoint	Cooling Supply Air Temperature Set Point	AV 47	W	Standard
Heat_SetPoint	Heating Supply Air Temperature Set Point	AV 48	W	Optional, BMS or MA/OA Mode Select
SAT_SetPoint	Calculated Supply Air Temp Requirement	AV 51	R	Standard
Preheat_SetPoint	Preheat Set Point	AV 52	W	Optional

System Alarms				
Variable Name	Description	BMS Address	Read/Write	Point Availability
mAirflowAlarm_On	Loss of Airflow Alarm	BV 1	R	Standard
mC1HighPress_On	Circuit 1 High Refrigerant Pressure Alarm	BV 2	R	Standard
mC1LowPress_On	Circuit 1 Low Refrigerant Pressure Alarm	BV 3	R	Standard
mC2HighPress_On	Circuit 2 High Refrigerant Pressure Alarm	BV 4	R	Dual Circuit Units
mC2LowPress_On	Circuit 2 Low Refrigerant Pressure Alarm	BV 5	R	Dual Circuit Units
mCondensateAlarm_On	High Condensate Pan Switch Alarm	BV 6	R	Standard
mDirtyFilterAlarm_On	Dirty Filter Alarm	BV 7	R	Standard
mFreezestat_On	Freezestat Alarm	BV 8	R	Requires Freezestat Option
GLOBAL_ALARM	Global (General) Alarm	BV 9	R	Standard
mHighCO2Alarm	High CO2 Level Alarm	BV 10	R	Requires CO2 Option
mHighHumAlarm	High Space Humidity Alarm	BV 11	R	Optional, Primary Units
mHighTempAlarm	High Space Temperature Alarm	BV 12	R	Standard, Primary Units
mSmokeAlarm_On	Smoke Alarm	BV 13	R	Standard
reserved		BV 14	R	Standard
mLowHumAlarm	Low Space Humidity Alarm	BV 15	R	Optional, Primary Units
mLowTempAlarm	Low Space Temperature Alarm	BV 16	R	Standard, Primary Units
mCO2_Alarm	CO2 Sensor Failure Alarm	BV 17	R	Requires CO2 Option
mHeadP1_Alarm	Circuit 1 Head Pressure Sensor Failure Alarm	BV 18	R	Standard
mHeadP2_Alarm	Circuit 2 Head Pressure Sensor Failure Alarm	BV 19	R	Dual Circuit Units
mMixedH_Alarm	Mixed Air Humidity Sensor Failure Alarm	BV 20	R	Standard
mMixedT_Alarm	Mixed Air Temperature Sensor Failure Alarm	BV 21	R	Standard
mSpaceH_Alarm	Space Humidity Sensor Failure Alarm	BV 22	R	Optional, Primary Units
mSpaceT_Alarm	Space Temperature Sensor Failure Alarm	BV 23	R	Standard, Primary Units
mSupplyT_Alarm	Supply Air Temperature Failure Alarm	BV 24	R	Standard
reserved		BV 25	R	-
reserved		BV 26	R	-
reserved		BV 27	R	-
reserved		BV 28	R	-
reserved		BV 29	R	-
reserved		BV 30	R	-
reserved		BV 31	R	-

Component Enables				
Variable Name	Description	BMS Address	Read/Write	Point Availability
Comp1_En	Circuit 1 DX/HP Enable 0=Off, 1=Auto	BV 32	W	Standard
Comp2_En	Circuit 2 DX/HP Enable 0=Off, 1=Auto	BV 33	W	Units > 10 Tons
Comp3_En	Circuit 3 DX/HP Enable 0=Off, 1=Auto	BV 34	W	Dual Circuit Units
Comp4_En	Circuit 4 DX/HP Enable 0=Off, 1=Auto	BV 35	W	Dual Circuit Units
Condenser_En	Condenser Enable 0=Off, 1=Auto	BV 36	W	Standard
Economizer_En	Airside Economizer Enable 0=Off, 1=Auto	BV 37	W	Requires Airside Economizer Option
Exhaust_En	Energy Recovery Enable 0=Off, 1=Auto	BV 38	W	Requires ERW or Exhaust Fan Option
Heater1_En	Heater Stage 1 Enable 0=Off, 1=Auto	BV 39	W	Requires Heat Option
Heater2_En	Heater Stage 2 Enable 0=Off, 1=Auto	BV 40	W	Requires Heat Option
HgRht_En	Hot Gas Reheat Enable 0=Off, 1=Auto	BV 41	W	Standard
EvapDamper_En	Damper Relay Enable 0=Off, 1=Auto	BV 42	W	Standard
Preheat_En	Preheat Enable 0=Off, 1=Auto	BV 43	W	Requires Preheat Option
System_En	System Enable 0=Off, 1=Auto	BV 44	W	Standard
Wheel_En	Energy Recovery Enable 0=Off, 1=Auto	BV 45	W	Requires ERW Option

Component Status				
Variable Name	Description	BMS Address	Read/Write	Point Availability
AlarmRelay1_On	Programmable alarm relay is active	BV 50	R	Standard
Comp1_On	Compressor 1 is On	BV 51	R	Standard
Comp2_On	Compressor 2 is On	BV 52	R	Units > 10 Tons
Comp3_On	Compressor 3 is On	BV 53	R	Dual Circuit Units
Comp4_On	Compressor 4 is On	BV 54	R	Dual Circuit Units
Condenser_On	Condenser Fan/Valve is On	BV 55	R	Standard
EvapDamper_On	Damper is Open	BV 56	R	Standard
Economizer_On	Economizer is On	BV 57	R	Requires Airside Economizer Option
Fan_On	Supply Fan is On	BV 58	R	Standard
Heater1_On	Heater 1 is On	BV 59	R	Requires Heat Option
Heater2_On	Heater 2 is On	BV 60	R	Requires Heat Option
HgRht_On	Hot Gas Reheat is On	BV 61	R	Standard
HPRevValve_On	Reversing Valve is On (Cool Position)	BV 62	R	Requires Heat Pump Option
Preheat_On	Preheat is On	BV 63	R	Requires Preheat Option

Delays and Lockouts				
Variable Name	Description	BMS Address	Read/Write	Point Availability
CompressorLockout_On	Compressors are Locked Out	BV 64	R	Optional
CondenserDelay_On	Condenser Fan is in Delay	BV 65	R	Standard
Defrost_On	Defrost Cycle is Active	BV 66	R	Requires Heat Pump Option
Fan_Delay_On	Supply Fan is in Delay	BV 67	R	Standard
RemoteStopStart_On	Remote Stop/Start is in its Start Position	BV 68	R	Standard

System Operation				
Variable Name	Description	BMS Address	Read/Write	Point Availability
System_On	System is On	BV 69	R	Standard
reserved		BV 70	R	-
Unoccupied_Setback_On	Unit is operating based on unoccupied set back	BV 71	R	Standard, Primary Control Units

System Modes				
Variable Name	Description	BMS Address	Read/Write	Point Availability
CoolMode	Unit is in its cooling mode	BV 72	R	Standard
DehumidifyMode	Unit is in its dehumidifying mode	BV 73	R	Standard
HeatMode	Unit is in its heating mode	BV 74	R	Standard
ReheatMode	Unit is in its reheating mode	BV 75	R	Standard

BMS Specific Points				
Variable Name	Description	BMS Address	Read/Write	Point Availability
BMS_Occ	BMS Control of Occupancy schedule	BV 76	W	Optional, Primary Control Units
CoolHeatSelect_Selection	BMS Control of Cool/Dehumid or Heat Operation	BV 77	W	Standard
Off_by_Superv	BMS Command to turn unit off	BV 78	W	Standard
RESET_ALARMS	BMS point to reset system alarms	BV 79	W	Standard
RESET_BUZZER	BMS point to reset display terminal buzzer	BV 80	W	Standard