

Systems Integration

McQuay Microtech III BACnet MS/TP Application 4181 Point Map

APOGEE® Open Processor with McQuay Microtech III BACnet MS/TP Driver: Microtech III Applied Rooftop Unit Controllers

Table 1. McQuay Microtech III BACnet MS/TP APOGEE Points, Application Number: 4181.

Point	Type	Description	Range/Units ^{a b c}
1	LAO	–	–
2	LAO	–	–
3	LAI	Unit State	1- OFF 2- Start 3-Recirc 4-FanOnly 5-MinDAT 6-Htg 7-Econo 8-Clg
4	LAI	McQuay AHU Unit Status	1-Enabled, 2-Off Man 3-Off ManCtrl 4-Off Net 5-Off Alarm 6-Off Fan Retry
5	LAI	Cooling Status	1=Enabled 2=None 3=Off Amb 4=Off Alarm 5=Off Net 6=Off Man
6	LAI	Heating Status	1=Enabled 2=None 3=Off Amb 4=Off Alarm (Not Used) 5=Off Net 6=Off Man
7	LAI	Economizer Status	–
8	LAI	Cooling Capacity	%
9	LAI	Heating Capacity	%
10	LAI	Supply Fan Capacity	%
11	LAI	Return/Exhaust Fan Capacity	%

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Table 1. McQuay Microtech III BACnet MS/TP APOGEE Points, Application Number: 4181. (continued)

Point	Type	Description	Range/Units^{a b c}
12	LAI	Economizer Capacity	%
13	LAO	Emergency Override	–
14	LAO	Application Mode	1-Off 2-Heat 3-Cool 4-Fan Only 5-Auto
15	LAI	Occupancy	–
16	LAO	Occupancy Mode	1 = Occ 2 = Unocc 3 = TntOvrd 4 = Standby (Same as Occ) 5 = Auto
17	LAI	Discharge Air Temperature	°F °C
18	LAI	Return Air Temperature	°F °C
19	LAI	Space Temperature	°F °C
20	LAI	Outdoor Air Temperature	°F °C
21	LAI	Entering Fan/Leaving Coil Temperature	°F °C
22	LAI	Entering Water Temperature	°F °C
23	LAI	Mixed Air Temperature	°F °C
24	LDI	Return/Exhaust Fan Status	Off/On
25	LAI	VAV Box Output	–
26	LAI	Duct Static Pressure	IN WC Pa
27	LAO	Duct Static Pressure Setpoint	IN WC Pa
28	LAO	Remote Supply Fan Capacity Control Flag	–
29	LAO	Supply Fan Capacity Input	%
30	LAI	Building Static Pressure	IN WC Pa
31	LAO	Building Static Pressure Setpoint	IN WC Pa
32	LAO	Remote Return/Exhaust Fan Capacity Control Flag	–
33	LAO	Return Fan Capacity Input	%
34	LAO	Exhaust Fan Capacity Input	%

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Table 1. McQuay Microtech III BACnet MS/TP APOGEE Points, Application Number: 4181. (continued)

Point	Type	Description	Range/Units ^{a b c}
35	LAO	Occupied Cooling Setpoint	°F °C
36	LAO	Unoccupied Cooling Setpoint	°F °C
37	LAO	Discharge Air Cooling Setpoint	°F °C
38	LAO	Min Discharge Air Cooling Setpoint	°F °C
39	LAI	Conductivity	S
40	LAI	Space CO2	ppm
41	LAI	Outdoor Airflow	cfm Lpm
42	LAO	Occupied Heating Setpoint	°F °C
43	LAO	Unoccupied Heating Setpoint	°F °C
44	LAO	Discharge Air Heating Setpoint	°F °C
45	LAO	Max Discharge Air Heating Setpoint	°F °C
48	LAO	Relative Humidity Setpoint	%
49	LAO	Dew Point Setpoint	°F °C
50	LAI	Reheat Capacity	%
51	LAO	Receive Heartbeat (LON)	–
52	LAO	Outdoor Air Temperature Input	°F °C
53	LAO	Space Temperature Input	°F °C
54	LAO	Occupancy Scheduler Input - Current State	–
55	LAO	Occupancy Scheduler Input - Next State	–
56	LAO	Occupancy Scheduler Input - Time to Next State	sec
57	LAO	Primary Cool Enable - State	–
58	LAO	Primary Cool Enable - Value	–
59	LAO	Primary Heat Enable - State	–
60	LAO	Primary Heat Enable - Value	–
61	LAO	Economizer Enable - State	–
62	LAO	Economizer Enable - Value	–
63	LAO	Waterflow Switch Input	–

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Table 1. McQuay Microtech III BACnet MS/TP APOGEE Points, Application Number: 4181. (continued)

Point	Type	Description	Range/Units ^{a b c}
64	LAO	Space IAQ Input	ppm
66	LAO	Outddor Air Damper Min Position Input	%
67	LAI	Eff Discharge air Temp Setpoint	°F °C
68	LAO	Clear Alarms	1-None 2-ClrFlts 3-ClrPrblms 4-ClrWrngs 5-ClrAllAlms
69	LAI	Application Version	–
70	LAI	Local Space Temperature	°F °C
71	LAI	Local Outdoor Air Temperature	°F °C
72	LAI	Warning Alarm	0 - No Active Alarms 24 - Dirty Filter 28 - Airflow Sw 32 - Conductivity
73	LAI	Problem Alarm	0 - No Active Alarms 137 - Waterflow Sw 140 - Water Regulating Valve 154 - Low Pressure - Circuit 6 155 - Low Pressure - Circuit 5 156 - Low Pressure - Circuit 4 157 - Low Pressure - Circuit 3 158 - Low Pressure - Circuit 2 159 - Low Pressure - Circuit 1 162 - High Pressure - Circuit 6 163 - High Pressure - Circuit 5 164 - High Pressure - Circuit 4 165 - High Pressure - Circuit 3 166 - High Pressure - Circuit 2 167 - High Pressure - Circuit 1 169 - Sump Pump Fail 179 - EFT_LCT Problem 182- Return Air Sensor Problem 185 - Space Sensor Problem 188 - OAT Sensor Problem 191 - EWT Problem 194 - MAT Problem 197 - Freeze Problem

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Table 1. McQuay Microtech III BACnet MS/TP APOGEE Points, Application Number: 4181. (continued)

Point	Type	Description	Range/Units^{a b c}
74	LAI	Fault Alarm	0 - No Active Alarms 208 - Airflow Fault 212 - Low Discharge Air Temp 216 - High Discharge Air Temp 220 - High Return Air Temp 224 - Duct High Limit 228 - Discharge Sensor Fail 244 - Control Temp Fault 250 - Emergency Stop Fault 252 - Freeze Fault
75	LAI	Alarm Value	0 - No Active Alarms 24 - Dirty Filter 28 - Airflow Sw 32 - Conductivity 137 - Waterflow Sw 140 - Water Regulating Valve 154 - Low Pressure - Circuit 6 155 - Low Pressure - Circuit 5 156 - Low Pressure - Circuit 4 157 - Low Pressure - Circuit 3 158 - Low Pressure - Circuit 2 159 - Low Pressure - Circuit 1 162 - High Pressure - Circuit 6 163 - High Pressure - Circuit 5 164 - High Pressure - Circuit 4 165 - High Pressure - Circuit 3 166 - High Pressure - Circuit 2 167 - High Pressure - Circuit 1 169 - Sump Pump Fail 179 - EFT_LCT Problem 182- Return Air Sensor Problem 185 - Space Sensor Problem 188 - OAT Sensor Problem 191 - EWT Problem 194 - MAT Problem 197 - Freeze Problem 208 - Airflow Fault 212 - Low Discharge Air Temp 216 - High Discharge Air Temp 220 - High Return Air Temp 224 - Duct High Limit 228 - Discharge Sensor Fail 244 - Control Temp Fault 250 - Emergency Stop Fault 252 - Freeze Fault
76	LDI	Airflow Fault	Normal/Alarm
77	LDI	Airflow Switch Warning	Normal/Alarm
78	LDI	Conductivity Warning	Normal/Alarm
79	LDI	Control Temp Fault	Normal/Alarm
80	LDI	Dirty Filter Warning	Normal/Alarm

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Table 1. McQuay Microtech III BACnet MS/TP APOGEE Points, Application Number: 4181. (continued)

Point	Type	Description	Range/Units ^{a b c}
81	LDI	Discharge Sensor Fault	Normal/Alarm
82	LDI	Duct High Limit Fault	Normal/Alarm
83	LDI	Emergency Off Fault	Normal/Alarm
84	LDI	Entering Fan Temp/ Leaving Coil Temp Problem	Normal/Alarm
85	LDI	Entering Water Temp Problem	Normal/Alarm
86	LDI	Freeze Fault	Normal/Alarm
87	LDI	Freeze Problem	Normal/Alarm
88	LDI	High Discharge Temp Fault	Normal/Alarm
89	LDI	High Pressure Circuit 1 Problem	Normal/Alarm
90	LDI	High Pressure Circuit 2 Problem	Normal/Alarm
91	LDI	High Pressure Circuit 3 Problem	Normal/Alarm
92	LDI	High Pressure Circuit 4 Problem	Normal/Alarm
93	LDI	High Pressure Circuit 5 Problem	Normal/Alarm
94	LDI	High Pressure Circuit 6 Problem	Normal/Alarm
95	LDI	High Return Temp Fault	Normal/Alarm
96	LDI	Low Discharge Temp fault	Normal/Alarm
97	LDI	Low Pressure Circuit 1 Problem	Normal/Alarm
98	LDI	Low Pressure Circuit 2 Problem	Normal/Alarm
99	LDI	Low Pressure Circuit 3 Problem	Normal/Alarm
100	LDI	Low Pressure Circuit 4 Problem	Normal/Alarm
101	LDI	Low Pressure Circuit 5 Problem	Normal/Alarm
102	LDI	Low Pressure Circuit 6 Problem	Normal/Alarm
103	LDI	Mixed Air Temperature Problem	Normal/Alarm
104	LDI	Outdoor Air Temperature Problem	Normal/Alarm
105	LDI	Return Air Temperature Problem	Normal/Alarm
106	LDI	Space Temperature Problem	Normal/Alarm
107	LDI	Sump Pump Fail Problem	Normal/Alarm
108	LDI	Waterflow Switch Problem	Normal/Alarm
109	LDI	Water Regulating Valve Problem	Normal/Alarm
<p>^a Values noted for LDIs and LDOs are in the following format: OFF text/ON text.</p> <p>^b This column indicates the value/range or engineering units or both if known.</p> <p>^c The default English value is not italicized. An italicized entry indicates an SI value.</p>			

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