

AURORA

Aurora Universal Protocol Converter (UPC)

BACnet Points List For Dual Compressor WSHP

Software Version 1.01 Utilizing the Aurora UPC Controller

Aurora UPC BACnet Points List For Dual Compressor

BACnet Points for Dual Compressor WSHP

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
1	AV	ABC FW BETA_an_A	abc_fw_beta_an_a	R		no units	Do Not Map to BAS		
2	AV	ABC FW BETA_an_B	abc_fw_beta_an_b	R		no units	Do Not Map to BAS		
3	AV	ABC FW Rev_an_A	abc_fw_rev_an_a	R		no units	Do Not Map to BAS		
4	AV	ABC FW Rev_an_B	abc_fw_rev_an_b	R		no units	Do Not Map to BAS		
5	AV	ABC_LAT_an_A	abc_lat_an_a	R		°F	Displays the leaving air temperature that is connected to the FP2 input on ABC A.		
6	AV	Acc1 Delay_c_A	acc1_delay_c_a	R/W	90	seconds	Allows for the network to adjust the time delay of the ACC-1 output on circuit A.		
7	AV	Acc1 Delay_c_B	acc1_delay_c_b	R/W	90	seconds	Allows for the network to adjust the time delay of the ACC-1 output on circuit B.		
8	AV	ActiveSetPt_an	active_setpt_an	R		°F	Displays the set point that is controlling the call for the compressor.		
9	AV	*Aux_Current_an_A	aux_current_an_a	R		A	Displays the amp draw for the Auxiliary output on circuit A or B if the AXB and sensing hardware is present.		
10	AV	*Aux_Current_an_B	aux_current_an_b	R		A			
11	AV	*Aux_Output_Pwr_an_A	aux_output_pwr_an_a	R		W	Displays the watt usage for Auxiliary output on circuit A or B if the AXB and sensing hardware is present.		
12	AV	*Aux_Output_Pwr_an_B	aux_output_pwr_an_b	R		W			
13	AV	*AXB Spare Analog Input_an_A	axb_spare_ana_input_an_a	R		°F	Displays the Spare Analog output value located on the AXB for circuit A or B.		
14	AV	*AXB Spare Analog Input_an_B	axb_spare_ana_input_an_b	R		°F			
15	AV	*AXB_PWM_High Output_c_A	axb_pwm_high_c_a	R/W	100	%	Commandable point that allows for the PWM output on AXB A or B to controlled.		
16	AV	*AXB_PWM_High Output_c_B	axb_pwm_high_c_b	R/W	100	%			
17	AV	*AXB_LAT_an_A	axb_lat_an_a	R		°F	Displays the value of the sensor connected to the leaving air temperature input on the AXB Board A or B is sensing hardware and AXB is present.		
18	AV	*AXB_LAT_an_B	axb_lat_an_b	R		°F			
19	AV	*AXB_PWM_Low_output_c_A	axb_pwm_low_c_a	R/W	75	%	Commandable point that allows for the PWM output on the AXB A or B to controlled thru the BAS the AXB is present.		
20	AV	*AXB_PWM_Low_output_c_B	axb_pwm_low_c_b	R/W	75	%			
21	AV	Blower_Off_Adjust_c	blower_off_adjust_c	R/W	30	seconds	Commandable point allows for adjustment of the time that the blower stays on after the compressor shuts off if the blower is set for cycled operation.		
22	AV	*Circuit_A_EER_an	circuit_a_eer_an	R		no units	Displays the EER calculation of circuit A or B if the AXB and sensing hardware are present		
23	AV	*Circuit_B_EER_an	circuit_b_eer_an	R		no units			
24	AV	*Clg_Subcooling_an_A	clg_subcooling_an_a	R		°F	Displays the sub cooling calculation of circuit A or B if the AXB and sensing hardware are present		
25	AV	*Clg_Subcooling_an_B	clg_subcooling_an_b	R		°F			
26	AV	CO2_an	co2_an	R		ppm	Displays the CO2 value if the zones sensor is equipped with the sensor		
27	AV	CO2_c	co2_c	R/W	0	ppm	Allows for the BAS to write the CO2 value to the UPC if desired.		
28	AV	Coax Temp_an_A	coax_temp_an_a	R		°F	Displays the temperature of the refrigerant at the Coax associated with circuit A on ABC A.		
29	AV	Coax Temp_an_B	coax_temp_an_b	R		°F	Displays the temperature of the refrigerant at the Coax associated with circuit B on ABC B.		
30	AV	*Coefficient_Of_Performance_an_A	coefficient_of_performance_an_a	R		no units	Displays the calculated C.O.P of circuit A or B if the AXB and sensing hardware is present.		
31	AV	*Coefficient_Of_Performance_an_B	coefficient_of_performance_an_b	R		no units			

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
32	AV	*Combined_HE_HR_Total_an	combined_he_hr_total_an	R		Btu/hr	Displays the heat of extraction and heat of rejection calculation of both circuits if the AXB and sensing hardware is present.		
33	AV	*Combined_Total_Capacity_an	combined_total_capacity_an	R		Btu/hr	Calculates and displays the combined capacity of both circuits if both AXB's and sensing hardware is present.		
34	AV	*Combined_Total_Power_an	combined_total_power_an	R		W	Calculates and displays the combined total power of both circuits if both AXB's and sensing hardware is present.		
35	AV	*Compressor Power_an_A	compressor_power_an_a	R		W	Calculates and displays the compressor power of circuit A or B if the AXB and sensing hardware is present.		
36	AV	*Compressor Power_an_B	compressor_power_an_b	R		W			
37	AV	*Compressor_1_Current_an_A	compressor_1_current_an_a	R		A	Displays the compressor amp draw on L1 or L2 on circuit A or B if the AXB and sensing hardware is present.		
38	AV	*Compressor_2_Current_an_B	compressor_2_current_an_b	R		A			
39	AV	*Comp_1_Current_an_A	comp_1_current_an_a	R		A	Displays the compressor amp draw on L1 or L2 on circuit A or B if the AXB and sensing hardware is present.		
40	AV	Comp_2_Current_an_B	comp_2_current_an_b	R		A			
41	AV	*Condensor_Temp_an_A	condensor_temp_an_a	R		°F	Displays the condensor temperature for circuit A or B if the AXB and sensing hardware is present.		
42	AV	*Condensor_Temp_an_B	condensor_temp_an_b	R		°F			
43	AV	Control Voltage_an_A	control_voltage_an_a	R		V	Displays the low voltage circuit value that is powering the ABC A and B.		
44	AV	Control Voltage_an_B	control_voltage_an_b	R		V			
45	AV	Dehum_Diff_c	dehum_diff_c	R/W	5	%rh	Allows for adjustment of the dehumidify dead band value, default value is 5%rh.		
46	AV	*Discharge_Line_Temp_an_A	discharge_line_temp_an_a	R		°F	Displays the discharge line temperature for circuit A or B if the AXB and sensing hardware is present.		
47	AV	*Discharge_Line_Temp_an_B	discharge_line_temp_an_b	R		°F			
48	AV	*Dischg Press_an_A	dischg_press_an_a	R		psi	Displays the discharge line pressure for circuit A or B if the AXB A and sensing hardware is present.		
49	AV	*Dischg Press_an_B	dischg_press_an_b	R		psi			
50	AV	*Dom_Hot_Wtr_A	dom_hot_wtr_an_a	R		°F	Do Not Map to BAS		
51	AV	*Dom_Hot_Wtr_B	dom_hot_wtr_an_b	R		°F	Do Not Map to BAS		
52	AV	*Econo_Sample_an	econo_sample_an	R/W	90	seconds	Allows for the adjustment of economizer sample timer that is used to check economizer water temperatures when equipped with hardware.		
53	AV	*Economizer Setpt_c	economizer_setpt_c	R/W	45	°F	Allows for adjustment of the economizer set point value.		
54	AV	*Economizer Water Temp_an	economizer_water_temp_an	R		°F	Displays the economizer water temperature that is being read if the hardware is present.		
55	AV	EffOccupy_an	eff_occ_an	R		no units	Displays the effective occupancy of the unit.	[1 = Occupied] [2 = Unoccupied] [3 = Temp Occ] [4 = Standby] [5 = Occ Sensor]	
56	AV	Est_Line_Voltage_an_A	est_line_voltage_an_a	R		V	Displays the estimated line voltage to the unit, this can be calibrated using point AV-86.		
57	AV	Est_Line_Voltage_an_B	est_line_voltage_an_b	R		V			
58	AV	*EWT_an_A	entering_wtr_temp_an_a	R		°F	Displays the value of the EWT input if AXB A or B and the sensing hardware is present.		
59	AV	*EWT_an_B	entering_wtr_temp_an_b	R		°F			

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
60	AV	Factory DipSw Ovrld_c_A	factory_dip_sw_ovrd_c_a	R/W	32767	no units	Do Not Map to BAS		
61	AV	Factory DipSw Ovrld_c_B	factory_dip_sw_ovrd_c_b	R/W	32767	no units	Do Not Map to BAS		
62	AV	*Fan Current_an_A	fan_current_an_a	R		A	Displays the amp draw of the fan when AXB A or B and sensing hardware is present.		
63	AV	*Fan Current_an_B	fan_current_an_b	R		A			
64	AV	Fan Power_an_A	fan_power_an_a	R		W	Displays the fan power for circuit A or B if AXB and sensing hardware is present.		
65	AV	Fan Power_an_B	fan_power_an_b	R		W			
66	AV	Filter_Alarm_Hours_c	filter_alarm_hours_c	R/W	1000	no units	Allows for adjustment to the filter alarm hours, adjust this value to set the number of fan run hours.		
67	AV	Filter_Hours_an	filter_hours_an	R		hr	Displays the number of fan run hours since the last filter alarm reset.		
68	AV	Fp1 Setpt_an_A	fp1_setpoint_an_a	R		°F	Displays the FPI freeze detection limit (coax temp) for circuit A.		
69	AV	Fp1 Setpt_an_B	fp1_setpoint_an_b	R		°F	Displays the FPI freeze detection limit (coax temp) for circuit B.		
70	AV	*HE/HR_an_A	he_hr_an_a	R		Btu/hr	Calculates and displays the heat of rejection and heat of extraction for circuit A or B if the AXB A and sensing hardware is present.		
71	AV	*HE/HR_an_B	he_hr_an_b	R		Btu/hr			
72	AV	*Hgt_Subcooling_an_A	hgt_subcooling_an_a	R		°F	Calculates and displays the sub cooling value for circuit A or B when operating in heating if the AXB A and sensing hardware is present.		
73	AV	*Hgt_Subcooling_an_B	hgt_subcooling_an_b	R		°F			
74	AV	Humidity_an	humidity_an	R		%rh	Displays the humidity value of the zone sensor if it is equipped with a humidity sensor.		
75	AV	Humidity_c	humidity_c	R/W	0	%rh	Allows for the BAS to override the space humidity value if desired.		
76	AV	*Liq Line Temp_an_A	liq_line_temp_an_a	R		°F	Displays the heating liquid line temperature for circuit A or B if the AXB and sensing hardware is present.		
77	AV	*Liq Line Temp_an_B	liq_line_temp_an_b	R		°F			
78	AV	LO_Stat_Reg_an_A	lo_stat_reg_an_a	R		no units	Do Not Map to BAS		
79	AV	LO_Stat_Reg_an_B	lo_stat_reg_an_b	R		no units	Do Not Map to BAS		
80	AV	Lockouts Enum an_A	lockouts_enumerated_an_a	R		no units	Displays alarm values for ABC A or B, refer to the dual compressor alarms table "AV" column for a list of enumerated alarm descriptions.		
81	AV	Lockouts Enum an_B	lockouts_enumerated_an_b	R		no units			
82	AV	*Loop_Pressure_an_A	loop_pressure_an_a	R		psi	Displays the loop pressure for circuit A or B if the AXB and sensing hardware is present.		
83	AV	*Loop_Pressure_an_B	loop_pressure_an_b	R		psi			
84	AV	*LWT_an_A	lv_g_wtr_temp_an_a	R		°F	Displays the value of the LWT Input on circuit A or B if the AXB and sensing hardware is present.		
85	AV	*LWT_an_B	lv_g_wtr_temp_an_b	R		°F			
86	AV	Measured_Line_Voltage_c	measured_line_voltage_c	R/W	230	V	Allows for calibration of the line voltage reading, measure the incoming line voltage and enter the value here, this is used to improve the accuracy of the performance monitoring data.		
87	AV	Mode_st_an	mode_st_an	R		no units	Displays the operation mode of the unit, refer to the mode of operations table for a description of modes.		
88	AV	*Network_Loop_Temp_c	network_loop_temp_c	R/W	0	°F	Allows for the BAS to write the loop temperature value that is used in the economizer portion of the control program, BV-88 must be set to "Network" or "Active" for this override to work.		

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
89	AV	OAT_an	oat_an	R		°F	Displays the outdoor air temperature if the BAS is sending a value to AV-90.		
90	AV	OAT_c	oat_c	R/W	0	°F	Allows for the BAS to write the outdoor air temperature to the UPC, this temperature is not used in the control strategy.		
91	AV	OccDehumSetpt_c	occ_dehum_setpt_c	R/W	53	%rh	Allows for the adjustment of the occupied dehumidify set point, if the unit is not equipped reheat this value will have no effect on the units operation.		
92	AV	OccManCmd_c	occ_man_cmd_an_c	R/W	1	no units	Allows for the BAS to command the occupancy of the unit if BV-101 is set for "AV" or "Active". If BV-101 is not set for Active or AV then commands to this AV will be ignored.		
93	AV	Rem Setpt Span_c	rem_setpt_span_c	R/W	5	°F	Allows for adjustment to the space temperature set point span, the span is the amount adjustment the zone sensor can influence the effective set points.		
94	AV	*SAT_Evap_Temp_an_A	sat_evap_temp_an_a	R		°F	Displays the saturated evaporator temperature for circuit A or B if the AXB and sensing hardware is present.		
95	AV	*SAT_Evap_Temp_an_B	sat_evap_temp_an_b	R		°F			
96	AV	Set point	clg_adj_an	R/W		°F	Displays and Allows for the adjustment of the effective cooling set point, this point is the same as adjusting the zone sensor's temp offset.		
97	AV	Set point	eff_clg_sp_an	R/W		°F	Displays the effective cooling set point.		
98	AV	Set point	eff_htg_sp_an	R/W		°F	Displays the effective heating set point.		
99	AV	Set point	htg_adj_an	R/W		°F	Displays and Allows for the adjustment of the effective heating set point, this point is the same as adjusting the zone sensor's temp offset.		
100	AV	Set point	occ_clg_sp_c	R/W		°F	Displays and sets the occupied cooling set point.		
101	AV	Set point	occ_htg_sp_c	R/W		°F	Displays and sets the occupied heating set point.		
102	AV	Set point	unocc_clg_sp_c	R/W		°F	Displays and sets the unoccupied cooling set point.		
103	AV	Set point	unocc_htg_sp_c	R/W		°F	Displays and sets the unoccupied heating set point.		
104	AV	Standby_Cool_c	standby_cool_c	R/W	76	°F	Displays and sets the standby cooling set point.		
105	AV	Standby_Heat_c	standby_heat_c	R/W	68	°F	Displays and sets the standby heating set point.		
106	AV	*Suct Press_an_A	suction_press_an_a	R		psi	Displays the suction pressure of circuit A or B if AXB and sensing hardware is present.		
107	AV	*Suct Press_an_B	suction_press_an_b	R		psi			
108	AV	*Suct Temp_an_A	suct_temp_an_a	R		°F	Displays the suction temperature of circuit A or B if AXB and sensing hardware is present.		
109	AV	*Suct Temp_an_B	suct_temp_an_b	R		°F			
110	AV	*SuperHeat_an_A	super_heat_an_a	R		°F	Displays the super heat of circuit A or B if AXB and sensing hardware is present.		
111	AV	*SuperHeat_an_B	super_heat_an_b	R		°F			
112	AV	SW Part No_an_A	sw_part_no_an_a	R		no units	Do Not Map to BAS		
113	AV	SW Part No_an_B	sw_part_no_an_b	R		no units	Do Not Map to BAS		
114	AV	Temporary Occupancy Time Remaining_an	temp_occ_time_an	R		m/sec	Displays the amount of time left in temporary occupancy only while in Temp Occ.		
115	AV	Test Md Pwd_c	test_md_pwd_c	R/W	0	no units	Do Not Map to BAS		

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
116	AV	*Total Capacity_an_A	total_capacity_an_a	R		Btu/hr	Displays the calculated value for circuit A or B's total capacity if the AXB and sensing hardware is present.		
117	AV	*Total Capacity_an_B	total_capacity_an_b	R		Btu/hr			
118	AV	*Total Power_an_A	total_power_an_a	R		W	Displays the calculated total watt usage for circuit A or B if the AXB and sensing hardware is present.		
119	AV	*Total Power_an_B	total_power_an_b	R		W			
120	AV	*Total_Amps_an_A	total_amps_an_a	R		A	Displays the calculated total amp draw for circuit A or B if the AXB and sensing hardware is present.		
121	AV	*Total_Amps_an_B	total_amps_an_b	R		A			
122	AV	Tstat Ovrld_c	tstat_ovrd_c	R/W	0	no units	Do Not Map to BAS		
123	AV	*Universal_Input_an_A	universal_input_an_a	R		no units	Displays the raw count value of the universal input if the AXB and sensing hardware is present.		
124	AV	*Universal_Input_an_B	universal_input_an_b	R		no units			
125	AV	Unnoc Dehum Setpt_c	unocc_dehum_setpt_c	R/W	75	%rh	Allows for the unoccupied dehumidify set point to be adjusted from the BAS.		
126	AV	*Variable Speed pump output_an_A	var_spd_pmp_output_an_a	R		%	Displays the operating % of the output for circuit A or B if the AXB and sensing hardware is present.		
127	AV	*Variable Speed pump output_an_B	var_spd_pmp_output_an_b	R		%			
128	AV	VOC_an	voc_an	R		ppm	Displays the parts per million of volatile organic compounds in the space if the zone sensor is equipped with the VOC Sensor.		
129	AV	VOC_c	voc_c	R/W	0	ppm	Allows for the BAS to write the PPM of VOC's to the UPC Controller for the purpose of displaying the value on a graphic.		
130	AV	*Water Flow_an_A	water_flow_an_a	R		gpm	Displays the GPM flow rate of circuit A or B if the AXB and sensing hardware is present.		
131	AV	*Water Flow_an_B	water_flow_an_b	R		gpm			
132	AV	Zone_Temp_Ovrld_c	zone_temp_ovrd_c	R/W	0	°F	Allows for the Zone Temp to be overridden by the BAS if necessary, need to command BV-136 to "Active or BAS" before the override will work.		
133	AV	ZoneTemp_an	zone_temp_an	R		°F	Displays the Zone Temp as read by the zone sensors, if more than one sensor is used the temperatures will be averaged within the UPC and average is displayed.		
134	AV	ZoneTmpAdj_c	zone_temp_adj_c	R/W	0	°F	Displays and allows for the zone temperature reading on the BAS to be adjusted, this is used to calibrate the value displayed at BAS. The Aurora Touch Interface is used to calibrate the sensors display and BAS reading.		
135	AV	point name_c	m409_c	R/W	0	no units	Do Not Map to BAS		
136	AV	point name_c	m417_c	R/W	0	no units	Do Not Map to BAS		
137	AV	point name_c	m421_c	R/W	0	no units	Do Not Map to BAS		
138	AV	point name_c	m453_c	R/W	0	no units	Do Not Map to BAS		
139	AV	point name_c	m449_c	R/W	0	no units	Do Not Map to BAS		
140	AV	point name_c	m445_c	R/W	0	no units	Do Not Map to BAS		
141	AV	point name_c	m433_c	R/W	0	no units	Do Not Map to BAS		
142	AV	point name_c	m429_c	R/W	0	no units	Do Not Map to BAS		

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
143	AV	point name_c	m425_c	R/W	0	no units	Do Not Map to BAS		
144	AV	point name_c	m488_c	R/W	0	no units	Do Not Map to BAS		
145	AV	point name_c	m494_c	R/W	0	no units	Do Not Map to BAS		
146	AV	point name_c	m495_c	R/W	0	no units	Do Not Map to BAS		
147	AV	point name_c	m496_c	R/W	0	no units	Do Not Map to BAS		
148	AV	point name_c	m497_c	R/W	0	no units	Do Not Map to BAS		
149	AV	point name_c	m498_c	R/W	0	no units	Do Not Map to BAS		
150	AV	point name_c	m441_c	R/W	0	no units	Do Not Map to BAS		
151	AV	point name_c	m500_c	R/W	0	no units	Do Not Map to BAS		
152	AV	point name_c	m501_c	R/W	0	no units	Do Not Map to BAS		
154	AV	R10_c	m555_c	R/W	120	no units	Do Not Map to BAS		
155	AV	R11_1_an_A	m558_an	R		no units	Do Not Map to BAS		
156	AV	R11_an_B	m2006_1_an	R		no units	Do Not Map to BAS		
157	AV	R12_c	m557_c	R/W	1	seconds	Do Not Map to BAS		
158	AV	R13_c	m563_c	R/W	0	seconds	Do Not Map to BAS		
159	AV	R15_c	m567_c	R/W	76	seconds	Do Not Map to BAS		
160	AV	R16_1_an_A	m560_an	R		no units	Do Not Map to BAS		
161	AV	R16_2_an_B	m2011_an	R		no units	Do Not Map to BAS		
162	AV	R17_c	m569_c	R/W	120	seconds	Do Not Map to BAS		
163	AV	R18_c	m571_c	R/W	0	seconds	Do Not Map to BAS		
164	AV	R1_an_A	m545_an	R		no units	Do Not Map to BAS		
165	AV	R1_an_B	m1999_an	R		no units	Do Not Map to BAS		
166	AV	R21_1_an_A	m535_an	R		no units	Do Not Map to BAS		
167	AV	R21_2_an_B	m2014_an	R		no units	Do Not Map to BAS		
168	AV	R22_c	m574_c	R/W	0	no units	Do Not Map to BAS		
169	AV	R23_an_A	m576_an	R		no units	Do Not Map to BAS		
170	AV	R23_an_B	m2015_an	R		no units	Do Not Map to BAS		
171	AV	R24_c	m579_c	R/W	1	no units	Do Not Map to BAS		
172	AV	R25_an_A	m578_an	R		no units	Do Not Map to BAS		
173	AV	R25_an_B	m2024_an	R		no units	Do Not Map to BAS		
174	AV	R26_an_A	m582_an	R		no units	Do Not Map to BAS		

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
175	AV	R26_an_B	m2025_an	R		no units	Do Not Map to BAS		
176	AV	R27_an_A	m584_an	R		no units	Do Not Map to BAS		
177	AV	R27_an_B	m2029_an	R		no units	Do Not Map to BAS		
178	AV	R28_an_A	m586_an	R		no units	Do Not Map to BAS		
179	AV	R28_an_B	m2033_an	R		no units	Do Not Map to BAS		
180	AV	R29_an_A	m588_an	R		no units	Do Not Map to BAS		
181	AV	R29_an_B	m2037_an	R		no units	Do Not Map to BAS		
182	AV	R30_an_A	m590_an	R		no units	Do Not Map to BAS		
183	AV	R30_an_B	m2041_an	R		no units	Do Not Map to BAS		
184	AV	R31_an_A	m592_an	R		no units	Do Not Map to BAS		
185	AV	R31_an_B	m2045_an	R		no units	Do Not Map to BAS		
186	AV	R33_an_A	m594_an	R		no units	Do Not Map to BAS		
187	AV	R33_an_B	m2049_an	R		no units	Do Not Map to BAS		
188	AV	R343_c	m598_c	R/W	32767	no units	Do Not Map to BAS		
189	AV	R344_an_A	m599_an	R		no units	Do Not Map to BAS		
190	AV	R344_an_B	m2055_an	R		no units	Do Not Map to BAS		
191	AV	R34_c	m596_c	R/W	60	seconds	Do Not Map to BAS		
192	AV	R3_an_A	m547_an	R		no units	Do Not Map to BAS		
193	AV	R3_an_B	m2001_an	R		no units	Do Not Map to BAS		
194	AV	R5_c	r5_c	R/W	240	no units	Do Not Map to BAS		
195	AV	R6_c	m549_c	R/W	0	no units	Do Not Map to BAS		
196	AV	R7_c	m551_c	R/W	0	no units	Do Not Map to BAS		
197	AV	R9_c	m553_c	R/W	120	no units	Do Not Map to BAS		
198	AV	AXB_AO1_c_A	axb_ao1_c_a	R/W	0	%	Used to command the analog output 1 on AXB "A".		
199	AV	AXB_AO1_c_B	axb_ao1_c_b	R/W	0	%	Used to command the analog output 1 on AXB "B".		
Note - "*" Requires AXB			Binary Values					State Text	
1	BV	ABC Modbus Comm Alarm_st_A	abc_modbus_comm_alarm_st_a	R			Displays the status of the Modbus communication between the ABC A and the UPC.	Communication Normal	Communication Lost
2	BV	ABC Modbus Comm Alarm_st_B	abc_modbus_comm_alarm_st_b	R				Communication Normal	Communication Lost
3	BV	Acc 1 Status_st_A	acc1_st_a	R			Displays the status of the ACC-1 output on ABC A, this output will always energize 90 seconds before the compressor contactor is energized.	Off	On

BACnet Points for Dual Compressor WSHP cont.

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Object ID	Object Type	Display Name <small>*-Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
4	BV	Acc 1 Status_st_B	acc1_st_b	R			Displays the status of the ACC-1 output ABC B, this output is configured using the ABC B dipswitches.	Off	On
5	BV	Add Device Enable_c	add_device_enable_c	R/W	Inactive (0)		Used to add communicating devices to the Aurora Control Boards.	Off	On
6	BV	Alarm Reset Command_st	alarm_reset_cmd_st	R			Displays the commanded status of the alarm reset command.	Off	On
7	BV	Alarm Reset_c	alarm_reset_c	R/W	Inactive (0)		Allows for the network to command the alarm reset, to clear the alarm command to "ON" then Back to "OFF".	Off	On
8	BV	ALM_RHt_HDW_st_A	alm_rht_hdw_st_a	R			Displays the status of the ABC A or B's alarm/reheat output. If configured with reheat, this output will show Active(ON) when the unit is operating in reheat.	Off	On
9	BV	ALM_RHt_HDW_st_B	alm_rht_hdw_st_b	R				Off	On
10	BV	Aux Heat Command_st	aux_heat_cmd_st	R			Displays the status of the aux heat command.	Off	On
11	BV	Aux_Heat_Ena_c	aux_heat_ena_c	R/W	Active (1)		Allows for the network to select how the E.H.-1 output is controlled, if set to Aux heat the P.I.D. loop will enable and disable the output.	Network EH	Aux Heat
12	BV	AXB Enable_c_A	axb_enable_c_a	R/W	Inactive (0)		Used along with BV-5 to add the AXB to either ABC A or B. AXB hardware needs to present to prevent nuisance alarms.	No AXB	AXB Present
13	BV	AXB Enable_c_B	axb_enable_c_b	R/W	Inactive (0)			No AXB	AXB Present
14	BV	Brine_Selection_c	brine_selection_c	R/W	Inactive (0)		Allows for the selection of the anti-freeze concentration for the use of performance monitoring calculations only.	Water	Anti-Freeze
15	BV	CC_Op_Cfg_st_A	cc_op_cfg_st_a	R			Do Not Map to BAS.	Do Not Map	Do Not Map
16	BV	CC_Op_Cfg_st_B	cc_op_cfg_st_b	R			Do Not Map to BAS.	Do Not Map	Do Not Map
17	BV	Clear Faults_c	clear_faults_c	R/W	Inactive (0)		Do Not Map to BAS.	Do Not Map	Do Not Map
18	BV	Compr Hi Capy Status_st_A	high_capacity_st_a	R			Do Not Map to BAS.	Do Not Map	Do Not Map
20	BV	Compressor Status_st_A	compressor_st_a	R			Displays the status of the ABC A or B's output for the compressor operation.	Off	On
21	BV	Compressor Status_st_B	compressor_st_b	R				Off	On
22	BV	Condensate_st_A	condensate_st_a	R			Displays the status of the condensate input on ABC A or B.	Normal	Alarm
23	BV	Condensate_st_B	condensate_st_b	R				Normal	Alarm
24	BV	D SW1_c_A	sw2_1_c_a	R/W	Inactive (0)		Used to select the position of dip SW2-1 on ABC A which selects the freeze detection set point.	15°	30°
25	BV	D SW1_c_B	sw2_1_c_b	R/W	Active (1)		Used to select the position of dip SW2-1 on ABC B which selects the freeze detection set point.	15°	30°
26	BV	D SW2_c_A	sw2_2_c_a	R/W	Active (1)		Do Not Map To BAS.	Not Used	Not Used
27	BV	D SW2_c_B	sw2_2_c_b	R/W	Active (1)		Do Not Map To BAS.	Not Used	Not Used
28	BV	D SW3_c_A	sw2_3_c_a	R/W	Active (1)		Used to select the position of dip SW1-3 on ABC A, this selects the default position of the reversing valve.	Cooling	Heating

BACnet Points for Dual Compressor WSHP cont.

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
29	BV	D SW3_c_B	sw2_3_c_b	R/W	Active (1)		Used to select the position of dip SW1-3 on ABC B, this selects the default position of the reversing valve.	Cooling	Heating
30	BV	D SW4_c_A	sw2_4_c_a	R/W	*Factory Set		Will have no effect of the Acc 1 Output on ABC A. This output is energized 90 seconds before the compressor.	Slow Opening Water Valve	
31	BV	D SW4_c_B	sw2_4_c_b	R/W	Active (1)		Used along with Dip SW1-5 on ABC B to select the operation of the ACC1 output for circuit B.	Refer to DIP Switch settings table for explanation on how to set these switches.	
32	BV	D SW5_c_A	sw2_5_c_a	R/W	*Factory Set		Will have no effect of the Acc 1 Output on ABC A. This output is energized 90 seconds before the compressor.	Slow Opening Water Valve	
33	BV	D SW5_c_B	sw2_5_c_b	R/W	Inactive (0)		Used along with Dip SW1-4 on ABC B to select the operation of the ACC1 output for circuit B.	Refer to DIP Switch settings table for explanation on how to set these switches.	
34	BV	D SW6_c_A	sw2_6_c_a	R/W	Inactive (0) *Factory Set		Used to select the position of dip SW1-6 on ABC A which selects dual capacity or single capacity operation.	Dual Capacity	Single Capacity
35	BV	D SW6_c_B	sw2_6_c_b	R/W	Inactive (0) *Factory Set		Used to select the position of dip SW1-6 on ABC B which selects dual capacity or single capacity operation.	Dual Capacity	Single Capacity
36	BV	D SW7_c_A	sw2_7_c_a	R/W	Active (1)		Used to select the position of dip SW1-7 which selects a pulsed or continuous signal for the Alarm Output.	Pulsed	Continuous
37	BV	D SW7_c_B	sw2_7_c_b	R/W	Active (1)		Used to select the position of dip SW1-7 which selects a pulsed or continuous signal for the Alarm Output.	Pulsed	Continuous
38	BV	D SW8_c_A	sw2-8_c_a	R/W	Active (1) *Factory Set		Used to select the position of dip SW1-8 which is factory set for either reheat or normal operation.	Reheat	Normal
39	BV	D SW8_c_B	sw2-8_c_b	R/W	Active (1) *Factory Set		Used to select the position of dip SW1-8 which is factory set for either reheat or normal operation.	Reheat	Normal
40	BV	Dehumidification Command_st	dh_cmd_st	R			Displays the status of the dehumidification command.	Off	On
41	BV	DH Disable_c	dh_disable_c	R/W	Inactive (0)		Allows for the network to enable/disable dehumidification.	DH Disabled	DH Enabled
42	BV	DH_HDW_st_A	dehum_hdw_st_a	R			Displays the status of DH hardware input on ABC A or B.	Off	On
43	BV	DH_HDW_st_B	dehum_hdw_st_b	R				Off	On
44	BV	Dip Sw Ovrdr Ena_c_A	dip_sw_ovrd_ena_c_a	R/W	Inactive (0)		Used to enable the BAS write privileges for dip switch overrides on ABC A or B, Overrides are BV-24 thru BV-39.	Off	On
45	BV	Dip Sw Ovrdr Ena_c_B	dip_sw_ovrd_ena_c_b	R/W	Inactive (0)			Off	On
46	BV	Dip Switch Ovrdr Release_c_A	dipswithovrdrelease_c_a	R/W	Inactive (0)		Used to release the dip switch overrides made on BV-24 thru BV-39	Off	On
47	BV	Dip Switch Ovrdr Release_c_B	dipswithovrdrelease_c_b	R/W	Inactive (0)			Off	On
48	BV	Dirty_Filter_Alarm_st	dirty_filter_alarm_st	R			Displays alarm associated with the dirty filter timer.	Normal	Change Filter

BACnet Points for Dual Compressor WSHP cont.

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
49	BV	Economizer_Ena_c	economizer_ena_c	R/W	Inactive (0)		Allows for the network to enable the economizer control feature of the program.	Disabled	Enabled
50	BV	EH1 Status_st	eh_1_st	R			Displays the status of the E.H.-1 output on ABC A.	Off	On
51	BV	EH3 Status_st	eh_3_st	R			Displays the status of the E.H.-3 output on ABC B.	Off	On
52	BV	EH1_Ovrd_c	eh1_ovrd_c	R/W	Inactive (0)		Allows for network to command E.H.-1 output relay on ABC A if BV-11 is set to active or network.	Off	On
53	BV	EH2 Mode_c	eh2_mode_c	R/W	Active (1)		Allows for the network to select how the E.H.-2 output on ABC A is controlled, if set to Aux heat the P.I.D. loop will enable and disable the output.	Aux Heat	Network EH
54	BV	EH2 Status_st	eh_2_st	R			Displays the status of the E.H.-2 output on ABC A.	Off	On
55	BV	EH2 Status_st	eh_4_st	R			Displays the status of the E.H.-4 output on ABC B.	Off	On
56	BV	EH2_Ovrd_c	eh2_ovrd_c	R/W	Inactive (0)		Allows for network to command E.H.-2 output relay on ABC A if BV-53 is set to active or network.	Off	On
57	BV	EH3 Mode_c	eh3_mode_c	R/W	Active (1)		Allows for the network to select how the E.H.-3 output is controlled, if set to Aux heat the P.I.D. loop will enable and disable the output.	Aux Heat	Network EH
58	BV	EH3_Ovrd_c	eh3_ovrd_c	R/W	Inactive (0)		Allows for network to command E.H.-3 output relay on ABC B if BV-57 is set to active or network.	Off	On
59	BV	EH4 Mode_c	eh4_mode_c	R/W	Active (1)		Allows for the network to select how the E.H.-4 output is controlled, if set to Aux heat the P.I.D. loop will enable and disable the output.	Aux Heat	Network EH
60	BV	EH4_Ovrd_c	eh4_ovrd_c	R/W	Inactive (0)		Allows for network to command E.H.-4 output relay on ABC B if BV-59 is set to active or network.	Off	On
61	BV	Emgcy Shutdn_c	e_stop_c	R/W	Inactive (0)		Allows for the network to issue a emergency shutdown command to the unit.	Normal Operation	Shutdown
62	BV	ES_HDW_st_A	es_hdw_st_a	R			Displays the status of the emergency shutdown hardware input on ABC A or B.	Normal	Shutdown
63	BV	ES_HDW_st_B	es_hdw_st_b	R				Normal	Shutdown
64	BV	Factory Test Ena_c	factory_test_ena_c	R/W	Inactive (0)		Do Not Map to BAS	Do Not Map	Do Not Map
65	BV	Fan Operation_c	fan_operation_c	R/W	Active (1)		Allows for the network to select either cycled or continuous operation of the fan.	Cycled	Continuous
66	BV	Fan Status_st_A	fan_st_a	R			Displays the output status of the ABC A or B's fan output.	Off	On
67	BV	Fan Status_st_B	fan_st_b	R				Off	On
68	BV	Filter_Alm_Reset_c	filter_alm_reset_c	R/W	Inactive (0)		Used to reset the dirty filter alarm after the filter has been changed.	Off	On
69	BV	FP1_Lim_st_A	fp1_lim_st_a	R			Displays current freeze detection set point of ABC A.	15°	30°
70	BV	FP1_Lim_st_B	fp1_lim_st_b	R			Displays current freeze detection set point of ABC B.	15°	30°

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
71	BV	G Cmd_st	g_cmd_st	R			Displays status of the UPC fan command to the unit.	Off	On
72	BV	G_HDW_st_A	g_hdw_fan_proving_input_st_a	R			Displays the status of the "G" hardware input on ABC A, this is used as a fan proving input, requires field installed current switch.	Off	On
73	BV	G_HDW_ST_B	g_hdw_fan_proving_input_st_b	R			Displays the status of the "G" hardware input on ABC B, this is used as a fan proving input, requires field installed current switch.	Off	On
74	BV	Heat Cool Command_st	heat_cool_st	R			Displays the command the UPC is sending to the reversing valves on both ABC A and B.	Heating	Cooling
75	BV	High_Press_HDW_ST_A	high_press_hdw_st_a	R			Displays the status of the high pressure hardware input on ABC A and B.	Open	Closed
76	BV	High_Press_HDW_ST_B	high_press_hdw_st_b	R				Open	Closed
77	BV	Internal_External Scheduling_st	internal_external_scheduling_st	R	Active (1)		Used to select which schedule is used to control the unit occupancy. Occupied internal schedule = 7:30 - 5:00 Mon-Fri EST.	Internal	External
78	BV	Lead_Lag_Ena_c	lead_lag_ena_c	R/W	Active (1)		Used to enable/disable the compressor lead lag control.	Off	On
79	BV	Load Shed_c	load_shed_c	R/W	Inactive (0)		Allows for the network to enable/disable load shed.	Off	On
80	BV	LOADSHED_st_A	loadshed_st_a	R			Displays the status of the loadshed command from the UPC to ABC A and B.	Normal	Load Shed
81	BV	LOADSHED_st_B	loadshed_st_b	R				Normal	Load Shed
82	BV	Lockout Status_st_A	lockout_st_a	R			Displays the status of the alarm output on ABC A.	Normal	Lockout
83	BV	Lockout Status_st_B	lockout_st_b	R			Displays the status of the alarm output on ABC B.	Normal	Lockout
84	BV	LockOut_CFG_st_A	lockout_cfg_st_a	R			Do Not Map to BAS.	Do not map	Do not map
85	BV	LockOut_CFG_st_B	lockout_cfg_st_b	R			Do Not Map to BAS.	Do not map	Do not map
86	BV	Lockout_HDW_st_A	lockout_hdw_st_a	R			Displays the status of the alarm hardwired output relay for ABC A and B.	Normal	Lockout
87	BV	Lockout_HDW_st_B	lockout_hdw_st_b	R				Normal	Lockout
88	BV	Loop_Temp_Select_c	loop_temp_select_c	R/W	Inactive (0)		Used to select which temperature input is used for the economizer temperature. If set for network, the BAS should write to AV-88.	Sensor	Network
89	BV	LP_HDW_st_A	low_press_hdw_st_a	R			Displays the status of the low pressure switch hardware input on ABC A and B.	Open	Closed
90	BV	LP_HDW_st_B	low_press_hdw_st_b	R				Open	Closed
91	BV	LS_HDW_st_A	load_shed_hdw_st_a	R			Displays the status of the load shed hardware input on ABC A and B.	Normal	Load Shed
92	BV	LS_HDW_st_B	load_shed_hdw_st_b	R				Normal	Load Shed
93	BV	Network DH_c	network_dh_c	R/W	Inactive (0)		Used to issue a dehumidification call to the unit. BV-41 must be set to active for this to work.	Off	On
94	BV	Network G_c	network_g_c	R/W	Inactive (0)		Used to control the fan from the BAS.	Off	On
95	BV	Network O_c	network_o_c	R/W	Inactive (0)		Used to control the reversing valve from the BAS.	Heating	Cooling

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
96	BV	Network W_c	network_w_c	R/W	Inactive (0)		Used to control the EH-1 output on ABC A if BV-11 is set for network control.	Off	On
97	BV	Network Y1_c	network_y1_c	R/W	Inactive (0)		Used to control the compressor call for ABC A.	Off	On
98	BV	Network Y2_c	network_y2_c	R/W	Inactive (0)		Used to control the compressor call for ABC B.	Off	On
99	BV	O_HDW_st_A	o_hdw_occ_sensor_input_st_a	R	Inactive (0)		Allows for an Occupancy Sensor to enable temporary occupancy if BV-102 is set to active and sensor is wired between "R and O" on either ABC A or ABC B.	Off	On
100	BV	O_HDW_st_B	o_hdw_occ_sensor_input_st_b	R	Inactive (0)			Off	On
101	BV	Occ_Cmd_AV-MSV_Select_c	occ_cmd_av-msv_select_c	R/W	Inactive (0)		Used to select which point (AV-92 or MSV-9) is used for commanding occupancy.	MSV	AV
102	BV	Occ_Sensor_Enable_c	occ_sensor_enable_c	R/W	Inactive (0)		Used to enable/disable the field installed Occupancy sensor on the hardwired "O" input on either ABC a or B.	Disabled	Enabled
103	BV	pid_aux_hgt_st	pid_aux_hgt_st	R			Do Not Map To BAS.	Do Not Map	Do Not Map
104	BV	pid_y2_an	pid_y2_an	R			Do Not Map To BAS.	Do Not Map	Do Not Map
105	BV	R800_c	r800_c	R/W	Inactive (0)		Do Not Map To BAS.	Do Not Map	Do Not Map
106	BV	R400_c	r400_c	R/W	Inactive (0)		Do Not Map To BAS.	Do Not Map	Do Not Map
107	BV	R803_c	r803_c	R/W	Inactive (0)		Do Not Map To BAS.	Do Not Map	Do Not Map
108	BV	R812_c	r812_c	R/W	Inactive (0)		Do Not Map To BAS.	Do Not Map	Do Not Map
109	BV	R827_c_A	r827_c_a	R/W	Inactive (0)		Do Not Map To BAS.	Do Not Map	Do Not Map
110	BV	Reheat_CFG_st_A	reheat_cfg_st_a	R	*Factory Set		Displays the position of the D SW1-8 on ABC A that is used to select reheat or non-reheat operation.	Reheat	Normal
111	BV	Reheat_CFG_st_B	reheat_cfg_st_b	R	*Factory Set		Displays the position of the D SW1-8 on ABC B that is used to select reheat or non-reheat operation.	Reheat	Normal
112	BV	Rev Vlv Status_st_A	rev_vlv_st_a	R			Displays the status of both the reversing valve outputs on both ABC control boards.	Heat	Cool
113	BV	Rev Vlv Status_st_B	rev_vlv_st_b	R				Heat	Cool
114	BV	RV_Setup_st_A	rv_setup_st_a	R			Displays the default position of the reversing valve that is set by BV-28 and BV-29.	Cooling	Heating
115	BV	RV_Setup_st_B	rv_setup_st_b	R				Cooling	Heating
116	BV	Schedule Selector Command_c	schedule_selector_c	R/W	Active (1)		Used to select between the internal or external schedule, internal schedule is Occupied 7:30-5:00 Mon-Fri EST.	Internal	External
117	BV	SW1_Test_CFG_st_A	sw1_test_cfg_st_a	R			Displays the status of the SW1 configuration button on ABC A or B, button can be used for enabling test mode.	Off	On
118	BV	SW1_Test_CFG_st_B	sw1_test_cfg_st_b	R				Off	On
119	BV	SW_2_4_st_A	sw_2_4_st_a	R	*Factory Set		Displays the status of the SW2-4 dipswitch.	Slow Opening Water Valve	
120	BV	SW_2_4_st_B	sw_2_4_st_b	R			Displays the status of the SW2-4 dipswitch, used along with BV-122 to select the ACC-1 mode operation for the ABC B.	Refer to the Dip Switch settings table for explanation on how to set these switches.	
121	BV	SW_2_5_st_A	sw_2_5_st_a	R	*Factory Set		Displays the status of the SW2-5 dipswitch.	Slow Opening Water Valve	

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
122	BV	SW_2_5_st_B	sw_2_5_st_b	R			Displays the status of the SW2-5 dipswitch, used along with BV-120 to select the ACC-1 mode operation for the ABC B.	Refer to the Dip Switch settings table for explanation on how to set these switches.	
123	BV	Temp Occ Dis_c	temp_occ_dis_c	R/W	Active (1)		Allows for the network to disable temporary occupancy capabilities.	Disabled	Enabled
124	BV	TempOcc_st	temp_occ_st	R			Displays the status of the temporary occupancy input.	Normal	Temp Occ
125	BV	Test Mode Ena_c	test_mode_ena_c	R/W	Inactive (0)		Do Not Map to BAS	Do Not Map	Do Not Map
126	BV	Test Mode HDW_st_A	test_mode_hdw_st_a	R			Do Not Map to BAS	Do Not Map	Do Not Map
127	BV	Test Mode HDW_st_B	test_mode_hdw_st_b	R			Do Not Map to BAS	Do Not Map	Do Not Map
128	BV	W_HDW_st_A	w_hdw_dirty_filter_input_st_a	R			Displays the status of the "W" hardware input on ABC A or B, this input can be used as a dirty filter input, requires field installed switch.	Off	On
129	BV	W_HDW_st_B	w_hdw_dirty_filter_input_st_b	R				Off	On
130	BV	Y1 Cmd_st	y1_cmd_st	R			Displays the status of the "Y1" command to ABC A from the UPC.	Off	On
131	BV	Y1 HDW_st_A	y1_hdw_comp_proving_input_st_a	R			Displays the status of the "Y1" hardware input on ABC A or B, used as a Compressor proving input, requires field installed hardware.	Off	On
132	BV	Y1 HDW_st_B	y1_hdw_comp_proving_input_st_b	R				Off	On
133	BV	Y2 Cmd_st	y2_cmd_st	R			Displays the status of the "Y2" command to the ABC A from the UPC.	Off	On
134	BV	Y2_HDW_st_A	y2_hdw_vlv_end_sw_input_st_a	R			Displays the status of the "Y2" hardware input on ABC A or B, used as a valve end switch input, requires field installed hardware.	Off	On
135	BV	Y2_HDW_st_B	y2_hdw_vlv_end_sw_input_st_b	R				Off	On
136	BV	Zone_Temp_Selector_c	zone_temp_selector_c	R/W	Inactive (0)		Used to select which zone temp input to operate from, if set to BAS, the temperature must be written by the BAS to AV-132.	Sensor	BAS
137	BV	R10400_c	r10400_c	R/W	Inactive (0)		Do Not Map To BAS.	Do Not Map	Do Not Map
138	BV	R10800_c	r10800_c	R/W	Inactive (0)		Do Not Map To BAS.	Do Not Map	Do Not Map
139	BV	R10812_c	r10812_c	R/W	Inactive (0)		Do Not Map To BAS.	Do Not Map	Do Not Map
140	BV	Archive_Now_c	Archive_Now_c	R/W	Inactive (0)		Used to force the UPC to archive the current configuration.	Off	On

BACnet Points for Dual Compressor WSHP cont.

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Object ID	Object Type	Display Name <small>*=Requires AXB</small>	Reference Name	Read / Write	Default Value	Units	Description	State Text	
								Inactive = 0	Active = 1
<i>Multistate Values</i>									
1	MSV	Blower_Type_Select_c	blower_type_select_c	R/W	1		Do Not Map To BAS	Do Not Map	Do Not Map
2	MSV	EffectiveOccup_st	effect_occup_st	R			Displays the effective occupancy of the unit.	[1 = Occupied] [2 = Unoccupied] [3 = Temp Occ] [4 = Standby]	
3	MSV	*Energy_Monitor_Select_c_A	energy_monitor_select_c_a	R/W	1		Used to select a method of energy monitoring if AXB A or B are present and enabled and sensing hardware is present.	[1 = Off] [2 = Compressor Monitoring] [3 = Energy Monitoring]	
4	MSV	*Energy_Monitor_Select_c_B	energy_monitor_select_c_b	R/W	1				
5	MSV	*Flow_Meter_Select_c_A	flow_meter_select_c_a	R/W	1		Used to select the size of the flow meter if the AXB A are present and flow meter is installed, proper sizing improves performance calculations.	[1 = None] [2 = Small 3/4"] [3 = Large 1"]	
6	MSV	Lockout_Enumerated_st_A	lockout_enumerated_st_a	R			Displays a specific alarm text that is used to describe the alarm condition for ABC A or ABC B.	Refer to the Aurora UPC Dual Compressor alarms table.	
7	MSV	Lockout_Enumerated_st_B	lockout_enumerated_st_b	R					
8	MSV	Mode_of_Operation_st	mode_st	R			Displays the current operating mode of the unit. There are a total of 20 different modes.	Refer to the Mode Of Operations Table.	
9	MSV	OccManCmd_c	occ_man_cmd_c	R/W	1		Used to command the units occupancy, BV-101 has to be set to 'MSV' for this point to work.	[1 = Occupied] [2 = Unoccupied] [3 = Temp Occ] [4 = Standby] [5 = Occ Sensor]	
10	MSV	*Phase_Selection_c	phase_selection_c	R/W	1		Used to select the supply power phase, this selection helps to improve energy monitoring if the AXB and sensing hardware is present.	[1 = Single Phase] [2 = Three Phase]	
11	MSV	*Flow_Meter_Select_c_B	flow_meter_select_c_b	R/W	1		Used to select the size of the flow meter if the AXB B are present and flow meter is installed, proper sizing improves performance calculations.	[1 = None] [2 = Small 3/4"] [3 = Large 1"]	

Modes of Operation for Dual Compressor WSHP

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Dual Compressor Water to Air Modes Of Operation
1 = Standby
2 = Fan Only
3 = Cooling Stage 1
4 = Cooling Stage 2
5 = Hot Gas Reheat
6 = Heating Stage 1
7 = Heating Stage 2
8 = Emergency Heat
9 = Auxiliary Heat
10 = Emergency Shutdown
11 = Load Shed
12 = ABC A Lock-Out
13 = Test Mode
14 = Economizer Mode
15 = ABC B Lout-Out
16 = Full Cool W/Economizer
17 = Dehumidification Mode
18 = 1/2 Capacity W/Lock-Out
19 = Full Lockout Condition
20 = Clg 1 W/Economizer

ABC Dipswitches for Dual Compressor WSHP

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ABC Dip Switch Commandable Override Points

We understand the hassles associated with configuring each unit's controller in a commercial building so we have provided a way to accomplish this thru the Building Automation System or through the ATU interface. The BAS method allows for the control technician to send commands to UPC Controller and set the freeze detection set point or the accessory 1 relay operation through a BAS. The physical dip switch bank that is normally used to configure the unit settings can still be used if desired, but one must make sure that the switches have not already been overridden. A technician can determine if the dip switches have been overridden by the BAS by looking at the yellow LED located on the Aurora Base Controller, if the yellow LED is constantly flashing slow then at least one switch has been overridden. The following procedure must be followed carefully to ensure proper unit configuration. Since we are able to use the BAS to select these settings special care must be taken when doing start-up on the units. The physical switch position can differ from what is set as defaults in the UPC program, so verify and record the actual switch settings before trying to command the points. First thing that needs to be done is to determine what settings are present and what settings need changed. To locate the current switch settings refer to these points for their read only values. Remember that these points represent the current configuration and not necessarily the actual position of the switches, there is a column below that can be used to record the current switch settings.

Dual Compressor Aurora Base Controller A & B Dip Switch Override Read Only Points					
Switch #	Point Address	Point Name	Brief Descriptions	Current Switch Setting	UPC Default Value
1	BV-69	FP1_lim_st_a	Displays the current freeze detection set point for the coax on ABC A & B, (FP1) 15° or 30°		Active (30°F)
	BV-70	FP1_lim_st_b			
2	N/A	N/A	This switch is not used in the Dual Compressor Software.	N/A	N/A
3	BV-114	rv_setup_st_a	Displays the default position of the reversing valve.		Active (heating)
	BV-115	rv_setup_st_b	This switch is set at the factory, and should not require a change.		
4	BV-119	sw_2_4_st_a	Displays the current position of the SW-4 switch on ABC A and on ABC B.		Active (On)
	BV-120	sw_2_4_st_b			
5	BV-121	sw_2_5_st_a	Displays the current position of the SW-5 switch on ABC A and on ABC B.		Inactive (Off)
	BV-122	sw_2_5_st_b			
6	BV-15	cc_op_cfg_st_a	Units built with two compressors will not support this feature. This switch is set at the factory, do not change.		Inactive (Dual Stage)
	BV-16	cc_op_cfg_st_b			

Alarms for Dual Compressor WSHP

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Commercial Alarms Table for the Dual Compressor Aurora with UPC						
Aurora Base Controller with UPC Alarms Table		ABC Red LED Flash Code	Alarm Values Enumerated on AV-80 & AV-81 or ADF-78 & ADF-79 to the BAS	Alarm Values Enumerated on MSV-6 & MSV-7 to the BAS	Lockout	Reset
ABC & AXB Basic Faults	Normal - No Faults	Off	0	1	-	-
	E1 - Fault-Input	1	1	2	No	Auto
	E2 - Fault-High Pressure	2	2	3	Yes	Hard or Soft
	E3 - Fault-Low Pressure	3	3	4	Yes	Hard or Soft
	E4 - Fault-Freeze Detection FP2	4	4	5	Yes	Hard or Soft
	E5 - Fault-Freeze Detection FP1	5	5	6	Yes	Hard or Soft
	E6 - Fault-Loss Of Charge	6	6	7	Yes	Hard or Soft
	E7 - Fault-Condensate Overflow	7	7	8	Yes	Hard or Soft
	E8 - Fault-Over/Under Voltage	8	8	9	No**	Auto
	E9 - Airflow Monitoring	9	9	10	Future	Future
	E10 - Fault-Compressor Monitoring	10	10	11	Yes	Hard or Soft
	E11 - Fault-FP1 Snsr Error	11	11	12	Yes	Hard or Soft
	E12 - Refrigeration Monitoring	12	12	13	Future	Future
	E13 - Non Critical AXB Sensor Error	13	13	14	Future	Future
	E14 - Critical AXB Sensor Error	14	14	15	Future	Future
	E15 - Hot Water Limit	15	15	16	No	Auto
	E16 - Fault-VarSpdPump	16	16	17	No	Auto
	E30 - Zone Sensor Loss of Comm	N/A	30	18	Yes	Auto
	E18 - Non-CritComErr	18	18	19	No	Auto
	E19 - CritComErr	19	19	20	Yes	Auto
E20 - UPC-ABC Critical Comm Error	N/A	20	20	Yes	Auto	

Dual Compressor Water to Air Modes Of Operation
1 = Standby
2 = Fan Only
3 = Cooling Stage 1
4 = Cooling Stage 2
5 = Hot Gas Reheat
6 = Heating Stage 1
7 = Heating Stage 2
8 = Emergency Heat
9 = Auxiliary Heat
10 = Emergency Shutdown
11 = Load Shed
12 = ABC A Lock-Out
13 = Test Mode
14 = Economizer Mode
15 = ABC B Lout-Out
16 = Full Cool W/Economizer
17 = Dehumidification Mode
18 = 1/2 Capacity W/Lock-Out
19 = Full Lockout Condition
20 = Clg 1 W/Economizer

Internal Schedule for Dual Compressor WSHP

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Aurora UPC Schedule		
Internal Schedule	Eastern Standard Time	
	Occupied	Unoccupied
Sunday	Unscheduled	Unscheduled
Monday	7:30am-5pm	5pm-7:30am
Tuesday	7:30am-5pm	5pm-7:30am
Wednesday	7:30am-5pm	5pm-7:30am
Thursday	7:30am-5pm	5pm-7:30am
Friday	7:30am-5pm	5pm-7:30am
Saturday	Unscheduled	Unscheduled

Control Tables for Dual Compressor WSHP

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Read Only Values	1	Standby	
	2	Fan Only	
	3	Cool Stage 1	
	4	Cool Stage 2	
	5	Hot Gas Reheat	
	6	Heat Stage 1	
	7	Heat Stage 2	
	8	Emergency Heat	
	9	Auxiliary Heat	
	10	Emergency Shutdown	
	11	Load Shed	
	12	ABC A Lock-Out	
	13	Test Mode	
	14	Economizer Mode	
	15	ABC B Lock-Out	
	16	Full Cool W/Economizer	
	17	Dehumidification	
	18	1/2 Capacity W/Lock-out	
	19	Full Lock-Out	
	20	Cooling 1 W/Economizer	

AV-92		Read/Write	
occ_man_cmd_ana_c			
Value	1	Occupied	
	2	Unoccupied	
	3	Temp Occ	
	4	Standby	

MSV-9		Read/Write	
occ_man_cmd_c			
Value	1	Occupied	
	2	Unoccupied	
	3	Temp Occ	
	4	Standby	

		Read Only	
MSV-2		effect_occup_st	
AV-55		eff_occ_an	
Value	1	Occupied	
	2	Unoccupied	
	3	Temp Occ	
	4	Standby	
	5	Occ Sensor	

BV-101		Read/Write	
occ_cmd_AV-MSV_Select_c			
Inactive	MSV-9		
Active	AV-92		

BV-116		Read/Write	
Internal_external_Scheduling			
Inactive	Internal		
Active	External		

Hardwired Inputs for Dual Compressor WSHP

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Fan Proving Hardwired Input					
		Instance Number			
Protocol	ABC "A"	ABC "B"	Reference Name	Point Type	Read / Write
BACnet	72	73	g_hdw_fan_proving_input_st	BV	Read
N2 Open	71	72	g_hdw_fan_proving_input_st	BD	Read
Description	When a UPC is present and connected to the ABC, this point is used to provide the status of the fan if a current switch is installed and wired into the ABC's hardwired "G" input.				

Compressor Proving Hardwired Input					
		Instance Number			
Protocol	ABC "A"	ABC "B"	Reference Name	Point Type	Read / Write
BACnet	131	132	y1_hdw_comp_proving_input_st	BV	Read
N2 Open	119	120	y1_hdw_comp_proving_input_st	BD	Read
Description	When a UPC is present and connected to the ABC, this point is used to provide the status of the compressor if a current switch is installed and wired into the ABC's hardwired "Y1" input.				

Occupancy Sensor Hardwired Input					
		Instance Number			
Protocol	ABC "A"	ABC "B"	Reference Name	Point Type	Read / Write
BACnet	99	100	o_hdw_occ_sensor_input_st	BV	Read
N2 Open	94	95	o_hdw_occ_sensor_input_st	BD	Read
Description	When a UPC is present and connected to the ABC, this point is used to provide the status of an occupancy switch that is wired into the ABC's hardwired "O" input.				

Valve End Switch					
		Instance Number			
Protocol	ABC "A"	ABC "B"	Reference Name	Point Type	Read / Write
BACnet	134	135	y2_hdw_vlv_end_sw_input_st	BV	Read
N2 Open	122	123	y2_hdw_vlv_end_sw_input_st	BD	Read
Description	When a UPC is present and connected to the ABC, this point is used to provide the status of a valve end switch if the switch is installed and wired into the ABC's hardwired "Y2" input.				

Dirty Filter Hardwired Input					
		Instance Number			
Protocol	ABC "A"	ABC "B"	Reference Name	Point Type	Read / Write
BACnet	129	130	w_hdw_dirty_filter_input_st	BV	Read
N2 Open	116	117	w_hdw_dirty_filter_input_st	BD	Read
Description	When a UPC is present and connected to the ABC, this point is used to provide the status of a differential pressure switch if the switch is installed and wired into the ABC's hardwired "W" input.				

Notes Key for Dual Compressor WSHP

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Dual Compressor Notes Key	
① = Only displayed if logged in as the Administrator	④ = Factory set value
② = Only displayed if logged in as the User	⑤ = Adjustable thru the touchscreen
③ = Only displayed if logged in as the factory	⑥ = Only displayed if feature is enabled

