

		Point Description Name	BACnet Name Type ID	MODBUS Object Type	Register	N2 Type	ID	SNV T #	LON Name	SNVT	Read Only	Description	
	1	Control Source	ctrl_sourc e_1	AV:15	Holding Register(Float)	40023	Internal Float	12	3	rvCtrlSource	SNVT_count_inc(9)		Control Source for Occupancy Setup 0 = Digital Input Enable (e.g. Room Occupancy Sensor) 1 = Keypad Schedule 2 = BAS Occupancy Command (Default) 3 = Factory Use Only 4 = Manual On-Continuous
	2	Occupancy Command (BAS)	occupancy _cmd_1	BV:1	Coil	1	Binary Output	1	12	rvOccupancyCm d	SNVT_switch(95)		BAS Occupancy Command 0 = Unoccupied (Default) 1 = Occupied (Enables Unit Operation)
	3	BAS Smoke Input / Emergency Shutdown	bas_smok e_1	BV:75	Coil	00013	Binary Data	73	59	rvBasSmoke	SNVT_switch(95)		Smoke Detector or Emergency Shutdown Alarm Network Input 0 = Normal (Default)
	4	Zone Mode Status	zone_mod e_stat_1	MSV:4	Input Register(Signed)	30060	Internal Integer	4	56	rvZoneModeSta t	SNVT_count_inc(9)	✓	Zone Mode status 1 = Auto (Default) 2 = Heat 3 = Cool 5 = Off
	5	Unit Mode Status	mode_stat us_1	AV:24	Input Register (Float)	30027	Internal Float	34	25	rvUnitModeStatus	SNVT_count_inc(9)	✓	Unit Mode Status 0 = Straight Cool 2 = Heat pump (Default)
	6	Set Zone Mode	zone_mod e_1	MSV:3	Holding Register(Signed)	40124	Internal Integer	3	55	rvZoneMode	SNVT_count_inc(9)		Setup Zone Mode 1 = Auto (Default) 2 = Heat 3 = Cool 5 = Off
	7	Compressor Control Mode	comp_mo de_1	AV:64	Holding Register(Float)	40013	Internal Float	8	-	-	-		Compressor Mode Setup 0 = Zone Control - ZS (Default) 1 = Discharge Air Control 2 = Zone Control - BAS Sensor 3 = Zone Control - Remote Sensor
	8	Analog Output 3 Options Configuration	ao3_cfg_s el_1	AV:108	Holding Register(Float)	40111	Internal Float	73	60	rvAo3CfgSel	SNVT_count_inc(9)		Options Configuration - Controller Analog Output #3 (AO-3) 0 = Not Used (Default) 1 = Modulating Outdoor Air Damper Control
	9	Analog Output 2 Options Configuration	ao2_cfg_s el_1	AV:83	Holding Register(Float)	40089	Internal Float	65	52	rvAo2CfgSel	SNVT_count_inc(9)		Options Configuration - Controller Analog Output #2 (AO-2) 0 = Not Used (Default) 1 = Modulating Hot Gas Reheat Valve Control
	10	Analog Output 1 Options Configuration	ao1_cfg_s el_1	AV:82	Holding Register(Float)	40087	Internal Float	64	51	rvAo1CfgSel	SNVT_count_inc(9)		Options Configuration - Controller Analog Output #1 (AO-1) 0 = Not Used (Default) 1 = Variable Frequency Drive Signal Control 2 = Mixed Air SCR Preheat Control 3 = SCR Controlled Aux Electric Heat
	11	Output 5 Options Configuration	bo5_cfg_s el_1	AV:113	Holding Register(Float)	40101	Internal Float	78	-	-	-		Options Configuration - Controller Binary Output #5 (BO-5) 0 = Not Used (Default) 1 = Hot Gas Reheat for Humidity Control 2 = Auxiliary Electric Heat Control 3 = Fresh Air Damper Control 4 = Condenser Water Valve (Loop Valve) Control 6 = Water-Side Economizer Control 7 = Boilerless Electric Heat Control
	12	Output 4 Options Configuration	bo4_cfg_s el_1	AV:112	Holding Register(Float)	40099	Internal Float	77	-	-	-		Options Configuration - Controller Binary Output #4 (BO-4)/#155 = "1" 0 = Not Used (Default) 1 = Economizer Valve 2 = Boilerless Control 3 = Fresh Air Damper Control
	13	Input 1 Configuration	in1_cfg_s el_1	AV:110	Holding Register(Float)	40095	Internal Float	75	-	-	-		Controller Input #1 (IN-1) Configuration Setup 0 = Not Used (Default) 2 = Digital Input Enable (e.g. Room Occupancy Sensor) 3 = RH Probe Sensor
	14	Input 2 Configuration	in2_cfg_s el_1	AV:111	Holding Register(Float)	40097	Internal Float	76	-	-	-		Controller Input #2 (IN-2) Configuration Setup 0 = Not Used 1 = Zone Remote Sensor 2 = Outdoor Air Temperature Sensor 3 = Entering Water Temperature Sensor (Default) 4 = Mixed Air Temperature Sensor 5 = Relative Humidity Sensor (Probe) 6 = Digital Enable (e.g. Room Occupancy Sensor) 7 = Return Air Temperature Sensor
	15	DIS Mode (Digital Input 5)	dis_mode _1	AV:60	Holding Register(Float)	40015	Internal Float	10	-	-	-		Controller Input #5 (IN-5) Configuration Setup 0 = Dirty Filter Switch 1 = Entering Water Temp Sensor - Economizer/Boilerless 2 = Differential Pressure Switch 3 = Secondary Condensate Pan 4 = Fan Status Switch 5 = Valve End Switch 6 = Damper End Switch 7 = Smoke Detector Switch 8 = Pump Status Switch 9 = Mixed Air Temp Sensor - Mixed Air Control 10 = Input Expansion Module (IEM) 11 = Not Used (Default)
	16	Fan Response for Comp Lockout	lockout_res p_1	BV:7	Coil	00004	Binary Data	33	48	rvLockoutResp	SNVT_switch(95)		Configures Fan Response during Compressor Lockout by system 0 = Do not lock fan upon compressor lockout (Default) 1 = Lock fan upon compressor lockout
	17	ZS Sensor Enable	zs_sens or_en_1	AV:41	Holding Register(Float)	40077	Internal Float	60	-	-	-		Used to configure controller to recognize a connected ZS Sensor(s) 0 = No ZS Sensors 1 = ZS Sensors Enabled (Default)
ZONE CONTROL SETUP & STATUS	18	Equipment Touch RH	eq_rh_1	AV:1904	Select...	0	0	0	-	-	-		
	19	Equipment Touch Temp	eq_temp_1	AV:1902	Select...	0	0	0	-	-	-		
	20	ZS Sensor Combo Selector	zs_sen_co mbo_sel_1	AV:40	Holding Register(Float)	40075	Internal Float	59	-	-	-		ZS Sensor Combination Selection (sensor must be compatible to selection) 0 = Temp Only 1 = RH Only 2 = CO2 Only 3 = Temp + RH 4 = Temp + CO2 5 = RH + CO2 6 = Temp + RH + CO2 (Default) 7 = No ZS Sensor
	21	ZS Sensor Setpoint Adjustment Limit	stpt_adj_li m_1	AV:42	Holding Register(Float)	40081	Internal Float	61	-	-	-		Used to set the allowable range of setpoint manipulation from a ZS sensor in the space Default: +/- 3 °F
	22	Sensor Override Enable/Disable	enable_ou tsh_button_1	BV:95	Coil	00010	Binary Data	70	-	-	-		Used to enable or disable ZS Plus/Pro Sensor Override in the space 0 = ZS Sensor Override NOT Allowed 1 = ZS Sensor Override Allowed (Default)
	23	Override Status	overrid e_status_1	BV:94	Discrete Input	10072	Binary Data	69	-	-	-	✓	Reports status of override button on ZS Plus/Pro Sensor 0 = Normal 1 = ZS Sensor in Override Mode
	24	Override Time Remaining	to_rem_1	AV:115	Input Register (Float)	30047	Internal Float	82	58	rvToRem	SNVT_count_inc(9)	✓	Reports time remaining since ZS Plus/Pro sensor in the space was placed in manual override mode
	25	Setpoint	occ_cig_st pt_1	AV:4	Holding Register(Float)	40103	Internal Float	52	9	rvOccCigStpt	SNVT_temp_p(105)		Occupied Cooling Setpoint Setup in °F Default: 74 °F
	26	Setpoint	occ_htg_st pt_1	AV:2	Holding Register(Float)	40105	Internal Float	53	10	rvOccHtgStpt	SNVT_temp_p(105)		Occupied Heating Setpoint Setup in °F Default: 70 °F
	27	Setpoint	unocc_cig stpt_1	AV:1	Holding Register(Float)	40131	Internal Float	66	13	rvUnoccCigStpt	SNVT_temp_p(105)		Unoccupied Cooling Setpoint Setup in °F Default: 80 °F
	28	Setpoint	unocc_htg stpt_1	AV:3	Holding Register(Float)	40133	Internal Float	67	14	rvUnoccHtgStpt	SNVT_temp_p(105)		Unoccupied Heating Setpoint Setup in °F Default: 55 °F
	29	Effective Cooling Setpoint	eff_cig_st pt_1	AV:5	Holding Register(Float)	40039	Internal Float	20	4	rvEffCigStpt	SNVT_temp_p(105)	✓	Effective Cooling Setpoint (after setpoint adjustment applied) in °F
	30	Effective Heating Setpoint	eff_htg_st pt_1	AV:6	Holding Register(Float)	40045	Internal Float	23	5	rvEffHtgStpt	SNVT_temp_p(105)	✓	Effective Heating Setpoint (after setpoint adjustment applied) in °F
	31	Zone Temperature	eff_zone_t emp_1	AV:7	Holding Register(Float)	40057	Internal Float	29	38	rvContFan	SNVT_switch(95)	✓	Effective Zone Temperature Status in °F
	32	Night Setback (NSB) Status	nsb_status _1	BV:22	Discrete Input	10013	Binary input	13	8	rvNsbtStatus	SNVT_switch(95)	✓	Night Setback Status 0 = Night Setback disabled 1 = Night Setback enabled
	33	High ZS Zone Sensor Temperature Alarm	ztmp_hi_1	BV:26	Discrete Input	10062	Binary input	62	-	-	-	✓	Zone Temperature Alarm (High) 0 = Normal 1 = High Zone Temperature(Default: 10 °F Above Setpoint)

REM	34	Low ZS Zone Sensor Temperature Alarm	ztmp_lo_1	BV:27	Discrete Input	10063	Binary input	63	-	-	-	✓	Zone Temperature Alarm (Low) 0 = Normal 1 = Low Zone Temperature (Default: 10 °F Below Setpoint)
	35	ZS Zone Sensor Hardware Failure Alarm	zone_sen_1	BV:28	Discrete Input	10058	Binary input	58	-	-	-	✓	Zone Sensor Failure Alarm 0 = Normal 1 = Sensor Failure (Check: ZS Sensor Hardware)
	36	Effect Zone Remote Temperature	eff_remoze_temp_1	AV:9	Input Register (Float)	30019	Internal Float	25	-	-	-	✓	Reports the Effective Temperature from a Zone Remote Temp Sensor after an offsets have been applied
	37	Remote Temp or Return Air Temp Value	zone_rem_sen_val_1	AV:31	Input Register (Float)	30035	Internal Float	58	-	-	-	✓	Reports the Return Air Temperature or Zone Remote Temperature at the Sensor
DISCHARGE AIR CONTROL SETUP & STATUS	38	System Status	sys_status_1	AV:16	Input Register (Float)	30031	Internal Float	54	28	rvoSysStatus	SNVT_count_inc(9)	✓	General System Status 0 = Unoccupied 1 = Occupied 2 = Fan Only 3 = Heating 4 = Cooling 5 = Transition to Cool 6 = Transition to Heat 7 = Air Economizer 8 = Unit Locked 9 = Aux Heat 10 = Re-Heat 11 = Manual Re-Heat 12 = Transition to Re-Heat 13 = Free Cooling 14 = Transition to Free Cooling 15 = Water-Side Economizer
	39	Cooling Demand Percentage	clg_pct_1	AV:13	Holding	40025	Internal	13	-	-	-	✓	Cooling Status in Demand Percent. %
	40	Heating Demand Percentage	htg_pct_1	AV:12	Holding	40073	Internal	37	-	-	-	✓	Heating Capacity in %
	41	Leaving Water Temperature (LWT)	eff_lwt_1	AV:11	Input Register (Float)	30015	Internal Float	21	23	rvoEffLwt	SNVT_temp_p(10 5)	✓	Effective Leaving Water Temperature Status in °F
	42	Effect Disch Air Temp	eff_dat_1	AV:10	Input Register (Float)	30011	Internal Float	18	21	rvoEffDat	SNVT_temp_p(10 5)	✓	Discharge Air Temperature (DAT) in °F
	43	Outdoor Air Temperature (OAT)	eff_oat_1	AV:75	Holding Register(Float)	40055	Internal Float	28	6	rvoEffOat	SNVT_temp_p(10 5)	✓	Effective Outdoor Temperature Status in °F
	44	Discharged Air Temperature Setpoint	dat_stpt_1	AV:30	Holding Register(Float)	40017	Internal Float	11	18	rviDatStpt	SNVT_temp_p(10 5)	✓	Discharged Air Temperature Setpoint Setup in °F Default: 65 °F
	45	Temperature Reset Source	rst_temp_source_1	AV:8	Holding Register(Float)	40083	Internal Float	62	-	-	-	✓	Temperature Reset Source Selection 0 = Outside Air Temperature Reset (Default) 1 = Mixed Air (or Return Air) Temperature Reset Outside Air Temperature Sensor Source Status 1 = BAS OAT Sensor 2 = Hard-Wired OAT Sensor (Default)
	46	Outside Air Temperature Sensor Source Status	oat_sel_sta_1	AV:78	Input Register (Float)	30029	Internal Float	43	-	-	-	✓	Outside Air Temperature Sensor Source Status 1 = BAS OAT Sensor 2 = Hard-Wired OAT Sensor (Default)
	47	Temperature Reset Mode	oat_rst_mode_1	AV:71	Holding Register(Float)	40037	Internal Float	41	-	-	-	✓	Outside Air Temperature Reset Setup 0 = Single 1 = Multiple (Default)
	48	Single Reset/Free Cooling Reset Temperature	oat_reset1_1	AV:69	Holding Register(Float)	40027	Internal Float	35	-	-	-	✓	Outside Air Temperature (Free Cooling Temperature) Operation in °F or Single Reset Temperature Default: 50 °F
	49	Part Cool Reset Temperature	oat_reset2_1	AV:72	Holding Register(Float)	40029	Internal Float	36	-	-	-	✓	Outside Air Temperature (Stage 1 Cooling Temperature) Operation in °F Default: 60 °F
	50	Full Cool Reset Temperature	oat_reset3_1	AV:74	Holding Register(Float)	40033	Internal Float	38	-	-	-	✓	Outside Air Temperature (Stage 2 Cooling Temperature) Operation in °F Default: 75 °F
	51	Heating Reset Temperature	oat_reset_ht_1	AV:92	Holding Register(Float)	40035	Internal Float	39	-	-	-	✓	Outside Air Temperature Reset Mixed Air (Stage 1 Heating) Operation in °F Default: 40 °F
	52	Outside Air Temperature Sensor	oat_sel_1	AV:73	Holding Register(Float)	40041	Internal Float	42	-	-	-	✓	Outside Air Temperature Sensor Source Setup 1 = BAS OAT Sensor 2 = Hard-Wired OAT Sensor (Default)
	53	Outside Air Temperature Sensor Failure	oat_sen_1	BV:87	Discrete Input	10046	Binary Data	48	-	-	-	✓	Outside Air Temperature Alarm (Sensor) 0 = Normal 1 = Sensor Failure (Check Sensor Hardware)
ZTR	54	Hot Gas Reheat Modulating Valve Status	eff_hgr_mod_vlv_1	AV:28	Input Register (Float)	30005	Internal Float	14	19	rvoEffHgrModVlv1	SNVT_lev_percent(81)	✓	Effective Hot Gas Reheat Modulating Valve Output Status
	55	Compressor Enabled Stages	enabled_ci_stages_1	AV:68	Input Register (Float)	30023	Internal Float	27	-	-	-	✓	Compressor Stages Enabled 0 = No Stages Enabled 1 = 1 Stage Enabled 2 = 2 Stages Enabled
	56	Supply Air Setpoint Differential	dat_stpt_diff_1	AV:58	Holding Register(Float)	40067	Internal Float	51	-	-	-	✓	Supply Air Temperature Setpoint Differential Setup Default: 2.0 °F
	57	Supply Air High Differential Trip	sat_hi_trip_1	AV:63	Holding Register(Float)	40063	Internal Float	50	-	-	-	✓	Supply Air Temperature High Trip Differential Setpoint Setup Default: 2.0 °F
	58	Supply Air Low Differential Trip	sat_lo_trip_1	AV:77	Holding Register(Float)	40061	Internal Float	49	-	-	-	✓	Supply Air Temperature Low Trip Differential Setpoint Setup Default: 2.0 °F
	59	High Cooling Supply Air Temperature in DAC	csat_hi_1	BV:86	Discrete Input	10016	Binary Data	17	-	-	-	✓	High Cooling Supply Air Temperature during Discharge Air Control Alarm 0 = Normal 1 = Alarm Active
	60	Low Heating Supply Air Temperature in DAC	hsat_lo_1	BV:149	Discrete Input	10037	Binary Data	38	-	-	-	✓	Heating Supply Air Temp Alarm (Low) 0 = Normal 1 = Active (Default: <80 °F)
	61	Effective Discharge Air Temperature Setpoint	eff_dat_stpt_1	AV:67	Input Register (Float)	30049	Internal Float	83	-	-	-	✓	Effective Discharged Air Temperature Setpoint in °F after any resets are applied (for Discharge Air Control with Zone Temp Reset)
	62	Effective ZS Sensor Temperature	zt_reset_1	AV:116	Input Register (Float)	30051	Internal Float	84	-	-	-	✓	Effective Zone Temperature reading from ZS sensor after any offsets have been applied (for Discharge Air Control with Zone Temp Reset)
	63	Occupancy Status	occ_status	BV:21	Discrete Input	10014	Binary input	14	11	rvoOccStatus	SNVT_switch(95)	✓	Occupancy Status 0 = Unoccupied 1 = Occupied
	64	Fan Output Cmd	fan_cmd_1	BV:17	Discrete Input	10011	Binary input	11	7	rvoFanCmd	SNVT_switch(95)	✓	Fan Output Status (G) 0 = Fan Output Off 1 = Fan Output On
	65	Reversing Valve Output Status	rev_vhv_cmd_1	BV:15	Discrete Input	10050	Binary Data	54	-	-	-	✓	Reversing Valve Output Status 0 = Reversing Valve De-energized 1 = Reversing Valve Energized
	66	Comp Stage1 Output Cmd	cmp_stg1_cmd_1	BV:11	Discrete Input	10008	Binary Data	8	33	rvoCompStg1Cmd	SNVT_switch(95)	✓	Compressor Stage 1 Output Status 0 = Compressor 1 Off 1 = Compressor 1 On
	67	Comp Stage2 Output Cmd	cmp_stg2_cmd_1	BV:12	Discrete Input	10009	Binary Data	9	34	rvoCompStg2Cmd	SNVT_switch(95)	✓	Compressor Stage 2 Output Status 0 = Compressor 2 Off 1 = Compressor 2 On
	68	Compressor Stages	cmp_stgs_1	AV:14	Input Register (Float)	30001	Internal Float	7	16	rvoCompStgs	SNVT_count_inc(9)	✓	Reports Configuration Status of Compressor Stages 1 = 1 Compressor 1 Stage 2 = 2 Compressor 2 Stages 3 = 1 Compressor 2 Stages
	69	Compressor Status	comp_stat_e_1	AV:120	Input Register (Float)	30053	Internal Float	90	47	rvoCompState	SNVT_count_inc(9)	✓	Reports compressor state for heat pump units: 0 = Normal/Off 1 = Compressor Locked 2 = Compressor Overridden "ON" 3 = Compressor Shutdown/Alarm
	70	Alarm Status	alm_status_1	BV:24	Discrete Input	10002	Binary Data	2	-	-	-	✓	Network Status indicating alarm condition in unit (see "Current Alarm" for more information) 0 = System Normal 1 = System in Alarm
	71	Current Alarm Condition Status	current_alarm_1	AV:17	Input Register (Float)	30003	Internal Float	9	17	rvoCurrentAlarm	SNVT_count_inc(9)	✓	Alarm Status of unit: 0 = No Alarm. 1-10 = UPM Fault Code (See UPM Alarms below) 20 = Output Overridden via Keypad 30 = Sensor Failure 40 = Leaving Water Temp Alarm 50 = Zone Temp Alarm 60 = Discharge Air Temperature Alarm 70 = Filter Alarm/Compressors 1 & 2 Runtime 80 = Zone Humidity Alarm 90 = High CO2 Level Alarm 100 = Differential Pressure Switch (DPS) Alarm
	72	High Leaving Water Temperature	hlg_hi_1	BV:32	Discrete Input	10041	Binary Data	43	-	-	-	✓	High Leaving Water Temperature Alarm (LWT) 0 = Normal 1 = Alarm (Default: >135 °F)

ALARMS	73	Low Leaving Water Temperature	lwg_lo_1	BV:33	Discrete Input	10042	Binary Data	44	-	-	-	✓	Low Leaving Water Temperature (LWT) 0 = Normal 1 = Alarm (Default: <40 °F)
	74	High Discharge Air Temperature	dat_hi_1	BV:29	Discrete Input	10021	Binary Data	22	-	-	-	✓	Discharge Air Temperature Sensor Alarm (High Threshold - Cooling) 0 = Normal 1 = Alarm (Default: >70 °F)
	75	Discharge Air Temperature Alarm	dat_lo_1	BV:30	Discrete Input	10022	Binary Data	23	-	-	-	✓	Discharge Air Temperature Sensor Alarm (Low Threshold - Heating) 0 = Normal 1 = Low DAT Alarm (Default: <75 °F)
	76	UPM Safety - High Pressure Alarm	hpl_2st_1	BV:5	Discrete Input	10035	Binary Data	36	44	rvoHpl2st	SNVT_switch(95)	✓	UPM High Pressure Alarm Status 0 = Normal 1 = High Pressure Alarm (UPM-I code = 1; UPM-II codes = 1,3)
	77	UPM Safety - Low Pressure Alarm	lp1_2st_1	BV:4	Discrete Input	10039	Binary Data	41	46	rvoLp12st	SNVT_switch(95)	✓	UPM Low Pressure Alarm Status 0 = Normal 1 = Low Pressure Alarm (UPM-I code = 2; UPM-II codes = 2,4)
	78	UPM Safety - Condenser Coil Freeze Alarm	frz_2st_1	BV:8	Discrete Input	10030	Binary Data	31	42	rvoFrz2st	SNVT_switch(95)	✓	UPM Condenser Coil Freeze Alarm Status 0 = Normal 1 = Condenser Freeze Alarm (UPM-I code = 3; UPM-II codes = 5,9)
	79	UPM Safety - High Condensate Alarm	con_2st_1	BV:9	Discrete Input	10010	Binary Data	12	37	rvoCon2st	SNVT_switch(95)	✓	UPM Condensate Drain Alarm Status 0 = Normal 1 = Condensate Overflow Alarm (UPM-I code = 4; UPM-II code = 6)
	80	UPM Safety - Brownout Alarm	brn_2st_1	BV:10	Discrete Input	10004	Binary Data	4	32	rvoBrn2st	SNVT_switch(95)	✓	UPM Brownout Alarm Status 0 = Normal 1 = Brownout Alarm (UPM-I code = 5; UPM-II code = 7)
	81	UPM Safety - Evaporator Coil Freeze Alarm	frz_evap_2st_1	BV:90	Discrete Input	10031	Binary Data	32	43	rvoFrzEvap2st	SNVT_switch(95)	✓	UPM Evaporator Coil Freeze Alarm Status 0 = Normal 1 = Evaporator Freeze Alarm (UPM-I code = 6; UPM-II codes = 8,10)
	82	UPM Safety - A2L Alarm	a2l_2st_1	BV:104	Discrete Input	10104	Binary Data	104	N/A	N/A	N/A	✓	UPM A2L Alarm Status 0 = Normal 1 = A2L Alarm (UPM-I code = 7; UPM-II codes = 11)
	83	UPM Safety - Communication Alarm	comm_2st_1	BV:106	Discrete Input	10106	Binary Data	106	N/A	N/A	N/A	✓	UPM Communication Alarm Status 0 = Normal 1 = Communication Alarm (UPM-I codes = 12)
	84	UPM Reset	upm_rst_1	BV:25	Coil	00009	Binary Data	61	50	rviUpmRst	SNVT_switch(95)	✓	UPM Reset (Momentary On/Off) 0 = Reset Off (Default) 1 = Reset On
	85	UPM Input Alarm	upm_input_1	BV:39	Discrete Input	10064	Binary Data	60	-	-	-	✓	UPM Input Failure Alarm 0 = UPM Connected 1 = UPM Connection Failure (Check Alarm Hardware Configuration)
	86	Leaving Water Temperature Sensor Failure	lwg_sen_1	BV:34	Discrete Input	10043	Binary Data	45	-	-	-	✓	Leaving Water Temperature Alarm (Sensor) 0 = Normal 1 = Sensor Failure (Check Sensor Hardware)
	87	Discharge Air Temperature Sensor	da_sen_1	BV:31	Discrete Input	10018	Binary Data	19	-	-	-	✓	Discharge Air Temperature Sensor Alarm 0 = Sensor Normal 1 = Sensor Failure Alarm (Check Sensor Hardware Configuration)
	88	Digital Override Lock Alarm	do_lock_1	BV:37	Discrete Input	10023	Binary Data	24	-	-	-	✓	Digital Override Lock Alarm 0 = Normal 1 = Digital Override Enabled Alarm
	89	Inputs Override Status	input_lock_1	BV:38	Discrete Input	10038	Binary Data	39	-	-	-	✓	Software Input Lock 0 = Normal 1 = Software Lock Enabled
	90	Duplicate Input 1&2 Alarm	dup_in12_1	BV:2	Discrete Input	10001	Binary Data	1	-	-	-	✓	Duplicated Sensor Configuration for IN-1 and IN-2 Alarm 0 = Normal 1 = Alarm (Check input configuration for conflicts)
AIR ECONOMIZER		Compressor 1 Runtime	comp1_rnt_m_1	BV:35	Discrete Input	10006	Binary Data	6	-	-	-	✓	Fan Mode 1 = Auto (cycle with compressor) 4 = On (Default)
		Compressor 2 Runtime	comp2_rnt_m_1	BV:36	Discrete Input	10007	Binary Data	7	-	-	-	✓	Compressor 2 Runtime Alarm Status 0 = Normal 1 = Timer Has Expired (Default: >8760 Hours)
		Compressor 1 Runtime Reset	cmp1_rnt_m_rst_1	BV:13	Coil	00002	Binary Data	10	35	rviCmp1RntmRst	SNVT_switch(95)	✓	Compressor 1 Runtime Reset. Momentary On/Off required. 0 = Reset Off (Default) 1 = Reset On
		Compressor 2 Runtime Reset	cmp2_rnt_m_rst_1	BV:14	Coil	00003	Binary Data	11	36	rviCmp2RntmRst	SNVT_switch(95)	✓	Compressor 2 Runtime Reset. Momentary On/Off required. 0 = Reset Off (Default) 1 = Reset On
		High Remote Temperature Alarm	zrem_hi_1	BV:41	Discrete Input	10060	Binary input	60	-	-	-	✓	Remote Sensor Zone Temperature Alarm (High) 0 = Normal 1 = High Zone Temperature (Default: 10 °F Above Setpoint)
		Low Remote Temperature Alarm	zrem_lo_1	BV:42	Discrete Input	10061	Binary input	61	-	-	-	✓	Remote Sensor Zone Temperature Alarm (Low) 0 = Normal 1 = Low Zone Temperature (Default: 10 °F Below Setpoint)
		Remote Temperature Sensor Hardware Failure Alarm	zrem_sen_1	BV:43	Discrete Input	10059	Binary input	59	-	-	-	✓	Remote Temperature Zone Sensor Failure Alarm 0 = Normal 1 = Sensor Failure (Check Remote Sensor Hardware)
		Entering Water Temperature Sensor Alarm	ewt_sen_1	BV:80	Discrete Input	10026	Binary Data	27	26	rvoEwtSen	SNVT_switch(95)	✓	Entering Water Temperature Sensor Alarm 0 = Normal 1 = Sensor Failure Alarm (Check Hardware)
		Air Economizer Status	aecon_stat_us_1	BV:6	Discrete Input	10032	Binary Data	13	-	-	-	✓	Air Economizer Option Status 0 = Inactive 1 = Active
		OAT high limit for Air Econ	oat_hi_lim_aecon_1	AV:100	Holding Register(Float)	40113	Internal Float	86	-	-	-	✓	Air Economizer Option: range setting for Outside Air Temperature (High Limit) i °F Default: 60 °F
ECON / BOIL		OAT low limit for Air Econ	oat_lo_lim_aecon_1	AV:117	Holding Register(Float)	40115	Internal Float	87	-	-	-	✓	Air Economizer Option: range setting for Outside Air Temperature (Low Limit) i °F Default: 50 °F
		Outdoor RH high limit for Air Econ	rh_hi_lim_aecon_1	AV:118	Holding Register(Float)	40117	Internal Float	88	-	-	-	✓	Air Economizer Option: range setting for Outside Air Relative Humidity (High Limit) in % Default: 50 %
		Outdoor RH low limit for Air Econ	rh_lo_lim_aecon_1	AV:119	Holding Register(Float)	40119	Internal Float	89	-	-	-	✓	Air Economizer Option: range setting for Outside Air Relative Humidity (Low Limit) in % Default: 40 %
		Boilerless Status	htg_econ_1	BV:91	Discrete Input	10034	Binary Data	35	30	rvoHtgEcon	SNVT_switch(95)	✓	Boilerless Control Status 0 = Off 1 = On (Electric Heating)
		Economizer Cooling Command	clg_econ_1	BV:92	Discrete Input	10015	Binary Data	16	-	-	-	✓	Cooling Economizer Status 0 = On 1 = Off
		Entering Water Temperature	eff_ewt_1	AV:62	Input Register (Float)	30013	Internal Float	19	22	rvoEffEwt	SNVT_temp_p(10 5)	✓	Water Side Economizer Effective Entering Water Temperature in °F
		Condenser Water Valve Output	cwv_cmd_1	BV:79	Discrete Input	10017	Binary Data	18	-	-	-	✓	Condenser Water Valve Status 0 = Closed 1 = Open
		Valve End Switch Status	ves_status_1	BV:68	Discrete Input	10065	Binary Data	62	-	-	-	✓	Valve End Switch Status 0 = Off 1 = Valve End Switch Detected
		Valve Switch Hand	ves_hand_1	BV:150	Discrete Input	10066	Binary Data	63	-	-	-	✓	Valve End Switch Hand Mode Condenser Water Valve engaged but not commanded by controller.
		Valve End Switch Alarm	ves_fail_1	BV:151	Discrete Input	10067	Binary Data	64	-	-	-	✓	Valve End Switch Fail Alarm 0 = Normal 1 = Active
DPS		Differential Pressure Switch (DPS) Alarm	dps_alarm_1	BV:77	Discrete Input	10024	Binary Data	25	-	-	-	✓	Differential Pressure Switch Alarm 0 = Normal 1 = Alarm
		Aux Heat Output Cmd	aux_htg_cmd_1	BV:20	Discrete Input	10003	Binary Data	3	31	rvoAuxHtgCmd	SNVT_switch(95)	✓	Auxiliary Heat Output Status 0 = Aux Heat Off 1 = Aux Heat On
		Pre-Heat Output Override	pre_htg_ovide_1	AV:175	Holding Register(Float)	40049	Internal Float	45	-	-	-	✓	Pre-Heat Output Override Allow/Do not Allow 0 = Do not allow override (Default) 1 = allow override
EH / SCR		SCR Electric Heat Output	mat_pid_1	AV:121	Input Register (Float)	30055	Internal	91	-	-	-	✓	SCR controlled Electric Heat Output in %
		Filter Service Alarm	filter_1	BV:40	Discrete Input	10029	Binary Data	30	-	-	-	✓	Filter Alarm 0 = Off 1 = Service Filter Alarm

FILT		Reset Fan Runtime	fan_rtm_rst_1	BV:19	Coil	00007	Binary Data	52	-	-	-		Reset Fan Runtime. Momentary On/Off required for reset 0 = Reset Off (Default) 1 = Reset On
FAN STATUS		Set Fan Mode	fan_mode_1	MSV:2	Holding Register(Signed)	40123	Internal Integer	2	54	rvcFanMode	SNVT_count_inc(9)		Set Fan Mode 1 = Auto (Cycel with Compressor) 4 = On (Default)
		Fan Mode Status	fan_mode_stat_1	MSV:1	Input Register(Signed)	30059	Internal Integer	1	53	rvcFanModeStat	SNVT_count_inc(9)	✓	Fan Mode Status 1 = Auto (Cycel with Compressor) 4 = On (Default)
		Fan Running Status	fan_status_1	BV:66	Discrete Input	10028	Binary Data	29	41	rvcFanStatus	SNVT_switch(95)	✓	Fan Running Status 0 = Off 1 = On - Fan Running
		Fan Hand Mode Alarm	saf_hand_1	BV:83	Discrete Input	10027	Binary Data	28	-	-	-	✓	Fan Hand Mode Alarm Fan is running but not being commanded by controller.
		Supply Air Fan Switch Failure	saf_switch_fail_1	BV:82	Discrete Input	10052	Binary Data	56	-	-	-	✓	Supply Air Fan Status Alarm 0 = Normal 1 = Alarm (Check Fan Hardware)
HOT GAS REHEAT		Zone Humidity	eff_zone_humid_1	AV:20	Input Register (Float)	30021	Internal Float	26	24	rvcEffZoneHumid	SNVT_lev_percent(81)	✓	Effective Zone Humidity in Percent RH (%)
		Occupied Zone Humidity Setpoint	occ_zhumid_setpt_1	AV:21	Holding Register(Float)	40043	Internal Float	44	-	-	-		Occupied Humidity Setpoint Setup in % Default: 55%, Minimum: 20%, Maximum: 95%
		Zone Humidity Setpoint Differential	zhumid_setpt_difft_1	AV:22	Holding Register(Float)	40071	Internal Float	57	-	-	-		Zone Humidity Setpoint Differential Setup in RH % Default: 2%, Minimum: 1%, Maximum: 5%
		Hot Gas Re-Heat Valve Status	eff_hgrvc_md_1	BV:44	Discrete Input	10025	Binary Data	26	-	-	-	✓	Hot Gas Re-Heat Valve Status (Start/Stop) 0 = Valve Off 1 = Valve On
		High Humidity Alarm	zhumid_hi_1	BV:45	Discrete Input	10068	Binary Data	65	-	-	-	✓	Zone Humidity Alarm (High) 0 = Normal 1 = High Humidity (Default: 10% above Setpoint)
		Low Humidity Alarm	zhumid_lo_1	BV:46	Discrete Input	10069	Binary Data	66	-	-	-	✓	Zone Humidity Alarm (Low) 0 = Normal 1 = Low Humidity (Default: 30% below Setpoint)
		Humidity Sensor Hardware Failure Alarm	zhumid_sensor_1	BV:47	Discrete Input	10070	Binary Data	67	-	-	-	✓	Zone Humidity Sensor Alarm 0 = Normal 1 = Sensor Failure (Check RH Sensor Hardware Configuration)
INPUT EXPANSION MODULE		Input Expansion Module Mode	iem_mode_1	AV:50	Holding Register(Float)	40085	Internal Float	63	-	-	-		IEM in Controller Input #5 (IN-5) Configuration Setup 0 = Dirty Filter Switch, Fan Status Switch, Valve End Switch (Default) 1 = Smoke Detector Switch, Fan Status Switch, Valve End Switch 2 = Dirty Filter Switch, Fan Status Switch, Differential Pressure Switch 3 = Smoke Detector Switch, Fan Status Switch, Dirty Filter Switch 4 = Dirty Filter Switch, Fan Status Switch, Damper End Switch 5 = Smoke Detector Switch, Fan Status Switch, Secondary Drain Pan 6 = Dirty Filter Switch, Fan Status Switch, Pump Status
		Enable/Disable Fan Status Switch in IEM	allow_fan_alarm_1	BV:67	Coil	00011	Binary Data	71	-	-	-		Must be set to enable Fan Status Switch when using IEM in IN-5 0 = FSS on IEM disabled (Default)
		Enable/Disable Valve Switch in IEM	allow_valve_alarm_1	BV:69	Coil	00012	Binary Data	72	-	-	-		Must be set to enable Valve End Switch when using IEM in IN-5 0 = VES on IEM disabled (Default)
		Smoke Alarm Enable/Disable	smoke_alarm_enable_1	BV:71	Coil	00014	Binary Data	74	-	-	-		Must be set to enable Smoke Detector Switch when using IEM in IN-5 0 = SDS on IEM disabled (Default) 1 = SDS on IEM Enabled
MIXED AIR CONTROL		Mixed Air Temperature (MAT)	eff_mat_1	AV:87	Input Register (Float)	30017	Internal	22	-	-	-	✓	Effective Mixed Air Temperature in °F
		Mix Air Temperature Source Status	mat_sel_status_1	AV:84	Input Register (Float)	30025	Internal	30	-	-	-	✓	Mixed Air Temperature Sensor Source Status 0 = BAS MAT 1 = Wired MAT
		Mixed Air Temperature Sensor	mat_sel_1	AV:85	Holding Register(Float)	40019	Internal Float	31	-	-	-		Mixed Air Temperature Sensor Source Setup 0 = BAS MAT Sensor 1 = Hard-Wired MAT Sensor (Default)
		Mixed Air Temperature Setpoint	mat_setpt_1	AV:90	Holding Register(Float)	40021	Internal Float	32	-	-	-		Mixed Air Temperature Setpoint Default: 42 °F, Minimum: 40°F, Maximum: 60°F
		Electric Preheat Output	ma_preheat_1	AV:61	Input Register (Float)	30041	Internal Float	85	-	-	-	✓	SCR Electric Preheat Output for Mixed Air Control Option in V
		Low Mixed Air Temperature	mat_low_1	BV:89	Discrete Input	10044	Binary Data	46	-	-	-	✓	Mixed Air Low Temperature Alarm (Low) 0 = Normal 1 = Alarm (Default: <38 °F)
		Mix Air Temperature Sensor Failure	mat_sensor_1	BV:88	Discrete Input	10045	Binary Data	47	-	-	-	✓	Mixed Air Low Temperature Alarm (Sensor) 0 = Normal 1 = Sensor Failure (Check Sensor Hardware)
PUMP		Circulation Pump Output Command	pump_cmd_1	BV:3	Discrete Input	10005	Binary Data	5	-	-	-	✓	Loop Water Pump Status 0 = Pump Running 1 = Pump Off
		Circulation Pump Switch Failure Alarm	pss_fail_1	BV:56	Discrete Input	10047	Binary Data	49	-	-	-	✓	Pump Status Switch Fail Alarm 0 = Normal 1 = Active
		Pump Switch Status	pump_status_1	BV:57	Discrete Input	10048	Binary Data	50	-	-	-	✓	Pump Switch Status 0 = Off 1 = Pump Switch Detected
		Circulation Pump Switch In Hand Alarm	pss_hand_1	BV:58	Discrete Input	10049	Binary Data	51	-	-	-	✓	Pump Status Switch Hand Mode Pump running but not being commanded by controller.
SDP		Secondary Condensate Pump Alarm	conpump_1	BV:50	Discrete Input	10012	Binary Data	14	-	-	-	✓	Secondary Condensate Pump Alarm 0 = Normal 1 = Alarm Active
SMOKE		Smoke Event Alarm Notification	smoke_1	BV:81	Discrete Input	10054	Binary Data	58	49	rvcSmoke	SNVT_switch(95)	✓	Smoke Detector Alarm 0 = Normal 1 = Alarm
		Smoke Event Status	smoke_status_1	BV:70	Discrete Input	10055	Binary Data	59	-	-	-	✓	Smoke Alarm Status 0 = Normal 1 = Smoke Detector Active
DEMAND CONTROLLED VENTILATION		Zone CO2 Level	eff_zn_co2_lev_1	AV:25	Holding Register(Float)	40065	Internal Float	33	-	-	-	✓	Effective Zone CO2 Levels in PPM
		Zone CO2 High Trip	zn_co2_high_trip_1	AV:27	Holding Register(Float)	40135	Internal Float	68	-	-	-		Set level of CO2 reported as a High Level Alarm Default: 1200 PPM
		CO2 Hardware Failure Alarm	zn_co2_fail_1	BV:51	Discrete Input	10056	Binary Input	56	-	-	-	✓	CO2 Zone Sensor Alarm (Sensor) 0 = Normal 1 = Sensor Failure (Check CO2 Hardware Configuration)
		High CO2 Alarm	zn_co2_high_1	BV:48	Discrete Input	10057	Binary Input	57	-	-	-	✓	CO2 Zone Sensor Alarm (High) 0 = Normal 1 = High CO2 Level (Default: >1200 PPM)
		Damper Option Selection	dmp_opt_sel_1	AV:107	Holding Register(Float)	40093	Internal Float	72	-	-	-		Used to configure how on/off damper is enabled when not enabled by CO2 0 = Damper Opens when Fan Runs (Default) 1 = Damper Opens when Occupied 2 = Damper Opens for Free Cooling (Air Economizer)
		Damper Command	damper_cmd_1	BV:49	Discrete Input	10020	Binary Data	21	39	rvcDamperCmd	SNVT_switch(95)	✓	Damper Position Output Status 0 = Closed 1 = Open
		Damper End Switch	des_status_1	BV:93	Discrete Input	10019	Binary Data	20	-	-	-	✓	Damper End Switch Status 0 = Damper Closed 1 = Damper Open
		Modulating Damper Position	eff_dpr_pos_screen_1	AV:81	Holding Register(Float)	40047	Internal Float	24	-	-	-	✓	Effective Outside Air Modulating Damper Position in %
		Minimum Damper Position	min_mdpr_pos_1	AV:79	Holding Register(Float)	40079	Internal Float	40	-	-	-		Minimum Modulating Damper Position Setup Default = 10% Open
		Damper Occupancy Selection	mdpr_occ_sel_1	AV:97	Holding Register(Float)	40031	Internal Float	16	-	-	-		Modulating Damper Occupancy Selection Setup 0 = Disabled 1 = Occupied (Default) 2 = Unoccupied 3 = Any Occupancy
VFD		Static Air Fan Speed	eff_sa_fan_speed_1	AV:55	Input Register (Float)	30007	Internal Float	15	20	rvcEffSaFanSpeed	SNVT_lev_percent(81)	✓	Effective Static Air Fan Speed in %
		Supply Air Duct Static Pressure	eff_sa_sta_press_1	AV:53	Input Register (Float)	30009	Internal Float	17	-	-	-	✓	Effective Static Air Pressure Sensor Status in H2O"
		Static Press Setpoint	sta_press_setpt_1	AV:52	Holding Register(Float)	40053	Internal Float	47	27	rvcStaPressSetpt	SNVT_press_p(13)		Static Pressure Setpoint in inches of H2O Setup Default: 1.00 "H2O
		Supply Air Fan Minimum Speed	saf_min_speed_1	AV:59	Holding Register(Float)	40059	Internal Float	48	-	-	-		Minimum VFD Fan Speed Setpoint Setup Default: 40%
		Supply Air Static Pressure High Trip	sa_sta_high_trip_1	AV:54	Holding Register(Float)	40051	Internal Float	46	-	-	-		High Static Air Pressure Alarm Trip Setpoint inches of H2O Default: 2.75 "H2O

	Static Air Pressure Sensor Hardware Alarm	sas_sen_1	BV:65	Discrete Input	10051	Binary Data	55	-	-	-	✓	Static Air Pressure Sensor Alarm (Sensor) 0 = Normal 1 = Sensor Failure (Check Static Pressure Hardware Configuration)
	High Static Pressure Alarm	sas_hi_1	BV:64	Discrete Input	10053	Binary Data	57	-	-	-	✓	Static Air Pressure Alarm (High) 0 = Normal 1 = High Static Pressure (Default: > 2.75" H2O)
	Unit Mode	unit_mode_1	AV:23	Holding Register(Float)	40069	Internal Float	56	29	rvUnitMode	SNVT_count_inc(9)		Unit Mode Setup 0 = Cooling only 2 = Heat Pump (Default)
	Compressor Stages Selection	stages_1	AV:114	Holding Register(Float)	40107	Internal Float	79	-	-	-		Selected Compressor Stages 1 = 1 Compressor 1 Stage (<i>UPM-I Alarm Codes Used</i>) 2 = 2 Compressor 2 Stages (<i>UPM-II Alarm Codes Used</i>) 5 = 1 Compressor 2 Stages (UPM-I Alarm Codes Used) (Default)
	Evaporator Coil Configuration Selection	coil_cfg_1	AV:94	Holding Register(Float)	40011	Internal Float	6	-	-	-		Coil Configuration Setup 0 = Parallel (Default) 1 = Series
	BAS Loop Enable/Disable	loop_enabled_1	BV:23	Coil	00006	Binary Data	40	45	rvLoopEnabled	SNVT_switch(95)		Loop Status 0 = Disable Heat/Cool 1 = Allow Heat/Cool Operation (Default)
	BAS Relative Humidity Enable/Disable	rh_bas_selected_1	AV:51	Holding Register(Float)	40109	Internal Float	80	57	rvRHBasSel	SNVT_count_inc(9)		RH Sensor Source Selection 0 = BAS RH Sensor 1 = Hard-Wired RH Sensor (Default)
	CO2 BAS Enable/Disable	co2_bas_enabled_1	AV:106	Holding Register(Float)	40091	Internal Float	71	-	-	-		CO2 Sensor Source Selection 0 = BAS CO2 Sensor 1 = Hard-Wired CO2 Sensor (Default)
BAS Values	BAS CO2 Sensor Value	bas_co2_val_1	AV:49	Holding Register(Float)	40001	Internal Float	1	1	rvBasCo2Val	SNVT_ppm(29)		BAS CO2 Sensor Value in PPM Default: 1001 PPM
	BAS Mixed Air Temp	bas_mat_1	AV:86	Holding Register(Float)	40003	Internal Float	2	-	-	-		BAS Mixed Air Temperature Value in °F Default: 66.5 °F
	BAS Outside Air Temperature	effective_oat_1	AV:29	Holding Register(Float)	40005	Internal Float	3	0	rvEffectiveOAT	SNVT_temp_p(105)		Effective Outside Air Temperature in °F Default: 60 °F
	BAS RH Sensor Value	bas_rh_sensor_val_1	AV:56	Holding Register(Float)	40007	Internal Float	4	15	rvBasRhSenVal	SNVT_lev_percent(81)		RH Sensor Value Supplied by BAS in % Default: 56 %RH
	BAS Temperature Sensor Value	bas_sen_val_1	AV:19	Holding Register(Float)	40009	Internal Float	5	2	rvBasSenVal	SNVT_temp_p(105)		BAS Zone Temperature Sensor Value in °F Default: 74 °F