FHP BOSCH - Water to Air, Zone/ RH/ CO2/ Remote / BAS sensor options
Network Integration Points List
Version 7.03.00

Point Name	BACnet		Modbus		N2 Open		Lonworks			Description
	Name	Type:ID	Object Type	Register	Type	ID	Name	SNVT	Read Only	
BAS CO2 Sensor Value	bas_co2_val_1	AV:49	float value	40001	data float	1	nviBASCO2Val	SNVT_temp_p (105)		Network parameter to define BAS CO2 sensor Value
BAS Temp Sensor Value	bas_sen_val_1	AV:19	float value	40003	data float	2	nviBASSenVal	SNVT_temp_p (105)		Network parameter to define BAS Zone Temperature sensor Value
co2 sensor ena	co2_sensor_ena_1	AV:26	float value	40005	data float	3	nviBASCO2SenSel	SNVT_count_inc (9)		Network Parameter to enable CO2: 0 = No Co2, 1=CO2 monitoring, 2 = CO2+ Damper 3= BAS CO2 Monitoring, 4 = CO2 bas + Damper
Compressor Stages	cmp_stgs_1	AV:14	float value	40007	data float	4	nvoCmpStgs	SNVT_count (8)	✓	Network status indicating number of compressor stages in unit: 1 = 1 Compressor 1 Stage, 2 = 2 Compressor 2 Stages, 5 = 1 Compressor 2 Stages
Control Source	ctrl_source_1	AV:15	float value	40009	data float	5	nviCtrlSrc	SNVT_count_inc (9)		Network parameter setting control source for occupancy: (0=Digital Input 1, 1=Keypad Schedule, 2=BAS Occupancy Command, 3=Factory Use, 4=Manual On-Continuous)
Cooling Percentage	clg_pct_1	AV:13	float value	40011	data float	6	nvoClgPct	SNVT_lev_cont (21)	✓	Network status indicating percent capacity of cooling
Ctrl Sens Sel	ctrl_sen_sel_1	AV:18	float value	40013	data float	7	nviCtrlSenSel	SNVT_count_inc (9)		Network parameter setting use to select controlling sensor: 0 = RS Sensor , 1 = Remote Sensor, 2 = BAS Temperature Sensor
Current Alarm	current_alarm_1	AV:17	float value	40015	data float	8	nvoCurAlm	SNVT_count (8)	✓	Network status indicating alarm condition in unit: 0=No Alarm, 1-7 = UPM Fault Code, 20=Output Overridden via Keypad, 30=Sensor Failure, 40 = Leaving Water Temp Alarm, 50 = Zone Temp Alarm, 60=Discharge Air Temperature, 70 = Filter Alarm/ Compressors 1 & 2 Runtime, 80 = Zone Humidity Alarm, 90 = High CO2 Level Alarm
Effect Cooling Setpoint	eff_clg_stpt_1	AV:5	float value	40017	data float	9	nvoEffClgStpt	SNVT_temp_p (105)	✓	Network status of effective cooling setpoint (after setpoint adjustment applied)
Effect Disch Air Temp	eff_dat_1	AV:10	float value	40019	data float	10	nvoEffDat	SNVT_temp_p (105)	✓	Network status of discharge air temperature
Effect Heating Setpoint	eff_htg_stpt_1	AV:6	float value	40021	data float	11	nvoEffHtgStpt	SNVT_temp_p (105)	✓	Network status of effective heating setpoint (after setpoint adjustment applied)
Effective Zone Humidity	eff_zone_humid_1	AV:20	float value	40023	data float	12	nvoEffZnHum	SNVT_temp_p (105)	✓	Network status of zone humidity
Effect Leaving Wtr Temp	eff_lwt_1	AV:11	float value	40025	data float	13	nvoEffLwt	SNVT_temp_p (105)	✓	Network status of leaving water temperature
Effect Zone Temp	eff_zone_temp_1	AV:7	float value	40027	data float	14	nvoEffZnTemp	SNVT_temp_p (105)	✓	Network status of zone temperature
Eff Zone Co2 Lev	eff_zn_co2_lev_1	AV:25	float value	40029	data float	15	nvoEffCO2	SNVT_temp_p (105)	✓	Network Status of zone CO2 levels
Heating Percentage	htg_pct_1	AV:12	float value	40031	data float	16	nvoHtgPct	SNVT_lev_cont (21)	✓	Network status indicating percent capacity of heating
mode status	mode_status_1	AV:24	float value	40033	data float	17	nvoModeStatus	SNVT_count_inc (9)	✓	Network Status of the unit mode of operation: 0 =Cooling only, 1 = Aux Heat, 2 = Heat Pump, 3 = Heat Pump + Aux Heat, 4 = Heat Pump + Hot gas Re-heat, 5 = Cooling + Hot Gas Re-Heat
Occ Clg Stpt	occ_clg_stpt_1	AV:4	float value	40035	data float	18	nviOccClgStpt	SNVT_temp_p (105)		Network parameter to define occupied cooling setpoint
Occ Htg Stpt	occ_htg_stpt_1	AV:2	float value	40037	data float	19	nviOccHtgStpt	SNVT_temp_p (105)		Network parameter to define occupied heating setpoint
Occupied Zone Humidity Setpoint	occ_zhumid_stpt_1	AV:21	float value	40039	data float	20	nviOccZnhumStpt	SNVT_temp_p (105)		Network parameter to define occupied humidity setpoint
Override Time	ovr_time_1	AV:9	float value	40041	data float	21	nvoOvrTime	SNVT_count (8)	✓	Network status of override time remaining (from sensor in space)
Setpoint Adjust	stpt_adj_1	AV:8	float value	40043	data float	22	nvoStptAdj	SNVT_temp_p (105)	✓	Network status of setpoint adjustment (from sensor in space)
System Status	sys_status_1	AV:16	float value	40045	data float	23	nvoSysStatus	SNVT_count (8)	✓	General System Status: 0=Unoccupied, 1=Occupied, 2=Fan Only, 3=Heating, 4=Cooling, 5=Transition to Cool, 6=Transition to Heat, 7=Manual Cool, 8=Manual Heat, 9 = Aux Heat, 10 = Re-heat, 11 = Manual Re-heat, 12 = Transitionto Re-heat

Unit_mode	unit_mode_1	AV:23	float value	40047	data float	24	nviUnitMode	SNVT_count_inc (9)		Network Parameter to set the unit mode, factory preset: 0 =Cooling only, 1 = Aux Heat, 2 = Heat Pump, 3 = Heat Pump + Aux Heat, 4 = Heat Pump + Hot gas Re-heat, 5 = Cooling + Hot Gas Re-Heat
Unocc Clg Stpt	unocc_clg_stpt_1	AV:3	float value	40049	data float	25	nviUnoccClgStpt	SNVT_temp_p (105)		Network parameter to define unoccupied cooling setpoint
Unocc Htg Stpt	unocc_htg_stpt_1	AV:1	float value	40051	data float	26	nviUnoccHtgStpt	SNVT_temp_p (105)		Network parameter to define unoccupied heating setpoint
Zone Co2 High Trip	zn_co2_hi_trip_1	AV:27	float value	40053	data float	27	nviCO2HiAlm	SNVT_temp_p (105)		Netwrok parameter to define level of CO2 to be reported as a high level alarm
Zone Humidity Stpt Diff	zhumid_stpt_diff_1	AV:22	float value	40055	data float	28	nviHumStptDiff	SNVT_temp_p (105)		Network status of setpoint adjustment (from sensor in space)
Alarm Status	alm_status_1	BV:24	discrete in	10001	binary in	1	nvoAlmStatus	SNVT_count_inc (9)	✓	Network Status indicating alarm condition in unit (see "Current Alarm" for more information)
Aux Heat Output Cmd	aux_htg_cmd_1	BV:20	discrete in	10002	binary in	2	nvoAuxHtgCmd	SNVT_count_inc (9)	✓	Network status of auxilliary heat output command: 1=heat On, 2=heat Off
BV Occupancy Command (BAS)	occupancy_cmd_1	BV:1	discrete out	1	binary out	1	nviBASOccCmd	SNVT_count_inc (9)		Network parameter to define occupancy
Comp1 Runtime Rst	cmp1_rntm_rst_1	BV:13	discrete out	2	binary out	2	nviCmp1RntmRst	SNVT_count_inc (9)		Network parameter to reset Comp 1 runtime. Momentary On/Off required.
Comp2 Runtime Rst	cmp2_rntm_rst_1	BV:14	discrete out	3	binary out	3	nviCmp2RntmRst	SNVT_count_inc (9)		Network parameter to reset Comp 2 runtime. Momentary On/Off required.
Comp Stage1 Output Cmd	cmp_stg1_cmd_1	BV:11	discrete in	10003	binary in	3	nvoCmpStg1Cmd	SNVT_count_inc (9)	✓	Network status of Compressor Stage 1 output command (0=Comp1 Off, 1=Comp1 On)
Comp Stage2 Output Cmd	cmp_stg2_cmd_1	BV:12	discrete in	10004	binary in	4	nvoCmpStg2Cmd	SNVT_count_inc (9)	✓	Network status of Compressor Stage 2 output command (0=Comp2 Off, 1=Comp2 On)
Continous Fan	cont_fan_1	BV:18	discrete out	4	binary out	4	nvoCondAlarm	SNVT_count_inc (9)		Network parameter to run fan continuously during Occ Mode: On=runs in occupied,Off=cycle with compressors
Effect HGR Vlv Command	eff_hgrv_cmd_1	BV:44	discrete in	10005	binary in	5	nviFanCont	SNVT_count_inc (9)	✓	Network status of hot gas re-heat valve output command: 1=heat On, 2=heat Off
Fan Output Cmd	fan_cmd_1	BV:17	discrete in	10006	binary in	6	nvoFanCmd	SNVT_count_inc (9)	✓	Network status of fan output command: 1=fan On, 0=fan Off
Loop Enabled	loop_enabled_1	BV:23	discrete out	5	binary out	5	nviLoopEna	SNVT_count_inc (9)		Network parameter indicating loop status: On = Allow Heat/Cool, Off =Disable Heat/Cool
NSB Status	nsb_status_1	BV:22	discrete in	10008	binary in	8	nvoNSBStatus	SNVT_count_inc (9)	✓	Network status of night setback command : 1=NSB enabled , 2=NSB disabled
Occupancy Status	occ_status_1	BV:21	discrete in	10009	binary in	9	nvoOccStatus	SNVT_count_inc (9)	✓	Network status of occupancy command (1=occupied, 0=unoccupied)
Reset Fan Rntm	fan_rntm_rst_1	BV:19	discrete out	6	binary out	6	nvoEffRhVlvCmd	SNVT_count_inc (9)		Network parameter to reset fan runtime. Momentary On/Off required. Typicaly toggled upon filter change
Rev Valve Action	rev_vlv_act_1	BV:16	discrete out	7	binary out	7	nvoRevVlvAct	SNVT_count_inc (9)		Network parameter for reversing valve action 1=Cooling is enabled, 0=Heating is enabled.
Rev Valve Output Cmd	rev_vlv_cmd_1	BV:15	discrete in	10010	binary in	10	nvoRevVlvCmd	SNVT_count_inc (9)	✓	Network status of reversing valve output command (1=vlv energized, 0=vlv de-energized)
UPM Reset	upm_rst_1	BV:25	discrete out	8	binary out	8	nviUPMReset	SNVT_count_inc (9)		UPM Reset. Momentary. Would rather the BAS toggle the OCC signal or setpoints to reset. This is here to
BRN	brn_2st_1	BV:10	discrete in	10011	binary in	11	nvoBrnAlm	SNVT_count_inc (9)	✓	Network status of UPM Brownout Alarm: 0=BRN normal, 1=BRN alarm
CON	con_2st_1	BV:9	discrete in	10014	binary in	14	nvoCondAlarm	SNVT_count_inc (9)	✓	Network status of UPM Condensate Alarm: 0=CON normal, 1=CON alarm
FRE	frz_2st_1	BV:8	discrete in	10020	binary in	20	nvoFrzAlarm	SNVT_count_inc (9)	✓	Network status of UPM Freeze Alarm : 0=FRZ normal, 1=FRZ alarm
HP1	hp1_2st_1	BV:5	discrete in	10021	binary in	21	nvoHp1Alarm	SNVT_count_inc (9)	✓	Network status of UPM High Pressure Alarm Comp 1: 0=HP1 normal, 1=HP1 alarm
HP2	hp2_2st_1	BV:7	discrete in	10022	binary in	22	nvoHp2Alarm	SNVT_count_inc (9)	✓	Network status of UPM High Pressure Alarm Comp 2: 0=HP2 normal, 1=HP2 alarm
LP1	lp1_2st_1	BV:4	discrete in	10024	binary in	24	nvoLp1Alam	SNVT_count_inc (9)	✓	Network status of UPM Low Pressure Alarm Comp 1: 0=LP1 normal, 1=LP1 alarm
LP2	lp2_2st_1	BV:6	discrete in	10025	binary in	25	nvoLp2Alarm	SNVT_count_inc (9)	✓	Network status of UPM Low Pressure Alarm Comp 2: 0=LP2 normal, 1=LP2 alarm
Damper Output Cmd	damper_cmd_1	BV:49	discrete out	10037	binary in	36	nvoDmprCmd	SNVT_count_inc (9)	✓	Network status of damper output command: 0=Comp1 Off, 1=Comp1 On