

## Data point list Modbus/TCP run around coil system

V005 - 09/2021

D: important data points

S: system specific data points

default BACnet Device ID: 105001

no.	D/S	group	object name	description	R/W	unit	object type	values	object instance
1	D	system data	blnResetErrors	reset all errors	W		4 (BO)	ACTIVE = reset	2
2	D	system data	elnSystemMode	AHU operation mode	W	(95)	1 (AO)	0 = off; 1 = manual mode; 2 = auto mode	5
3	S	setpoints	fInSPTempMin	setpoint of the min. air temperature	W	°C (62)	1 (AO)		10
4	S	setpoints	fInSPTempMax	setpoint of the max. air temperature	W	°C (62)	1 (AO)		11
5	S	setpoints	fInSPHumMin	setpoint of the min. air humidity	W	g/kg (28)	1 (AO)		12
6	D	setpoints	fInSPHumMax	setpoint of the max. air humidity	W	g/kg (28)	1 (AO)		13
7	D	setpoints	fInPowerDemandRac	power demand 0...100% of the run around coil system (standalone only)	W	% (98)	1 (AO)		19
8	S	setpoints	fInSupplyAirFlowRac	supply air volume flow to the run around coil system (standalone only)	W	m³/h (135)	1 (AO)		20
9	S	settings	fInSPTempSUPMin	setpoint of the min. supply air temperature	W	°C (62)	1 (AO)		14
10	S	settings	fInSPTempSUPMax	setpoint of the max. supply air temperature	W	°C (62)	1 (AO)		15
11	S	settings	fInSPHumSUPMin	setpoint of the min. supply air humidity	W	g/kg (28)	1 (AO)		16
12	D	settings	fInSPHumSUPMax	setpoint of the max. supply air humidity	W	g/kg (28)	1 (AO)		17
13	S	system data	eOutEventNotification	notification of alarm class	R	(95)	0 (AI)	0 = no alarm; 1 = warning (B-alarm); 2 = critical (A-alarm)	1
14	S	measurement data	fOutPVTempODA	present value outdoor air temperature	R	°C (62)	0 (AI)		2
15	S	measurement data	fOutPVTempSUP	present value supply air temperature	R	°C (62)	0 (AI)		3
16	S	measurement data	fOutPVTempETA	present value extracted air temperature	R	°C (62)	0 (AI)		4
17	S	measurement data	fOutPVHumODA	present value outdoor air humidity	R	%rF (29)	0 (AI)		6
18	S	measurement data	fOutPVHumSUP	present value supply air humidity	R	%rF (29)	0 (AI)		7
19	S	measurement data	fOutPVHumETA	present value extracted air humidity	R	%rF (29)	0 (AI)		8
20	S	supply air fan	fOutFanSUPPVAirflow	present value supply airflow	R	m³/h (135)	0 (AI)		74
21		extract air fan	fOutFanETAPVAirflow	present value extract airflow	R	m³/h (135)	0 (AI)		76
22		modbus comm. error	bOutComErrSenHumODA	modbus comm. error with the outdoor air humidity sensor	R		3 (BI)	ACTIVE = ok	577
23		modbus comm. error	bOutComErrSenHumSUP	modbus comm. error with the supply air humidity sensor	R		3 (BI)	ACTIVE = ok	578
24		modbus comm. error	bOutComErrSenHumETA	modbus comm. error with the extract air humidity sensor	R		3 (BI)	ACTIVE = ok	579
25		modbus comm. error	bOutComErrSenTempODA	modbus comm. error with the outdoor air temperature sensor	R		3 (BI)	ACTIVE = ok	581
26		modbus comm. error	bOutComErrSenTempSUP	modbus comm. error with the supply air temperature sensor	R		3 (BI)	ACTIVE = ok	582
27	D	modbus comm. error	bOutComErrSenTempETA	modbus comm. error with the extract air temperature sensor	R		3 (BI)	ACTIVE = ok	583
28		current operation mode	eOutPVOperationMode	current operation mode of the air handling unit.	R	(95)	0 (AI)	0 = off; 1 = standby; 2 = control; 7 = manual;	104
29		rac	bOutKVS2ReleasePump	pump release	R		3 (BI)	ACTIVE = on	599
30		rac	bOutKVS2MsgPumpError	pump error	R		3 (BI)	ACTIVE = alarm	598
31		rac	bOutKVS2BrinePressure1	pressure step 1 triggered	R		3 (BI)	ACTIVE = alarm	589
32		rac	bOutKVS2BrinePressure2	pressure step 2 triggered	R		3 (BI)	ACTIVE = alarm	590
33	D	rac	bOutKVS2MsgMinTempInletETA	exhaust air heat exchanger is frosting (prio=2)	R		3 (BI)	ACTIVE = alarm	595

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no.	D/S	group	object name	description	R/W	unit	object type	values	object instance
34		rac	bOutKVS2MsgFrostFeedCoil	alarm feed coil frosting (prio=3)	R		3 (BI)	ACTIVE = alarm	594
35		rac	bOutKVS2MsgNoRecovery	heat recovery is currently not possible (prio=2)	R		3 (BI)	ACTIVE = alarm	597
36		rac	bOutKVS2MsgNoFeed	feed doesn't have cooling or heating (prio=2)	R		3 (BI)	ACTIVE = alarm	596
37		rac	bOutKVS2MsgBrinePressureLow	brine pressure have to be checked, low pressure (prio=2)	R		3 (BI)	ACTIVE = alarm	593
38		rac	bOutKVS2MsgBrinePressureCritical	critical brine pressure (prio=3)	R		3 (BI)	ACTIVE = alarm	592
39	D	rac	bOutKVS2MsgAutoPumpOff	auto pump stop (prio=2)	R		3 (BI)	ACTIVE = alarm	591
40		rac	bOutKVS2StateHeatExchangerOperation	state of the operation signal be released	R		3 (BI)	ACTIVE = on	602
41	S	rac	bOutKVS2StateFastMode	state of the fast cool- or heating mode active	R		3 (BI)	ACTIVE = on	601
42	S	rac	bOutKVS2StateCoolingFeed	state of the cooling feed feeding is active	R		3 (BI)	ACTIVE = on	600
43		rac	bOutKVS2StateHeatingFeed	state of the heating feed feeding is active	R		3 (BI)	ACTIVE = on	603
44		rac	bOutKVS2ActuatingValueFeedCoolingPu	pump release cooling feed	R		3 (BI)	ACTIVE = on	604
45		rac	bOutKVS2ActuatingValueFeedHeatingPu	pump release heating feed	R		3 (BI)	ACTIVE = on	605
46		rac	bOutKVS2ReleaseColdProvider	release cold provider	R		3 (BI)	ACTIVE = on	606
47		rac	bOutKVS2ReleaseHeatProvider	release heat provider	R		3 (BI)	ACTIVE = on	607
48	D	rac	fOutKVS2CtrlPump	controlled value pump speed	R	% (98)	0 (AI)		107
49	D	rac	fOutKVS2CtrlPowerValve	controlled value run around coil power valve	R	% (98)	0 (AI)		106
50	S	rac	fOutKVS2CtrlFrostProtectionValve	controlled value run around coil frost protection valve	R	% (98)	0 (AI)		105
51		rac	fOutKVS2TempSUPIn	current value inlet temperature of the fresh air heat exchanger	R	°C (62)	0 (AI)		112
52		rac	fOutKVS2TempSUPOut	current value outlet temperature of the fresh air heat exchanger	R	°C (62)	0 (AI)		113
53		rac	fOutKVS2TempETAIIn	current value inlet temperature of exhaust air heat exchanger	R	°C (62)	0 (AI)		109
54		rac	fOutKVS2TempETAOOut	current value return temperature exhaust air heat exchanger	R	°C (62)	0 (AI)		110
55		rac	fOutKVS2TempPreFeed	current value brine temperature	R	°C (62)	0 (AI)		111
56	D	rac	fOutKVS2BrineVolumeFlow	present value brine volume flow	R	m³/h (135)	0 (AI)		108
57	S	rac	fOutKVS2ThermalPowerSUP	current value thermal power of the fresh air heat exchanger	R	kW (48)	0 (AI)		114
58	S	rac	fOutKVS2ThermalPowerETA	current value thermal power of the exhaust air heat exchanger	R	kW (48)	0 (AI)		115
59	S	rac	fOutKVS2ThermalPowerFeedHeat	current value thermal power of the heating feed	R	kW (48)	0 (AI)		116
60	S	rac	fOutKVS2ThermalPowerFeedCool	current value thermal power of the cooling feed	R	kW (48)	0 (AI)		117
61	S	rac	fOutKVS2CtrlFeedCoolingValve	controlled value run around coil cooling feed valve	R	% (98)	0 (AI)		118
62	S	rac	fOutKVS2CtrlFeedHeatingValve	controlled value run around coil heating feed valve	R	% (98)	0 (AI)		119
63		rac	fOutKVS2TempCoolFeedIn	current value inlet temperature of cooling feed	R	°C (62)	0 (AI)		122
64		rac	fOutKVS2TempHeatFeedOut	current value return temperature of heating feed	R	°C (62)	0 (AI)		123
65		rac	fOutKVS2CtrlDehumCoolerValve	controlled value run around coil dehumidifier cooling valve	R	% (98)	0 (AI)		120
66		rac	fOutKVS2CtrlDehumReheaterValve	controlled value run around coil dehumidifier cooling recovery valve	R	% (98)	0 (AI)		121