## HomeAutomation Interface V2.08

Reg	Ident	r/w	Unit	Range	Description
1	VERSION	r/w		02	(0) V2.03 compatible (1) Cascade (2) Home Automation
2	AMBIENT TEMP	r	1/10°C		Ambient Temperature
3	PLANT_MODE	r/w		02	(0) Off (1) Auto (2) Domestic Hot Water
4	IO-BOX INDEX	r/w		02	Switch between the IO Boxes
5	ERROR 1	r			See error description*
6	ERROR 2	r			See error description*
7	ERROR 3	r			See error description*
8	ERROR 4	r			See error description*
9	ERROR 5	r			See error description*
10	Heating Circuit Index	ŗ		0,1,3,5	(0) not available, else index
11			(0) Off, (1) Auto, (2) Heat, (3) Setback		
12 HC Heating Temp r/w 1/10°C		5°C 40°C	Heating Temperature		
13 HC Setback Temp r/w 1/10°C 5°C 40°C		Setback Temperature			
14 HC Remote Control Override r 1/10°C -5°C 5°C Remote cor		Remote control override			
15	15 HC State r *See Descriptio		*See Description		
			(0) Off, (1) External On, (2) External Inverted (if learned)		
17	HC Eco Mode	r/w	r/w 03 (0)Off, (1)Comfort, (2)Minimum, (3) Eco		(0)Off, (1)Comfort, (2)Minimum, (3) Eco
18	HC Time Program	r/w		01	Current Time Program
19	HC Current Room Set Temp	r	1/10°C		Current set temp
20	HC Current Room Temp	r	1/10°C		Current room temp
	HC Current Flow Temp Set	r	1/10°C		Current flow temp set
22 HC Current Flow Temp r 1/10°C		Current flow temp			
	HC Pump	r		01	Off/On Heating Circuit Pump
	HC Solar Heating Mode	r/w		02	Off / Eco / On
25	HC Solar Heating Temp	r/w	1/10°C	02	Flow / Room Temperature
26					
27					
28					

29						
30	Heating Circuit Index	r		0,2,4,6	(0) not available, else index	
31	HC Mode	r/w		03	(0) Off, (1) Auto, (2) Heat, (3) Setback	
32	HC Heating Temp	r/w	1/10°C	5°C 40°C	Heating Temperature	
33	HC Setback Temp	r/w	1/10°C	5°C 40°C	Setback Temperature	
34	HC Remote Control Override	r	1/10°C	-5°C 5°C	Remote control override	
35	HC State	r			*See Description	
36	HC External Demand	r/w	0	02	(0) Off, (1) External On, (2) External Inverted (if learned)	
37	HC Eco Mode	r/w		03	(0)Off, (1)Comfort, (2)Minimum, (3) Eco	
38	HC Time Program	r/w		01	Current Time Program	
39	HC Current Room Set Temp	r	1/10°C		Current set temp	
40	HC Current Room Temp	r	1/10°C		Current room temp	
41	HC Current Flow Temp Set	r	1/10°C		Current flow temp set	
42	HC Current Flow Temp	r	1/10°C		Current flow temp	
43	HC Pump	r		01	Off/On Heating Circuit Pump	
44	HC Solar Heating Mode	r/w		02	Off / Eco / On	
45	HC Solar Heating Temp	r/w	1/10°C	02	Flow / Room Temperature	
46						
47						
48						
49						
50	DHW Index	r		03	(0) not available, else index	
51	DHW Mode	r/w		0 2	(0)Off, (1) Auto, (2) On	
52	DHW Force Once	r/w		01	Heatup water once	
53	DHW Priority Mode	r/w		01	Priority mode	
54	DHW Set Temp	r/w	1/10°C	8°C 80°C	Set Temperature DHW	
55	DHW Minimum Temp	r/w	1/10°C	8°C 80°C	Minimum Temperature DHW	
56	DHW Time Program	r/w		0 1	Current Time Program	
57	7 DHW Legionella r/w 0 8 (0) Monday (7) Sunday, (8) Off		(0) Monday (7) Sunday, (8) Off			
58	DHW State	r			*See Description	
	DHW External	r/w		0 2	(0) Off, (1) External On, (2) External Inverted (if learned)	
60	DHW On Temp	r	1/10°C		On Temperature	
61	DHW Off Temp	r	1/10°C		Off Temperature	

62	DHW Temp Set	r	1/10°C		Current set temp
63	DHW Solar Heating Mode	r/w		02	Off / Eco / On
64					
65	ACCU Index	r		03	(0) not available, else index
66	ACCU use time program	r/w		0 1	(0) only on demand, (1) time program
67	ACCU Min On	r/w	1/10°C	8°C 80°C	Minimum Temp Of Accu
68	ACCU Min Off	r/w	1/10°C	8°C 80°C	Minimum Switch of Temp
69	ACCU Min On (external/timeprg)	r/w	1/10°C	8°C 80°C	Minimum Temp ON Accu for TimeProg or ext Demand
70	ACCU Min Off (external/timeprg)	r/w	1/10°C	8°C 80°C	Maximum Temp OFF Accu for TimeProg or ext Demand
71	ACCU External	r		0 2	(0) Off, (1) External On, (2) External Inverted (if learned)
72	ACCU TPO	r	1/10°C		UPPER Temperature
73	ACCU TPM	r	1/10°C		MIDDLE Temperature
74	ACCU State	r			*See Description
75	Solar Collector Temp	r	1/10°C		Collector Temperature
76	Solar Index	r		0,1,3,5	(0) not available, else index
77	Solar Mode	r/w		01	(0) Off, (1) On
78	Solar Storage Temp	r	1/10°C		Temperature Store
79	Solar Cooling	r/w		0 2	Off / Eco / On
80	Solar Pump	r	Off/On	0 1	Solar Pump state
81	Solar State	r			*See Description
82					
83	Solar Index	r		0,2,4,6	(0) not available, else index
84	Solar Mode	r/w		01	(0) Off, (1) On
85	Solar Storage Temp	r	1/10°C		Temperature Store
86	Solar Cooling	r/w		0 2	Off / Eco / On
87	Solar Pump	r	Off/On	01	Solar Pump state
88	Solar State	r			*See Description
89					
90	SolarGain index	r		0,1,2,3	(0) not available, else index
91	SolarGain current	r	0,1 kW		Current solar energy
92	SolarGain today	r	0,1 kWh		todays solar energy
93	SolarGain yesterday	r	0,1 kWh		yesterdays solar energy
94	SolarGain total	r	0,1 kWh		total solar energy

95	SolarGain flow rate	r	0.01 l/min		flow rate
96	SolarGain flow temp	r	1/10°C	Solar flow temperature	
97	SolarGain return temp	r	1/10°C		Solar return temperature
98					
99					
100	FA Index	r/w		1,2,3	Index of FA (else 0)
	FA Mode	r/w			(0) Off (1) Auto (2) On
	FA Temp	r	1/10°C		Current boiler temperature
	FA Temp set	r	1/10°C		Set temp for boiler
	FA Modulation	r	%		Modulation
	FA State	r			Boilerstate*
	FA Runtime	r	h		total burner runtime
	FA Starts	r			total burner starts
	FA Maintenance	r/w		0 1	Maintenance (0 restarts Maintenance Intervall)
109					
110	ECO Mode	r/w	Off/On	0 1	Enable/Disable ECO Mode
111	ECO Temp	r	°C		Current Temp
112	ECO Clouds	r	%		Current Clouds
113	ECO Forecast Temp	r	°C		Forecast Temp
114	ECO Forecast Clouds	r	%		Forecast Clouds
115	ECO Starttime	r	hhmm		Ecomode Starttime
116	ECO Endtime	r	hhmm		Ecomode Endtime
117	ECO Cloud limit	r/w	%	10 90	Enable/Disable ECO Cloud limitode
118	ECO Switch off temp hysteresys	r/w	°K	-20°K 0°K	Enable/Disable ECO Switch off temp hysteresysode
119	ECO Lead	r/w	min	0 600 min	Enable/Disable ECO Leadode

To decode unsigned integer simply add 65536 to negative values.

*Boilerstate	
0	Permanent Op
1	Start

2	Ignition		
3	3 Softstart		
4	Heating Full Power		
5	Run On Time		
6	Off		
7	Suction		
8	Ash		
9	Pellet		
10	Pellet switch		
11	Error		
12	Measure		
1399	Off		

Error description	*	Examples
digit		20040 (2004/0)
1,2,3,4	Errorcode (see error manual)	20041 (2004/1)
5	Index of Boiler/Accu starting at 0	50100 (5010/0)

State Bit	Heating Circuit
0	Check Alarm Text
1	DHW Preference
2	Source Overheating / Collector Protection active
3	Operating Mode Off
4	HC Mode Set Back
5	HC Mode Heating On
6	Screed Program active
7	Vacation Function active
8	Party Function active
9	Frost Protection active

Example Heating Circuit State 1056	
Convert to binary	
1056 dez = 10000100000 bin	
Start from right	
10000100000	
09876543210	
Bit 5 is set:	
HC Mode Heating on	
Bit 10 is set	
Outside Temp above heating limit	

10	Outside Temp above Heating Limit
11	Room Temp reached
12	Free Wheel Scavening / Frost Scavening active
13	Source Temp below Pump Release Temp
14	External requirement active
15	Waiting for external requirement
16	Outer temp over setback temp
17	Solare heating active
18	Fine weather forecast. Temperature was reduced.
19	Bad weather forecast. Solar heating inactive.
20	Pump postrun active
21	Advanced Run Up Active
22	Solar heating is disabled, room temperature reached
23	Source Temp over Flow Temp Max
24	Comforttemperature active

State Bit	Domestic Hot Water
0	Check Alarm Text
1	Source Overheating / Collector Protection active
2	Operating Mode Off
3	Time Outside Time Program
4	Time within Time Program
5	Legionella Protection active
6	Frost Protection active
7	Run Down active
8	Source Temp below Pump Release Temp
9	Source Temp below Pump Temp
10	DHW Boost active
11	Free Wheel Scavening / Frost Scavening active
12	Priority Function active
13	Requirement Off
14	Requirement On
15	External requirement active

16	Waiting for external requirement
17	Solare heating active
18	Bad weather forecast. Solar heating inactive.
19	Intelligent water heating active
20	Good weather forecast. Reduced set temp.

State Bit	Accu
0	Check Alarm Text
1	Source Overheating / Collector Protection active
2	Frost Protection active
3	System Temp Maximum Reached
4	Run Down active
5	Free Wheel Scavening / Frost Scavening active
6	Source Temp below Pump Release Temp
7	Source Temp below Release Temp
8	Requirement On
9	Requirement Off
10	External requirement active
11	Waiting for external requirement
12	Power request Stirling is active
13	Time program active

State Bit	Solar Circuit
0	Check Alarm Text
1	Operating Mode Off
2	ACC Max reached
3	Limit Max reached
4	Coll Overheating
5	Difference Collecter-ACC too low
6	Operating Mode On
7	Frost Protection active
8	Priority Function\: Run Time active
9	Priority Function\: Rest Time active

10	Priority Function\: Scavening active
11	Priority Function\: Scavening active
12	Free Wheel Scavening active
13	Parallel Operation active
14	Pumpe because of Switch Valve active
15	Scavening active
16	Coll Temp Min not reached
17	Solar Circuit with Priority active
18	Good weather forecast solar cooling active

Value	Boiler
0	Cont. run
1	Start
2	Ignition
3	Softstart
4	Powerburn
5	Shutdown
7	Suction
10	Pellets Switch
11	Error
20	Input AK
21	Input AK inverted
22	no Stirling release
23	Power Vent error
24	Outer temp over heating temp
99	Off
150	Boiler lock time active