BACnet IP

GOLD sizes 04-80, program version 5.15 and newer versions.

Overview

This BACnet driver is implemented in GOLD PV 5.15 and provides the function
of monitoring and operating the air handling unit.
GOLD is a BACnet Application Specific Controller (B-ASC).
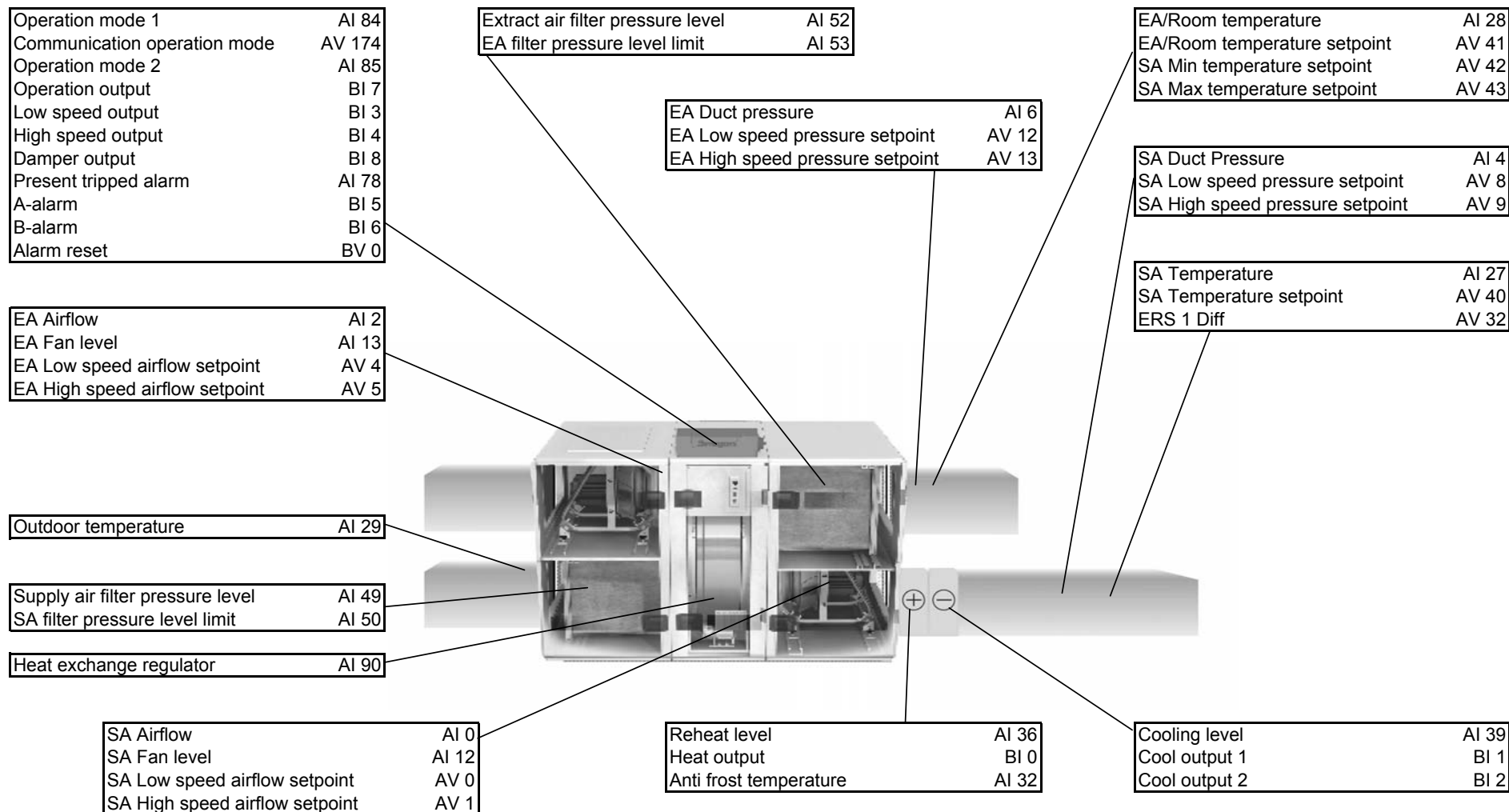The supported Data Link Layer Options are BACnet / IP.
See also document BACnet PICS (Protocol Implementation Conformance Statement) GOLD
and GOLD EDE (Engineering Data Exchange).

BACnet Interoperability Building Blocks Supported.

Data Sharing	DS-RP-B	Data Sharing-Read Property-B
Data Sharing	DS-RPM-B	Data Sharing-Read Property Multiple-B
Data Sharing	DS-WP-B	Data Sharing-Write Property-B
Data Sharing	DS-COV-B	Data Sharing-COV-B
Alarm&Event Management	AE-N-I-B	Alarm&Event-Notification Internal-B
Device Management	DM-DDB-B	Device Management-Dynamic Device Binding-B
Device Management	DM-DOB-B	Device Management-Dynamic Object Binding-B
Device Management	DM-DCC-B	Device Management-Dynamic Communication Control-B

Standard Object Types Supported.

Object Type	Properties
Analog Input	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Units, Min_Pres_Value, Max_Pres_Value, Resolution, COV_Increment.
Analog Value	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Units, Priority_Array, Relinquish_Default, COV_Increment.
Binary Input	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Polarity, Time_Delay, Notification_Class, Alarm_Value, Event_Enable, Acked_Transitions, Notify_Type, Event_Time_Stamps.
Binary Value	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Priority_Array, Relinquish_Default.
Device	Object_Identifier, Object_Name, Object_Type, System_Status, Vendor_Name, Vendor_Identifier, Model_Name, Firmware_Revision, Application_Software_Version, Location, Description, Protocol_Version, Protocol_Revision, Protocol_Services_Supported, Protocol_Object_Types_Supported, Object_List, Max_APDU_Length_Accepted, Segmentation_Supported, APDU_Timeout, Number_Of_APDU_Retries, Device_Address_Binding, Database_Revision, Active_COV_Subscriptions.
Notification Class	Object_Identifier, Object_Name, Object_Type, Description, Notification_Class, Priority, Ack_Required, Recipient_List, Profile_Name.

Operation mode 1	AI 84
Communication operation mode	AV 174
Operation mode 2	AI 85
Operation output	BI 7
Low speed output	BI 3
High speed output	BI 4
Damper output	BI 8
Present tripped alarm	AI 78
A-alarm	BI 5
B-alarm	BI 6
Alarm reset	BV 0

EA Airflow	AI 2
EA Fan level	AI 13
EA Low speed airflow setpoint	AV 4
EA High speed airflow setpoint	AV 5

Outdoor temperature	AI 29

Supply air filter pressure level	AI 49
SA filter pressure level limit	AI 50

Heat exchange regulator	AI 90

SA Airflow	AI 0
SA Fan level	AI 12
SA Low speed airflow setpoint	AV 0
SA High speed airflow setpoint	AV 1

Extract air filter pressure level	AI 52
EA filter pressure level limit	AI 53

EA Duct pressure	AI 6
EA Low speed pressure setpoint	AV 12
EA High speed pressure setpoint	AV 13

Reheat level	AI 36
Heat output	BI 0
Anti frost temperature	AI 32

EA/Room temperature	AI 28
EA/Room temperature setpoint	AV 41
SA Min temperature setpoint	AV 42
SA Max temperature setpoint	AV 43

SA Duct Pressure	AI 4
SA Low speed pressure setpoint	AV 8
SA High speed pressure setpoint	AV 9

SA Temperature	AI 27
SA Temperature setpoint	AV 40
ERS 1 Diff	AV 32

Cooling level	AI 39
Cool output 1	BI 1
Cool output 2	BI 2

Analog Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
0	**SA Airflow**	0-8200l/s	
	Present supply airflow.		
1	**SA Airflow regulator**	0-8200l/s	
	Present supply airflow regulator setpoint.		
2	**EA Airflow**	0-8200l/s	
	Present extract airflow.		
3	**EA Airflow regulator**	0-8200l/s	
	Present extract airflow regulator setpoint.		
4	**SA Duct pressure**	0-2000Pa	
	Present supply air duct pressure.		
5	**SA Duct pressure regulator**	0-2000Pa	
	Present supply air duct pressure regulator setpoint.		
6	**EA Duct pressure**	0-2000Pa	
	Present extract air duct pressure.		
7	**EA Duct pressure regulator**	0-2000Pa	
	Present extract air duct pressure regulator setpoint.		
8	**SA VAV demand/boost input**	0-100.00%	
	Present input signal for supply air VAV demand or boosting function.		
9	**SA VAV demand regulator**	0-100.00%	
	Present supply air VAV demand regulator setpoint.		
10	**EA VAV demand/boost input**	0-100.00%	
	Present input signal for extract air VAV demand or boosting function.		
11	**EA VAV demand regulator**	0-100.00%	
	Present supply air VAV demand regulator setpoint.		
12	**SA Fan level**	0-100.00%	
	Present running level for the supply air fan.		
13	**EA Fan level**	0-100.00%	
	Present running level for the extract air fan.		
14	**SA Fan effect**	0-6500W	
	Present power consumption level for the supply air fan.		
15	**EA Fan effect**	0-6500W	
	Present power consumption level for the extract air fan.		
16	**SFP**	0.0-9.9	
	SFP supply air + extract air.		
17	**SA Frequency**	0-100.00Hz	
	Present frequency level for the supply air fan.		
18	**EA Frequency**	0-100.00Hz	
	Present frequency level for the extract air fan.		
19	**SA Voltage**	0-500V	
	Present voltage level for the supply air fan.		
20	**EA Voltage**	0-500V	
	Present voltage level for the extract air fan.		
21	**SA Current**	0-30.000A	
	Present current level for the supply air fan.		
22	**EA Current**	0-30.000A	
	Present current level for the extract air fan.		
23	**SA Airflow pressure**	0-2000Pa	

Analog Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
	Present airflow pressure in the supply air fan inlet.		
24	**EA Airflow pressure**	0-2000Pa	
	Present airflow pressure in the extract air fan inlet.		
25	**SA Temp regulator**	-55.00-125.00°C	
	Present supply air temperature regulator setpoint.		
26	**EA Temp regulator**	-55.00-125.00°C	
	Present extract air temperature regulator setpoint.		
27	**SA Temperature**	-55.00-125.00°C	
	Present supply air temperature.		
28	**EA/Room temperature**	-55.00-125.00°C	
	Present extract air/room temperature in the unit.		
29	**Outdoor temperatur**	-55.00-125.00°C	
	Present outdoor air temperature in the unit.		
30	**EA/Room temperature external**	-55.00-125.00°C	
	Present room temperature external from the unit.		
31	**Outdoor temperatur external**	-55.00-125.00°C	
	Present outdoor air temperature external from the unit.		
32	**Anti frost temperature**	-55.00-125.00°C	
	Present anti frost temperature for water reheating coils.		
33	**Temperature sensor 3**	-55.00-125.00°C	
	Present temperature for temp sensor no.3		
34	**Temperature sensor 4**	-55.00-125.00°C	
	Present temperature for temp sensor no.4		
35	**Rotary heat exchanger level**	0-100.00%	
	Present operation level from rotary heat exchanger.		
36	**Reheat level**	0-100.00%	
	Present level of reheat.		
37	**SA Down regulation level**	0-100.00%	
	Present level of supply airflow down regulation.		
38	**Extre regulation sequence level**	0-100.00%	
	Present level of the extra regulation sequence.		
39	**Cooling level**	0-100.00%	
	Present level of cooling.		
40	**Heating boost level**	0-100.00%	
	Present level of heating boost.		
41	**Cooling boost level**	0-100.00%	
	Present level of cooling boost.		
42	**HX pressure level**	0-2000Pa	
	Present pressure drop for the rotary heat exchanger.		
43	**HX pressure alarm limit**	0-2000Pa	
	Present pressure drop alarm limit for the rotary heat exchanger.		
44	**HX temperature**	0-100.00°C	
	Present temperature inside the control unit for the rotary heat exchanger.		
45	**Effect reduction level**	0-100.00%	
	Present level of max output signal for electrical reheaters, active during low supply airflow.		
46	**Anti frost temp setpoint/operation**	10.00-16.00°C	
	Present anti frost temperature setpoint for water reheating coils during unit operation.		
47	**Anti frost temp setpoint/stop**	15.00-40.00°C	

Analog Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
	Present anti frost temperature setpoint for water reheating coils when the unit is in stop.		
48	**Anti frost temp alarm limit**	5.00-30.00°C	
	Setting of antifrost temperature alarm limit.		
49	**Supply air filter pressure level**	0-2000Pa	
	Present supply air filter pressure drop.		
50	**Supply air filter pressure alarm limit.**	0-2000Pa	
	Present supply air filter pressure alarm limit.		
51	**Supply air filter pressure level, new**	0-2000Pa	
	Supply air filter pressure saved from calibration.		
52	**Extract air filter pressure level**	0-2000Pa	
	Present extract air filter pressure drop.		
53	**Extract air filter pressure alarm limit.**	0-2000Pa	
	Present extract air filter pressure alarm limit.		
54	**Extract air filter pressure level, new**	0-2000Pa	
	Extract air filter pressure saved from calibration.		
55	**Temperature displacement**	-5.00 - 5.00°C	
	Present temperature displacement from input signal.		
56	**Coil type**	0-20	
	Present connected reheat coil type.		
57	**Cool step time**	0-600s	
	Present time between cool step shift.		
58	**Cool relay 1 restart time**	0-900s	
	Present time between two starts of cool relay 1.		
59	**Cool relay 2 restart time**	0-900s	
	Present time between two starts of cool relay 2.		
60	**Programversion, HMI**	0-10.00	
	Present programversion for the handterminal.		
61	**Programversion, HMI-slave**	0-10.00	
	Present programversion for the extra handterminal.		
62	**Programversion, main controller.**	0-10.00	
	Present programversion for the main control unit.		
63	**Programversion, SA FC-1.**	0-10.00	
	Present programversion for the supply air frequency converter no.1.		
64	**Programversion, SA FC-2.**	0-10.00	
	Present programversion for the supply air frequency converter no.2.		
65	**Programversion, EA FC-1.**	0-10.00	
	Present programversion for the extract air frequency converter no.1.		
66	**Programversion, EA FC-2.**	0-10.00	
	Present programversion for the extract air frequency converter no.2.		
67	**Programversion, HX control unit**	0-10.00	
	Present programversion for the rotary heat exchange control unit.		
68	**Weekday**	0 - 6	
	Present weekday for the unit's internal clock.		
69	**Extended low speed op. Hours**	0-23	
	Present time for extended low speed operation.		
70	**Extended low speed op. Minutes**	0-59	
	Present time for extended low speed operation.		
71	**Extended high speed op. Hours**	0-23	

Analog Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
	Present time for extended high speed operation.		
72	**Extended high speed op. Minutes**	0-59	
	Present time for extended high speed operation.		
73	**SA Fan operation time**	0-9999	
	Present operation time for the supply air fan, measured in minutes and present in days (24h).		
74	**EA Fan operation time**	0-9999	
	Present operation time for the extract air fan, measured in minutes and present in days (24h).		
75	**Cool operation time**	0-9999	
	Present operation time for cooling, measured in minutes and present in days (24h).		
76	**Heat exchange operation time**	0-9999	
	Present operation time for heat exchange, measured in minutes and present in days (24h).		
77	**Reheat operation time**	0-9999	
	Present operation time for reheat, measured in minutes and present in days (24h).		
78	**Present tripped alarm**	0-200	
	Present tripped alarm number with highest priority.		
79	**Active not tripped alarm no.1**	0-200	
	Present active alarm in delay.		
80	**Active not tripped alarm no.2**	0-200	
	Present active alarm in delay.		
81	**Active not tripped alarm no.3**	0-200	
	Present active alarm in delay.		
82	**SA Fan size**	04 - 80	
	Present supply air fan size.		
83	**EA Fan size**	04 - 80	
	Present extract air fan size.		
84	**Operation mode 1**	0 - 18	
	0=Manual stop. 1=Ext. stop. 2=Com. stop 1. 3=Manual high speed. 4=Summer night cooling. 5=Int. night heat. 6=Manual low speed. 7=Ext. high speed. 8=Com. high speed. 9=Year channel stop. 10=Year channel high speed. 11=Year channel low speed. 12=Time channel high speed. 13=Ext. low speed. 14=Com. low speed. 15=Time channel low speed. 16=Time channel stop. 17=Low speed=stop. 18=Com. stop 2. (New in PV 5.00)		
85	**Operation mode 2**	0 - 22	

Analog Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
	0= 1=Coold air recovery. 2=Cooling boost. 3=SA down regulation. 4=HX defrosting. 5=Anti frost func. active. 6=Effect reduction. 7=Startup. 8=Zero calibration. 9=Extended low speed. 10=Extended high speed. 11=Air adjustment. 12=Cooling off. 13=Purging R.HX. 14=Extended R.HX. op. 15=Filter calibration. 16=R.HX. calibration 17=Morning boost. 18=Heating boost. 19=Alarm. 20=CoolDX pressure reduction. (PV 2.00) 21=Startup extract air fan (New in 4.00) R.HX speed limited. (Only in PV 2.00-2.02) 22=Fan heat retention (New in PV 5.00)		
86	**Operation mode, manual**	0 - 3	
	Present manual operation set on the unit's handterminal. 0=Stop. 1=Auto operation. 2=Manual low speed. 3=Manual high speed.		
87	**Copy of Input Status 1-16.**	0-65535	
	Bit 0=1x0001 Bit 1=1x0002 Bit 15=1x0016		
88	**Copy of Input Status 17-32.**	0-65535	
	Bit 0=1x00017 Bit 1=1x00018 Bit 15=1x0032		
89	**Copy of Input Status 33-48.**	0-65535	
	Bit 0=1x00033 Bit 1=1x00034 Bit 15=1x0048		
90	**Heat exchanger regulator**	0-100.00%	
	Present level of heat exchanger regulator RX/CX/PX.		
91	**Extract air-humidity**	0-100.00%	
	Present level of extract air-humidity.		
92	**Extract air-humidity temperature**	-55.00-125.00°C	
	Present temperature inside extract air-humidity sensor.		
93	**Extract air-dewpoint**	-55.00-125.00°C	
	Calculated extract air-dewpoint.		
94	**AYC chilled water temperature**	-55.00-125.00°C	
	Present AYC chilled water temperature.		
95	**AYC chilled water temperature regulator**	-55.00-125.00°C	
	Present AYC chilled water temperature regulator setpoint.		

Analog Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
96	**AYC chilled water output**	0-100.00%	
	Present level of AYC chilled water valve output.		
97	**Supply air-dewpoint regulator**	-55.00-125.00°C	
	Present supply air-dewpoint regulator setpoint.		
98	**Supply air-humidity**	0-100.00%	
	Present level of supply air-humidity		
99	**Supply air-humidity temperature**	-55.00-125.00°C	
	Present temperature inside supply air-humidity sensor.		
100	**Supply air-dewpoint**	-55.00-125.00°C	
	Calculated supply air-dewpoint.		
101	**C.HX. Temperature**	-55.00-125.00°C	
	Present temperature of coil heat exchanger.		
102	**P.HX. Temperature 1**	-55.00-125.00°C	
	Present temperature 1 of plate heat exchanger.		
103	**P.HX. Temperature 2**	-55.00-125.00°C	
	Present temperature 2 of plate heat exchanger.		
104	**P/C.HX. Humidity**	0-100.00%	
	Present level of air-humidity in plate/coil heat exchanger.		
105	**R.HX. Efficiency**	0-100.00%	
	Calculated level of rotary heat exchanger efficiency.		
106	**C.HX. Valve output**	0-100.00%	
	Present level of coil heat exchanger valve output.		
107	**P.HX bypass output**	0-100.00%	
	Present level of plate heat exchanger bypass output.		
108	**Supply air prefilter pressure level**	0-2000Pa	
	Present supply air prefilter pressure drop.		
109	**Supply air prefilter pressure alarm limit.**	0-2000Pa	
	Present supply air prefilter pressure alarm limit.		
110	**Supply air prefilter pressure level, new**	0-2000Pa	
	Supply air prefilter pressure saved from calibration.		
111	**Extract air prefilter pressure level**	0-2000Pa	
	Present extract air prefilter pressure drop.		
112	**Extract air prefilter pressure alarm limit.**	0-2000Pa	
	Present extract air prefilter pressure alarm limit.		
113	**Extract air prefilter pressure level, new**	0-2000Pa	
	Extract air prefilter pressure saved from calibration.		
114	**Xzone reheat level**	0-100.00%	
	Present level of Xzone reheat.		
115	**Xzone anti frost temperature**	-55.00-125.00°C	
	Present Xzone anti frost temperature for water reheating coils.		
116	**Xzone cooling level**	0-100.00%	
	Present level of Xzone cooling.		
117	**Xzone cool step time**	0-600s	
	Present time between Xzone cool step shift.		
118	**Xzone cool relay 1 restart time**	0-900s	
	Present time between two starts of Xzone cool relay 1.		
119	**Xzone cool relay 2 restart time**	0-900s	
	Present time between two starts of Xzone cool relay 2.		
120	**Xzone SA Temp regulator**	-55.00-125.00°C	
	Present Xzone supply air temperature regulator setpoint.		
121	**Xzone EA Temp regulator**	-55.00-125.00°C	
	Present Xzone extract air temperature regulator setpoint.		
122	**Xzone SA Temperature**	-55.00-125.00°C	

Analog Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
	Present Xzone supply air temperature.		
123	**Xzone EA/Room temperature**	-55.00-125.00°C	
	Present Xzone extract air/room temperature.		
124	**Pre-heating air temperature**	-55.00-125.00°C	
	Present pre-heating air temperature.		
125	**Pre-heating level**	0-100.00%	
	Present level of pre-heating.		
126	**Pre-heating anti frost temperature**	-55.00-125.00°C	
	Present anti frost temperature for water pre-heating coils.		
127	**ReCO2 CO2 input**	0-100.00%	
	Present input signal for ReCO2 CO2.		
128	**ReCO2 internal damper output**	0-100.00%	
	Present output signal for ReCO2 internal damper.		
129	**ReCO2 external damper output**	0-100.00%	
	Present output signal for ReCO2 external damper.		
130	**ReCO2 outdoor airflow**	0-8200l/s	
	Present ReCO2 outdoor airflow.		
131	**ReCO2 outdoor airflow regulator**	0-8200l/s	
	Present ReCO2 outdoor airflow regulator setpoint.		
132	**ReCO2 outdoor airflow pressure**	0-2000Pa	
	Present ReCO2 outdoor airflow pressure.		
133	**Preheat operation time**	0-9999	
	Present operation time for preheat, measured in minutes and present in days (24h).		
134	**Xzone cool operation time**	0-9999	
	Present operation time for Xzone cooling, measured in minutes and present in days (24h).		
135	**Xzone reheat operation time**	0-9999	
	Present operation time for Xzone reheat, measured in minutes and present in days (24h).		
136	**Supply air-D temperature**	-55.00-125.00°C	
	Present supply air-D temperature.		
137	**Extract air-D temperature**	-55.00-125.00°C	
	Present extract air-D temperature.		
138	**AYC heat temperature**	-55.00-125.00°C	
	Present AYC heat temperature.		
139	**AYC heat temp regulator**	-55.00-125.00°C	
	Present AYC heat temperature regulator setpoint.		
140	**AYC heat valve output**	0-100.00%	
	Present level of AYC heat valve output.		
141	**Min/Max/Average Sens1Temp**	-55.00-125.00°C	PV 5.15
	Present Min/Max/Average sensor 1 temperature.		
142	**Min/Max/Average Sens2Temp**	-55.00-125.00°C	PV 5.15
	Present Min/Max/Average sensor 2 temperature.		
143	**Min/Max/Average Sens3Temp**	-55.00-125.00°C	PV 5.15
	Present Min/Max/Average sensor 3 temperature.		
144	**Min/Max/Average Sens4Temp**	-55.00-125.00°C	PV 5.15
	Present Min/Max/Average sensor 4 temperature.		

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
0	**SA Low speed airflow setpoint**	0-8200l/s	
	Supply airflow setpoint for the unit when running in low speed operation.		
1	**SA High speed airflow setpoint**	0-8200l/s	
	Supply airflow setpoint for the unit when running in high speed operation.		
2	**SA Max speed airflow setpoint**	0-8200l/s	
	Supply airflow max. limit for the unit when the low/high speed operation setpoint is altered by boosting function etc.		
3	**SA Min speed airflow setpoint**	0-8200l/s	
	Supply airflow min. limit for the unit when the low/high speed operation setpoint is altered when running in fan regulation mode VAV demand.		
4	**EA Low speed airflow setpoint**	0-8200l/s	
	Extract airflow setpoint for the unit when running in low speed operation.		
5	**EA High speed airflow setpoint**	0-8200l/s	
	Extract airflow setpoint for the unit when running in high speed operation.		
6	**EA Max speed airflow setpoint**	0-8200l/s	
	Extract airflow max. limit for the unit when the low/high speed operation setpoint is altered by boosting function etc.		
7	**EA Min speed airflow setpoint**	0-8200l/s	
	Extract airflow min. limit for the unit when the low/high speed operation setpoint is altered when running in fan regulation mode VAV demand.		
8	**SA Low speed pressure setpoint**	0-750Pa	
	Supply air duct pressure setpoint for the unit when running in low speed operation.		
9	**SA High speed pressure setpoint**	20-750Pa	
	Supply air duct pressure for the unit when running in high speed operation.		
10	**SA Max speed output signal**	10.00-100.00%	
	Max. limit for the supply air fan speed when running in pressure regulation mode.		
11	**SA Max speed pressure setpoint**	20-750Pa	
	Supply air duct pressure max. limit for the unit when the low/high speed operation setpoint is altered by boosting function etc.		
12	**EA Low speed pressure setpoint**	0-750Pa	
	Extract air duct pressure setpoint for the unit when running in low speed operation.		
13	**EA High speed pressure setpoint**	20-750Pa	
	Extract air duct pressure setpoint for the unit when running in high speed operation.		
14	**EA Max speed output signal**	10.00-100.00%	
	Max. limit for the extract air fan speed when running in pressure regulation mode.		
15	**EA Max speed pressure setpoint**	20-750Pa	
	Extract air duct pressure max. limit for the unit when the low/high speed operation setpoint is altered by boosting function etc.		
16	**SA Low speed demand setpoint**	0-100.00%	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	Supply air setpoint for the 0-10V input signal on terminal 30..31 for the unit when running in low speed operation.		
17	**SA High speed demand setpoint**	0-100.00%	
	Supply air setpoint for the 0-10V input signal on terminal 30..31 for the unit when running in high speed operation.		
18	**EA Low speed demand setpoint**	0-100.00%	
	Extract air setpoint for the 0-10V input signal on terminal 32..33 for the unit when running in low speed operation.		
19	**EA High speed demand setpoint**	0-100.00%	
	Extract air setpoint for the 0-10V input signal on terminal 32..33 for the unit when running in high speed operation.		
20	**SA Airflow regulation zone**	1.00 - 10.00	
	Supply airflow regulation zone setting in % of the present airflow setpoint that the regulator is allowed to work within.		
21	**SA Airflow C-factor**	0.005 - 2.500	
	Supply airflow regulator affection setting.		
22	**EA Airflow regulation zone**	1.00 - 10.00	
	Extract airflow regulation zone setting in % of the present airflow setpoint that the regulator is allowed to work within.		
23	**EA Airflow C-factor**	0.005 - 2.500	
	Extract airflow regulator affection setting.		
24	**SA Pressure regulation zone**	1.00 - 10.00	
	Supply air pressure regulation zone setting in % of the present duct pressure setpoint that the regulator is allowed to work within.		
25	**SA Pressure C-factor**	0.005 - 2.500	
	Supply air pressure regulator affection setting.		
26	**EA Pressure regulation zone**	1.00 - 10.00	
	Extract air pressure regulation zone setting in % of the present duct pressure setpoint that the regulator is allowed to work within.		
27	**EA Pressure C-factor**	0.005 - 2.500	
	Extract air pressure regulator affection setting.		
28	**SA Demand P-band.**	1.00 - 100.00	
	Supply air demand regulator P-band setting.		
29	**SA Demand C-factor**	0.005 - 2.500	
	Supply air demand regulator affection setting.		
30	**EA Demand P-band.**	1.00 - 100.00	
	Extract air demand regulator P-band setting.		
31	**EA Demand C-factor**	0.005 - 2.500	
	Extract air demand regulator affection setting.		
32	**ERS 1 Diff**	1.00 - 7.00°C	
	Supply air temperature difference setting accordning to the diagram for ERS 1.		
33	**ERS 1 Breakpoint**	12.00 - 26.00°C	
	Breakpoint setting accordning to the diagram for ERS 1.		
34	**ERS 2 Breakpoint X1**	10.00-38.00°C	
	Breakpoint X1 setting accordning to the diagram for ERS 2.		
35	**ERS 2 Breakpoint Y1**	10.00-40.00°C	
	Breakpoint Y1 setting accordning to the diagram for ERS 2.		
36	**ERS 2 Breakpoint X2**	11.00-39.00°C	
	Breakpoint X2 setting accordning to the diagram for ERS 2.		
37	**ERS 2 Breakpoint Y2**	10.00-40.00°C	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	Breakpoint Y2 setting accordning to the diagram for ERS 2.		
38	**ERS 2 Breakpoint X3**	12.00-40.00°C	
	Breakpoint X3 setting accordning to the diagram for ERS 2.		
39	**ERS 2 Breakpoint Y3**	10.00-40.00°C	
	Breakpoint Y3 setting accordning to the diagram for ERS 2.		
40	**SA Temperature setpoint**	10.00-40.00°C	
	Supply air temperature setting, for supply air temp regulation mode.		
41	**EA/Room Temperature setpoint**	10.00-40.00°C	
	Extract air/room temperature setting, for Extract air/room temp regulation mode.		
42	**SA Min temp setpoint**	8.00-20.00°C	
	Supply air min.setpoint during EA/room regulation mode.		
43	**SA Max temp setpoint**	16.00-50.00°C	
	Supply air max.setpoint during EA/room regulation mode.		
44	**SA Temperature P-band**	1.00 - 40.00	
	Supply air temperature regulator P-band setting.		
45	**EA/Room Temperature P-band**	1.00 - 40.00	
	Extract air/room temperature regulator P-band setting.		
46	**SA HX. Reg C-factor**	0.000 - 2.500	
	Supply air heat exchange regulator affection setting.		
47	**EA/Room HX. Reg C-factor**	0.000 - 2.500	
	Extract air/room heat exchange regulator affection setting.		
48	**SA Heat Reg C-factor**	0.000 - 2.500	
	Supply air reheat regulator affection setting.		
49	**EA/Room Heat Reg C-factor**	0.000 - 2.500	
	Extract air/room reheat regulator affection setting.		
50	**SA Extra Reg heat C-factor**	0.000 - 2.500	
	Supply air extra regulation sequence for reheating regulator affection setting.		
51	**SA Extra Reg cool C-factor**	0.000 - 2.500	
	Supply air extra regulation sequence for cooling regulator affection setting.		
52	**EA Extra Reg heat C-factor**	0.000 - 2.500	
	Extract air extra regulation sequence for reheating regulator affection setting.		
53	**EA Extra Reg cool C-factor**	0.000 - 2.500	
	Extract air extra regulation sequence for cooling regulator affection setting.		
54	**SA Down regulation Reg C-factor**	0.000 - 2.500	
	Supply air reheat regulator affection setting.		
55	**Reserve AV1**		
56	**SA Cool reg C-factor**	0.000 - 2.500	
	Supply air cool regulator affection setting.		
57	**EA/Room Cool reg C-factor**	0.000 - 2.500	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	Extract air/room cool regulator affection setting.		
58	**SA Cooling boost C-factor**	0.000 - 2.500	
	Supply air cooling boost affection setting.		
59	**EA/Room Cooling boost reg C-factor**	0.000 - 2.500	
	Extract air/room cooling boost regulator affection setting.		
60	**HX Pressure alarm set.**	30 - 100Pa	
	Heat exchange pressure alarm limit setting (alarm no.38).		
61	**P/C.HX. defrost P-band**	1.00 - 40.00	
	Plate/coil heat exchange defrost P-band setting.		
62	**P/C.HX. defrost C-factor**	0.000 - 2.500	
	Plate/coil heat exchange defrost C-factor setting.		
63	**Cooling off set.**	10 - 50%	
	Cooling off airflow setting in % of max. airflow.		
64	**SA Down regulation neautral zone**	0.00-10.00°C	
	Neutral zone setting before downregulation is permitted.		
65	**Cool Outdoor temp limit.1**	0.00-25.00°C	
	Outdoor temperature limit setting for cooling stage 1.		
66	**Cool Outdoor temp limit.2**	0.00-25.00°C	
	Outdoor temperature limit setting for cooling stage 2.		
67	**Cool Outdoor temp limit.3**	0.00-25.00°C	
	Outdoor temperature limit setting for cooling stage 3.		
68	**Temperature reg. Neutral zone**	0.50-10.00°C	
	Neutral zone setting before shift between heating and cooling.		
69	**SA Cool min air flow**	0-8200l/s	
	Supply air min. air flow setting for cooling.		
70	**EA Cool min air flow**	0-8200l/s	
	Extract air min. air flow setting for cooling.		
71	**Heating boost start limit**	0.00-40.00°C	
	Heating boost start temperature limit.		
72	**Cooling boost start limit**	0.00-40.00°C	
	Cooling boost (comfort) start temperature limit.		
73	**SA Filter alarm limit**	50-300Pa	
	Supply air filter pressure alarm limit setting.		
74	**EA Filter alarm limit**	50-300Pa	
	Extract air filter pressure alarm limit setting.		
75	**Int. Night heat room start temp**	5.00-25.00°C	
	Intermittent night heat function, extract air temperature setting for start.		
76	**Int. Night heat room stop temp**	5.00-25.00°C	
	Intermittent night heat function, extract air temperature setting for stop.		
77	**Int. Night heat SA temp setpoint**	5.00-40.00°C	
	Intermittent night heat function, supply air temperature setpoint during night heat.		
78	**Int. Night heat SA airflow setpoint**	0-8200l/s	
	Intermittent night heat function, supply airflow setpoint during night heat.		
79	**Int. Night heat EA airflow setpoint**	0-8200l/s	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	Intermittent night heat function, extract airflow setpoint during night heat.		
80	**Summer night cool EA start temp**	17.00-27.00°C	
	Summer night cool function, extract air temperature setting for start.		
81	**Summer night cool EA stop temp**	12.00-22.00°C	
	Summer night cool function, extract air temperature setting for stop.		
82	**Summer night cool outdoor temp limit**	5.00-15.00°C	
	Summer night cool function, outdoor temperature limit.		
83	**Summer night cool SA temp setpoint**	10.00-20.00°C	
	Summer night cool function, supply air temperature setpoint during summer night cool.		
84	**Outdoor temp comp. Winter X1.**	-30.00-(-10.00)°C	
	Endpoint of winter compensation.		
85	**Outdoor temp comp. Winter X2.**	-10.00-15.00°C	
	Startpoint of winter compensation.		
86	**Outdoor temp comp. Winter Y1.**	0.00-10.00°C	
	Level of winter compensation at X1.		
87	**Outdoor temp comp. Summer X3.**	15.00-25.00°C	
	Startpoint of summer compensation.		
88	**Outdoor temp comp. Summer X4.**	25.00-40.00°C	
	Endpoint of summer compensation.		
89	**Outdoor temp comp. Summer Y2.**	-10.00-10.00°C	
	Level of summer compensation at X4.		
90	**Outdoor airflow comp. Winter X1.**	-30.00-(-10.00)°C	
	Endpoint of winter compensation.		
91	**Outdoor airflow comp. Winter X2.**	-10.00-15.00°C	
	Startpoint of winter compensation.		
92	**Outdoor airflow comp. Winter Y1.**	0-50.00%	
	Level of airflow compensation at X1.		
93	**Extra Reg. Sequence max output**	0-100.00%	
	Maximum output signal setting for the extra regulation sequence.		
94	**EA/Room min temp alarm limit**	8.00-20.00°C	
	Setting for min extract air /room temp alarm no.40.		
95	**SA Deviation alarm limit**	2.00-15.00°C	
	Setting for supply air temperature below present setpoint, alarm no.41.		
96	**Reserve AV2**		
97	**SA Fan regulation mode**	0 - 3	
	Setting of regulation type for the supply air fan. 0=Airflow reg. 1=Pressure reg. 2=Demand reg. 3=Slave controlled by EA fan.		
98	**EA Fan regulation mode**	0 - 3	
	Setting of regulation type for the extract air fan. 0=Airflow reg. 1=Pressure reg. 2=Demand reg. 3=Slave controlled by SA fan.		

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
99	**ERS Step**	1 - 4	
	Setting of curve when temperature is above breakpoint.		
100	**Temperature regulation mode.**	0 - 3	
	Setting of temperature regulation type. 0=ERS 1 reg. 1=ERS 2 reg. 2=SA reg. 3=EA/Room reg.		
101	**Cooling off periode**	60 - 900s	
	Time setting for cooling off electrical heating coil.		
102	**Cool step time set**	0 - 600s	
	Time setting between cool step shift.		
103	**Cool restart time**	60 - 900s	
	Setting of time between two starts of the cool relays.		
104	**Cool regulation mode**	0 - 6	
	Setting of cool regulation type 0=Controlled 0-10V 1=Controlled 10-0V 2=On/Off 1-step 3=On/Off 2-steps 4=On/Off 3-steps binary 5=CoolDX economi (PV 2.00) 6=CoolDX comfort (PV 3.00)		
105	**Heating boost regulation mode.**	0 - 1	
	Setting for heating boost function. 0=Inactive. 1=Active.		
106	**Cooling boost regulation mode.**	0 - 5	
	Setting of cooling boost regulation type. 0=Inactive. 1=Comfort. 2=Economy. 3=Sequence. 4=Comfort+economy (New in PV 5.00). 5=Economy+sequence (New in PV 5.00).		
107	**Filter calibration mode**	0 - 5	
	Setting for required filter calibration. 0=Inactive. 1=SA+EA-Filter. 2=SA-Filter. 3=EA-Filter. 4=HX. 5=ReCO2 (New in PV 5.00).		
108	**Air adjustment time, minutes**	0 - 1727	
	Setting for amount of minutes to air adjustment function.		
109	**Air adjustment time, hours**	0 - 28	
	Setting for amount of hours to air adjustment function.		
110	**Handterminal language**	0 - 18	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	0=Svenska 1=Norsk 2=Dansk 3=Suomi 4=English 5=Français 6=Deutsch 7=Polski 8=Český 9=Italiano 10=Español 11=Português 12=Русский 13=Eesti 14=Latviesu 15=Lietiviu 16=Nederlands 17=Magyar (New in PV 5.00) 18=Türkçe (New in PV 5.01)		
111	**Summer night cool start, hour**	0-23	
	Setting for start time of summer night cooling function.		
112	**Summer night cool start, minute**	0-59	
	Setting for start time of summer night cooling function.		
113	**Summer night cool stop, hour**	0-23	
	Setting for stop time of summer night cooling function.		
114	**Summer night cool stop, minute**	0-59	
	Setting for stop time of summer night cooling function.		
115	**Extra regulation sequence cool mode**	0 - 2	
	Setting of extra regulation sequence cool type. 0=Inactive. 1=Comfort. 2=Economi.		
116	**Extra regulation sequence heat mode**	0 - 2	
	Setting of extra regulation sequence heat type. 0=Inactive. 1=Comfort. 2=Economi.		
117	**Morning boost time, hours**	0-23	
	Setting of morning boost time before normal operation.		
118	**Morning boost time, minutes**	0-59	
	Setting of morning boost time before normal operation.		
119	**Startup time**	0 - 600s	
	Setting of time for startup when the unit regulator is running with fixed signals.		
120	**Start delay SA fan.**	0 - 600s	
	Setting of start delay time for the supply air fan.		
121	**Start delay EA fan.**	0 - 600s	
	Setting of start delay time for the extract air fan after supply air fan has started.		
122	**Air flow unit**	0 -2	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	Setting of air flow unit presented in the unit's handterminal and WEB. 0=l/s. 1=m3/s. 2=m3/h.		
123	Reserve AV3		
124	Year	2000-2099	
	Setting for the unit's internal clock.		
125	Month	1-12	
	Setting for the unit's internal clock.		
126	Date	0-31	
	Setting for the unit's internal clock.		
127	Hour	0-23	
	Setting for the unit's internal clock.		
128	Minute	0-59	
	Setting for the unit's internal clock.		
129	Second	0-59	
	Setting for the unit's internal clock.		
130	Time channel 1 status	0-10,16-26	
	Low speed Högfart 0=Inactive 16=Inactive 1=Monday 17=Monday 2=Tuesday 18=Tuesday 3=Wednesday 19=Wednesday 4=Thursday. 20=Thursday 5=Friday 21=Friday 6=Saturday 22=Saturday 7=Sunday 23=Sunday 8=Monday..Friday 24=Monday..Friday 9=Monday..Sunday 25=Monday..Sunday 10=Saturday..Sunday 26=Saturday..Sunday		
131	Time channel 1 start hour	0-23	
132	Time channel 1 start minute	0-59	
133	Time channel 1 stop hour	0-23	
134	Time channel 1 stop minute	0-59	
135	Time channel 2 status	0-10,16-26	
136	Time channel 2 start hour	0-23	
137	Time channel 2 start minute	0-59	
138	Time channel 2 stop hour	0-23	
139	Time channel 2 stop minute	0-59	
140	Time channel 3 status	0-10,16-26	
141	Time channel 3 start hour	0-23	
142	Time channel 3 start minute	0-59	
143	Time channel 3 stop hour	0-23	
144	Time channel 3 stop minute	0-59	
145	Time channel 4 status	0-10,16-26	
146	Time channel 4 start hour	0-23	
147	Time channel 4 start minute	0-59	
148	Time channel 4 stop hour	0-23	
149	Time channel 4 stop minute	0-59	
150	Time channel 5 status	0-10,16-26	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
151	Time channel 5 start hour	0-23	
152	Time channel 5 start minute	0-59	
153	Time channel 5 stop hour	0-23	
154	Time channel 5 stop minute	0-59	
155	Time channel 6 status	0-10,16-26	
156	Time channel 6 start hour	0-23	
157	Time channel 6 start minute	0-59	
158	Time channel 6 stop hour	0-23	
159	Time channel 6 stop minute	0-59	
160	Time channel 7 status	0-10,16-26	
161	Time channel 7 start hour	0-23	
162	Time channel 7 start minute	0-59	
163	Time channel 7 stop hour	0-23	
164	Time channel 7 stop minute	0-59	
165	Time channel 8 status	0-10,16-26	
166	Time channel 8 start hour	0-23	
167	Time channel 8 start minute	0-59	
168	Time channel 8 stop hour	0-23	
169	Time channel 8 stop minute	0-59	
170	Extended low speed op. Hours set	0-23	
	Setting for extended low speed operation.		
171	Extended low speed op. Minutes set	0-59	
	Setting for extended low speed operation.		
172	Extended high speed op. Hours set	0-23	
	Setting for extended low speed operation.		
173	Extended high speed op. Minutes set	0-59	
	Setting for extended low speed operation.		
174	Communication operation mode	0 - 4	

	Setting of unit operation mode from communication.
	0=Auto operation.
	1=Communication stop 1.
	2=Communication low speed.
	3=Communication high speed.
	4=Communication stop 2 (New in PV 5.00).
	   Summer night cool, intermittent night heat and
	   morning boost functions works at stop 2.		

175	Service periode alarm.	0-99	
	Setting for delay time in months before service alarm.		
176	External alarm 1 delay	1 - 600s	
	Setting of delay time for external alarm no 1		
177	External alarm 2 delay	1 - 600s	
	Setting of delay time for external alarm no 2		
178	Int. Night heat SA pressure setpoint	20-750Pa	
	Intermittent night heat function, supply pressure setpoint during night heat.		
179	Int. Night heat EA pressure setpoint	20-750Pa	
	Intermittent night heat function, extract pressure setpoint during night heat.		
180	Copy of Coil Status 1-16	0-65535	
	Bit 0=1x0001 Bit 1=1x0002 Bit 15=1x0016		

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
181	**Copy of Coil Statust 17-32**	0-65535	
	Bit 0=1x00017 Bit 1=1x00018 Bit 15=1x0032		
182	**Copy of Coil Status 33-48**	0-65535	
	Bit 0=1x00033 Bit 1=1x00034 Bit 15=1x0048		
183	**Heat relay periodic func.**	0-3	
	Setting of periodic operation. 0=Inactive 1=Pump 2=Pump+valve 3=Valve (PV 2.02)		
184	**Cool relay 1 periodic func.**	0-3	
	Setting of periodic operation. 0=Inactive 1=Pump 2=Pump+valve 3=Valve (PV 2.02)		
185	**Cool relay 2 periodic func.**	0-3	
	Setting of periodic operation. 0=Inactive 1=Pump 2=Pump+valve 3=Valve (PV 2.02)		
186	**Slave control C-factor**	0.5 - 2.0	
	Slave regulator affection setting.		
187	**SA dehumid P-band**	1.00 - 40.00	
	SA dehumid regulator P-band setting.		
188	**SA dehumid C-factor**	0.000 - 2.500	
	SA dehumid regulator affection setting.		
189	**Dewpoint reg. P-band**	1.00 - 40.00	
	Dewpoint regulator P-band setting.		
190	**Dewpoint reg. C-factor**	0.000 - 2.500	
	Dewpoint regulator affection setting.		
191	**AYC chilled water temperature set**	5.00-30.00°C	
	Setting of AYC chilled water temperature setpoint.		
192	**Dewpoint neutralzone**	0.00-5.00°C	
	Dewpoint neutralzone setting.		
193	**Comp. airflow**	0-30.00%	
	Setting of comp. airflow.		
194	**Supply air-humidity**	10.00-90.00%	
	Setting of supply air-humidity.		
195	**Water heating periodic op. time**	0-60min	
	Setting of periodic op. time (minute).		
196	**Water heating interval**	0-168h	
	Setting of water heating interval time (hour).		
197	**Cool periodic op. time**	0-60min	
	Setting of periodic op. time (minute).		
198	**Cool interval**	0-168h	
	Setting of cool interval time (hour).		
199	**P/C.HX. bypass adj.**	-5.00-5.00°C	
	Setting of plate/coil heat exchange bypass adjustment.		

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
200	**EA/Room temperature external func.**	0-3	PV 5.15
	Setting of EA/Room temperature (external) function. 0=Inactive. 1=Input signal on terminal 40..41. 2=Communication (AV 201). 3=Min/Max/Average (PV 5.15).		
201	**EA/Room temperature com.**	-55.00-125.00°C	
	Setting of EA/Room temperature via communication.		
202	**Outdoor temperature external func.**	0-2	
	Setting of outdoor temperature (external) function. 0=Inactive. 1=Input signal on terminal 38..39. 2=Communication (AV 203).		
203	**Outdoor temperature com.**	-55.00-125.00°C	
	Setting of outdoor temperature via communication.		
204	**Timeout temperature com.**	0-9999min	
	Setting of timeout for temperature via communication (AV 201, AV 203).		
205	**Flow at fire function.**	0-3	
	Setting for activating the air fan operation at fire function 0=Inactive. 1=SA. 2=EA. 3=SA+EA.		
206	**Air fan down regulation func.**	0-2	
	Setting for activating the air fan down regulation function 0=Inactive. 1=SA. 2=SA+EA.		
207	**SA speed at fire.**	50.00-100.00%	
	Setting of supply air speed at fire.		
208	**EA speed at fire.**	50.00-100.00%	
	Setting of extract air speed at fire.		
209	**Temperature alarm setpoint.**	-25.00-25.00°C	
	Temperature alarm function setting (no.80).		
210	**Temperature alarm time.**	1-999s	
	Setting of delay time for temperature alarm (no.80).		
211	**Supply air min P-band.**	1.00 - 40.00	
	Supply air min regulator P-band setting.		
212	**Supply air min C-factor.**	0.000 - 2.500	
	Supply air min regulator affection setting.		
213	**Supply air max P-band.**	1.00 - 40.00	
	Supply air max regulator P-band setting.		
214	**Supply air max C-factor.**	0.000 - 2.500	
	Supply air max regulator affection setting.		
215	**Year channel 1 function.**	0 - 3	
	0=Inactive. 1=Stop. 2=Low speed. 3=High speed.		
216	**Year channel 1 start year.**	2000 - 2099	
217	**Year channel 1 start month.**	1 - 12	
218	**Year channel 1 start date.**	1 - 31	
219	**Year channel 1 start hour.**	0 - 23	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
220	Year channel 1 start minute.	0 - 59	
221	Year channel 1 stop year.	2000 - 2099	
222	Year channel 1 stop month.	1 - 12	
223	Year channel 1 stop date.	1 - 31	
224	Year channel 1 stop hour.	0 - 23	
225	Year channel 1 stop minute.	0 - 59	
226	Year channel 2 function.	0 - 3	
227	Year channel 2 start year.	2000 - 2099	
228	Year channel 2 start month.	1 - 12	
229	Year channel 2 start date.	1 - 31	
230	Year channel 2 start hour.	0 - 23	
231	Year channel 2 start minute.	0 - 59	
232	Year channel 2 stop year.	2000 - 2099	
233	Year channel 2 stop month.	1 - 12	
234	Year channel 2 stop date.	1 - 31	
235	Year channel 2 stop hour.	0 - 23	
236	Year channel 2 stop minute.	0 - 59	
237	Year channel 3 function.	0 - 3	
238	Year channel 3 start year.	2000 - 2099	
239	Year channel 3 start month.	1 - 12	
240	Year channel 3 start date.	1 - 31	
241	Year channel 3 start hour.	0 - 23	
242	Year channel 3 start minute.	0 - 59	
243	Year channel 3 stop year.	2000 - 2099	
244	Year channel 3 stop month.	1 - 12	
245	Year channel 3 stop date.	1 - 31	
246	Year channel 3 stop hour.	0 - 23	
247	Year channel 3 stop minute.	0 - 59	
248	Year channel 4 function.	0 - 3	
249	Year channel 4 start year.	2000 - 2099	
250	Year channel 4 start month.	1 - 12	
251	Year channel 4 start date.	1 - 31	
252	Year channel 4 start hour.	0 - 23	
253	Year channel 4 start minute.	0 - 59	
254	Year channel 4 stop year.	2000 - 2099	
255	Year channel 4 stop month.	1 - 12	
256	Year channel 4 stop date.	1 - 31	
257	Year channel 4 stop hour.	0 - 23	
258	Year channel 4 stop minute.	0 - 59	
259	Year channel 5 function.	0 - 3	
260	Year channel 5 start year.	2000 - 2099	
261	Year channel 5 start month.	1 - 12	
262	Year channel 5 start date.	1 - 31	
263	Year channel 5 start hour.	0 - 23	
264	Year channel 5 start minute.	0 - 59	
265	Year channel 5 stop year.	2000 - 2099	
266	Year channel 5 stop month.	1 - 12	
267	Year channel 5 stop date.	1 - 31	
268	Year channel 5 stop hour.	0 - 23	
269	Year channel 5 stop minute.	0 - 59	
270	Year channel 6 function.	0 - 3	
271	Year channel 6 start year.	2000 - 2099	
272	Year channel 6 start month.	1 - 12	
273	Year channel 6 start date.	1 - 31	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
274	**Year channel 6 start hour.**	0 - 23	
275	**Year channel 6 start minute.**	0 - 59	
276	**Year channel 6 stop year.**	2000 - 2099	
277	**Year channel 6 stop month.**	1 - 12	
278	**Year channel 6 stop date.**	1 - 31	
279	**Year channel 6 stop hour.**	0 - 23	
280	**Year channel 6 stop minute.**	0 - 59	
281	**Year channel 7 function.**	0 - 3	
282	**Year channel 7 start year.**	2000 - 2099	
283	**Year channel 7 start month.**	1 - 12	
284	**Year channel 7 start date.**	1 - 31	
285	**Year channel 7 start hour.**	0 - 23	
286	**Year channel 7 start minute.**	0 - 59	
287	**Year channel 7 stop year.**	2000 - 2099	
288	**Year channel 7 stop month.**	1 - 12	
289	**Year channel 7 stop date.**	1 - 31	
290	**Year channel 7 stop hour.**	0 - 23	
291	**Year channel 7 stop minute.**	0 - 59	
292	**Year channel 8 function.**	0 - 3	
293	**Year channel 8 start year.**	2000 - 2099	
294	**Year channel 8 start month.**	1 - 12	
295	**Year channel 8 start date.**	1 - 31	
296	**Year channel 8 start hour.**	0 - 23	
297	**Year channel 8 start minute.**	0 - 59	
298	**Year channel 8 stop year.**	2000 - 2099	
299	**Year channel 8 stop month.**	1 - 12	
300	**Year channel 8 stop date.**	1 - 31	
301	**Year channel 8 stop hour.**	0 - 23	
302	**Year channel 8 stop minute.**	0 - 59	
303	**Filter select.**	0 - 3	
	Setting for filter select function. 0=Inactive. 1=Supply air. 2=Extract air. 3=SA+EA.		
304	**Prefilter select.**	0 - 3	
	Setting for prefilter select function. 0=Inactive. 1=Supply air. 2=Extract air. 3=SA+EA.		
305	**SA prefilter alarm limit.**	50-300Pa	
	Supply air prefilter pressure alarm limit setting.		
306	**EA prefilter alarm limit.**	50-300Pa	
	Extract air prefilter pressure alarm limit setting.		
307	**Prefilter calibration mode.**	0 - 3	
	Setting for requiered filtercalibration. 0=Inactive. 1=SA+EA-Filter. 2=SA-Filter. 3=EA-Filter.		
308	**Xzone reheat function.**	0 - 4	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	Setting for Xzone reheat function. 0=Inactive. 1=El. coil P/P. 2=El. coil 0-10V. 3=Water coil with FP. 4=Water coil without FP.		
309	**Xzone cooling function.**	0 - 5	
	Setting for Xzone cooling function. 0=Inactive. 1=0-10V. 2=10-0V. 3=On/off 1. 4=On/off 2. 5=On/off 3.		
310	**Xzone temperature reg. Neutral zone.**	0.50-10.00°C	
	Xzone neutral zone setting before shift between heating and cooling.		
311	**Xzone temperature regulation mode.**	0 - 3	
	Setting of Xzone temperature regulation type. 0=ERS 1 reg. 1=ERS 2 reg. 2=SA reg. 3=EA/Room reg.		
312	**Xzone ERS Step.**	1 - 4	
	Setting of Xzone curve when temperature is above breakpoint.		
313	**Xzone ERS 1 Diff.**	1.00 - 7.00°C	
	Supply air temperature difference setting accordning to the diagram for Xzone ERS 1.		
314	**Xzone ERS 1 Breakpoint.**	12.00 - 26.00°C	
	Breakpoint setting accordning to the diagram for Xzone ERS 1.		
315	**Xzone ERS 2 Breakpoint X1.**	10.00-38.00°C	
	Breakpoint X1 setting accordning to the diagram for Xzone ERS 2.		
316	**Xzone ERS 2 Breakpoint Y1.**	10.00-40.00°C	
	Breakpoint Y1 setting accordning to the diagram for Xzone ERS 2.		
317	**Xzone ERS 2 Breakpoint X2.**	11.00-39.00°C	
	Breakpoint X2 setting accordning to the diagram for Xzone ERS 2.		
318	**Xzone ERS 2 Breakpoint Y2.**	10.00-40.00°C	
	Breakpoint Y2 setting accordning to the diagram for Xzone ERS 2.		
319	**Xzone ERS 2 Breakpoint X3.**	12.00-40.00°C	
	Breakpoint X3 setting accordning to the diagram for Xzone ERS 2.		
320	**Xzone ERS 2 Breakpoint Y3.**	10.00-40.00°C	
	Breakpoint Y3 setting accordning to the diagram for Xzone ERS 2.		
321	**Xzone SA Temperature setpoint.**	10.00-40.00°C	
	Xzone supply air temperature setting, for supply air temp regulation mode.		
322	**Xzone EA/Room Temperature setpoint.**	10.00-40.00°C	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	Xzone extract air/room temperature setting, for extract air/room temp regulation mode.		
323	**Xzone SA Min temp setpoint.**	8.00-20.00°C	
	Xzone supply air min.setpoint during EA/room regulation mode.		
324	**Xzone SA Max temp setpoint.**	16.00-50.00°C	
	Xzone supply air max.setpoint during EA/room regulation mode.		
325	**Preheating function.**	0 - 4	
	Setting of preheating function. 0=Inactive. 1=El. coil P/P. 2=El. coil 0-10V. 3=Water coil with FP. 4=Water coil without FP.		
326	**Preheating setpoint.**	-30.00-30.00°C	
	Setting of preheating temperature setpoint.		
327	**Xzone P-band.**	1.00-40.00	
	Xzone regulator P-band setting.		
328	**Xzone SA reheat C-factor.**	0.000 - 2.500	
	Xzone supply air reheat regulator affection setting.		
329	**Xzone SA cooling C-factor.**	0.000 - 2.500	
	Xzone supply air cooling regulator affection setting.		
330	**Xzone EA reheat C-factor.**	0.000 - 2.500	
	Xzone extract air reheat regulator affection setting.		
331	**Xzone EA cooling C-factor.**	0.000 - 2.500	
	Xzone extract air cooling regulator affection setting.		
332	**Xzone SA min P-band.**	1.00 - 40.00	
	Xzone supply air min regulator P-band setting.		
333	**Xzone SA min C-factor.**	0.000 - 2.500	
	Xzone supply air min regulator affection setting.		
334	**Xzone SA max P-band.**	1.00 - 40.00	
	Xzone supply air max regulator P-band setting.		
335	**Xzone SA max C-factor.**	0.000 - 2.500	
	Xzone supply air min regulator affection setting.		
336	**Preheat P-band.**	1.00 - 40.00	
	Preheat regulator P-band setting.		
337	**Preheat C-factor.**	0.000 - 2.500	
	Preheat regulator affection setting.		
338	**ReCO2 CO2 function.**	0 - 2	
	Setting of ReCO2 CO2 function. 0=Inactive. 1=CO2. 2=CO2+flow.		
339	**ReCO2 CO2 setpoint.**	0-100.00%	
	Setting of ReCO2 CO2 setpoint.		
340	**ReCO2 cooling function.**	0 - 2	
	Setting of ReCO2 cooling function. 0=Inactive. 1=Comfort. 2=Economy.		
341	**ReCO2 heating function.**	0 - 2	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	Setting of ReCO2 heating function. 0=Inactive. 1=Comfort. 2=Economy.		
342	**ReCO2 min outdoor air.**	0-8200l/s	
	Setting of ReCO2 min outdoor air.		
343	**ReCO2 min exhaust air.**	0-8200l/s	
	Setting of ReCO2 min exhaust air.		
344	**ReCO2 CO2 P-band.**	1.00 - 100.00	
	ReCO2 CO2 regulator P-band setting.		
345	**ReCO2 CO2 C-factor.**	0.000 - 5.000	
	ReCO2 CO2 regulator affection setting.		
346	**ReCO2 CO2 flow C-factor.**	0.000 - 5.000	
	ReCO2 flow regulator affection setting.		
347	**ReCO2 heating C-factor.**	0.000 - 5.000	
	ReCO2 heating regulator affection setting.		
348	**ReCO2 cooling C-factor.**	0.000 - 5.000	
	ReCO2 cooling regulator affection setting.		
349	**AYC function.**	0 - 3	
	Setting of AYC function. 0=Inactive. 1=Cool. 2=Heat. 3=Cool+heat.		
350	**AYC heat temp set.**	10.00-80.00°C	
	Setting of AYC heated water temperature setpoint.		
351	**AYC night comp. channel.**	1 - 2	
	Setting of AYC night compensation channel. 1=Channel 1. 2=Channel 2.		
352	**AYC channel start hour.**	0-23h	
	Setting of AYC channel start time (hour).		
353	**AYC channel start minute.**	0-59min	
	Setting of AYC channel start time (minute).		
354	**AYC channel stop hour.**	0-23h	
	Setting of AYC channel stop time (hour).		
355	**AYC channel stop minute.**	0-59min	
	Setting of AYC channel stop time (minute).		
356	**AYC channel period.**	0-10	
	Setting of AYC channel period. 0=Inactive 1=Monday 2=Tuesday 3=Wednesday 4=Thursday 5=Friday 6=Saturday 7=Sunday 8=Monday..Friday 9=Monday..Sunday 10=Saturday..Sunday		
357	**AYC heat P-band.**	1.00 - 40.00	
	AYC heat regulator P-band setting.		
358	**AYC heat C-factor.**	0.000 - 2.500	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	AYC heat regulator affection setting.		
359	**AYC cool P-band.**	1.00 - 40.00	
	AYC cool regulator P-band setting.		
360	**AYC cool C-factor.**	0.000 - 2.500	
	AYC cool regulator affection setting.		
361	**AYC heat out comp. X1.**	-40.00-40.00°C	
	AYC outdoor compensation of heated water, outdoor temp X1 setting.		
362	**AYC heat out comp. Y1.**	10.00-80.00°C	
	AYC outdoor compensation of heated water, heated water temp Y1 setting.		
363	**AYC heat out comp. X2.**	-40.00-40.00°C	
	AYC outdoor compensation of heated water, outdoor temp X2 setting.		
364	**AYC heat out comp. Y2.**	10.00-80.00°C	
	AYC outdoor compensation of heated water, heated water temp Y2 setting.		
365	**AYC heat out comp. X3.**	-40.00-40.00°C	
	AYC outdoor compensation of heated water, outdoor temp X3 setting.		
366	**AYC heat out comp. Y3.**	10.00-80.00°C	
	AYC outdoor compensation of heated water, heated water temp Y3 setting.		
367	**AYC heat room comp. temp limit.**	0.00-40.00°C	
	AYC room compensation of heated water, heated water temp limit setting.		
368	**AYC heat room comp P-band.**	1.00-10.00°C	
	AYC room compensation of heated water, heated water P-band setting.		
369	**AYC heat night comp temp.**	-10.00-10.00°C	
	AYC night compensation of heated water, heated water night setting.		
370	**AYC heat pump on temp.**	-40.00-40.00°C	
	AYC pump operation of heated water, outdoor temp start setting.		
371	**AYC heat pump off temp.**	-40.00-40.00°C	
	AYC pump operation of heated water, outdoor temp stop setting.		
372	**AYC heat pump alarm.**	0 - 3	
	Setting for selecting the AYC heated water pump alarm function. 0=Inactive. 1=Open. 2=Closed. 3=Contactor.		
373	**AYC heat per op function.**	0 - 3	
	Setting for selecting the AYC heated water periodic operation function. 0=Inactive. 1=Pump. 2=Pump+valve. 3=Valve.		
374	**AYC heat per op time.**	0-60min	

Specifications are subject to alteration without notice.

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	AYC periodic operation of heated water, time (minute) setting.		
375	**AYC heat per op interval.**	0-168h	
	AYC periodic operation of heated water, interval time (hour) setting.		
376	**AYC cool out comp. X1.**	-40.00-40.00°C	
	AYC outdoor compensation of chilled water, outdoor temp X1 setting.		
377	**AYC cool out comp. Y1.**	10.00-80.00°C	
	AYC outdoor compensation of chilled water, chilled water temp Y1 setting.		
378	**AYC cool out comp. X2.**	-40.00-40.00°C	
	AYC outdoor compensation of chilled water, outdoor temp X2 setting.		
379	**AYC cool out comp. Y2.**	10.00-80.00°C	
	AYC outdoor compensation of chilled water, chilled water temp Y2 setting.		
380	**AYC cool out comp. X3.**	-40.00-40.00°C	
	AYC outdoor compensation of chilled water, outdoor temp X3 setting.		
381	**AYC cool out comp. Y3.**	10.00-80.00°C	
	AYC outdoor compensation of chilled water, chilled water temp Y3 setting.		
382	**AYC cool room comp. temp limit.**	0.00-40.00°C	
	AYC room compensation of chilled water, chilled water temp limit setting.		
383	**AYC cool room comp. P-band.**	1.00-10.00°C	
	AYC room compensation of chilled water, chilled water P-band setting.		
384	**AYC cool night comp temp.**	-10.00-10.00°C	
	AYC night compensation of chilled water, chilled water night setting.		
385	**AYC cool pump on temp.**	-40.00-40.00°C	
	AYC pump operation of chilled water, outdoor temp start setting.		
386	**AYC cool pump off temp.**	-40.00-40.00°C	
	AYC pump operation of chilled water, outdoor temp stop setting.		
387	**AYC cool pump alarm.**	0 - 3	
	Setting for selecting the AYC chilled water pump alarm function. 0=Inactive. 1=Open. 2=Closed. 3=Contactor.		
388	**AYC cool per op function.**	0 - 3	
	Setting for selecting the AYC chilled water periodic operation function. 0=Inactive. 1=Pump. 2=Pump+valve. 3=Valve.		
389	**AYC cool per op time.**	0-60min	

Analog Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	AYC periodic operation of chilled water, time (minute) setting.		
390	**AYC cool per op interval.**	0-168h	
	AYC periodic operation of chilled water, interval time (hour) setting.		
391	**IO-mod 3 output 1 function.**	0 - 10	
	Setting of I/O-module no. 3 relay 1 output. 0=Cooling boost. 1=Heating boost. 2=Cooling. 3=Heat exchange. 4=Reheat. 5=Down regulation. 6=Effect reduction. 7=Intermittent night heat. 8=Summer night cooling. 9=Morning boost. 10=Heat exchange defrost.		
392	**IO-mod 3 output 2 function.**	0 - 10	
	Setting of I/O-module no. 3 relay 2 output. 0=Cooling boost. 1=Heating boost. 2=Cooling. 3=Heat exchange. 4=Reheat. 5=Down regulation. 6=Effect reduction. 7=Intermittent night heat. 8=Summer night cooling. 9=Morning boost. 10=Heat exchange defrost.		
393	**Humid reg. func.**	0 - 2	PV 5.10
	Setting for selecting humidifying function. 0=Inactive. 1=Supply air. 2=Extract air.		
394	**Humid reg. Start.**	10.00-90.00%	PV 5.10
	Humidifying start limit setting.		
395	**Humid reg. Stop.**	15.00-95.00%	PV 5.10
	Humidifying stop limit setting.		
396	**Min/Max/Average SensNumber**	1 - 4	PV 5.15
	Setting for selecting numbers of sensors to the Min/Max/Average function.		
397	**Min/Max/Average SensFunction**	0 - 2	PV 5.15
	Setting for selecting sensor function. 0=Min. 1=Max. 2=Average.		

Binary Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
0	**Heat output**	0-1	
	Status for relay output.		
1	**Cool output 1**	0-1	
	Status for relay output.		
2	**Cool output 2**	0-1	
	Status for relay output.		
3	**Low speed output**	0-1	
	Status for relay output.		
4	**High speed output**	0-1	
	Status for relay output.		
5	**A-alarm.**	0-1	
	Status for relay output.		
6	**B-alarm.**	0-1	
	Status for relay output.		
7	**Operation output**	0-1	
	Status for relay output.		
8	**Damper output**	0-1	
	Status for relay output.		
9	**External low speed input**	0-1	
	Status for digital input.		
10	**External high speed input**	0-1	
	Status for digital input.		
11	**External alarm 1 input**	0-1	
	Status for digital input.		
12	**External alarm 2 input**	0-1	
	Status for digital input.		
13	**External fire alarm input.**	0-1	
	Status for digital input.		
14	**External stop input**	0-1	
	Status for digital input.		
15	**DIP Switch 1**	0-1	
	Status for dip switch setting.		
16	**DIP Switch 2**	0-1	
	Status for dip switch setting.		
17	**DIP Switch 3**	0-1	
	Status for dip switch setting.		
18	**DIP Switch 4**	0-1	
	Status for dip switch setting.		
19	**DIP Switch 5**	0-1	
	Status for dip switch setting.		
20	**DIP Switch 6**	0-1	
	Status for dip switch setting.		
21	**AYC heat pump output**	0-1	
	Status for AYC heat pump output.		
22	**AYC cool pump output**	0-1	
	Status for AYC cool pump output.		
23	**C.HX. pump output**	0-1	
	Status for coil heat exchanger pump output.		
24	**R.HX rotation monitor**	0-1	
	Status from the rotation detector.		
25	**Xzone heat output**	0-1	
	Status for relay output.		
26	**Xzone cool output 1**	0-1	
	Status for relay output.		

Binary Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
27	**Xzone cool output 2**	0-1	
	Status for relay output.		
28	**Pre-heat output**	0-1	
	Status for relay output.		
29	**IO-mod 3 output 1**	0-1	
	Status for I/O-module no. 3 relay 1 output.		
30	**IO-mod 3 output 2**	0-1	
	Status for I/O-module no. 3 relay 2 output.		
31	**IO-mod 4 output 1**	0-1	PV 5.10
	Status for I/O-module no. 4 relay 1 output.		
32	**Reserve BI12**		
33	**Reserve BI13**		
34	**Reserve BI14**		
35	**Reserve BI15**		
36	**Reserve BI16**		
37	**Reserve BI17**		
38	**Reserve BI18**		
39	**Reserve BI19**		
40	**Reserve BI20**		
41	**Reserve BI21**		
42	**Reserve BI22**		
43	**Reserve BI23**		
44	**Reserve BI24**		
45	**Reserve BI25**		
46	**Reserve BI26**		
47	**Reserve BI27**		
48	**Alarm number 1**	0-1	
	Status if alarm number 1 is active.		
49	**Alarm number 2**	0-1	
	Status if alarm number 2 is active.		
50	**Alarm number 3**	0-1	
	Status if alarm number 3 is active.		
247	**Alarm number 200**	0-1	
	Status if alarm number 200 is active.		
248	**Info number 1**	0-1	

Binary Inputs (RO).

Object Instance	Object Name	Min/Max	Misc
	Status if info number 1 is active.		
249	**Info number 2**	0-1	
	Status if info number 2 is active.		
250	**Info number 3**	0-1	
	Status if info number 3 is active.		
347	**Info number 100**	0-1	
	Status if info number 100 is active.		

Binary Value (R/W).

Object Instance	Object Name	Min/Max	Misc
0	**Alarm reset**	0-1	
	Resets tripped alarms.		
1	**SA Boosting func.**	0-1	
	Setting for activating the boost function for the supply air fan.		
2	**EA Boosting func.**	0-1	
	Setting for activating the boost function for the extract air fan.		
3	**R.HX. Defrost func.**	0-1	
	Setting for activating the defrost function for the rotary heat exchanger.		
4	**SA Down regulation func.**	0-1	
	Setting for activating the down regulation function for the supply air fan. (Moved to AV 206 in PV 3.00)		
5	**Reserve BV1**		
6	**Reserve BV2**		
7	**Cool operation mode**	0-1	
	Setting for cooling between off and auto operation.		
8	**Int. Night heat func.**	0-1	
	Setting for activating the intermittent night heat function.		
9	**Damper func.**	0-1	
	Setting for activating the damper output relay during int. night heat.		
10	**Summer night cooling**	0-1	
	Setting for activating the suumer night cool function.		
11	**Temp displacement**	0-1	
	Setting for activating the external temperature displacement function.		
12	**Outdoor temp compensation**	0-1	
	Setting for activating the outdoor temperature compensation function.		
13	**Outdoor airflow compensation**	0-1	
	Setting for activating the outdoor airflow compensation function.		
14	**Auto. Summer/winter switch**	0-1	
	Setting for activating the automatic switch between summer/winter time function.		
15	**Switch clock func.**	0-1	
	Setting for switch clock function type. 0=Stop - low speed - high speed. 1=Low speed - high speed.		
16	**Internal fire alarm func.**	0-1	
	Setting for activating the internal fire alarm function.		
17	**EA at fire**	0-1	
	Setting for activating the extract air fan operation at fire function. (Moved to 4x0206 in PV 3.00)		
18	**External alarm 1 active at closure**	0-1	
	Setting for external alarm number 1 condition to be activated. 0=Alarm at closed input. 1=Alarm at open input.		
19	**External alarm 2 active at closure**	0-1	

Binary Value (R/W).

Object Instance	Object Name	Min/Max	Misc
	Setting for external alarm number 2 condition to be activated. 0=Alarm at closed input. 1=Alarm at open input.		
20	**Reserve BV3**		
21	**Dewpoint reg. func.**	0-1	
	Setting for activating the dewpoint regulator funktion.		
22	**Dehumid reg. func.**	0-1	
	Setting for activating the dehumid regulator funktion.		
23	**External fire alarm func.**	0-1	
	Setting for external fire resetting function. 0=Manual. 1=Automatic.		
24	**External alarm 1 func.**	0-1	
	Setting for external alarm 1 resetting function. 0=Manual. 1=Automatic.		
25	**External alarm 2 func.**	0-1	
	Setting for external alarm 2 resetting function. 0=Manual. 1=Automatic.		
26	**Temperature alarm func.**	0-1	
	Setting for activating temperature below setpoint alarm function (no.80).		
27	**Int. Night heat output func.**	0-1	
	Setting for selecting the intermittent night heat output function. 0=IQnomic 1=IQnomic+		
28	**AYC heat out comp. func.**	0-1	
	Setting for selecting the AYC outdoor comp. heated water function. 0=Inactive 1=Active		
29	**AYC heat room comp. func.**	0-1	
	Setting for selecting the AYC room comp. heated water function. 0=Inactive 1=Active		
30	**AYC heat room comp. night block func.**	0-1	
	Setting for selecting the AYC room comp. heated water night block function. 0=Inactive 1=Active		
31	**AYC heat night comp. func.**	0-1	
	Setting for selecting the AYC night comp. heated water function. 0=Inactive 1=Active		
32	**AYC heat valve signal func.**	0-1	
	Setting for selecting the AYC valve signal heated water alarm function. 0=Inactive 1=Active		

Binary Value (R/W).

Object Instance	Object Name	Min/Max	Misc
33	**AYC cool out comp. func.**	0-1	
	Setting for selecting the AYC outdoor comp. chilled water function. 0=Inactive 1=Active		
34	**AYC cool room comp. func.**	0-1	
	Setting for selecting the AYC room comp. chilled water function. 0=Inactive 1=Active		
35	**AYC cool room comp. night block func.**	0-1	
	Setting for selecting the AYC room comp. chilled water night block function. 0=Inactive 1=Active		
36	**AYC cool night comp. func.**	0-1	
	Setting for selecting the AYC night comp. chilled water function. 0=Inactive 1=Active		
37	**AYC cool valve signal func.**	0-1	
	Setting for selecting the AYC valve signal chilled water alarm function. 0=Inactive 1=Active		
38	**Reserve BV4**		

Notification Class.

Object Instance	Object Name	Min/Max	Misc
0	**NC 00 A-Alarm**		PV 5.15
	Notification class for A-Alarm.		
1	**NC 00 B-Alarm**		PV 5.15
	Notification class for B-Alarm.		