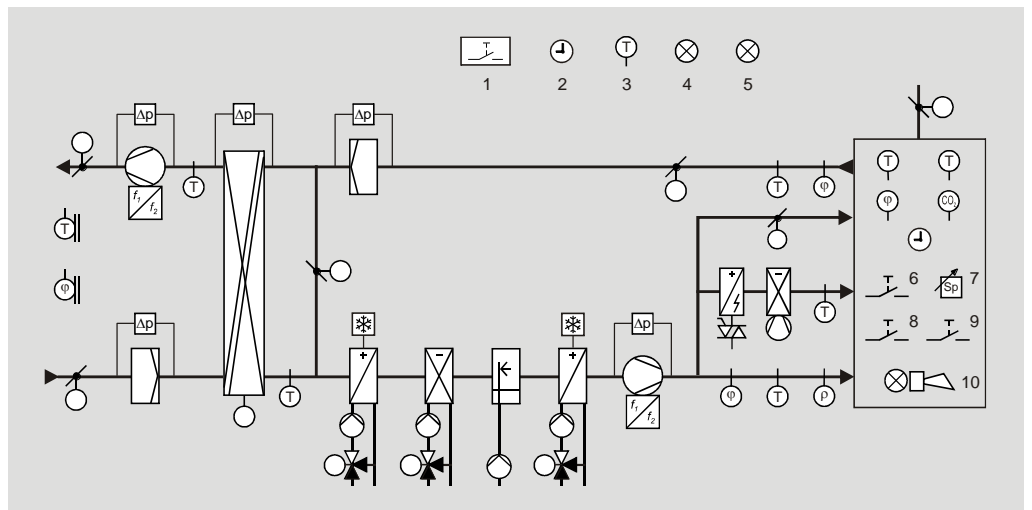
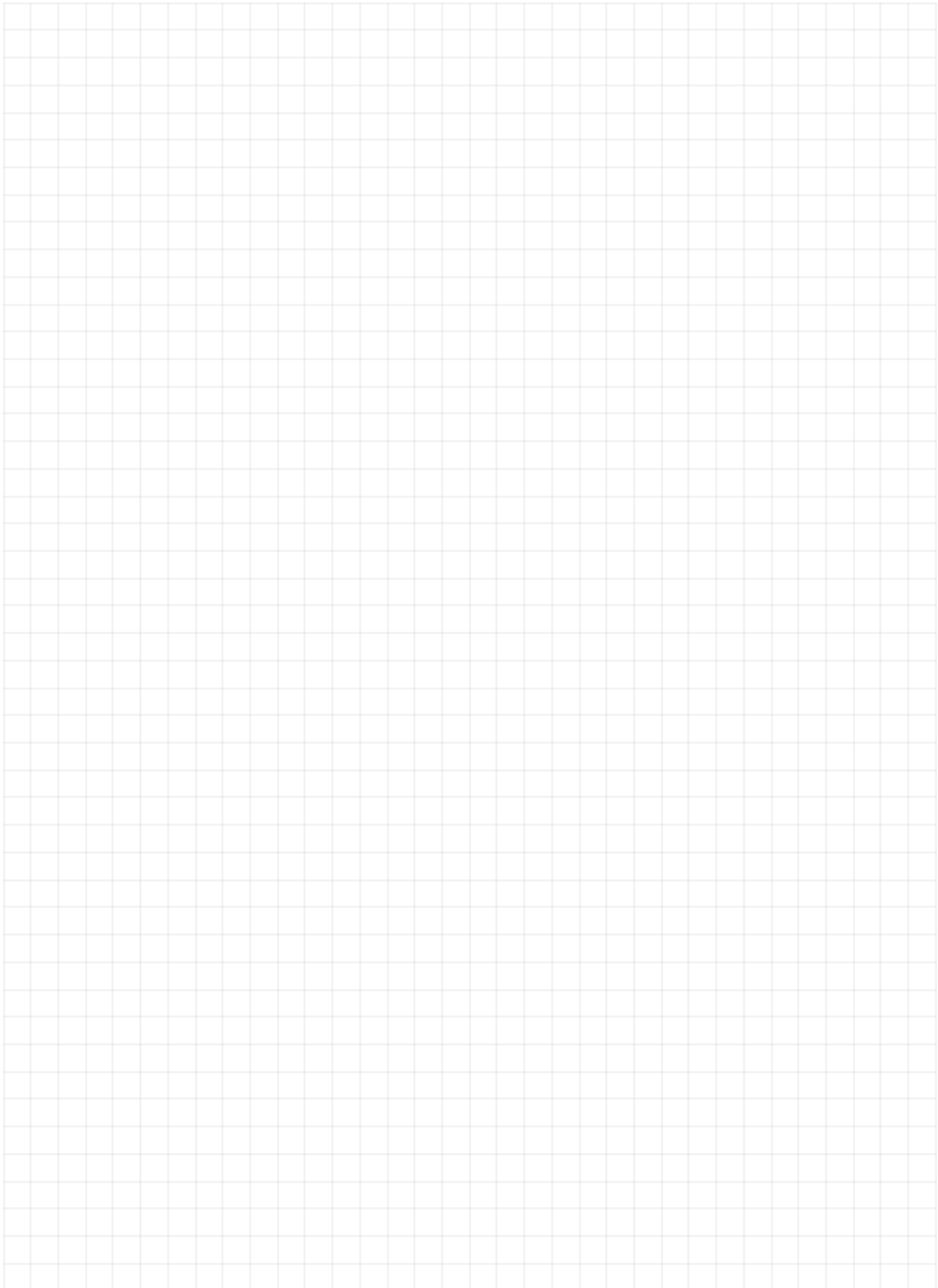


Air handling with focus on LCC



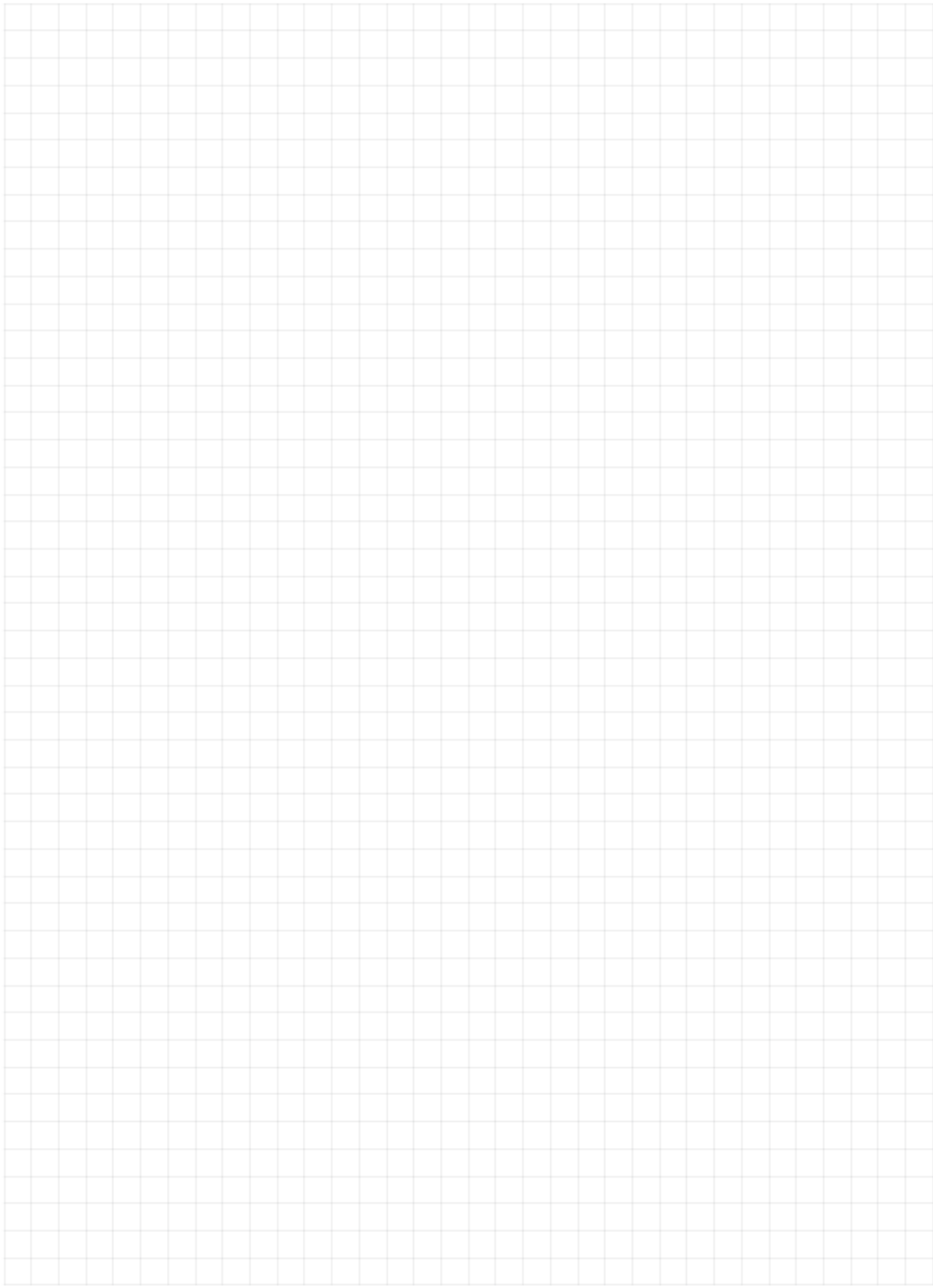
**Climatix™**  
**BACnet/IP communication with POL908.00**  
**Objects addresses for IV Produkt**  
**AHU application v3.52**



# Table of contents

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|          |   |          |
|----------|---|----------|
| <b>1</b> | <b>About this document .....</b>                  | <b>5</b> |
| 1.1      | Revision history.....                             | 5        |
| 1.2      | Before you start.....                             | 5        |
| 1.3      | Reference documents.....                          | 5        |
| <b>2</b> | <b>Standard application AHU v3.x.....</b>         | <b>6</b> |
| 2.1      | General information .....                         | 6        |
| <b>3</b> | <b>BACnet objects of AHU v3.x .....</b>           | <b>8</b> |
| 3.1      | General .....                                     | 8        |
| 3.2      | BACnet object types .....                         | 8        |
| 3.3      | BACnet objects .....                              | 9        |
| 3.3.1    | Analog inputs type No. 0.....                     | 9        |
| 3.3.2    | Analog outputs type No. 1.....                    | 13       |
| 3.3.3    | Analog values type No. 2.....                     | 14       |
| 3.3.4    | Binary inputs type No. 3.....                     | 31       |
| 3.3.5    | Binary outputs type No. 4.....                    | 33       |
| 3.3.6    | Binary values type No. 5.....                     | 34       |
| 3.3.7    | Calendar type No. 6.....                          | 37       |
| 3.3.8    | Device type No. 8.....                            | 37       |
| 3.3.9    | Multistate input type No. 13 .....                | 37       |
| 3.3.10   | Multistate output type No. 14 .....               | 39       |
| 3.3.11   | Notification classes for alarms type No. 15.....  | 40       |
| 3.3.12   | Schedule type No. 17.....                         | 40       |
| 3.3.13   | Multistate value type No. 19.....                 | 41       |
| 3.3.14   | Notification classes for trend type No. 20 .....  | 49       |
| 3.3.15   | Characterstring value type No. 40 .....           | 49       |
| 3.3.16   | Positive integer type No. 48 .....                | 50       |
| 3.3.17   | BACnet priority for each notification class ..... | 50       |



# 1 About this document

## 1.1 Revision history

| Version | Date       | Changes   |
|---------|------------|---|
| .01     | 2011-      | First edition   |
| .02     | 2012-09-10 | Addresses for Home series added                             |
| .03     | 2013-12-16 | Addresses for Quick menu, Home HS and Energy Analyzer added |
| .04     | 2017-12-05 | General updates to v3.42                                    |
| .05     | 2018-03-12 | Updated BACnet object image                                 |
| .06     | 2019-01-09 | General updates to v3.52                                    |

## 1.2 Before you start

### Validity

This document applies to the following product:

| Name                         | Type (ASN)    | Version |
|------------------------------|---------------|---------|
| Customer IVP AHU application | POL63x.00/AHU | 1.05    |



This document is a supplement to the general integration guide:

"BACnet/IP communication with POL908.00" \*)

\*) POL908.00: Climatix BACnet/IP communication module

That document must be read first and all general information such as document conventions, important information on safety, trademarks, copyright etc. are valid for this document as well.



This document only contains the unique information for the product mentioned above. All general engineering information such as mounting modules, communication settings etc. are described in the integration guide.

### Prerequisite

User has read the general BACnet/IP integration guide for Climatix, CB1J3962en.

## 1.3 Reference documents

### Further information

The following documents contain additional information on the products described in this manual:

| Document   | Order no.  |
|--|------------|
| Data sheet "Communication module BACnet/IP"                | CB1Q3933en |
| Basic documentation "BACnet communication modules"         | CB1P3933en |
| Integration Guide "BACnet/IP communication with POL908.00" | CB1J3960en |
| Basic documentation "BACnet PICS"                          | CB1P3939en |
| Basic documentation "Standard Application AHU"             | CB1P3977en |

## 2 Standard application AHU v3.x

### 2.1 General information

#### What are standard applications?

Standard applications for Climatix comprise predefined monitoring and control functions for a particular plant type.

Features:

- OEM customers receive standard applications as a set of loadable files. They can be loaded in the controller via SD card.
- An HMI operator unit allows for assigning inputs and outputs to the respective plant as well as select, configure and parameterize the required functions.

#### Standard application AHU v3.x

Standard application AHU v3.x is available at this time. It contains all common functions to control and monitor air conditioning units (**Air Handling Units**). The following diagram provides an overview of selectable measured values and control equipment:

#### BACnet objects

The set of loadable files mentioned above also includes a mapping file for integration in a higher building automation and control system via communications module. The Climatix controller automatically assumes the BACnet objects required for integration as per the plant data points and functions configured and parameterized previously.

The following tables list all BACnet objects supported by standard application AHU v3.x.

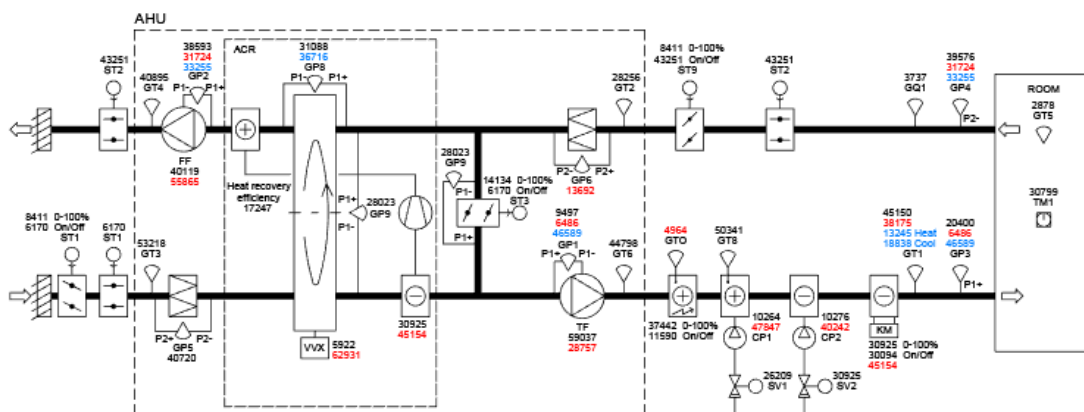


Only the objects for the activated functions and I/Os are present on BACnet.

#### Examples of useful BACnet objects

Click on the image title (link) for a full size pdf or see IV Produkt homepage. The pdf can be downloaded, then it possible to copy Modbus addresses etc.

#### [BACnet object addresses for AHU in general, examples](#)



#### Status and alarm

|       |  |
|-------|--|
| 6080  | Actual operating mode  |
| 28279 | Actual fan step  |
| 31604 | Manual operation (terminal service switch)                                   |
| 30799 | External control (Dlg.Input, timer switch)                                   |
| 24616 | 0=Winter (Supply air temp. control)<br>1=Summer (Room/Exhaust temp. control) |
| 46769 | Alarm class Danger (A)   |
| 42640 | Alarm class Critical (A)   |
| 38643 | Alarm class Low (B)  |
| 34514 | Alarm class Warning (C)  |

|       |                       |
|-------|-----------------------|
| Black | Value/Status          |
| Green | Setpoint/Command      |
| Red   | Alarm                 |
| Blue  | Actual setpoint-value |

#### Setpoints

|       |   |
|-------|---|
| 8442  | BMS control unit (override internal time switch program)  |
| 22817 | Setpoint heating  |
| 65251 | Deadzone (creates cooling setpoint, Ex 21°C + 2°C = 23°C) |
| 7989  | Supply temp. compensation (Exhaust/Supply alternative)    |
| 52572 | Supply fan setpoint step 1 (low) TF (% Pa, I/s)           |
| 22144 | Supply fan step 2 (normal) TF (% Pa, I/s)                 |
| 8244  | Supply fan step 3 (high) TF (% Pa, I/s)                   |
| 45030 | Exhaust fan setpoint step 1 (low) FF (% Pa, I/s)          |
| 13370 | Exhaust fan step 2 (normal) FF (% Pa, I/s)                |
| 17038 | Exhaust fan step 3 (high) FF (% Pa, I/s)                  |
| 22649 | Setpoint air quality, CO <sup>2</sup>                     |
| 39130 | Alarm reset   |
| 28514 | Fire Alarm  |
| 9864  | Emergency stop input                                      |

#### Energy Watch

|       |                                      |
|-------|--------------------------------------|
| 12177 | SFP-Value                            |
| 39394 | Heat recovery Actual rec. power (kW) |
| 35632 | Heat recovery day (kWh)              |
| 43587 | Heat recovery month (kWh)            |
| 10992 | Heat recovery year (MWh)             |
| 51997 | Heat recovery last year (MWh)        |
| 46842 | Added heat Actual Power (kW)         |
| 43989 | Added heat Energy today (kWh)        |
| 22690 | Added heat Energy month (kWh)        |
| 55769 | Added heat Energy year (MWh)         |
| 15713 | Added heat Energy last year (MWh)    |
| 49612 | Fans Actual Power (kW)               |
| 11618 | Fans Energy added today (kWh)        |
| 16232 | Fans Energy added month (kWh)        |
| 49115 | Fans Energy added year (MWh)         |
| 13057 | Fans Energy added last year (MWh)    |



## 3 BACnet objects of AHU v3.x

### 3.1 General

#### Purpose

This section describes the BACnet objects available in the specific application, see chapter 1.2 "Before you start" under "Validity".

#### Present objects

All present BACnet objects for the specific unit are found in the EDE files. See the integration guide how to export the EDE files.

### 3.2 BACnet object types

#### Overview

Special care must be taken to the BACnet standard and what object types and properties that are supported both on the Climatix and the client side.

This application supports the object types listed below:

| Object type        | Supported                           | Can be created dynamically | Can be deleted dynamically |
|--------------------|-------------------------------------|----------------------------|----------------------------|
| Analog Input       | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Analog Output      | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Analog Value       | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Binary Input       | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Binary Output      | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Binary Value       | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Calendar           | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Command            | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Device             | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Event Enrollment   | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| File               | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Group              | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Loop               | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Multi-State Input  | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Multi-State Output | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Multi-State Value  | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Notification Class | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Program            | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Schedule           | <input checked="" type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Averaging          | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Trend Log          | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Life-Safety-Point  | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Life-Safety-Zone   | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Accumulator        | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |
| Pulse-Converter    | <input type="checkbox"/>            | <input type="checkbox"/>   | <input type="checkbox"/>   |

#### Description

See the following basic document for a detailed description of the individual object types: CB1P3939en "BACnet Protocol Implementation Conformance Statement (PICS)"



## 3.3 BACnet objects

### Introduction

Normally either the object-name or the object-instance can be used as a BACnet reference.

### 3.3.1 Analog inputs type No. 0

| Analog input, object name | Object instance | Object description            | LOL   | HIL     | Dim | Release  |
|---------------------------|-----------------|-------------------------------|-------|---------|-----|----------|
| SupplyTmp                 | 45150           | Supply air temp               | -64.0 | 99.0    | °C  |          |
| RoomTmp                   | 60643           | Room temperature              | -64.0 | 64.0    | °C  |          |
| RoomTmp2                  | 51635           | Room temperature 2            | -64.0 | 64.0    | °C  |          |
| RmUTmp1                   | 33923           | Roomunit 1 temp               | -64.0 | 64.0    | °C  |          |
| RmUTmp2                   | 46304           | Roomunit 2 temp               | -64.0 | 64.0    | °C  |          |
| ReturnAirTmp              | 28256           | Exhaust air temp              | -64.0 | 99.0    | °C  |          |
| OutTmp                    | 53218           | Outside air temp              | -64.0 | 64.0    | °C  |          |
| HtgFrstTmp                | 50341           | Heating frost temp            | 5.0   | 99.0    | °C  |          |
| HrecIcTemp                | 33725           | Heat recovery Cold corner     | -64.0 | 99.0    | °C  | v2.14.xx |
| HrecWtrTmp                | 12446           | Heat recovery water temp      | -2.0  | 64.0    | °C  |          |
| ExhaustTmp                | 40895           | Extract air temp              | -60.0 | 64.0    | °C  |          |
| HPExhaustTmp              | 50359           | Heat Pump Extract temp        | -10.0 | 64.0    | °C  |          |
| HrecSupplyTmp             | 44798           | Heat recovery supply air temp | -64.0 | 64.0    | °C  |          |
| ExtraSupplyTmp            | 20915           | Supply temp Ex seq            | -64.0 | 64.0    | °C  |          |
| ExtraRmRtTmp              | 39209           | Room/Return air temperature 2 | -64.0 | 64.0    | °C  |          |
| ExtraFrstTmp              | 4854            | Heating 2 frost temp          | 5.0   | 95.0    | °C  |          |
| FPPoolTmp                 | 24571           | FlexoPool Pool temp           | -64.0 | 64.0    | °C  |          |
| FrcdGrp1Tmp               | 11707           | Forcegroup 1 Temperature      | -64.0 | 64.0    | °C  | v2.04.xx |
| FrcdGrp2Tmp               | 46695           | Forcegroup 2 Temperature      | -64.0 | 64.0    | °C  | v2.04.xx |
| SupplyPrs                 | 20400           | Supply air pressure           | 0.0   | 5000.0  | Pa  |          |
| ReturnPrs                 | 39576           | Exhaust air pressure          | 0.0   | 5000.0  | Pa  |          |
| SupplyFlow                | 9497            | Supply air flow               | 0.0   | 40000.0 | l/s |          |
| ReturnFlow                | 38593           | Exhaust air flow              | 0.0   | 20000.0 | l/s |          |
| HrecFrstPrs               | 39125           | Heat recovery frost pressure  | 0.0   | 5000.0  | Pa  |          |
| BalPrs                    | 28023           | Pressure balance              | 0.0   | 5000.0  | Pa  | v2.04.xx |
| SplyFilAlm                | 40720           | Supply filter alarm           | 0.0   | 5000.0  | Pa  | v2.14.xx |
| ExhFilAlm                 | 13692           | Extract filter                | 0.0   | 5000.0  | Pa  | v2.14.xx |
| SupplyHum                 | 53018           | Supply air humidity relative  | 0.0   | 100.0   | %rH |          |
| RoomHum                   | 37799           | Room humidity relative        | 0.0   | 100.0   | %rH |          |
| OutHum                    | 45222           | Outside air humidity relative | 0.0   | 100.0   | %rH |          |
| AirQuality                | 3737            | Air quality                   | 0.0   | 3000.0  | ppm |          |
| FrcdGrp1Co2               | 58796           | FrcdGrp1 Co2                  | 0.0   | 3000.0  | ppm | v2.04.xx |
| FrcdGrp2Co2               | 32368           | FrcdGrp2 Co2                  | 0.0   | 3000.0  | ppm | v2.04.xx |
| ExtSetpointSpv            | 12205           | External setpoint             | -6.0  | 6.0     | °C  |          |
| ExtSignalHome             | 1541            | External Signal Home          | 0.0   | 110.0   | %   | v2.14.xx |
| AuxTmp                    | 115             | Auxiliary temp                | -64.0 | 64.0    | °C  |          |
| AuxActvSignal             | 38580           | Auxiliary activation signal   | -99.0 | 10000.0 |     | v2.04.xx |
| AuxTmp1                   | 21874           | Auxiliary temp 1              | -64.0 | 99.0    | °C  | v2.14.xx |

| Analog input, objectname | Object instance | Object description               | LOL      | HIL      | Dim | Release   |
|--------------------------|-----------------|----------------------------------|----------|----------|-----|-----------|
| SplyFan_FanSpeed         | 48513           | Supply fan A speed               | -200.0   | 5000.0   | rpm | v.3.10.xx |
| SplyFan_MaxSpeed         | 64587           | Supply fan A max speed           | -200.0   | 5000.0   | rpm | v.3.10.xx |
| SplyFan_DCL Voltage      | 33830           | Supply fan A DC-link voltage     | -10000.0 | 10000.0  | V   | v.3.10.xx |
| SplyFan_DCL Current      | 56927           | Supply fan A DC-link current     | -10000.0 | 10000.0  | A   | v.3.10.xx |
| SplyFan_Power            | 39978           | Supply fan A Actual power        | -10000.0 | 10000.0  | W   | v.3.10.xx |
| SplyFan_ModTemp          | 28696           | Supply fan A Power module temp.  | -100.0   | 100.0    | °C  | v.3.10.xx |
| SplyFan_Op Time          | 8364            | Supply fan A Motor runtime       | -64.0    | 100000.0 |     | v.3.10.xx |
| SplyFan_Op TimeHH        | 16169           | Supply fan A Motor runtime HH    | -64.0    | 100000.0 | hrs | v.3.10.xx |
| SplyFan_Op TimeMM        | 36985           | Supply fan A Motor runtime mm    | -64.0    | 64.0     |     | v.3.10.xx |
| SplyFan2_FanSpeed        | 27680           | Supply fan B speed               | -200.0   | 5000.0   | rpm | v.3.44.xx |
| SplyFan2_MaxSpeed        | 11754           | Supply fan B max speed           | -200.0   | 5000.0   | rpm | v.3.44.xx |
| SplyFan2_DCL Voltage     | 2043            | Supply fan B DC-link voltage     | -10000.0 | 10000.0  | V   | v.3.44.xx |
| SplyFan2_DCL Current     | 23938           | Supply fan B DC-link current     | -10000.0 | 10000.0  | A   | v.3.44.xx |
| SplyFan2Power            | 64936           | Supply fan B Actual power        | -10000.0 | 10000.0  | W   | v.3.44.xx |
| SplyFan2_ModTemp         | 63945           | Supply fan B Power module temp.  | -100.0   | 100.0    | °C  | v.3.44.xx |
| SplyFan2_Op Time         | 56875           | Supply fan B Motor runtime       | -64.0    | 100000.0 |     | v.3.44.xx |
| SplyFan2_Op TimeHH       | 61064           | Supply fan B Motor runtime HH    | -64.0    | 100000.0 | hrs | v.3.44.xx |
| SplyFan2_Op TimeMM       | 16856           | Supply fan B Motor runtime mm    | -64.0    | 64.0     |     | v.3.44.xx |
| ExhFan_FanSpeed          | 41627           | Exhaust fan A speed              | -200.0   | 5000.0   | rpm | v.3.10.xx |
| ExhFan_MaxSpeed          | 58193           | Exhaust fan A max speed          | -200.0   | 5000.0   | rpm | v.3.10.xx |
| ExhFan_DCL Voltage       | 9232            | Exhaust fan A DC-link voltage    | -10000.0 | 10000.0  | V   | v.3.10.xx |
| ExhFan_DCL Current       | 32361           | Exhaust fan A DC-link current    | -10000.0 | 10000.0  | A   | v.3.10.xx |
| ExhFan_Power             | 42634           | Exhaust fan A Actual power       | -10000.0 | 10000.0  | W   | v.3.10.xx |
| ExhFan_ModTemp           | 12204           | Exhaust fan A Power module temp. | -100.0   | 100.0    | °C  | v.3.10.xx |
| ExhFan_Op Time           | 6069            | Exhaust fan A Motor runtime      | -64.0    | 100000.0 |     | v.3.10.xx |
| ExhFan_Op TimeHH         | 8243            | Exhaust fan A Motor runtime HH   | -64.0    | 100000.0 | hrs | v.3.10.xx |
| ExhFan_Op TimeMM         | 36707           | Exhaust fan A Motor runtime mm   | -64.0    | 64.0     |     | v.3.10.xx |

| Analog input, object name | Object instance | Object description               | LOL       | HIL      | Dim | Release   |
|---------------------------|-----------------|----------------------------------|-----------|----------|-----|-----------|
| ExhFan2_FanSpeed          | 38398           | Exhaust fan B speed              | -200.0    | 5000.0   | rpm | v3.44.xx  |
| ExhFan2_MaxSpeed          | 54324           | Exhaust fan B max speed          | -200.0    | 5000.0   | rpm | v3.44.xx  |
| ExhFan2_DCLVoltage        | 33809           | Exhaust fan B DC-link voltage    | -10000.0  | 10000.0  | V   | v3.44.xx  |
| ExhFan2_DCLCurrent        | 56936           | Exhaust fan B DC-link curren     | -10000.0  | 10000.0  | A   | v3.44.xx  |
| ExhFan2Power              | 51889           | Exhaust fan B Actual power       | -10000.0  | 10000.0  | W   | v3.44.xx  |
| ExhFan2_ModTemp           | 59091           | Exhaust fan B Power module temp. | -100.0    | 100.0    | °C  | v3.44.xx  |
| ExhFan2_OpTime            | 33183           | Exhaust fan B Motor runtime      | -64.0     | 100000.0 |     | v3.44.xx  |
| ExhFan2_OpTimeHH          | 5974            | Exhaust fan B Motor runtime HH   | -64.0     | 100000.0 | hrs | v3.44.xx  |
| ExhFan2_OpTimeMM          | 47110           | Exhaust fan B Motor runtime mm   | -64.0     | 64.0     |     | v3.44.xx  |
| Room1Tmp                  | 27321           | Temp. room 1                     | -64.0     | 64.0     | °C  | v.3.40.xx |
| Room2Tmp                  | 61797           | Temp. room 2                     | -64.0     | 64.0     | °C  | v.3.40.xx |
| Room3Tmp                  | 34769           | Temp. room 3                     | -64.0     | 64.0     | °C  | v.3.40.xx |
| Room4Tmp                  | 55036           | Temp. room 4                     | -64.0     | 64.0     | °C  | v.3.40.xx |
| Room5Tmp                  | 41032           | Temp. room 5                     | -64.0     | 64.0     | °C  | v.3.40.xx |
| Room6Tmp                  | 15252           | Temp. room 6                     | -64.0     | 64.0     | °C  | v.3.40.xx |
| Room7Tmp                  | 19744           | Temp. room 7                     | -64.0     | 64.0     | °C  | v.3.40.xx |
| Room1Hum                  | 5629            | Humidity room 1                  | 0.0       | 100.0    | %rH | v.3.40.xx |
| Room2Hum                  | 36385           | Humidity room 2                  | 0.0       | 100.0    | %rH | v.3.40.xx |
| Room3Hum                  | 63637           | Humidity room 3                  | 0.0       | 100.0    | %rH | v.3.40.xx |
| Room4Hum                  | 43448           | Humidity room 4                  | 0.0       | 100.0    | %rH | v.3.40.xx |
| Room5Hum                  | 57100           | Humidity room 5                  | 0.0       | 100.0    | %rH | v.3.40.xx |
| Room6Hum                  | 17616           | Humidity room 6                  | 0.0       | 100.0    | %rH | v.3.40.xx |
| Room7Hum                  | 12900           | Humidity room 7                  | 0.0       | 100.0    | %rH | v.3.40.xx |
| AirQualit2                | 28383           | Air quality 2                    | 0.0       | 3000.0   | ppm | v3.10.xx  |
| AirQualit3                | 32510           | Air quality 3                    | 0.0       | 3000.0   | ppm | v3.10.xx  |
| AirQualit4                | 3609            | Air quality 4                    | 0.0       | 3000.0   | ppm | v3.10.xx  |
| AirQuality2Snsr1          | 25568           | Air quality 2 Sensor 1           | 0.0       | 3000.0   | rpm | v3.24.xx  |
| Room1AirQ                 | 9080            | Air quality room 1               | 0.0       | 3000.0   | ppm | v.3.40.xx |
| Room2AirQ                 | 52650           | Air quality room 2               | 0.0       | 3000.0   | ppm | v.3.40.xx |
| Room3AirQ                 | 26619           | Air quality room 3               | 0.0       | 3000.0   | ppm | v.3.40.xx |
| Room4AirQ                 | 47              | Air quality room 4               | 0.0       | 3000.0   | ppm | v.3.40.xx |
| Room5AirQ                 | 43646           | Air quality room 5               | 0.0       | 3000.0   | ppm | v.3.40.xx |
| Room6AirQ                 | 17580           | Air quality room 6               | 0.0       | 3000.0   | ppm | v.3.40.xx |
| Room7AirQ                 | 61181           | Air quality room 7               | 0.0       | 3000.0   | ppm | v.3.40.xx |
| ExhFanExtSpv              | 61683           | External setpoint Exhaust fan    | -155000.0 | 155000.0 |     | v.3.40.xx |
| SplyFanExtSpv             | 16935           | External setpoint Supply fan     | -155000.0 | 155000.0 |     | v.3.40.xx |
| AuxTmp2                   | 25873           | Aux.Temp. 2                      | -64.0     | 64.0     | °C  | v3.24.xx  |
| AuxTmp3                   | 30000           | Aux.Temp. 3                      | -64.0     | 64.0     | °C  | v3.24.xx  |
| AuxTmp4                   | 1495            | Aux.Temp. 4                      | -64.0     | 64.0     | °C  | v3.24.xx  |
| AuxTmp5                   | 5622            | Aux.Temp. 5                      | -64.0     | 64.0     | °C  | v3.24.xx  |
| AuxTmp6                   | 9621            | Aux.Temp. 6                      | -64.0     | 64.0     | °C  | v3.24.xx  |

| Analog input, objectname | Object instance | Object description | LOL    | HIL      | Dim  | Release   |
|--------------------------|-----------------|--------------------|--------|----------|------|-----------|
| SupplyFlow_m3/s          | 6005            | SupplyFlow m3/s    | 0.0    | 40000.0  | m3/s | v.3.50.xx |
| SupplyFlow_m3/h          | 46127           | SupplyFlow m3/h    | -200.0 | 150000.0 | m3/h | v.3.50.xx |
| ExhaustFlow_m3/s         | 64089           | ReturnFlow m3/s    | 0.0    | 40000.0  | m3/s | v.3.50.xx |
| ExhaustFlow_m3/h         | 22787           | ReturnFlow m3/h    | -200.0 | 150000.0 | m3/h | v.3.50.xx |

### 3.3.2 Analog outputs type No. 1

| Analog output, object name | Object instance | Object description             | LOL | HIL | Dim | Release  |
|----------------------------|-----------------|--------------------------------|-----|-----|-----|----------|
| BallanceControlPos         | 8411            | Pressure balance damper        | 0   | 100 | %   |          |
| ForceGroup 1Pos            | 64285           | Damper Forc grp 1              | 0   | 100 | %   |          |
| ForceGroup 2Pos            | 5583            | Damper Forc grp 2              | 0   | 100 | %   |          |
| SplyFanVarPos              | 59037           | Supply fan                     | 0   | 100 | %   |          |
| ExhFanVarPos               | 40119           | Exhaust fan                    | 0   | 100 | %   |          |
| HumidityCtrlPos            | 39618           | Humidity                       | 0   | 100 | %   |          |
| FPDmprPos                  | 28825           | FlexoPool damper output signal | 0   | 100 | %   |          |
| ElectricalHtgPos           | 37442           | Electrical heating             | 0   | 100 | %   |          |
| HrecDampPos                | 42156           | Heat recovery damper           | 0   | 100 | %   |          |
| HrecPos                    | 5922            | Heat recovery                  | 0   | 100 | %   |          |
| HrecS1Pos                  | 11521           | Heat recovery output signal S1 | 0   | 100 | %   | v2.04.xx |
| HrecS2Pos                  | 46813           | Heat recovery output signal S2 | 0   | 100 | %   | v2.04.xx |
| CoolingPos                 | 30925           | Cooling                        | 0   | 100 | %   |          |
| HeatingPos                 | 26209           | Heating                        | 0   | 100 | %   |          |
| ExtraElHtgPos              | 45777           | Electrical heating 2           | 0   | 100 | %   |          |
| ExtraClgPos                | 60283           | Cooling 2                      | 0   | 100 | %   |          |
| ExtraHtgPos                | 46994           | Heating 2                      | 0   | 100 | %   |          |
| AuxOutput                  | 22813           | Auxiliary A output fan         | 0   | 100 | %   |          |

### 3.3.3 Analog values type No. 2

| Analog values, object name | Object instance | Object description             | LOL | HIL   | Dim | Release                |
|----------------------------|-----------------|--------------------------------|-----|-------|-----|------------------------|
| ValidRoomTmp               | 2878            | Actual room temp               |     |       | °C  |                        |
| ExtControlDlyOfTm          | 4853            | External control off delay     |     |       | hrs |                        |
| NightCoolRmSpv             | 7412            | Night cooling room setpoint    |     |       | °C  |                        |
| NightCoolRmHys             | 17755           | Night cooling room hysteres    |     |       | °C  |                        |
| NightCoolMinOutTmp         | 4465            | Night cooling min outtemp      |     |       | °C  |                        |
| NightCoolOnDiff            | 1475            | Night cooling on delta         |     |       | °C  |                        |
| TmpStartHtgStrt            | 32003           | Temp start heating start       |     |       | °C  |                        |
| TmpStartHtgSpv             | 105729          | Temp start heating setpoint    |     |       | °C  |                        |
| TmpStartClgStrt            | 8682            | Temp start cooling start       |     |       | °C  |                        |
| TmpStartClgSpv             | 22740           | Temp start cooling setpoint    |     |       | °C  |                        |
| BoostRmSpv                 | 13266           | Boost room temp setpoint       |     |       | °C  | Removed after v3.44.xx |
| BoostPreStrtTm             | 3510            | Boost compensation time        |     |       | min | Removed after v3.44.xx |
| BoostHtgSpv                | 27113           | Boost start heating setpoint   |     |       | °C  | Removed after v3.44.xx |
| BoostClgSpv                | 44092           | Boost start cooling setpoint   |     |       | °C  | Removed after v3.44.xx |
| BalPrsSp                   | 22141           | Pressure balance setpoint      |     |       | Pa  | v2.04.xx               |
| FrcdGrp1Co2Spv             | 580             | Forcegroup 1 Co2 Setpoint      |     |       | ppm | v2.04.xx               |
| FrcdGrp1TmpSpv             | 6134            | Forcegroup 1 temp Setpoint     |     |       | °C  | v2.04.xx               |
| FrcdGrp2Co2Spv             | 56006           | Forcegroup 2 Co2 Setpoint      |     |       | ppm | v2.04.xx               |
| FrcdGrp2TmpSpv             | 53108           | Forcegroup 2 temp Setpoint     |     |       | °C  | v2.04.xx               |
| SlaveOffset                | 24823           | Fan slave offset               |     |       | l/s |                        |
| SuCmpFanPrVal              | 8596            | Actual summer compensation fan |     |       | %   |                        |
| WiCmpFanPrVal              | 50290           | Actual winter compensation fan |     |       | %   |                        |
| SplyFanSpvSt1Spv           | 52572           | Supply fan step 1 setpoint     | 0.0 | 40000 |     |                        |
| SplyFanSpvSt2Spv           | 22144           | Supply fan step 2 setpoint     | 0.0 | 40000 |     |                        |
| SplyFanSpvSt3Spv           | 8244            | Supply fan step 3 setpoint     | 0.0 | 40000 |     |                        |
| SplyFanSpvMaxForce         | 25092           | Supply fan max force           | 0.0 | 39910 |     |                        |
| ExhFanSpvSt1Spv            | 45030           | Exhaust fan step 1 setpoint    | 0.0 | 5000  |     |                        |
| ExhFanSpvSt2Spv            | 13370           | Exhaust fan step 2 setpoint    | 0.0 | 5000  |     |                        |
| ExhFanSpvSt3Spv            | 17038           | Exhaust fan step 3 setpoint    | 0.0 | 5000  |     |                        |
| ExhFanSpvMaxForce          | 2525            | Exhaust fan max force          | 0.0 | 4910  |     |                        |
| SplyFanActVal              | 56628           | Actual value supply fan        |     |       |     |                        |

| Analog values, object name | Object instance | Object description  | LOL   | HIL   | Dim   | Release  |
|----------------------------|-----------------|---|-------|-------|-------|----------|
| ExhFanActVal               | 59694           | Actual value exhaust fan                                      |       |       |       |          |
| SplyFanActSpv              | 46589           | Actual supply fan setpoint                                    |       |       |       |          |
| SplyFanDevAlmMaxDev        | 57203           | Max deviation supply fan                                      |       |       |       |          |
| ExhFanActSpv               | 33255           | Actual exhaust fan setpoint                                   |       |       |       |          |
| ExhFanDevAlmMaxDev         | 56254           | Max deviation exhaust fan                                     |       |       |       |          |
| SplyVol                    | 28478           | Supply Air Volume   | -64   | 10000 |       | v2.04.xx |
| AirQSpv                    | 22649           | Air quality setpoint  |       |       | ppm   |          |
| SensibleEffect             | 25817           | SensibleEffect Eff  |       |       | kW    | v2.14.xx |
| AirQCmpPrVal               | 10236           | Actual airquality compensation                                |       |       | %     |          |
| SplyEnth                   | 29558           | Supply air enthalpy   |       |       | kJ/kg |          |
| SplyHumAbs                 | 13958           | Supply air humidity absolute                                  |       |       | g/kg  |          |
| RmEnth                     | 61369           | Room/Return enthalpy  |       |       | kJ/kg |          |
| RmHumAbs                   | 17315           | Room/Exhaust humidity absolute                                |       |       | g/kg  |          |
| HumSpvRelSpv               | 2194            | Humidity setpoint relative                                    |       |       | %rH   |          |
| HumSpvRelDz                | 37532           | Humidity deadzone relative                                    |       |       | %rH   |          |
| HumSpvRelSpvDehum          | 11342           | Dehumidity setpoint relative                                  | 0.0   | 100.0 |       |          |
| HumSpvRelSpvHum            | 10627           | Humidity setpoint relative                                    | 0.0   | 100.0 |       |          |
| HumSpvAbsSpv               | 20105           | Humidity setpoint absolute                                    |       |       | g/kg  |          |
| HumSpvAbsDz                | 61029           | Humidity deadzone absolute                                    |       |       | g/kg  |          |
| HumSpvAbsSpvDehum          | 62747           | Dehumidity setpoint absolute                                  | 100.0 | 0.0   |       |          |
| HumSpvAbsSpvHum            | 22791           | Humidity setpoint absolute                                    | 100.0 | 0.0   |       |          |
| FlexopoolForceMinRunTm     | 40497           | ForceMinRunTm   |       |       | min   |          |
| FlexopoolForceEconStart    | 49868           | ForceEconStart  |       |       | %rH   |          |
| FlexopoolForceComfStDiff   | 48706           | ForceComfStDiff   |       |       | %rH   |          |
| FlexopoolForceHysteres     | 49842           | ForceHysteres   |       |       | %rH   |          |
| FlexopoolHumSpvOutTmp1     | 42388           | Flexopool humidity setpoint outdoor temp 1                    |       |       | °C    |          |
| FlexopoolHumSpvSpvDehum1   | 62369           | Flexopool humidity setpoint, setpoint dehumidity 1            |       |       | %rH   |          |
| FlexopoolHumSpvOutTmp2     | 38391           | Flexopool humidity setpoint outdoor temp 2                    |       |       | °C    |          |
| FlexopoolHumSpvSpvDehum2   | 50114           | Flexopool humidity setpoint, setpoint dehumidity 2            |       |       | %rH   |          |
| FlexopoolMinFreshAir       | 55495           | Flexopool.MinFresh Air  |       |       | %     |          |
| FlexopoolLowFreshAir       | 57875           | LowFreshAir   |       |       | %     |          |
| FlexopoolEcMinFreshAir     | 28827           | Flexopool.MinFreshAir economy                                 |       |       | %     | v2.04.xx |
| HumMaxCtrlMaxSpv           | 57438           | Supply humidity max setpoint                                  |       |       | %rH   |          |
| ActCascSpvHum              | 58111           | Actual supply humidity setpoint (when use of cascade control) |       |       | %rH   |          |

| Analog values, object name | Object instance | Object description   | LOL   | HIL  | Dim   | Release  |
|----------------------------|-----------------|--|-------|------|-------|----------|
| ActCascSpvDeh              | 50248           | Actual supply dehumidity setpoint (when use of cascade control)    |       |      | %rH   |          |
| ActMainSpvHum              | 40393           | Actual humidity setpoint, Main (depending on actual controlmode)   |       |      | %rH   |          |
| ActMainSpvDeh              | 47998           | Actual dehumidity setpoint, Main (depending on actual controlmode) |       |      | %rH   |          |
| ActCtrlValHum              | 38385           | Actual controlled humidity   |       |      | %rH   |          |
| DewpointDz                 | 41175           | Dew point dead zone  |       |      | °C    |          |
| Dewpoint                   | 21292           | Dew point  | -64.0 | 64.0 |       |          |
| FanCmpHumSpv               | 53848           | Fan compensation humidity setpoint                                 |       |      | %rH   |          |
| FanCmpHumPrVal             | 15399           | Actual fan compensation humidity                                   |       |      | %     |          |
| DeHumidityPrVal            | 18150           | Actual dehumidity value  |       |      | %rH   |          |
| SplyHumDevAlmMaxDev        | 22230           | Max deviation supply humidity                                      |       |      | %rH   |          |
| RmHumDevAlmMaxDev          | 39703           | Max deviation room humidity  |       |      | %rH   |          |
| OutEnth                    | 57226           | Outside air enthalpy   |       |      | kJ/kg |          |
| OutHumAbs                  | 16390           | Outside air humidity absolute                                      |       |      | g/kg  |          |
| TmpSpvRtTmp1               | 47485           | Exh air temp setpoint 1  |       |      | °C    |          |
| TmpSpvSplyDiff1            | 63237           | Supply temp delta 1  |       |      | °C    |          |
| TmpSpvRtTmp2               | 35102           | Exh air temp setpoint 2  |       |      | °C    |          |
| TmpSpvSplyDiff2            | 51046           | Supply temp delta 2  |       |      | °C    |          |
| TmpSpvCoSpv                | 55992           | Comfort temp setpoint  |       |      | °C    |          |
| TmpSpvCoDz                 | 65251           | Comfort temp deadzone  |       |      | °C    |          |
| TmpSpvCoSpvClg             | 8970            | Comfort cooling setpoint   | 23.0  | 99.0 |       |          |
| TmpSpvCoSpvHtg             | 22817           | Comfort heating setpoint   | -64.0 | 99.0 |       |          |
| TmpSpvEcSpv                | 22543           | Economy temp setpoint  |       |      | °C    |          |
| TmpSpvEcDz                 | 44059           | Economy temp deadzone  |       |      | °C    |          |
| TmpSpvEcSpvClg             | 61866           | Economy cooling setpoint   | 0.0   | 99.0 |       |          |
| TmpSpvEcSpvHtg             | 35713           | Economy heating setpoint   | -64.0 | 99.0 |       |          |
| SuCmpTmpDta                | 34417           | Summer compensation temp delta                                     |       |      | K     |          |
| SuCmpTmpPrVal              | 41033           | Actual summer compensation temp                                    |       |      | °C    |          |
| WiCmpTmpDta                | 11601           | Winter compensation temp delta                                     |       |      | K     |          |
| WiCmpTmpPrVal              | 17839           | Actual winter compensation temp                                    |       |      | °C    |          |
| SwtchSplyCmp               | 7989            | Summer/winter supply compensation                                  |       |      | °C    |          |
| MinPoolDiff                | 32379           | MinPoolDiff  |       |      | °C    |          |
| TmpCascHighLmt             | 14826           | Supply temp max setpoint   |       |      | °C    | v2.14.xx |
| TmpCascLowLmt              | 59590           | Supply temp min setpoint   |       |      | °C    | v2.14.xx |



| Analog values, object name | Object instance | Object description   | LOL   | HIL  | Dim | Release  |
|----------------------------|-----------------|--|-------|------|-----|----------|
| CascFlowLmtMaxDevLmt       | 57930           | Draught heating max deviation                                      |       |      | °C  |          |
| CascFlowLmtMinDevLmt       | 27342           | Draught cooling max deviation                                      |       |      | °C  |          |
| FlowClgStop                | 44153           | Flow Cooling Stop  |       |      | l/s | v2.14.xx |
| FlowClgStart               | 19990           | Flow Cooling Start   |       |      | l/s | v2.14.xx |
| ActCtrlVal                 | 52988           | Actual controlled temp   |       |      | °C  |          |
| HrecPrsFrstSpv             | 2152            | Heat recovery frost setpoint step 1                                |       |      | Pa  |          |
| HrecPrsFrstSpvStBy         | 55606           | Heat recovery frost setpoint step 2                                |       |      | Pa  |          |
| HrecToaDewPActiv           | 558             | Heat recovery Dew point Activation Outside temp                    |       |      | °C  | v2.14.xx |
| HrecDewPointDz             | 23404           | Heat recovery Dew point Deadzone                                   |       |      | °C  | v2.14.xx |
| HrDewPoint                 | 1776            | Heat recovery Dew point  | -64.0 | 64.0 |     | v2.14.xx |
| HrecActDewPoint            | 3738            | Heat recovery Dew point Activation Setpoint.                       | -64.0 | 64.0 |     | v2.14.xx |
| OutTmpForceHrecMinLmt      | 25551           | Min signal Heat recovery.  |       |      | %   | v2.14.xx |
| DeFrstMxSpd                | 28660           | Max speed defrost  |       |      | %   |          |
| FanHPHIL                   | 8242            | Max decrease setpoint.   |       |      | %   | v3.44.xx |
| FanCmpHtgDz                | 41346           | Fan heating deadzone   |       |      | °C  |          |
| FanCmpClgDz                | 54041           | Fan cooling deadzone   |       |      | °C  |          |
| FanCmpTmpSpv               | 59241           | Fan compensation temp setpoint                                     |       |      | °C  |          |
| FanCmpTmpPrVal             | 9430            | Actual fan compensation temp                                       |       |      | %   |          |
| ExtraSpv                   | 58349           | Extra sequence setpoint  |       |      | °C  |          |
| ExtraDz                    | 1172            | Extra sequence deadzone  |       |      | °C  |          |
| ExSwTchSplyCmp             | 2021            | Su/wi sply comp Ex seq   |       |      | °C  |          |
| ExCascFlowLmtMaxDevLmt     | 44718           | Heating max deviation Ex seq                                       |       |      | °C  |          |
| ExCascFlowLmtMinDevLmt     | 9770            | Cooling max dev Ex seq   |       |      | °C  |          |
| ExActCascSpvHtg            | 13245           | Actual supply heating setpoint 2 (when use of cascade control)     |       |      | °C  |          |
| ExActCascSpvClg            | 18838           | Actual supply cooling setpoint 2 (when use of cascade control)     |       |      | °C  |          |
| ExActMainSpvHtg            | 19595           | Actual heating setpoint 2, Main (depending on actual control mode) |       |      | °C  |          |
| ExActMainSpvClg            | 13984           | Actual cooling setpoint 2, Main (depending on actual control mode) |       |      | °C  |          |
| ExActCtrlVal               | 34825           | Actual controlled temp Ex seq                                      |       |      | °C  |          |
| ActCascSpvHtg              | 28804           | Actual supply heating setpoint (when use of cascade control)       |       |      | °C  |          |
| ActCascSpvClg              | 2735            | Actual supply cooling setpoint (when use of cascade control)       |       |      | °C  |          |

| Analog values, object name | Object instance | Object description   | LOL   | HIL  | Dim | Release     |
|----------------------------|-----------------|--|-------|------|-----|-------------|
| ActMainSpvHtg              | 4018            | Actual heating setpoint (depending on actual controlmode)  |       |      | °C  |             |
| ActMainSpvClg              | 30105           | Actual cooling setpoint (depending on actual control mode) |       |      | °C  |             |
| TmpMinMaxCtrlMaxSpv        | 2907            | Supply temp max setpoint                                   | 17.0  | 50.0 |     | -> v3.44.xx |
| TmpMinMaxCtrlMinSpv        | 13640           | Supply temp min setpoint                                   | 10.0  | 49.0 |     | -> v3.44.xx |
| HrecDampminFrshAir         | 41552           | Min fresh air  |       |      | %   |             |
| HrecDampRec                | 14134           | Heat recovery damper recovery value                        |       |      | %   |             |
| HrecFrstSpv                | 51620           | Heat recovery frost setpoint                               |       |      | °C  |             |
| DefrostCyc                 | 6773            | Cycle time, dampers  |       |      | min | v2.04.xx    |
| DefrostP2                  | 5343            | Size konstant P2   |       |      |     | v2.04.xx    |
| DefrostP1                  | 9404            | Size konstant P1   |       |      |     | v2.04.xx    |
| DefrostTmDiff              | 58082           | Min time defrost   |       |      | min | v2.04.xx    |
| DefrostP0                  | 13469           | Size konstant P0   |       |      |     | v2.04.xx    |
| DefrostTmStp               | 4093            | Time stop heat recovery                                    |       |      | min | v2.04.xx    |
| DefrostOutTmpRed           | 52346           | Out Temp reduced heat recovery                             |       |      | °C  | v2.04.xx    |
| DefrostOutTmpAct           | 28382           | Out Temp block defrost                                     |       |      | °C  | v2.04.xx    |
| DefrostStartSp             | 62433           | Start defrosting   |       |      | %   | v2.04.xx    |
| DefrostStopSp              | 64177           | Stop defrosting  |       |      | %   | v2.04.xx    |
| NrmPrs                     | 64168           | Home Normal Pressure calculated                            |       |      | Pa  | v2.04.xx    |
| ActStartPrs                | 41115           | Home Actual start pressure defrost                         |       |      | Pa  | v2.04.xx    |
| ActStopPrs                 | 36716           | Home Actual stop pressure defrost                          |       |      | Pa  | v2.04.xx    |
| HPrs                       | 15683           | High pressure Hrec.  | -64.0 | 35.0 |     | v2.04.xx    |
| ActPrs                     | 31088           | Act.pressure over VVX                                      |       |      | Pa  | v2.04.xx    |
| DefrostMinDmpSp            | 24228           | Min VVX Setpoint   |       |      | %   | v2.14.xx    |
| DefrostToaX1               | 21054           | Outside air temp X1  |       |      | °C  | v2.14.xx    |
| DefrostDmpPosY1            | 53766           | Heat recovery Y1   |       |      | %   | v2.14.xx    |
| DefrostToaX2               | 25181           | Outside air temp X2  |       |      | °C  | v2.14.xx    |
| DefrostDmpPosY2            | 57957           | Heat recovery Y2   |       |      | %   | v2.14.xx    |
| DefrostRedDmpSp            | 28347           | Red. VVX defrost.  |       |      | %   | v2.14.xx    |
| DefrostDefrostSp           | 3259            | VVX defrosting   |       |      | %   | v2.04.xx    |
| CoolingOffTmp              | 16471           | Cooling disable outside temp                               |       |      | °C  |             |
| FanHtgPrVal                | 49915           | Actual fan heating value                                   |       |      | %   |             |
| FanClgPrVal                | 58670           | Actual fan cooling value                                   |       |      | %   |             |
| HeatingFrstSpv             | 35635           | Heating frost setpoint                                     |       |      | °C  |             |
| HeatingFrstSpvStBy         | 12781           | Heating standby setpoint                                   |       |      | °C  |             |
| HeatingPreHtgX1            | 23412           | Pre heating outside temp X1                                |       |      | °C  |             |
| HeatingPreHtgY1            | 26693           | Pre heating position Y1                                    |       |      | %   |             |
| HeatingPreHtgX2            | 27415           | Pre heating outside temp X2                                |       |      | °C  |             |
| HeatingPreHtgY2            | 22566           | Pre heating position Y2                                    |       |      | %   |             |
| SplyTmpDevAlmMaxDev        | 9756            | Max deviation supply temp                                  |       |      | °C  |             |

| Analog values, object name | Object instance | Object description                                  | LOL  | HIL   | Dim | Release  |
|----------------------------|-----------------|---|------|-------|-----|----------|
| RtRmTmpDevAlmMaxDev        | 61586           | Max deviation room temp                             |      |       | °C  |          |
| ExtraClgOffTmp             | 54677           | Cooling 2 disable outside temp                      |      |       | °C  |          |
| HPFrstCtrlrAirSpv          | 12259           | FlexoPool Heat Pump frost protection air setpoint   |      |       | °C  |          |
| HPFrstCtrlrWtrSpv          | 60794           | FlexoPool Heat Pump frost protection water setpoint |      |       | °C  |          |
| ExtraHtgFrstSpv            | 4625            | Heating 2 frost setpoint                            |      |       | °C  |          |
| ExtraHtgFrstSpvStBy        | 60579           | Heating 2 standby setpoint                          |      |       | °C  |          |
| ExtraHtgPreHtgX1           | 27620           | Heating 2 Pre heating outside temp X1               |      |       | °C  |          |
| ExtraHtgPreHtgY1           | 22741           | Heating 2 Pre heating position Y1                   |      |       | %   |          |
| ExtraHtgPreHtgX2           | 23431           | Heating 2 Pre heating outside temp X2               |      |       | °C  |          |
| ExtraHtgPreHtgY2           | 26806           | Heating 2 Pre heating position Y2                   |      |       | %   |          |
| HrecEffEff                 | 17247           | Heat recovery efficiency                            | 50.0 | 101.0 |     |          |
| AuxTmpSp1                  | 29887           | Aux.Temp 1 Setpoint 1                               |      |       | °C  | v2.14.xx |
| AuxTmpSp2                  | 17628           | Aux.Temp 1 Setpoint 2                               |      |       | °C  | v2.14.xx |
| SuWiSwchCheckOutTmp Dampd  | 24338           | Outside air temp damped                             |      |       | °C  |          |
| RoomUnitsOccTm             | 1206            | Roomunit presence time                              |      |       | hrs |          |
| RoomUnitsActSpvShift       | 15285           | Actual roomunit setpoint                            |      |       | °C  |          |
| CG_EM24_1ActPower          | 40280           | EM24 Energy actual power                            |      |       | W   | v3.40.xx |
| CG_EM24_1AvePower          | 36000           | EM24 Energy average power                           |      |       | W   | v3.40.xx |
| CG_EM24_1TotEnergy         | 61249           | EM24 Energy total                                   |      |       | kWh | v3.40.xx |
| CG_EM24_1ParEnergy         | 19610           | EM24 Energy partial                                 |      |       | kWh | v3.40.xx |
| CG_EM24_1OpHours           | 49048           | EM24 Energy operation hours                         |      |       | hrs | v3.40.xx |
| RoomTmpCOM                 | 1882            | Room temperature - Value communication.             |      |       | °C  |          |
| RoomTmp2COM                | 1883            | Room temperature 2 - Value communication.           |      |       | °C  |          |
| OutTmpCOM                  | 1881            | Outside air temp - Value communication.             |      |       | °C  |          |
| FPPoolTmpCOM               | 1885            | FP Pool Temp - Value communication.                 |      |       | °C  |          |
| Room1TmpCOM                | 1920            | Temp. room 1 - Value communication.                 |      |       | °C  |          |
| Room2TmpCOM                | 1921            | Temp. room 2 - Value communication.                 |      |       | °C  |          |
| Room3TmpCOM                | 1922            | Temp. room 3 - Value communication.                 |      |       | °C  |          |
| Room4TmpCOM                | 1923            | Temp. room 4 - Value communication.                 |      |       | °C  |          |
| Room5TmpCOM                | 1924            | Temp. room 5 - Value communication.                 |      |       | °C  |          |
| Room6TmpCOM                | 1925            | Temp. room 6 - Value communication.                 |      |       | °C  |          |
| Room7TmpCOM                | 1932            | Temp. room 7 - Value communication.                 |      |       | °C  |          |

|                     |       |  |  |  |     |          |
|---------------------|-------|--|--|--|-----|----------|
| RoomHumCOM          | 1889  | Room humidity relative - Value communication.        |  |  | %rH |          |
| OutHumCOM           | 1888  | Outside air humidity relative - Value communication. |  |  | %rH |          |
| Room1HumCOM         | 1926  | Humidity room 1 - Value communication.               |  |  | %rH |          |
| Room2HumCOM         | 1927  | Humidity room 2 - Value communication.               |  |  | %rH |          |
| Room3HumCOM         | 1928  | Humidity room 3 - Value communication.               |  |  | %rH |          |
| Room4HumCOM         | 1929  | Humidity room 4 - Value communication.               |  |  | %rH |          |
| Room5HumCOM         | 1930  | Humidity room 5 - Value communication.               |  |  | %rH |          |
| Room6HumCOM         | 1931  | Humidity room 6 - Value communication.               |  |  | %rH |          |
| Room7HumCOM         | 1933  | Humidity room 7 - Value communication.               |  |  | %rH |          |
| ExtSetpointSpvCOM   | 1884  | External setpoint - Value communication.             |  |  | °C  |          |
| PrsBalCtrLoopKp     | 21836 | Balance Controller - Gain (Kp)                       |  |  |     |          |
| PrsBalCtrLoopTI     | 21837 | Balance Controller - Integral.(Tn)                   |  |  | s   |          |
| PrsBalCtrLoopTD     | 21838 | Balance Controller - Derivative.(Tv)                 |  |  | s   |          |
| FrcGrp1TmpCtrLoopKp | 21960 | Force group 1 Temp - Gain (Kp)                       |  |  |     | v2.04.xx |
| FrcGrp1TmpCtrLoopTI | 21961 | Force group 1 Temp - Integral.(Tn)                   |  |  | s   | v2.04.xx |
| FrcGrp1TmpCtrLoopTD | 21962 | Force group 1 Temp - Derivative.(Tv)                 |  |  | s   | v2.04.xx |
| FrcGrp1Co2CtrLoopKp | 21963 | Force group 1 Co2 - Gain (Kp)                        |  |  |     | v2.04.xx |
| FrcGrp1Co2CtrLoopTI | 21964 | Force group 1 Co2 - Integral.(Tn)                    |  |  | s   | v2.04.xx |
| FrcGrp1Co2CtrLoopTD | 21965 | Force group 1 Co2 - Derivative.(Tv)                  |  |  | s   | v2.04.xx |
| FrcGrp2TmpCtrLoopKp | 21966 | Force group 2 Temp - Gain (Kp)                       |  |  |     | v2.04.xx |
| FrcGrp2TmpCtrLoopTI | 21967 | Force group 2 Temp - Integral.(Tn)                   |  |  | s   | v2.04.xx |
| FrcGrp2TmpCtrLoopTD | 21968 | Force group 2 Temp - Derivative.(Tv)                 |  |  | s   | v2.04.xx |
| FrcGrp2Co2CtrLoopKp | 21969 | Force group 2 Co2 - Gain (Kp)                        |  |  |     | v2.04.xx |
| FrcGrp2Co2CtrLoopTI | 21970 | Force group 2 Co2 - Integral.(Tn)                    |  |  | s   | v2.04.xx |
| FrcGrp2Co2CtrLoopTD | 21971 | Force group 2 Co2 - Derivative.(Tv)                  |  |  | s   | v2.04.xx |
| ExtSetpExhFanCOM    | 1887  | External setpoint Exhaust fan - Value communication. |  |  |     |          |
| ExtSetpSplyFanCOM   | 1886  | External setpoint Supply fan - Value communication.  |  |  |     |          |
| SplyFanCtrLoopKp    | 21845 | Supply fan - Gain (Kp)                               |  |  |     |          |
| SplyFanCtrLoopTI    | 21846 | Supply fan - Integral.(Tn)                           |  |  | s   |          |
| SplyFanCtrLoopTD    | 21847 | Supply fan - Derivative ti.(Tv)                      |  |  | s   |          |
| ExhFanCtrLoopKp     | 21848 | Exhaust fan - Gain (Kp)                              |  |  |     |          |

|                       |       |   |  |  |   |          |
|-----------------------|-------|---|--|--|---|----------|
| ExhFanCtrLoopTI       | 21849 | Exhaust fan - Integral.(Tn)                           |  |  | s |          |
| ExhFanCtrLoopTD       | 21850 | Exhaust fan - Derivative.(Tv)                         |  |  | s |          |
| AirQCmpCtrLoopKp      | 21851 | Air quality 1 Control. - Gain (Kp)                    |  |  |   | v3.40.xx |
| AirQCmpCtrLoopTI      | 21852 | Air quality 1 Control. - Integral.(Tn)                |  |  | s | v3.40.xx |
| AirQCmpCtrLoopTD      | 21853 | Air quality 1 Control. - Derivative.(Tv)              |  |  | s | v3.40.xx |
| AirQCmp2CtrLoopKp     | 21863 | Air quality 2 Control. - Gain (Kp)                    |  |  |   | v3.40.xx |
| AirQCmp2CtrLoopTI     | 21864 | Air quality 2 Contr. - Integral.(Tn)                  |  |  | s | v3.40.xx |
| AirQCmp2CtrLoopTD     | 21865 | Air quality 2 Contr. - Derivative.(Tv)                |  |  | s | v3.40.xx |
| HumMaxCtrLoopKp       | 21930 | Max supply humidity - Gain (Kp)                       |  |  |   |          |
| HumMaxCtrLoopTI       | 21931 | Max supply humidity - Integral.(Tn)                   |  |  | s |          |
| HumMaxCtrLoopTD       | 21932 | Max supply humidity - Derivative.(Tv)                 |  |  | s |          |
| FanCmpHumCtrLoopKp    | 21933 | Fan comp humidity - Gain (Kp)                         |  |  |   |          |
| FanCmpHumCtrLoopTI    | 21934 | Fan comp humidity - Integral.(Tn)                     |  |  | s |          |
| FanCmpHumCtrLoopTD    | 21935 | Fan comp humidity - Derivative.(Tv)                   |  |  | s |          |
| DampCmpHumCtrLoopKp   | 21936 | Heat recovery humidity compensation – Gain (Kp)       |  |  |   |          |
| DampCmpHumCtrLoopTI   | 21937 | Heat recovery humidity compensation - Integral.(Tn)   |  |  | s |          |
| DampCmpHumCtrLoopTD   | 21938 | Heat recovery humidity compansation - Derivative.(Tv) |  |  | s |          |
| HumidityCtrLoopKp     | 21939 | Humidifikation – Gain (Kp)                            |  |  |   |          |
| HumidityCtrLoopTI     | 21940 | Humidifikation - Integral.(Tn)                        |  |  | s |          |
| HumidityCtrLoopTD     | 21941 | Humidifikation - Derivative.(Tv)                      |  |  | s |          |
| DeHumidityCtrLoopKp   | 21945 | Dehumidification – Gain (Kp)                          |  |  |   |          |
| DeHumidityCtrLoopTI   | 21946 | Dehumidification - Integral.(Tn)                      |  |  | s |          |
| DeHumidityCtrLoopTD   | 21947 | Dehumidification - Derivative.(Tv)                    |  |  | s |          |
| HRecPrsFrstCtrLoopKp  | 21828 | Heat recovery frost pressure - Gain (Kp)              |  |  |   |          |
| HRecPrsFrstCtrLoopTI  | 21829 | Heat recovery frost pressure - Integr.(Tn)            |  |  | s |          |
| HRecPrsFrstCtrLoopTD  | 21830 | Heat recovery frost pressure - Derivative.(Tv)        |  |  | s |          |
| HRecDewPointCtrLoopKp | 21833 | Heat recovery Dew Point - Gain (Kp)                   |  |  |   | v2.14.xx |
| HRecDewPointCtrLoopTI | 21834 | Heat recovery Dew Point - Integral.(Tn)               |  |  | s | v2.14.xx |
| HRecDewPointCtrLoopTD | 21835 | Heat recovery Dew Point - Derivative.(Tv)             |  |  | s | v2.14.xx |
| FanHPLmtCtrLoopKp     | 21866 | HP Fan heating limit - Gain (Kp)                      |  |  |   | v3.44.xx |

|                     |       |   |  |  |   |                        |
|---------------------|-------|---|--|--|---|------------------------|
| FanHPLmtCtrLoopTI   | 21867 | HP Fan heating limit - Integral.(Tn)      |  |  | s | v3.44.xx               |
| FanHPLmtCtrLoopTD   | 21868 | HP Fan heating limit - Derivative.(Tv)    |  |  | s | v3.44.xx               |
| FanCmpTmpCtrLoopKp  | 21854 | Fan compensation temp - Gain (Kp)         |  |  |   |                        |
| FanCmpTmpCtrLoopTI  | 21855 | Fan compensation temp - Integral.(Tn)     |  |  | s |                        |
| FanCmpTmpCtrLoopTD  | 21856 | Fan compensation temp - Derivative.(Tv)   |  |  | s |                        |
| TmpMaxCtrLoopKp     | 21839 | Max supply temp – Gain (Kp)               |  |  |   | Removed after v3.44.xx |
| TmpMaxCtrLoopTI     | 21840 | Max supply temp - Integral.(Tn)           |  |  | s | Removed after v3.44.xx |
| TmpMaxCtrLoopTD     | 21841 | Max supply temp - Derivative.(Tv)         |  |  | s | Removed after v3.44.xx |
| TmpMinCtrLoopKp     | 21842 | Min supply temp – Gain (Kp)               |  |  |   | Removed after v3.44.xx |
| TmpMinCtrLoopTI     | 21843 | Min supply temp - Integral.(Tn)           |  |  | s | Removed after v3.44.xx |
| TmpMinCtrLoopTD     | 21844 | Min supply temp - Derivative.(Tv)         |  |  | s | Removed after v3.44.xx |
| HRecDamperCtrLoopKp | 21825 | Heat recovery damper - Gain (Kp)          |  |  |   |                        |
| HRecDamperCtrLoopTI | 21826 | Heat recovery damper - Integral.(Tn)      |  |  | s |                        |
| HRecDamperCtrLoopTD | 21827 | Heat recovery damper - Derivative.(Tv)    |  |  | s |                        |
| CoolingCtrLoopKp    | 21807 | Cooling - Gain (Kp)                       |  |  |   |                        |
| CoolingCtrLoopTI    | 21808 | Cooling - Integral.(Tn)                   |  |  | s |                        |
| CoolingCtrLoopTD    | 21809 | Cooling - Derivative.(Tv)                 |  |  | s |                        |
| FanHtgCtrLoopKp     | 21857 | Fan heating - Gain (Kp)                   |  |  |   |                        |
| FanHtgCtrLoopTI     | 21858 | Fan heating - Integral.(Tn)               |  |  | s |                        |
| FanHtgCtrLoopTD     | 21859 | Fan heating - Derivative.(Tv)             |  |  | s |                        |
| FanClgCtrLoopKp     | 21860 | Fan cooling - Gain (Kp)                   |  |  |   |                        |
| FanClgCtrLoopTI     | 21861 | Fan cooling – Integral.(Tn)               |  |  | s |                        |
| FanClgCtrLoopTD     | 21862 | Fan cooling - Derivative.(Tv)             |  |  | s |                        |
| EIHeatingCtrLoopKp  | 21804 | Electrical heating – Gain (Kp)            |  |  |   |                        |
| EIHeatingCtrLoopTI  | 21805 | Electrical heating - Integral.(Tn)        |  |  | s |                        |
| EIHeatingCtrLoopTD  | 21806 | Electrical heating - Derivative.(Tv)      |  |  | s |                        |
| HeatingCtrLoopKp    | 21801 | Heating - Gain (Kp)                       |  |  |   |                        |
| HeatingCtrLoopTI    | 21802 | Heating - Integral.(Tn)                   |  |  | s |                        |
| HeatingCtrLoopTD    | 21803 | Heating - Derivative.(Tv)                 |  |  | s |                        |
| MinExhTCtrLoopKp    | 21986 | Min exhaust temp Control. - Gain (Kp)     |  |  |   |                        |
| MinExhTCtrLoopTI    | 21987 | Min exhaust temp Control. - Integral.(Tn) |  |  | s |                        |

|                       |       |   |  |  |   |          |
|-----------------------|-------|---|--|--|---|----------|
| MinExhTCtrLoopTD      | 21988 | Min exhaust temp Control. - Derivative.(Tv)         |  |  | s |          |
| HRecFrstCtrLoopKp     | 21831 | Heat recovery frost protection - Gain (Kp)          |  |  |   |          |
| HRecFrstCtrLoopTI     | 21832 | Heat recovery frost protection - Integral.(Tn)      |  |  | s |          |
| HRecFrstCtrLoopTD     | 87368 | Heat recovery frost protection - Derivative.(Tv)    |  |  | s |          |
| HRecCtrLoopKp         | 21819 | Heat recovery - Gain (Kp)                           |  |  |   |          |
| HRecCtrLoopTI         | 21820 | Heat recovery - Integral.(Tn)                       |  |  | s |          |
| HRecCtrLoopTD         | 21821 | Heat recovery - Derivative.(Tv)                     |  |  | s |          |
| ExtEIHeatingCtrLoopKp | 21816 | Electrical Heating 2 - Gain (Kp)                    |  |  |   |          |
| ExtEIHeatingCtrLoopTI | 21817 | Electrical Heating 2 - Integral.(Tn)                |  |  | s |          |
| ExtEIHeatingCtrLoopTD | 21818 | Electrical Heating 2 - Derivative.(Tv)              |  |  | s |          |
| ExtCoolingCtrLoopKp   | 21813 | Cooling 2 - Gain (Kp)                               |  |  |   |          |
| ExtCoolingCtrLoopT    | 21814 | Cooling 2 - Integral.(Tn)                           |  |  | s |          |
| ExtCoolingCtrLoopTD   | 21815 | Cooling 2 - Derivative.(Tv)                         |  |  | s |          |
| HPFrstAirCtrLoopKp    | 21980 | Heat Pump Frost Protection Air. - Gain (Kp)         |  |  |   |          |
| HPFrstAirCtrLoopTI    | 21981 | Heat Pump Frost Protection Air. - Integral.(Tn)     |  |  | s |          |
| HPFrstAirCtrLoopTD    | 21982 | Heat Pump Frost Protection Air. - Derivative.(Tv)   |  |  | s |          |
| HPFrstWtrCtrLoopKp    | 21983 | Heat Pump Frost protection Water. – Gain (Kp)       |  |  |   |          |
| HPFrstWtrCtrLoopTI    | 21984 | Heat Pump Frost Protection Water. - Integral.(Tn)   |  |  | s |          |
| HPFrstWtrCtrLoopTD    | 21985 | Heat Pump Frost Protection Water. - Derivative.(Tv) |  |  | s |          |
| ExtHeatingCtrLoopKp   | 21810 | Heating 2 - Gain (Kp)                               |  |  |   |          |
| ExtHeatingCtrLoopTI   | 21811 | Heating 2 - Integral.(Tn)                           |  |  | s |          |
| ExtHeatingCtrLoopTD   | 21812 | Heating 2 - Derivative.(Tv)                         |  |  | s |          |
| Rm1FCtrLoopKp         | 21992 | Room 1 fan compensation. - Gain (Kp)                |  |  |   | v3.40.xx |
| Rm1FCtrLoopTI         | 21993 | Room 1 fan compensation. - Integral.(Tn)            |  |  | s | v3.40.xx |
| Rm1FCtrLoopTD         | 21994 | Room 1 fan compensation. - Derivative.(Tv)          |  |  | s | v3.40.xx |
| Rm2FCtrLoopKp         | 21995 | Room 2 fan compensation. – Gain (Kp)                |  |  |   | v3.40.xx |
| Rm2FCtrLoopTI         | 21996 | Room 2 fan compensation. - Integral.(Tn)            |  |  | s | v3.40.xx |

|                    |       |  |  |  |    |          |
|--------------------|-------|--|--|--|----|----------|
| Rm2FCtrLoopTD      | 21997 | Room 2 fan compensation. - Derivative.(Tv) |  |  | s  | v3.40.xx |
| Rm3FCtrLoopKp      | 21998 | Room 3 fan compensation. – Gain (Kp)       |  |  |    | v3.40.xx |
| Rm3FCtrLoopTI      | 21999 | Room 3 fan compensation. - Integral.(Tn)   |  |  | s  | v3.40.xx |
| Rm3FCtrLoopTD      | 22000 | Room 3 fan compensation. - Derivative.(Tv) |  |  | s  | v3.40.xx |
| Rm4FCtrLoopKp      | 22001 | Room 4 fan compensation. – Gain (Kp)       |  |  |    | v3.40.xx |
| Rm4FCtrLoopTI      | 22002 | Room 4 fan compensation. - Integral.(Tn)   |  |  | s  | v3.40.xx |
| Rm4FCtrLoopTD      | 22003 | Room 4 fan compensation. - Derivative.(Tv) |  |  | s  | v3.40.xx |
| Rm5FCtrLoopKp      | 22004 | Room 5 fan compensation. – Gain (Kp)       |  |  |    | v3.40.xx |
| Rm5FCtrLoopTI      | 22005 | Room 5 fan compensation. - Integral.(Tn)   |  |  | s  | v3.40.xx |
| Rm5FCtrLoopTD      | 22006 | Room 5 fan compensation. - Derivative.(Tv) |  |  | s  | v3.40.xx |
| Rm6FCtrLoopKp      | 22007 | Room 6 fan compensation. – Gain (Kp)       |  |  |    | v3.40.xx |
| Rm6FCtrLoopTI      | 22008 | Room 6 fan cmp. - Integral.(Tn)            |  |  | s  | v3.40.xx |
| Rm6FCtrLoopTD      | 22009 | Room 6 fan compensation. - Derivative.(Tv) |  |  | s  | v3.40.xx |
| Rm7FCtrLoopKp      | 22019 | Room 7 fan compensation. – Gain (Kp)       |  |  |    | v3.40.xx |
| Rm7FCtrLoopTI      | 22020 | Room 7 fan compensation. - Integral.(Tn)   |  |  | s  | v3.40.xx |
| Rm7FCtrLoopTD      | 22021 | Room 7 fan compensation. - Derivative.(Tv) |  |  | s  | v3.40.xx |
| RmAiQCtrLoopKp     | 22010 | Air quality room – Gain (Kp)               |  |  |    | v3.40.xx |
| RmAiQCtrLoopTI     | 22011 | Air quality room - Integral.(Tn)           |  |  | s  | v3.40.xx |
| RmAiQCtrLoopTD     | 22012 | Air quality room - Derivative.(Tv)         |  |  | s  | v3.40.xx |
| RmHumCtrLoopKp     | 22016 | Room Humidity – Gain (Kp)                  |  |  |    | v3.40.xx |
| RmHumCtrLoopTI     | 22017 | Room Humidity - Integral.(Tn)              |  |  | s  | v3.40.xx |
| RmHumCtrLoopTD     | 22018 | Room Humidity - Derivative.(Tv)            |  |  | s  | v3.40.xx |
| SplyFan1_MotorVolt | 54445 | Supply fan A Motor Volt                    |  |  | V  | v3.10.xx |
| SplyFan1_Power     | 50496 | Supply fan A Power                         |  |  | kW | v3.10.xx |



|                      |       |                                     |  |  |     |          |
|----------------------|-------|-------------------------------------|--|--|-----|----------|
| SplyFan1_Current     | 27394 | Supply fan A Current                |  |  | A   | v3.10.xx |
| SplyFan1_HeatSinkTmp | 11521 | Supply fan A Heatsink Temp          |  |  | °C  | v3.10.xx |
| SplyFan1_OpHrs       | 2299  | Supply fan A Motor run time         |  |  | hrs | v3.10.xx |
| SplyFan1_OutFreq     | 22616 | Supply fan A Output frequency.      |  |  | Hz  | v3.10.xx |
| SplyFan1_DCLink      | 35351 | Supply fan A DC-Volt                |  |  | V   | v3.10.xx |
| SplyFan1_Speed       | 47919 | Supply fan A speed                  |  |  | rpm | v3.10.xx |
| SplyFan1_Energy      | 6457  | Supply fan A energy                 |  |  | kWh | v3.10.xx |
| SplyFan2_OpHrs       | 53369 | Supply fan B Motor run time         |  |  | rpm | v3.10.xx |
| SplyFan2_OutFreq     | 29980 | Supply fan B Output frequency.      |  |  | Hz  | v3.10.xx |
| SplyFan2_DCLink      | 16994 | Supply fan B DC-link voltage        |  |  | V   | v3.44.xx |
| SplyFan2_MotorVolt   | 44119 | Supply fan B Motor Volt             |  |  | V   | v3.10.xx |
| SplyFan2_Power       | 7618  | Supply fan B Power                  |  |  | kW  | v3.10.xx |
| SplyFan2_Current     | 17990 | Supply fan B Current                |  |  | A   | v3.10.xx |
| SplyFan2_Speed       | 25517 | Supply fan B speed                  |  |  | rpm | v3.10.xx |
| SplyFan2_Energy      | 53580 | Supply fan B energy                 |  |  | kWh | v3.10.xx |
| SplyFan2_HeatSinkTmp | 58020 | Supply fan B Heatsink Temp          |  |  | °C  | v3.10.xx |
| ExhFan1_MotorVolt    | 8777  | Exhaust fan A Motor Volt            |  |  | V   | v3.10.xx |
| ExhFan1_Power        | 43415 | Exhaust fan A Power                 |  |  | kW  | v3.10.xx |
| ExhFan1_Current      | 40671 | Exhaust fan A Current               |  |  | A   | v3.10.xx |
| ExhFan1_HeatSinkTmp  | 10700 | Exhaust fan A Heatsink Temp         |  |  | °C  | v3.10.xx |
| ExhFan1_OpHrs        | 25644 | Exhaust fan A Motor run time        |  |  | hrs | v3.10.xx |
| ExhFan1_OutFreq      | 44421 | Exhaust fan A Output frequency.     |  |  | Hz  | v3.10.xx |
| ExhFan1_DCLink       | 61501 | Exhaust fan A DC-Volt               |  |  | V   | v3.10.xx |
| ExhFan1_Speed        | 55288 | Exhaust fan A speed                 |  |  | rpm | v3.10.xx |
| ExhFan1_Energy       | 25363 | Exhaust fan A energy                |  |  | kWh | v3.10.xx |
| ExhFan2_OpHrs        | 48302 | Exhaust fan B Motor run time        |  |  | hrs | v3.10.xx |
| ExhFan2_OutFreq      | 32961 | Exhaust fan B Output frequency.     |  |  | Hz  | v3.10.xx |
| EF.B DC-link voltage | 14408 | Exhaust fan B DC-link voltage       |  |  | V   | v3.44.xx |
| ExhFan2_MotorVolt    | 23219 | Exhaust fan B Motor Volt            |  |  | V   | v3.10.xx |
| ExhFan2_Power        | 28949 | Exhaust fan B Power                 |  |  | kW  | v3.10.xx |
| ExhFan2_Current      | 45979 | Exhaust fan B Current               |  |  | A   | v3.10.xx |
| ExhFan2_Speed        | 3962  | Exhaust fan B speed                 |  |  | rpm | v3.10.xx |
| ExhFan2_Energy       | 43878 | Exhaust fan B energy                |  |  | kWh | v3.10.xx |
| ExhFan2_HeatSinkTmp  | 58985 | Exhaust fan B Heatsink Temp         |  |  | °C  | v3.10.xx |
| AOC_HghPrs_r         | 16789 | Carel ACUACR High pressure          |  |  | bar | v3.10.xx |
| AOC_SpHghPrs         | 5762  | Carel ACUACR Max high pressure      |  |  | bar | v3.10.xx |
| AOC_ClgPrVal         | 41285 | Carel ACUACR Actual cooling output. |  |  | %   | v3.10.xx |

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|----------------------|-------|--|--|--|-----|----------|
| AOC_LowPrs_r         | 722   | Carel ACUACR Low pressure                      |  |  | bar | v3.10.xx |
| AOC_GasTmp_r         | 65355 | Carel ACUACR Discharge temp.                   |  |  | °C  | v3.10.xx |
| AOC_ComprHz_r        | 60036 | Carel ACUACR Compressor frequency              |  |  | Hz  | v3.10.xx |
| MOC_Eff              | 31137 | Danfoss VSD C1 Power                           |  |  | W   | v3.10.xx |
| MOC_SplyVolt         | 42061 | Danfoss VSD Supply volt                        |  |  | V   | v3.10.xx |
| MOC_VSDTmp           | 51394 | Danfoss VSD Inverter temp                      |  |  | °C  | v3.10.xx |
| MOC_DCVolt           | 60786 | Danfoss VSD DC-Link                            |  |  | V   | v3.10.xx |
| MOC_Curr_A           | 12005 | Danfoss VSD Phase A                            |  |  | A   | v3.10.xx |
| MOC_Curr_B           | 7814  | Danfoss VSD Phase B                            |  |  | A   | v3.10.xx |
| MOC_Curr_C           | 3751  | Danfoss VSD Phase C                            |  |  | A   | v3.10.xx |
| EEV_S2Tmp_r          | 41196 | Danfoss VSD Suction temp                       |  |  | °C  | v3.10.xx |
| EEV_EvapTmp_r        | 52221 | Danfoss VSD Evaporation temp                   |  |  | °C  | v3.10.xx |
| EEV_SuperHRef_r      | 17045 | Danfoss VSD Superheat reference.               |  |  | K   | v3.10.xx |
| EEV_SuperHT_r        | 51293 | Danfoss VSD Superheat                          |  |  | K   | v3.10.xx |
| EEV_OpenPCT_r        | 47451 | Danfoss VSD Expansion valve                    |  |  | %   | v3.10.xx |
| CarelInverterOutP    | 6698  | Carel ACUACR Inverter signal output            |  |  | %   | v3.10.xx |
| CarelSuction_Temp_C1 | 1908  | Carel ACUACR Suction temp EEV compressor 1     |  |  | °C  | v3.10.xx |
| CarelSuction_Temp_C2 | 14103 | Carel ACUACR Suction temp EEV compressor 2     |  |  | °C  | v3.10.xx |
| CarelSuction_Temp_C3 | 10038 | Carel ACUACR Suction temp EEV compressor 3     |  |  | °C  | v3.10.xx |
| CarelEvap_Temp_C1    | 32303 | Carel ACUACR Evaporation temp EEV compressor 1 |  |  | °C  | v3.10.xx |
| CarelEvap_Temp_C2    | 20044 | Carel ACUACR Evaporation temp EEV compressor 2 |  |  | °C  | v3.10.xx |
| CarelEvap_Temp_C3    | 24173 | Carel ACUACR Evaporation temp EEV compressor 3 |  |  | °C  | v3.10.xx |
| CarelEvap_Press_C1   | 29868 | Carel ACUACR Low pressure EEV compressor 1     |  |  | bar | v3.10.xx |
| CarelEvap_Press_C2   | 17615 | Carel ACUACR Low pressure EEV compressor 2     |  |  | bar | v3.10.xx |
| CarelEvap_Press_C3   | 21742 | Carel ACUACR Low pressure EEV compressor 3     |  |  | bar | v3.10.xx |
| CarelSuperheat_C1    | 33386 | Carel ACUACR Superheat compressor 1            |  |  | K   | v3.10.xx |
| CarelSuperheat_C2    | 45577 | Carel ACUACR Superheat compressor 2            |  |  | K   | v3.10.xx |

|                        |       |   |       |      |     |          |
|------------------------|-------|---|-------|------|-----|----------|
| CareSuperheat_C3       | 41512 | Carel ACUACR Superheat compressor 3       |       |      | K   | v3.10.xx |
| CareOpPress_C1         | 4242  | Carel ACUACR High pressure C1             |       |      | bar | v3.10.xx |
| CareOpPress_C2         | 8433  | Carel ACUACR High pressure C2             |       |      | bar | v3.10.xx |
| CareOpPress_C3         | 12496 | Carel ACUACR High pressure C3             |       |      | bar | v3.10.xx |
| CareCircuit1EEVOpening | 18709 | Carel ACUACR Expansion valve 1            |       |      | %   | v3.10.xx |
| CareCircuit2EEVOpening | 12783 | Carel ACUACR Expansion valve 2            |       |      | %   | v3.10.xx |
| CareCircuit3EEVOpening | 59814 | Carel ACUACR Expansion valve 3            |       |      | %   | v3.10.xx |
| CareC1_Condensing_Temp | 30946 | Carel ACUACR Compressor 1 Condensing temp |       |      | °C  | v3.10.xx |
| CareC2_Condensing_Temp | 18884 | Carel ACUACR Compressor 2 Condensing temp |       |      | °C  | v3.10.xx |
| CareC3_Condensing_Temp | 22822 | Carel ACUACR Compressor 3 Condensing temp |       |      | °C  | v3.10.xx |
| DischTempC2            | 57536 | Carel ACUACR Discharge temp. C2           |       |      | °C  | v3.40.xx |
| LiqTempC2              | 424   | Carel ACUACR Liquid line temp C2          |       |      | °C  | v3.40.xx |
| SubClgTempC2           | 36128 | Carel ACUACR Sub cooling C2               |       |      | °C  | v3.40.xx |
| DischTempC3            | 61665 | Carel ACUACR Discharge temp. C3           |       |      | °C  | v3.40.xx |
| LiqTempC3              | 4489  | Carel ACUACR Liquid line temp C3          |       |      | °C  | v3.40.xx |
| SubClgTempC3           | 40193 | Carel ACUACR Sub cooling C3               |       |      | °C  | v3.40.xx |
| PwrComp                | 38611 | Carel ACUACR Power. Etc. Compressor       |       |      | kW  | v3.40.xx |
| PwrClg                 | 15529 | Carel ACUACR Power Cooling                |       |      | kW  | v3.40.xx |
| PwrHtg                 | 18050 | Carel ACUACR Power Heating                |       |      | kW  | v3.40.xx |
| DischTemp              | 46177 | Carel ACUACR Discharge temp.              |       |      | °C  | v3.40.xx |
| LiqTemp                | 22226 | Carel ACUACR Liquid line temp             |       |      | °C  | v3.40.xx |
| SubClgTemp             | 57493 | Carel ACUACR Sub cooling                  |       |      | °C  | v3.40.xx |
| SuTmp                  | 50102 | Outside air temp summer                   |       |      | °C  |          |
| WiTmp                  | 7717  | Outside air temp winter                   |       |      | °C  |          |
| SuWiTm                 | 33748 | Su/Wi time constant                       |       |      | h   |          |
| ValidAirQ              | 51648 | Actual Airquality                         |       |      | ppm |          |
| BasicDataSFP           | 12177 | SFP                                       | -64.0 | 64.0 |     |          |
| AirQ1StartAirQStrt     | 48997 | Start unit Air quality 1                  |       |      | ppm |          |
| AirQ1StartAirQSpv      | 12727 | Setpoint Air quality 1 start              |       |      | ppm |          |
| AirQ2StartAirQStrt     | 23616 | Start unit Air quality 2                  |       |      | ppm |          |
| AirQ2StartAirQSpv      | 48148 | Setpoint Air quality 2 start              |       |      | ppm |          |

|                             |       |   |       |       |     |          |
|-----------------------------|-------|---|-------|-------|-----|----------|
| AirQ2Spv                    | 59130 | Air quality 2 setpoint                  |       |       | ppm |          |
| AirQCmp2PrVal               | 8801  | Actual air quality compensation 2       |       |       | %   |          |
| HtgDmpVal                   | 1612  | Damper Heating                          | -64.0 | 110.0 | %   |          |
| DmpCmpHumSpv                | 35353 | Heat recovery comp humidity Setpoint.   |       |       | %rH |          |
| DmpCmpHumPrVal              | 62901 | Heat recovery comp humidity             |       |       | %   |          |
| SuCmpTmpStart               | 41719 | Summer comp temp start                  |       |       | °C  |          |
| SuCmpTmpEnd                 | 3420  | Summer comp temp end                    |       |       | °C  |          |
| WiCmpTmpStart               | 34422 | Winter comp temp start                  |       |       | °C  |          |
| WiCmpTmpEnd                 | 42620 | Winter comp temp end                    |       |       | °C  |          |
| MinExhTSpv                  | 17155 | Setpoint exhaust temp.                  |       |       | °C  |          |
| MinExhTHIL                  | 55429 | Min exhaust T Max output.               |       |       | %   |          |
| OutTmpForceHrec             | 27735 | Outside Temp Force Heat recovery        |       |       | °C  |          |
| ExSuCmpTmpStrt              | 57806 | Summer comp temp start                  |       |       | °C  |          |
| ExSuCmpTmpEnd               | 5516  | Summer comp temp end                    |       |       | °C  |          |
| ExSuCmpTmpDta               | 40609 | Summer comp temp delta                  |       |       | K   |          |
| ExSuCmpTmpPrVal             | 57838 | Actual summer comp temp                 |       |       | °C  |          |
| ExWiCmpTmpStrt              | 50511 | Winter comp temp start                  |       |       | °C  |          |
| ExWiCmpTmpEnd               | 48812 | Winter comp temp end                    |       |       | °C  |          |
| ExWiCmpTmpDta               | 13697 | Winter comp temp delta                  |       |       | K   |          |
| ExWiCmpTmpPrVal             | 1032  | Actual winter comp temp                 |       |       | °C  |          |
| HPMinVal                    | 31550 | HP Min. val                             |       |       | %   |          |
| HPRstrTm                    | 62983 | HP restart time                         |       |       | min |          |
| MinExhTCntIPrVal            | 26525 | Min exhaust T output                    |       |       | %   |          |
| HrecAdjTchpEICoilkW         | 36905 | Power Elc. before Supply Fan            |       |       | kW  |          |
| HrecAdjTchpHrecTempCalcTCHP | 21114 | Calc Heat recovery temp.                |       |       | °C  |          |
| EnergyFlwMinAlm             | 15820 | Energy Watch Alarm blocked              |       |       | l/s | v3.14.xx |
| EnergyAddHeatDiff           | 58991 | Energy Watch Alarm heat diff.           | -64.0 | 10.0  | °C  | v3.14.xx |
| EnergyHrec                  | 39394 | Energy Watch Heat recovery Actual power |       |       | kW  | v3.14.xx |
| EnergyFlwFact               | 13069 | Energy Watch Airflow factor             |       |       | %   | v3.14.xx |
| EnergyHadd                  | 46842 | Energy Watch Heating Actual power       |       |       | kW  | v3.14.xx |
| EnergyFans                  | 49812 | Energy Watch Fans Actual power          |       |       | kW  | v3.14.xx |
| EnergyHrecDay               | 35832 | Energy Watch Heat recovery Today        |       |       | kWh | v3.14.xx |
| EnergyHrecMonth             | 43587 | Energy Watch Heat recovery Month        |       |       | kWh | v3.14.xx |
| EnergyHrecLMonth            | 64718 | Energy Watch Heat recovery Last month   |       |       | kWh | v3.44.xx |
| EnergyHrecYear              | 10992 | Energy Watch Heat recovery Year         |       |       | MWh | v3.14.xx |

|                   |       |  |  |  |     |          |
|-------------------|-------|--|--|--|-----|----------|
| EnergyHrecLYear   | 51997 | Energy Watch Heat recovery Last year               |  |  | MWh | v3.14.xx |
| EnergyHrecTrip    | 7018  | Energy Watch Heat recovery Trip meter              |  |  | MWh | v3.14.xx |
| EnergyHaddDay     | 43989 | Energy Watch Heating Today                         |  |  | kWh | v3.14.xx |
| EnergyHaddMonth   | 22890 | Energy Watch Heating Month                         |  |  | kWh | v3.14.xx |
| EnergyHaddLMonth  | 3863  | Energy Watch Added heat last month                 |  |  | kWh | v3.44.xx |
| EnergyHaddYear    | 55769 | Energy Watch Heating Year                          |  |  | MWh | v3.14.xx |
| EnergyHaddLYear   | 15713 | Energy Watch Heating Last year                     |  |  | MWh | v3.14.xx |
| EnergyHaddTrip    | 59459 | Energy Watch Heating Trip meter                    |  |  | MWh | v3.14.xx |
| EnergyFansDay     | 11618 | Energy Watch Fans Today                            |  |  | kWh | v3.14.xx |
| EnergyFansMonth   | 16232 | Energy Watch Fans Month                            |  |  | kWh | v3.14.xx |
| EnergyFansLMonth  | 36569 | Energy Watch Fans Last Month                       |  |  | kWh | v3.44.xx |
| EnergyFansYear    | 49115 | Energy Watch Fans Year                             |  |  | MWh | v3.14.xx |
| EnergyFansLYear   | 13057 | Energy Watch Fans Last year                        |  |  | MWh | v3.14.xx |
| EnergyFansTrip    | 36417 | Energy Watch Fans Trip meter                       |  |  | MWh | v3.14.xx |
| AvgTempAvTempMth  | 47706 | Average temp Month                                 |  |  | °C  | v3.14.xx |
| AvgTempAvTempLMth | 55969 | Average temp Last month                            |  |  | °C  | v3.14.xx |
| AvgTempAveTempDay | 4604  | Average temp Day                                   |  |  | °C  | v3.14.xx |
| AuxTmpSp1         | 29887 | Aux.Temp1 Setpoint 1                               |  |  | °C  |          |
| AuxTmpSp2         | 17628 | Aux.Temp1 Setpoint 2                               |  |  | °C  |          |
| ValidTmpMix       | 12356 | Actual room temp                                   |  |  | °C  |          |
| Rm1Spv            | 55296 | Room 1 Setpoint                                    |  |  | °C  | v3.40.xx |
| Rm2Spv            | 14034 | Room 2 Setpoint                                    |  |  | °C  | v3.40.xx |
| Rm3Spv            | 40067 | Room 3 Setpoint                                    |  |  | °C  | v3.40.xx |
| Rm4Spv            | 64343 | Room 4 Setpoint                                    |  |  | °C  | v3.40.xx |
| Rm5Spv            | 20742 | Room 5 Setpoint                                    |  |  | °C  | v3.40.xx |
| Rm6Spv            | 49108 | Room 6 Setpoint                                    |  |  | °C  | v3.40.xx |
| Rm7Spv            | 5509  | Room 7 Setpoint                                    |  |  | °C  | v3.40.xx |
| RmAirQSpv         | 35762 | Air Quality Setpoint                               |  |  | ppm | v3.40.xx |
| RoomMinTmp        | 39502 | Setpoint if disabled                               |  |  | °C  |          |
| RoomAirQStart     | 53345 | Setpoint if disabled                               |  |  | ppm |          |
| RoomAirQHys       | 53789 | Setpoint Hysteresis                                |  |  | ppm |          |
| RmHumSpv          | 61196 | Room Humidity Setpoint                             |  |  | %rH |          |
| ExtraRmExtrTmpCOM | 1938  | Room/Extract temp Ex sequence Value communication. |  |  | °C  | v3.50.xx |
| FrcdGrp1TmpCOM    | 1936  | Forcegroup 1 Temp - Value communication.           |  |  | °C  | v3.50.xx |
| FrcdGrp2TmpCOM    | 1937  | Forcegroup 2 Temp - Value communication.           |  |  | °C  | v3.50.xx |
| AirQualityCOM     | 1890  | Air quality - Value communication.                 |  |  | ppm | v3.50.xx |

|                     |       |  |     |        |      |          |
|---------------------|-------|--|-----|--------|------|----------|
| AirQuality2COM      | 1891  | Air quality 2 - Value communication.             |     |        | ppm  | v3.50.xx |
| AirQuality3COM      | 1892  | Air quality 3 - Value communication.             |     |        | ppm  | v3.50.xx |
| AirQuality4COM      | 1893  | Air quality 4 - Value communication.             |     |        | ppm  | v3.50.xx |
| AirQuality2Snsr1COM | 1894  | Air quality 2 Sensor 1 - Value communication.    |     |        | ppm  | v3.50.xx |
| FrcdGrp1Co2COM      | 1934  | Force group 1 Air Quality - Value communication. |     |        | ppm  | v3.50.xx |
| FrcdGrp2Co2COM      | 1935  | Force group 2 Air Quality - Value communication. |     |        | ppm  | v3.50.xx |
| SplyFan1OpMinutes   | 21266 | OJ Supply Fan A run time mm                      |     |        | min  | v3.50.xx |
| SplyFan1OpDays      | 36406 | OJ Supply Fan A run time days                    |     |        | Days | v3.50.xx |
| SplyFan2OpMinutes   | 11240 | OJ Supply Fan B run time mm                      |     |        | min  | v3.50.xx |
| SplyFan2OpDays      | 17987 | OJ Supply Fan B run time days                    |     |        | Days | v3.50.xx |
| ExhFan1OpMinutes    | 42486 | OJ Exhaust Fan A run time mm                     |     |        | min  | v3.50.xx |
| ExhFan1OpDays       | 62492 | OJ Exhaust Fan A run time days                   |     |        | Days | v3.50.xx |
| ExhFan2OpMinutes    | 56588 | Exhaust Fan B run time mm                        |     |        | min  | v3.50.xx |
| ExhFan2OpDays       | 15465 | OJ Exhaust Fan B run time days                   |     |        | Days | v3.50.xx |
| SplyFilCorrAlmLmt   | 53229 | Supply filter Correction Alarm limit             |     |        | Pa   | v3.50.xx |
| SplyFilCalclnit_dP  | 63519 | Supply filter Calculated Initial pressure drop   | 0.0 | 7000.0 | Pa   | v3.50.xx |
| ExtrFilCorrAlmLmt   | 37361 | Extract filter Correction Alarm limit            |     |        | Pa   | v3.50.xx |
| ExtrFilCalclnit_dP  | 13107 | Extract filter Calculated Initial pressure drop  | 0.0 | 7000.0 | Pa   | v3.50.xx |
| SuCmpFanStrt        | 55465 | Summer comp fan start                            |     |        | °C   | v3.50.xx |
| SuCmpFanEnd         | 39637 | Summer comp fan end                              |     |        | °C   | v3.50.xx |
| SuCmpFanDta         | 4600  | Summer comp fan delta                            |     |        | °C   | v3.50.xx |
| WiCmpFanStrt        | 64552 | Winter comp fan start                            |     |        | °C   | v3.50.xx |
| WiCmpFanEnd         | 12789 | Winter comp fan end                              |     |        | °C   | v3.50.xx |
| WiCmpFanDta         | 47832 | Winter comp fan delta                            |     |        | °C   | v3.50.xx |
| HtgPmpStart         | 10195 | Heating pump start                               |     |        | °C   | v3.50.xx |

### 3.3.4 Binary inputs type No. 3

| Binary input, object name | Object instance | Object description          | State texts          | Release  |
|---------------------------|-----------------|-----------------------------|----------------------|----------|
| HtgFrstDtctr              | 21294           | Heating frost monitor       | - OK<br>- Frost      |          |
| HtgPmpAlm                 | 47847           | Heating pump alarm          | - OK<br>- Alarm      |          |
| EIHtgAlm                  | 4964            | Electrical heating alarm    | - OK<br>- Alarm      |          |
| HrecFrstDtctr             | 31092           | Heat recovery frost monitor | - OK<br>- Frost      |          |
| HRecPmpAlm                | 18003           | Heat recovery pump alarm    | - OK<br>- Alarm      |          |
| HRecAlm                   | 62931           | Heat recovery alarm         | - OK<br>- Alarm      |          |
| ClgPmpAlm                 | 40242           | Cooling pump alarm          | - OK<br>- Alarm      |          |
| ClgAlm                    | 45154           | Cooling DX alarm            | - OK<br>- Alarm      |          |
| HumPmpAlm                 | 3706            | Humidity pump alarm         | - OK<br>- Alarm      |          |
| ExtraFrstDtctr            | 34361           | Heating 2 frost monitor     | - OK<br>- Frost      |          |
| ExtraHtgPmpAlm            | 23306           | Heating 2 pump alarm        | - OK<br>- Alarm      |          |
| ExtraEIHtgAlm             | 23132           | Electrical heating 2 alarm  | - OK<br>- Alarm      |          |
| ExtraClgPmpAlm            | 31967           | Cooling 2 pump alarm        | - OK<br>- Alarm      |          |
| ExtraClgAlm               | 48824           | Cooling 2 DX alarm          | - OK<br>- Alarm      |          |
| FanAlm                    | 8558            | Fan alarm                   | - OK<br>- Alarm      |          |
| SplyFanAlm                | 28757           | Supply fan alarm            | - OK<br>- Alarm      |          |
| ExhFanAlm                 | 55865           | Exhaust fan alarm           | - OK<br>- Alarm      |          |
| FilterAlm                 | 13699           | Filter alarm                | - OK<br>- Alarm      |          |
| SplyFilterAlm             | 34066           | Supply filter alarm         | - OK<br>- Alarm      |          |
| ExhFilterAlm              | 45320           | Exhaust filter alarm        | - OK<br>- Alarm      |          |
| FireAlm                   | 28514           | Fire alarm                  | - OK<br>- Alarm      |          |
| FireAlm2                  | 59736           | Fire alarm 2                | - OK<br>- Alarm      |          |
| ExtCtrl1                  | 11643           | External control input 1    | - Off<br>- On        |          |
| ExtCtrl2                  | 7448            | External control input 2    | - Off<br>- On        |          |
| EmergencyStop             | 9864            | Emergency stop              | - Off<br>- On        |          |
| SuWiSwtch                 | 26679           | Summer/Winter input         | - Winter<br>- Summer |          |
| RtAirMode                 | 20374           | Return Air Mode             | - Off<br>- On        | v2.04.xx |
| DamperSplyFBFbVal         | 6336            | Outside air damper feedback | - OK<br>- No         |          |
| DamperExhFBFbVal          | 27338           | Extract air damper feedback | - OK<br>- No         |          |
| FireDamperFdbkOpn         | 3118            | Fire damper opened          | - OK<br>- No         |          |

| Binary input, object name | Object instance | Object description          | State texts           | Release                |
|---------------------------|-----------------|-----------------------------|-----------------------|------------------------|
| FireDamperNoMove          | 44469           | Fire damper no move         | - OK<br>- Alarm       |                        |
| FireDamperFdbkClsd        | 53169           | Fire damper closed          | - OK<br>- No          |                        |
| FireDamper2FdbkOpn        | 2231            | Fire damper2 opened         | - OK<br>- No          |                        |
| FireDamper2NoMove         | 7990            | Fire damper2 no move        | - OK<br>- Alarm       |                        |
| FireDamper2FdbkClsd       | 5685            | Fire damper2 closed         | - OK<br>- No          |                        |
| SplyFanFBFbVal            | 64102           | Supply fan feedback         | - OK<br>- Alarm       | Removed after v3.44.xx |
| ExhFanFBFbVal             | 32844           | Exhaust fan feedback        | - OK<br>- Alarm       | Removed after v3.44.xx |
| FireFanFBFbVal            | 25846           | Fire fan fdbk               | - OK<br>- Alarm       |                        |
| HumidityCtrlCmdFBFbVal    | 14608           | Humidifier feedback         | - OK<br>- No Fdbk     |                        |
| HumidityCtrlPmpCmdFBFbVal | 24144           | Humidity pump feedback      | - OK<br>- No Fdbk     |                        |
| HrecPmpCmdFBFbVal         | 34557           | Heat recovery pump feedback | - OK<br>- No Fdbk     |                        |
| CoolingPmpCmdFBFbVal      | 51912           | Cooling pump feedback       | - OK<br>- No Fdbk     |                        |
| CoolingFBFbVal            | 43526           | Cooling DX feedback         | - OK<br>- No Fdbk     |                        |
| HeatingPmpCmdFBFbVal      | 15639           | Heating pump feedback       | - OK<br>- Alarm       |                        |
| ExtraClgPmpCmdFBFbVal     | 54719           | Cooling 2 pump feedback     | - OK<br>- No Fdbk     |                        |
| ExtraClgFBFbVal           | 47898           | Cooling 2 DX feedback       | - OK<br>- Alarm       |                        |
| ExtraHtgPmpCmdFBFbVal     | 13329           | Heating 2 pump feedback     | - OK<br>- No Fdbk     |                        |
| AuxAlm                    | 22605           | Auxiliary alarm             | - Passive<br>- Active |                        |
| AuxInp                    | 21522           | Auxiliary input             | - OK<br>- Fault       |                        |
| AuxAlm1                   | 45199           | Aux. Alarm 1                | - OK<br>- Fault       | v2.14.xx               |
| AuxAlm2                   | 33004           | Aux. Alarm 2                | - OK<br>- Fault       | v2.14.xx               |
| AuxAlm3                   | 37069           | Aux. Alarm 3                | - OK<br>- Fault       | v2.14.xx               |
| AuxAlm4                   | 57386           | Aux. Alarm 4                | - OK<br>- Fault       | v2.14.xx               |
| AuxAlm5                   | 61451           | Aux. Alarm 5                | - OK<br>- Fault       | v2.14.xx               |



### 3.3.5 Binary outputs type No. 4

| Object name             | Object instance | Object description                | State texts         | Release  |
|-------------------------|-----------------|-----------------------------------|---------------------|----------|
| DamperSplyOnOff         | 6170            | Outside air damper command        | - Off<br>- On       |          |
| DamperExhOnOff          | 43251           | Extract air damper command        | - Off<br>- On       |          |
| FireDamperCmd           | 12328           | Fire damper command               | - Off<br>- On       |          |
| FireDamper2Cmd          | 64011           | Fire damper2 command              | - Off<br>- On       |          |
| FireFanOnOff            | 24267           | Fire fan command                  | - Off<br>- On       |          |
| HumidityCtrlCmdOnOff    | 18044           | Humidifier command                | - Off<br>- On       |          |
| HumidityCtrlPmpCmdOnOff | 49625           | Humidifier pump command           | - Off<br>- On       |          |
| HrecPmpCmdOnOff         | 59969           | Heat recovery (pump) command      | - Off<br>- On       |          |
| CoolingPmpCmdOnOff      | 10276           | Cooling pump command              | - Off<br>- On       |          |
| HeatingPmpCmdOnOff      | 10264           | Heating pump command              | - Off<br>- On       |          |
| ExtraClgPmpCmdOnOff     | 63601           | Cooling 2 pump command            | - Off<br>- On       |          |
| ExtraHtgPmpCmdOnOff     | 31944           | Heating 2 pump command            | - Off<br>- On       |          |
| FPHeatPumpOnOff         | 59138           | Heatpump command                  | - Off<br>- On       |          |
| AuxTspOutput            | 22528           | Auxiliary TSP output              | - Off<br>- On       |          |
| AuxOpModelnd            | 5163            | Auxiliary operation mode output 1 | - Off<br>- On       |          |
| AuxOpModelnd2           | 28580           | Auxiliary operation mode output 2 | - Off<br>- On       | v2.04.xx |
| AuxTmpOutput            | 64421           | Auxiliary temp 1 output           | - Off<br>- On       | v2.14.xx |
| AlmOutHigh              | 5714            | Alarm output 1                    | - Normal<br>- Alarm |          |
| AlmOutLow               | 8035            | Alarm output 2                    | - Normal<br>- Alarm |          |

### 3.3.6 Binary values type No. 5

| Binary value, object name | Object instance | Object description                               | State texts           |                     |
|---------------------------|-----------------|--|-----------------------|---------------------|
| SplyTmpFireAlm            | 44098           | Supply temp fire alarm                           | – OK<br>– Alarm       |                     |
| RtTmpFireAlm              | 4286            | Exhaust temp fire alarm                          | – OK<br>– Alarm       |                     |
| SplyFanDevAlmAlm          | 6486            | Supply fan deviation                             | – Passive<br>– Active |                     |
| ExhFanDevAlmAlm           | 31724           | Exhaust fan deviation                            | – Passive<br>– Active |                     |
| FanOpHrsAlm               | 36120           | Fan operation hours alarm                        | – Passive<br>– Active |                     |
| SplyHumDevAlmAlm          | 57113           | Supply humidity deviation                        | – Passive<br>– Active |                     |
| RmHumDevAlmAlm            | 21718           | Room/Return humidity deviation                   | – Passive<br>– Active |                     |
| SplyTmpDevAlmAlm          | 38175           | Supply temp deviation                            | – Passive<br>– Active |                     |
| RtRmTmpDevAlmAlm          | 7373            | Room temp deviation                              | – Passive<br>– Active |                     |
| CommTest                  | 60516           | Communication test<br>Note! Use Prio 14 for puls | – 0<br>– 1            |                     |
| ManualMode                | 24032           | Manual mode                                      | – Auto<br>– Manual    |                     |
| PBCommAlm                 | 48527           | PB comm alarm                                    | – Passive<br>– Active | Removed after v3.46 |
| ZoneCtrlr                 | 61922           | Zone controller                                  | – Passive<br>– Active |                     |
| MBCommAlm                 | 57614           | Modbus communication alarm                       | – OK<br>– Alarm       |                     |
| FireAlmCOM                | 1900            | Fire alarm – Value communication                 | – OK<br>– Fault       |                     |
| FireAlm2COM               | 1901            | Fire alarm 2 – Value communication.              | – OK<br>– Fault       |                     |
| ExtCtrl1COM               | 1895            | Ext control input 1 – Value communication.       | – Off<br>– On         |                     |
| ExtCtrl2COM               | 1896            | Ext control input 2 – Value communication.       | – Off<br>– On         |                     |
| EmergencyStopCOM          | 1897            | Emergency stop – Value communication.            | – Off<br>– On         |                     |
| SuWiSwTchCOM              | 1898            | Su/Wi input – Value communication.               | – Off<br>– On         |                     |
| AlmAckBtnCOM              | 1899            | Alarm ackn button – Value communication.         | – Off<br>– On         | Removed after v3.44 |
| SplyFan1_Warn             | 12927           | Supply fan No 1 warning.                         | – Normal<br>– Active  |                     |
| SplyFan2_Warn             | 64671           | Supply fan No 2 warning.                         | – Normal<br>– Active  |                     |
| MB_SplyFanAlm             | 45899           | Communication ModBus Supply Fan alarm            | – OK<br>– Fault       |                     |
| ExhFan1_Warn              | 1637            | Exhaust fan No 1 warning.                        | – Normal<br>– Active  |                     |
| ExhFan2_Warn              | 51333           | Exhaust fan No 2 warning.                        | – Normal<br>– Active  |                     |
| MB_ExhFanAlm              | 2305            | Communication ModBus Exhaust Fan alarm           | – OK<br>– Fault       |                     |
| MB_ManualMode             | 64967           | Fan manual mode                                  | – Auto<br>– Manual    |                     |
| MB_CG_EM24Alm             | 49897           | Communication ModBus CG-EM24 alarm               | – OK<br>– Fault       |                     |
| AOC_OpStatus              | 14793           | Compressor C1                                    | – Off<br>– On         |                     |

|                   |       |                                    |                     |  |
|-------------------|-------|------------------------------------|---------------------|--|
| AOC_Alm           | 13212 | Alarm, Cooler                      | - OK<br>- Alarm     |  |
| MB_Danfoss_VSDAlm | 44764 | Communication Modbus alarm Danfoss | - Normal<br>- Alarm |  |
| Cmpr1Alm          | 51166 | Compressor 1 alarm                 | - Normal<br>- Alarm |  |
| Cmpr2Alm          | 23554 | Compressor 2 alarm                 | - Normal<br>- Alarm |  |
| Cmpr3Alm          | 10934 | Compressor 3 alarm                 | - Normal<br>- Alarm |  |
| Cmpr4Alm          | 31643 | Compressor 4 alarm                 | - Normal<br>- Alarm |  |
| CarelGeneralAlm   | 143   | Compressor General alarm           | - Normal<br>- Alarm |  |
| Compr1OutP        | 60189 | Compressor 1 output                | - Off<br>- On       |  |
| Compr2OutP        | 1487  | Compressor 2 output                | - Off<br>- On       |  |
| Compr3OutP        | 44958 | Compressor 3 output                | - Off<br>- On       |  |
| Compr4OutP        | 51274 | Compressor 4 output                | - Off<br>- On       |  |
| EVDAlmOffL1       | 22007 | EVD Alarm OffLine C1               | - Normal<br>- Alarm |  |
| AlmS1_1           | 39065 | Alarm C1 lowpressure transducer    | - Normal<br>- Alarm |  |
| AlmS2_1           | 49609 | Alarm C1 suction gas temp sensor   | - Normal<br>- Alarm |  |
| AlmS3_1           | 63225 | Alarm C1 hi.pressure transducer    | - Normal<br>- Alarm |  |
| LowSH1Alm         | 46231 | Low super heat alarm - C1          | - Normal<br>- Alarm |  |
| LopAlm1           | 4340  | Low temp of evaporation alarm - C1 | - Normal<br>- Alarm |  |
| MopAlm1           | 43157 | MOP alarm - C1                     | - Normal<br>- Alarm |  |
| EEVmAlm1          | 19886 | EEV motor error - C1               | - Normal<br>- Alarm |  |
| LowSuctAlm1       | 9345  | Low suction temp alarm - C1        | - Normal<br>- Alarm |  |
| EVDAlmOffL2       | 26004 | EVD Alarm OffLine C2               | - Normal<br>- Alarm |  |
| AlmS1_2           | 43258 | Alarm C2 lowpressure transducer    | - Normal<br>- Alarm |  |
| AlmS2_2           | 61866 | Alarm C2 suction gas temp sensor   | - Normal<br>- Alarm |  |
| AlmS3_2           | 50842 | Alarm C2 hi.pressure transducer    | - Normal<br>- Alarm |  |
| LowSH2Alm         | 12107 | Low super heat alarm - C2          | - Normal<br>- Alarm |  |
| LopAlm2           | 8343  | Low temp of evaporation alarm - C2 | - Normal<br>- Alarm |  |
| MopAlm2           | 39158 | MOP alarm - C2                     | - Normal<br>- Alarm |  |
| EEVmAlm2          | 32205 | EEV motor error - C2               | - Normal<br>- Alarm |  |
| LowSuctAlm2       | 5346  | Low suction temp alarm - C2        | - Normal<br>- Alarm |  |
| EVDAlmOffL3       | 30133 | EVD Alarm OffLine C3               | - Normal<br>- Alarm |  |
| AlmS1_3           | 47323 | Alarm C3 lowpressure transducer    | - Normal<br>- Alarm |  |
| AlmS2_3           | 57739 | Alarm C3 suction gas temp sensor   | - Normal<br>- Alarm |  |

|                  |       |                                    |                     |  |
|------------------|-------|------------------------------------|---------------------|--|
| AlmS3_3          | 54971 | Alarm C3 hi.pressure transducer    | – Normal<br>– Alarm |  |
| LowSH3Alm        | 23039 | Low super heat alarm - C3          | – Normal<br>– Alarm |  |
| LopAlm3          | 12470 | Low temp of evaporation alarm - C3 | – Normal<br>– Alarm |  |
| MopAlm3          | 35031 | MOP alarm - C3                     | – Normal<br>– Alarm |  |
| EEVmAlm3         | 28140 | EEV motor error - C3               | – Normal<br>– Alarm |  |
| LowSuctAlm3      | 1219  | Low suction temp alarm - C3        | – Normal<br>– Alarm |  |
| MB_CareAlm       | 23403 | Communication Modbus alarm Carel   | – Normal<br>– Alarm |  |
| SplyFiltrFireAlm | 36950 | Supply Filter Fire Alarm           | – OK<br>– Fault     |  |
| RtFiltrFireAlm   | 2561  | Exhaust Filter Fire Alarm          | – OK<br>– Fault     |  |
| FPEmHtgAlm       | 330   | FP Emergency heating               | – Normal<br>– Alarm |  |

### 3.3.7 Calendar type No. 6

| Calendar, object name | Object instance | Object description |
|-----------------------|-----------------|--------------------|
| CalendarEx            | 38114           | Calendar exception |
| CalendarOff           | 51936           | Calendar fix off   |
| CalendarAux           | 29758           | Calendar aux       |

### 3.3.8 Device type No. 8

| Device, object name                            | Object instance                        | Object description   |
|--|--|--|
| <i>Your Device Name:<br/>Ex. POL908_FF2C8D</i> | <i>Your Device ID:<br/>Ex. 1693899</i> | <i>Your Device Description:<br/>Ex. POL908_FF2C8D-Climatix</i> |

### 3.3.9 Multistate input type No. 13

| Multistate input, object name | Object instance | Object description      | State texts   |
|-------------------------------|-----------------|-------------------------|---|
| SplyFan1OJ_Alm                | 18545           | Supply Fan OJ A Alarm   | <ul style="list-style-type: none"> <li>- Normal</li> <li>- V Low Alarm</li> <li>- V High Alarm</li> <li>- I High Alarm</li> <li>- Internal HW Fault</li> <li>- Rotor Direction</li> <li>- Internal Stop</li> <li>- Motor Phase Error</li> <li>- ComSF.A Alarm</li> </ul>                  |
| SplyFan1OJ_Warn               | 22662           | Supply Fan OJ A Warning | <ul style="list-style-type: none"> <li>- Normal</li> <li>- Temperature High</li> <li>- Input Phase Error</li> <li>- Rotor Blocked</li> <li>- Limit</li> <li>- EEPROM Error</li> <li>- Brake Chopper Fault</li> <li>- V Ripple</li> <li>- Ext. 24V supply overload SF.A Warning</li> </ul> |
| SplyFan2OJ_Alm                | 32772           | Supply Fan OJ B Alarm   | <ul style="list-style-type: none"> <li>- Normal</li> <li>- V Low Alarm</li> <li>- V High Alarm</li> <li>- I High Alarm</li> <li>- Internal HW Fault</li> <li>- Rotor Direction</li> <li>- Internal Stop</li> <li>- Motor Phase Error</li> <li>- ComSF.B Alarm</li> </ul>                  |
| SplyFan2OJ_Warn               | 30146           | Supply Fan OJ B Warning | <ul style="list-style-type: none"> <li>- Normal</li> <li>- Temperature High</li> <li>- Input Phase Error</li> <li>- Rotor Blocked</li> <li>- Limit</li> <li>- EEPROM Error</li> <li>- Brake Chopper Fault</li> <li>- V Ripple</li> <li>- Ext. 24V supply overload SF.A Warning</li> </ul> |

| Multistate input, object name | Object instance | Object description    | State texts   |
|-------------------------------|-----------------|-----------------------|---|
| ExhFan1OJ_Alm                 | 12891           | Exhaust Fan A Alarm   | <ul style="list-style-type: none"> <li>- Normal</li> <li>- V Low Alarm</li> <li>- V High Alarm</li> <li>- I High Alarm</li> <li>- Internal HW Fault</li> <li>- Rotor Direction</li> <li>- Internal Stop</li> <li>- Motor Phase Error</li> <li>- ComEF.A Alarm</li> </ul>                  |
| ExhFan1OJ_Warn                | 44379           | Exhaust Fan A Warning | <ul style="list-style-type: none"> <li>- Normal</li> <li>- Temperature High</li> <li>- Input Phase Error</li> <li>- Rotor Blocked</li> <li>- Limit</li> <li>- EEPROM Error</li> <li>- Brake Chopper Fault</li> <li>- V Ripple</li> <li>- Ext. 24V supply overload EF.A Warning</li> </ul> |
| ExhFan2OJ_Alm                 | 64046           | Exhaust Fan B Alarm   | <ul style="list-style-type: none"> <li>- Normal</li> <li>- V Low Alarm</li> <li>- V High Alarm</li> <li>- I High Alarm</li> <li>- Internal HW Fault</li> <li>- Rotor Direction</li> <li>- Internal Stop</li> <li>- Motor Phase Error</li> <li>- ComEF.B Alarm</li> </ul>                  |
| ExhFan2OJ_Warn                | 32799           | Exhaust Fan B Warning | <ul style="list-style-type: none"> <li>- Normal</li> <li>- Temperature High</li> <li>- Input Phase Error</li> <li>- Rotor Blocked</li> <li>- Limit</li> <li>- EEPROM Error</li> <li>- Brake Chopper Fault</li> <li>- V Ripple</li> <li>- Ext. 24V supply overload EF.B Warning</li> </ul> |

### 3.3.10 Multistate output type No. 14

| Multistate output, object name | Object instance | Object description           | State texts   |
|--------------------------------|-----------------|------------------------------|---|
| SplyFanCmdSt                   | 21928           | Supply fan command           | <ul style="list-style-type: none"> <li>– Off</li> <li>– Stage1</li> <li>– Stage2</li> <li>– Stage3</li> </ul> |
| ExhFanCmdSt                    | 14719           | Exhaust fan command          | <ul style="list-style-type: none"> <li>– Off</li> <li>– Stage1</li> <li>– Stage2</li> <li>– Stage3</li> </ul> |
| ElectricalHtgCmdStSt           | 11590           | Electrical heating command   | <ul style="list-style-type: none"> <li>– Off</li> <li>– Stage1</li> <li>– Stage2</li> <li>– Stage3</li> </ul> |
| CoolingCmdDxSt                 | 30094           | Cooling DX command           | <ul style="list-style-type: none"> <li>– Off</li> <li>– Stage1</li> <li>– Stage2</li> <li>– Stage3</li> </ul> |
| ExtraElHtgCmdStSt              | 30897           | Electrical heating 2 command | <ul style="list-style-type: none"> <li>– Off</li> <li>– Stage1</li> <li>– Stage2</li> <li>– Stage3</li> </ul> |
| ExtraClgCmdDxSt                | 27550           | Cooling 2 DX command         | <ul style="list-style-type: none"> <li>– Off</li> <li>– Stage1</li> <li>– Stage2</li> <li>– Stage3</li> </ul> |

### 3.3.11 Notification classes for alarms type No. 15

| Notification classes for alarms, object name | Object instance | Object description                    |
|--|-----------------|---------------------------------------|
| NotificationClass11                          | 11              | Alarm class Danger alarm (A) status   |
| NotificationClass21                          | 21              | Alarm class Critical alarm (A) status |
| NotificationClass31                          | 31              | Alarm class Low alarm (B) status      |
| NotificationClass41                          | 41              | Alarm class Warning alarm (C) status  |
| NotificationClass61                          | 61              | Trend notification                    |

### 3.3.12 Schedule type No. 17

| Schedule, object name | Object instance | Object description            | State texts   |
|-----------------------|-----------------|-------------------------------|---|
| ScheduleSt            | 31059           | Schedule (variant steps)      | <ul style="list-style-type: none"> <li>- Off</li> <li>- St1</li> <li>- St2</li> <li>- St3</li> </ul>  |
| ScheduleStTmp         | 32703           | Schedule (variant steps/temp) | <ul style="list-style-type: none"> <li>- Off</li> <li>- Ec1</li> <li>- Co1</li> <li>- Ec2</li> <li>- Co2</li> <li>- Ec3</li> <li>- Co3</li> </ul> |
| ScheduleAux           | 55253           | Schedule aux output           | <ul style="list-style-type: none"> <li>- Off</li> <li>- On</li> </ul>   |



### 3.3.13 Multistate value type No. 19

| Multistate value, object name | Object instance | Object description  | State texts  | Release  |
|-------------------------------|-----------------|---|--|----------|
| TimeSchedSt                   | 12316           | Actual TSP (variant steps)                                    | <ul style="list-style-type: none"> <li>- Off</li> <li>- Stage1</li> <li>- Stage2</li> <li>- Stage3</li> </ul>  |          |
| TimeSchedStTmp                | 596             | Actual TSP (variant steps/temp)                               | <ul style="list-style-type: none"> <li>- Off</li> <li>- Eco St1</li> <li>- Comf St1</li> <li>- Eco St2</li> <li>- Comf St2</li> <li>- Eco St3</li> <li>- Comf St3</li> </ul>   |          |
| OpModeTspCopyUnitPls          | 33544           | Copy schedule   | <ul style="list-style-type: none"> <li>- MondayTo</li> <li>- Tu-Fr</li> </ul>  |          |
| ExtControlStep                | 28852           | External control fan step                                     | <ul style="list-style-type: none"> <li>- Auto</li> <li>- Off</li> <li>- Stage1</li> <li>- Stage2</li> <li>- Stage3</li> </ul>  |          |
| ExtControlActMode             | 30799           | Act operation mode external control                           | <ul style="list-style-type: none"> <li>- Auto</li> <li>- Off</li> <li>- Stage1</li> <li>- Stage2</li> <li>- Stage3</li> </ul>  |          |
| OpModeAutoManStSwtch          | 31604           | Manual operation (variant steps)                              | <ul style="list-style-type: none"> <li>- Auto</li> <li>- Off</li> <li>- Stage1</li> <li>- Stage2</li> <li>- Stage3</li> </ul>  |          |
| OpModeAutoManStTmpSwtch       | 60288           | Manual operation (variant steps/temp)                         | <ul style="list-style-type: none"> <li>- Auto</li> <li>- Off</li> <li>- Eco St1</li> <li>- Comf St1</li> <li>- Eco St2</li> <li>- Comf St2</li> <li>- Eco St3</li> <li>- Comf St3</li> </ul>   |          |
| OpModeAutoManStTmpManSwtch    | 38557           | Continuous run  | <ul style="list-style-type: none"> <li>- No</li> <li>- Eco St1</li> <li>- Comf St1</li> </ul>  | v2.14.xx |
| OpModeBmsTimeStSwtch          | 8442            | BMS control/override time switch program (variant steps)      | <ul style="list-style-type: none"> <li>- Auto</li> <li>- Off</li> <li>- Stage1</li> <li>- Stage2</li> <li>- Stage3</li> </ul>  |          |
| OpModeBmsTimeStTmpSwtch       | 32040           | BMS control/override time switch program (variant steps/temp) | <ul style="list-style-type: none"> <li>- Auto</li> <li>- Off</li> <li>- Eco St1</li> <li>- Comf St1</li> <li>- Eco St2</li> <li>- Comf St2</li> <li>- Eco St3</li> <li>- Comf St3</li> </ul>   |          |
| ActOpMode                     | 6080            | Actual operating mode   | <ul style="list-style-type: none"> <li>- Off</li> <li>- On/Comfort</li> <li>- Economy</li> <li>- Na</li> <li>- Osstp</li> <li>- NightCooling</li> <li>- Unoccupied</li> <li>- Nightkick</li> <li>- Firedamper</li> <li>- Fire</li> <li>- Stop</li> </ul> |          |

| Multistate value, object name | Object instance | Object description   | State texts                                    | Release  |
|-------------------------------|-----------------|--|--|----------|
|                               |                 |  | – Overrun<br>– Startup                         |          |
| FireDamperTestStrtHMIPs       | 64867           | Fire damper test   | – Passive<br>– Active                          |          |
| FireDamperState               | 24347           | Fire damper state  | – NotDefined<br>– Closed<br>– Move<br>– Opened |          |
| FireDamperOperation           | 9703            | Fire damper mode   | – NotDefined<br>– OK<br>– Test<br>– Alarm      |          |
| FireDamper2State              | 45701           | Fire damper2 state   | – NotDefined<br>– Closed<br>– Move<br>– Opened |          |
| FireDamper2Operation          | 64435           | Fire damper2 mode  | – NotDefined<br>– OK<br>– Test<br>– Alarm      |          |
| ActFanStep                    | 28279           | Actual fan step  | – Off<br>– Stage1<br>– Stage2<br>– Stage3      |          |
| SplyEngUnit                   | 54155           | Sply fan eng unit  | – %<br>– Pa<br>– l/s                           |          |
| ExhEngUnit                    | 43819           | Exh fan eng unit   | – %<br>– Pa<br>– l/s                           |          |
| ActCtrlModeHum                | 25131           | Actual control mode humidity   | – Room<br>– Supply                             |          |
| HumEngUnit                    | 13725           | Hum eng unit   | – %rH<br>– g/kg                                |          |
| SeqHumEngUnit                 | 64493           | Hum seq eng unit   | – %rH<br>– g/kg                                |          |
| ActCtrlMode                   | 28561           | Actual control mode temp   | – Room<br>– Return<br>– Supply                 |          |
| ExActCtrlMode                 | 45715           | Act control mode Ex seq  | – Room<br>– Return<br>– Supply                 |          |
| DefActv                       | 46503           | Defrost Active   | – Off<br>– Active                              | v2.04.xx |
| HeatingPreHtgactv             | 55722           | Pre heating state  | – Passive<br>– Active                          |          |
| ExtraHtgPreHtgactv            | 24454           | Pre heating 2 state  | – Passive<br>– Active                          |          |
| MECHactv                      | 59996           | Cooling recovery status  | – Passive<br>– Active                          |          |
| TimeSchedAux                  | 52222           | Auxiliary TSP output   | – Off<br>– On                                  |          |
| AuxiliaryTspCopyAuxPls        | 44050           | Copy schedule  | – MondayTo<br>– Tu-Fr                          |          |
| AuxiliaryBmsTimeAuxSwth       | 48172           | Auxiliary BMS TSP output   | – Auto<br>– Off<br>– On                        |          |
| AckAlmPls                     | 39130           | Alarm acknowledge puls<br>Note! This object is used to acknowledge all alarms in the controller. | – Off<br>– On                                  |          |
| SuWiSwthCheckState            | 24616           | SummerWinter mode  | – Winter<br>– Summer                           |          |

| Multistate value, object name | Object instance | Object description        | State texts  | Release |
|-------------------------------|-----------------|---------------------------|--|---------|
| CommTestEn                    | 1708            | Enable communication test | – No<br>– Yes  |         |
| AlmCl0                        | 46769           | Danger alarm (A)          | – Normal<br>– Alarm  |         |
| AlmCl1                        | 42640           | Critical alarm (A)        | – Normal<br>– Alarm  |         |
| AlmCl2                        | 38643           | Low alarm (B)             | – Normal<br>– Alarm  |         |
| AlmCl3                        | 34514           | Warning alarm (C)         | – Normal<br>– Alarm  |         |
| RoomUnitsActRmUMode           | 4347            | Actual roomunit mode      | – Auto<br>– Comfort<br>– Standby<br>– Economy<br>– Off   |         |
| CG_EM24_1ResetParPls          | 53050           | Energy reset partial      | – Passive<br>– Active  |         |
| SplyFanActAlm                 | 32186           | Ebm Supply fan A alarm    | – Nu<br>– Mains Over Volt.<br>– Mains Under Volt.<br>– DC link Under Volt<br>– DC link Over Volt<br>– Internal Electronics<br>– Locked<br>– Hall Sensor<br>– Over heat<br>– Communication Error<br>– Power Over heat<br>– Phase Fail<br>– Normal   |         |
| SplyFanActWarn                | 62832           | Ebm Supply fan A warning  | – Nu<br>– Open circuit at input<br>– Actual speed less than low limit<br>– Brake operation<br>– Low DC-link voltage<br>– High electronics temp<br>– High motor temp<br>– High output stage temp<br>– Mesh power limitation<br>– High line impedance<br>– Mesh current limitation<br>– Normal |         |

|                 |       |                          |  |  |
|-----------------|-------|--------------------------|--|--|
| SplyFan2ActAlm  | 61443 | Ebm Supply fan B alarm   | <ul style="list-style-type: none"> <li>- Nu</li> <li>- Mains Over Volt.</li> <li>- Mains Under Volt.</li> <li>- DC link Under Volt</li> <li>- DC link Over Volt</li> <li>- Internal Electronics</li> <li>- Locked</li> <li>- Hall Sensor</li> <li>- Over heat</li> <li>-Communication Error</li> <li>- Power Over heat</li> <li>- Phase Fail</li> <li>- Normal</li> </ul>  |  |
| SplyFan2ActWarn | 3157  | Ebm Supply fan B warning | <ul style="list-style-type: none"> <li>- Nu</li> <li>- Open circuit at input</li> <li>- Actual speed less than low limit</li> <li>- Brake operation</li> <li>- Low DC-link voltage</li> <li>- High electronics temp</li> <li>- High motor temp</li> <li>- High output stage temp</li> <li>- Mesh power limitation</li> <li>- High line impedance</li> <li>- Mesh current limitation</li> <li>- Normal</li> </ul> |  |
| ExhFanActAlm    | 18848 | Ebm Exhaust fan A alarm  | <ul style="list-style-type: none"> <li>- Nu</li> <li>- Mains Over Volt.</li> <li>- Mains Under Volt.</li> <li>- DC link Under Volt</li> <li>- DC link Over Volt</li> <li>- Internal Electronics</li> <li>- Locked</li> <li>- Hall Sensor</li> <li>- Over heat</li> <li>-Communication Error</li> <li>- Power Over heat</li> <li>- Phase Fail</li> <li>- Normal</li> </ul>  |  |

|                |       |                           |  |  |
|----------------|-------|---------------------------|--|--|
| ExhFanActWarn  | 39335 | Ebm Exhaust fan A warning | <ul style="list-style-type: none"> <li>- Nu</li> <li>- Open circuit at input</li> <li>- Actual speed less than low limit</li> <li>- Brake operation</li> <li>- Low DC-link voltage</li> <li>- High electronics temp</li> <li>- High motor temp</li> <li>- High output stage temp</li> <li>- Mesh power limitation</li> <li>- High line impedance</li> <li>- Mesh current limitation</li> <li>- Normal</li> </ul> |  |
| ExhFan2ActAlm  | 51969 | Ebm Exhaust fan B alarm   | <ul style="list-style-type: none"> <li>- Nu</li> <li>- Mains Over Volt.</li> <li>- Mains Under Volt.</li> <li>- DC link Under Volt</li> <li>- DC link Over Volt</li> <li>- Internal Electronics</li> <li>- Locked</li> <li>- Hall Sensor</li> <li>- Over heat</li> <li>- Communication Error</li> <li>- Power Over heat</li> <li>- Phase Fail</li> <li>- Normal</li> </ul>                                       |  |
| ExhFan2ActWarn | 35181 | Ebm Exhaust fan B warning | <ul style="list-style-type: none"> <li>- Nu</li> <li>- Open circuit at input</li> <li>- Actual speed less than low limit</li> <li>- Brake operation</li> <li>- Low DC-link voltage</li> <li>- High electronics temp</li> <li>- High motor temp</li> <li>- High output stage temp</li> <li>- Mesh power limitation</li> <li>- High line impedance</li> <li>- Mesh current limitation</li> <li>- Normal</li> </ul> |  |

|                  |       |   |  |  |
|------------------|-------|---|--|--|
| ModbusComSnsrAlm | 53317 | Communication ModBus<br>Sensor module alarm | <ul style="list-style-type: none"> <li>- Normal</li> <li>- Sensor 40</li> <li>- Sensor 41</li> <li>- Sensor 42</li> <li>- Sensor 43</li> <li>- Sensor 44</li> </ul>  |  |
| AOC_Status_      | 15476 | Cooler Status                               | <ul style="list-style-type: none"> <li>- 0</li> <li>- 1</li> <li>- 2</li> <li>- 3</li> <li>- 4</li> <li>- 5</li> <li>- 6</li> <li>- 7</li> <li>- 8</li> <li>- 9</li> <li>- 10</li> <li>- 11</li> <li>- 12</li> <li>- 13</li> <li>- 14</li> <li>- 15</li> <li>- 16</li> <li>- 17</li> <li>- 18</li> <li>- 19</li> <li>- 20</li> <li>- 21</li> <li>- 22</li> <li>- 23</li> <li>- 24</li> <li>- 25</li> <li>- 26</li> <li>- 27</li> <li>- 28</li> <li>- 29</li> <li>- 30</li> </ul> |  |
| AOC_Limit_       | 50714 | VSD Limit                                   | <ul style="list-style-type: none"> <li>- 0</li> <li>- 1</li> <li>- 2</li> <li>- 3</li> <li>- 4</li> <li>- 5</li> <li>- 6</li> <li>- 7</li> <li>- 8</li> <li>- 9</li> <li>- 10</li> <li>- 11</li> <li>- 12</li> <li>- 13</li> <li>- 14</li> <li>- 15</li> <li>- 16</li> <li>- 17</li> <li>- 18</li> <li>- 19</li> <li>- 20</li> <li>- 21</li> <li>- 22</li> <li>- 23</li> <li>- 24</li> <li>- 25</li> <li>- 26</li> <li>- 27</li> <li>- 28</li> <li>- 29</li> <li>- 30</li> </ul> |  |

|               |       |           |  |  |
|---------------|-------|-----------|--|--|
| AOC_SafeMode_ | 32070 | Safe mode | - 0<br>- 1<br>- 2<br>- 3<br>- 4<br>- 5<br>- 6<br>- 7<br>- 8<br>- 9<br>- 10<br>- 11<br>- 12<br>- 13<br>- 14<br>- 15<br>- 16<br>- 17<br>- 18<br>- 19<br>- 20<br>- 21<br>- 22<br>- 23<br>- 24<br>- 25<br>- 26<br>- 27<br>- 28<br>- 29<br>- 30 |  |
| AOC_Alarm_    | 60997 | Alarm     | - 0<br>- 1<br>- 2<br>- 3<br>- 4<br>- 5<br>- 6<br>- 7<br>- 8<br>- 9<br>- 10<br>- 11<br>- 12<br>- 13<br>- 14<br>- 15<br>- 16<br>- 17<br>- 18<br>- 19<br>- 20<br>- 21<br>- 22<br>- 23<br>- 24<br>- 25<br>- 26<br>- 27<br>- 28<br>- 29<br>- 30 |  |

|                        |       |   |  |              |
|------------------------|-------|---|--|--------------|
| CareUnitStatus         | 20464 | Unit Status                                 | <ul style="list-style-type: none"> <li>- Waiting</li> <li>- UnitOn</li> <li>- OFF by ALARM</li> <li>- OFF by NET</li> <li>- OFF by BMS</li> <li>- OFF by SCHEDULE</li> <li>- OFF by DIN</li> <li>- OFF by KEY</li> <li>- Manual</li> <li>- --</li> <li>- High cond Temp</li> <li>- Frost Protection Opr</li> <li>- Alarm</li> <li>- Custom4</li> </ul>   |              |
| NbrCompressors         | 45445 | Compressor nbr                              | <ul style="list-style-type: none"> <li>- None</li> <li>- Comp1</li> <li>- Comp2</li> <li>- Comp3</li> <li>- Comp4</li> </ul>   |              |
| OpModeTspCopyUnit      | 46810 | Time switch program Copy Unit               | <ul style="list-style-type: none"> <li>- Monday to Tu to Fr</li> <li>- Tu to Su</li> </ul>   |              |
| OpModeAutoManStManSwch | 12705 | Continuous run                              | <ul style="list-style-type: none"> <li>- No</li> <li>- Stage 1</li> </ul>  |              |
| ActOpSta               | 32321 | Actual operating status                     | <ul style="list-style-type: none"> <li>- NU</li> <li>- Configuration</li> <li>- Fire Alarm</li> <li>- Alarm Class.0</li> <li>- Emergency Stop</li> <li>- Alarm Class.1</li> <li>- Fire Damper Test</li> <li>- External Control</li> <li>- BMS</li> <li>- Manuel operation mode</li> <li>- Room unit operation mode</li> <li>- Time Switch Program</li> <li>- Boost</li> <li>- Night heating/cooling</li> <li>- Night cooling</li> <li>- Test</li> <li>- Service</li> </ul> |              |
| FPHeatPumpBlock        | 48060 | Heatpump Block                              | <ul style="list-style-type: none"> <li>- Off</li> <li>- On</li> <li>- Block</li> </ul>   |              |
| EnergyHrecResetTrip    | 30173 | Energy Watch Reset Heat recovery Trip       | <ul style="list-style-type: none"> <li>- Reset</li> </ul>  |              |
| EnergyHaddResetTrip    | 47184 | Energy Watch Reset heating added heat Trip. | <ul style="list-style-type: none"> <li>- Reset</li> </ul>  |              |
| EnergyFansResetTrip    | 50125 | Energy Watch Reset fans Trip.               | <ul style="list-style-type: none"> <li>- Reset</li> </ul>  |              |
| AvgTempSet0MinTemp     | 63738 | Energy Watch Reset min temp.                | <ul style="list-style-type: none"> <li>- Reset</li> </ul>  |              |
| TmpMix                 | 19068 | Room temp Night Cooling                     | <ul style="list-style-type: none"> <li>- Ave</li> <li>- Min</li> <li>- Max</li> </ul>  |              |
| HPPrio                 | 51843 | Heat Pump priority                          | <ul style="list-style-type: none"> <li>- No</li> <li>- Yes</li> </ul>  | v3.44.<br>xx |



### 3.3.14 Notification classes for trend type No. 20

| Notification classes for alarms, object name | Object instance | Object description | Release  |
|--|-----------------|--------------------|----------|
| TrendObj1                                    | 1               | Trend01            | v2.14.xx |
| TrendObj2                                    | 2               | Trend02            | v2.14.xx |
| TrendObj3                                    | 3               | Trend03            | v2.14.xx |
| TrendObj4                                    | 4               | Trend04            | v2.14.xx |
| TrendObj5                                    | 5               | Trend05            | v2.14.xx |
| TrendObj6                                    | 6               | Trend06            | v2.14.xx |
| TrendObj7                                    | 7               | Trend07            | v2.14.xx |
| TrendObj8                                    | 8               | Trend08            | v2.14.xx |
| TrendObj9                                    | 9               | Trend09            | v2.14.xx |
| TrendObj10                                   | 10              | Trend10            | v2.14.xx |
| TrendObj11                                   | 11              | Trend11            | v2.14.xx |
| TrendObj12                                   | 12              | Trend12            | v2.14.xx |
| TrendObj13                                   | 13              | Trend13            | v2.14.xx |
| TrendObj14                                   | 14              | Trend14            | v2.14.xx |
| TrendObj15                                   | 15              | Trend15            | v2.14.xx |
| TrendObj16                                   | 16              | Trend16            | v2.14.xx |
| TrendObj17                                   | 17              | Trend17            | v2.14.xx |
| TrendObj18                                   | 18              | Trend18            | v2.14.xx |
| TrendObj19                                   | 19              | Trend19            | v2.14.xx |
| TrendObj20                                   | 20              | Trend20            | v2.14.xx |
| TrendObj21                                   | 21              | Trend21            | v2.14.xx |
| TrendObj22                                   | 22              | Trend22            | v2.14.xx |
| TrendObj23                                   | 23              | Trend23            | v2.14.xx |
| TrendObj24                                   | 24              | Trend24            | v2.14.xx |
| TrendObj25                                   | 25              | Trend25            | v2.14.xx |
| TrendObj26                                   | 26              | Trend26            | v2.14.xx |
| TrendObj27                                   | 27              | Trend27            | v2.14.xx |
| TrendObj28                                   | 28              | Trend28            | v2.14.xx |
| TrendObj29                                   | 29              | Trend29            | v2.14.xx |
| TrendObj30                                   | 30              | Trend30            | v2.14.xx |

### 3.3.15 Characterstring value type No. 40

| Positive-integer, object name | Object instance | Object description                          | Release |
|-------------------------------|-----------------|---|---------|
| EnergyHrecTime                | 18463           | Energy Watch Heat recovery Trip meter since |         |
| EnergyHaddTime                | 34194           | Energy Watch Heating Trip meter since       |         |
| EnergyFansTime                | 65039           | Energy Watch Fans Trip meter since          |         |

### 3.3.16 Positive integer type No. 48

| Positive-integer, object name | Object instance | Object description                              | Release  |
|-------------------------------|-----------------|---|----------|
| SplyFan1_AlmWarn              | 39562           | Danfoss/Ziehl Supply fan 1 alarm warning number | v3.10.xx |
| SplyFan2_AlmWarn              | 47054           | Danfoss Supply fan 2 alarm warning number       | v3.10.xx |
| ExhFan1_AlmWarn               | 28503           | Danfoss/Ziehl Supply fan 2 alarm warning number | v3.10.xx |
| ExhFan2_AlmWarn               | 16915           | Danfoss Supply fan 2 alarm warning number       | v3.10.xx |
| CarelAlmOmf10                 | 17326           | Alarm Danfoss omf.10                            | v3.40.xx |
| CarelAlmOmf11                 | 21391           | Alarm Danfoss omf.11                            | v3.40.xx |
| CarelAlmOmf20                 | 5885            | Alarm Danfoss omf.20                            | v3.40.xx |
| CarelAlmOmf21                 | 1756            | Alarm Danfoss omf.21                            | v3.40.xx |
| CarelAlmReg5                  | 41115           | Alarm register 5.                               | v3.40.xx |

### 3.3.17 BACnet priority for each notification class

| Object name         | Prio         |          |           | Ack        |          |           |
|---------------------|--------------|----------|-----------|------------|----------|-----------|
|                     | ToOff Normal | To Fault | To Normal | Off Normal | To Fault | To Normal |
| NotificationClass11 | 1            | 1        | 5         | 1          | 1        | 0         |
| NotificationClass21 | 1            | 1        | 5         | 1          | 1        | 0         |
| NotificationClass31 | 2            | 2        | 6         | 1          | 1        | 0         |
| NotificationClass41 | 3            | 3        | 8         | 1          | 1        | 0         |
| NotificationClass12 | 1            | 1        | 5         | 0          | 0        | 0         |
| NotificationClass22 | 2            | 2        | 5         | 0          | 0        | 0         |
| NotificationClass32 | 3            | 3        | 6         | 0          | 0        | 0         |
| NotificationClass42 | 6            | 6        | 8         | 0          | 0        | 0         |
| NotificationClass13 | 1            | 1        | 5         | 0          | 0        | 0         |
| NotificationClass23 | 2            | 2        | 5         | 0          | 0        | 0         |
| NotificationClass33 | 3            | 3        | 6         | 0          | 0        | 0         |
| NotificationClass43 | 6            | 6        | 8         | 0          | 0        | 0         |
| NotificationClass14 | 1            | 1        | 5         | 0          | 0        | 0         |
| NotificationClass24 | 2            | 2        | 5         | 0          | 0        | 0         |
| NotificationClass34 | 3            | 3        | 5         | 0          | 0        | 0         |



*Air handling with the focus on LCC*

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