komfovent

# BACNET CONNECTION C5

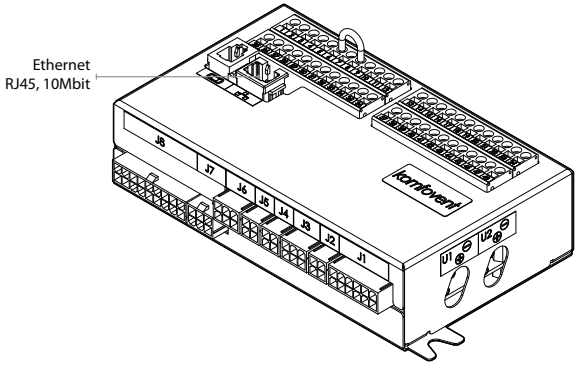
INSTALLATION AND SERVICE MANUAL

EN

# BACNET CONNECTION AND SETTINGS

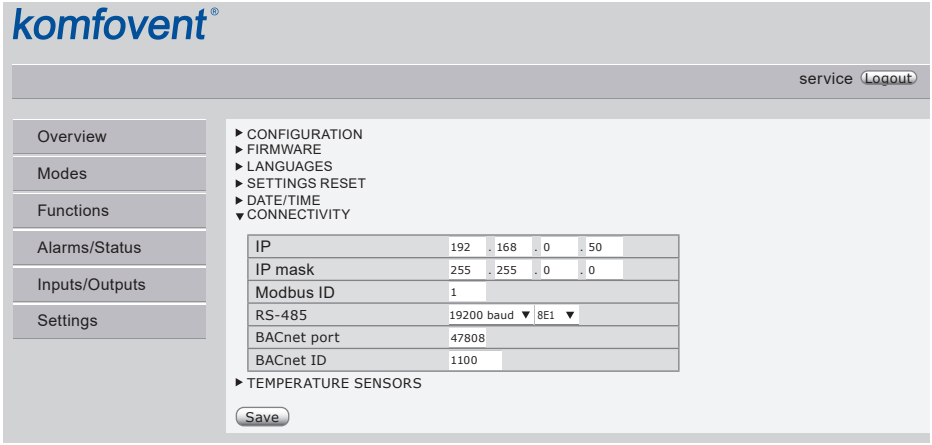
BACnet is a standard communication protocol for Building Automation and Control (BAC) networks that can be used to monitor and control Komfovent air handling units with C5 controller. The supported Data Link Layer is BACnet / IP.

BACnet protocol works via Ethernet interface, connection is provided to RJ-45 socket (Pic.1) on the C5 controller (CAT5 cable is recommended):




**Picture 1.** C5 controller board

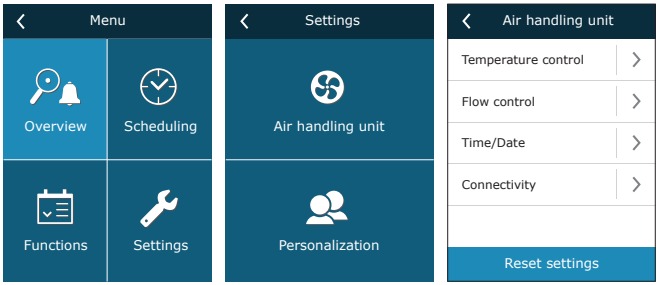
Below is default network settings of the C5 controller. These can be changed according to the building network software requirements. To do so, it is needed to connect a laptop to the integrated webserver of C5 controller:




**Picture 2.** Connectivity settings

**To have a stable connection between BMS and AHU via BACnet network, at least 1s. polling time is recommended.**

C5 controller IP can also be viewed and changed on the control panel – from *Main menu* go to *Settings->Air handling unit->Connectivity:*




**Picture 3.** Connectivity settings on C5.1 control panel display

### BACnet Interoperability Building Blocks Supported:

| | | |
|---|---|---|
| Data Sharing | DS-RP-B | Data Sharing-Read Property-B |
| | DS-RPM-B | Data Sharing-Read Property Multiple-B |
| | DS-WP-B | Data Sharing-Write Property-B |
| Device Management | DM-DDB-B | Device Management-Dynamic Device Binding-B |
| | DM-DOB-B | Device Management-Dynamic Object Binding-B |

### Standard Object Types Supported:

| | |
|---|---|
| Analog Input | Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Units, Description, Reliability, |
| Analog Output | Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Units, Priority_Array, Relinquish_Default, |
| Analog Value | Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Units,Description, Priority_Array, Relinquish_Default, Max_Pres_Value, Min_Pres_Value, Resolution, |
| Binary Input | Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Polarity,Description |
| Binary Output | Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Polarity,Priority_Array, Relinquish_Default, Active_Text, Inactive_Text, |
| Binary Value | Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Priority_Array, Relinquish_Default, |
| Device | Object_Identifier, Object_Name, Object_Type, System_Status, Vendor_Name, Vendor_Identifier, Model_Name, Firmware_Revision, Application_Software_Version, Protocol_Version, Protocol_Revision, Protocol_Services_Supported, Protocol_Object_Types_Supported, Object_List, Max_APDU_Length_Accepted, Segmentation_Supported, APDU_Timeout, Number_Of_APDU_Retries, Device_Address_Binding, Database_Revision, Description,Location, |

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### Analog input

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Monitoring data** | | | | | |
| Supply air temperature | 0 | -50.0..+120.0 | °C | R | |
| Extract air temperature | 1 | -50.0..+120.0 | °C | R | |
| Outdoor air temperature | 2 | -50.0..+120.0 | °C | R | |
| Exhaust air temperature | 3 | -50.0..+120.0 | °C | R | |
| Water temperature | 4 | -50.0..+120.0 | °C | R | |
| Air quality | 5 | 0..100 | % | R | |
| Supply air humidity | 6 | 0..100 | %RH | R | |
| Supply air flow | 7 | 0..1000000 | variable[1] | R | |
| Exhaust air flow | 8 | 0..1000000 | variable[1] | R | |
| Outdoor air filter pressure | 9 | 0..5500 | Pa | R | |
| Extract air filter pressure | 10 | 0..5500 | Pa | R | |
| Zone 1 supply air temperature | 11 | -50.0..+120.0 | °C | R | |
| Zone 1 water temperature | 12 | -30.0..+120.0 | °C | R | |
| Zone 2 supply air temperature | 13 | -50.0..+120.0 | °C | R | |
| Zone 2 water temperature | 14 | -30.0..+120.0 | °C | R | |
| Internal supply air temperature | 15 | -50.0..+120.0 | °C | R | |
| Zone 1 air quality | 16 | 0..100 | % | R | |
| Zone 1 heater temperature | 17 | 0..+120.0 | °C | R | |
| Zone 2 air quality | 18 | 0..100 | % | R | |
| Zone 2 heater temperature | 19 | 0..+120.0 | °C | R | |
| Supply temperature set-point | 20 | +5..+45 | °C | R | |
| Supply air absolute humidity | 21 | 0..40.0 | g/m³ or g/kg | R | |
| Supply air pressure | 22 | 0..5500 | Pa | R | |
| Extract air pressure | 23 | 0..5500 | Pa | R | |

### Analog output

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Output signals** | | | | | |
| Water heater level | 0 | 0..100 | % | R | |
| Water cooler level | 1 | 0..100 | % | R | |
| Humidifier level | 2 | 0..100 | % | R | |
| Heat exchanger level | 3 | 0..100 | % | R | |
| Recirculation level | 4 | 0..100 | % | R | |
| Supply fan level | 5 | 0..100 | % | R | |
| Exhaust fan level | 6 | 0..100 | % | R | |
| Outdoor air damper level | 7 | 0..100 | % | R | |
| Exhaust air damper level | 8 | 0..100 | % | R | |

[1] See Analog Value Object Instance 72.

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Output signals** | | | | | |
| El. Heater level | 9 | 0..100 | % | R | |
| DX level | 10 | -100..+100 | % | R | |
| Heat pump level | 11 | -100..+100 | % | R | |
| Zone 1 level/heater level | 12 | -100..+100 | % | R | |
| Zone 2 level/heater level | 13 | -100..+100 | % | R | |
| Zone 1 cooler level | 14 | 0..100 | % | R | |
| Zone 2 cooler level | 15 | 0..100 | % | R | |
| Zone 1 temperature setpoint/ error | 16 | +5..+40 / 0..100 | °C or % | R | |
| Zone 2 temperature setpoint/ error | 17 | +5..+40 / 0..100 | °C or % | R | |

### Digital input

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **External contacts** | | | | | |
| OVR | 0 | 0..1 | | R | 0-open, 1- closed |
| External stop | 1 | 0..1 | | R | 0-open, 1- closed |
| Zone 1 electric heater TK100 | 2 | 0..1 | | R | 0-open, 1- closed |
| Zone 1 electric heater TK60 | 3 | 0..1 | | R | 0-open, 1- closed |
| Zone 1 electric heater TK70 | 4 | 0..1 | | R | 0-open, 1- closed |
| Zone 1 low water temperature | 5 | 0..1 | | R | 0-open, 1- closed |
| Zone 1 combined coil | 6 | 0..1 | | R | 0-open, 1- closed |
| Zone 1 external stop | 7 | 0..1 | | R | 0-open, 1- closed |
| Zone 2 electric heater TK100 | 8 | 0..1 | | R | 0-open, 1- closed |
| Zone 2 electric heater TK60 | 9 | 0..1 | | R | 0-open, 1- closed |
| Zone 2 electric heater TK70 | 10 | 0..1 | | R | 0-open, 1- closed |
| Zone 2 low water temperature | 11 | 0..1 | | R | 0-open, 1- closed |
| Zone 2 combined coil | 12 | 0..1 | | R | 0-open, 1- closed |
| Zone 2 external stop | 13 | 0..1 | | R | 0-open, 1- closed |
| Outdoor air filter | 14 | 0..1 | | R | 0-open, 1- closed |
| Extract air filter | 15 | 0..1 | | R | 0-open, 1- closed |
| C5 Control | 16 | 0..1 | | R | 0-open, 1-closed |

### Digital output

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Water pumps** | | | | | |
| Water heating pump | 0 | 0..1 | | R | 0-stop, 1- run |
| Water cooling pump | 1 | 0..1 | | R | 0-stop, 1- run |
| **Zone 1** | | | | | |
| Zone 1 stage 1 | 2 | 0..1 | | R | 0-stop, 1- run |

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| Zone 1 stage 2 | 3 | 0..1 | | R | 0-stop, 1- run |
| Zone 1 stage 3 | 4 | 0..1 | | R | 0-stop, 1- run |
| Zone 1 stage 4 | 5 | 0..1 | | R | 0-stop, 1- run |
| Zone 1 heating water pump | 6 | 0..1 | | R | 0-stop, 1- run |
| Zone 1 cooling water pump | 7 | 0..1 | | R | 0-stop, 1- run |
| Zone 1 DX level unit reverse | 8 | 0..1 | | R | 0-stop, 1- run |
| Zone 1 DX modulated unit operation | 9 | 0..1 | | R | 0-stop, 1- run |
| Zone 1 DX modulated unit cooling | 10 | 0..1 | | R | 0-stop, 1- run |
| Zone 1 DX modulated unit heating | 11 | 0..1 | | R | 0-stop, 1- run |
| **Zone 2** | | | | | |
| Zone 2 stage 1 | 12 | 0..1 | | R | 0-stop, 1- run |
| Zone 2 stage 2 | 13 | 0..1 | | R | 0-stop, 1- run |
| Zone 2 stage 3 | 14 | 0..1 | | R | 0-stop, 1- run |
| Zone 2 stage 4 | 15 | 0..1 | | R | 0-stop, 1- run |
| Zone 2 heating water pump | 16 | 0..1 | | R | 0-stop, 1- run |
| Zone 2 cooling water pump | 17 | 0..1 | | R | 0-stop, 1- run |
| Zone 2 DX level unit reverse | 18 | 0..1 | | R | 0-stop, 1- run |
| Zone 2 DX modulated unit operation | 19 | 0..1 | | R | 0-stop, 1- run |
| Zone 2 DX modulated unit cooling | 20 | 0..1 | | R | 0-stop, 1- run |
| Zone 2 DX modulated unit heating | 21 | 0..1 | | R | 0-stop, 1- run |
| **Alarm output** | | | | | |
| Alarm DOUT | 22 | 0..1 | | R | 0-no alarm, 1-alarm |
| **Active functions** | | | | | |
| AQC active | 23 | 0..1 | | R | 0-stop, 1- run |
| OCV active | 24 | 0..1 | | R | 0-stop, 1- run |
| MTC active | 25 | 0..1 | | R | 0-stop, 1- run |
| OVR active | 26 | 0..1 | | R | 0-stop, 1- run |
| SNC active | 27 | 0..1 | | R | 0-stop, 1- run |
| OOD active | 28 | 0..1 | | R | 0-stop, 1- run |
| REC active | 29 | 0..1 | | R | 0-stop, 1- run |
| HUM active | 30 | 0..1 | | R | 0-stop, 1- run |

### Digital value

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Alarms** | | | | | |
| Low supply air flow | 0 | 0..1 | | R | |
| Low extract air flow | 1 | 0..1 | | R | |
| VAV calibration fail | 2 | 0..1 | | R | |
| Change outdoor air filter | 3 | 0..1 | | R | |
| Change extract air filter | 4 | 0..1 | | R | |
| Electric heater off | 5 | 0..1 | | R | |
| High pressure on compressor | 6 | 0..1 | | R | |
| Low pressure on compressor | 7 | 0..1 | | R | |
| Service time | 8 | 0..1 | | R | |
| Service mode | 9 | 0..1 | | R | |
| Supply air temp. sensor failure | 10 | 0..1 | | R | |
| Extract air temp. sensor failure | 11 | 0..1 | | R | |
| Outdoor air temp. sensor failure | 12 | 0..1 | | R | |
| Exhaust air temp. sensor failure | 13 | 0..1 | | R | |
| Water temp. sensor failure | 14 | 0..1 | | R | |
| Return water temp low | 15 | 0..1 | | R | |
| Internal fire alarm | 16 | 0..1 | | R | |
| External fire alarm | 17 | 0..1 | | R | |
| External stop | 18 | 0..1 | | R | |
| Heat exchanger failure | 19 | 0..1 | | R | |
| Heat exchanger icing | 20 | 0..1 | | R | |
| Low supply air temperature | 21 | 0..1 | | R | |
| High supply air temperature | 22 | 0..1 | | R | |
| Electric heater overheat | 23 | 0..1 | | R | |
| Evaporator air temp. sensor failure | 24 | 0..1 | | R | |
| Evaporator coil temp. sensor failure | 25 | 0..1 | | R | |
| Compressor failure | 26 | 0..1 | | R | |
| Supply fan drive failure | 27 | 0..1 | | R | |
| Supply fan drive overload | 28 | 0..1 | | R | |
| Supply fan motor failure | 29 | 0..1 | | R | |
| Supply fan motor overload | 30 | 0..1 | | R | |
| Exhaust drive failure | 31 | 0..1 | | R | |
| Exhaust fan drive overload | 32 | 0..1 | | R | |
| Exhaust fan motor failure | 33 | 0..1 | | R | |
| Exhaust fan motor overload | 34 | 0..1 | | R | |
| Rotor drive failure | 35 | 0..1 | | R | |
| Rotor drive overload | 36 | 0..1 | | R | |
| Rotor motor failure | 37 | 0..1 | | R | |
| Rotor motor overload | 38 | 0..1 | | R | |

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Alarms** | | | | | |
| Communication error | 39 | 0..1 | | R | |
| Controller failure | 40 | 0..1 | | R | |
| Compressor off | 41 | 0..1 | | R | |
| Evaporator icing | 42 | 0..1 | | R | |
| Zone 1 TK100 alarm | 43 | 0..1 | | R | |
| Zone 1 TK70 alarm | 44 | 0..1 | | R | |
| Zone 1 TK60 alarm | 45 | 0..1 | | R | |
| Zone 1 low water temperature | 46 | 0..1 | | R | |
| Zone 1 external stop | 47 | 0..1 | | R | |
| Zone 2 TK100 alarm | 48 | 0..1 | | R | |
| Zone 2 TK70 alarm | 49 | 0..1 | | R | |
| Zone 2 TK60 alarm | 50 | 0..1 | | R | |
| Zone 2 low water temperature | 51 | 0..1 | | R | |
| Zone 2 external stop | 52 | 0..1 | | R | |
| Low heat exchanger efficiency | 53 | 0..1 | | R | |

### Analog value

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| Unit On/Off | 0 | 0..1 | | R/W | 0-Off, 1-On |
| **Ventilation modes** | | | | | |
| Current mode | 1 | 0..5 | | R | 0-Off/Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special |
| Mode selection | 2 | 1..6 | | R/W | 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program |
| Comfort1 Supply flow | 3 | 0..200000 | variable[1] | R/W | |
| Comfort1 Extract flow | 4 | 0..200000 | variable[1] | R/W | |
| Comfort1 Setpoint | 5 | +5..+40 | °C | R/W | |
| Comfort2 Supply flow | 6 | 0..200000 | variable[1] | R/W | |
| Comfort2 Extract flow | 7 | 0..200000 | variable[1] | R/W | |
| Comfort2 Setpoint | 8 | +5..+40 | °C | R/W | |
| Economy1 Supply flow | 9 | 0..200000 | variable[1] | R/W | |
| Economy1 Extract flow | 10 | 0..200000 | variable[1] | R/W | |
| Economy1 Setpoint | 11 | +5..+40 | °C | R/W | |
| Economy2 Supply flow | 12 | 0..200000 | variable[1] | R/W | |
| Economy2 Extract flow | 13 | 0..200000 | variable[1] | R/W | |
| Economy2 Setpoint | 14 | +5..+40 | °C | R/W | |
| Special Supply flow | 15 | 0..200000 | variable[1] | R/W | |
| Special Extract flow | 16 | 0..200000 | variable[1] | R/W | |
| Special Setpoint | 17 | +5..+40 | °C | R/W | |
| Special mode Heating | 18 | 0..1 | | R/W | 0-Disable, 1-Enable |
| Special mode Cooling | 19 | 0..1 | | R/W | 0-Disable, 1-Enable |
| Special mode Recirculation | 20 | 0..1 | | R/W | 0-Disable, 1-Enable |
| Special mode Humidifying | 21 | 0..1 | | R/W | 0-Disable, 1-Enable |
| Special mode Dehumidifying | 22 | 0..1 | | R/W | 0-Disable, 1-Enable |
| Flow control mode | 23 | 0..2 | | R/W | 0-CAV, 1-VAV, 2-DCV |
| Temp. control mode | 24 | 0..3 | | R/W | 0-Supply, 1-Extract, 2-Room, 3-Balance |

[1] See Analog Value Object Instance 72.

### Analog value

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Functions** | | | | | |
| AQC Enable | 25 | 0..1 | | R/W | 0-Disable, 1-Enable |
| AQC Setpoint 1 | 26 | variable[1] | variable[1] | R/W | 200..1800 ppm, or 10..90 % or 5,0..45,0 °C |
| AQC Mode 1 | 27 | 1..5 | | R/W | 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special |
| AQC Setpoint 2 | 28 | variable[1] | variable[1] | R/W | 200..1800 ppm, or 10..90 % or 5,0..45,0 °C |
| AQC Mode 2 | 29 | 1..5 | | R/W | 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special |
| OCV Enable | 30 | 0..1 | | R/W | 0-Disable, 1-Enable |
| OCV Winter compensation stop | 31 | -40.0..+50.0 | °C | R/W | |
| OCV Winter compensation start | 32 | -40.0..+50.0 | °C | R/W | |
| OCV Summer compensation start | 33 | -40.0..+50.0 | °C | R/W | |
| OCV Summer compensation stop | 34 | -40.0..+50.0 | °C | R/W | |
| MTC Enable | 35 | 0..1 | | R/W | 0-Disable, 1-Enable |
| MTC Setpoint | 36 | -40.0..+50.0 | °C | R/W | |
| OVR Enable | 37 | 0..1 | | R/W | 0-Disable, 1-Enable |
| OVR Type | 38 | 0..2 | | R/W | 0-Alltime, 1-If on, 2-If off |
| OVR Mode | 39 | 0..6 | | R/W | 0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program |
| SNC Enable | 40 | 0..1 | | R/W | 0-Disable, 1-Enable |
| SNC Start temperature | 41 | 15.0..+50.0 | °C | R/W | |
| SNC Stop temperature | 42 | 15.0..+50.0 | °C | R/W | |
| OOD Enable | 43 | 0..1 | | R/W | 0-Disable, 1-Enable |
| OOD Setpoint | 44 | variable[1] | variable[1] | R/W | 200..1800 ppm, or 10..90 % or 5,0..45,0 °C |
| REC Enable | 45 | 0..1 | | R/W | 0-Disable, 1-Enable |
| REC Setpoint 1 | 46 | variable[1] | variable[1] | R/W | 200..1800 ppm, or 10..90 % or 5,0..45,0 °C |

[1] Dependent on the value of air quality control sensor type (CO2, VOC, RH, Temperature sensor types supported).

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Functions** | | | | | |
| REC Mode 1 | 47 | 1..5 | | R/W | 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special |
| REC Setpoint 2 | 48 | variable[1] | variable[1] | R/W | 200..1800 ppm, or 10..90 % or 5,0..45,0 °C |

### Analog value

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Functions** | | | | | |
| REC Mode 2 | 49 | 1..5 | | R/W | 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special |
| REC Min. Fresh Air 1 | 50 | 0..100 | % | R/W | |
| REC Min. Fresh Air 2 | 51 | 0..100 | % | R/W | |
| REC Winter end | 52 | -40.0..+50.0 | °C | R/W | |
| REC Winter start | 53 | -40.0..+50.0 | °C | R/W | |
| REC Summer start | 54 | -40.0..+50.0 | °C | R/W | |
| REC Summer end | 55 | -40.0..+50.0 | °C | R/W | |
| REC Default recirculation | 56 | 0..100 | % | R/W | |
| REC Activated recirculation | 57 | 0..100 | % | R/W | |
| HUM Enable | 77 | 0..1 | | R/W | 0-Disable, 1-Enable |
| HUM Setpoint 1 | 78 | 10..90 | % | R/W | |
| HUM Mode 1 | 79 | 1..5 | | R/W | 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special |
| HUM Setpoint 2 | 80 | 10..90 | % | R/W | |
| HUM Mode 2 | 81 | 1..5 | | R/W | 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2 |
| CF heatexchanger calibration | 84 | 0..2 | | R/W | 0-No calibration, 1- Calibrated, 2-Calibrating. Write 1 to start calibration |
| HUM mode | 85 | 0..2 | | R/W | 0-Supply, 1-Indoor+Supply, 2-Indoor |
| HUM Type | 86 | 0..1 | | R/W | 0-RH, 1-AH |
| HUM Units | 87 | 0..1 | | R/W | AH: 0-g/m$^3$, 1-g/kg |
| OCV Minimum airflow | 88 | 20..100 | | R/W | % |
| Water heater: Enable/Disable | 89 | 0..1 | | R/W | 0-Disable, 1-Enable |

| Name | Object Instance | Range | Unit | Access | Description |
|---|---|---|---|---|---|
| **Functions** | | | | | |
| Water cooler: Enable/Disable | 90 | 0..1 | | R/W | 0-Disable, 1-Enable |
| **Alarm reset** | | | | | |
| Actual alarms reset | 58 | 1 | | W | 1-Reset current alarm |
| **Counters** | | | | | |
| Air heater operation | 59 | 0..2^32 | hours | R/W | |
| Supply fan operation | 60 | 0..2^32 | hours | R/W | |
| Exhaust fan operation | 61 | 0..2^32 | hours | R/W | |
| Heat exchanger thermal efficiency | 62 | 1..100 | % | R | 255-none |
| Heat exchanger recovery | 63 | 0..2^32 | watt | R | |
| Thermal energy saving | 64 | 0..100 | % | R | |
| Supply SFP | 65 | 0..655 | | R | |
| Exhaust SFP | 66 | 0..655 | | R | |
| **User settings** | | | | | |
| Day | 67 | 1..31 | days | R/W | |
| Month | 68 | 1..12 | months | R/W | |
| Year | 69 | 2000..2250 | years | R/W | |
| Hours | 70 | 0..23 | hours | R/W | |
| Minutes | 71 | 0..59 | minutes | R/W | |
| Flow units | 72 | 0..3 | | R/W | 0-$m^3/h$, 1-l/s, 2-$m^3/s$, 3-Pa |
| External room temperature sensor | 73 | -50.0..+120.0 | °C | R/W | Values outside the range disables override |
| Zone 1 setpoint | 74 | -50.0..+40.0 | °C | R/W | |
| Zone 2 setpoint | 75 | -50.0..+40.0 | °C | R/W | |
| Digital input IN4 override | 76 | -1..2 | | R/W | -1 – disabled, 0 – heating, 1 – cooling, 2 – error |
| Daylight saving time | 82 | 0..1 | | R/W | 0-Disable, 1-Enable |
| BACnet Broadcast Management Device | 83 | 0..1 | | R/W | 0-Disable, 1-Enable |

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|---|---|---|
| **AT** | J. PICHLER Gesellschaft m. b. H. | www.pichlerluft.at |
| **BE** | Ventilair group | www.ventilairgroup.com |
| | ACB Airconditioning | www.acbairco.be |
| **CZ** | REKUVENT s.r.o. | www.rekuvent.cz |
| **CH** | WESCO AG | www.wesco.ch |
| | SUDCLIMATAIR SA | www.sudclimatair.ch |
| | CLIMAIR GmbH | www.climair.ch |
| **DK** | Øland A/S | www.oeland.dk |
| **EE** | BVT Partners | www.bvtpartners.ee |
| **FR** | ATIB | www.atib.fr |
| **HR** | Microclima | www.microclima.hr |
| **HU** | AIRVENT Légtechnikai Zrt. | www.airvent.hu |
| | Gevent Magyarország Kft. | www.gevent.hu |
| | Merkapt | www.merkapt.hu |
| **IE** | Lindab | www.lindab.ie |
| **IR** | Fantech Ventilation Ltd | www.fantech.ie |
| **IS** | Blikk & Tækniþjónustan ehf | www.bogt.is |
| | Hitataekni ehf | www.hitataekni.is |
| **IT** | ICARIA | www.icaria.srl |
| **NL** | Ventilair group | www.ventilairgroup.com |
| | DECIPOL-Vortvent | www.vortvent.nl |
| | CLIMA DIRECT BV | www.climadirect.com |
| **NO** | Ventilution AS | www.ventilution.no |
| | Ventistål AS | www.ventistal.no |
| | Thermo Control AS | www.thermocontrol.no |
| **PL** | Ventia Sp. z o.o. | www.ventia.pl |
| **SE** | Nordisk Ventilator AB | www.nordiskventilator.se |
| **SI** | Agregat d.o.o | www.agregat.si |
| **SK** | TZB produkt, s.r.o. | www.tzbprodukt.sk |
| **UA** | TD VECON LLC | www.vecon.ua |