



komfovent C8 Air Handling Unit with Controller Owner's Manual

[Home](#) » [komfovent](#) » komfovent C8 Air Handling Unit with Controller Owner's Manual 

komfovent BACNET CONNECTION C8 INSTALLATION AND SERVICE MANUAL

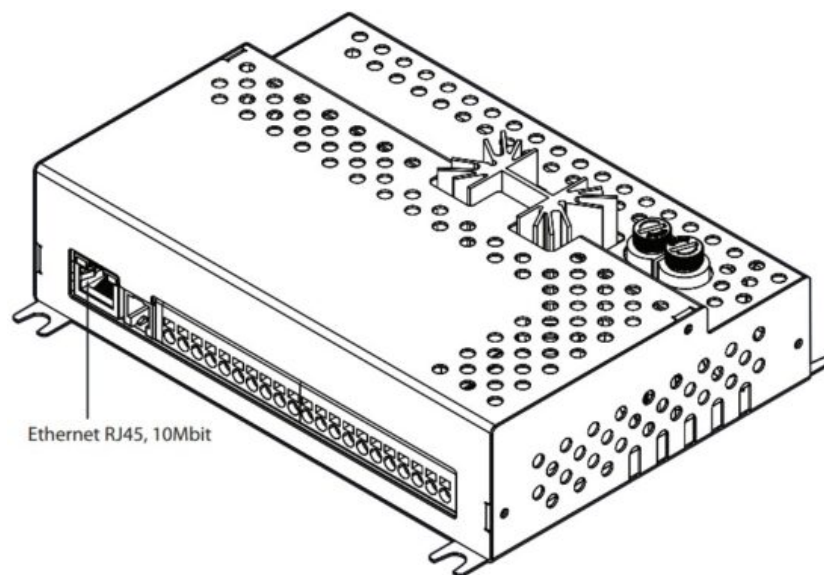
Contents

- [1 BACNET CONNECTION AND SETTINGS](#)
- [2 BACnet Interoperability Building Blocks Supported](#)
- [3 SERVICE AND SUPPORT](#)
- [4 Documents / Resources](#)
 - [4.1 References](#)

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 C8 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 C8 controller (CAT5 cable is recommended):



Picture 1. C8 controller board

Below is default network settings of the C8 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 C8 controller:

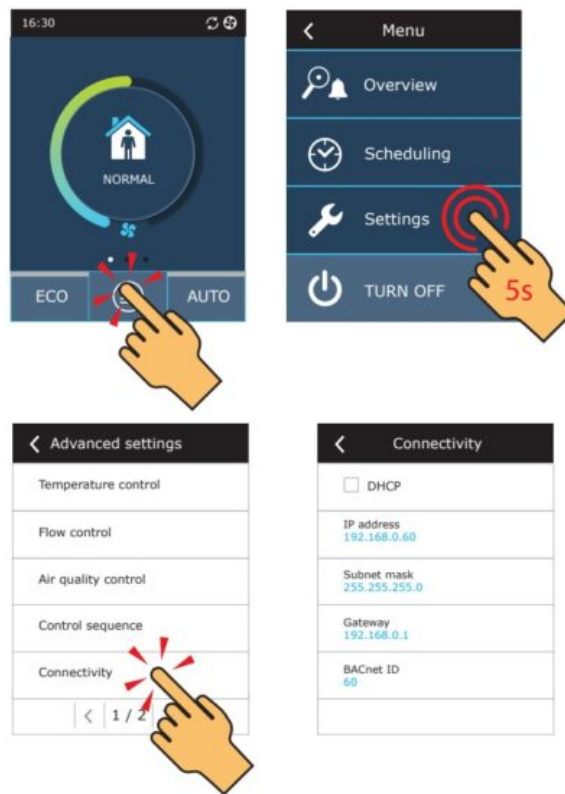
CONNECTIVITY				
DHCP	☒ Off ☐ On			
IP address	192	168	0	60
Subnet mask	255	255	255	0
Gateway	192	168	0	1
BACnet ID	60			
Modbus ID	254			
RS-485	19200 baud		▼ 8E1 ▼	

Picture 2. Connectivity settings



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

C8 controller IP can also be viewed and changed on the control panel – from Main menu go to Advanced settings>Connectivity:



Picture 3. Connectivity settings on C6.1 control panel display

BACnet Interoperability Building Blocks Supported

Data sharing	DS-RP-B	Read Property
	DS-RPM-B	Read Property Multiple
	DS-WP-B	Write Property
Device management	DM-DCC-B	Device Communication Control
	DM-DDB-B	Dynamic Device Binding
	DM-DOB-B	Dynamic Object Binding
	DM-TS-B	Time Synchronization

Standard Object Types Supported:

Object type	Properties
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, Property_List; Description, Local_Date, Local_Time
Analog value	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Units, Property_List; Reliability
Binary value	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Property_List; Incative_Text, Active_Text
Date value	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Property_List
Multi-state value	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Event_State, Out_Of_Service, Number_Of_States, Property_List; State_Text
Positive integer value	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Units, Property_List; Reliability
Time value	Object_Identifier, Object_Name, Object_Type, Present_Value, Status_Flags, Property_List

Objects:

Analog value			
Object name	Object instance	Present value	
		Range/values/units	Access
AWAY: setpoint	0	5.0 – 40.0 [°C]	W
NORMAL: setpoint	1	5.0 – 40.0 [°C]	W
INTENSIVE: setpoint	2	5.0 – 40.0 [°C]	W
BOOST: setpoint	3	5.0 – 40.0 [°C]	W
KITCHEN: setpoint	4	5.0 – 40.0 [°C]	W

Analog value			
Object name	Object instance	Present value	
		Range/values/units	Access
FIREPLACE: setpoint	5	5.0 – 40.0 [°C]	W
OVERRIDE: setpoint	6	5.0 – 40.0 [°C]	W
HOLIDAYS: setpoint	7	5.0 – 40.0 [°C]	W
ECO: minimum supply air temperature	8	5.0 – 40.0 [°C]	W
ECO: maximum supply air temperature	9	5.0 – 40.0 [°C]	W
AIR QUALITY: temperature setpoint	10	5.0 – 40.0 [°C]	W
INFO: supply temperature	11	[°C]	R
INFO: extract temperature	12	[°C]	R
INFO: outdoor temperature	13	[°C]	R
INFO: water temperature	14	[°C]	R
INFO: panel 1 temperature	15	[°C]	R
INFO: panel 2 temperature	16	[°C]	R
INFO: current supply fan intensity	17	[%]	R
INFO: current extract fan intensity	18	[%]	R
INFO: heat exchanger	19	[%]	R
INFO: electric heater	20	[%]	R
INFO: analog output 0-10V	21	[%]	R
INFO: DX unit	22	[%]	R

Binary value				
Object name	Object instance	Present value		
		Range/values/units		Access
CONTROL: ON/OFF status	0	0 – off	1 – on	W
CONTROL: ECO mode	1	0 – off	1 – on	W
CONTROL: AUTO mode	2	0 – off	1 – on	W
AWAY: heating	3	0 – off	1 – on	W
NORMAL: heating	4	0 – off	1 – on	W
INTENSIVE: heating	5	0 – off	1 – on	W
BOOST: heating	6	0 – off	1 – on	W
KITCHEN: heating	7	0 – off	1 – on	W
FIREPLACE: heating	8	0 – off	1 – on	W
OVERRIDE: heating	9	0 – off	1 – on	W
HOLIDAYS: heating	10	0 – off	1 – on	W
ECO: free heating/cooling	11	0 – off	1 – on	W
ECO: heating enable denied	12	0 – off	1 – on	W
ECO: cooling enable denied	13	0 – off	1 – on	W
ECO: non stop recuperation	14	0 – off	1 – on	W
AIR QUALITY: enabled	15	0 – disabled	1 – enabled	W
AIR QUALITY: heating	16	0 – off	1 – on	W
ALARMS: return water temperature low	17	0 – no	1 – yes	R
ALARMS: low supply air temperature	18	0 – no	1 – yes	R
ALARMS: high supply air temperature	19	0 – no	1 – yes	R
ALARMS: electric heater overheat	20	0 – no	1 – yes	R
ALARMS: heat exchanger failure	21	0 – no	1 – yes	R
ALARMS: heat exchanger icing	22	0 – no	1 – yes	R
ALARMS: internal fire alarm	23	0 – no	1 – yes	R

Binary value				
Object name	Object instance	Present value		
		Range/values/units		Access
ALARMS: external fire alarm	24	0 – no	1 – yes	R
ALARMS: temperature sensor failure	25	0 – no	1 – yes	R
ALARMS: controller failure	26	0 – no	1 – yes	R
ALARMS: service mode	27	0 – no	1 – yes	R
ALARMS: clogged air filters	28	0 – no	1 – yes	R
ALARMS: heat exchanger low efficiency	29	0 – no	1 – yes	R
ALARMS: fire dampers communication error	30	0 – no	1 – yes	R
ALARMS: fire dampers failure	31	0 – no	1 – yes	R
INFO: heating	32	0 – off	1 – on	R
INFO: cooling	33	0 – off	1 – on	R
CLEAN FILTERS CALIBRATION	34	0 – no	1 – yes	W

Date value			
Object name	Object instance	Present value	
		Range/values/units	Access
HOLIDAYS: from	0	2017-01-01 – 2035-12-31	W
HOLIDAYS: till	1	2017-01-01 – 2035-12-31	W

Multi-state value				
Object name	Object instance	Present value		
		Range/values/units		Access
CONTROL: auto mode control	0	1 – scheduling	2 – air quality	R
CONTROL: current mode	1	1 – standby 2 – away 3 – normal 4 – intensive 5 – boost 6 – kitchen	7 – fireplace 8 – override 9 – holiday 10 – auto 11 – off	W [2-5]
SCHEDULER: operation program	2	1 – stay at home 2 – working week	3 – office 4 – custom	W
SCHEDULER: next mode	3	1 – standby 2 – away 3 – normal	4 – intensive 5 – boost	R
SCHEDULER: next mode weekday	4	1 – today 2 – mo 3 – tu 4 – we	5 – th 6 – fr 7 – sa 8 – su	R
CONTROL: temperature control	5	1 – supply 2 – extract	3 – room 4 – balance	W
CONTROL SEQUENCE: stage 1	6	1 – none 2 – external coil	3 – electric heater 4 – external DX unit	W
CONTROL SEQUENCE: stage 2	7			W
CONTROL SEQUENCE: stage 3	8			W
SETTINGS: coil type	9	1 – hot water	2 – cold water	W

Multi-state value				
Object name	Object instance	Present value		
		Range/values/units		Access
SETTINGS: language	10	1 – en 2 – lt 3 – ru 4 – pl 5 – sk 6 – de 7 – fr 8 – hu 9 – it 10 – ee	11 – nl 12 – lv 13 – pt 14 – se 15 – fi 16 – hr 17 – sl 18 – cz 19 – dk	W
OVERRIDE: mode	11	1 – all time 2 – if on	3 – if off	W
HOLIDAYS: microventilation	12	1 – 1 t. per day 2 – 2 t. per day	3 – 3 t. per day 4 – 4 t. per day	W
AIR QUALITY: sensor type B8	13	1 – none 2 – CO2	3 – VOC 4 – RH	W
RESET SETTINGS	14	1 – none 2 – “away” 3 – “normal” 4 – “intensive” 5 – “boost” 6 – “holidays”	7 – “override” 8 – “kitchen” 9 – “fireplace” 10 – air quality 11 – eco 12 – advanced	W

Positive integer value			
Object name	Object instance	Present value	
		Range/values/units	Access
CONNECTIVITY: IP address	0	0 – 4294967295	W
CONNECTIVITY: mask	1	0 – 4294967295	W
AWAY: supply flow	2	20 – 100 [%]	W
AWAY: extract flow	3	20 – 100 [%]	W
NORMAL: supply flow	4	20 – 100 [%]	W
NORMAL: extract flow	5	20 – 100 [%]	W
INTENSIVE: supply flow	6	20 – 100 [%]	W
INTENSIVE: extract flow	7	20 – 100 [%]	W
BOOST: supply flow	8	20 – 100 [%]	W
BOOST: extract flow	9	20 – 100 [%]	W
KITCHEN: supply flow	10	20 – 100 [%]	W
KITCHEN: extract flow	11	20 – 100 [%]	W
FIREPLACE: supply flow	12	20 – 100 [%]	W
FIREPLACE: extract flow	13	20 – 100 [%]	W
OVERRIDE: supply flow	14	20 – 100 [%]	W
OVERRIDE: extract flow	15	20 – 100 [%]	W
KITCHEN: timer	16	0 – 300 [min]	W
FIREPLACE: timer	17	0 – 300 [min]	W
OVERRIDE: timer	18	0 – 300 [min]	W
AIR QUALITY: air quality setpoint	19	0 – 2000 [ppm] 0 – 100 [%]	W
AIR QUALITY: humidity setpoint	20	0 – 100 [%]	W
AIR QUALITY: minimum intensity	21	0, 20 – 100 [%]	W
AIR QUALITY: maximum intensity	22	0, 20 – 100 [%]	W
AIR QUALITY: check period	23	1 – 24 [h]	W

Positive integer value			
Object name	Object instance	Present value	
		Range/values/units	Access
ALARMS: active alarms count	24	0 – 10	W [39366resetsalarms]

ALARMS: alarm history count	25	0 – 50	R
INFO: current supply flow	26	[%]	R
INFO: current extract flow	27	[%]	R
INFO: filters impurity	28	[%]	R
INFO: air dampers	29	[%]	R
INFO: air quality/humidity sensor	30	[ppm, %]	R
INFO: panel 1 humidity	31	[%]	R
INFO: panel 2 humidity	32	[%]	R
INFO: panel 1 air quality	33	[ppm]	R
INFO: panel 2 air quality	34	[ppm]	R
EFFICIENCY/STATUS: heater power	35	[W]	R
OPERATION COUNTERS: supply air fan (day)	36	[h]	R
OPERATION COUNTERS: supply air fan (month)	37	[h]	R
OPERATION COUNTERS: supply air fan (total)	38	[h]	R
OPERATION COUNTERS: exhaust air fan (day)	39	[h]	R
OPERATION COUNTERS: exhaust air fan (month)	40	[h]	R
OPERATION COUNTERS: exhaust air fan (total)	41	[h]	R
OPERATION COUNTERS: electric heater (day)	42	[h]	R
OPERATION COUNTERS: electric heater (month)	43	[h]	R
OPERATION COUNTERS: electric heater (total)	44	[h]	R
OPERATION COUNTERS: heat exchanger (day)	45	[h]	R
OPERATION COUNTERS: heat exchanger (month)	46	[h]	R
OPERATION COUNTERS: heat exchanger (total)	47	[h]	R

Time value			
Object name	Object instance	Present value	
		Range/values/units	Access
SCHEDULER: next mode start time	0	00:00 – 24:00	R

SERVICE AND SUPPORT

LITHUANIA UAB KOMFOVENT Phone: +370 5 200 8000 service@komfovent.com www.komfovent.com	FINLAND Komfovent Oy Muuntotie 1 C1 FI-01 510 Vantaa, Finland Phone: +358 20 730 6190 toimisto@komfovent.com www.komfovent.com
GERMANY Komfovent GmbH Konrad-Zuse-Str. 2a, 42551 Velbert, Deutschland Phone: +49 0 2051 6051180 info@komfovent.de www.komfovent.de	LATVIA SIA Komfovent Bukaišu iela 1, LV-1004 Riga, Latvia Phone: +371 24 66 4433 info.lv@komfovent.com www.komfovent.com
SWEDEN Komfovent AB Ögärdesvägen 12A 433 30 Partille, Sverige Phone: +46 31 487 752 info_se@komfovent.com www.komfovent.se	UNITED KINGDOM Komfovent Ltd Unit C1 The Waterfront Newburn Riverside Newcastle upon Tyne NE15 8NZ, UK Phone: +447983 299 165 steve.mulholland@komfovent.com www.komfovent.com

PARTNERS

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

www.komfovent.com

2024-10

Documents / Resources

 BACHET CONNECTION C8 INSTALLATION AND SERVICE MANUAL	komfovent C8 Air Handling Unit with Controller [pdf] Owner's Manual C8, C8 Air Handling Unit with Controller, Air Handling Unit with Controller, Handling Unit with Controller, Unit with Controller, Controller
---	---

References

-  [ACB Airconditioning](#)
-  [Prezračevalne naprave - Agregat](#)
-  [Airvent Légtechnikai Zrt.](#)
-  [Solutions de ventilation et de traitement d'air ATIB](#)
-  [bogt.is](#)
-  [BVT | BVT](#)
-  [Clima Direct: alles wat jij nodig hebt](#)
-  [HOME | Climair Schweiz](#)
-  [GEVENT Magyarország](#)
-  [Lindab Ireland | Ventilation, Air Movement & HVAC Solutions](#)
-  [Merkapt Zrt. – Épületgépészeti kereskedések](#)
-  [Nordisk Ventilator AB |](#)
-  [oeland.dk](#)
-  [Rekuvent | Rekuperace, vzduchotechnika, řízené větrání](#)
-  [Totalleverandør av kjølemaskiner og varmepumper > Thermo Control](#)
-  [TZB produkt](#)
-  [Ventilution AS](#)
-  [Hjem - Ventistål](#)
-  [Vind hier luchtbehandeling voor uw bedrijf - Vortvent](#)
- [User Manual](#)

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.