FLEXIT

FlexitGO

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Contents

1. How to read this manual

DANGER! When a text box is this colour, it means that a life-threatening or serious personal injury may be the consequence of not following the instructions.

NOTICE! When a text box is this colour, it means that a poor utilisation ratio or product operating issues may be the consequence of not following the instructions.

CAUTION! When a text box is this colour, it means that material damage may be the consequence of not following the instructions.

INFO! When a text box is this colour, it means that it contains important information.

The parameters described in this document are accessed via the Flexit GO app. They are available on different pages that you navigate to through the main menu and submenus. The menu structure is shown in the Menu tree chapter. In the top of each table (See Example table below) the path on how to navigate to that page is listed.

Depending on the configuration of your ventilation unit, some of the parameters are not used, which means that they or that page do not appear in the Flexit GO app.

In this document both end-user and Installer access is shown. You can see which user has access to which parameters. The table have columns (B and I) that defines access. For end-user access the column has title B, and for Installer access the column has title I. In these two columns you see the type of access according to:

--   This means you have no access and will not even see the parameter.

R   This means you have read access.

RW   This means you have both read and write access.

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Example table:

Path:
The path to this page. Ex. *Air/Air temperature*

Page title:
This is the Title of the page. Ex. **Air temperature**

Submenu:
This is a submenu that takes you to a new page. In the table, these are always indicated with the symbol ">" in the column before. If an end-user doesn't have access to any of the parameters in a submenu, they won't even see the submenu.

Section help text:
This is a text that helps explain the parameters under.

Parameter:
This is the actual parameter. In the table, these are always indicated with a number in the column before. If the parameter is referred to in any text, it is done so in the following manner: **{number|name}**
ex. **{951| Parameter 1}**, this way they are easier to find.

BACnet object:
This is the BACnet object which corresponds to the actual parameter.

Modbus:
This is the Modbus register and data type which corresponds to the actual parameter.

Path

	Page title	B	I	Default	Range	Unit	BACnet object	Modbus Reg	Modbus Data type
>	Submenu								
	Section help text								
951	Parameter 1	RW	RW	10	10 - 30	°C			
952	Parameter 2	R	RW	28	10 - 30	°C			
	Section help text 2								
833		R	R		Mode 1; Mode 2; Mode ...				
	Section help text 3								
833	Parameter 4	--	RW	15	10 - 30	°C			
788	Parameter 5	--	R	18	10 - 30	°C			

Example table

This is an example of how information in example table is presented in the Flexit GO app depending on access level.

Page title	
Submenu	>
Section help text 1	
Parameter 1	10ºC >
Parameter 2	28ºC
Section help text 2	
	Mode 1
(End user)	

Page title	
Submenu	>
Section help text 1	
Parameter 1	10ºC >
Parameter 2	28ºC
Section help text 2	
	Mode 1
Section help text 3	
Parameter 4	15ºC >
Parameter 5	18ºC
(Installer)	

1.1. MENU TREE, ECONORDIC

This is a visualization of the menu tree. The different colours show different access.

☐ Standard shows what an end user can access.
■ Installer shows the extra features you can access if you are logged on as installer.
■ Accessories shows features that are visable if you have that particular accessory installed / configured.

The names correspond to different sections in this documentation.

Colour explanation:

Standard | **Accessories**
Installer/Service | **EcoNordic WH4**

Main menu
- Home
- Air
  - Operating information
  - Air temperature
    - Additional heating
    - Cooling
    - Outdoor air compentation
    - Secondary temperature zone
  - Air Quality (CO_2) → Air quality, advanced settings
  - Air humidity → Air humidity, advanced settings
  - Fans → Fans, advanced settings
  - Air filter
  - Heat Recovery
- Water
- Heating
  - Advanced settings
    - Heating curve settings
    - Floor drying function
    - **EcoNordic WH4**
- More
  - Installer
    - Configuration
    - Wireless accessories
    - Commissioning
    - Communication
    - Heat recovery unit
    - Periodic maintenance
  - Status heat pump
  - Additional functions
    - Wireless accessories
    - Settings, free cooling
    - Settings, deicing
  - Security
  - Alarm
  - System info
  - Operating hours
  - Service
  - About Flexit GO
  - Change product
  - Sign out

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2. Home

Air Panel

The air panel shows information on current ventilation mode, temperature setpoint, outside air temperature, air quality CO_2 (accessory), air humidity (accessory) and extract air temperature. From the air panel you can change ventilation mode and temperature setpoint.

Five individual ventilation modes are available: Away, Home, High, Fireplace and Cooker hood. In each of the ventilation modes the required fan speed can be individually set for both supply and exhaust fans.

Separate temperature setpoints can be defined for HOME and AWAY ventilation modes. Ventilation modes High, Fireplace and Cooker hood use the same temperature setpoint as HOME mode.

You can also add accessories for air quality (CO_2) and air humidity. They have their own separate limits that can be set for ventilation modes, Home and Away. These functions can only control the fans during Home or Away mode. The colure of the icon will show if the value is under the limit or above.

Water Panel

In the water panel you can see the current water mode. Available water modes are Eco, Comfort and Temporary boost.

Heating Panel (Econordic WH4)

In the heating panel you can see the current setpoint for space heating. Just click on the panel and you will be able to change it from the "Set Value" page.

2.1. ECONORDIC

Main menu
Ventilation mode
Temperature setpoint
Air panel
Water mode
Water panel
Room temperature setpoint
Heating panel (WH4)

Android

Ventilation mode
Temperature setpoint
Air panel
Water mode
Water panel
Room temperature setpoint
Heating panel (WH4)
Main menu

iOS
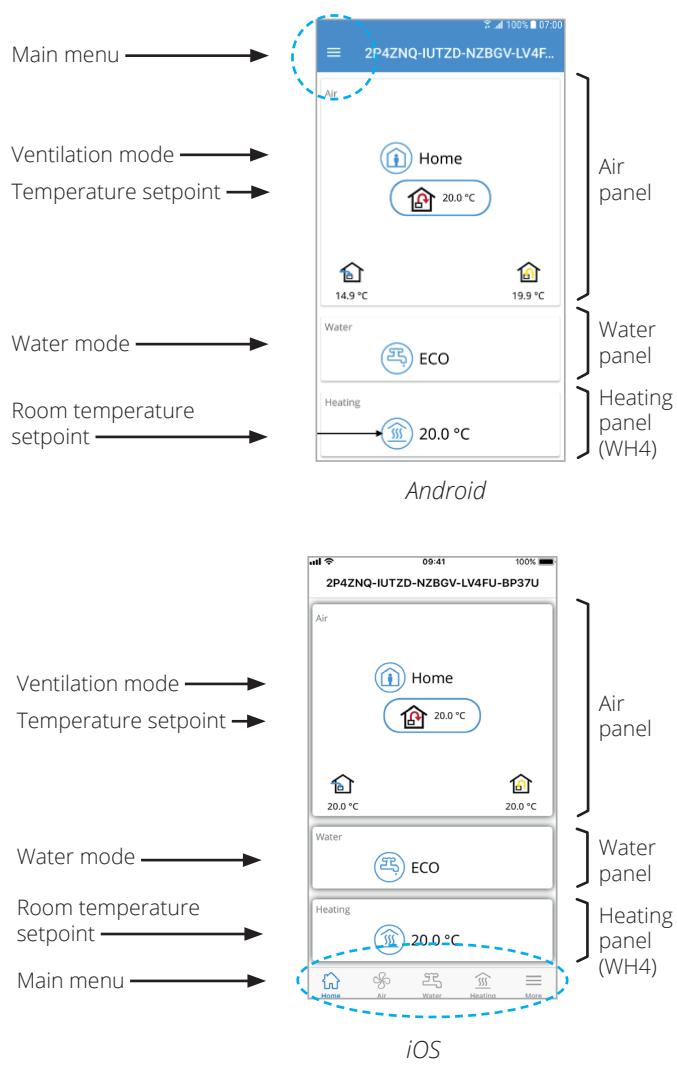
2.2. ICON DESCRIPTIONS

The following table lists the icons used on the home page:

Icon	Description
	Outside air
	Suppy air
	Extract air
CO₂	The air quality value is under the limit and the fans are running on the setpoint for the current mode
CO₂	The air quality value is over the limit and the fans are regulating to increase the air flow to reduce the value below the limit
	The air humidity value is under the limit and the fans are running on the setpoint for the current mode
	The humidity sensor in the exhaust air has initiated the dehumidification process and the ventilation mode has been increased to HIGH, to reduce the humidity.
	The air humidity value is over the limit and the fans are regulating to increase the air flow to reduce the value below the limit
	Indicates that a temporary mode is running. Remaining time is also shown
	Indicates that the calendar is activated
	Active alarm (A banner with error code is also shown)
	Alarm not active, waiting for acknowledge
	Alarm acknowledged, but still active
	Alarm not active, waiting for reset
	Active maintenance (A banner with error code is also shown)
	Maintenance not active, but not acknowledged
	Maintenance acknowledged, but still active
	Temporary override

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2.3.   CHANGE VENTILATION MODE

From this page you can change the ventilation mode. Ventilation modes can either be constant or temporary. Constant means they will be active until you change the mode. Temporary means that they will be active for the set duration after which the previous mode will take place.

When you click on a specific mode, it will expand to show the start button and for some modes the possibility to delay the start or set a duration.

Cooker hood: This mode can only be activated using a wireless or cabled accessory, which is mounted in your cooker hood. It activates when you use your cooker hood.
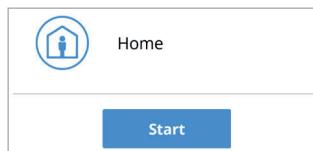
Home: This is a constant mode and is Intended for normal use when the building is occupied.
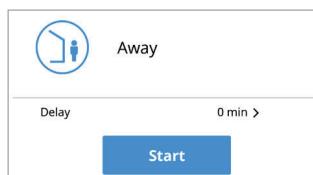
Away: This is a constant mode and is intended for use when the building is unoccupied for longer periods. You can also set a delayed start, which can be useful if you just got out of the shower before you leave the house. This function always overrides the calender.

High: This can be both a constant mode and a temporary mode with a set duration. It is intended for use when a higher ventilation demand is temporarily required.

Fireplace: This mode is used temporarily when lighting a fire in the fireplace. It is used to improve smoke extraction in the chimney by increasing the supply air flow and reducing the exhaust air flow.
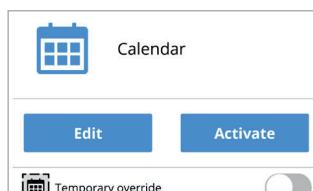
Calender: If the calendar is activated, a notification icon will show up in the top left corner of the air panel.

Edit: The default ventilation mode is the Home mode, this means that you can define the start and stop time for either Away or High mode. All other time the ventilation mode will be the Home mode.
To add an event, just click at the desired start time on the day you want to add the event. A yellow plus sign (+) will appear and if you click it again, a new page appears where you can select between ventilation mode Away or High, and change the start and stop time, by 30min intervals.
If you click on an already defined event, you can edit or delete it.

Copy: This is useful if you have defined one day, and then want to copy the same settings to other days. Just press the copy button, then choose a day to copy and select to which days you want it copied to and press ok.

Temporary override: If this function is enabled and the calendar is active, you can manually select another ventilation mode and the calender will return to the calender at next scheduled event.

2.4.   WATER PANEL

Android   *iOS*

In the water panel you can see the current water mode. Available water modes are Eco, Comfort and Temporary boost.

Eco: The most economical way to produce hot water. The system uses the top sensor in the hot water tank to trigger a charge of hot water from the heat pump. When the charge starts there is about 15 % hot water left in the tank.

Comfort: An economical way to produce hot water. The system uses the middle sensor in the hot water tank to trigger a charge of hot water from the heat pump. When the charge starts there is about 50 % hot water left in the tank. If the hot water consumption is high and the hot water level in the tank gets below 15 %, the system activates an additional electrical heater to increase the hot water production.

Temporary boost: This is a temporary mode with a set duration that you can activate if you are going to have a very high consumption of hot water. This mode activates the charge of hot water as soon as the hot water level in the tank is less than 100% and activates the additional electrical heater if the hot water level is less than 50 %. After the duration the water mode returns to the previous mode, Eco or Comfort.

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2.5. HEATING PANEL (WH4)

Main menu

Ventilation mode

Temperature setpoint

heating panel

Android

Ventilation mode

Temperature setpoint

heating panel

Main menu

iOS

In the heating panel you can see the current setpoint for space heating. Just click on the panel and you will be able to change it from the "Set Value" page.

2.6.   SET VALUE

From the set value page, you can set a new value for a parameter. For all parameters that are not selections and are writable you will get the set value page if you click it.
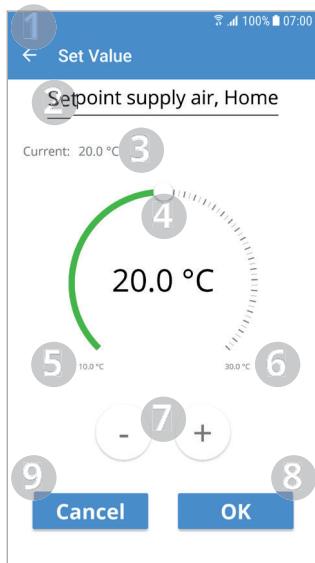
1. Navigate back.

2. The name of the parameter.

3. Current value (before change).

4. Value selector, slide or click along the scale to change the value.

5. Min allowed value.

6. Max allowed value.

7. Increase or decrease the value by the smallest resolution.

8. Write the new value.

9. Cancel, go to previous page.

For writable parameters that are selections you will get the below page if you click it.
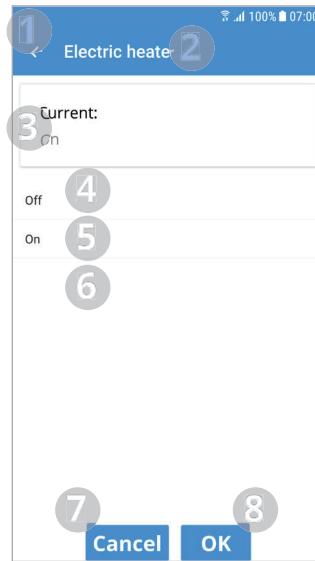
1. Navigate back.

2. The name of the parameter.

3. Current selection (before change).

4. Choice 1. Click to select.

5. Choice 2. Click to select.

6. More choices if available.

7. Cancel, navigate back.

8. Write the selected choice.

2.7.   AUTOMATIC FUNCTIONS

In the product, there are several automatic functions that can override the ventilation mode that is set. There are two categories of functions that can do this:

Security features
For more information see chapter ADDITIONAL INFORMATION and sub section Deicing.

Functions for demand control
For more information see chapters AIR QUALITY REGULATION and HUMIDITY REGULATION.

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3. Air

Main menu
- Home
- Air
- More

Air:
- Operating information
- Air temperature
  - Additional heating
  - Cooling
  - Outdoor air compentation
  - Secondary temperature zone
- Air Quality (CO_2)
  - Air quality, advanced settings
- Air humidity
  - Air humidity, advanced settings
- Fans
  - Fans, advanced settings
- Air filter
- Heat Recovery
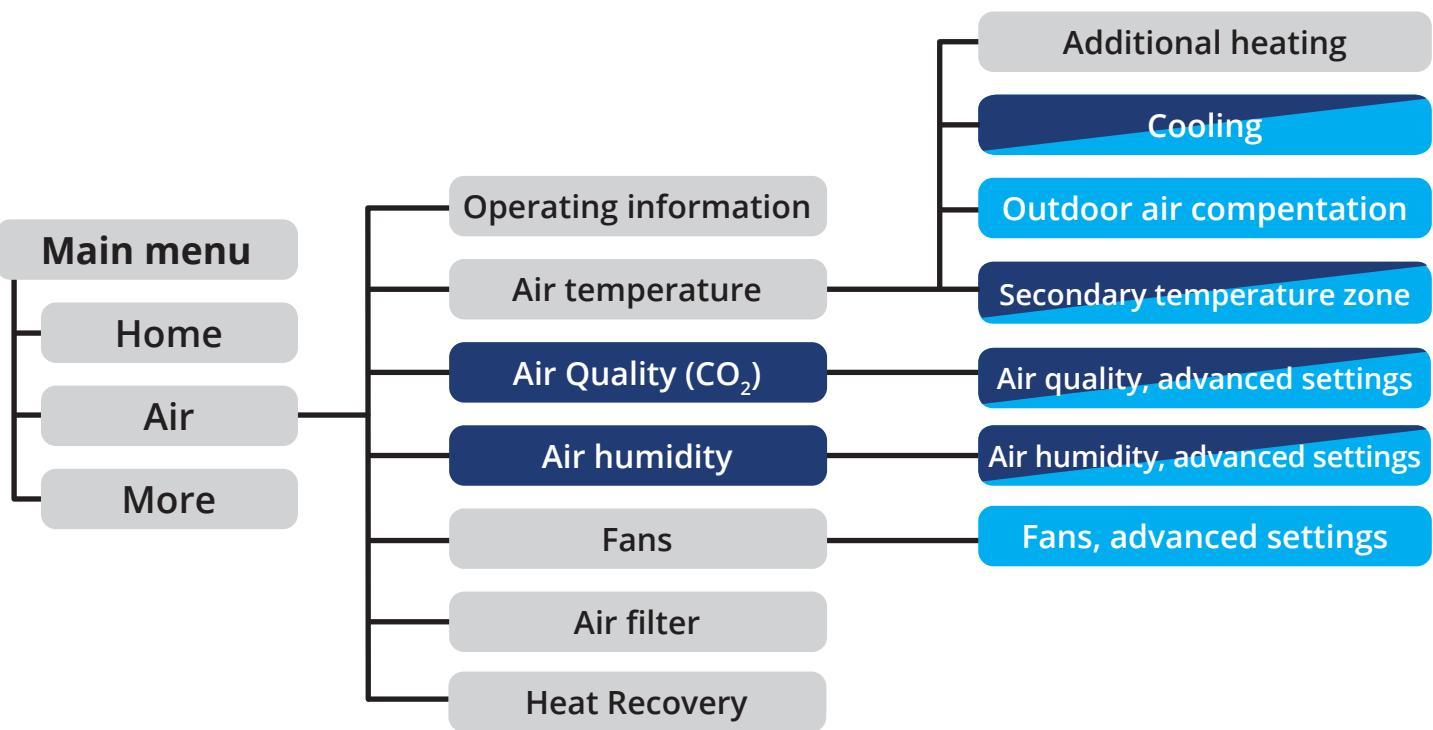
Air/

	Air	B	I	S	Range	Unit
	> Operating information					
	> Air temperature					
*	> Air Quality (CO_2)					
*	> Air Humidity					
	> Fans					
	> Air Filter					
	> Heat recovery					

*Accessories and/or configuration needed

3.1. OPERATING INFORMATION

On this page you can view the ventilation units operating information. The information shown here depends on the configuration and if you have installed accessories.

Air/Operating information

		Operating information								Modbus	
			B	I	Range	Resolution	Unit	BACnet object	Reg	Data type
		Ventilation mode								
	29		R	R	Stop; Away; Home; High; Cooker hood; Fireplace; High	0	0	MVAL,361	3x3034	Uint 16
		Sensors								
	13	Outside air	R	R	-50 to 50	0,1	°C	AI,1	3x0001	Float 32
	3	Supply air	R	R	-50 to 80	0,1	°C	AI,4	3x0005	Float 32
	14	Extract air	R	R	-50 to 80	0,1	°C	AI,59	3x0009	Float 32
	15	Exhaust air	R	R	-50 to 80	0,1	°C	AI,11	3x0013	Float 32
*	264	Air quality (CO$_2$)	R	R	to	0	0	AVAL,1919	3x1039	Float 32
*	265	Humidity	R	R	0 to 100	1	%	AVAL,2090	3x1041	Float 32
		Supply fan								
	19	Control signal	R	R	0 to 100	1	%	AO,3	4x0005	Float 32
*	266	Duct pressure	R	R	-3000 to 3000	1	Pa	AI,79	3x0037	Float 32
	27	Pressure (Diff)	--	R	-3000 to 3000	1	Pa	AI,73	3x0053	Float 32
*	25	Air flow	R	R	0 to 100000	1	m³/h	AVAL,168	3x1011	Float 32
	20	Speed	R	R	0 to 18000	0,1	rev/min	AI,5	3x0021	Float 32
		Extract fan								
	22	Control signal	R	R	0 to 100	1	%	AO,4	4x0009	Float 32
*	267	Duct pressure	R	R	-3000 to 3000	1	Pa	AI,78	3x0041	Float 32
	28	Pressure (Diff)	--	R	-3000 to 3000	1	Pa	AI,72	3x0057	Float 32
*	26	Air flow	R	R	0 to 100000	1	m³/h	AVAL,236	3x1015	Float 32
	23	Speed	R	R	0 to 18000	0,1	rev/min	AI,12	3x0025	Float 32
		Heat recovery unit								
	17	Mode	R	R	Heating; Cooling	0	0	BVAL,22	4x2025	Uint 16
	42	Speed	R	R	0 to 100	1	%	AO,0	4x0001	Float 32
	16	Efficiency	--	--	0 to 100	1	%	AVAL,2023	3x1043	Float 32
		Additional heating								
	169	Setpoint	--	R	0 to 50	0,1	°C	AVAL,1977	3x1053	Float 32
	18	Electric battery	R	R	0 to 100	1	%	AO,29	4x0013	Float 32
	174	Power	--	--	0 to 10	0,01	kW	AVAL,194	3x1045	Float 32
*	96	Water battery	R	R	0 to 100	0,1	%	AO,12	4x0017	Float 32
*	43	Return temperature	--	R	-50 to 80	0,1	°C	AI,31	3x0033	Float 32
*		**Secondary temperature zone**								
*	488	Temperature sensor	R	R	-50 to 150	0,1	°C	AI,63	3x0073	Float 32
*	489	Water battery	R	R	0 to 100	1	%	AO,22	4x0049	Float 32
**	490	Electric battery	R	R	0 to 100	1	%	AO,23	4x0101	Float 32
**	491	Return temperature	--	R	-50 to 150	0,1	°C	AI,64	3x0065	Float 32

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		Operating information							Modbus	
			B	I	Range	Resolution	Unit	BACnet object	Reg	Data type
		Cooling								
*	159	Setpoint	--	R	0 to 40	0,1	°C	AVAL,1955	3x1049	Float 32
*	160	Water battery	--	R	0 to 100	1	%	AO,34	4x0025	Float 32
*	168	DX status	--	R	Off; On	0	0	BVAL,472	3x3025	Uint 16
		Demand controlled function								
	213		R	R	Free Cooling Deicing Emergency shut down Somke control supply Smoke control extract Smoke purge	0	0	MVAL,19	4x2031	Uint 16
		Digital inputs								
	256		R	R	Stop	0	0	BI,20	3x3009	Uint 16
	268		R	R	Away	0	0	BI,22	3x3008	Uint 16
	269	DI1***	R	R	Home	0	0	BI,21	3x3007	Uint 16
	270		R	R	High	0	0	BI,82	3x3006	Uint 16
	271		R	R	Fireplace	0	0	BI,17	3x3010	Uint 16
	272		R	R	Cooker hood	0	0	BI,16	3x3011	Uint 16
	257		R	R	Stop	0	0	BI,27	3x3009	Uint 16
	273		R	R	Away	0	0	BI,29	3x3008	Uint 16
	274	DI2***	R	R	Home	0	0	BI,28	3x3007	Uint 16
	275		R	R	High	0	0	BI,83	3x3006	Uint 16
	276		R	R	Fireplace	0	0	BI,24	3x3010	Uint 16
	277		R	R	Cooker hood	0	0	BI,23	3x3011	Uint 16
	258	X8***	R	R	Away	0	0	BI,31	3x3008	Uint 16
	278		R	R	Home	0	0	BI,30	3x3007	Uint 16

*Accessories and/or configuration needed
**EcoNordic
***Only one function can be selected for each DI - Dependant on configuration the listed BACnet object and Modbus register is valid for that function.

3.2.   AIR TEMPERATURE

From this page you can change the temperature setpoint for ventilation modes Home and Away. You can also access other pages as shown in the table below depending on user level and configuration.

The product supports two different ventilation air temperature controlling strategies:
- Supply air control (Default)
- Extract air cascade control (Only for special use, needs to be configured)

Supply air control
The product aims to keep the supply air at the setpoint **{259|Home}** or **{260|Away}.** It uses heat recovery unit and the available and configured heating or cooling components to achive that.

Extract air cascade control
This temperature control mode tries to keep the extract air temperature at the setpoint **{261|Home}** or **{262|Away}** by changing the supply air temperature between the min **{201|Min}** – max **{200|Max}** setting, using a cascade regulator. This temperature control mode can be used when your ventilation system is your primary heating source or during summer time if a cooling component is used.

Air/Air temperature

		Air temperature								Modbus	
			B	I	Default	Range	Resolution	Unit	BACnet object	Reg	Data type
*	>	Additional heating									
	>	Cooling									
	>	Outdoor air compensation									
***	>	Secondary temperature zone									
		Temperature setpoints supply air									
	259	Home	RW	RW	20	10 to 30	0,5	°C	AVAL,1994	4x1155	Float 32
	260	Away	RW	RW	18	10 to 30	0,5	°C	AVAL,1985	4x1163	Float 32
**		**Temperature setpoints extract air**									
**	261	Home	RW	RW	20	10 to 30	0,5	°C	AVAL,2070	4x1155	Float 32
**	262	Away	RW	RW	18	10 to 30	0,5	°C	AVAL,1988	4x1163	Float 32
***		**Secondary temperature zone**									
***	492	Delta	RW	RW	0	0 to 10	0,5	K	AVAL,1888	4x1257	Float 32
**		**Temperature limitation supply air**									
**	201	Min	--	RW	16	10 to 30	0,5	°C	AVAL,2044	4x1189	Float 32
**	200	Max	--	RW	26	10 to 30	0,5	°C	AVAL,2043	4x1187	Float 32

*Accessories and/or configuration needed
** If extract air cascade control is configured
***EcoNordic

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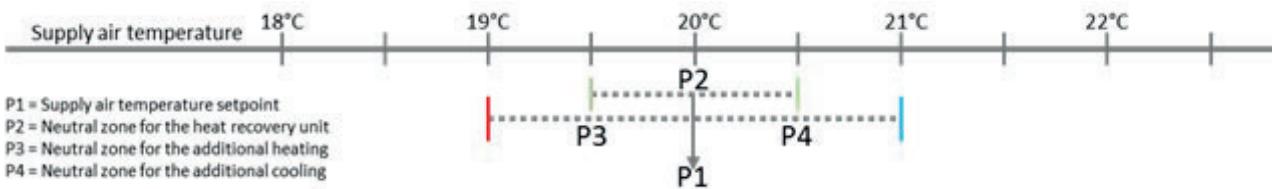
Heating:
The heat recovery unit (HRU) tries to keep the supply air at P1 – P2/2.
If the supply air drops below P1 – P3 because the HRU can't recover enough heat energy, the additional heating will start to regulate to keep the supply air at P1 – P3.
The extract air needs to be warmer than the outdoor air for the HRU to be able to recover heat energy.

Cooling:
The heat recovery unit (HRU) tries to keep the supply air at P1 + P2/2.
If the supply air rises above P1 + P4 because the HRU can't recover enough cooling energy, the additional cooling (accessory) will start to regulate to keep the supply air at P1 + P4.
The extract air needs to be colder than the outdoor air for the HRU to be able to recover cooling energy.

Components

Heat recovery
The heat recovery unit is always the first step used in the temperature control. The purpose of the heat recovery is to take heat/cool energy from the extract air and transfer it back to the supply air. The heat recovery unit is an active element which uses a PI regulated stepper signal for speed control.

Additional heating
From this page you can turn on or off **{171|Electric heater}** the electric heater (Default).
If a water battery is configured, only setpoints shown in the table below is shown.

When heating is required the first step is the heat recovery unit which recovers heat from the extract air. If the supply air temperature can't be reached only using the heat recovery unit the additional heating component will be used.

Air/Air temperature/Additional heating

| | Additional heating | B | I | Default | Range | Resolution | Unit | BACnet object | Modbus | |
									Reg	Data type
171	Electric heater	RW	RW	On	Off; On	0	0	BVAL,445	4x3035	Uint 16
	Fan switch-off delay to cool down electrical heater									
172	Delay	--	--	90	0 to 300	10	s	PINTVAL,34	4x1299	Uint 32
	Neutral zone for additional heating									
196	Home	--	RW	1	0 to 10	0,5	K	AVAL,1921	4x1161	Float 32
199	Away	--	RW	1	0 to 10	0,5	K	AVAL,1987	4x1169	Float 32
*	**Settings Water battery**									
* 184	Frost protection	--	R	5	0 to 30	1	°C	AVAL,1949	4x1359	Float 32
* 185	Frost risk	--	R	10	0 to 30	1	°C	AVAL,1880	4x1355	Float 32
* 186	Standby protection	--	R	25	0 to 30	1	°C	AVAL,1881	4x1363	Float 32

*Accessories and/or configuration needed

Cooling (Accessory)

This page is only visable for an installer and only if a cooling component is configured and installed.

When cooling is required the heat recovery unit can be used if the extract air is colder than the outside air. If the supply air temperature can't be reached only using the heat recovery unit the additional cooling component may be used.

Air/Air temperature/Cooling

| | Cooling | B | I | Default | Range | Resolution | Unit | BACnet object | Modbus | |
									Reg	Data type
	Neutral zone for cooling									
195	Home	--	RW	2	0 to 10	0,5	K	AVAL,1926	4x1159	Float 32
198	Away	--	RW	6	0 to 10	0,5	K	AVAL,1992	4x1167	Float 32
	Outdoor temperature release for cooling									
158	Cooling release	--	RW	20	0 to 40	0,5	°C	AVAL,76	4x1173	Float 32
	Limitations for DX on/off time									
166	Min DX off time	--	RW	300	0 to 3600	60	s	PINTVAL,322	4x1253	Uint 32
167	Min DX on time	--	RW	300	0 to 3600	60	s	PINTVAL,325	4x1255	Uint 32
	Valve position for DX on/off									
161	DX on	--	--	5	0 to 100	1	%	PINTVAL,320	4x1249	Uint 32
162	DX off	--	--	3	0 to 100	1	%	PINTVAL,321	4x1251	Uint 32

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Outdoor temperature compensation

From this page an installer can change the settings to activate this functionality.

During hot summer periods or cold winter times, the temperature setpoint may be weather compensated to increase comfort or cost-optimize the operation. Compensation can be set individually for summer and winter, with dedicated settings to adjust the temperature setpoint.

Winter compensation
{57 | setpoint shift}
{55 | Start temperatur}
{56 | End temperature}

Summer compensation
{60 | setpoint shift}
{58 | Start temperatur}
{59 | End temperature}
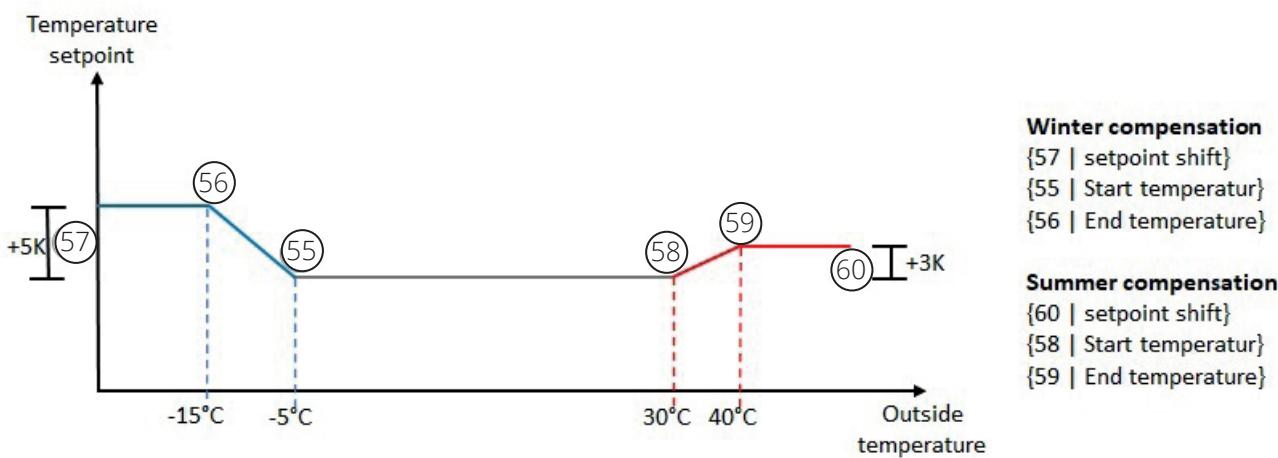
Outdoor temperature compensation is active when setpoint shift (**{57|Setpoint shift}** or **{60|Setpoint shift}**) is defined (≠0) and the outside temperature is below/above set start limits (**{55|Start temperature}** or **{58|Start temperature}**). It has an influence on the temperature setpoint for both supply air and extract air cascade control.

Air/Air temperature/Outdoor air compensation

	Outdoor air compensation	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus Reg	Data type
	Winter compensation									
57	Setpoint shift	--	RW	0	-10 to 10	1	K	AVAL,107	4x1179	Float 32
55	Start temperature	--	RW	-5	-20 to 0	1	°C	AVAL,106	4x1175	Float 32
56	End temperature	--	RW	-15	-30 to 0	1	°C	AVAL,102	4x1177	Float 32
	Summer compensation									
60	Setpoint shift	--	RW	0	-10 to 10	1	K	AVAL,79	4x1185	Float 32
58	Start temperature	--	RW	30	20 to 40	1	°C	AVAL,78	4x1181	Float 32
59	End temperature	--	RW	40	20 to 50	1	°C	AVAL,75	4x1183	Float 32

Secondary temperature zone (Accessory)

The product can be configured to control an additional heating battery to further heat a secondary temperature zone. If it is configured and connected, the product controls it to keep a set temperature defined by a positive delta that is added to the supply air setpoint **{492|Delta}**. Example: If the ventilation mode is set to Home and the setpoint **{259|Home}** is set at 20 °C and the **{492|Delta}** is set at 2 K, the secondary temperature zone will try to keep the air at 22°C.

The Secondary temperature zone page is only visable for an installer and only if a secondary temperature zone water battery is configured and installed.

									Modbus	
	Secondary temperature zone	B	I	Default	Range	Resolution	Unit	BACnet object	Reg	Data type
	Settings Water battery									
493	Frost risk	--	R	10	0 to 30	1	°C	AVAL,1897	4x1179	Float 32
494	Frost protection	--	R	5	0 to 30	1	°C	AVAL,2022	4x1175	Float 32
495	Standby protection	--	R	25	0 to 30	1	°C	AVAL,1898	4x1177	Float 32

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3.3. AIR QUALITY (CO$_2$) REGULATION (ACCESSORIES)

From this page you can see the air quality limits for ventilation modes Home and Away. As an installer you can also change the limits and certain settings explained below.

By using a CO$_2$ sensor as an input from a room, this function controls the fan speeds to keep the ppm-level under the set limit. Individual limits can be set for ventilation modes: **Away {44|Away}** and Home **{45|Home}.**
If the CO$_2$ level exceeds the set limit, the air quality controller increases the fan speed to bring in more fresh air. The calculation is performed by a PI-controller. Fan speed is controlled dynamically to a higher value until it reaches the HIGH ventilation mode speed for both fans, if necessary. Minimum speed is defined by the active ventilation mode.

During active air quality control, the speed of both fans will be increased and decreased linearly and simultaneously with symmetrical control signal which keeps the set difference in every situation and the air quality below the limit. When the ppm value drops below the limit, air quality controlling reduces the fan speed until the defined level for the active ventilation mode.

It is possible to use more than one Air quality (CO$_2$) sensor simultaneously from different rooms. In that case, the highest value is used. Air quality (CO$_2$) sensors are available as cabled (0-10V) or as wireless. Max one sensor of each type can be connected.

⚠️ This function will temporarily override the selected fan speed settings. When the increased demand returns to normal level, the unit will return to the selected ventilation mode.

Air/Air Quality (CO$_2$)

									Modbus	
	Air Quality (CO$_2$)	B	I	Default	Range	Resolution	Unit	BACnet object	Reg	Data type
>	Air quality, advanced settings									
	Limit									
45	Home	R	RW	700	500 to 1500	10	ppm	AVAL,23	4x1109	Float 32
44	Away	R	RW	700	500 to 1500	10	ppm	AVAL,22	4x1107	Float 32
	Sensors									
453	ECU: 0-10V sensor	R	R	0	0 to 2000	1	ppm	AI,77	3x0045	Float 32
214	0-10V sensor	R	R	0	0 to 2000	1	ppm	AI,60	3x0149	Float 32
215	Wireless sensor	R	R	0	0 to 2000	1	ppm	AVAL,2096	3x1007	Float 32

Air/Air Quality (CO$_2$)/Air quality, advanced settings

	Air quality, advanced settings	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus	
									Reg	Data type
	X3: Settings, 0-10V sensor									
97	Min input signal	--	RW	0	0 to 10	0,1	V	AVAL,2100	4x1121	Float 32
99	Max input signal	--	RW	10	0 to 10	0,1	V	AVAL,2101	4x1123	Float 32
101	Min input CO$_2$	--	RW	0	0 to 5000	10	ppm	AVAL,2098	4x1117	Float 32
103	Max input CO$_2$	--	RW	2000	0 to 5000	10	ppm	AVAL,2099	4x1119	Float 32
	ECU: Settings, 0-10V sensor									
98	Min input signal	--	RW	0	0 to 10000	100	mV	AVAL,2104	4x1129	Float 32
100	Max input signal	--	RW	10000	0 to 10000	100	mV	AVAL,2105	4x1131	Float 32
102	Min input CO$_2$	--	RW	0	0 to 5000	10	ppm	AVAL,2102	4x1125	Float 32
104	Max input CO$_2$	--	RW	2000	0 to 5000	10	ppm	AVAL,2103	4x1127	Float 32

3.4. AIR HUMIDITY REGULATION

The purpose of the function is to dehumidify the building through increased ventilation. When the moisture level is back to normal, the product returns to the selected ventilation mode.
Depending on the type of humidity sensor used (extract air or accessory), the functionality partially differs. The two different methods are described in section 3.4.1 and 3.4.2.

3.4.1. HUMIDITY REGULATION WITH THE EXTRACT AIR HUMIDITY SENSOR

⚠️ This function will temporarily override the selected fan speed settings. When the invcreased demand returns to normal level, the unit will return to the selcted ventilation mode.
NB! Make sure that ventilation mode HIGH is properly commisioned to your building, in order to achieve correct functionality.

The product includes an extract air humidity sensor, which measures the humidity level in the extract air duct and represents an average for the entire building. The sensor is used to control the dehumidification function inside the product.

The dehumidification function continuously monitors changes in humidity levels and activates when the humidity level exceeds a predetermined **{552|Switch-on point.** Once activated, the function sets the ventilation mode to HIGH, and runs until a **{553|Switch-off point** with decreasing humidity level is detected. After reaching the switch-off point, a time delay **{554|Switch-off delay** is activated, to ensure that the dehumidification function is running until the humidity increase has decreased. The unit then returns to the selected ventilation mode.

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If the function cannot reduce the humidity level within a certain time after activation, **{555|Maximum runtime}**, the function ends, and the unit returns to the selected ventilation mode.

Note that the function only operates when the HOME and AWAY ventilation modes are selected.

If the dehumidification function is triggered too frequently or not often enough, you can adjust the sensitivity of the **{552|Switch-on point}**.
· A higher value slows down the function.
· A lower value speeds up the function.

The function can be enabled or disabled by changing the **{557|Dehumidification function}** setting.

Extract air sensor

	Air Humidity	B	I	Default	Service	Range	Unit	BACnet object	Modbus Reg	Modbus Data type
>	Air humidity, advanced settings									
	Extract air sensor, sensitivity settings:									
557	Dehumidification function	RW	RW	1	Disabled Enabled	0	0	MVAL,620	4x3043	Uint 16
552	Switch-on point	RW	RW	1	0,6 to 10	0,2	0	AVAL,2295	4x1635	Float 32
553	Switch-off point	RW	RW	-0,3	-10 to -0,3	0,1	0	AVAL,2292	4x1637	Float 32
550	Calculated value	R	R	0	-100 to 100	0,1	0	AVAL,2308	3x1085	Float 32
	Extract air sensor, time settings:									
554	Switch-off delay	RW	RW	30	0 to 120	0	min	PINTVAL,262	4x1639	Uint 32
555	Maximum runtime	RW	RW	120	60 to 600	0	min	PINTVAL,263	4x1641	Uint 32
	Room sensors, limits									
50	Home	RW	RW	70	30 to 100	1	%RH	AVAL,62	4x1135	Float 32
49	Away	RW	RW	80	30 to 100	1	%RH	AVAL,63	4x1133	Float 32
	Sensors									
560	Extract air sensor	R	R	0	10 to 95	0,1	%RH	AI,96	3x0061	Float 32
216	0-10V sensor	R	R	0	0 to 100	1	%	AI,50	3x0061	Float 32
217	Wireless room sensor 1	R	R	0	0 to 100	1	%	AVAL,2093	3x1001	Float 32
218	Wireless room sensor 2	R	R	0	0 to 100	1	%	AVAL,2094	3x1003	Float 32
219	Wireless room sensor 3	R	R	0	0 to 100	1	%	AVAL,2095	3x1005	Float 32

	Air Humidity, advanced settings	B	I	Default	Service	Range	Unit	BACnet object	Modbus Reg	Modbus Data type
	Duty cycle at high outdoor humidity for room sensor control									
*53	On time	--	RW	1800		0 - 10000	s			
*54	Off time	--	RW	1800		0 - 10000	s			

* Only visible if room sensors (accessories) are installed

3.4.2. HUMIDITY REGULATION (ACCESSORIES)

From this page you can change the humidity limits for ventilation modes Home and Away. As an installer you can also change certain settings explained below.

By using a humidity sensor as an input from a room, this function controls the fan speeds to keep the humidity level under the set limit. Individual limits can be set for ventilation modes: Away **{49|Away}** and Home **{50|Home}**.

If the relative humidity exceeds the set limit, the humidity controller increases the fan speed to bring in more fresh air. The calculation is performed by a PI-controller. Fan speed is controlled dynamically to a higher value until it reaches the HIGH ventilation mode speed for both fans, if necessary. Minimum speed is defined by the active ventilation mode.

Since increased ventilation alone cannot lower the humidity level in every situation, the controller calculates internally the dew point from the air humidity with a fix room temperature value of 22°C, to define if outside air temperature is sufficient for lowering the humidity level in the room. In case the outside air temperature is low enough to assure dehumidification, the PI-control works continuously. Otherwise, the PI works periodically with configurable on time **{53|On time}** and off time **{54|Off time}** for the function.
The function is deactivated when the relative humidity drops below the current limit.

It is possible to use more than one humidity sensor simultaneously from different rooms. In that case, the highest value is used.

> ⚠ This function will temporarily override the selected fan speed settings. When the increased demand returns to normal level, the unit will return to the selected ventilation mode.

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Humidity sensors – Accessories (only visible if existing)

	Air Humidity	B	I	Default	Range	Step	Unit	BACnet object	Modbus Reg	Data type
>	Air humidity, advanced settings									
	Limit									
50	Home	RW	RW	70	30 - 100	1	%RH	AVAL,62	4x1135	Float 32
49	Away	RW	RW	80	30 - 100	1	%RH	AVAL,63	4x1133	Float 32
	Sensors									
216	0-10V sensor	R	R	0	0 - 100	1	%RH	AI,50	3x0061	Float 32
217	Wireless sensor 1	R	R	0	0 - 100	1	%RH	AVAL,2093	3x1001	Float 32
218	Wireless sensor 2	R	R	0	0 - 100	1	%RH	AVAL,2094	3x1003	Float 32
219	Wireless sensor 3	R	R	0	0 - 100	1	%RH	AVAL,2095	3x1005	Float 32

Air/Air Humidity/Air humidity, advanced settings (only visible if existing)

	Air humidity, advanced settings	B	I	Default	Range	Step	Unit	BACnet object	Modbus Reg	Data type
	Settings, 0-10V sensor									
105	Min input signal	--	RW	0	0 - 10	0,01	V	AVAL,2108	4x1151	Float 32
106	Max input signal	--	RW	10	0 - 10	0,01	V	AVAL,2109	4x1153	Float 32
107	Min input R.H	--	RW	0	0 - 100	1	%RH	AVAL,2106	4x1147	Float 32
108	Max input R.H	--	RW	100	0 - 100	1	%RH	AVAL,2107	4x1149	Float 32
	Duty cycle at high outdoor humidity for room sensor control									
53	On time	--	R	1800	0 - 10000	100	s	PINTVAL,265	4x1143	Float 32
54	Off time	--	R	1800	0 - 10000	100	s	PINTVAL,266	4x1145	Float 32

3.5. FANS

Air flow (Default)
The supply fan and extract fan have individual setpoints for each ventilation mode, m³/h value is used. The controller uses a PI-regulator to control the fan speed to keep the air flow at the setpoint for the current ventilation mode.

If a pressure sensor becomes faulty and flow control can no longer be guaranteed, fan control of the fan with faulty sensor is automatically switched to fan speed control. Setpoints used for the fan speed control are then calculated by using the unit's nominal air flow value as 100% and setting the actual flow setpoint proportionally according to the maximum value. Example: When air flow nominal is 100 m³/h and AWAY flow is set to 35 m³/h then fan speed of 35 % (3,5 V) is used in case of a fault.

Air/Fans

	Fans	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus	
									Reg	Data type
>	Fans, advanced settings									
	Fan setpoints, Away									
32	Supply air	RW	RW	130	100 to 240	1	m³/h	AVAL,18	4x1017	Float 32
33	Extract air	RW	RW	140	100 to 240	1	m³/h	AVAL,12	4x1019	Float 32
	Fan setpoints, Home									
30	Supply air	RW	RW	225	140 to 340	1	m³/h	AVAL,19	4x1009	Float 32
31	Extract air	RW	RW	240	140 to 340	1	m³/h	AVAL,13	4x1011	Float 32
	Fan setpoints, High									
34	Supply air	RW	RW	300	240 to 400	1	m³/h	AVAL,20	4x1001	Float 32
35	Extract air	RW	RW	315	240 to 400	1	m³/h	AVAL,14	4x1003	Float 32
	Fan setpoints, Cooker hood									
38	Supply air	RW	RW	225	100 to 400	1	m³/h	AVAL,15	4x1033	Float 32
39	Extract air	RW	RW	240	100 to 400	1	m³/h	AVAL,10	4x1035	Float 32
	Fan setpoints, Fireplace									
36	Supply air	RW	RW	260	100 to 400	1	m³/h	AVAL,16	4x1025	Float 32
37	Extract air	RW	RW	240	100 to 400	1	m³/h	AVAL,11	4x1027	Float 32

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Fans, advanced settings

On this page you can view some fan parameters and an installer can select how the duct pressure control is connected if it is configured and installed.

	Fans, advanced settings	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus Reg	Data type
	Settings, fan montitoring									
>	Unit for air flow									
73	Fan montitoring	--	--	TRUE	Off; On	0	0	BVAL,426	4x3005	Uint 16
74	Alarm limit	--	--	100	0 to 1000	1	rev/min	AVAL,1944	4x1087	Float 32
	Max setting									
220	Air flow	--	R	400	0 to 2000	1	m³/h	AVAL,155	4x1061	Float 32
	Max setting									
263	Duct pressure	--	R	250	0 to 1250	1	Pa	AVAL,1855	4x1067	Float 32
	Sensor selection, duct pressure									
222		--	RW	1	Supply air & Extract air Supply air Extract air	0	0	MVAL,362	4x3042	Uint 16
	Supply fan									
19	Control signal	R	R	NULL	0 to 100	1	%	AO,3	4x0005	Float 32
266	Duct pressure	R	R	0	-3000 to 3000	1	Pa	AI,79	3x0037	Float 32
25	Air flow	R	R	0	0 to 100000	1	m³/h	AVAL,168	3x1011	Float 32
20	Speed	R	R	0	0 to 18000	0,1	rev/min	AI,5	3x0021	Float 32
27	Pressure (Diff)	--	R	0	-3000 to 3000	1	Pa	AI,73	3x0053	Float 32
67	K-factor	--	--	28,5	0 to 500	0,1	0	AVAL,154	4x1079	Float 32
	Extract fan									
22	Control signal	R	R	NULL	0 to 100	1	%	AO,4	4x0009	Float 32
267	Duct pressure	R	R	0	-3000 to 3000	1	Pa	AI,78	3x0041	Float 32
26	Air flow	R	R	0	0 to 100000	1	m³/h	AVAL,236	3x1015	Float 32
23	Speed	R	R	0	0 to 18000	0,1	rev/min	AI,12	3x0025	Float 32
28	Pressure (Diff)	--	R	0	-3000 to 3000	1	Pa	AI,72	3x0057	Float 32
71	K-factor	--	--	26,5	0 to 500	0,1	0	AVAL,233	4x1097	Float 32

3.6.   AIR FILTER

The air filters are default set to be changed every six months (The period can be changed, see chapter Additional functions). This will be shown as maintenance message 1020, or you can see how long time there is until a filter change is needed in the Air filter page. When it's time, you can reset the counter from the maintenance message or from the Air filter page.

3.7.   HEAT RECOVERY

For a service technician it's possible to adjust different parameters for the cooling recovery function.

	Heat recovery	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus Reg	Data type
	Select the desired control for the rotary heat exchanger:									
590	Control	--	RW	1	Speed Control On/Off Control	0	0	BVAL,649	4x3051	Uint 16
	Speed Control:									
	In this mode, the heat exchanger's rotor speed is regulated to maintain the supply air temperature at the setpoint, assuming the temperature conditions allow.									
	On/Off Control:									
	In this mode, the heat exchanger's rotor speed will be set to 100% when there is a cooling/heating need, and 0% when there is no cooling/heating need, assuming the temperature conditions allow. The minimum time for how long the rotor speed should remain at each level can be adjusted.									
621	Min Off time (0%)	--	RW	20	10 to 600	10	min	PINTVAL,1287	4x1673	Uint 32
622	Min On time (100%)	--	RW	60	10 to 600	10	min	PINTVAL,1288	4x1671	Uint 32

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4. Water

Main menu
- Home
- Air
- Water
- Heating
- More
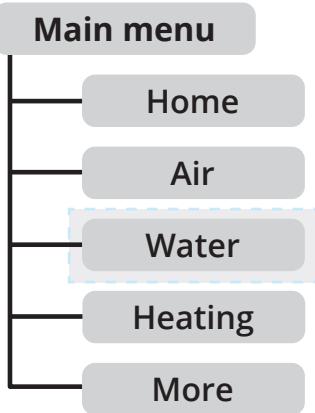
On this page you can view the water tank operating information. You can also change the water mode in the Water panel. Available water modes are Eco, Comfort and Temporary boost.

Eco: The most economical way to produce hot water. The system uses the top sensor in the hot water tank to trigger a charge of hot water from the heat pump. When the charge starts there is about 15 % hot water left in the tank.

Comfort: An economical way to produce hot water. The system uses the middle sensor in the hot water tank to trigger a charge of hot water from the heat pump. When the charge starts there is about 50 % hot water left in the tank. If the hot water consumption is high and the hot water level in the tank gets below 15 %, the system activates an additional electrical heater to increase the hot water production.

Temporary boost: This is a temporary mode with a set duration that you can activate if you are going to have a very high consumption of hot water. This mode activates the charge of hot water as soon as the hot water level in the tank is less than 100% and activates the additional electrical heater if the hot water level is less than 50 %. After the duration the water mode returns to the previous mode, Eco or Comfort.

Water

Water	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus Reg	Data type
Status hot water									
334	R	R	0	Standby Loading tank Heating from tank Loading tank Legionella phase 2 Standby Loading tank Legionella	0	0	MVAL,40	4x2061	Uint 16
Tank temperatures									
450 Top sensor	R	R	0	-50 to 150	0,1	°C	AI,70	3x0081	Float 32
449 Middle sensor	R	R	0	-50 to 150	0,1	°C	AI,69	3x0085	Float 32
433 Bottom sensor	R	R	0	-50 to 150	0,1	°C	AI,58	3x0089	Float 32
Status heat pump									
419	R	R	1	Standby Air purge process Startup process Normal operation Stop process Defrost operation Standby when error Manual operation Forced fan operation Forced pump operation State 10 State 11 State 12 State 13 State 14 State 15	0	0	MI,1	3x3028	Uint 16
Electric heating									
337 Control signal	R	R	NULL	0 to 100	0,1	%	AVAL,264	4x0085	Float 32
Temperatures in the water circuit									
445 From the water tank	--	R	0	-50 to 150	0,1	°C	AI,65	3x0093	Float 32
446 To the water tank	--	R	0	-50 to 150	0,1	°C	AI,66	3x0113	Float 32
Power electric heating									
458 Selection	--	--	TRUE	1kW; 3kW	0	0	BVAL,47	4x3020	Uint 16
Is the frost protection damper mounted on a common exhaust air duct from the heat pump and ventilation?									
525 Selection	--	--	TRUE	Nej; Ja	0	0	BVAL,446	4x3018	Uint 16

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5. Heating

```
Main menu
├── Home
├── Air
├── Water
├── Heating ── Advanced settings ──┬── Heating curve settings      EcoNordic
├── More                           └── Floor drying function       WH4
```
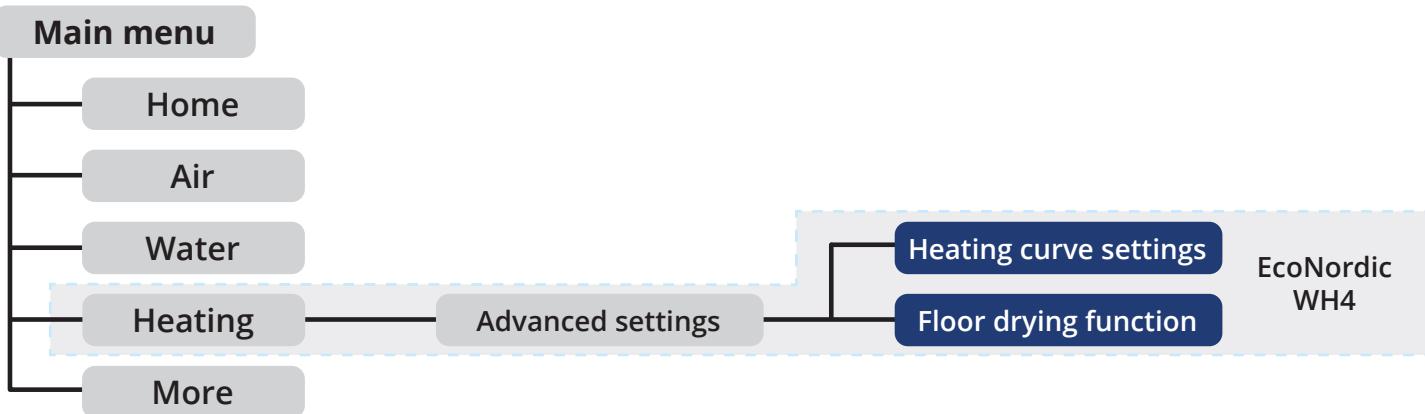
On this page you can view the heating operating information. You can also change the temperature setpoint for heating from the heating panel.

Heating/

	Heating	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus	
									Reg	Data type
	Status heating									
455		R	R	0	Standby Standby Heating from tank Heating & loading tank HP not available Swith-off delay flow through heater Legionella phase 2 Heating from Heat Pump Heating & loading tank Legionella	0	0	MVAL,40	4x2061	Uint 16
	Flow temperature:									
340	Setpoint	R	R	0	0 to 100	0,1	°C	AVAL,258	3x1055	Float 32
448	Actual value	R	R	0	-50 to 150	0,1	°C	AI,68	3x0097	Float 32
	Return temperature									
447	Actual value	R	R	0	-50 to 150	0,1	°C	AI,67	3x0101	Float 32
	Circulation pump, secondary									
441	Speed	R	R	NULL	0 to 100	1	%	AO,30	4x0061	Float 32
	Status heat pump									

	Heating	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus Reg	Modbus Data type
419		R	R	1	Standby Air purge process Startup process Normal operation Stop process Defrost operation Standby when error Manual operation Forced fan operation Forced pump operation State 10 State 11 State 12 State 13 State 14 State 15	0	0	MI,1	3x3028	Uint 16
	Electric heating									
337	Control signal	R	R	NULL	0 to 100	0,1	%	AVAL,264	4x0085	Float 32
>	Advanced settings									

5.1. ADVANCED SETTINGS

As a basic user you can parallel shift **{342|Parallel shift}** the entire heating curve if the temperature in the house differs from the set value **{518|Set value}**. If the temperature is lower than the set value, you increase the parallel shift. If the temperature is higher than the set value, you decrease the parallel shift.

- {349|Limit}: This limit decides at which outside temperature the heating starts to regulate. Change it if you want it to start at a higher or lower outside temperature.

- {546|Upper limit} and {547|Lower limit}: The upper and the lower limit defines a working area where the product takes energy for space heating demands from the hot water tank. This is done to reduce the number of starts/stops due to low power demands inside the working area. Changing the lower limit will affect at which outside temperature the heat pump will start to produce energy directly to the space heating ciruit.

- {497|Limit}: This limit decides at which outside temperature the electric heater can assist.

- {365|Min}: This setpoint sets the min limit for the flow temperature setpoint. This means that the flow temperature setpoint can never go below this setpoint regardless of heat curve settings.

- {366|Max}: This setpoint sets the max limit for the flow temperature setpoint. This means that the flow temperature setpoint can never go above this setpoint regardless of heat curve settings.

- {372|Delta}: This sets the delta that the regulator aims to keep between the flow and return temperatures.

- {520|Hysteresis Off} and {521|Hysteresis On}: The hysteresis decides when the heating starts and stops. The heating starts if the flow temperature drops the on hysteresis below the current flow temperature setpoint. If the flow temperature rises by the off hysteresis over the current flow temperature setpoint for 30 min the heating stops.

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Heating/Advanced setting

| | Heating, advanced | B | I | Default | Range | Resolution | Unit | BACnet object | Modbus | |
									Reg	Data type
>	Heating Curve settings									
>	Floor drying function									
	If the temperature in the housing differs from the set value, you can use parallel shift to shift the entire heating curve.									
518	Set value	R	R	20	10 to 30	0,5	°C	AVAL,1918	4x1451	Float 32
342	Parallel shift	RW	RW	0	-20 to 20	0,5	K	AVAL,1974	4x1449	Float 32
	Outdoor temperature limit for activation of space heating									
349	Limit	--	RW	22	-50 to 50	1	°C	AVAL,265	4x1415	Float 32
	Outdoor temperature range where space heating needs between 1.5kW - 2.5kW									
546	Upper limit	--	RW	15	-25 to 25	1	°C	AVAL,2288	4x1617	Float 32
547	Lower limit	--	RW	-5	-25 to 25	1	°C	AVAL,2287	4x1619	Float 32
	Outdoor temperature limit that allows electric heater to assist space heating									
497	Limit	--	RW	-8	-25 to 25	1	°C	AVAL,276	4x1467	Float 32
	Limits for flow temperature									
365	Min	--	RW	25	5 to 50	1	°C	AVAL,1760	4x1419	Float 32
366	Max	--	RW	35	15 to 60	1	°C	AVAL,1761	4x1417	Float 32
	Delta between flow and return									
372	Delta	--	RW	5	1 to 20	0,5	K	AVAL,269	4x1473	Float 32
	Hysteresis (on/off)									
521	On	--	RW	2	0 to 20	0,5	K	AVAL,2272	4x1609	Float 32
520	Off	--	RW	4	0 to 20	0,5	K	AVAL,2273	4x1611	Float 32

Heating Curve settings

An installer can also change the flow temperature setpoint for each point in the 7-point heating curve. Each point on the heating curve corresponds to an outside temperature.

Below is a chart displaying the default heating curve and how the flow temperature is calculated between the 7 points.
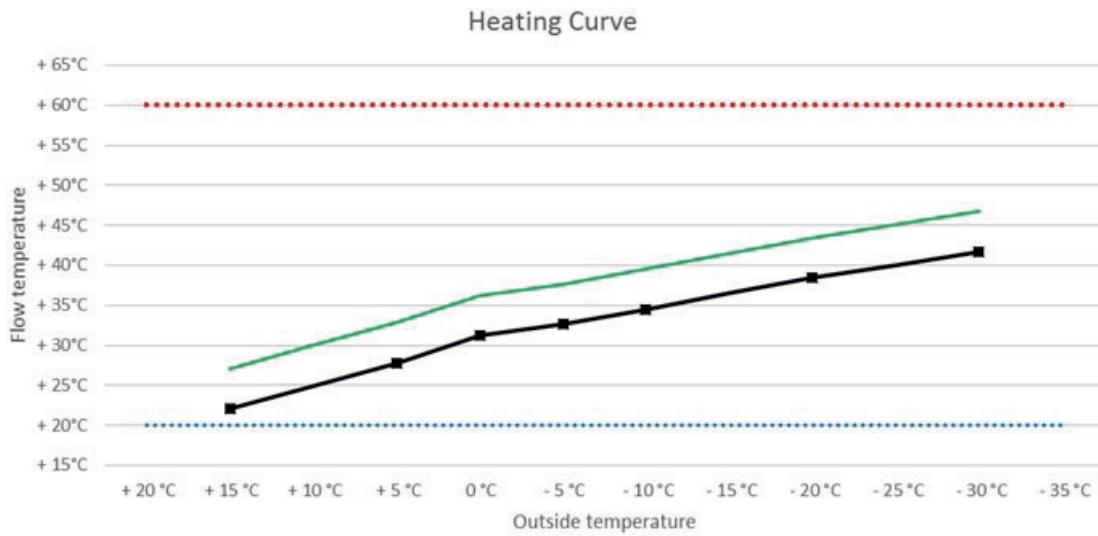

Heating Curve

Heating

≤	Heating curve	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus	
									Reg	Data type
	Here you can adjust the flow temperature for each point in the heating curve									
395	Outside air: 15 °C	--	RW	24,1	5 to 60	0,1	°C	AVAL,1973	4x1447	Float 32
394	Outside air: 5 °C	--	RW	29,8	5 to 60	0,1	°C	AVAL,1972	4x1443	Float 32
393	Outside air: 0 °C	--	RW	33	5 to 60	0,1	°C	AVAL,1971	4x1439	Float 32
392	Outside air: -5 °C	--	RW	34,6	5 to 60	0,1	°C	AVAL,1970	4x1435	Float 32
391	Outside air: -10 °C	--	RW	36,5	5 to 60	0,1	°C	AVAL,1969	4x1431	Float 32
390	Outside air: -20 °C	--	RW	40,4	5 to 60	0,1	°C	AVAL,1968	4x1427	Float 32
389	Outside air: -30 °C	--	RW	43,7	5 to 60	0,1	°C	AVAL,1967	4x1423	Float 32

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Floor drying function

An installer can activate a floor drying function. There are two different functions available, Constant flow or a predefined profile, which will run as shown in the chart below [Profile].
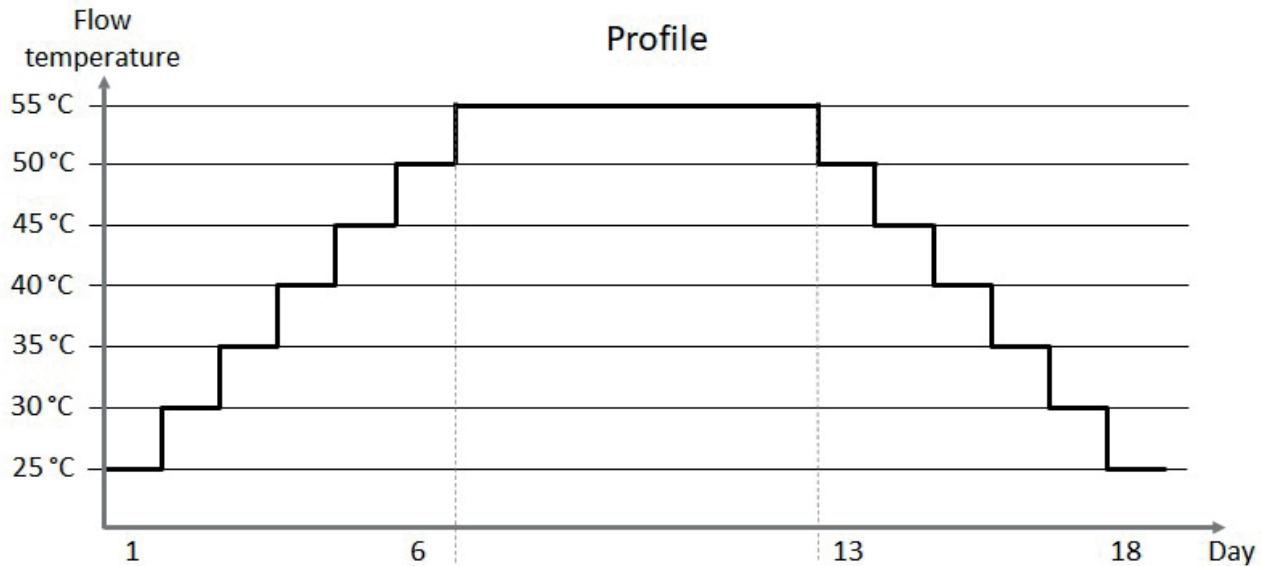

The constant flow function keeps a constant flow temperature for a set duration. Both the flow temperature **{406|Setpoint}** and the duration **{405|Duration}** can be configured.

Both functions are activated manually by selecting the function **{404|Function}** and will stay active for their duration. You can manually turn off the function by selecting None.

Heating

										Modbus	
≤	Floor drying function	B	I	Default	Range	Resolution	Unit	BACnet object		Reg	Data type
	Function: Profile										
	The function regulates the flow temperature against a predefined heating profile.										
	Function: Constant flow										
	The function keeps the flow temperature at a configurable setpoint and remains active for a configurable duration.										
	Parameters, constant flow										
405	Duration	--	RW	18	0 to 100	0	d	PINTVAL,327		4x1539	Uint 32
406	Setpoint	--	RW	50	20 to 60	1	°C	AVAL,2077		4x1541	Float 32
	Choose floor drying function										
404	Function	--	RW	1	None Constant flow Profile	0	0	MVAL,363		4x3021	Uint 16

6. More

Main menu
- **Home**
- **Air**
- **Water**
- **Heating**
- **More**
  - **Installer**
    - **Configuration**
    - **Wireless accessories**
    - **Commissioning**
    - **Communication**
    - **Periodic maintenance**
  - **Status heat pump**
  - **Additional functions**
    - **Wireless accessories**
    - **Settings, free cooling**
    - **Settings, deicing**
  - **Security**
  - **Alarm**
  - **System info**
  - **Operating hours**
  - **Service**
  - **About Flexit GO**
  - **Change product**
  - **Sign out**
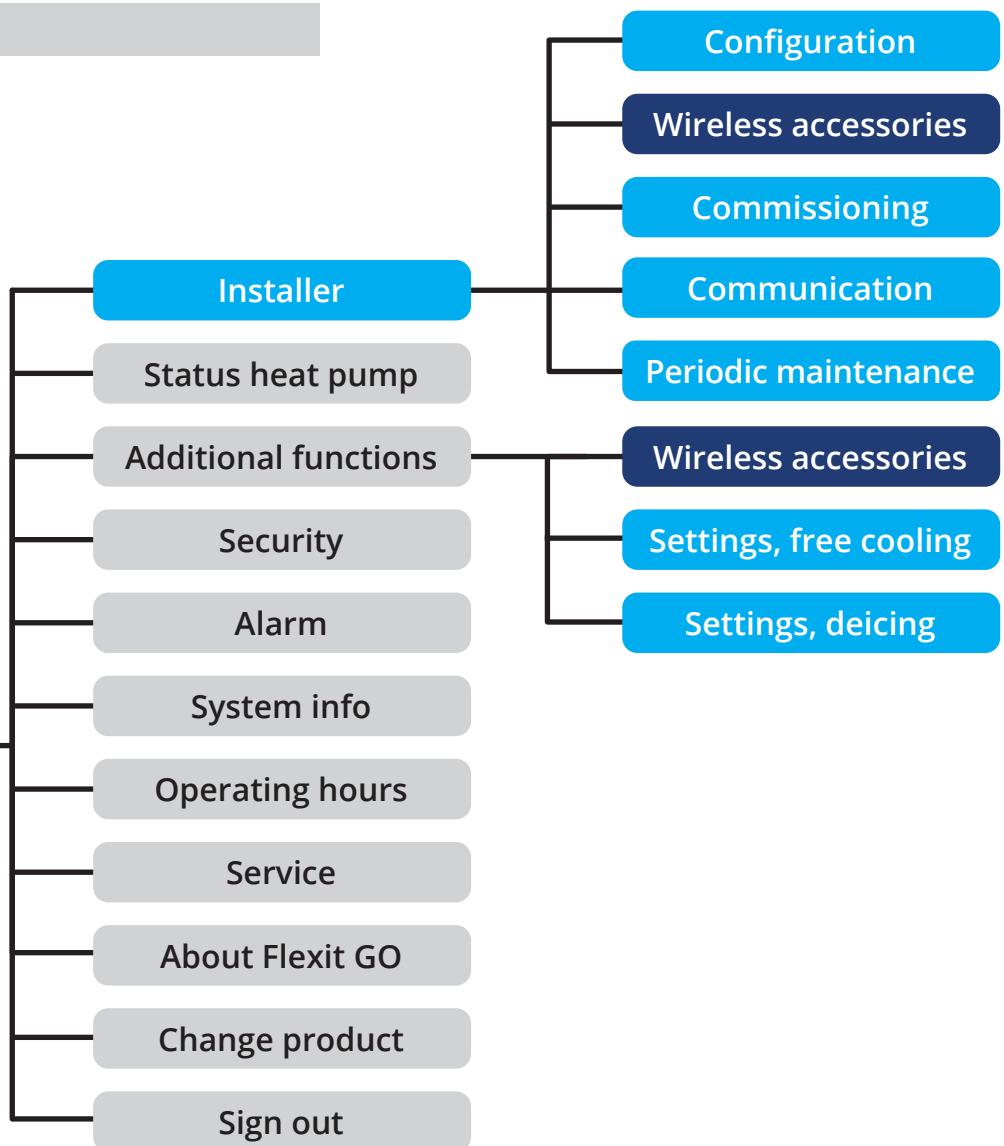
	More	B	I	Range	Unit
>	Installer				
>	Status heat pump				
>	Additional functions				
>	Security				
>	Alarm				
>	System info				
>	Operating hours				
>	Service				
>	About Flexit GO				
>	Change product				
>	Sign out				

FLEXIT

6.1.   INSTALLER

This page is only accessible when connected as installer using local network.

- **Configuration** is only necessary if accessories are to be installed and/or certain functionality or I/O needs to be added or changed.
- *****Wireless accessories** is only shown if the CI 75 Wireless adapter was connected and added in the configuration. From that page you can add wireless accessories (see chapter Wireless accessories).
- **Commissioning** starts a guide that steps the installer through the steps necessary for the specific installation, such as fan and temperature setpoints.
- **Communication** shows and let you configure settings for Modbus or BACnet communication.
- **Time zone.** Settings for time zone.

Configuration

When you enter this page, you will be prompted with a pop-up message informing you that to enter the configuration mode the application in the controller needs to be stopped and you can cancel or proceed. Stopping the application takes up to 2 minutes.
The configuration is divided into 2 sections, functionality and hardware I/O.

Functionality

Under functionality you can configure the following functions. The default function is marked as **this**.

Function	Choice	Comment
Temperature control ventilation	**Supply air control** Extract air cascade control	
Fan control	**Air flow** Duct pressure Fan speed	Duct pressure is commonly used together with VAV control.
Dehumidify control	**Off** On	Activate this function if you install humidity sensors.
Cooling coil	**None** Water DX	For Water or DX, you also need to select the cooling pump on Q1, Q2 or Q3.
Fire damper	**No** Yes	For Fire damper you also need to configure output on Q1, Q2 or Q3 and the feedback on DI1, DI2 or X8.
Secondary temperature zone	**None** Electrical Water	Activate this function if you have an additional heating battery that the product is to control. A positive offset setpoint added to the supply air setpoint is used for control

Hardware I/O

In the Configure hardware I/O page is it possible to change functions of some in and outputs on the control system. The bold and underlined choice is the default choice on a EcoNordic product.

Several I/O:s demands an accessory to be available for physical connection, please see comment in column "I/O available where" in table below, for more information.

I/O	Choice	I/O available where	Comment
DI1 Selection (Input)	None Cooker hood Fireplace *Fire damper feedback **High** Stop Home Away Emergency off CO detector Smoke detector - extract Smoke detector - supply Smoke detector - off Smoke detector - max	In 3-core cable on top of the unit.	Here you can choose the function of digital input DI1. The available choices are the different ventilation modes and the different Emergency inputs see chapter security. *If you have configured fire damper the feedback is available as a choice as well. If you select Emergency off, CO detector or Smoke detector, the input is automatically configured to NC function. All other selections are configured as NO function.
DI2 Selection (Input)	None **Cooker hood** Fireplace *Fire damper feedback High Stop Home Away Emergency off CO detector Smoke detector - extract Smoke detector - supply Smoke detector - off Smoke detector - max	In 3-core cable on top of the unit.	Here you can choose the function of digital input DI2. The available choices are the different ventilation modes and the different Emergency inputs see chapter security. *If you have configured fire damper the feedback is available as a choice as well. If you select Emergency off, CO detector or Smoke detector, the input is automatically configured to NC function. All other selections are configured as NO function.
X8 Selection (Input)	None Home Away Emergency off CO detector Smoke detector - extract Smoke detector - supply Smoke detector - off Smoke detector - max *Fire damper feedback **Cooker hood** Fireplace High Stop	In connection terminal on unit.	Here you can choose the function of digital input X8. The available choices are the different ventilation modes and the different Emergency inputs see chapter security. *If you have configured fire damper the feedback is available as a choice as well. If you select Emergency off, CO detector or Smoke detector, the input is automatically configured to NC function. All other selections are configured as NO function This I/O can only be configured as "Cooker hood" on Nordic KS3 model.
Q1 Selection (Output)	None **Outside air damper** *Fire damper Common alarm and maintenance indication Alarm indication Maintenance indication Operation indication Bypass damper *Cooling pump	In connection terminal on unit.	Here you can choose the function of digital output Q1. *Fire damper and cooling are not visible until they are configured as a function.

FLEXIT

I/O	Choice	I/O available where	Comment
Q2 Selection (Output)	None Outside air damper *Fire damper **Common alarm and maintenance indication** Alarm indication Maintenance indication Operation indication Bypass damper *Cooling pump	In connection terminal on unit.	Here you can choose the function of digital output Q2. *Fire damper and cooling are not visible until they are configured as a function.
Q3 Selection (Output)	**None** Outside air damper *Fire damper Common alarm and maintenance indication Alarm indication Maintenance indication Operation indication Bypass damper *Cooling pump	As accessory, Accessory harness EcoNordic.	Here you can choose the function of digital output Q3. *Fire damper and cooling are not visible until they are configured as a function.
CI75 – Wireless accessories	**None** Connected	On top of the unit.	Make sure that the adapter CI-75 is connected before you choose Connected.

6.2. STATUS HEAT PUMP

On this page an installer can view the heat pump status.
It requires local network connection.

More/Status heat pump

	Status heat pump	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus	
									Reg	Data type
419		R	R	1	Standby Air purge process Startup process Normal operation Stop process Defrost operation Standby when error Manual operation Forced fan operation Forced pump operation State 10 State 11 State 12 State 13 State 14 State 15	0	0	MI,1	3x3028	Uint 16
	Parameters									
421	Heat pump	--	R	-	Off On	0	0	BO,48	4x2070	Uint 16
422	Pump mode	--	R	-	Off On	0	0	BO,49	4x2079	Uint 16
460	Outside air	R	R	0	-50 to 150	0,1	°C	AI,15	3x0121	Float 32
461	Cold water in	R	R	0	-50 to 150	0,1	°C	AI,13	3x0117	Float 32
462	Hot water out	R	R	0	-50 to 150	0,1	°C	AI,14	3x0109	Float 32
463	Circulation pump	R	R	0	0 to 100	1	%	AI,17	3x0069	Float 32
464	Deicing	R	R	0	-50 to 150	0,1	°C	AI,51	3x0125	Float 32
465	Hot gas	R	R	0	-50 to 150	0,1	°C	AI,52	3x0129	Float 32
466	INV heat sink	R	R	0	-50 to 150	0,1	°C	AI,53	3x0133	Float 32
467	Fan speed	R	R	0	0 to 8000	1	rev/min	AI,54	3x0137	Float 32
469	Compressor speed	R	R	0	0 to 100	1	Hz	AI,56	3x0145	Float 32
468	System version	R	R	0	0 to 100	0,01	0	AI,55	3x0141	Float 32
417	Error code	--	R	0	0 to 10000	1	0	AI,16	3x0105	Float 32

FLEXIT

6.3. ADDITIONAL FUNCTIONS

From this page you can see if the functions Free cooling and Deicing are enabled or not and which interval time the filter change has. As an installer you can access and change the settings for those functions and change the filter change interval **{459|Interval}.**
You can also access the wireless accessories page to add wireless devices if the CI 75 Wireless adapter is connected and configured.

More/Additional functions

		Additional functions	B	I	Default	Range	Unit
*	>	Wireless accessories					
	206	Free cooling enabled	R	RW	Off	Off; On	
	>	Settings, free cooling					
	118	Deicing enable	R	RW	Off	Off; On	s
	>	Settings, deicing					
		Filter change, interval setting					
	459	Interval	R	RW	4380	0 - 8760	h

*Accessories and/or configuration needed

Wireless accessories (Accessory)
This page is only shown if the CI 75 wireless adapter has been connected and configured.

When the CI 75 Wireless adapter is connected and configured, you can add the following wireless devices:

Device	Max qty
CI78 - Control panel	3
CI77 - RH sensor	3
CI76 - CO_2 sensor	1
CI79 - Pressure switch	1

This page exists both here and under the Installer page. From this page you can add wireless accessories. Chose the device you want to add **{149|Chosen device}** and then wait for the **Pairing process status** to show **Start pairing procedure**, then activate the commissioning command on the wireless device and wait for the **Pairing process status** to show **Closed** and the chosen device to shift it's connected status under **Connected devices** from No to Yes. The procedure is the same for all wireless devices except for activating the commissioning command on the device itself.

More/Additional functions/Wireless accessories

	Wireless accessories	B	I	Default	Range	Unit
	Add wireless device					
149	Chosen device	RW	RW		All devices	
	Pairing process status					
233		R	R	Closed	Closed; Start pairing process	
	Connected devices					
224	CI78 - Control panel 1	R	R	No	No; Yes	
225	CI78 - Control panel 2	R	R	No	No; Yes	
226	CI78 - Control panel 3	R	R	No	No; Yes	
227	CI77 - RH sensor 1	R	R	No	No; Yes	
228	CI77 - RH sensor 2	R	R	No	No; Yes	
229	CI77 - RH sensor 3	R	R	No	No; Yes	
230	CI76 - CO_2 sensor	R	R	No	No; Yes	
231	CI79 - Pressure switch	R	R	No	No; Yes	
	Remove wireless device					
232	Chosen device	RW	RW		All devices	

Free cooling

The purpose of the Free cooling function is to ensure that overheated living area can be cost efficiently cooled down by using the lower outside temperatures just by increasing the air circulation. As an end user you can see if this function is activated or not, to change that and access the settings you need installer access.
Activation of the function occurs when the outside air temperature is more than **{210|DT B3-B4 enable start}** lower than the extract air temperature, and the extract air temperature is above **{205|Extract temp setpoint}**, and the outside air temperature is above **{208|Outside temp limit}**. During activation, the ventilation mode is set to HIGH and kept there until the extract air temperature is below **{205|Extract temp setpoint}** or the outside air temperature is less than **{211|DT B3-B4 disable}** lower than the extract air temperature, and more time than **{212|Min on time}** has elapsed.

More/Additional functions/Settings, free cooling

	Free cooling	B	I	Default	Range	Unit
205	Extract temp setpoint	--	RW	22	10 - 30	°C
208	Outside temp limit	--	RW	18	10 - 30	°C
212	Min on time	--	RW	600	0 - 10000	s
	Advanced settings					
210	DT B3-B4 enable start	--	RW	4	0 - 10	K
211	DT B3-B4 disable	--	RW	1	0 - 10	K

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Deicing
EcoNordic - The function is not enabled

The purpose of the function is to periodically get rid of ice from the heat recovery unit. Depending on prevailing conditions ice may start to accumulate on the unit or in some situation ice may already exist when the function is activated.

When the defrost function of the heat recovery unit is active, it will change the ventilation mode while running, which has a higher priority than the selected ventilation mode.

After defrosting is complete, the product returns to the selected operating mode.

⚠ The defost function will override Fireplace and Cooker hood ventilation modes. This can cause a suppression in the building, resulting in a poor functionality of the Fireplace and Cooker hood ventilation modes.

As an installer you can change the speed of the heat recovery **{122|Recovery speed}**, the speed of the supply fan **{123|Supply fan}** and the speed of the extract fan **{124|Extract fan}** for the active period of the function, if it isn't working satisfactory.

More/Additional functions/Settings, Deicing

| | Deicing | B | I | Default | Range | Resolution | Unit | BACnet object | Modbus | |
									Reg	Data type
	Exhaust air temperature for activation of:									
119	Rotor reduction	--	R	0	-30 to 10	0,5	°C	AVAL,1939	4x1301	Float 32
120	Fan reduction	--	R	0	-30 to 10	0,5	°C	AVAL,1938	4x1303	Float 32
	Settings for active deicing									
121	Active time	--	R	420	0 to 3600	10	s	PINTVAL,272	4x1305	Uint 32
122	Recovery speed	--	RW	100	0 to 100	1	%	AVAL,1852	4x1307	Float 32
123	Supply fan	--	RW	130	0 to 400	1	m³/h	AVAL,1854	4x1309	Float 32
124	Extract fan	--	RW	300	0 to 400	1	m³/h	AVAL,1956	4x1605	Float 32
	Settings for off time ramp start									
126	Max off time	--	R	6900	1000 to 18000	100	s	PINTVAL,298	4x1327	Uint 32
125	Off time ramp start	--	R	0	-50 to 0	0,5	°C	AVAL,1942	4x1325	Float 32
	Settings for off time ramp end									
128	Min off time	--	R	1800	100 to 18000	100	s	PINTVAL,299	4x1331	Uint
127	Off time ramp end	--	R	-9	-50 to 0	0,5	°C	AVAL,1943	4x1329	Float 32

6.4.   SECURITY

Fire damper
This page is only available for installers and if you have installed and configured a Fire damper. The fire dampers, which will close automatically when fire alarm from duct temperatures (If supply air temp or extract air temp is above 72°C) or smoke / fire alarm "Smoke detector - off" is active. In normal operational situation when power is on, the dampers are always open. When power drops off, dampers close automatically. After fire dampers have been closed due to alarm situation, normal operation cannot be resumed before error is manually acknowledged and reset.


Local fire safety regulations may require that fire dampers are being **periodically tested** to secure correct operation. Testing period is automatically made after interval is set. During active fire damper operation test the ventilation is first shut down, then dampers are driven close and back open again before ventilation may be resumed. Fire dampers have inbuilt auxiliary (limit switch) switches on both open and closed positions which signalizes that movement was successful. Limit switch works as a fire damper feedback.

FLEXIT

The feedback signal is "active" at both closed and opened damper position and is "inactive" if the damper is in the middle postion. If one of these signals is missing, A-alarm is generated, and unit is stopped. However, fire damper doesn't close in this particular case.

At start up and during test a **full test cycle** is executed
0.   Start
1.   Closing (Feedback = 0)
2.   Closed (Feedback = 1)
3.   Opening (Feedback = 0)
4.   Open (Feedback = 1)
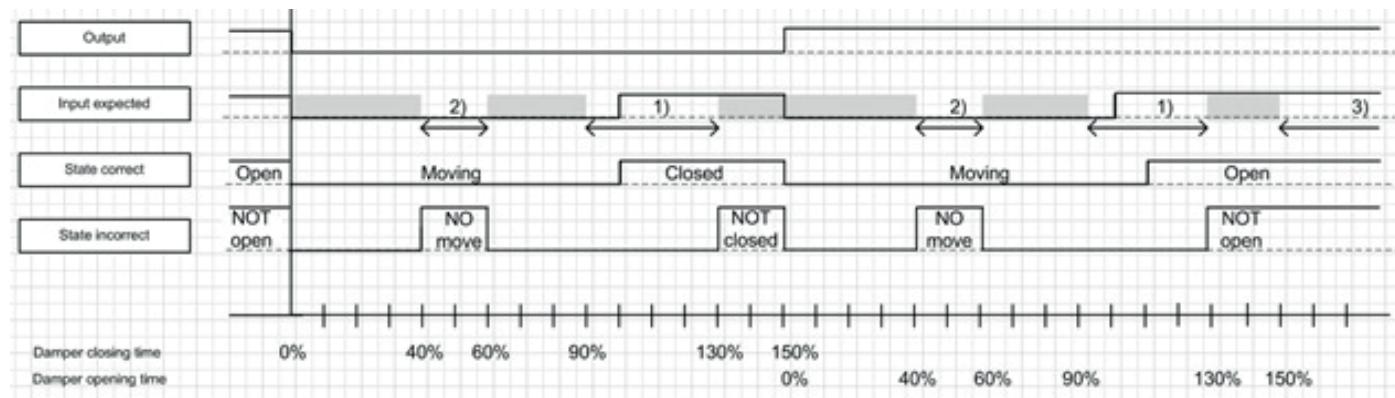
1) Input must be "1" once in the time range
2) Input must be "0" during the complete time range
3) Input must be "1" during the complete time range

        Input not supervised

After power up and after Acknowledge/Reset the actual damper position is not known.
Due to that only a **partial test** cycle is performed
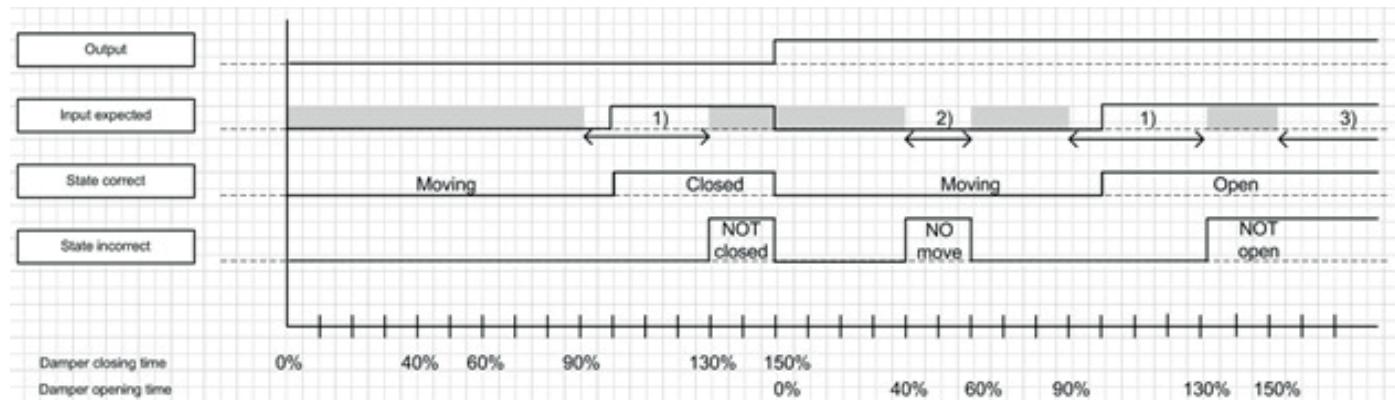
1) Input must be "1" once in the time range
2) Input must be "0" during the complete time range
3) Input must be "1" during the complete time range

        Input not supervised

Incase fire dampers are equipped with own thermostat, during fire situation dampers close autonomously and feedback signal will become inactive and generate an A-alarm for fire situation with emergency shut-down.

CO/smoke /fire alarm detection

Ventilation unit can be equipped with various kinds of hazard indicators such as smoke, carbon monoxide detectors or human interaction (push button). Within first phase of fire situation, it can be assumed that ventilation may be used to help the prevailing situation, thus functionality is different from temperature driven fire alarm coming from temperature measurement or fire damper indication.

Depending on the requirements, the ventilation unit can be set to react on an active signal in 6 different ways:
· "CO detector" signal on X8: Both fans would be switched to 100% speed in case of active alarm
· "Emergency off" signal on X8: Both fans would be switched to 0 % speed in case of active alarm
· "Smoke detector - supply" signal on X8: Supply fan would be switched to 100% speed and exhaust fan to 0 % speed
· "Smoke detector - extract" signal on X8: Supply fan would be switched to 0% speed and exhaust fan to 100% speed
· "Smoke detector - off" signal on X8: Both fans would be switched to 0 % speed in case of active alarm
· "Smoke detector - max" signal on X8: Both fans would be switched to 100% speed in case of active alarm

If any of these is configured, the status of the input is shown under **X8 input status**.

As long as the supply fan is running, the temperature control with a water heating coil tries to maintain the temperature setpoint. Frost protection is active any time whereas an electrical heating coil is permanently switched off.

Since ventilation operation is a reaction to A-alarm situation, the defined function will only be stopped after A-alarm is reset and acknowledged.

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More/Security

	Security	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus Reg	Data type
	Duct temperatures, fire alarm limits									
88	Supply air	--	--	72	40 to 100	1	°C	AVAL,56	4x1381	Float 32
89	Extract air	--	--	72	40 to 100	1	°C	AVAL,59	4x1383	Float 32
	Duct temperatures, maintenance limits									
91	Min supply air	--	--	0	0 to 100	1	°C	AVAL,58	4x1387	Float 32
90	Max supply air	--	--	60	0 to 100	1	°C	AVAL,57	4x1385	Float 32
	Fire damper settings & status									
92	Damper opening time	--	RW	45	0 to 600	1	s	PINTVAL,44	4x1263	Uint 32
93	Damper closing time	--	RW	15	0 to 600	1	s	PINTVAL,45	4x1265	Uint 32
94	Fire damper status	--	R	1	Moving Closed Open No move No close No open	0	0	MVAL,34	3x3012	Uint 16
	X8 input status									
236	Emergency off	--	R	-	Off; On	0	0	BI,32	3x3015	Uint 16
279	CO detector	--	R	-	Off; On	0	0	BI,87	3x3016	Uint 16
280	Smoke detector - extract	--	R	-	Off; On	0	0	BI,88	3x3017	Uint 16
281	Smoke detector - supply	--	R	-	Off; On	0	0	BI,89	3x3018	Uint 16
282	Smoke detector - off	--	R	-	Off; On	0	0	BI,90	3x3019	Uint 16
283	Smoke detector - max	--	R	-	Off; On	0	0	BI,91	3x3020	Uint 16

6.5.   ALARM

There are two types of alarms, alarm (A) and maintenance (B).

· A-Alarms are important and urgent situations which stops and locks either the ventilation or hot water production immediately. See tables for more information on impact. The alarm must be acknowledged. If the reason for the A-Alarm(s) is resolved, the alarm can be reset, and the product tries to restart.

· B-Maintenance leave the product running, but components or functions of the unit (for example the heat recovery) are switched off and locked. If the reason for these alarms are resolved, they can be acknowledged, and the affected part or function is available again.

On the Air panel, an active alarm indication is shown at the top as a banner. If you click the banner you will be directed to the alarm page, where you can se more information, acknowledge and reset the alarm.
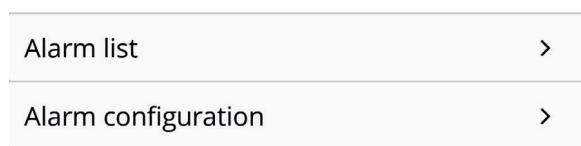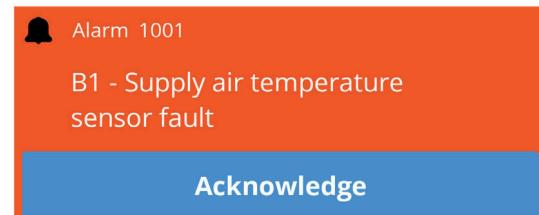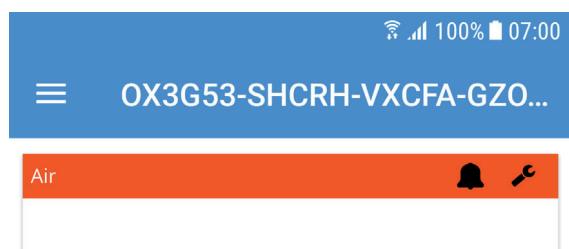
There are different notification icons depending in which state the alarm is in.
These are also shown in the top of the air panel.

Alarm icon	Maintenance icon	State	Situation
🔔	🔧	Alarm, unacknowledged	Problem detected by controller and alarm activated (e.g. new alarm)
🔔✓	🔧✓	Alarm, acknowledged	Problem still existing, but the alarm has been acknowledged
🔔✓	Not a state for maintenance	Normal, acknowledged	Problem disappeared/was fixed, alarm is acknowledged, but not reset
🔔	🔧	Normal, unacknowledged	Problem disappeared/was fixed, but alarm is not acknowledged

If you navigate to the alarm page (More/Alarm) you will also see if an alarm is active and at which state it is. From here you can acknowledge Alarms (A) and maintenance messages (B) and reset alarms (A).

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Error codes

Error code	Error source
1000...1999	Hardware related errors
2000...2999	Application related errors
3000...3999	Communication errors
9000...9999	Heat pump errors

Error impact	Description
1	No impact
2	Ventilation unit stop
3	Unit running, impaired function
4	Special ventilation function, see chapter security
5	Heat pump stop, hot water production with electric heater
6	Heat pump stop, no hot water production
7	No energy from tank (Low SH demands) and impaired legionella prevention. (error impact 6 at <-25°C)

Alarm list

Code #	Alarm list	Type	Ventilation impact	Hot water production impact
1001	B1 - Supply air temperature sensor fault	A	2	1
1002	B6 - Exhaust air temperature sensor fault	B	3	1
1003	B3 - Extract air temperature sensor fault	B	3	1
1004	B4 - Outside air temperature sensor fault	A/B	2	1
1005	B5 - Frost protection temp. Heating coil sensor fault			
1006	H1 - 0-10 V Humidity sensor fault	B	3	1
1007	M3 - Rotary heat exchanger motor stuck	A/B	3	1
1008	M3 - Rotary heat exchanger belt broken	A/B	3	1
1009	M9 - Fire damper fault	A	2	1
1010	TM1 - Supply air fan fault	A	2	1
1011	TM2 - Exhaust air fan fault	A	2	1
1012	CI-70 - Room temperature sensor on CI-70 fault	B	3	1
1020	Time to replace air filter	B	3	1
1022	B10 - HWT top sensor fault	B	1	3
1023	B11 - HWT middle sensor fault	B	1	3
1024	B12 - Flow temp. heating circuit sensor fault			
1025	B13 - Return temp. heating circuit sensor fault			
1026	B14 - Flow temp. After reheating coil sensor fault	B	1	3
1027	B15 - Return temp. HWT sensor fault	B	1	3
1028	B16 - HWT bottom sensor fault	B	1	3
1029	B20 - Frost protection temp. zone sensor fault	A	2	1
1030	B21 - Supply air temperature sensor fault	B	3	1
1032	P4 - Supply air pressure sensor fault	B	3	1
1033	P5 - Extract air pressure sensor fault	B	3	1
1034	P1 - Differential pressure supply air sensor fault	B	3	1
1035	P2 - Differential pressure exhaust air sensor fault	B	3	1
1036	HWT all sensor fault	A	1	6
1039	M3 - Rotary heat exchanger, motor shorted	B	3	1
1040	Low battery wireless device	B	3	1

Code #	Alarm list	Type	Ventilation impact	Hot water production impact
2001	X8 - Emergency off	A	2	1
2002	X8 - Smoke detector	A	4	1
2003	X8 - CO detector	A	4	1
2004	Fire alarm - B1 or B3 over max temperature	A	2	1
2005	Supply air temperature min alarm	B	1	1
2007	B5 - Heating coil frost alarm			
2008	F15 - Heat pump reheating coil over temperature detection	A	1	6
2009	F20 - Zone 2 electric heater over temperature detection	A	2	1
2010	F10 - electric heater supply air over temperature detection	A	2	1
2011	B20 - Heating coil frost alarm zone 2	A	2	1
2014	M6, M8, M14 - Heat pump dampers stop air flow	A	2	1 (M6 or M8), 5 (M14)
2015	Heat pump A-Error present	A/B	1	5 or 6
2016	Heat pump outlet water over temperature (B30)	B	1	1
2020	M31 - Water pump unable to start. Restart product	B	1	7
2024	EB1 - Electric Heating, unable to control	B	3	1
2025	M3 - Rotary heat exchanger, unable to control	B	3	1
3001	XCU - communication fault, heat pump	A/B	1	6
3002	ECU - communication fault, expantion board	A/B	2	6
3003	ECUL communication fault, expantion board			
3004	QBM - communication fault, pressure sensor	A/B	3	1
3005	XCU or ECU communication fault	B	3	1
3006	CI-75 - Communication fault, wireless adapter	B	3	1
3007	Communication fault, wireless device	B	3	1
9001	B31 - Inlet water temperature sensor, heat pump	A	1	6
9002	B30 - Outlet water temperature sensor, heat pump	A	1	6
9003	B32 - Inlet air temperature sensor, heat pump	B	1	5
9004	Heat pump - Defrosting temperature sensor	B	1	5
9005	Heat pump - Discharge temperature sensor	B	1	5
9006	Heat pump - Outlet water temperature high	A	1	6
9007	Heat pump - Outlet water temperature low	A	1	6
9008	Heat pump - CO_2 discharge temperature high	B	1	5
9009	Heat pump - CO_2 discharge temperature low	B	1	5
9010	Heat pump - High pressure switch	B	1	5
9011	Heat pump - High air temperature defrosting	B	1	5
9012	Heat pump - Fan motor	B	1	5
9013	M31 - Water pump	A	1	6
9014	Inverter communication	B	1	5
9015	Inverter motor control	B	1	5
9016	Inverter over current	B	1	5
9017	Inverter current detection	B	1	5

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Code #	Alarm list	Type	Ventilation impact	Hot water production impact
9018	Inverter over voltage	B	1	5
9019	Inverter under voltage	B	1	5
9020	Inverter power supply	B	1	5
9021	Inverter voltage detection	B	1	5
9022	Inverter heatsink temperature	B	1	5
9023	Inverter overload	B	1	5
9024	Scale	A	1	6
9025	Mixing valve	A	1	6
9026	Three way valve	A	1	6
9027	Dump	B	1	5
9028	FTH	A	1	6

6.6. SYSTEM INFO

This page shows system information such as activation key, application version, firmware version and more.

More/System info

	System info	B	I	Default	Range
	General				
237	Flexit serial number	R	R		
238	Activation key	R	R		
239	Firmware	R	R		
240	Application	R	R		
241	Model name	R	R		
248	Model information	R	R		
254	SOC serial number	R	R		
245	Date	R	R		
	Network				
457	Cloud service:	R	R		No access Checking connection... Connection error Product not registered Product connected
252	IP address	R	R		
249	IP default gateway	R	R		
250	IP subnet mask	R	R		
251	UDP Port	R	R		
253	MAC address	R	R		
	Configured functionality				
572	Temperature control ventilation	R	R	1	Supply air control Extract air cascade control
573	Fan control	R	R	3	Air flow Duct pressure Fan speed
574	Dehumidify control	R	R	2	Off On
575	Heating coil	R	R	2	None Electrical Water
576	Cooling coil	R	R	1	None Water DX
577	Fire damper	R	R	1	No Yes
	Configured hardware I/O				
579	DI1 Selection (Input)	R	R	5	None Cooker hood Fireplace Fire damper feedback High Stop Home Away Emergency off CO detector Smoke detector - extract Smoke detector - supply Smoke detector - off Smoke detector - max

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	System info	B	I	Default	Range
580	DI2 Selection (Input)	R	R	2	None Cooker hood Fireplace Fire damper feedback High Stop Home Away Emergency off CO detector Smoke detector - extract Smoke detector - supply Smoke detector - off Smoke detector - max
581	X8 Selection (Input)	R	R	11	None Home Away Emergency off CO detector Smoke detector - extract Smoke detector - supply Smoke detector - off Smoke detector - max Fire damper feedback Cooker hood Fireplace High Stop
582	Q1 Selection (Output)	R	R	2	None Outside air damper Fire damper Common alarm and maintenance indication Alarm indication Maintenance indication Operation indication Cooling pump
583	Q2 Selection (Output)	R	R	4	None Outside air damper Fire damper Common alarm and maintenance indication Alarm indication Maintenance indication Operation indication Cooling pump
584	Q3 Selection (Output)	R	R	1	None Outside air damper Fire damper Common alarm and maintenance indication Alarm indication Maintenance indication Operation indication Cooling pump
585	Y1 Selection (Output)	R	R	2	None Electrical heater Pump water heater
586	X3 Selection (Input)	R	R	4	None 0-10V Humidity sensor 0-10V CO_2 sensor B3/H1 sensor
587	X4 Selection (Input)	R	R	2	None Thermostat overheating Return water temperature
588	X7 Selection (Output)	R	R	1	None 0-10V Water heater valve N/A 0-10V Water cooling valve
589	CI75 - Wireless adapter	R	R	1	None Connected

6.7. OPERATING HOURS

Various time counters are running automatically on the background depending on which operating mode is active.

If 240 minutes are reached 4 hours are added to counter.

More/Operating hours

	Operating hours	B	I	Default	Range	Unit	BACnet object	Modbus	
								Reg	Data type
313	Total	R	R	0	0 to 999999	h	AVAL,1847	4x1267	Float 32
	Ventilation								
314	Stop	R	R	0	0 to 999999	h	AVAL,1913	4x1273	Float 32
315	Away	R	R	0	0 to 999999	h	AVAL,1914	4x1275	Float 32
316	Home	R	R	0	0 to 999999	h	AVAL,1915	4x1277	Float 32
317	High	R	R	0	0 to 999999	h	AVAL,1916	4x1279	Float 32
318	Fireplace	R	R	0	0 to 999999	h	AVAL,1811	4x1281	Float 32
319	Cooker hood	R	R	0	0 to 999999	h	AVAL,1815	4x1283	Float 32
320	Heat exchanger	R	R	0	0 to 999999	h	AVAL,1851	4x1285	Float 32
321	Electrical battery	R	R	0	0 to 999999	h	AVAL,1879	4x1287	Float 32
* 322	Water battery	R	R	0	0 to 999999	h	AVAL,1882	4x1287	Float 32
	Heat pump								
323	Heat pump	R	R	0	0 to 999999	h	AVAL,1905	4x1547	Float 32
324	Hot water production	R	R	0	0 to 999999	h	AVAL,1906	4x1549	Float 32
325	Heating	R	R	0	0 to 999999	h	AVAL,1907	4x1551	Float 32
326	Heating & Hot water	R	R	0	0 to 999999	h	AVAL,1910	4x1555	Float 32
	Secondary temperature zone								
327	Electrical battery	R	R	0	0 to 999999	h	AVAL,1893	4x1289	Float 32
* 328	Water battery	R	R	0	0 to 999999	h	AVAL,1899	4x1289	Float 32

*Accessories and/or configuration needed

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6.8. SERVICE

On this page you can put the product in service mode. If you need to change filter or any other maintenance, put the product in service mode before turning off the power to the product.
When the product is put in service mode it makes a controlled shutdown. The shutdown time depends on the operating mode. If for instance the heat pump is in normal operation, it can take some time for the product to shut down.

	Heat pump service	B	I	Default	Range	Resolution	Unit	BACnet object	Modbus Reg	Modbus Mapping
	Maintenance mode heat pump									
470	Mode	--	RW	0	None Air purge	0	0	MVAL,38	4x2082	Uint 16
524	Mode	--	--	0	None Fan mode Air purge Forced operation Pump mode	0	0	MVAL,38	4x2082	Uint 16
	Status heat pump									
419		R	R	1	Standby Air purge process Startup process Normal operation Stop process Defrost operation Standby when error Manual operation Forced fan operation Forced pump operation	0	0	MI,1	3x3028	Uint 16
	Parameters									
460	Outside air	R	R	0	-50 to 150	0,1	°C	AI,15	3x0121	Float 32
461	Cold water in	R	R	0	-50 to 150	0,1	°C	AI,13	3x0117	Float 32
462	Hot water out	R	R	0	-50 to 150	0,1	°C	AI,14	3x0109	Float 32
463	Circulation pump	R	R	0	0 to 100	1	%	AI,17	3x0069	Float 32
464	Deicing	R	R	0	-50 to 150	0,1	°C	AI,51	3x0125	Float 32
465	Hot gas	R	R	0	-50 to 150	0,1	°C	AI,52	3x0129	Float 32
466	INV heat sink	R	R	0	-50 to 150	0,1	°C	AI,53	3x0133	Float 32
467	Fan speed	R	R	0	0 to 8000	1	rev/min	AI,54	3x0137	Float 32
468	System version	R	R	0	0 to 100	0,01	0	AI,55	3x0141	Float 32
469	Compressor speed	R	R	0	0 to 100	1	Hz	AI,56	3x0145	Float 32
	Forced pump mode, set the circulation pump speed									
361	M31 pump speed	--	--	100	20 to 100	1	%	AVAL,259	4x1537	Float 32
	Forced fan mode ,set the fan speed									
353	fan speed	--	--	1000	500 to 2000	100	rev/m	AVAL,252	4x1535	Float 32

6.9.   ABOUT FLEXIT GO

This page shows information such as app version and used open source libraries and also has a link to the terms and conditions for the Flexit GO platform.

6.10.   CHANGE PRODUCT

If you have access to more than one Flexit Nordic or EcoNordic product on your cloud account this page lets you change access between your products. You can only access products that are online.

6.11.   SIGN OUT

This page gets you to the start page and also lets you sign out from your cloud account if you are logged on through that.

7.   TROUBLE SHOOTING

General information:
For each alarm code a scenario containing one or more steps are described.
When you are using the manual start with:
Step 1, do necessary actions and check if the problem is solved.
In case not continue to:
Step 2, do necessary actions and check if the problem is solved.
In case not continue following the listed steps in the same way as described until the problem is solved.

7.1.   HARDWARE RELATED ERRORS

Code #	Displayed text	Explanation	Product owner What can I do ?
1001 1002 1003 1004 1005	B1 - Supply air temperature sensor fault B6 - Exhaust air temperature sensor fault B3 - Extract air temperature sensor fault B4 - Outside air temperature sensor fault B5 - Frost protection temp. Heating coil sensor fault	The temperature sensor displays a value higher or lower than the specified operating range, generating an alarm.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
1006	H1 - 0-10 V Humidity sensor fault	The humidity sensor displays a value higher or lower than the specified operating range, generating an alarm.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
1007	M3 - Rotary heat exchanger motor stuck	The system indicates that the rotary heat exchanger is running too heavy or is completely stuck. As a safety measure, the rotor motor is stopped pending check/reset of the alarm.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. Switch off the supply voltage to the unit by pulling out the mains plug. Look for a possible reason why the rotor runs heavy/gets stuck. If ice formation is the cause, the module must be removed (see user manual) to allow the ice to melt. Also remove any moisture/ice that remains in the unit. In case of recurring problems with de-icing, the commissioned air flows should be reviewed to ensure correct operation. Consider enabling the defrost function. 2. In case this action doesn't solve your problem, please contact your service partner.
1008	M3 - Rotary heat exchanger belt broken	The alarm indicates temperature differences that are outside of expected values, which the system interprets as if the rotary heat exchanger is not rotating.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. Disconnect the operating voltage to the unit by pulling out the mains plug connector. Check for possible reason why the rotor is not turning. Ensure that the unit is operated on commissioned air flows. In the event that the rotor belt is intact and the rotor appears to be rotating as it should: Check for probable cause why the temperature difference between supply air and exhaust air has decreased (extremely low air flows can trigger this type of alarm). Connect the mains plug connector again and wait 3 min for the unit to restart. In case neither action solves your problem, please contact your service partner.

Code #	Displayed text	Explanation	Product owner What can I do ?
1009	M9 - Fire damper fault	In this case a fire damper is installed in the system. (accessory) The alarm is indicating that the fire damper is not working/is not properly configured.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. In case this action doesn't solve your problem, please contact your service partner.
1010 1011	TM1 - Supply air fan fault TM2 - Exhaust air fan fault	Inside the fan motor there is a tacho generator which provides feedback on how many revolutions the fan is performing at the moment. The alarm message is indicating that the tacho signal is missing.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. Switch off the supply voltage to the unit by pulling out the mains plug. Check that the connector to the fan motor that is causing the alarm is properly connected (see user manual regarding cleaning fans). Check for possible cause of fan motor not rotating/going heavy/get stuck. Reconnect the mains plug and wait 3 minutes for the device to boot. 3. In case this action doesn't solve your problem, please contact your service partner.
1020	Time to replace air filters	A timer is showing that it's time to replace the air filters in the unit.	1. Order Flexit original air filters. 2. Replace the filters by following the procedure described in the user manual. 3. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using.
1022 1023 1024 1025 1026 1027 1028 1029 1030	B10 - HWT top sensor fault B11 - HWT middle sensor fault B12 - Flow temp. heating circuit sensor fault B13 - Return temp. heating circuit sensor fault B14 - Flow temp. After reheating coil sensor fault B15 - Return temp. HWT sensor fault B16 - HWT bottom sensor fault B20 - Frost protection temp. zone sensor fault B21 - Supply air temperature sensor fault	The temperature sensor is showing a value which is higher or lower than the specified operating range, which is indicating a fault on the sensor. (Only valid in case an externat water based heater is used for the 2:nd temperature zone)	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
1032	Supply air duct pressure sensor fault	An external duct pressure sensor is installed in the system. (accessory) The system is not detecting a valid signal from the pressure sensor.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
1033	Extract air duct pressure sensor fault	An external duct pressure sensor is installed in the system. (accessory) The system is not detecting a valid signal from the pressure sensor.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
1034	P1 - Differential pressure supply air sensor fault	The internal pressure sensor for detection of supply air flow is not providing a valid feedback.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
1035	P2 - Differential pressure exhaust air sensor fault	The internal pressure sensor for detection of exhaust air flow is not providing a valid feedback.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
1036	HWT all sensor fault	The system is experiencing that all temperature sensors in the hot water tank is showing a value which is higher or lower than the specified operating range.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
1039	M3 - Rotary heat exchanger, motor shorted	The control of the rotary heat exchanger detects a too high current value and can therefore not work.	1. Disconnect the operating voltage to the unit by pulling out the mains plug connector. Wait 10 s. 2. Connect the mains plug connector again and wait 3 min for the unit to restart. 3. In case this action doesn't solve your problem, please contact your service partner.

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Code #	Displayed text	Explanation	Product owner What can I do ?
1040	Low battery wireless device	There are one or several wireless devices connected to the system, indicating that the battery level in the sensor is low.	1. Push the button on each connected wireless sensor. If the device has a low battery level it will indicate with a red blinking LED. 2. Replace the battery in the device/devices with a low battery level. 3. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 4. In case this action doesn't solve your problem, please contact your service partner.

7.2. APPLICATION RELATED ERRORS

Code #	Displayed text	Explanation	Product owner What can I do ?
2001	X8 - Emergency off	If digital input X8 is configured as emergency off function an installed actuator (push button or similar) has activated the alarm. Please pay attention to that the external device is supposed to create this condition in case it is activated, just follow the instructions on how to go back to normal operation.	1. Reset the actuator. (push button or similar) 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2002	X8 - Smoke detector	If digital input X8 is configured for smoke detector function an installed smoke detector has activated the alarm. Please pay attention to that the external device is supposed to create this condition in case it is activated, just follow the instructions on how to go back to normal operation.	1. Reset the smoke detector following the instruction for that specific device. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2003	X8 - CO detector	If digital input X8 is configured for CO detector function an installed CO detector has activated the alarm. Please pay attention to that the external device is supposed to create this condition in case it is activated, just follow the instructions on how to go back to normal operation.	1. Reset the CO detector following the instruction for that specific device. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2004	Fire alarm - B1 or B3 over max temperature	The temperature level surrounding the temperature sensor is unnaturally high.	1. Check the area surrounding the temperature sensor and secure that the area is not blocked by some foreign object. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2005	Supply air temperature min alarm	The temperature level surrounding the temperature sensor is unnaturally low.	Check for possible reason why supply air temperature is extremely low. At low outside temperatures together with functions that increase the supply air/imbalance (e.g. cooker hood) there may be a need for post-heating to achieve an acceptable supply air temperature. Clogged exhaust air filter or low exhaust air flow/high supply air flow increases the risk of the alarm occurring. 1. Consider activating the post-heat element using the procedure described for the Flexit GO app or control panel, depending on which method you are using. 2. In case of recurring problem behaviour, the commissioned air flows shall be reviewed to ensure correct function. 3. If no action solves your problem, contact your service partner.
2007	B5 - Heating coil frost alarm	The return water sensor from the water based heater is indicating a low temperature and the unit is stopped in order to prevent freezing of the water based heater.	1. Check that the source providing heat to the water based heater is producing hot water. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2008	F15 - Heat pump reheating coil over temperature detection	The overheating termostat for the electrical heater in the tank module has created an alarm.	1. Reset the termostat according to section "Reset overheating protection - water" in the user manual. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In the event of a recurring alarm, follow the venting procedure according to section "Reset overheating protection - water" in the user manual. 4. Check the water filter according to periodic maintenance "EcoNordic W4/WH4" in the user manual. 5. In case this action doesn't solve your problem, please contact your service partner.

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Code #	Displayed text	Explanation	Product owner What can I do ?
2009	F20 - Zone 2 electric heater over temperature detection	The overheating termostat for the electrical heater in zone 2 shows an alarm. (Only valid if you have installed an additional electrical heater)	1. Reset the termostat according to user manual for that specific accessory. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2010	F10 - electric heater supply air over temperature detection	The overheating termostat for the electrical heater in the ventilation unit has created an alarm.	1. Reset the termostat according to the user manual. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2011	B20 - Heating coil frost alarm zone 2	The return water sensor from the Zone 2 water based heater is indicating a low temperature and the unit is stopped in order to prevent freezing of the water based heater. (Only valid if you have installed an additional heater)	1. Check that the source providing heat to the water based heater is producing hot water. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2014	M6, M8, M14 - Heat pump dampers stop air flow	The product has detected that at least one of the dampers are manually overridden in the wrong position.	1. Cycle the power to the product. Wait for 3 min. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2016	Low water flow warning	The product is indicating that the water flow inside is low. This indicates that the water flow through the heat pump is low. It might be time to schedule a manitenance for cleaning the circuit.	1. Alarm that indicates that you should perform service according to section " Periodic maintenance - EcoNordic W4/WH4" in the user manual. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. In case this action doesn't solve your problem, please contact your service partner.
2018	Heat pump unable to start	Due to some reason the heat pump is not able to start.	1. Cycle the power to the product. Wait for 3 min. 2. In case this action doesn't solve your problem, please contact your service partner.
2019	Heat pump, B31 - high return temperature	The heat pump have tried to restart several times but is shut down due to high return temperature. Low energy consumtion on the seconadary side is making the heat pump shut down due to high return temperature.	1. Check the underfloor heating pressure. Min. 1 bar. - Could be air on the underfloor heating side. -Clogged water filter underfloor heating. -Actuators do not open so that there is little consumption of underfloor heating. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. Adjust the lower boundry for the mid range area to a lower value in order to make the heat pump work in a better load area. 4. In case this action doesn't solve your problem, please contact your service partner.
2020	M31 - Water pump unable to start. Restart product	Alarm on primary water pump. heat pump operation is not possible.	1. Cycle the power to the product. Wait for 3 min. 2. Check that the connector is properly attached to the water pump. 3. In case this action doesn't solve your problem, please contact your service partner.
2024	EB1 - Electric Heating, unable to control	The electrical heater cannot be operated according to the control logic.	Contact your service partner.

Code #	Displayed text	Explanation	Product owner What can I do ?
2025	M3 - Rotary heat exchanger, unable to control	The rotary heat exchanger cannot be operated according to the control logic.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. Disconnect the operating voltage to the unit by pulling out the mains plug connector and wait for 10 s. 3. Connect the mains plug connector again and wait 3 min for the unit to restart. 4. Ensure that the unit runs on commissioned air flows. 5. In case of recurring alarms: Check for probable cause why the temperature difference between supply air and exhaust air is lower than expected (extremely low air flows can trigger this type of alarm). 6. In case neither action solves your problem, please contact your service partner.

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7.3. COMMUNICATION ERRORS

Code #	Displayed text	Explanation	Product owner What can I do ?
3001	XCU - communication fault, heat pump	The communication between the main circuit bord in the ventialtion unit and the heat pump is poor or missing.	Contact your service partner.
3002	ECU - communication fault, expantion board	The communication between the main circuit bord and the I/O circuit board (ECU) in the ventialtion unit is poor or missing.	Contact your service partner.
3003	ECUL communication fault, expantion board	This unit is an accessory. The alarm code is showing that the communication between the ventialtion unit and the accessory is poor or missing.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
3004	QBM - communication fault, pressure sensor	This unit is an accessory. The alarm code is showing that the communication between the ventialtion unit and the accessory is poor or missing.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
3006	CI-75 - Communication fault, wireless adapter	This unit is an accessory. The alarm code is showing that the communication between the ventialtion unit and the accessory is poor or missing.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
3007	Communication fault, wireless device	This unit is an accessory. The alarm code is indicating that the wireless transmission between the CI 75 - Wireless transmitter and the accessory is poor.	1. Verify the placement of the CI-75 wireless transmitter. Ensure that it is not positioned in such a way as to block/significantly degrade the signal to the wireless accessories. 2. Try moving the transmitter to get better communication. 3. Try to move the accessory closer to the transmitter in order to get better communication. 4. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 5. In case this action doesn't solve your problem, please contact your service partner.

7.4.   HEAT PUMP ERRORS

Code #	Displayed text	Explanation	Product owner What can I do ?
9001 9002 9003 9004 9005	B31 - Inlet water temperature sensor, heat pump B30 - Outlet water temperature sensor, heat pump B32 - Inlet air temperature sensor, heat pump Heat pump - Defrosting temperature sensor Heat pump - Discharge temperature sensor	The temperature sensor is showing a value which is higher or lower than the specified operating range, which is indicating a fault on the sensor.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9006 9008	Heat pump - Outlet water temperature high Heat pump - CO_2 discharge temperature high	The temperature of outgoing water from the heat pump is to high. The discharge CO_2 temperature is to high.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9007 9009	Heat pump - Outlet water temperature low Heat pump - CO_2 discharge temperature low	The temperature of outgoing water from the heat pump is to low. The discharge CO_2 temperature is to low.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9010	Heat pump - High pressure switch	The CO_2 High pressure sensor has created an alarm due to high pressure.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9011	Heat pump - High air temperature defrosting	The defrost sensor temperature is to high and out of range.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9012	Heat pump - Fan motor	The heat pump fan motor is blocked and cant move.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9013	M31 - Water pump	The water pump in the heat pump unit is not running.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9014	Inverter communication	There is a communication error between the heat pump circuit board and the inverter circuit board.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9015	Inverter motor control	There is a compressor motor error on the unit.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9016 9017 9018 9023	Inverter over current Inverter current detection Inverter over voltage Inverter overload	The heat pump's inverter is overloaded.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9019	Inverter under voltage	The heat pump's inverter does not work due to undervoltage.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9020	Inverter power supply	The heat pump's inverter does not work due to problems with the power supply.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.

FLEXIT

Code #	Displayed text	Explanation	Product owner What can I do ?
9021	Inverter voltage detection	The heat pump's inverter does not work due to the voltage detection.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9022	Inverter heatsink temperature	The heat pump's inverter does not work due to overtemperature.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9024	Scale	The heat pump's fluid flow is low, which can affect performance and function.	1. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 2. In case this action doesn't solve your problem, please contact your service partner.
9025 9026 9027 9028	Mixing valve, M11 error Three way valve, M12 error Damper, M8 error FTH error	The product detects that the component is in the wrong position and therefore cannot continue with the next step.	1. Check the LEDs on the valve. If they flash (regardless of color), the valve does not reach its position. 2. Try to reset the alarm following the procedure described for the Flexit GO app or control panel, dependant on which device you are using. 3. If this action does not solve your problem, contact your service partner.
9029	Super low air temperature error	The heat pump cannot start due to the outside temperature being too low.	Due to the very low outside temperature, the heat pump cannot start. The system returns to normal operation again as soon as the outside temperature rises. Meanwhile, the flow through heater kicks in to ensure the production of heat and hot water.