



EcoNordic WH4/W4



INSTRUCTIONS TRANSLATED FROM ORIGINAL LANGUAGE

ART.NO. 800501, 800502

EN

ASSEMBLY INSTRUCTIONS

Indoor Climate Central

**INSTALLATION
INSTRUCTIONS**

Contents

1.	General	5
1.1.	Disclaimer	5
1.2.	Warranty	5
1.3.	Manufacturer	5
1.4.	Service and support	5
1.5.	Disposal	5
1.6.	Validation	5
2.	Safety	6
2.1.	Symbols and stickers	6
2.2.	Warnings in the manual	6
2.3.	General safety rules	7
3.	Transport	8
3.1.	Components included	8
3.1.1.	Supplied in tank module	9
3.1.2.	Supplied in chassis module	9
3.1.3.	Supplied in ventilation module	9
3.1.4.	Supplied in heat pump module	9
4.	System overview	10
4.1.	System diagram W4	10
4.2.	System diagram WH4	11
4.3.	Component overview for electricity	12
4.4.	Component overview for water	13
4.5.	Component overview for ventilation	14
5.	Assembly	15
5.1.	Space requirements for heat pump	16
5.2.	Assembly of modules	17
5.2.1.	Prerequisites	17
5.2.2.	Instructions	17
5.3.	Installation of frost protection damper	25
5.4.	Assembly of ventilation ducts	26
5.4.1.	Prerequisites	26
5.4.2.	Instructions	26
5.5.	Electrical installation	27
5.5.1.	Before you start	27
5.5.2.	Internet access	27
5.5.3.	If accessories are used	27
5.5.4.	Circuit diagram and conversion, electricity	27
5.5.5.	Prerequisites	28
5.5.6.	Control and accessories	28
5.5.7.	Connection of a frost protection damper	30
5.5.8.	Voltage supply	30
5.6.	Water and pipe work	31
5.6.1.	Domestic Hot Water Recirculation System	31
5.6.2.	Incoming water	31
5.6.3.	Water quality	31
5.6.4.	Water connections	32
5.6.5.	Drainage	32
5.7.	Connecting the heating system WH4	33
5.7.1.	Installation	33
5.7.2.	Dimensioning	33

.....

6.	Commissioning.....	34
6.1.	Prior to commissioning.....	34
6.2.	Connection	35
6.2.1.	No network available.....	35
6.2.2.	Network available	35
6.3.	Connect to the product.....	37
6.4.	Start-up Guide.....	39
7.	Adjustment.....	41
7.1.	System differences between Android and iOS	41
7.2.	Initial adjustment, ventilation	41
7.3.	Settings, heating	44
8.	Technical data.....	45
8.1.	Air capacity and sound data.....	46
8.2.	Pump capacity, heating system	47
8.3.	Nipple location.....	47
9.	Dimensions	48
9.1.	Tank module	49
9.2.	Chassis module.....	49
9.3.	Ventilation module	50
9.4.	Heat pump module	50

1. General

Read these instructions carefully before using the unit.
Keep the instructions for future use.

1.1. Disclaimer



NB

In order for the warranty to be valid, these instructions must be followed.

FLEXIT's products are subject to ongoing development and we therefore reserve the right to modify components, specifications and the contents of these instructions without prior notice.

FLEXIT is not responsible or bound by warranty if these instructions are not followed during installation, operation or servicing.

FLEXIT guarantees the correct functioning of the unit only with original or specified components.

We are not responsible for any typographical errors that may arise.

1.2. Warranty

The product must be assembled exactly as instructed, otherwise the warranty will not be valid.

1.3. Manufacturer

Flexit AS, Moseveien 8, N-1870 Ørje, Norway
www.flexit.com

1.4. Service and support

For questions concerning support, contact Flexit.

1.5. Disposal

The product is covered by warranty as stated in the current conditions of sale, provided that the product has been used and maintained correctly. Filters are consumable material.



The symbol on the product indicates that it must not be treated as household waste. Instead, it should be taken to a recycling centre that accepts electrical and electronic equipment. By disposing of the product correctly, you contribute to preventing the negative consequences to health and the environment that may result from incorrect treatment. For further information concerning the recycling of the product, contact your local authority, recycling centre or place of purchase.

Claims arising from faulty or inadequate installation should be made to the installation company responsible. The warranty may be invalidated by incorrect use or gross negligence in the maintenance of the unit.

1.6. Validation


This user manual applies to EcoNordic WH4 and W4.

2. Safety


2.1. Symbols and stickers

A number of symbols are used for these products. They are used both for labelling the product itself and in the installation and user documentation.


Symbols on the product




Extract air



Exhaust air




Supply air




Outdoor air


Stickers in the product




Danger:
Electrical current




Danger - do not touch



Drainage




Outgoing
water




Incoming
water

2.2. Warnings in the manual


The following types of instruction are used in the user manual.




DANGER
A text field with this colour means that life-threatening or serious injury may result if the instructions are not observed.



CAUTION
A text field with this colour means that poor efficiency or operational problems with the product may result if the instructions are not observed.



WARNING
A text field with this colour means that damage may result if the instructions are not observed.



NB
A text field with this colour means that it contains important information.

2.3. General safety rules

These safety rules must be followed when you use and maintain the system. Failure to follow them may result in injury, death or damage to the equipment.



DANGER

It is the responsibility of the installer to carry out a comprehensive safety and function check of the unit.



DANGER

All electrical connections must be carried out by a qualified electrician.



DANGER

The product must not be used for the extraction of combustible or flammable gases.



WARNING

All pipe installation work must be done by a qualified plumber.



WARNING

The product should be placed in a room with a drain.



WARNING

The incoming water pressure should not exceed 0.45/4.5 MPa/bar. If the water pressure exceeds 0.45/4.5 MPa/bar, a pressure reduction valve (with check valve) must be installed.

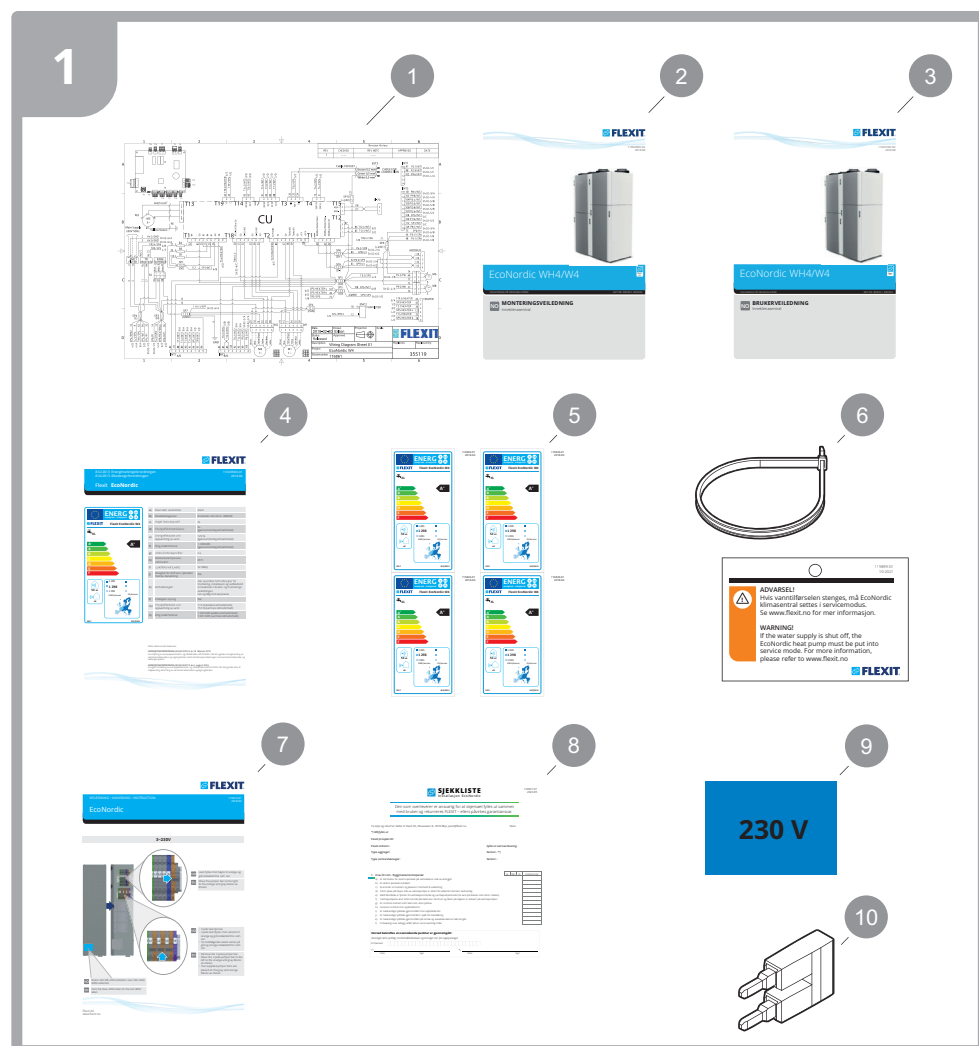
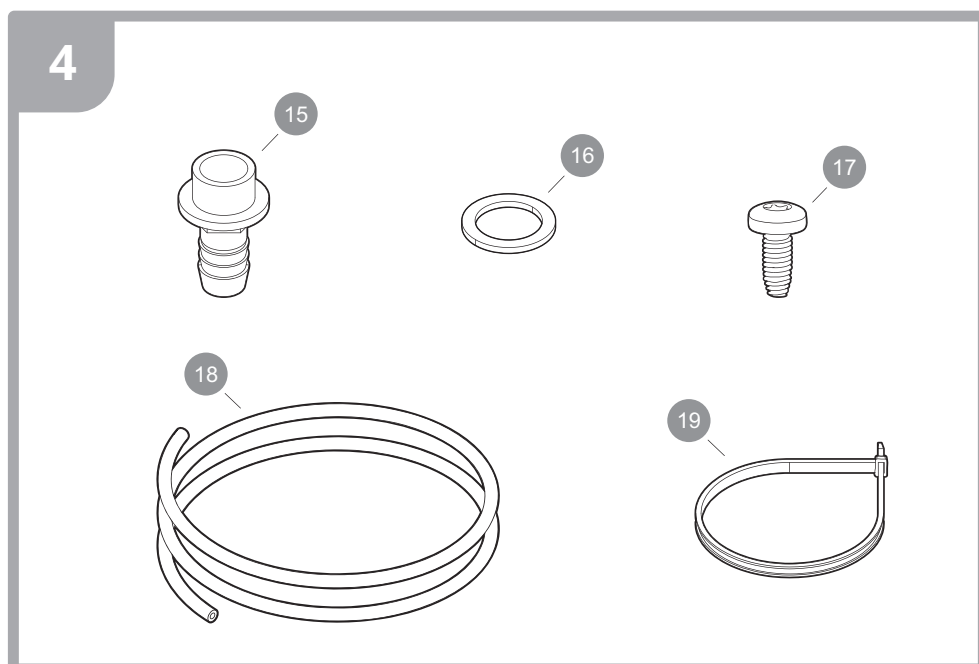
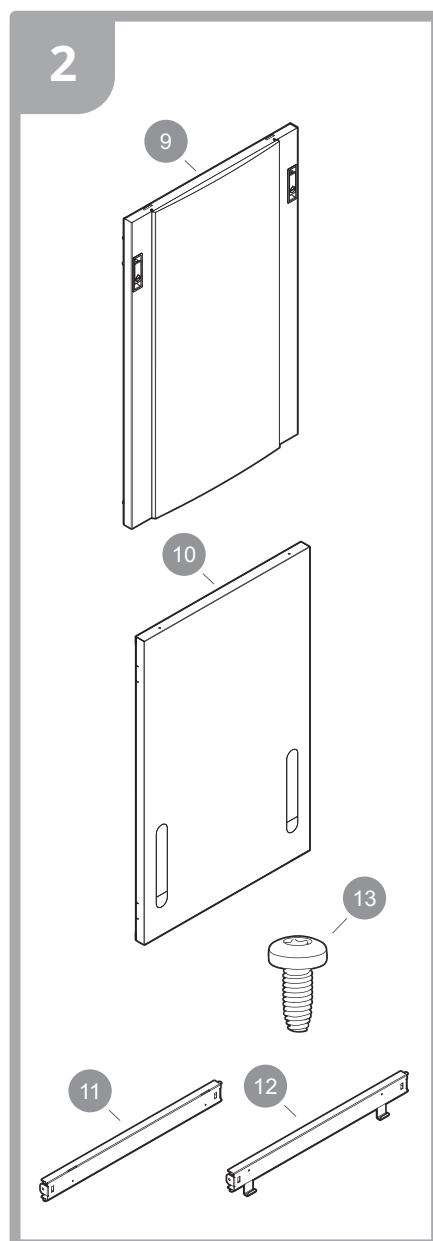
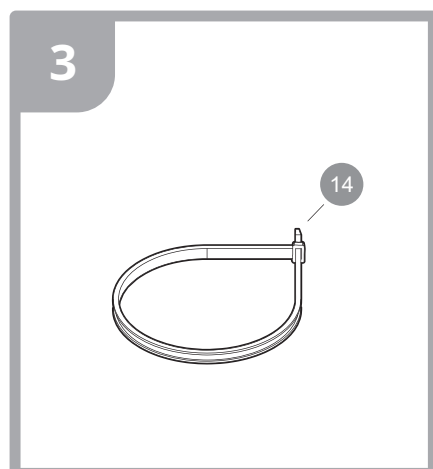


CAUTION

Tumble driers must not be connected to the unit.

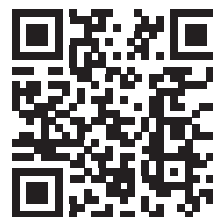
3. Transport

3.1. Components included



3.1.1. Supplied in tank module

Item	Description	Number
1	Circuit diagram, electricity	1
2	Assembly instructions	1
3	User manual	1
4	Eco design document	1
5	Eco design label	1
6	Label with cable tie	1
7	Conversion 3N~400 V-3~230V	1
8	Installation checklist	1
9	Label 230V	1
10	Jumper	2



*Installation - checklist
EcoNordic*

The person handing over the delivery is responsible for ensuring that the form is completed together with the user and returned to FLEXIT (post@flexit.no) – if not, guarantee liabilities may be affected.

3.1.2. Supplied in chassis module

Item	Description	Number
9	Door	1
10	Side wall	1
11	U-profile	3
12	U-profile with door latch	1
13	Self-tapping screw	17

3.1.3. Supplied in ventilation module

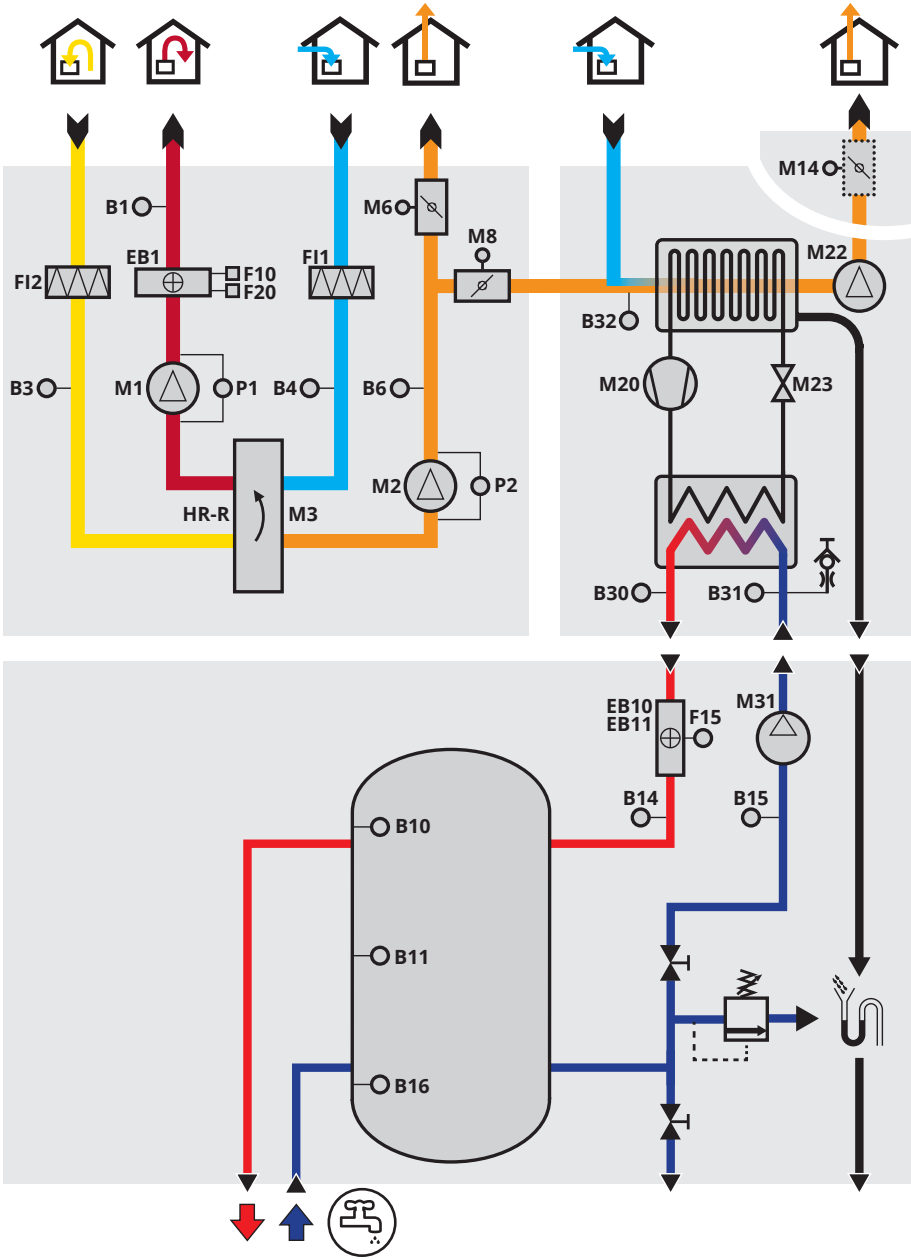
Item	Description	Number
14	Cable tie	4

3.1.4. Supplied in heat pump module

Item	Description	Number
15	Drainage plug	1
16	Gasket	1
17	Self-tapping screws	5
18	Venting hose	1
19	Cable tie	2

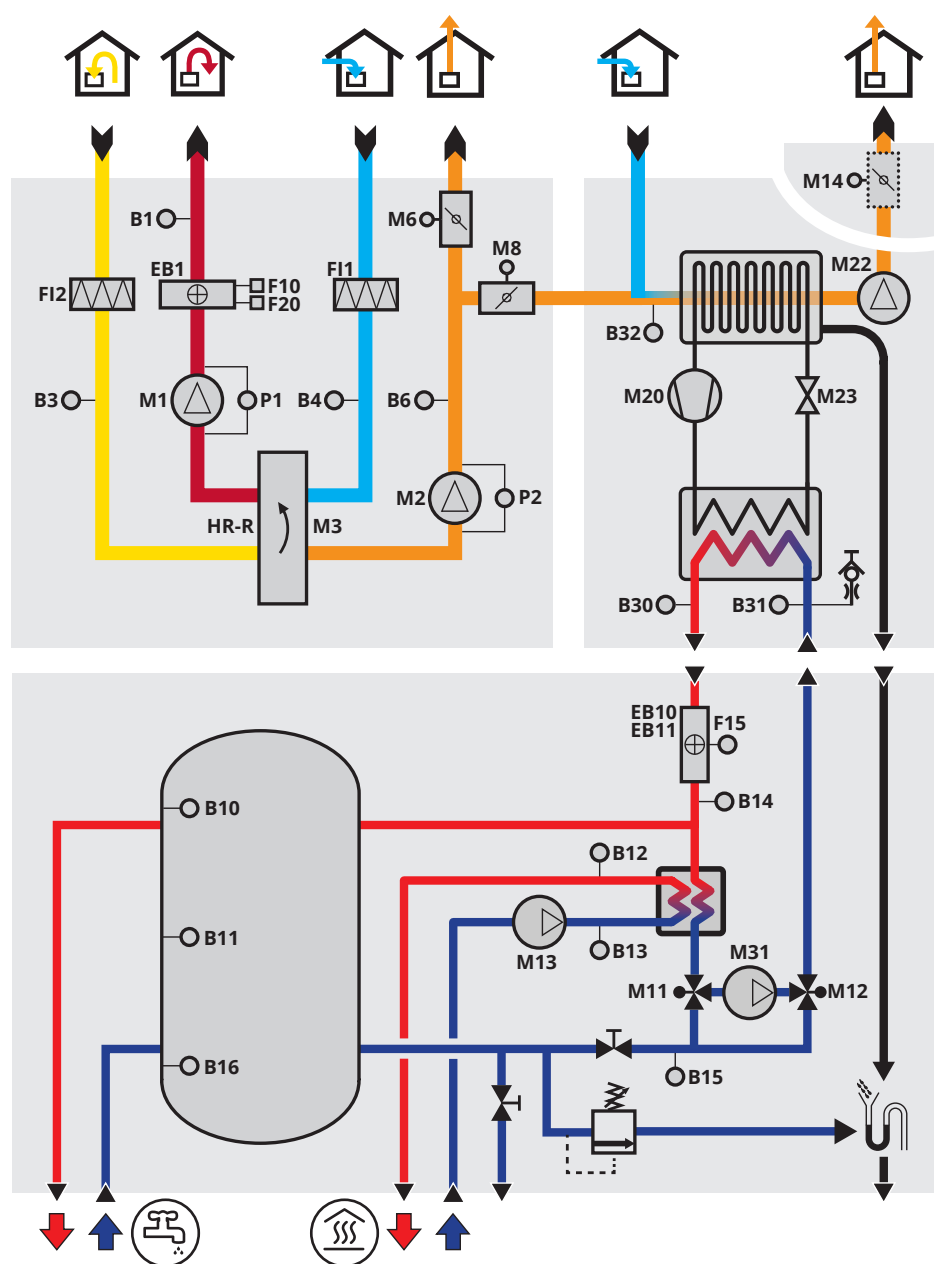
4. System overview

4.1. System diagram W4

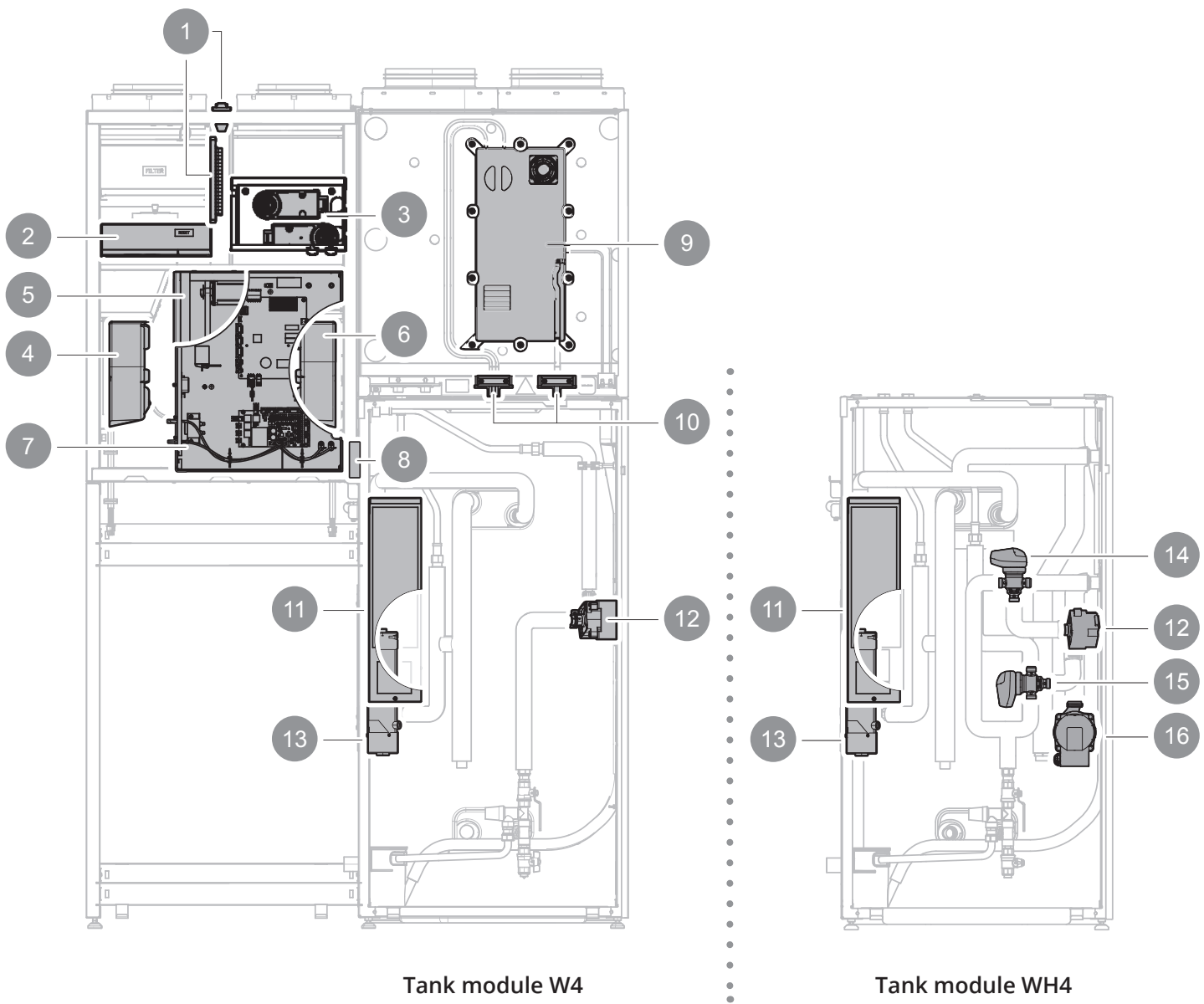


Pos.	Beskrivelse
B1	Temperature sensor, supply air
B3	Temperature sensor, extract air
B4	Temperature sensor, outdoor air
B6	Temperature sensor, exhaust air
B10	Temperature sensor, upper part of tank
B11	Temperature sensor, middle of tank
B12	(WH4) Temperature sensor, heating system feed
B13	(WH4) Temperature sensor, heating system return
B14	Temperature sensor, electric heating battery (FTH)
B15	Temperature sensor, from tank to heat pump
B16	Temperature sensor, lower part of tank
B30	Temperature sensor, HP water outlet
B31	Temperature sensor, HP water inlet
B32	Temperature sensor, HP air inlet
M1	Supply air fan
M2	Extract air fan
M3	Rotor motor
M6	Exhaust air damper
M8	Heat pump damper
M11	(WH4) Regulating valve DHW / heating system
M12	(WH4) Shuttle valve tank / heat pump
M13	(WH4) Circulation pump heating system
M14	Frost protection damper
M20	Compressor
M22	Fan HP
M23	Expansion valve HP
M31	Circulation pump primary circuit
F10	Overheating thermostat EB1
F15	Overheating thermostat electric element (FTH), manual reset
F20	Overheating thermostat EB1
EB	Heating battery, electric
EB10/EB11	Water heater, electric
F1	Outdoor air filter
F2	Extract air filter
P1	Pressure sensor, supply air
P2	Pressure sensor, extract air
HR-R	Rotary wheel-type heat exchanger

4.2. System diagram WH4



4.3. Component overview for electricity

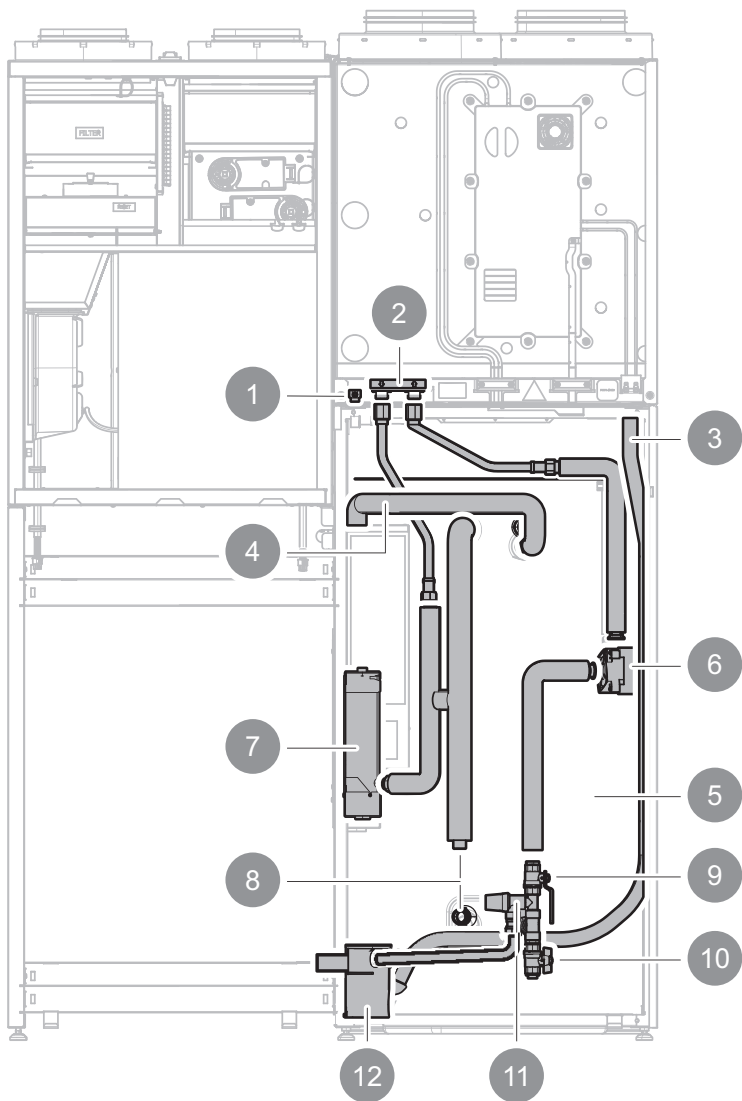


The unit can be converted for 230 V, 3-phase

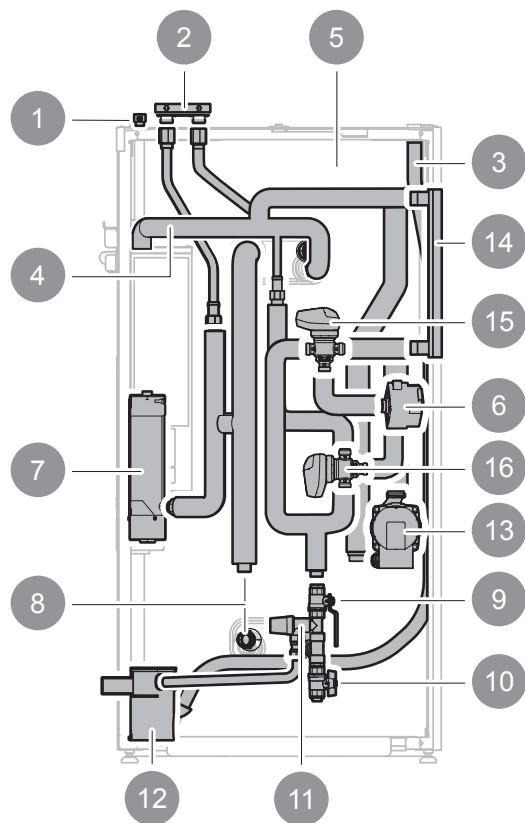
Item	Designation
1	Connection for external control etc.
2	Battery
3	Damper motors
4	Air intake fan
5	Rotor
6	Air outlet fan
7	Control centre for ventilation and water
8	Connection box for module connection

Item	Designation
9	Control unit for heat pump
10	Electrical connections for heat pump
11	Voltage connection / control unit
12	Circulation pump primary circuit
13	Flow through heater
14	Regulating valve DHW / heating system
15	Shuttle valve tank / heat pump
16	Circulation pump heating system

4.4. Component overview for water



Tank module W4

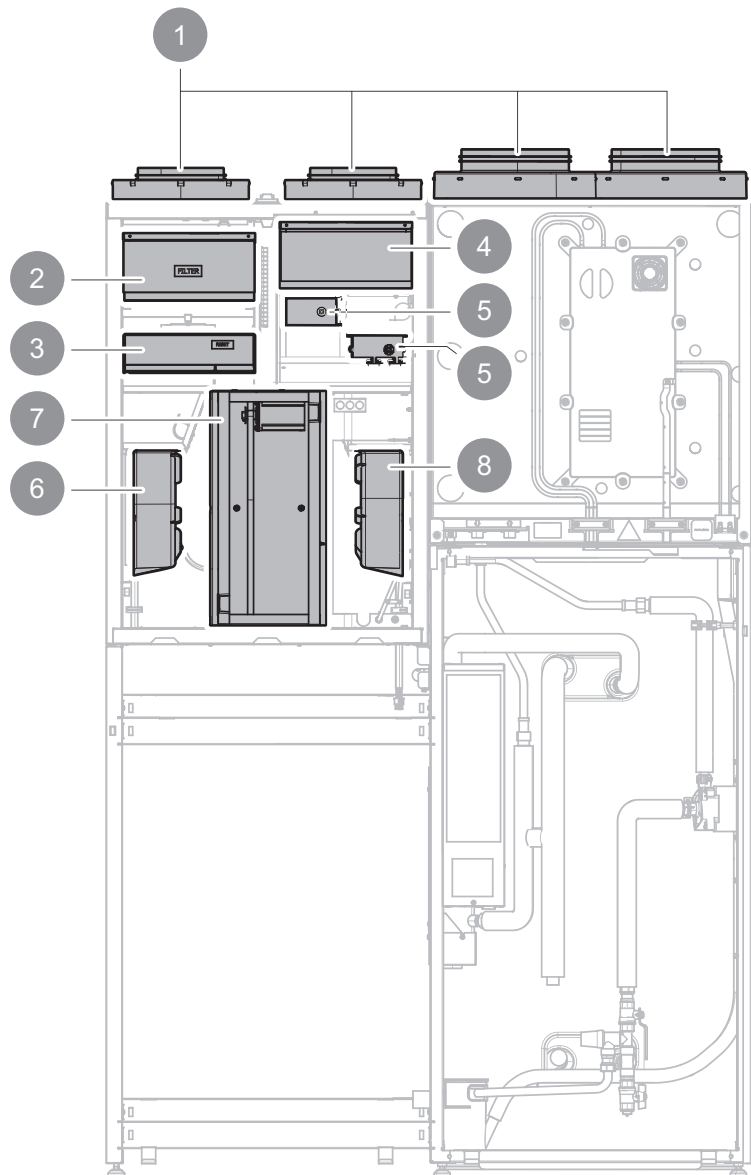


Tank module WH4

Item	Designation
1	Air extraction
2	Water connection for heat pump
3	Connection for drainage hose
4	Pipe system
5	Hot water tank
6	Circulation pump
7	Electric water heater
8	External water connections

Item	Designation
9	Shut-off valve
10	Draw-off valve
11	Safety valve
12	Drainage cup for draining and safety valve
13	Circulation pump heating system
14	Plate heat exchanger
15	Regulating valve DHW / heating system
16	Shuttle valve tank / heat pump

4.5. Component overview for ventilation



Item	Designation
1	Air connections
2	Extract air filter
3	Post-heating battery
4	Supply air filter
5	Damper
6	Air intake fan
7	Rotor
8	Air outlet fan

5. Assembly



INFO! First read the instructions "Preparations" before starting assembly.



Preparations

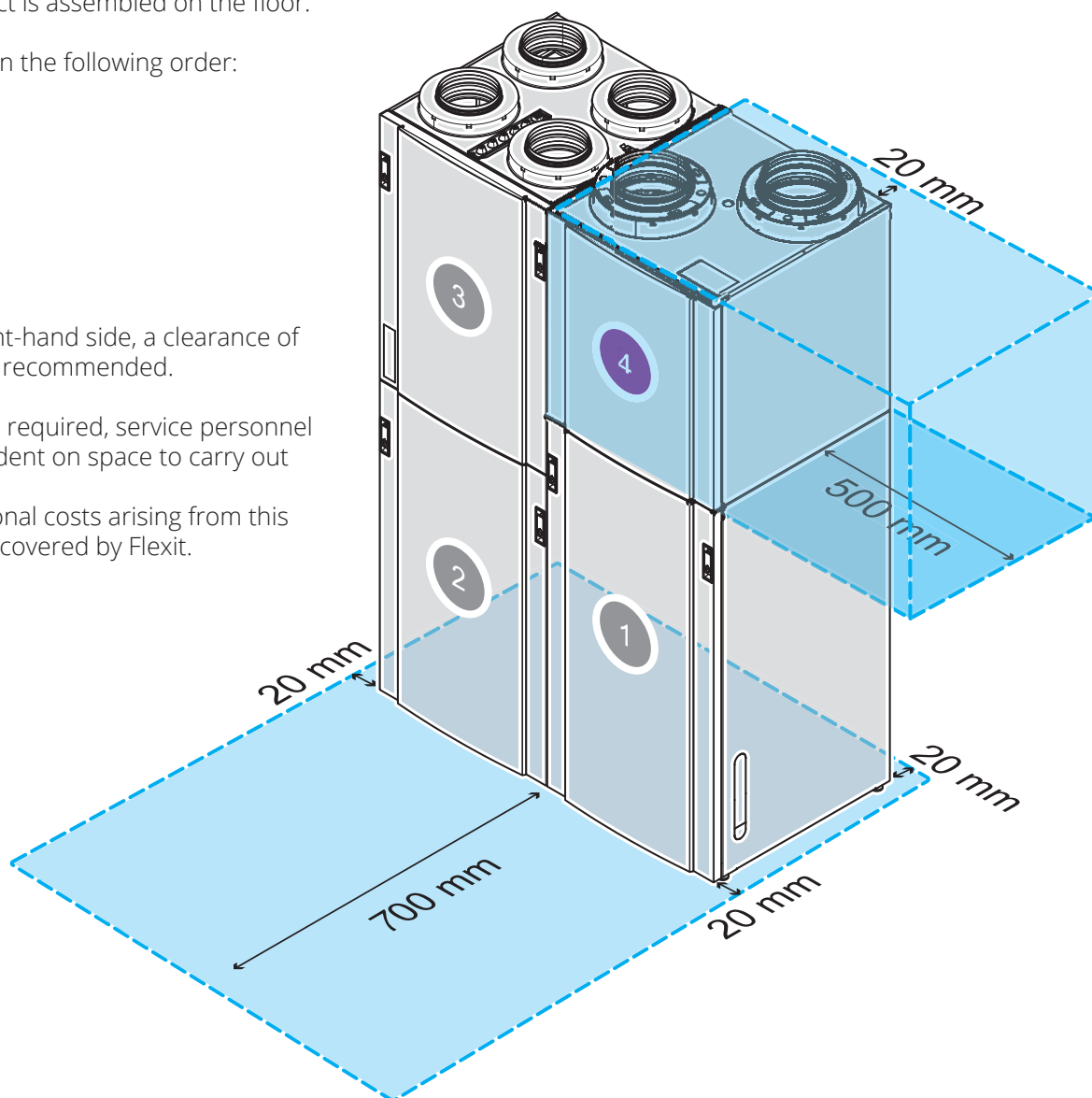
The product is assembled on the floor.

Assemble in the following order:

On the right-hand side, a clearance of 500 mm is recommended.

If service is required, service personnel are dependent on space to carry out the work.

Any additional costs arising from this will not be covered by Flexit.



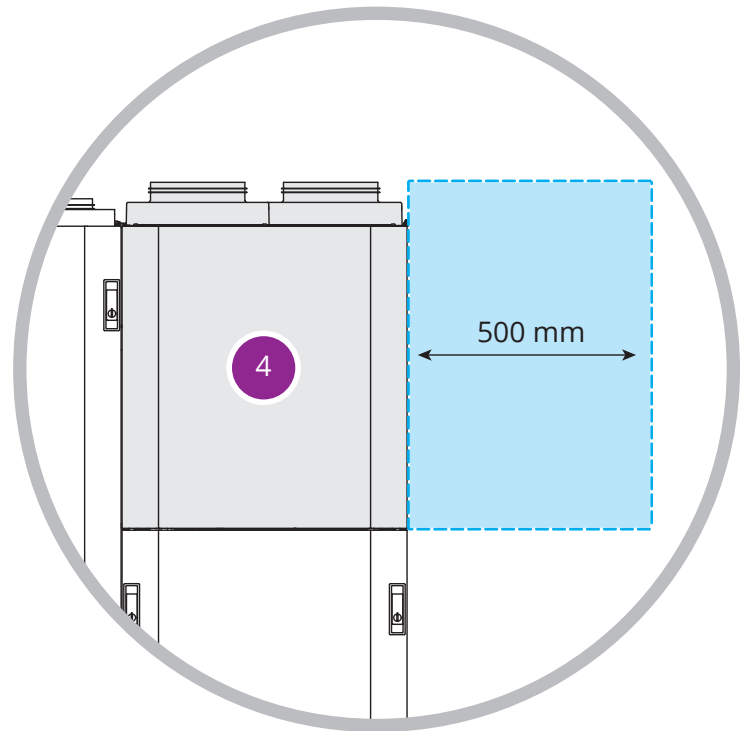
5.1. Space requirements for heat pump



INFO When installing EcoNordic it is important to follow the Flexit installation instructions.

If it becomes necessary to replace the fan, service personnel will require space to carry out the work.

Any additional costs arising from this will not be covered by Flexit.



5.2. Assembly of modules



WARNING

Risk of cuts.
Wear protective gloves during assembly.



NB

Before beginning assembly, make sure that the doors on module 1 and module 3 have been removed.

5.2.1. Prerequisites

Number of persons

2

Time

45 min.

Tools

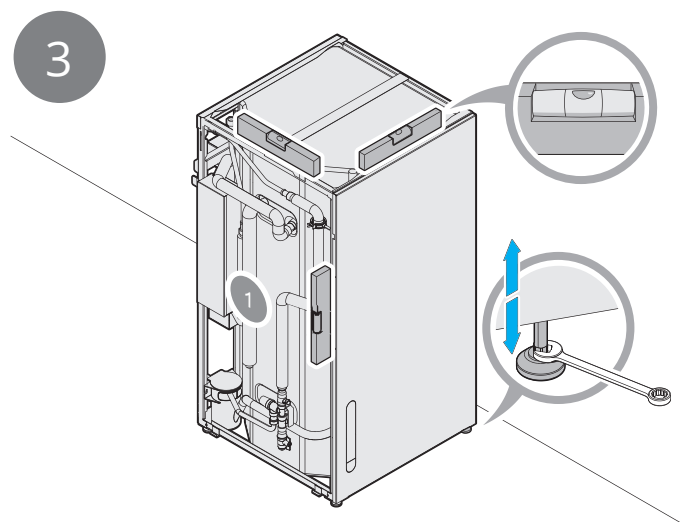
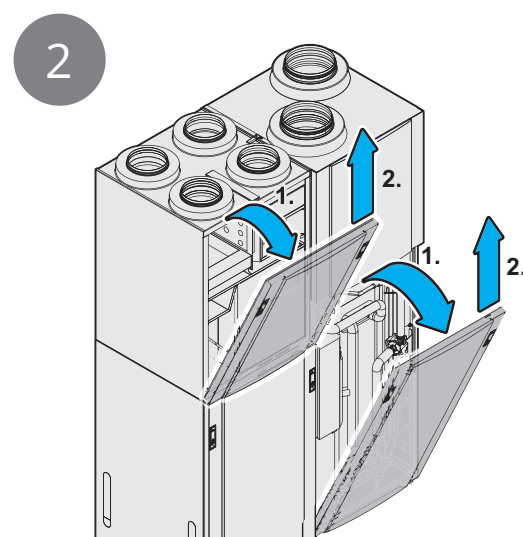
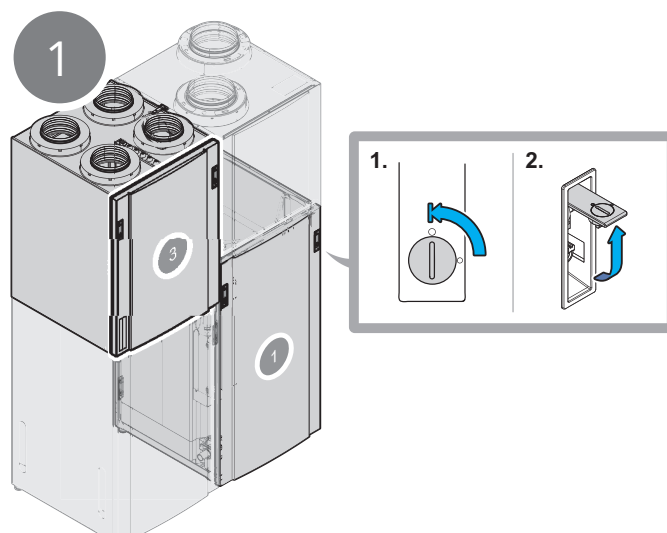
Screwdriver and TX20 bits

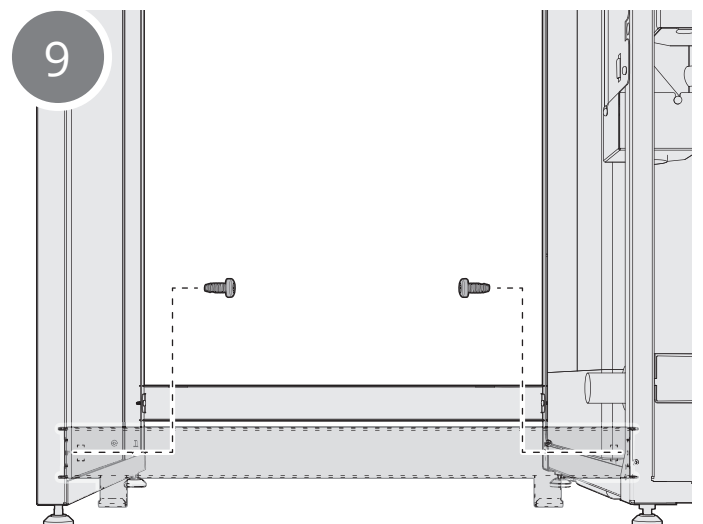
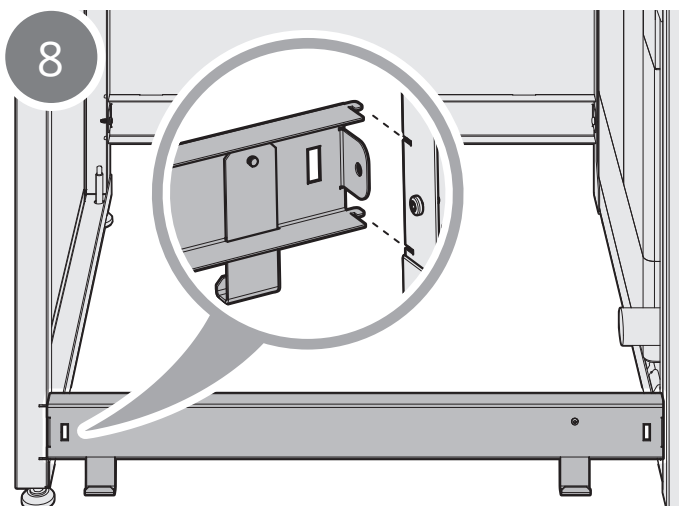
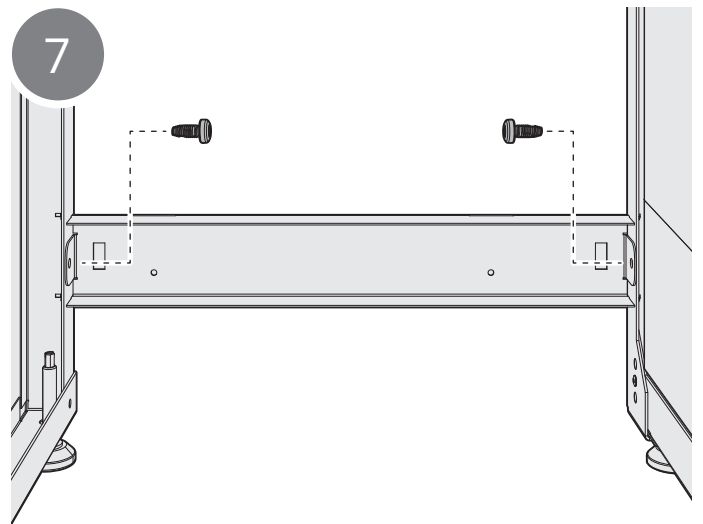
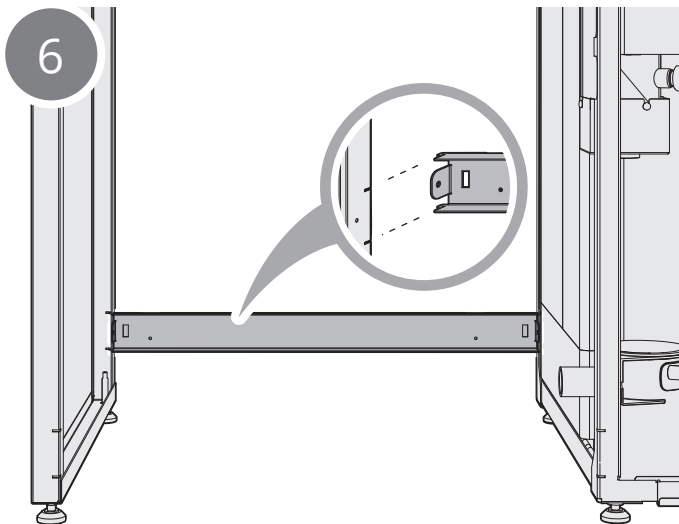
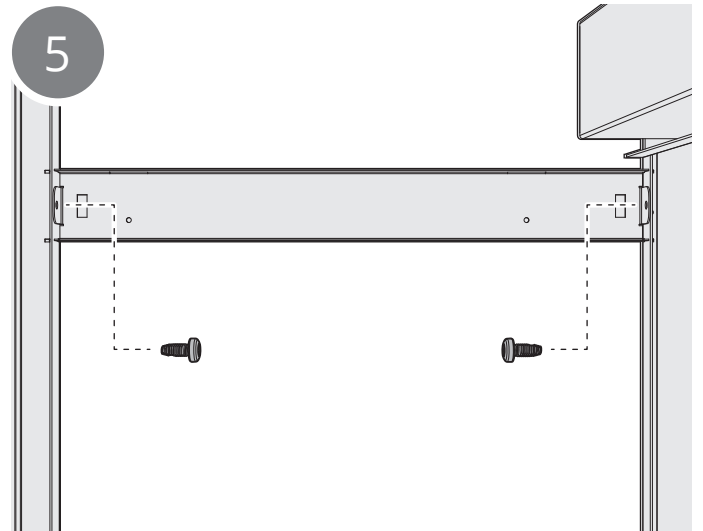
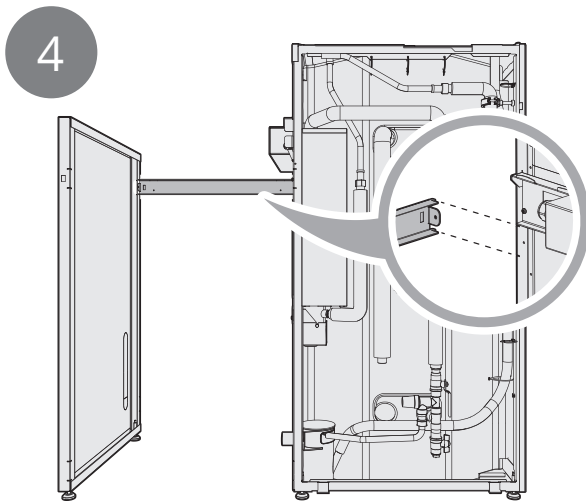
Wrench, 24 mm

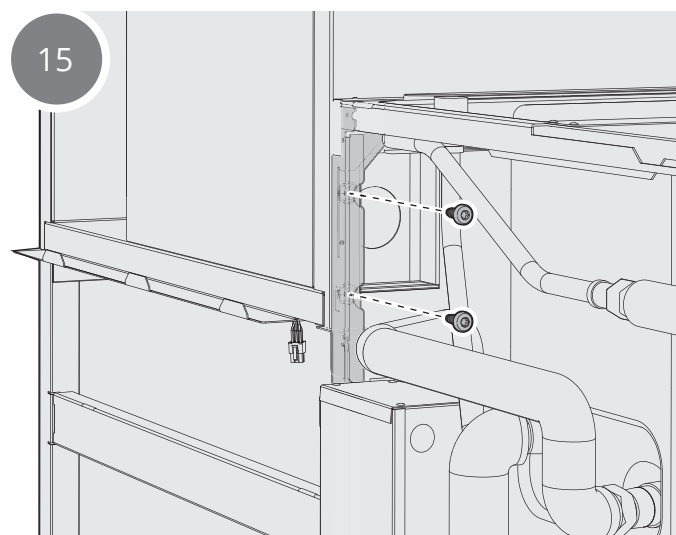
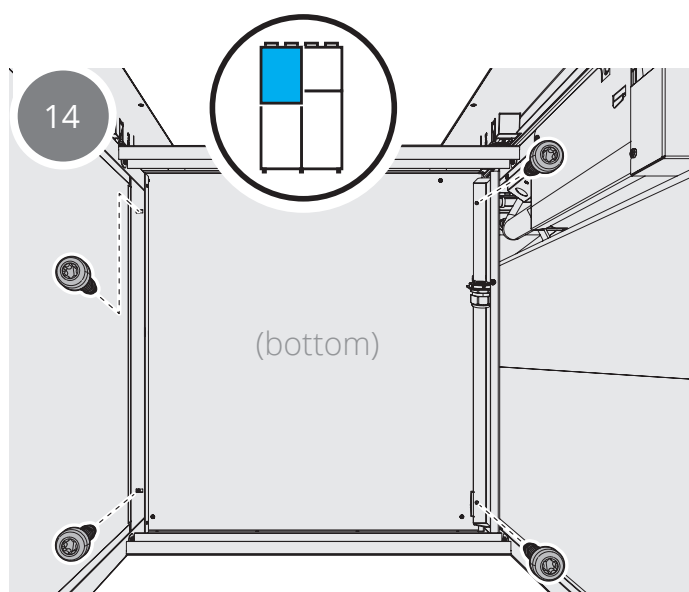
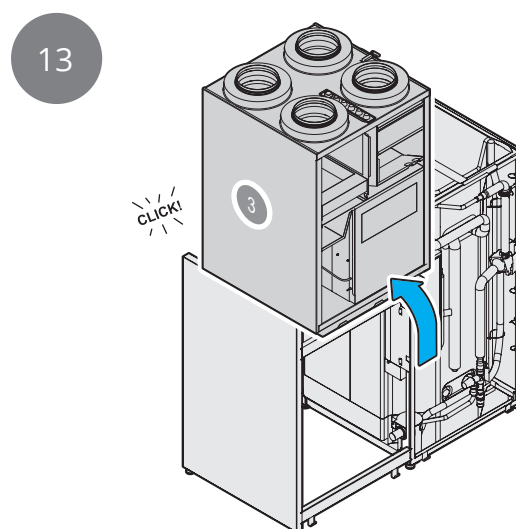
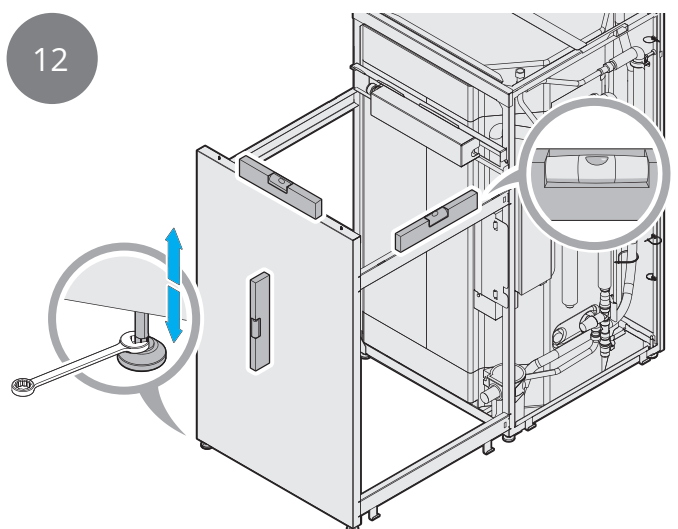
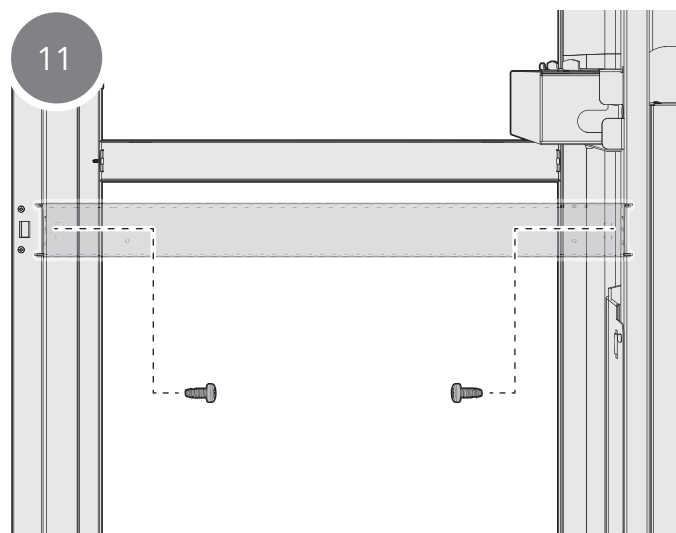
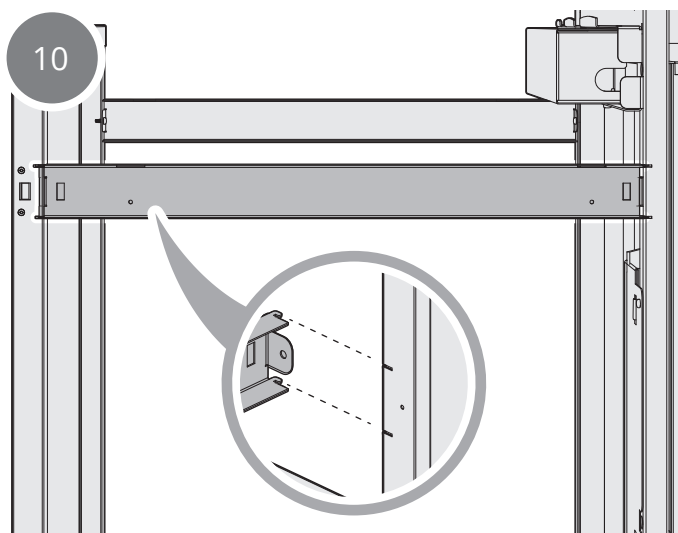
Wrench, 8 mm

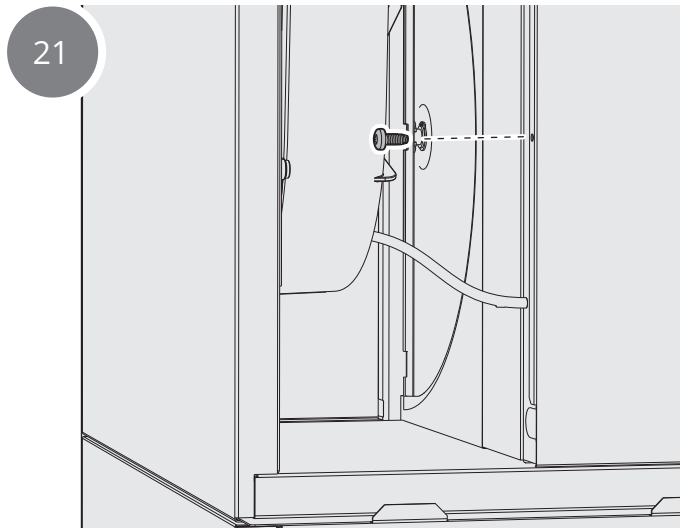
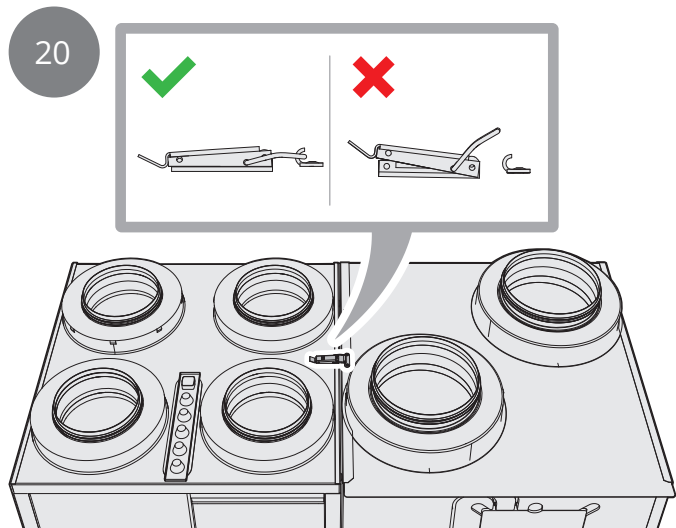
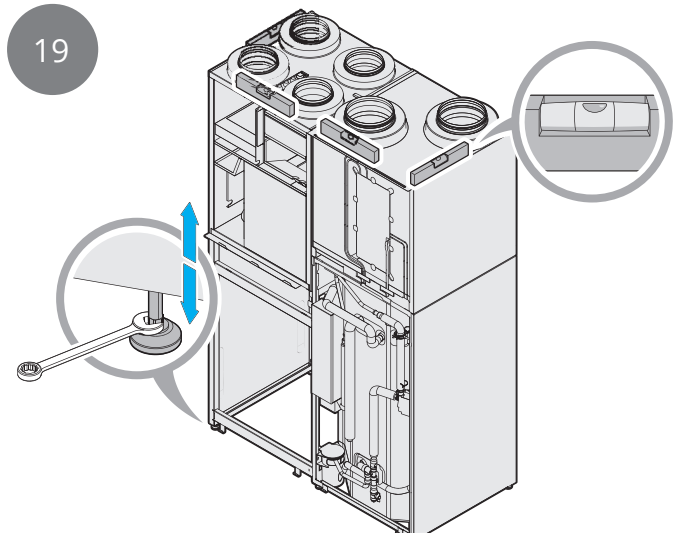
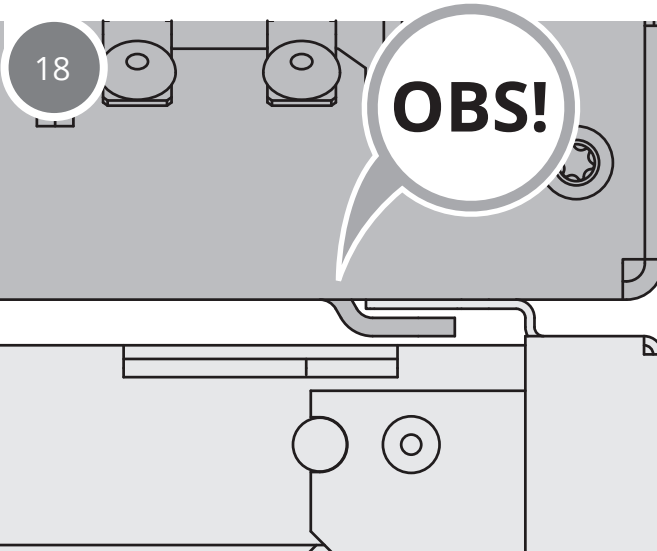
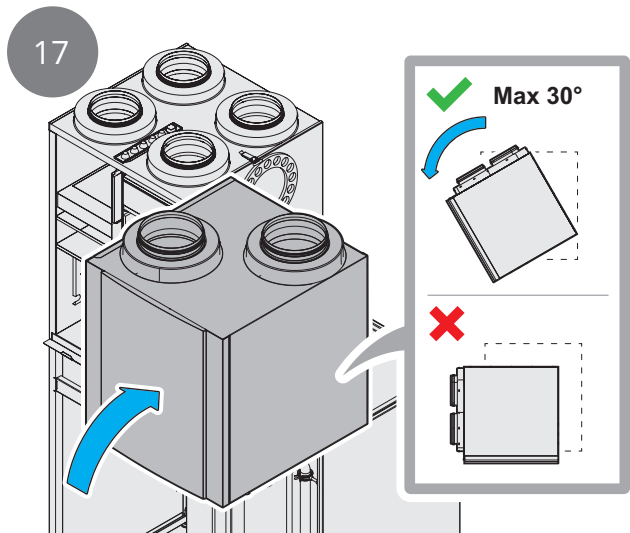
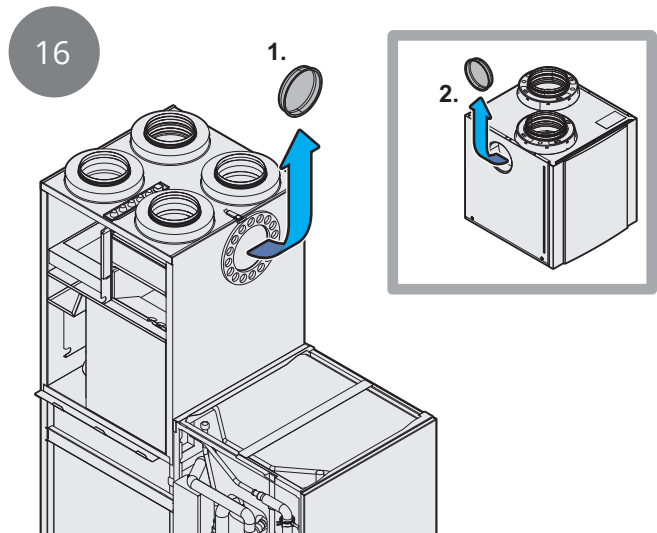
Spirit level

5.2.2. Instructions

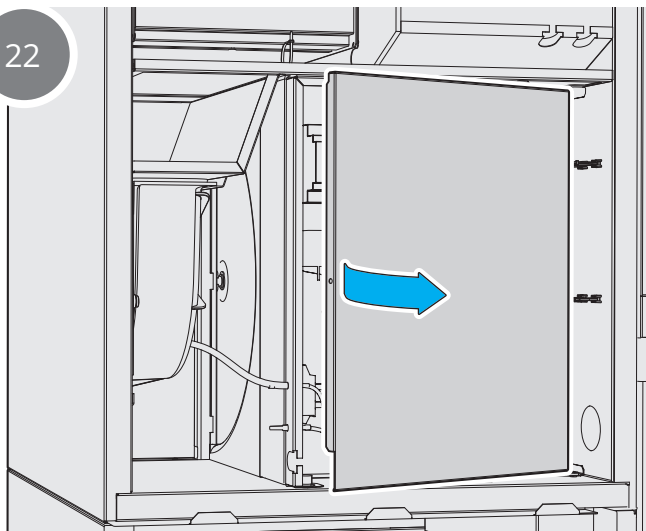




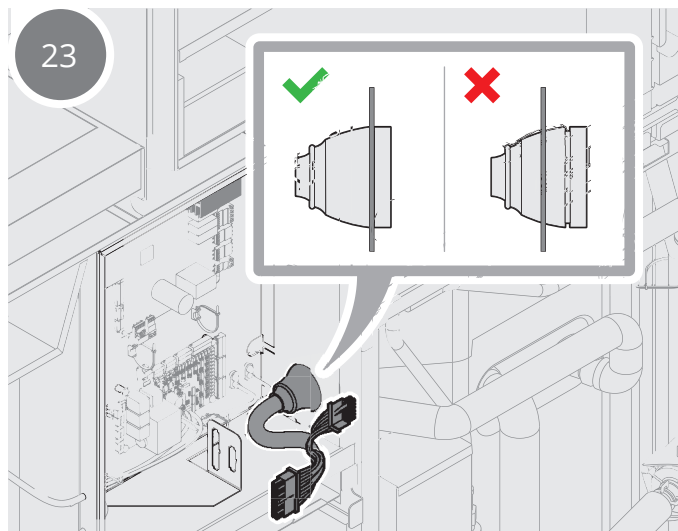




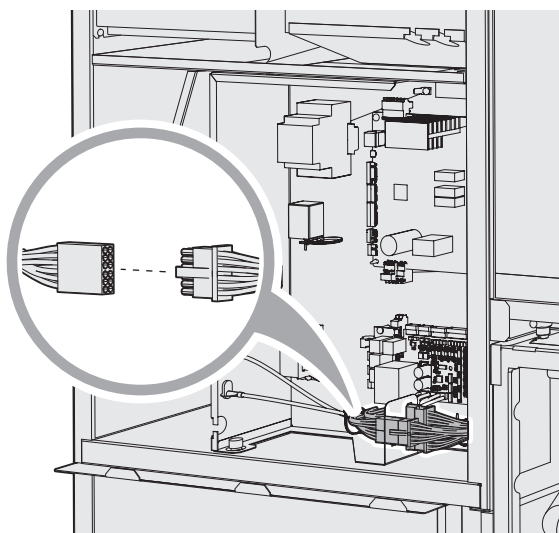
22



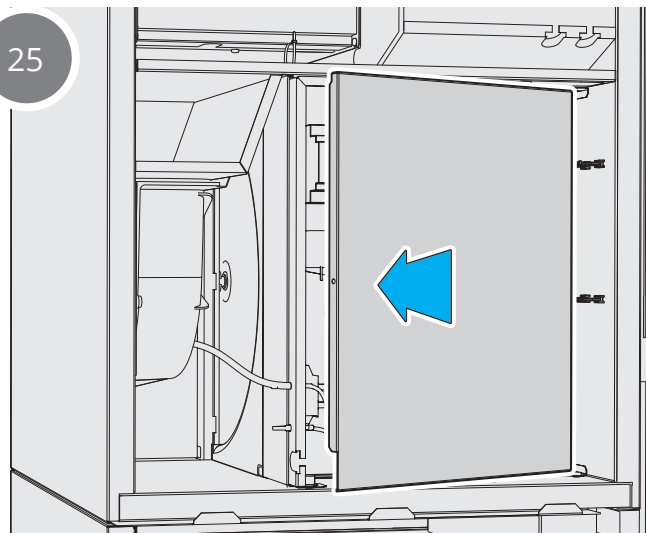
23



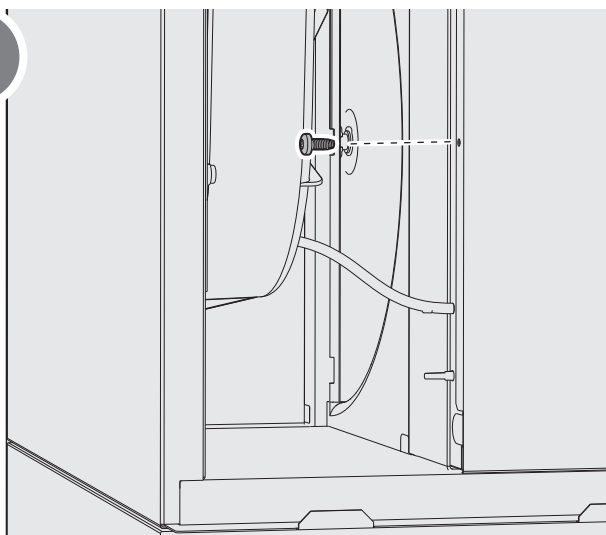
24



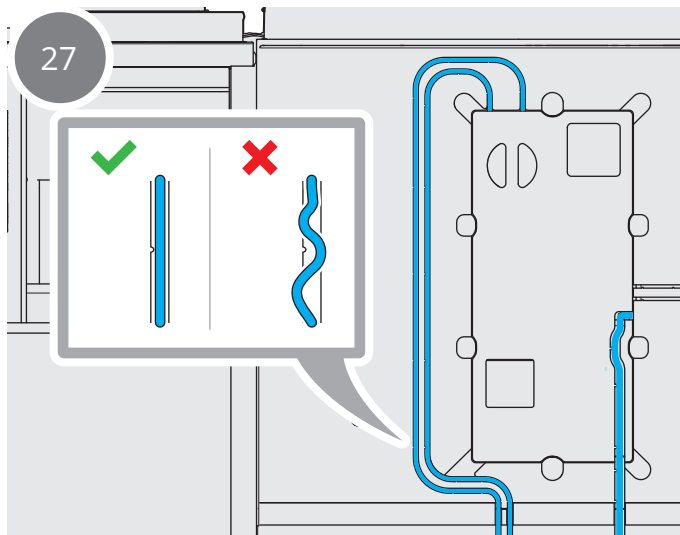
25

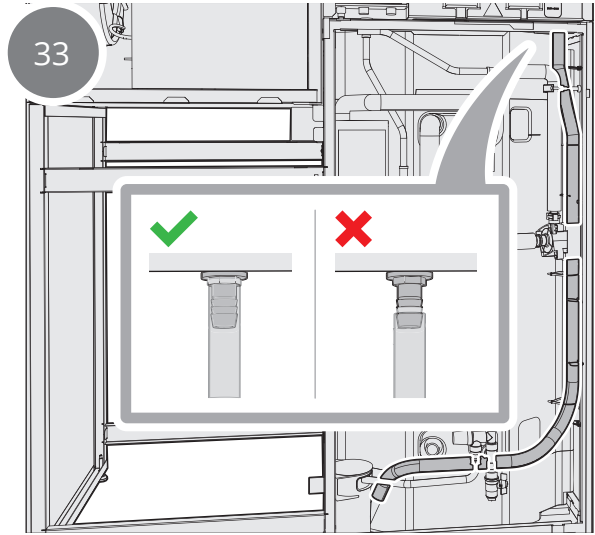
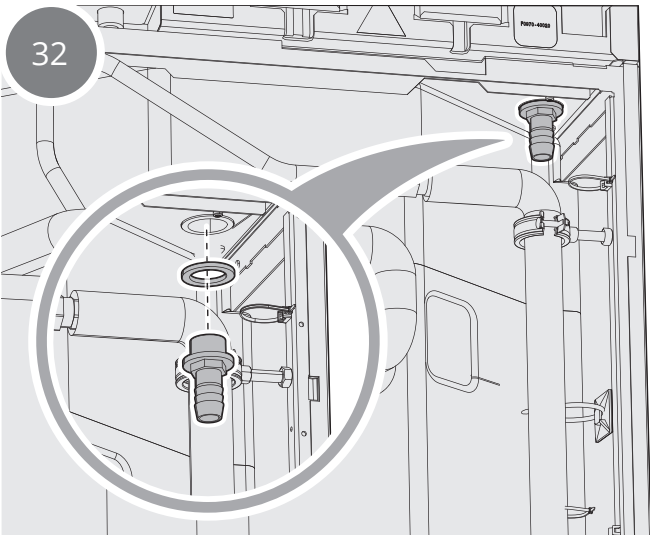
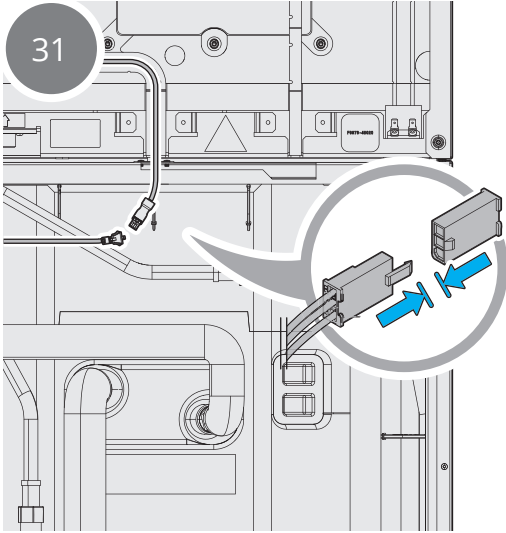
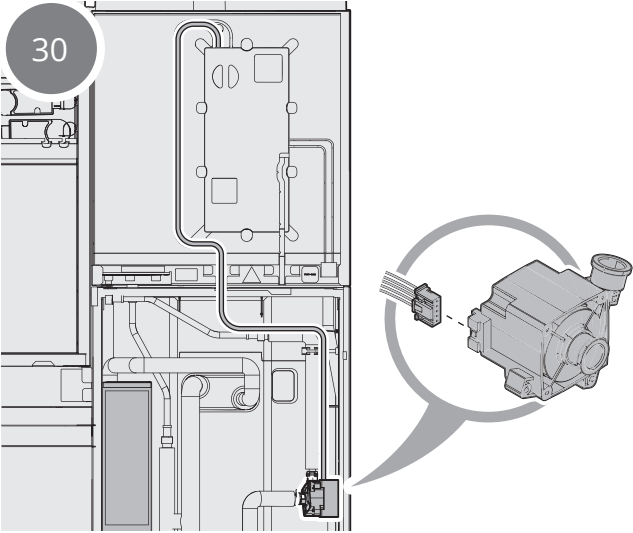
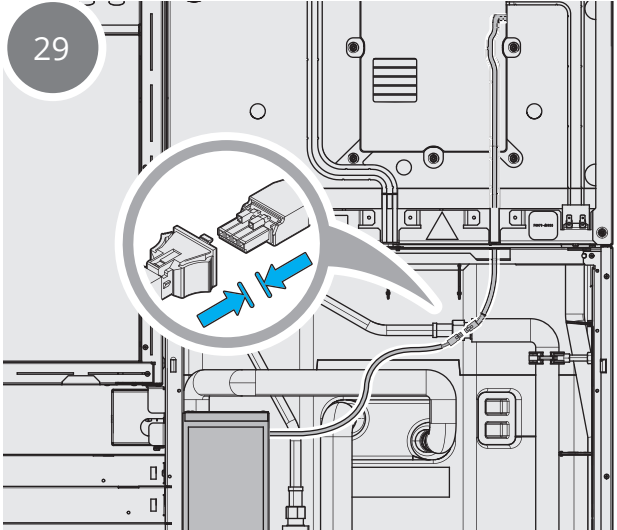
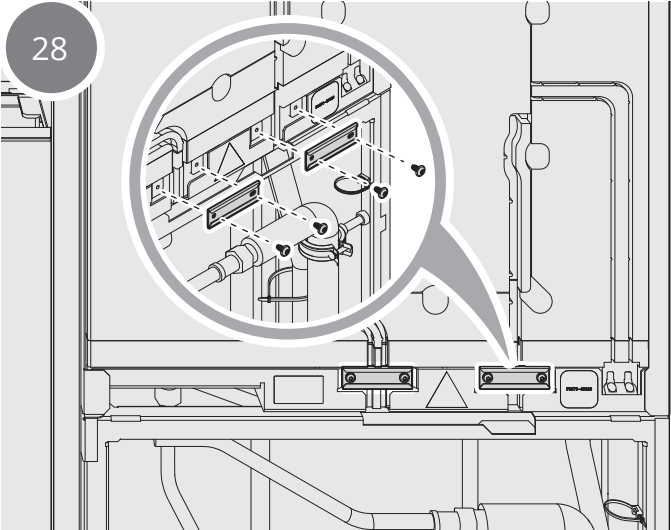


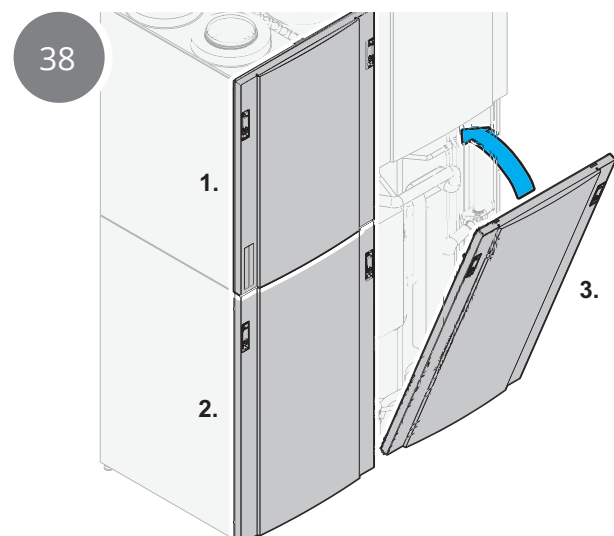
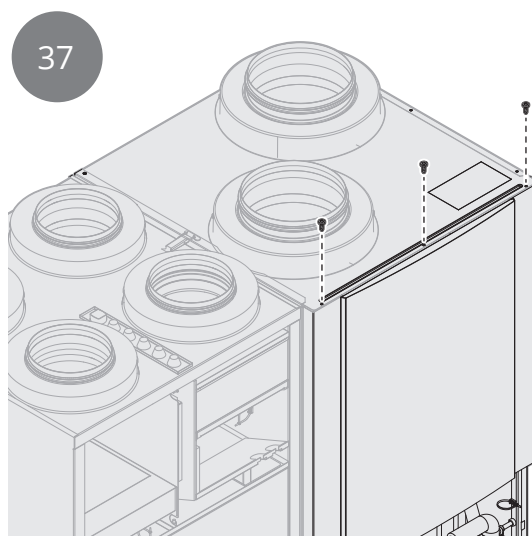
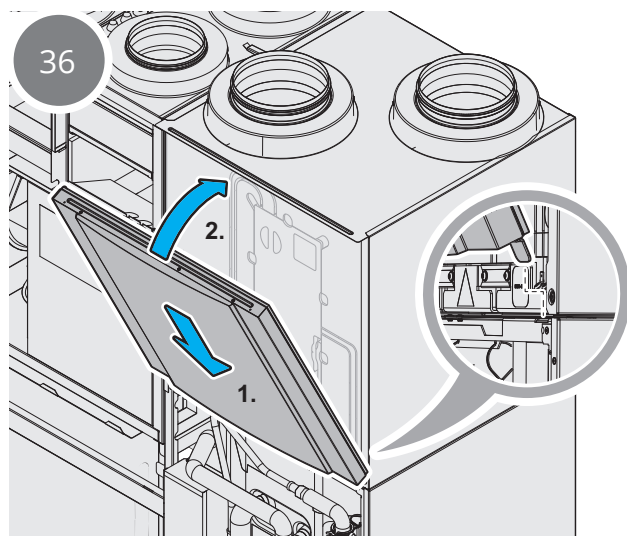
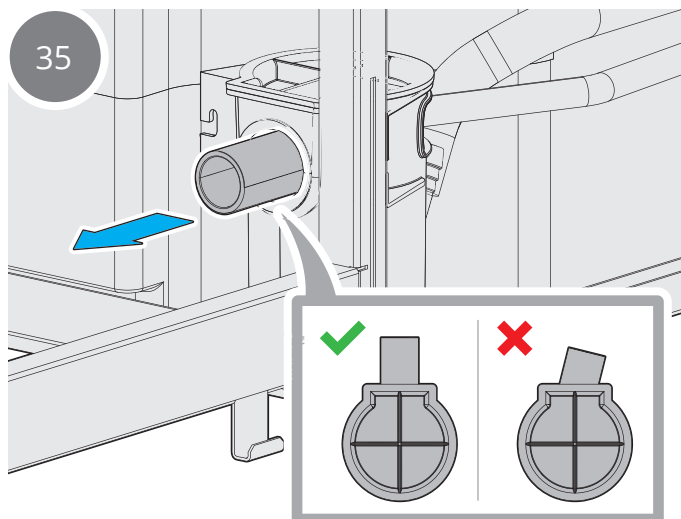
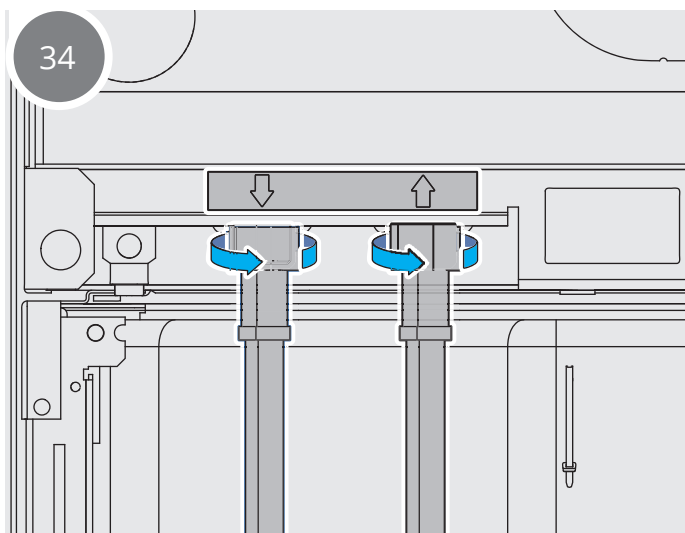
26



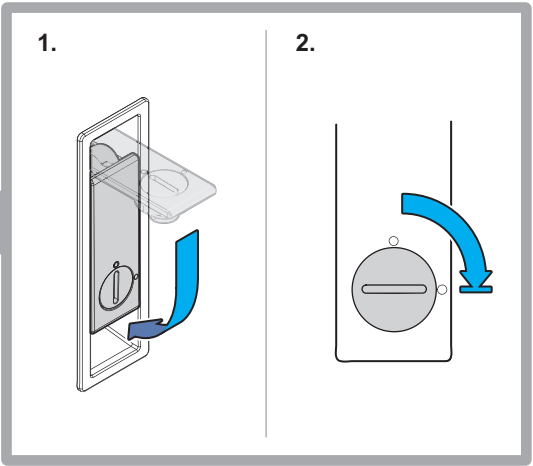
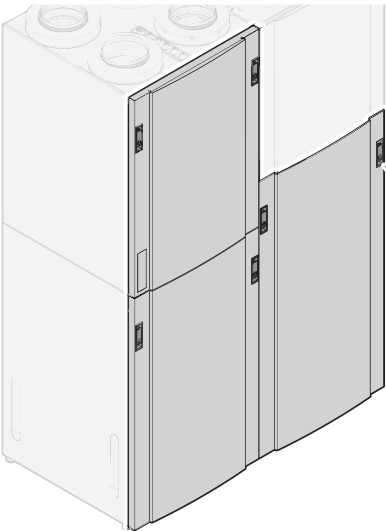
27





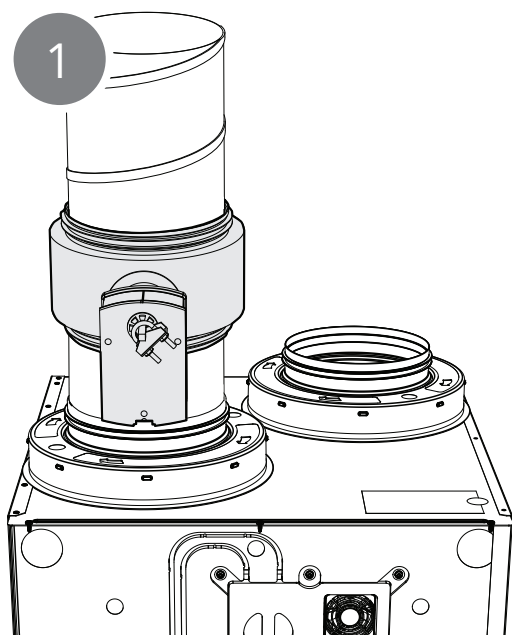


39

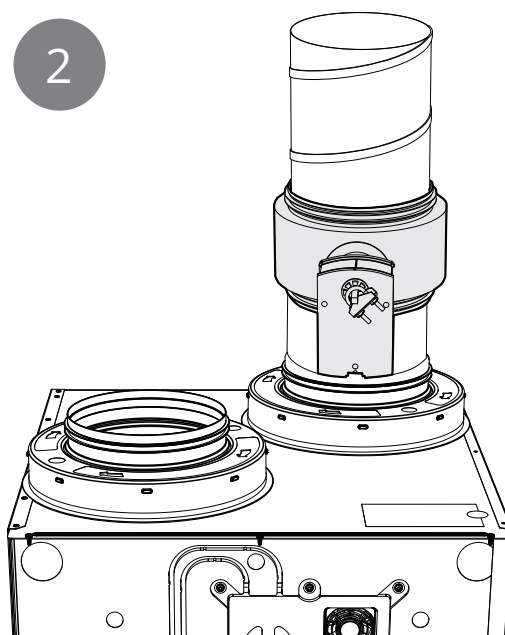


5.3. Installation of frost protection damper

Examples of installation:



The advantage of connecting the damper to the outdoor air duct is that the cable will reach the terminal block. Must be connected by an electrician, please refer to section 5.5.7. Connection of a frost protection damper on p. 30.



If the damper is connected to the exhaust air duct, the cable must be spliced

5.4. Assembly of ventilation ducts



CAUTION
Outdoor air to the heat pump and outdoor air to the ventilation must not be connected together.



CAUTION!
With duct enclosures, it must be possible to open or remove the front and right-hand panel.



NB
The exhaust air ducts from the heat pump and ventilation may be connected together.



NB
The exhaust air duct is laid at a slight gradient to the exhaust air hood, so that any water that has entered can run out again.

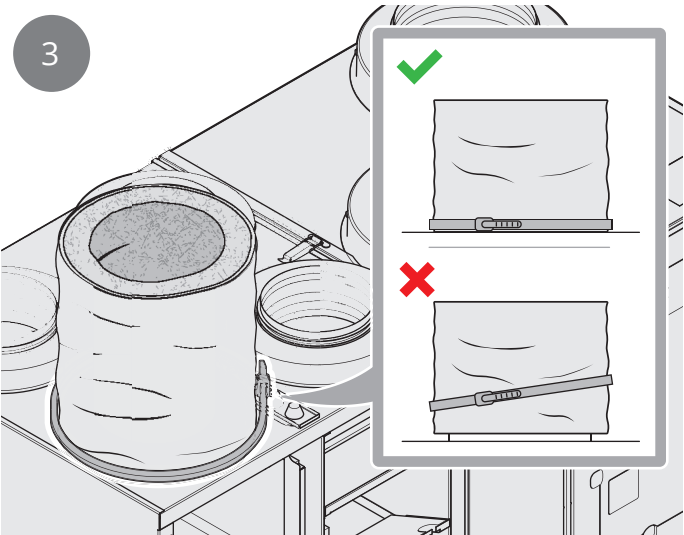
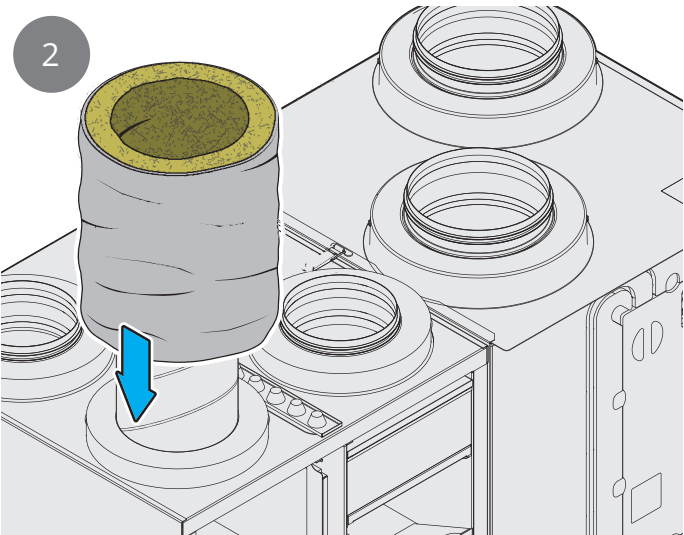
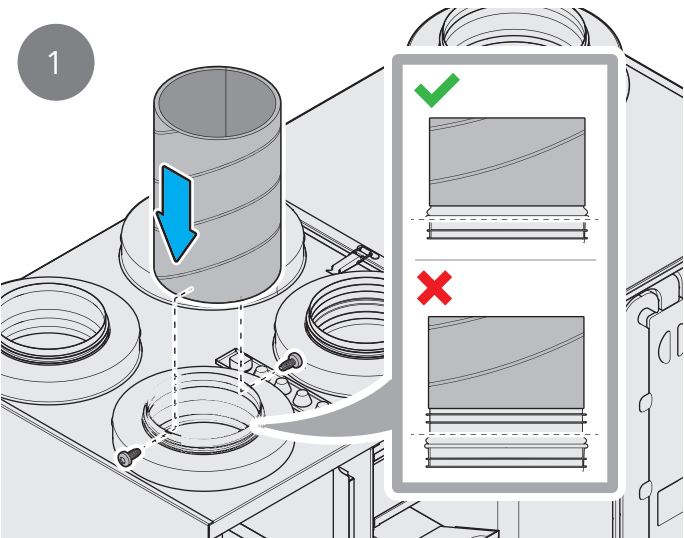


NB
Silencers should be installed on the main trunk to reduce fan noise to the rest of the duct system.

5.4.1. Prerequisites

Number of persons
1
Time
30 min.
Tools
Adhesive tape
Screwdriver
Materials
50 mm insulation with insulation grade equivalent to $\lambda = 0.035 \text{ W/m}^{\circ}\text{C}$ or better

5.4.2. Instructions



5.5. Electrical installation

The product may be converted to 230V~3.
The necessary equipment is supplied. See separate conversion instructions and wiring diagram.



DANGER

All electrical connections must be carried out by a qualified electrician.



DANGER

The product should be connected to 400 V, 3-phase+N, 16 A with an earth leakage switch and all-pole circuit breaker. Earth leakage switch must be type B.



NB

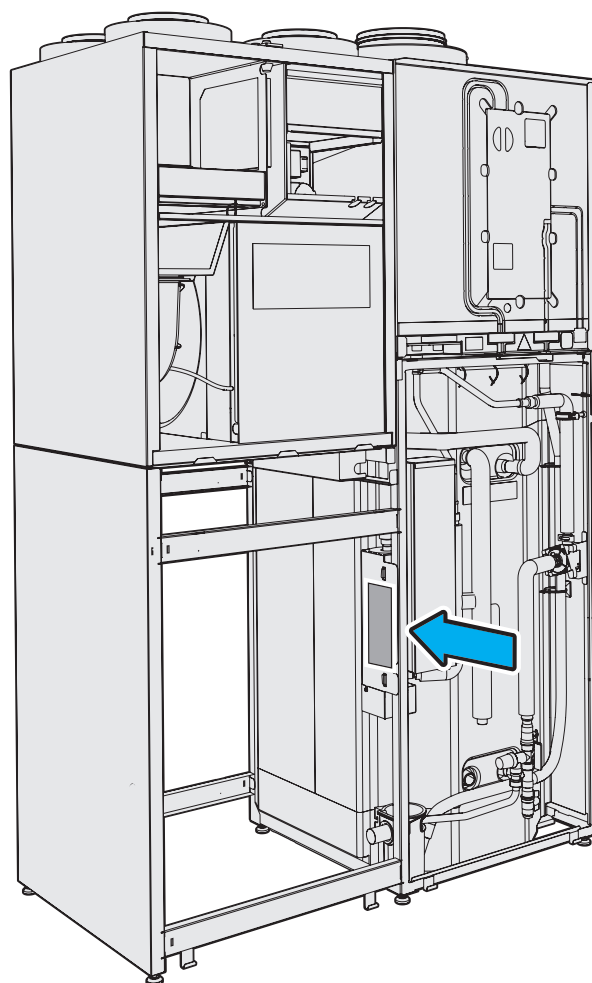
The location should be selected in accordance with national legal requirements concerning electrical safety. Check which regulations apply in your country.



NB

The PG nipples for the power cable and control cable must be tightened to at least 2.0 Nm.

5.5.4. Circuit diagram and conversion, electricity



The circuit diagram is on the left-hand side of the tank module.

5.5.1. Before you start

Check that all electrical connections between the modules have been made.

5.5.2. Internet access

The unit should be connected to the internet. A cable duct with at least Ø20 mm for the network cable should be laid between the unit and the home router.

5.5.3. If accessories are used

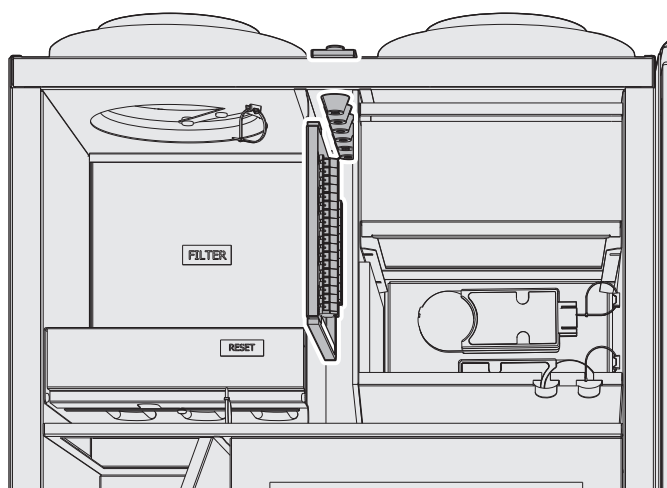
Lay a Ø16 mm duct between the unit and the intended location of the accessory (kitchen fan, pressure monitor etc.).

See the user manual of the accessory for further information.

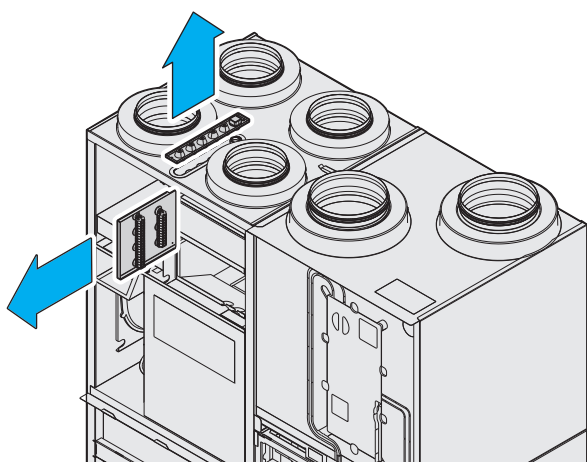
5.5.5. Prerequisites

Number of persons
1
Time
60 min.
Tools
Screwdriver
Descaler

5.5.6. Control and accessories



Pull out the panel with connection terminals so that the connections are accessible. The panel with seals right at the top may be loosened for easier access.



Connection table

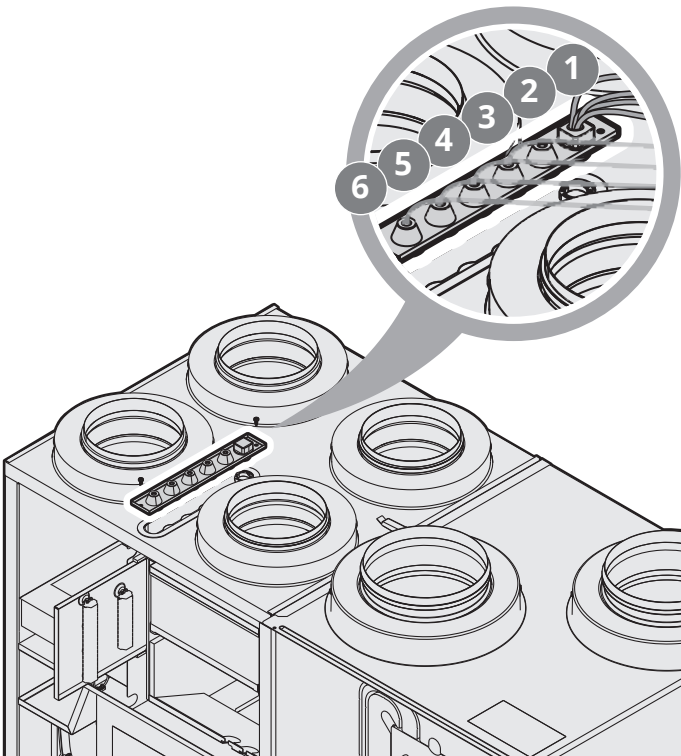
		Digital input X8 The following choices are available: None Home <u>Away</u> Emergency stop CO ₂ detector Smoke detector—extract air Smoke detector—supply air Smoke detector—off Smoke detector—max. Fire damper feedback
1	X8*	
2	G0	Signal ground
3	Q1 C**	Supply, digital output 1
		Digital output 1 normally open The following choices are available: None <u>Outdoor air damper</u> Fire damper Common alarm/maintenance indication Alarm indication Maintenance indication Operating indication Bypass damper Cooling pump
4	Q1 NO*	
5	Q2 C**	Supply, digital output 2
		Digital output 2 normally open The following choices are available: None Outdoor air damper Fire damper <u>Common alarm/maintenance indication</u> Alarm indication Maintenance indication Operating indication Bypass damper Cooling pump
6	Q2 NO*	
7	L (230 V)	L 230 V
8	N (230 V)	N 230V
9	GND	PE
10	M14 C	Frost protection damper, heat pump C (230VAC)
11	M14 NO	Frost protection damper, heat pump NO (230VAC)
12	Cooling	0-10 V Water cooling valve

* Inputs/outputs that may have different functions, depending on the configuration selected via Flexit GO. The choice underlined is the default setting.

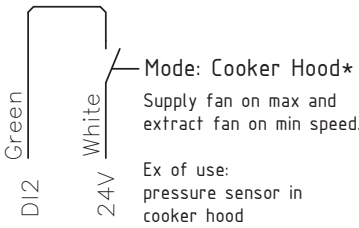
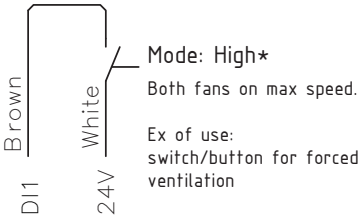
** Max. voltage 230 V AC, max. current 2 A resistive load.

Location of penetrations for electric cables

	Cable type
1	Network cable
	Control panel cable (CI-70)
	3-core cable (e.g. for kitchen fan) (DI1&DI2)
	Accessory cable (Accessories)
2	Spare (accessories)
3	Spare (accessories)
4	Spare (accessories)
5	Spare (accessories)
6	Spare (accessories)



Example how to connect DI1 & DI2 cable



* default config

I/O	Selection	Comment
Selection for DI1 (input)	None Cooker hood Fireplace *Fire damper feedback High Stop Home Away	This is where to select the function of digital input DI1. The available alternatives are the various ventilation positions. *If you have configured the fire damper, feedback will also be an alternative.
Selection for DI2 (input)	None Cooker hood Fireplace *Fire damper feedback High Stop Home Away	This is where to select the function of digital input DI2. The available alternatives are the various ventilation positions. *If you have configured the fire damper, feedback will also be an alternative.

5.5.7. Connection of a frost protection damper



CAUTION!

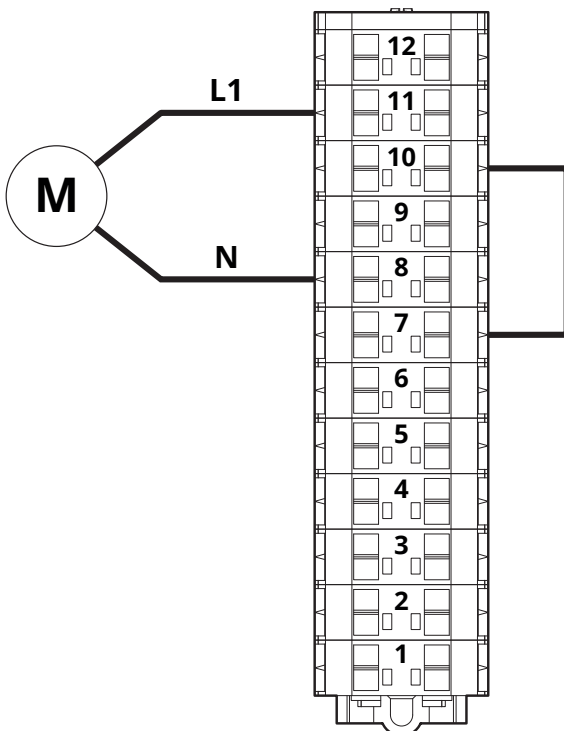
A frost protection damper must be connected to prevent the heat pump's water circuit from freezing in the event of a power cut.

The damper must be a 2-core 230 V damper with mechanical spring return to the closed position in dead state. Flexit product 14481 (Ø200) or 14485 (Ø250) can be used.

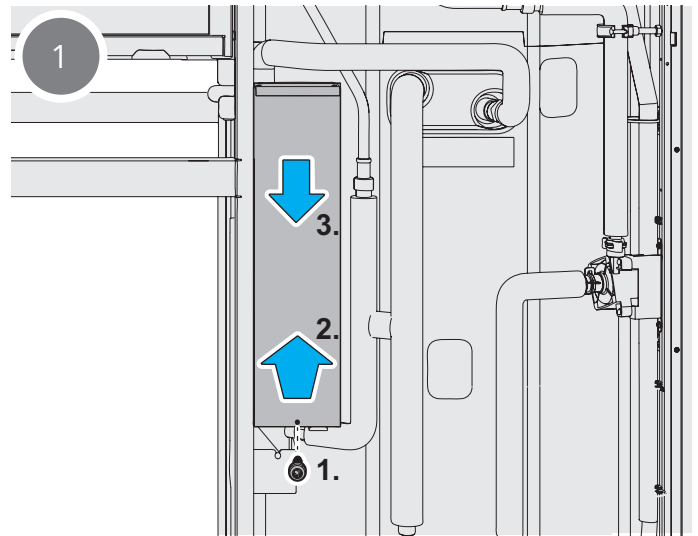
Electrical connection

NB! Remember to bridge between outputs 7 and 10. See the table in section 5.5.6 for a description of inputs and outputs.

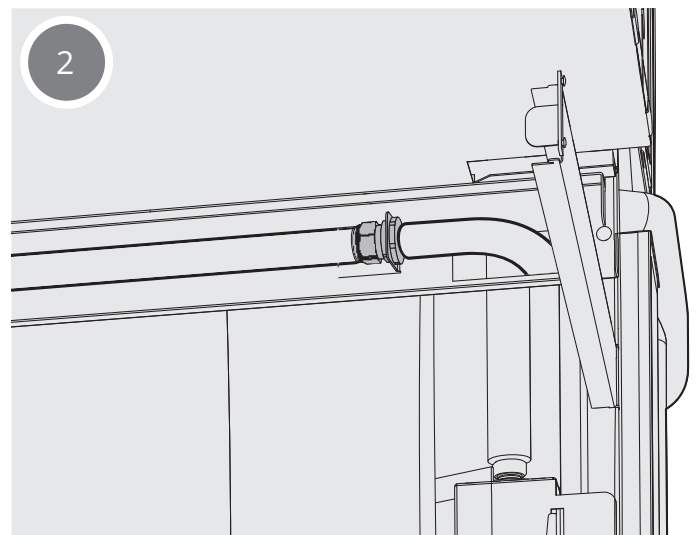
As from ventilation modules with art. no. 800480-000036 & 800481-000168, the bridge is factory-fitted.



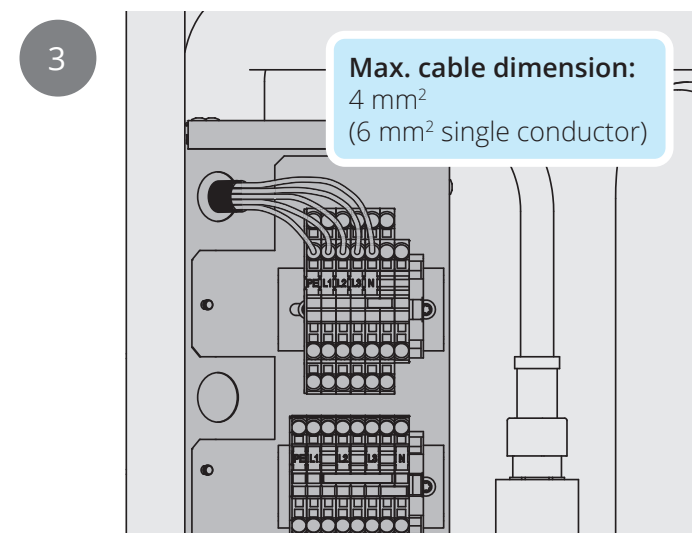
5.5.8. Voltage supply



Loosen the screws to the lid over the electricity box and remove the lid.



Tighten the nipple to 2 Nm.



5.6. Water and pipe work

Piping should be laid, without clamping, in the inner wall adjoining the bedrooms and living room. This is in order to avoid any transmission of noise and vibration.



CAUTION

No soldering is to be carried out on the product's connections.



NB Ensure that a dirt filter is installed in the incoming cold water supply so that no unnecessary particles enter the product.

5.6.1. Domestic Hot Water Recirculation System

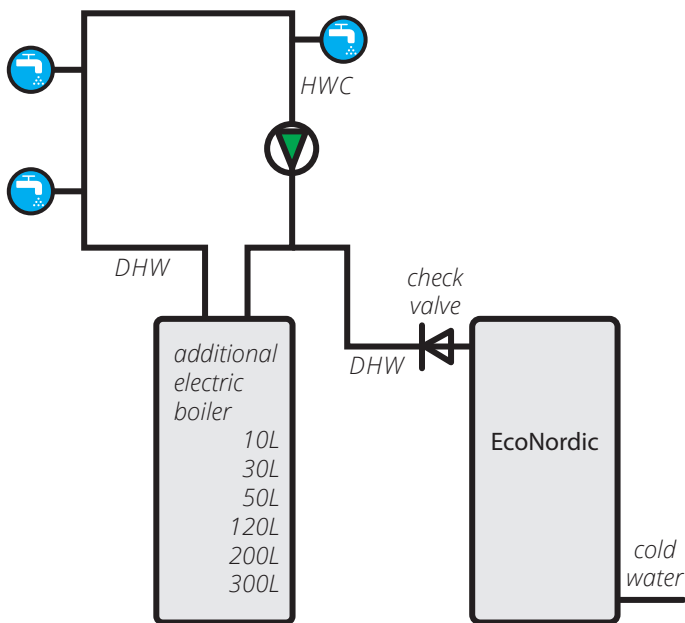
The use of extra Domestic Hot Water recirculation pump is not recommended without the use of an additional boiler.

Hot water circulation tap water with additional boiler

Use a smaller hot water cylinder for hot water circulation and a larger cylinder to increase domestic hot water capacity plus any hot water circulation.

The thermostat on the hot water cylinder must be set higher than 65 °C, e.g. 70 °C.

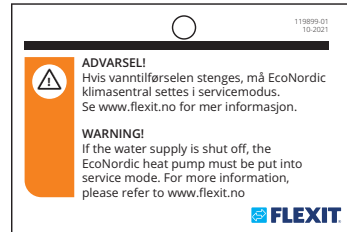
If there's a need for hot water circulation, an accumulator tank must be used as illustrated:



5.6.2. Incoming water

The incoming water pressure should not exceed 0.45/4.5 MPa/bar. If the water pressure exceeds 0.45/4.5 MPa/bar a pressure reduction valve (with check valve) must be installed.

Fix the label to the incoming water pipe to ensure that incoming water is not turned off while the product is in operation.



Label

5.6.3. Water quality

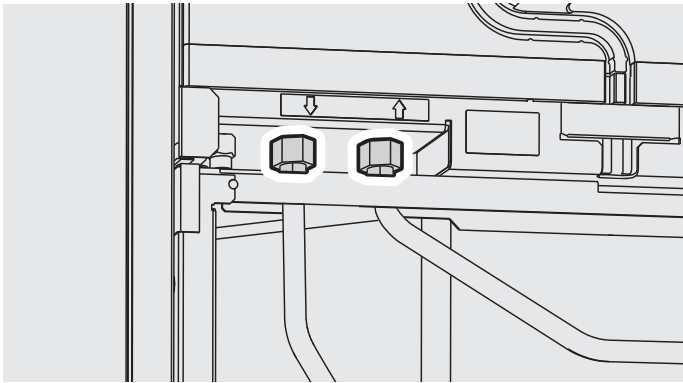
If the drinking water has a higher dH (German hardness) than indicated below, a softening filter must be installed. This is to safeguard the heat pump's function.

If the pH value is close to the lowest level, it may be necessary to flush the system during the lifespan of the product. If the value is lower than the specified value, pH-raising filters must be installed to avoid the need for system flushing.

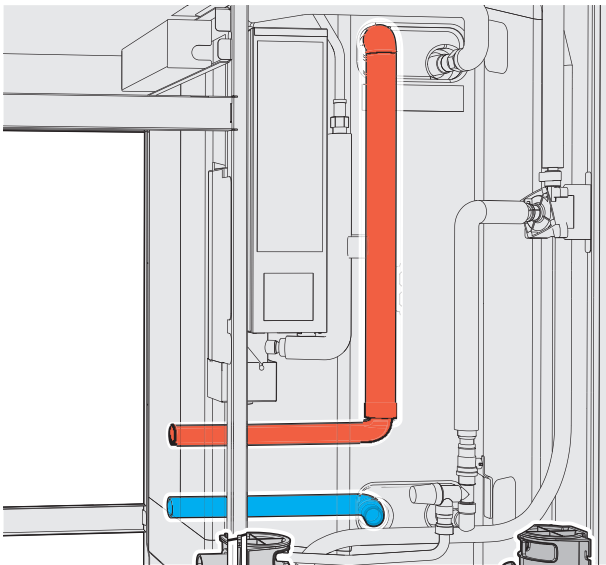
	Minimum allowable level	Maximum level allowed
pH value:	7,3 pH	9,5 pH
Hardness:	1 °dH	7 °dH
Calcium:	4 mg/l	50 mg/l
Magnesium:		10 mg/l
Carbon dioxide (free):		5 mg/l
Chloride:		250 mg/l
Sulphate:		250 mg/l
Chloride and sulphate:		250 mg/l

When using water from the user's well/borehole, water samples must be taken and analysed. Necessary filtration must be installed if required based on the water quality.

5.6.4. Water connections



Check the connections to the heat pump.
Tightening torque 30 Nm.

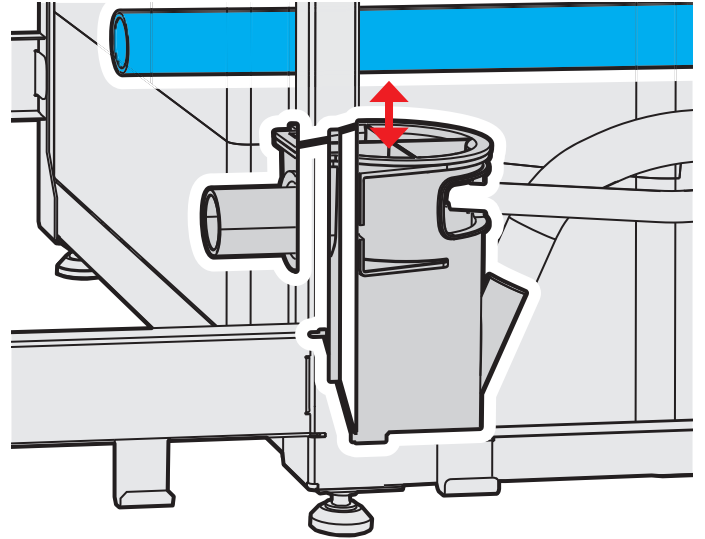


Hot water connection Ø22 mm, flat end.
Cold water connection G3/4".
Normal piping is shown.

5.6.5. Drainage

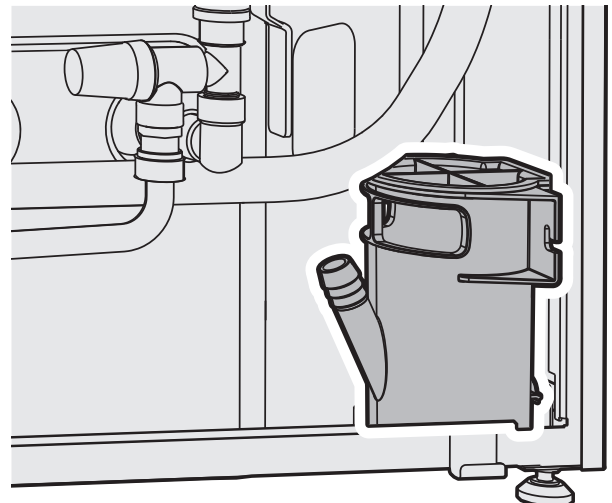
Drainage water from the evaporator and safety valve are led via a non-pressurised pipe to the drainage cup and on to the drainage gully. Check that the drain pipe has a downward fall all the way to the floor gully.

The drainage cup dimension for further connections is dia. 32 mm.



CAUTION!

Make sure there is good access to the drainage cup, allowing this to be cleaned when necessary.

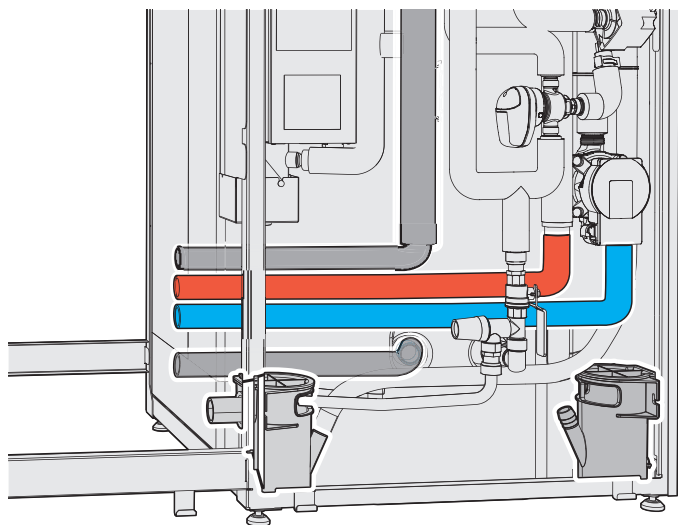


Alternative exit for hot and cold water pipes.
Alternative location for drainage cup.

The drainage hose can be cut and moved.
A hole can be made in the side wall where indicated.

5.7. Connecting the heating system WH4

For domestic water connections, see chap. 5.6.4.



G1" connections for heating system.
Normal pipe route shown

5.7.1. Installation

CAUTION!

The pipe system must be flushed clean before connecting the heat pump to avoid any contamination in the pipes damaging the components in the product.

A suitable filter must be inserted on the return water side to extend the service life of the components.

5.7.2. Dimensioning

NB

The safety valve must have an opening pressure of max. 0.3/3 MPa/bar and be mounted on the heating medium's return side.

The feed temperature must normally be set between 25°C and 45°C. Check the recommendations for the floors in the specific home.

CAUTION!

Be especially aware of the max. and min. temperatures when making the initial settings, as incorrect values could damage the floor. Check the recommendations for the specific home.

Highest permitted return temperature: 50°C

Water quality
Ordinary tap water may be used in the heating medium circuit.
Particularly hard or corrosive water should be avoided .

6. Commissioning

6.1. Prior to commissioning

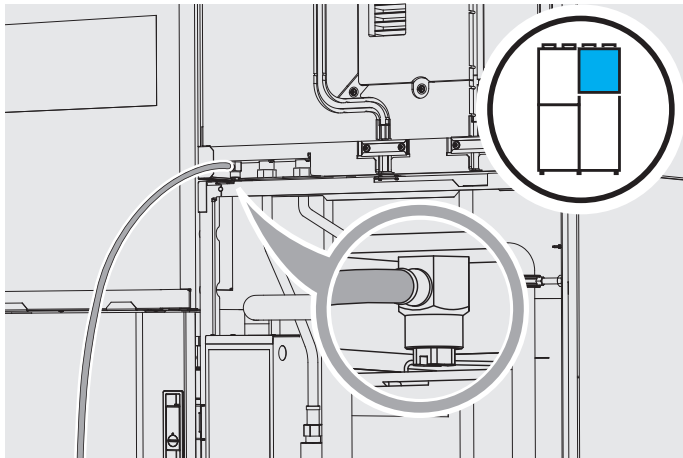


CAUTION!

Prior to commissioning, the following instructions must be followed to avoid damaging the product.

NB! Important points before connecting the product to the power supply.

- 1 All water connections on the primary and heating medium side must be connected as indicated in the previous chapters.
- 2 Tank/primary circuit must be filled with water. Remember to open the cut-off valve when filling the tank. This must always be open when the product is in operation and only closed for servicing the primary circuit. Open a valve during filling to ensure that most of the air is vented from the system.
- 3 Water supply must be opened.



- 4 Connect the venting hose as shown. Lead the hose to a container to avoid water spillage on the product.
- 5 The heating medium circuit (WH4) must be filled before startup.

Electric power may now be applied.

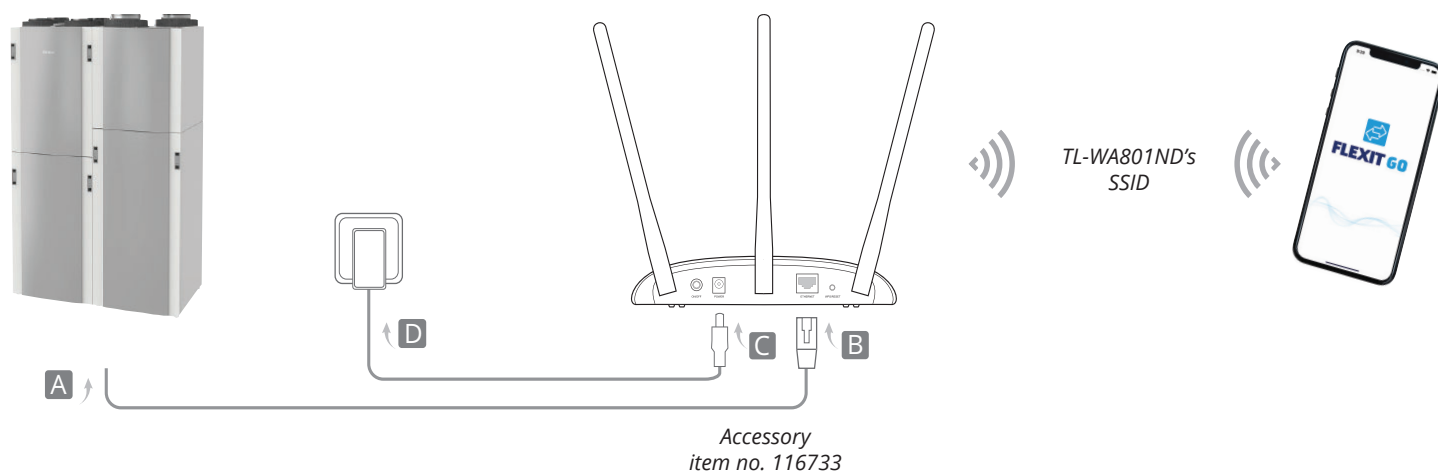
On connecting electric power, the circulation pump in WH4 will start up. Venting of the heating medium circuit may now be completed.

6.2. Connection

Depending on whether or not there is a network available, follow the appropriate instructions below.

6.2.1. No network available

Connect the product to the access point (accessory item no. 116733).

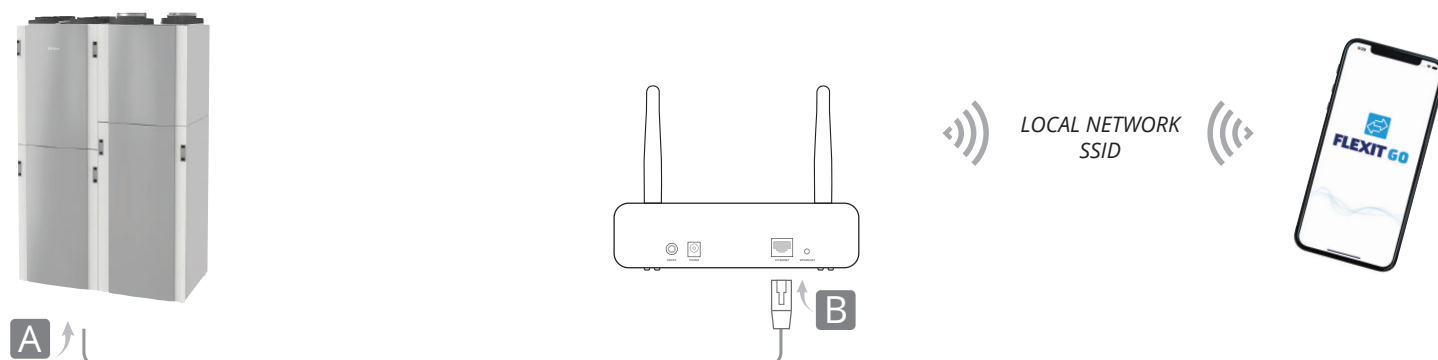


- 1 Connect a network cable from the product to the access point (A to B).
- 2 Connect the mains adapter to the access point (C till D).
- 3 Switch on the access point and wait until the LEDs for current (⏻) and wireless (📶) are illuminated continuously.

6.2.2. Network available

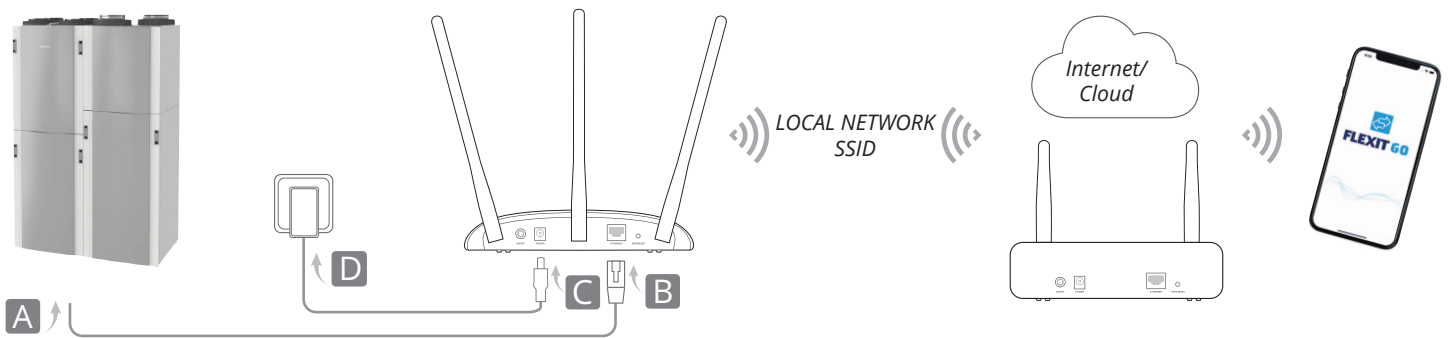
If there is a network available, the product can be connected in two ways: with a network cable or with Wi-Fi using accessory item no. 116733.

Connect the product to the home router with a network cable.



- 1 Connect a network cable from the product to the home router (A to B).

Connect the product to the home router via Wi-Fi
(accessory item no. 116733).



- 1 Connect a network cable from the product to the access point (A to B).
- 2 Connect the mains adapter to the access point (C till D).
- 3 Switch on the access point and wait until the LEDs for current (⏻) and wireless (📶) are illuminated continuously.
- 4 Connect to the accessory's Wi-Fi network by using a standard SSID and the password (printed on the label of the access point).
- 5 Open a web browser and enter 192.168.0.254
- 6 Log in with **admin** (lower case) as both user name and password.
- 7 Press 'Quick installation' and press 'Next'.
- 8 If you wish, change the login password and press 'Next'.
- 9 Select client mode and press 'Next'.
- 10 Follow the instructions to complete the configuration.

6.3. Connect to the product



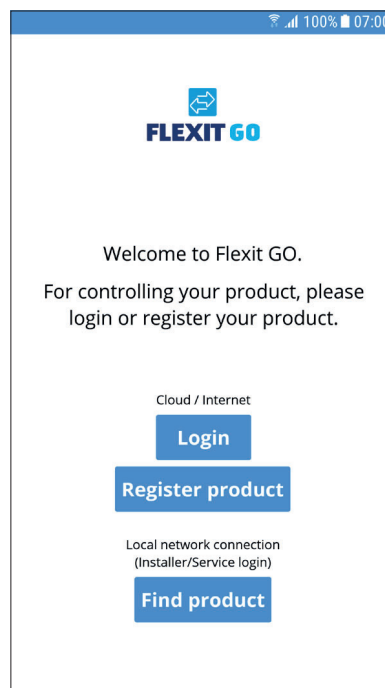
NB

The product is commissioned by means of a direct wireless connection between the product and a mobile telephone or tablet with the Flexit GO app installed.

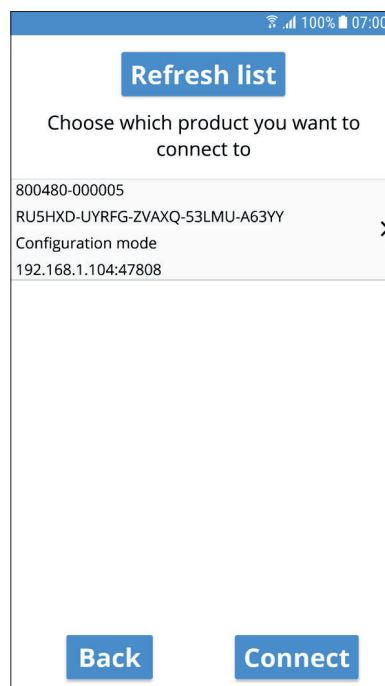
- 1 Download the Flexit GO application to your mobile device.



- 2 Switch on the product and access point (accessory item no. 116733) if you have not already done so.
- 3 Wait three minutes.
- 4 Go to the mobile device's settings for wireless networks.
- 5 Connect to router or access point.
If using the access point: Connect to the access point's wireless network. The SSID and password are printed on a label underneath the access point.
- 6 Start Flexit GO on your mobile device.



- 7 Press 'Find product'.

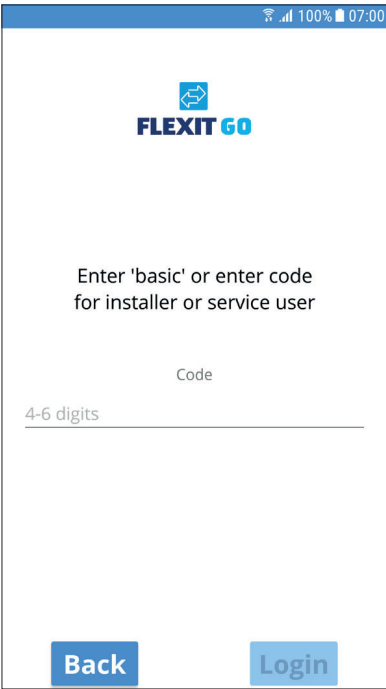


- 8 Press the unit which you wish to connect to from the list.
- 9 Press "Connect"

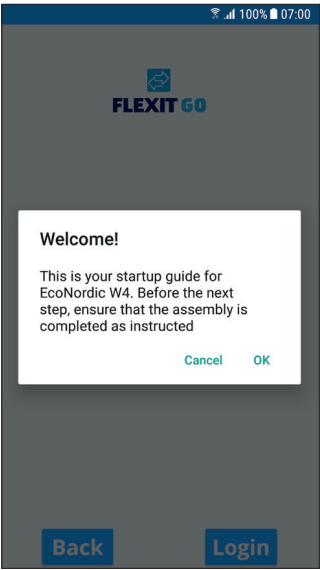


NB

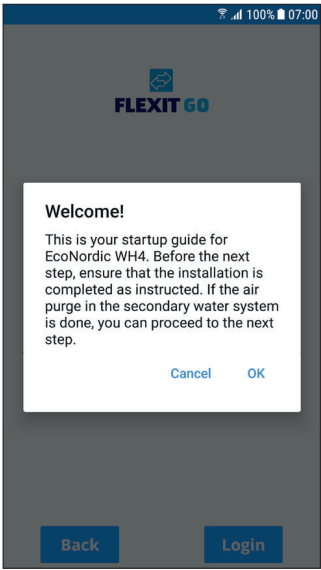
In order for the start-up guide to start, the product must be in configuration mode.



10 Enter the code '1000' to log in as installer.



W4



WH4

11 If everything is ready for the air purge to start, press 'OK' to open the Start-up Guide. If not, press 'Cancel'.

6.4. Start-up Guide



WARNING

If a correct adjustment of the unit is not carried out, its functioning may be affected and cause damage to the building.

Startup Guide EcoNordic WH4/W4

Is the frost protection damper mounted on a common exhaust air duct from the heat pump and ventilation?

Selection Yes >

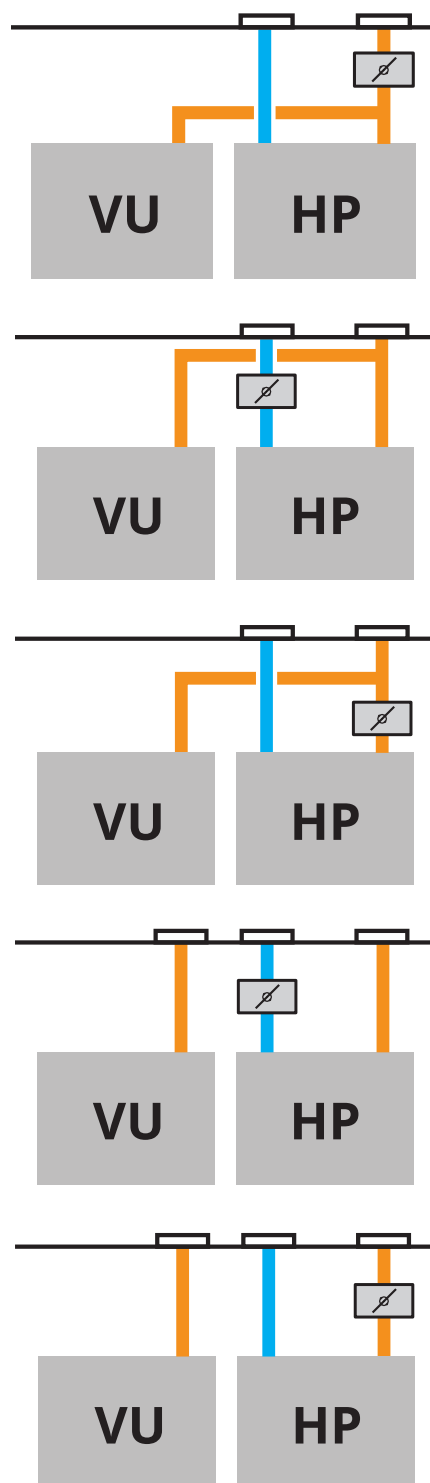
Power electric heating

Selection 3kW >

Cancel Next

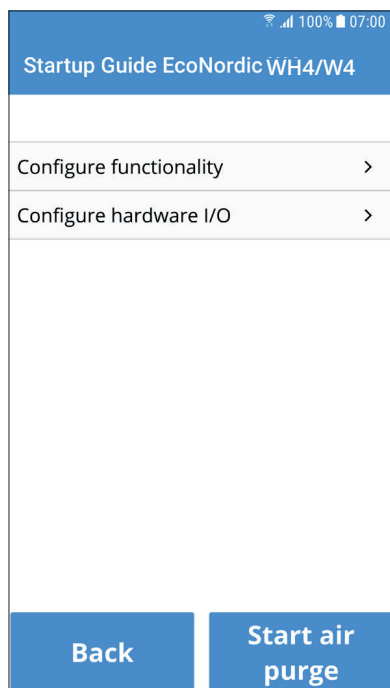
- 1 Select whether the frost protection damper is mounted on a common exhaust duct from the heat pump and ventilation system.
 - 1.1 Press "Select"
 - 1.2 Press "Yes" or "No".
 - 1.3 Press "OK"
- 2 Select between 1 kW or 3 kW electric element:
 - 2.1 Under Electric element output, press "Select".
 - 2.2 Press "1 kW" or "3 kW".
 - 2.3 Press "OK"
 - 2.4 Press "Next"

Examples of frost protection damper installation:

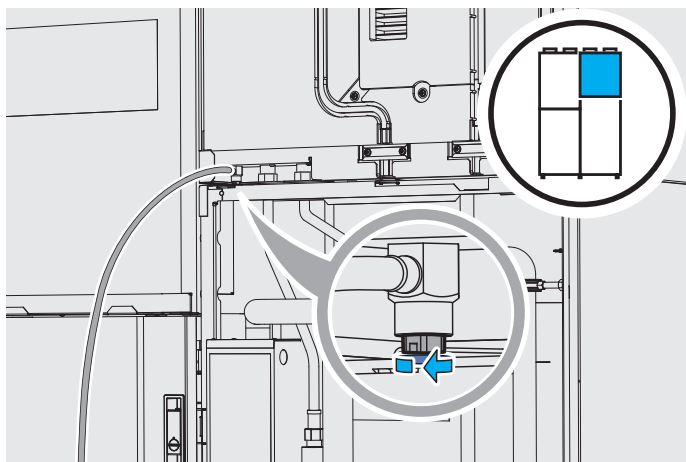


The advantage of connecting the damper to the outdoor air duct is that the cable will reach the terminal block. Must be connected by an electrician, see chap. 5.5.7. Connection of a frost protection damper on page 30.

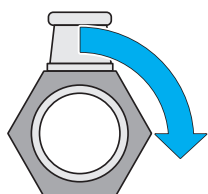
If the damper is connected to the exhaust air duct, the cable must be spliced.



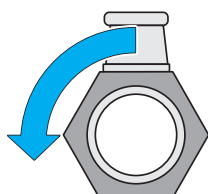
- 3 Are there any accessories connected which, according to their instructions, require configuration?
 Yes: press 'Configure functionality'.
 No: press 'Start air purge'.



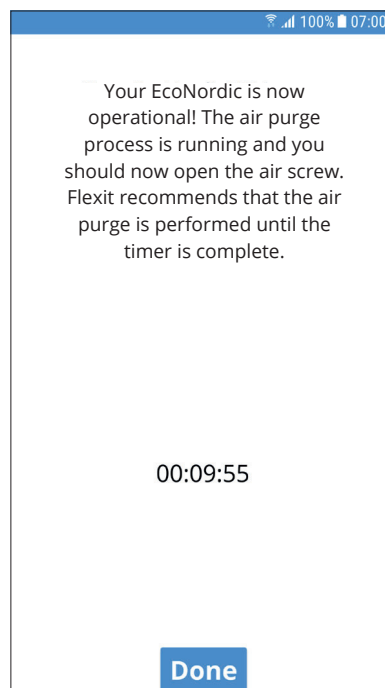
Use a 10 mm spanner to close and open the bleed nipple.



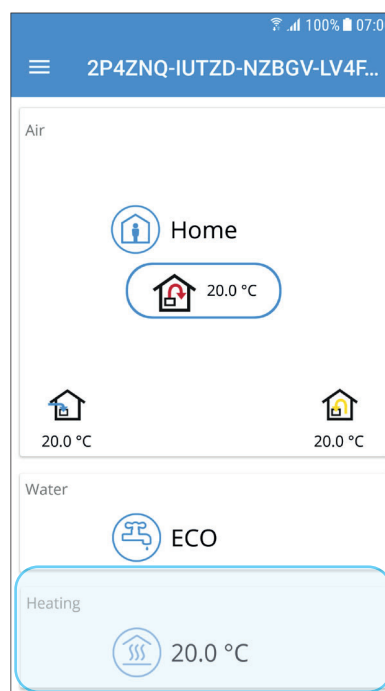
To close, screw to the right.



To open, screw to the left.



- 4 If you think the air purge has finished ahead of time, press "Ready".
 5 Press "OK" to stop the air purge.

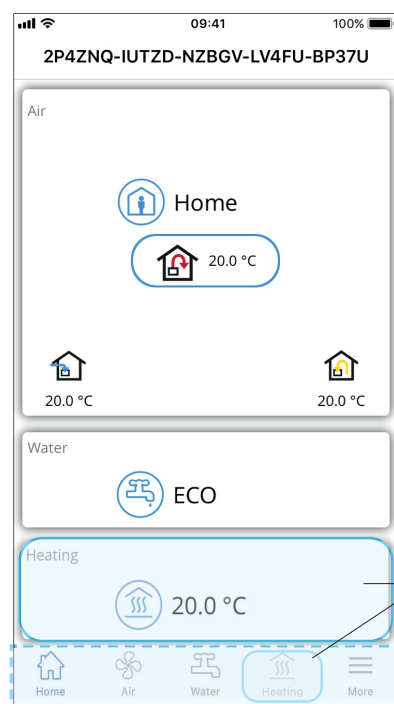
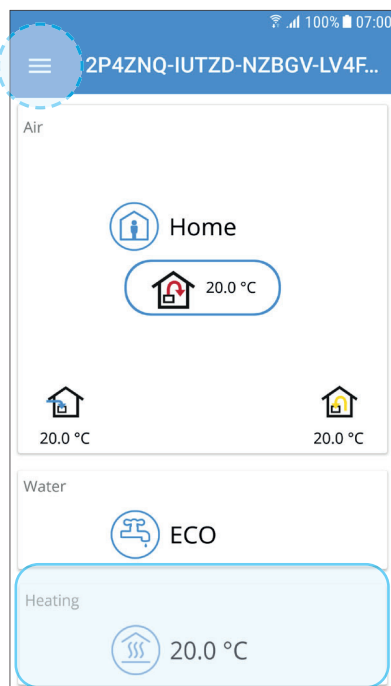


- 6 When you have finished the the air purge operation, you will return to the home page.

7. Adjustment

7.1. System differences between Android and iOS

The start screen will look differently depending on whether the mobile unit you are using is for the Android or iOS system. The most important difference is that Android has the menus as an option at the upper left of the start screen, while iOS has menu choice icons at the bottom of the screen.

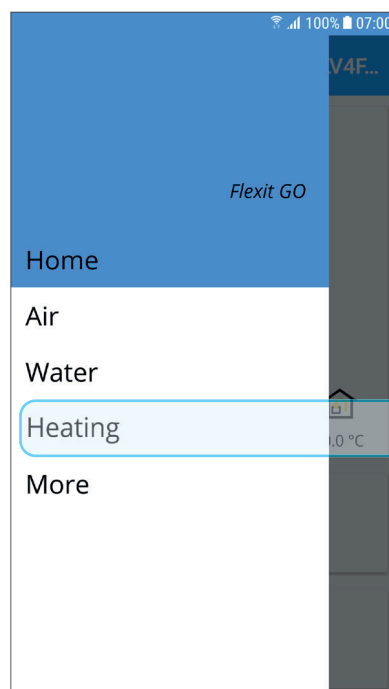


7.2. Initial adjustment, ventilation

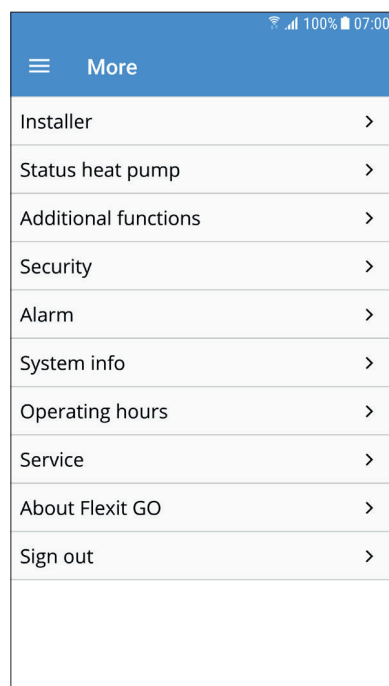


WARNING

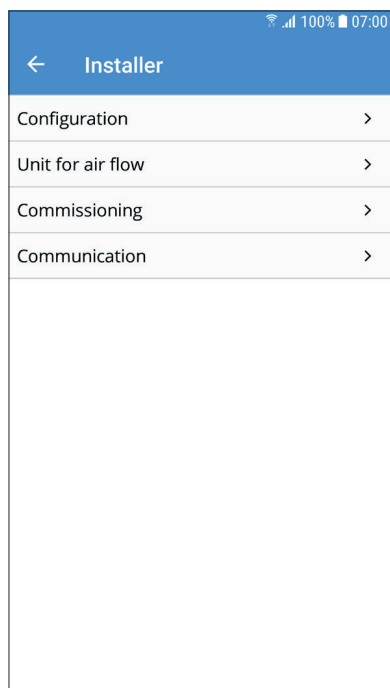
If adjustment of the product is not carried out correctly, its functioning may be affected and cause damage to the building.



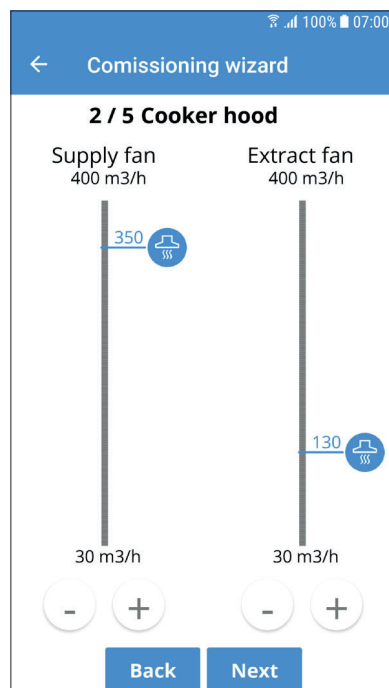
1 Press the menu selection 'More'.



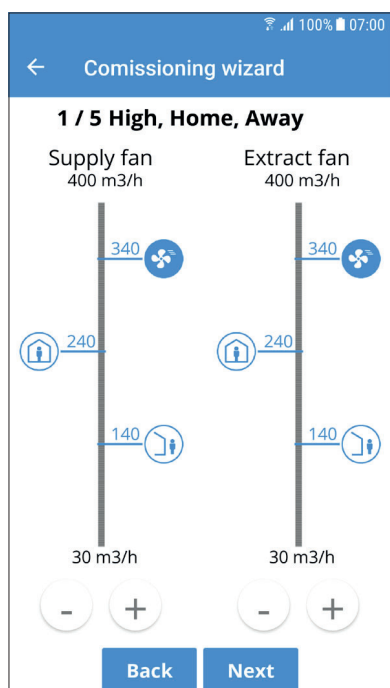
2 Press 'Installer'.



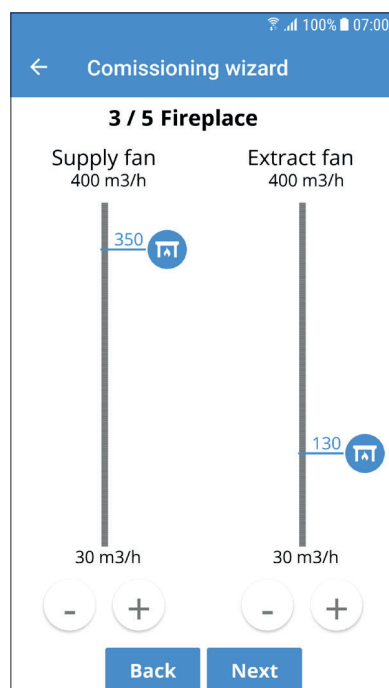
- 3 Press 'Commissioning'.
Follow the guide and adjust the values as necessary.



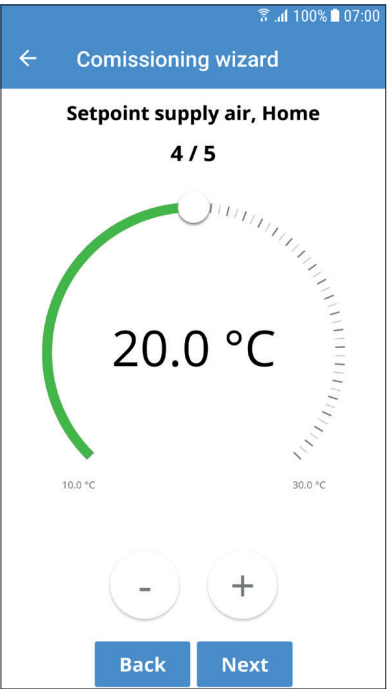
- 5 Adjust value if necessary.
Press 'Next' to continue.



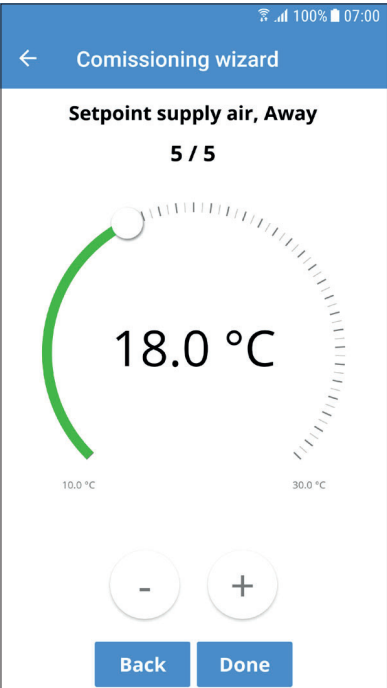
- 4 Adjust value if necessary.
Press 'Next' to continue.



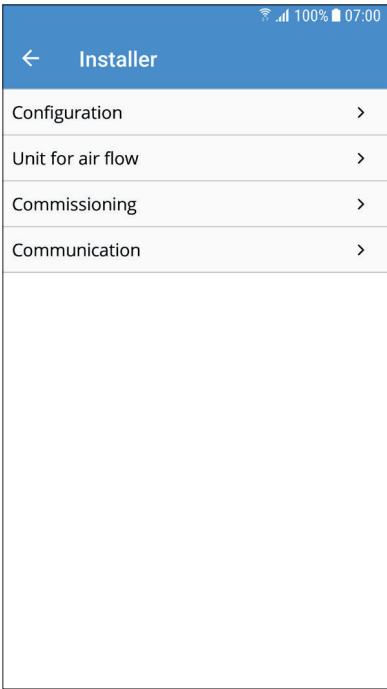
- 6 Adjust value if necessary.
Press 'Next' to continue.



7 Adjust value if necessary.
Press 'Next' to continue.



8 Adjust value if necessary.
Press 'Done'.



The product is now ready to use.

7.3. Settings, heating

If you wish to adjust the heating settings, go to the main menu → "Heating" → "Advanced settings"

← Heating, advanced		
Heating Curve settings	>	The heat curve is adjusted here.
Floor drying function	>	Can be used in case of new production and to regulate feed temperature to a specific profile.
If the temperature in the housing differs from the set value, you can use parallel shift to shift the entire heating curve.		
Set value	20.0 °C	Desired indoor temperature. These changes will not appear when viewing the heat curve, but will be added to or subtracted from the current target value.
Parallel shift	0.0 K	Parallel displacement of heat curve. Used if it is too hot or cold indoors, regardless of outdoor air temperature. These changes will not appear when viewing the heat curve, but will be added to or subtracted from the current target value.
Outdoor temperature limit for activation of space heating		
Limit	18 °C	When the outdoor air temperature is below the indicated value, the circulation pump in the secondary circuit will start up. If the value is higher, heat regulation will be in standby mode.
Outdoor temperature range where space heating needs between 1.5kW - 2.5kW		
Upper limit	10 °C	Working range when both the accumulation function from the tank and compressor operation are used alternately. For optimum operation, the output requirement in the home must be between 1.5 - 2.5 kW.
Lower limit	-5 °C	
Outdoor temperature limit that allows electric heater to assist space heating		
Limit	-8 °C	When the outdoor air temperature is below the indicated value, the electric element can start up if heat is needed.
Limits for flow temperature		
Min	20 °C	Limits to heat curve target value. Should be adjusted in the case of underfloor heating.
Max	45 °C	
Delta between flow and return		
Delta	5.0 K	The desired delta between your feed and the return from your heating circuit is regulated by use of the secondary circulation pump.
Hysteresis (on/off)		
On	2.0 K	Regulation of heating requirement. If the difference between the actual and target value is greater than indicated, Power on or Power off will be activated. Before Power off is applied to the heating requirement, a 30 minute timer function must have been active.
Off	2.0 K	

To adjust the heating curve settings, go to "Heating curve settings".

Heating curve	
Here you can adjust the flow temperature for each point in the heating curve	
Outside air: 15 °C	22.1 °C >
Outside air: 5 °C	27.8 °C >
Outside air: 0 °C	31.2 °C >
Outside air: -5 °C	32.6 °C >
Outside air: -10 °C	34.5 °C >
Outside air: -20 °C	38.4 °C >
Outside air: -30 °C	41.7 °C >

8. Technical data

		W4	WH4
		400 V~3N	400 V~3N
PERFORMANCE	Tap water profile (EN 16147)	XL	XL
	COP, tap water (EN 16147)	3.2	3.2
	Outgoing compressor capacity	3 kW	up to 4 kW
	Sound level (EN 12102)	52 dB(A)	52 dB(A)
	IP code	IP21	IP21
	Max. air quantity	370 m³/h @ 100 Pa	370 m³/h @ 100 Pa
	Operating point	240 m³/h @ 100 Pa	240 m³/h @ 100 Pa
	SFP	1,5 @ 240 m³/h	1,5 @ 240 m³/h
	Component efficiency	84 %	84 %
	Temperature efficiency	90 % <	90 % <
	SCOP (EN 14825)		3,08
CURRENT	Rated voltage	400 V~3N	400 V~3N
	Continuous flow through heater, capacity	3 kW (1 kW)	3 kW (1 kW)
	Fuse size	3x16 A (3x10 A)	3x16 A (3x10 A)
	Total rated current	14.3 A (10,0 A)	14.3 A (10.0 A)
	Total rated power	6.4 kW (4.4 kW)	6.4 kW (4.4 kW)
VENTILATION	Fan type	B-wheel	B-wheel
	Fan motor control	0-10 V	0-10 V
	Fan speed	3,750 rpm, max.	3,750 rpm, max.
	Control system, standard	Flexit GO	Flexit GO
	Filter type (IN/OUT)	ePM1 55% (F7)	ePM1 55% (F7)
	Duct connection	Dia. 160 mm	Dia. 160 mm
HOT WATER	Heater volume	197 L	197 L
	Nominal operating pressure	0.45/4.5 MPa/bar	0.45/4.5 MPa/bar
	Max. operating pressure	0.7/7 MPa/bar	0.7/7 MPa/bar
	Water temperature	5-65°C (Legionella: 75°C)	5-65°C (Legionella: 75°C)
	Minimum distance to combustible surfaces	no requirement	no requirement
HEAT PUMP	Refrigerant	CO ₂ (0.5 kg)	CO ₂ (0.5 kg)
	GWP	1	1
	Duct connection	Dia. 200 mm	Dia. 200 mm
	Max operating pressure	14/140 MPa/bar	14/140 MPa/bar
	Outdoor air temperature	Min. -25°C	Min. -25°C
	Inverter control	Yes	Yes
DIMENSIONS	Height	1,900 mm	1,900 mm
	Width	1,198 mm	1,198 mm
	Depth	650 mm	650 mm
WEIGHT	Total, excluding water	232 kg	238 kg
	Tank module	65 kg	71 kg
	Ventilation module	59 kg (weight without door)	65 kg (weight without door)
	Heat pump	84 kg	84 kg
	Ventilation chassis	76 kg (weight without door)	76 kg (weight without door)
INSTALLATION	Position	71 kg	71 kg
	Room temperature	65 kg (weight without door)	65 kg (weight without door)
		12 kg	12 kg
INSTALLATION	Position	Technical room/cupboard	Technical room/cupboard
	Room temperature	Min. 3°C	Min. 3°C

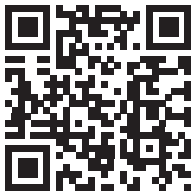
Energy class:



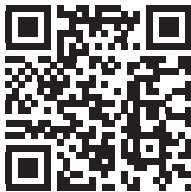
(average climatic conditions)

8.1. Air capacity and sound data

Capacity diagrams and performance data for the products can be found in the product data sheets and in our calculation program Flexit Select.

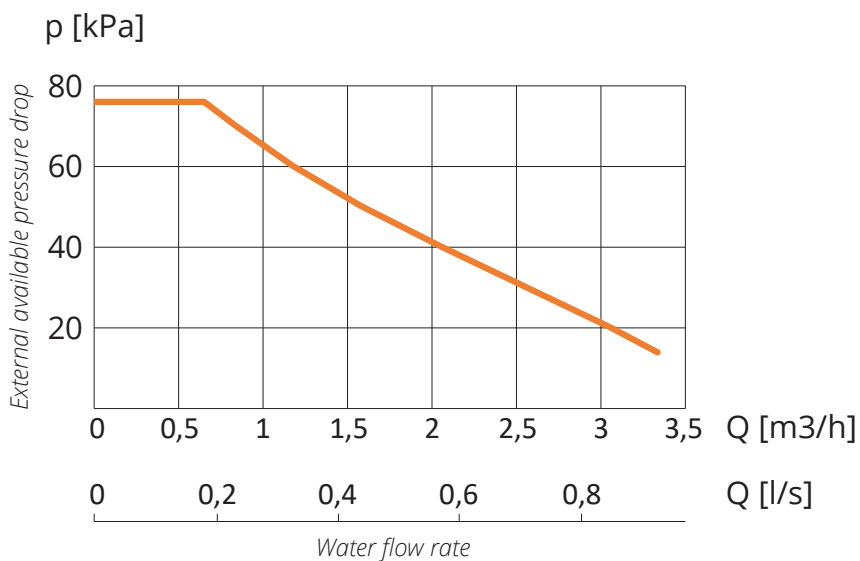


Product data sheet
EcoNordic W4



Product data sheet
EcoNordic WH4

8.2. Pump capacity, heating system

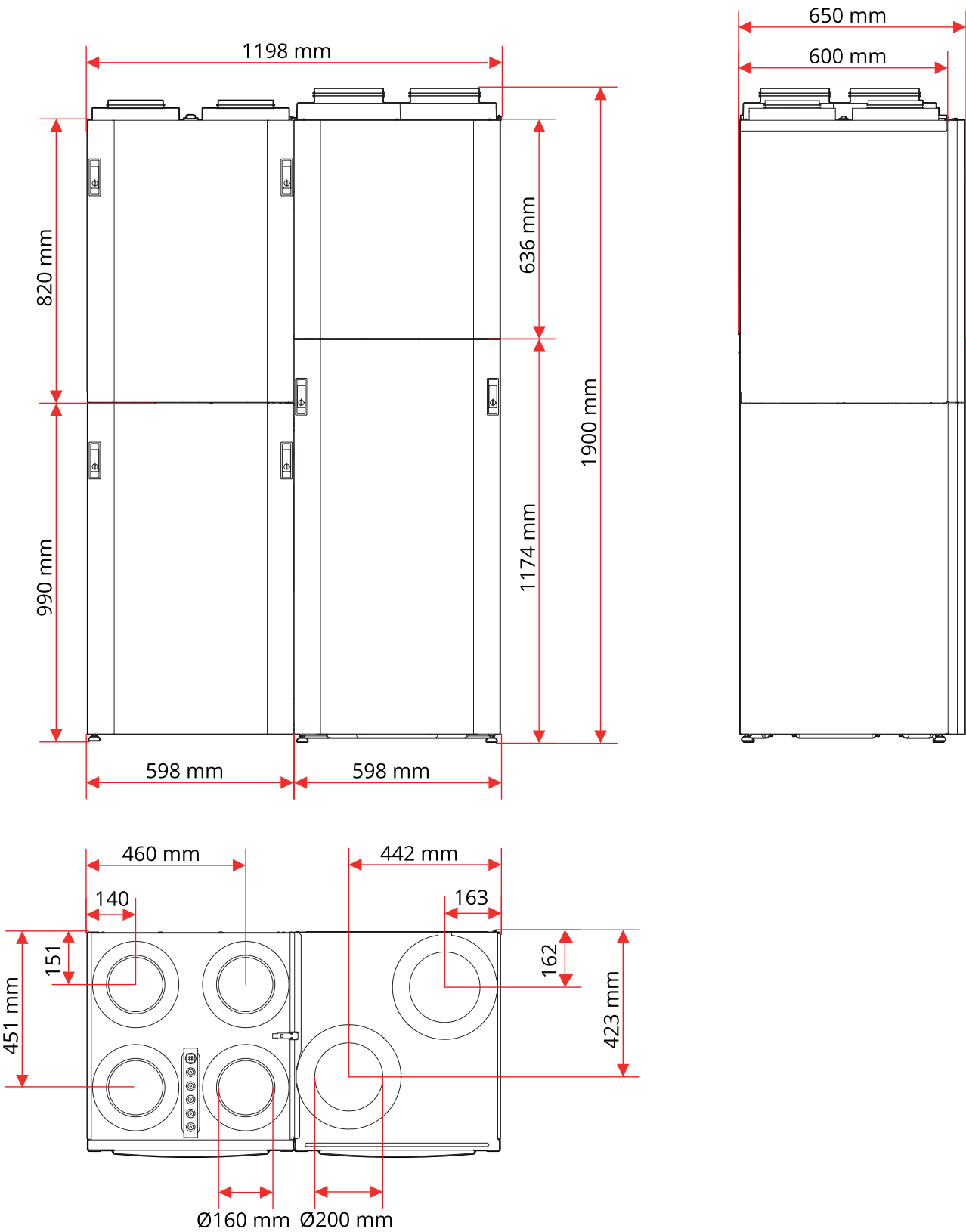


Shows the circulation pump capacity in the heating system.
Maximum pressure head is 6.5 metres. If exceeded, an additional circulation pump is needed.

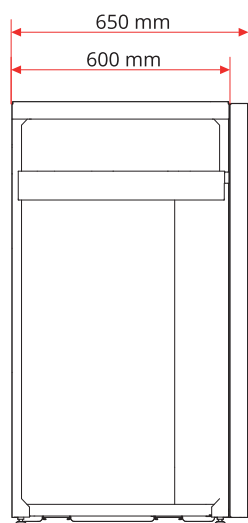
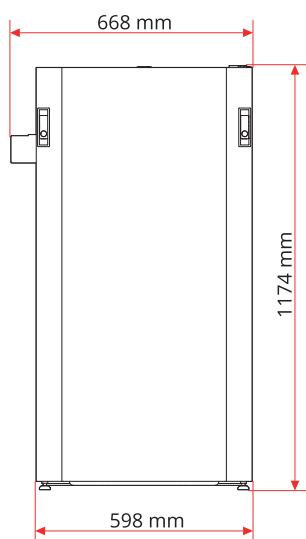
8.3. Nipple location



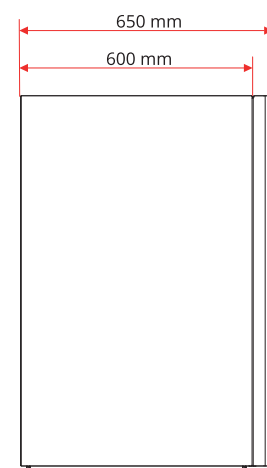
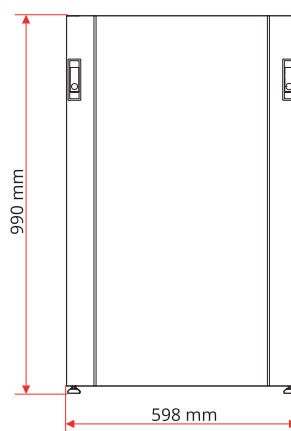
9. Dimensions



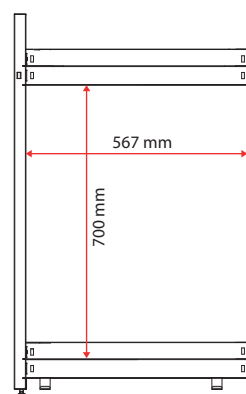
9.1. Tank module



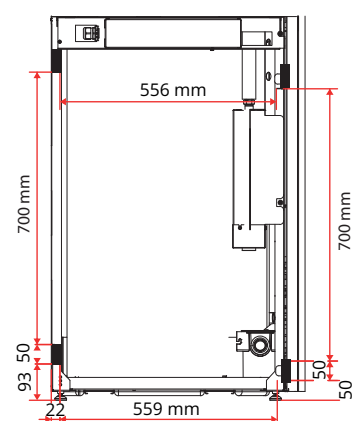
9.2. Chassis module



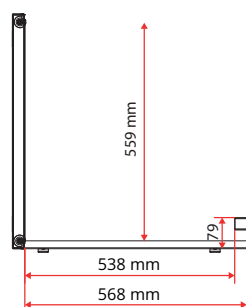
Internal dimensions:



Front view

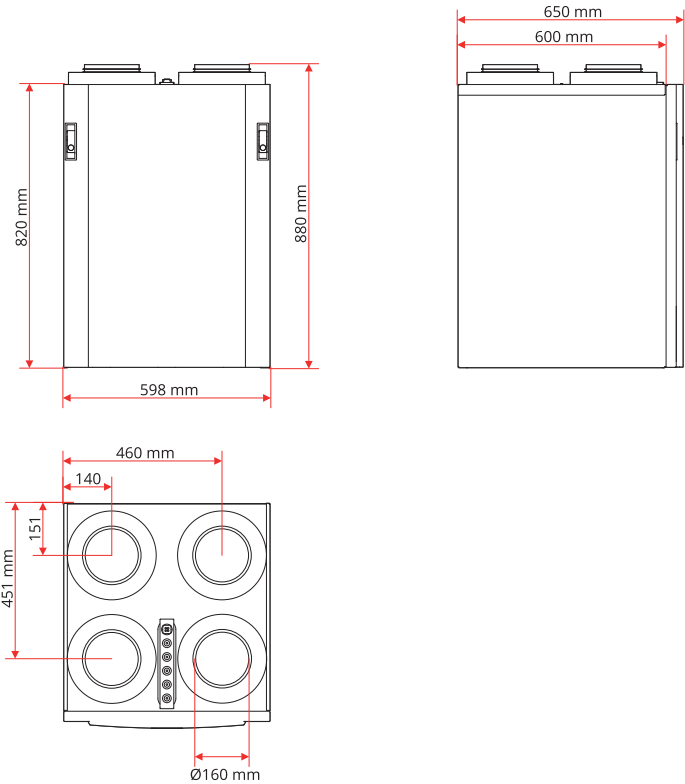


Side view

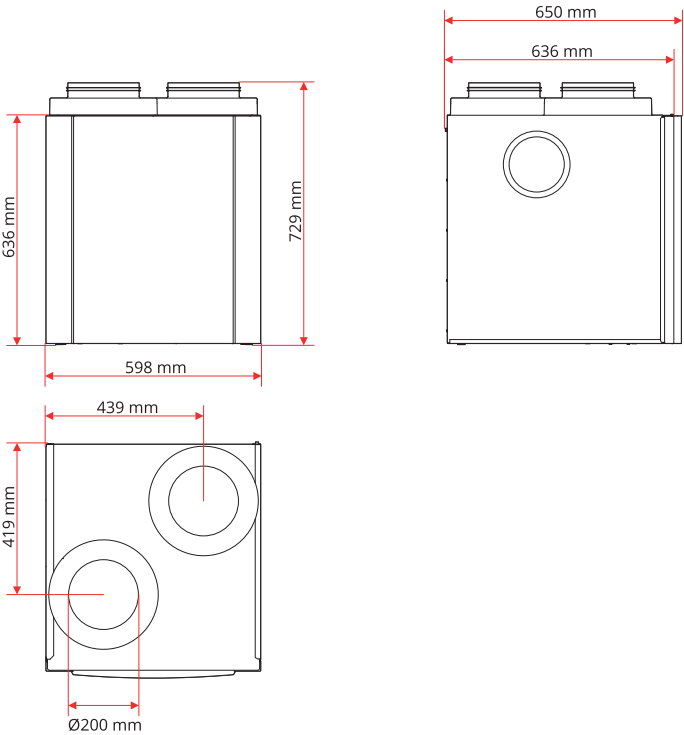


Top view

9.3. Ventilation module



9.4. Heat pump module



The product is listed in the
database for building products
that can be used in **Nordic
Swan Ecolabelled buildings.**



Flexit AS, Moseveien 8, N-1870 Ørje
www.flexit.com