

EcoNordic



Assembly instructions

Indoor Climate Central EcoNordic WH4/WH4 XL

ART.NO.:
800501, 800505

Instructions translated from original language

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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 WH4 XL.

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



High pressure



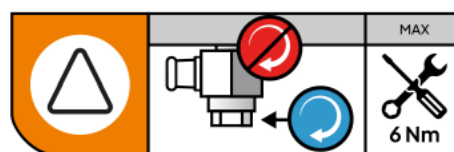
Drainage



Outgoing
water



Incoming
water



Air venting

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.
- All electrical connections must be carried out by a qualified electrician. The product must be connected to the mains voltage with a multi-pole switch and a residual current device (RCD). The RCD must be of type B.
- Put the product in service mode and then disconnect the power before service is performed.
- The product must not be used for the extraction of combustible or flammable gases.
- In order to reduce the risk of fire, electric shock or injury, read all safety instructions and warning texts before using the product.
- This product may be used by children over the age of eight, by persons with impaired physical, sensory or mental capacity and by persons lacking in experience and knowledge, provided that they are instructed in the safe use of the product or are supervised to ensure safe use of the product, and provided that they are aware of the risks present.
- Children may not play with the device.
- Children may not perform cleaning and user maintenance without supervision.
- System contains refrigerant under very high pressure. The system must be serviced by qualified persons only.

Service mode

1. Start the Flexit GO app and select the product you want to service.
2. Enter the service menu (More > Service)
3. Select "Service mode". The product will now make a controlled shutdown. The shutdown time depends on the operating mode.
4. Switch off the all-pole switch. Service can now be carried out. See chap. 4. System overview in the User Manual.



WARNING

- All pipe installation work must be done by a qualified plumber. The product should be placed in a room with a drain.
- The water inlet of this appliance shall not be connected to inlet water obtained from any other water heating system.
- 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.
- If the water supply to the building is turned off, the EcoNordic indoor climate control centre must be set to service mode. If the product is run while the water supply is turned off, air bubbles may enter the water circuit and reduce the product's functionality and service life. In such cases, it is recommended to vent the water circuit. Contact a service technician and perform the venting process as described in Installation Instructions chap. 6.4. Start-up Guide. NOTE! Air screw max 6 Nm.



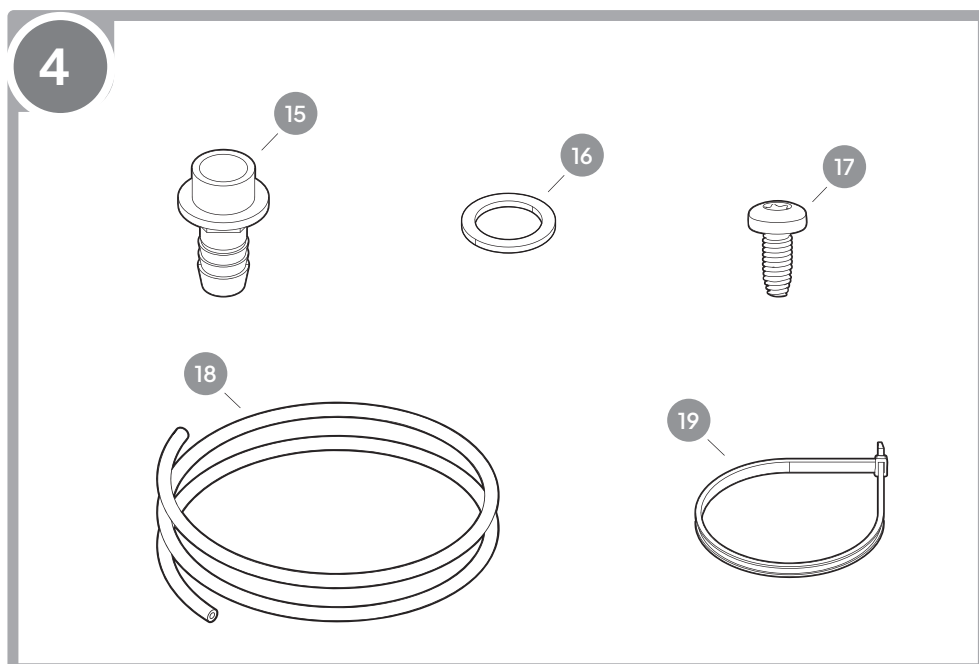
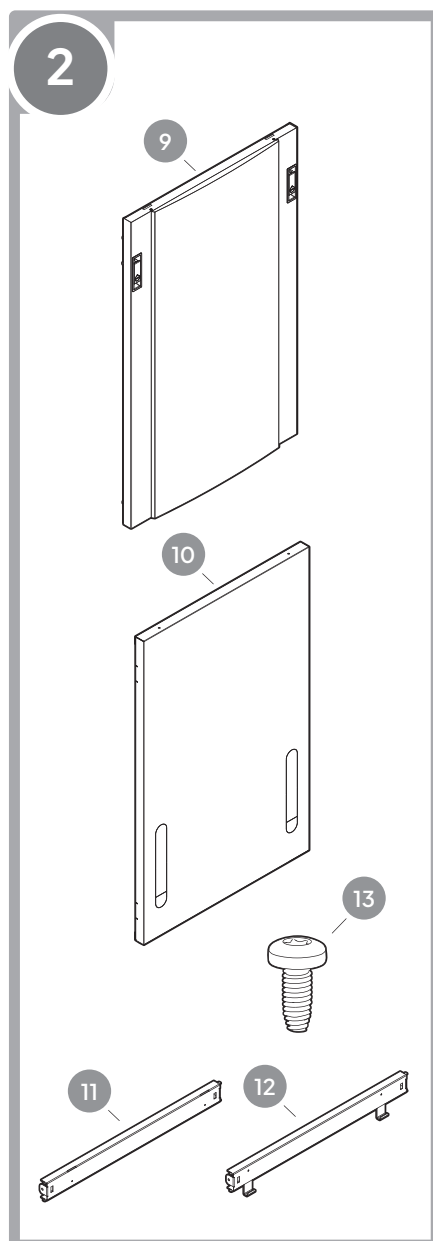
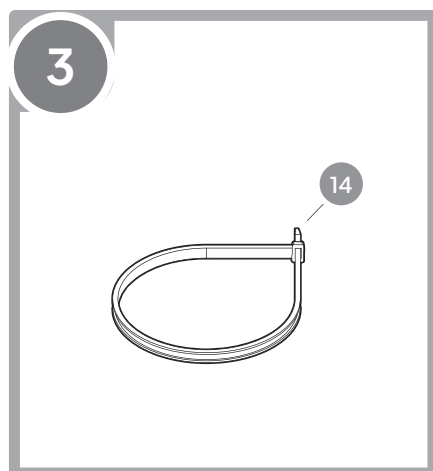
CAUTION

- This product is only intended for ventilation air in dwellings and commercial premises.
- The product must not be operated unless the filters and doors are fitted.
- Tumble driers must not be connected to the unit.
- In order to maintain a satisfactory indoor climate, follow all directions and prevent condensation damage, the product should never be switched off except for service and maintenance or in the event of an accident.



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 400 V 3N~ - 230 V 3~	1
8	Installation checklist	1
9	Label 230 V	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

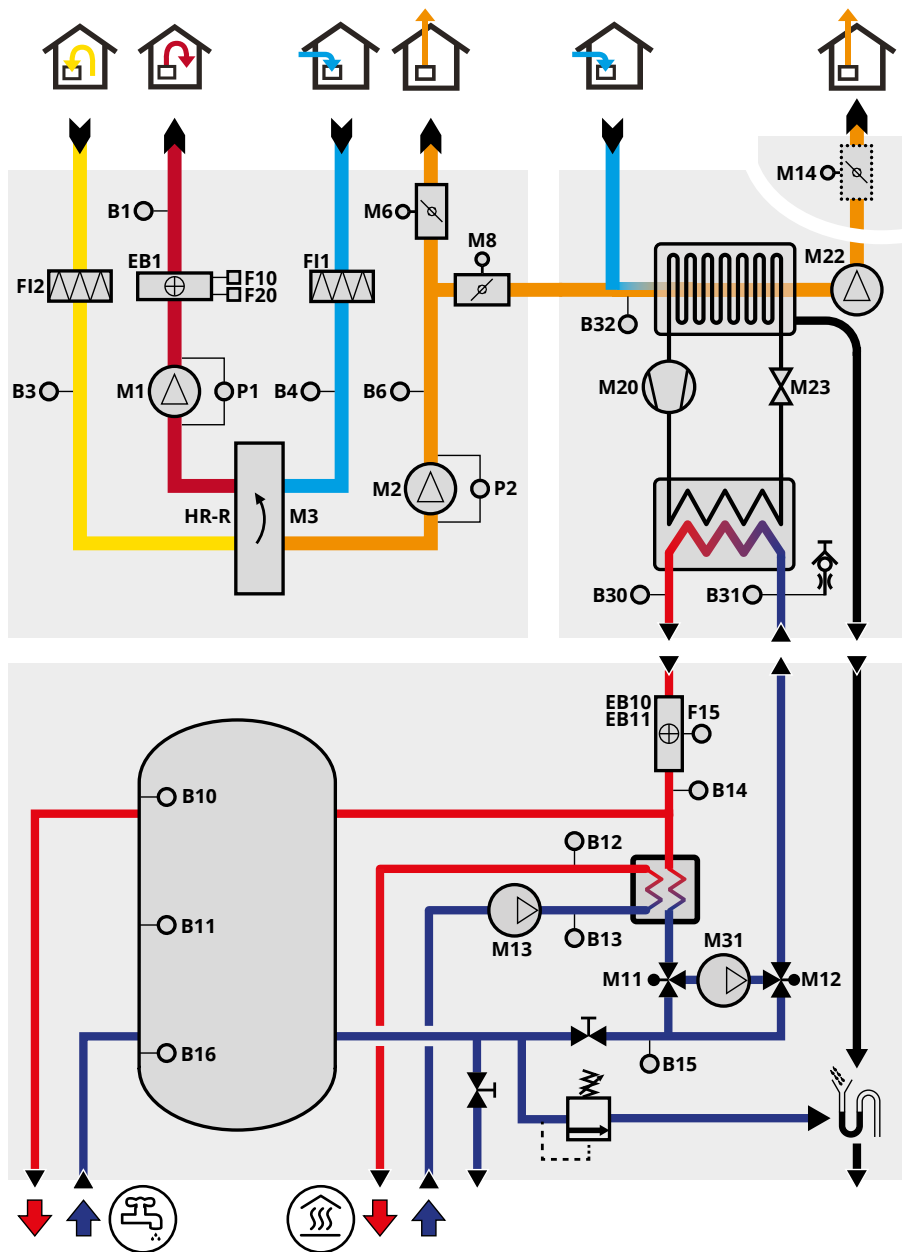
Item	Description	Number
14	Cable tie	4

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

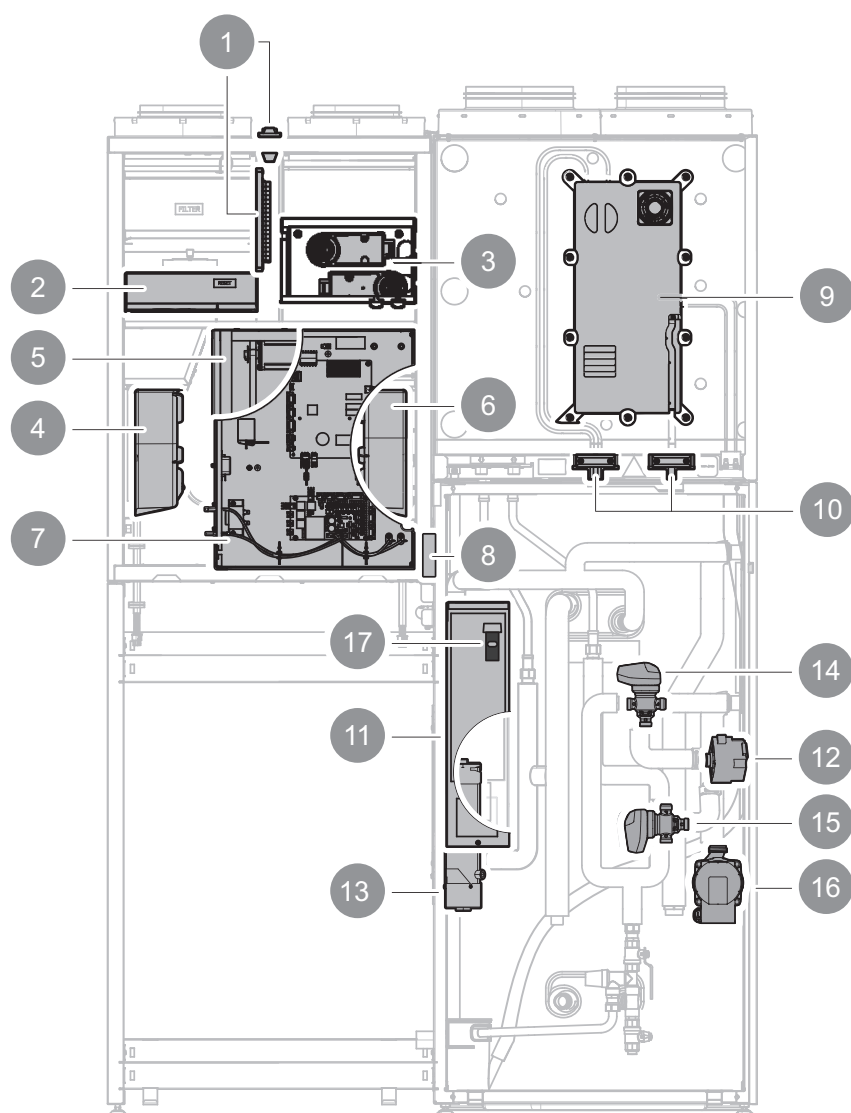
4. System overview

4.1. System diagram WH4/WH4 XL



Item	Description
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
EB1	Heating battery, electric
EB10/EB11	Water heater, electric
F11	Outdoor air filter
F12	Extract air filter
P1	Pressure sensor, supply air
P2	Pressure sensor, extract air
HR-R	Rotary wheel-type heat exchanger

4.2. Component overview for electricity

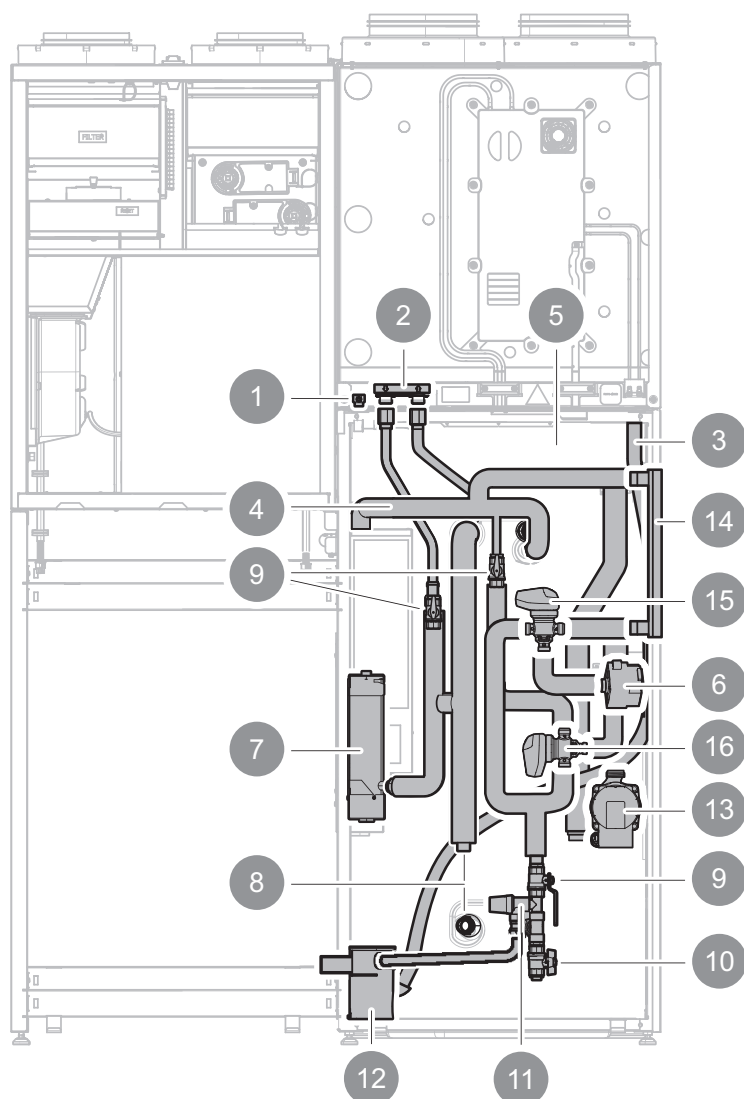


The unit can be converted for 230 V, 3-phase

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
9	Control unit for heat pump

Item	Designation
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
17	Circuit breaker

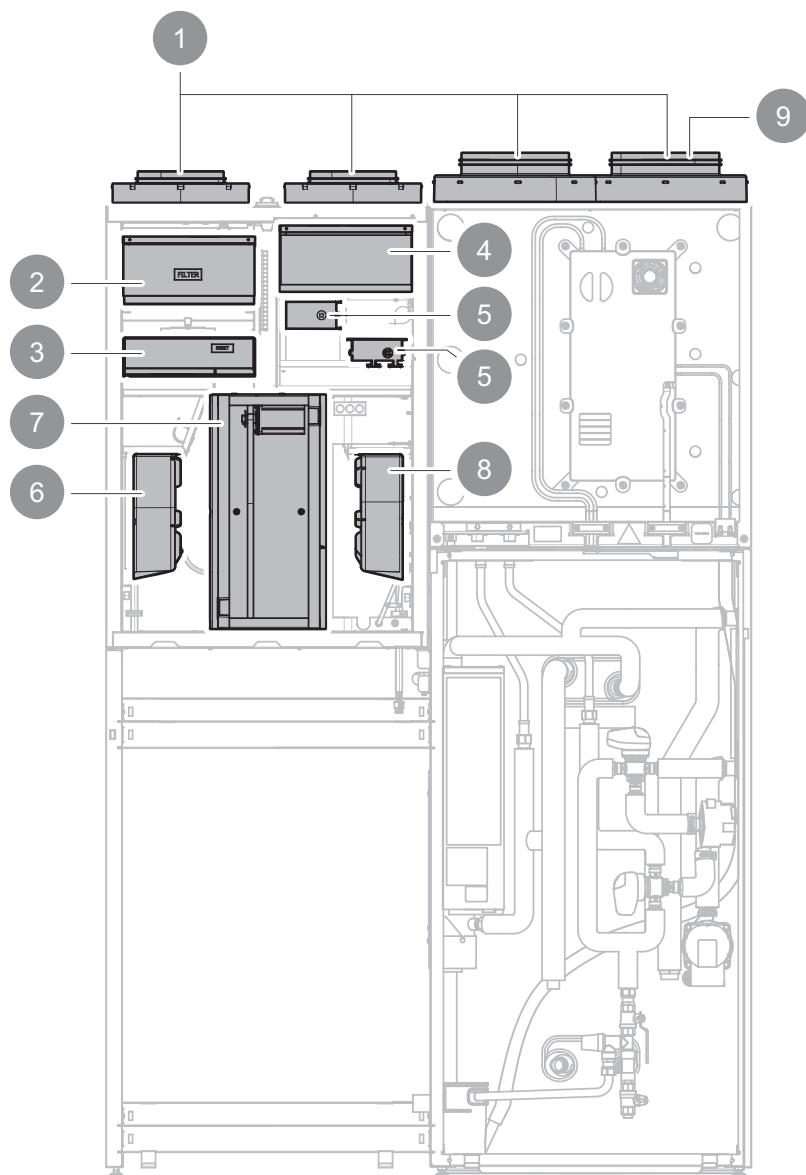
4.3. Component overview for water



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

4.4. 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
9	Frost protection damper

5. Assembly



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



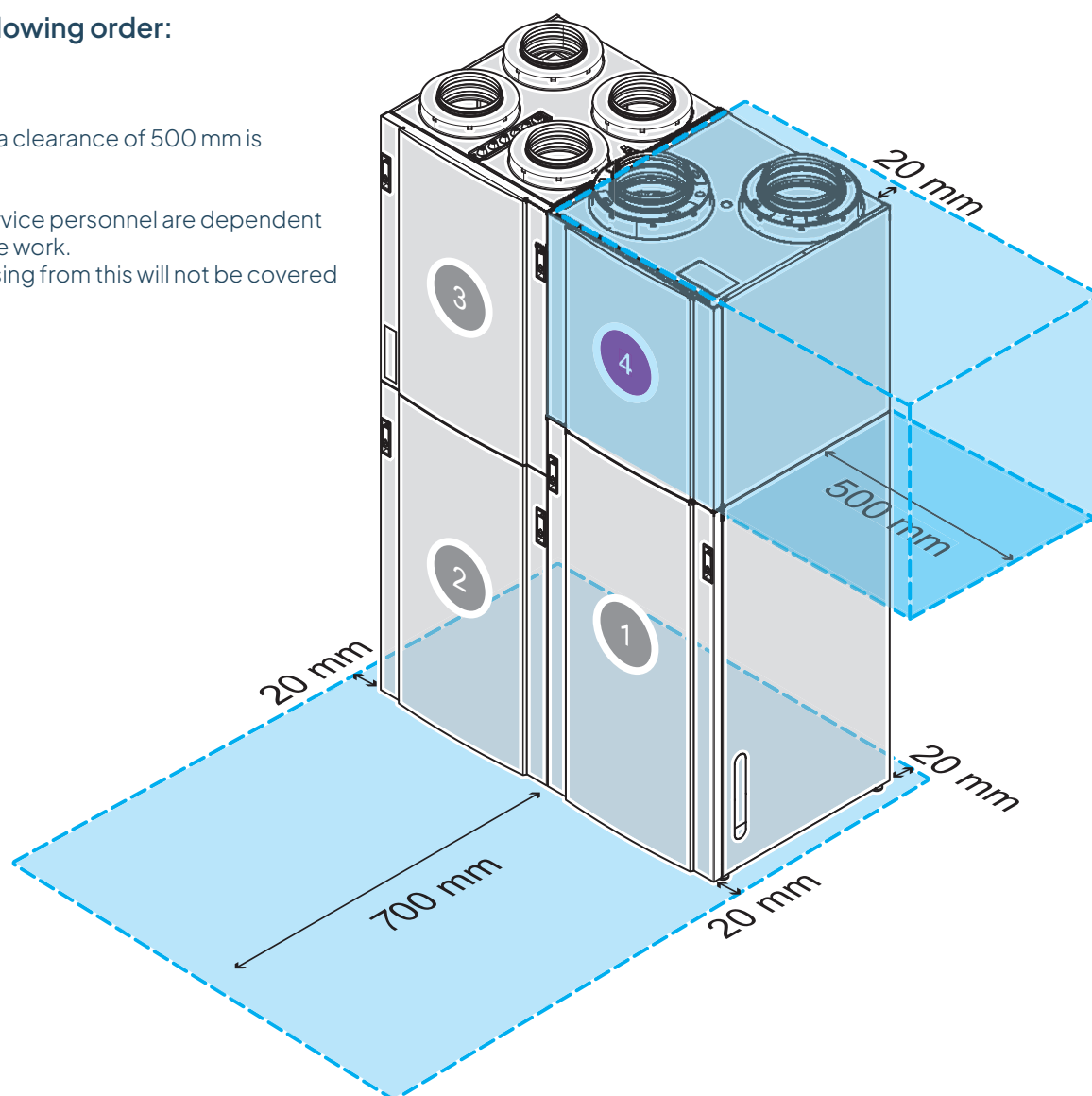
Preparations

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.



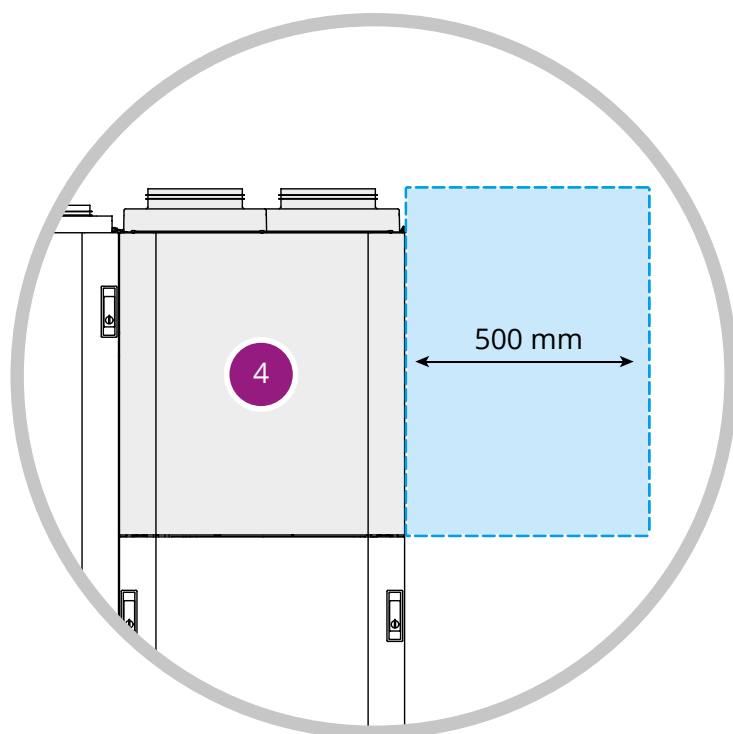
5.1. Space requirements for heat pump



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

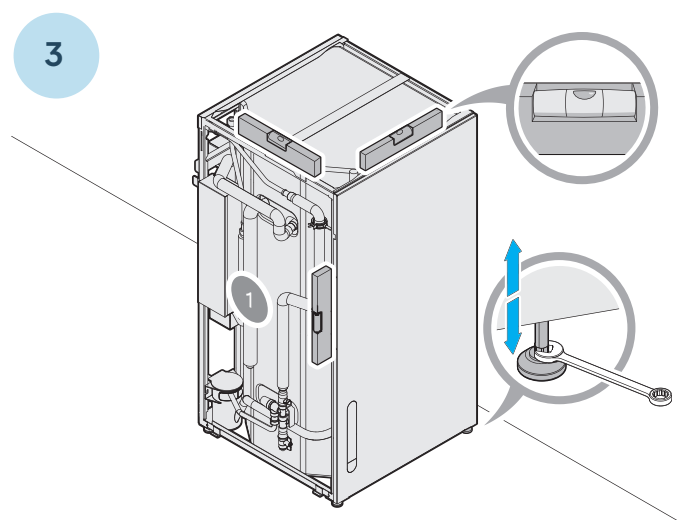
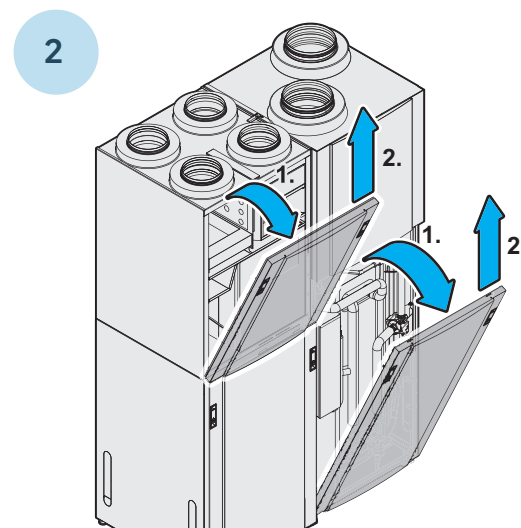
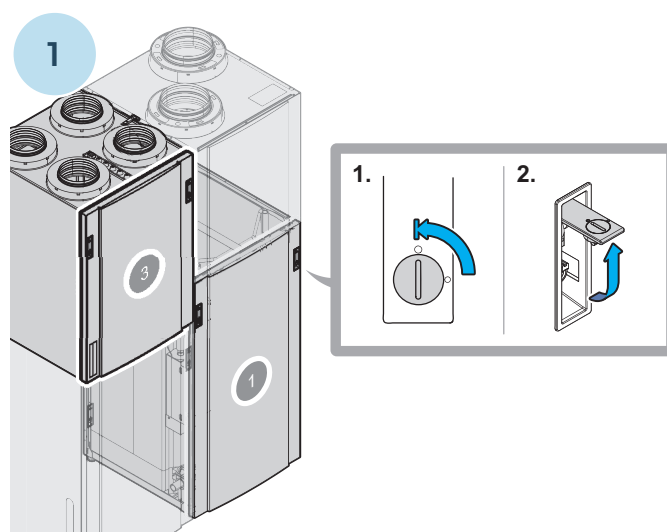
Screwdriver and TX20 bits

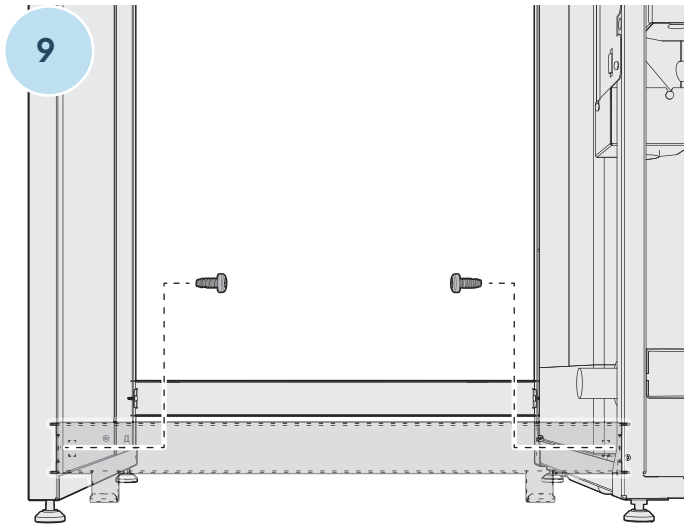
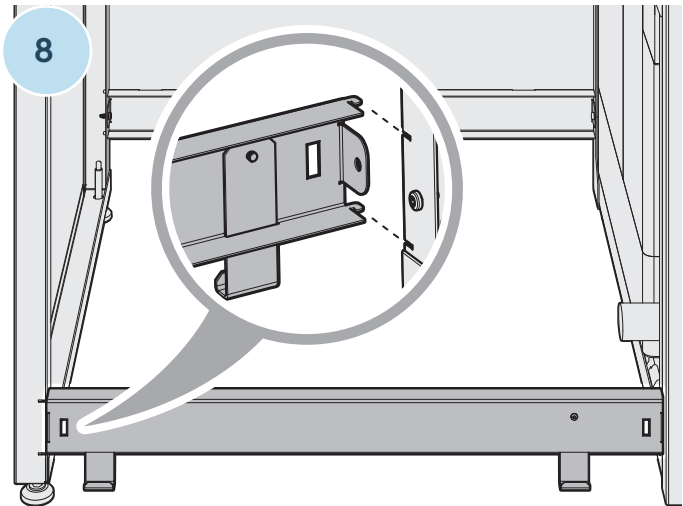
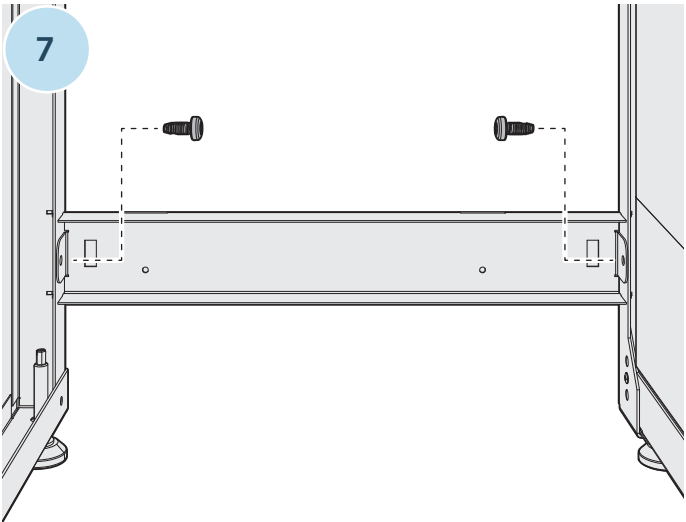
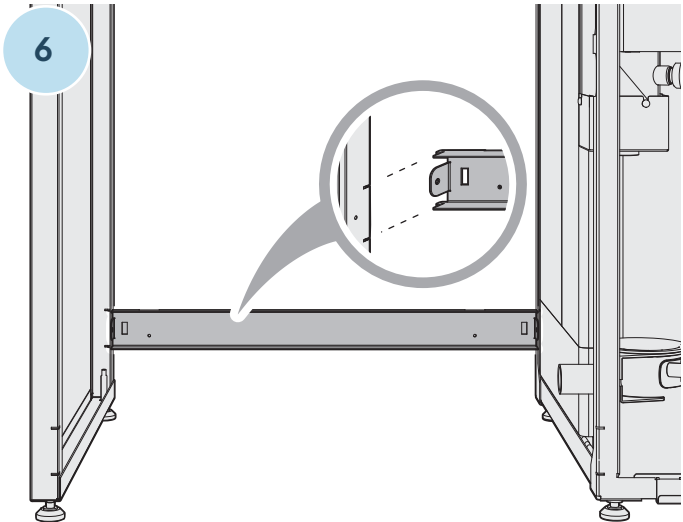
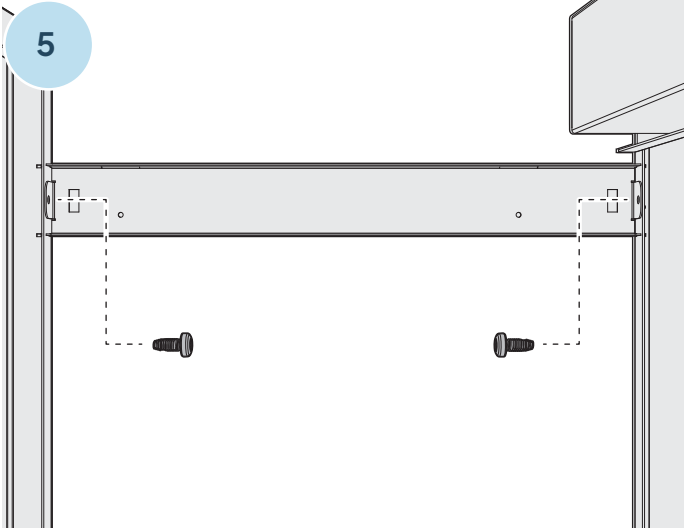
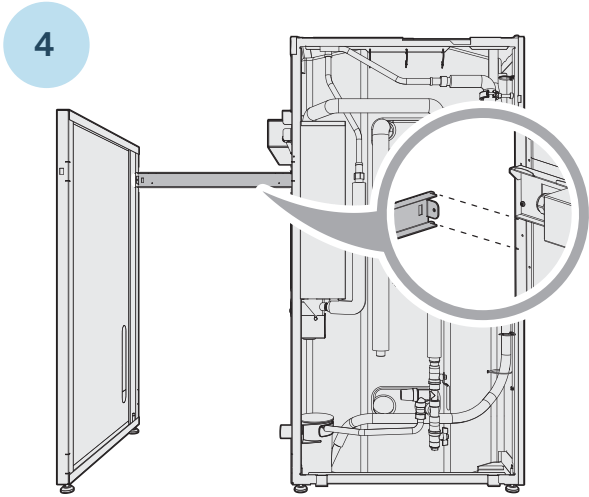
Wrench, 24 mm

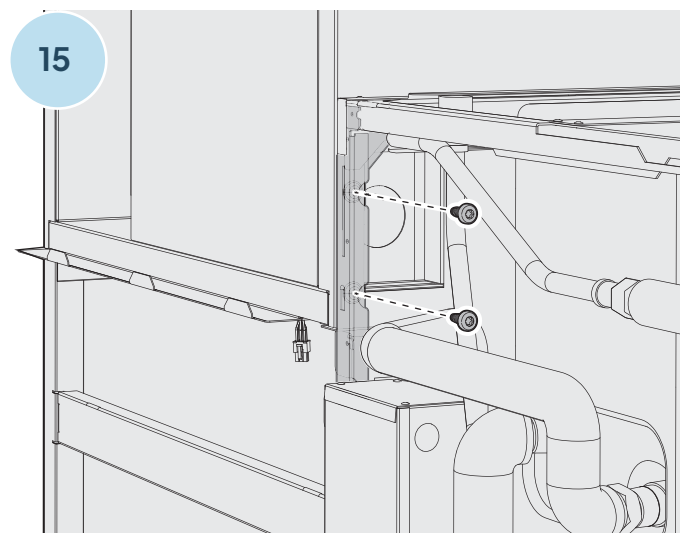
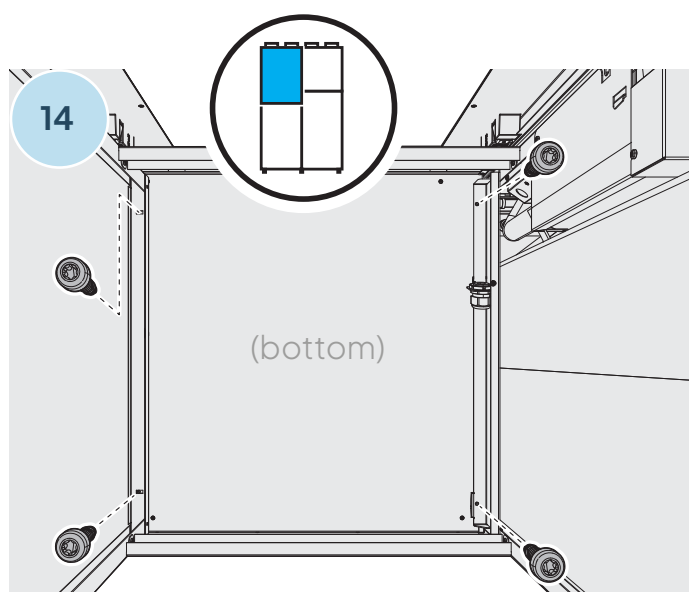
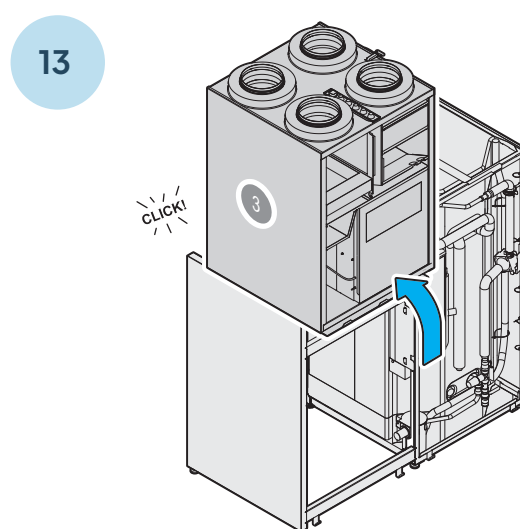
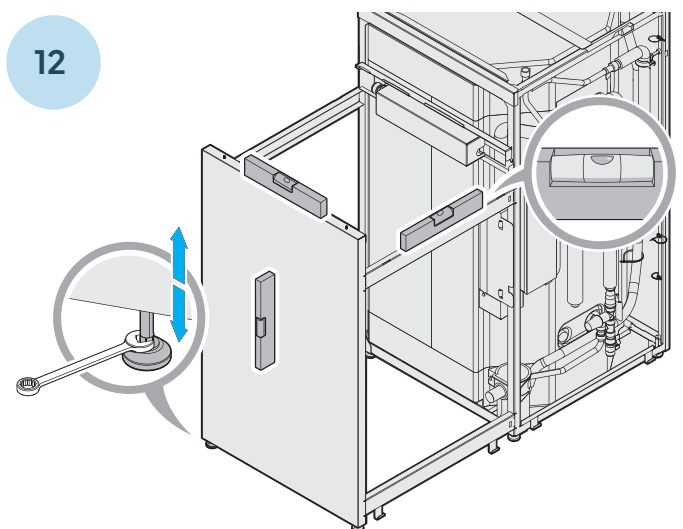
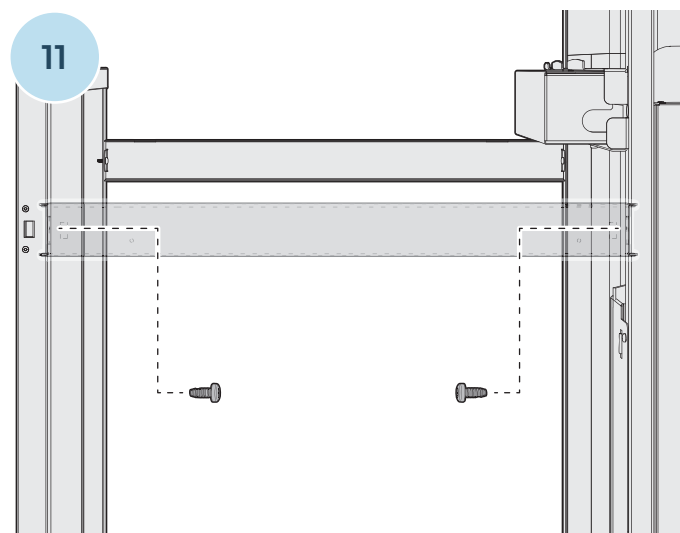
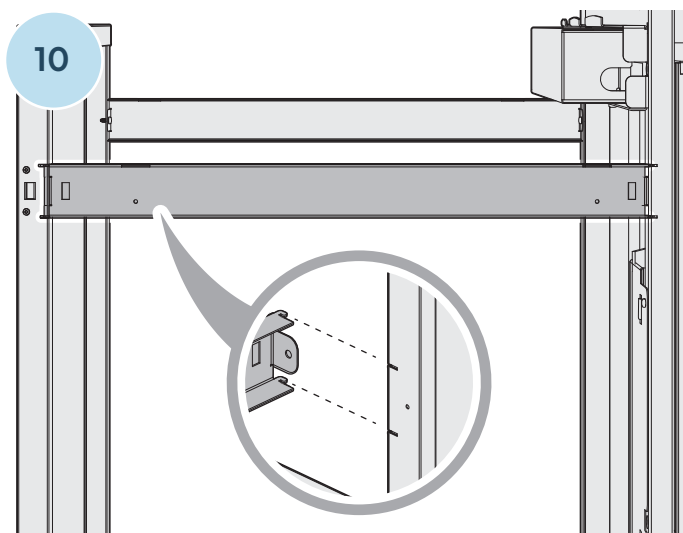
Wrench, 8 mm

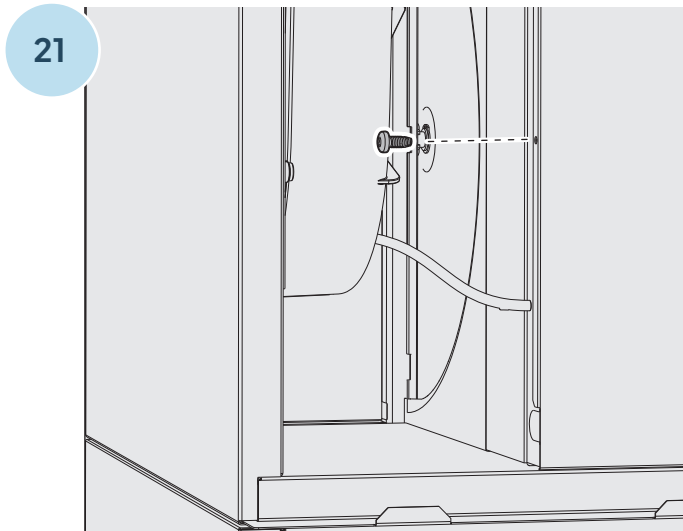
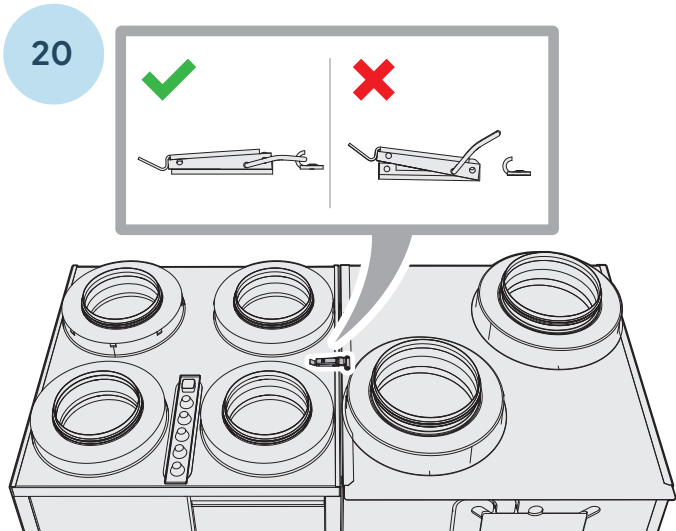
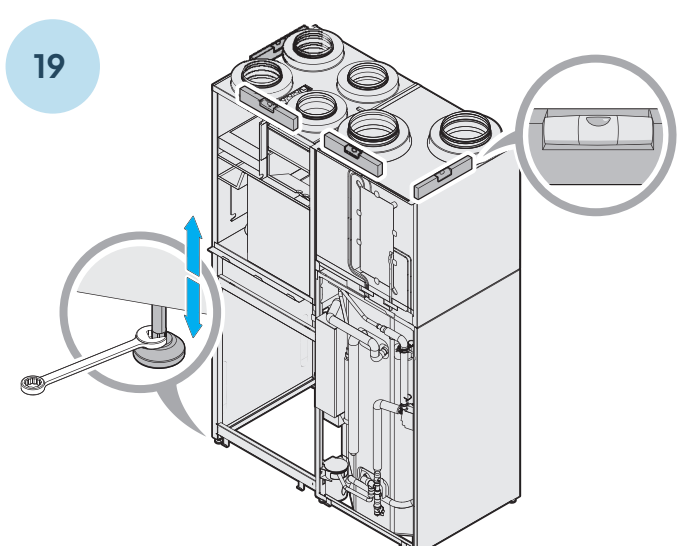
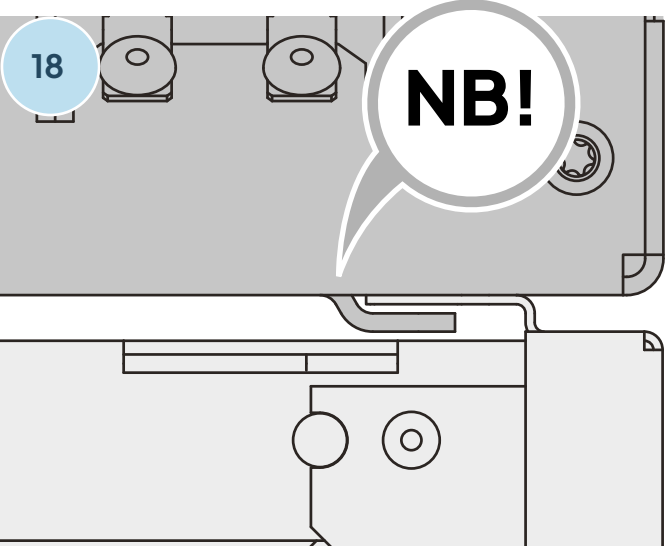
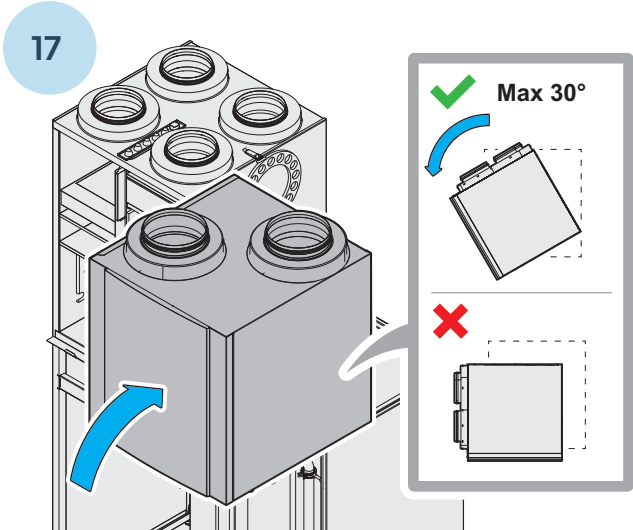
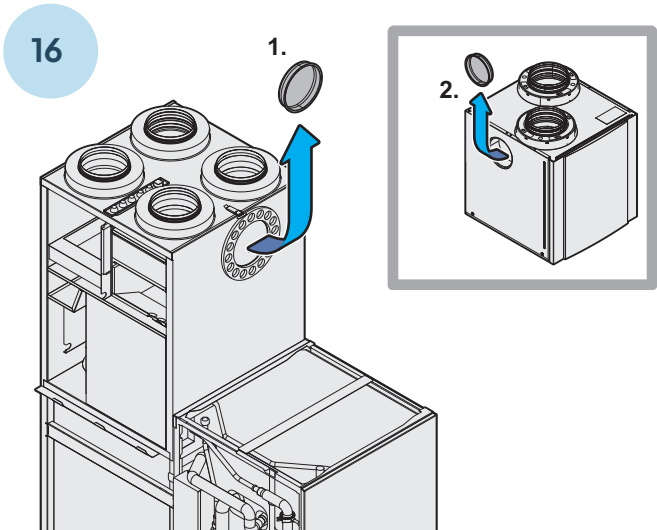
Spirit level

5.2.2. Instructions

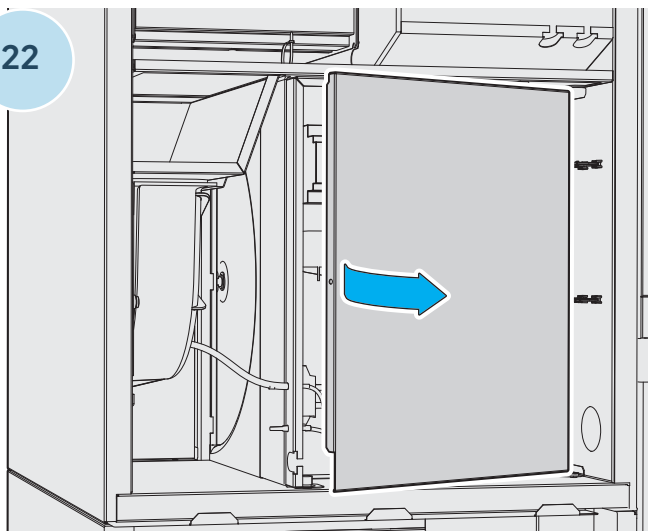




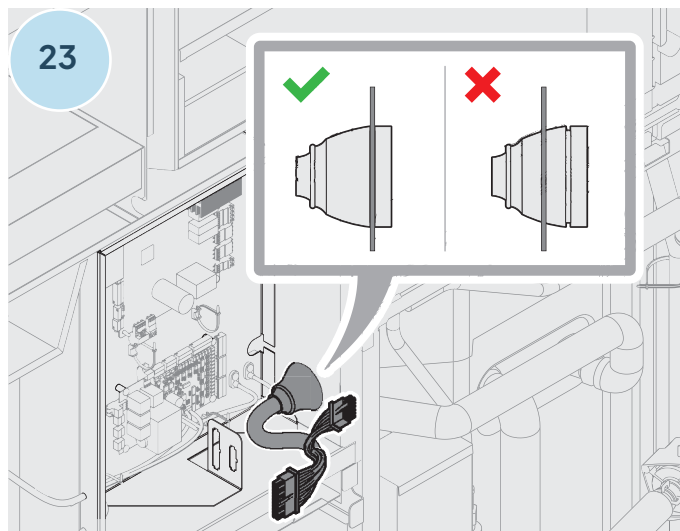




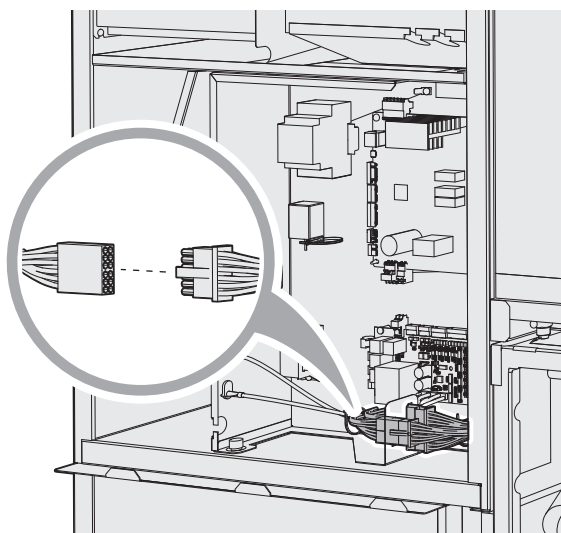
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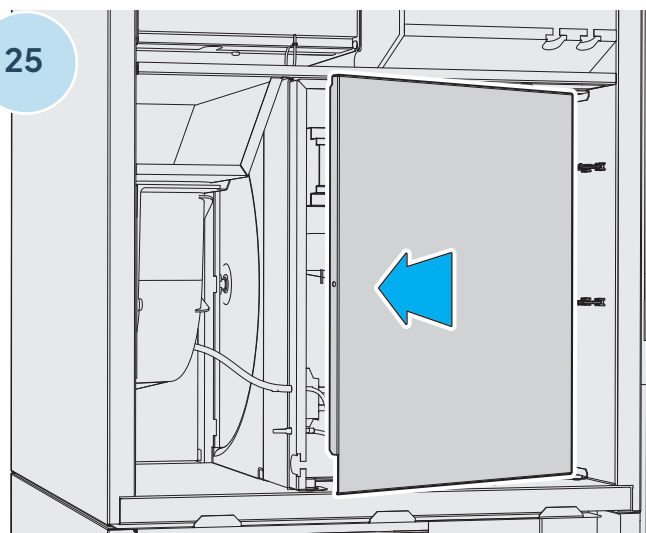
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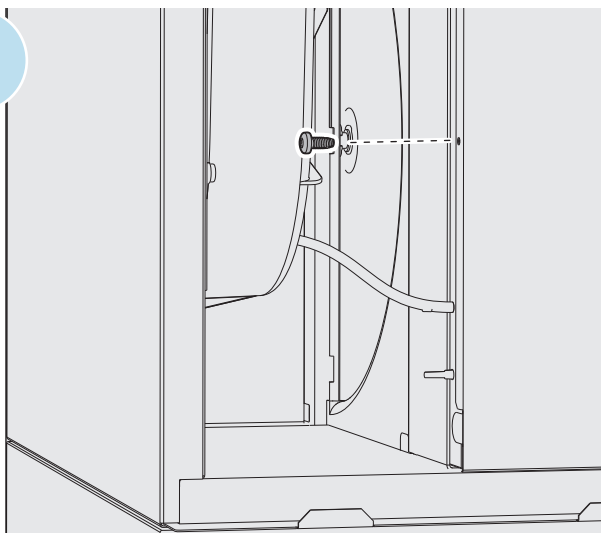
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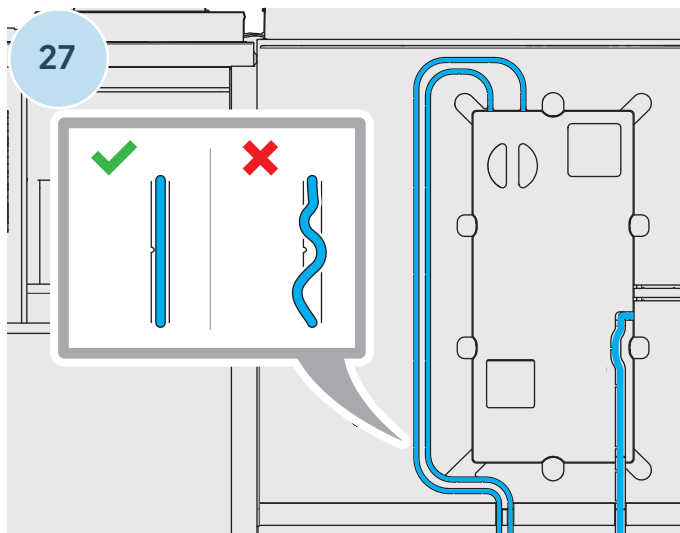
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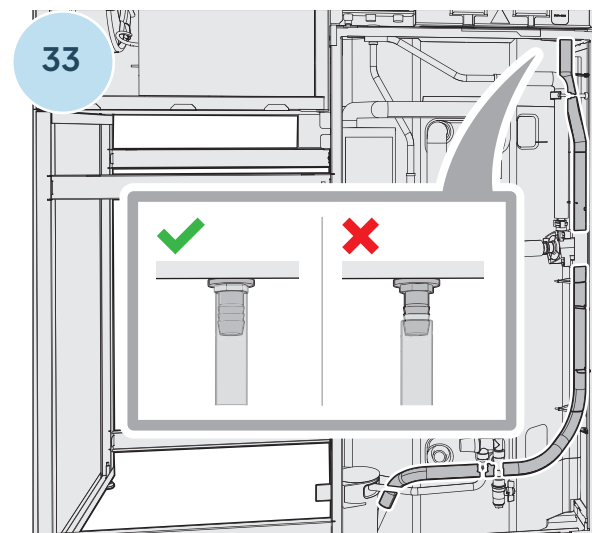
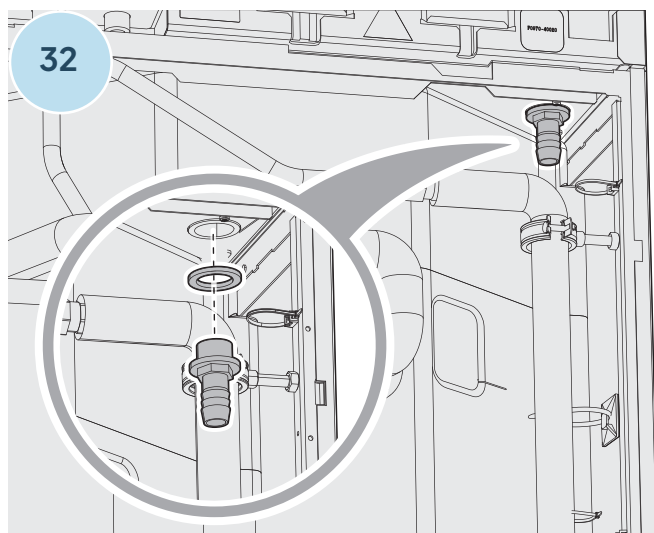
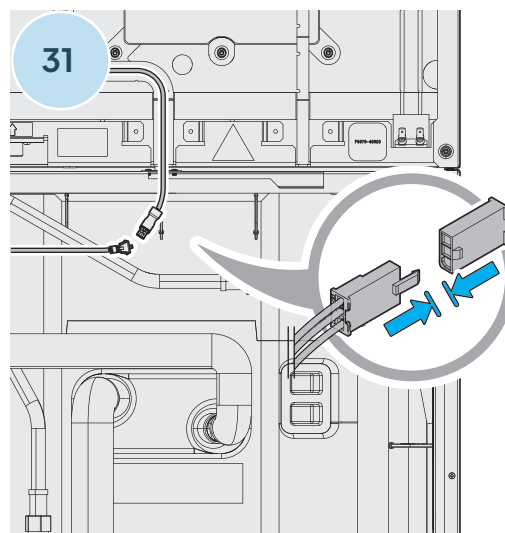
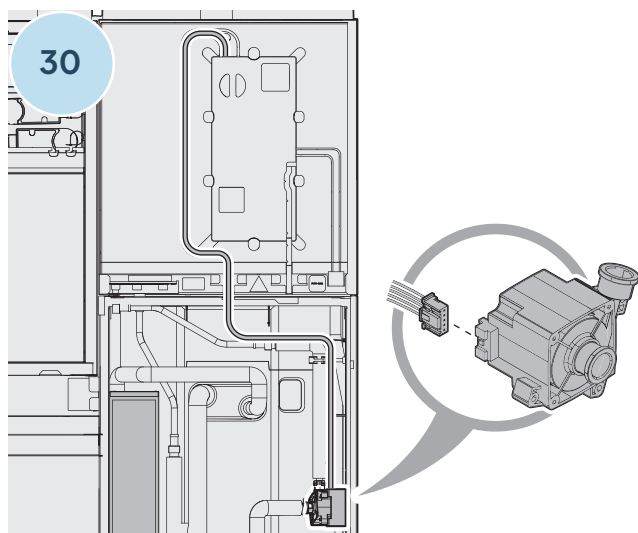
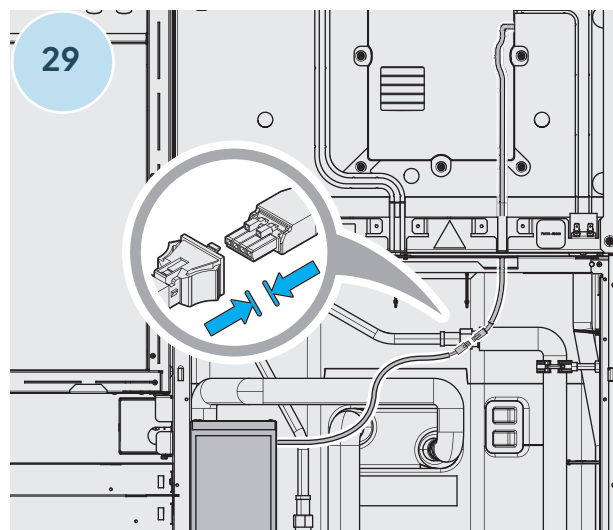
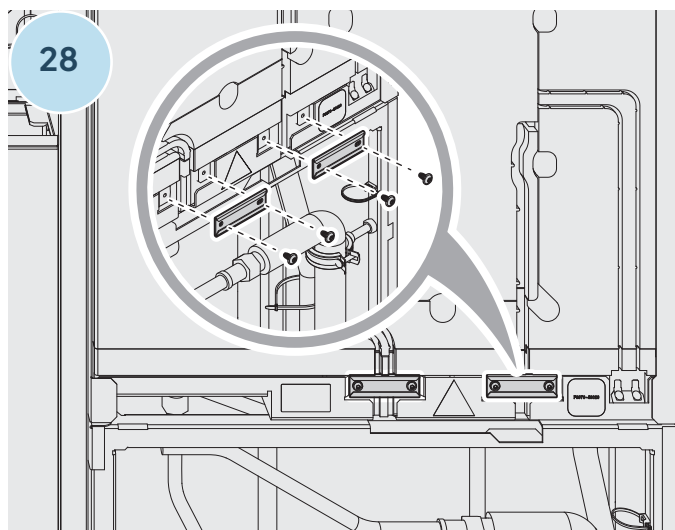


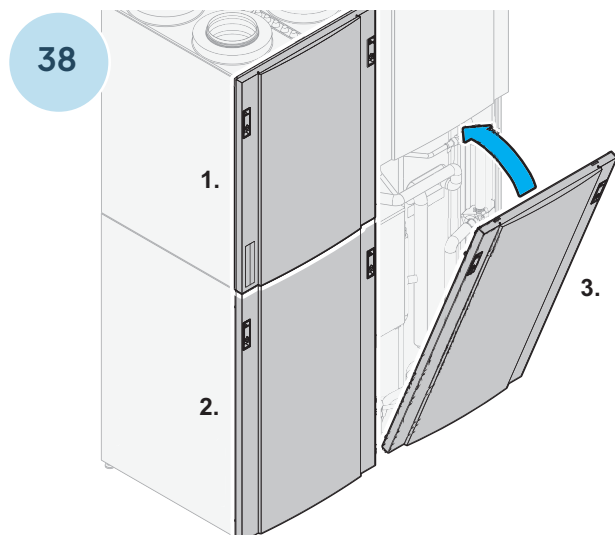
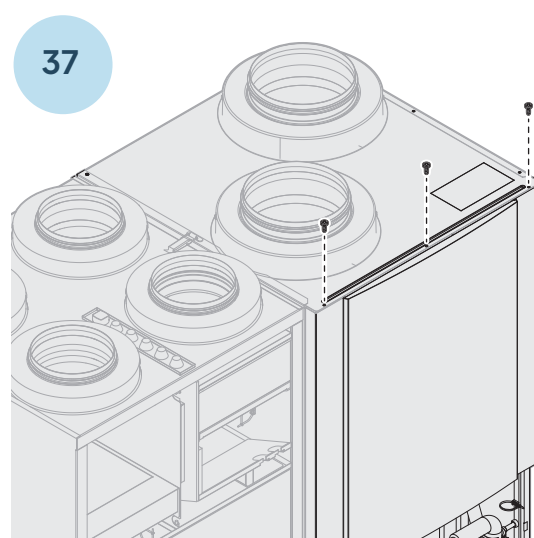
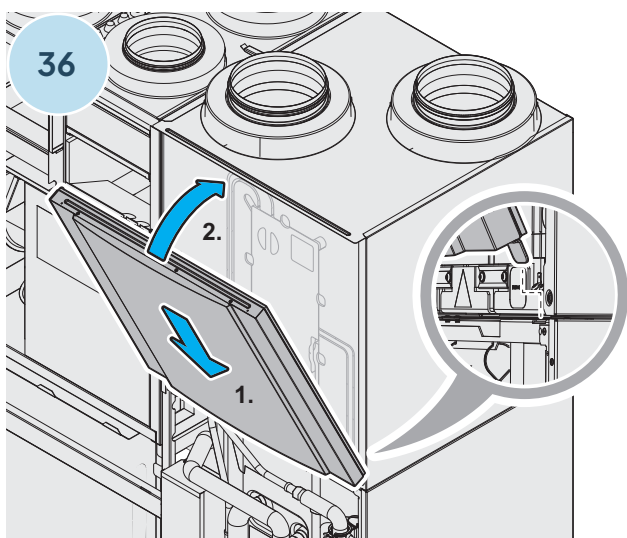
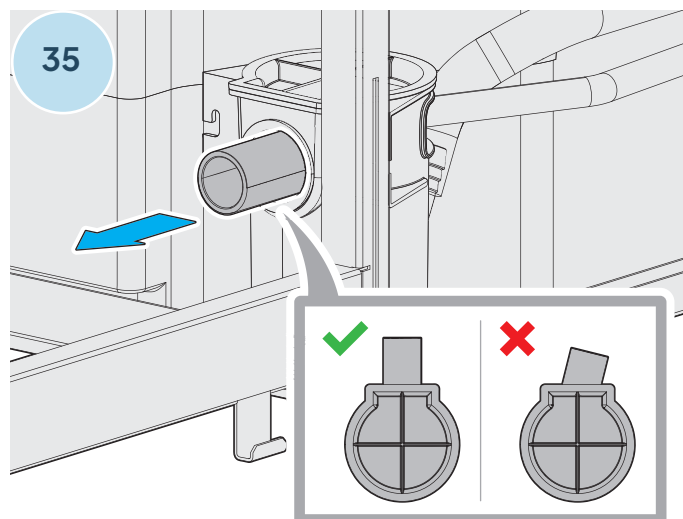
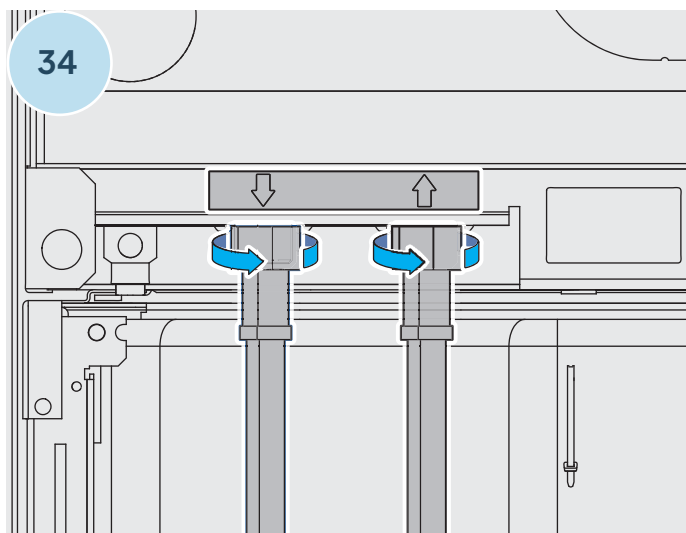
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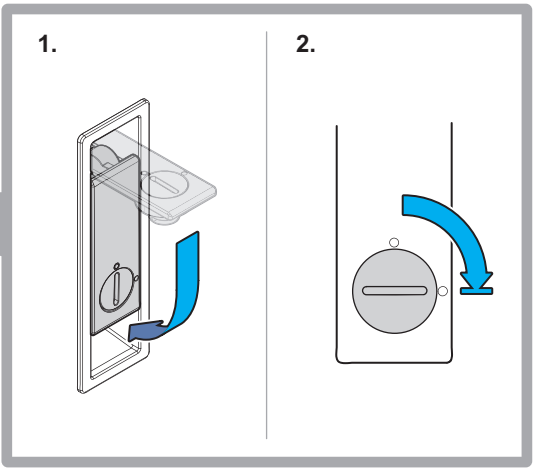
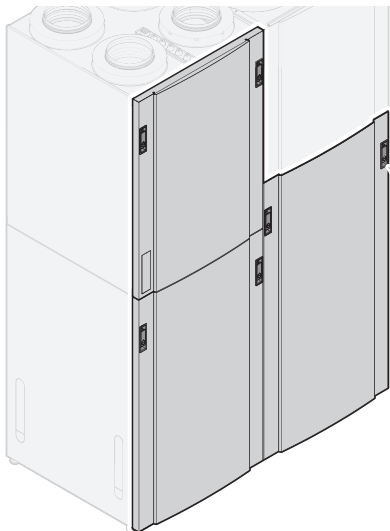
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5.3. Assembly of ventilation ducts



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.

5.3.1. Prerequisites

Number of persons

1

Time

30 min.

Tools

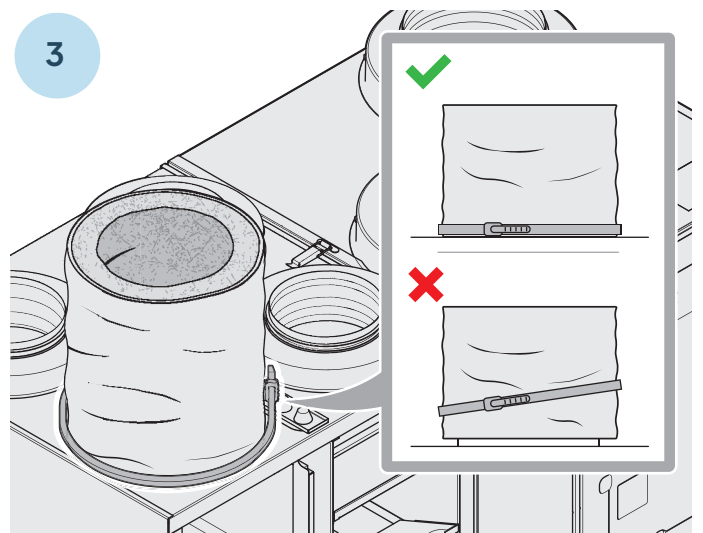
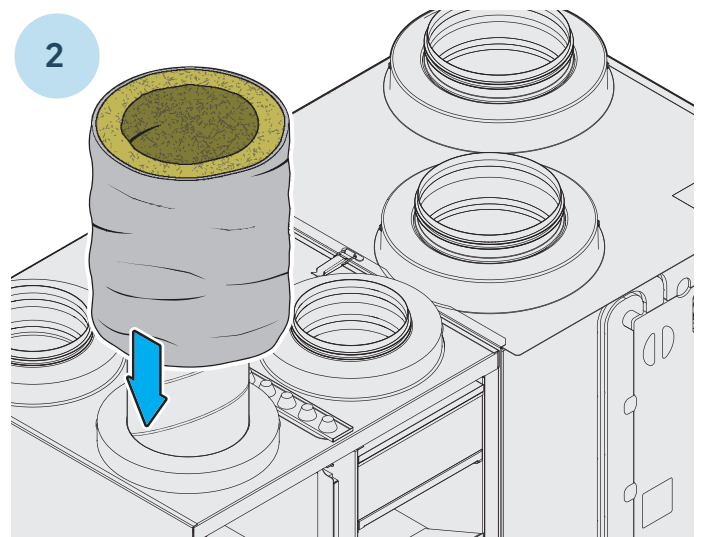
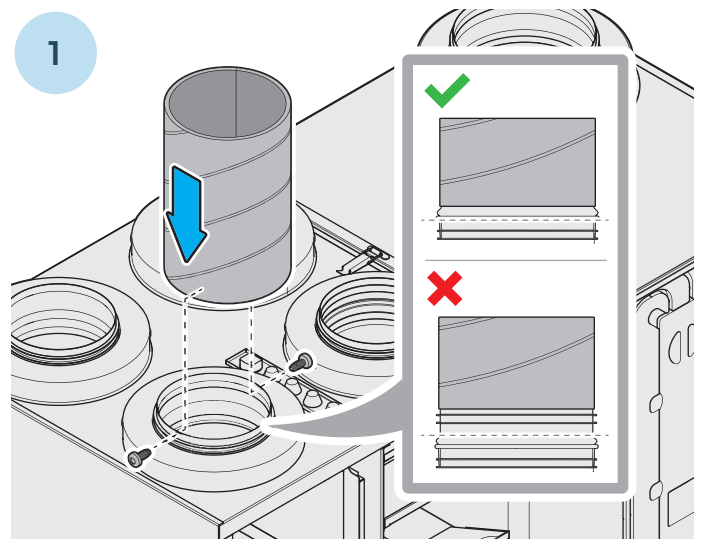
Adhesive tape

Screwdriver

Materials

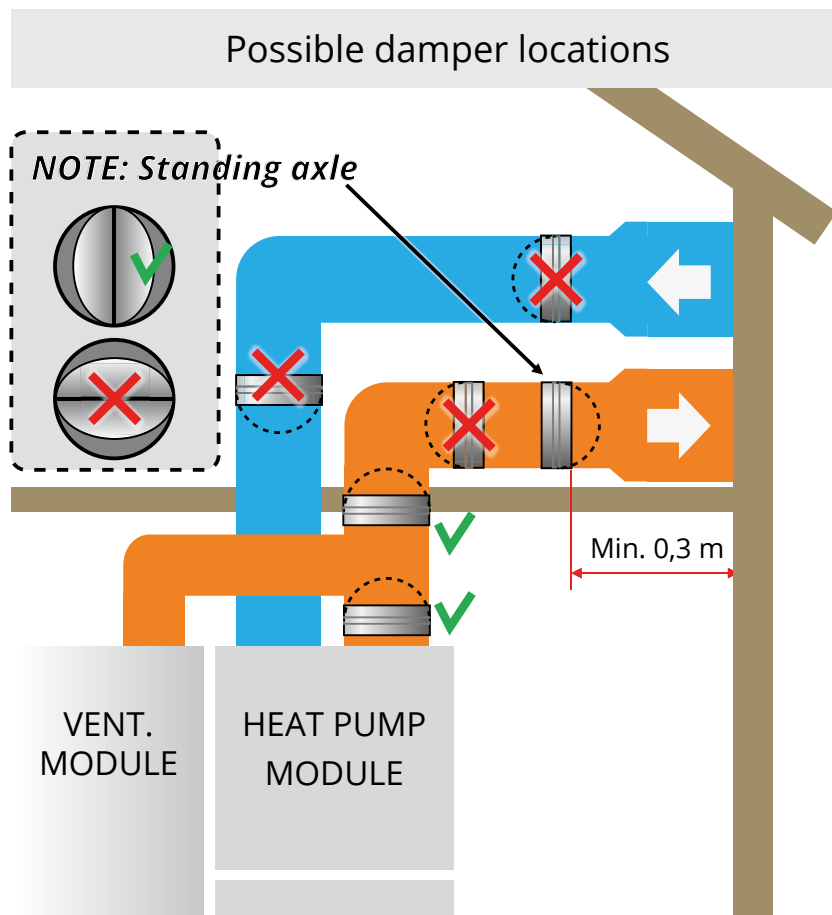
50 mm insulation with insulation grade equivalent to $\lambda = 0,035 \text{ W/m}^{\circ}\text{C}$ or better

5.3.2. Instructions



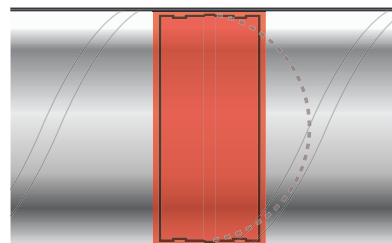
5.4. Frost protection damper

The damper must be installed to prevent serious damage to the product, and it can only be mounted according to the proposed positions shown below.

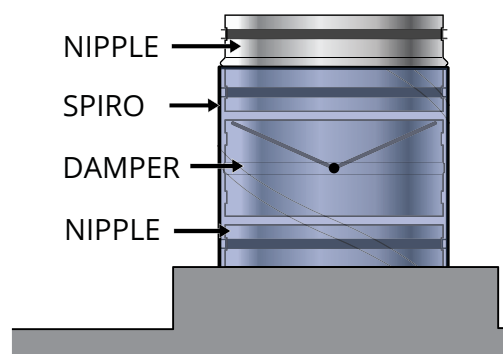


Damper inside the spiro

No screws in this area!



Installation on heat pump
Spiro cut length: 175 mm



5.5. Electrical installation

The product may be converted to 230 V 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.

5.5.1. Before you start

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

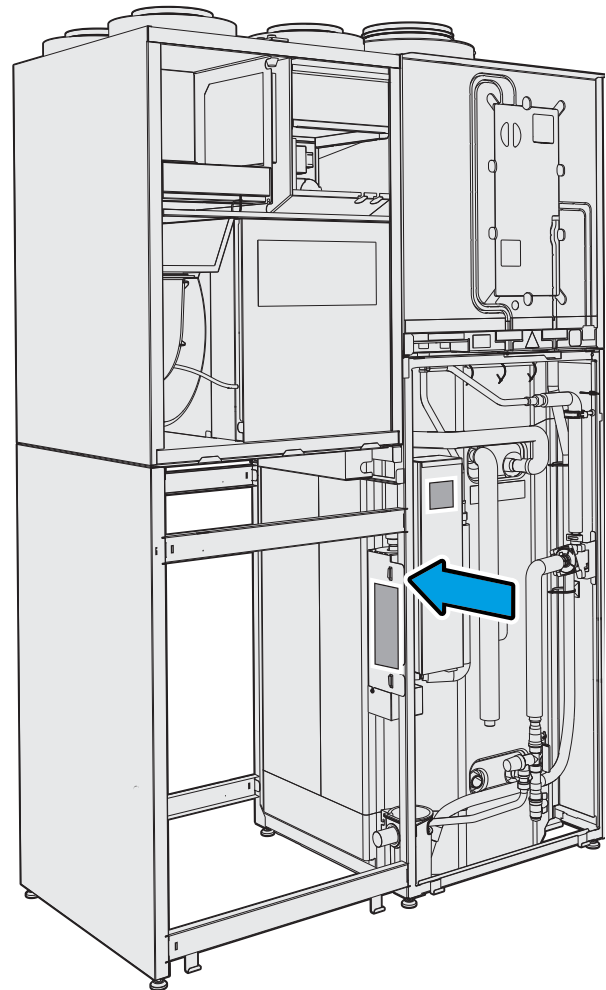
5.5.2. Internet access

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.

5.5.4. Circuit diagram and conversion, electricity

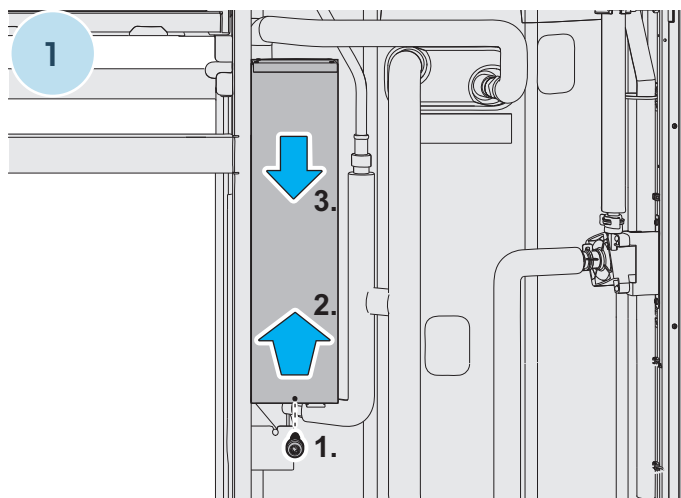


The circuit diagram is on the left-hand side of the tank module.

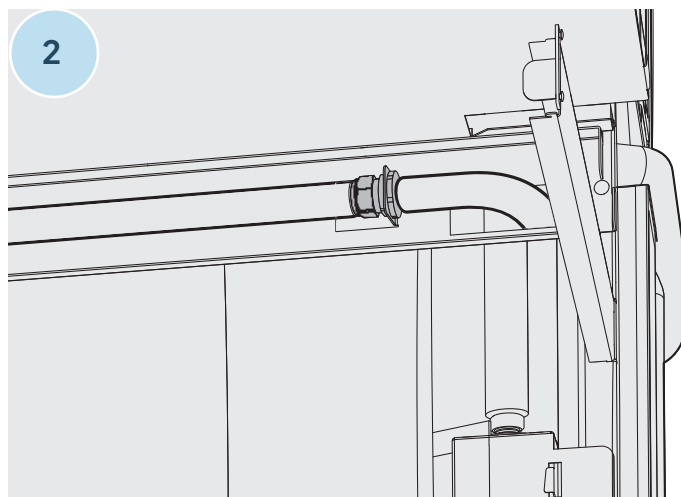
5.5.6. Prerequisites

Number of persons
1
Time
60 min.
Tools
Screwdriver
Descaler

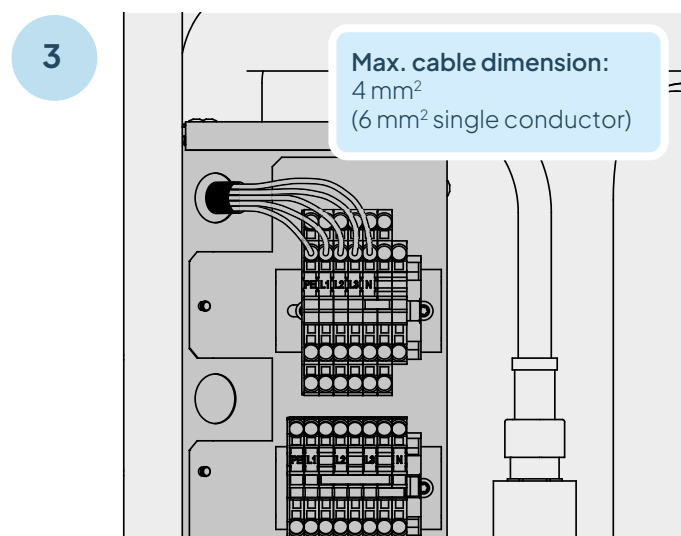
5.5.7. Voltage supply



Loosen the screws to the lid over the electrical room and remove the lid.

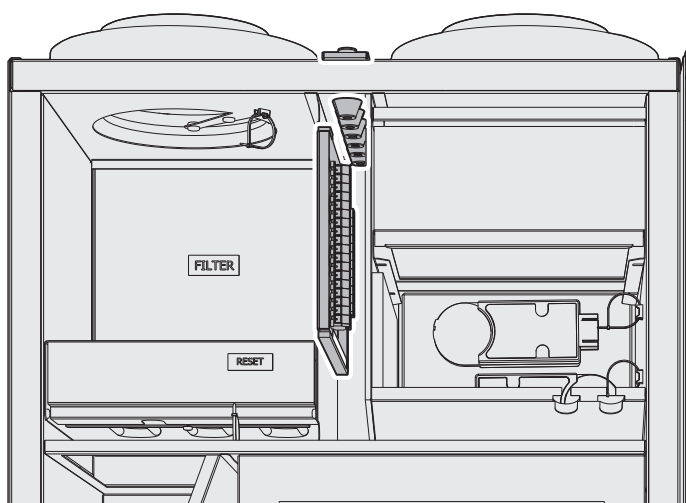


The electrical cable is pulled through the PG nipple and into the electrical room.
Tighten the nipple to 2 Nm.

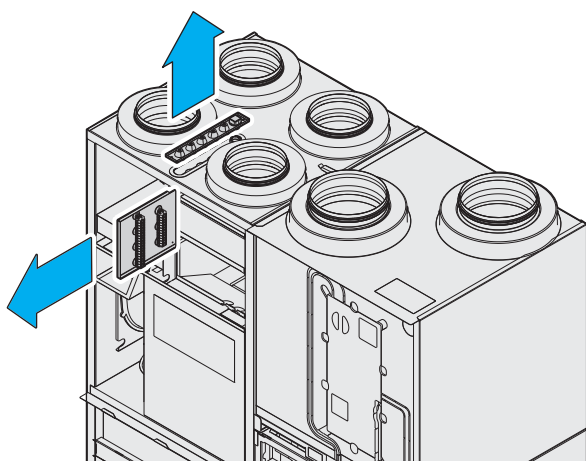


See the electrical diagram for connection.

5.5.8. 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

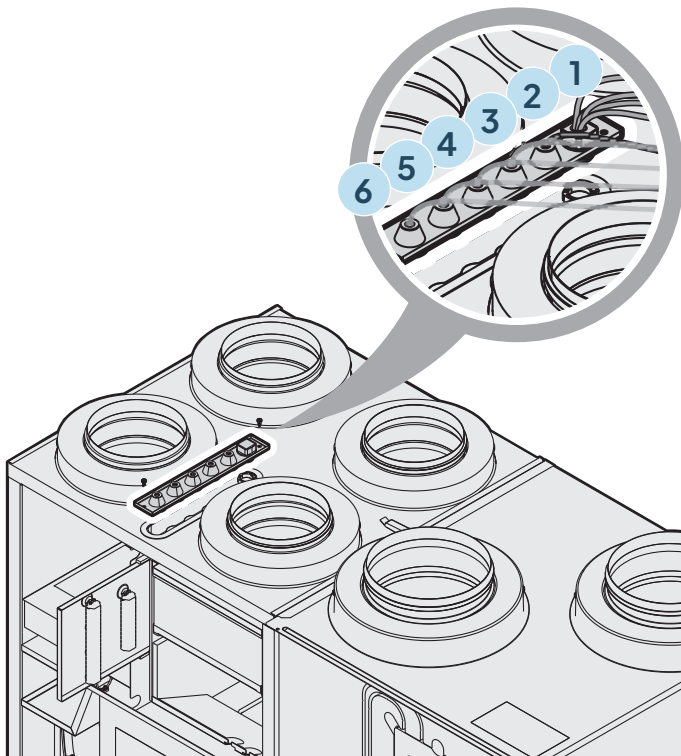
1	X8*	Digital input X8 The following choices are available: None Home Away Emergency stop CO ₂ detector Smoke detector—extract air Smoke detector—supply air Smoke detector—off Smoke detector—max. Fire damper feedback
2	G0	Signal ground
3	Q1 C**	Supply, digital output 1
4	Q1 NO*	Digital output 1 normally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

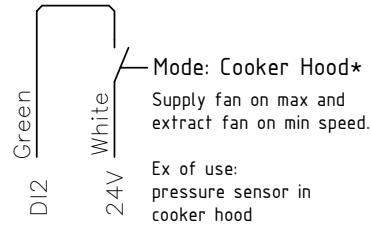
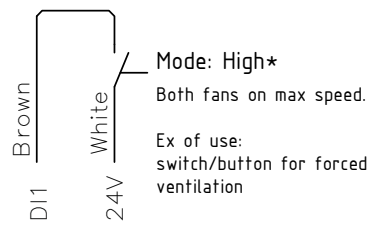
** Max. voltage 230 V AC, max. current 2 A resistive load.

Location of penetrations for electric cables

	Cable type
1	Network cable
	Control panel cable (CI-70 discontinued)
	3-core cable (e.g. for kitchen fan) (DI1&DI2)
	Accessory cable (Accessories)
2	Control panel cable (Nordic Panel)
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 <u>High</u> 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 <u>Cooker hood</u> 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.

5.6. 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.



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



CAUTION!

Ensure that a dirt filter is installed on the incoming cold-water supply. This is to make sure that no unnecessary particles enter the product.



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

The purpose is to reduce wear and extend the service life of the circulation pump and other components in the heating system.

A properly installed filter also helps lower energy consumption and reduces the need for future system flushing.

NOTE!

If you have chosen to install our prefab module, both a dirt filter for the incoming cold-water supply and a magnetite filter for the heating system are included.

5.6.1. Domestic Hot Water Recirculation System

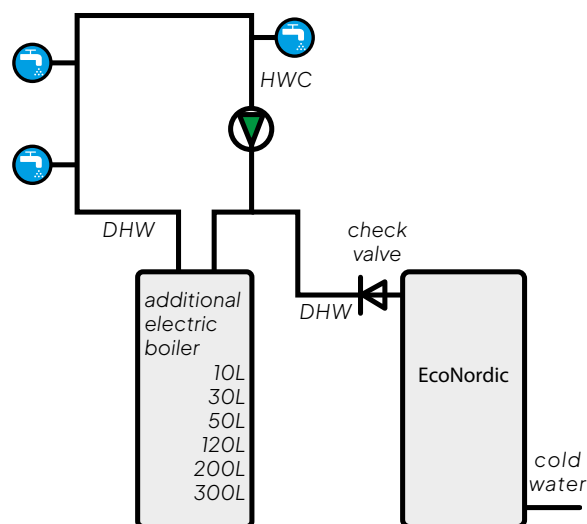
The use of extra Domestic Hot Water recirculation pump is not recommended without the use of an additional boiler.

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.

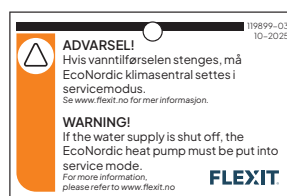
The thermostat on the hot water cylinder must be set higher than 65 °C, e.g. 70 °C.

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

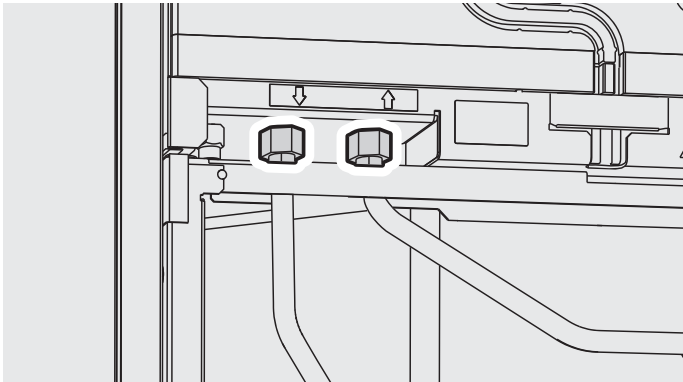
If the drinking water has a higher dH (German hardness) than indicated below, a softening filter must be installed. This is to safeguard the heat pump's function.

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.

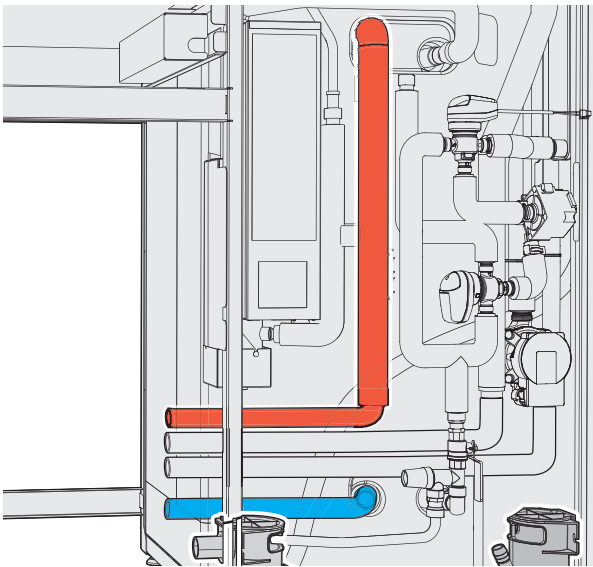
	Minimum allowable level	Maximum level allowed
pH value:	7,3 pH	9,5 pH
Hardness:	1 °dH	7 °dH
Calcium:	4 mg/l	50 mg/l
Magnesium:		10 mg/l
Carbon dioxide (free):		5 mg/l
Chloride:		250 mg/l
Sulphate:		250 mg/l
Chloride and sulphate:		250 mg/l

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.

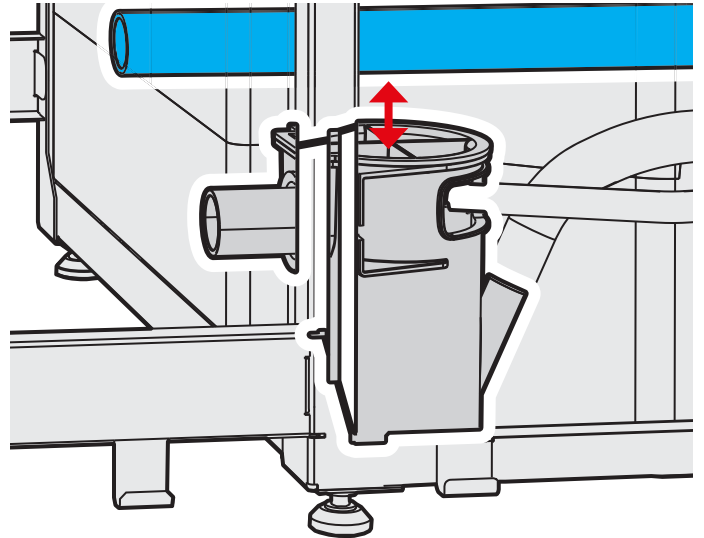


Hot water connection Ø22 mm, flat end.
Cold water connection G3/4".
Normal piping is shown.

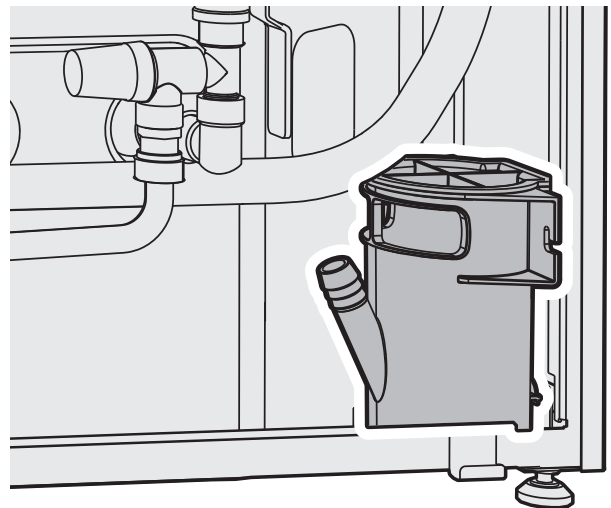
5.6.5. Drainage

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.

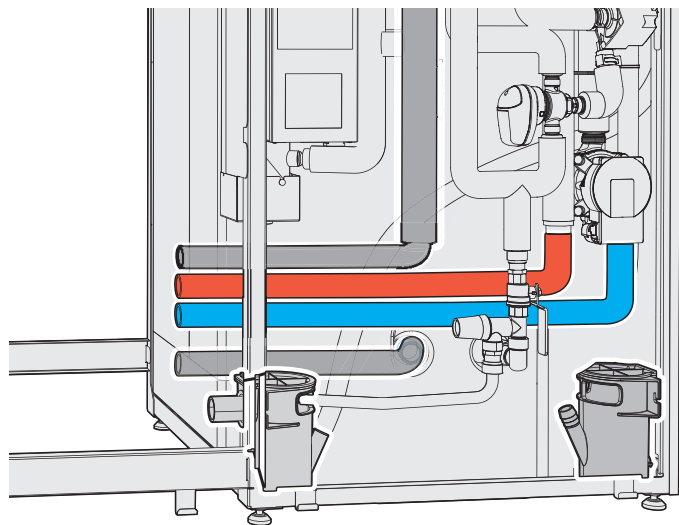


Alternative exit for hot and cold water pipes.
Alternative location for drainage cup.

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.



NB! Ensure that there is a dirt filter on the incoming cold-water supply, as well as a filter with a magnetic rod or alternatively a magnetite filter for the heating system.

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

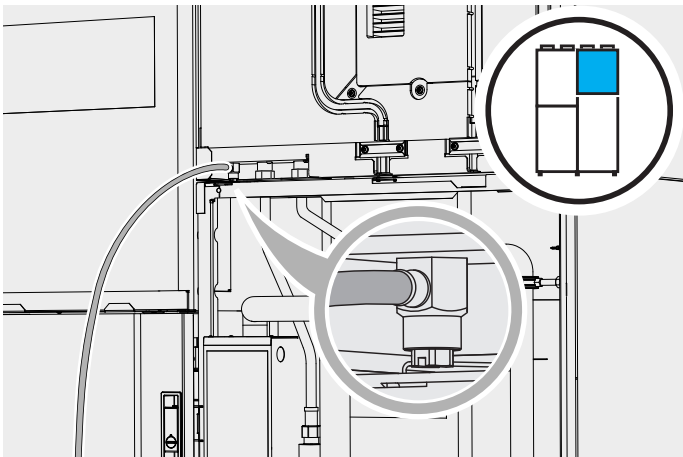
6.1. Prior to commissioning



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

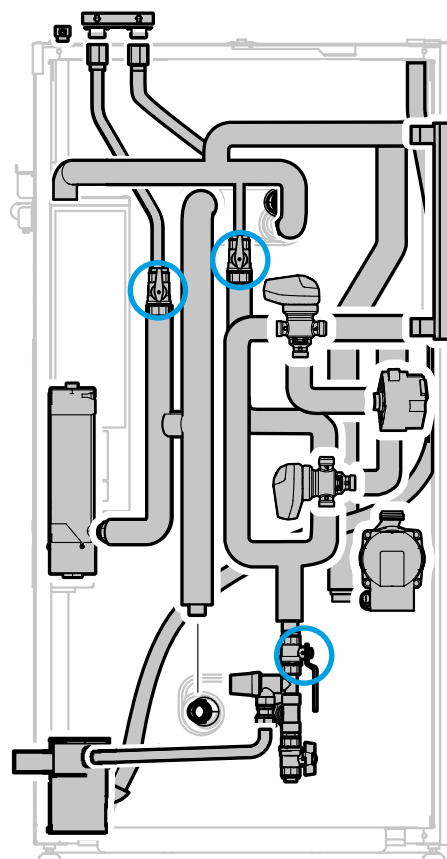
NB! Important points before connecting the product to the power supply.

1. All water connections on the primary and heating medium side must be connected as indicated in the previous chapters.
2. Make sure that all taps are open according to the illustration of the tank module. These must always be open when the product is in operation and only closed for servicing the primary circuit.
3. Filling: Open the incoming water. **TIP:** Open a tap at a draw-off point during the filling process to expel most of the air from the system.



4. Connect the venting hose as shown. Lead the hose in the drainage cup or directly into a drain.
NOTE! See chapter 6.4, start-up guide (max 6 Nm).
5. The heating medium circuit must be filled before startup.

Electric power may now be applied.



Tank module

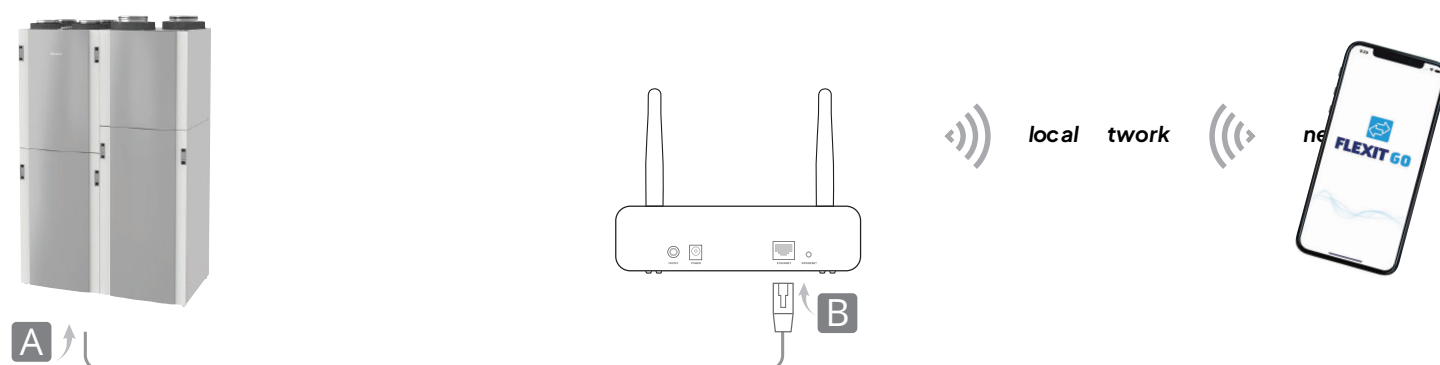
6.2. Connection

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

6.2.1. 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 art. no. 116733.

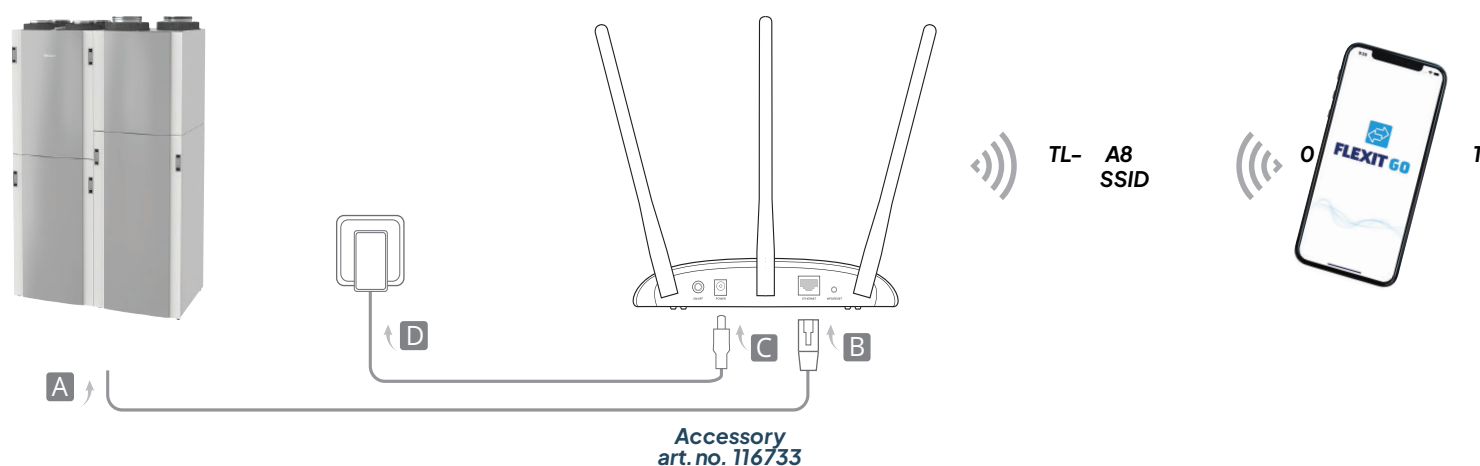
Connect the product to the home router with a network cable.



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

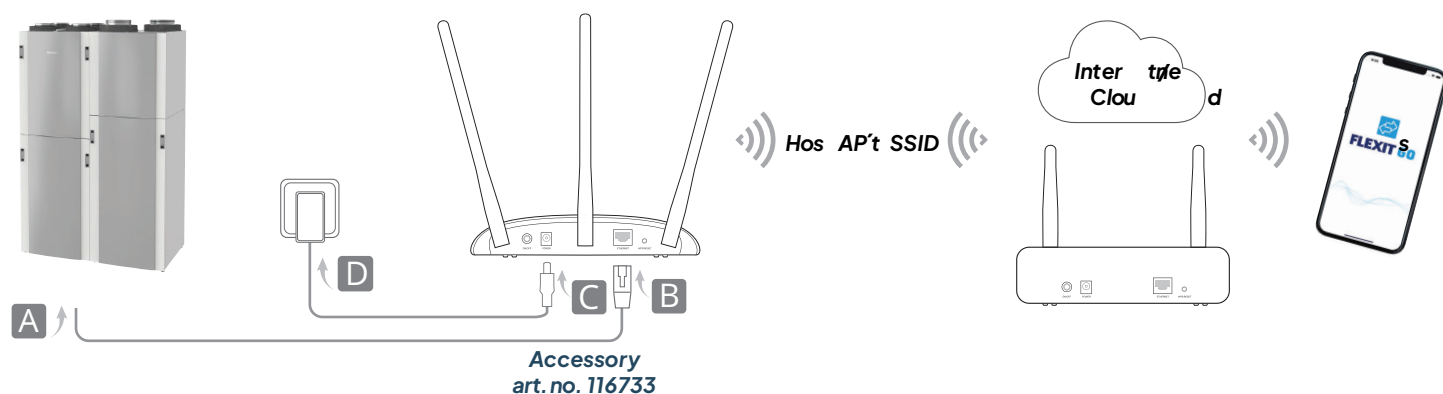
6.2.2. No network available

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.

Connect the product to the home router via Wi-Fi (accessory art. 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

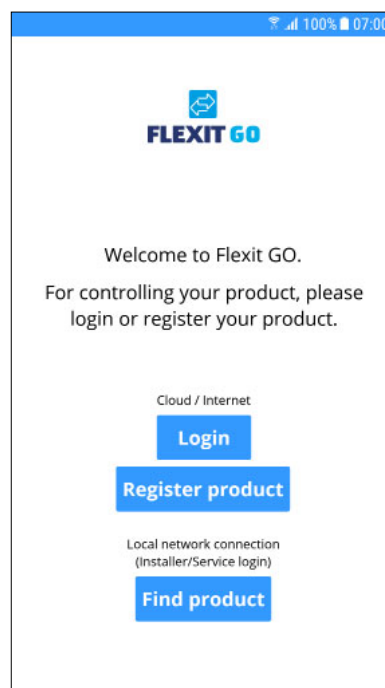


NB The product is commissioned by means of a direct wireless connection between the product and a mobile telephone or tablet with the Flexit GO app installed.

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'.

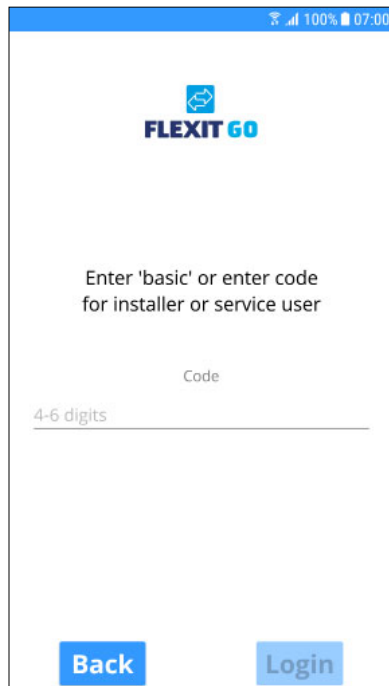


8. Press the unit which you wish to connect to from the list.
9. Press "Connect"

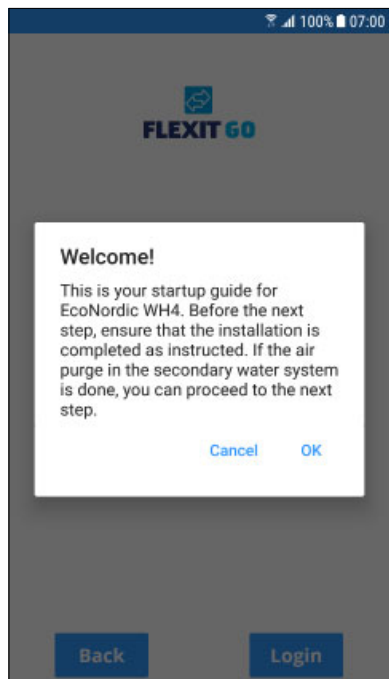
6.4. Start-up Guide

Depending on when the product was manufactured, the start-up guide may appear in different ways for EcoNordic WH4. Follow the guide that is displayed for you; Start-up Guide - Option 1 or 2.

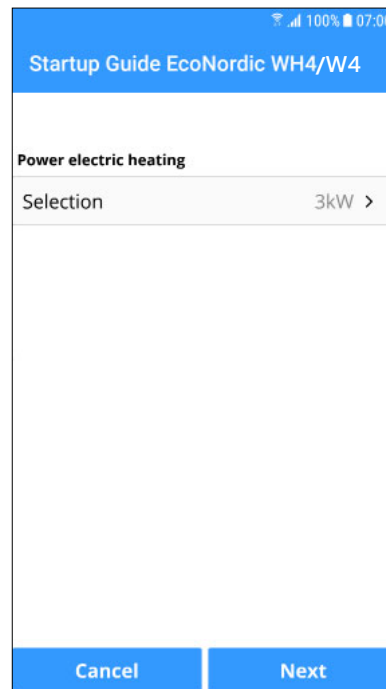
6.4.1. Start-up Guide - Option 1



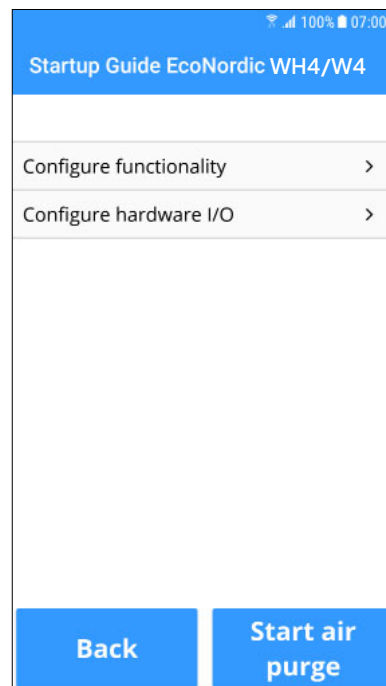
1. Enter the code '1000' to log in as installer.



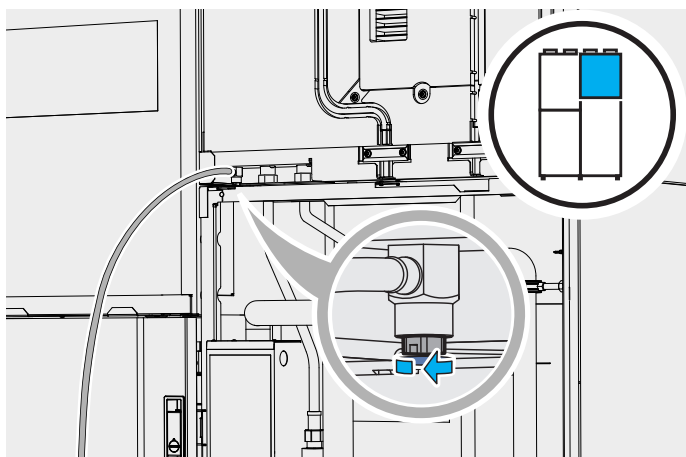
2. If everything is ready for the air purge to start, press 'OK' to open the Start-up Guide. If not, press 'Cancel'.



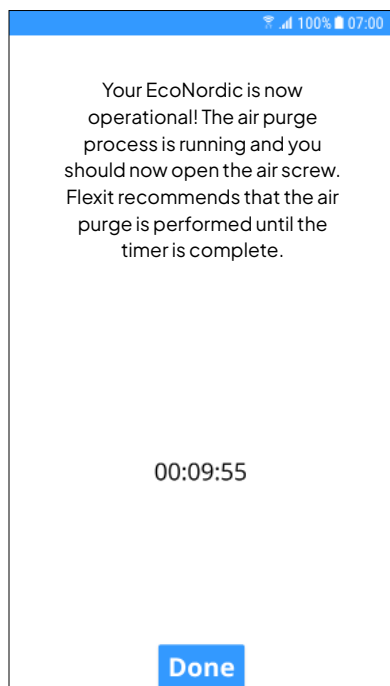
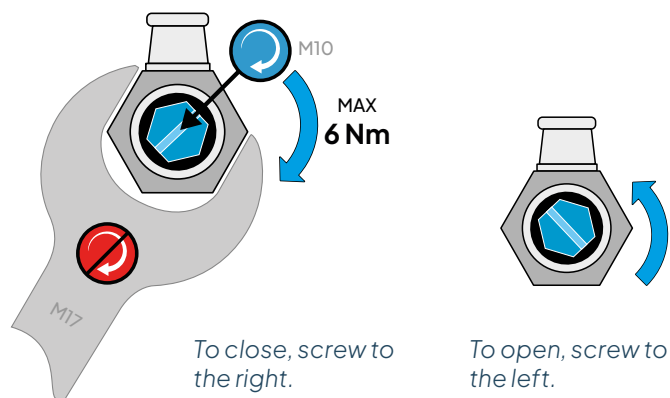
3. Select between 1 kW or 3 kW electric element:
 - 3.1 Under Electric element output, press "Select".
 - 3.2 Press "1 kW" or "3 kW".
 - 3.3 Press "OK"
 - 3.4 Press "Next"



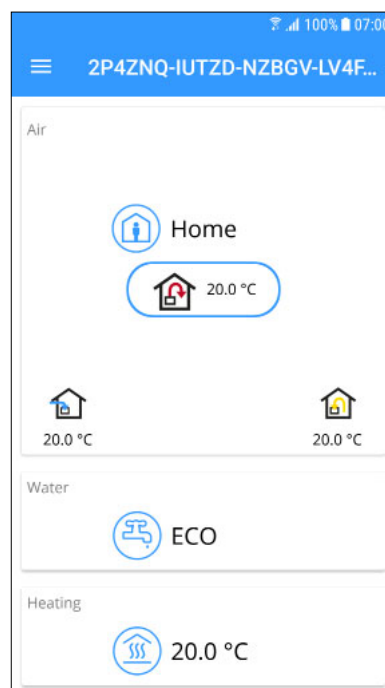
4. Are there any accessories connected which, according to their instructions, require configuration?
 - Yes: press 'Configure functionality'.
 - No: press 'Start air purge'.



- Remove the door to the heat pump module.
- Hold with a 17 mm wrench.
- Open and close the air screw using a 10 mm wrench or a screwdriver.



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

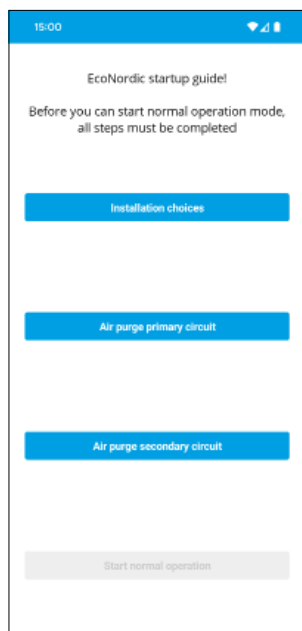


7. When you have finished the the air purge operation, you will return to the home page.

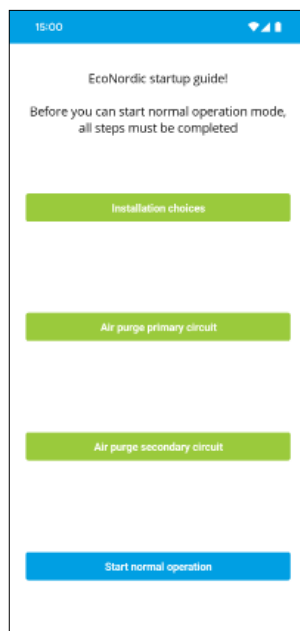
6.4.2. Start-up Guide - Option 2



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

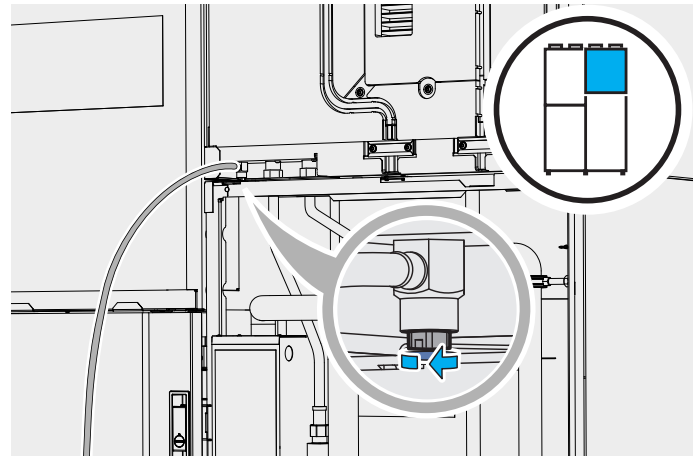


No step confirmed

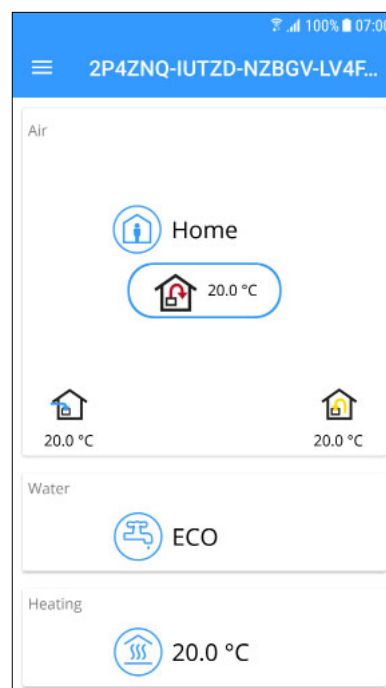
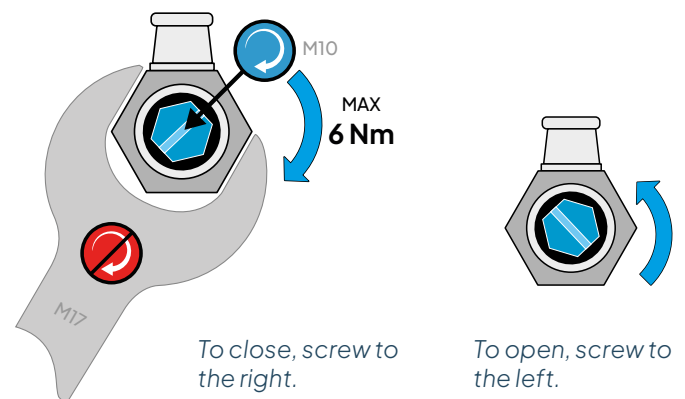


All steps confirmed

2. To start normal operation, you must complete the installation choices and purge the primary and secondary circuits. All steps must be confirmed before you can start normal operation. The steps can be done in any order and at different times.



- Remove the door to the heat pump module.
- Hold with a 17 mm wrench.
- Open and close the air screw using a 10 mm wrench or a screwdriver.

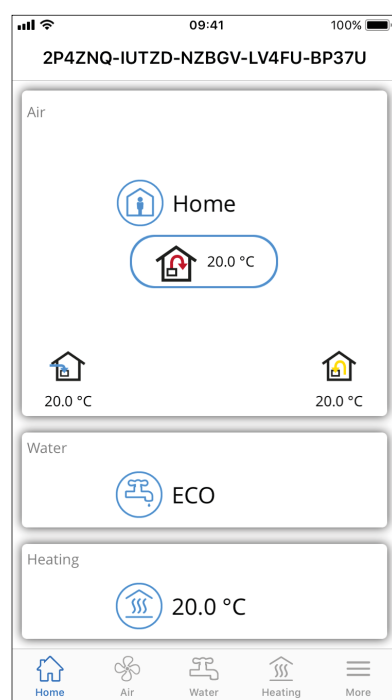
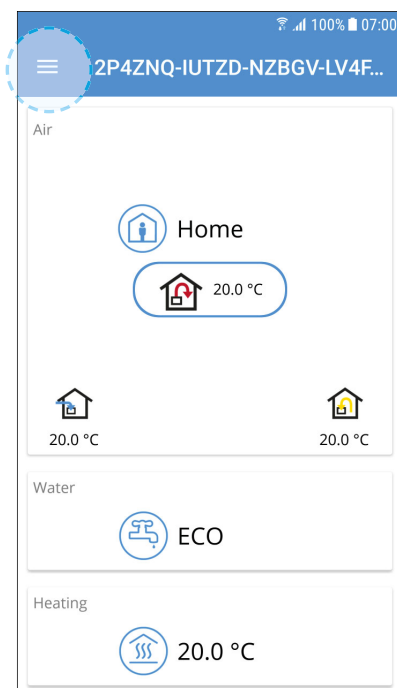


3. When you have finished the the air purge operation, you will return to the home page.

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.

Navigate to: **“Main menu”** -> **“Installer”**

Follow the instructions under “Commissioning” and adjust the airflows according to the design specifications.

The default unit for airflow is m³/h; this can be changed to l/s under “Unit for air flow.”

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 >	
Outdoor temperature limit for activation of space heating		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.
Limit	18 °C >	
Outdoor temperature range where space heating needs between 1.5kW - 2.5kW		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.
Upper limit	10 °C >	
Lower limit	-5 °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.
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		Limits to heat curve target value. Should be adjusted in the case of underfloor heating.
Min	20 °C >	
Max	45 °C >	
Delta between flow and return		The desired delta between your feed and the return from your heating circuit is regulated by use of the secondary circulation pump.
Delta	5.0 K >	
Hysteresis (on/off)		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.
On	2.0 K >	
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

		WH4		WH4 XL	
		400 V 3N~	230 V 3~	400 V 3N~	230 V 3~
PERFORMANCE	Tap water profile (EN 16147)	XL		XL	
	COP, tap water (EN 16147)	3,21		3,21	
	Outgoing compressor capacity	up to 4 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		524 m³/h @ 100 Pa	
		103 l/s @ 100 Pa		145 l/s @ 100 Pa	
	SFP range (l,5)	110 - 319 m³/h @ 100 Pa		106 - 325 m³/h @ 100 Pa	
		31 - 88 l/s @ 100 Pa		30 - 90 l/s @ 100 Pa	
	Temperature efficiency	> 90 %		> 90 %	
	SCOP (EN 14825)	3,22		3,22	
CURRENT	Rated voltage	400 V 3N~	230 V 3~	400 V 3N~	230 V 3~
	Continuous flow through heater, capacity	3 kW (1 kW)	3 kW (1 kW)	8 kW (6 kW/5 kW)	8 kW
	Fuse size	3×16 A (3×10 A)	3×25 A (3×16 A)	3×16 A	3×25 A
	Total rated current	14,3 A (10,0 A)	22,3 A (14,8 A)	14,3 A	23,7 A
	Total rated power	6,4 kW (4,4 kW)	6,4 kW (4,4 kW)	9,3 kW (7,3 kW/6,3 kW)	9,3 kW
VENTILATION	Fan type	B-wheel		B-wheel	
	Fan motor control	0-10 V		0-10 V	
	Control system, standard	Flexit GO		Flexit GO	
	Filter type (IN/OUT)	ePM1 55% (F7)		ePM1 55% (F7)	
	Duct connection	Ø 160 mm		Ø 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)	
HEAT PUMP	Refrigerant	CO ₂ (0,5 kg)		CO ₂ (0,5 kg)	
	GWP	1		1	
	Duct connection	Ø 200 mm		Ø 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	1900 mm		1900 mm	
	Width	1198 mm		1198 mm	
	Depth	650 mm		650 mm	
WEIGHT	Total, excluding water	220 kg		222 kg	
	Tank module	64 kg	58,5 kg (weight without door)	65 kg	59,5 kg (weight without door)
	Ventilation module	79 kg	70,5 kg (weight without door)	80 kg	71,5 kg (weight without door)
	Heat pump	65 kg	59 kg (weight without door)	65 kg	59 kg (weight without door)
	Ventilation chassis	12 kg		12 kg	
INSTALLATION	Position	Technical room/cupboard		Technical room/cupboard	
	Room temperature	Min. 3 °C		Min. 3 °C	

Energi 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.

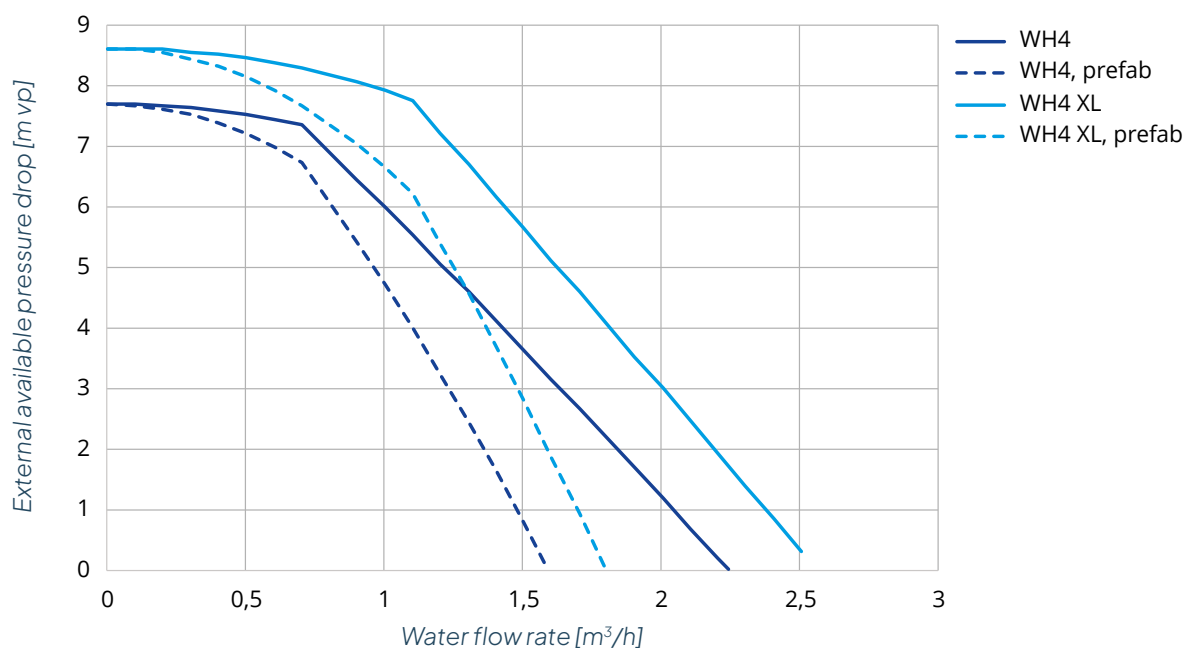


*Product data sheet
EcoNordic WH4*



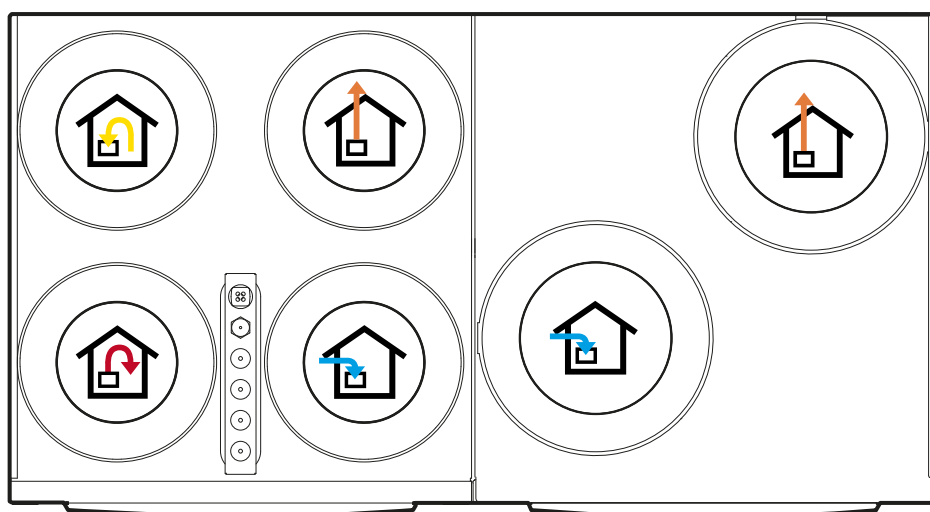
*Product data sheet
EcoNordic WH4XL*

8.2. Pump capacity, heating system

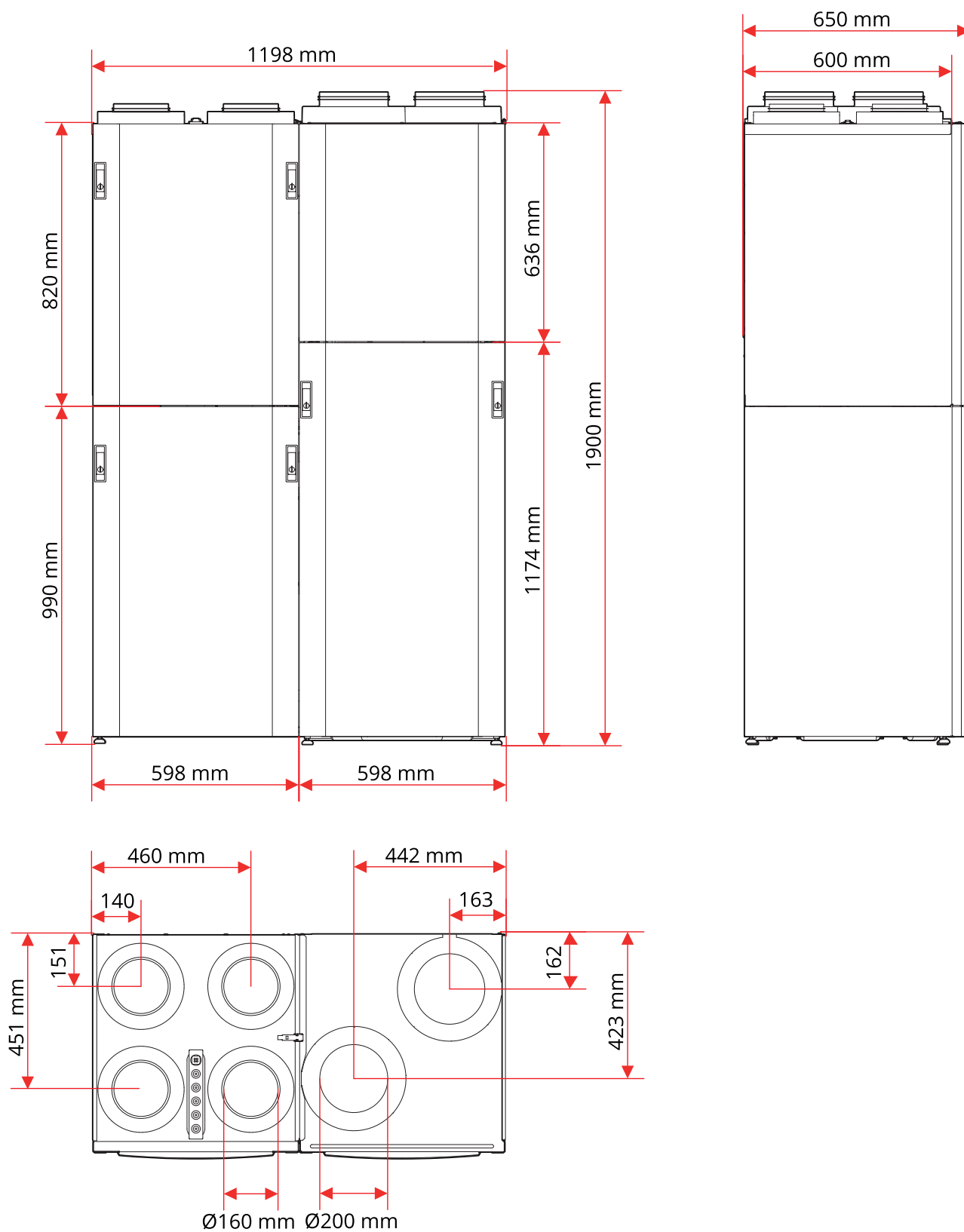


Shows the circulation pump capacity in the heating system. Maximum pressure head is 6.5 metres. If exceeded, an additional circulation pump is needed.

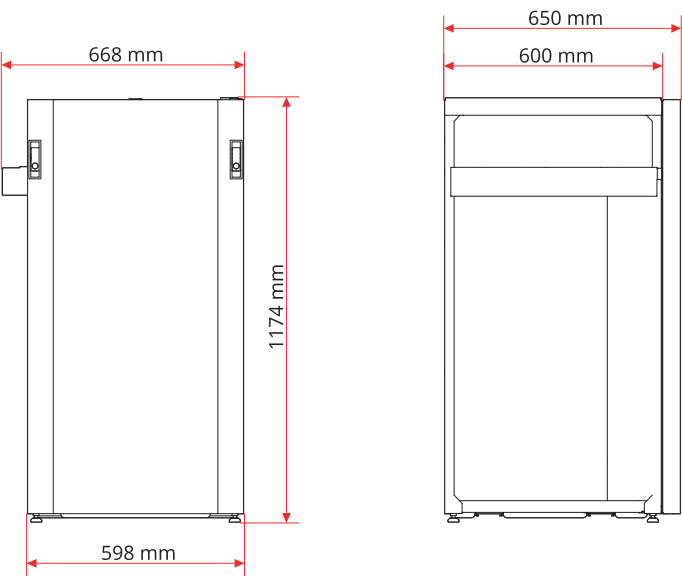
8.3. Nipple location



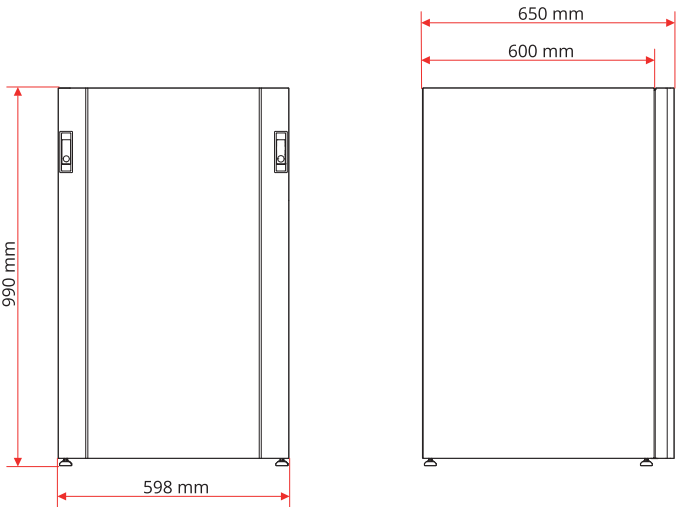
9. Dimensions



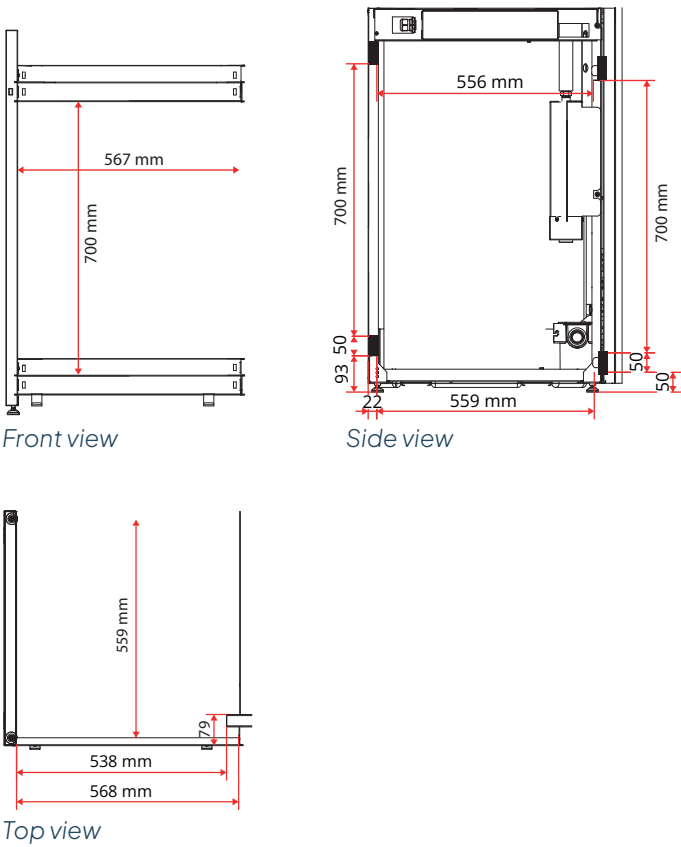
9.1. Tank module



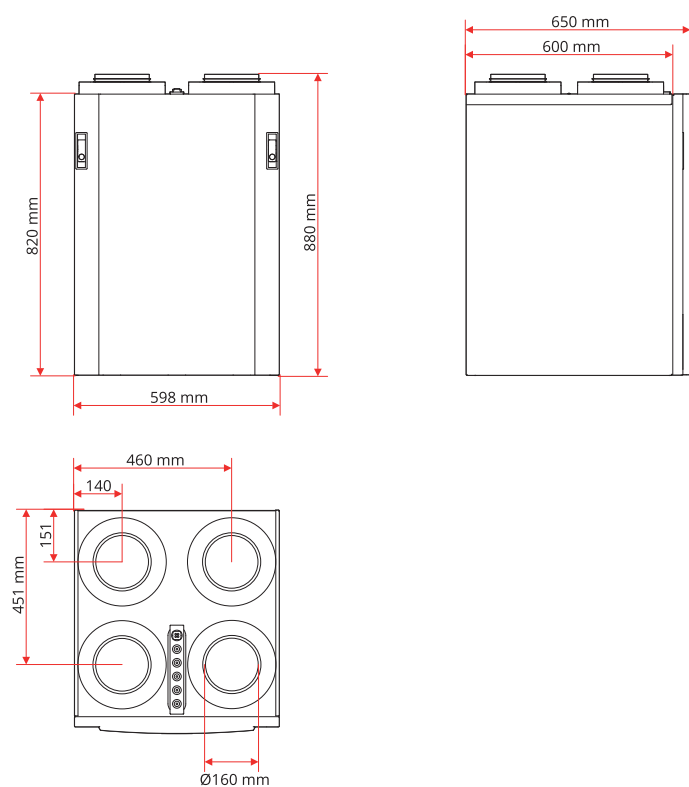
9.2. Chassis module



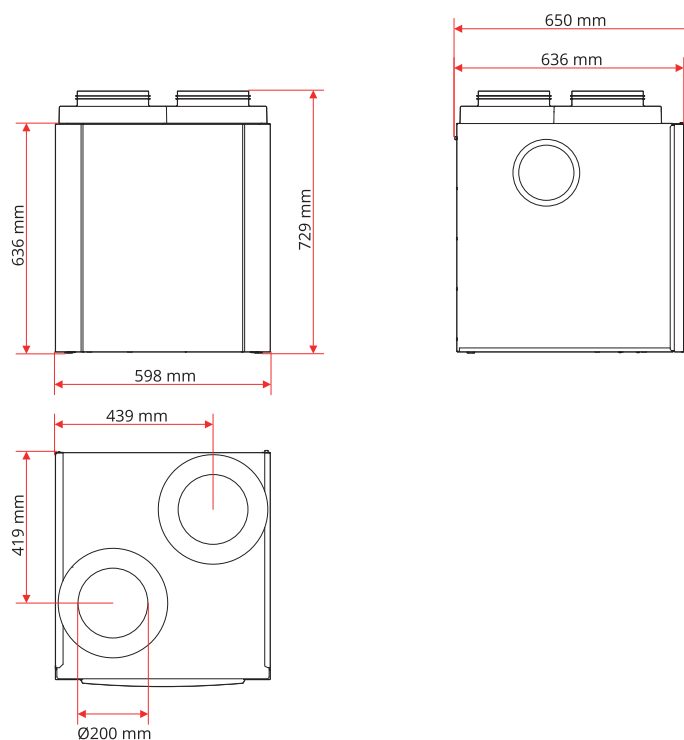
Internal dimensions:



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

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