

Preparations

EN

ECONORDIC

Important information



Positioning must comply with individual countries' electrical safety legislation. Check which rules apply in your country.



The electrician is responsible for ensuring that installation is carried out in accordance with current statutory requirements.



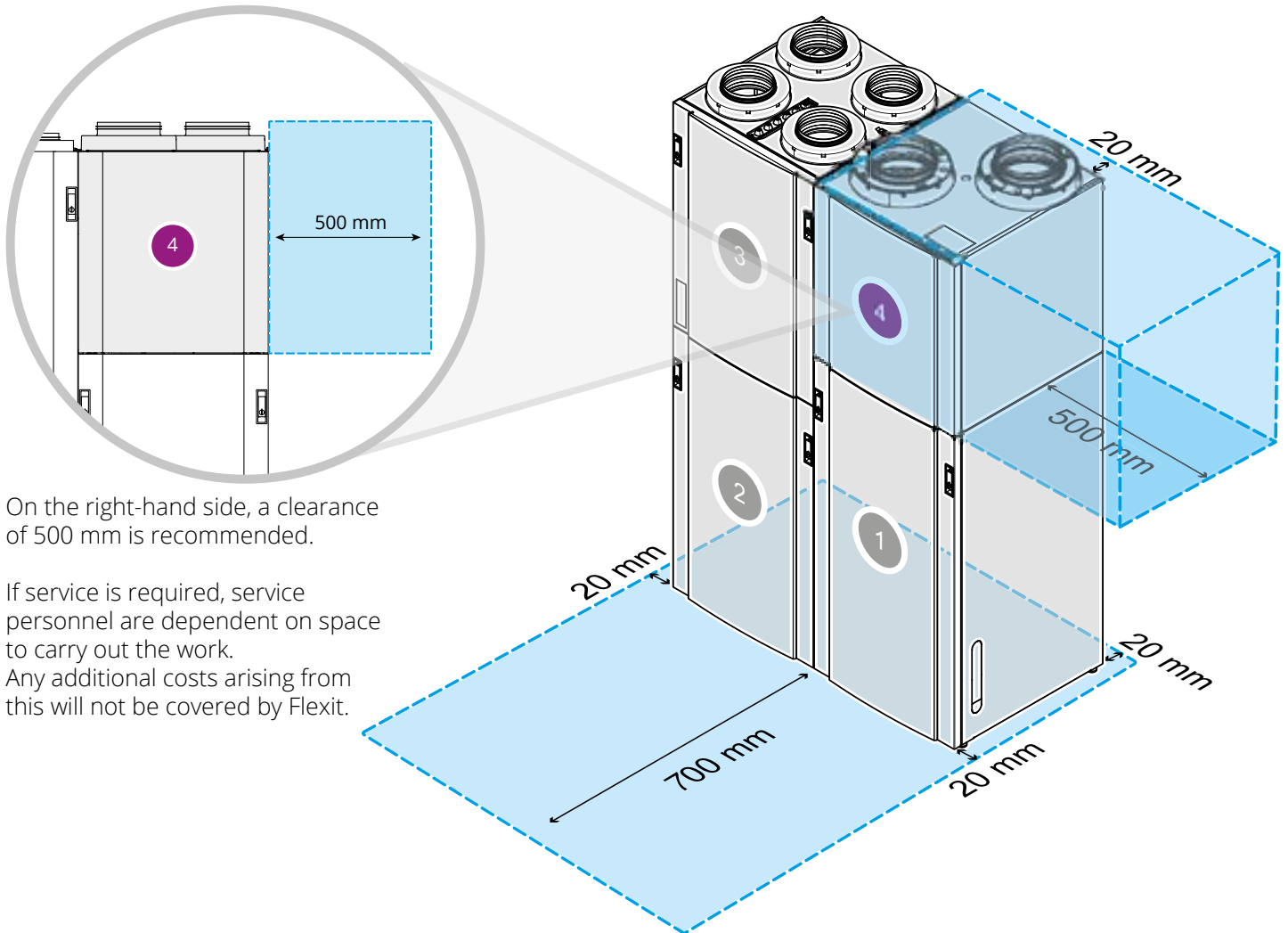
CAUTION

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

1. Position



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



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.

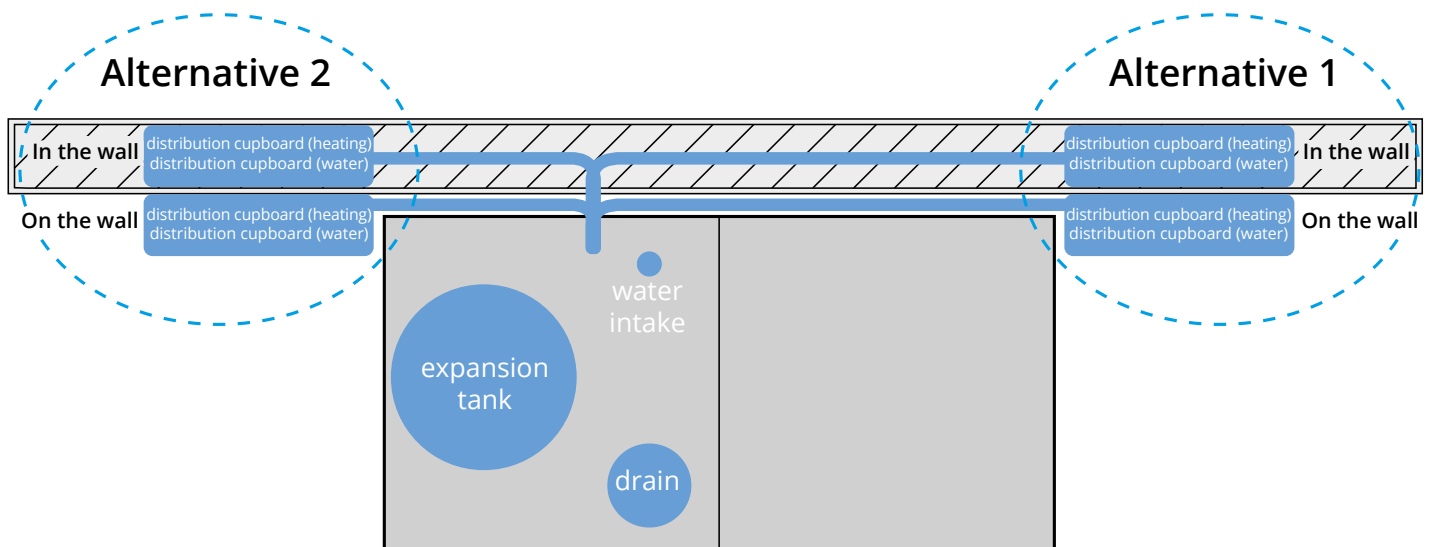


Diagram illustrating the installation location for the EcoNordic unit. The unit is shown as a grey rectangle. The distance from the rear wall to the center of the floor drain (e.g. Joti) is 500 mm. The distance from the left wall to the center of the floor drain is 450 mm. The distance from the right wall to the unit is min. 500 mm. The distance from the ceiling to the unit is min. 20 mm. The distance from the floor to the unit is min. 20 mm.

* distance requirement min. 20 mm

min. distance 500 mm

500 mm

450 mm

feed/return underfloor heating

location for installation of EcoNordic

centre of the floor drain (e.g. Joti) should be 500 mm from the rear wall and 450 mm from the wall to the left



2. Joiner and fitter

Room layout

- The floor's load-bearing capacity must be able to cope with the product's total weight of <450 kg, including full water heater.
- Distance to wall: see installation instructions.
- The room must have a drain. Recommended location: centrally under the chassis module.
- The temperature in the room must always be between +3°C and +30°C.
- The installation room must be defined as a technical room.
- The installation room and adjoining rooms must be adapted to the product's sound level (see installation instructions for details of your product).
- It is recommended to use soundproof walls with staggered studs and panels, as well as double drywall or wall design of equivalent quality.
- A soundproof door with a tight threshold and a sound-insulated wall with cut-off studs and boards and double plasterboard or wall design of equivalent quality is recommended.
- The room must have a ceiling height of at least 2.4 m.
- The heat pump's fan is accessible from the top right-hand side of the product. The necessary access must be ensured.

Air flow between rooms

Ensure with a gap of 20 mm under doors up to 72 m³/h or a flow opening of 2.2 cm² per m³ of air an hour.

Kitchen

If a kitchen fan with motor is planned, a suitable air supply must be ensured owing to negative pressure. This can, for example, be done with a pressure relay that changes the speed of the unit when the kitchen fan starts. Alternatively, a window or the like can be used. Kitchen fans with an extra high capacity require extraordinary air supply measures.

Fireplace

The air supply for fireplaces of 150-300 m³/h should be in the form of a fresh air duct directly to the fireplace or a ventilated flue.

External damper

Dampers with spring-loaded closing must be fitted on the heat pump's outdoor or exhaust air duct to prevent frost damage in the event of a power failure. The damper must be insulated in the same way as the rest of the duct system on the outdoor or air exhaust side.

Fire requirements

Any fire safety requirements must be clarified.

Heat sources

The positioning of heat sources must be coordinated with extract air valves so that heat is not sucked straight out through a valve or door gap.

Enclosure

Any enclosure of ducts must be done in such a way that inspection is possible from the front, the left-hand and the right-hand side of the product.

Ventilation

1. All ventilation channels must be connected.
2. Outdoor air and exhaust ducts must be insulated all the way to the outer wall.

3. Plumber

Water quality

Make sure the pH value is no lower than 7,3 and calcium content below 4 mg/L.

For more information, see chap. "5.6.3. Water quality" in the installation instructions.

Installation

Flexit does not supply pipe connections for EcoNordic WH4 except where you have purchased the prefab module.

In this case, the following must be carried out before commissioning:

Cold water in:

- Mount filter.
- The installer must establish a connection for cold water at the base of the tank, 3/4" external thread.
- If cold water in has a pressure of 4.5 bar or more, a reduction valve must be mounted, throttling the pressure to, say, 3 bar.

Hot water out:

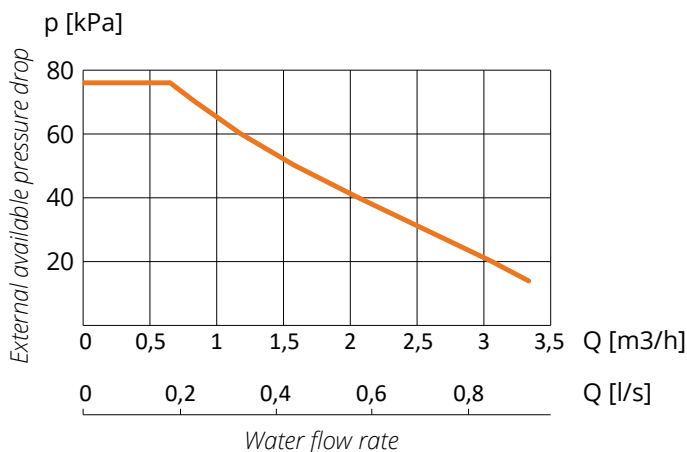
- The installer must establish a connection for hot water out, 22 mm plain end.
- It is not recommended to connect this to hot water circulation.

Feed and return heating system:

- Connections have 1" external thread. Use transition unions for e.g. 22 or 28 mm. Connect to the manifold with hose or fixed piping in 28 mm or 1".
- The heating system return will require a filter, pressure gauge and normally a 12 litre expansion tank with 2.5 bar safety valve.
- Mount a filling valve with non-return valve.
- EcoNordic WH4 has its own circulation pump for heating systems dimensioned for up to approx. 250 m² of underfloor heating.

EcoNordic WH does not require an accumulation tank or bypass.

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.

4. Electrician

The product is supplied as 400 V~3N, but can be converted to 230 V~3. The necessary equipment is supplied.

If connected to 230V, a earth leakage circuit breaker of 'type B' must be used.

A slow-blow fuse is recommended, e.g. C-type.

See separate conversion instructions and wiring diagram.

External dampers:

See table in chap. "5.5.6. Control and accessories" in the installation instructions for description of inputs and outputs, and chap. "5.5.7. Connection of a frost protection damper".

Rated voltage	400 V~3N		230 V~3	
Flow-through heater power	3 kW	1 kW	3 kW	1 kW
Fuse size	3x16 A	3x10 A	3x25 A	3x16 A
Rated current, total	14,3 A	10,0 A	22,3 A	14,8 A
Rated power, total	6,4 kW	4,4 kW	6,4 kW	4,4 kW

External pipe connections:

Link to [installation instructions](#) for prefab module.

Commissioning

1. Prior to commissioning, all connections must be made: cold water in, hot water out, feed and return to heating system.
2. The heating system must be vented and filled to minimum 1 bar pressure.
3. At startup all floor ports must be fully open and their flow regulated.

Commissioning with Flexit GO (control system via app)

- Connect to functioning internet in the dwelling. If there is no internet, use an access point
- For more information, see chap. "6.2. Connection" in the installation instructions.



The app is regularly updated. As there may be a difference between older installation instructions and the new app, it is recommended to download the latest version of the instructions from www.flexit.com.

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

