

# Condensation water pipe

## **KVR 11**

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# Important information

## Safety information

This manual describes installation and service procedures for implementation by specialists.

The manual must be left with the customer.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

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## Symbols

Explanation of symbols that may be present in this manual.



### NOTE

This symbol indicates danger to person or machine.



### Caution

This symbol indicates important information about what you should consider when installing or servicing the installation.



### TIP

This symbol indicates tips on how to facilitate using the product.

## Marking

Explanation of symbols that may be present on the product's label(s).



Read the Installer Manual.

# General

The accessory KVR 11 is used to safely divert most of the condensation from the air/water heat pump to a frost-free collection point.

The accessory is suitable to following products from NIBE:

- F2120
- S2125



## NOTE

It is important to the heat pump function that condensation water is led away and that the drain for the condensation water run off is not positioned so that it can cause damage to the house.

The heating cable starts automatically at an outdoor temperature of 1.5 °C. When the temperature exceeds 2 °C the heating cable switches off again.

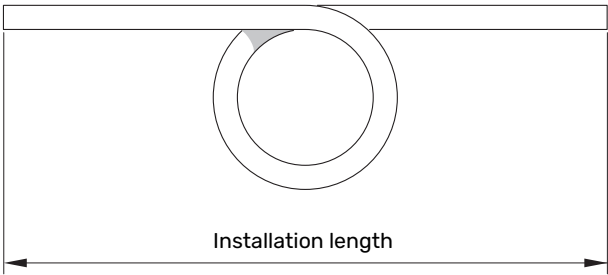


## NOTE

Installation of KVR 11 can affect the machine's function. Read the entire Installer Manual together with the main product's Installer Manual!

# Different versions of KVR 11

KVR 11 is available in three lengths. Here you can see an example of the installation length.



## F2120 / S2125

	KVR 11	KVR 11 2x230V <sup>1</sup>
	Part No.	Part No.
Hose length 1 metre (installation length 1 m without water seal)	067 823	067 826
Hose length 3 metres (installation length 1-2.2 m with water seal)	067 824	067 827
Hose length 6 metres (installation length 2.2-5.2 m with water seal)	067 825	067 828

<sup>1</sup> Only applies to F2120, 2 x 230 V, part no. 064 193 and 064 194.

## CONTENTS

- 1 x Insulated hose (inner diameter 40 mm)
- 1 x Heating cable
- 1 x Hose clamp
- 1 x Fuse
- 6 x Cable ties
- 1 x Automatic protection

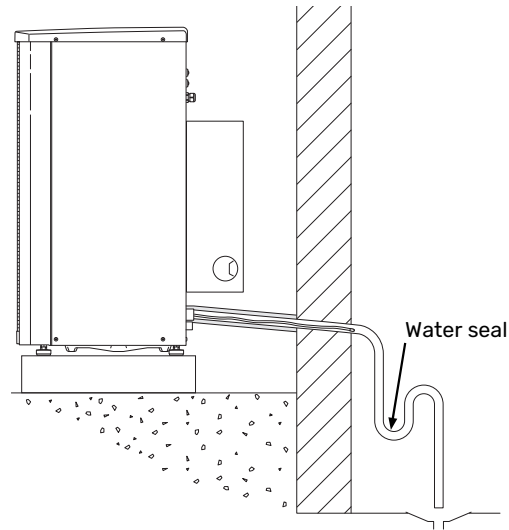
# Pipe connections

## General

Connect KVR 11 to the heat pump's condensation water trough using the supplied hose clamp.

- Pipe installation must be carried out in accordance with current norms and directives.
- We recommend three ways of leading off condensation water; to an indoor drain (subject to local rules and regulations), stone caisson, gutter drainage or other frost free collection point.
- When casting the base, the holes for KVR 11 must have an internal diameter of 110 mm.
- Route the pipe downward from the air/water heat pump.
- The insulation of KVR 11 must seal against the bottom of the product's condensation water trough.
- The drain from KVR 11 must be positioned at frost free depth or indoors (subject to local rules and regulations).
- The drain from KVR 11 must be able to receive up to 100 litres of condensation water per day.
- The installation must be equipped with a water seal where air circulation can occur in the condensation water pipe.

## Drain indoors



The condensation water is lead to an indoor drain (subject to local rules and regulations).

Route the pipe downward from the air/water heat pump.

The condensation water pipe must have a water seal to prevent air circulation in the pipe.

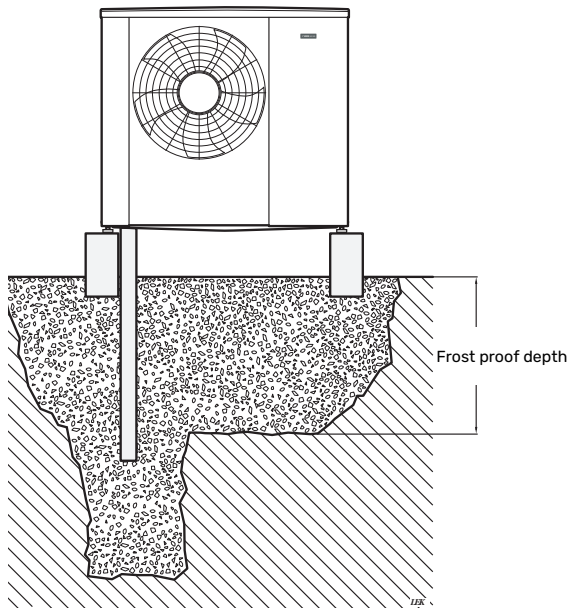
Pipe routing indoors is not included.



### NOTE

Do not select this option, "Indoor drain", if you have an air/water heat pump with a flammable or easily combustible refrigerant.

## Stone caisson



If the house has a cellar the stone caisson must be positioned so that condensation water does not affect the house. Otherwise the stone caisson can be positioned directly under the heat pump.

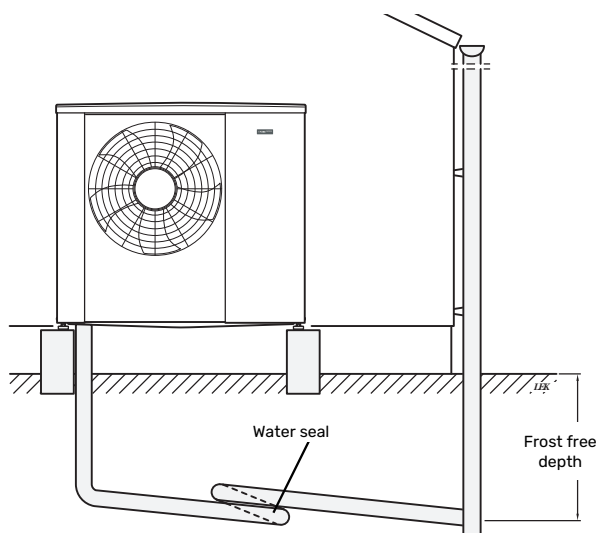
The outlet of the condensation water pipe must be at frost free depth.

## Gutter drainage



### NOTE

Bend the hose to create a water seal, see illustration.



- The outlet of the condensation water pipe must be at frost free depth.
- Route the pipe downward from the air/water heat pump.
- The condensation water pipe must have a water seal to prevent air circulation in the pipe.
- The installation length can be adjusted by the size of the water seal.



# Electrical connection



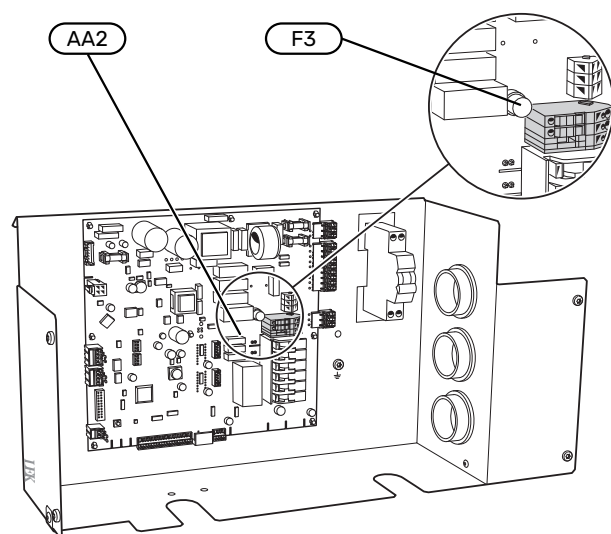
## NOTE

All electrical connections must be carried out by an authorised electrician.

## F2120 / S2125

KVR 11 is connected to the base board AA2-X9 in F2120 / S2125. The connection is fused with 250 mA via fuse F3 at the factory.

### FUSE LOCATION



### Fuse

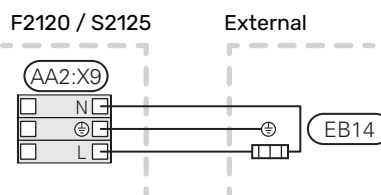
Length, heating cable (m)	P <sub>tot</sub> (W)	Fuse (F3)	Part No.
1	15	T100mA/250V	718 085
3	45	T250mA/250V	518 900*
6	90	T500mA/250V	718 086

\*Fitted at the factory.

### ELECTRICAL CONNECTION

F2120 / S2125 is equipped with a terminal block for an external heating cable (EB14). The connection is fused with 250 mA (F3) at the factory. If another cable is to be used, the fuse must be replaced with a suitable one.

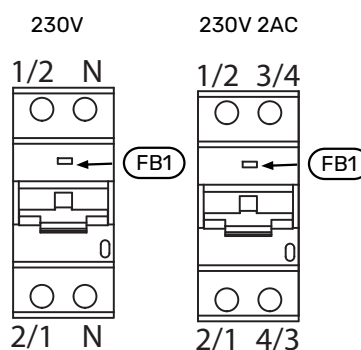
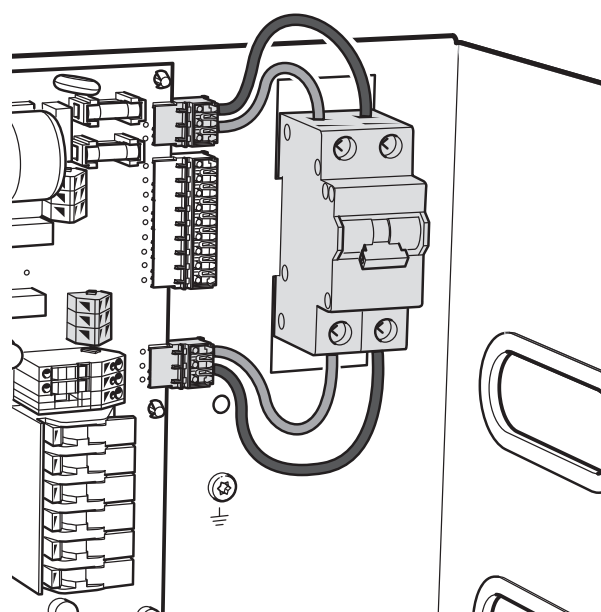
Connect external heating cable (EB14) to terminal block X9:L and X9:N. The earth cable must be connected to X9:PE. See following image.



### Connecting automatic protection

Replace miniature circuit-breaker (FC1) with automatic protection (FB1) when installing KVR 11. Automatic protection (FB1) is available as an enclosed component for KVR 11.

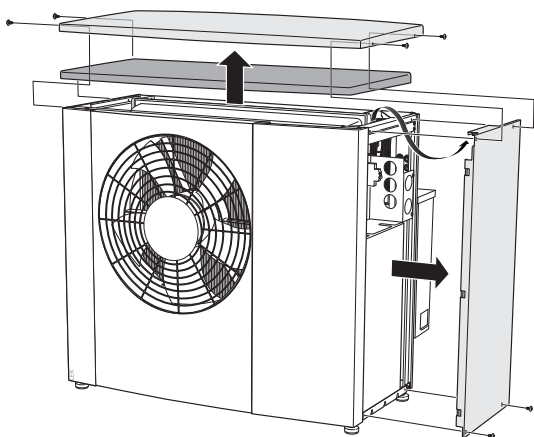
Connection of automatic protection (FB1) is with -XJ4 in pos. -AA2:X4 and -XJ3 in pos. -AA2:X3.



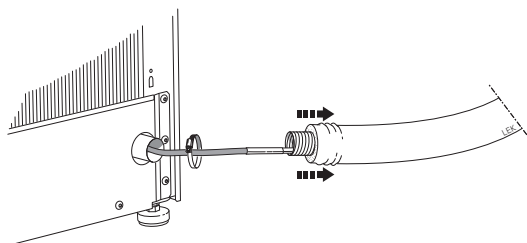
## Cable routing

The following image shows the recommended cable routing from the distribution box to the condensate drip tray on the inside of F2120 / S2125. The transition between the electrical cable and the heating cable must be after the lead-in to the condensate drip tray. The distance between the distribution box and the lead-in to the condensate drip tray is approx. 1,600 mm.

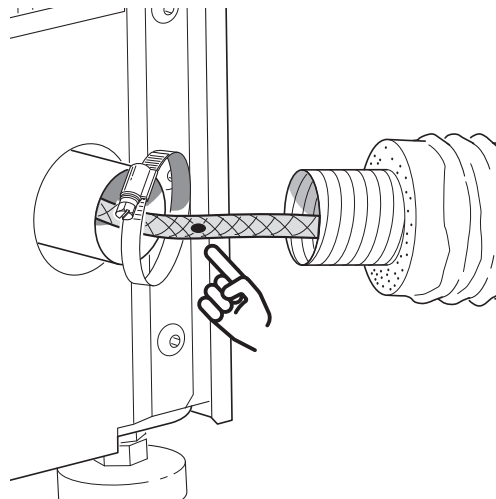
1. Remove the top panel, the top insulation and the side panel.



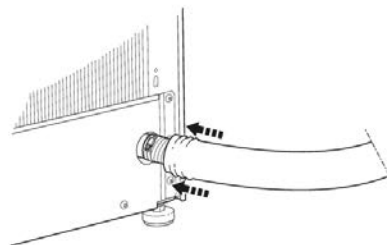
2. Thread hose clamp on.
3. Route the heating cable through the condensation water pipe.
4. Route the heating cable through the condensation water connection on the rear of KVR 11. Pull the insulation down slightly.



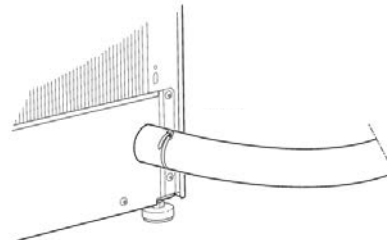
5. Lay the heating cable and ensure that the marking on the heating cable is as close to the condensation water connection as possible. Secure the heating cable with cable ties to the top of the evaporator, as illustrated in point 9.



6. Connect the hose to the condensation water connection and tighten the hose clamp. Pull the insulation up towards the plate.

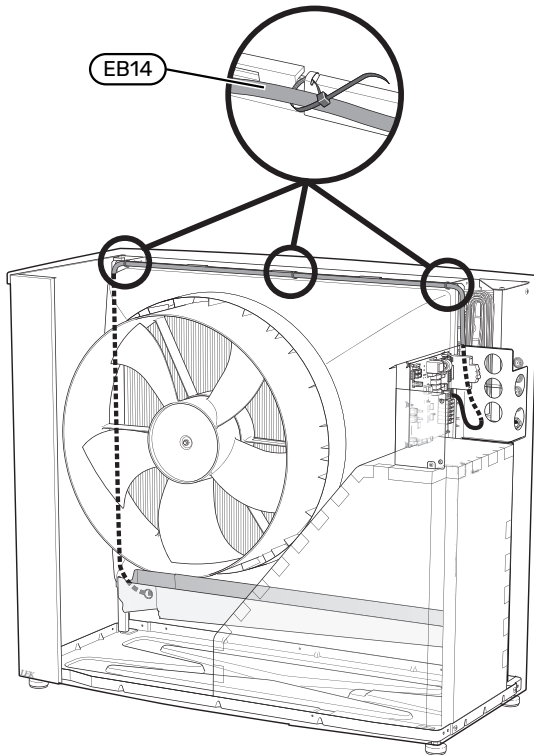


7. Secure the insulation with a cable tie.

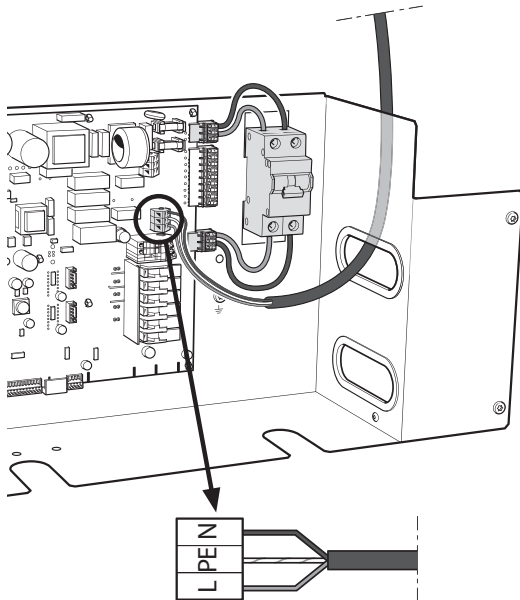


8. Route the heating cable to the electrical connection.

9. Use cable ties and strap anchors to secure the heating cable, see images.



10. Connect the cable as illustrated in "Electrical connection", see page Electrical connection. (Check the fuse according to the table, see page "Fuse".)



11. Reinstall the side panel, the top insulation and the top panel.







## Contact information

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