

# Installer manual CTC Condensation drain

Condensation water pipe

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## 1 General

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



#### 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.

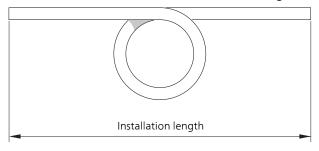


#### NOTE

The installation of CTC Condensation drain can affect the machine's function. Read the entire manual!

## **Different versions of CTC Condensation drain**

CTC Condensation drain is available in three lengths. Here you can see an example of the installation length.



Chapter 1 | General CTC Condensation drain

	CTC Condensation drain	CTC Condensation drain 2x230V
	Part No.	Part No.
Hose length 1 metre (installation length 1 m without water seal)	589342301	589342304
Hose length 3 metres (installation length 1-2.2 m with water seal)	589342302	589342305
Hose length 6 metres (installation length 2.2-5.2 m with water seal)	589342303	589342306

## Contents

1 x Insulated hose (inner diameter 40 mm)

1 x Heating cable

1 x Hose clamp

1 x Fuse

1 x Gasket

6 x Cable ties

1 x Screw

1 x Nuts

2 x Washers

1 x Connection piece

1 x Automatic protection

14 x Plug

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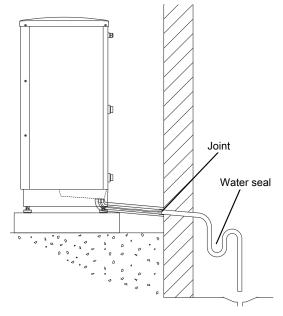
# 2 Pipe connections

## General

Connect CTC Condensation drain 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 CTC Condensation drain must have an internal diameter of 110 mm.
- Route the pipe downward from the air/water heat pump.
- The insulation of CTC Condensation drain must seal against the bottom of the product's condensation water trough.
- The drain from CTC Condensation drain must be positioned at frost free depth or indoors (subject to local rules and regulations).
- The drain from CTC Condensation drain 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**



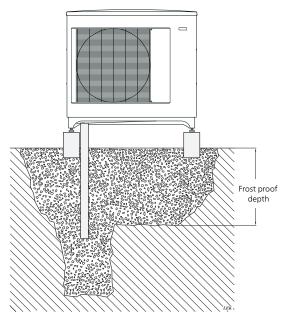
The condensation water is lead to an indoor drain (subject to local rules and regulations).

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.

CTC Condensation drain spliced as illustrated. Pipe routing inside house not included.

## 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.

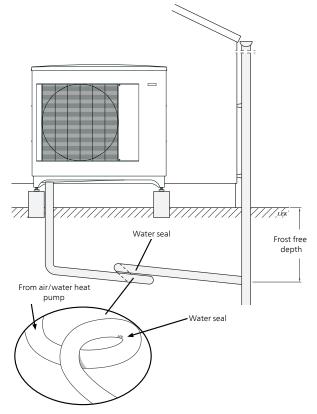
The outlet of the condensation water pipe must be at frost free depth.

# **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

# 3 Electrical connection



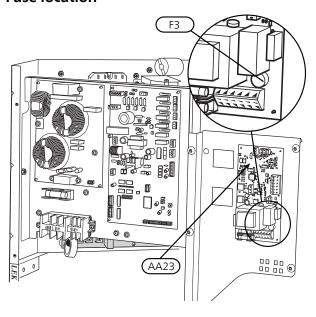
## NOTE

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

## CombiAir

CTC Condensation drain connects to the communication board (AA23-X1:4-6) in CombiAir. Communication board (AA23) is fitted with a 250 mA fuse.

## **Fuse location**



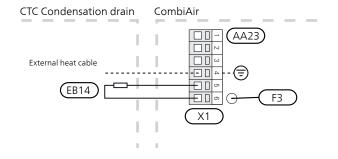
#### **Fuse**

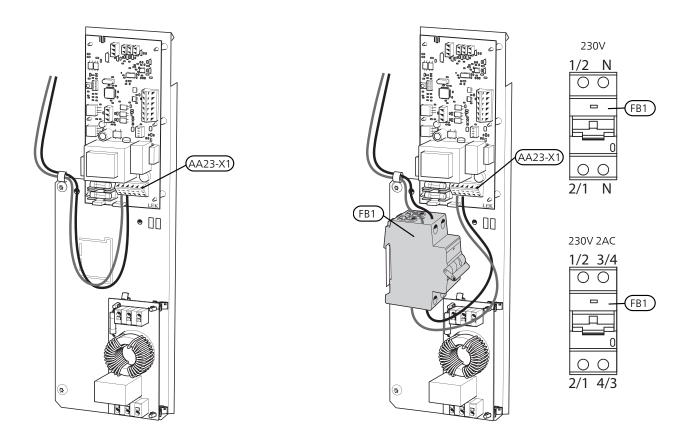
Length, heating cable (m)	P <sub>tot</sub> (W)	Fuse (F3)	Part No.
1	15	T100mA/250V	718 085
3	45	T250mA/250V	518 900*
6	90	T500mA/250V	718 086

<sup>\*</sup>Fitted at the factory.

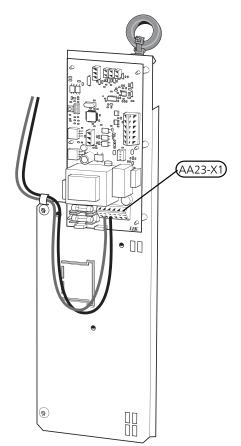
## **Electrical connection**

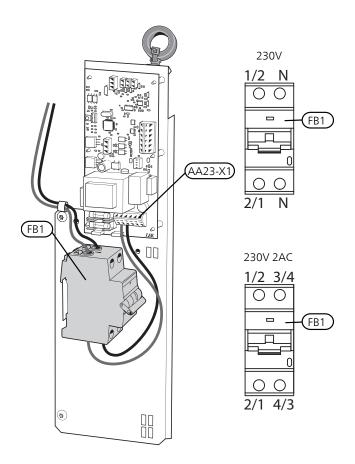
The external heating cable (EB14) is connected to terminal block (X1:4–6) as illustrated below:





230V/230V 2 AC

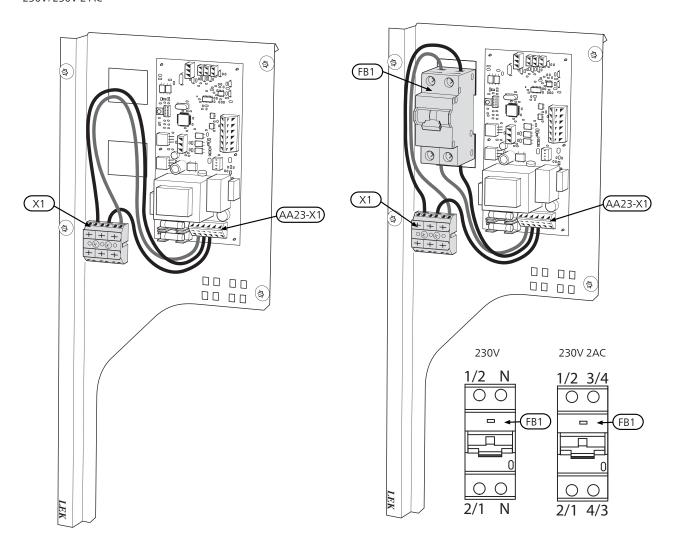




## CombiAir 12, version 1

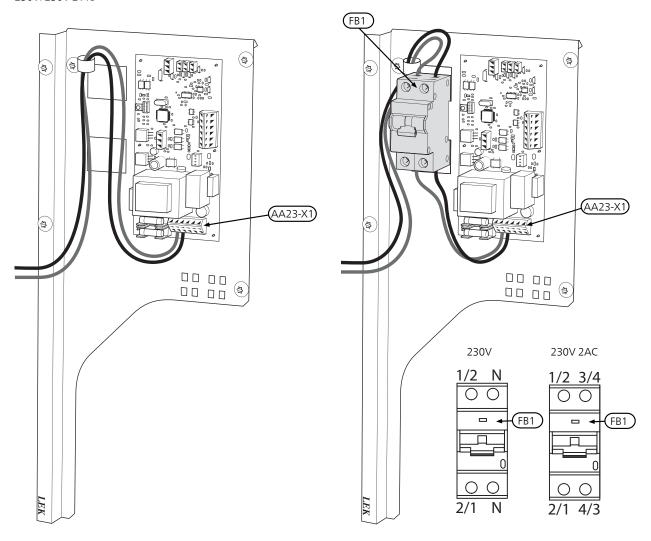
Connection of earth leakage circuit breaker (FB1) between terminal block (X1) and communication board (AA23-X1:1-3).

## 230V/230V 2 AC

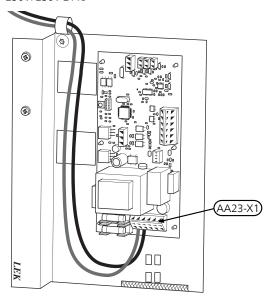


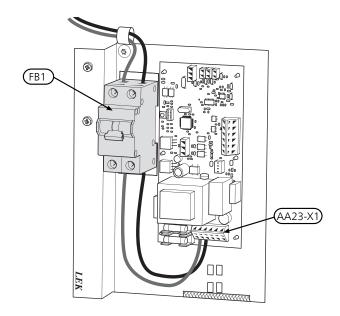
## CombiAir 12, version 2

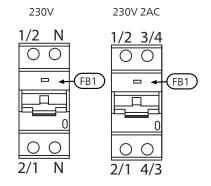
230V/230V 2 AC



230V/230V 2 AC



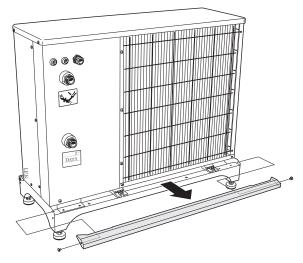




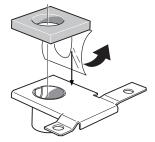
## Cable routing

The following image shows recommended cable routing from distribution box to condensation water pipe. Route the heating cable (EB14) through the grommet underneath and secure with two cable ties at the electrical connection. Transfer between electrical cable and heating cable must occur after the lead-in to the condensation water pipe.

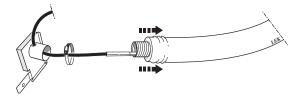
- 1. Remove the front and side panels.
- 2. Remove the rear cover plate from the stand.



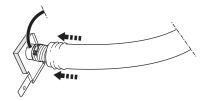
3. Pull off the protective paper and secure the gasket to the condensation water connection, see image.



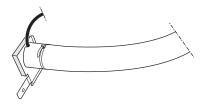
- 4. Thread hose clamp on.
- 5. Route the heating cable through the condensation water pipe.
- 6. Route the heating cable through the drain pipe on the connection plate, see image.



 Pull the insulation down slightly, connect the hose to the drain pipe and tighten the hose clamp, as illustrated.



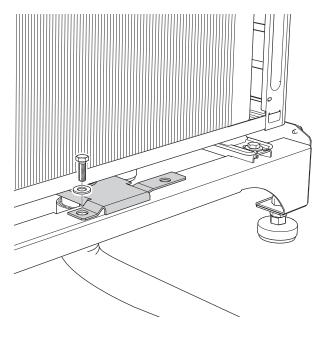
8. Push the insulation up towards the trough and secure it using cable ties, see image.



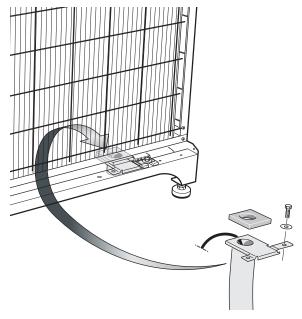
 For CombiAir 6, screw the connection piece securely to the stand as illustrated using a screw and washer. Now clamp the gasket between the adapter and the bottom of the module.

For CombiAir 8/12/16, loosen the nut and remove the washer securing the heat pump module to the stand. Fit the holder to the module's foot and reinstall the washer and nut. Now clamp the gasket between the adapter and the bottom of the module. When the drain holes have been adjusted above one another, tighten the nut.

#### CombiAir 6

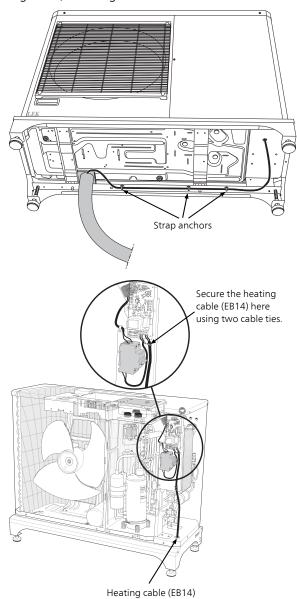


CombiAir 8, CombiAir 12, CombiAir 16



- 10. Stretch the heating cable and ensure that the marking on the heating cable is as close to the drain pipe as possible.
- 11. Route the heating cable to the electrical connection.

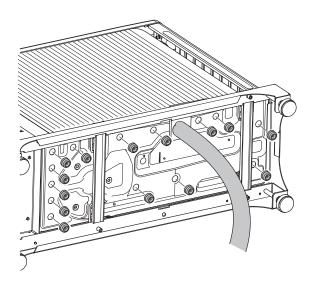
12. Use cable ties and strap anchors to secure the heating cable, see images.



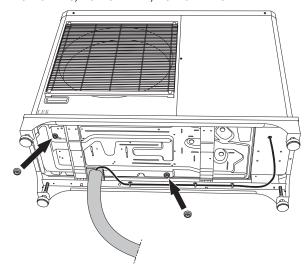
- 13. Connect the cable according to the "Electrical connection" image, see page 8. (Check the fuse according to the table, see page 8.)
- 14. Reinstall the cover, front and side panels.

## 15. Install plugs, see image.

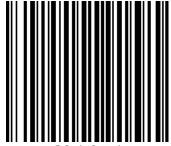
## CombiAir 6



CombiAir 8, CombiAir 12, CombiAir 16



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