



# KVR 10 Split

- SE Installatörshandbok Kondensvattenrör KVR 10 Split
- (GB) Installer manual Condensation water pipe KVR 10 Split
- DE Installateurhandbuch Kondenswasserschlauch KVR 10 Split
- (FI) Asentajan käsikirja Vedenpoistoputki KVR 10 Split



# English, Installer manual - KVR 10 Split

# General

The accessory KVR 10 Split is used to safely lead away most of the condensation water from NIBE Split to a frost free collection point.



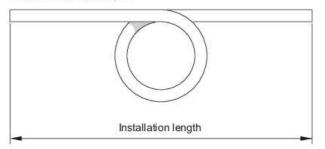
### NOTE

It is important for the heat pump system 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  $^{\circ}$ C. When the temperature exceeds 3,5  $^{\circ}$ C the heating cable switches off again.

## KVR 10 Split available in three lengths

Suitable for NIBE Split



#### Contents

- 1 x KVR 10 Split to NIBE Split ACVM 270 or KVR 10 Split to NIBE Split HBS
- 2 x Screw
- 1 x Wiring
- 6 x Cable ties
- 1 x Load relief
- 1 x Connection plate
- 1 x Hose
- 1 x Heating cable
- 3 x Cable tie with arrowhead
- 3 x Plug
- 1 x Hose clamp
- 1 x Gasket
- 3 x Cable ties
- 1 x Fuse

Part No.	Name	Hose length	Installation length
067239	KVR 10-10 ACVM	1 m	1 m without water seal
067240	KVR 10-10 ACVM 2x230V		
067276	KVR 10-10 HBS		
067241	KVR 10-30 ACVM	3 m	1–2,2 m with water seal
067242	KVR 10-30 ACVM 2x230V		
067277	KVR 10-30 HBS		
067243	KVR 10-60 ACVM	6 m	2,2–5,2 m with water seal
067244	KVR 10-60 ACVM 2x230V		
067278	KVR 10-60 HBS		



### NOTE

The installation of KVR 10 Split is critical to the machine's function. Read the entire manual!



### NOTE

Requires software version 1.05!



# Installation

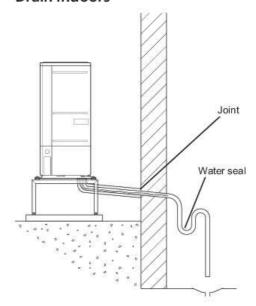
Connect KVR 10 Split to NIBE Split's condensation water trough with the connection plate and hose clip provided.

# Pipe connections

#### General

- 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.
- Route the pipe downward from the air/water heat pump.
- The insulation of KVR 10 Split must seal against the bottom of the condensation water trough.
- The drain from KVR 10 Split must be positioned at frost free depth or indoors (subject to local rules and regulations).
- The drain from KVR 10 Split 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**



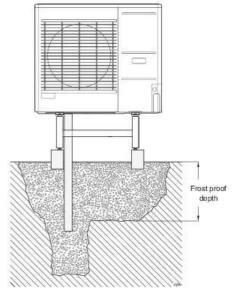
The condensation water is lead to an indoor drain (subject to local rules and regulations).

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.

KVR 10 Split 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.

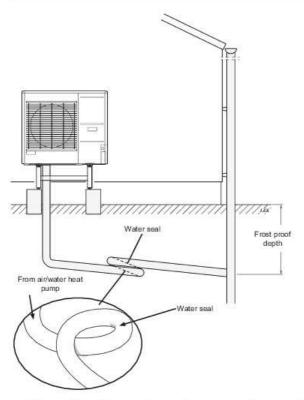


## **Gutter drainage**



### 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.



# **Electrical connection**

# $\Lambda$

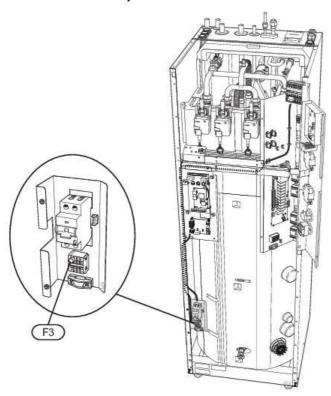
### NOTE

The electrical installation and wiring must be carried out under the supervision of an authorised electrician.

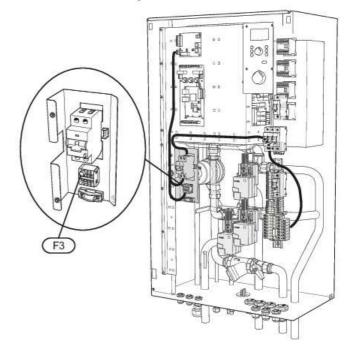
### General

If another cable length than 3 m is used then fuse (F3) must be replaced with the one supplied.

### Fuse location NIBE Split ACVM 270



### Fuse location NIBE Split HBS



### Fuse

Length (m)	P <sub>tot</sub> (W)	Fuse (F3)	NIBE Part no.
1	15	T100mA/250V	718085
3	45	T250mA/250V	518900*
6	90	T500mA/250V	718086

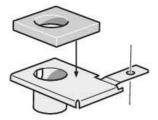
<sup>\*</sup> Fitted at the factory.



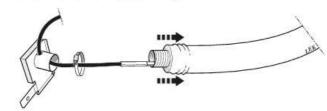
## Cable routing AMS 10

Recommended cable routing from the connection box to the condensation water hose connection to AMS 10. There is a switch between the cold and hot sections of the heating cable at the marking on the cable. The marking may end up at the edge of the hole for the cable grommet.

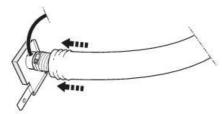
 Pull off the protective paper and secure the gasket to the condensation water connection, see image.



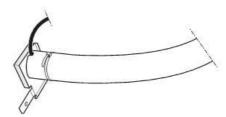
- 2. Thread hose clamp on.
- Route the heating cable through the condensation water pipe.
- 4. Route the heating cable through the drain pipe on the connection plate, see image.



 Pull the insulation down slightly, connect the hose to the drain pipe and tighten the hose clamps, see image.

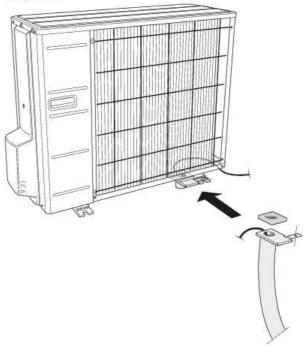


Push the insulation up towards the trough and secure it using cable ties, see image.

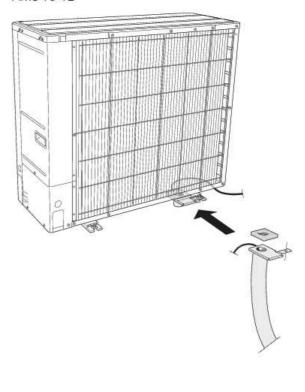


Stretch the heating cable and ensure that the marking on the heating cable is as close to the drain pipe as possible.  Install the connection plate on the right foot on AMS 10, seen from the rear. Use the mounting bolt that the heat pump is secured with. (See image of relevant AMS 10 model.)

AMS 10-8

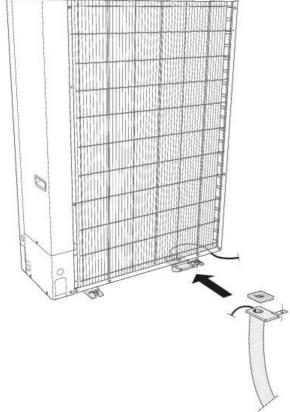


AMS 10-12







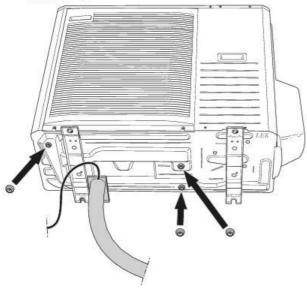


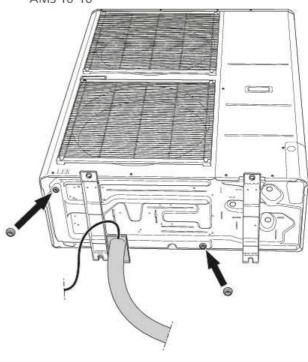
AMS 10-12

AMS 10-16

Install plugs on the underside of AMS 10. (See image of relevant AMS 10 model.)









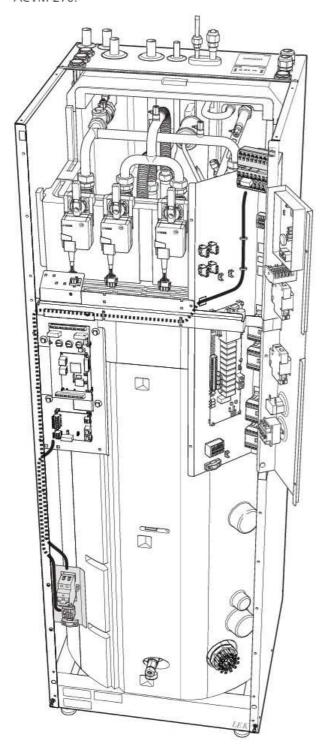
- Mount the control box on the wall close to AMS 10.
- 11. Route the heating cable to the connection box and connect it to the cable from the electrical connection KVR 10 Split, according to the image "Electrical connection". (Check the fuse according to the table, see chapter Fuse on page 20.)



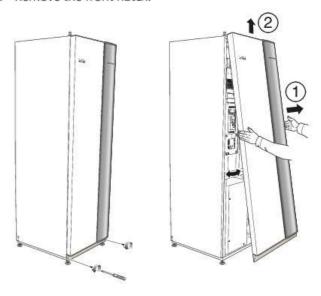
## Electrical connection, NIBE Split ACVM 270

### Installation electrical connection KVR 10 Split 400V 3NAC and cable kit

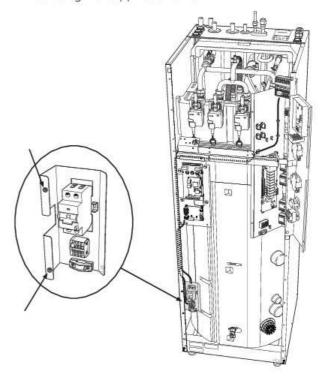
The following image shows installation of electrical connection KVR 10 Split and cable kit in NIBE Split ACVM 270.



- Ensure that NIBE Split ACVM 270 is unpowered before starting work.
- 2. Remove the front hatch.

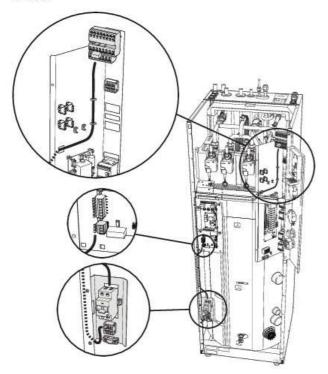


Install electrical connection KVR 10 Split, as illustrated using the supplied screws.

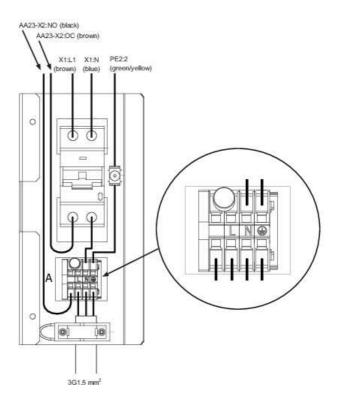




Lay the supplied cable kit and secure it, as illustrated.



- 5. Connect the brown cable with long stripped section in terminal block X1:L1 and the blue cable with long stripped section in terminal block X1:N. The earth cable must be connected to PE2:2. The other end of the wiring is connected to the electrical connection's automatic protection. Connect the brown cable on the automatic protection marked 1/2 and the blue cable on N. The earth cable is connected to the earth pin.
- 6. Connect the next wiring cable to the communication card AA23. Brown cable with short stripped section to AA23-X2:O/C and black cable with short stripped section to AA23-X2:NO. The other end of the wiring is connected to the electrical connection's automatic protection and terminal block. Brown cable is connected to automatic protection marked 2/1 and black cable to the terminal block, according to image.

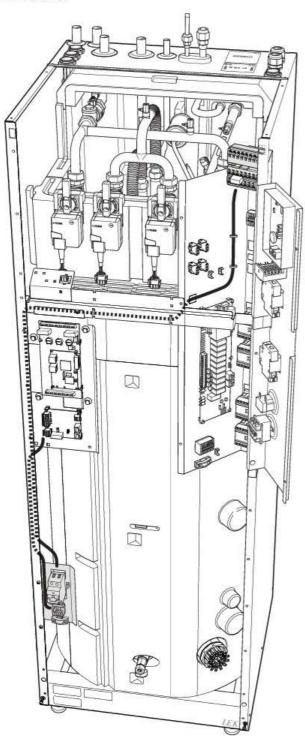


- Lay the cable between electrical connection KVR 10 Split and the connection box for the heating cable. Recommended cable area 3G1.5 mm<sup>2</sup>.
- Connect the cable to electrical connection KVR 10 Split's terminal block as follows: the brown cable to the terminal block marked L, the blue cable to the terminal block marked N and the earth cable to the earth terminal.
- 9. Reinstall the front panel.

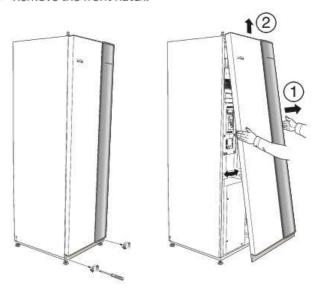


# Installation electrical connection KVR 10 Split 230V 2AC and cable kit

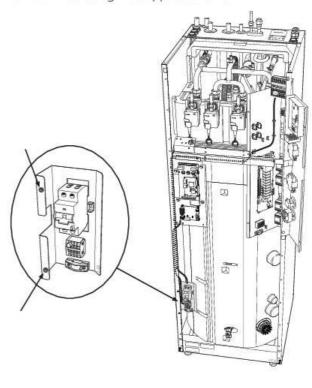
The following image shows installation of electrical connection KVR 10 Split and cable kit in NIBE Split ACVM 270.



- Ensure that NIBE Split ACVM 270 is unpowered before starting work.
- 2. Remove the front hatch.

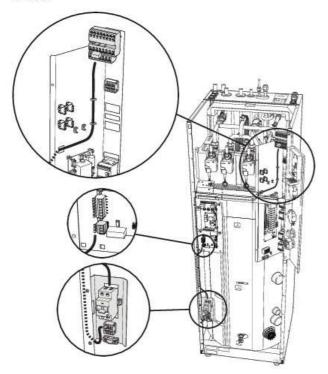


3. Install electrical connection KVR 10 Split 230V 2AC, as illustrated using the supplied screws.

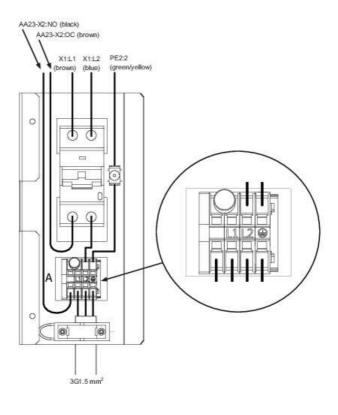




Lay the supplied cable kit and secure it, as illustrated.



- 5. Connect the brown cable with long stripped section to terminal block X1:L1 and the blue cable with long stripped section to terminal block X1:L2. The earth cable must be connected to terminal block PE2:2. The other end of the wiring is connected to the electrical connection's automatic protection. Connect the brown cable to the automatic protection marked 1/2 and the blue cable to 3/4. The earth cable is connected to the earth pin.
- 6. Connect the next wiring cable to the communication card AA23. Brown cable with short stripped section to AA23-X2:O/C and black cable with short stripped section to AA23-X2:NO. The other end of the wiring is connected to the electrical connection's automatic protection and terminal block. Brown cable is connected to automatic protection marked 2/1 and black cable to the terminal block, according to image.



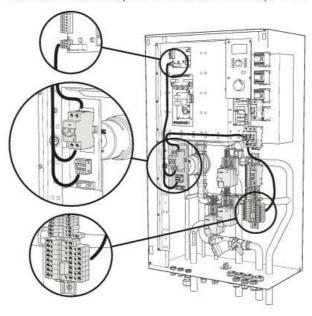
- Lay the cable between electrical connection KVR 10 Split and the connection box for the heating cable. Recommended cable area 3G1.5 mm<sup>2</sup>.
- Connect the cable to electrical connection KVR 10 Split's terminal block as follows: the brown cable on the terminal block marked L1, the blue cable on the terminal block markedL2 and the earth cable on the earth terminal.
- 9. Reinstall the front panel.



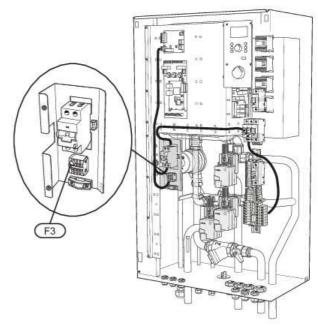
## Electrical connection, NIBE Split HBS

### Installation electrical connection KVR 10 Split 400V 3NAC and cable kit

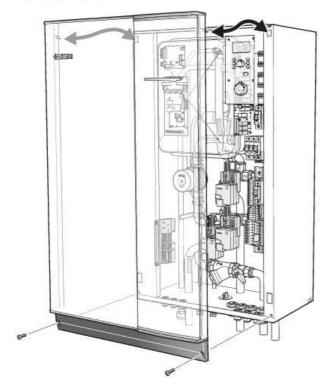
The following image shows installation of electrical connection KVR 10 Split and cable kit in NIBE Split HBS.



Install electrical connection KVR 10 Split, as illustrated using the supplied screws.

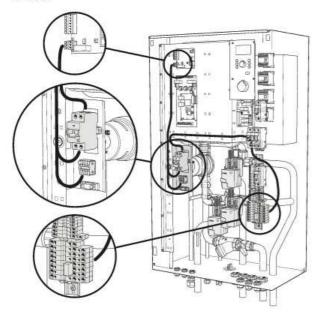


- Ensure that NIBE Split HBS is unpowered before starting work.
- 2. Remove the front hatch.

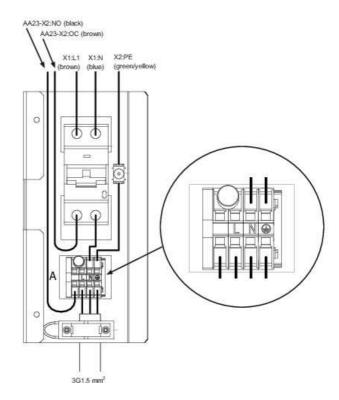




Lay the supplied cable kit and secure it, as illustrated.



- 5. Connect the brown cable with long stripped section to terminal block X1:L1 and the blue cable with long stripped section to terminal block X1:N. The earth cable must be connected to terminal block X2:PE. The other end of the wiring is connected to the electrical connection's automatic protection. Connect the brown cable to the automatic protection marked 1/2 and the blue cable to N. The earth cable is connected to the earth pin.
- Connect the next wiring cable to the communication card AA23. Brown cable with short stripped section to AA23-X2:O/C and black cable with short stripped section to AA23-X2:NO. The other end of the wiring is connected to the electrical connection's automatic protection and terminal block. Brown cable is connected to automatic protection marked 2/1 and black cable to the terminal block, according to image.



- Lay the cable between electrical connection KVR 10 Split and the connection box for the heating cable. Recommended cable area 3G1.5 mm2.
- Connect the cable to electrical connection KVR 10 Split's terminal block as follows: the brown cable to the terminal block marked L, the blue cable to the terminal block marked N and the earth cable to the earth terminal.
- 9. Reinstall the front panel.