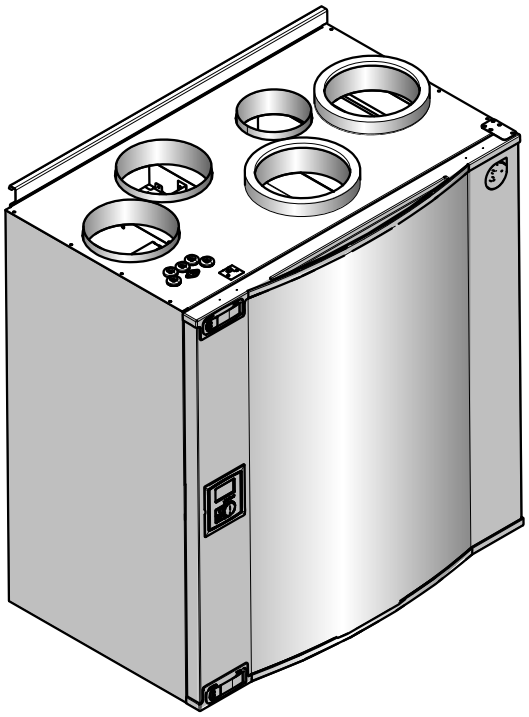
systemair

Installing Water heating battery

SAVE VTR 300/500



GB Installation instructions

Document in original language

208711-EN_GB
14-02-2014

Contents

1 Change the electrical heating battery

In this water battery kit, water battery (art. nr. 208317), frost protection sensor (art.nr. 13941) and mounting instruction are included.

Note:

Note: Frost protection sensor need to be installed before mounting the water battery into the unit”

1.1 Open the front hatch

⚠ Danger

- Make sure that the Mains supply to the unit is disconnected before performing any maintenance or electrical work!

Open the hatch with the two latches and swing the hatch open.

1.2 Remove the electrical heating battery

Open the lid to the electrical compartment by unscrewing the 7 torx screws (4 screws for VTR 500).

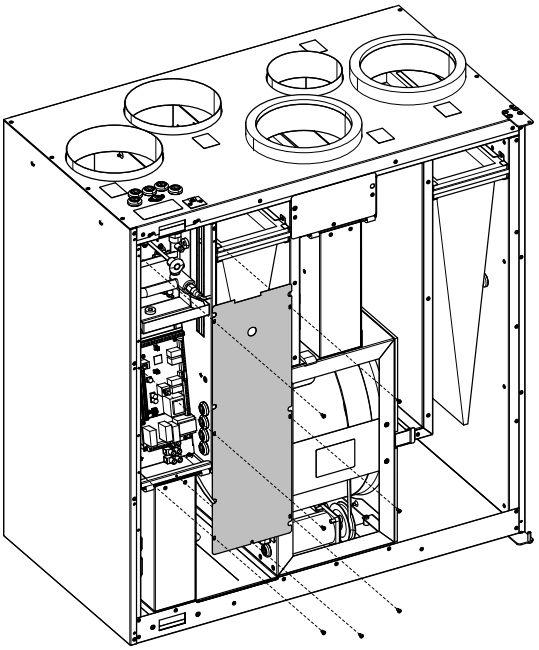


Fig. 1 Open the lid

Disconnect the ET2, ET1 and OT cables from the printing card. Disconnect electrical re-heater battery (blue and brown cable) from 3–pole socket. (A).

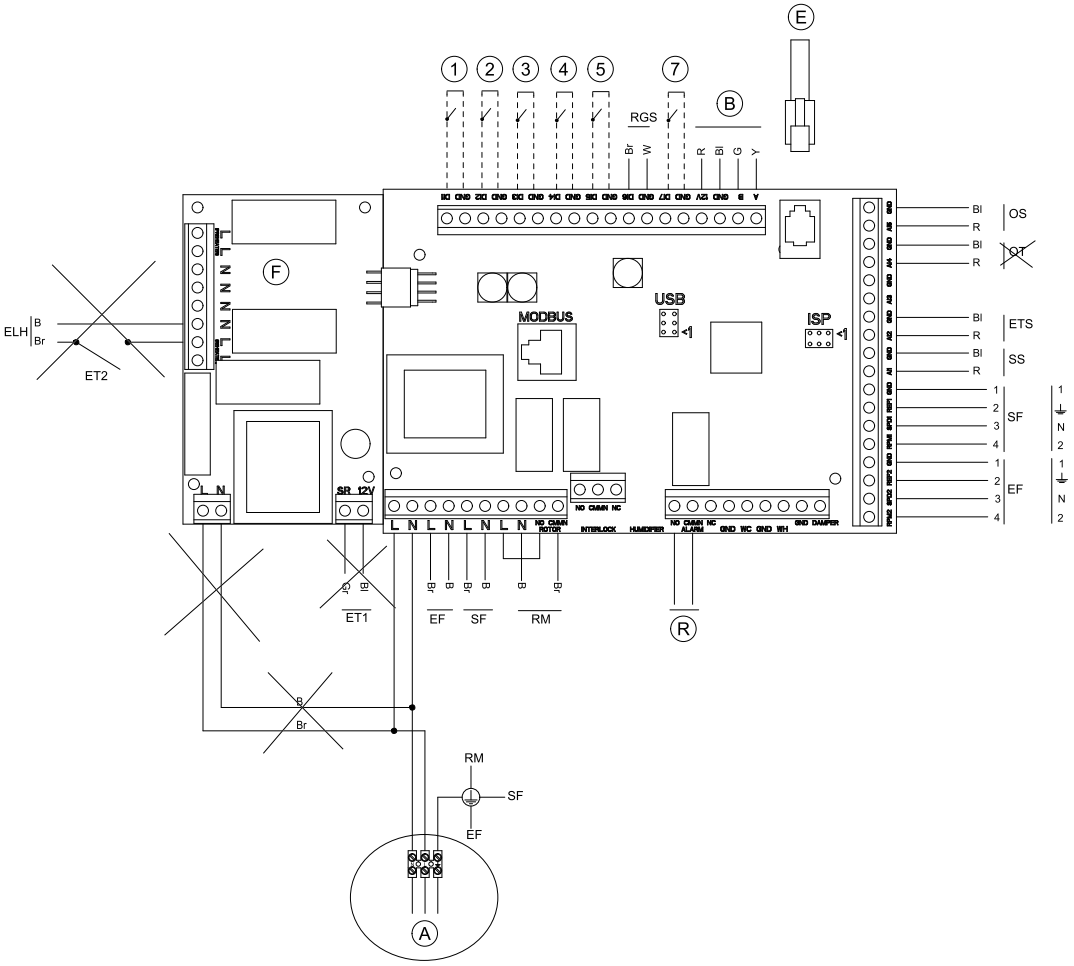


Fig. 2 Disconnect cables

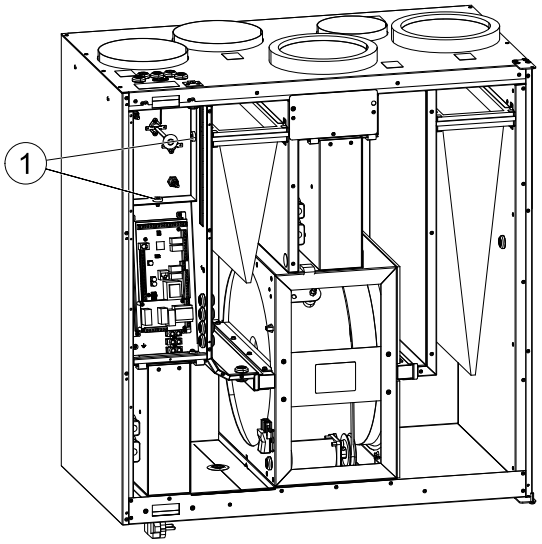


Fig. 3 Loosen the knobs

Loosen the knobs holding the electical heating battery.

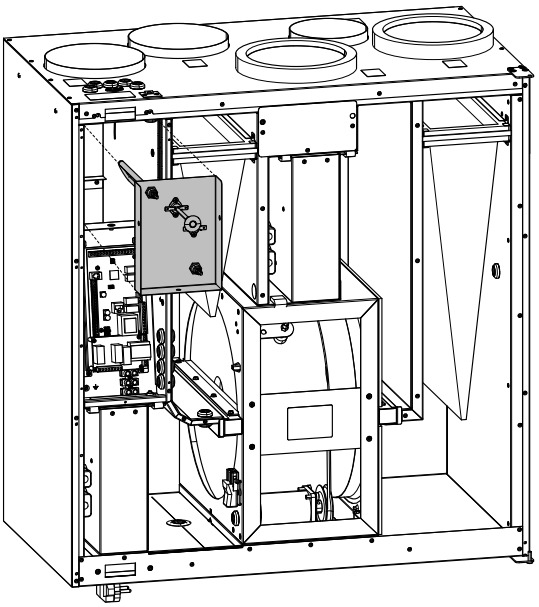
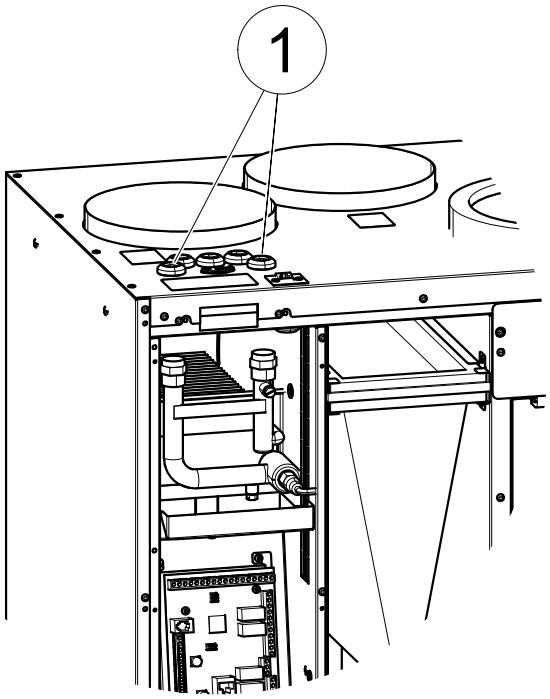


Fig. 4 Remove electrical heater

Pull out the electrical heating battery

Remove the 4 TSS, inner and outer glands (1)



1.3 Mount the water heating battery

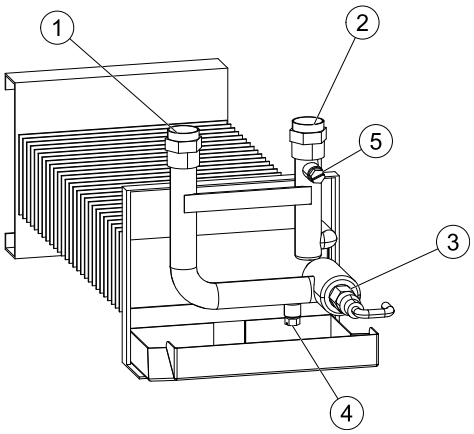


Fig. 5 The water heating battery

> **⚠ Caution**
>
> A plumber should remove the plug (3) and add the frost protection sensor. Thread seal the sensor connection.

1. Outlet
2. Inlet
3. Remove plug and add the frost protection sensor. Tread seal the sensor.
4. Drain screw
5. Bleed screw

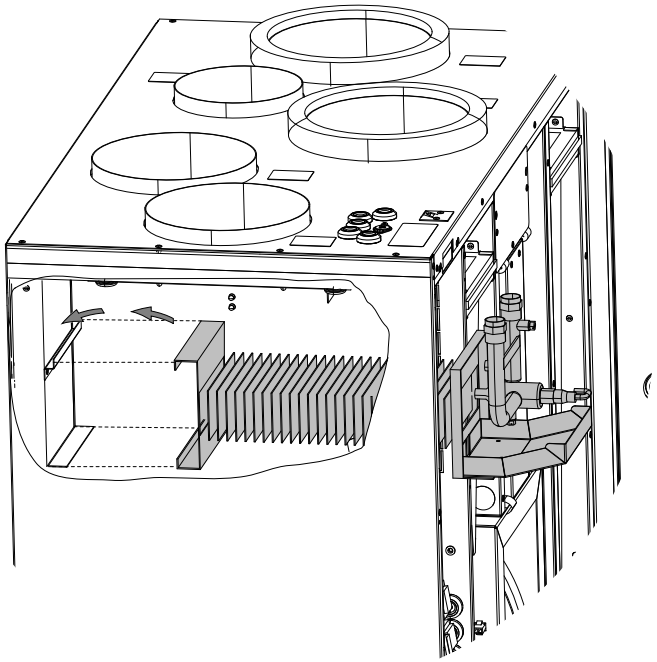


Fig. 6 Mount the water heater battery

Mount the water heater. Be careful not to damage the thin fins on the heater.

Attach the FPS frost protection sensor cabel to the print card. Use the enclosed wiring diagram for reference.

2 Water connection

When connecting a heater to the water system, the following things should be considered:

1. The connecting pipes from the heat exchanger must under no circumstances be subjected to twisting or bending stresses when assembling the pipe etc. Use suitable tools to counteract the connectors twisting/bending moments during assembly.
2. Ensure that forces due to expansion in the system and the intrinsic weight of the piping system itself do not put loads on to the connecting pipes from the heater.
3. Hot water inlet and outlet should be connected as illustrated in figure 5. The heater contains a bleed screw (5), the air must be properly vented from the system to ensure proper function. A **venting valve should normally be installed** near the heat exchanger or at the highest point in the system.
4. A drainage screw is connected on the heater figure 5 to empty the system in the event of repair work, a longer operational stop, or when there is a risk of freezing, etc.
5. Immediately after the system has been filled with water, the heater and its connections must be checked for water leaks. Leaks can cause water damage.

Operational data:

Max. operating temperature: 125°C

Max. operating pressure: 0,8 MPa (8 Bar)

⚠ Warning

If the water in the heat exchanger freezes, then it can burst. If this happends water may leak from the system and cause water damage.

If there is a risk of frost the heater must be installed with a circulation pump in a secondary circuit to ensure that a constant flow is achieved in the heater. It's strongly recommended to install an outdoor air damper with a spring return actuator.

Systemair AB reserves the right to make changes and improvements to the contents of this manual without prior notice.

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