QUICK MANUAL - HOUSE

ekkoair by jeremias

The quick start guide will guide you through the quick installation of the unit, but it cannot replace the complete manual. The complete manual is available on our website www.jeremias.de/en or you can download it using a QR code.

Check that there are no electrical cables, water pipes, debris or gas in the place where you are going to install the unit that could be damaged during installation. Check that the parameters of the electrical network to which you want to connect the unit meet the unit's requirements (production label).

Ensure that the installation of the unit will not interfere with the building's static and will comply with all legal safety requirements. Before starting installation, check the possibility of connecting to the sewer system to drain condensate from the unit.

1. APPLICATION AND CHARACTERISTICS:

The HOUSE EKKOAIR model by Jeremias is an individual controlled mechanical ventilation unit with heat recovery and tested efficiency of up to 92%. The unit has a maximum ventilation capacity of 250m³/h with low-consumption motors.

- Frost protection through flow compensation. - 100% AUTOMATIC bypass. - EC motors with constant flow. - Up to 92% tested efficiency. - Flat profile: 300 mm height. - Wide range of filters (factory setting M5). - Connection option to MoodBus. - Low noise level - No vibrations thanks to low weight and material selection. - Connection option to: WEB application, CO_2 sensor, humidity sensor, CO_2 and humidity sensor, pre-heating/post-heating resistors, enthalpy heat exchanger.

Read the QR Code with a smartphone that can read QR codes.

The outside air temperature can range from -20 °C to +40 °C (applicable to the version with preheating). If the supply air temperature is below -20 °C, the unit may switch off automatically to protect it from damage.

2. TECHNICAL DATA HOUSE

Technical data									
Parameters	Units	Values							
Airflow	m³/h	250 (200 Pa)							
Sound pressure LPa-3m*	dB	37,8							
Diameter connections	mm	4x125							
Controller		8 Speeds							
Installation		Wall-mounted							
IP classification		IP 20							
Filter type		M5 (ePM1 55 % ISO 16890)							
Weights	kg	17							
Dimensions	mm	800x600x300							
Multifunctional controller	m³/h	1	2	3	4	5	6	7	boost
		50	75	105	145	190	235	250	250
Housing		EPP + Metal							
Performance**	%	88,3							

* Outdoors at the reflection level

** According to UNE EN 308 at 70% of the nominal volume

PROHIBITED USE

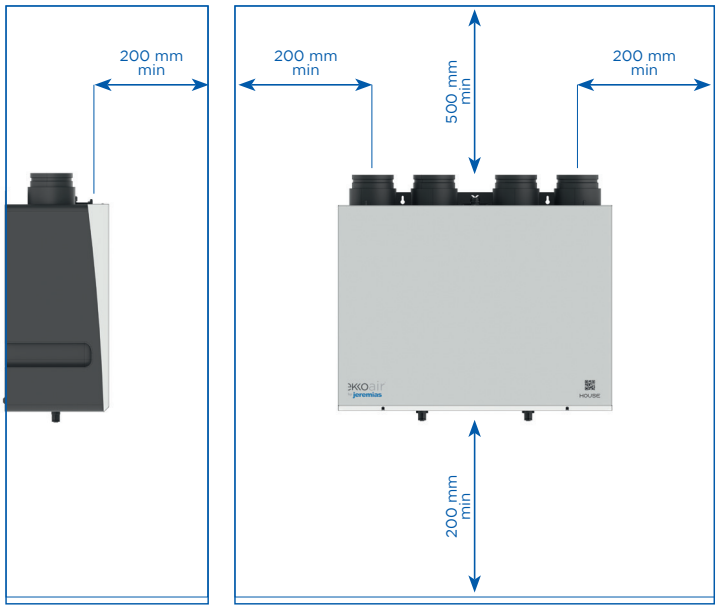
- The unit must not be used to extract burning or incandescent substances, flammable or explosive gases, aggressive media or liquids.
- The unit must not be installed near flammable materials or where there is a risk of explosion, flammable substances, dust or in environments with high humidity.
- Neither the manufacturer nor the supplier shall be liable for any damage caused by incorrect use of the units. The risk is borne by the user.

3. INSTALLATION

- Installation and connection may only be carried out by a specialist who has the appropriate authorization for electrical connections and the appropriate tools and resources. During installation, all instructions and recommendations contained in the manual should be followed.
- The installation location of the device must be checked to ensure that there are no electrical or other cables (e.g. gas, water, etc.) that could be damaged during installation.
- It must be ensured that the installation of the device, including the wall openings (depending on the selected installation position) for the connection cable, does not endanger the statics of the building and meets all legal requirements with regard to safety.
- Failure to observe the specified distances can lead to malfunctions of the device and thus to fan damage, increased noise or difficult service access to the device.
- Only the positions specified in the manual apply; any other form is prohibited.
- In order to access the filters and carry out maintenance work, the device must always be accessible from the front (cover side).
- The wall to which the device is anchored must be sufficiently stable and load-bearing.

If necessary, you should contact a structural engineer.

Minimum distances



Dimensions

Position

1 Extraction to the outside

2 Air intake from outside

3 Extraction of bathrooms and kitchens

4 Air intake for living room and bedroom

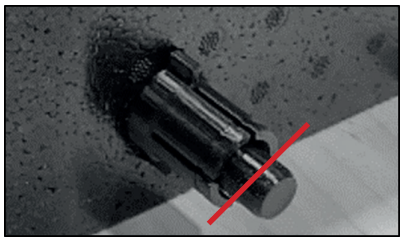
CONNECTION OF THE CONDENSER DRAINS

This heat recovery unit can only be wall-mounted and it is important to place the condensate trap in the drain located on the side of the ducts that connect to the outside. The other drain must be sealed with the appropriate plug.

HOW TO INSTALL THE DRAIN WITH SIPHON

As an accessory we offer a siphon which can be easily installed thanks to various adapters and can therefore be adapted to different types of pipes.

A) Cutting and deburring the closure

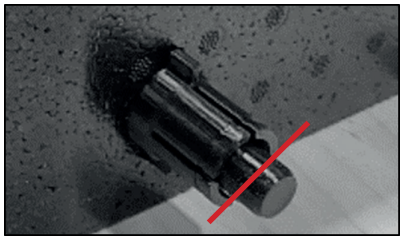


B) Connect one end of the supplied hose to the condensate drain and the other end to the siphon. Ensure the siphon is as vertical as possible.

Jeremias assumes no responsibility for any malfunctions caused by an incorrect siphon connection or by installing the drain outlet on the wrong side of the device!

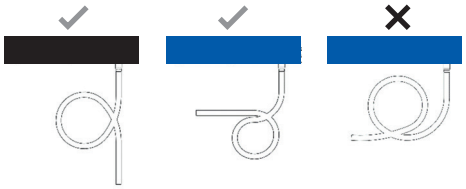
HOW TO INSTALL THE DRAIN WITHOUT A SIPHON

A) Cutting and deburring the closure

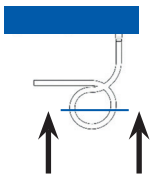


B) Creating a siphon with the condensate hose

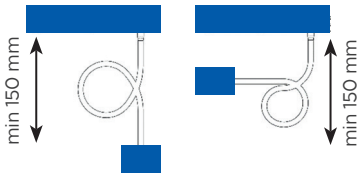
C) Make sure the siphon is installed correctly!



D) Filling the siphon with water and connection to the device



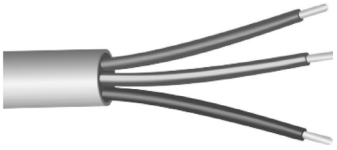
E) Connection to the downpipe



ATTENTION: When using the air conditioner in a ventilated building for cooling in summer, the second condensate drain must be connected - see full instruction manual.

- Before switching on the device for the first time or after it has been switched off for a long time, check the siphon. When bending the hose, pay attention to the correct bend radius to avoid hose breakage. To extend the siphon hose, always choose a hose/pipe with the same or larger diameter. Always choose the hose/pipe coupling with the least reduction in inner diameter.
- All pipe connections to the device must be adequately sealed to avoid unwanted leaks and subsequent problems such as condensation. The connected pipes must have the same diameter as the connection openings of the device. Using a smaller diameter tube may affect the airflow performance of the device and therefore shorten the life of the fans.

Connecting the House unit unit to power



BLUE (N) - NEUTRAL CABLE
GREEN-YELLOW (PE) - SAFETY CABLE
BLACK/BROWN (L) - PHASE WIRE

Connection of the unit to the electrical panel

- The input cable is prepared by the manufacturer for connection to the electrical panel.
- To connect the input cable to the mains, use the appropriate components (IE connectors, spring clamps).

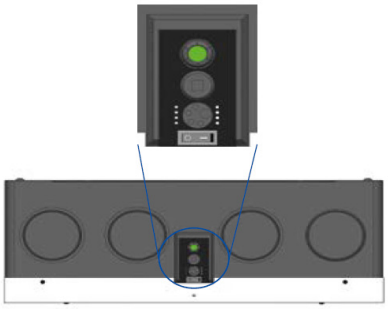
Connecting the unit to the power outlet

- The input cable can be connected with a plug with a safety connector (plug), which is not included in the delivery

The installation of the input cable to the electrical box or installation of the plug to the input cable and connection to the mains must only be carried out by an authorised person in accordance with the safety instructions in force in the installation area.

CONNECTION TO THE NETWORK FRM STORAGE

The electrical installation must properly comply with all relevant regulations. Before starting installation work, make sure that the junction box or socket to which you want to connect the device is equipped with a protective cable or plug (earth). Also make sure that the socket is not live during installation.



The HOUSE includes:

- On/off switch
- 1 m 220V power cable

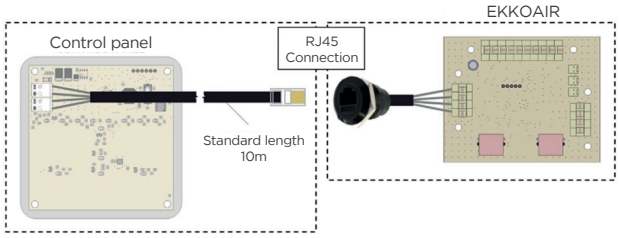
The two cable glands on the panel allow easy passage of the power and sensor cables and ensure the device is sealed.

The HOUSE also has 2 external connections that work as follows:

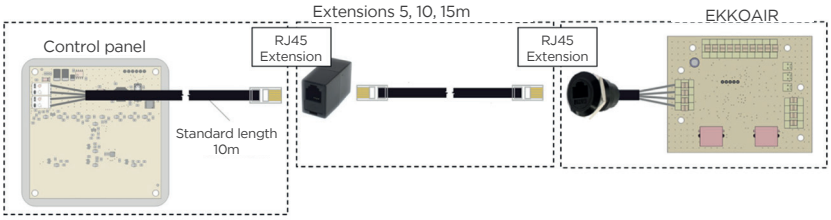
EXT1: Connected to the bathroom lighting via a relay, it increases the extraction power to the maximum for up to 1 minute after the light is turned off.

EXT2: Connected to the extractor hood via an inductive relay, it increases the flow rate to the maximum during operation up to 1 minute after the extractor hood is switched off.

1. Standard version



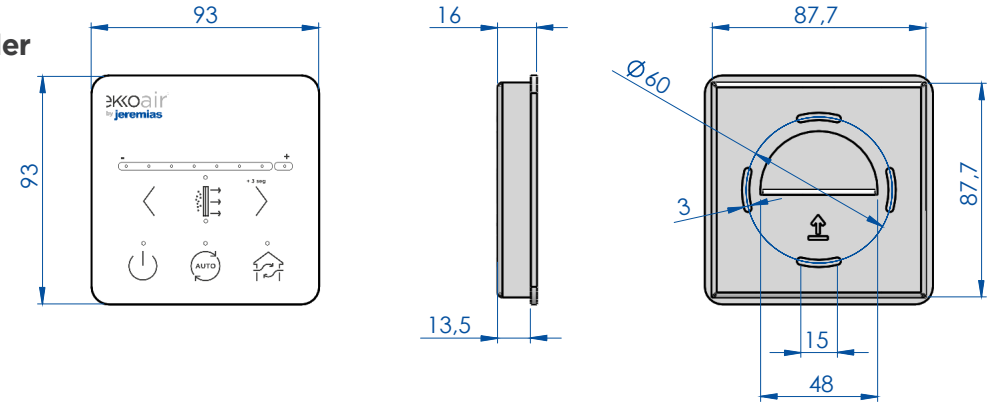
2. Version with cable extension



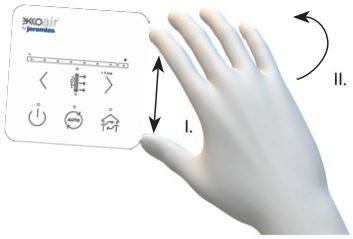
4. FURNISHINGS THE CONTROL

- **Required cable**
  An 8-core UTP cable without clamps is in scope of delivery contain. The length des connection cable amounts 10 m.
- **Concealed cable routing**
  The connection cable from the device to the control panel must be laid under plaster as part of the construction preparation and end in a flush-mounted box.

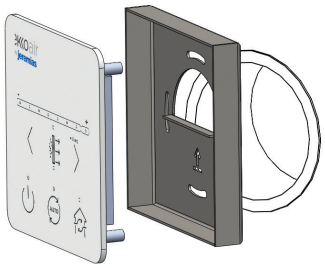
A) Dimensions of the controller



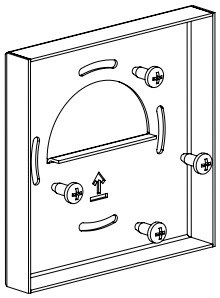
B) Open controller



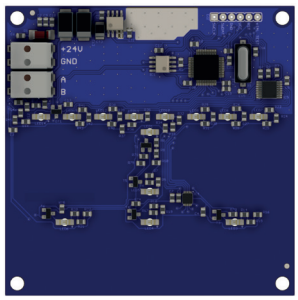
C) Route cables



D) Attachh the housing to the wall



E) Control command connections



+24v: brown

GND: orange

A: green

B: white

Network vables are included in the scope of delivery of the control unit

Make sure the connection is correct by paying attention to the position of the cables and inserting them correctly into the terminals. There is a risk of the device malfunctioning.

Electrical Installation – Connecting to the Power Supply

- Before starting the installation, ensure that the junction box or outlet to which you intend to connect the device is equipped with a protective conductor (green-yellow) or a protective contact (Schuko plug).
- If you use a power plug to connect the device, it must be accessible at all times so that the device can be safely disconnected from the power supply in an emergency.
- The corresponding circuit in the power distribution system must be fused with a maximum of 16 A.
- The electrical connection of the device to the power supply may only be carried out by persons qualified for this task, who have a valid permit and are familiar with the relevant standards and guidelines.
- This device belongs to the product group with a Y-connector. If the power supply is damaged, it must be replaced by the manufacturer, your customer service department, or a similarly qualified person to avoid a dangerous situation.
- The device's supply voltage (1~230 V/50-60 Hz) must not be changed in any way, as otherwise there is a risk of damage to the device.

5. CONTROLS – ELECTRICAL ACCESSORIES FOR THE HOUSE

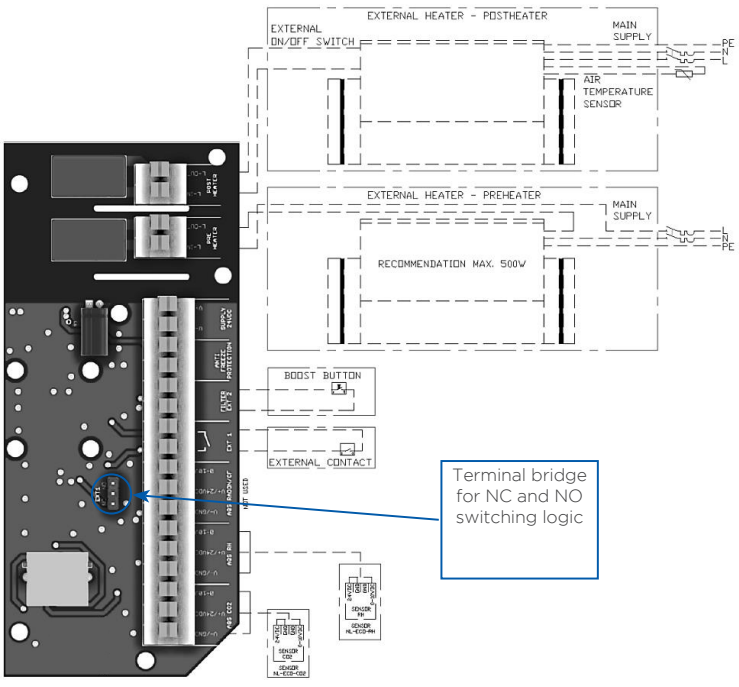
No additional components are required for proper operation of the device (in manual mode). It is ready for use immediately after wall mounting. For operation in automatic mode, the CO_2 (NL-ECO-CO_2) or HR (NL-ECO-RH) air quality sensors must be connected.

CONNECTION OF ELECTRICAL ACCESSORIES

Spring terminals with manual locking are used to connect the various components. Both slotted wire (cable with ferrules) and solid wire (wire) with a cross-section of 0.5 to 1.5 mm^2 and a stripped insulation of 10 mm can be installed on the terminals.

Before inserting the wire into the terminal, first press the orange locking button. Then insert the wire, release the lock, and check that it is firmly seated by gently pulling on the wire. To remove the wire from the terminal, follow the same procedure.

Select the optimal conductor cross-section based on the length of the cable run.

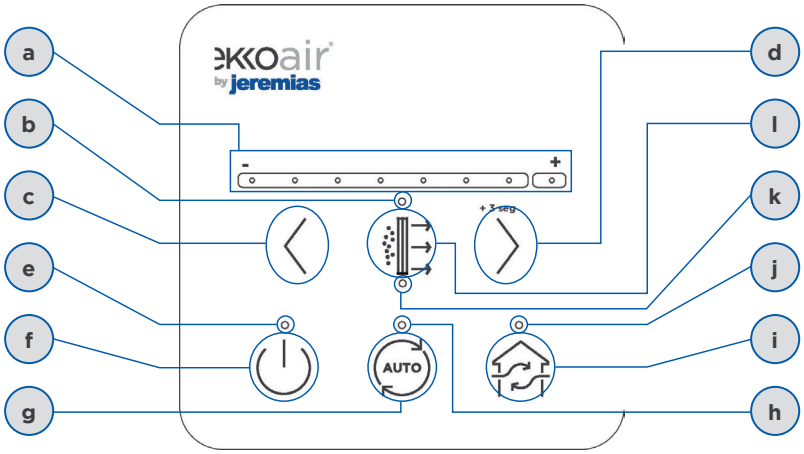


6. CONTROLLER FUNCTIONS

Working states of the controller:

a) Normal operating mode
Only the operating status is displayed - the device is switched on and the LED (e) is lit. The device is fully functional and works according to the user settings.
b) Control mode - 1 click on any key
Displays the active functions and settings of the device (ventilation performance). The display lasts for about 4 seconds, then the controller returns to sleep mode.
c) Adjustment mode - 2 clicks
Setting or activating some functions is only possible in this mode. Therefor double-click the button whose function you want to change.

2. Control scheme



3. Function of the buttons:

a) Display of the device air flow setting via LEDs

LED 1-7: Standard flow rate (low – high)

LED 1 flashing: EXT1 mode (bathroom) is active. Lights up for 1 minute after the bathroom light is switched off.

LED 8:

- short flashing: Boost mode is active

- long flashing: EXT2 mode (extractor hood) is active. Lights up for 1 minute after the extractor hood is switched off.

b) Set airflow rate (LED diodes 1 to 7)

c) Button to reduce the airflow

d) Button to increase the airflow

Pressing for approx. 3 seconds starts the boost functionality for 1 minute (8 LEDs flash briefly). Pressing again for 3 seconds stops the boost function.

e)/f) ON/OFF switch

Simply press to activate the ventilation.

If the system is running and you press the button for approx. 3 seconds, the ventilation unit automatically starts the necessary cooling for approx. 3 minutes and the LED (e) flashes quickly. After cooling, the LED (e) no longer lights up and the unit continues to operate at a minimum flow rate.

By pressing the button for approx. 6 seconds, the ventilation unit automatically starts the necessary cooling for approx. 3 minutes, the LED (e) flashes slowly. After cooling, the LED (e) no longer lights up and the unit is switched off.

g) Automatic mode button - control according to AQS sensors

Standard state (LED (h) is not lit): manual mode active , that Device operates according to AQS sensors and with the flow rate set by the user (a).

Pressing the button (g) activates automatic operation, LED (h) lights up. The device now reacts in a gently regulated manner to the ventilation requirements according to real-time sensors. Once CO_2 = 800 ppm, HR =

65% is reached, ventilation continues with the minimum flow rate .

If the concentration of CO_2 and HR in the room cannot be reduced, the device increases the flow rate up to the maximum flow value set by the user and then gently reduces the flow rate as the concentration decreases.

The aim of ventilation control is to find the optimal ventilation level (flow rate) based on the concentration of the controlled substance in the ventilated space. For this reason, the device can ventilate for a long period of time until the safe concentration limit or complete exhaustion of the controlled substance is reached. Once the concentration has dropped to the set value of CO_2 = 700 ppm and HR = 60%, the ventilation is switched to the minimum flow rate.

When using multiple sensors, the control gives priority to the sensor with the highest ventilation requirement.

LED h flashes: No AQS sensor is connected or the AQS sensor is defective.

i) Button to activate the summer bypass:

Pressing the button (i) activates the bypass when the bypass conditions are met (page 10) or deactivates it again.

Signal (j) lights up: Bypass function is activated.

Signal (j) flashes: Bypass function cannot be started. The device is in frost protection mode.

Signal (j) is not lit: Bypass is not active.

Parental controls

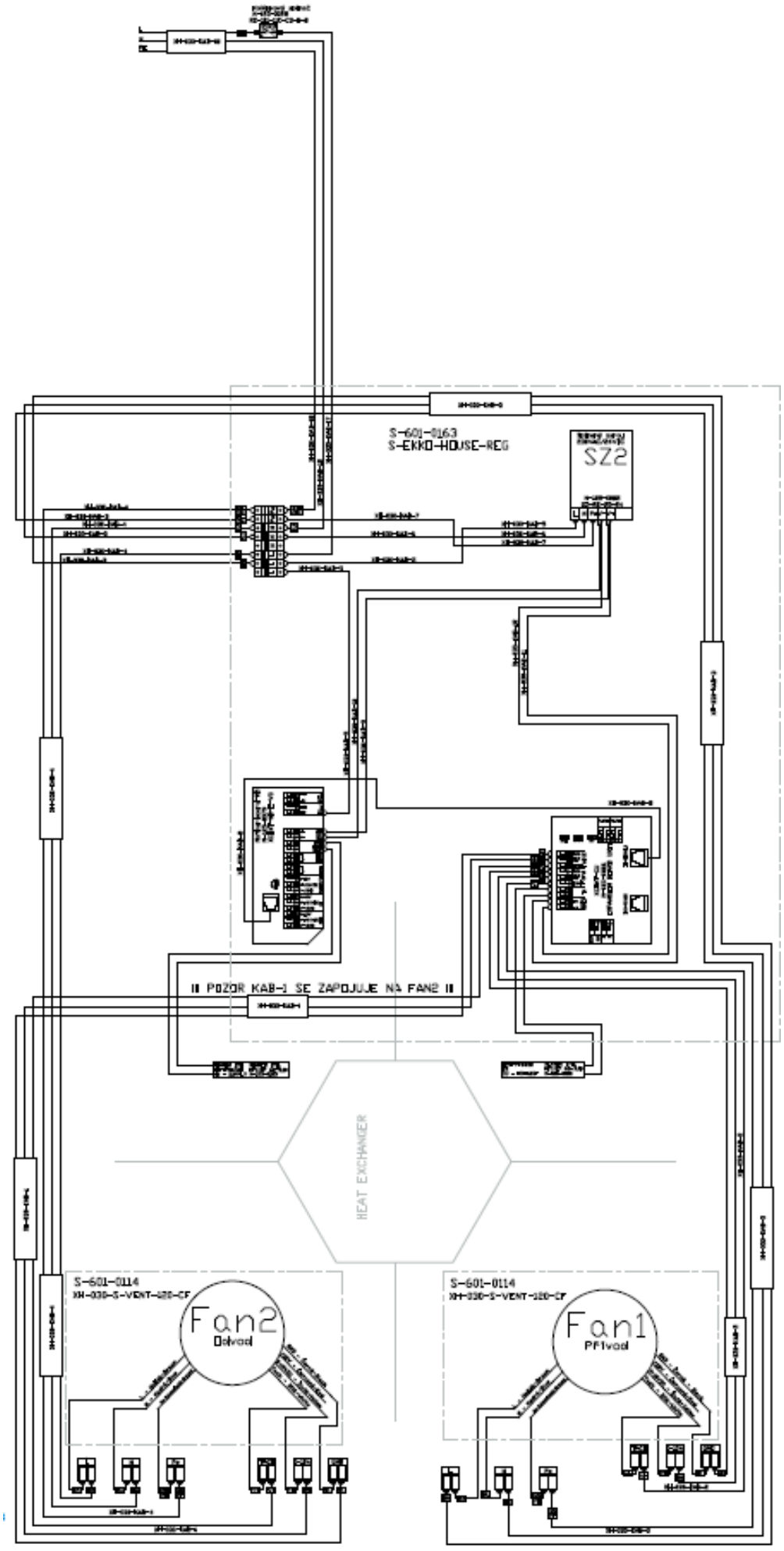
Protection against unauthorized use can be activated by pressing the bypass button (i) for 6 seconds activated. The LEDs (j), (h) and (b) flash 3 times . Nothing can then be set using the buttons (c) and (d). When these buttons are pressed, the LEDs (j), (h) and (b) flash 1 time .

The EXT1 and EXT2 functions remain active. The child safety lock can be deactivated by pressing the bypass button (i) again for 6 seconds.

k) Filter signal

As soon as the LED (k) flashes red, both filters of the device must be cleaned or replaced. This is necessary after approx. 4400 operating hours (approx. 6 months) . The function of the device is not restricted in any way.

By pressing buttons (g) and (i) simultaneously, the filter display is reset and the red LED (k) goes out.


S-601-0163
S-EKKO-HOUSE-REG
SZ2
!! POZOR KAB-1 SE ZAPOJUJE NA FAN2 !!
HEAT EXCHANGER
S-601-0114
Fan2
Odvod
S-601-0114
Fan1
PřívodPF1vod