

The quick manual will guide you through the quick installation of the unit, but in any case, it cannot replace the full manual. The full manual is available on our website, jeremias.es, or you can access to it via a QR code.

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Ensure that there are no electrical cables, water pipes, waste, or gas lines in the area where you will be installing the unit that could be damaged during installation. Check that the electrical network parameters where you intend to connect the unit meet the unit's requirements (see product label)
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Make sure that the installation of the unit will not interfere with the building's structural integrity and that it complies with all legal safety requirements. Before beginning the installation, verify the possibility of connecting to the sewer system to drain condensate from the unit.

1. APPLICATION AND FEATURES:

The LBS EKKOAIR by Jeremias model is a single-unit mechanical ventilation system with heat recovery, tested for efficiency up to 92%. The unit has a maximum ventilation capacity of 150 m³/h or 200 m³/h with low-consumption motors.

Features: 4 models in a single heat recovery unit - Multi-flow with flow rate selection (150 or 200 m³/h) via selector - Multi-position with orientation adjustment (left or right) via selector - Direct connection for up to 12 Ø75mm Ekkoflex semi-rigid ducts with guaranteed airtightness - Including wired multi-function controller with continuous regulation adjustment - Anti-freeze protection through flow balancing - 100% automatic bypass - EC motors with constant airflow - Efficiency tested up to 92% - Low-profile design with 210 mm height - Factory-equipped with M5 standard filter and wide filter options available - Low noise level and zero vibrations due to lightweight materials and smart design - The LBS model can be equipped with a temperature recovery exchanger with heat recovery or an enthalpy recovery exchanger with heat and humidity recovery.

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The outdoor air temperature can range between -20 °C and +40 °C (applicable to the version with pre-heating). If the supplied air temperature falls below -20 °C, the unit may shut down automatically to protect itself from potential damage.

2. Technical Specifications LBS 150 m³/h and 200 m³/h

150 m³/h			200 m³/h		
Parameters	Units	Values	Parameters	Units	Values
Airflow	m³/h	150 (200 Pa)	Airflow	m³/h	200 (200 Pa)
Sfp (70% Qvd)	W/m³/h	0,29	Sfp (70% Qvd)	W/m³/h	0,29
Accoustic pressure LPa-1m	dB	39,3	Accoustic pressure LPa-1m	dB	43
Accoustic pressure LPa-3m	dB	31,4	Accoustic pressure LPa-3m	dB	35,1
Power supply	V / Hz	1-230 / 50-60	Power supply	V / Hz	1-230 / 50-60
Nominal input	W	104	Nominal input	W	172
Nominal current	A	0,74	Nominal current	A	1,22
Mouth diameter	mm	2xØ130/Ø160 + 2x6Ø75	Mouth diameter	mm	2xØ130/Ø160 + 2x6Ø75
Controller		0-10V	Controller		0-10V
Installation		False ceiling, wall	Installation		False ceiling, wall
IP		IP 30	IP		IP 30
Filter type		M5 ePM10 55% ISO 16890	Filter type		M5 ePM10 55% ISO 16890
Weight	kg	16	Weight	kg	16
Dimensiones	mm	970x600x210	Dimensiones	mm	970x600x210
Multi-Function controller (200 Pa)			Multi-Function controller (200 Pa)		Control 0-10V
	m³/h	0 - 150		m³/h	0 - 200
Body + housing		EPP + metal sheet	Body + housing		EPP + metal sheet
Efficiency*	HRV - temperature	Heat	Efficiency*	HRV - temperature	Heat
	ERV - Temperature/ Humidity	Heat		ERV - Temperature/ Humidity	Heat
		Humidity			Humidity
		%			%
		89,3			88
		80,5			78
		43			43

*According to UNE EN 308 at 70% of nominal airflow

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PROHIBITED USE

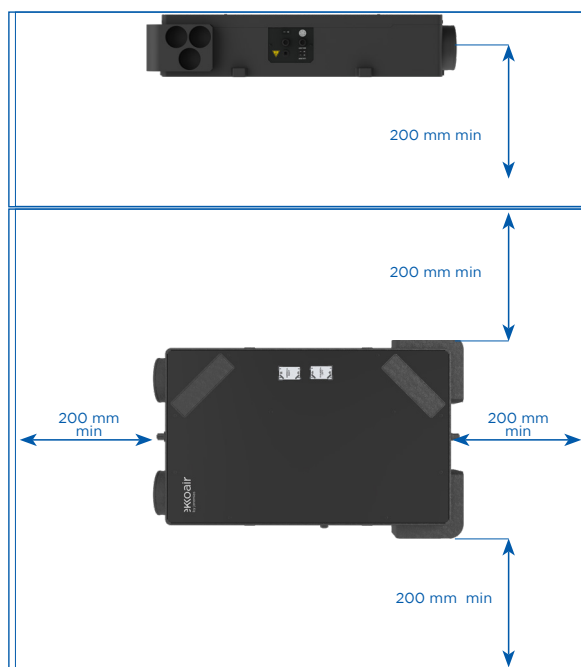
 - The unit must not be used to extract burning or glowing substances, flammable or explosive gases, aggressive agents, or liquids.
 - The unit must not be installed near flammable materials, explosion hazards, in areas with high levels of dust, or in environments with high humidity.
 - Neither the manufacturer nor the supplier is responsible for any damage caused by improper use of the units. The risk is borne by the user

3. INSTALLATION



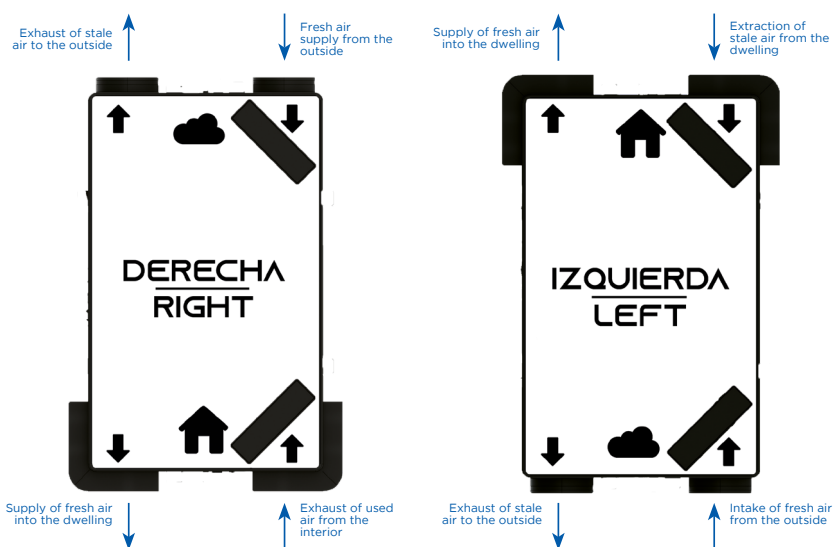
- Installation and connection must only be carried out by a qualified person with proper authorization to connect electrical equipment and who has the appropriate tools and resources. All instructions and recommendations contained in the manual must be followed during installation.
- It must be ensured that there are no electrical or other types of lines (such as gas or water) at the installation point that could be damaged during the process.
- The installation of the unit including wall openings or penetrations (depending on the chosen installation position) for duct passage must not compromise the structural integrity of the building and must comply with all legal safety requirements.
- Failure to respect the specified distances may result in malfunctioning of the unit, fan damage, increased noise, or restricted access for technical service.
- Only the positions shown in the manual are valid so any other installation method is prohibited.
- The unit must always be accessible from the front side (cover side) to access the filters and perform maintenance. If the unit is mounted on a wall or ceiling an inspection opening must be provided with dimensions large enough for the technician to access easily and to remove and reinstall the heat recovery unit if necessary.
- The wall supporting the unit must always be sufficiently strong.
- If needed a materials specialist or structural engineer should be consulted.

Minimum installation distances



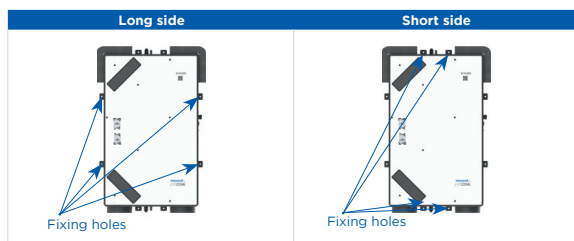
Positioning

Switch the unit version (right/left) using the rocker switch on the control cover plate.



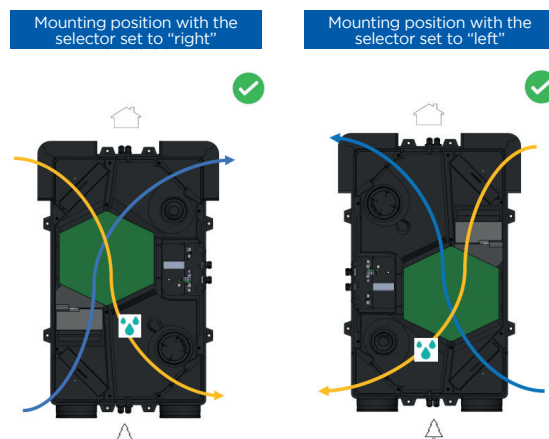
Ceiling Installation

- 1 The LBS box includes a template to facilitate the installation of the unit on the ceiling or wall.
- 2 Use the installation template to position it on the wall or ceiling and easily mark the unit's holes.
- 3 Drill the marked surface and screw the unit in place.



Wall installation

If we want to install the LBS vertically on the wall there are two mounting positions available.



CONDENSATE DRAIN CONNECTION

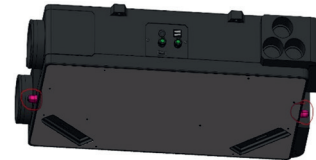
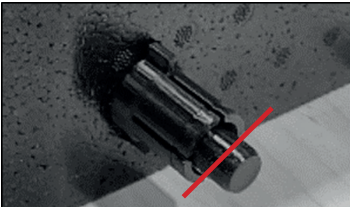
If you are installing on the roof, it is important to place the condensate trap on the drain located on the side of the ducts that connect to the exterior of the building. Of the two drains located in that area, the trap must be connected to the one positioned at the bottom of the unit. The drains on the side facing the interior of the building must not be handled and must remain sealed.

In the case of a wall installation: install the condensate trap on the nearest lower drain closest to the wall. The other drains must not be handled and must remain sealed.

Drain Unit Installation with Trap

We have a trap available as an additional accessory which is easy to install thanks to its various adapters allowing adjustment to different types of pipes

A) Cut the edge of the condensation outlet and remove any burrs

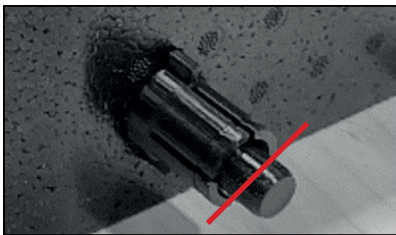


B) Connect one end of the supplied tube to the condensate outlet and the other end to the trap ensuring the trap is positioned as vertically as possible

! Jeremias is not responsible for any malfunctions caused by incorrect connection of the trap or by installing the drain outlet on the wrong side of the unit.

Drain unit installation without trap

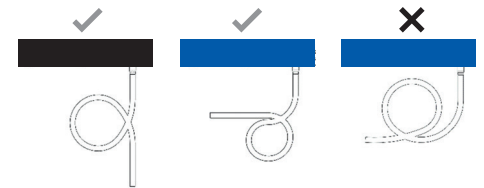
A) Cut the edge of the condensation outlet and remove any burrs



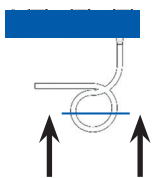
B) Create a trap by securing the hose and the fastening clamps



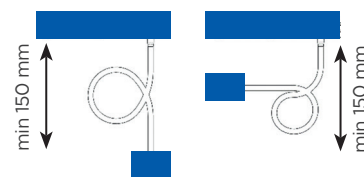
C) Choose the correct position of the trap for connection to the drain pipe



D) Fill the trap with water connect the hose to the unit outlet and secure it with a strap



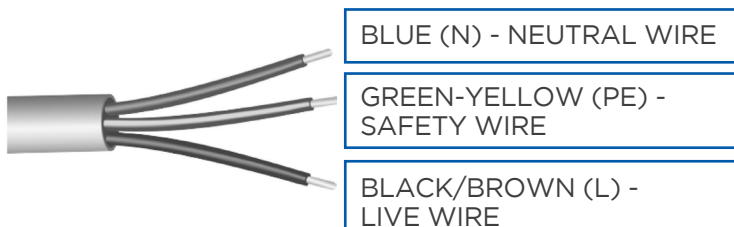
E) Connect the trap to the drain system



! WARNING when using air conditioning in a ventilated building for cooling in summer it is necessary to connect the second condensate outlet see full manual

! Before starting the unit for the first time or after a prolonged stop, check the water collector. If bending the hose, pay attention to the correct bending radius to avoid damaging the hose. To extend the siphon hose, always choose a hose or tube with the same or larger diameter. Always select a hose-to-tube coupling with the smallest reduction in inner diameter. All pipe connections to the unit must be properly sealed to prevent unwanted leaks and related issues such as condensation. Connected pipes should have the same diameter as the unit's connection ports. Using pipes with a smaller diameter may affect the unit's airflow performance and reduce the fans' lifespan.

Connection of the LBS unit to the power supply



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 power network, use the appropriate components such as IE connectors or spring clamps. Connection of the unit to the power outlet.
- The input cable can be connected using a plug with a safety connector which is not included in the delivery.

! Installation of the input cable to the electrical box or installation of the plug on the input cable and connection to the power network must be performed only by an authorized person and in accordance with the safety instructions applicable in the installation area.

4. CONNECTION TO THE POWER SUPPLY NETWORK



The electrical installation must comply properly with all relevant regulations. Before starting any installation work make sure that the wiring box or the power outlet you intend to use to connect the device is equipped with a protective wire or plug (ground).

If you use a wiring box to electrically connect the unit you must disconnect the power supply and secure the power source to prevent accidental activation. The LBS panel includes two selectors and a switch with different functions to allow choosing the option that best suits the user's needs.

- Power on/off switch.
- Selector for choosing left or right orientation where the LBS will be used.
- 230V power cable with a length of 1 meter.



Multi-position Section

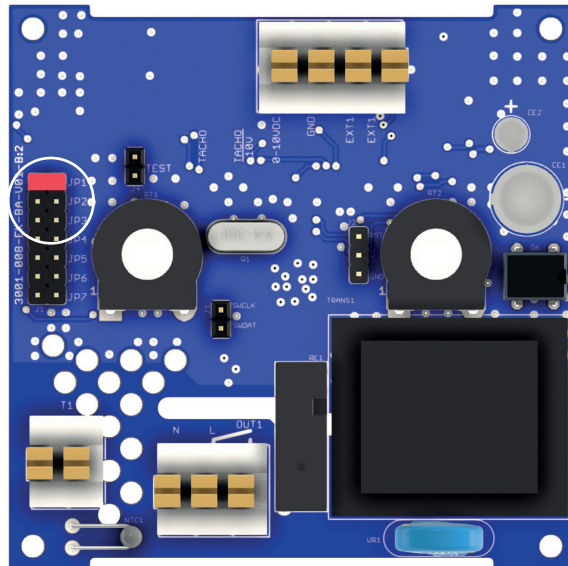
- Left
- Right

*Both switches must always be positioned on the same side.

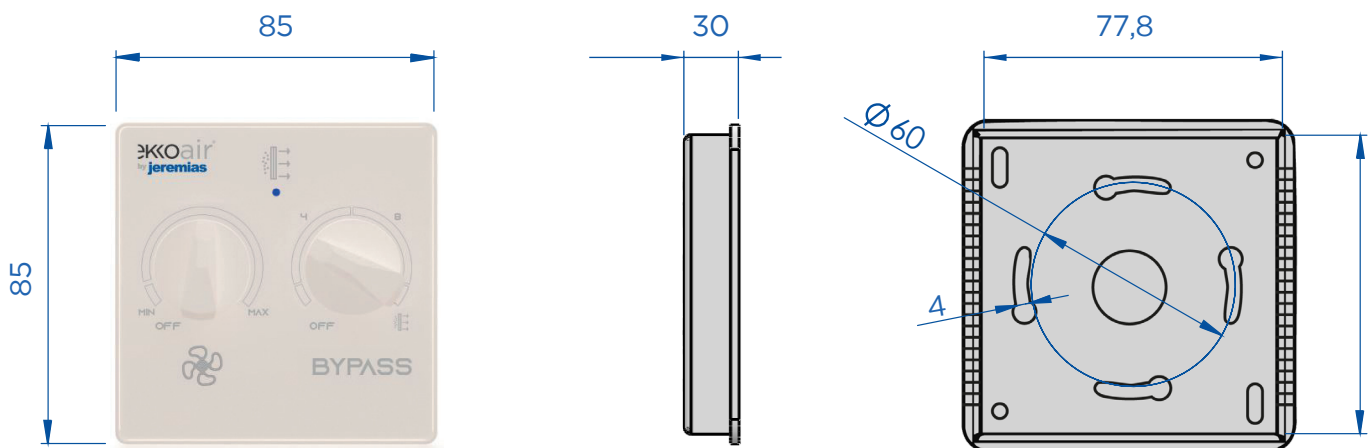
Control panel base plate

Flow rate selection: 150 m³/h and 200 m³/h

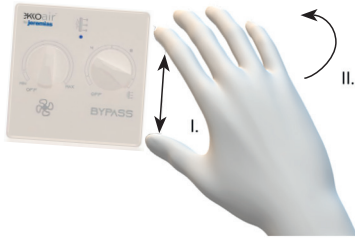
- Jumper for selecting airflow rates
- With the jumper connected: 200 m³/h airflow
- With the jumper disconnected: 150 m³/h airflow



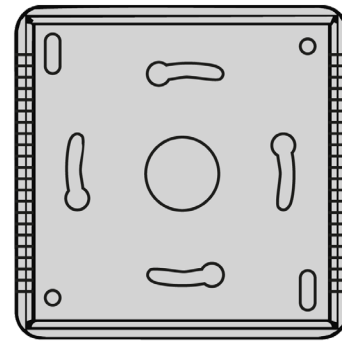
A) Controller Dimensions



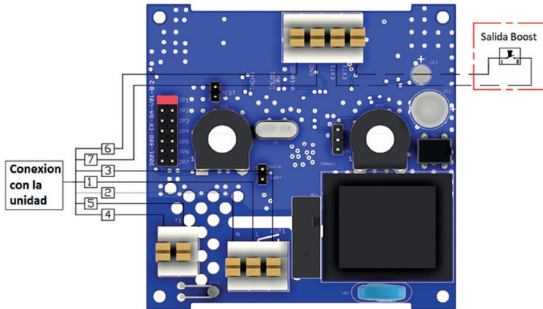
B) Open the controller



C) Insert the wiring



D) Wiring of the Control Panel



Pay attention to the correct connection by observing the cable positions and inserting them properly into the terminals. There is a risk of malfunction of the unit.



Electrical installation – connection to the power network

- Before starting any installation work make sure that the junction box or power outlet you intend to use to connect the unit is equipped with a protective wire or contact (green-yellow).
- If you use a mains plug to connect the device it must remain accessible at all times in order to safely disconnect the device from the network in case of emergency.
- The corresponding power circuit must be protected with a maximum of 16 A in the electrical distribution.
- The electrical connection of the unit to the network may only be carried out by persons qualified for this activity with valid authorization and knowledge of the relevant standards and directives.
- This unit belongs to the group of products with type Y connection. If the power supply is damaged it must be replaced by the manufacturer, its service center, or a similarly qualified person to avoid a hazardous situation.
- The power supply voltage of the unit 1-230V/50-60Hz must not be modified in any way otherwise there is a risk of damage to the unit.

5. CONTROLS - ELECTRICAL ACCESSORIES FOR THE LBS

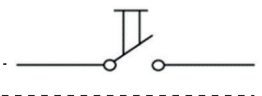
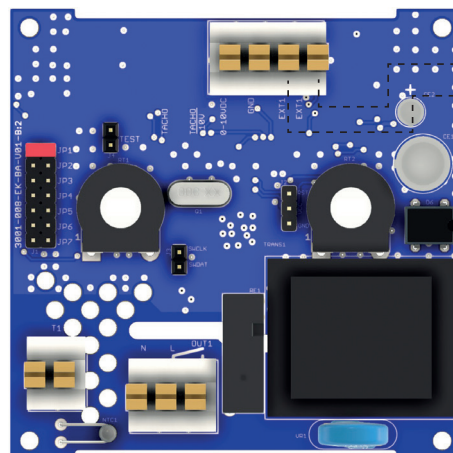
For proper operation of the unit (in manual mode), no additional components need to be connected. It is ready for immediate use after wall installation.

Connection of electrical accessories

Spring terminals with manual locking are used for connecting the various components. Both stranded conductors (wires with ferrules) and solid conductors (wire) can be installed in the terminals with a cross-section ranging from 0.5 to 1.5 mm² and a stripping length of 10 mm.

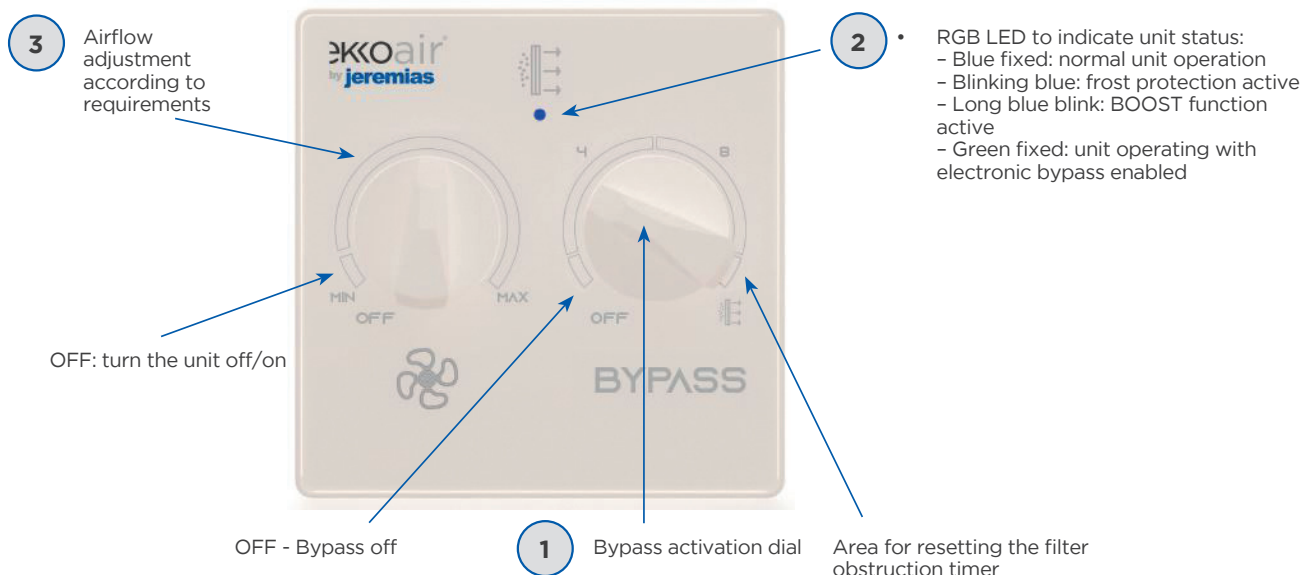
Before inserting the wire into the terminal first press the orange locking button. Then insert the wire release the lock and check that the wire is properly secured by gently pulling on it.

If you need to remove the wire from the terminal follow the same procedure. Select the optimal conductor cross-section according to the cable run length.

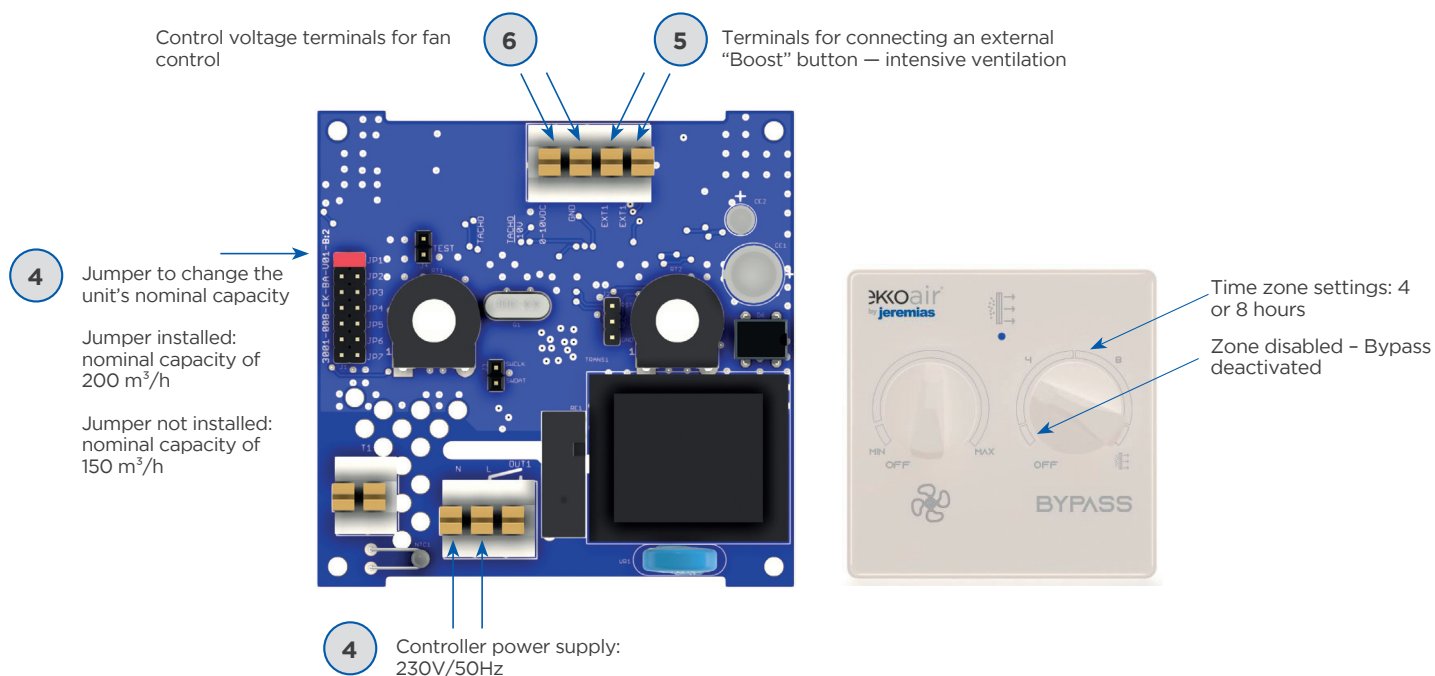


External push-button for
BOOST mode
Output: EXT1

A) Control Panel



B) Base Plate



vi. After setting the electronic bypass time, 2 seconds after the last movement of the dial from any previous position:

- The RGB LED will start glowing green, indicating that the bypass is activated.
- The exhaust fan will turn off.
- The timer set for the Bypass will begin counting down.

vii. When turning the dial between time zones during the countdown:

Two seconds after the last movement of the dial:

1) The countdown timer restarts, following the last set time zone.

- The exhaust fan stops.
- The RGB LED lights up green.

When the set runtime ends or when the bypass is turned off (OFF zone) using the dial:

1) The exhaust fan turns on, with both fans operating.

- The RGB LED indicating the operating status starts glowing blue, returning to normal ventilation mode.

To reactivate the bypass runtime after the previous interval has ended:

1) The dial must be turned to the OFF zone. Only then can the next Bypass runtime be set. The fan speed can be continuously adjusted while the bypass is running. Filter reset: Evaluation of the filter obstruction time.

The filter obstruction time is calculated from the first time the unit was turned on, considering only the actual operating time of the fans. The filter obstruction time is 6 months (approximately 4400 hours), after which:

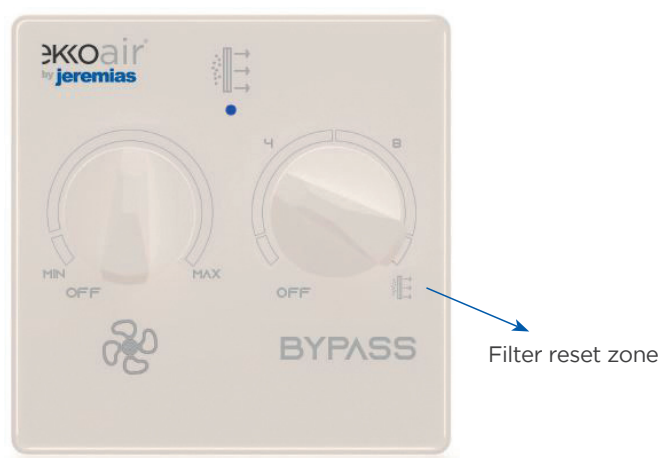
- The RGB LED blinks red.
- There is no limitation on the unit's function, but the RGB LED continues to indicate the filter obstruction status (blinking red).

The filter can only be reset after the filter obstruction timer has completed, indicated by a red blinking light.

To reset:

- The heat recovery unit must be running, not in the OFF position of the airflow adjustment dial (position 3)
- Turn the dial to the filter reset zone.
- The filter reset warning takes 5 seconds after turning the dial to the filter reset zone.
- The RGB LED stop blinking red to signal normal operation.
- The unit continues operating normally.

The filter obstruction indicator remains active at all times, except when the unit is turned off.



e) Boost Mode: Intensive ventilation

- Start of BOOST mode: Intensive ventilation is activated via an external switch (a flap switch with automatic return), which is triggered immediately after pressing the button.
- The external switch is connected as a potential-free input to the previously mentioned terminals (EXT1).
- When Boost mode is activated, the unit ignores the parameters set by the user:
 - The fan power increases to reach its maximum nominal capacity.
 - A 10-minute countdown for the Boost runtime starts.
- At the end of the Boost mode runtime:
 - The fan power returns to the setting established by the power dial.
 - If the Bypass was active before Boost started:
 - The Bypass countdown does not stop while Boost is running.
 - The Boost function adjusts according to the unit's set power.
 - The RGB LED indicates Boost operation with a long blue blink, signaling that Boost is active.
 - Once Boost ends, the unit returns to the previous mode.
- If you want to deactivate Boost mode before the specified 10-minute period, you must:
 - Press the external button immediately.
 - The unit will return to the mode currently set by the dials.
- When the unit is in frost protection mode and the Boost mode switch is pressed simultaneously:
 - The Boost function will not start.
 - The LED will not indicate Boost mode but will instead show the activation of frost protection.
- Activation of Boost mode in normal mode is indicated by a long blue blink of the RGB LED.
- If the settings are adjusted using the dials during Boost mode:
 - Changes to the settings will be ignored during the active Boost mode.
 - Once Boost ends, the unit will operate according to the values currently set on the dials.

