

USER MANUAL ^{v1.0}

WAFE 200 E Energy Recovery Ventilation Unit



ABOUT THE DOCUMENT

Information stated in the *User manual: WAFE 200 E Energy recovery ventilation unit* (hereinafter “manual”) are to provide safe and economically efficient operation of WAFE 200 E energy recovery ventilation unit (hereinafter “unit”).

Read carefully, please.

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Manual is written, published and applicable exclusively for WAFE 200 E unit.

Original version of this document was created in Czech language. The producer is not responsible for any possible discrepancies due to the translation.

As we are constantly upgrading and improving our devices, your version of the unit might look different than the one portrayed in this manual.

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Symbols used

-  Important information.
-  Unique feature differentiating your unit from the competition.
-  There is a danger of unit or ventilation system damage.
-  There is a danger of personal injury.

Intended use

WAFE 200 E energy recovery ventilation unit is an air ventilation device with an active heat and humidity recovery function designed for comfortable and ecological ventilation management.

The unit can be used only for the purposes for which it was developed and manufactured and for which it is technically eligible in accordance with the conditions specified by the manufacturer. Its design, implementation and technical condition adhere to general safety requirements.

Type designation

Nameplate is used to identify the precise model of the unit which is necessary for the safe use of the product. The nameplate is permanently located on the side of the unit.

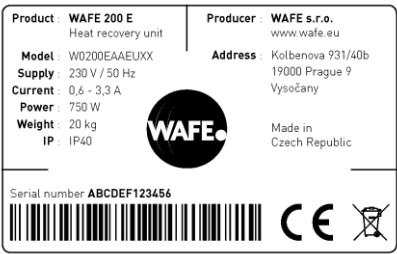


Figure 01: An example of a unit nameplate.

Manufacturer	W
Capacity	0200
Version	C
Recovery ventilation system	E
Versions of the electronics	A
Region	EU
Sheating	A
Preheating	N

Table 01: A structure of unit part number.

SAFETY INSTRUCTION

ⓘ Before using the ventilation unit carefully read all the safety instructions below. By compliance with the following, chances of mechanical or bodily damage are minimized. Manufacturer is not responsible for any damages resulting from non-compliance with these instructions.

- Ventilation unit must be installed in accordance with the general safety regulations valid in the place of installation.
- Ventilation unit must be installed, connected, operated and serviced only by a properly trained service technician, that is, a person with appropriate education, experience and knowledge of all the relevant regulations, standards and potential risks and dangers involved.
- When laying the wires connected to the unit it is necessary to make sure they are not exposed to any mechanical damage or detrimental environmental effects and that they do not interfere with the use of the space in which the unit is installed.
- In case of damaged power supply, it must be replaced by manufacturer, his service technician or equally qualified person.
- To prevent damage and injury when manipulating with the electrical plug, pull the plug head itself instead of its cable.
- The unit cannot be used by children under 8 years old and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they are supervised or instructed on the use of the unit in a safe way and understand the potential dangers.
- Children must not play with the unit or perform the cleaning and maintenance of it.

Disposal

Dispose the package material in an environmentally friendly way. Once the life cycle of WAFE 200 E comes to its end choose an eco-friendly option for its disposal. The unit must not be disposed together with a regular household waste. The unit has been classified according to the EU Directive 2012/19/EU. The directive is valid throughout Europe and it sets a framework for returning and recycling procedures of disposed appliances..

WAFE 200 E INSTALLATION

i Information in the following chapter assume that your WAFE 200 E unit will be installed by certified WAFE service technician.

Any other form of installation without a previous agreement with WAFE s.r.o. may affect the warranty on your device.

Planning the installation

Construction readiness

Purchase and delivery of WAFE 200 E is preceded by consulting the parameters of the construction project with a responsible person.

Transportation and unpacking

When transporting the unit, be careful and bear in mind the principles of working with heavy objects:

- Make sure that the transport path and the place of rest are empty before transporting the unit.
- Do not carry the unit over long distances on your own without a proper transportation aid.
- While lifting the unit up bend your knees and keep your back straight.

i The unit has to be stored in a protective plastic casing and in the original box until the moment of installation.



ELECTRICAL INSTALLATION

⚡ Electrical installation must be done in accordance with applicable law and regulations by qualified and authorized personnel.

Electricity is supplied to the unit through a power cable with a standard EU plug for 230V. The connecting cable for the external control and the preheater is to be connected directly to the central control board. The cover board is attached with four screws. Release the four screws and lead the cables of external activators through cable grommets (holes) that may be broken out accordingly.

Attachment of the adapter board

The external controller may be mounted on a standard switch box. 8-pole terminal block of the external controller is connected to a 4-pole terminal block X0 of the central control board with a 4 venous shielded cable (type J-Y(ST)Y 2x2x0,6).

Control board connecting terminal X0	Contact labeling
X0 01	+12V
X0 02	Us (intake ventilator control voltage)
X0 03	Ue (outtake ventilator control voltage)
X0 04	GND

Table 02: Terminal block for X0 connection of the control board.

1. Push out rotary button
2. Release screw
3. Take of top cover
4. Clamps for external controller

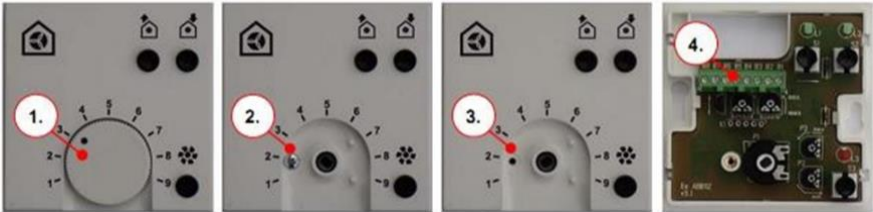


Figure 02: External controller.

Connecting clamp of the external controller	Contact labels
X 01	+12V
X 02	Us (intake ventilator control voltage)
X 03	Ue (outtake ventilator control voltage)
X 04	GND
X 05	Analog input 0-10V
X 06	Analog input GND
X 07	Boost input
X 08	Boost input GND

Table 03: Terminal block for external controller connection.

External boost switch connection

Boost may be activated by one or more switches in parallel connection. Potential-free connection between the sensor and the external controller clamp needs to be realized through at least two conductors (recommended cable J-Y(ST)Y 2x2x0.6).

Connecting clamp for Boost	Contacts for Boost
X 07	Cable 1
X 08	Cable 2 GND

Table 04: Terminal block for boost connection.

External sensor connection

Provoz v módu **Automatic Sensor** (automaticky podle čidla) je řízen pomocí analogového signálu 0-10V, který je generován jedním nebo více čidly. Propojení mezi čidly a hlavní řídicí jednotkou je zajištěno kabelem, který vede od čidla do svorky externího ovladače.

Připojovací svorka pro externí sensory	Kontakty externích sensorů
X 05	Cable 1 (0-10 V)
X 06	Cable 2 GND

Table 05: Terminal block for external sensor connection.

EXTERNAL CONTROLLER

External controller uses a rotary button with a scale up to nine to control the level of ventilation.

Two ON/OFF buttons allow for the required activity set up. The ON status is indicated by green LED light.

1. Both ON – Regular Mode (both ventilators active)
2. Outtake ON only – Only outtake active
3. Intake ON only – Only intake active

Boost button for Boost mode.

Filter reset button after filter exchange.

Red LED symbol to signalize actual operation mode.

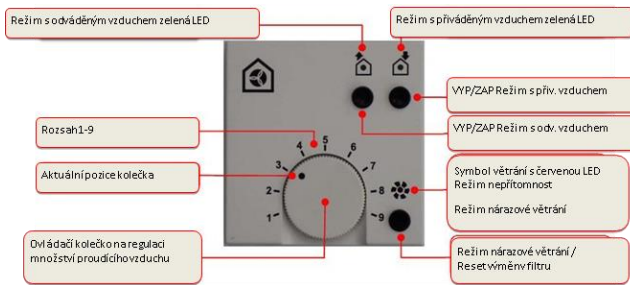


Figure 03: Button and light overview on the external controller.

Controller functions

Status	Function
Setting Position	Absence Mode Position 1: 1 min ON 6 min OFF Position 3: 6 min ON 1 min OFF Position of the rotary button between 1 and 3: relatively divided ON and OFF
Rotary Button	Operation Mode Position 4: lowest airflow Position 9: highest airflow Position of rotary button between 4 and 9: gradual increase/decrease of air-flow
Air Outtake Button	Press the button and set up the airflow to turn on outtake mode. Press the button again to turn off. Do not use this button in combination with fireplace mode unless intake button is on as well. Heat recovery ventilation and fire in the fireplace is not recommended due to risk of vacuum and harmful substance air contamination.
Air Intake Button	Press the button and set up the airflow to turn on intake mode. Press the button again to turn off.
Regular Mode	Press both Intake and Outtake button to turn on Regular Mode.
Boost Mode Button	Press Boost mode button to turn on Boost. The unit will ventilate at maximum (9) level for 15 minutes. After 15 minutes of Boost mode, the ventilators will return to original air flow level. Press the button for more than 3 seconds to turn off Boost manually.
Filter Exchange Reset status	For regular filter status check, a time meter for 180 days is set up in the unit control board. Push the Filter Reset Button for more than 3 seconds to reset the time meter to zero. If the reset is done within the 180day period, the LED light will blink 4 times. Do not use the reset button during Boost mode. Function

Table 06: Operation functions of the external controller.

Operation and Maintenance Indication

Symbol	LED signaling	Function/Interpretation/Measure
	Both LED lights green	Start balanced pressure ventilation by pressing both A and B buttons.
	Outtake LED green	Start Outtake mode by pressing A button only. Intake ventilator stays off.
	Intake LED Green	Start Intake mode by pressing B button only. Outtake ventilator stays off.
	Ventilation LED red	Start Boost for 15 minutes by pressing Boost button. Both ventilators go up to maximum speed (9). Boost mode may be activated during any operation Mode.
	Ventilation LED red blinking	Absence Mode active. Absence mode may be activated during any operation Mode.
	Ventilation LED red rapid blinking	The timer for filters indicates for an exchange. Please check the filter status and reset. Please do not reset the filter exchange timer during Boost mode.

Table 07: Operation and maintenance indication.

External control signal 0-10V

The unit can be controlled with an external 0-10V signal that governs the speed of ventilators and so reduces or increases the air flow. The external signal overrides the rotary button.

To allow for external 0-10V signal control, set the rotary button to level 1.

Boost function with an external switch

External switches for boost ventilation are placed mostly in rooms, from which you need to get rid of waste air more rapidly, such as bathrooms, toilets, kitchen, etc. The switch activates maximal ventilation power of the unit to release air contaminated by odors or vapor.

Functions and visualizations for boost ventilation are described in the external setup panel settings. Boost will be activated by pressing the connected switch, which will interrupt the ongoing mode for 15 minutes (factory setting). After the boost period is over, the unit will switch back to the previously set up mode.

USER MAINTENANCE

User maintenance comprises of periodical filter exchange and cleaning of intake and outtake air vents. It is recommended to exchange filters every three months, six months the latest.

During the exchange it is recommended to check the state of all other filters of the heat recovery system and make an exchange if necessary.

⚡ In case proper maintenance is not carried out regularly, the air quality of the interior may be reduced and the electrical consumption of the unit may rise!

Filter exchange

⚡ The device must not be operated without filters. During the exchange or maintenance, the unit must be switched off!

There are two high quality filters placed inside the ventilation unit. You will recognize the by the WAFE logo. The filters may be purchased through on order at info@wafe.cz. These two filters need to be checked if notified on the control panel. Please follow these steps:

1. Detach the unit from electricity
2. Take out the opening seal by the strap
3. Take out the filter by its strap
4. Place the new filter inside with the arrow pointing towards the center of the unit
5. Plug the seal back in
6. Connect the unit to electricity

WARRANTY AND RESPONSIBILITY

Warranty

The warranty does not cover the damage of the unit or its individual components caused by:

- improper handling or storage,
- non-compliance with the instructions provided in the manual,
- incorrect assembly not provided by the manufacturer,
- arbitrary tampering and misuse,
- neglecting the prescribed mandatory maintenance (such as a failure to replace clogged filters, etc.),
- use or installation of parts that have not been approved in writing by the manufacturer (e.g. operating the unit using non-original WAFE filters),
- non-compliance with the requirements for connected devices supplied by a third party (protection, security, etc.),
- violent damage, natural disaster or extreme operating conditions and influences, the effects of electromagnetic interference, etc.

The warranty also does not cover normal wear and tear.

Responsibility

WAFE 200 E energy recovery ventilation unit has been developed and manufactured for use in ventilation systems for residential applications. Any other way of installation and operation than the one approved by the manufacturer is considered inappropriate and can cause damage to the unit or property or personal injury for which the manufacturer cannot be held responsible.

 The manufacturer shall not be held responsible or liable for damages caused by:

- non-compliance with a proper installation and safety instructions stated in this manual and applicable regulations,
- failure to follow the instructions for operation, service and maintenance,
- the use of spare parts and accessories not supplied or prescribed by the manufacturer,
- improper, incompetent or incorrect installation,
- pollution of the system,
- normal wear and tear,
- expiration of the warranty period.

NOTES

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UŽIVATELSKÝ MANUÁL: REKUPERAČNÍ JEDNOTKA WAFE 200 E^{v1.0}

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