



## **SENSOR CONTROL PANEL**



***S22 Wi-Fi***

**EN**

**USER'S MANUAL**



**BLAUBERG**  
Ventilatoren

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This user's manual is a main operating document intended for technical, maintenance, and operating staff. The manual contains information about purpose, technical details, operating principle, design, and installation of the S22 Wi-Fi unit and all its modifications. Technical and maintenance staff must have theoretical and practical training in the field of ventilation systems and should be able to work in accordance with workplace safety rules as well as construction norms and standards applicable in the territory of the country. The information in this user's manual is correct at the time of the document's preparation. The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means in any information search system or translated into any language in any form without the prior written permission of the Company.

# SAFETY REQUIREMENTS

- Please read the user's manual carefully prior to installing and operating the unit.
- All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit.
- The warnings contained in the user's manual must be considered most seriously since they contain vital personal safety information.
- Failure to follow the rules and safety precautions noted in this user's manual may result in an injury or unit damage.
- After a careful reading of the manual, keep it for the entire service life of the unit.
- While transferring the unit control, the user's manual must be turned over to the receiving operator.

## UNIT MOUNTING AND OPERATION SAFETY PRECAUTIONS



- Disconnect the unit from power mains prior to any installation operations.



- Do not operate the unit outside the temperature range stated in the user's manual.
- Do not operate the unit in aggressive or explosive environments.



- Do not lay the power cable of the unit in close proximity to heating equipment.



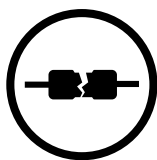
- While installing the unit follow the safety regulations specific to the use of electric tools.



- Do not change the power cable length at your own discretion.
- Do not bend the power cable.
- Avoid damaging the power cable.
- Do not put any foreign objects on the power cable.



- Unpack the unit with care.



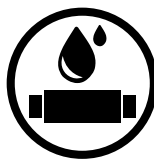
- Do not use damaged equipment or cables when connecting the unit to power mains.



- When the unit generates unusual sounds, odour or emits smoke disconnect it from power supply and contact the Seller.



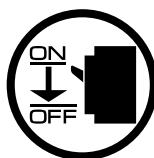
- Do not touch the unit controls with wet hands.
- Do not carry out the installation and maintenance operations with wet hands.



- Do not wash the unit with water.
- Protect the electric parts of the unit against ingress of water.



- Do not allow children to operate the unit.



- Disconnect the unit from power mains prior to any technical maintenance.



**THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE.  
DO NOT DISPOSE THE UNIT AS UNSORTED DOMESTIC WASTE.**

## PURPOSE



**THE UNIT SHOULD NOT BE OPERATED BY CHILDREN OR PERSONS WITH REDUCED PHYSICAL, MENTAL, OR SENSORY CAPACITIES, OR THOSE WITHOUT THE APPROPRIATE TRAINING.**

**THE UNIT MUST BE INSTALLED AND CONNECTED ONLY BY PROPERLY QUALIFIED PERSONNEL AFTER THE APPROPRIATE BRIEFING.**

**THE CHOICE OF UNIT INSTALLATION LOCATION MUST PREVENT UNAUTHORIZED ACCESS BY UNATTENDED CHILDREN.**

The wall control panel with a sensor display is designed for controlling industrial and domestic supply and exhaust ventilation units as well as other air handling units.

The control panel is not designed for standalone operation. It is rated for continuous operation.

## DELIVERY SET

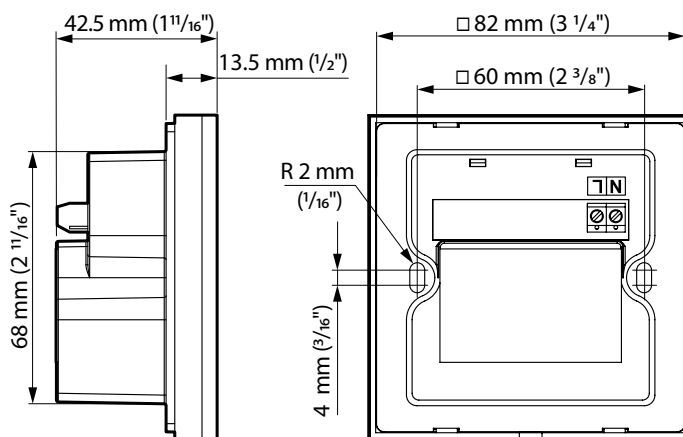
NAME	NUMBER
Control panel	1 pc.
Mounting box for wall surface mounting	1 pc.
Mounting box for wall flush mounting	1 pc.
Cable with mains plug [3 m]	1 pc.
User's manual	1 pc.
Packing	1 pc.

## TECHNICAL DATA

Power supply voltage, 50 (60) Hz [V]	110-230
Maximum current [A]	0.012
Cable type	2x0.35 mm <sup>2</sup>
Temperature range [°C]	+10...+45
Humidity range [%]	10-80 (no condensation)
Casing material	Plastic
Sensor surface material	Glass
Ingress protection rating	IP40
Weight [g]	190

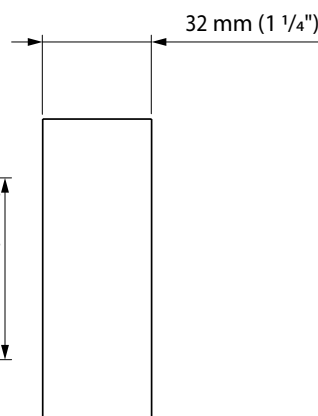
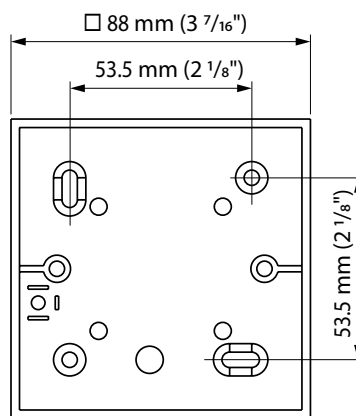
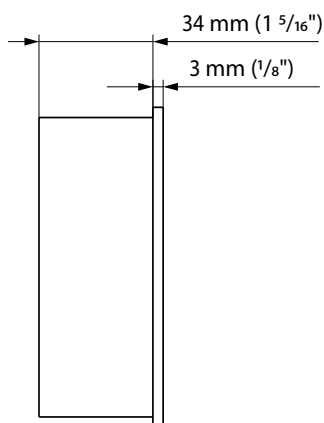
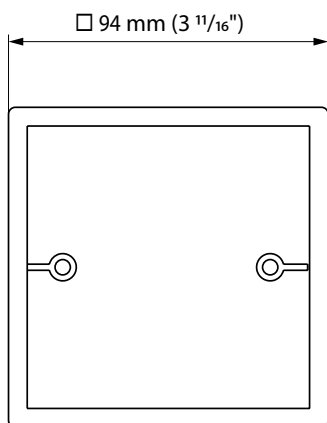
### WI-FI TECHNICAL DATA

Standard	IEEE 802.11 b/g/n
Frequency band [GHz]	2.4
Transmission power [mW] (dBm)	100 (+20)
Network	DHCP
WLAN safety	WPA, WPA2




**Mounting box for flush wall mounting**

**Mounting box for surface wall mounting**



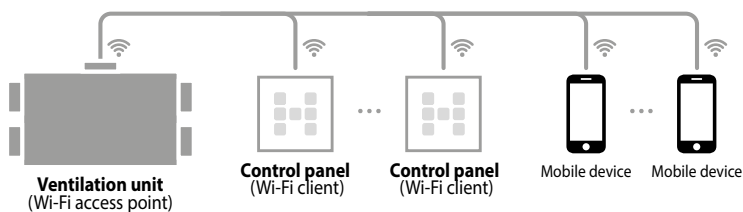
## INSTALLATION, CONNECTION TO POWER MAINS AND SET-UP



**CHECK THAT THE UNIT IS DISCONNECTED FROM POWER SUPPLY PRIOR TO ANY OPERATIONS!**

### SELECTION OF INSTALLATION PLACE FOR CONTROL PANEL Examples of wireless connections and system operation variants

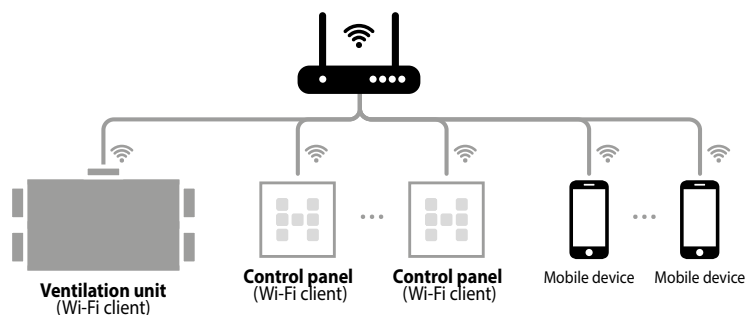
**Example 1:** direct connection of the control panel to the ventilation unit without a router. The control panel must be installed within coverage of the Wi-Fi access point in the ventilation unit.



1. Set the ventilation unit for the Wi-Fi operation in the access point mode. For details, refer to the manual for the wireless control system.
2. Install the control panel within the coverage of the Wi-Fi access point in the ventilation unit.
3. Integrate the control panel with the ventilation unit (see below).

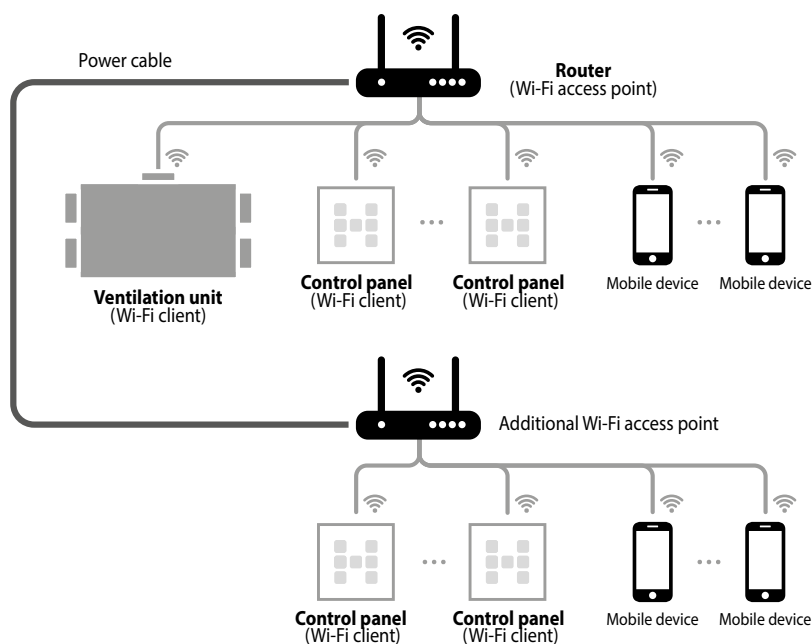
Note: the maximum number of the units to be connected to the ventilation unit in the Wi-Fi access point mode is stated in the manual for the wireless control system.

**Example 2:** connection via router with one Wi-Fi access point. The control panel must not necessarily be installed within coverage of the Wi-Fi access point in the ventilation unit.



1. Connect the ventilation unit to the Wi-Fi access point that is integrated in the router. For details, please refer to the manual for the wireless control system.
2. Bring the control panel in the coverage area of the Wi-Fi access point integrated in the ventilation unit.
3. Integrate the control panel with the ventilation unit (see below).
4. Mount the control panels within the coverage of the Wi-Fi access point integrated in the router.

**Example 3:** connection via the router which hosts several Wi-Fi access points.



1. Connect the ventilation unit to one of the Wi-Fi access points. For details, refer to the manual for the wireless control system.
2. Integrate the ventilation unit with the first group of the control panels.
3. Connect the ventilation unit to the other Wi-Fi access point. For details, refer to the manual for the wireless control system.
4. Integrate the ventilation unit with the second group of the control panels.

**ATTENTION!** Regardless of the selected connection type make sure that during the integration of the control panel with the ventilation unit the control panel is located in the coverage area of the Wi-Fi access point integrated in the ventilation unit.

### INTEGRATION OF THE CONTROL PANEL AND THE VENTILATION UNIT

#### 1. Set the ventilation unit for the Setup mode.

Press and hold the Setup mode for 5 seconds till the LED light on the button starts blinking.

Location of the button is shown in the user's manual for the ventilation unit.

#### 2. Set the control panel into the Setup mode.

Press and hold the  button for at least 5 seconds until the    buttons start to blink synchronously and a beep is heard. Successful completion of the integration process is confirmed with a beep and double blink of all the buttons on the control panel.

After successful integration the control panel exits the Setup mode.

If integration process cannot be established for 3 minutes, the control panel automatically exits the Setup mode and the control panel settings are not changed.

#### 3. Exit the Setup mode for the ventilation mode.

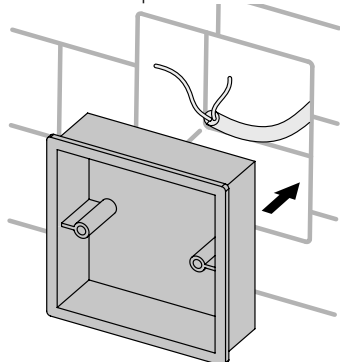
To exit the **Setup mode**, press again and hold the button for 5 seconds until the LED light on the button stops blinking.

If the button is not pressed once again, the ventilation unit remains in the Setup mode for 3 minutes and then reverts to the previous operation mode.

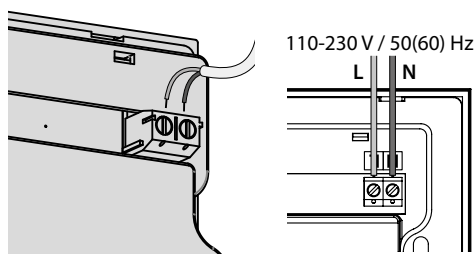
**NOTE:** integration must be carried out each time after change of the Wi-Fi parameters and the ventilation unit password. For details, refer to the manual for the wireless control system.

1. Install the mounting box.

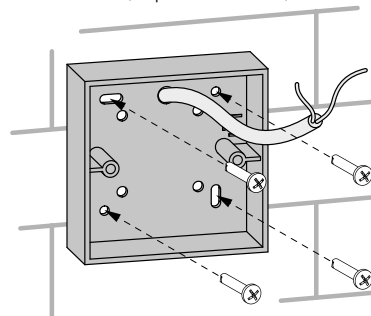
**Wall flush mounting:** prepare a wall opening, lay required wires and cables to the installation place and install the mounting box.



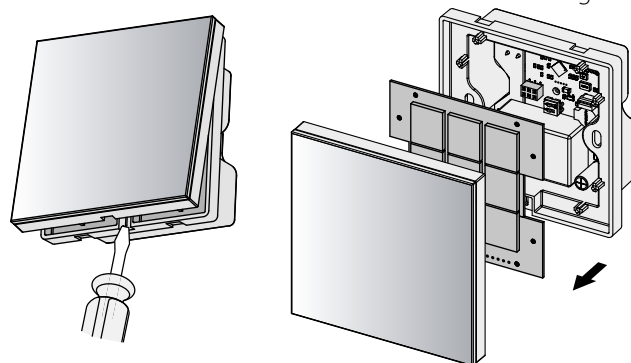
2. Make the electrical connections according to the wiring diagram.



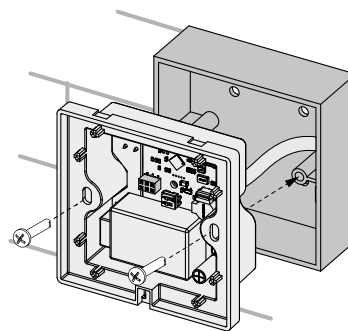
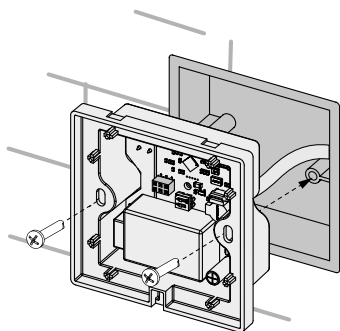
**Wall surface mounting:** lay required wires and cables to the installation place, bore the holes and fix the mounting box on the wall using the screws (separate order).



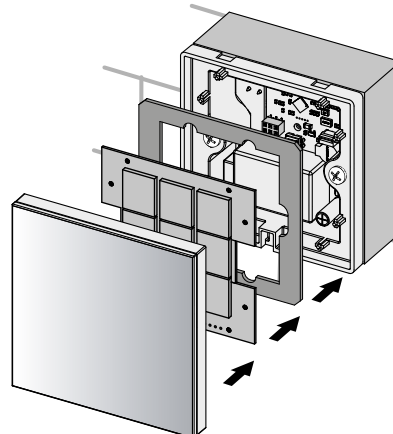
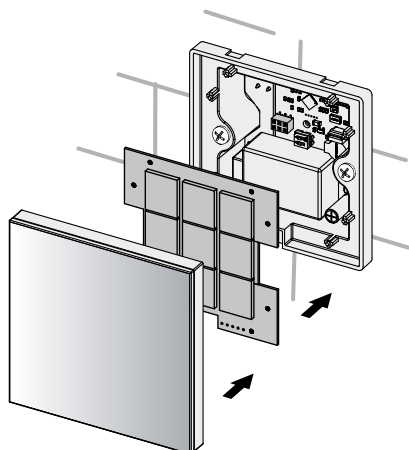
3. Unfasten gently the latches on the lower part of the glass control panel using a screwdriver and remove it. Then disconnect the sensor board from the board connector on the casing.



4. Attach the control panel frame to the mounting box with the screws. The fastening screws for fixation of the control panel to the mounting box are included in the delivery set.

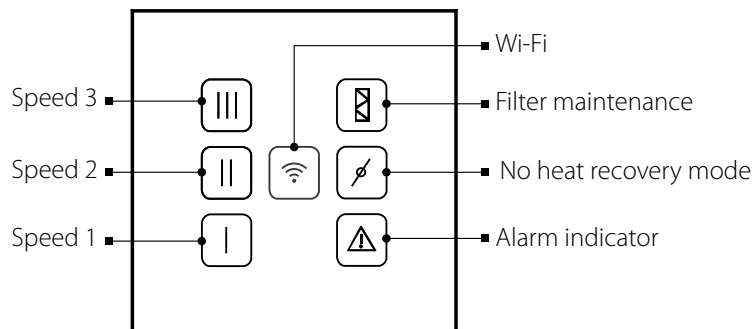



5. Fix the sensor board on the casing, and then the glass panel by pressing until it is fixed with the latches.




## CONTROL

### INDICATION AND FUNCTIONS OF THE CONTROL PANEL BUTTONS



 To **turn the unit on** or **change speed stage**, press any inactive speed button. Once activated, the button starts glowing, and the ventilation unit runs with the set speed.


 To **turn the unit off**, press any activated speed button.  
In the **Standby mode** during the unit operation the buttons do not glow.


 **The sensor control panel indication during its joint operation with the mobile application and other control devices is as follows:**


the buttons are highlighted in a definite sequence when the speed that is set with the mobile application or the control device is not supported with the sensor control panel.

Note: the parameter setting and speed setup with the mobile application and the link to download the program is stated in the user's manual for the wireless control system.

The parameter setting and speed setup with the control devices that are connected to the ventilation unit are stated in the user's manual for the wireless control system.

-  **No heat recovery mode**
- The indicator glows steady: the bypass damper is open/the rotary heat exchanger is stopped in the manual mode.
  - The indicator glows steady: the bypass damper is closed/ the rotary heat exchanger runs in the manual mode.
  - The indicator is off: the bypass damper/ rotary heat exchanger runs in the **Auto** mode.

-  **Filter maintenance**
- The button glows steady: the filter must be cleaned or replaced.  
After maintenance reset the filter timer.  
To reset the filter timer, press and hold the button for 5 seconds until a beep tone is heard.  
Release the filter maintenance button after all the buttons blink twice.

-  **Alarm**
- The indicator glows steady in case of alarm.  
The indicator blinks on case of communication loss with the ventilation unit.  
After troubleshooting an alarm reset the alarm indication.  
To reset alarm, press and hold the button for 5 seconds until a beep tone is heard.  
Release the alarm button after all the buttons blink twice.

-  **Wi-Fi**
- The indicator glows steadily if Wi-Fi connection is available.



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