

EN // BATHROOM FAN

Fan installation instructions

AIR and BIS series

Bathroom fans for the extraction of clean air in general ventilation systems. Ø100 mm and Ø150 mm versions, available with a humidity sensor, motion sensor or timer.

Ø100 / Ø150 mm

105 / 255 m³/h

12 / 21 W

34 / 35 dB



DEAR CUSTOMER
THANK YOU FOR YOUR PURCHASE

Scan the QR code to access video materials and the complete product documentation at www.ergowave.eu

Note: Read the instructions before starting the installation!

Comfort. Efficiency. Innovation

RoHS



UK CA



GENERAL INFORMATION ON INSTALLATION

These instructions contain essential information on the installation, commissioning and maintenance of the device. This information does not release the user from the obligation to observe general safety rules and the regulations on the operation of devices. Copying, distributing and passing the instructions to third parties is permitted only together with the device. The manufacturer accepts no liability for the completeness or correctness of this documentation.

The device has been manufactured in accordance with the applicable technical standards; nevertheless, there is a risk of personal injury or material damage.

Recommendations:

- Before installing and using the device, read these instructions carefully and in full.
- The instructions must be kept in a place easily accessible to all users.
- If the device is passed on to third parties, always enclose the original instructions.

INSTALLATION

Before installation:

- It has been checked that there are no foreign objects inside the duct.
- An installation location ensuring safety and stability has been chosen.

Fan installation:

- The device has been mounted on a flat and stable surface.
- The possibility of easy fan removal has been ensured.
- In the bathroom: mounted at a height of ≥ 2.1 m from the floor, or another safe location has been chosen.
- The fan has been protected against the effects of high temperature.
- The ventilation ducting has been installed so that condensate does not flow into the device.
- The fan has not been installed in a room with solid or liquid fuel firing appliances or with gas appliances.
- The fan has not been connected to chimney or flue ducts.
- Only approved materials and installation accessories have been used.
- No information markings on the device have been removed or altered.

Electrical connections – checklist

- The connections have been made in accordance with the enclosed wiring diagram.
- The compliance of the supply voltage and frequency with the device rating plate has been checked.
- A main switch with a contact gap of at least 3 mm, disconnecting all poles, has been installed.
- The main switch has been placed in an easily accessible location.
- The cable type, cross-section and routing method have been determined by a qualified electrician.

Commissioning – checklist

- It has been verified that the device is installed and connected in accordance with the instructions.
- All mechanical and electrical protections have been checked (guards, covers, earthing, safety installations).
- During the first start-up, the absence of the following has been checked:
 - excessive vibration,
 - unnatural noise,
 - other irregularities during device operation.

The connection and operation of the device may be carried out only by persons with the appropriate qualifications and authorisations, in accordance with the applicable occupational health and safety rules.

The following must be strictly observed:

- the guidelines contained in this documentation,
- the applicable standards and technical regulations,
- the technical conditions for the installation of electrical and ventilation equipment,
- national legislation and local regulations.

! GENERAL SAFETY INSTRUCTIONS

Designers, installers and the technical staff operating the building are responsible for the correct installation, connection and operation of the device.

Before start-up:

- The device must be inspected for visible damage, cracks or missing parts.
- Operating an incomplete, damaged or modified device is prohibited.

During use:

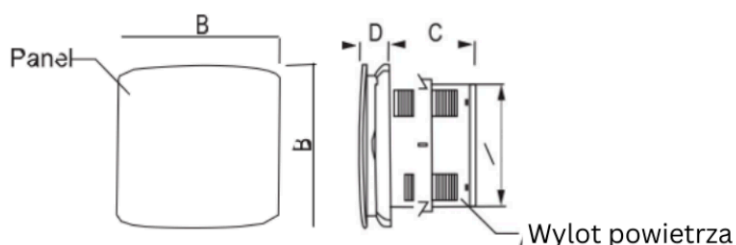
- The operating parameters specified in the documentation must not be exceeded.
- Before starting any service work, disconnect the supply to all poles and secure the installation against unauthorised reconnection.
- Protection must be ensured in accordance with electrical regulations, including protection against:
 - direct contact,
 - the suction of foreign objects into the device,
 - violation of the required safety clearances.
- It is forbidden to switch off or bypass protective installations and elements, or to interfere with their correct operation.
- The device must not be used by persons without qualifications and experience, unless they are supervised by a person responsible for safety.
- Children must be kept at a safe distance from the device and must not have access to it.

Intended use

Bathroom fans of the AIR and BISI series are intended for the extraction of clean air in general ventilation systems in buildings:

- residential,
- office,
- public utility,
- commercial and service,
- educational.

1 Product dimensions



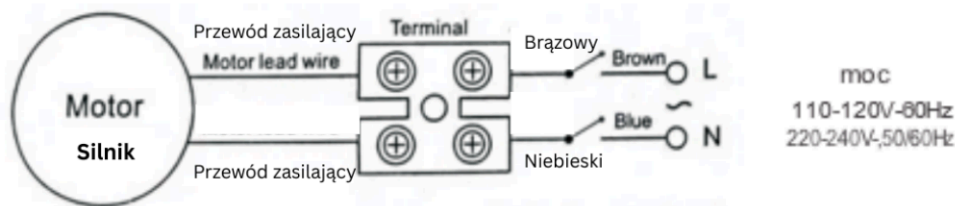
Model	A	B	C	D
100 mm (4")	100 mm	150 mm	90 mm	35 mm
150 mm (6")	150 mm	193 mm	100 mm	35 mm

2 Technical parameters

Note: The parameters below serve as a reference only. Detailed information on the rating plate

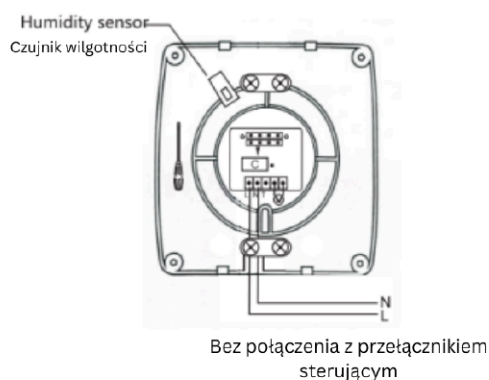
Model	Voltage	Power	Air volume	Noise
100 mm (4")	110-120 V~, 60 Hz 220-240 V~, 50/60	12 W	105 m³/h	34 dB
150 mm (6")		21 W	255 m³/h	35 dB

3 Diagram

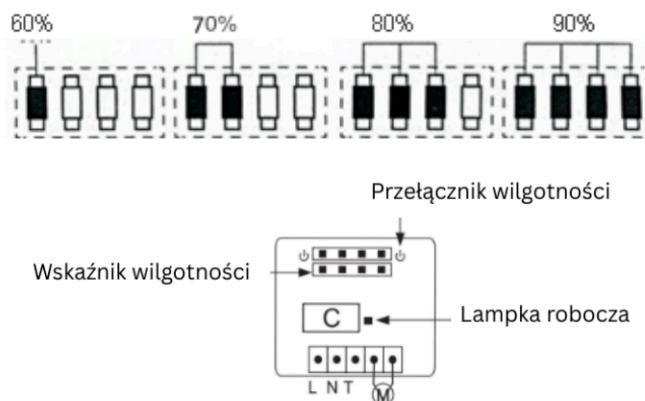


4 Wiring instructions

4.1 Humidity sensor



4.2 Humidity sensor system allowing humidity level adjustment

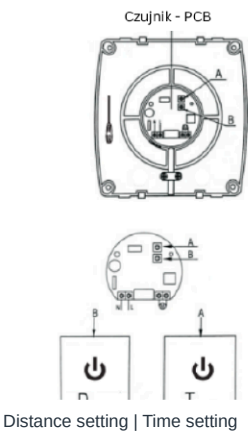


4.3 Humidity sensor operating instructions

When the humidity level in the room exceeds the humidity sensor threshold in the range of 60%–90%, the extractor fan switches on automatically and runs until the humidity drops to the set level. The fan then continues to run for 1 to 30 minutes and switches off.

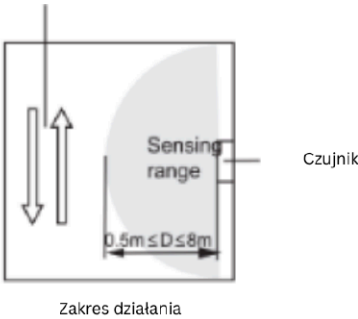
The extractor fan can be controlled by the switch only when the humidity level is below the set humidity sensor threshold. The extractor fan can be switched on to remove odour; after switching it off, the extractor fan continues to run for 1-30 minutes.

5 Motion sensor connection diagram and instructions



5.1 Specification of the motion sensor system operating parameters

Detection range	Detection angle	Time	Operating temp.
from 0.5 to 8 m	180-360	1-30min	-15 to +40

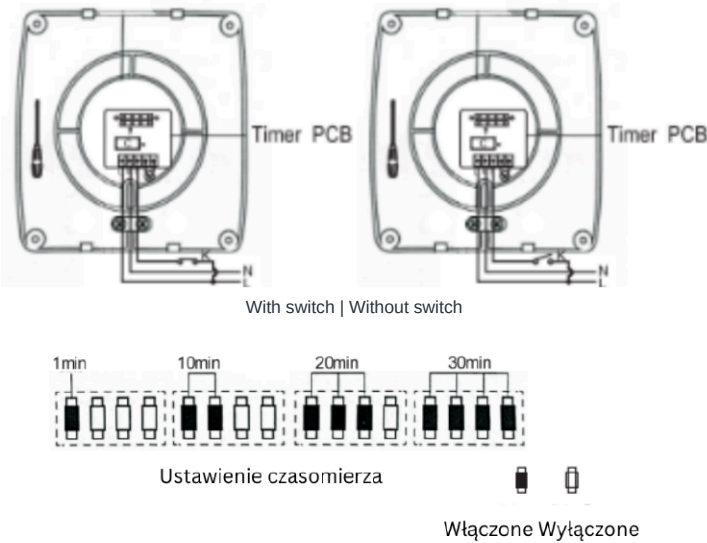


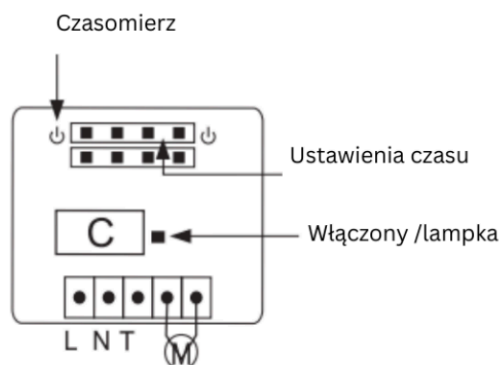
5.2 Motion sensor system - instructions

The fan with a motion sensor switches on automatically after detecting movement within a distance range of 0.5 m to 8 m. The detection angle is 180°X 360°. It runs until the movement stops. The fan will continue to run for 1 to 30 minutes according to the timer setting and will then switch off. The detection range can be adjusted from 0.5 m to 8 m. The operating range can be adjusted using the timer /delay/ and the distance using the switch (miniature button)

The factory-set distance is 0.5 m and the timer is 1 min.

6 Time sensor - diagram





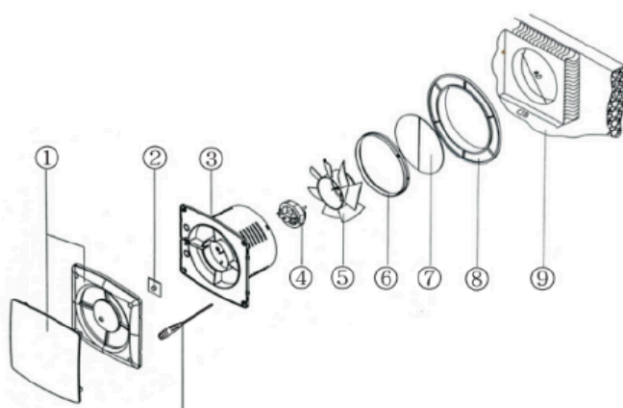
6.1 Time sensor system - instructions Without switch connection

During fan operation, it will operate on the basis of the set timer level

With connection switch

During fan operation, the fan will be based on the set humidity level

7 Installation diagram



1. Panel 2. PCB 3. Housing 4. Motor 5. Fan blades
6. Louvre frame 7. Louvre 8. Cap 9. Frame

8 Warnings

8.1 Installation height: above 2.3 m from the floor.

8.2 Never install the fan in the ceiling or in a place where it would be exposed to water splashes, excessive steam or high temperature, splashes, excessive steam or high temperature. Never install ducts in a chimney containing toxic gas.

8.3 When using the switch to control the power, avoid frequently switching the switch on/off. Switch off the switch if the fan is not used for a longer period.

8.4 Avoid air returning to the room through an open chimney or other appliances with an open flame.

8.5 If the power cable is damaged, it must be replaced by a specialist from the manufacturer's maintenance department or similar qualified electrical personnel using a special cable, or by the manufacturer or the maintenance department.

8.6 This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lacking experience and knowledge, unless they are supervised or have been instructed on the use of the device by a person responsible for their safety. Children should be supervised to ensure that they do not play with the device

8.7 A multi-pole switch must be used to install the device. The gap between the contacts must not be less than 3 mm.

8.8 A cover for the ventilation opening must be fitted to prevent the ingress of water and pests

9 Maintenance

Regular cleaning of the device is essential, as accumulated dirt can lead to a drop in performance, imbalance of components and a shortened service life of the fan.

Before starting any maintenance or repair work:

- disconnect the power supply (all poles),
- make sure that a repeated, unauthorised switching on of the device is impossible.

Cleaning procedure:

- Disconnect the cables and secure them against contact.
- Remove the fan and then take off the louvre, cover and impeller.
- Remove dust and dirt with a soft cloth or brush.
- In case of heavy soiling, use a slightly damp cloth with a mild, neutral cleaning agent (a test on an invisible part is recommended).

Prohibitions and precautions:

- Do not use water at a temperature above 50°C, petrol, benzene, thinners, organic solvents or sharp tools.
- Do not allow water to enter the motor.
- Do not wash any components in dishwashers.
- The bearings are maintenance-free – they must not be lubricated.

After cleaning:

- Dry the parts naturally or with a soft, dry cloth.
- Assemble the components in reverse order.
- Before reconnecting, make sure that the power supply is completely disconnected (all poles).

Note: A damaged device or its components must be replaced with new ones. Repair of the fan must be entrusted to an authorised service centre, and replacement of the power cable to a qualified electrician.

DECLARATION OF PERFORMANCE

Issuer of the declaration: ergowave sp. z o.o., ul. Malinowa 14H, 43-100 Tychy VAT ID (NIP):6463025040 | REGON:543175153 Importer of the product:

FAN: AIR100, AIR150, BIS100, BIS150 Country of origin: China

Declaration of conformity

The company ergowave sp. z o.o. declares that the above products:

- are safe in use,
- meet the requirements set out in the manufacturer's technical documentation,
- and comply with the applicable European Union directives and technical standards.

Characteristics and conformity tests

1. The performance characteristics of the product comply with the technical requirements set out in the applicable EU regulations.
2. Conformity tests were carried out in accordance with the directives:

- Directive 2014/30/EU (EMC): Harmonised standards applied:
 - EN 60335-1:2012 +A1:2019+A2:2019+A11:2014+A12:2017+A13:2017+A14:2019+A15:2021
 - EN 60335-2-80:2003+A1:2004+A2:2009
 - EN 55014-1:2017+A11:2020, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013+A1:2019+A2:2021

Test reports: SPT220110M05001-C1; SPT220110M05001-C2 Place and date of issue of the declaration: Tychy, 01.01.2026

WARRANTY CARD

Warranty granted to: Date of granting the warranty:

Invoice number / acceptance protocol: Device model/serial number:

1. The products are covered by a 24-month manufacturer's warranty, counted from the day of sale.
2. If the device is repaired under warranty, the warranty period is extended by the duration of the repair, counted in full days.
3. The warranty covers hidden manufacturing defects of the products.
4. The warranty does not cover damage resulting from:
 - incorrect installation, commissioning or operation not in accordance with the technical documentation of the device,
 - improper connection or supply of the device with a voltage other than that indicated on the rating plate and/or in the technical operating documentation,
 - operation in conditions not corresponding to the intended use and design parameters (e.g. presence of greases, dust, extremely high or low temperatures),
 - burning out of the electric motors resulting from operation of the device without the thermal protections required in the technical operating documentation,
 - improper or neglected maintenance provided for in the technical documentation.
5. Detected damage to a device covered by the warranty should be reported to: ergowave sp. z o.o., ul. Malinowa 14H, 43-100 Tychy; email: office@ergowave.eu
6. The complaint report should contain:
 - the device model,
 - the serial number,
 - the date of the report,
 - a description of the damage,
 - the date of purchase,
 - a copy of the proof of purchase.
7. Complaint reports are processed within 30 days from the date of the report.
8. The device must be dismantled, packed appropriately and sent to the address:
9. If the complaint is accepted, the device will be repaired or replaced with a new one and sent back to the Buyer. The shipping cost is covered by the Guarantor.
10. The Guarantor reserves the right to choose the method of fulfilling the warranty — repair or replacement with a new device.
11. In the case of an unfounded warranty claim, the device will be repaired and/or sent back at the Buyer's expense, after prior acceptance by the Buyer of the repair and shipping costs.
12. Any unauthorised repairs or structural modifications of the devices result in loss of the warranty.
13. The warranty does not exclude, limit or suspend the Buyer's rights arising from the provisions on warranty for defects of the item sold.

NOTE:

At the end of its service life, the device must be handed over to an authorised waste treatment facility or to a seller offering a take-back service for used electrical equipment.

Correct sorting of waste and electrical equipment prevents negative effects on the environment and human health, and also enables the recovery of raw materials and energy savings.

The obligation of separate collection of used equipment is marked with the crossed-out wheeled bin symbol placed on the device. Illegal disposal of the device is subject to administrative sanctions in accordance with the applicable legal regulations.

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