# **OPFRATING MANUAL**





#### IMPORTANT NOTICE

Please read the Operating Manual carefully before attempting to install or service the axial fan! AWENTA shall not be liable for any damage resulting from incorrect operation, non-intended use or unauthorized repair or modifications of the product.

The Operating Manual and the installation instructions contained in it are an essential part of the product equipment. The Operating Manual specifies important technical information and instructions for the operating safety of the axial fan. Carefully read the installation instructions in the Operating Manual. Keep the Operating Manual available for future reference. A copy of the Operating Manual can be downloaded from www.awenta.pl

## Warnings

The following safety symbols show important safety information. Follow all safety regulations and the safety symbols shown in the Operating Manual to avoid injury and hazards.







# Safety precautions:

- This product can be used by children at least 8 years old, by people with impaired physical and/or mental abilities, and by people without any experience in or understanding of the operation of the product, if supervised or instructed by a competent adult in the safe use of the product so that they understand the relevant operating risks. This product is not a toy and children should not play with it. Children should not be allowed to clean or maintain the product without supervision of an adult.
- The axial fan is intended for permanent installation and connection with the building electrical system. The building electrical system connected to the

axial fan must be capable of breaking live voltage contact on all switching poles to fully isolate the axial fan from power during Category III overvoltage conditions, in accordance to applicable electrical engineering regulations.

- The ventilator is designed for installation at a substantial height, i.e. 2.3 m above the floor. The axial fan shall only be installed in a position and an orientation specified in the Operating Manual, given the necessary entry of the power cable into the axial fan housing.
- Before servicing the axial fan, isolate it from the mains voltage with the circuit breaker. Secure the circuit breaker against inadvertent operation.
- The axial fan installation design must prevent reverse flow of flue gas into the room from open flue gas exhaust ducts and appliances operated with open flames.
- · Never attempt to modify or alter the axial fan without authorization.
- Before installing the axial fan, verify the load bearing capacity of the installation substructure. Improper installation fastening may result in damage or failure of the axial fan and hazards to the people nearby.



The axial fan can be hazardous when operated against its intended use or installed by unqualified personnel.

## **Application and operating conditions**

- The axial fan is intended for handling indoor air of normal quality or with a low dust content (with a particle size  $<10~\mu m)$  and without aggressive chemicals or high humidity. The axial fan is intended for operation in temperate climate conditions and within the performance limits specified in the product catalogue.
- The axial fan may be operated only in a permanent indoor installation and with its power supply line concealed.
- $\bullet \ \, \text{The axial fans can be mounted in ventilation ducts and directly in the walls as exhaust fans (fig.4)}.$
- The maximum temperature of the medium handled by the axial fan and the maximum ambient temperature are +40°C.
- The axial fan is an IP44 and protection class I device. The axial fan can be installed in indoor moisture Zone II, ref. IEC 60364-7-701, provided that the following requirements from the axial fan manufacturer are complied with:
  - 1 the correct wall-mounting position is maintained with a proper seal of the power supply line in the grommet (see Section "Installation").
    2 - the air exhaust duct secures the axial fan from direct exposure to water per IP44 and direct access to live
- 2 the air exhaust duct secures the axial ran from direct exposure to water per ii-44 and direct access to live and/or rotating parts, including the fan rotor in motion; or the air exhaust duct is at least 1,5 m long upstream of the axial fan and installed with special tools which will be required to access the axial fan for servicing.
- The axial fan must be operated according to its intended use and within the performance limits specified on the nameplate.
- Connect the axial fan to the building mains (electrical system) with the following power cable: NYM-O 5x1.5 mm<sup>2</sup> (H07V-K 5x1.5mm<sup>2</sup>).

- Do not use the axial fan to handle the air with the following content:
- viscous contaminants prone to deposition in the axial fan,
- corrosive contaminants which may degrade the axial fan.
- flammable contaminants, including gas, vapours, mists or particulates which may form explosive mixtures with air
- The control system must prevent extremely frequent power cycling.

# Transport and storage

- · Keep the axial fans in their original packaging in a dry, sheltered room.
- The transport and storage ambient temperature limits are -20 °C to +40 °C.
- Protect against impact and shocks. Transport the axial fan in its original packaging.
- If the storage time exceeds 1 year, the motor bearings of the axial fan must be tested by turning the fan rotor by hand before installation. The fan rotor must run smoothly.
- Dispose of the axial fan at the end of its operating life strictly in accordance with environmental protection and waste management laws.
- · Should it occur, damage caused by improper transport, handling, storage or commissioning will be demonstrated and is not on warranty.

#### INSTALLATION



The axial fan shall only be installed, connected to electrical mains and commissioned for use by qualified personnel in accordance with applicable laws!

### Installation process

- · Precise where the fan will be installed.
- Prepare the power cord. Use NYM-O 5x1.5 mm<sup>2</sup> (HO7V-K 5x1.5 mm<sup>2</sup>).
- NOTE: Make sure that the power cord is not live before starting work.
- Measure and make holes for the fan pipe connection (3) and fixing studs in the partition wall, to which it will be attached
- Make holes for screws in the recesses (2) on the fan body (1).
- · Route the power cord and connect according to the wiring diagram in Figure 2.

Before attaching the fan, it is necessary to: remove foreign objects from inside the fan; check if the rotor rotates freely, putting it into motion by hand.

### It is recommended to connect the fan to the duct system using a flexible pipe connection!

Place the fan body (1) and the fixing studs in the previously prepared holes.

### NOTE! For wall mounting, position the fan so that the duct conduit is at the bottom!

- Fix the fan to the partition wall by screwing the screws into the fixing studs.
- The connection cable must be protected in such a way that water cannot penetrate live parts along the cable in case of flooding.



ATTENTION! A rotating impeller can crush your fingers! It is forbidden to start the fan without a protective mesh against touching the moving parts!

#### First start

Start the axial fan only with all safety precautions in place and all hazards eliminated. Start the axial fan. Check that it runs steadily and the air is handled efficiently (out of the room and through the air exhaust ductwork to the outside).

Check the operation of the axial fan (noise, vibration, the possibility to control the rotation speed).

The fan may only be used with a grille to prevent contact from the intake side.

Depending on the actual installation conditions, the axial fan may require a protection against touching the

moving parts on the delivery side. Suitable delivery-side direct guards can be provided on request. If the axial fan is guarded against direct touch due to their installation conditions (e.g. in line with the air exhaust ductwork), no direct touch guard is required if the installation conditions provide an equivalent level of safety. Note that the axial fan user is liable for compliance with current safety standards and may be held liable for accidental injury or death caused by failure to provide the required safety equipment.

#### **Electrical connections**

- Electrical connections and commissioning of the axial fan shall only be completed by qualified professional electricians.
- Always follow the applicable standards, safety regulations and technical requirements specified by the power company!
- The power supply line for the axial fan requires a multi-pole circuit breaker / isolation switch with a minimum contact break gap of 3 mm (ref. EN 60335-1)!
- The mains system, voltage and frequency must match the nameplate ratings of the axial fan.

#### Dimensions

The dimensions of specific axial fan models are shown in Fig. 3.

## MAINTENANCE AND CLEANING

### Servicing and maintenance

- Use protective footwear and gloves during maintenance!
- During all maintenance and servicing works the electrical and OHS regulations (IEC 60364-3) must be
  observed.
- Before servicing the axial fan, isolate it from the mains voltage with the circuit breaker. Secure the circuit breaker against inadvertent operation!
- The axial fan ductwork must be clear of foreign bodies: hazard of injury by objects blown out at a high speed!
- · Do not attempt any maintenance when the axial fan is running or at live voltage!
- If excessive vibrations are felt or heard, have the technical inspection carried out by a qualified electrician.
- The maintenance intervals depend on the actual contamination of the fan rotor and must not be longer than 6 months!
- · Check the fan rotor for cracks.
- The manufacturer shall not be liable for any damage resulting from unprofessional repairs.

### Cleaning



Electrocution hazard by damaged wiring insulation!

Before attempting to clean the axial fan, isolate it from the mains voltage with the circuit breaker. Secure the circuit breaker against inadvertent operation!

- Clean the front panel and the visible parts of the housing with a damp cloth.
- · Do not use aggressive paint solvents!
- Do not clean with a high pressure cleaner or strong jets of water!
- · Clean carefully to prevent water from entering the motor or the terminal box.
- · Always keep the guard grille at the suction side clean.

#### WARRANTY TERMS & CONDITIONS

- 1. The warranty period for the proper operation of the fan is 2 years, depending on the model (see information on the packaging), from the date of sale.
- The warranty rights and obligations will be void and null without demonstrating a proof of purchase (a receipt or an invoice).

- 3. The warranty covers all defects and damage attributable to the manufacturer.
- 4. Have your product delivered for warranty servicing to the manufacturer or the original seller.
- 5. The manufacturer undertakes to repair the product or replace it with a new counterpart within 14 days from filing your warranty complaint.
- 6. The warranty does not cover any of the following: damage to the product attributable to improper or unqualified installation, operation against the intended use, improper transport, storage and/or maintenance, any faults attributable to unauthorized repairs, or any accidental damage.
- 7. The warranty does not cover the installation or the maintenance of the product.
- 8. For all matters not provided for by this Warranty Certificate, the Polish Civil Code (Articles 577- 582) shall apply.

## Do not dispose of waste electrical equipment with household waste.

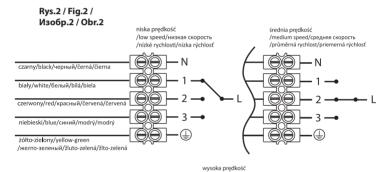
The crossed-out wheelie bin symbol on this product means that it is waste of electrical and electronic

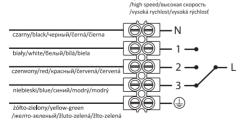


waste. The crossed-out wheelie bin symbol specifies that the product is subject to obligatory waste. The crossed-out wheelie bin symbol specifies that the product is subject to obligatory waste segregation schedules for proper disposal. The product is made from recyclable materials and components. The product user is required to return the product which has become WEEE to a WEEE collection unit. The operators of WEEE collection units, including local WEEE locations, product resellers and other WEEE collection locations managed by local authorities form a proper waste disposal system. Proper WEEE disposal helps avoid harmful

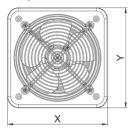
effects to humans and the environment from the risk caused by hazardous components this product may contain. The household plays an important role in contributing to reuse and recovery, including recycling, of used up appliances, and it is the stage where attitudes are created that impact the preservation of the common being the clean natural environment. Households are among the leading consumers of small appliances and equipment. A rational management of operation and disposal of small appliances and equipment will contribute to efficient recycling.

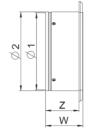
Rys.1 / Fig.1 / Изобр.1 / Obr.1

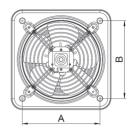




Rys.3 / Fig.3 / Изобр.3 / Obr.3

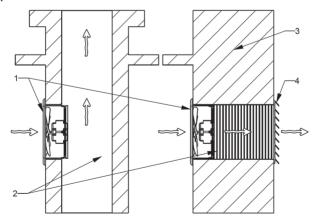






| INDEX / ИНДЕКС | Ø1  | Ø2  | Α   | В   | Х   | Υ   | W   | Z   |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| WO200          | 200 | 210 | 220 | 220 | 280 | 280 | 125 | 110 |
| WO250          | 250 | 260 | 255 | 255 | 330 | 330 | 125 | 110 |
| WO315          | 315 | 325 | 320 | 320 | 410 | 410 | 125 | 110 |

Rys.4 / Fig.4 / Изобр.4 / Obr.4



- 1. Wentylator WO / WO axial fan / Вентилятор WO / Ventilátor WO / Ventilátor WO
- 2. Kanał wentylacyjny / Ventilation duct / Вентиляционный канал / Ventilační kanál / Ventilačný kanál
- 3. Ściana zewnętrzna / External wall / Внешняя стена / Vnější stěna / Vonkajšia stena
- Kratka wentylacyjna wywiewna / Exhaust air grille / Вытяжная вентиляционная решетка / Výstupní ventilační mřížka / Výstupná ventilačná mriežka.



Producent / Manufacturer / Производитель / Výrobce / Výrobca:

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