INSTALLATION & OPERATING INSTRUCTIONS

Aura-eco

100mm & 150mm Axial Fans

AIRFLOW™

AIRFLOW eco air RANGE

Introduction

This Service Instructions are combined with technical specification, operating guide and specification for the “Aura-eco ” fan; it contains information on installation, that are important for ensuring correct and safe operation of the fan.

Designation

Fans are designed for ventilation of domestic and similar premises (apartments,offices,stores,garages,kitchens, bathrooms, toilets and other rooms, heated in wintertime).
Fans are exhaust fans and are designed for wall or ceiling mounting (Fig.6,7).
They are designed for a long-duration operation, without disconnection from the power network.
The fan design is being constantly improved therefore some models may slightly vary from those described in the present specification.

Set of supply

The following article is included:
- Fan 1pc;
- User's manual;
- Screws 4 pcs.
- Packing box

The fan arrangement with the timer or with a timer and a humidity sensor is shown at the Fig. 1

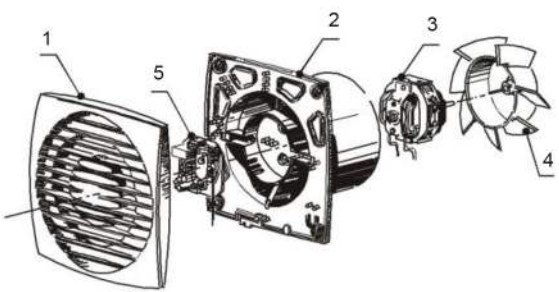


Fig.1

1-cover, 2-casing, 3-electric motor
4-blade impeller, 5-timer.

The options arrangement of the fans is given in the table 1.

Table 1

	B	T	HT	PRT
Adjustable timer (2-30) minutes		✓		
Timer with humidity sensor			✓	
Timer with motion sensor				✓

Key features

The fans' designation, their characteristics, appearance, overall and connection dimensions are listed in the tables 2,3 and at the Fig. 1,2. The fans are designed for the connection to the AC network with the voltage of 220-240 V and current frequency of 50 Hz.

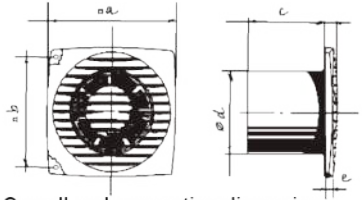
Table 2

Max. air intake, m^3/h	Max. pressure, Pa	Nominal power, W	Noise level, dBA
60	35	6	26
235	86	20	35

The fans are designed for use in the premises with temperature from 0°C to 45°C.
The fans do not interfere with radio, television and video equipment.

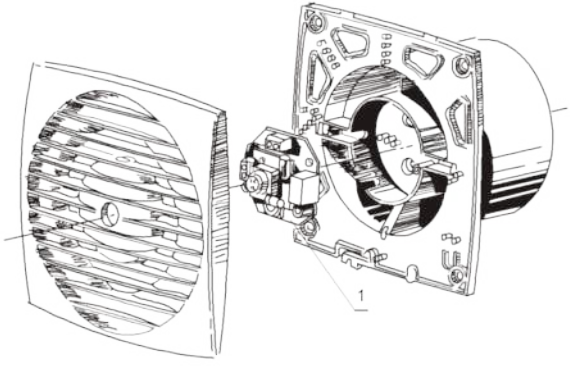
Table 3

Type	Dimensions,					Weight, kg
	a	b	c	d	e	
Aura eco-air 100	150	122	102	100	17	0,56
Aura eco-air 150	205	174	124	150	19	0,9



Overall and connection dimensions

Fig. 2



1- Timer with motion sensor

Fig. 3

SAFETY REQUIREMENTS

The fan "Aura-eco" complies with the requirements according to the EU norms and directives.
Level of protection from access to hazardous parts and waterproof is to IPX4
Connection of fans supplied with the electric cords to power supply as well as replacement of electric cord should be perfomed by a competent person (Part P) and in accordance with latest IEE wiring regulations. A 3 amp fused isolator should be fitted.
Fan operation beyond the operational temperature range as well as in rooms with ambient air containing aggresive mixture is prohibited.
Precautions must be taken to avoid the black -flow of gases into the room from the open flue of gas or other fuel-burning appliances.

Attention:

Ensure impeller rotates freely. Do not overtight on ductwork connections to fan spigot.
Precautions must be taken to avoid the black -flow gases into the room from the open flue of gas or other fuel-burning appliances.

PREPARATION OF DEVICE OPERATION

Attention:

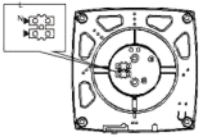
All work must be carried out with the equipment fully isolated from the power supply. The electrical connection is to be carried out in accordance with the relevant wiring diagram and are only to be done by a certified electrician. The electrical connection must be fully isolated from the supply up to the final assembly!

All relevant safety regulation, national standards and norms are to be adhered to. An appliance is required for cut off from the supply with a minimum of 3mm contact opening of each pole.

The rated voltage and frequency must correspond with the data on the type plate. The insertion of mains supply cable is carried out via a cable grommet which is included in the delivery. Never lead cable over sharp edges. The equipment corresponds to protection IPX4.

Diagrams of the connection to electric supply

Diagram of the connection of “Aura-eco” fan without built-in switch, where B is an external switch



connection of “Aura-eco” fan 100/150 B

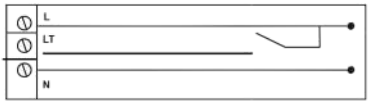
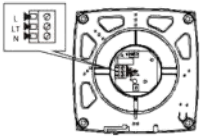
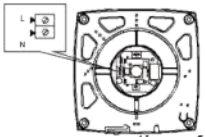


Diagram of the connection of “Aura-eco” fan with timer / timer with humidity sensor, with built-in switch



connection of “Aura-eco” fan 100/150 T, HT

Diagram of the connection of “Aura-eco” fan with timer / timer with motion sensor, without built-in switch



connection of “Aura-eco” fan 100/150 PRT

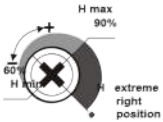
USER MAINTENANCE AND SENSOR ADJUSTMENT

Before starting work ensure the fan is disconnected from the power supply.

Cleaning should be done with a soft cloth wet with soap solution; after that, the surfaces should be rubbed dry. The blades of the fan need careful cleaning each 6 months. For this purpose, it is necessary to take the blade wheel off the motor shaft (holding it by the boss). The blades should be cleaned with solution of water and a detergent. Please avoid water entry on the motor.

Fig. 5.1

The fan with timer options switches on when the voltage is supplied to clamp LT. After the voltage is disconnected the fan continues working during the time T, which is regulated from 2 till 30 minutes. The time T is regulated by turning the potentiometer clockwise to increase and anticlockwise to decrease the delay time (Fig. 5.1)



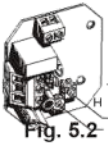


Fig. 5.2

The fan with timer and humidity sensor switches on when voltage is supplied to clamp LT or when the definite humidity level (regulated from 60% till 90 %) is exceeded. After the voltage is disconnected or humidity level H is decreased, the fan continues working during the time set by timer T, which is regulated from 2 till 30 min. The options of time T and humidity H are regulated by turning the potentiometers T and H clockwise to increase and anticlockwise to decrease the delay time and humidity level respectively. To set the maximum humidity level the potentiometer H has to be set in position H max (90%).

Attention! If during the regulation the potentiometer H is set outside of the indicated zone rightwards from H max there is a probability that the fan will not switch on. In this case, it is necessary to check the position of the potentiometer (Fig. 5.2).

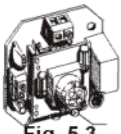


Fig. 5.3

The fan with the timer and movement sensor switches on when a person moves at the distance from 1 till 4 meters with viewing angle of the sensor of 100° horizontaly. After the person stops moving the fan continues working during the set time T, which is regulated from 2 till 30 minutes. The time T is regulated by turning the potentiometers clockwise to increase and anticlockwise to decrease the delay time (Fig. 5.3)

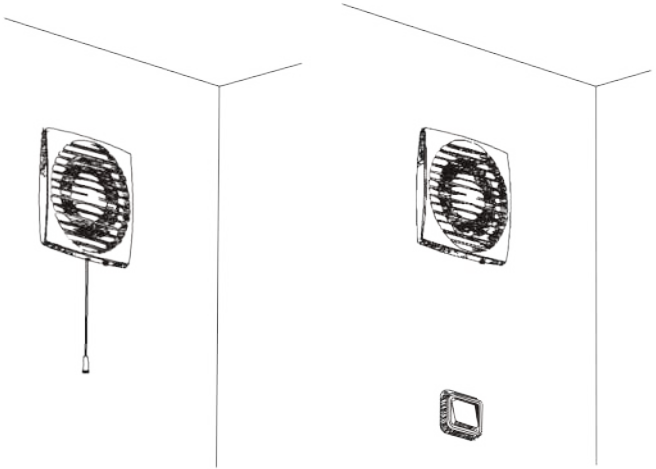


Fig. 6

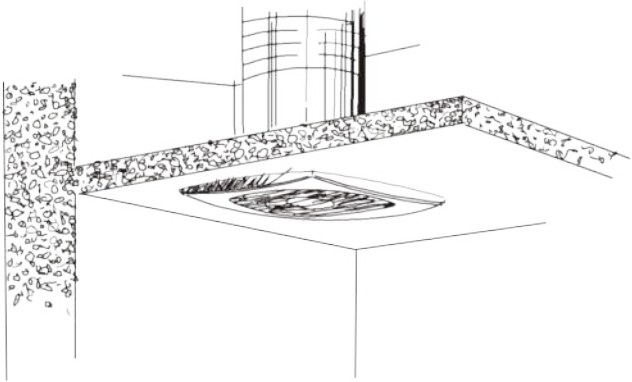


Fig. 7

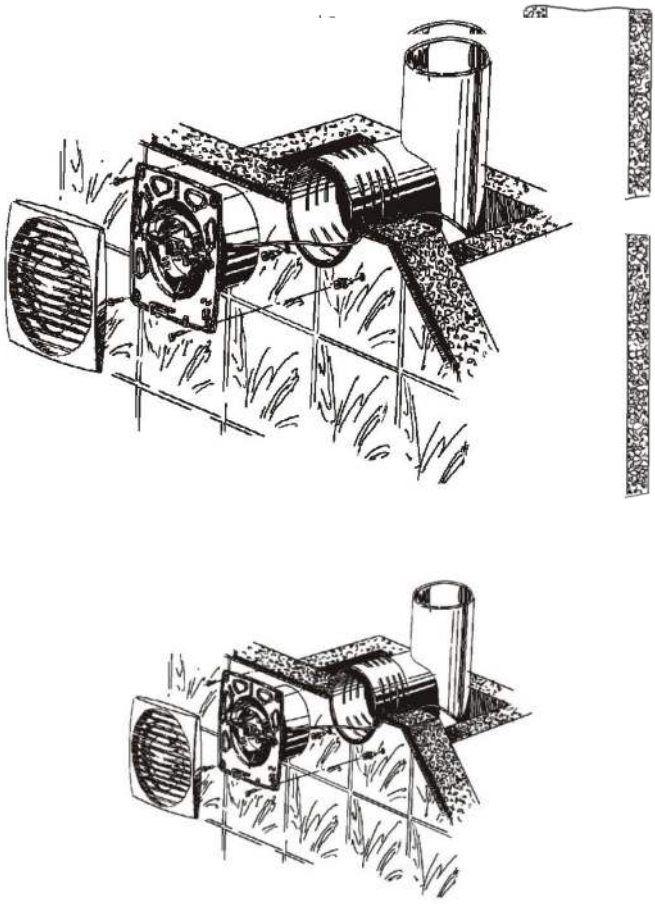


Fig. 9

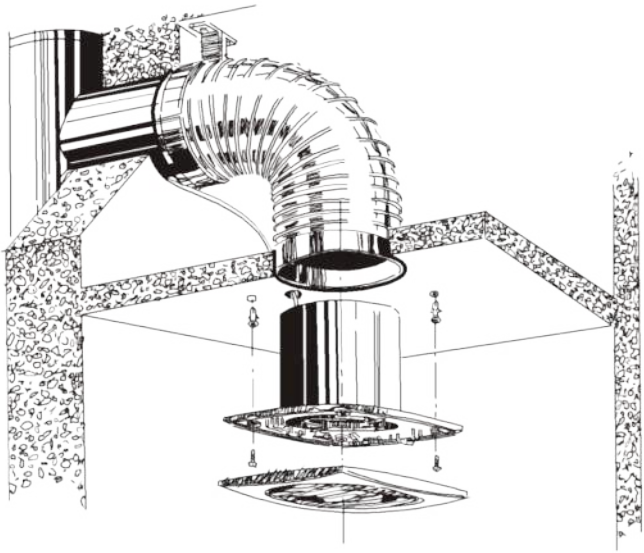


Fig. 10

Warranty:

Applicable to units installed and used in the United Kingdom

Airflow guarantees the Aura eco-air for 2 years. The guarantees can be upgraded to 3 years upon registering on our website airflow.com from date of purchase against faulty material or workmanship.

In the event of any defective parts being found, Airflow Developments Ltd reserve the right to repair or at our discretion replace without charge provided that the unit

1.) Has been installed and used in accordance with the fitting and wiring instructions supplied with each unit.
2.) Has not been connected to an unsuitable electrical supply.
3.) Has not been subjected to misuse, neglect or damage.
4.) Has not been modified or repaired by any person not authorised by Airflow Development Ltd
5.) Has been installed in accordance with Building Regulations (IEE wiring regulations).

Airflow Developments shall not be liable for any loss, injury or other consequential damage, in the event of a failure of the equipment or arising from or in connection with the equipment excepting only that nothing in this condition shall be construed as to exclude or restrict liability for negligence.

This warranty does not in any way affect any statutory or other consumer rights

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