



# SLIMAIRE/NA 12V and 230V Slimline Axial Fans

## Installation and Maintenance

### SLIMAIRE/NA Fans

The Nuaire slimline range of axial fans incorporates 12 models. These IPX4-Splashproof fans have been specifically designed to ventilate small rooms such as toilets, bathrooms, shower rooms, utility rooms and kitchens and are ideal for wall, ceiling or panel installation. The units extract directly to outside or through a short length of ducting.

### Fan Coding and range

SLIMAIRE/NA 100/150	Standard version operated by remote switch.
SLIMAIRE/NA 100PC/150PC	Standard version operated by pull cord.
SLIMAIRE/NA 100T/150T	With integral overrun timer - the fan should be operated by a remote switch which can also serve to switch the room light on and off. After the light is switched off, the fan will continue to operate for a minimum of 3 minutes (adjustable to a maximum of 25 minutes) by turning the trimmer (Fig 5) in a clockwise direction.
SLIMAIRE/NA 100HT/150HT	With integral humidistat and overrun timer - the adjustable, electronic humidistat is pre-set so that the fan will operate automatically when the moisture content in the room reaches a pre-set level of relative humidity. The fan will continue to run until the relative humidity falls below the pre-set level. This level can be adjusted by turning the trimmer (Fig 6) on the fan. This fan can be operated by a remote switch or light switch allowing operation of the fan independently of the humidistat. The overrun timer, which will <b>always</b> make the fan continue to operate for the pre-set length of time even after it has been manually switched off, can be adjusted as described above.
SLIMAIRE/NA 100PIR/150PIR	With integral sensor and overrun timer - the fan will start to operate automatically when it detects the presence of a person. After the room is vacated, the fan will continue to operate for a minimum of 3 minutes (adjustable to a maximum of 25 minutes) by turning the trimmer in an anti-clockwise direction (Fig 7).
SLIMAIRE/NA 100-12 12V version	This version <b>must</b> be installed using the remote transformer supplied (see current IEE Regulations for guidance).
SLIMAIRE/NA 100T-12 12V version	With integral overrun timer adjusted as above. This version <b>must</b> be installed using the remote transformer supplied (see current IEE Regulations for guidance).

Note: A neon indicator is incorporated on the front of some models to indicate that the fan is operating.

#### IMPORTANT

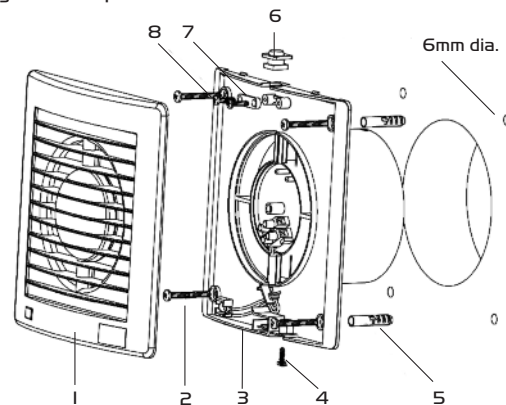
Isolation - Before commencing work make sure that the unit is electrically isolated from the mains and switched live supply.

### Fan Installation

Installation should be carried out by competent personnel in accordance with the appropriate authority and conforming to all statutory and governing regulations.

The product should not be used in an ambient temperature higher than 40°C (104°F) and should not be exposed to atmospheric agents (rain, sun, snow, etc). The product or any part of it should not be placed in water or other liquids.

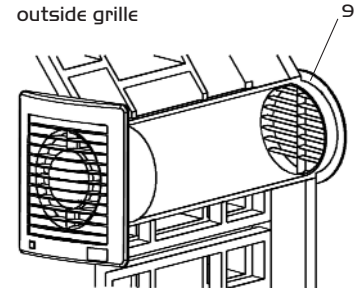
Figure 1. Components



#### Component Key

1. Front Cover
2. Wall Fixing Screws
3. Motor Fan Assembly
4. Front Cover Fixing Screw
5. Wall Plug
6. Cable Grommet
7. Cable Clamp
8. Cable Fixing Screws (by others)

Figure 2. Wall Installation with outside grille



### Siting Information

1. Remove the fan from the box, taking care to dispose of the packing material properly.
2. Check the location of existing wiring for ease of connection and that the voltage and frequency correspond with those marked on the fan rating label.
3. For optimum performance site the fan a minimum of 2.3m above ground level and should be away from a heat source (e.g. a heater), any direct light (sunlight, lamp etc) or any air conditioning unit. Care should be taken to ensure that the sensor (PIR unit) is free of any obstruction (such as a cupboard).
4. **LV models** must be installed using the remote transformer, which should be sited outside the scope of any water source (see current IEE Regulations for guidance).
5. The fan must not be used in an ambient temperature higher than 40°C.
6. Use the appropriate size core cutter to obtain a hole diameter of 100mm or 150mm in the wall/ceiling allowing if necessary for the thickness of any ducting to be used.
7. The fan must not be exhausted into a duct which is already used for any other purpose (see Approved Document F1 2006 for guidance).

- B. Dismantle the fan:**
- Remove the front cover (1) by unscrewing front fixing screw (4).
  - Using the Motor Fan Assembly (3) of the fan as a template, mark the hole drilling positions to fix the fan to the wall or ceiling.
  - Drill the fixing holes and using the wall plugs and long screws provided, fix the Motor Fan Assembly (3) to the wall/ceiling.

Figure 3. Top cable knockout & cable grommet

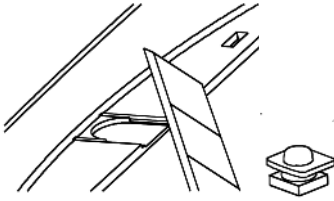
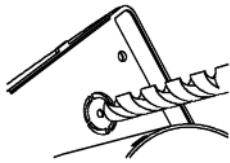


Figure 4. Rear cable knockout



**9. Note:** Before fixing the fan to the wall/ceiling, decide whether to have the cable entering the fan through the knocked-out hole on the top of the Motor Fan Assembly or through the back of the Motor Fan Assembly. In the first case the included cable clamp and grommet will need to be used. In the second option the cable entry hole will need to be knocked out.

**10.** With the front cover removed connect the mains supply cable to the terminal block then replace front cover of the Fan.

## Timer and humidistat adjustment

Figure 5. Timer adjustment for "T" models

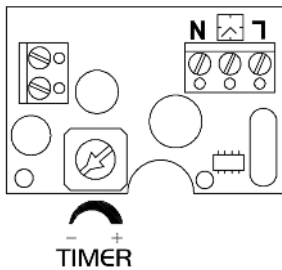


Figure 6. Humidistat/Timer adjustment for "HT" models

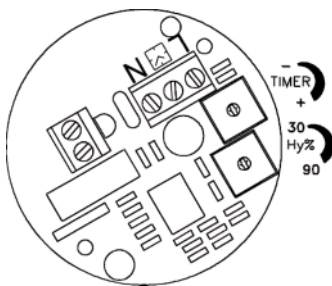


Figure 7. Timer adjustment for "PIR" models

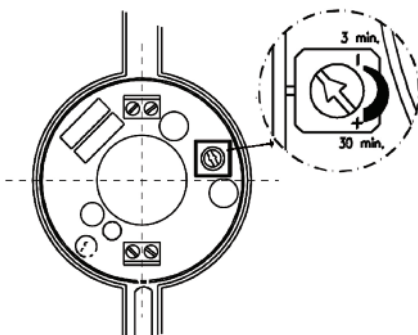
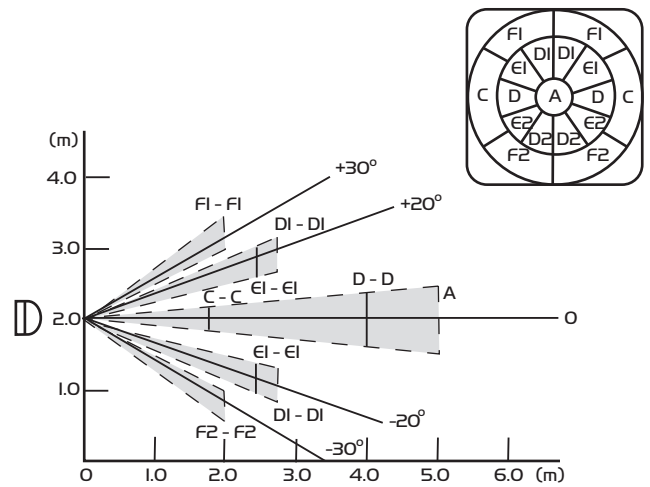
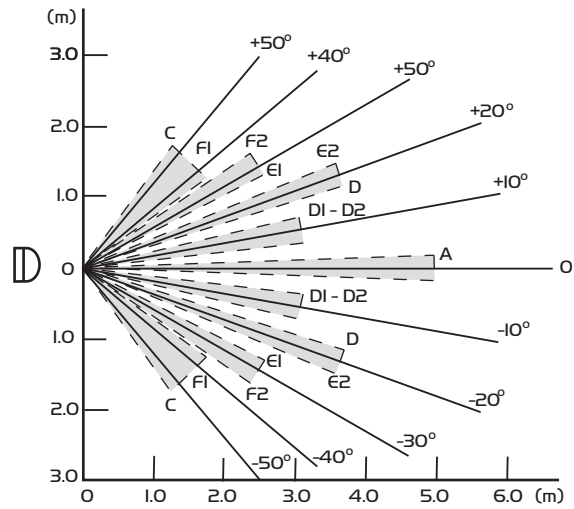


Figure 8. "PIR" Detection Area



**IMPORTANT**  
Isolation - Before commencing work make sure that the unit is electrically isolated from the mains and switched live supply.

## Performance details

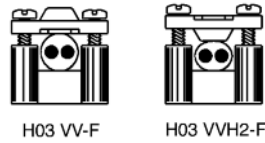
Model	m <sup>3</sup> /hr	Pa	W	dBa @3m
SLIMAIRE/NA 100 230V	95	24	11	40
SLIMAIRE/NA 150 230V	290	67	26	49

## Wiring details

It is recommended that the installation be carried out by a qualified electrician.

All electrical connections must comply with current IEE wiring regulations. The fan is a fixed appliance, and the electrical supply must therefore be by a fixed wired and fused (3 amp) spur incorporating a double or triple pole switch with contact openings of at least 3mm. Use twin conductor cable of at least 1mm<sup>2</sup> in section (see Fig 9).

Figure 9. Twin conductor cable



The fan is double insulated and does not require earthing. The fan complies with current electrical safety regulations (IE64, CENELEC 384), including EEC Directive EMC2004/108/CE concerning the suppression of radio interference and electromagnetic compatibility, and LVD2006/95/CE. The fan must not be used as a switch for water heaters, stoves etc. The printed circuit board in these fans has been protected to make it compatible with the majority of fluorescent fittings available on the market today. However, it is impossible to be aware of all new products introduced. We suggest, therefore, that you contact your supplier to establish the compatibility of any fluorescent fittings you intend to use.

Figure 10. SLIMAIRE/NA 100/150 with remote switch.

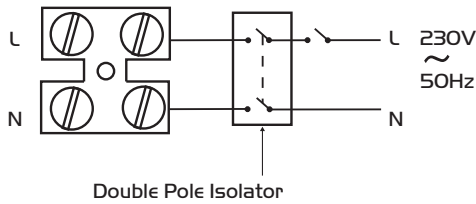


Figure 11. SLIMAIRE/NA 100PC/150PC with pullcord.

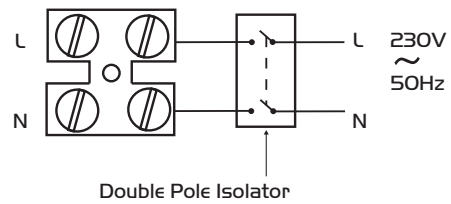


Figure 12. SLIMAIRE/NA 100T/100HT/150T/150HT via light switch/ remote switch.

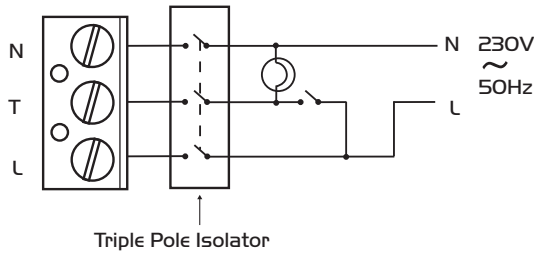


Figure 13. SLIMAIRE/NA 100/150HT and PIR with Humidistat and Integral sensor only.

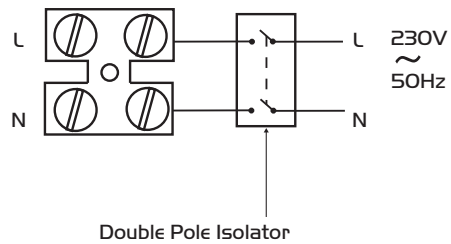


Figure 14. SLIMAIRE/NA 100-12 Must be installed with remote transformer.

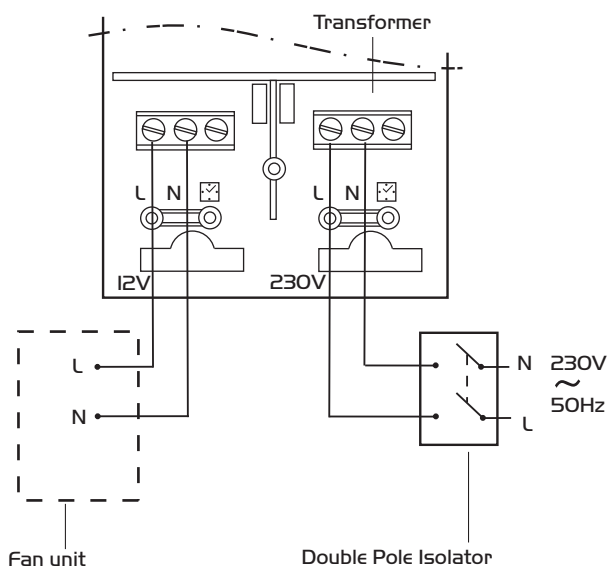
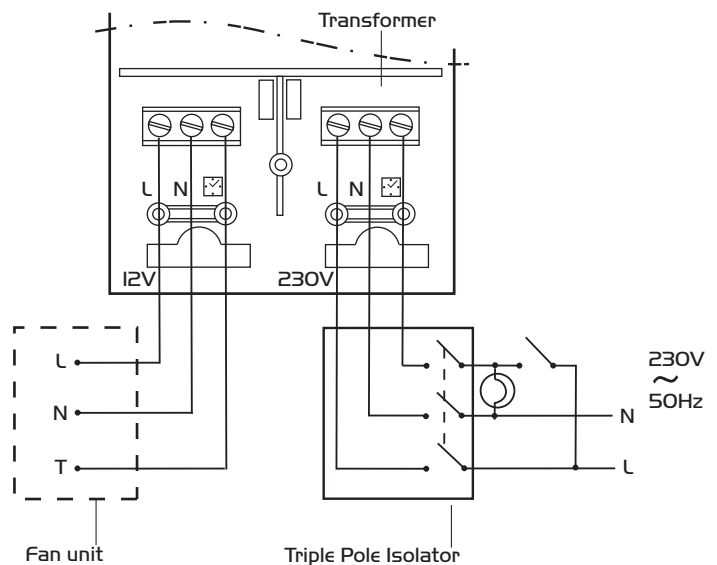


Figure 15. SLIMAIRE/NA 100T-12 via light switch (or remote switch). Must be installed with remote transformer.



## Maintenance

### General

Before any maintenance or cleaning operation, switch off the fan and disconnect from the main power supply.

The front cover can be cleaned with a dry cloth. Any other maintenance or cleaning should be carried out by properly qualified personnel.

The front cover can be removed and cleaned with water and a mild detergent using a soft cloth and the motor fan assembly can be cleaned with a dry brush or dry cloth. Ensure the unit does not come into contact with any kind of liquid or solvent. If this should occur, contact a qualified technician before reassembling the fan.

**Note: The motor does not require lubrication as it is maintenance free "sealed for life" type.**

## Replacement of Parts

Should any component need replacing Nuair keep extensive stocks for quick delivery. Ensure that the unit is electrically isolated, before carrying out any work. When ordering spare parts, please quote the serial number of the unit and the ARC number of the purchase if possible (This information is located on the fan label).

## Warranty

The 1 year warranty starts from the day of delivery.

## Service Enquiries

Nuair can assist you in all aspects of service. Our Technical Support department will be happy to provide any assistance required, initially by telephone and if necessary arrange for an engineer to call.

**Technical Support Department  
on 029 2085 8400**

## General Installation Precautions

Following these installation instructions will ensure the reliability of the product and extend its working life.

1. Remove the product from its packaging and make sure that it has not been damaged. If in doubt, contact the supplier, authorised dealer, service centre or manufacturer to check that the product will still operate correctly. Do not attempt to use or repair the product before doing this.
2. Do not leave packing material within the reach of children, unskilled people, or dump any hazardous parts into the environment (polystyrene, plastic, polypropylene, etc).
3. The use of any electrical product requires compliance with the basic rules which are listed below:
  - do not touch it with wet or damp parts of the body (e.g hands, feet).
  - this product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the product by a person responsible for their safety. It should be sited where it is inaccessible to such people.
  - children should be supervised to ensure they do not play with the product.
4. The product should be connected to the mains electricity supply or electrical outlet only if:
  - the electrical voltage and frequency correspond to those shown on the rating label.
  - the capacity of the electricity supply is sufficient to operate the product at its maximum power.
  - suitable electrical protection must be provided for the product to be installed.
5. The electrical supply to which the fan is connected must comply with all existing regulations. All installations must comply with current IEE wiring regulations.
6. Before maintenance or cleaning is carried out, the product must be switched off and disconnected from the mains electricity supply.
7. If a fault, malfunction or anomaly of any type occurs, the fan should be isolated (by turning off the switch and disconnecting it from the mains electricity supply) and advice sought from qualified personnel.
8. Always request original spare parts to effect any repairs.
9. If the product needs to be removed, turn off the mains supply circuit-breaker and then disconnect the fan.
10. The fan **MUST BE** installed as detailed in this document.

## Special Precautions

1. This product is professionally manufactured and complies with the current standards regarding electrical equipment.
2. The product complies with the Low Voltage Directive and with EC Directive EMC 204/108/CE for the Suppression of Radio Interference.
3. Routine maintenance as described below should be carried out to ensure the condition of the fan.
  - To reduce the risk of fire, do **not** use the product in the presence of flammable substances or vapours such as alcohol, oil, kerosene, petrol, etc.
  - For fumes being extracted must be clean and free from dust particles, soot, chemical and corrosive agents, oil, gas or explosive mixes (If these substances are to be extracted, contact an authorised dealer for specific range of explosion-proof products).
4. The product must be connected to the electricity supply via a double pole switch of a suitable size, with contact openings of at least 3 mm.
5. If the electrical supply board (or switching device) is located some distance from the fan a means of local isolation must be provided.
6. To ensure optimum operation, do not block the air intake and exit vents.
7. Any ducting used must be free of blockages.
8. The room where the product is operating must have adequate air replacement to ensure maximum effectiveness.
9. If the product is sited in a room containing a fuel burning appliance which is not of the balanced flue type, the installer must ensure that air replacement is adequate both for the fan and the fuel burning appliance.
10. The product must **not** be used as an activator for water heaters, stoves, etc.
11. The product must **not** exhaust into ducts designed to evacuate fumes from combustion in stoves or other combustion-powered devices.

Nuair NA and Slimline

Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.