

NALAF

In-line Acoustic Single Fans

Installation and Maintenance

CE The EMC Directive 2014/30/EU
The Low Voltage directive 2014/35/EU

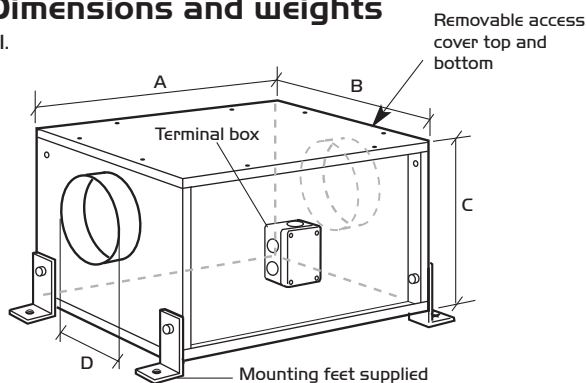
Introduction

The Nuair NALAF range of single fans consists of seven models with duties up to a maximum of 1.2m³/s. Manufactured in acoustically lined galvanised steel with a natural finish units are rectangular in section with rigid circular inlet and outlet spigots.

A matched range of ancillaries is available to complement and aid the installation i.e. silencers, filters, heaters, AV mounts, speed controls etc. **contact us on 029 2085 8585 for details.**

I.O Dimensions and weights

Figure 1.

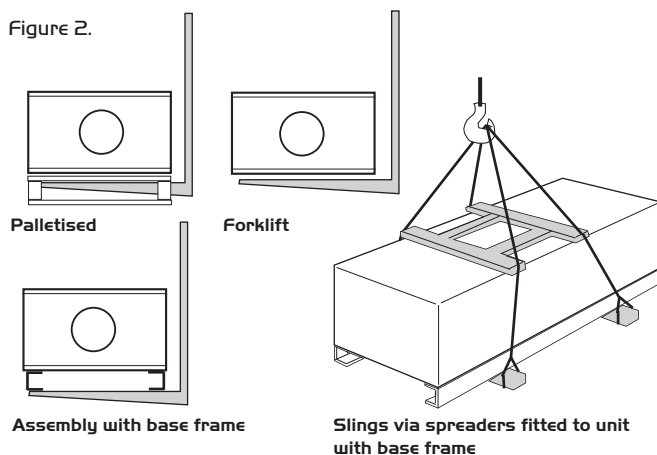


Fan Code	A	B	C	D	Weight Kg
NALAF125	300	365	285	125	10.0
NALAF150	300	480	285	150	18.0
NALAF200	450	370	370	200	22.0
NALAF250	540	540	430	250	36.0
NALAF315	540	540	540	315	38.0
NALAF400	540	540	540	400	40.0
NALAF500	875	965	680	500	90.0

2.0 Handling

Always handle the units carefully to avoid damage and distortion, if mechanical aids are used to lift the unit employ spreaders and slings.

Figure 2.



3.0 Installation and General Advice

Installation must be completed by competent personnel in accordance with good industry practice, the appropriate authority and in conformance with all statutory and governing regulations i.e. CIBSE, HVCA, ATEX, BSI & EN standards etc.

4.0 Mechanical Installation

The method of mounting is the total responsibility of the installer.

Before commencing the installation ensure that all parts and material required to complete the work are to hand. Remove the unit lid and ensure all packaging, literature and any included ancillary are removed, gently rotate the fan impeller by hand to ensure free rotation.

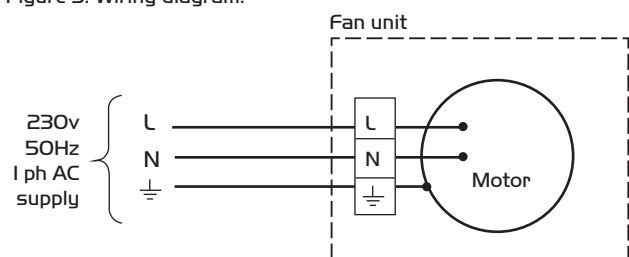
Using the mounting feet supplied, the unit can be installed at any angle and at any position conducive to system design. Observe the unit weight before lifting and the air directional arrows on the unit rating plate before positioning and connecting to duct work.

5.0 Electrical connection

Size and install the electrical wiring observing the table of electrical data, provide local electrical isolator and appropriately rated fuse protection. Connect to the fan side termination box provided.

Where Nuair ancillaries such as speed control or overrun timers are included observe the appropriate device wiring diagrams.

Figure 3. Wiring diagram.



Electrical Data

Fan Code	Phase	RPM	Watts	amps f1c	amps sc
NALAF125	1	2040	83	0.7	0.8
NALAF150	1	1260	97	0.6	0.8
NALAF200	1	1260	230	1.6	2.3
NALAF250	1	1260	330	1.6	2.3
NALAF315	1	1020	730	2.7	4.5
NALAF400	1	1200	1200	6.0	9.6
NALAF500	1	960	1693	8.0	14.0

IMPORTANT

Isolation - Before removing panels
make sure that the unit is electrically isolated from
the mains supply.

6.0 Setting to work

Ensure all mechanical and electrical fixings are secure and that the ductwork is free of any obstruction or debris.

Switch the fan on:

- **Ascertain correct direction of airflow by comparing with the directional label.**
- **Check full load and starting currents, compare with the rating plate.**
- **Check for vibration**

Where speed control or other control method is used check and confirm the control functionality with the appropriate data sheet.

7.0 Maintenance

Isolate the unit before removing any panels, only appropriately qualified personnel should carry out routine and preventative maintenance on this product.

Motors are fitted with 'sealed for life' and therefore require no lubrication. The unit should be examined three months from commissioning and twelve-monthly thereafter as dictated by the levels of contamination seen.

During such maintenance check all fixings for security and remove all dust and dirt residue taking care not to damage impeller or dislodge balance weights. Remove stubborn dirt with warm soapy water, do not use any caustic fluids.

8.0 Replacement of Parts

Nuair keep extensive stocks of spares for quick delivery, when ordering be sure to quote unit model code, serial number, ARC number etc. all available from the fan side rating plate.

9.0 Warranty

The one-year warranty starts from day of delivery and includes parts and labour.

This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled, or not installed, commissioned and maintained in accordance with the details contained in this manual and general good practice.

The product warranty applies to the UK mainland and in accordance with Clause 14 of our Conditions of Sale. Customers purchasing from outside of the UK should contact Nuair International Sales office for further details.

10.0 After Sales Enquiries

For technical assistance or further product information, please contact the After Sales Department.



Telephone 02920 858 400

DECLARATION OF INCORPORATION AND INFORMATION FOR SAFE INSTALLATION, OPERATION AND MAINTENANCE

We declare that the machinery named below is intended to be assembled with other components to constitute a system of machinery. The machinery shall not be put into service until the system has been declared to be in conformity with the provisions of the EC Machinery Directive.

Designation of machinery: IN-LINE SINGLE FAN
 Machinery Types: NALAF
 Relevant EC Council Directives: 2006/42/EC (Machinery Directive)
 Applied Harmonised Standards: BS EN ISO 12100-1, BS EN ISO 12100-2, EN294, EN60204-1, BS EN ISO 9001
 Applied National Standards: BS848 Parts One, Two and Five
 Note: All standards used were current and valid at the date of signature.

Signature of manufacture representatives:

Name:	Position:	Date:
1) C. Biggs 	Technical Director	20. 07. 07
2) A. Jones 	Manufacturing Director	20. 07. 07

INFORMATION FOR SAFE INSTALLATION, OPERATION AND MAINTENANCE OF NUAIRE VENTILATION EQUIPMENT

To comply with EC Council Directives 2006/42/EC Machinery Directive and 2004/108/EC (EMC).

To be read in conjunction with the relevant Product Documentation (see 2.1)

1.0 GENERAL

1.1 The equipment referred to in this Declaration of Incorporation is supplied by Nuairé to be assembled into a ventilation system which may or may not include additional components.

The entire system must be considered for safety purposes and it is the responsibility of the installer to ensure that all of the equipment is installed in compliance with the manufacturers recommendations and with due regard to current legislation and codes of practice.

2.0 INFORMATION SUPPLIED WITH THE EQUIPMENT

- 2.1 Each item of equipment is supplied with a set of documentation which provides the information required for the safe installation and maintenance of the equipment. This may be in the form of a Data sheet and/or Installation and Maintenance instruction.
- 2.2 Each unit has a rating plate attached to its outer casing. The rating plate provides essential data relating to the equipment such as serial number, unit code and electrical data. Any further data that may be required will be found in the documentation. If any item is unclear or more information is required, contact Nuairé.
- 2.3 Where warning labels or notices are attached to the unit the instructions given must be adhered to.

3.0 TRANSPORTATION, HANDLING AND STORAGE

- 3.1 Care must be taken at all times to prevent damage to the equipment. Note that shock to the unit may result in the balance of the impeller being affected.
- 3.2 When handling the equipment, care should be taken with corners and edges and that the weight distribution within the unit is considered. Lifting gear such as slings or ropes must be arranged so as not to bear on the casing.
- 3.3 Equipment stored on site prior to installation should be protected from the weather and steps taken to prevent ingress of contaminants.

4.0 OPERATIONAL LIMITS

- 4.1 It is important that the specified operational limits for the equipment are adhered to e.g. operational air temperature, air borne contaminants and unit orientation.
- 4.2 Where installation accessories are supplied with the specified equipment e.g. wall mounting brackets. They are to be used to support the equipment only. Other system components must have separate provision for support.
- 4.3 Flanges and connection spigots are provided for the purpose of joining to duct work systems. They must not be used to support the ductwork.

5.0 INSTALLATION REQUIREMENTS

In addition to the particular requirements given for the individual product, the following general requirements should be noted.

- 5.1 Where access to any part of equipment which moves, or can become electrically live are not prevented by the equipment panels or by fixed installation detail (eg ducting), then guarding to the appropriate standard must be fitted.
- 5.2 The electrical installation of the equipment must comply with the requirements of the relevant local electrical safety regulations.
- 5.3 For EMC all control and sensor cables should not be placed within 50mm or on the same metal cable tray as 230V switched live, lighting or power cables and any cables not intended for use with this product.

6.0 COMMISSIONING REQUIREMENTS

- 6.1 General pre-commissioning checks relevant to safe operation consist of the following:
 Ensure that no foreign bodies are present within the fan or casing.
 Check electrical safety. e.g. Insulation and earthing.
 Check guarding of system.
 Check operation of Isolators/Controls.
 Check fastenings for security.
- 6.2 Other commissioning requirements are given in the relevant product documentation.

7.0 OPERATIONAL REQUIREMENTS

- 7.1 Equipment access panels must be in place at all times during operation of the unit, and must be secured with the original fastenings.
- 7.2 If failure of the equipment occurs or is suspected then it should be taken out of service until a competent person can effect repair or examination. (Note that certain ranges of equipment are designed to detect and compensate for fan failure).

8.0 MAINTENANCE REQUIREMENTS

- 8.1 Specific maintenance requirements are given in the relevant product documentation.
- 8.2 It is important that the correct tools are used for the various tasks required.
- 8.3 If the access panels are to be removed for any reason the electrical supply to the unit must be isolated.
- 8.4 A minimum period of two minutes should be allowed after electrical disconnection before access panels are removed. This will allow the impeller to come to rest.
NB: Care should still be taken however since airflow generated at some other point in the system can cause the impeller to "windmill" even when power is not present.
- 8.5 Care should be taken when removing and storing access panels in windy conditions.

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.