

Opus OK / Genie NKF1 Kitchen Extract Unit

NUAIRE

NuAire Limited
Western Industrial Estate Caerphilly,
Mid Glamorgan CF83 1XH
Telephone: 029 2088 5911
Facsimile: 029 2088 7033
Email: info@nuaire.co.uk
www.nuaire.co.uk

Leaflet 670525

MARCH 2002

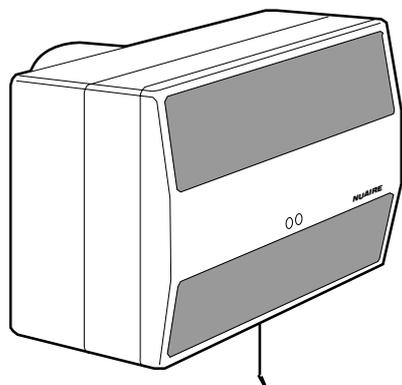


Fig. 1. General view of a surface mounted unit.

Introduction

Nuaire's Opus/Genie Kitchen extract fan is designed to be installed in the area to be ventilated. The unit may be surface mounted or semi recessed using the optional mounting flange kit.

Inlet is through two filters located on the front cover of the unit, which can be easily removed for cleaning. (Filters and front cover plus fixings are supplied bagged separately and are fitted during installation).

Exhaust air is discharged through a 100mm dia. spigot on the rear of the unit.

The Opus/Genie Kitchen unit has two speeds; 'Low', 'Boost' and an 'Off' position. Manual operation is by a pull cord. 'Low' and 'Boost' speeds can be selected by successive pulls, a third pull returns the unit to the 'Off' position.

The unit extracts 74 l/s on full speed and 35 l/s on low speed. A single (full) speed model without pull-cord for remote operation via a light switch or similar (not supplied) is available. See Coding on page 4.

A two speed unit is available for remote operation via a two speed, on/off switch (supplied).

An optional humidity control may be specified. When supplied with this option the unit continuously monitors the relative humidity (RH) within the kitchen. The humidistat sensor is located within the unit case, behind the front cover. The point at which the fans operate can be adjusted to suit the individual installation. At any time the unit can be manually over-ridden so that the 'Low' and 'High' settings may be selected independently of the Humidity control. See 'Humidistat Installation & Adjustment' page 3. When triggered, the RH sensor operates the fan on 'Boost' until the RH returns to below its set point. Control then reverts to the manual position chosen previously. The two speeds are visually indicated by twin LED's on the front panel.

A unit with an integral humidistat override is available. The units speeds are selected by a bell push switch (supplied).

IMPORTANT WARNING



Installation and servicing **MUST** be carried out by electrically qualified personnel. The unit **MUST BE TOTALLY ISOLATED** from the electrical supply before removing covers. **NOTE** internal input socket will be exposed and may be live with the fan module removed. See 'ISOLATION' note on page 3.



Contents

Introduction

Typical arrangements

Installation

Adjustment

Dimensions

Maintenance

Electrical

IMPORTANT!

This unit is **NOT** designed for installation directly above a cooker or hob unit
WARNING!

Typical arrangements

Mounting in wall or ceiling.

Fig. 2a Surface mounting
(standard)

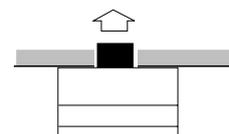
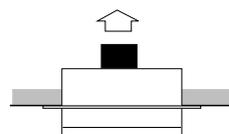


Fig. 2b Semi-recessed version
(order optional fixing kit)



Installation (Surface Mounting)

NOTE:

Before commencing work isolate the electrical supply.

It is assumed that a solid non-reverberant mounting position has been selected, and the necessary passages for ductwork as well as the electrical connection have been prepared. It is also assumed that compatible ductwork is already installed.

Withdraw the fan module from the case. Remove the relevant cable entry position in the back of the casing. The front cover and filters are bagged separately with fixings and will be fitted during installation.

Support the case in the mounting position. Connect to the ductwork and feed the supply cable through the cable entry (see Fig. 3).

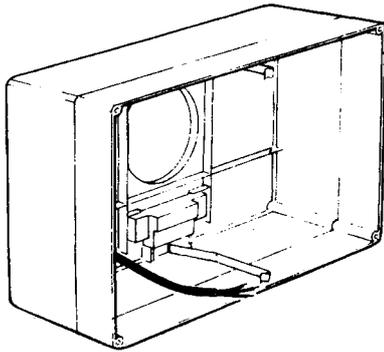


Fig. 3. Cable entry

Secure the unit using three No.8 wood screws, drilling and plugging the mounting surface if necessary. Connect the wiring to the internal terminal block socket. (See diagram in electrical section). **NOTE: The terminal block socket can be removed (2 screws) to facilitate wiring**

Fit the fan module to the case, mating its plug fully with the internal socket. Lock with the spring clips. Feed the pull-cord through the nylon bush in the case bottom.

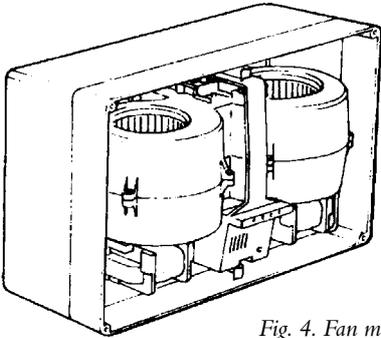


Fig. 4. Fan module in position.

Fit the cover (supplied bagged with 4 screws and filters). Fit filters into front cover recesses and test run the unit as follows:

Switch on supply. Pull cord once- the green LED should light indicating 'Low' speed. Pull cord once again the red LED should also light indicating 'High' speed. A third pull on the cord returns the unit to the 'Off' position.

Installation (Semi Recessed Mounting)

Order fixing kit 770984

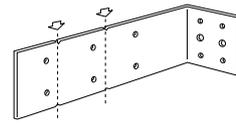
a) An opening should be prepared to accept the fan case plus a clearance of 5-10mm which will be necessary to allow for the fixing kit brackets. Therefore an area of 327mm x 245mm will be required. Care must be taken during this operation as an aperture larger than 335mm x 253mm will not be covered by the finishing skirt supplied in the kit.

The depth of the recess should be at least 25mm more than the dimension from the back of the unit to the rear face of the skirt.

It is assumed that a solid, non-reverberant mounting position has been selected, and the necessary passage for ductwork as well as the electrical connection have been prepared. It is also assumed that compatible ductwork has been installed.

To assemble the fixing kit mounting frame, attach the

b) three legs to the 'Y' shaped plate using the self tapping screws provided. (See Fig.5).



Cut legs to suit

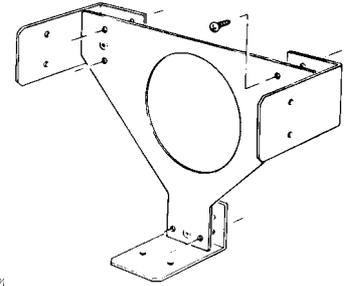


Fig. 5. Semi recess kit frame assem

Position the mounting frame in the prepared aperture so that the the ends of the bracket are flush with the mounting surface of the wall. Secure the mounting frame with suitable fixings.

- c) Note the front cover, 4 screws and 2x filters are bagged separately. Unclip and remove the fan module. Remove the four screws and special plates which retain the mid section of the case. **(Note the way the plates are fitted)** Remove the case mid section Knock out a suitable cable entry hole in the rear face of the case.
- d) Offer up the casing to the mounting frame, feeding the cable through the entry hole. Engage the outlet spigot in the ductwork and fix the case to the frame using the three screws supplied.
- e) Connect the wiring to the internal terminal block/ socket.
- f) Fit the fan module into the case, mating its plug fully into the case socket. Secure the module with the two spring clips.
- g) Holding the skirt in position against the case / wall surface refit the mid section of the case with the small plates and screws ensuring correct positioning of the plates. Pass the pullcord through the nylon bush in the case mid section.
- h) Fit the case front cover. Retain with the screws supplied. Fit the filters supplied into the cover recesses. Test run the unit.

Installing the unit into flatducting

It is assumed that the flat duct is already fitted with a plenum section incorporating a 100mm dia. spigot in the area of the proposed Opus/Genie kitchen fan.

Proceed as in steps (a), (b) & (c) in previous section.

Feed the 100mm flexible ducting (supplied) through the rear of the mounting frame and fit to the spigot on the flat duct plenum.

Offer up the case to the mounting frame and join the end of the flexible ducting to the outlet spigot using tape (not supplied, see Fig. 6).

Engage the outlet spigot in the ductwork and fix the case to the frame using the three screws supplied.

Continue as in steps (e) to (h) in the previous section.

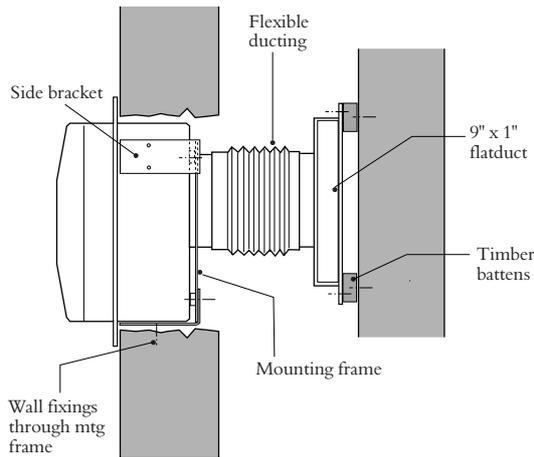


Fig. 6. Flat duct installation

Important Installation Note: Shutters

No backdraught shutter is fitted in the unit. We recommend the use of the outlet shutter (shown in dimension drawings). This shutter is available from your NUAIRE supplier as an optional extra.

Adjusting the Humidistat

(For units supplied with integral Humidistat option).

The humidistat is set to maximum at the factory to operate the unit. The trigger point at which the humidistat operates the unit should be adjusted to suit individual requirements of the area to be ventilated.

A rotary adjuster shaft (Fig 7) is located on the front of the motor control housing section inside the unit case. See installation section for case front removal/fitting details.

Assuming the Opus/Genie Kitchen is installed, switch off the mains power to the unit. Remove the front cover. Rotate the adjuster fully clockwise (fig. 7). Replace the cover and supply mains power to the unit. The timer will run for approximately 30 minutes and the fan will then stop. Slowly rotate the adjuster anti-clockwise until the fan operates. This is the ambient humidity setting within the room. Slowly rotate the adjuster clockwise a few degrees from this point. Check that the unit switches off at the new setting. From time to time the unit sensitivity will need adjusting due to changes in ambient conditions.

NOTE: The unit may be manually over-ridden at any time by use of the pull cord.

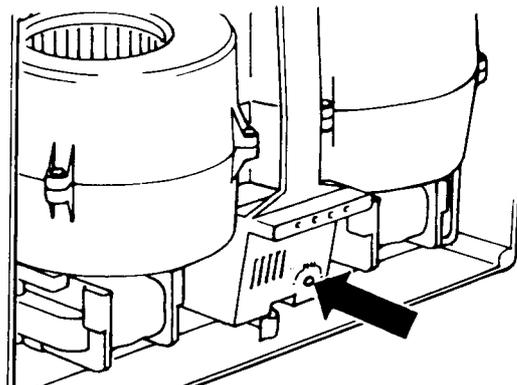


Fig. 7. Humidistat trigger adjustment.

Dimensions

Fig. 8a Opus/Genie Kitchen unit.

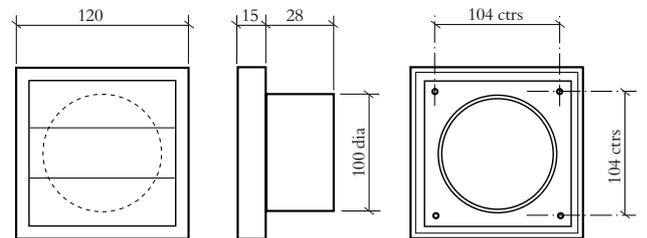
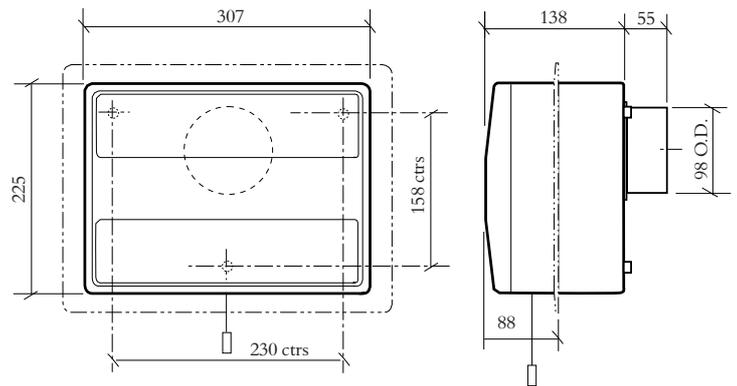


Fig. 8b Louvred Outlet Shutter.

Maintenance

Isolation

Ensure that the unit is totally isolated from the electrical supply. Switch off at the main junction box and also remove the relevant fuse.

General

It is inevitable that some dust, fluff etc. will pass through the filters which, if ignored, will build up internally on the motors and impellers, shortening the life of the unit, and in severe cases leading to overheating of the motors. Consequently, it is strongly recommended that all units are inspected and cleaned at least every six months. To clean the filters, remove them from the unit by pinching the filter strips on their corners and peeling them away from the case. Wash the filters in tepid water adding a little mild detergent. Shake out excess water and allow to dry naturally. Replace when dry.

Procedure

At all times take care not to damage, distort or disturb the balance of the impellers. Remove the cover as detailed earlier release the spring clips and withdraw the fan module. Inspect all parts.

Using a brush or dry cloth clean the backplate. Lightly brush away dust and dirt from the fan module. If stubborn, carefully remove with a suitable blade or scraper. Wash the cover in warm soapy water. Dry thoroughly. Refit the fan module, followed by the cover. Test / run.

Warranty

The plastic control box integral with the fan assembly is a sealed component. Breaking the seal will invalidate the guarantee. The unit is guaranteed for three years.

Electrical

	Low Speed	High Speed
Input Power	30 Watts	110 Watts
Full Load Running Current	448 mA	1.13 Amps
Starting Current	720 mA	2.20 Amps

Electronics: 48mA - 11Watts

Wiring diagrams

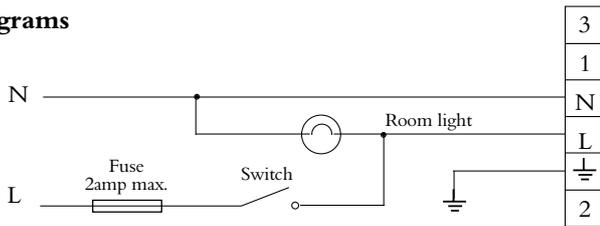


Fig.9 Unit ventilating one room. Single speed (room switch option, OK-STD only / NKF1STD only).

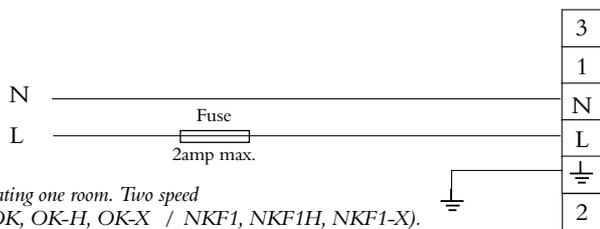


Fig.10 Unit ventilating one room. Two speed (pull-cord option OK, OK-H, OK-X / NKF1, NKF1H, NKF1-X).

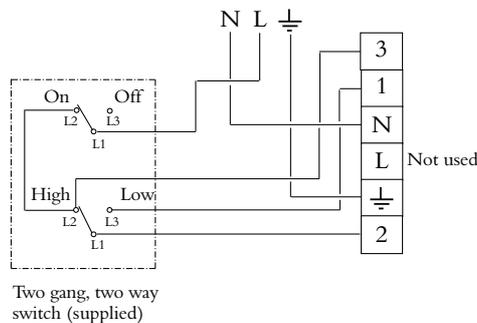


Fig.11 Unit ventilating one room. (Two speed remote switch option OK-RS / NKF1-RS).

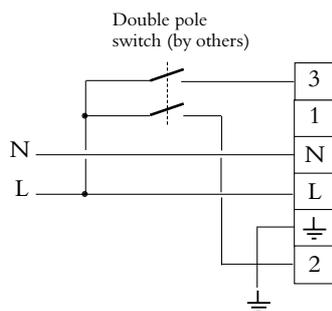


Fig.12 Unit ventilating one room. (Continuous trickle ventilation with boost via remote double pole switch OK-XR / NKF1-XR).

Note: Switch by others

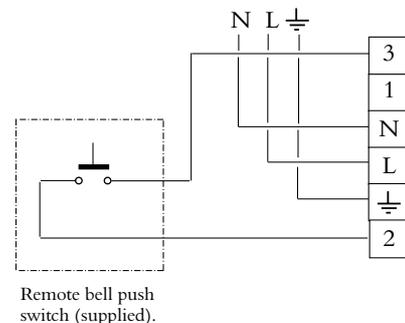


Fig.13 Unit ventilating one room, two speeds with integral humidistat. Remote mounted bell push switch. Humidistat overrides all switch positions

Coding

ITEM
MODEL

Kitchen Unit Two speed OK / NKF1

Kitchen Unit Single speed OK-STD / NKF1STD

Kitchen Unit, continuous trickle vent, boost by pull switch OK-X / NKF1-X

Kitchen Unit, continuous trickle vent, boost by remote switch* OK-XR / NKF1-XR

Kitchen Unit Two speed with integral Humidistat OK-H / NKF1H

Kitchen Unit Two speed remote operated c/w switch OK-RS / NKF1-RS

Kitchen Unit Two speed with integral Humidistat Remote bell push switch (supplied) overrides all internal switching OK-HX2R / NKF1-HX2R

Outlet Shutter NKF1 SHUT

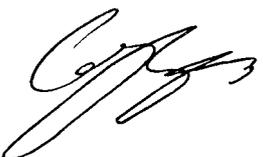
Fire Damper OPUS DAMPER

* Switch not supplied.

*We declare that the machine named below
conforms to the requirements of EC Council Directives
relating to Electromagnetic Compatibility and
Safety of Electrical Equipment.*

Designation of machinery :-	KITCHEN EXTRACT FAN
Machinery Types :-	OPUS OK / GENIE NKF1
Relevant EC Council Directives :-	89/336/EEC, 92/31/EEC (EMC) 73/23/EEC, 93/68/EEC (Low Voltage Directive)
Applied Harmonised Standards :-	EN55014-1, EN55014-2, EN60204-1 EN60335-2-80
Basis of Self Attestation :-	Quality Assurance to BS EN ISO 9001 BSI Registered Firm Certificate No. FM 149

Signature of manufacture representatives :-

	Name:	Position:	Date:
1)	 C. Biggs	Technical Director	2. 3. 00
2)	 W. Glover	Manufacturing Director	2. 3. 00

Service

As a manufacturer NuAire provides you with factory trained Service Engineers.

Our Engineers are supported by a comprehensive range of spare parts 'off the shelf.'

If you are an industrial or commercial user, you may be interested in details of NuAire's regular maintenance Service Contracts. This is a worthwhile service that helps you get the most from our products.

Our Service Department will be happy to give you more information.

Telephone: 029 2085 8585

Controls Application Service (CAS)

A team of Engineers and technicians is available to provide pre and post order support.

We are on hand to provide help and advice from the most basic use of any NuAire equipment to the more complex applications, maximising on the versatility of our control products.

Telephone: 029 2085 8585

Facsimile: 029 2085 8586

3 Year Warranty

The three year warranty starts from the date of delivery and includes parts and labour for the first year.

The labour element is subject to full, free and safe access to the equipment as recommended by the CDM regulations.

The remaining two years covers replacement parts only.

NOTE:

Installation & Maintenance of the equipment must be as directed in the instructions provided with the unit.

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 alterations without prior notice.

NUAIRE

Western Industrial Estate, Caerphilly,
United Kingdom. CF83 1XH
Tel: 029 2088 5911, Fax: 029 2088 7033
Email: info@nuaire.co.uk
www.nuaire.co.uk

NB

If you have any comments or queries on any of our products or services please write to the Product Information Manager at the main address opposite