

## OPUS 30 and 60

### Duct Mounted ('M' range) Domestic Extract Fans

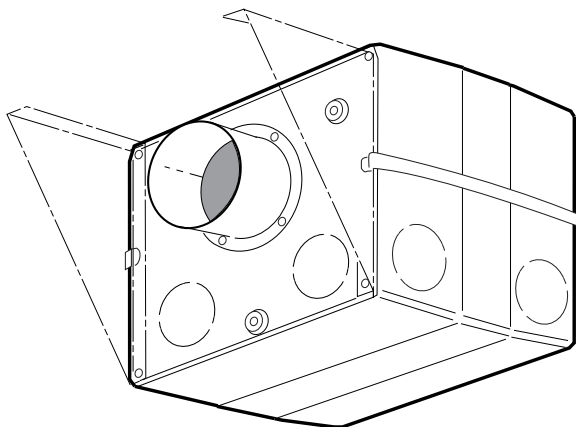


Fig. 1 General view Opus 60M

### Introduction

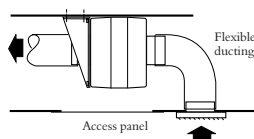
NuAire's OPUS 30 & 60 range of duct mounted domestic extract fans are designed to extract small volumes of air through 100 mm dia. pipes, with provision for adding a 50 mm dia. subsidiary unit to extract air simultaneously from a second room.

Units are available with one or two fans and in two duty sizes 32l/s and 55l/s Inlet is through a 100 mm dia. pipe located on the front of the unit.

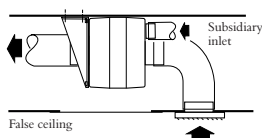
Units can be fitted with a selection of controls which enable them to be linked to light switches, either directly or through run-on circuits.

### Typical arrangements

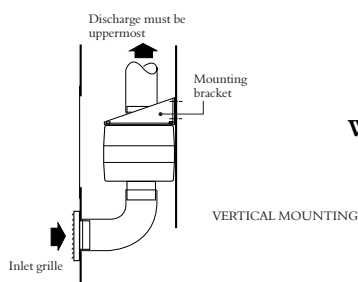
#### Duct mounting - horizontal or vertical\*



One room extraction



Two room extraction



Wall mounting

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### 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' notes.

### Coding

- M** Basic unit with single fan
- MS** Single fan unit incorporating a run-on circuit, adjustable between 5 and 30 mins.
- 2MAS** Twin unit incorporating both run-on and fan failure detection/change over circuits.
- MX** Single fan unit providing continuous low duty running with boost when room light is switched on. (Opus 30 only)

### Installation

- a) It is assumed that a solid non reverberant mounting position has been prepared inside the duct passage area and the necessary ductwork already installed with adequate clearance on the inlet side to allow fitting of the flexible ducting supplied with the unit. It is also assumed that the electrical connections are in position and if a second room is to be ventilated, the ductwork for a subsidiary spigot has been made ready.

# Installation and Maintenance OPUS (M range)

- b) Separate the two halves of the unit by releasing the two clips on either side of the unit. Release the two internal clips and remove the fan unit. See Fig. 3.

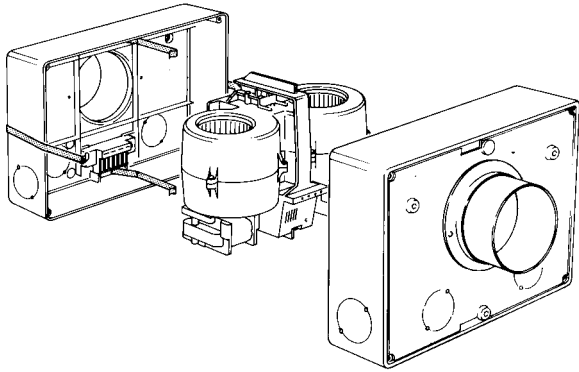


Fig. 3. General view, cover and fan unit removed.

- c) If a second room is to be served, remove the appropriate weakened area from either cover and working from the inside fit the subsidiary inlet spigot by passing it through the case and turning quarter of a turn to lock. Fig. 4a and 4b. Remove the relevant cable entry in the back of the casing.

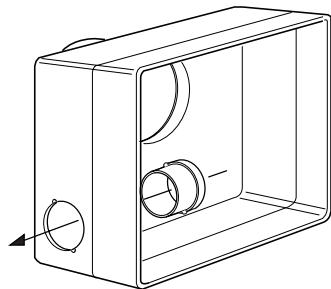


Fig. 4a. Fitting a subsidiary spigot

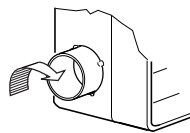


Fig. 4b

- d) Fit the mounting brackets (supplied) to the portion of the case containing the wiring socket, using four self-tapping screws and washers supplied. Fig. 5.

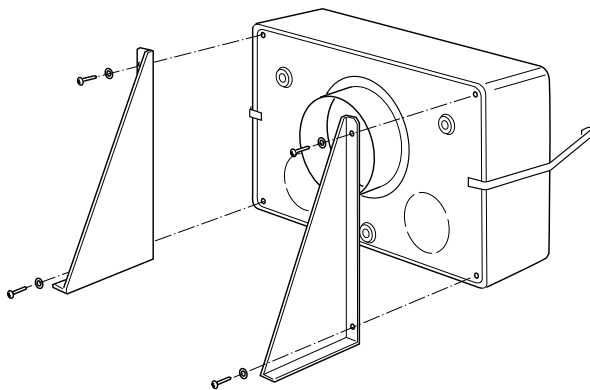


Fig. 5. Fitting the mounting brackets.

- e) Assemble the outlet spigot to the ducting and fix the casing to a solid non-reverberant surface using four No. 8 wood screws through the mounting brackets drilling and plugging the fixing area if necessary.

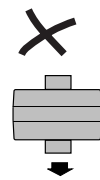


Fig. 6a Vertical mounting

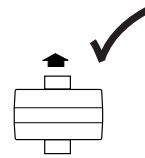
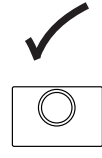


Fig. 6b Horizontal mounting



**Note:**

When the unit is mounted in a vertical configuration it is important that the air flow is upwards so that the gravity operated shutters will work properly (see Fig. 6a). For horizontally mounted units ensure that case is installed as shown in Fig. 6b.

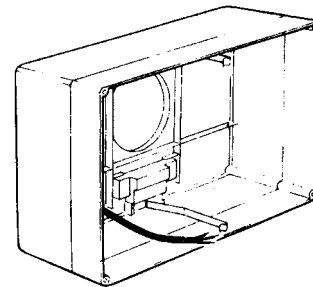


Fig. 7 Cable entry.

- f) Feed the supply cable through the cable entry Fig. 7. Connect the wiring to the internal terminal block/socket.

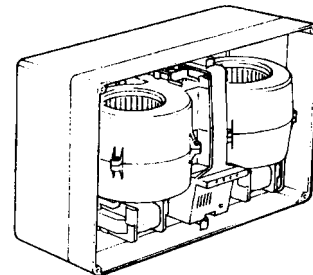


Fig. 8 Fan module in position.

- g) Fit the fan module to the case, mating it's plug fully with the internal socket. Lock with the spring clips. Fig. 8.
- h) If a second room is to be ventilated, connect the subsidiary ductwork to the 50mm spigot.
- i) Secure the adaptor to the 100mm dia. flexible ducting supplied using duct tape (by others). Insert the adaptor into the already prepared inlet side ductwork and seal. Fit the other end of the flexible ducting to the spigot on the remaining (cover) half the case. Fig. 9.

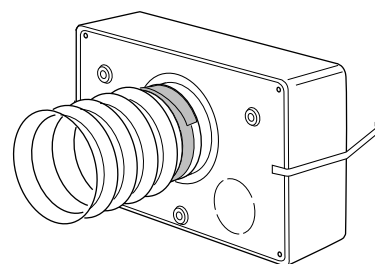
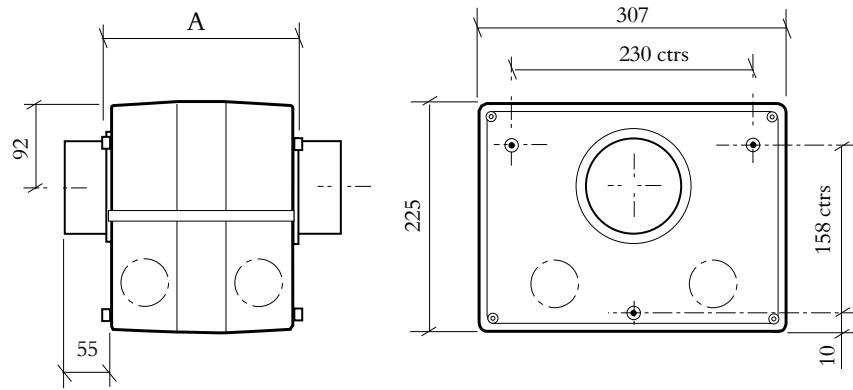


Fig. 9 Fitting the flexible ducting.j)

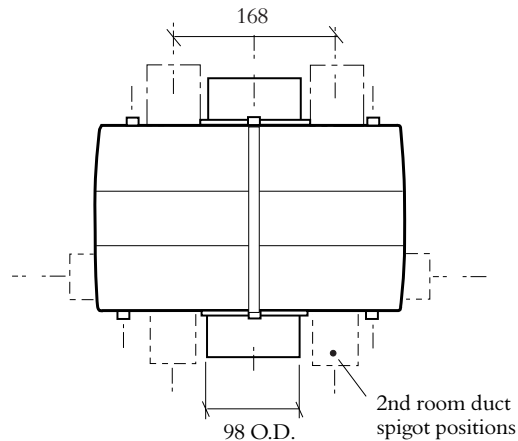
- j) Replace the cover. Test/run the unit.

# Installation and Maintenance OPUS (M range)

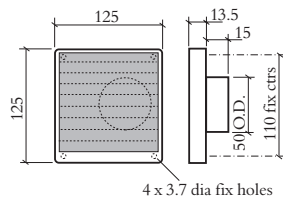
## Dimensions



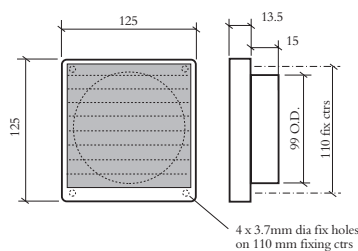
Dimension 'A'	
Opus 30	144
Opus 60	188



### Optional ancillaries

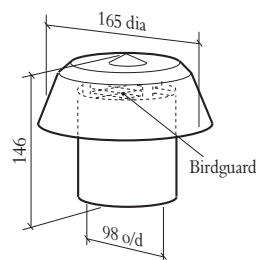


4 x 3.7 dia fix holes

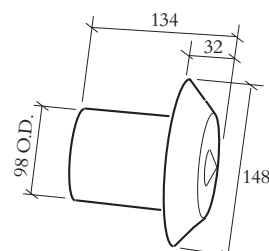


4 x 3.7mm dia fix holes on 110 mm fixing ctrs

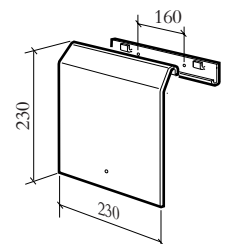
50 & 100 mm Inlet grilles



Roof Cowl



Wall Cowl



Outlet Baffle

## Maintenance

### General

Dust, fluff etc. if allowed will build up internally on 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 every six months.

### Isolation

Ensure that the unit is totally isolated from the electrical supply. This is particularly important when dealing with a run-on circuit or a continuously running fan unit with boost when the room light is switched on (letter X in the Model Code)

**NOTE THE INPUT SOCKET TERMINALS WITHIN THESE UNITS REMAIN LIVE, EVEN WHEN THE ROOM LIGHT OR OTHER ACTUATING SWITCH IS OFF.**

Take care therefore when working within the case with the fan module removed.

### Procedure

At all times, take care not to damage, distort or disturb the balance of the impellers. Remove the cover and then the fan module after releasing the spring clips. Inspect all parts. With 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.

### Adjusting the run-on timer

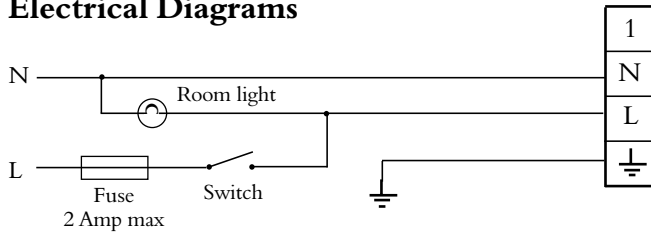
Remove cover. Locate the Time Delay Adjustment at the plastic box integral, with the fan module. Re-set against the graduated scale. Re-fit the cover.

### Warranty

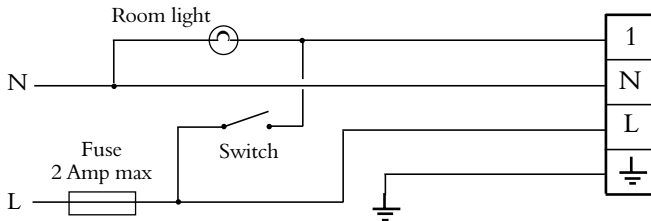
The plastic control box integral with the fan assembly is a sealed component. Breaking the plastic sealing tie will invalidate the guarantee. The unit is guaranteed for a period of 3 years. First first year parts and labour, remaining two years parts only.

# Installation and Maintenance OPUS (M range)

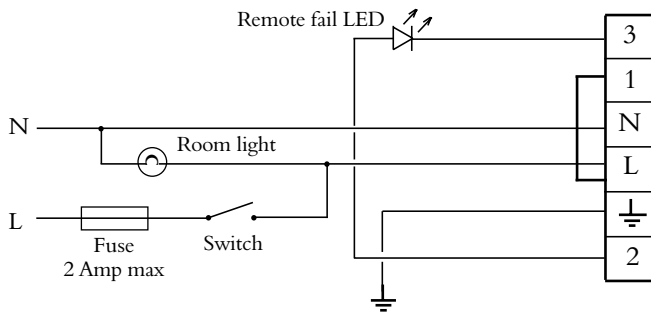
## Electrical Diagrams



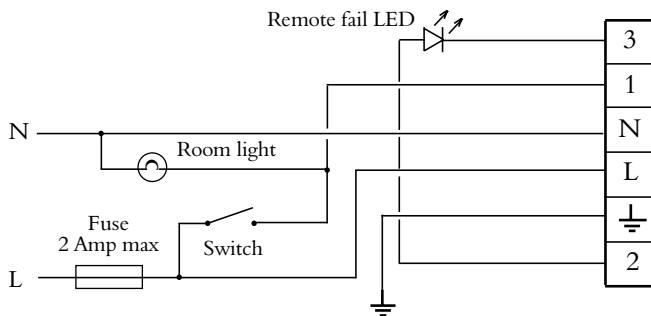
**M Unit ventilating one room.**



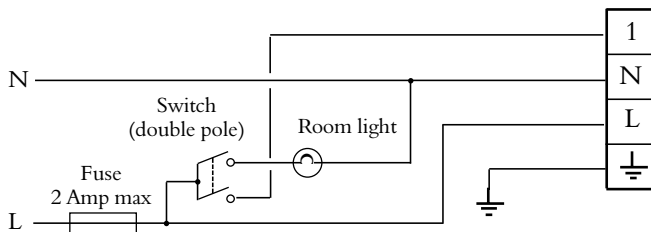
**MS Unit ventilating one room. (using run on circuit).**



**2MAS Unit ventilating one room, (no run on timer).**



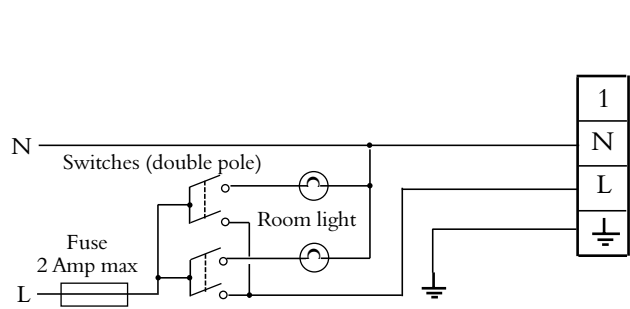
**2MAS Unit ventilating one room (using run on circuit).**



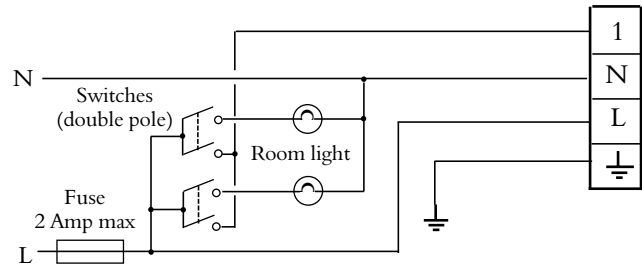
**MX Continuous run with boost (Opus 30).**

Model	Opus 30			Opus 60	
	M	MX on boost	2MAS	M	2MAS
Unit input power (watts)	26	26	26	58	58
Full load running current (amps)	0.170	0.170	0.170	0.190	0.190
*Starting current (amps)	0.215	0.215	0.215	0.280	0.280

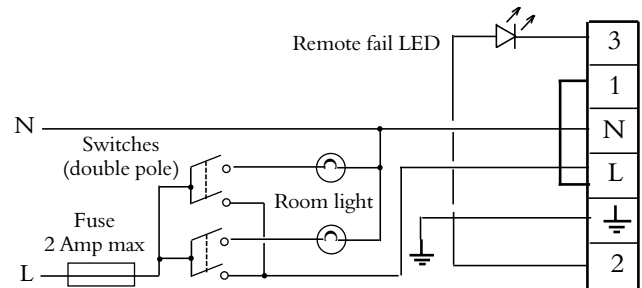
\* On starting both fans run together



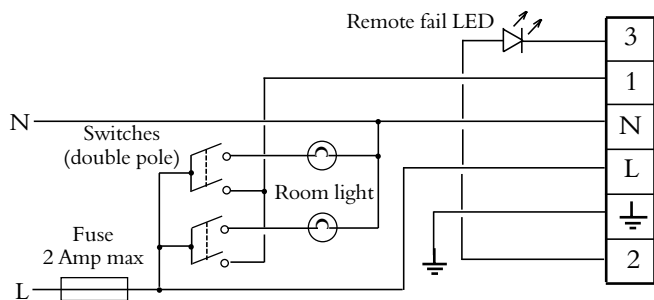
**M Unit ventilating two rooms.**



**MS Unit ventilating two rooms (using run on circuit).**

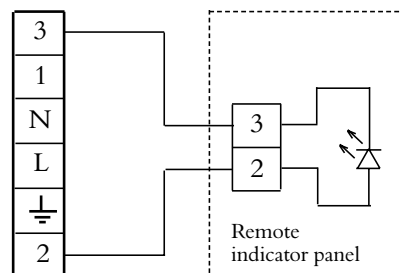


**2MAS Unit ventilating two rooms (no run on timer).**



**2MAS Unit ventilating two rooms (using run on circuit).**

Fan terminal block



**Wiring details for remote indicator.**

# NUAIRE

## CE **DECLARATION OF CONFORMITY**

NuAire Limited,  
Western Industrial Estate, Caerphilly, Mid  
Glamorgan, CF83 1XH. United Kingdom.  
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Fax: 02920 887033  
Email: info @ nuair.co.uk  
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MARCH 2000

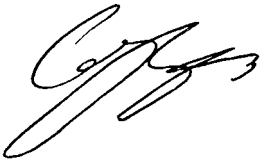

*We declare that the machine named below  
conforms to the requirements of EC Council Directives  
relating to Electromagnetic Compatibility and  
Safety of Electrical Equipment.*

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<b>Designation of machinery :-</b>	OPUS 30, OPUS 60 EXTRACT FANS
<b>Machinery Types :-</b>	'M' IN-LINE DUCTED
<b>Relevant EC Council Directives :-</b>	89/336/EEC, 92/31/EEC (EMC) 73/23/EEC, 93/68/EEC (Low Voltage Directive)
<b>Applied Harmonised Standards :-</b>	E55014-1, EN55014-2, EN60204-1 EN60335-2-80
<b>Basis of Self Attestation :-</b>	Quality Assurance to BS EN ISO 9001 BSI Registered Firm Certificate No. FM 149

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**Signature of manufacture representatives :-**

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

Please telephone: 02920 885991

## **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 SMART and NetLink control products.

Telephone: 02920 858585

Facsimile: 02920 858586

*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.*

# **NUAIRE**

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Mid Glam CF8 1XH United Kingdom.**

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Leaflet No. 670445

## **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.**

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

GP 142