

Fig. 1. General view of unit.

Introduction

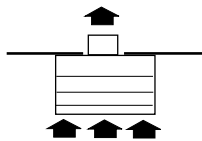
NuAire's OPUS 30 range of surface mounted domestic extract fans are designed not only to meet the requirements of the building regulations document F1 1990, but also that of the 16th edition IEE Wiring Regulations On Site Guide.

The units are designed to ventilate bathrooms / shower rooms where the unit is to be mounted in the 'splash zone'. (See Installation section).

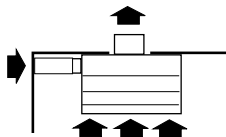
They discharge air through 100mm dia. pipe and have provision for adding a 50mm. dia. subsidiary inlet to extract air from a second room.

Typical arrangements

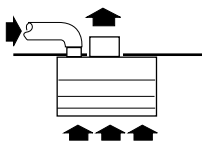
surface mounting, wall or ceiling



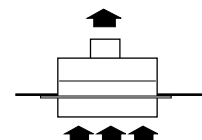
One room extraction



Two room extraction
(with side subsidiary).



Two room extraction
(with rear subsidiary).



Semi recessed version

Contents

Page

Introduction	1
Arrangements and Codes	1
Installation	2
Adjusting the run on timer	2
Dimensions & Ancillaries	3
Maintenance	3
12V Transformer details	4
Spares & Service	5
Electrical Diagrams	6

Units are available with one or two fans (run & standby) with a duty of 32 l/s.

Inlet is through filters located on the front cover of the unit which can easily be removed for cleaning.

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.

Coding

BS12 Single fan unit incorporating a run-on circuit.

2BAS12 Twin unit incorporating both run-on and fan failure detection/change over circuits.

Installation

Note: 'SPLASH ZONE'

The splash zone can be considered to be an area within a bathroom or shower room where a person using the bath or shower could effectively reach. An arms reach is defined as 0.6 metres from the edge of the bath or shower up to a height of 2.25 metres.

- a) It is assumed that a solid non reverberant mounting position has been selected, and the necessary passages for ductwork, from outlet spigot and to subsidiary inlet spigot (if a second room is to be ventilated) as well as the electrical connection have been prepared. It is also assumed that compatible ductwork is already installed.
- b) Remove the fan module from the case. If a second room is to be served, remove the appropriate knockout area from the case 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 3a and 3b. Remove the relevant cable entry in the back of the casing.

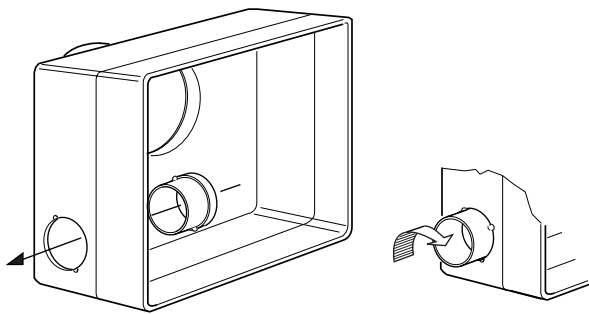


Fig.3. Fitting a subsidiary spigot.

- c) Position the case in the mounting position, connect to the ductwork and feed the supply cable through the cable entry. Fig. 4.

Secure with three No. 8 woodscrews, drilling and plugging the mounting surface if necessary. Connect the wiring to the internal terminal block/socket.

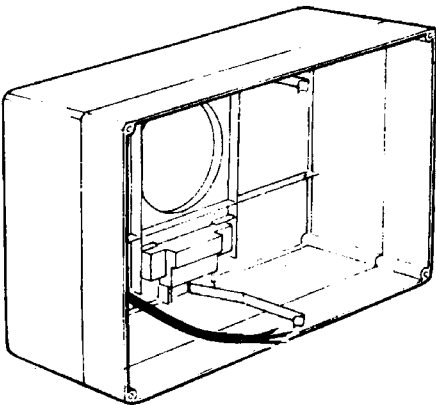


Fig. 4. Cable entry

- d) Fit the fan module to the case, mating it's plug fully with the internal socket. Lock with the spring clips. Fig. 5.
- e) Fit the front cover using the four screws supplied. Fit the two filters into the rebates in the front cover. Test/run the unit.

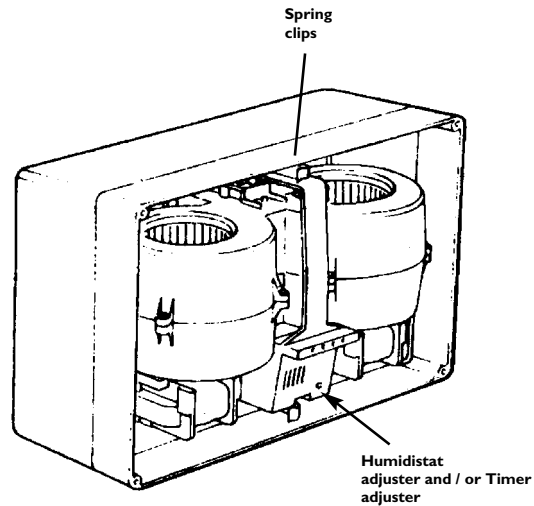
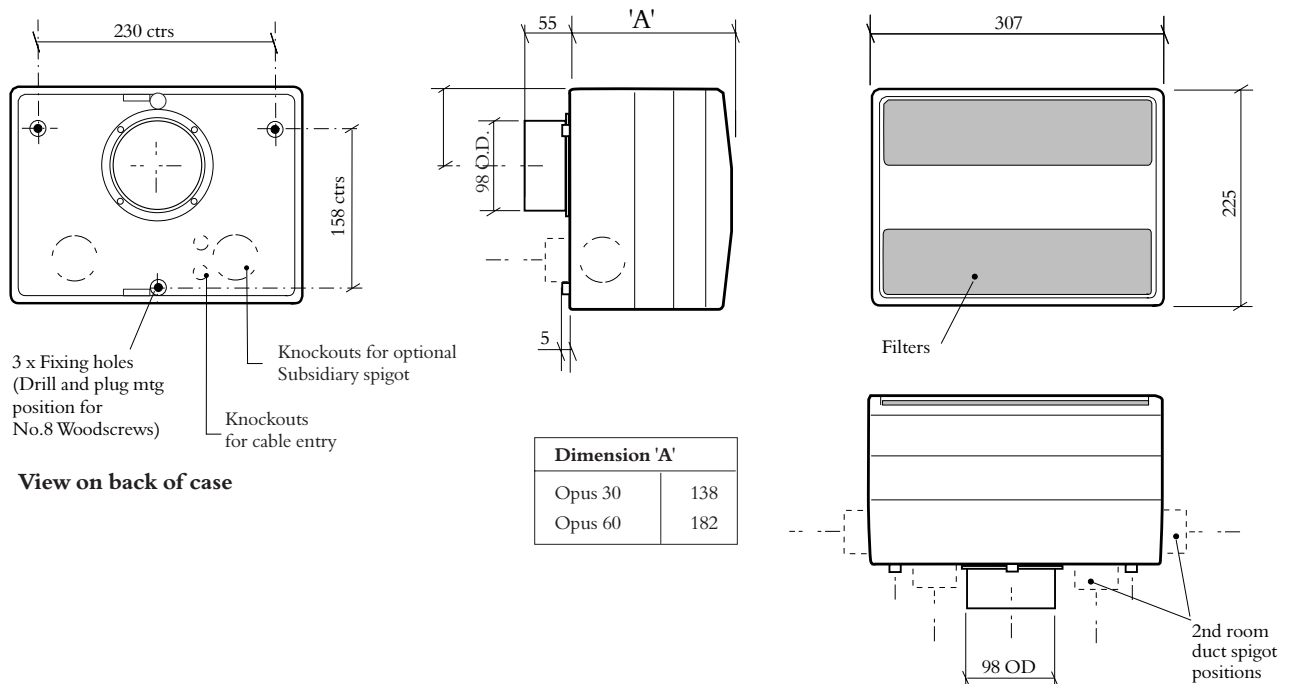


Fig. 5. Fan module in position

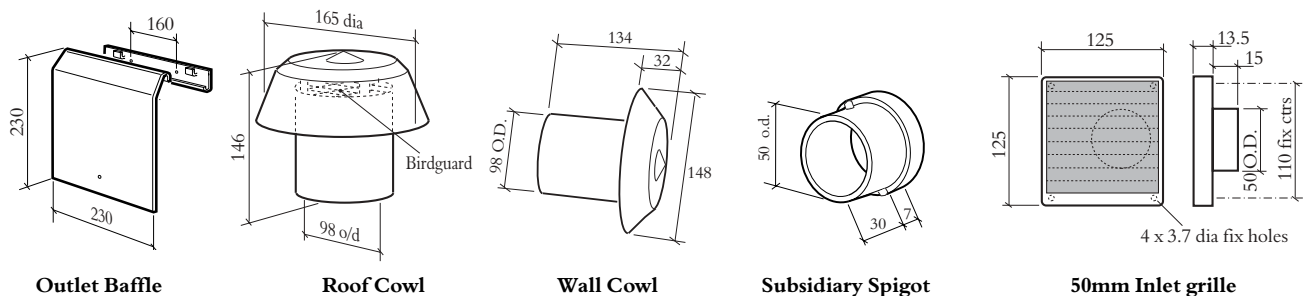
Adjusting the run-on timer

Remove cover. Locate the Time Delay Adjustment at the plastic box integral with the fan module directly between and under the fan scroll mouldings (see fig. 5). Re-set against the graduated scale. Re-fit the cover.

Dimensions



Optional ancillaries



Maintenance

General

It is inevitable that some dust, fluff etc. will pass through the filters, and which, 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. To clean the filters, remove them from the unit, wash in tepid water to which a little mild detergent has been added. Shake out excess water and allow to dry naturally. Replace when dry.

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) AS 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. 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 the unit.

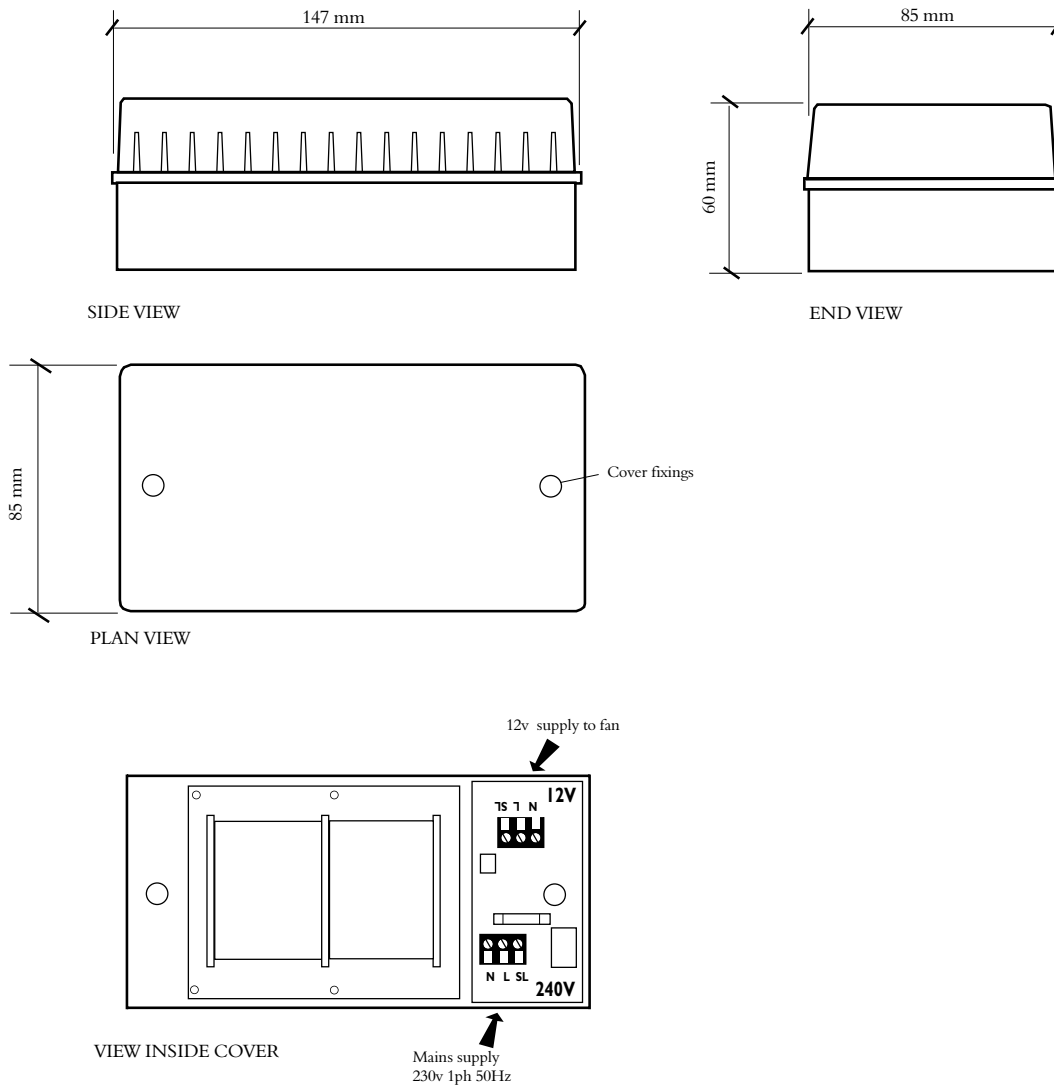
Adjusting the run-on timer

Remove cover. Locate the Time Delay Adjustment at the plastic control 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.

12v Transformer details



Installation of Transformer enclosure

The enclosure containing the transformer is intended to be mounted out of sight (e.g. in a loft, cupboard, under floorboards etc.). However, if this is not possible the transformer enclosure should be mounted as close to the ceiling, or as far from the "splash zone" as possible (see page 2 for definition of the splash zone). As can be seen from the table of wiring sizes on page 5, it is advisable to place the enclosure as close to the fan as possible to reduce the costs of wiring and assist in installation.

Procedure

1. Remove two screws securing the cover and remove the cover.
2. Position the enclosure on mounting surface and route cables into rear. Mark the fixing points on the mounting surface and secure using suitable fixings (by others).
3. Connect wiring as shown.
4. Replace cover.
KEEP VENTS CLEAR OF OBSTRUCTION.

NOTE:

NO EARTH IS TO BE CONNECTED BETWEEN TRANSFORMER AND FAN

Installation Notes:

TABLE OF WIRING SIZES

It is important to note that the size of wire used between the transformer and the fan unit can have an adverse effect on the units performance if the following table is not adhered to.

Mains supply (240v)	0.5mm sq.
TRANSFORMER TO FAN	
Cable run (max. 10m)	Cable size
Up to 2m	0.75mm sq.
Up to 4m	1.00mm sq.
Up to 6m	1.50mm sq.
Up to 10m	2.50mm sq.

Power consumption

Unit input power (watts)	42.0
Full load current (amps)	4.2
Starting Current (amps)	4.4
Transformer input power (watts).....	67.0
Full load current (amps)34
Starting Current (amps)35

Spares

OPUS 30 single fans

ITEM	PART No.
Front grille assembly	770874
Foam Filter set (all units).	630016
Transformer assembly	771921
Internal assembly:	
BS12 units	771287

OPUS 30 Twin fans

ITEM	PART No.
Front grille assembly	770874
Foam Filter set (all units).	630016
Transformer assembly	771922
Internal assembly:	
2BAS12 units	771290

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: **029 2085 8585**

Please fax: **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.

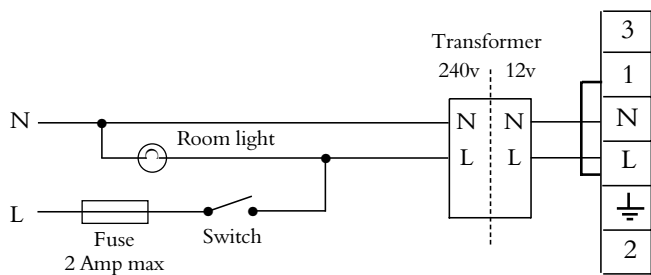
The labour element is subject to full, free and safe access to the equipment as recommended by the CDM regulations.

The remaining two years covers replacement parts only.

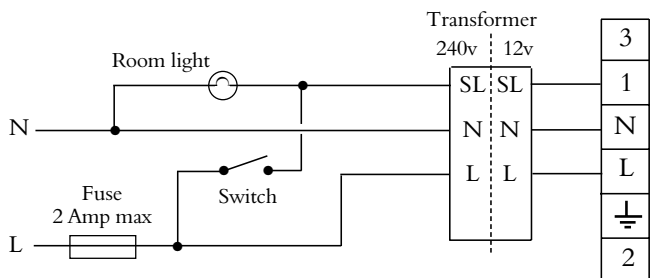
NOTE:

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

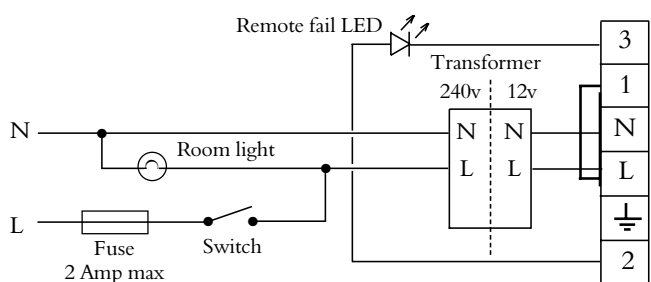
Electrical Diagrams



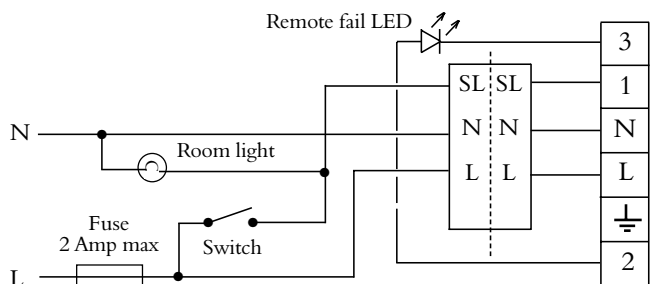
BS12 Unit ventilating one room.



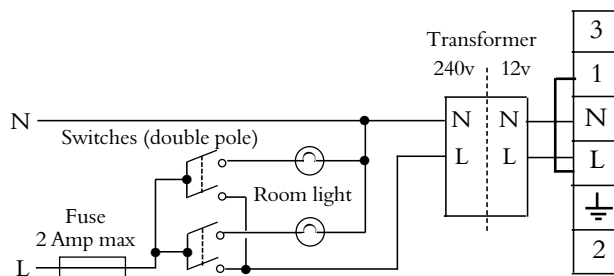
BS12 Unit ventilating one room (using run on circuit).



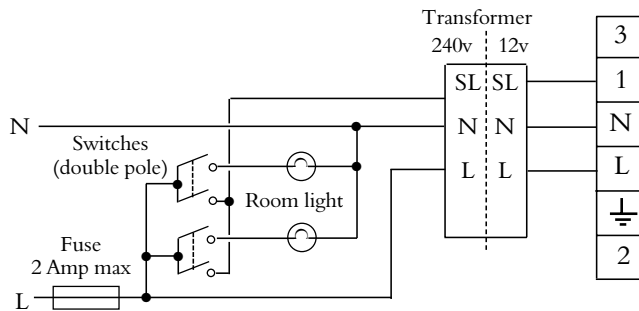
2BAS12 Unit ventilating one room, (no run on timer).



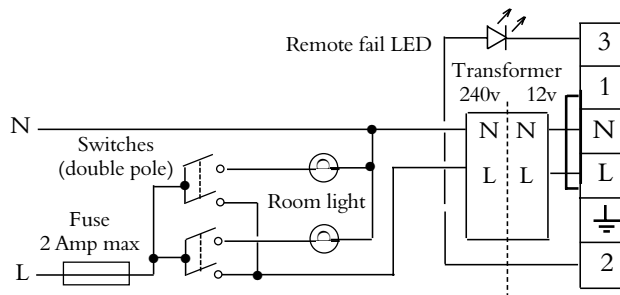
2BAS12 Unit ventilating one room (using run on circuit).



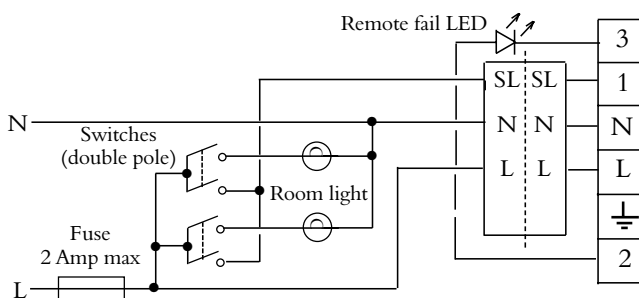
BS12 Unit ventilating two rooms.



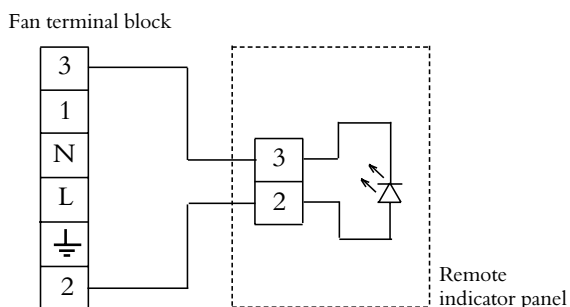
BS12 Unit ventilating two rooms (using run on circuit).



2BAS12 Unit ventilating two rooms, (no run on timer).



2BAS12 Unit ventilating two rooms (using run on circuit).



Wiring details for remote indicator.

NUAIRE

CE DECLARATION OF CONFORMITY

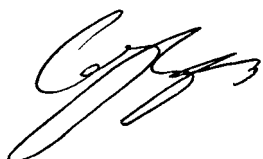

NuAire Limited,
Western Industrial Estate, Caerphilly, Mid
Glamorgan, CF83 1XH.
United Kingdom.
Telephone: 02920 885911
Fax: 02920 887033
Email: info @ nuair.co.uk
www.nuair.co.uk

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.*

Designation of machinery :-	OPUS EXTRACT FANS
Machinery Types :-	OPUS 30 ('B' RANGE) 12VOLT
Relevant EC Council Directives :-	89/336/EEC, 92/31/EEC (EMC) 73/23/EEC, 93/68/EEC (Low Voltage Directive)
Applied Harmonised Standards :-	E50081-1, EN50082-1, 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	3. 3. 00
2)	 W. Glover	Manufacturing Director	3. 3. 00

NOTES

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

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

Leaflet No. 670626

NB

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

GP146