POSITIVE INPUT VENTILATION (PIV)

CREATING A HEALTHY INDOOR ENVIRONMENT
Nuaire is a world leader in the design and manufacture of fans and ventilation systems. We put our energy into efficient ventilation so you don’t waste yours.

Nuaire is a British company that designs and manufactures innovative ventilation products for the residential and commercial sectors. We are proud to be recognised for our expertise, commitment to innovation and the outstanding quality of our products and customer service.

Our people are at the heart of Nuaire, we have more than 400 experienced staff based at our headquarters, with a further 65 technical sales engineers throughout the UK and Ireland.

Based in South Wales, our factory covers 18,000m², allowing us to manufacture almost all of our products on site; from small bathroom fans to large air handling units.

In recent years Nuaire has invested millions of pounds into a new manufacturing plant to support its plans for growth.

“Our manufacturing facility is approximately 4 x the size of the Wembley pitch”

Nuaire’s technical application team can offer expert advice and support to help you make the right choice in your ventilation strategy. Providing a simple, quick selection or offering advice on compliance with the very latest building regulations and environmental issues, we are here for you every step of the way.
Advice On Compliance
Stay ahead of the latest building regulations and make the best product and fabric choices.

Over 65 Sales Staff
Field and office based staff to support you at every stage.

Gold Star Aftercare
Our comprehensive product warranty and dedicated after sales support gives you peace of mind.

The Full Service
Help with product selection, detailed parts lists and fast delivery to ensure you meet your deadline and budget.
NUAIRE’S PIV

POSITIVE INPUT VENTILATION (Alternative Systems)

Nuaire’s alternative approach to continuous mechanical ventilation is Positive Input Ventilation (PIV).

Invented by Nuaire and installed in thousands of dwellings each year, PIV can be a more cost-effective and simple to install ventilation solution, whilst still meeting building regulations.

PIV How does it work?

It has become the UK’s most popular alternative method of low energy, cost-effective ventilation.

**CREATE A HEALTHY LIVING ENVIRONMENT**
Significantly improves indoor air quality by removing indoor air pollutants such as carbon dioxide and keeping out external pollutants such as traffic fumes and pollen.

**MOISTURE AND CONDENSATION ARE DRIVEN OUT**
The filtered air gently pressurises the home from inside out, forcing out the stale air.

**NO NEED TO OPEN WINDOWS TO VENTILATE**
Clean, fresh air is continuously drawn in through the lofts natural leakage points, passed through the filters and fed into the property via a central hallway diffuser.

From this...

Invented over 40 years ago, Nuaire invented PIV over 40 years ago.
Nuaire offers solutions for homes with a loft, without a loft and even three-storey homes.

The simple installation of DRIMASTER-ECO is fully compliant to building regulations and only requires minimal maintenance.

For homes without a loft, the Flatmaster product is compact and can be fitted in a convenient location, such as a utility cupboard or hallway.

PIV systems are proven to be effective units in significantly reducing radon gas levels in affected areas. The system works by gently supplying fresh, filtered air into the property. This process changes the direction of airflow within the dwelling to force the air contaminated by radon out of the home.

PIV technology is also proven to help allergy and asthma sufferers by guaranteeing filtered, quality indoor air. The DRIMASTER-ECO range averages at approximately 0.17 watts/l/s, with solar gains up to 550kw/hr/year, PIV is an ideal low power ventilation solution.
The DRIMASTER eco Range

The DRIMASTER-ECO range provides whole home ventilation using the Positive Input Ventilation principle, which introduces fresh filtered air into the dwelling at a continuous rate, encouraging movement of air from inside to outside. To achieve this the unit is mounted in the loft space, drawing air through the filters and inputting it, at ceiling level, into the property.

The DRIMASTER-ECO units are fitted with an internal temperature sensor, which continuously monitors the temperature in the loft and boosts the air volume when the loft temperature is above a set level (heat recovery mode). If the loft temperature becomes excessive, the unit will switch to standby mode (no airflow). Once installed, the airflow can be set to suit the house size and if required, the way it responds to the temperature changes within.

DRI-ECO-HC

The DRI-ECO-HC enhances Nuaire’s PIV technology with the added benefit of having the system controls located in the contemporary ceiling diffuser. This unique feature offers the homeowner complete control of the unit, without having to enter the loft space. Not only can settings be altered with the push of a button on the contemporary diffuser, but there is also a 7 segment display which notifies the user of the need for filter change and what setting the DRIMASTER-ECO is running on.

DRI-ECO-LINK-HC INSTALLATION

7 YEAR WARRANTY
**Technical**

**DIMENSIONS (mm) & UNIT WEIGHT**

- **Weight - 3.5KG**
  - Dimensions: 341 x 338 x 820 mm

- **Weight - 1KG**
  - Dimensions: Ø320 x 85 mm

**DIFFUSER (mm)**

- **Weight - 1KG**
  - Dimensions: Ø320 x 85 mm

---

**Wiring**

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface e.g. a wooden joist. The fan unit is also supplied with a fused spur.

The 2 core mains cable from the power supply should be connected to a fixed wiring installation in accordance with current IEE wiring regulations.

---

**Electrical Details**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>230V 1ph 50Hz</td>
<td>1.6W(min) 17W(max)</td>
</tr>
</tbody>
</table>

**Typical Installation**

**INSTALLATION OPTIONS**

**Roof structure**

**STANDARD METHOD OF FIXING**

This method will take advantage of solar gain within the loft

**OPTIONAL METHOD OF FIXING.**

*AV MOUNTING KIT ON TO ROOF JOISTS*

Part Code 771393
NUAIRE’S PIV: HALL CONTROL

DRI-ECO-LINK-HC

The DRI-ECO-LINK-HC sees Nuaire offer its long-standing PIV technology alongside wireless control and sensor capabilities.

By offering a choice of interactive sensors Nuaire has created an adaptable, market-leading PIV product. Homeowners can choose to use one or all of the sensors available for optimum system performance, in addition to the unique controls sited at our re-designed, modern ceiling diffuser.

Technical

DIMENSIONS (mm) & UNIT WEIGHT

Weight - 3.5KG

DIFFUSER (mm)

Weight - 1KG

Wiring

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface e.g. a wooden joist. The fan unit is also supplied with a fused spur.

The 2 core mains cable from the power supply should be connected to a fixed wiring installation in accordance with current IEE wiring regulations.
**Remote/Wired Sensors**

**DRI-ECO-2S**
A 2 button switch that gives the homeowner control to increase the airflow within the property when required.

**DRI-ECO-RM**
The Remote Monitoring device will allow readings to be taken from outside the property to determine how long the unit has been running and the operating speed of the unit. This will benefit the social housing provider when checks are carried out to ensure measures put in place to alleviate condensation issues are being adhered to, without having to enter the property.

**DRI-ECO-RH**
Nuaire’s latest Relative Humidity sensor monitors the humidity levels within the home and instructs the unit within the loft to adjust the speed in order to maintain optimum comfort.

**DRI-ECO-CO2**
A Carbon Dioxide CO2 sensor which must be wired directly in to the mains power supply. This ancillary will provide complete confidence in the property’s air quality by automatically boosting the fan speed should high levels of CO2 rise above a set point.

---

**Typical Installation**

**INSTALLATION OPTIONS**

**Roof structure**

**STANDARD METHOD OF FIXING**
This method will take advantage of solar gain within the loft

**OPTIONAL METHOD OF FIXING.**
(AV MOUNTING KIT ON TO ROOF JOISTS)
Part Code 771393

---

**Electrical Details**

<table>
<thead>
<tr>
<th></th>
<th>Voltage</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRI-ECO-LINK-HC</td>
<td>230V 1ph 50Hz</td>
<td>1.6W(min) 17W(max)</td>
</tr>
</tbody>
</table>

---

**Voltage Consumption**

- **230V 1ph 50Hz**

---

**DRI-ECO-RH**
Nuaire’s latest Relative Humidity sensor monitors the humidity levels within the home and instructs the unit within the loft to adjust the speed in order to maintain optimum comfort.
NUAIRE’S PIV: HALL CONTROL

DRI-ECO-HEAT-HC

The unique DRI-ECO-HEAT-HC incorporates all of the wireless functions of our DRI-ECO-LINK-HC unit but with the benefit of an integral heating element, located between the flexible duct and ceiling diffuser.

This heating component will temper the air which is distributed through the property via the ceiling diffuser, thus ensuring a comfortable living environment. This pioneering design sees the low watt heater (400w) react efficiently and effectively, guaranteeing an economically friendly product.

Technical

DIMENSIONS (mm) & UNIT WEIGHT

<table>
<thead>
<tr>
<th>Weight - 3.5KG</th>
<th>820</th>
</tr>
</thead>
<tbody>
<tr>
<td>341</td>
<td>338</td>
</tr>
</tbody>
</table>

DIFFUSER (mm)

<table>
<thead>
<tr>
<th>Weight - 1KG</th>
<th>Ø320</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø316</td>
<td></td>
</tr>
</tbody>
</table>

INTEGRAL HEATER (mm)

<table>
<thead>
<tr>
<th>Weight - 2KG</th>
<th>224</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø316</td>
<td></td>
</tr>
</tbody>
</table>

Wiring

The unit is supplied with a pre-wired power supply. The fan unit is also supplied with a fused spur. The 3 core mains cable from the power supply should be connected to a fixed wiring installation in accordance with current IEE wiring regulations.
**Remote/Wired Sensors**

**DRI-ECO-4S**
A 4 button switch that gives the homeowner control to increase the airflow within the property when required.

**DRI-ECO-RM**
The Remote Monitoring device will allow readings to be taken from outside the property to determine how long the unit has been running and the operating speed of the unit. This will benefit the social housing provider when checks are carried out to ensure measures put in place to alleviate condensation issues are being adhered to, without having to enter the property.

**DRI-ECO-CO2**
A Carbon Dioxide CO2 sensor which must be wired directly into the mains power supply. This ancillary will provide complete confidence in the property’s air quality by automatically boosting the fan speed should high levels of CO2 rise above a set point.

**DRI-ECO-RH**
Nuaire’s latest Relative Humidity sensor monitors the humidity levels within the home and instructs the unit within the loft to adjust the speed in order to maintain optimum comfort.

---

**Electrical Details**

<table>
<thead>
<tr>
<th></th>
<th>Voltage</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRI-ECO-HEAT-HC</td>
<td>230V 1ph 50Hz</td>
<td>1.6W(min) 17W(max)</td>
</tr>
</tbody>
</table>

Standard running: 1.6W(min) 15.3W(max) Up to 400W with heater at full load.

---

**Typical Installation**

**INSTALLATION OPTIONS**
- Roof structure

**STANDARD METHOD OF FIXING**
This method will take advantage of solar gain within the loft

**OPTIONAL METHOD OF FIXING.**
(AV MOUNTING KIT ON TO ROOF JOISTS)
Part Code 771393
NUAIRE'S PIV

Consultants Specification

Low energy Positive Input Ventilation system for use in homes with a loft.

The unit shall be robustly constructed from ABS polymer.

Flame retardant filters of G4 grade, surface area approximately 0.47m² (with 5 year typical maintenance period) shall be fitted, which may be removed from the unit without the use of tools. The filters shall be arranged such as to prevent their obstruction in the loft space.

The unit shall incorporate a forward curved centrifugal impeller and high efficiency brushless DC motor fitted with sealed for life, selflubricating bearings and locked rotor protection. The unit's average power consumption shall be 0.17 watts per l/s airflow; excluding power consumed by the heating element within DRI-ECO-HEAT-HC when running.

The unit shall be supplied with a 2m length of flexible ducting and all necessary connectors and fittings.

The unit shall weigh 3.5kg and we recommend the unit is suspended from the roof structure. The unit shall be supplied with a purpose designed flame retardant polymer diffuser for efficient, directable air input. The diffuser design shall be optimised for use in areas where smoke detectors are fitted. The unit shall include 5 programmable temperature control strategies, 6 volume control settings and an optional high duty boost setting, providing an airflow rate of 70 l/s for optimum performance and occupant comfort. All control/duty strategies shall be optimised for maximum performance and occupant comfort.

An internal run motor shall record the unit's operational time. For information on reducing radon egress, it is suggested that the details given in Positive Pressurisation: A BRE Guide to Radon Remedial Measures in Existing Dwellings may be considered.

DRI-ECO-HC

The DRI-ECO-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor will increase airflow to the dwelling when the temperature in the loft is anywhere between 19-24 degrees celsius. If the DRI-ECO-RH is purchased then the temperature sensor integral to this ancillary will be used to communicate with the PIV unit and should the temperature in the loft become warmer than the dwelling, the fan will boost. The unit’s ‘Fixed Temperature Heat Recovery’ strategies shall be achieved via these sensors and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. It also has the ability to be controlled using a radio frequency function and can be boosted from a remote wall mounted switch, remote CO2 detector and an remote humidity sensor.

The unit shall be offered with a 7 year warranty; 1 year parts and labour, remaining years parts only. 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 the I&M manual and general good practice.

DRI-ECO-LINK-HC

The DRI-ECO-LINK-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor will increase airflow to the dwelling when the temperature in the loft is anywhere between 19-24 degrees celsius. If the DRI-ECO-RH is purchased then the temperature sensor integral to this ancillary will be used to communicate with the PIV unit and should the temperature in the loft become warmer than the dwelling, the fan will boost. The unit’s ‘Fixed Temperature Heat Recovery’ strategies shall be achieved via these sensors and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. A heater section ancillary will be used to communicate with the PIV unit and should the temperature in the loft become warmer than the dwelling, the fan will boost. The unit’s ‘Fixed Temperature Heat Recovery’ strategies shall be achieved via these sensors and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. The unit shall be offered with a 7 year warranty; 1 year parts and labour, remaining years parts only. 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 the I&M manual and general good practice.

DRI-ECO-HEAT-HC

The DRI-ECO-HEAT-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor will increase airflow to the dwelling when the temperature in the loft is anywhere between 19-24 degrees celsius. If the DRI-ECO-RH is purchased then the temperature sensor integral to this ancillary will be used to communicate with the PIV unit and should the temperature in the loft become warmer than the dwelling, the fan will boost. The unit’s ‘Fixed Temperature Heat Recovery’ strategies shall be achieved via these sensors and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. A heater section incorporating a 400w heating element shall be fitted to the diffuser. It shall be electronically controlled so as to minimise energy use. A temperature sensor shall be fitted to the outlet of the heater and will control the output of the heater in an attempt to maintain the set point. The set point will be adjustable between 6°C and 20°C. It also has the ability to be controlled using a radio frequency function and can be boosted from a remote wall mounted switch, remote CO2 detector and an remote humidity sensor.

The unit shall be offered with a 7 year warranty; 1 year parts and labour, remaining years parts only. 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 the I&M manual and general good practice.
Nuaire invented PIV over 40 years ago!

OUR REPUTATION IS BASED ON PROVEN ACHIEVEMENTS

1st to introduce the Positive Input Ventilation strategy
1st to develop MVHR and MEV systems
1st to offer REVIT compatible BIM files
1st to provide a free design service to customers
The DRIMASTER-ECO range provides whole home ventilation using the Positive Input Ventilation principle, which introduces fresh filtered air into the dwelling at a continuous rate, encouraging movement of air from inside to outside.

The DRI-ECO-LC is our basic unit which provides all of the benefits of Positive Input Ventilation, offering system controls on the unit within the loft space. Whilst the controls offer variable options, when the DRIMASTER-ECO is installed the system should be set to a speed that is suitable to the property meaning access to the loft is only necessary for the cleaning/replacement of filters.

**Technical**

**DIMENSIONS (mm) & UNIT WEIGHT**

- Weight - 3.5KG

**DIFFUSER (mm)**

- Weight - 1KG
Wiring

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface e.g. a wooden joist. The fan unit is also supplied with a fused spur.

The 2 core mains cable from the power supply should be connected to a fixed wiring installation in accordance with current IEE wiring regulations.

Electrical Details

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRI-ECO-LC</td>
<td>230V 1ph 50Hz</td>
</tr>
<tr>
<td></td>
<td>1.6W(min) 17W(max)</td>
</tr>
</tbody>
</table>

Typical Installation

**INSTALLATION OPTIONS**

*Roof structure*

**STANDARD METHOD OF FIXING**

This method will take advantage of solar gain within the loft

**OPTIONAL METHOD OF FIXING. (AV MOUNTING KIT ON TO ROOF JOISTS)**

Part Code 771393
NUAIRE’S PIV: LOFT CONTROL

DRI-ECO-3STOREY

The DRI-ECO-3STOREY is the only unit within the DRIMASTER-ECO range which is suitable for install within three storey properties, by using an intumescent aluminium diffuser in order to meet fire regulation standards.

The unit itself works by drawing fresh air in from the loft space and dispersing it through the property via a powder coated ceiling diffuser, which provides a 1 hour fire-block. This technology is fundamental to the well-being of the home owner and allows Nuaire to offer a ventilation solution for every property type.

Technical

DIMENSIONS (mm) & UNIT WEIGHT

Weight - 3.5KG

![Diagram of DRI-ECO-3STOREY dimensions and unit weight]
AIR DIFFUSER FOR THREE STOREY DWELLINGS

For use in stairwells of three storey properties, the optional powder-coated aluminium diffuser with 'fire-block' provides 1 hour of fire resistance in accordance with BS476 Part 20 and ISO834.

Wiring

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface e.g. a wooden joist. The fan unit is also supplied with a fused spur.

The 2 core mains cable from the power supply should be connected to a fixed wiring installation in accordance with current IEE wiring regulations.

Electrical Details

<table>
<thead>
<tr>
<th></th>
<th>Voltage</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRI ECO-3STOREY</td>
<td>230V 1ph 50Hz</td>
<td>1.6W(min) 17W(max)</td>
</tr>
</tbody>
</table>

Typical Installation

STANDARD METHOD OF FIXING

This method will take advantage of solar gain within the loft

Part Code 771393
Consultants Specification

Low energy Positive Input Ventilation system for use in homes with a loft. The unit shall be robustly constructed from ABS polymer.

Flame retardant filters of G4 grade, surface area approximately 0.47 m² (with 5 year typical maintenance period) shall be fitted, which may be removed from the unit without the use of tools. The filters shall be arranged such as to prevent their obstruction in the loft space.

The unit shall incorporate a forward curved centrifugal impeller and high efficiency brushless DC motor fitted with sealed for life, self-lubricating bearings and locked rotor protection. The unit’s average power consumption shall be 0.17 watts per l/s airflow.

The unit shall be supplied with a 2m length of flexible ducting and all necessary connectors and fittings.

The unit shall weigh 3.5kg and we recommend the unit is suspended from the roof structure. The unit shall be supplied with a purpose designed flame retardant polymer diffuser for efficient, directable air input. The diffuser design shall be optimised for use in areas where smoke detectors are fitted. The unit shall include 5 programmable temperature control strategies, 6 volume control settings and an optional high duty boost setting, providing an airflow rate of 70 l/s for optimum performance and occupant comfort. All control/ duty strategies shall be optimised for maximum performance and occupant comfort.

An internal run motor shall record the unit’s operational time. For information on reducing radon egress, it is suggested that the details given in Positive Pressurisation: A BRE Guide to Radon Remedial Measures in Existing Dwellings may be considered.

DRI-ECO-LC

The DRI-ECO-LC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor is to increase airflow to the dwelling when the loft reaches a temperature anywhere between 19-24 degrees celsius. The units ‘Fixed Temperature Heat Recovery’ strategy shall be achieved via a sensor located in the unit and shall improve energy performance accordingly.

The unit shall be offered with a 5 year warranty; 1 year parts and labour, remaining years parts only. 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 the I&M manual and general good practice.

DRI-ECO-3STOREY

The DRI-ECO-3STOREY fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor is to increase airflow to the dwelling when the loft reaches a temperature anywhere between 19-24 degrees celsius. The units ‘Fixed Temperature Heat Recovery’ strategy shall be achieved via a sensor located in the unit and shall improve energy performance accordingly. The aluminium ceiling vent supplied includes an intumescent closure element.

The unit shall be offered with a 5 year warranty; 1 year parts and labour, remaining years parts only. 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 the I&M manual and general good practice.
DRI-365 is a unique low-energy, loft mounted Positive Input Ventilation unit which provides whole home ventilation all year round.

The unit is fully automatic and intelligently decides which location to supply the air from. It utilises the solar gain within the loft during the colder months subsequently bringing in fresh air during the warmer months.

If the loft temperature is above 24°C air is drawn directly from outside to provide background ventilation. In addition, a boost switch is supplied to increase airflow when required.

During the colder months, tempered air is drawn from the loft space taking advantage of solar gain combined with the heat conducted through the ceiling of the home.

**Technical**

**DIMENSIONS (mm) & UNIT WEIGHT**

<table>
<thead>
<tr>
<th>Weight - 10 KG</th>
</tr>
</thead>
<tbody>
<tr>
<td>275mm</td>
</tr>
<tr>
<td>705mm</td>
</tr>
<tr>
<td>301mm</td>
</tr>
</tbody>
</table>

**DIFFUSER (mm)**

<table>
<thead>
<tr>
<th>Weight - 1KG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø320</td>
</tr>
</tbody>
</table>

**5 YEAR WARRANTY**
**NUAIRE’s PIV**

**Electrical Details**

<table>
<thead>
<tr>
<th></th>
<th>Voltage</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRI-365</td>
<td>230V 1ph 50Hz</td>
<td>2W(min) 24W(max)</td>
</tr>
</tbody>
</table>

**Typical Installation**

A remote boost switch comes as standard with the DRI-365 model. This must be wired directly in to the unit and can be used to control the fan with the choice of “Normal” or “Boost” functionality.

For installation the choice of either a Sofit Kit or Wall Kit must be made and ordered separately to the DRI-365 unit.

Please note part codes are DRI365-SOFITKIT and DRI365-WALLKIT.

![Diagram of installation](image)

**ACCESSORIES**

- G4 FILTER
- BOOST SWITCH
Consultants Specification

DRI-365

Nuaire DRI-365 ultra low energy Positive Input Ventilation unit.

The unit casing shall be manufactured from thermally lined pre-painted steel.
The casing shall have an easily removable panel to allow access for maintenance.

The unit shall incorporate a filter of G4 grade with an area of approximately 0.47m².

The unit shall incorporate a forward curved centrifugal impeller and high efficiency brushless DC motor fitted with sealed for life, selflubricating bearings and locked rotor protection.

The unit shall be supplied with a purpose designed polymer diffuser for efficient, directable air input using side blanking pieces supplied.

The ducting between the unit and the diffuser is supplied with unit.

The unit shall incorporate 6 volume control settings for maximum flexibility and occupant comfort. The unit is fully automatic. If the loft temperature is below 24°C then the unit will draw fresh air from the loft. If the loft temperature is above 24°C then cool fresh air will be drawn from outside the dwelling.

The unit shall incorporate two air inlets, one draws air from the loft, the other from outside via a 150mm dia. spigot.

The unit can be boosted to obtain maximum ventilation by the operation of a boost switch (supplied).

An internal monitor shall record the unit’s operational time. For information on reducing radon egress, it is suggested that the details given in Positive pressurisation: A BRE Guide to Radon Remedial Measures in Existing Dwellings may be considered.

The unit shall be offered with a 5 year warranty; 1 year parts and labour, remaining years parts only. 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 the I&M manual and general good practice.
# DRIMASTER-ECO PIV Product Selector

<table>
<thead>
<tr>
<th>Feature</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>14</th>
<th>16</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>For properties with lofts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integral heater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible with relative humidity sensor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible with CO2 sensor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible with remote two-way boost switch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible with four-way remote switch with boost and heater control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible with Remote Monitoring device</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy accessible discreet commissioning and controls behind diffuser</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls/commissioning at unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern circular ceiling diffuser</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminium intumescent diffuser</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-year warranty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-year warranty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**KEY:**  
DRI Drimaster (loft-mounted)  
ECO Eco-friendly  
HC Hall control (diffuser)  
HEAT Integral heater  
LC Loft control/unit  
3STOREY 3 storey properties  
365 Operates 365 days a year
Nuaire offers other forms of residential ventilation!

Dedication to innovative technology due to the increased demand for energy efficient homes means Nuaire can offer everything from simple bathroom fans, through to combined heating and ventilation systems with acoustic solutions for every property type.

For more information contact our Residential Sales Office on

029 2085 8500
or residential.enquires@nuaire.co.uk

www.nuaire.co.uk
The FLATMASTER Range

FOR PROPERTIES WITHOUT LOFT SPACE
Low cost ventilation for properties with no loft space. The unit is designed to take fresh air from outside, filter it and discharge the clean air into the central hallway via a ducting system.

FLATMASTER
The dwelling’s internal air discharge grille is usually installed at a high level in a central location within the hallway, although discharging the air down the length of the hallway (away from the front door) should also prove acceptable. Unit performance may be enhanced if an existing heat source can warm the discharged air e.g. by locating the discharge grille above a radiator.

FLAT2000L/FLAT2000R
The unit is designed to take fresh air from outside, filter it and discharge the clean air into the central hallway via a ducting system. The dwelling’s internal discharge grille is usually installed at a high level in a central hallway, although discharging the air down the length of the hallway (away from the front door), should also prove acceptable.

Additional heat when required
The FLAT2000L and FLAT2000R units come with an integral heater which tempers the air brought in from outside the property, after it has been filtered. This is an automatic function based on a set point which is triggered by the outside temperature.

Technical

DIMENSIONS (mm) & UNIT WEIGHT

WEIGHT: Flatmaster: 4.7kg FLAT2000L/FLAT2000R 2000: 5.2kg

100mm dia. or 121x60mm interchangeable spigots supplied with unit

Alternative end spigot panels

100 dia. spigot shown

121x60 rectangular spigot indicated

Alternative (knock out) spigot positions on rear face 100mm dia. only.
Typical Installation

INSTALLATION OPTIONS

Side input installation (View from side)
- Input grille (Louvers slant downwards)
- 100mm dia/125x60mm rectangular ducting (Note input side kept as short as possible)
- 100mm dia. ducting

Rear input installation (View from above)
- Air input
- 100mm dia. ducting
- Note alternative spigot positions
- Flatmaster
- Discharge grille (Note louvers slant upwards)
- Hallway (Typical)

(IF the heater option is required, the wiring should be connected to the appropriate terminal on the PCB).

Electrical Details

<table>
<thead>
<tr>
<th></th>
<th>Voltage</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLATMASTER</td>
<td>230V 1ph 50Hz</td>
<td>Speed 1 3.1W(max)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speed 2 5.7W(max)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speed 3 9.4W(max)</td>
</tr>
<tr>
<td>FLAT2000L/FLAT2000R</td>
<td>230V 1ph 50Hz</td>
<td>Heater 300W(max)</td>
</tr>
</tbody>
</table>

Wiring

Please note the electrical connections to the unit should be carried out by a qualified electrician.

The unit should be wired in accordance with current IEE regulations.

A remote boost switch comes as standard with the FLAT2000L and FLAT2000R models. This must be wired directly in to the unit and can be used to control the fan with the choice of “Normal” or “Boost” functionality.
Consultants Specification

FLATMASTER

The unit casing shall be manufactured from flame retardant V0 rated ABS polymer and thermally insulated pre-coated mild steel. A washable flame retardant filter of G3 grade (with 1-2 year typical maintenance period) shall be fitted, which may be accessed via the easily removable front cover.

The unit shall incorporate an injection moulded radial bladed centrifugal impeller. The impeller shall be driven by a high efficiency, reversible brushless DC motor fitted with steel, self-lubricating bearings and locked rotor protection.

The unit shall have a maximum power consumption of 0.4w/l/s. The unit shall be highly adaptable for ease of installation, allowing circular or rectangular duct connections and air entry from side or rear of the case at high or low level.

A selection of spigots enabling connection to 100mm circular or 121x60mm rectangular distribution ductwork, without the use of transformation sections, shall be provided. Ducting and grilles shall be supplied separately.

The unit shall be offered with a 5 year warranty; 1 year parts and labour, remaining years parts only. 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 the I&M manual and general good practice.

FLAT2000L/FLAT2000R

See FLATMASTER specification.

The unit shall have a maximum power consumption of 1.1w/l/s; excluding power consumed by integral heating element.
**FLATMASTER PIV Product Selector**

<table>
<thead>
<tr>
<th>Feature</th>
<th>FLATMASTER</th>
<th>FLAT2000L/FLAT2000R</th>
</tr>
</thead>
<tbody>
<tr>
<td>For properties without lofts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integral heater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual boost switch provided – when additional ventilation is required, i.e. cooking odours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls/commissioning at unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 year warranty</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For properties without lofts
As part of our policy of continuous product development, Nuaire reserves the right to alter specifications without prior notice. Telephone calls may be recorded for quality and training purposes.