

# AIRIUS DE-STRATIFICATION UNITS



ENERGY THROUGH INNOVATION

## Thermal De-stratification

Thermal de-stratification is the equalisation of the air temperature throughout a building or enclosed space. Naturally warm air rises away from floor level, whilst more dense cool air sinks, you can easily become trapped in cold spots and is difficult to circulate. Arius de-stratification systems supplied by New Energy Co-operative prevent this.

Using energy efficient motors and patented columnar flow technology, the Arius system supplied by NuVision Energy is more versatile and efficient than any other system, circulating internal atmospheres and optimising heating and cooling systems to create a uniform temperature to within 2° from floor to ceiling.

This results in significant energy savings and reduced carbon emissions, as well as vastly improving internal temperatures and air quality.

The benefits of de-stratification are clear:-

### Features

- Reduces heating costs by 20% - 50%
- Reduces CO2 emissions by 20% - 50%
- Reduces condensation
- Small, versatile, unobtrusive units
- Simple to install with no ducting required
- No maintenance required
- Reduces wear on existing HVAC equipment
- Eligible for carbon reducing grants / loans
- Established and proven technology
- Reduces cooling costs by 20% to 40%
- Recycles heat from machinery, lighting, heat gain etc.
- Maintains optimum working / retail environment
- Rapid ROI - usually between 12 - 30 months
- Stand alone or BMS integrated
- Minimal running costs
- Simple, inexpensive and efficient CRC solution



**AIRIUS**<sup>®</sup>  
saving you energy



From factory temperature control, retail temperature control, office temperature control and warehouse temperature control, New Energy Co-operative can supply the Arius de-stratification ceiling fan that will suit your facility.

[www.nuvisionenergy.co.uk](http://www.nuvisionenergy.co.uk)

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Inexpensive to purchase, easy to install, simple to maintain and economical to operate New Energy Co-operative can supply Arius models to accommodate nearly any workplace temperature control, appropriate for ceiling heights from 2.5 to 31 meters, adaptable to changing floor plans and each units is designed to service between 65 - 220 sq Meters.

The free hanging de-scarification unit is an extremely efficient wind turbine that is suspended just below ceiling height. Each unit takes in the hot ceiling air and transports it to the floor or picks up cooled air and circulates throughout the entire space using a slow moving column of air, avoiding

draught and disturbance and creating a better working environment whilst reducing total energy consumption. Each free hanging de stratification unit is capable of equalising 65 - 220 square meters of floor area.

The suspended ceiling unit accommodates ceilings heights from 2.5 to 8 meters and is adaptable to changing floor plans. The unit is easy to install and very power efficient, using a single phase electrical system that requires between 12 and 31 watts depending upon the model. They are also ultra-quiet so as to avoid any additional noise pollution in the work space.

## TECHNICAL SPECIFICATIONS

|                                   | Model 10         | Model 15         | Model 25          | Model 45/PS-4     | Model 60          | Model 100         |
|-----------------------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Average Floor Area:               | 46m <sup>2</sup> | 74m <sup>2</sup> | 111m <sup>2</sup> | 111m <sup>2</sup> | 186m <sup>2</sup> | 232m <sup>2</sup> |
| Diameter Coverage:                | 7.5m             | 9.7m             | 12m               | 12m               | 15m               | 17m               |
| Ceiling Heights:                  | 2.5m - 3.5m      | 4m - 5m          | 5.5m - 8m         | 8.5m - 12m        | 15m - 18m         | 19m - 31m         |
| Volts <sup>1</sup> :              | 230              | 230              | 230               | 230               | 230               | 230               |
| Watts @ 50 Hz <sup>1</sup> :      | 12               | 15               | 31                | 42                | 120               | 390               |
| RPM @ 50 Hz <sup>1</sup> :        | 980              | 1230             | 1450              | 1400              | 1390              | 1690              |
| CFM @ 50 Hz <sup>1</sup> :        | 318              | 406              | 460               | 595               | 1667              | 3358              |
| m <sup>3</sup> /hr <sup>1</sup> : | 540              | 690              | 780               | 1010              | 2832              | 5705              |
| AMPS @ 50 Hz <sup>1</sup> :       | .06              | .06              | .13               | .19               | .57               | 2.5               |
| Thermal Shut Off <sup>1</sup> :   | 110°C            | 110°C            | 110°C             | 135°C             | 135°C             | 135°C             |
| Noise Level <sup>2</sup> :        | 0 - 25dB         | 0 - 30dB         | 0 - 34dB          | 0 - 34dB          | 0 - 47dB          | 0 - 43dB          |
| Unit Weight:                      | 3.2 kgs          | 4.1 kgs          | 4.1 kgs           | 6.4 kgs           | 10 kgs            | 20.5 kgs          |
| Height to Rim:                    | 305 mm           | 410 mm           | 410 mm            | 457 mm            | 610 mm            | 845 mm            |
| Height (inc handle):              | 410 mm           | 560 mm           | 560 mm            | 610 mm            | 813 mm            | N/A               |
| Diameter:                         | 330 mm           | 330 mm           | 330 mm            | 380 mm            | 464 mm            | 495 mm            |

<sup>1</sup>Motor data provided by motor manufacturer and is subject to change at any time. <sup>2</sup>Noise levels recorded from installed units at floor level. Each facility has unique fluid dynamics, please contact supplier to specify your system.

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NuVision Energy is a trading name Solar Supplies (Europe) Ltd.

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