



## Installation, Operation and Maintenance Manual

**Unit: Eclipse Vertical LPHW & Electric Air Curtain**

**Project Reference:**

**Drawing Number:**

**Wiring Diagram Number:**

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## 1 Pre Installation

### 1.1 Delivery Check

On receipt of delivery check the unit and packaging for any damage. Report any transport damage to Diffusion immediately, or within two working days.

Make sure that all ordered parts have been delivered. Any shortfall should be reported to Diffusion immediately.

### 1.2 Handling

The unit must be handled with care, to avoid damage to the grille and painted surfaces. Distortion of the chassis and damage to the internal components may occur as a result from impact.

### 1.3 Storage

Units should not be stacked. The units should be carefully stored under dry and dust free conditions in their packaging until required.

## 2 Installation

### 2.1 General

Make sure that the structure on which the unit will be mounted on is capable of supporting the weight of the unit. The weight is shown on the G/A drawings.

Unit pipe work, electrical connections are accessible from return air filters. Return air filters should not be covered as it will affect the performance of the unit. Access to unit will be required by the form of a suitable return air grille or access panel.

The unit must be positioned as close to the entrance/exit as possible to provide the most effective curtain as possible.

### 2.2 Mounting unit

The unit is to be mounted and levelled using four 13mm holes provided, paying particular attention to the direction of airflow (see G/A drawing).

### 2.3 Pipe connections

Flow and return connections are 22mm or 28mm plain copper tails and these are located at the bottom of the unit. Exact details are within sales literature or GA drawings.

### 2.4 Electrical connections

The unit requires a 230/1ph/50hz (LPHW version) & 415/3ph/50Hz (electric version) electrical supply that is terminated within the control box and should be connected in accordance with the wiring diagram and current IEE regulations.

The cable entries can be made through the bottom section of the unit. The controlbox can be accessed by removing the return air filter.

**Warning: The unit must be earthed. Make sure that the mains supply you are working on is switched off.**

### 3 Operation

#### 3.1 Unit operation

Electric Version: The unit shall be supplied with a remote control plate housing 2-speed/off and heat on/off switches. The unit can be used in ambient mode, by using the fans only setting. Should the airflow fail, or reduce to dangerously low levels due to obstruction or fan failure, the manual over heat safety cut out will operate. This cuts the electrical power to the heating elements and shuts them down, which prevents the unit from seriously over-heating and becoming a safety hazard.

LPHW version: Supplied with a remote control plate housing 4 speeds/off.

Energy saving controls: Operation of controls is detailed in the controller O&M document.

#### 3.2 Safety Instructions

**Warning:**

**Do not insert any objects into the inlet or discharge openings.**

**Never block the inlet or discharge openings.**

**During operation the surface of the unit can become hot.**

**Make sure mains power supply is switched off, whilst working on the unit.**

### 4 Maintenance and Servicing

#### 4.1 Safety Instructions

**Warning: Before maintaining/servicing the unit:**

**Make sure mains power is switched off, (i.e. fused spur or main circuit breaker).**

**Wait until fans/motors have stopped rotation.**

**Allow the unit to cool down after operation.**

**Coil fins and elements fins can be sharp.**

#### 4.2 General maintenance

Access to all the components can be made by removing the return air filters.

Removal of fans: Fans are located on bulkhead and are fixed into place with M6 fixing screws. Fans will need to be de-wired before removal.

Fans: Impeller blades should lightly brushed/cleaned at regular intervals, this is to remove any dust that has gathered. The fans have sealed for life bearings and therefore require no lubrication.

Electric Elements: Fins should be lightly brushed/cleaned at regular intervals; this is to remove any dust that has gathered.

We would suggest that the unit is maintained on at least a 6 month period, however this may change of location of installation and therefore this is only a guide.

**5     Spares Parts**

5.1    Spares lists

        Contact Diffusion for full lists

**6     Drawings**

6.1    G/A Drawings

6.2    Wiring Diagrams

## **General information**

The goods supplied are subject to et Environmental standard terms and conditions of sale, a copy of which is available on request. If anything in these installation operation and maintenance instructions conflicts with the terms and conditions, then the terms and conditions will apply.

Each unit is individually tested both mechanically and electrically. A test label is attached to each unit signed by the tester for each test completed.

Liability for the contents of this guide:

However much care might have been taken in ensuring the correctness and, where necessary, completeness of the description of the relevant parts, et Environmental disclaims all liability for damage resulting from any inaccuracies and/or deficiencies in this guide.

Should you detect any errors or ambiguities in this guide then we would be pleased to hear from you: it helps us to improve our documentation even further.

et Environmental has a policy of continuous development and therefore reserves the right to alter information contained in this literature without prior notice.

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