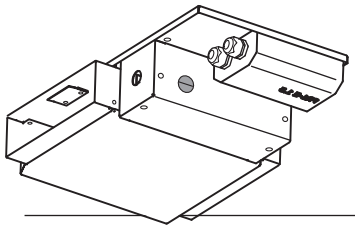


AP-EH500-L/R-CHELSEA

Duct Mounted Burst Fire Heater

Installation Guide

The EMC Directive 2014/30/EU

The Low Voltage Directive 2014/35/EU

1.0 Duct Mounted Burst Fire Heater

This Burst Fire Heater should only be used as a supplementary heater in conjunction with specified MVHR Ventilation Unit: AP-EH500-L/R-CHELSEA.

The AP-EH500 heater unit is a duct mounted heater, with an electric heating element. The heater is supplied with a burst fire output controller and room mounted temperature set-point adjustment control unit.

The heater is intended to provide individual room temperature control as a supplement to the LPHW heating supply integrated with the MVHR ventilation unit, providing typically 30 % of the heating load of the room.

On application of a heating enable signal (volt free) from the central controller, and verified fan operation, the electric heater control is enabled, and the room occupant is able to adjust the set-point controller to the required temperature.

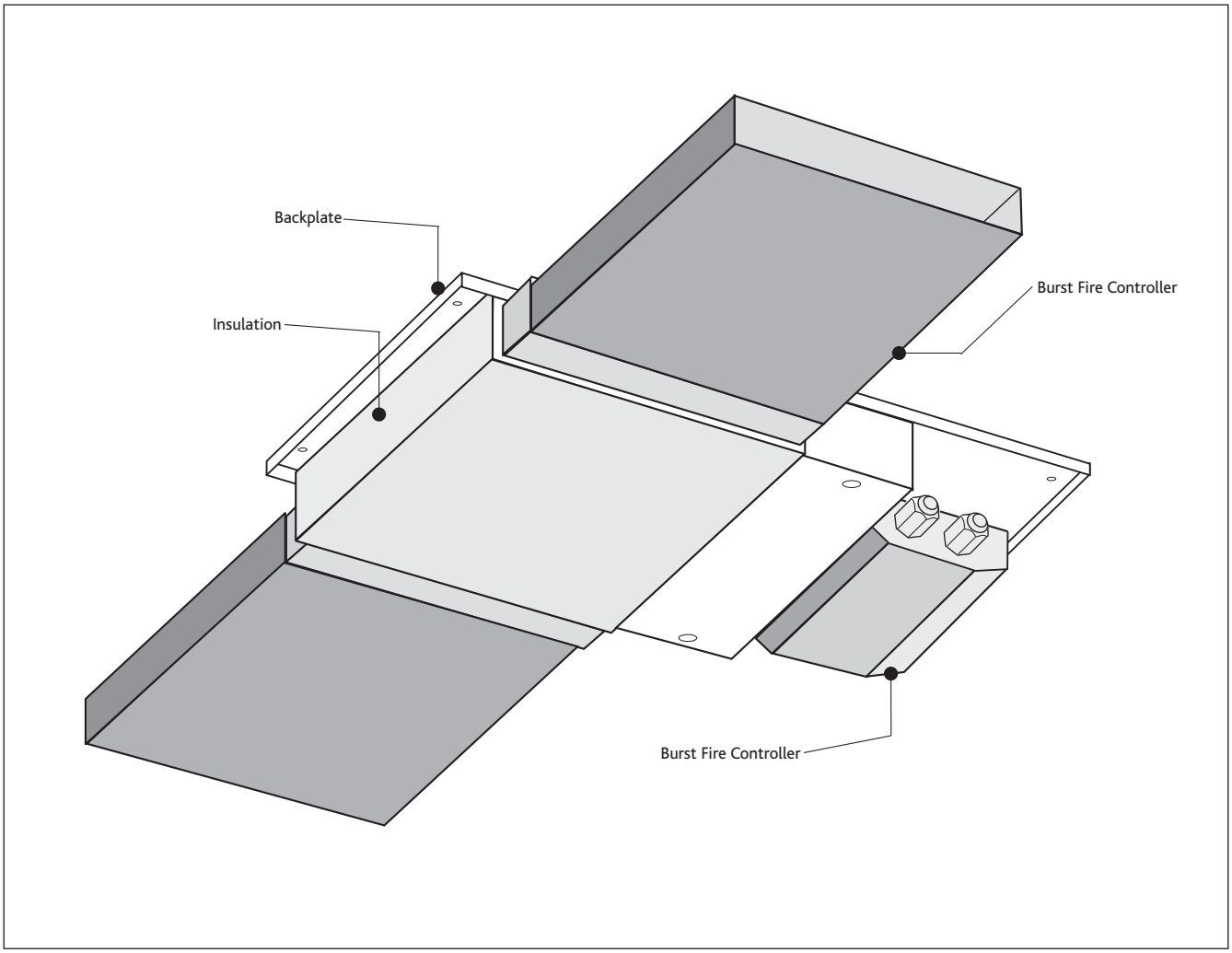
2.0 Installation of the Heater

Installation must be completed by qualified personnel only.

The Heater must be fitted indoors away from any water spray or source of steam.

Heater to be secured directly to ceiling slab and then rectangular ducting(by others) fitted directly to inlet and outlet spigots.

Fig 1. General view of unit and components.



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09. 05. 17. Leaflet Number 671652

3.0 Burst Fire Heater General Specification

The electric heater assembly shall be constructed of galvanised mild steel (natural finish).

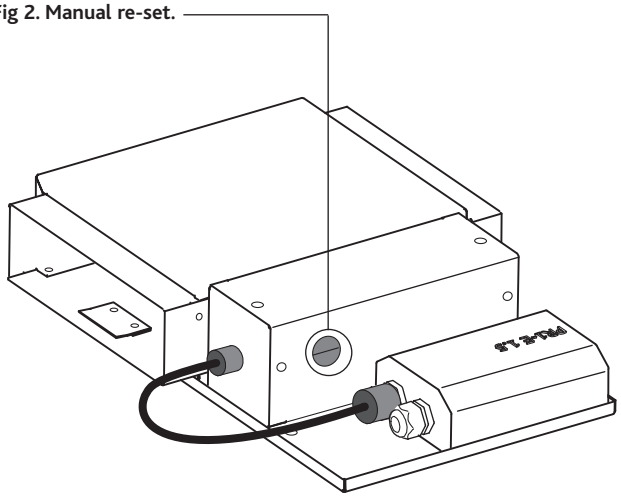
The heating element shall be of steel sheathed type, and be rated at 500W output with a 230V 50 Hz 1ph supply.

The heater enclosure shall be thermally insulated with approximately 10mm of mineral fibre insulation materials. (This level of insulation is considered appropriate for operation within a warm ceiling void adjacent to the room served).

Manual Re-Set Button

The unit shall incorporate a thermal overload device requiring manual re-set if tripped by over-temperature. Unit will only re-set when power is on.

Fig 2. Manual re-set.



The device is rated for airstream operation only, and lack of, or failure of air flow will cause over- temperature, and the operation of the thermal overload.

(Sized to interface with 204 x 60mm plastic ducting (push fit connection ports are provided), the minimum air flow rate for the standard device is approximately 8 l/s).

The assembly shall include a mounting plate with fixing holes, and shall include the Burst fire controller.

Connection terminals shall be provided for mains and control connections (The unit does not incorporate a means of electrical isolation).

IMPORTANT

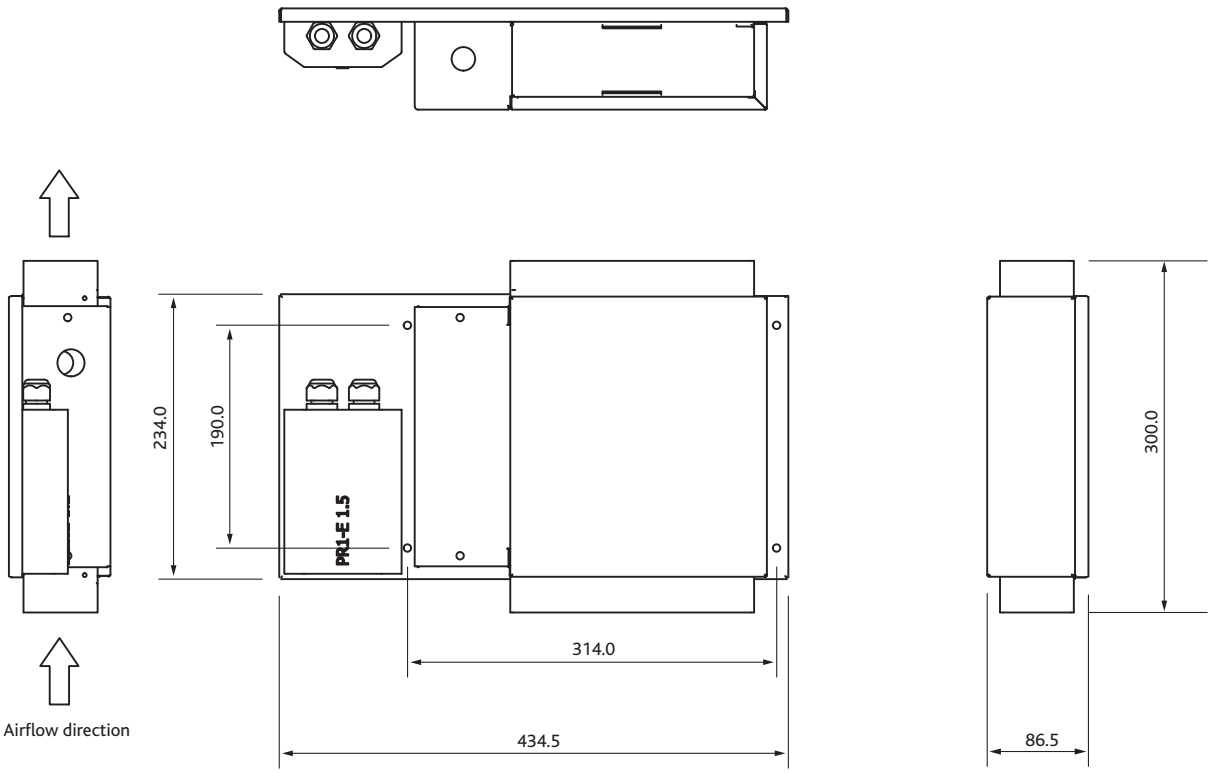
N.B. Control cables should not be routed within 50mm of mains supply cables.

Unit current rating:-
3 A Fusing requirement :-
5A Power supply 1 ph. 230V 50 Hz AC.
This unit must be earthed

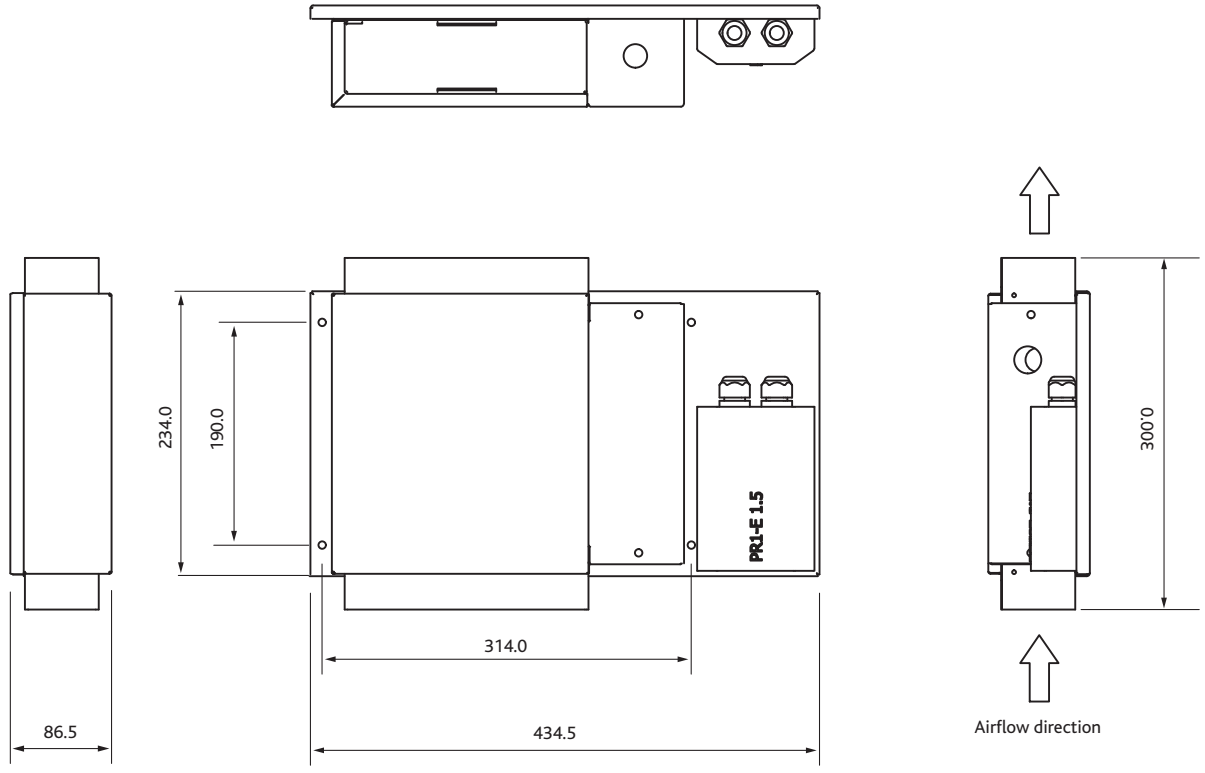
4.0 Fan Unit Dimensions (mm)

Fig 3. Dimensions for Left and Right hand units.

AP-EH500-L/R-CHELSEA (Left hand Burst Heater)

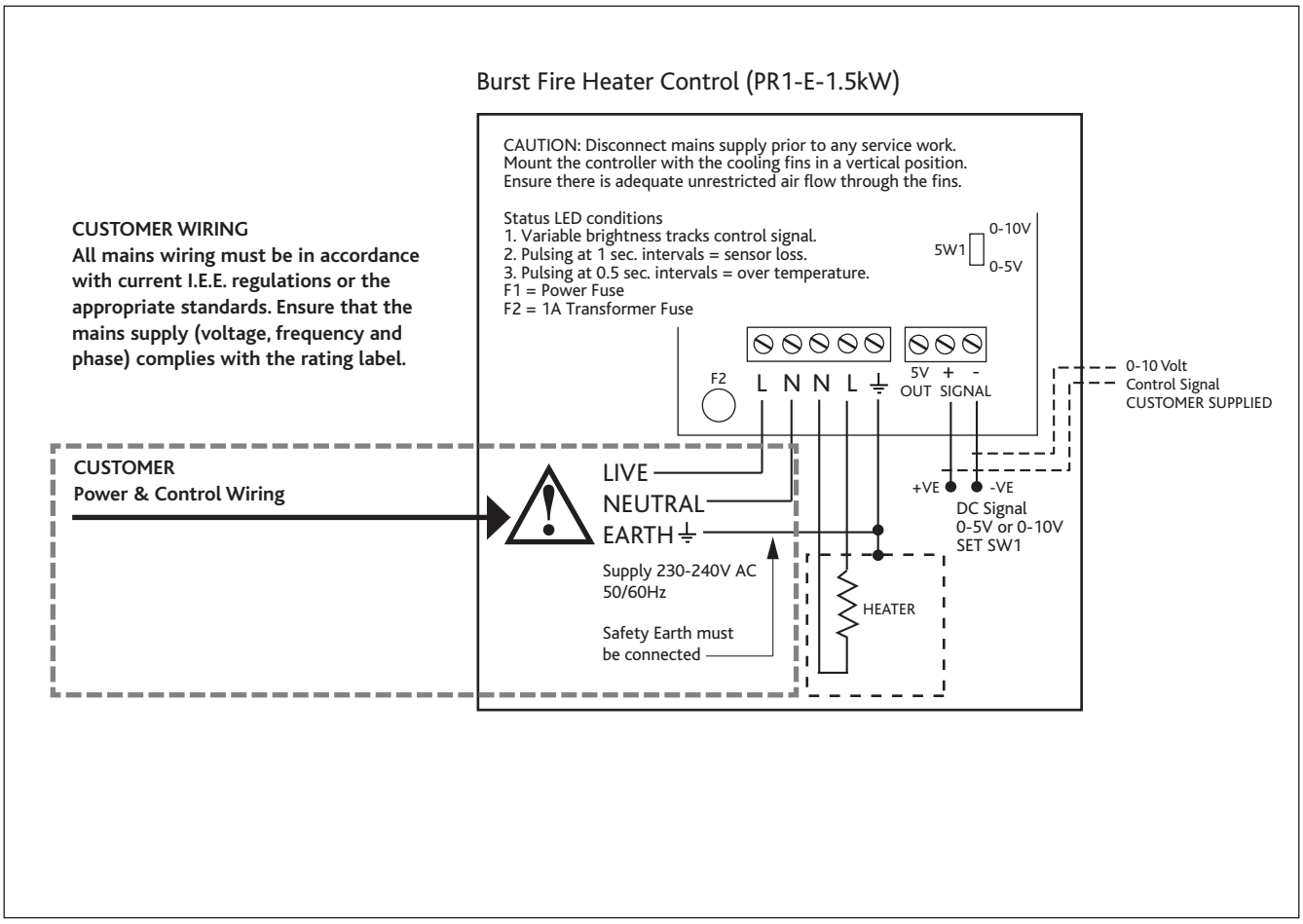


AP-EH500-L/R-CHELSEA (Right hand Burst Heater)



5.0 Wiring

Fig 4. Mains wiring.



6.0 Replacement of Parts

Should any component need replacing Nuaire keep extensive stocks for quick delivery. When ordering spare parts, please quote the serial number of the unit and the ARC number of the purchase if possible. **(This information will be available on the fan label).**

Telephone 02920 858 400

7.0 Warranty

The 3 year warranty starts from the day of delivery and includes parts and labour for the first year. The remaining period covers replacement 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 this manual and general good practice.

The product warranty applies to the UK mainland and in accordance with Clause 14 of our Conditions of Sale. Customers purchasing from outside of the UK should contact Nuaire International Sales office for further details.

8.0 After Sales Enquiries

For technical assistance or further product information, please contact the After Sales Department.

9.0 Certification

DECLARATION OF INCORPORATION AND INFORMATION FOR SAFE INSTALLATION, OPERATION AND MAINTENANCE

We declare that the machinery named below is intended to be assembled with other components to constitute a system of machinery. All parts except for moving parts requiring the correct installation of safety guards comply with the essential requirements of the Machinery Directive. The machinery shall not be put into service until the system has been declared to be in conformity with the provisions of the EC Machinery Directive.

Designation of machinery:	BURST FIRE HEATER
Machinery Types:	AP-EH500-L/R-CHELSEA
Relevant EC Council Directives:	2006/42/EC (Machinery Directive)
Applied Harmonised Standards:	BS EN ISO 12100-1, BS EN ISO 12100-2, EN60204-1, BS EN ISO 9001, BS EN ISO 13857
Applied National Standards:	BS848 Parts 1, 2.2 and 5

Note: All standards used were current and valid at the date of signature.

Signature of manufacture representatives:

Name:		Position:	Date:
1) C. Biggs		ical Director	08. 08. 13
2) A. Jones		Manufacturing Director	08. 08. 13

INFORMATION FOR SAFE INSTALLATION, OPERATION AND MAINTENANCE OF NUAIRE VENTILATION EQUIPMENT

To comply with EC Council Directives 2006/42/EC Machinery Directive and 2014/30/EU (EMC).

To be read in conjunction with the relevant Product Documentation (see 2.1)

1.0 GENERAL

1.1 to The equipment referred to in this **Declaration of Incorporation** is supplied by Nuaire be assembled into a ventilation system which may or may not include additional components.

The entire system must be considered for safety purposes and it is the responsibility of the installer to ensure that all of the equipment is installed in compliance with the manufacturers recommendations and with due regard to current legislation and codes of practice.

2.0 INFORMATION SUPPLIED WITH THE EQUIPMENT

2.1 Each item of equipment is supplied with a set of documentation which provides the information required for the safe installation and maintenance of the equipment. This may be in the form of a Data sheet and/or Installation and Maintenance instruction.

2.2 Each unit has a rating plate attached to its outer casing. The rating plate provides essential data relating to the equipment such as serial number, unit code and electrical data. Any further data that may be required will be found in the documentation. If any item is unclear or more information is required, contact Nuaire.

2.3 Where warning labels or notices are attached to the unit the instructions given must be adhered to.

3.0 TRANSPORTATION, HANDLING AND STORAGE

3.1 Care must be taken at all times to prevent damage to the equipment. Note that shock to the unit may result in the balance of the impeller being affected.

3.2 When handling the equipment, care should be taken with corners and edges and that the weight distribution within the unit is considered. Lifting gear such as slings or ropes must be arranged so as not to bear on the casing.

3.3 Equipment stored on site prior to installation should be protected from the weather and steps taken to prevent ingress of contaminants.

4.0 OPERATIONAL LIMITS

4.1 It is important that the specified operational limits for the equipment are adhered to e.g. operational air temperature, air borne contaminants and unit orientation.

4.2 Where installation accessories are supplied with the specified equipment eg. wall mounting brackets. They are to be used to support the equipment only. Other system components must have separate provision for support.

4.3 Flanges and connection spigots are provided for the purpose of joining to duct work systems. They must not be used to support the ductwork.

5.0 INSTALLATION REQUIREMENTS

In addition to the particular requirements given for the individual product, the following general requirements should be noted.

5.1 Where access to any part of equipment which **moves**, or can become **electrically live** are not prevented by the equipment panels or by fixed installation detail (eg ducting), then guarding to the appropriate standard must be fitted.

5.2 The electrical installation of the equipment must comply with the requirements of the relevant local electrical safety regulations.

5.3 For EMC all control and sensor cables should not be placed within 50mm or on the same metal cable tray as 230V switched live, lighting or power cables and any cables not intended for use with this product.

6.0 COMMISSIONING REQUIREMENTS

6.1 General pre-commissioning checks relevant to safe operation consist of the following:

Ensure that no foreign bodies are present within the fan or casing.

Check electrical safety. e.g. Insulation and earthing.

Check guarding of system.

Check operation of Isolators/Controls.

Check fastenings for security.

6.2 Other commissioning requirements are given in the relevant product documentation.

7.0 OPERATIONAL REQUIREMENTS

7.1 Equipment access panels must be in place at all times during operation of the unit, and must be secured with the original fastenings.

7.2 If failure of the equipment occurs or is suspected then it should be taken out of service until a competent person can effect repair or examination. (Note that certain ranges of equipment are designed to detect and compensate for fan failure).

8.0 MAINTENANCE REQUIREMENTS

8.1 Specific maintenance requirements are given in the relevant product documentation.

8.2 It is important that the correct tools are used for the various tasks required.

8.3 If the access panels are to be removed for any reason the electrical supply to the unit must be isolated.

8.4 A minium period of two minutes should be allowed after electrical disconnection before access panels are removed. This will allow the impeller to come to rest.

NB: Care should still be taken however since airflow generated at some other point in the system can cause the impeller to "windmill" even when power is not present.

8.5 Care should be taken when removing and storing access panels in windy conditions.