

# Series UH Unit Heater

## End User Instructions

**DUNHAM-BUSH®**

Product Data Sheet - Applications Department  
Dunham-Bush Ltd, Downley Road, Havant, Hants, PO9 2JD  
Tel. 023 9247 7700 Fax. 023 9245 0396

PDS-1200-H-0202-02

Part No. 115-000-001

Email. Info@dunham-bush.co.uk

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**Installer: Please leave these instruction with the user**

### Introduction

The following instruction/recommendations will ensure the best possible service for Dunham-Bush series UH unit heaters.

Please read the instructions carefully before commencing any cleaning or maintenance which should be only undertaken by a competent person.

### Identification

The nameplate on the side of the heater casing is marked with the unit designation, serial number, motor electrical supply and maximum test and working pressures.

### Description

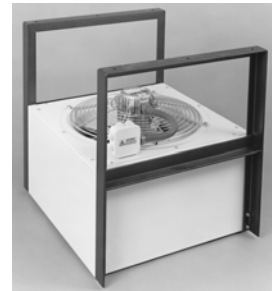
Each basic heater consists of a casing, heating coil, discharge louver with individual adjustable blades and a fan plate assembly, comprising an electric motor, axial fan and guard. A wide range of accessories are offered.

Series UH unit heaters are suitable for horizontal and vertical applications.

### Range

Series UH heaters are offered in four casing sizes, 1, 2, 3 and 4. Each casing is offered with a choice of four hot water coils, type A, B, C, D and one steam coil type S.

All motors are single speed, normal or low. All standard motors have built in thermal cut-out to prevent the motor overheating.



### Accessories

A wide range of accessories are offered, including filter box, mixing box, inlet box, wall/ceiling brackets and widespread discharge.

Series UH unit heaters provide warm air heating when used in conjunction with a pumped hot water or steam system and an electrical supply.

When the system is functioning and any associated controls such as room thermostats sense the temperature changing, the motor will operate. Air is blown through the coil by the action of the axial fan and it is heated indirectly by the hot water or steam passing through the coil tubes which conduct heat to the fins.

Controls vary according to the original specification. Generally, series UH unit heaters with 415 volts, 3 phase, 50 hertz motors will be controlled by a contactor switch or a starter with thermal overloads. A room thermostat is usually installed to control the space temperature.

Where outlet louvers are fitted, they are adjustable.

For horizontal application, ensure that the warm air reaches working level but will not cause annoyance.

For vertical applications, ensure that the optimum spread/throw is achieved. Note, louvers in vertical position, will give maximum downward throw, and minimum spread. Angling the louvers will give the opposite effect.

## Cleaning and Maintenance

Cleaning and maintenance should be undertaken by a competent person.

### Warning

Prior to undertaking any cleaning or maintenance, ensure that the unit is isolated from the electrical supply, and that under no circumstances can it be re-started manually or automatically. The recommended method of ensuring this is to turn off the isolating switch and remove the appropriate fuses.

### Inspection

Basic units should be cleaned annually. When filter boxes are fitted, they should be inspected and if necessary, at 6-8 week intervals.

### Cleaning

1. Heating Coil - Remove the side panel opposite the connections to gain access to the back or top of the coil. Vacuum in opposite directions to normal air flow.
2. Casing - Remove all accessible dust and fluff with a damp cloth to prevent the build of dirt.
3. Motor/Fan Assembly - The motor is maintenance free. The fan should be wiped clean, if necessary.
4. Accessories – Filters
  - a) Remove the filter access panel quick release fasteners and remove the panel.
  - b) Slide out the filter assembly, noting that the impregnated surface of the filter is located on the air discharge side.
  - c) Tap out and vacuum any dust and foreign matter. Wash the filter under clean running water.
  - d) If the filter is extremely dirty, it should be washed in warm water, up to 40°C, using house-hold detergent.
  - e) Allow filter to dry naturally. Artificial heat should not be applied.

- f) Replace filter assembly correctly, see paragraph (b)

### Mixing box

Wipe all damper blades clean and remove any foreign matter from the mixing box.

### Maintenance

#### Hot Water Coil

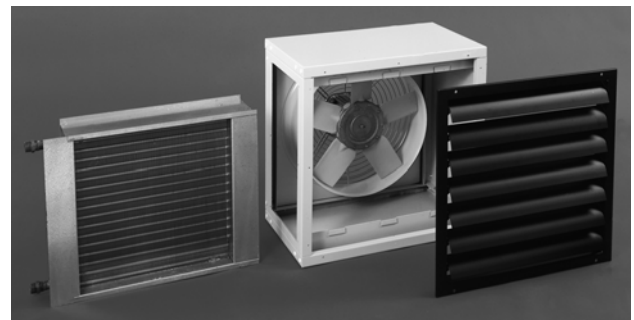
Ensure coil is not air-locked by purging at a high point above the unit, in the connecting pipe work.

#### Steam Coil

Clean the strainer and scale pocket. Check that the steam trap and non-return valve are in good order.

### Repairs and Replacement Parts

The Dunham-Bush guarantee covers the supply of replacement parts for a period of 1 year from the date of despatch. Always quote the details on the heater nameplate when ordering spare parts. If units are fitted with filter boxes. We recommend a spare set of filters should be available on site for maintenance purposes.



**Dunham Bush Ltd**  
**Downley Road**  
**Havant**  
**Hants PO9 2JD**

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**Fax. 023 9245 0396**

**email: [info@dunham-bush.co.uk](mailto:info@dunham-bush.co.uk)**  
**[www.dunham-bush.co.uk](http://www.dunham-bush.co.uk)**