



SCREENZONE WARM AIR CURTAINS

**CATALOGUE NUMBERS:
HE7420 & HE7402**

INSTALLATION AND OPERATING MANUAL

All electrical appliances produced by the Company are guaranteed for one year against faulty materials or workmanship. This applies only if the appliance has been used for purposes in accordance with the instructions provided and has not been connected to an unsuitable electricity supply, or subject to misuse, neglect, damage or modified or repaired by any person not authorised by us. This guarantee is offered to you as an extra benefit and does not affect your legal rights.

The correct electricity supply voltage is shown on the rating label attached to the appliance.

Reasonable care has been taken to ensure that this guide is accurate at the time of printing. In the interest of progress the Company reserve the right to vary specifications from time to time without notice.

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1. General Information

1.1 Warnings

All installations must be in accordance with the regulations. These instructions must be handed to the user on completion of the installation. Installers and service engineers must be able to demonstrate competence and be suitably qualified in accordance with the regulations. To ensure continued and safe operation it is recommended that the appliance is serviced annually. The heater's outlet/inlet grille must not be obstructed during use. Any modifications made to the unit not approved by Consort will void manufacturer's warranty and potentially create a hazard. The appliance is NOT intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience or knowledge unless they have been given instruction concerning use of the appliance by a person responsible for their safety.

1.2 Health and Safety

Please read these instructions thoroughly before installing the appliance. Sole liability rests with the installer to ensure that all site safety procedures are adhered to during installation. Sole liability rests with the installer to ensure that protective safety wear such as hand, eye, ear and head protection is used during installation of the product. Ensure that all anchoring points are suitable for the weight of the appliance.

Do not rest anything especially ladders against the product.

1.3 Maintenance

Always ensure that the main external electricity supply is switched off before attending to the servicing of your Claudgen heater. To obtain best results from your heater it is necessary to avoid the build up of dust and dirt within the unit and on the air inlet and discharge grilles. For this reason regular cleaning is necessary, paying particular attention to the removal of dirt build up on the rotor blades.



**THIS HEATER SHOULD NOT BE
INSTALLED WHERE THERE IS A
CORROSIVE ATMOSPHERE OR
EXCESSIVE DUST.**



2. Introduction

2.1 Introduction

This instruction manual describes the CLAUDGEN HE7420 and HE7402. These units are 622mm wide 3kW and 4.5kW modular heaters designed for mounting above doorways and similar entrances. They may also be used as space heaters. 1035mm wide 4.5kW & 6kW units are also available.

2.2 Noise levels

The recorded noise levels are 46dbA.

Sound pressure levels dBA are measured at a 3m distance with a single air curtain mounted at its maximum mounting height, operating in a room with average acoustic characteristics as defined in CIBSE Guide B5 (reverberation time 0.7s at 1kHz) and a room size equivalent to 8 air changes per hour (ac/h). The dB meter must not be in the direct airflow of the heater. Care needs to be taken when selecting air curtains for an installation as noise levels can be several dB higher if the mounting height is reduced, if the room is more 'live' (i.e. hard surfaces, no furnishings or absorbent materials), if the room is smaller than 8 ac/h equivalent or a combination of these factors. Noise levels will also increase if more than one air curtain is installed at the same doorway (e.g. +3dBA for 2 equal point sources: direct field).

2.3 Electrical connections

These units are suitable for connection to a 230/240 Volt 50 Hz single phase supply. The maximum cable inlet size is 4mm².

The appliance shall be connected to the supply via an appropriate switched fused double pole isolator having a contact separation of greater than 3mm. Test for correct operation and refit the cover.

For safety reasons, a sound earth connection must always be made to the unit before it is put to use. The unit should be wired in accordance with IEE Regulations for the Electrical Equipment of Buildings.

Note: When switched on for the first time the appliance may emit a slight smell. This is purely the evaporation of a fluid used in the manufacturing process.

WARNING: This appliance must be earthed.

Fig.1 To open air curtain remove 2 screws to remove front cover

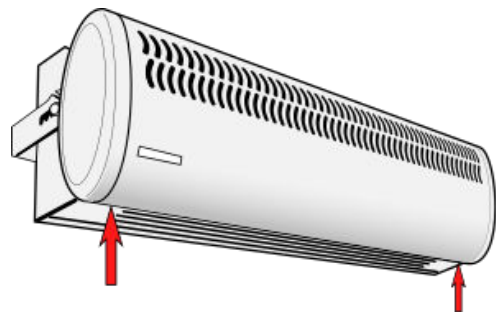
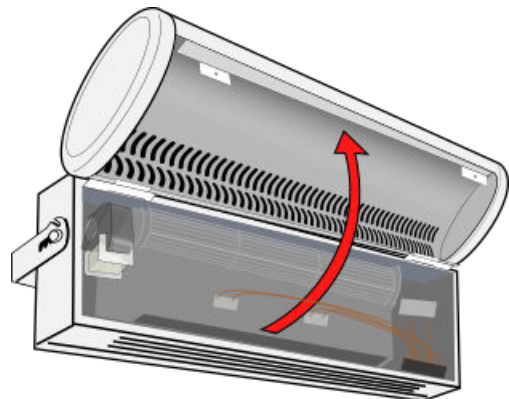


Fig.2 Heater with front cover open



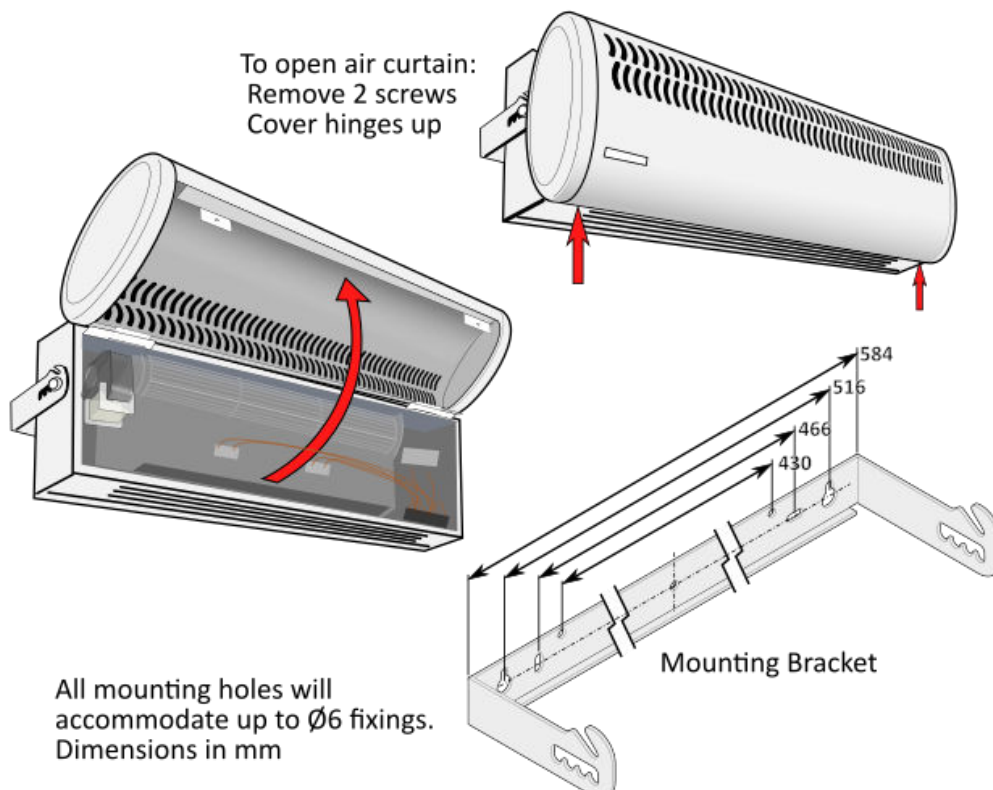
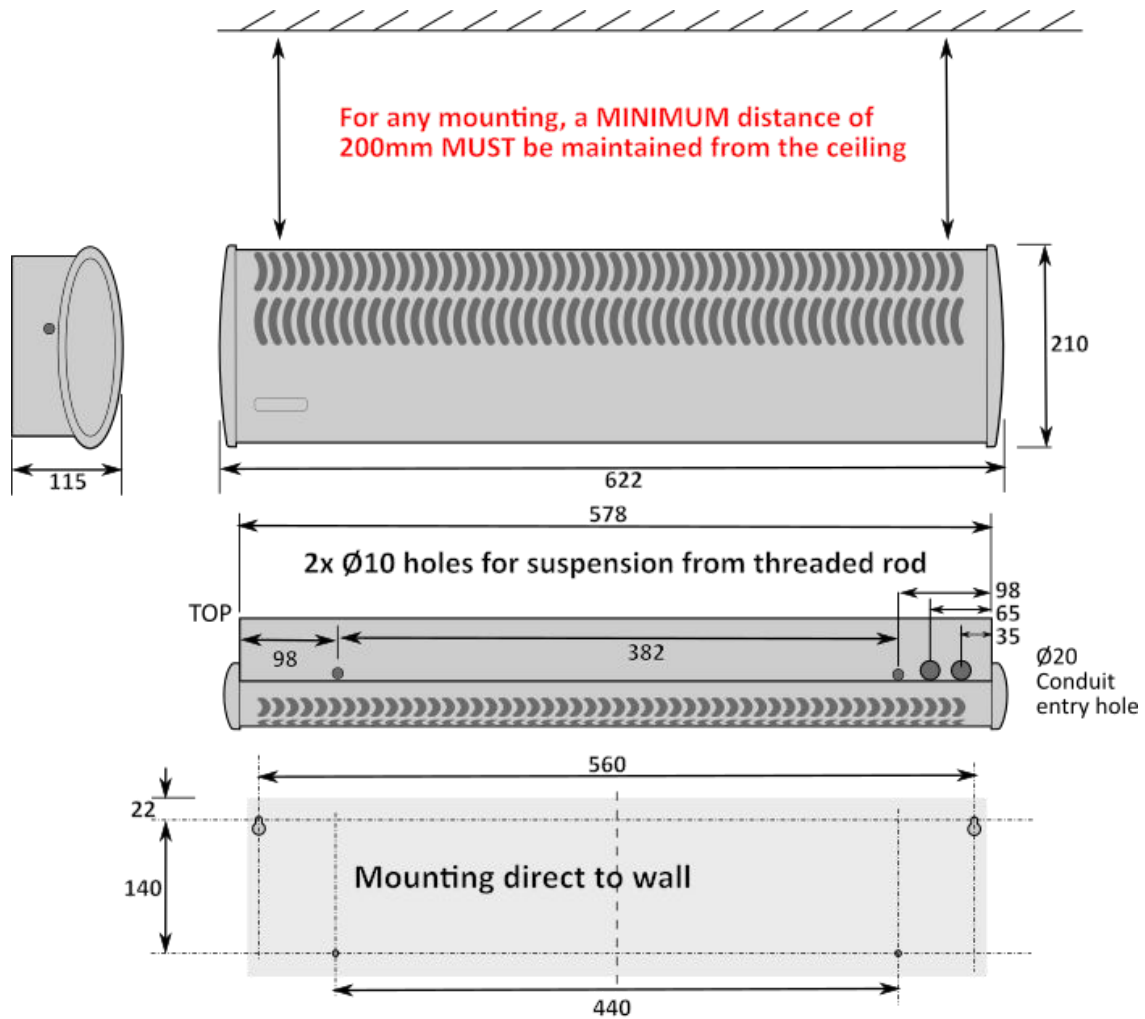
There are no exceptions.



For connection to the mains supply it will be necessary to open the front cover of the unit. Wire in accordance to the wiring diagrams.

3. Dimensions & Fixing locations

The unit should be positioned so that the airflow is not obstructed by any part of the doorframe. When installed the top of the heater case should be a minimum of 200mm below the ceiling.



4. Installation Details

4.1 Mounting

When mounted over a standard doorway the unit should be fitted as low as possible and not more than 2.3 meters from ground level. The unit should be positioned so that the airflow is not obstructed by any part of the doorframe. When installed the top of the heater case should be a minimum of 200mm from the ceiling.

4.2 Installation

Step 1

Carefully unpack the heater. Loosen mounting screws, allowing the mounting bracket to be removed from the unit.

Step 2

Remove the front cover by loosening the 2 screws at the bottom of the heater, on the left and right side of the grille, as shown in figure 1.

Step 3

For suspending from the ceiling:

Either drop rods or catenary wire can be used to fasten the air curtain to the ceiling support structure. The mounting points can be seen in Section 3.

Using supplied bracket:

Making sure that the mounting bracket is horizontal, fix the bracket to the wall using appropriate fasteners. Place the unit on the mounting bracket ensuring the washers are spaced (a plain washer either side of the mounting bracket).

For direct wall mounting:

The heater can be fixed to the wall using 6mm holes provided. Mark and drill required holes and fix heater to the wall using appropriate fasteners. It is the sole responsibility of the installer to ensure that the points of attachment to the building are sound. Consultation with the consultant, architect or owner of the building is recommended to ensure that a sound, mechanically stable installation is achieved.

All attachments must be capable of supporting the weight of the product.

Step 4

Connect electrical supply to appropriate terminals.

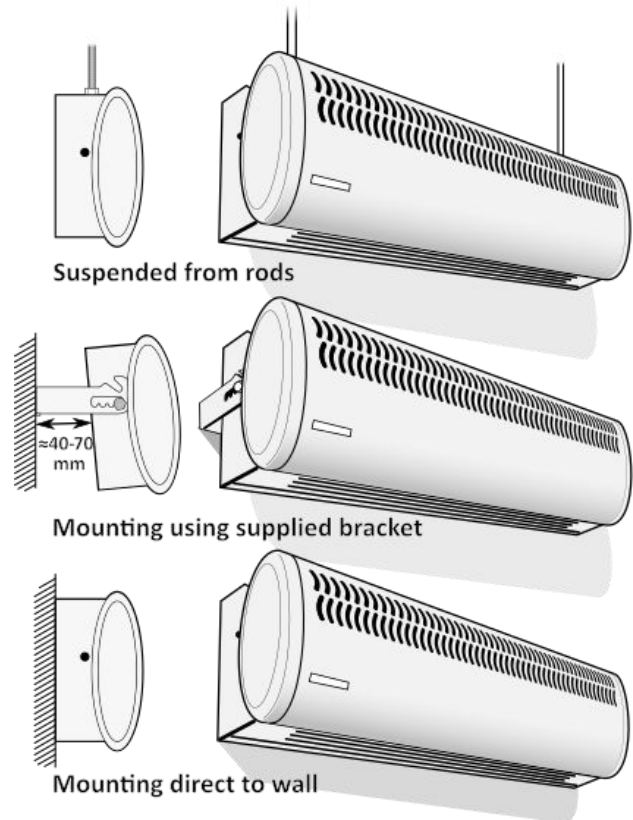
Step 5

Test the heater.

Step 6

Refit the heater front cover.

Fig.3 Various Heater mountings



WEIGHT OF THE UNIT IS 5.1 KG

5. Controls

5.1 Operation

The right hand switch connects the mains supply to the fan motor (giving a cool airflow) and energizes the heat control switches.

5.2 Heat control - HE7402

When the centre switch (marked with a single bar) is pressed the heat output is 1kW. When the left-hand switch (marked with two bars) is pressed the heat output is 2kW. When both switches are pressed the heat output is 3kW.

5.3 Heat control - HE7420

When the centre switch (marked with a single bar) is pressed the heat output is 1.5kW. When the left-hand switch (marked with a two bars) is pressed the heat output is 3kW. When both switches are pressed the heat output is 4.5kW.

5.4 Optional Remote control - HE8407

NOTE: This unit is suitable for remote control operation, with the use of remote control switch part no. HE8407.

The two independent live feeds must be used on 4.5kW & 6kW heaters as shown on the diagrams.



**DO NOT LINK ACROSS LIVE
FEED ON SWITCHES**



This optional control switch is useful if you have the unit mounted up high, as you would need a step ladder to reach the heater's switches. You can fit the HE8407 lower down, allowing you to easily change the heat settings.

When using the HE8407 remote switches all wires from the internal switches need to be removed.



**ONLY ONE CONTROL METHOD
CAN BE USED AT ANY TIME**



5.5 Replacing parts

To replace a switch:

1. Remove the front cover.
2. Release the three fixings which secure the switch bracket to the right hand side of the main case.
3. Remove the push-on connectors, noting their positions.
4. Remove by compressing the plastic retaining tabs and lifting out the switch.
5. Insert the new switch, refit and push on connectors in the correct order, test and reassemble.

To replace fan heater assembly:

1. Remove the front cover.
2. Disconnect the internal wiring from the main terminal block and earth stud.
3. Release the three fixings which secure the switch bracket to the right hand of the main case.
4. Remove the four nuts and washers fixing the fan heater assembly to the back of the case.
5. The fan heater assembly can now be eased forward and removed from the heater case.
6. Fit replacement fan heater and assemble in reverse order.

5.6 Spares

It is essential when ordering spares or replacement parts to state the full model number and the serial number shown on the rating label fixed to the top of the unit.

6. Wiring diagram

THE TWO INDEPENDENT LIVE FEEDS MUST BE USED ON 4.5KW HEATERS AS SHOWN ON THE DIAGRAMS.

Fig 4. Optional HE8407 remote switch connection via mains to the switch

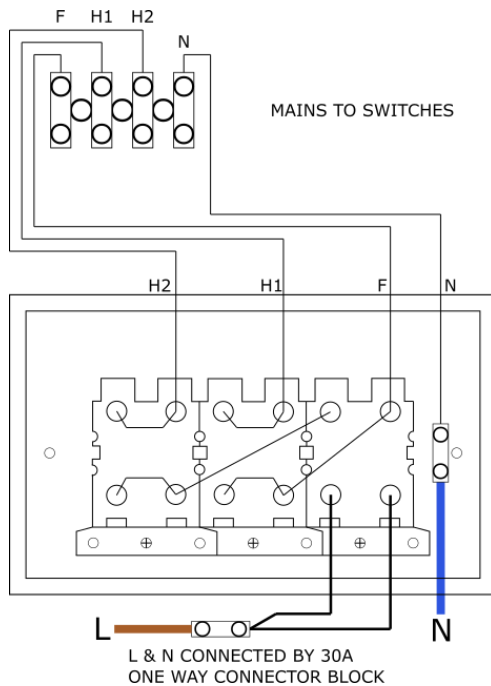


Fig 5. Optional HE8407 remote switch connection via mains to the heater

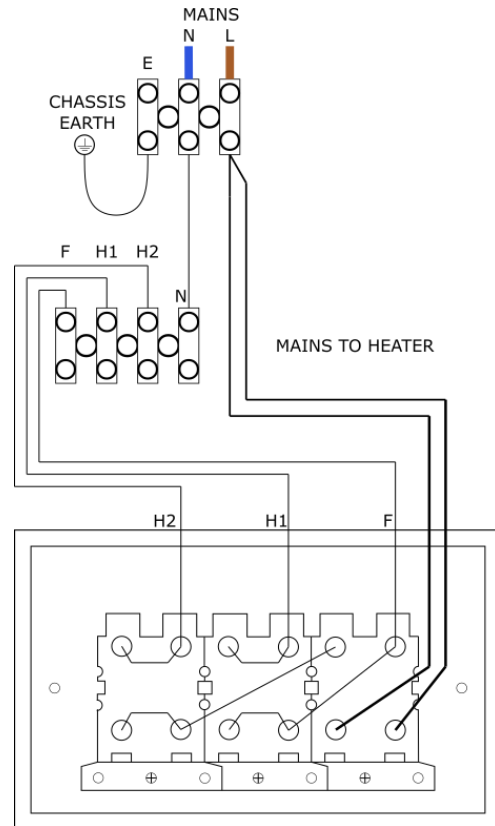


Fig.6 Schematic of HE7402 as supplied with internal switches

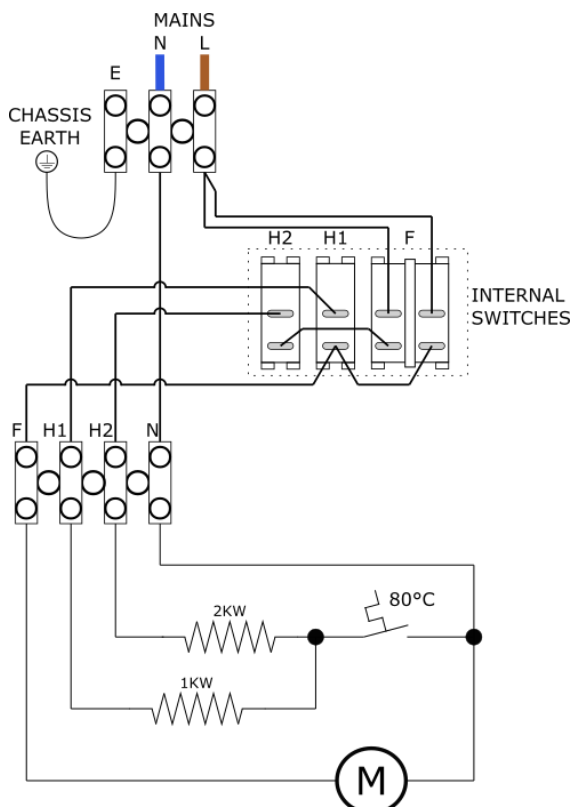
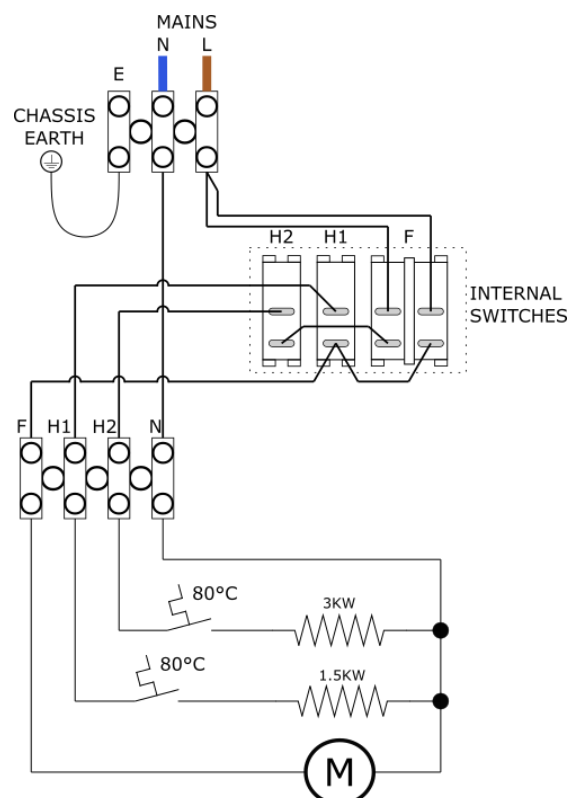


Fig.7 Schematic of HE7420 as supplied with internal switches



Declaration Of Conformity

In accordance with UK Government Guidance.
WE HEREBY CERTIFY THAT THE APPLIANCES DETAILED HEREON HAVE BEEN
INSPECTED AND TESTED, AND CONFORM TO THE REQUIREMENTS OF THE
FOLLOWING UK STATUTORY INSTRUMENTS WHERE APPLICABLE:

Electrical Equipment (Safety) Regulations 2016 SI. 2016 1101
Electromagnetic Compatibility Regulations 2016 SI. 2016 No. 1091
Radio Equipment Regulations 2017 SI. 2017 No. 1206
The Ecodesign for Energy Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019. SI. 2010 2617
The Restriction of use of Certain Hazardous Substances. SI. 2012 No. 3032
The Waste Electrical and Electronic Equipment Regulations 2013. SI. 2013 No. 3113
Security Requirements for 'Connectable Products' PTSI Acts 2022

Transposed standards used:

- **BS EN 55014 (2006)**
- **BS EN 301489.1 & .3**
- **BS EN 300220.1 & .2**
- **BS EN 60730.2.9**
- **BS EN 60335.1 (2012)**
- **BS EN 60335.2.30 (2009)**
- **ETSI BS EN 303645**

PART NUMBER AND DESCRIPTION OF APPLIANCE: HE7402 & HE7420

NAME OF RESPONSIBLE PERSON:
POSITION:
DATE:

DAVID O'SULLIVAN
OPERATIONS MANAGER
24/06/24



FM 12671

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