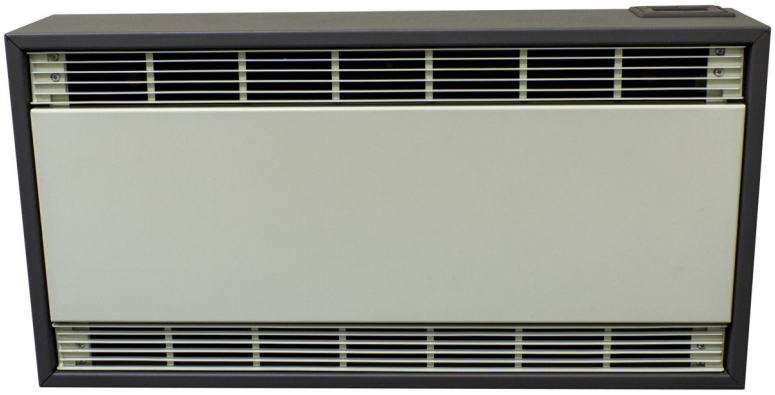
HEATSTORE

THE TOTAL ELECTRIC HEATING SOLUTION



3kW Low Level Fan Heater with Electronic Controls and Open Window Detection

Catalogue Number: HSCF3000E

Installation and Operating Manual

All electrical appliances produced by the company are guaranteed for two years 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 authorized 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.

Contents

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 Heatstore 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 Location

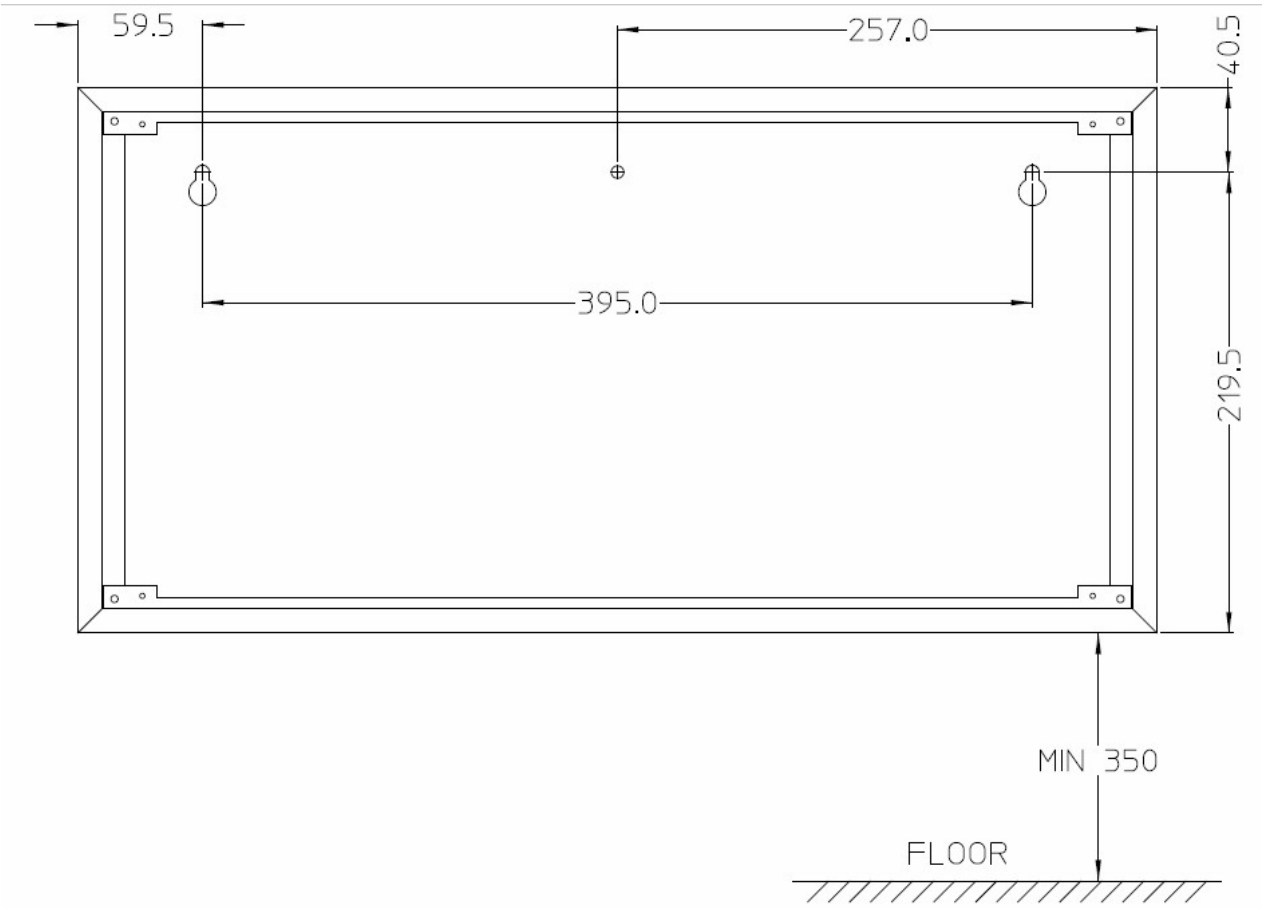
This unit should be installed vertically. The mounting clearances are specified in page 3 & 4.
Care must be taken to allow complete free air movement into the inlet grilles of the unit to ensure the correct working operation of the heater. DO NOT site this heater in a damp environment such as bathroom or drying rooms. DO NOT site the heater is a corner. The minimum distance from the wall or corner is 300mm. The minimum distance from the floor is 0.350mm.

WARNING:

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

2. Dimensions and Fixing locations

Figure 1. - HSCF3000E dimensions



OPTIMUM MOUNTING HEIGHT IS 400mm FROM THE FLOOR.

NOTE:

- MINIMUM CLEARANCE FROM THE FLOOR IS 350mm.

- MINIMUM CLEARANCE FROM THE SIDES OF THE HEATR AND ANY OPSTRUCTION IS 300mm.

- THE HEATER MUST NOT BE LOCATED IMMEDIATELY BELOW A FIXED SOCKET OUTLET.

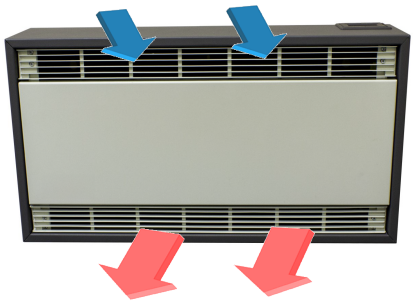
2. Dimensions and Fixing locations

2.1 Mounting

It is the sole responsibility of the installer to ensure that the points of attachment to the building are sound. Care must be taken to allow complete free air movement into the inlet grilles of the unit to ensure the correct working operation of the heater.

The weight of the HSCF3000E is 6kg.

The inlets of the HSCF3000E at the front top of the heater, while the outlet is on the front bottom of the heater.



This unit is for wall mounting only. It is designed to be very quiet in operation if mounted correctly. When fitting more than one heater in a room we would recommend that they are sited on the same wall to optimise airflow and ensure quiet operation.

MOUNTING ON A PLASTERBOARD WALL

- Ensure at least one of the screws is secured to the timber frame of the studded wall by using standard wood screws.
- Where the screw is fitted onto plasterboard only, ensure plasterboard fixings are used. Standard wall plugs will not be suitable.
- Where possible, mount the heater(s) on an outside wall to inhibit transfer of sound within the building.

NB: Failure to follow the instructions and recommendations provided could result in increased noise levels.

INSTALLATION INSTRUCTIONS

1. Remove the front cover (4 screws at the front side).
2. Mark top 2 screw fixing positions 'A' in accordance with the dimension shown on the diagram. The unit must be screwed to the wall with 3 screws through the holes provided in the case.
3. Drill 2 holes in the wall to suit No 10 wood screws (round head) and insert wall plugs. At the top 2 screw positions 'A' screws can now be screwed in until the heads are approximately 5mm from the wall.
4. The unit can now be hung on these two screws and the position of the third bottom fixing marked on the wall. Remove the unit from the wall and drill a third fixing hole in the position marked and insert a wall plug.
5. The unit can now be hung on the wall and the third screw screwed in. Before tightening all three screws ensure the unit is horizontal.

2.2 Electrical Supply

Electrical supply is 230/240V single phase, Neutral and Earth. The fitted supply cable is 1.5mm^2, the cable is 1.8m long and exits at the bottom right of the heater.

2.3 Electrical connections

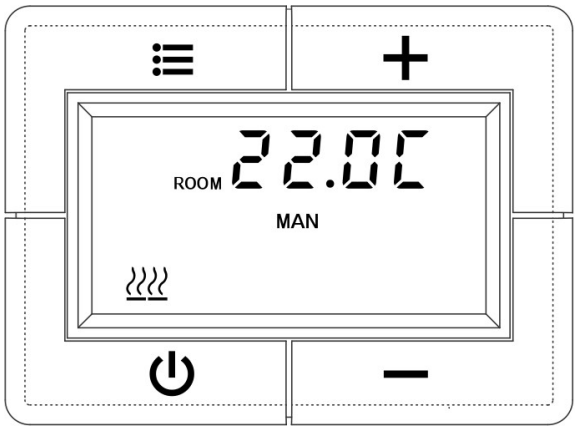
These units are suitable for connection to a 230/240 Volt 50 Hz single phase supply.

The appliance shall be connected to the supply via an appropriate switched fused double pole isolator having a contact separation of greater than 3mm.

There are no exceptions.

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.

3. Controls



3.1 Basic Operation

The HSCF3000E has 4 standard operating modes: **BOOST, MANUAL, SETB and PROG.**
Each mode can be selected by pressing the MENU button to cycle through the options. The cycle sequence will always start with **BOOST** mode followed by **MANUAL**, **SETB** and **PROG**.

The HSCF3000E also has a **STANDBY MODE**. To enter/exit this mode, press the standby button. In **STANDBY MODE,** the heating will not be activated.

To adjust the operating mode/settings of the HSCF3000E, the display must first be activated.
If the controller is in **STANDBY MODE**, press the power button. The heater will exit standby mode and the display will be activated for 5 seconds.
If the controller is not in **STANDBY MODE**, press either of the + or - or menu buttons once. The display will be activated for 5 seconds.

3.2 BOOST - 15 minute

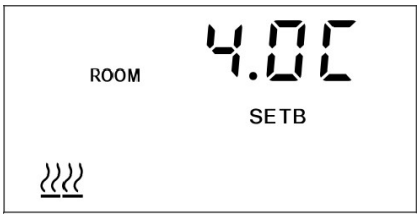
The boost feature increases the room temperature for 15 minutes. To amend the set temperature when in **BOOST** mode, activate the display and use the **+** and **-** buttons to change the temperature. Once the temperature is set, you can leave the display to return to the main screen and the settings will be saved. After 15 minutes, the HSCF3000E will return to the previous operating mode.

3.3 MAN - Manual Mode

In **MANUAL** mode, the heater maintains a chosen set temperature between 15°C and 35°C. To amend the set temperature when in **MANUAL** mode, activate the display and use the **+** and **-** buttons to change the temperature. Once the temperature is set, you can leave the display to return to the main screen and the settings will be saved. When the room temperature reaches the set temperature, the heating is disabled.

3.4 SETB - Setback Mode

In **SETB** mode, the heater maintains a chosen set temperature between 4°C and 15°C. To amend the set temperature when in **SETB** mode, activate the display and use the **+** and **-** buttons to change the temperature. Once the temperature is set, you can leave the display to return to the main screen and the settings will be saved.



3.5 PROG - Automatic time mode

In this mode, the heater will follow the week's time / temperature program.
The temperature can be temporarily overridden in **PROG** mode by simply activating the display and using the **+** and **-** buttons to set the new temperature. The new set temperature will be then maintained until the next program step.

3. Controls

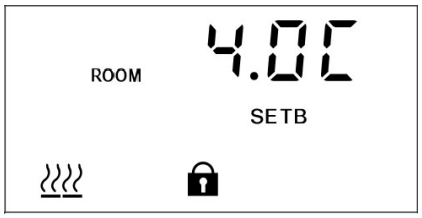
3.6 Heat symbol

Every time there is a demand for heat, the display will show the heat icon.

Reduced heat output when the room temperature is close to the set temperature allowing for almost silent operation.

Full heat output.

3.7 Keys Locking



Press and hold + and - together for 5 seconds. The display will show the 🔒 symbol. Repeat the step to unlock.

3.8 Setting the time and day

The HSCF3000E will come set with the correct time and day. It has an internal battery back up that can remember the settings. It will auto-matically change the clock to adjust to British summer time. Should you need to alter the time, see section setup menu.

3.9 Open window detection

Ensuring you do not waste energy on heating the outside world, the heater is equipped with optional open / closed window detection. The heater recognises sudden drops in temperature when a window or a door is opened and turns the heating off to save energy. When the window is closed, the heater will automatically detect a temperature rise, and switch itself back on. Once enabled in the setup menu, the open window detection is fully automatic and does not require any human intervention to be activated. When the open window detection has been triggered, the heat symbol will flash on/off as shown below.

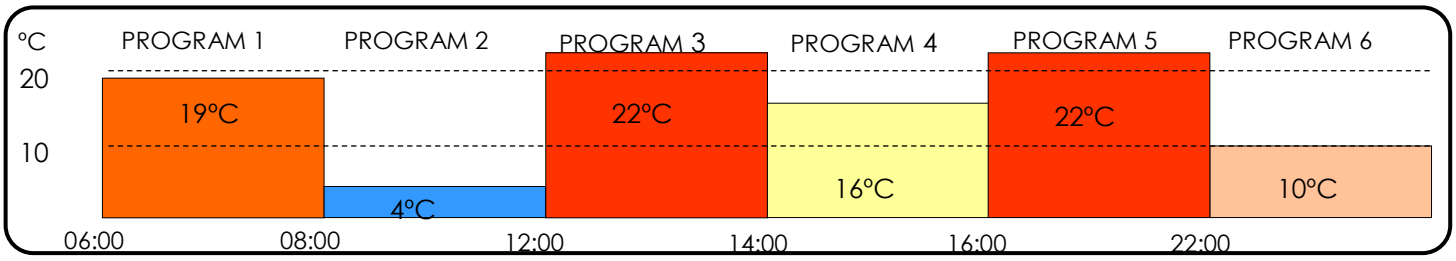
The system has been factory set to default time and temperature values. If necessary, all values can be adjusted. When the heating is on, open window detection sensor will automatically switch the heater off when it detects a fall in temperature of 2°C in less than 10 minutes (this temperature and time can be changed in Setup menu). If a temperature rise of 2°C in less than 30 seconds is detected, the heater will switch itself back on (this tem-perature and time can be changed in Setup menu).

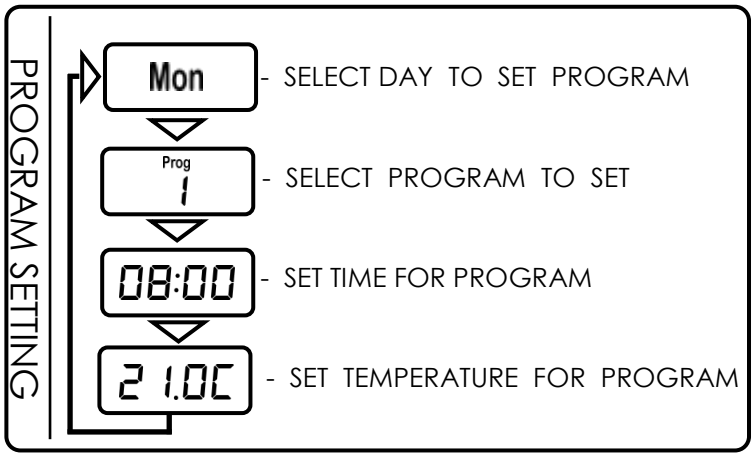
3.10 Fan only mode

This appliance comes with a fan only option. This is very good for the warmer months to help improve air circulation. To enter fan only mode, activate the display, reduce heater temperature using MENU button until no heat symbol is showing. Then use MENU button to scroll until the display shows a fan symbol. To exit fan simply activate the display and press the MENU button.

4. Setting the automatic program schedule

An example of one day program on HSCF3000E





This section provides an example of how to set the 7-day program for one day. The example will program the timer to maintain 21°C from 08:00 until 16:00. It will maintain 4°C from 16:00 onwards. It does this by setting the programs as follows;

Prog 1 - Set to 08:00 and 21°C
Prog 2 - Set to 16:00 and 4°C
Prog 3, 4, 5, 6 - Set to inactive

Ensure timer is set to 7d in setting A of the set up menu (page 9). The steps to program this are shown below;

Step 1: Press and hold the MENU button. The display below should show with Monday flashing.

Step 2: Press the MENU button. Prog 1 in the top left of the display should flash. This represents the program number. Each day has 6 programs.

Step 3: Press the MENU button. The time should flash. Use the + and - buttons to set the time you want the heating to switch on.

Step 4: Press the MENU button. The temperature should flash. Use the + and - buttons to set the temperature you want to maintain.

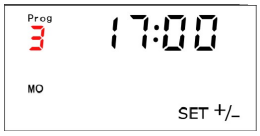
Step 5: Press the MENU button. Monday should flash again.

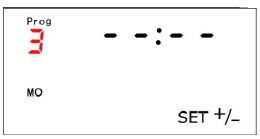
Step 6: Press the MENU button. Prog 1 in the top left of the display should flash. Use the + button to increment this to Prog 2. (Note: you can cycle between the different programs using the + and - buttons)

Step 7: Press the MENU button. The time should flash. Use the + and - buttons to select the time you want the heating to switch off.

Step 8: Press the MENU button. The temperature should flash. Use the + and - buttons to select a frost protection temperature.

Step 9: Repeat these steps for programs 3-6 if additional time periods are required. Any programs not being utilized must be deactivated. To do this, simply select the program in question as per step 6 and press the STANDBY button. The time should change to dashes as shown below. To reactivate the program, simply press the STANDBY button again.





5. Program mode overview

5.1 Overview of program mode

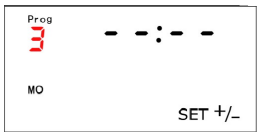
The HSCF3000E has a 7-day, 5-day **+** 2-day and a 24 hour timer available. This can be chosen in the setup menu. Up to 6 programming steps are available for each day. In the programming you can set a start time and a temperature for each program.

5.2 Basic operation in program mode

1. Press and hold MENU for 5 seconds to enter the program setting.
2. The day will be flashing. Use **+** and **-** to navigate day, press MENU to select day.
3. PROG 1 will be flashing. Use **+** and **-** to navigate program, use MENU to select program.
4. The time will be flashing. To set time, use **+** and **-** , press MENU to set the time.
5. The temperature will be flashing. To set temperature, use **+** and **-** to change temperature, press MENU to set temperature.

5.3 Setting program inactive

If you do not require the use of all 6 programs they can be deactivated. When in programming mode select the program you want to make inactive and press the STANDBY button. To activate the program again, press the STANDBY button.



5.4 Copy day function

If you require the same set of programs throughout the week, 7day timer is available. This will use the same program every day. A5-day + 2-day timer is also available. This will use the same programs Monday-Friday, and alternative programs Saturday and Sunday. These modes are enabled in the setup menu, as explained in the setup menu.
Alternatively, it is possible to copy a program from one day to another.
To do this, follow the steps below;

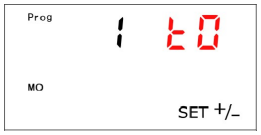
Step 1: Press and hold MENU for 5 seconds to enter the program setting.

Step 2: Press and hold STANDBY for 5 seconds to enter the copy day setting.

Step 3: Use the MENU button to select the day to copy the programs from. 1= Monday, 2 = Tuesday and so on.

Step 4: Use the + and - buttons to select the day to copy the programs to.

Step 5: Press the STANDBY button to copy the programs. The 'TO' will flash to confirm the programs have been copied.



6. Setup Menu

1. Press and hold MENU and **-** together for 5 seconds.
2. The display will enter the setup menu.
3. Use **+** and **-** to change a value.
4. Use Menu to scroll between the settings.
5. Use standby button to exit the setup menu.

Each available setting is explained below.

1 - Temperature calibration

The temperature reading is factory calibrated but if for any reason it needs adjusting (better accuracy required, to suit different position in the room etc.), the reading can be recalibrated in 0.5 degree steps.

2 - Celsius / Fahrenheit

3 - Set minimum temperature limit

4 - Set maximum temperature limit

5 - Enable/disable open window detection

6 - Open window detection time

7 - Temperature drop in open window detection time

8 - Closed window detection time

9 - Temperature rise in closed window detection time

A - Program mode select.

Choose between a 7-day, 5-day 2-day or a 24 hour timer.

b - Time and Date setting.

The year is shown first, use + and - to change, then press menu to change month, day, hours and minutes.

C - Power Selection

2000kW or 3000kW.

d - Backlight Setting

If this is OFF the backlight will turn off after 15 seconds. The display must be activated before using the controls.
If this is ON the back light will be permanently on when the heater is active.

7. Fault detection and indication

7.1 Self diagnostics

This unit has a self diagnostic system in place to detect any faults with the heater, below is a table of all possible faults that will display on the screen when a problem is found.

ERR Code	Fault
2	External temperature sensor fault Response: Heater stops
3	Internal temperature sensor fault Response: Heater stops
7	Motor stopped or motor sensor fault Response: Heater stops
8	Motor slow or motor sensor fault Response: Heater stops
9	Overheating detected Response: Heater stops for 10 minutes to cool down

7.2 Thermal cut-outs

The units are protected by thermal cut-outs from overheating in the event of fan failure or an obstruction of airflow.

If this happens the thermal cut-outs switch off the heating element. The appliance will not operate until the heater is disconnected from the mains supply and has cooled down.

7.3 Fault Finding

If the heater will not operate, disconnect it from the mains and arrange for a certified electrician to attend and investigate the reason.
And the display should be showing an ERROR message for guidance (See Above).

The cause of cut-outs operating should be investigated before resetting.

7.4 Maintenance

ALWAYS ENSURE THAT THE MAIN EXTERNAL ELECTRICITY SUPPLY IS SWITCHED OFF BEFORE COMMENCING ANY MAINTENANCE ON THIS HEATER.

To obtain the best results from the heater, it is essential to avoid the accumulation of dust and dirt within the unit on the air inlet and discharge grilles. For this reason regular cleaning is necessary.
Cleaning of the fan is best carried out with a soft brush.
The product should be serviced annually.
Servicing shall be undertaken by a competent person.

7.5 Cleaning

Always ISOLATE the heater from the mains before cleaning. The heater should not require any maintenance, but it is strongly advised that it is kept clean. An occasional wipe over with a soft cloth is all that should be necessary.

- Do NOT use metal or furniture polish on any part of the heater.
- Do NOT touch the heater with wet hands or in any way bring water into contact with it.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or a similarly qualified person in order to avoid a hazard.

7.6 If Your Heater Does Not Work

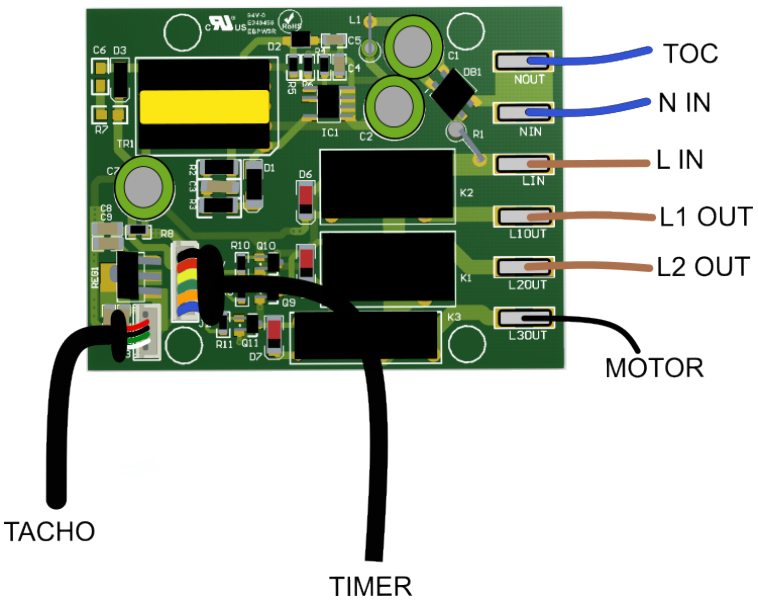
- Check that power is available to the heater.
- Check that the fuse in the spur unit has not blown. This can be done by replacing the fuse with another suitable fuse.

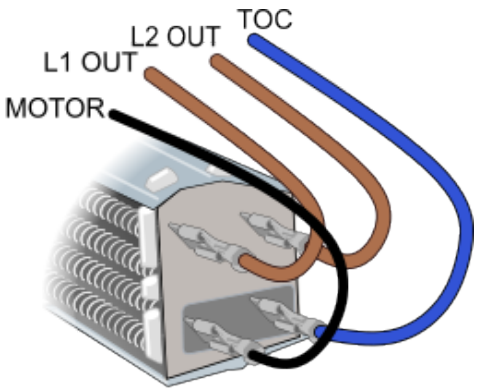
Should none of the above remedies work, then telephone the helpline number shown in these instructions (UK ONLY). Do not attempt to repair the heater.

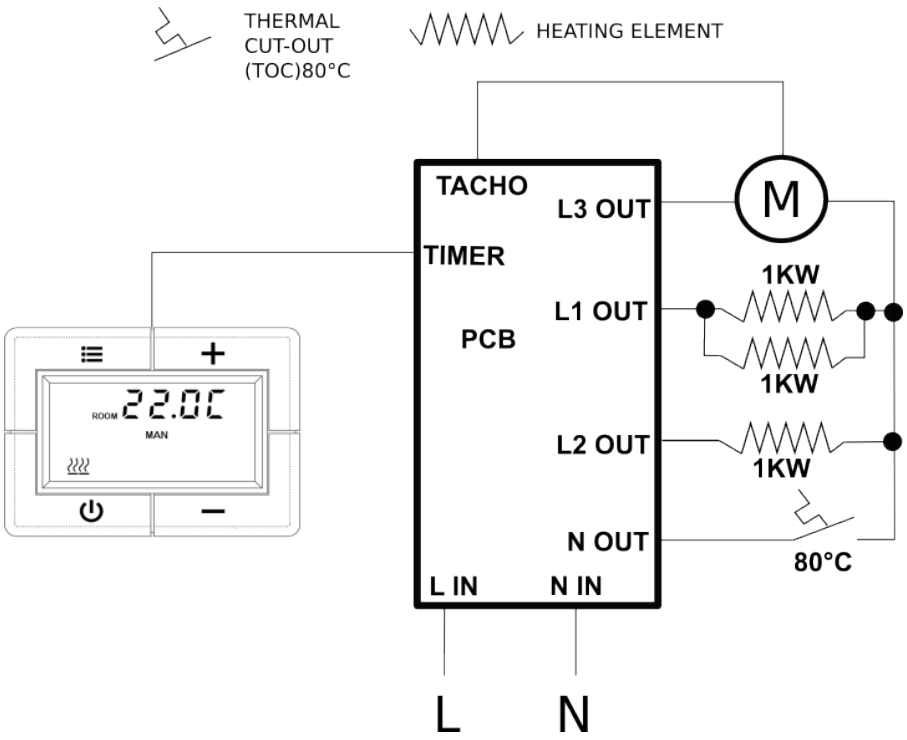
7.7 Replacing the Fan Assembly

1. Remove the grille.
2. Disconnect the internal wiring from the blower
3. Remove the 4 screws fixing the fan heater assembly to the back of the case.
4. The fan heater assembly can now be eased forward and removed from the heater case.
5. Fit replacement fan heater and reassemble in reverse order.

8. Wiring diagrams







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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 Act 2022

Transposed standards used:

- **BS EN 55014 (2006)**
- **BS EN 301 489.1 & .3**
- **BS EN 300 220.1 & .2**
- **BS EN 60 730.2.9**
- **BS EN 60335.1 (2012)**
- **BS EN 60335.2.30 (2009)**
- **ETSI BS EN 303645**
- **EN 50663 (2017)**
- **EN 60730-2-9 (2010)**
- **EN 60730-1 (2011)**
- **ETSI EN 300 220-1 V3.1.1 (2017-02)**
- **ETSI EN 300 220-2 V3.2.1 (2018-06)**
- **ETSI EN 301 489-1 V2.2.2 (2019)**
- **ETSI EN 301 489-3 V2.1.1 (2019)**

PART NUMBER AND DESCRIPTION OF APPLIANCE: HSCF3000E

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POSITION: Technical Services Manager
DATE: 20/01/26

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