



## Versatile, energy efficient heating Sterling 3 kW Electric

Model: STR 3 E

# INSTALLATION & USER GUIDE

PLEASE RETAIN THIS LEAFLET FOR FUTURE MAINTENANCE



### MODEL

The STR3E is a quiet High Level Fan Heater designed for Commercial and Industrial situations. It is suitable for wall mounting. The Heater incorporates a tangential flow fan and the unit is designed to operate in free air conditions. It is important that there should be no restriction to the free flow of air through the unit.

### PROTECTION

The unit is protected in the event of fan failure, or an obstruction of the free airflow, by a single thermal PTC Self Hold Cut-out. Having tripped, the PTC Cut-out remains open, effectively switching off the heating elements as long as mains power is available inside the appliance. The PTC Cut-out will only reset when the appliance is switched OFF and allowed to cool for at least 20 minutes.

### MOUNTING

The normal mounting height is 2.3m above the floor, although this will depend to some extent on the situation. The unit should be mounted at least 450mm below ceiling. The heater can be arranged to blow air at any angle, from horizontal to vertically downwards, subject to the conditions mentioned below. It is suggested that an angle of 45 deg is a convenient starting point when setting up the

unit. It must always be installed with the axis of the motor horizontal. Failure to ensure this will result in excessive bearing wear and premature failure.

A mounting bracket is provided for mounting to a wall.

The heater should not be mounted in situations where it may be subject to conditions of excessive humidity or the atmosphere is corrosive.

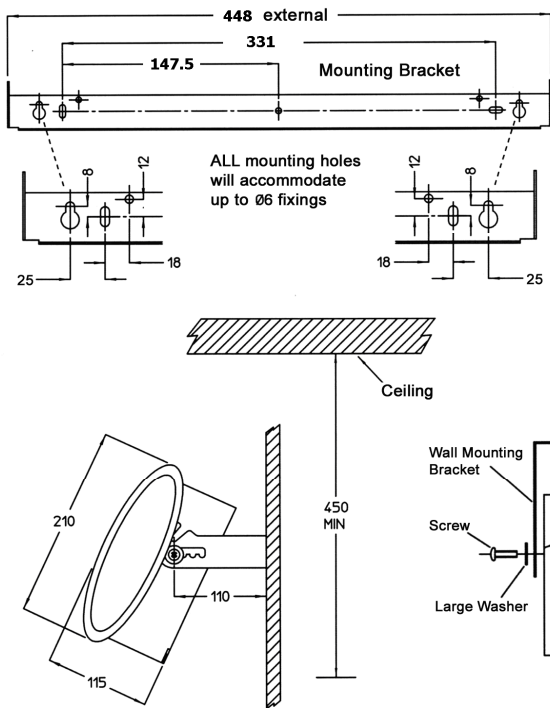
### INSTALLATION

**IN ALL CASES, THE UNIT SHOULD BE WIRED IN ACCORDANCE WITH IET REGULATIONS FOR THE ELECTRICAL EQUIPMENT OF BUILDINGS.**

Loosen mounting screws, allowing the mounting bracket to be removed from the unit. Making sure that the mounting bracket is horizontal, fix the bracket to the wall using 3 x No 8 wood screws.

Place the unit on the mounting bracket ensuring the washers are spaced as on diagram.

Tighten screws to hold the unit at the required angle.



## OPERATION

The lower right hand switch connects the mains supply to the fan motor (giving cold air flow) and energizes the heat control switches.

## HEAT CONTROL

When the centre switch (marked with 1 bar) is depressed the output is 1kW. When top switch (marked with 2 bars) is depressed the heat output is 2kW. When both switches are depressed the heat output is 3kW.

## THERMOSTAT ADJUSTMENT KNOB CONTROL

The heater is fitted with a built-in thermostat to control the temperature level to which the room is heated. The thermostat adjustment knob is located on the left hand end and is numbered. Rotate the knob clockwise to a higher number against the thermostat reference mark to raise the room temperature. Once set it is unlikely to require being touched again.

## MAINTENANCE

**ALWAYS ENSURE THAT THE MAIN EXTERNAL ELECTRICITY SUPPLY IS SWITCHED OFF BEFORE ATTENDING TO THE SERVICING OF THE UNIT.**

To obtain the best results from the Heater it is necessary to avoid any build-up of dust or dirt within the unit or on the air inlet grille. For this reason the unit should be cleaned regularly, paying particular attention to the removal of dirt build-up on the back of the fan rotor blades.

The removal of dust and dirt is best achieved using a soft brush.

**IN ALL CASES, THE UNIT SHOULD BE WIRED IN ACCORDANCE WITH IET REGULATIONS FOR THE ELECTRICAL EQUIPMENT OF BUILDINGS.**



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## ELECTRICAL CONNECTIONS

This unit is suitable for connection to a 230/240V 50Hz single phase AC supply. The unit consumes 3kW of electrical power when the fan and heater are in operation. Connection to the mains supply should be via a switched fused isolator.

To connect a supply to the heater the curved top cover first needs to be removed. Looking directly at the output grille the top cover is secured by two screws which are located at the upper left and right of the outlet grille. Once the 2 screws are removed the curved top cover can be removed by lifting it up and away from the output grille, then lifting off the cover from the two slot hinges located at the opposite side to the two screws/output grille. The input terminal block, marked ENL, is fitted at the left hand side of the unit looking from above (at the opposite end to the fan motor).

To the unit connect a suitable length of 3 core 1.5 mm<sup>2</sup> flexible cable to the input terminal block marked ENL.

For safety reasons, a sound earth connection **MUST ALWAYS** be made to the unit before being put to use.

## TO RESET THE PTC SELF HOLD CUT-OUT

### DO NOT ADJUST BY HAND ANY INTERNAL COMPONENTS

- The cut-out is reset by switching OFF mains power to the appliance.
- Allow the appliance to cool for 20 minutes
- Reconnect mains power, switch ON the appliance.
- If the cut-out trips again the appliance and installation should be checked by a qualified electrician.

## TO REPLACE A SWITCH

- Ensure mains supply is switched off.
- Remove the top cover.
- Remove the push-on connectors, noting their position.
- Remove copper links, noting their position.
- Remove switch by compressing the plastic retaining tabs, and lifting out the switch.
- Insert the new switch, refit copper links and push on connectors in the correct order.
- Test and reassemble.

## TO REPLACE THE FAN HEATER ASSEMBLY

- Remove the top cover.
- Disconnect the internal wiring from the main terminal block.
- Remove the four nuts and washers fixing the fan heater assembly and earth tag to the back of the case.
- The fan heater assembly can now be eased forward and removed from the heater case.
- Fit replacement fan heater and reassemble in reverse order.

## IF YOUR HEATER DOES NOT WORK

- Check that the unit is wired correctly
- Check that the fuse has not blown in the connection to the unit
- Check re-set of PTC (as described under relevant section)

Should none of the above remedies work, disconnect heater from power supply and consult accredited service agent. If the appliance is still under guarantee, return it to your supplier.

- Do NOT attempt to repair the heater yourself

## GUARANTEE

Your product is covered by a free 5-year parts and labour guarantee.