Sterling

Installation, commissioning
and user manual



3 kW Electric
High Level Fan Heater

Issue 002 | October 2026
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Introduction

In the event of items missing or visible damage please contact us on 01245 324560.

The STR3EL 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.

Warning

- Do NOT site the appliance in a corner.
- Do NOT handle the appliance with wet hands.
- Do NOT use the appliance in workshops or rooms where excessive dust is generated or present.
- Ensure that nothing is pushed into any aperture of this appliance.
- Do NOT touch outlet grille when the appliance is in use.
- Do NOT cover or restrict any aperture of the appliance when in use.
- Do NOT use the appliance if damaged.
- Do NOT leave the appliance unattended where young children are present.

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:

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

Transposed standards used:
BSEN55014 (2006)
BSEN301 489.1 & .3
BSEN300 220.1 & .2
BSEN60 730.2.9
BSEN 60.335.1 (2012) BS EN 60.335.2.30 (2009)

Customer: Smiths Environmental Products Ltd.

Part number and description of appliance:
STR3E 3kW High Level Fan Heater 240V 50HZ

Name of responsible person: A C Reynolds

Position: Quality Engineering

Date: 15/03/21

Consort Equipment Products Ltd.
Thornton Industrial Estate,
Milford Haven,
Pembrokeshire, SA73 2RT. UK
Tel: +44 1646 692132

Symbols

This manual contains information and prescriptions marked by the following symbols:



Ignoring these safety provisions marked by the symbol “caution: hazard” may endanger the safety of people.



Ignoring these safety provisions marked by the symbol “caution: electricity” may endanger the safety of people, as well as the integrity of the equipment.



High temperature surface. Take utmost care to prevent people from getting in contact with the hot surfaces of the appliance.



To avoid overheating, the appliance should not be draped with clothing or other material.

Important safety and installation instructions

Prior to installation, read these installation and operating instructions. The installation and operation should also be in accordance with national regulations and accepted codes of good practice.



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision. Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.

To guard against injury, basic safety precautions should be observed, including the following:

1. Read and follow all safety instructions and all the important notices on the appliance before installing, using and maintaining the appliance. Failure to do so may cause personal injury or damage to the appliance or installation.



2. Always disconnect electrical supply before putting on or taking off parts and whilst the equipment is being installed, maintained or handled. Never work with bare feet and/or with wet hands.
3. Carefully examine the appliance before and after installation.Do not operate the appliance if it has a damaged supply cord or enclosure, or if it is malfunctioning or it is dropped or damaged in any manner. Inspect the appliance periodically.
4. Improper use.

   Do not use this appliance:

- In locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas) (EN60335-2-51);
- For other than intended use.



5. **CAUTION**
   Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.
6. Installation.
   The appliance must be mounted in a stable/fixed position in a dry, well ventilated, frost-free, waterproof and protected place, with sufficient ventilation around it. Make sure that the appliance is securely and correctly installed before operating it and that there is enough room around it for maintenance operations, dismantling, checking for free inspection.



The maximum ambient temperature at which the appliance is to be used is 40°C (EN60335-2-51).

7. Electrical connection
   IMPORTANT: Connection to the power supply is by means of a power cable which can be fitted with a plug-type connection or a two pole isolating switch with a minimum contact opening of 3 mm.

   Electrical connection must be carried out by a qualified electrician and in accordance with local regulations and both data on the name-plate and the appropriate diagram inside the terminal box cover.

   Follow all safety standards.
8. Connect the appliance only to a mains supply protected by a Residual Current Device (RCD or Ground-Fault Circuit-Interrupter) with a rated residual operating current not exceeding 30mA.
9. Prior to any modification being made to the equipment, it must be agreed with and authorised by the manufacturer. Original spare parts and accessories authorised by the manufacturer are integral part contributing to the safety of the equipment and of the machines. The use of non original components or accessories may endanger the safety and causes the termination of the warranty. Safe operation is only assured for the applications and conditions described in Application of this manual.



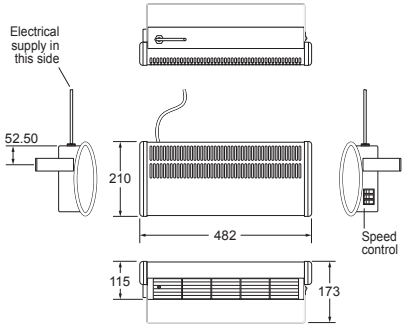
10. In order to avoid overheating, do not cover the equipment.

Non-observance of the safety instructions results in the loss of any claims to damages.

The indicated limit values are binding and cannot be exceeded for any reason whatsoever.

KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE.

Product dimensions



Product performance

Heat output

Heat Output (kW)	Fused spur	Total Power Consumption (kW)	Sound Levels (dBA)	Casting colour	Fan-only
1kW/2kW/3kW	13A	1kW/2kW/3kW	39	white	•

Sound levels measured at 1.5m with the product installed at 2.2m high

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 unit should be positioned so that the air flow is not obstructed.

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 200mm 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.

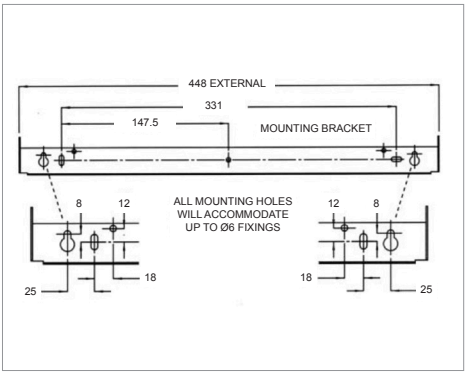
Loosen mounting screws, allowing the mounting bracket to be removed from the unit. Making sure that the mounting bracket is horizontal fix, the bracket to the wall using appropriate screws.

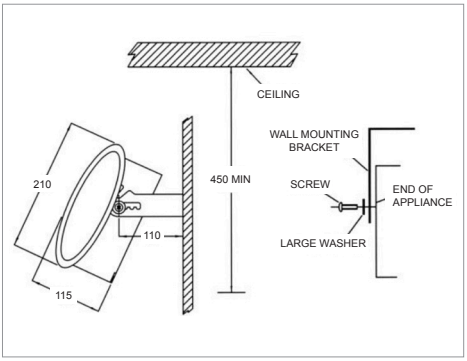
Looking directly at the output grille the top cover is secured by 2 screws which are located at the upper left and upper right of the outlet grille. Once the 2 screws are removed the curved top

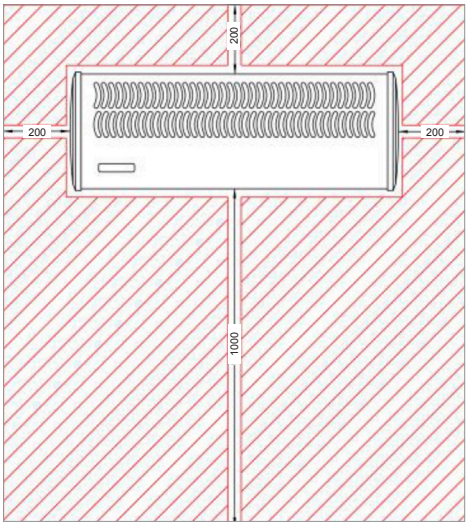
cover can now be removed by lifting it off the two slot hinges located at the opposite side to the 2 screws/ output grille.

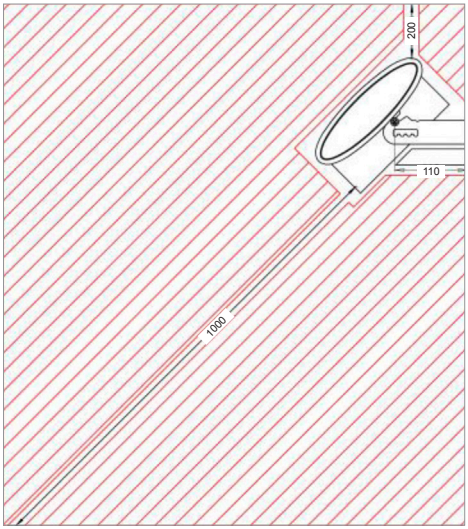
Place the unit on the mounting bracket ensuring the washers are spaced as on the diagram.

Tighten screws to hold the unit at the required angle.









Electrical Connection

This unit is suitable for connection to a 230/240V 50Hz single phase AC supply. The maximum load / output of the heater is 3kW. 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^2 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 used.

Refit the heater front cover.

Controller

The unit is supplied with a Wireless controller. This controller must be used in conjunction with the heater.

Important: The heater will not function without the controller.

The controller should be positioned 1.5m above the floor and in the same room as the heater. The controller should be fixed to the wall. Avoid areas with draft or direct sun. Do not position the controller above or close to the heater or other heat sources. Damp areas or areas where the controller can be mechanically damaged should also be avoided. Avoid installing the controller in areas where there are metal objects between the heater and the controller. This will reduce the RF range. The RF range in ideal conditions can be up to 20m however this can be reduced when the signal is passing through the walls or other objects. The range can be also affected where the controller is mounted close to power cables, motors or equipment producing strong electromagnetic field. If the temperature control feature is used it is necessary to use one controller for each room or zone.

To reset the PTC self hold cut-out

DO NOT ADJUST BY HAND ANY INTERNAL COMPONENTS

a) The cut-out is reset by switching OFF mains power to the appliance.

b) Allow the appliance to cool for 20 minutes

c) Reconnect mains power, switch ON the appliance.

d) If the cut-out trips again the appliance and installation should be checked by a qualified electrician.

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)
- Check the controller is calling for heat.
- Check the unit is paired with the controller
- Check the battery condition in the controller and replace if necessary

Do NOT attempt to repair the heater yourself

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.

Operation

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

Note: wireless controller must be in the on position for the heater to work.

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.

Note: for all heat settings the lower right-hand must be set to on (fan).

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 buildup 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.

Controller - Introduction

In compliance with LOT20 European legislation, this product is supplied with a wireless battery powered wall-mounted time and temperature controller. The product will NOT function without the wall-mounted controller. The controller can control an unlimited number of heaters.

The controller is primarily designed to minimise energy wastage and ensure the room is maintained at the comfort level set by the user. In the basic setting, the controller is a simple room thermostat in which the heater will run until the set temperature is reached. If the room temperatures falls the heater will switch on again until the set temperature is reached.
The operating range is between 15°C and 35°C.

The controller has a number of advanced features that, if required MUST be set during the installation process. Please discuss with your customer which features they require.

- **Programmable Timer**
  To allocate designated time slots in which the room will be heated.
- **Frost Protection**
  Can be used in situations where you require a minimum room temperature to be maintained, between 4-15 degrees C.
- **Maximum Temperature Setting**
  This can be set to limit the maximum temperature set by the user.
- **Open Window Detect**
  Will switch off the heating to limit the loss of energy when it detects a sudden temperature drop as a result of an open window or door, switching back on when it detects it has been closed again.

Batteries in Wall Controller

Is recommended that the batteries are changed every 12 months to protect potential damage by batteries leaking (batteries are supplied with the controller).

You do not need to re-pair after batteries have been changed (pairing is done by programming the chip memory).

Wireless Controller Self Diagnostic

The controller is equipped with a self diagnostic software that will check functionality of all main components. If there is a fault with any part of the controller or controller is operating outside of the temperature limits, the display will show ‘Err’ on the display. If this happens, controller will not function in order to protect itself and the heaters.

Registering your product

Thank you for purchasing a Smith's product. It has been designed and manufactured to the highest quality standards to ensure it gives you efficient and trouble-free service for many years. We are committed to achieving the highest standards and our faith is supported by a free parts and labour guarantee with every product.

For more information on the warranty period for this product please visit our website smithsep.co.uk/product-registration/

This gives you the peace of mind that in the unlikely event of product failure, we will repair or replace the product completely free of charge providing the product has been installed, used and maintained in accordance with the instructions. Your statutory rights are not affected by this warranty.

It is important to register as soon as possible online at: smithsep.co.uk/product-registration/. This will ensure you will receive prompt and efficient service if your product requires attention within the warranty period. If you do not register your product, you will be required to produce proof of purchase prior to receiving service.

For more details please visit our website: SmithsEP.co.uk

SCAN HERE TO REGISTER YOUR PRODUCT

Disposal

As part of the policy of continuous product improvement, Smith's Environmental Products LTD reserves the right to alter specification without prior notice.

Products with this symbol (crossed out wheelie bin) cannot be disposed as household waste. Old electrical and electronic equipment must be recycled at a facility capable of handling these products and their waste by-products. If you are purchasing replacement equipment your retailer may offer a 'take back' scheme, or will be able to give details of the nearest approved authorised treatment facility. Proper recycling and waste disposal will help conserve resources whilst preventing detrimental effects on our health and the environment.

WEEE Registered Code: WEE/ED0093VW

Approved CQS ISO 9001:2015

ISO 14001

After sales

If you experience any problems with the use of your product, please contact our after-sales office +44 (0) 1245 324560.

For product information, customer services or sales support call us on +44 (0) 1245 324900

For the Republic of Ireland, contact MT Agencies on 01 864 3363

Sales: sales@SmithsEP.co.uk
General information: info@SmithsEP.co.uk

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Happy to help
Smith's Environmental Products Ltd is one of the leading manufacturers of heating and cooling products in the UK. We are committed to achieving the highest standards and our faith is supported by a free parts and labour guarantee with every product (see our website for more information). Our customer service is second to none and we are happy to offer any help and guidance that you might need.

Stockists
All products are available nationally from Builders' Merchants, Plumbers' Merchants, Heating Equipment Distributors and Kitchen Equipment Distributors. In the event of difficulty, please contact us or visit our website SmithsEP.co.uk for details of your nearest stockist.

Information and advice
Full technical specifications and list prices is available to download from our website or in hard copy from our office. Also available on our website are price lists, individual product data sheets, installation & user guides, where to buy, who to contact and a media centre.

Alternatively contact our office 9.00am to 5.00pm Monday to Friday.

As part our commitment to continuous improvement Smith's Environmental Products may change the specifications of its products without prior notification or public announcement. All descriptions, illustrations, drawings and specifications in this publication present only general particulars and shall not form part of any contract. All dimensions are in mm unless otherwise stated. Please visit the website for the most up to date information.

To view the full product information download the datasheet at: www.SmithsEP.co.uk

For product information, customer services or sales support call us on **+44 (0) 1245 324900**

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