

### **Accessories**

By fitting optional equipment this product can operate automatically under normal running conditions. The optional controls fit within the casing of the unit and are supplied with easy to fit instructions.

### **Adjustable low temperature cut-out ALTC T3**

This enables the end user to precisely select the temperature at which the fans will switch on when combined with different heat sources.

### **Wall Mounted Controller WMCEC**

This enables the end user to control the fan speed from a wall mounted control.

### **Plinth to suit Caspian Universal CCLP**

Where the product is installed floor level, the plinth will raise the unit 150mm above the floor. (Available in black & white)

### **Air inlet filters for all models.**

**For accessories or spares please contact either your supplier or Smith's Environmental Products Ltd.**

Technical designation CL 60, 90, 120

*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



ISO 9001  
Registered Firm

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For Ireland (Republic & Northern), contact MT Agencies on 00 353 1 864 3363

In light of our policy of continuous development Smith's Environmental Products Ltd reserve the right to alter specifications without prior notice.

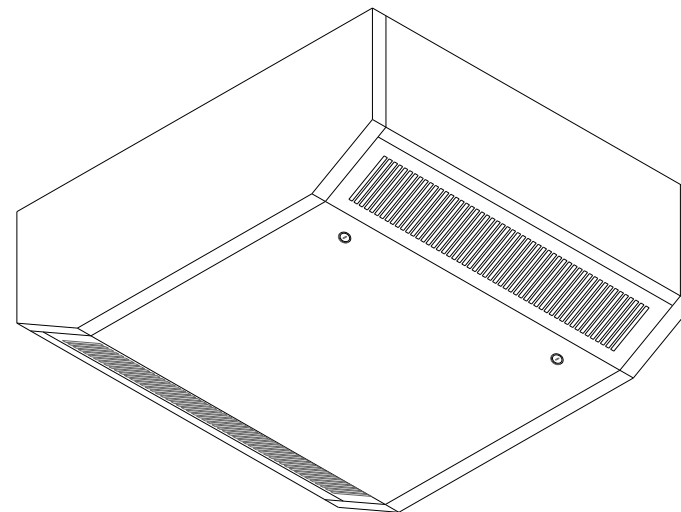
### **Manufactured in the**



# Caspian Universal 60, 90 & 120 Series Fan Convectors

Suitable for Low, High &  
Ceiling Level Installations

## Installation & User Guide



### **User Information.**

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance. Cleaning and user maintenance shall not be made by children without supervision. (refer EN 60335-1 clause 7.12).

## Introduction

These heaters are designed as a universal mounted product and can be mounted at low level, high level and ceiling level. When installed in a suspended ceiling the heater must be supported by suitable chain or threaded rods. Do not attempt to fix the heater to the ceiling tile frame.

These heaters must not be installed in wet rooms or other high humidity areas.

These heaters are designed for use on standard two-pipe pumped central heating systems with a maximum water temperature of 86° C and a maximum pressure of 6 bar (88lbs/in<sup>2</sup>). Pipe connections are 22mm and either pipe may be used as flow or return.

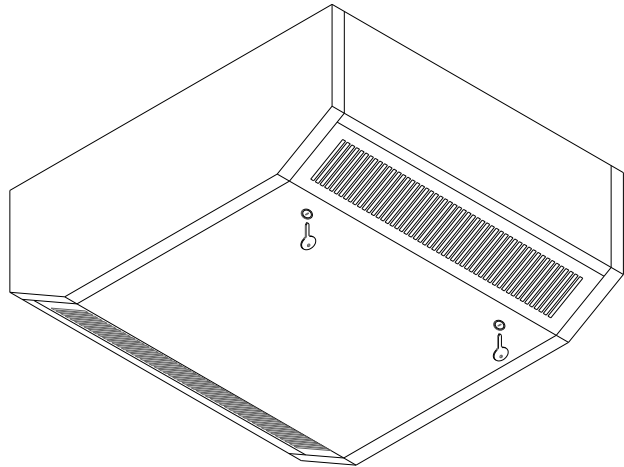
These heaters are classified as a fixed appliance and the electrical connection should be via a 3A fused spur. The fused spur must **not** be directly below the heater but should be accessible after completion of the installation. All heaters must be earthed. It is recommended that this heater is wired via a remote room thermostat.

To avoid the possibility of vibration these units must be fitted to a flat even surface. This heater is fitted with a 35°C Low Limit Stat (L.T.C). An adjustable low temperature cut-out is available (See accessories on page 8).

To conform to Building Regulations Part L (Part J in Scotland), a remote room thermostat can be used in conjunction with this heater. Refer to the instructions supplied with the thermostat. **Please note the guarantee may be invalidated if this product is not installed and used in accordance with these instructions.** For further details please contact our Technical Support on 01245 324560.

## Installation Guide

1. Unlock and lower the front access panel using the keys supplied.



## Fault Finding

1. The fan does not run on any speed setting.
  - a. Check the power supply is switched ON.
  - b. Check the fuse in the fused spur.
  - c. Check the wiring at the fused spur.
  - d. If thermostat is fitted ensure it is calling for heat
  - e. Check the central heating is switched ON
  - f. Vent any trapped air from the system (with the heating system turned OFF).
2. No heat output.
  - a. Vent any trapped air from the system (with the heating system turned OFF).
  - b. Check the central heating is switched ON.
  - c. If a thermostat is fitted ensure it is calling for heat.
  - d. Balance the central heating system if installed on the same circuit as panel radiators and increase the circulating pump speed if required.
  - e. Increase the boiler water temperature.

Providing the power supply is switched on the room thermostat (if fitted) is calling for heat the heater will switch on and off automatically with the central heating system.

In the event of difficulty please contact our technical help-line on 01245 324560. It will be helpful if you do not disconnect the heater from the central heating system.

## Maintenance.

**Warning! Isolate from the electrical supply before performing any work on the unit.**

The internal air filter is removable for servicing. To gain access to the filter unlock and lower the front access panel, remove the 2 screws from the filter enclosure panel and lift out. Carefully lift out and remove filter (see fig 3). The filter should be gently tapped to remove any accumulated dust and vacuumed if necessary.

The coil fins are delicate so take care and only use a soft brush or vacuum cleaner to remove any dust that may have accumulated.

The fan(s) and motors should not require servicing. Please contact your supplier if damaged.

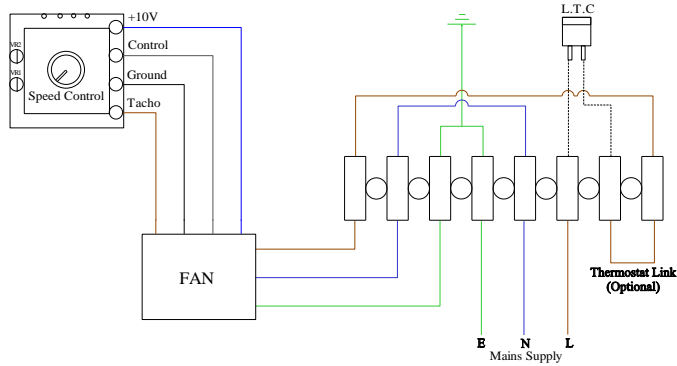
This appliance is not intended for use by persons (including children) with reduced physical knowledge, unless they have been given supervision or instruction concerning use of appliance by person or persons responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Please note in the event of an engineer's visit, Smith's Environmental Products Ltd reserve the rights to apply a call-out charge should the fault prove to be with the system or installation and not the heater appliance.

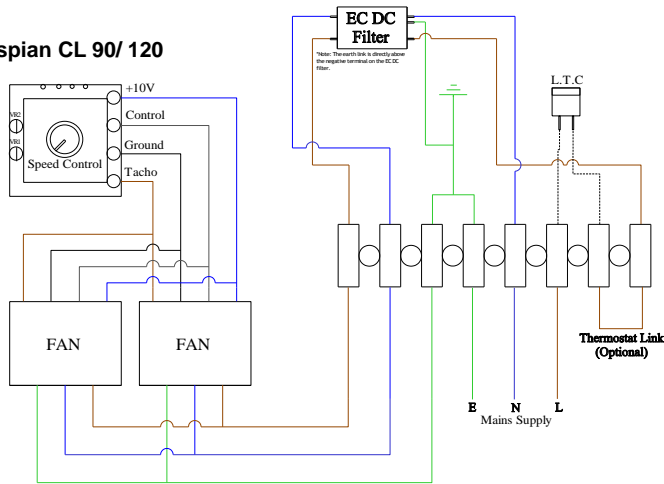
To replace filter use reverse the removal instructions and ensure the lower front access panel is securely locked.

## Wiring Diagram

Caspian CL 60



Caspian CL 90/ 120

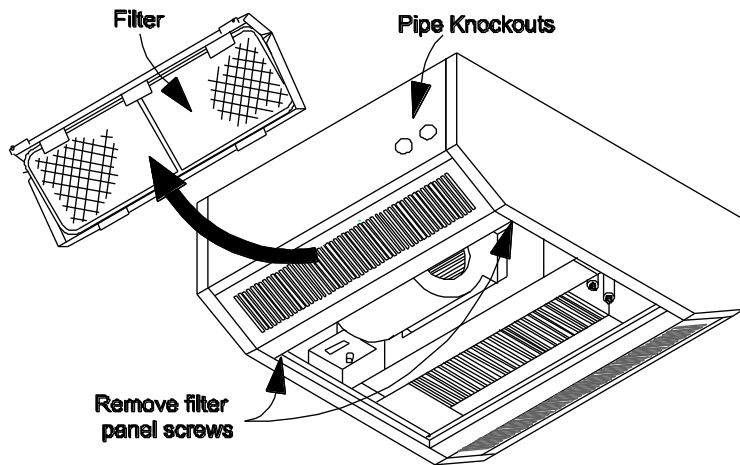


**Note:**

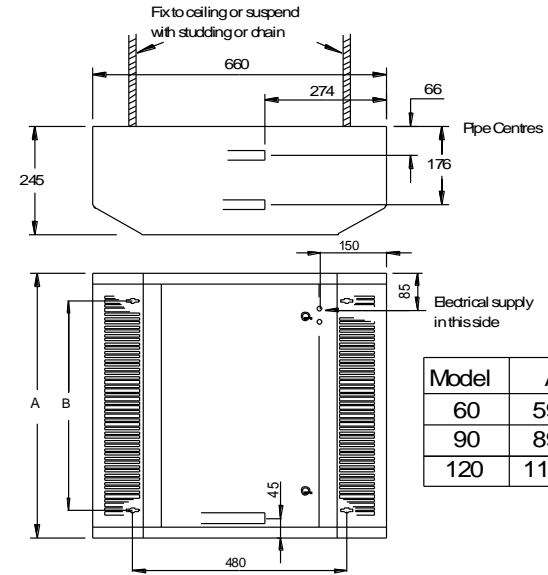
If your heater was built before October 2014 or the colours shown in this diagram do not match those on your unit please refer to the below Key:

+10V (Red) = Blue  
 Control (Yellow) = Grey  
 Ground (Blue) = Black  
 Tacho (White) = Brown

Fig 3



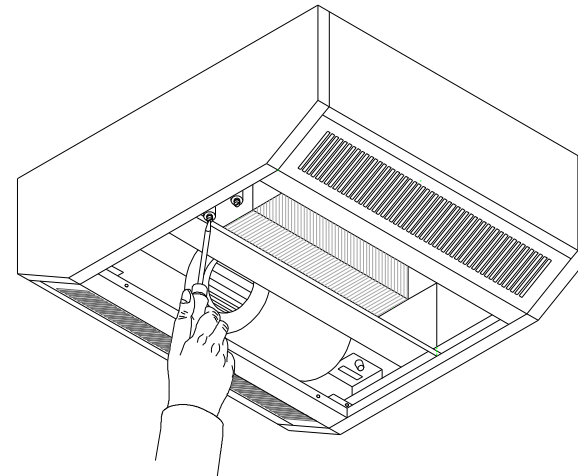
2. Fix the unit to the ceiling or wall via suitable fixings. If fitted to suspended ceilings or similar then suitable means of support such as threaded rods or chains must be used.



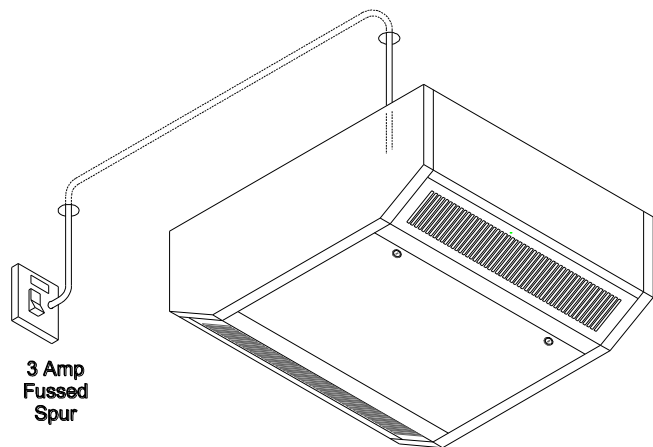
3. Connect the heating system flow and return pipes to the heater pipe work. Pipe entry/ exit can be made through either the back of the unit or by using the Pipe Knockouts on the bottom of the unit (See Fig 3). Do not use soldered fittings to the heater pipe work as the heat generated may cause damage to internal wiring and components.

Note: We recommend the use of full-flow service valves. The valves should be accessible after completion of the installation. We also advise the fitting of an air vent at the highest point on either the flow or return pipe to remove any air trapped within the system.

4. Open the full flow service valves (see above) and check for water leaks. Remove any trapped air from the unit via the built in bleed screws as shown in the diagram below.



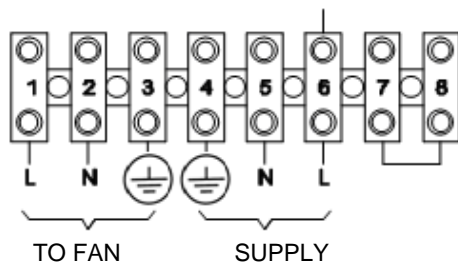
- Isolate the electrical supply
- Connect the power supply from the fused spur (3 Amp) to the heater terminal block marked **Supply E N L** (see fig 2) via the cable entry hole in the top chassis of the heater. The fused spur must not be directly below the heater and must be accessible after the installation is complete. All electrical work should be carried out in accordance with current IEE regulations.



- To connect a room thermostat (not supplied) to the connection block on the heater remove link and connect to terminals 7 & 8.

For further information refer to the room thermostat manufacturers instructions.

Fig 1



### Commissioning

- Turn on the electrical supply at the fused spur.
- Turn the thermostat control (if fitted) to maximum.

- Turn on the central heating system.
- If these heaters are installed on the same circuit as panel radiators balance the central heating system.
- If the installation is working correctly remember to reset the thermostat control (if fitted) to its normal setting.
- Set the fan speed control to the desired position (see fig 2)
- Lift up and close front access panel, ensure this is secure and locked in place with keys provided.
- Please leave this Installation & User Guide with the user for future reference.

### Heat Output Performance

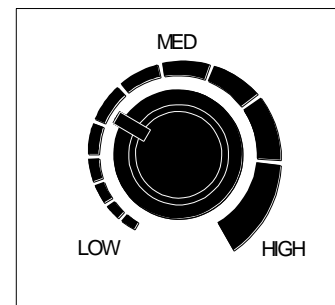
CL Model	Heat Output (kW)	Heat Output (kW)	Heat Output (kW)
	High	Medium	Low
60	4.5	3.8	3.2
90	7.6	6.4	5.2
120	14.5	10.7	6.7

Heat outputs based at 80°C mean water temperature, with an entering air temperature of 18°C, in accordance with BS 4856.

### Heating – see below

Ensure the central heating system is **ON**. Switch on the power supply to the unit. Set the thermostat control (if fitted) to the desired temperature. Providing the water temperature in the central heating system is more than 35°C and the thermostat (if fitted) is calling for heat the product will switch on.

Fig 2



It is recommended that the model chosen is capable of maintaining the calculated heat loss at medium heat output enabling the high speed setting to be used for faster heat up and the low speed for maintaining temperature.

Thank you for purchasing a Smith's heater.

It has been designed and manufactured to the highest quality standards to ensure it gives you efficient and trouble-free service for many years.

To back up our commitment, included with your product is a **free five year parts and labour guarantee.**

This gives you peace of mind that in the unlikely event of the product failing within the first five years, we will repair or replace the product completely free of charge provided the product has been installed, used and maintained in accordance with the instructions.

It is important to register within 7 days. This will ensure you receive a prompt and efficient service, if your product requires attention within the guarantee period. If you do not register your product, you will be required to produce a proof of purchase prior to receiving this service.

If you experience any problems with the use of your product, please contact our **after-sales office** on 01245 324560.

Smith's Environmental Products Ltd manufactures a complete range of heaters for domestic and commercial applications.

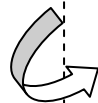
If you require any further information, please contact us on **01245 324900** or visit our website at **[www.smiths-env.com](http://www.smiths-env.com)**.

Your statutory rights are not affected by this guarantee.

**Please pull this registration card from the booklet and fill in all parts and return.**



please fold along here



**Smith's Environmental Products Ltd**  
**Units 1 & 2 Blackall Industrial Estate**  
**Hamberts Road**  
**South Woodham Ferrers**  
**Chelmsford**  
**Essex**  
**CM3 5UW**

**Please  
affix  
stamp  
here**

**Guarantee Statement**

**Guarantee Registration Card  
& Customer Satisfaction Survey**

Dear Customer

We hope our product suits all your requirements; it would help us immensely if you could find the time to fill in this form, your response will help us maintain the quality standards we all expect in today's climate.

Customer name \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Email Address \_\_\_\_\_@\_\_\_\_\_

Product Name \_\_\_\_\_

Tick as appropriate

	V Good	Good	Fair	Poor
Product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales & Ordering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Response to any problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Thank you for your time to fill in this survey, the response will help us to serve your needs more effectively. Please return by fax to 01245324422.

Quality Control Manager: Ron Brown                      ronbrown@smiths-env.com

**User Details**

User Name Mr/Mrs/Miss/Ms/Other .....

Initials ..... Surname .....

Address .....

.....

..... Post Code: .....

Telephone: .....

Product & Model installed (e.g. Space Saver SS5)

.....

Room Installed (e.g. Kitchen): .....

Your details will only be held by Smiths Environmental Products Ltd and used solely to provide customer services and product information.  
 If you do not wish to be contacted, please put an x in the box.    

**Installer Details**

Company name: .....

Principal contact: Mr/Mrs/Miss/Ms/Other: .....

Initials: ..... Surname: .....

Address: .....

.....

..... Post Code: .....

Telephone: .....

Date of installation ...../...../.....

Room Installed (e.g. Kitchen): .....

Your details will only be held by Smiths Environmental Products Ltd and used solely to provide customer services and product information.  
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