Accessories
By fitting optional equipment this product can operate automatically under normal running conditions. The optional controls fit within the casing of the unit & are supplied with easy to fit instructions.
Adjustable LTC Kit 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.
Air inlet filters for all models.
For accessories or spares please contact your supplier.

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

RECYCLE

ISO 9001
Registered Firm

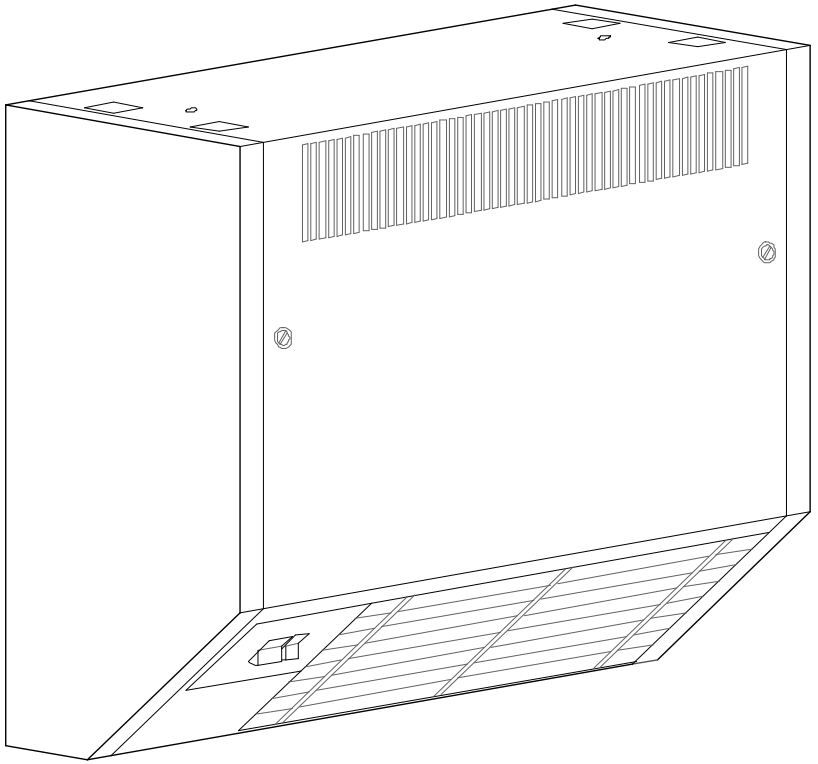
Smith's Environmental Products Ltd,
Blackall Industrial Estate, South Woodham Ferrers, Chelmsford Essex CM3 5UW
Tel: 01245 324900 After Sales: 01245 324560 Fax: 01245 324422
E-mail: info@smiths-env.com Web: www.smiths-env.com
For Ireland (Republic & Northern), contact MT Agencies on 00 353 1 864 3363

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 UK

Caspian 60, 90 & 120
High Level Fan Convector

Installation & User Guide



Introduction

These heaters are primarily intended for installation directly onto a wall at high level.
They must not be installed in bathrooms or other high humidity areas. Please contact us on 01245 324900 for details of products suitable for these applications.

These heaters are designed for use on standard two-pipe pumped central heating system with a maximum water temperature of 86°C and a maximum pressure of 6 bar (88lbs/in²).
Pipes are 22mm and either pipe may be used as flow or return.

These heaters are classified as a fixed appliances and 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.

To avoid the possibility of vibration these units must be fitted to a flat even surface.

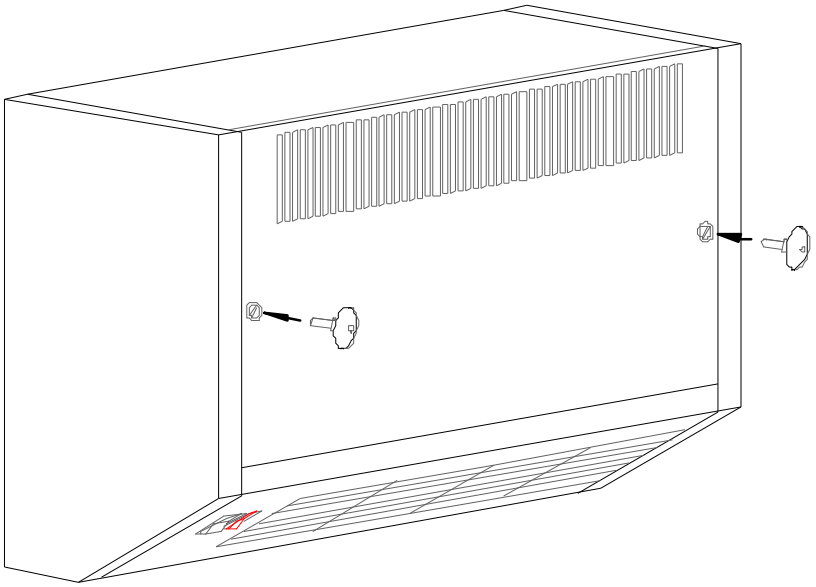
His heater is fitted with a 35℃ Low Limit Stat (L. T.C). An adjustable L.T.C kit is available (See accessories).

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. For further details please contact our Technical Support on 01245 324560.

Please note the guarantee may be invalidated if this product is not installed and used in accordance with these instructions.

Installation Guide

1. Remove the front access cover using the supplied keys.



Fault Finding

1. The fan does not run on any switch 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.

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.

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.

Your fan convector is designed to operate as part of your central heating system in the same way as a panel radiator.

Providing you leave the heat output switch in either the low, medium or boost position it will switch on and off automatically with your central heating system.

Maintenance.

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

The front panel air filter is removable for servicing by removing the front cover, sliding the air filter along to the open end of the mounting bracket, lift the end of the air filter then pull it sideways to remove it. The filter should be gently tapped to remove any accumulated dust and either vacuumed or washed in lukewarm water with detergent, rinsed thoroughly and allowed to dry. See page 4

Replacing the air filter is the reverse of removing it.

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.

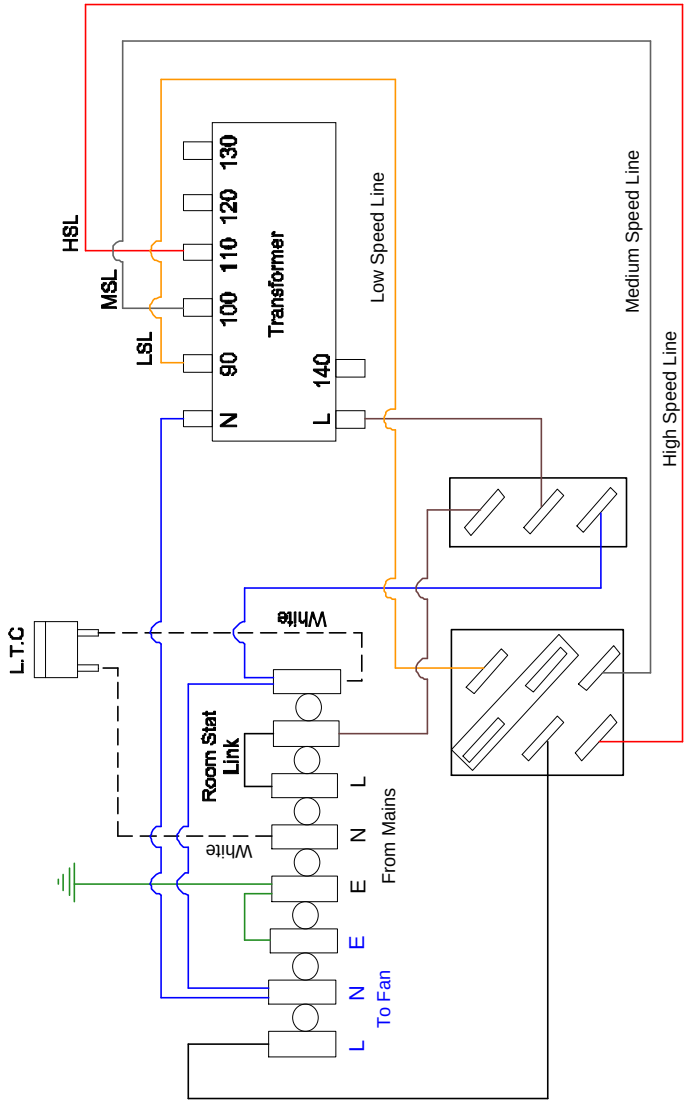
The fan(s) and motors should not require servicing. Please contact your supplier if damaged.

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.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid hazard. (Refer EN 60335-1 & EN 60335-2-30 clauses 7.12 & 7.12.5)

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.

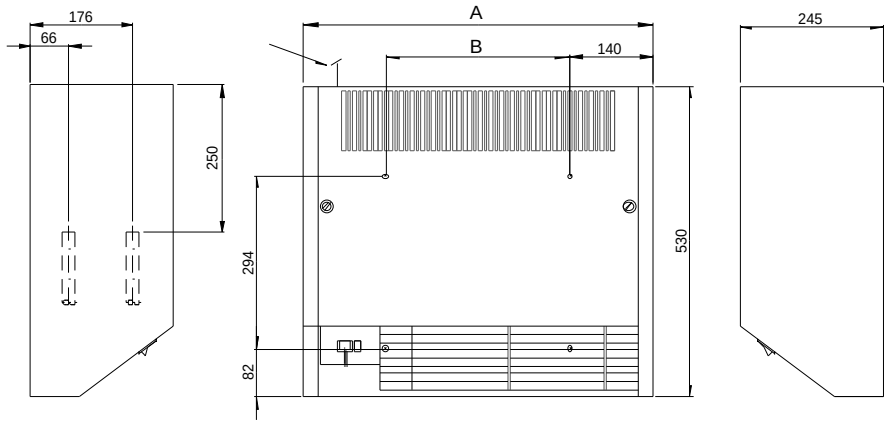
Wiring Diagram



Caspian Model Transformer Tappings					
Line Speed	**Caspian 60**	**Caspian 90**	**Caspian 120**		
	Type 03/04	Type 06/07	Type 10	Type 11	Type 12
LSL	90	90	90	100	110
MSL	100	100	110	120	130
HSL	110	110	120	130	140
Caspian Models 60 & 90 Tappings Shown					

2. If hanging bracket is used, a distance of 35mm must be left between the top of the unit and the ceiling.

If the hanging bracket is not used the unit can be mounted up to the ceiling.



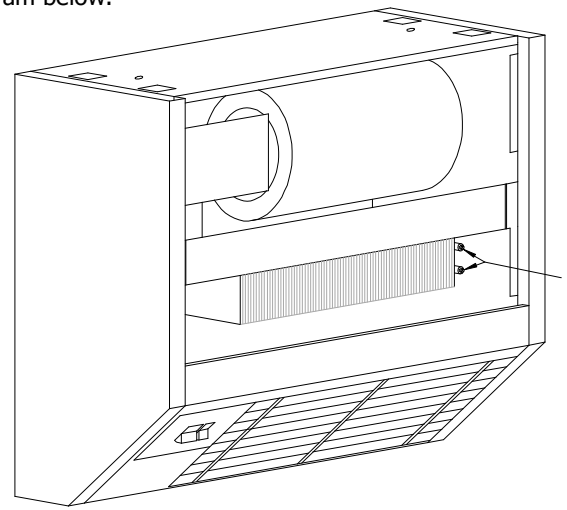
Electrical supply either side

Model	A	B
60	595	316
90	895	616
120	1195	2 x 458

3 Connect the heating system flow and return pipes to the heater pipe work. Do not use soldered fittings to the heater pipe work as the heat generated may cause damage to internal wiring and components.

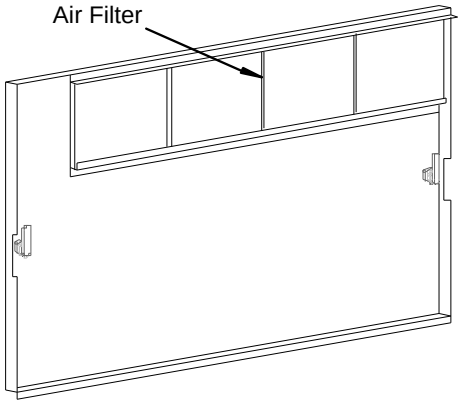
Note: We recommend the use of full-flow service valves. The valves should be accessible after completion of the installation. We also advise the fitting of an air vent at the highest point on either the flow or return pipe to remove any air trapped within the system.

4 Check for water leaks. Remove any trapped air from the unit via the built in bleed screws as shown in the diagram below.

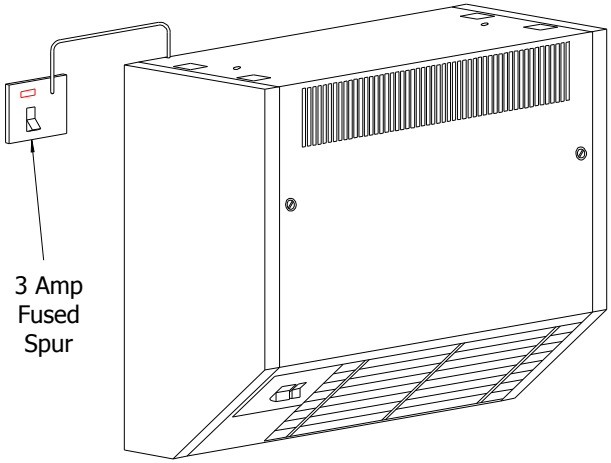


Bleed Valves

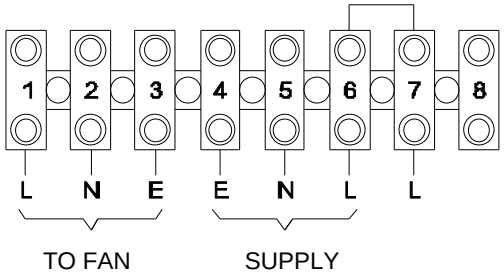
5. Refit cover with pre-installed air filter, lock cover in place with keys provided.



6. Isolate the electrical supply and connect the heater cable to the fused spur (3 Amp). 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 IEEE regulations.



7. Fit the thermostat if required. There is a connection facility within the heater. Remove the link and attach wires to terminals 6 & 7 as diagram below.



8. Please leave this Installation & User Guide with the user for future reference.

Commissioning

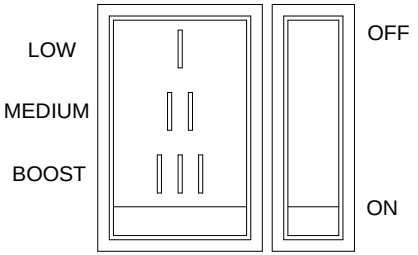
1. Turn on the electrical supply at the fused spur.
2. Turn the thermostat control (if fitted) to the maximum.
3. Turn on the central heating system.
4. Turn on the water – see User Guide.
5. If these heaters are installed on the same circuit as panel radiators balance the central heating system.
6. If the installation is working correctly remember to reset the thermostat control (if fitted) to its normal setting.

Heat Output Performance

High-Level Model	Heat Output (kW)	Heat Output (kW	Heat Output (kW
	High	Medium	Low
Caspian 60/03	3.7	3.5	3.2
Caspian 60/04	5.1	4.5	4.0
Caspian 90/06	7.4	6.8	6.2
Caspian 90/07	8.6	7.7	6.8
Caspian 120/10	12.5	11.4	9.5
Caspian 120/11	13.4	12.5	10.5
Caspian 120/12	14.4	13.4	11.4

80℃ average water temperature, 18℃ entering air t emperature

Heating – see below
Ensure your central heating system is **ON**. Switch on the heater (the neon switch will illuminate). Set the thermostat control (if fitted) to the desired temperature. Set the heat output switch to the medium output setting. Providing the water temperature in the central heating system is more than 35℃ and the thermostat (if fitted) is calling for heat the product will switch on. If you require a faster warm up move the heat output switch to boost. When the room reaches the desired temperature you may move the heat output switch to low.



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