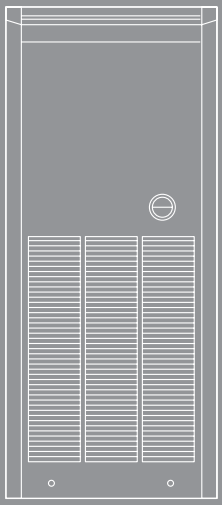
Ecovector® VE

Smith's
A Swan Group Company

Installation, commissioning
and user manual



VE2500

Vertical Fan Convector
with SLVTB Battery Controller

Issue 001 | December 2025
ENGLISH | UK | IRL | SmithsEP.co.uk

Contents

Introduction

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

This heater must be operated with the supplied SLVTB battery powered wireless controller. IT WILL NOT WORK WITHOUT IT

This heater is intended for mounting on a wall at low level. No clearance is required on either side of the heater.

This heater must not be used in bathrooms or other high humidity areas.

Ecovector is designed for use on standard two-pipe pumped central heating systems where the system hot water is generated from either a boiler or renewable sources. This product is not suitable for one-pipe heating systems. Pipe connections are 15mm.

We recommend the use of full flow isolating valves. These valves should be accessible after completion of the installation.

Ecovector is classified as a fixed appliance and electrical connection should be via a double pole 3A fused spur. The fused spur must not be directly above the heater but should be accessible after completion of the installation. If the pre-wired mains cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons. The appliance must be earthed.

To avoid possibility of vibration, this product must be installed on a flat, even surface.

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

Declaration of conformity

EC Declaration of conformity

We, Smith's Environmental Products Limited
1-2 Blackall Industrial Estate
South Woodham Ferrers
Chelmsford
Essex CM3 5UW
Tel: 01245 324900 Fax: 01245 324422

Declare under sole responsibility that the products:

Product name:
Ecovector Vertical

Product range:
VE2500

Listed above conforms with the following directives:
Low Voltage Directive 2006/95/EC / Electrical Equipment (Safety) Regulations 2016
EMC Directive 2004/108/EC / Electromagnetic Compatibility Regulations 2016
Pressure Equipment directive 97/23/EC / Pressure Equipment (Safety) Regulations 2016
Machinery Directive 98/37/EC / Supply of Machinery (Safety) Regulations 2008

Standards Comply with The Above Directives.

Safety Directive Standards:
EN 60335-2-80:2003 + A1:04 in conjunction with EN 60335-1:2002 + A11:04 + A1:04 + A12:06 + A2:06
With U.K deviations.

This Declaration is made on behalf of Smith's Environmental Products Limited.

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 things.

The removal of the screws can cause the output of hot fluids under high pressure from heating system. Drain the system or close the isolating valves.

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

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.

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. To avoid possible electric shock, special care should be taken since water is used with electrical equipment. 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.

The appliance should not be electrically supplied if there is water on parts not intended to be wet.

4. Risk of scalding. To avoid injury before any servicing operation wait until the water has cooled inside the appliance. Do not touch the fluid or the appliance when temperature is higher than 60°C.

5. Improper use.
   This is an appliance to be used in heating systems with clean water without abrasive particles.

Do not use this appliance:

- With liquids other than water (e.g. flammable liquids, etc.) (EN60335-2-51);
- 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.

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. Electric connection
   IMPORTANT: Connection to the power supply must be effected by means of a fixed power cable which is 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. All electrical work should be carried out in accordance with current IEEE regulations; we recommend the appliance is protected by a Residual Current Device (RCD or Ground-Fault Circuit-Interrupter) with a rated residual operating current not exceeding 30mA.

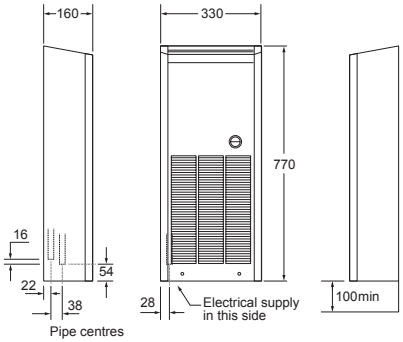
9. Prior to any modification being made to the equipment, it must be agreed with and authorised by the manufacturer. Original spare parts and accessories authorised by the manufacturer are integral part contributing to the safety of the equipment and of the machines. The use of non original components 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.

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 at 80°		Heat Output at 75°		Heat Output at 70°	
Low (kW)	High (kW)	Low (kW)	High (kW)	Low (kW)	High (kW)
2.5	2.6	2.3	2.4	2.0	2.1

Heat Output at 65°		Heat Output at 60°		Heat Output at 55°	
Low (kW)	High (kW)	Low (kW)	High (kW)	Low (kW)	High (kW)
1.9	2.0	1.7	1.8	1.5	1.5

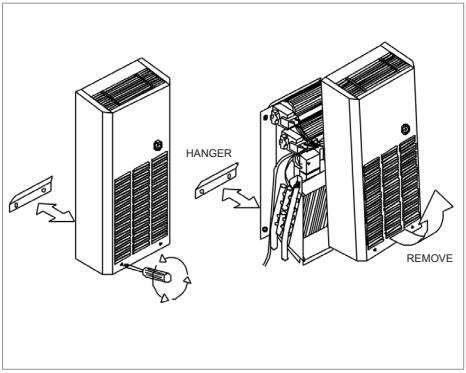
Heat Output at 50°		Heat Output at 45°		Heat Output at 40°	
Low (kW)	High (kW)	Low (kW)	High (kW)	Low (kW)	High (kW)
1.3	1.3	1.1	1.1	0.9	1.0

Flow & return connections	Mains cable	Trans-former	Fused spur	Total Power Consumption		Water Capacity (Litres)	Sound Levels		Casting colour	Fan-only
				Low (Watts)	High (Watts)		Low (dBA)	High (dBA)		
15mm	1.5m	n/a	3A	28	36	0.75	36	39	white	n/a

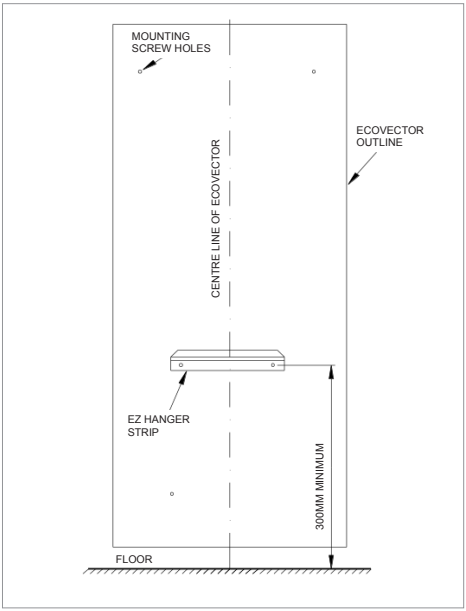
Heat outputs tested in accordance with BS4856 using entering water temperature and 340 l/h (75gph) flow rate.
Sound levels measured at 1.5m.

Mounting the Unit

Remove the EZ hanger from the back of the heater. Remove screws from the base of the front panel, carefully lift up and remove.



Fix the EZ hanger to the wall, position the heater on the EZ hanger and secure to the wall at the two fixing points.

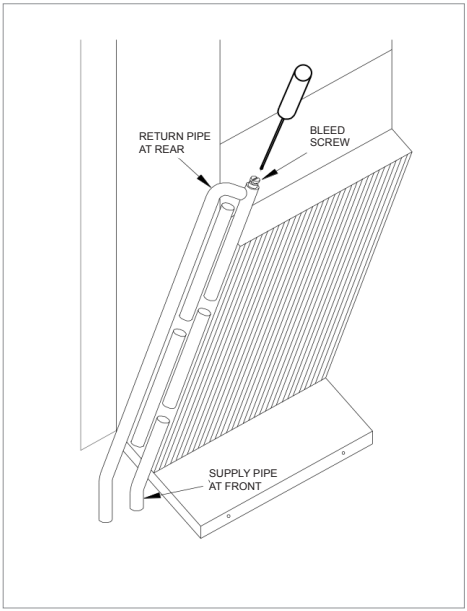


Pipe Work

We recommend the use of full flow isolating valves. These valves should be accessible after completion of the installation.

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 could damage internal wiring and components. The pipe nearest the front of the heater is the supply flow and the pipe nearest the chassis is the return.

Check for water leaks. Remove any trapped air from the system via the vent valve on the top left-hand side of the heat exchanger. Do not over tighten the air vent



Electrical Connection

ALL ELECTRICAL INSTALLATIONS CONNECTIONS MUST COMPLY WITH BS7671, 1992 AND THE IEE REGULATIONS. CHECK THE VOLTAGE ON THE HEATER IS CORRECT FOR YOUR SUPPLY. IF IN DOUBT, CONSULT A QUALIFIED ELECTRICIAN.

If the pre-wired mains cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons.

Isolate the supply and connect the heater three core mains lead to the fused spur (3A) in accordance with the instructions provided on the mains lead label. (The supply wire which is coloured green or green and yellow must be connected to the terminal marked E on the appliance, the supply wire which is coloured black or blue must be connected to the terminal marked N on the appliance and the supply wire which is coloured red or brown must be connected to the terminal marked L on the appliance).

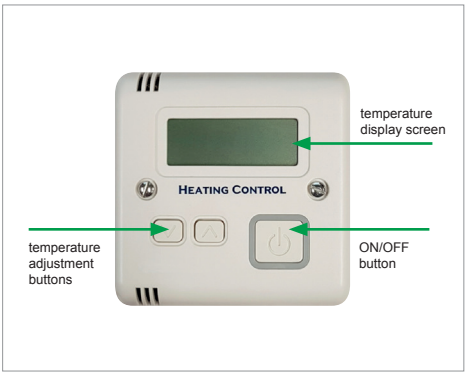
The fused spur must not be directly above the heater but should be accessible after completion of the installation.

SLVTB Wireless Controller Installation

The SLVT-B controller is supplied with a white plastic back box but it was designed to fit onto most single gang back boxes. The controller is powered by two AAA batteries that are supplied.

The controller should be fitted at a height of 1.5metres from floor level and within 10 metres from the heater. To ensure trouble free operation ensure the thermostat is mounted away from any possible sources of interference (such as radios, TV sets, computers, etc). Do not mount on or in close proximity to large metal objects. It is recommended that the batteries should be replaced every 12 months.

Please refer to the instructions packed with the controller for full setting options and functions.



Thermostat Controller - Quick Set up

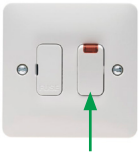
IMPORTANT – THIS HEATER WILL NOT WORK UNLESS USED AND PAIRED WITH THE SLVTB THERMOSTAT CONTROLLER

1. Turn OFF the mains power supply to the heater at the fused spur or power connection.

2. Set the heater switches on the heater to ON.

3. On the back of the controller, you will see the battery compartment. Pull and remove the battery tag. Look at the front display. If the batteries are good, the front battery display will show the ambient room temperature.

4. Turn ON the mains power supply to the heater at the fused spur or power connection and within 20 seconds press and hold, the ON button on the controller until the display shows “PAIR”



5. After the pairing is finished,the display will show “TEST”. If the pairing was successful and the heater should function (This can take up to 5 seconds after pairing).

If process fails repeat all the steps again (ensure that the thermostat temperature is set higher than the ambient room temperature)

6. Press the power button once to exit pairing and then press again to switch back on.

7. Using the up and down arrow buttons set the room temperature to the desired temperature.

Note: The power supply to the heater must be switched off before the pairing process (step 1)

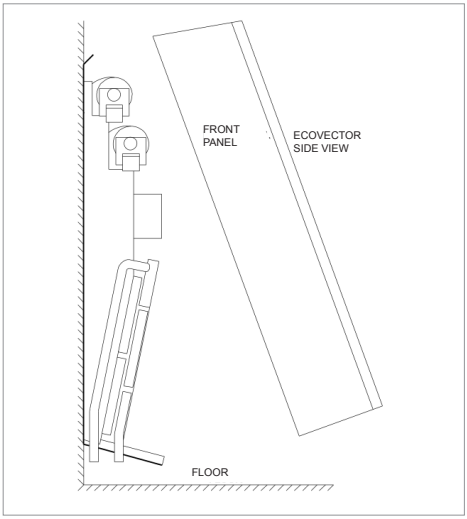
Please carefully read the Installation and Control Guide included with the product for full control and operation guide.

Installation Completion

If this heater is installed on the same circuit as panel radiators balance the central heating system.

When the installation is working correctly, remember to set the wireless thermostat control to its normal setting.

Refit the outer casing to the chassis and refit screws in base of front panel.



Commissioning

1. This heater is equipped with a low temperature cut out thermostat (+38°C) which requires hot water to be sensed before the fan(s) will run.
2. Ensure that the heat source is circulating hot water through the heating system
3. Ensure the heater is paired with the SLVT-B wireless controller (Page 8). The heater will not operate unless used with the controller.
4. Adjust the set point of the thermostat at least +3°C higher than the measured room temperature (Page 9)
5. Ensure the speed switch on the heaters casing is in position “|” or “||”

Providing that there is hot water circulating & the SLVTB wireless controller is calling for heat the unit will run.

Once commissioning is complete, set the thermostat & speed setting as desired.

Fault finding

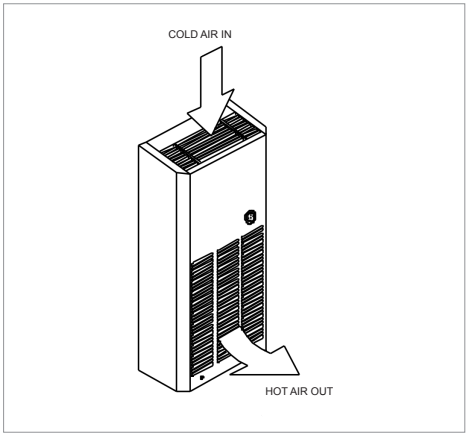
In the event of any difficulty, please contact us on +44 (0) 1245 324560.
It will be helpful if you do not disconnect the heater from the central heating system.

Fault	Checking/Solution
No heat output on settings I and II / Fan does not run on any switch setting	Check the power supply is switched ON
	Check the heating system is ON
	Check the SLVTB controller is paired with the unit
	Check the SLVTB controller is switched on and calling for heat
	Check the service valves (if fitted) are open
	Bleed air from appliance
	Increase the boiler water temperature
	Balance the central heating system if installed on the same circuit as panel radiators and increase the circulating pump speed if required
	Check fuse in the fused spur
	Check wiring connections at the fused spur

User Manual

Your Ecovector is designed to operate as part of your central heating system in the same way as a panel radiator. Providing you leave the heater switches in their normal operating positions it will switch on and off automatically with you central heating system.

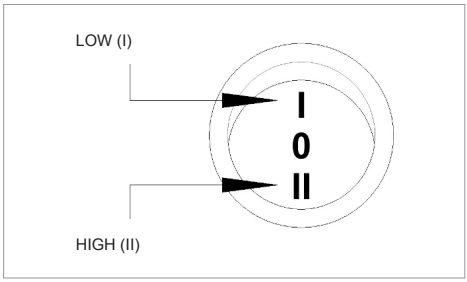
Heat from your central heating system passes through a heat exchanger transferring its heat to the aluminium fins, room air is drawn in the top grille and heated as it passes through the heat exchanger before being gently expelled back into the room at floor level.



Ecovector includes a low temperature thermostat that prevents the fan(s) operating until the central heating system water passing through the heat exchanger reaches a set temperature.

Heating

Ensure your central heating is ON, the heat output switch set to Low (I). If you require a faster warm up set the heat output switch to High (II)



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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#ThinkSmiths

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.

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**

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

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