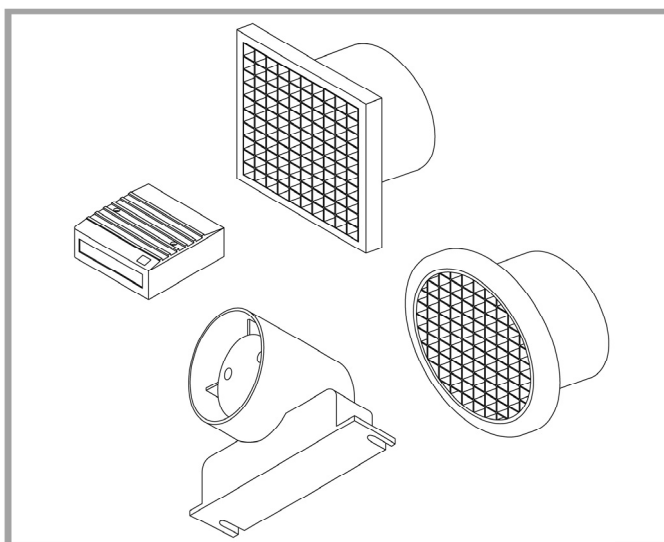


# Minivent

## Lo-Carbon RANGE

In-Line Fan Kit

Installation and Wiring Instructions



**Stock Ref. N°**

**Lo-Carbon  
Minivent B (Basic)**

**441421A**

**Lo-Carbon  
Minivent T (Timer)**

**441422A**

FAN UNITS 12V DC SELV (CLASS III)  
CONTROLLERS 220-240V 50Hz MAINS SUPPLY (CLASS II)  
WITH 12V DC SELV OUTPUT

# **Vent-Axia®**

PLEASE READ INSTRUCTIONS IN CONJUNCTION WITH THE ILLUSTRATIONS.  
PLEASE SAVE THESE INSTRUCTIONS

**CE**

## Installation and Wiring Instructions for the Minivent Lo-Carbon Fan Kit.



### IMPORTANT:

**READ THESE INSTRUCTIONS BEFORE COMMENCING THE INSTALLATION**

DO NOT install this product in areas where the following may be present or occur:

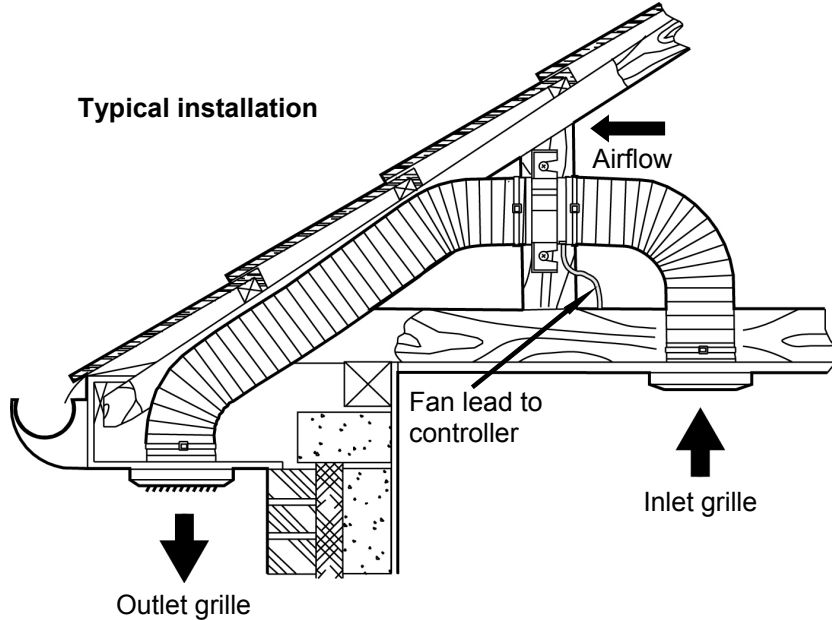
- Excessive oil or a grease laden atmosphere.
- Corrosive or flammable gases, liquids or vapours.
- Ambient temperatures higher than 40°C or less than -5°C.
- Possible obstructions which would hinder the access or removal of the Fan.
- Sudden ductwork bends or transformations close to the Fan.

## SAFETY AND GUIDANCE NOTES

- A.** All wiring to be in accordance with the current I.E.E. Regulations, or the appropriate standards of your country and **MUST** be installed by a suitably qualified person.
- B.** The Fan should be provided with a local double pole isolator switch having a contact separation of at least 3mm.
- C.** The control unit is intended for permanent connection to the fixed electrical supply.
- D.** The controller is only suitable for use with one fan unit.
- E.** The fan is only suitable for use with the safety extra low voltage DC transformer controller supplied. The unit **MUST NOT** be connected directly to the mains voltage electrical supply.
- F.** Ensure that the mains supply (Voltage, Frequency, and Phase) complies with the rating label.
- G.** The transformer controller requires free air circulation and must not be recessed into the mounting surface or covered with any insulating material that might be in a ceiling or roof void.
- H.** The Fan should only be used in conjunction with the appropriate Vent-Axia products.
- I.** It is recommended that the connection to the fan connector terminals is made with flexible cable.
- J.** When the Fan is used to remove air from a room containing a fuel-burning appliance, ensure that the air replacement is adequate for both the fan and the fuel-burning appliance.
- K.** The Fan should not be used where it is liable to be subject to direct water spray for prolonged periods of time.
- L.** Where ducted Fans are used to handle moisture-laden air, a condensation trap should be fitted. Horizontal ducts should be arranged to slope slightly downwards away from the Fan.
- M.** This appliance is not intended for use by young children or infirm persons without supervision.
- N.** Young children should be supervised to ensure that they do not play with the appliance.

## A INSTALLATION.

The unit is designed to be installed in 100mm ducting. The ducting run should not exceed 3m. The flexible ducting should be fully extended to obtain the best results. Position the fan at the highest point on the system with both ducting runs sloping downwards from this point. In circumstances where an excessive amount of moisture is present in the air then a condensation trap should be installed. Pass the cable supplying power to the fan through the grommet provided. Secure the duct to the fan once wiring is complete.



## B. WIRING.



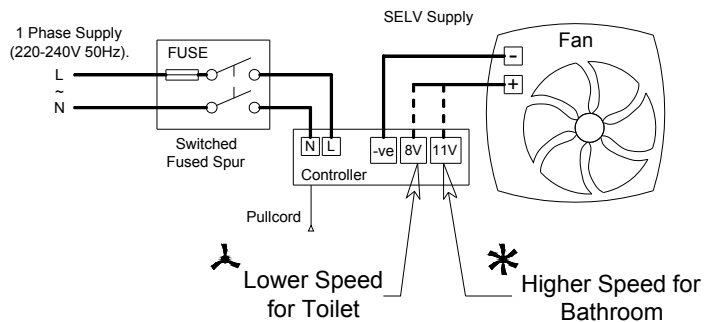
**WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE.**

**NOTE: The Controller MUST be surface mounted to allow air to freely circulate around the unit. When installed in a loft void it MUST NOT be enclosed or covered with insulation.**

1. Select and follow the appropriate wiring diagram (Fig. 2-3).
2. Check all connections have been made correctly and ensure all terminal connections and cable clamps are securely fastened.
3. The cable entry must be made using the cable grommet.
4. Ensure the impeller rotates and is free from obstructions.

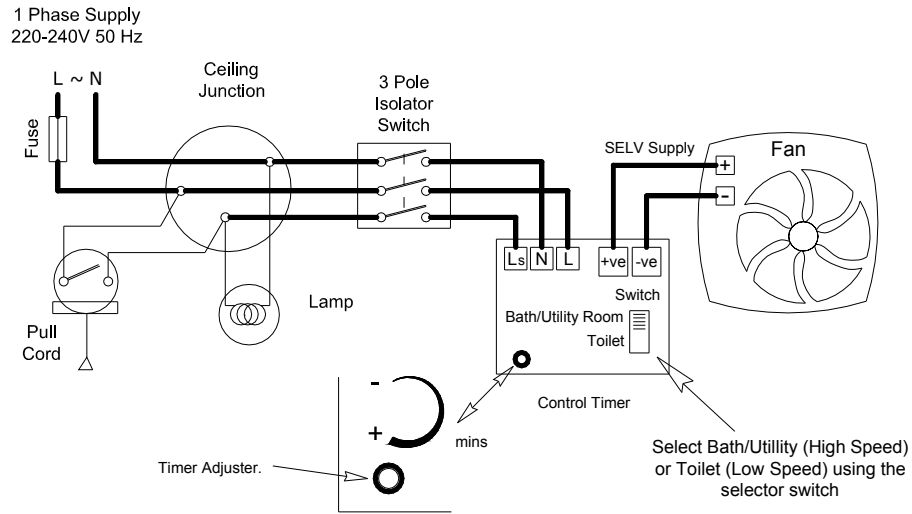
**Fig. 2.**  
**Minivent Lo-Carbon B**  
**Basic Model.**

Select the wiring configuration required for the Toilet or Bathroom.



**Fig. 3.**  
**Minivent Lo-carbon T**  
**Timer Model.**

Switch the selector switch to the required mode.



**Timer Adjustment.**

The overrun time period is factory set to 15 minutes. The overrun time period may be adjusted from 5-25 minutes, by altering the adjuster on the back of the Control Timer.

**Before adjusting the timer, switch off the Mains Supply.**

1. Remove the Controller Unit.
2. To REDUCE the operating time, turn the adjuster ANTI-CLOCKWISE on the back of the Controller.
3. To INCREASE the operating time, turn the adjuster CLOCKWISE on the back of the Controller.
4. Replace the front of the Control Timer.
5. Reconnect the mains supply.

## PRODUCT FICHE

For Residential Ventilation Units (Complying Commission Delegated Regulation (EU) No 1254/2014)

Name:	Vent-Axia	Vent-Axia
Model ID (Stock Ref.) :	Lo-Carbon MiniVent B - 441421	Lo-Carbon MiniVent T - 441422
SEC Class	E	E
SEC Value ('Average')	17.15	18.74
SEC Value ('Warm')	7.76	8.48
SEC Value ('Cold')	33.55	36.67
Label Required? (Yes/No=Out of scope)	No	No
Declared as: RVU or NRUVU/UVU or BVU	RVU-UVU	RVU-UVU
Speed Drive	Multi-Speed	Multi-Speed
Type HRS (Recuperative, Regenerative, None)	None	None
Thermal Eff: [ (%), NA(if none)]	N/A	N/A
Max. Flow Rate (m3/h)	111.60	111.60
Max. Power Input (W): (@Max.Flow Rate)	6.50	6.50
LWA: Sound Power Level (dB)	40.52	40.52
Ref. Flow Rate (m3/s)	0.02	0.02
Ref. Pressure Diff. (Pa)	N/A	N/A
SPI [W/(m3/h)]	0.08	0.08
Control Factor & Control Typology: (CTRL/ Typology)		
Control Factor; CTRL	1.00	0.95
Control Typology	Manual Control	Clock Control
Declared: -Max Internal & External Leakage Rates(%) for BVUs or carry over (for regenerative heat exchangers only), -&Ext. Leakage Rates (%) for Ducted UVUs;	N/A	N/A
Mixing Rate of Non-Ducted BVUs not intended to be equipped with one duct connection on either supply or extract air side;	N/A	N/A
Position and description of visual filter warning for RVUs intended for use with filters, including text pointing out the importance of regular filter changes for performance and energy efficiency of the unit	N/A	N/A
For UVUs (Instructions Install Regulated Supply/Extract Grilles Façade)	In F&W	In F&W
Internet Address (for Disassembly Instructions)	<a href="http://www.vent-axia.com">www.vent-axia.com</a>	<a href="http://www.vent-axia.com">www.vent-axia.com</a>
Sensitivity p. Variation@+20/-20 Pa: (for Non-Ducted Vus)	N/A	N/A
Air Tightness-ID/OD-(m3/h) (for Non-Ducted Vus)	N/A	N/A
Annual Electricity Consumption: AEC (kWh/a)	1.04	0.97
Annual Heating Saved: AHS (kWh/a)		
AHS: Average	17.15	18.74
AHS: Warm	7.76	8.48
AHS: Cold	33.55	36.67

### **C. SERVICING AND MAINTENANCE.**



**WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING MAINTENANCE.**

1. At intervals appropriate to the installation, the fan should be inspected and cleaned to ensure there is no build up of dirt or other deposits.

**The Lo-Carbon fan has sealed for life bearings, which do not require lubrication.**



## The **Vent-Axia**® Guarantee

Applicable only to products installed and used in the United Kingdom. For details of guarantee outside the United Kingdom contact your local supplier.

Vent-Axia guarantees its products for two years from date of purchase against faulty material or workmanship. In the event of any part being found to be defective, the product will be repaired, or at the Company's option replaced, without charge, provided that the product:-

- Has been installed and used in accordance with the instructions given with each unit.
- Has not been connected to an unsuitable electricity supply. (The correct electricity supply voltage is shown on the product rating label attached to the unit).
- Has not been subjected to misuse, neglect or damage.
- Has not been modified or repaired by any person not authorised by the company.

### IF CLAIMING UNDER TERMS OF GUARANTEE

Please return the complete product, carriage paid to your original supplier or nearest Vent-Axia Centre, by post or personal visit. Please ensure that it is adequately packed and accompanied by a letter clearly marked "Guarantee Claim" stating the nature of the fault and providing evidence of date and source of purchase.

The guarantee is offered to you as an extra benefit, and does not effect your legal rights

# **Vent-Axia**®

Head Office: Fleming Way, Crawley, West Sussex

**UK NATIONAL CALL CENTRE**, Newton Road, Crawley, West Sussex, RH10 9JA

SALES ENQUIRIES: Tel: 0844 8560590 Fax: 01293 565169

TECHNICAL SUPPORT: Tel: 0844 8560594 Fax: 01293 539209

For details of the warranty and returns procedure please refer to [www.vent-axia.com](http://www.vent-axia.com) or write to Vent-Axia Ltd, Fleming Way, Crawley, RH10 9YX

404176B

0916