Minivent
Lo-Carbon RANGE
In-Line Fan Kit
Installation and Wiring Instructions

Stock Ref. N°
Lo-Carbon  Minivent B (Basic)
441421
Lo-Carbon  Minivent T (Timer)
441422

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

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

IP44
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. Before fitting the duct to the inlet side of the fan pierce a hole in the TOP of the duct approx. 40mm from the fan. The cable supplying power to the fan will pass through this. Secure the duct to the fan once wiring is complete. Seal around this “wiring hole” as necessary.
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.

![Wiring Diagram for Minivent Lo-Carbon B Basic Model](image)

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

Switch the selector switch to the required mode.

![Wiring Diagram for Minivent Lo-carbon T Timer Model](image)

**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.
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.