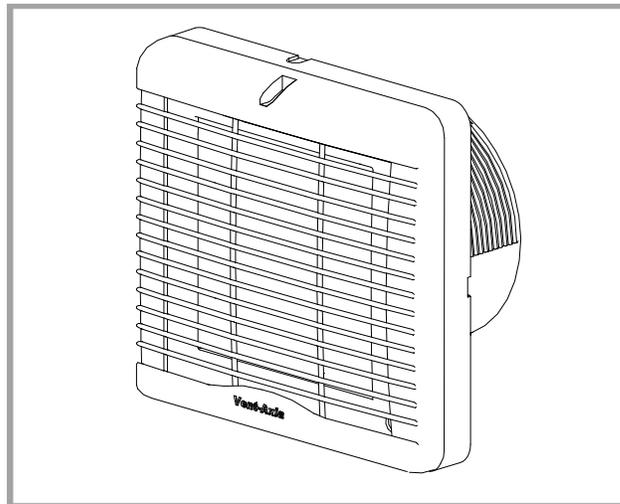


# VA150

## Lo-Carbon RANGE

Axial Kitchen & Utility Room Fans

Installation and wiring Instructions



### Stock Ref.No

Lo-Carbon VA150P	459123A
Lo-Carbon VA150T	459124A
Lo-Carbon VA150HP	459125A

220-240V~50Hz

# Vent-Axia®

READ IN CONJUNCTION WITH ILLUSTRATIONS  
PLEASE SAVE THESE INSTRUCTIONS



## Installation and Wiring Instructions for the Lo-Carbon Utility and Kitchen Extract Fan.



### 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.

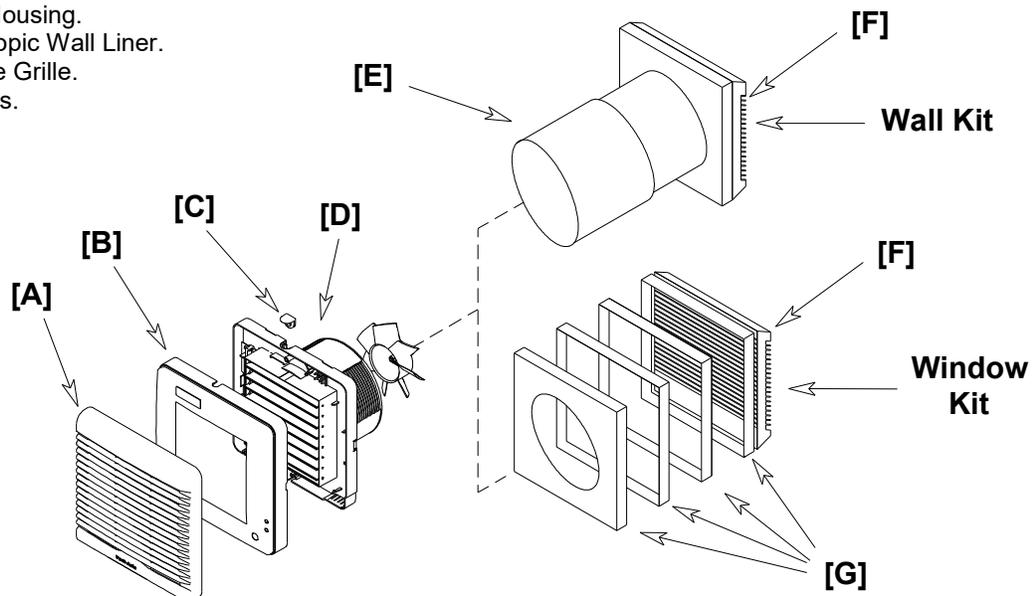
### SAFETY AND GUIDANCE NOTES

- 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.
- The Fan should be provided with a local double pole isolator switch having a contact separation of at least 3mm.
- Ensure that the mains supply (Voltage, Frequency, and Phase) complies with the rating label.
- The Fan should only be used in conjunction with the appropriate Vent-Axia products.
- It is recommended that the connection to the fan connector terminals is made with flexible cable.
- 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.
- The Fan should not be used where it is liable to be subject to direct water spray for prolonged periods of time.
- 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.
- 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.
- Young children should be supervised to ensure that they do not play with the appliance.

### DESCRIPTION

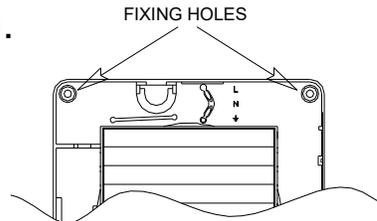
The Lo-Carbon Utility/Kitchen Fan is suitable for Panel mounting either in a horizontal or vertical plane as standard; both Window (14 09 01A) and Wall (14 09 02A White / 14 09 03A Brown) Kits are available to suit these options.

- [A] Indoor Grille.
- [B] Inner Cover.
- [C] Cable Grommet.
- [D] Base Housing.
- [E] Telescopic Wall Liner.
- [F] Outside Grille.
- [G] Spacers.



**A INSTALLATION.****PANEL MOUNTING**

1. Cut a 152mmØ hole through the panel, also suitable for existing holes up to 185mmØ.
2. Remove the Indoor Grille [A]. Loosen the screw (top middle) of the Grille, to release front grille gently lever the Grille downwards away from the Inner Cover [B].
3. Remove Inner Cover [B]. Loosen the screw (bottom middle) and release the inner grille gently from the Base Housing [D].
4. Remove the Cable Grommet [C], pierce/cut a hole in the Grommet to suit the cable size, maintaining the integrity of the seal and replace the grommet in the Base Housing to suit either a top or back cable entry.
5. Slide the Base Housing into the hole in the panel and secure into position using screws and fixings provided.

**Fig. 1.**

6. Ensure the fan blade rotates freely.
7. Select and follow the appropriate wiring diagram in **Section B WIRING.**
8. Replace the Inner Cover and Indoor Grille (retightening the screw securely).
9. Switch the mains power supply on and check the fan is operating correctly.

**WALL MOUNTING**

1. Cut a 152mmØ (suitable for up to 185mmØ) hole through the wall and insert the wall sleeve with the larger diameter sleeve on the room side and cement both ends into position flush with the wall faces. The wall sleeve should be angled downwards away from the fan to allow any condensation to drain to the outside wall.
2. Remove the Wall Mount from the Outside Grille [F] to use as a template, mark the fixing hole centres on the wall. Drill and plug the wall and fix the Wall Mounting Plate into position (screws provided).
3. Fix the Outside Grille [F] back onto the Wall Mounting Plate. Ensure the louvres are pointing downwards.
4. Remove the Indoor Grille [A]. Loosen the screw (top middle) of the Grille, to release front grille gently lever the Grille downwards away from the Inner Cover [B].
5. Remove Inner Cover [B]. Loosen the screw (bottom middle) and release the inner grille gently from the Base Housing [D].
6. Remove the Cable Grommet [C], pierce/cut a hole in the Grommet to suit the cable size, maintaining the integrity of the seal and replace the grommet in the Base Housing to suit either a top or back cable entry.
7. Slide the Base Housing into the Wall Liner and secure into position using screws and fixings provided (*Fig. 1.*).
8. Ensure the fan blade rotates freely.
9. Select and follow the appropriate wiring diagram in **Section B WIRING.**
10. Replace the Inner Cover and Indoor Grille (retightening the screw securely).
11. Switch the mains power supply on and check the fan is operating correctly.

**WINDOW MOUNTING**

1. Cut a 152mmØ hole in the glass, also suitable for existing holes up to 185mmØ.
2. Ensure that the glass surfaces are clean and free from grease.
3. Remove the Indoor Grille [A]. Loosen the screw (top middle) of the Grille, to release front grille gently lever the Grille downwards away from the Inner Cover [B].
4. Remove Inner Cover [B]. Loosen the screw (bottom middle) and release the inner grille gently from the Base Housing [D].
5. Remove the Cable Grommet [C], pierce/cut a hole in the Grommet to suit the cable size, maintaining the integrity of the seal and replace the grommet in the Base Housing to suit a top cable entry.
6. Fit required spacers behind the fan back plate, engaging the locating pips. Place the fan spigot through the hole in the glass from the inside, with a gasket on each side of the glass.
7. From the outside, place on the remaining spacer, with the locating pips facing outwards. For double-glazing and materials up to 40mm thick, one or more spacers may be discarded.
8. Draw the assembly together with the threaded fixing ring. Do not over-tighten.
9. Fix the Outside Grille [F] on to the Spacers (screws provided). Ensure the louvres are pointing downwards.
10. Ensure the fan blade rotates freely.
11. Select and follow the appropriate wiring diagram in **Section B WIRING.**
12. Replace the Inner Cover and Indoor Grille (retightening the screw securely).
13. Switch the mains power supply on and check the fan is operating correctly

## B. WIRING.



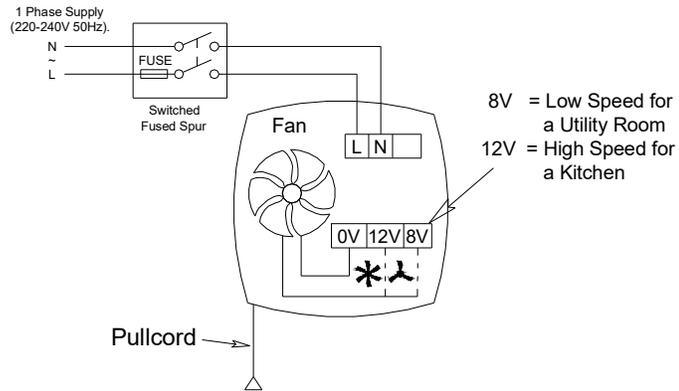
**WARNING: THE FAN AND ANY ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE.**

1. Select and follow the appropriate wiring diagram (Fig. 2-4).
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.**

**Lo-Carbon U/KP  
(45 91 23A) Pullcord Model.**

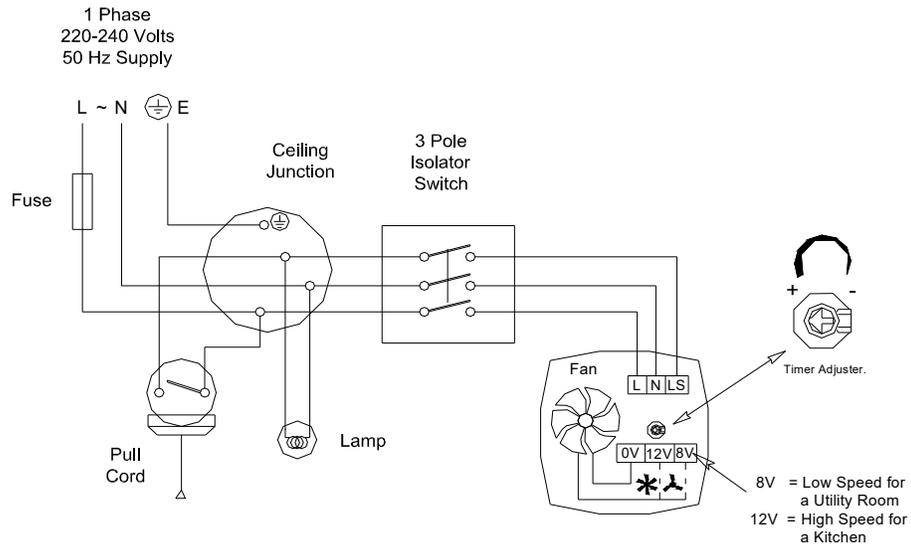
Select the wiring configuration required for the Utility or Kitchen.



**Fig. 3.**

**Lo-Carbon U/KT  
(45 91 24A) Timer Model.**

Select the wiring configuration required for the Utility or Kitchen.



### Timer Adjustment.

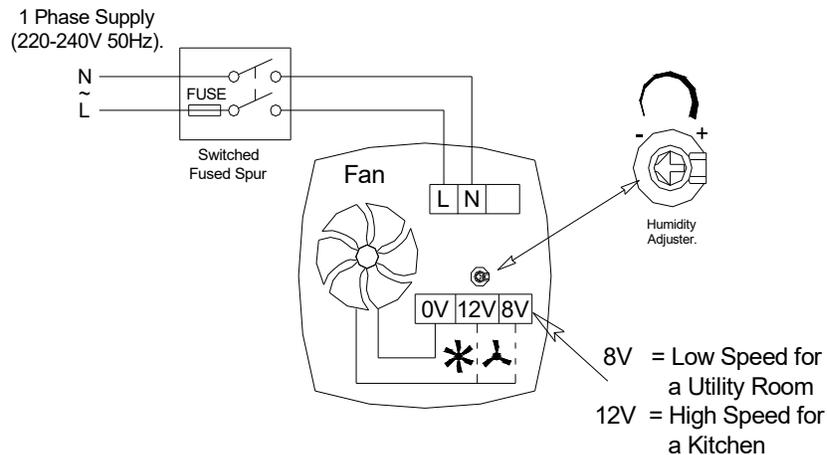
The overrun time period is factory set to 15 minutes. The overrun time period may be adjusted from 5-30 minutes, by altering the adjuster on the Fan PCB.

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

1. Remove the Indoor Grille [A]. Loosen the screw (top middle) of the Grille, to release front grille gently lever the Grille downwards away from the Inner Cover [B].
2. Remove Inner Cover [B]. Loosen the screw (bottom middle) and release the inner grille gently from the Base Housing [D].
3. To REDUCE the operating time, turn the Timer Adjuster CLOCKWISE.
4. To INCREASE the operating time, turn the Timer Adjuster ANTI-CLOCKWISE.
5. Replace the Inner Cover and Indoor Grille.
6. Reconnect the mains supply.

**Fig. 4.**  
**Lo-Carbon U/KHP**  
**(45 91 25A) Humidity Controlled Model.**

Select the wiring configuration required for the Utility or Kitchen.



**Humidity Set-Point Adjustment.**

The Fan's Humidity Set-Point is factory set to switch the fan on at 72%RH.

**Before adjusting the Set-Point, switch off the Mains Supply.**

1. Remove the Indoor Grille [A]. Loosen the screw (top middle) of the Grille, to release front grille gently lever the Grille downwards away from the Inner Cover [B].
2. Remove Inner Cover [B]. Loosen the screw (bottom middle) and release the inner grille gently from the Base Housing [D].
3. To LOWER the Set-Point, turn the adjuster CLOCKWISE. This makes the fan more sensitive to RH%, i.e. the fan will come on at a lower RH%.
4. To RAISE the Set-Point, turn the adjuster ANTI-CLOCKWISE. This makes the fan less sensitive to RH%, i.e. the fan will come on at a higher RH%.
5. Replace the Inner Cover and Indoor Grille.
6. 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.
2. Remove the Indoor Grille (See Section A : 2 for instructions) and wash in warm soapy water.
3. Wipe the shutter blades with a damp cloth until clean.
4. Replace the Grille.

**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 affect your legal rights

# **Vent-Axia**® #

Head Office: Fleming Way, Crawley, West Sussex, RH10 9YX.

EU Authorised Representative: Vent-Axia Bedrijvenweg 17 7442 CX Nijverdal Nederland.

[authorisedrep@vent-axia.nl](mailto:authorisedrep@vent-axia.nl)

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

SALES ENQUIRIES: Tel: 0344 8560590 Fax: 01293 565169

TECHNICAL SUPPORT: Tel: 0344 8560594 Fax: 01293 532814

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