

Silhouette

Lo-Carbon RANGE

100/150mm AXIAL EXTRACT FAN

Installation and Wiring Instructions



Stock Ref. N°

44 16 24A	- 100B
44 16 25A	- 100T
44 16 26A	- 100HT
44 16 28A	- 150B
44 16 29A	- 150T
44 16 30A	- 150HT

220-240V~50Hz

Vent-Axia®

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

IPX4
UK
CA
CE

Installation and Wiring Instructions for the Lo-Carbon Silhouette Range of Extractor Fans.



**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.

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 isolator switch capable of disconnecting all poles, 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.
- The fan should only be used in conjunction with fixed wiring.
- 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.
- Children should be supervised to ensure that they do not play with the appliance.
- Stationary appliances not fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under over voltage category III, the instructions state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
- The **exterior** grille should be at least 2.3m above the ground to prevent people from being able to access moving parts. If the **external** grille is positioned between 0-2.3m from the ground, Please use the Vent-Axia wall kit as detailed below to ensure people cannot access the fans impeller from the outside.

DESCRIPTION

The Lo-Carbon Silhouette 100mm fan is an axial extraction fan suitable for domestic bathrooms and W.C's. The Lo-Carbon Silhouette 150mm fan is an axial extraction fan suitable for domestic kitchens and utility rooms. They are available as wall or panel mounted models with shutter timer and humidity combinations.

Long life ball bearing DC motor with anti-vibration mounts provides low noise transmission into plasterboard/panels for silent operation.

The fan can be wall or panel/ceiling mounted.

ACCESSORIES (not supplied)

WALL FITTING KIT

A range of 100mm and 150mm wall kits are available for installing into most walls using telescopic liners supplied.

	Stock Reference	
	White	Brown
100	254102	254100
150	140902A	140903A

A. INSTALLATION

IMPORTANT: The fan should only be used in conjunction with fixed wiring.

PANEL/CEILING MOUNTING

1. For panel/ceiling mounting the fan should be installed into a closed duct system of at least 1.2m long (max 3m) or protected by an exterior air grille that must comply with the standard requirements of your country to prevent access to the fans impeller.
2. Cut a 105mm diameter hole for 100mm fans or a 155mm diameter hole for 150mm fans.
3. Loosen the screw at the bottom of the grille and remove the front grille. Mark the screw centres through the holes in the fan back plate. Drill, plug and screw into position.
4. Attach ducting as required for the installation.
5. Wire the fan as described in Section B-Wiring. Adjust any settings as required (see Section C-Setup).
6. Replace the grille and tighten the retaining screw.
7. After installation, ensure impeller rotates freely and the shutters can open.

WALL MOUNTING

1. For wall mounting either cut a 117mm diameter hole for 100mm fans or a 170mm diameter hole for 150mm fans, through the wall and insert the wall sleeve. Slope the sleeve slightly downwards away from the fan. Cut to length and cement both ends into position flush with the wall faces.
2. Loosen the screw in the bottom of the grille and remove the front grille. Mark the screw centres through the holes in the fan back plate. Drill, plug and screw into position. Fix exterior grille into position with the louvres positioned downwards. (Note:- The grille must comply with the standard requirements of your country to prevent access to the fans impeller. The wall kit used in this installation should provide a minimum ducting length of 100mm from the fans back plate to the inside of the external grille).
3. Wire the fan as described in Section B-Wiring. Adjust any settings as required (see Section C-Setup).
4. Replace the grille and tighten the retaining screw.
5. After installation, ensure impeller rotates freely and the shutters can open.

B. WIRING.



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

IMPORTANT

- The fan should only be used in conjunction with fixed wiring.
- The cross - sectional area of supply cord used should be ranged from 1 -1.5mm².
- Cable entry can only be made from the rear of the fan.
- The extraction fan is suitable for connection to 220-240V 50Hz supply.
- The fan is a class II double insulated product and **MUST NOT** be earthed.

1. Select and follow the appropriate wiring diagram. (Fig. 2 or 3)
2. Check all connections have been made correctly and ensure all terminal connections and cable clamps are securely fastened.
3. Ensure the impeller rotates and is free from obstructions.

C. SETUP



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

ACCESSING THE CONTROL SETTINGS – (Fig. 4)

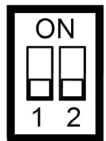
1. For 100 & 150mm fans loosen the screw in the bottom of the grille and remove the front grille. (The 150mm fan controls are located in the top left hand corner of the fan).
2. For 100mm fans carefully pull the inner cap from the centre of the fan away from the chassis.
3. Adjust the settings as outlined below.

SPEED SETTINGS FOR :100B, 150B, 100T, 150T, 100HT (For 150HT fan see below and Fig.6) BEFORE SETTING THE SPEED, SWITCH OFF THE MAINS SUPPLY. SPEED SHOULD ONLY BE SET BEFORE OR DURING INSTALLATION.

The fan has two speed settings for different installation requirements:

1) High speed:

- T and 100HT models: Dip switch 2 in the ‘OFF’ position. (Fig.5 & 6 – and right)
- 100B models: Remove jumper (Fig.5)
- 150B models: Remove jumper (Fig.6)



High speed
(T/100HT)

2) Low speed (Factory set):

- T and 100HT models: Dip switch 2 should be in the ‘ON’ position. (Fig.5 & 6– and right)
- 100B models: Replace jumper. (Fig.5)
- 150B models: Replace jumper. (Fig.6)



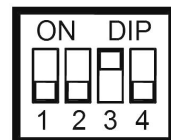
Low speed
(T/100HT)

Dip switch 1 should be in the ‘OFF’ position (T and 100HT models only).

Speed settings for 150HT see below and refer to Fig.6

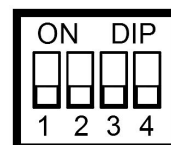
1) High speed:

- 150HT model: Dip switch 3 in the ‘ON’ position. (Fig.6)



2) Low speed (Factory set):

- 150HT model: Dip switch 3 should be in the ‘OFF’ position. (Fig.6)



Dip switch 1 & 2 should be in the ‘OFF’ position.

TIMER ADJUSTMENT (T AND HT MODELS)

BEFORE ADJUSTING THE TIMER, SWITCH OFF THE MAINS SUPPLY. TIMER SHOULD ONLY BE ADJUSTED BEFORE OR DURING INSTALLATION.

1. Remove the fan grille. The overrun timer is factory set to approximately 15 minutes. This timer period can be adjusted between approximately 3-30 minutes by altering the adjuster on the control PCB.
2. To REDUCE the operating time, use a small screwdriver to turn the adjuster Fig.5. CLOCKWISE.
3. To INCREASE the operating time, use a small screwdriver to turn the adjuster Fig.5. ANTI-CLOCKWISE.
4. Replace the fan grille.

HUMIDITY SET-POINT ADJUSTMENT (HT MODELS ONLY)

BEFORE ADJUSTING THE CONTROLLER, SWITCH OFF THE MAINS SUPPLY. HUMIDISTAT SHOULD ONLY BE ADJUSTED BEFORE OR DURING INSTALLATION.

1. Remove the fan grille. The controller is factory set to switch on at about 70% RH. The humidity set point can be adjusted from 65-95%RH by altering the adjuster on the control PCB.
2. To LOWER the set-point use a small screwdriver to turn the adjuster Fig.5. ANTI-CLOCKWISE. This makes the controller MORE sensitive.
3. To RAISE the set-point use a small screwdriver to turn the adjuster Fig.5. CLOCKWISE. This makes the controller LESS sensitive.
4. Replace the fan grille.

SELECTING THE DELAY-ON OPTION (150HT model only) – Switch dip switch 4 (Fig 6) into the ON position to activate the delay-on feature. This will prevent the fan from switching on for approximately 2 minutes. If the Switch Live is disconnected (switched off) within this period the fan will not go on. If the Switch Live is still active after the period the fan will switch on and run for the pre-set overrun time.

D. 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. Wipe the inlets and front face with a damp cloth until clean.

The fan has sealed for life bearings, which do not require lubrication.

Fig.1.

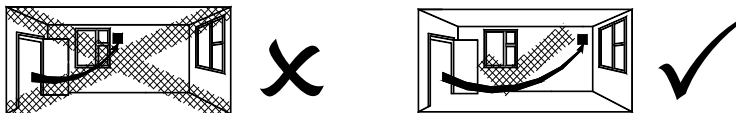


Fig.2 Models: 100B/150B, 100HT/150HT (Timer not used)

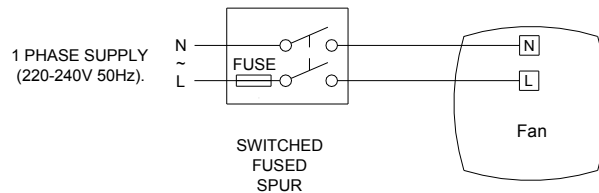


Fig.3 Models: 100T/150T, 100HT/150HT

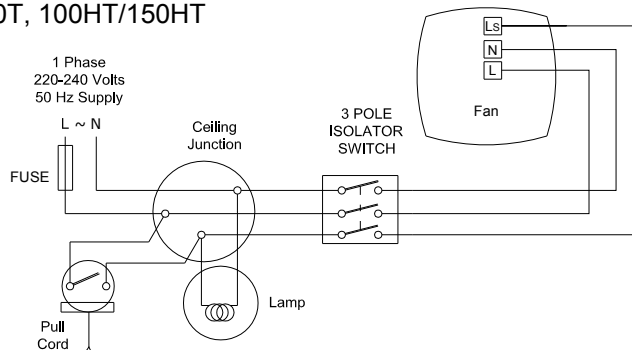


Fig.4. Accessing the control settings for 100mm fans

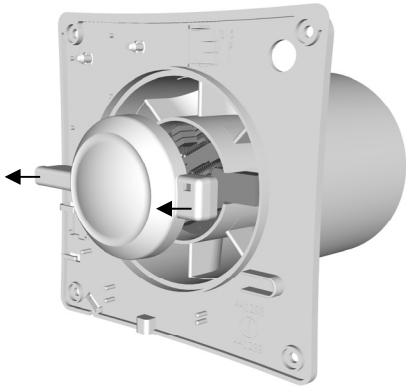


Fig.5. Control settings for 100mm fans

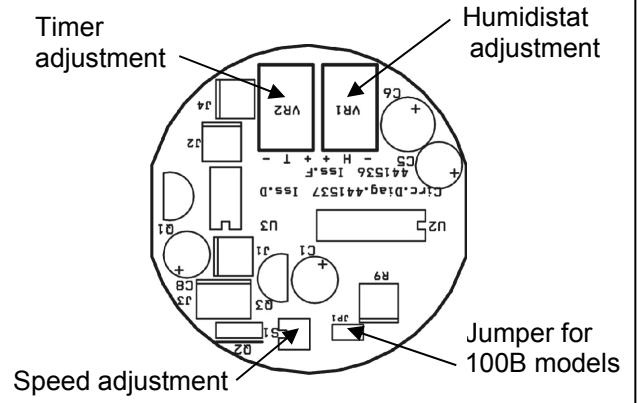
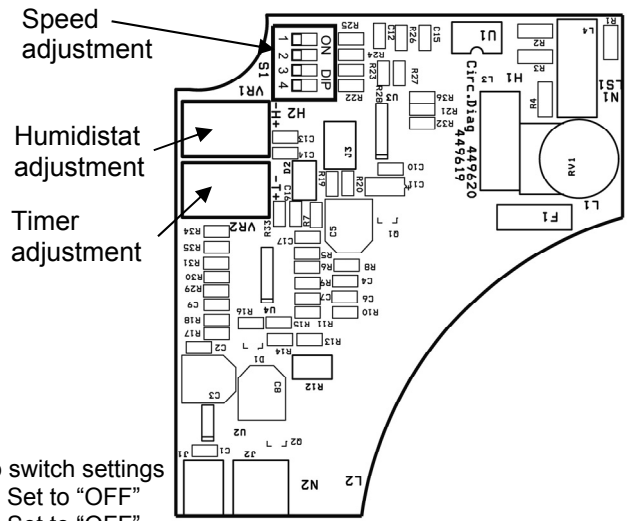
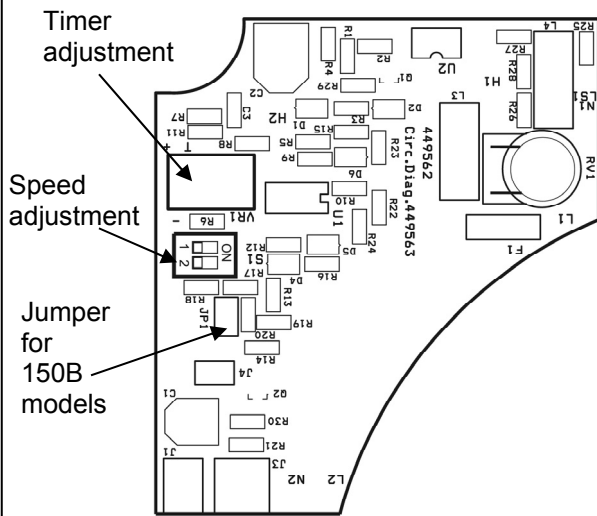


Fig.6. Control settings for 150mm fans



- Dip switch settings
- 1 = Set to "OFF"
 - 2 = Set to "OFF"
 - 3 = Low speed = "OFF" High speed = "ON"
 - 4 = Delay on timer "ON" or "OFF"

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

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TECHNICAL SUPPORT: Tel: 0844 8560594 Fax: 01293 532814

For details of the warranty and returns procedure please refer to www.vent-axia.com or write to Vent-Axia, Fleming Way, Crawley, RH10 9YX