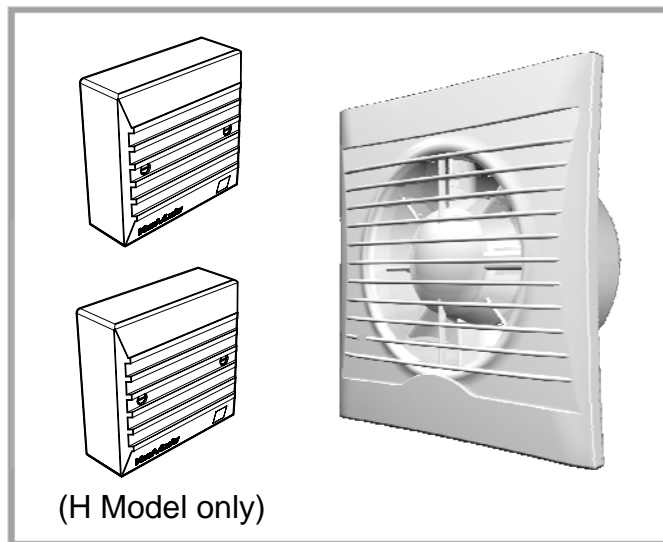


Silhouette

Lo-Carbon SELV RANGE

Installation and Wiring Instructions



Stock Ref. N°

441511	(100SV)
441512	(100SVT)
441513	(100SVH)

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 ILLUSTRATIONS.
PLEASE SAVE THESE INSTRUCTIONS.

IPX7



Installation and Wiring Instructions for the Lo-Carbon Silhouette SELV Fan & Controller.



**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

- 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 & controller(s) should be provided with a local isolator switch capable of disconnecting all poles, having a contact separation of at least 3mm.
- C.** Ensure that the mains supply (Voltage, Frequency, and Phase) complies with the rating label.
- D.** The fan should only be used in conjunction with the appropriate Vent-Axia products.
- E.** It is recommended that the connection to the fan connector terminals is made with flexible cable.
- F.** 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.
- G.** The fan should not be used where it is liable to be subject to direct water spray for prolonged periods of time.
- H.** 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.
- I.** This appliance is not intended for use by young children or infirm persons without supervision.
- J.** Young children should be supervised to ensure that they do not play with the appliance.

IMPORTANT:- ONLY CONNECT TOGETHER PRODUCTS FROM THE LO-CARBON SILHOUETTE SELV RANGE SINCE THE FANS ARE SPECIALLY DESIGNED TO WORK ON 12V DC AND ARE NOT COMPATIBLE WITH OTHER VENT-AXIA CONTROLLERS. DO NOT CONNECT MORE THAN ONE FAN TO THE CONTROLLER.

DESCRIPTION

The Lo-Carbon Silhouette SELV range from Vent-Axia is a 100mm extract fan for domestic bathrooms and WC's available as wall or panel mounted models. Model options with shutter, timer and auto humidity control.

ACCESSORIES (not supplied)

A range of 100mm wall kits are available for installing into most walls using telescopic liners supplied. (White – 254102, Brown – 254100)

A. INSTALLATION

SITING THE CONTROLLER

1. The controller must not be installed in a shower cubicle or enclosure. It must be sited away from direct sources of water spray and out of reach (1.5m) of a person using a fixed bath or shower.
2. Site away from direct sources of heat. Ambient temperature range 0 to 40°C. Do not site in an area containing excessive levels of grease.
3. Decide where to site the controller and fan (see section siting the fan), and work out the required cable runs.
4. The H Model is supplied with an ambient response humidity sensor. (Please refer to the instruction leaflet supplied with the controller for its siting and operation).

SITING THE FAN

1. The electrical supply to this fan is 12V DC SELV from the mains controller. This means that the fan may be installed within reach of a person using a fixed bath or shower, i.e. in a nearby wall. However, the fan must not be placed where it could be submerged in water or regularly exposed to direct water spray, e.g. from a shower head whether permanently fixed or movable.
2. Site away from direct sources of heat. Ambient temperature range 0 to 40°C. Do not site in an area containing excessive levels of grease.
3. If the fan is installed in a room containing a fuel burning appliance the installer must ensure that air replacement is adequate for both the fan and the fuel burning appliance. If the fan is used to supply air into the room the installer must ensure that the fan intake is located at least 600mm away from any flue outlet.
4. Ducted Applications. These fans can be used with short lengths of rigid ducting, but check details first with your Vent-Axia sales centre. Where an excessive amount of moisture is present in the air, a condensation trap will need to be installed in the exhaust duct. Horizontal ducts should slope away from the fan unit. Ducts passing through an unheated roof void should be insulated.
5. A short circuit of the airflow should always be avoided by siting the fan as far away as possible from and opposite to the main source of air replacement. FIG.1

PANEL/CEILING MOUNTING

IMPORTANT: The fan should be installed into a closed duct system or protected by an exterior air grille.

1. Cut a 105mm diameter hole in the fixing surface.
2. Remove the grille by loosening the screw at the bottom of the grille.
3. Mark the screw centres through the holes in the fan back plate. Drill, plug and screw into position.
4. Securely attach ducting.
5. Replace grille and tighten the screw.

WALL MOUNTING (Wall kit not supplied – see Accessories above)

1. Cut a 115mm diameter hole through the wall and insert the wall sleeve with the large diameter sleeve on the room side. Slope the sleeve slightly downwards away from the fan. Cement both ends into position flush with the wall faces.
2. Remove the grille by loosening the screw at the bottom of the grille.
3. Mark the screw centres on the wall through the holes of the fan back plate. Drill plug and screw into position.
4. Repeat for the external grille sub-frame. Fix exterior grille into position with the louvres positioned downwards.

AFTER INSTALLATION ENSURE IMPELLER ROTATES FREELY

B. WIRING.



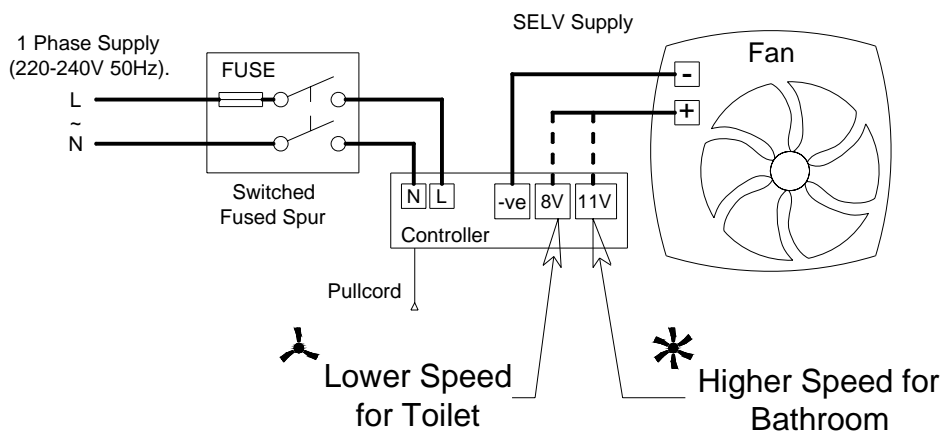
WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE.

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. 2-5).
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.

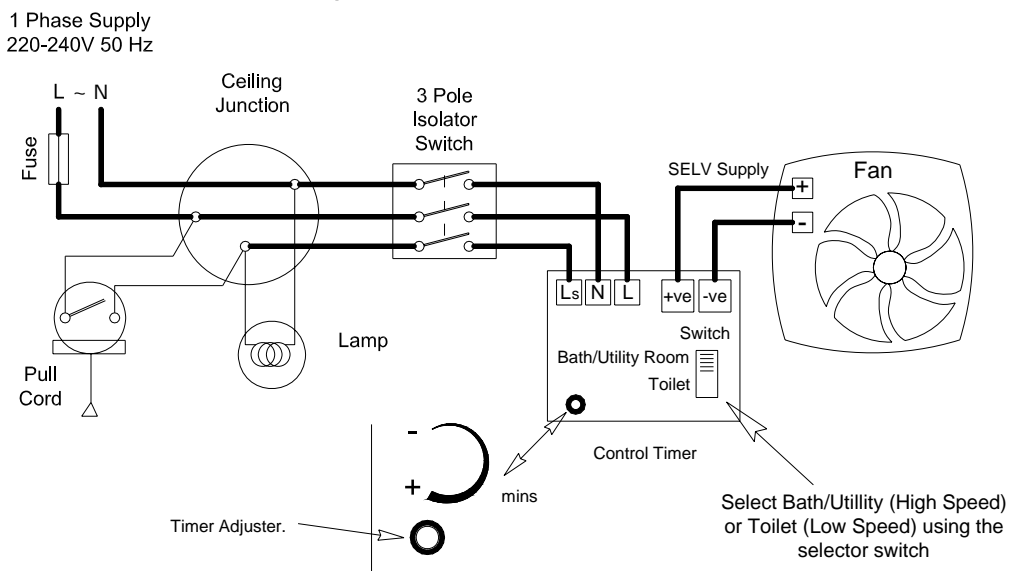
**Fig. 2.
Lo-Carbon Silhouette 100 SELV P
Pullcord Model.**

Select the wiring configuration required for the Toilet or Bathroom.



**Fig. 3.
Lo-carbon Silhouette 100 SELV 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.

Fig. 4.

Lo-carbon Silhouette 100 SELV H HUMIDISTAT Model.

Toilet Humidity Controlled setting (low speed)

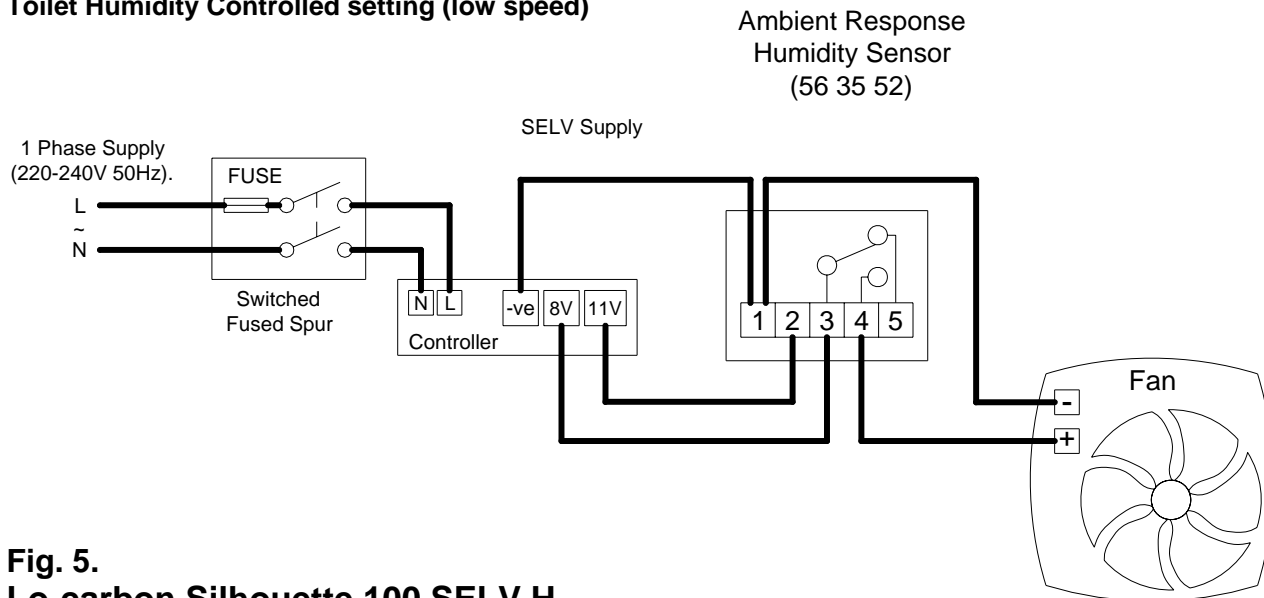
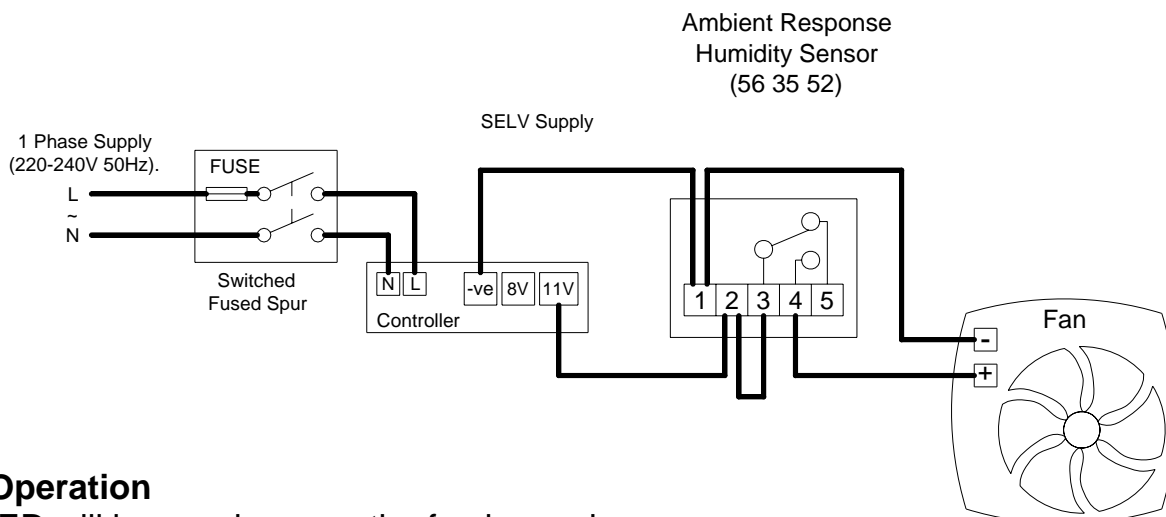


Fig. 5.

Lo-carbon Silhouette 100 SELV H HUMIDISTAT Model.

Bathroom/Utility Humidity Controlled setting (high speed).



LED Operation

The LED will be on whenever the fan is running.

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

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

Vent-Axia[®]

Head Office: Fleming Way, Crawley, West Sussex, RH10 9YX. Tel: 01293 526062 Fax: 01293 551188

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

SALES ENQUIRIES: Tel: 0844 8560590 Fax: 01293 565169

TECHNICAL SUPPORT: Tel: 0844 8560595 Fax: 01293 539209

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