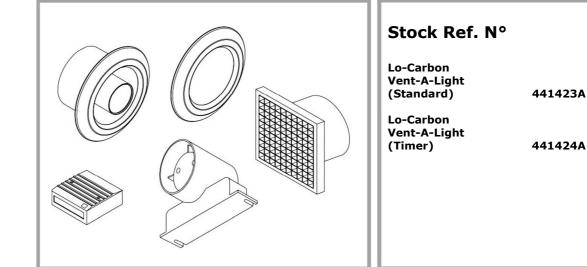
Vent-A-Light Lo-Carbon Range In-Line Fan & Light kit

Installation and Wiring Instructions



FAN UNITS 12V DC SELV (CLASS III) CONTROLLERS 220-240V 50Hz MAINS SUPPLY (CLASS II) WITH 12V DC SELV OUTPUT (For both fan & light assembly)



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

Vent-Axia.

Installation and Wiring Instructions for the Lo-Carbon Vent-a-Light 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 connecter 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.
- **O.** The luminaire shall, under no circumstance, be covered by insulating matting or similar material.

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.

INSTALLATION OF THE SHOWER LIGHT

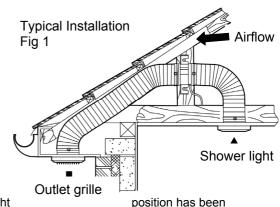
Cut a 102mm hole in the ceiling between the joists, once the shower Light position has been determined. Hold the body of the shower light against the ceiling and mark the four screw holes (alternatively use the fixing clips to secure the fan in the ceiling). See Fig 2 below.

LIGHTING TRANSFORMER - WIRING DETAIL

Connect the transformer to the shower light and to a suitable power supply, ideally the switched live of the extractor fan or bathroom lighting circuit. (see Fig.4 for timer model, or for standard model see Fig.3)

IMPORTANT:-The shower light must not work independently of the fan. Where the installation does not permit connecting the LV leads from the lamp housing directly into the remote transformer an extended lead can be used.

The lead should be a minimum of 1mm sq in section connections



SCREW

should be made within a standard BS6220 5 amp junction box. Once the wiring to the lamp is complete the lamp bezel white or chrome can be fitted by locating the 3 lugs, and twisting anti-clockwise.

Never connect mains supply direct to the class III shower light. Power input – 12 volts DC

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. 3-4).
- 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. 3.

Lo-Carbon Vent-A-Light Standard Model. Select the wiring configuration required for the Toilet or Bathroom.

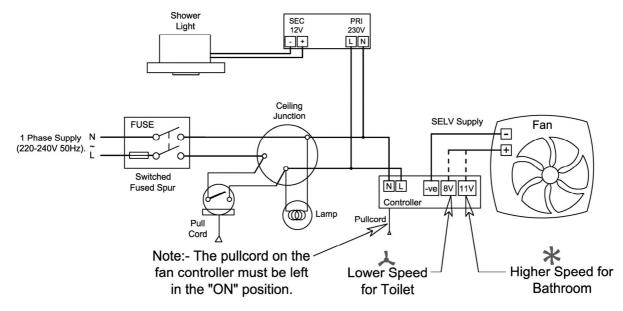
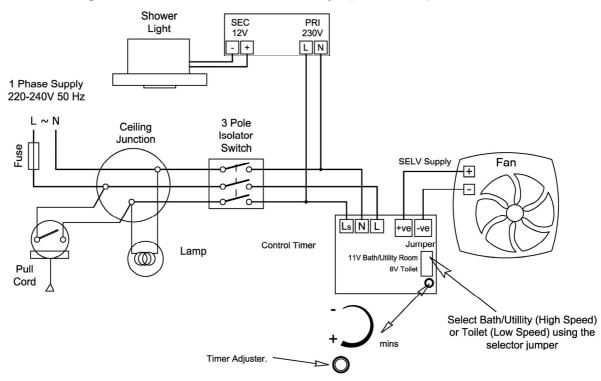


Fig. 4. Lo-carbon Vent-A-Light T Timer Model. Switch the selector jumper to the required mode.



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.

C. SERVICING AND MAINTENANCE.



WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT <u>MUST</u> BE ISOLATED FROM THE POWER SUPPLY DURING MAINTENANCE.

BULB REPLACEMENT

Disconnect the power supply, and be sure that the lamp has fully cooled before removing or replacing. Replace any cracked or damaged lamp Remove the faulty lamp by pulling it out the lamp housing. Replace new lamp by aligning the 2 lamp pins with the lamp holder in the lamp housing and then pushing it into position. Use only a 3W LED 12VDC Lamp, Type MRI6

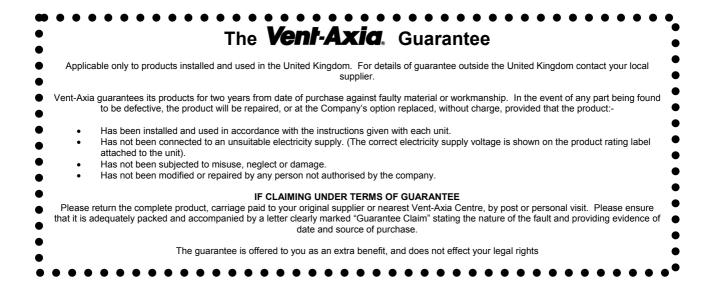
MAINTENANCE

Disconnect the power supply The shower light bezel can be removed and cleaned with a cloth. The shower light housing and inline fan can be cleaned with a cloth. It is recommended to check the electrical connections annually.

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

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 Vent-A-Light Fan and LED Light Kit - 441423	Lo-Carbon Vent-A-Light Fan and LED Light Kit Timer - 441424
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 NRVU/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)	www.vent-axia.com	www.vent-axia.com
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





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

 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 or write to Vent-Axia Ltd, Fleming Way, Crawley, RH10 9YX