

# LuminAir Fan & Light Ventilation Kit

Fitting and wiring instructions



## Stock Ref. No

LuminAir Kit L	453410A
LuminAir Kit T	453413A
LuminAir Kit H	453416A

Supply voltage to transformer/controller 220-240V/1/50Hz  
Output to fan 12V SELV/1/50Hz

# **Vent-Axia**<sup>®</sup>

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.

UK  
CA  
CE



**VENT-AXIA LUMINAIR RANGE: FITTING AND WIRING INSTRUCTIONS**  
**PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION**

## **1. GENERAL**

Unpack taking care to note the product model reference on the outside of the carton eg. LuminAir T. The installation details apply to all fan/light units and controllers, but the wiring and functions vary. This kit consists of the following parts:- 1 luminair vent light, 1 luminair bend, 1 luminair axial fan, 3 metres of flexible ducting, 2 duct ties, 1 soffit grille, 1 lighting transformer, 1 fan transformer/controller & fixings pack. (H model also includes a humidity controller).

## **2. SAFETY AND GUIDANCE NOTES**

2.1. DO NOT install this product in areas where the following may be present or occur:

- 2.1.1. Excessive oil or a grease laden atmosphere.
- 2.1.2. Corrosive or flammable gases, liquids or vapours.
- 2.1.3. Ambient temperatures higher than 40°C or less than -5°C.
- 2.1.4. Possible obstructions which would hinder access or removal of the Fan.

2.2. 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.

2.3. The fan should be provided with a fused, isolator switch capable of disconnecting all poles, having a contact separation of at least 3mm.

2.4. Ensure that the mains supply (voltage, frequency, and phase) complies with the fan's rating label.

2.5. 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.

2.6. When the fan extracts air from a room containing an open flue of a gas or fuel burning appliance, precautions must be taken to avoid the back-flow of gases into the room.

2.7. The fan should not be used where it is liable to be subjected to direct water spray.

2.8. The fan should be mounted at the highest point in the system to protect it from condensation build up.

2.9. This fan should be vented to the outdoors.

2.10. 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.

2.11. Children should be supervised to ensure that they do not play with the appliance.

**ONLY CONNECT TOGETHER THE PRODUCTS SUPPLIED FROM LUMINAIR RANGE AS THE FAN IS SPECIALLY DESIGNED TO OPERATE AT 12V AC AND IS NOT COMPATIBLE WITH OTHER VENT-AXIA CONTROLLERS. DO NOT CONNECT MORE THAN ONE FAN UNIT TO THE FAN CONTROLLER.**

**WARNING:** Ensure that the mains supply is disconnected before making any electrical connections. All electrical connections should be made by a properly qualified electrician. The siting and installation MUST comply with current IEE Regulations, BS7671 (U.K.) or the appropriate standards in your country. All regulations and requirements MUST be strictly followed to prevent hazard to life and property, both during and after installation, and while carrying out any subsequent servicing and maintenance.

### **3. SITING THE LUMINAIR**

**3.1** The electrical supply to the LuminAir fan is 12V AC SELV from the mains transformer controller and the Luminair light is 12V DC from the mains lighting LED driver. This allows the LuminAir fan & light to be installed within reach of a person using a fixed bath or shower ie. in the ceiling above. However, direct water spray on to the LuminAir should be avoided as this will reduce the life of the unit.

**3.2** Site away from direct sources of heat. Do not site in areas containing excessive levels of grease. If the LuminAir 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.

#### **3.3 Ducting**

The LuminAir must be ducted to the outside to extract moisture laden air which could cause damage to property. LuminAir Ventilation Kit is supplied with 3 metres of flexible ducting.

DUCTS SHOULD SLOPE AWAY FROM THE LUMINAIR AND DUCTS PASSING THROUGH AN UNHEATED ROOF VOID SHOULD BE INSULATED TO AVOID CONDENSATION.

### **4. SITING THE TRANSFORMER CONTROLLER & LIGHTING LED DRIVER**

**4.1** THE TRANSFORMER CONTROLLER MUST NOT BE SITED IN A SHOWER CUBICLE OR WITHIN REACH OF A PERSON USING A FIXED BATH OR SHOWER. (ARMS LENGTH= 1.25m).

**4.2** Site away from heat. The controllers require free air circulation and must not be covered with any insulating material such as might be in a ceiling or roof void. Ambient temperature range of both the LuminAir Fan & Light and transformer controller is 0 to 40°C.

**4.3** Decide where to mount the LuminAir and its controllers and work out the cable runs.

#### **4.4 LuminAir H models**

In addition to the above please refer to the fitting and wiring instructions supplied with the SELV electronic humidistat for appropriate siting details.

### **5. FITTING THE LUMINAIR FAN/LIGHT**

**5.1** Mark and cut the 110mm hole in the ceiling surface where the LuminAir is to be fitted. (Mounting holes 130mm dia. Centres)

**5.2** Drill and plug the fixing holes if these are to be used (See 5.4 below).

**5.3** Pull the LuminAir Bezel from the main assembly by gripping it firmly around its centre. Do not prise the Bezel from the unit as this may damage its clip fastenings.

**5.4** Loosen the two screws on the Lamp Housing until the Securing Clamps allow sufficient clearance to accommodate the ceiling thickness. Position the Securing Clamps against the Lamp Housing and fit the LuminAir through the hole. Retighten the screws to clamp the LuminAir in place. From the outside cut a 110mm hole in the soffit and secure the soffit grille using the screws provided. Extend the ductwork provided between the soffit grille and the outlet of the LuminAir fan, securing with the duct ties provided. Ensure that the duct is fully extended for maximum performance and that unnecessary duct is cut off.

**5.5** Fit the Bezel to the Lamp Housing.

### **6. FITTING THE TRANSFORMER CONTROLLER – LUMINAIR L, T AND H**

NOTE: The controller is supplied with a surface mounting box and this should not be recessed.

**6.1** Break out the desired cable entry opening(s) in the mounting box. Cable entry glands or grommets should be used to ensure that the enclosure retains its integrity against dust and moisture penetration.

**6.2** The mounting box should be fixed to the mounting surface using screws compatible with the surface.

#### **FITTING THE LED LIGHTING DRIVER**

**6.3** The LED lighting driver should be fixed to the mounting surface using screws compatible with the surface.

## 7. WIRING THE LUMINAIR AND TRANSFORMER CONTROLLERS

**WARNING:** This appliance **MUST NOT** be earthed. The controller **MUST** be connected to a 220-240V 50Hz AC single phase mains fan supply. It provides a 12V 50Hz AC Safety Extra Low Voltage (SELV) output for only one Vent-Axia LuminAir unit.

7.1 Ensure that the mains supply is switched OFF before starting any wiring.

7.2 The mains supply should be via a switched spur with a 3A fuse (UK) to provide double pole isolator switch with a contact separation of at least 3mm. The switch should be located outside the room if it contains a fixed bath or shower, or in accordance with mandatory wiring and safety regulations.

7.3 The SELV wiring **MUST** be with mains voltage rated cable. The SELV wiring should be physically separated and insulated from any mains supply or other cabling. Cut the outer sheathing back as little as possible so that the insulating sheath almost reaches the terminal block. 1.5mm<sup>2</sup> cable is recommended for cable runs up to 8m. Cable runs over 8m are not recommended.

7.4 Make the appropriate electrical connections as shown in fig. 1, 2 and 3. Surface wiring, must be securely clipped to the mounting surface close to the controller.

7.5 The LuminAir fan & light assemblies are supplied with flying leads. Connections between the controllers and the LuminAir should be made in a mains voltage rated junction box or similar.

7.6 Make sure all connections are secure. Fix the controller & LED lighting driver covers back on. Do not over-tighten the screws and take care not to trap any wires when fitting the two pieces together.

## 8. TIMER ADJUSTMENT (LUMINAIR T MODELS ONLY)

The electronic timer fitted to the LuminAir T is triggered automatically when the unit is switched on by means of a remote switch eg. a lightswitch. The fan will run for an adjustable preset period (between 3 and 25 minutes) after the lamp is turned off via the remote switch. The timer is factory preset at approximately 15 minutes.

### BEFORE ADJUSTING TIMER ISOLATE TRANSFORMER CONTROLLER FROM MAINS SUPPLY

8.1 The adjuster is located on the circuit board inside the transformer controller.

8.2 Using a small screwdriver turn the adjuster clockwise to increase or anti-clockwise to decrease the over-run period. N.B. If used in a room lighting circuit, for reliable operation, we recommend a tungsten filament lamp. The manufacturers of some fluorescent and low energy lighting systems indicate that their products can interfere with electronic timer circuits.

## 9. LAMP REPLACEMENT BEFORE REMOVING OR REPLACING THE LAMP ISOLATE THE TRANSFORMER CONTROLLER FROM MAINS SUPPLY

The Vent-Axia LuminAir is specially designed for use with the supplied 12VDC LED lamp rated at 3W. The lamp is a straight push in/pull out type. Any twisting movement, when removing/replacing the lamp, should be avoided.

## Wiring Diagrams

Fig 1. LuminAir Kit L (Ref. No 453410A)

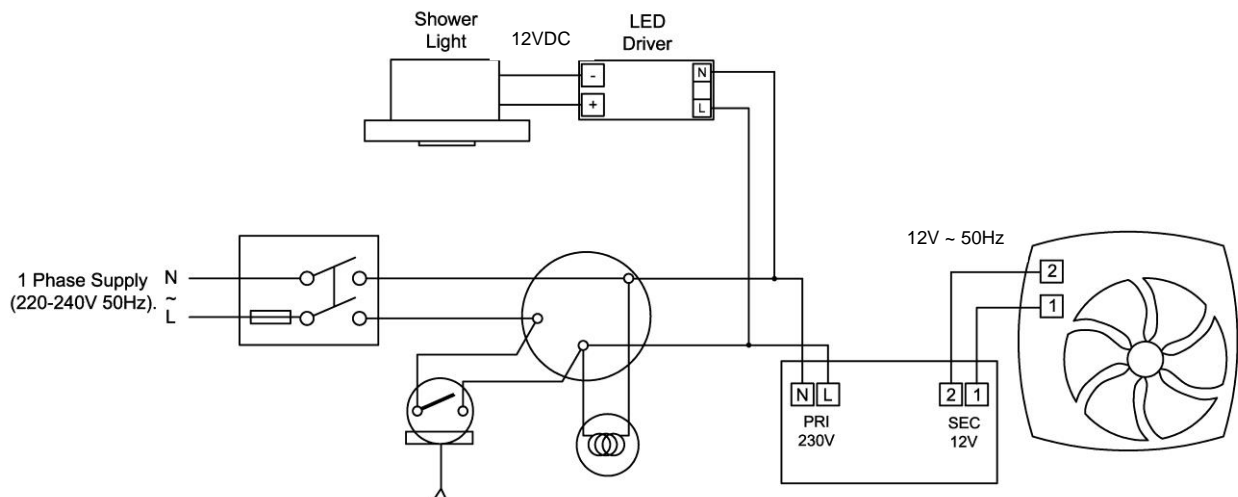


Fig 2. LuminAir Kit T (Ref. No 453413A)

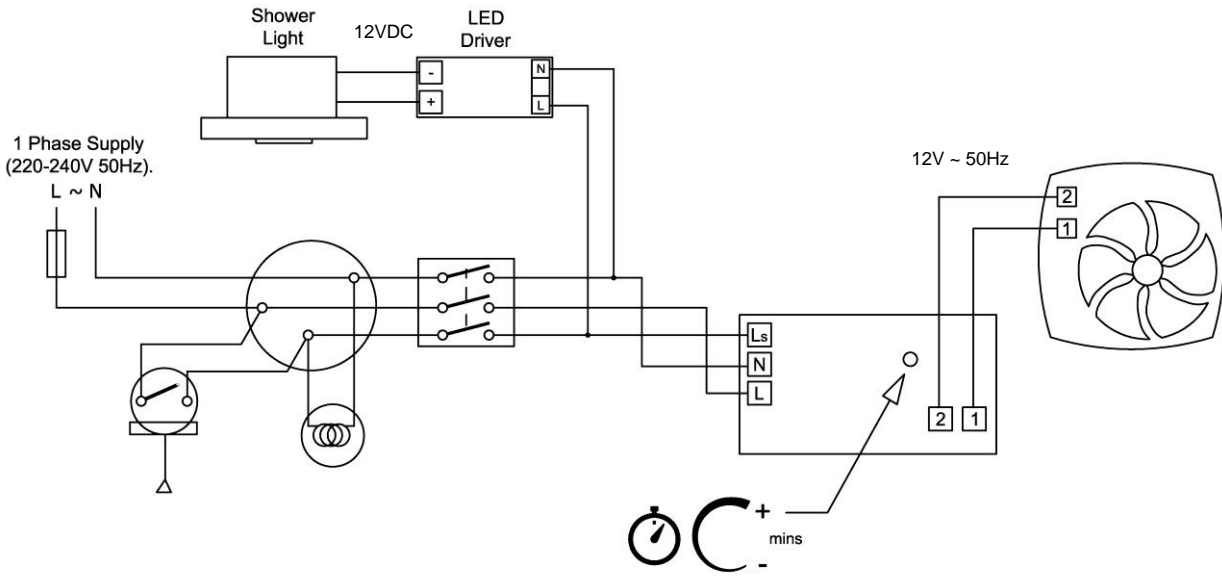
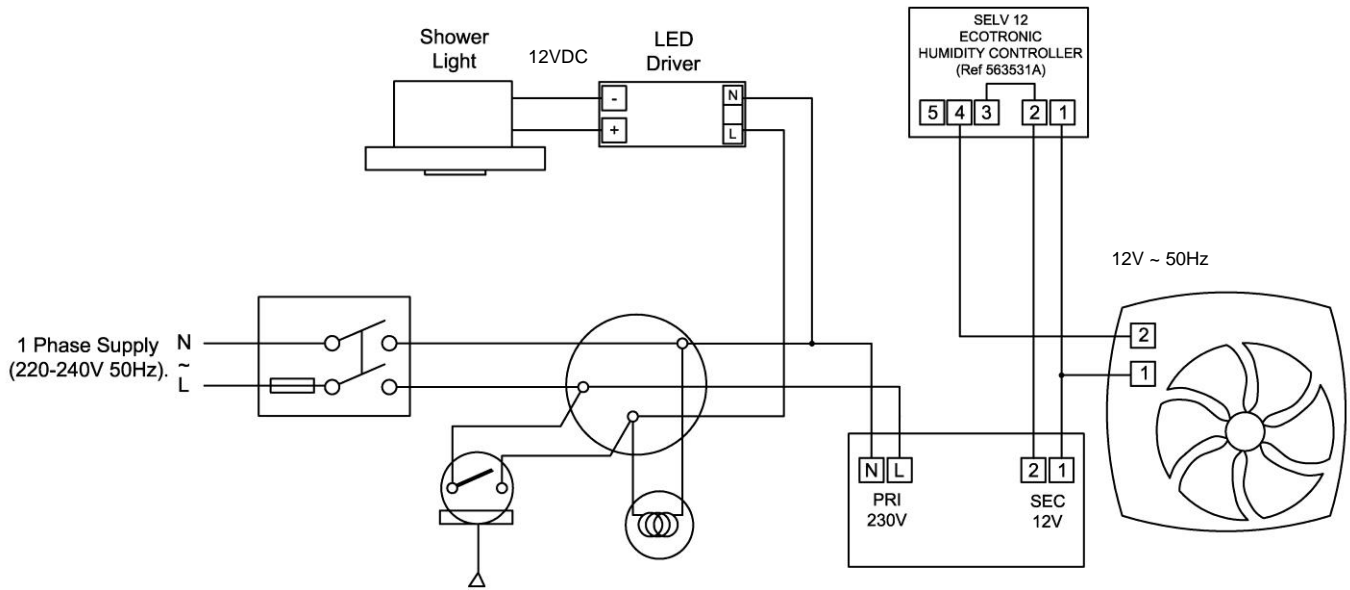


Fig 3. LuminAir Kit H (Ref. No 453416A)







### Disposal

This product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice.

## 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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For details of the warranty and returns procedure please refer to [www.vent-axia.com](http://www.vent-axia.com) or write to:-  
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