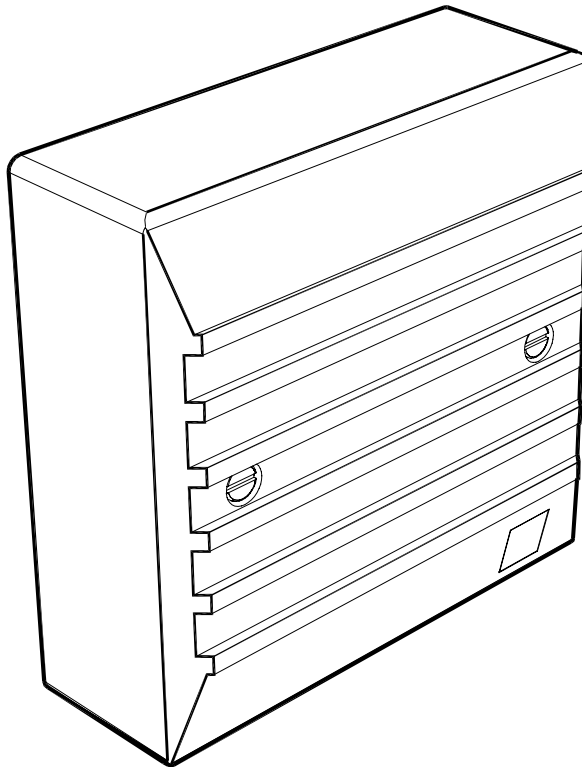


# Vent-Axia<sup>®</sup>

## ECOTRONIC SELV24 SENTINEL HUMIDITY CONTROLLER

Fitting & Wiring Instructions



**Stock Ref:- 432949**

*READ INSTRUCTIONS IN CONJUNCTION WITH ILLUSTRATIONS  
READ AND SAVE THESE INSTRUCTIONS*



# VENT-AXIA SENTINEL SELV24 ECOTRONIC FITTING AND WIRING INSTRUCTIONS

**PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLATION**

## **OPERATION**

The Ecotronic humidity controller has been designed for maximum versatility. It has a single pole change-over relay. The relay is energized either by manual override, or in automatic mode when the room Relative Humidity (RH) reaches the set-point. The relay remains energized until the room RH falls below the set-point.

The integral pullcord switches between automatic humidity control and manual override. The Ecotronic indicator lights when in manual override. The indicator will **NOT** light under automatic humidity control, even if the relay is energized. There is no permanent OFF position.

## **Note:**

On installation it is possible that the humidity controller will run continuously until it has acclimatized to the environment.

## **INSTALLATION**

The Ecotronic is designed to fit any non-metallic UK single mounting box with a minimum depth of 20mm. Fixing centers 60.3mm. A surface mounting box is available (Vent-Axia Ref. 410020). Do NOT use a metallic mounting box.

The ambient temperature working range of the Ecotronic is 0 to 40°C. Site the Ecotronic sensor on a wall away from direct sources of heat and out of direct sunlight. Do not site directly above a cooker or in an area where excessive heat, smoke or grease is present as this may affect the accurate working of the Humidity sensor.

This sensor is not suitable for installation in a shower cubicle or enclosure where water droplets can cause damage to the sensing element.

The Ecotronic can be used to directly control a duct damper when used with a 24V dc SELV power supply (VA Part No. 433193), Fig. 1, or wired directly to the Sentinel controller. The Ecotronic may also be used to switch the fan unit from MIN. speed (trickle) to MAX speed (boost), Fig. 2.

If the Ecotronic is used for damper control in conjunction with the 24Vdc power supply (VA Part No. 433193), it is possible to connect up to 5 damper actuators.

## **WIRING**

The Ecotronic must not be earthed. It is a Class III Safety Extra Low Voltage (SELV) product.

All electrical connections should be made by a properly qualified electrician. The sitting and installation MUST comply with the current I.E.E. Regulations (BS7671 UK) or the appropriate standards in your country.

**All regulations and requirements MUST be strictly followed to prevent hazards to life and property both during and after installation, and during any subsequent servicing and maintenance.**

The SELV wiring MUST be with mains voltage rated non-metallic sheathed cable. The SELV wiring should be physically separated and insulated from any mains supply or other cabling.

When using surface wiring that is not contained in conduit, the cables must be securely clipped to the mounting surface, close to the controller.

Double check the wiring making sure all connections are secure. Fit the Ecotronic to the mounting box with the two screws provided. Do not over-tighten the screw. Do not trap any wires when fitting the two pieces together. Switch the mains supply on and check operation.

## **TRANSFORMER**

If the mains transformer is used with the installation, Fig. 1, the transformer must be sited out of reach of a person using a fixed bath or shower. It provides a 24V dc Safety Extra Low Voltage (SELV) to the Ecotronic, which in turn supplies voltage to a 24V dc damper control. Under these conditions, the Ecotronic therefore may be installed within reach of a person using a fixed bath or shower.

Wiring to the mains transformer controller should be via a switched spur with a 3A fuse (UK). The installation **MUST** be provided with a 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.

## **HUMIDITY SET-POINT ADJUSTMENT**

### **Before adjusting the controller switch off the mains supply**

Unscrew the screws holding the Ecotronic to the mounting box whilst supporting the Ecotronic and wiring. Tilt it to expose the adjuster shaft which has RH% marked nearby on the label.

The Ecotronic is factory set to switch on at about 72%RH.

TO LOWER the set-point turn the adjuster shaft **CLOCKWISE**. This makes the Ecotronic **MORE** sensitive to RH%, i.e. it will come on at a lower RH.

TO RAISE the set-point turn the adjuster shaft **ANTI-CLOCKWISE**. This makes the Ecotronic **LESS** sensitive to RH%, i.e. it will come on at a higher RH.

Check all the connections and carefully refit Ecotronic. Switch the supply back ON and check operation.

FIG 1: CONNECTION CIRCUIT FOR USE WITH BELIMO DAMPER

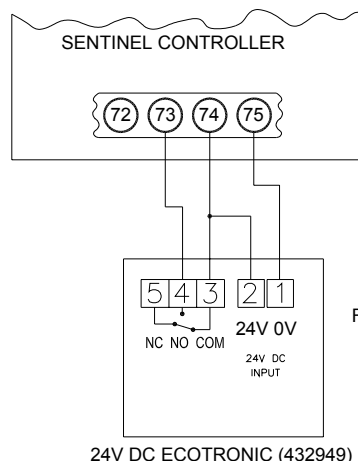
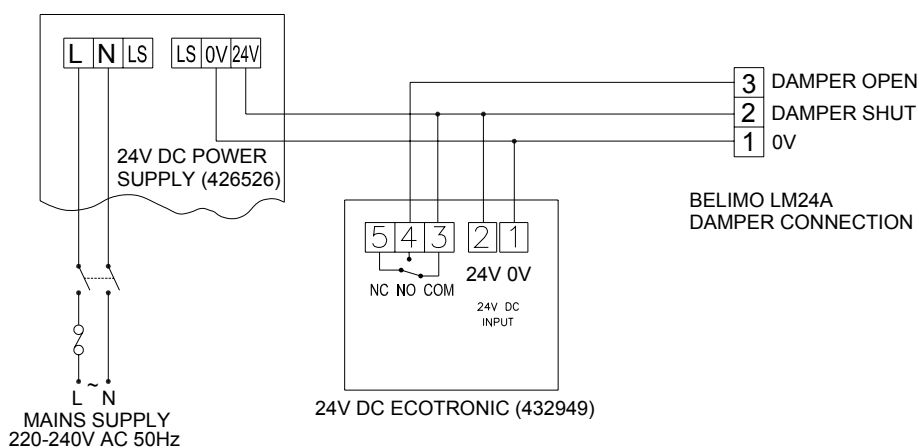


FIG 2: SYSTEM BOOST CONNECTION FOR MIN TO MAX SETTING

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**The Vent-Axia Guarantee**

Applicable only to products installed and used in the United Kingdom. For details of the Guarantee outside of the United Kingdom contact your local supplier.

Vent-Axia guarantees this product for two years from the 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 discretion the product will be replaced without charge, provided that the product:

- 1). Has been installed and used in accordance with the instruction given with each unit.
- 2). The electricity supply complies with the rating label.
- 3). Has not been misused, neglected or damaged.
- 4). Has not been modified or repaired by any person not authorized to do so by Vent-Axia.

**IF CLAIMING UNDER THE TERMS OF THE GUARANTEE**

Please return the complete product, carriage paid to your original supplier by post or in person. Please ensure that it is adequately packed and accompanied by a letter clearly marked 'Guarantee Claim' stating the nature of the fault and providing proof of the date and source of purchase.

As part of the policy of continuous product improvement  
Vent-Axia reserve the right to alter specifications without notice

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