

# Centra

CONTINUOUS EXTRACT FAN

Installation and Wiring Instructions



**Stock Ref. N°**  
44 17 82 B

220-240V~50Hz

***Vent-Axia***<sup>®</sup>

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

IPX4  
**CE**

## Installation and Wiring Instructions for the Centra 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**

- 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 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. The fan should only be used in conjunction with fixed wiring.
- 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 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.
- J. Young children should be supervised to ensure that they do not play with the appliance.

### **DESCRIPTION**

The Centra 100mm fan is a continuously running extract fan for kitchens, utility rooms, bathrooms and toilets.

The product incorporates an airflow detection system that detects the installation duct resistance and maintains the correct fan speed to achieve the preset extract flow rate of either 6l/s, 9l/s or 15l/s, minimising energy use and noise (see Section C-Setup for more information).

Long life ball bearing DC motor with anti-vibration mounts provides virtually zero 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 white (stock ref. 254102) or brown (stock ref. 254100) 100mm wall kits are available for installing into most walls using telescopic liners supplied.

## 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 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.
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.

### WALL MOUNTING

1. For wall mounting cut a 117mm diameter hole 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.
3. 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).
4. Wire the fan as described in Section B-Wiring. Adjust any settings as required (see Section C-Setup).
5. Replace the grille and tighten the retaining screw.
6. 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.**

### **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 -1.5mm<sup>2</sup>.
- 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. 1, 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 and 5)

1. Loosen the screw in the bottom of the grille and remove the front grille.
2. Carefully pull the inner cap from the centre of the fan away from the chassis.
3. Adjust the settings as outlined below.

### Trickle speed selection (6l/s or 9l/s) – (Fig. 7)

In normal running mode the fan can extract at either 6l/s (22m<sup>3</sup>/h) or 9l/s (32m<sup>3</sup>/h) flow rate. The fan will boost to 15l/s (54m<sup>3</sup>/h) when the LS connection is switched.

- Factory set at **6l/s** (22m<sup>3</sup>/h).
- Remove jumper connector (JP1) if **9l/s** (32m<sup>3</sup>/h) extract flow rate is required.

### Airflow detection system – enable/disable (Fig. 8)

The airflow detection system will detect the installation duct resistance and also react to external wind conditions to ensure the fan maintains a constant extraction rate. This can cause the fan to ramp up and down and in most applications will not be required. To turn this feature on, complete the following:

- Push switch (SW1) into the on position to turn on constant flow mode.
- Push switch (SW1) into the off position to turn off constant flow mode.  
(Factory set)

**IMPORTANT** – On first power up, the fan will run through its initialisation routine. This will involve the fan running on maximum speed for 10-20 seconds. After which the fan will run as normal and will not need to be initialised/calibrated again. The fan will remember its settings if there is a power cut.

## 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. Carefully push the front panel of the grille upwards away from the base part of the grille (fig. 6).
3. Wipe the inlets and front face with a damp cloth until clean.

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

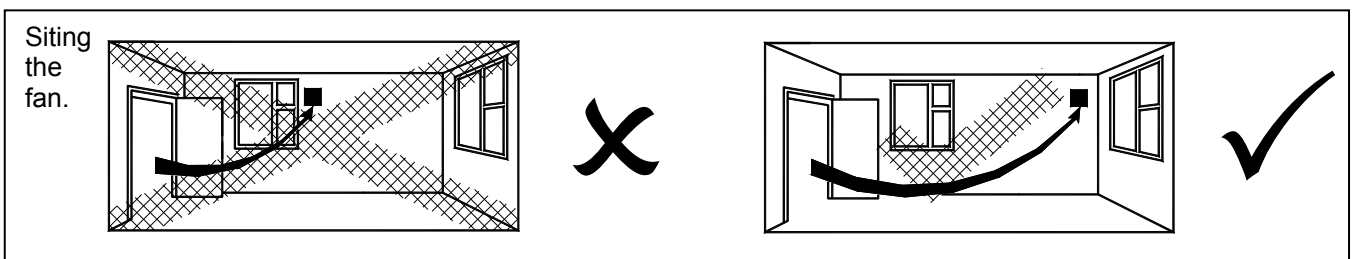


Fig.1 Continuous trickle (6l/s or 9l/s) with no boost facility

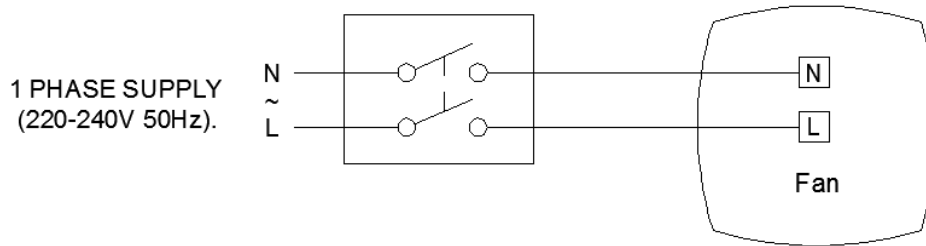


Fig.2 Continuous boost (15l/s) with no trickle facility

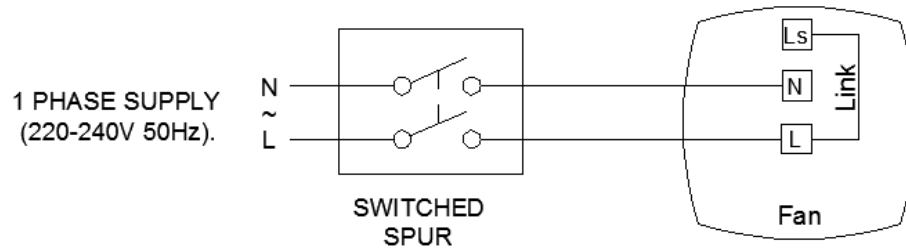


Fig.3 Continuous trickle with boost facility

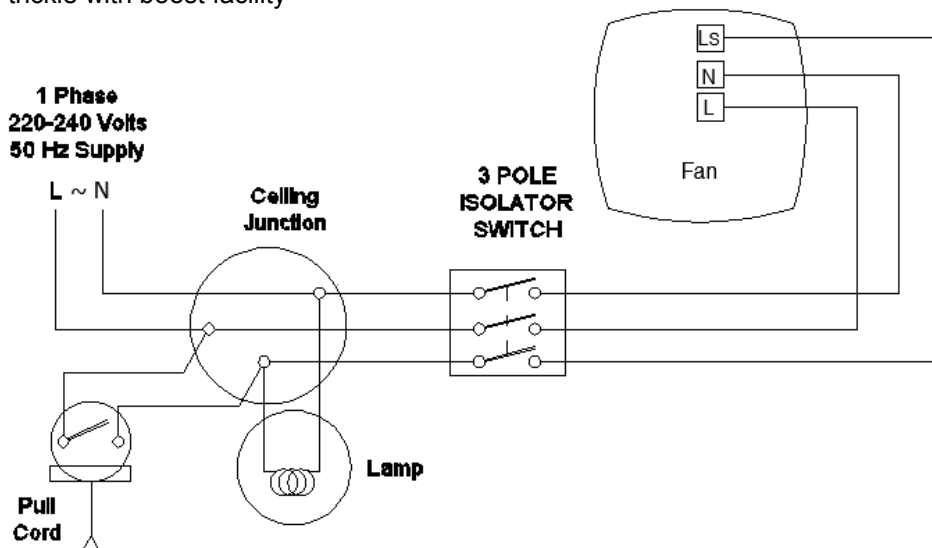
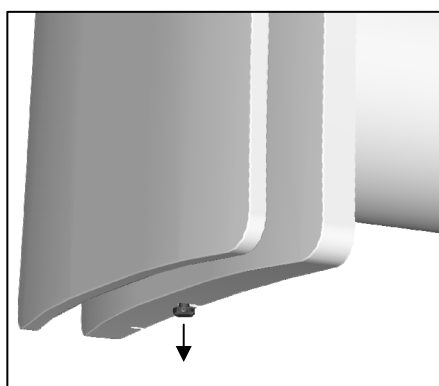
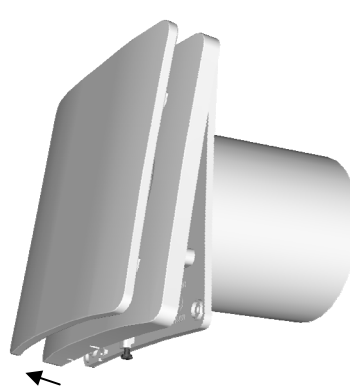


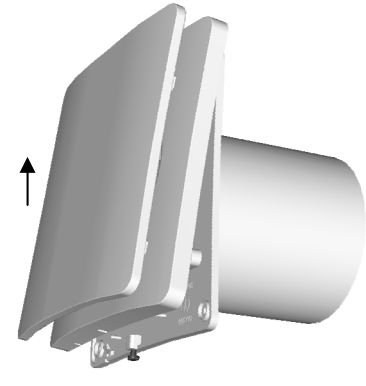
Fig.4. Removing the grille for wiring and setting the controls



1. Loosen screw.



2. Pull grille slightly away from bottom edge.



3. Push grille upwards until clear from the fan chassis.

Fig.5. Accessing the control settings

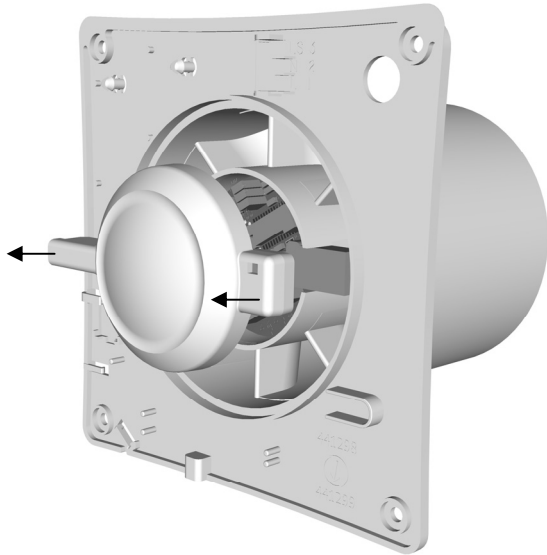


Fig.6. Removing the front grille panel for cleaning.

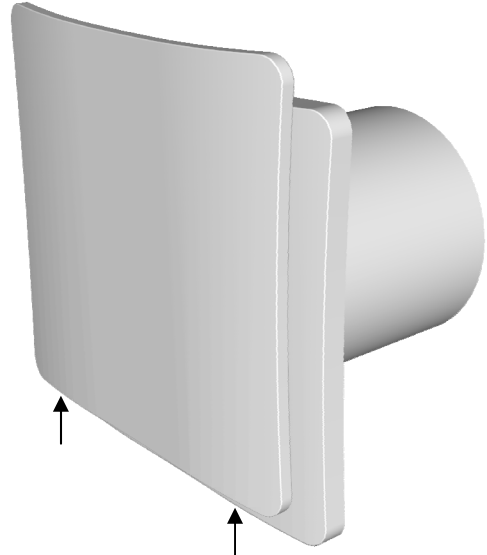
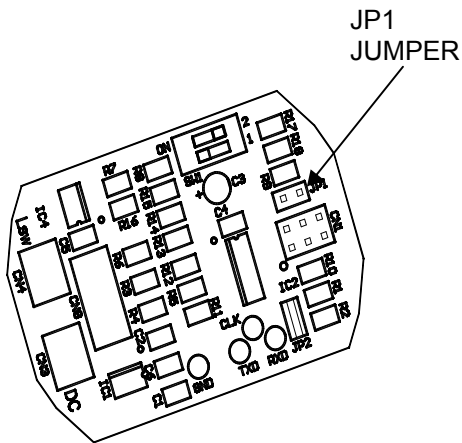


Fig.7. Speed Selection



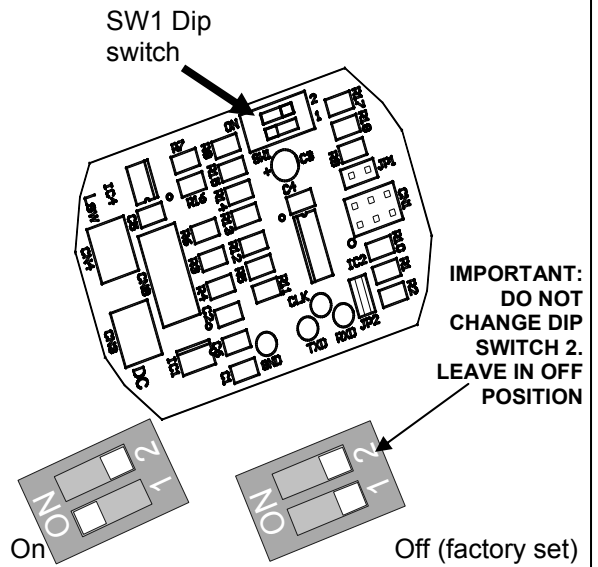
**9l/s** = Remove Jumper Connector  
**6l/s** = Replace Jumper Connector (factory set)

(For **15l/s**, permanently link terminal connections L to LS)

Flow rate conversion:

6l/s = 22m<sup>3</sup>/h  
 9l/s = 32m<sup>3</sup>/h

Fig.8. Airflow detection system



**Auto sensing mode** = Push switch (SW1) into the on position to turn on airflow detection system.

**Manual mode** = Push switch (SW1) into the off position to turn off airflow detection system.

## PRODUCT FICHE

For Residential Ventilation Units (Complying Commission Delegated Regulation (EU)  
No 1254/2014

Name:	Vent-Axia
Model ID (Stock Ref.) :	Lo-Carbon Centra dMEV - 441782
SEC Class	C
SEC Value ('Average')	26.23
SEC Value ('Warm')	11.86
SEC Value ('Cold')	51.31
Label Required? (Yes/No=Out of scope)	No
Declared as: RVU or NRVU/UVU or BVU	RVU-UVU
Speed Drive	2-Speed
Type HRS (Recuperative, Regenerative, None)	None
Thermal Eff: [ (%), NA(if none)]	N/A
Max. Flow Rate (m3/h)	54.00
Max. Power Input (W): (@Max.Flow Rate)	2.40
LWA: Sound Power Level (dB)	33.02
Ref. Flow Rate (m3/s)	0.01
Ref. Pressure Diff. (Pa)	N/A
SPI [W/(m3/h)]	0.06
Control Factor & Control Typology: (CTRL/ Typology)	
Control Factor; CTRL	0.65
Control Typology	Local Demand 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
Mixing Rate of Non-Ducted BVUs not intended to be equipped with one duct connection on either supply or extract air side;	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
For UVUs (Instructions Install Regulated Supply/Extract Grilles Façade)	In F&W
Internet Address (for Disassembly Instructions)	<a href="http://www.vent-axia.com">www.vent-axia.com</a>
Sensitivity p. Variation@+20/-20 Pa: (for Non-Ducted Vus)	N/A
Air Tightness-ID/OD-(m3/h) (for Non-Ducted Vus)	N/A
Annual Electricity Consumption: AEC (kWh/a)	0.52
Annual Heating Saved: AHS (kWh/a)	
AHS: Average	26.23
AHS: Warm	11.86
AHS: Cold	51.31

## 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 effect your legal rights

# **Vent-Axia**

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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](http://www.vent-axia.com) or write to Vent-Axia Ltd, Fleming Way, Crawley, RH10 9YX