

# Solo Pro

INTERMITTENT EXTRACT FAN

Installation and Wiring Instructions



## Stock Ref. N°

Solo Pro P 409159  
Solo Pro T 409160  
Solo Pro HTP 409161  
Solo Pro TM 409162

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 Solo Pro 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 Solo Pro fan is an extract fan for bathrooms and toilets specifically designed for ducted applications. Pullcord, Timer, Humidity and PIR options are available.

## **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.

### **WINDOW FITTING KIT**

A window fitting kit is available. Stock reference 11461685.

## **A. INSTALLATION**

### **PANEL/CEILING MOUNTING – (FIG.4.)**

1. Cut a 105mm diameter hole.
2. Remove the front panel by carefully pulling it away from the fan.
3. Loosen the two self-retaining screws and remove the inner cover by carefully pulling it away from the housing.
4. Remove the impeller by carefully pushing the retaining clips together.
5. Remove the PCB cover by loosening the two screws and pulling it out of the fan housing.
6. Mark the screw centres through the holes in the fan back plate. Drill, plug and screw into position. Attach ducting as required for the installation.
7. Wire the fan as described in Section B-Wiring. Adjust any settings as required (see Section C-Setup).
8. Replace the PCB and inner covers and impeller.
9. After installation, ensure impeller rotates freely. Replace the front panel.

### **WALL MOUNTING – (FIG.4.)**

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. Where necessary cut to length and cement both ends into position flush with the wall faces.
2. Fix exterior grille into position with the louvres positioned downwards.
3. Remove the front panel by carefully pulling it away from the fan.
4. Loosen the two self-retaining screws and remove the inner cover by carefully pulling it away from the housing.
5. Remove the impeller by carefully pushing the retaining clips together.
6. Remove the PCB cover by loosening the two screws and pulling it out of the fan housing.
7. Mark the screw centres through the holes in the fan back plate. Drill, plug and screw into position.
8. Wire the fan as described in Section B-Wiring. Adjust any settings as required (see Section C-Setup).
9. Replace the PCB and inner covers and impeller.
10. After installation, ensure impeller rotates freely. Replace the front panel.

## B. WIRING.



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

### **IMPORTANT**

- The cross - sectional area of supply cord used should be ranged from 0.75 -1.5mm<sup>2</sup>.
- 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 supply wires are securely fastened using cable clamp provided.
3. Ensure the impeller rotates and is free from obstructions once reassembled (Fig. 4 and 5).

## C. SETUP



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

### **TIMER ADJUSTMENT – HTP AND T MODELS (FIG. 4 AND 5)**

*BEFORE ADJUSTING THE TIMER, SWITCH OFF THE MAINS SUPPLY. TIMER SHOULD ONLY BE ADJUSTED BEFORE OR DURING INSTALLATION.*

1. Remove the fan grilles and PCB cover. The product is factory set at 15 minutes approx. The overrun period can be adjusted from 3-25 minutes by altering the pot on the control PCB.
2. To **REDUCE** the operating time, use a small screwdriver to turn the pot **ANTI-CLOCKWISE**.
3. To **INCREASE** the operating time, use a small screwdriver to turn the pot **CLOCKWISE**.
4. Replace the PCB cover, impeller and fan covers.

### **HUMIDITY SET-POINT ADJUSTMENT – HTP MODEL (FIG. 4 AND 5)**

*BEFORE ADJUSTING THE CONTROLLER, SWITCH OFF THE MAINS SUPPLY. HUMIDISTAT SHOULD ONLY BE ADJUSTED BEFORE OR DURING INSTALLATION.*

1. Remove the fan grilles and PCB cover. The product is factory set to switch on at about 70% RH. The humidity set point can be adjusted from 40-95%RH by altering the pot on the control PCB.
2. To **LOWER** the set-point use a small screwdriver to turn the pot **ANTI-CLOCKWISE**. This makes the controller **MORE** sensitive.
3. To **RAISE** the set-point use a small screwdriver to turn the pot **CLOCKWISE**. This makes the controller **LESS** sensitive.
4. Replace the PCB cover, impeller and fan covers.

**IMPORTANT:** Upon installation it is possible that the humidity controller will make the fan run continuously until it has acclimatised to the environment. As part of the installation process it is important to set/adjust the humidity sensitivity to the desired position. The controller is already factory set to switch on at about 75% R.H.

**PULLCORD OPERATION**

The PULLCORD will activate the fan when switched. When the PULLCORD is switched into the off position the fan will deactivate. The HTP model will return to the Auto sensing mode.

**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 pull the front panel off the inner grille. (fig. 4)
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.**

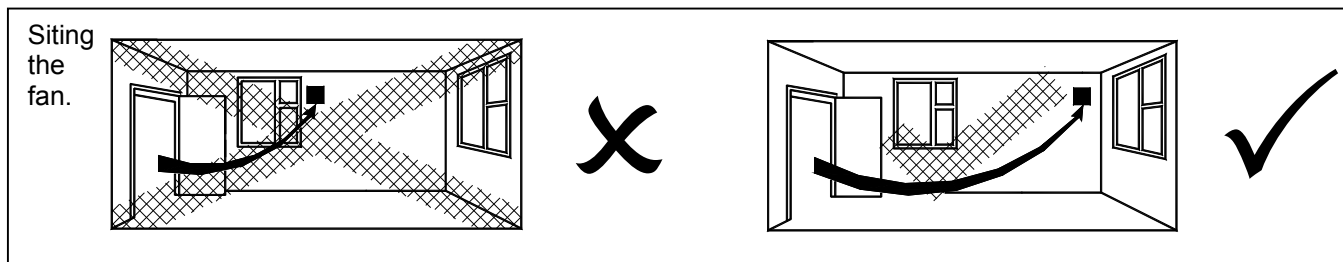


Fig.1 (Solo Pro)

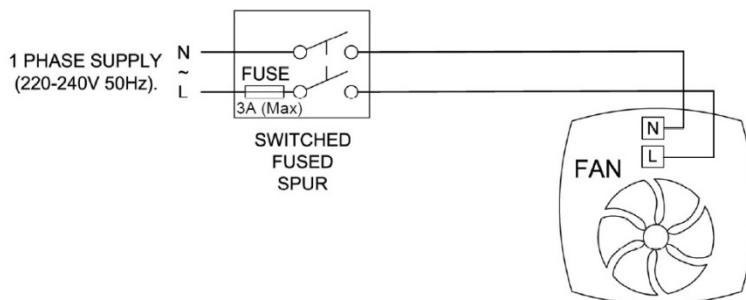


Fig.2 (Solo Pro T/HTP)

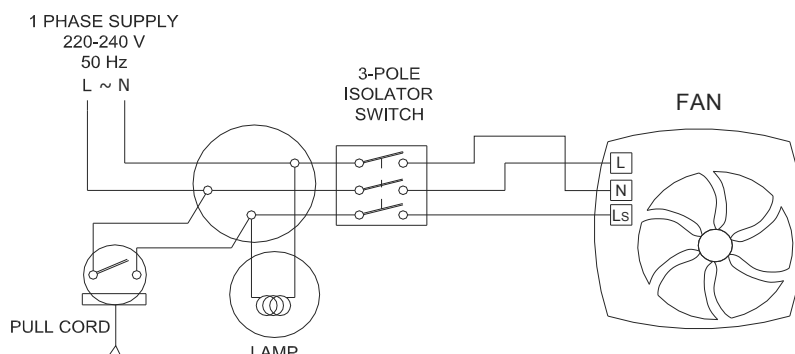


Fig.3 (Solo Pro TM)

Please follow the fitting and wiring instructions for the Visionex PIR Controller for full installation instructions.

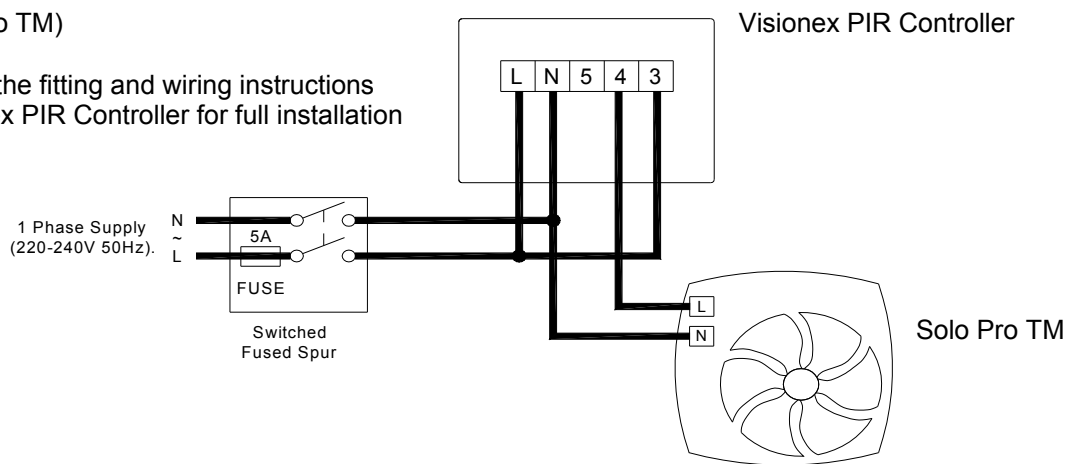
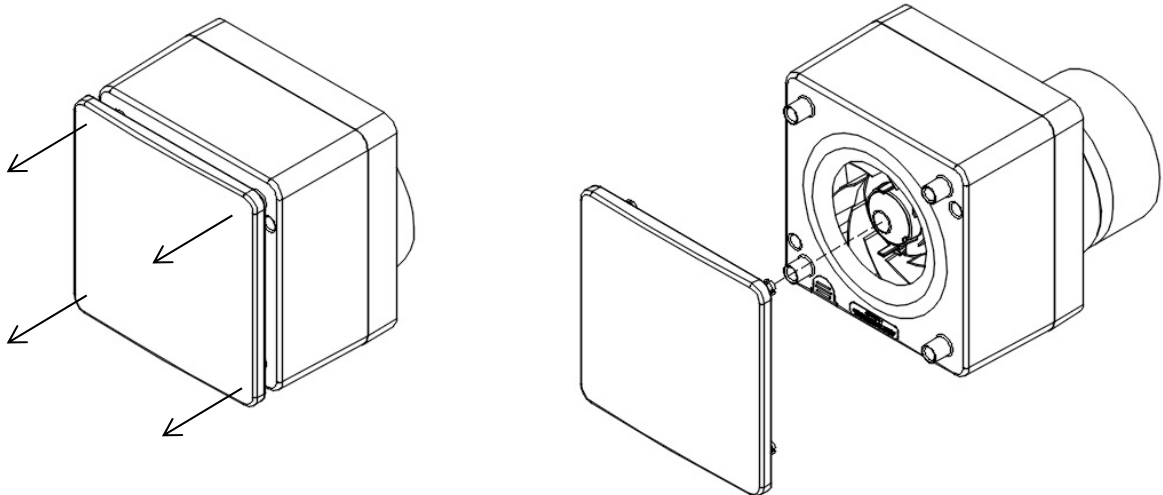
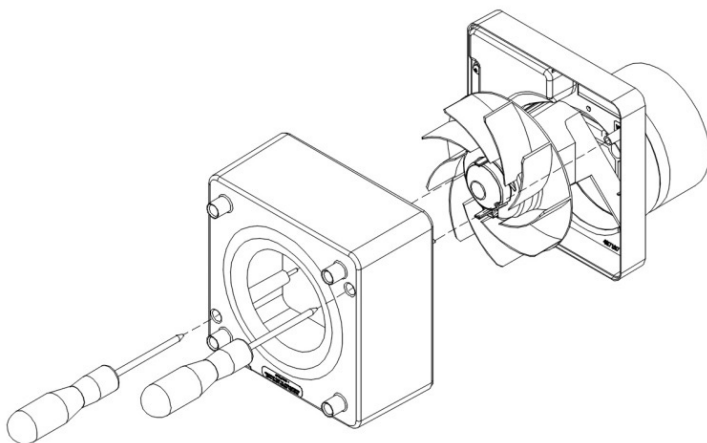


Fig.4. Removing the grille for wiring and setting the controls

- 1) Carefully pull the outer grille away from the fan at each corner.



- 2) Remove the two screws as shown



- 3) For P and HTP models, remove the pull cord clip

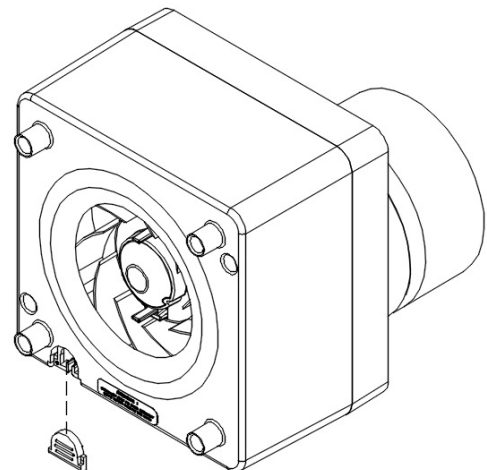


Fig.4 continued. Remove the PCB cover

4) Push clips together to release the impeller.

5) Remove two screws as shown

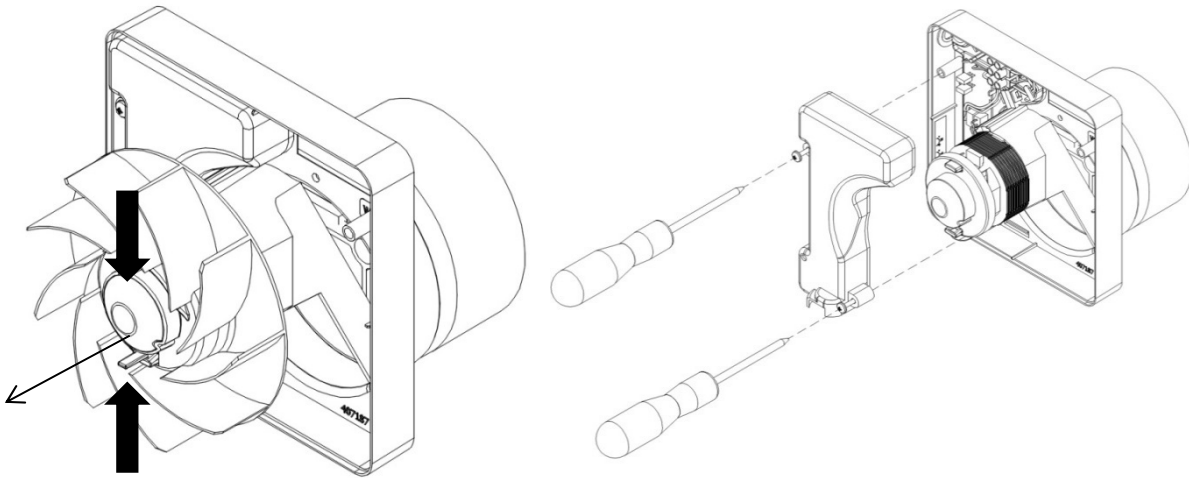


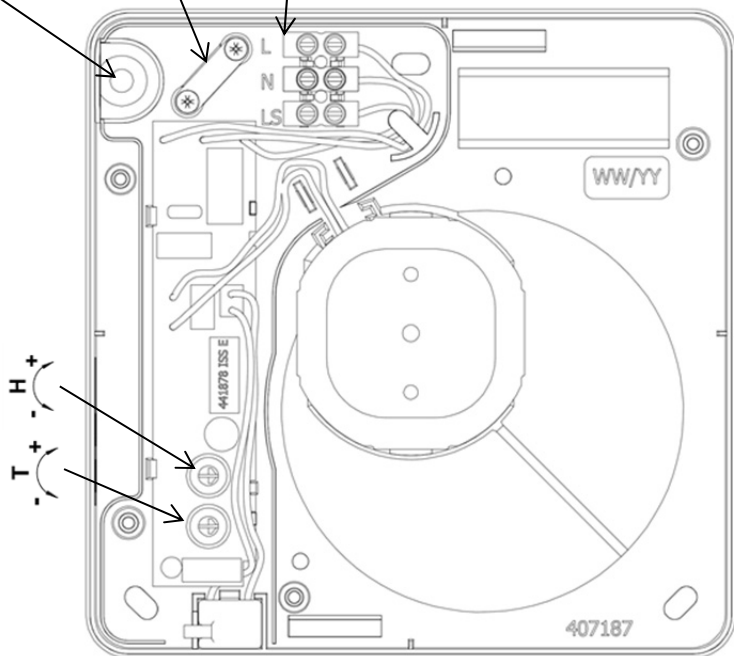
Fig.5. Wiring and settings

Supply cable via side or rear

Supply cable connections

Secure Supply cable with Cable Clamp

Adjust Timer overrun or Humidistat set point (model dependant) as shown.



**PRODUCT FICHE**

For Residential Ventilation Units (Complying Commission Delegated Regulation (EU)

No 1254/2014)

Name:	Vent-Axia	Vent-Axia	Vent-Axia	Vent-Axia
Model ID (Stock Ref.) :	Solo Pro P - 409159	Solo Pro T - 409160	Solo Pro HTP - 409161	Solo Pro TM - 409162
SEC Class	F	F	E	E
SEC Value ('Average')	13.97	15.72	26.23	26.23
SEC Value ('Warm')	6.32	7.11	11.86	11.86
SEC Value ('Cold')	27.32	30.75	51.31	51.31
Label Required? (Yes/No=Out of scope)	No	No	No	No
Declared as: RVU or NRVU/UVU or BVU	RVU-UVU	RVU-UVU	RVU-UVU	RVU-UVU
Speed Drive	on/off Single Speed	on/off Single Speed	on/off Single Speed	on/off Single Speed
Type HRS (Recuperative, Regenerative, None)	None	None	None	None
Thermal Eff: [ (%), NA(if none)]	N/A	N/A	N/A	N/A
Max. Flow Rate (m3/h)	86.40	86.40	86.40	86.40
Max. Power Input (W): (@Max.Flow Rate)	17.00	17.00	17.00	17.00
LWA: Sound Power Level (dB)	47.52	47.52	47.52	47.52
Ref. Flow Rate (m3/s)	0.02	0.02	0.02	0.02
Ref. Pressure Diff. (Pa)	N/A	N/A	N/A	N/A
SPI [W/(m3/h)]	0.28	0.28	0.28	0.28
Control Factor & Control Typology: (CTRL/ Typology)				
Control Factor; CTRL	1.00	0.95	0.65	0.65
Control Typology	Manual Control	Clock Control	Local Demand Control	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	N/A	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	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	N/A	N/A
For UVUs (Instructions Install Regulated Supply/Extract Grilles Façade)	In F&W	In F&W	In F&W	In F&W
Internet Address (for Disassembly Instructions)	<a href="http://www.vent-axia.com">www.vent-axia.com</a>	<a href="http://www.vent-axia.com">www.vent-axia.com</a>	<a href="http://www.vent-axia.com">www.vent-axia.com</a>	<a href="http://www.vent-axia.com">www.vent-axia.com</a>
Sensitivity p. Variation@+20/-20 Pa: (for Non-Ducted Vus)	N/A	N/A	N/A	N/A
Air Tightness-ID/OD-(m3/h) (for Non-Ducted Vus)	N/A	N/A	N/A	N/A
Annual Electricity Consumption: AEC (kWh/a)	3.87	3.68	2.52	2.52
Annual Heating Saved: AHS (kWh/a)				
AHS: Average	13.97	15.72	26.23	26.23
AHS: Warm	6.32	7.11	11.86	11.86
AHS: Cold	27.32	30.75	51.31	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 affect your legal rights

# **Vent-Axia**

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TECHNICAL SUPPORT: Tel: 0344 8560594 Fax: 01293 532814

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