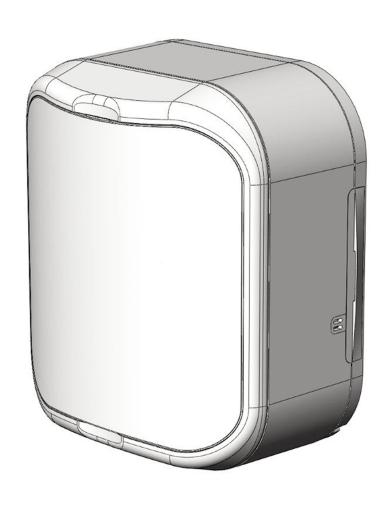
Omnique (OF100GIP)

Intermittent / Continuous Running Ventilation Installation Instructions



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1.0 General Description / Physical Specification

1.1 Overview

- 1.1.1 Greenwood's OF100GIP is an intermittent or continuously running extract fan, designed to offer a simplistic approach to meet Building Regulations and provide an energy efficient domestic ventilation solution to improve indoor air quality in dwellings.
- 1.1.2 The concept revolves around 'one product', which has been designed to be flexible in application (wall, window and ceiling 230V / SELV installations) and to meet the performance requirements of all 'wet' rooms within a dwelling.
- 1.1.3 Please refer to section 4.0 for how the OF100GIP can be installed. The OF100GIP features new SMART technology (fully automatic integral delay / over-run timer (or run-on timer via pullcord) and humidity functions) which monitor the homeowners' environment.

Greenwood TimerSMART™ monitors the length of time that there is an occupancy presence within a wet room (via the 'Switch Live') and provides a fixed over-run time period to best match the length of time that the 'Switch Live' is active (as shown in the table below). This removes nuisance running noise and unnecessary energy wastage typically associated with traditional timers.

Note: The first 5 minutes will not activate an over-run.

Time 'Switch Live'	Continuous Over-run	Intermittent Over-run
is Active	Boost Period	Period
0 – 5 minutes	No over-run	No over-run
5 – 10 minutes	5 minutes	5 minutes
10 – 15 minutes	10 minutes	10 minutes
15 – 20 minutes	15 minutes	15 minutes

Note: When the OF100GIP is operated by the pullcord only and has been commissioned as a timer, the OF100GIP will operate as follows:

- Continuous mode: Boost for 15 minutes then automatically return to trickle. Manual override available by re-pulling the pullcord.
- Intermittent mode: Turn on for 15 minutes then automatically turn off. Manual override available by re-pulling the pullcord.

Greenwood HumidiSMART™ monitors the ambient humidity within the wet room environment and looks for short peaks of humidity made by either cooking, showering or bathing. This smart technology ensures that your OF100GIP is only running when required, removing nuisance running noise and unnecessary energy wastage typically associated with increases to background humidity which naturally occurs with the changing seasons.

- 1.1.4 If your fan has been commissioned in "continuous mode", a boost speed facility is provided to increase the ventilation rate during peak times, helping to provide a comfortable indoor environment. This can be activated via the following methods:
 - Integral pullcord
 - A 'Switch Live' light switch (see section 2.6 Electrical)
 - An alternative boost switch (not supplied) (see section 2.7 Electrical)

If your fan has been commissioned in "intermittent mode", the fan can be manually activated by either the pullcord or via the switch live.

Note: If required, the pullcord can be removed within wall/window installations, however the pullcord must be removed within ceiling installations.

1.1.5 Packaging Includes –

1 x OF100GIP Unit

1 x Loose item set consisting of:

- 1 x SELV Box top
- 2 x Pan head screws
- 4 x Counter-sunk screws
- 6 x Rawl plugs
- 4 x SELV Box retaining screws
- 1 x Installation Instructions
- 1 x Commissioning & Inspection Record

Ancillary Items Required:

Round ducting (100mm) or Flat duct (110 x 54mm) for up to 30 l/s airflow or Flat duct (204 x 60mm) for up to 60 l/s airflow 100mm grille & appropriate boost switch (for example GS2) Window mounting kit (EWOF100) Picture Frame Adapter -150mm to 100mm conversion (PFAOF100)

- 1.1.6 **Warning:** This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.
- 1.1.7 Where an open-flued oil or gas-fuelled appliance is installed, precautions must be taken to avoid a back-flow of gases into the room.
- 1.1.8 When installing wall mounted fans, ensure that there are no buried cables or pipes in the way. It is recommended that this fan is mounted >1.8m above floor level.
- 1.1.9 The fan should not be sited where it would be subject to a direct source of heat in excess of 40°C.
- 1.1.10 Observe appropriate safety precautions if working on steps or ladders. Wear eye protection when breaking out wall or window materials, etc.
- 1.1.11 Always isolate fan from mains supply before cleaning. Do not use solvents to clean this fan.
- 1.1.12 Cleaning and user maintenance shall not be made by children without supervision.
- 1.1.13 To disassemble the unit, disconnect from mains supply and use a screwdriver to segregate the electronic components and motor from the plastic housing. Dispose items in accordance with WEEE.

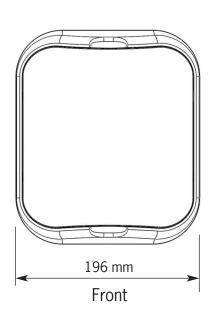
1.1.14 WEEE Statement

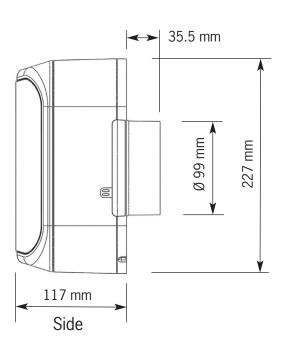
This product may not be treated as household waste. Instead it should be handed to an appropriate collection point for the recycling of electrical and Electronic equipment.

For more detailed information about the recycling of this product, please contact your local council office or your household waste disposal service.



1.2 Physical Specification

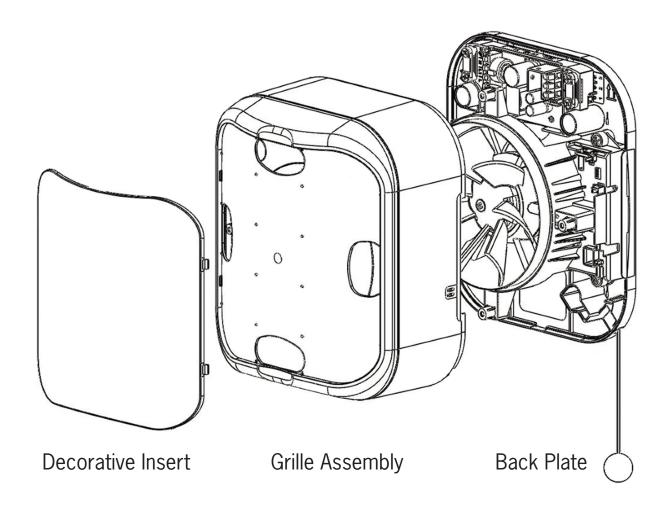




2.0 Installation Instructions

2.1 General Preparation

2.1.1 The OF100GIP fan has been supplied ready for installation, consisting of three main component sections:



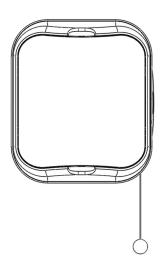
Note: The grille assembly has been designed to retain and hold the screws and are already in position for final fixing to back plate.

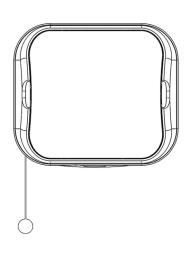
Note: The back plate must be secured using all four fixing points. (see Section 2.2.2).

- 2.1.2 The OF100GIP fan is supplied with a 100mm nominal spigot for connection of ducts for installation.
- 2.1.3 100mm diameter rigid duct should be used to provide the best performance levels required for compliance with Building Regulations. Technical Services can be contacted on +44 (0) 1276 408402 should you have any questions in respect of this.
- 2.1.4 Installation of the unit should be in accordance with the current editions of Building Regulations and BS7671: IEE Wiring Regulations.
- 2.1.5 Electrical installation must only be carried out by a qualified Electrician.

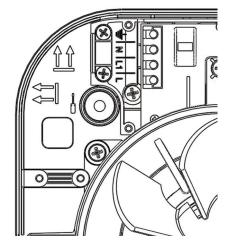
2.2 Positioning / Application

2.2.1 The OF100GIP can be installed on a wall, window or ceiling – in either location it can be rotated through a 90° angle to accommodate differing installation requirements.

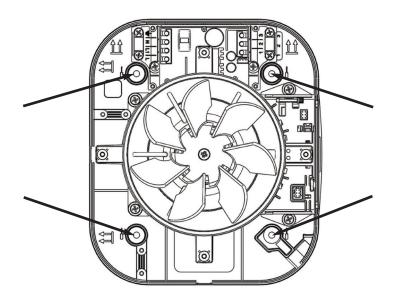




Note: In wall / window installations to correctly position the fan please ensure that either of the two sets of "orientation arrows" are pointing in the upwards direction – the arrows are located on the back plate.



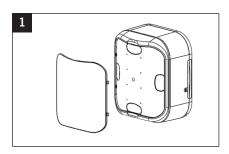
2.2.2 The unit must be securely mounted using all four fixing holes provided. (see Figure 1).



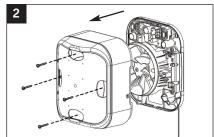
Using screws provided, ensure that all four fixing points on the back plate are securely fitted. (i.e. screwed home fully and flush with counter-sunk hole).

Figure 1: Back Plate Screw Fixtures

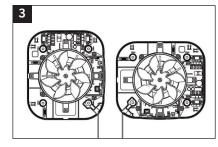
2.3 Wall Mounting



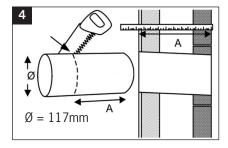
Remove decorative insert by carefully levering from top and bottom slots.



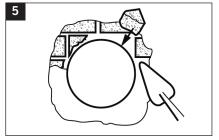
Remove grille assembly by unscrewing the four screws located in the four side openings.



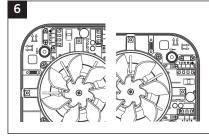
Decide on required fan orientation to best suit installation position. Ensure that the orientation arrows are facing upwards when in either Portrait or Landscape orientation.



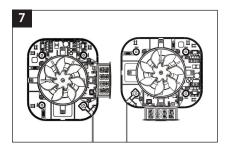
Cut the duct to width of the plasterboard or tiled wall with slight fall to exterior. (Make provisions for cable).



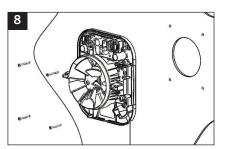
Fill in any gaps with mortar or foam and make good internal and external walls. Make sure that ducting remains circular.



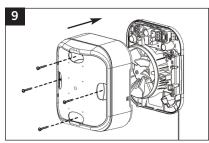
To ensure the fan is in the correct position, mount the fan with orientation symbol arrows facing upwards.



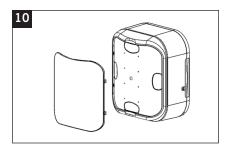
For control panel access ensure a minimum of 100mm free space is left between side of product to any solid structure.



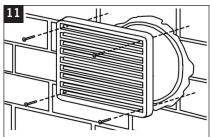
Using the four fixing screws, secure fan body to the wall. The electrical cable passes through as appropriate. Wire fan (See wiring details). Pullcord can be removed if required.



Position grille assembly onto back plate and secure with 4 fixing screws, ensuring they are driven home.

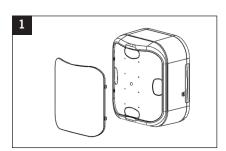


To secure decorative insert, clip in one side and then flex cover slightly to engage opposing clips.

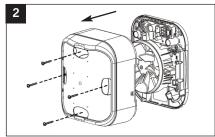


Screw the protective wall grille over the external duct opening.

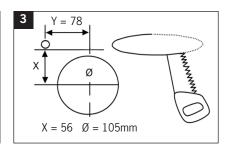
2.4 Ceiling Mounting



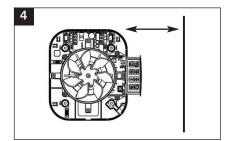
Remove decorative insert by carefully levering from top and bottom slots.



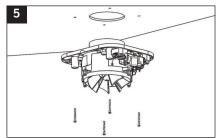
Remove grille assembly by unscrewing the four screws located in the four side openings. For Ceiling mounted installation remove or cut off pullcord.



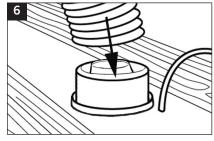
Cut an opening through the ceiling for the fan and electrical cable.



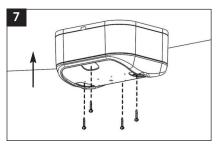
For control panel access ensure a minimum of 100mm free space is left between side of product to any solid structure.



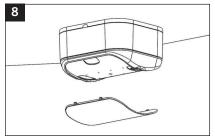
The unit must be securely mounted using all four fixing holes and fixing screws provided. The screw fixings must be completely driven home to ensure that they do not interfere with the actuated grille mechanism.



Place flexible or rigid ducting over the spigot of the fan. Fit ducting to spigot using appropriate method. Refer to section 2.5.



Position grille assembly onto back plate and fully secure with 4 fixing screws, ensuring they are driven home.



To secure decorative insert, clip in on one side and then flex cover slightly to engage opposing clips.

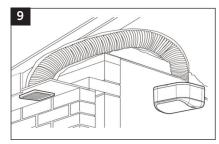


Diagram depicting typical installation ducted through roof soffit. Do not terminate via a tile vent.

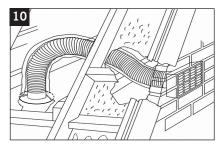


Diagram depicting typical installation ducted through roof to external wall. Do not terminate via a tile vent.

2.5 Ducting Guidelines

- 2.5.1 A 100mm nominal diameter spigot is provided for connection to ducting. Ductwork should be securely connected to fan spigot. Failure to do this will cause unnecessary air leakage and may impair performance.
- 2.5.2 All duct connections require sealing. Where ducts are installed against a solid structure this can be difficult to achieve. In such locations preassembly of duct ensure the seal is maintained during installation.
- 2.5.3 If applicable, Fire dampers **MUST BE FITTED** in accordance with Part B of the Building Regulations.
- 2.5.4 **Rigid Ducting** Install using the least number of fittings to minimise resistance to airflow. Where access to ducts will not be possible after construction is complete, i.e. within floor and wall voids, consideration should be given to permanent connection and sealing with an appropriate non-hardening sealant, and not using duct tape to achieve connection and sealing.

- 2.5.5 The **Flexible Ducting** Ensure ducting lengths are kept to a minimum and ducting is pulled taut so that it is smooth and straight. Where bends are necessary, and where ducting is run in restricted areas, ensure the ducting is not crushed. Connection of lengths of flexible duct must use a rigid connector and jubilee clips or similar to ensure a long term seal is achieved. Connection of lengths of flexible duct should not be taped-only.
- 2.5.6 The fan exhaust must terminate to external air and be protected by a suitable wall or roof terminal. Roof terminal to have a minimum equivalent free area of 10,000mm².

2.6 Electrical

- 2.6.1 WARNING: All wiring must conform to BS7671: IEE Wiring Regulations.
- **2.6.2** WARNING: The appliance must be isolated from the mains supply before removing the electronics cover.
- 2.6.3 The installation must be carried out by a qualified electrician.
- 2.6.4 The Unity OF100GIP is suitable for:
 - 220-240V ~ 50Hz single phase supply fused at 3A.
 - SELV 24VDC by using the SELV cover and removable mains power supply.
- 2.6.5 A double-pole switch having a minimum contact separation of 3mm must be used to provide isolation for the unit.
- 2.6.6 The recommended alternative 'Switch Live' switch for use when commissioned into continuous mode is the GS2 switch.

Mode	Switch Position	Function	
Continuous	I	(trickle)	Fan running at trickle speed
	II	(boost)	Fan running at boost speed

2.6.7 The fan must not be mounted above or closer than 1m to the cooker where it could be affected by excessive heat or moisture.

2.6.8 Fan Specifications

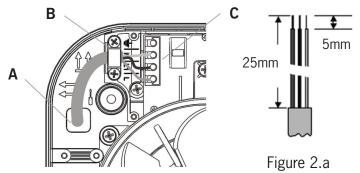
220-240V ~ 50Hz / 1 Ph. IPX4 30 Watts max.

Cable sizes (max): Fixed flat wiring - 2 core 1mm², 3 core 1/1.5mm² When converted to SELV: 24V DC between controller and fan.

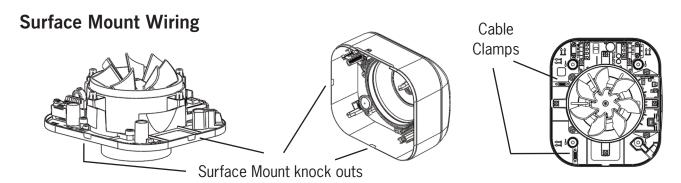
2.6.9 Wiring Details 230V Model

Standard Wiring

- Strip cable to correct lengths as shown in Figure 2.a.
- Insert cable through cable entry point (A), and then secure cable using the cable clamp (B).

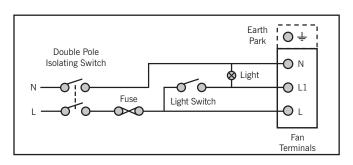


 Push the wires into the terminal block (C) as per the wiring diagram (see section 2.6.10). Tighten the terminal block screws and ensure a good connection.



- If surface mounted cable is used the corresponding knock outs on both the Grille Assembly and the Back Plate need to be removed to allow cable to enter the product.
- Once cable knock outs are removed ensure that the edges of the knock outs are dressed so that the external cable insulation is not damaged by any sharp edges.
- Cable can now be inserted through the knock out and clamped using the cable clamps provided.

2.6.10 Wiring Diagram 230V Model

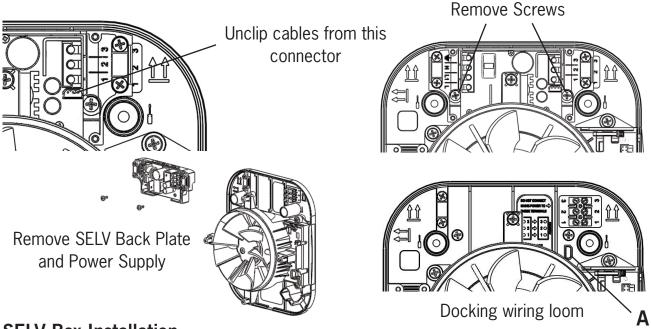


2.7 Conversion to SELV

- 2.7.1 The installation must be carried out by a qualified electrician.
- 2.7.2 A double-pole switch having a minimum contact separation of 3mm must be used to provide isolation for the unit.
- 2.7.3 The recommended alternative 'switch-live' switch for use is the GS2 switch (see section 2.6.6). (Not to be used when product is commissioned in intermittent mode).
- 2.7.4 The fan must not be mounted above or closer than 1m to the cooker where it could be affected by excessive heat or moisture.

2.7.5 Wiring Details SELV 24V DC Model

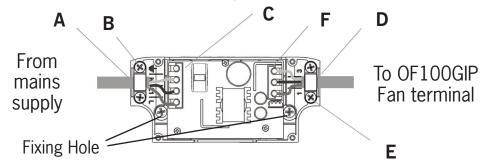
- Unclip cables from the connector on the Power Supply.
- Unscrew the two screws holding the SELV Back Plate to the OF100GIP.
- Once the SELV Back Plate and Power Supply has been removed the cables that have been unclipped need to be docked into the designated docking point on the Back Plate (A).



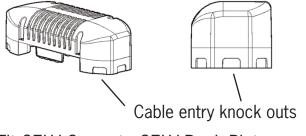
SELV Box Installation

- Install SELV Back Plate and Power Supply in a suitable location outside of the splash zones, preferably outside the room where the OF100GIP fan is installed. The location should be as such that air can circulate around the Power Supply unit and it should never be covered.
- The distance between the fan and the SELV Back Plate and Power Supply should be kept to a minimum and ideally not be greater than 3.0m.
- Strip cable to correct lengths as shown in Figure 2.a (section 2.6.9) for both fan and SELV Back Plate.

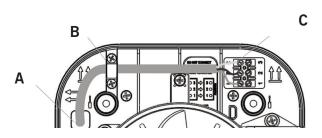
Insert mains cable (A) and clamp using cable clamp provided (B).



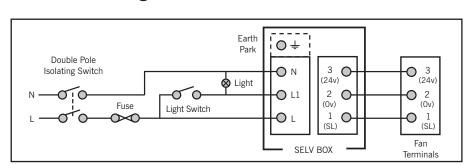
- Push the wires into the terminal block (C) as per the wiring diagram (see section 2.7.6). Tighten the terminal block screws and ensure a good connection.
- Insert low voltage cable through cable entry point (D) and then secure cable using the cable clamp (E).
- Push the wires into the terminal block (F) as per the wiring diagram (see section 2.7.6). Tighten the terminal block screws and ensure a good connection.
- Before fitting the SELV Box Top remove suitable cable knock outs that best suit the entry position of both the mains and low voltage cables, ensure that they are dressed and that all sharp edges are removed to ensure cable insulation is not damaged.



- Fit SELV Cover to SELV Back Plate and Power Supply and secure using the 4 off screws provided.
- Insert low voltage cable through cable entry point (A) and then secure cable using the cable clamp (B).
- Push the wires into the terminal block (C) as per the wiring diagram (see section 2.7.6). Tighten the terminal block screws and ensure a good connection.



2.7.6 Wiring Diagram 24V DC SELV Model



3.0 On Site Commissioning / Set Up

- 3.1.1 This section covers set up, configuration of the unit for installation (either intermittent or continuous running) and altering pre-set factory settings.
- 3.1.2 The control panel can be accessed by inserting a large flat bladed screwdriver into the slot located on the side of the OF100GIP and eased out, care should be taken while doing this to ensure the slot area is not damaged.
- 3.1.3 On first power up, all LED's should flash in sequence and then both Bathroom and Kitchen Room selection button lights should start to flash to indicate that an appropriate installation setting needs to be selected.

For Intermittent Mode

Step 1

Press Bathroom or Kitchen button

- light will go solid

Press button again

- light will now flash at a slower rate to indicate intermittent mode

Step 2

Press respective "Airflow" button for required intermittent room airflow - factory settings

1401017 001111180							
	*	*					
	WC 6 l/s	Bathroom 15 l/s					
	Utility 30 l/s	Kitchen 60 l/s					

Step 3

Press speed adjustment buttons to required level and verify with an airflow meter - re-press Airflow Button to confirm

Step 4

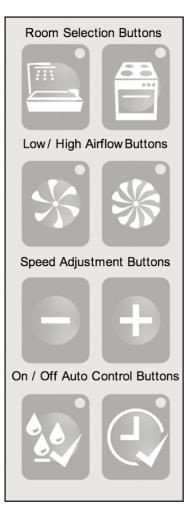
For HumidiSMART press button to turn on - light will go solid



Step 5

For TimerSMART press button to turn on - light will go solid





For Continuous Mode

Step 1

Press Bathroom or Kitchen button - light will go solid

Step 2

High Airflow (Boost) button will flash – factory setting:



Bathroom 8 l/s | Kitchen 13 l/s

Press speed adjustment buttons to required level and verify with an airflow meter - re-press Boost button to confirm

Step 3

Low Airflow (Trickle) button will flash – factory setting:

*

Bathroom 5 l/s | Kitchen 8 l/s

Press speed adjustment buttons to required level and verify with an airflow meter - re-press Trickle button to confirm

Step 4

For HumidiSMART press button to turn on

- light will go solid



Step 5

For TimerSMART press button to turn on

- light will go solid



Selection lights should remain on for approximately 10 seconds to enable the setup and status of the fan to be observed and checked, upon which time the commissioning section of the controls should lock out.

Note: Pullcord and Switch Live will be ignored when in commissioning mode.

To Reactivate Commissioning Mode or carry out a Factory Reset

To enter the commissioning mode press and hold [-/+] buttons simultaneously for approximately 3 seconds until the Bathroom & Kitchen lights flash simultaneously - airflow settings from previous commissioning should be recalled, these settings can now be re-adjusted.

Note: To 'factory reset' press and hold [-/+] buttons simultaneously for approximately 10 seconds until all lights flash to indicate the fan has been reset to factory settings and then revert to both room selection lights at start of commissioning mode.

4.0 How Your Fan Can Be Installed

With	8. %.		istat	Intermittent Mode	
	Switch	PullCard Timer Hurridistat How It Works	How It Works		
Pullcord Only		•			Pullcord turns fan on / off. Automatic switch off after 2 hours.
		•	•		 Pullcord turns fan "run timer" on. Fan runs for 15 minutes and then automatically turns off. Manual override by re-pulling the pullcord.
		•	•	•	 Pullcord turns fan "run timer" on. Fan runs for 15 minutes and then automatically turns off. Manual override by re-pulling the pullcord. HumidiSMART will automatically turn the fan on and then off when humidity is cleared. Pullcord will not function when HumidiSMART is activated.
		•		•	 Pullcord turns fan on / off. Automatic switch off after 2 hours. HumidiSMART will automatically turn the fan on and then off when humidity is cleared. Pullcord will not function when HumidiSMART is activated.
Pullcord & Switch Live	•	•			 Pullcord turns fan on / off. Automatic switch off after 2 hours. Switch Live will turn the fan on / off. Pullcord will not function when fan is activated via Switch Live.
	•	•	•		 Pullcord turns fan "run timer" on. Fan runs for 15 minutes and then automatically turns off. Manual override by re-pulling the pullcord. Switch Live will turn the fan on / off. Pullcord will not function when fan is activated via Switch Live. TimerSMART will activate when Switch Live is turned off. Pullcord will not function when TimerSMART is activated.
	•	•	•	•	 Pullcord turns fan "run timer" on. Fan runs for 15 minutes and then automatically turns off. Manual override by re-pulling the pullcord. Switch Live will turn the fan on / off. Pullcord will not function when fan is activated via Switch Live. TimerSMART will activate when Switch Live is turned off. Pullcord will not function when the smart timer is activated. HumidiSMART will automatically turn the fan on and then off when humidity is cleared. Pullcord will not function when HumidiSMART is activated.
	•	•		•	 Pullcord turns fan on / off. Automatic switch off after 2 hours. Switch Live will turn the fan on / off. Pullcord will not function when fan is activated via Switch Live. HumidiSMART will automatically turn the fan on and then off when humidity is cleared. Pullcord will not function when HumidiSMART is activated.
	•				Switch Live will turn the fan on / off.
Switch Live Only	•		•		 Switch Live will turn the fan on / off. TimerSMART will activate when Switch Live is turned off.
	•		•	•	 Switch Live will turn the fan on / off. TimerSMART will activate when Switch Live is turned off. HumidiSMART will automatically turn the fan on and then off when humidity is cleared.
	•			•	 Switch Live will turn the fan on / off. HumidiSMART will automatically turn the fan on and then off when humidity is cleared.

With	154.	Time Pullcard Timer Humidistat How It Works		nistat.	Continuous Mode
	Shire		How It Works		
Pullcord Only		•			Pullcord turns fan to boost / trickle. Automatically returns to trickle after 2 hours.
		•	•		Pullcord turns fan to "run timer" boost. Fan runs at boost for 15 minutes and then automatically returns to trickle. Manual override by re-pulling the pullcord.
		•	•	•	 Pullcord turns fan to "run timer" boost. Fan runs at boost for 15 minutes and then automatically returns to trickle. Manual override by re-pulling the pullcord. HumidiSMART will automatically turn the fan to boost and return it to trickle when humidity is cleared. Pullcord will not function when HumidiSMART is activated.
		•		•	 Pullcord turns fan to boost / trickle. Automatically returns to trickle after 2 hours. HumidiSMART will automatically turn the fan to boost and return it to trickle when humidity is cleared. Pullcord will not function when HumidiSMART is activated.
Pullcord & Switch Live	•	•			 Pullcord turns fan to boost / trickle. Automatically returns to trickle after 2 hours. Switch Live will turn the fan to boost / trickle. Pullcord will not function when fan is activated via Switch Live.
	•	•	•		 Pullcord turns fan to "run timer" boost. Fan runs at boost 15 minutes and then automatically returns to trickle. Manual override by re-pulling the pullcord. Switch Live will turn the fan to boost / trickle. Pullcord will not function when fan is activated via Switch Live. TimerSMART will activate when Switch Live is turned off. Pullcord will not function when the smart timer is activated.
	•	•	•	•	 Pullcord turns fan to "run timer" boost. Fan runs at boost 15 minutes and then automatically returns to trickle. Manual override by re-pulling the pullcord. Switch Live will turn the fan to boost / trickle. Pullcord will not function when fan is activated via Switch Live. TimerSMART will activate when Switch Live is turned off. Pullcord will not function when TimerSMART is activated. TimerSMART will automatically turn the fan to boost and return it to trickle when humidity is cleared. Pullcord will not function when the smart timer is activated.
	•	•		•	 Pullcord turns fan to boost / trickle. Automatically returns to trickle after 2 hours. Switch Live will turn the fan to boost / trickle. Pullcord will not function when fan is activated via Switch Live. HumidiSMART will automatically turn the fan to boost and return it to trickle when humidity is cleared. Pullcord will not function when HumidiSMART is activated.
	•				Switch Live will turn the fan to boost / trickle.
Switch Live Only	•		•		 Switch Live will turn the fan to boost / trickle. TimerSMART will activate when Switch Live is turned off.
	•		•	•	 Switch Live will turn the fan to boost / trickle. TimerSMART will activate when Switch Live is turned off. HumidiSMART will automatically turn the fan to boost and return it to trickle when humidity is cleared.
	•			•	 Switch Live will turn the fan to boost / trickle. HumidiSMART will automatically turn the fan to boost and return it to trickle when humidity is cleared.

5.0 Servicing / Maintenance

- 5.1.1 The OF100GIP contains a unique backward curved mixed flow impellor that has been designed to reduce any build up of dirt. The fan motor has sealed for life bearings, which do not require lubrication.
- 5.1.2 Periodic cleaning of the fan's front cover and casing can be carried out using a soft damp cloth. Care must be taken when wiping around the control panel. Do not use solvents to clean this fan.
- 5.1.3 Please note that your stored fan settings will not be lost during any interruptions to your fan's power supply.

All information is believed correct at time of going to press. All dimensions referred to are in millimetres unless otherwise shown. E&OE.
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