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iCONstant^{**} Continuous Ventilation Installation and Operating Guide



iCONstant T - 72687117 iCONstant HT - 72687118



Electrical Installation



All electrical installation to be carried out by an approved electrician in accordance with Part "P" U.K. Building Regulations and to the latest IEEE standards, or the appropriate regulations in the country of installation. iCONstant fans require a 90-264V 50/60Hz supply, it is double insulated so therefore does not require an earth. Fans installed in Zone 1 or Zone 2 must be at least IPX4 (splash proof) rated. Additionally, fans installed in Zone 1 must be SELV (Safety Extra Low Voltage) or IPX5 (jet proof) rated. The iCONstant range is IPX5 rated and suitable for use in Zone 1.



The iCONstant range consists of timer and humidity/timer variants. They are designed for use in any wet room. Trickle flows rates of 6, 8 or 13 l/s can be selected on installation. Boost flow rates are activated by pull cord, external switch or humidity sensor (HT model only). The iCONstant range is IPX5 rated and suitable for use in Zone 1 of a wet room. Page 2 of 16

Secure supply wires into the terminal block. L—Live, N-Neutral and T—switched live (optional). Secure AC mains cable to main body of fan with cable clamp supplied.



Fit back plate cover.

- 1. Locate back plate cover on to main body.
- 2. Twist back plate cover clockwise until locked. (Arrow should be in the 12 o'clock position).
- 3. Secure back plate cover with fixing screw.



Installation

Remove front cover.

1. Twist anticlockwise and 2. Lift away.



Remove back plate cover.

- 1. Remove screw at base of back plate cover.
- 2. Twist back plate cover anticlockwise.
- 3. Lift away.



Access to the electronics

Remove electronics cover.1. Undo the 2 fixing screws,2. Lift off electronics cover.



Description of electronic controls.



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Prepare wall or ceiling

Using the template provided, mark and drill a spigot hole to suit 100mm diameter rigid ducting. Make provision for the electrical supply cable. Fit wall plugs provided.



Mount fan into the spigot hole ensuring cable is fed through the cable grommet provided. Position alignment arrow vertically. Fix to wall or ceiling with the 4 screws provided.



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Dip switch functions

Function		1	2	3	4	5	6	7	8
Delayed start	0 seconds	OFF							
Delayed start	2 minutes	ON							
Timer	2 mins		OFF	OFF					
Timer	15 mins		OFF	ON	1				
Timer	30 mins		ON	OFF					
Timer	45 mins		ON	ON					
Humidity	50-60%				OFF	OFF			
Humidity	60-70%				OFF	ON			
Humidity	70-80%				ON	OFF			
Humidity	80-90%				ON	ON			
Flow rate	OFF						OFF	OFF	
Flow rate	6 L/s						OFF	ON	
Flow rate	8 L/s						ON	OFF	
Flow rate	13 L/s						ON	ON	
Flow sensor	ON								ON
Flow sensor	OFF								OFF

Dip Switch factory settings highlighted above.



Start up diagnostic sequence



Commissioning adjustment

To adjust the airflow rate on commissioning, press top button to increase flow rate, press bottom button to decrease flow rate.



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Good practice guide

Installation in the ceiling



To avoid the back flow of condensation into the fan in the ceiling installations it is good practice to fit a condensation trap (optional-Airflow Part 51978301) to the vertical outlet duct of the fan.

possible cable routing



Store new flow rate

flash

Restore selected dip switch flow rate

0



Fit electronics cover and secure with the 2 fixing screws. Check the fan is running. If the LED is on permanently check installation for impeller obstructions and resolve. Replace the front cover and twist clockwise to secure.



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Installation with flexible ducting



Where flexible ducting is used the diameter must be maintained and it is good ventilation practice that the ducting is extended to 90% of its possible length in order to maintain the best possible airflow. Ensure that flexible duct connections are not over tightened to the fan outlet spigot. To avoid reduced air flow rigid ducting should be used (see airflow.com). The fan and ducting should be installed in accordance with the requirements of the Domestic Ventilation Compliance Guide, part of the Building Regulations.

Humidity function (HT model only)



Automatic Humidity Control with a progressive increase in humidity-the fan will boost when the pre-set value (factory setting 70-80% RH) is reached. However, when the sensor detects a rapid increase in humidity the fan will boost automatically before the pre-set value has been reached so that preventive ventilation commences. The fan reverts to trickle automatically when the humidity is reduced to 10% below the set point. Note: It is possible that a high level of humidity is present within the room for a longer period of time due to generally high humidity in the ambient air (summertime) or a build up of high humidity over several hours (steam rooms/sauna etc.)

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Maintenance

SAFETY FIRST: ALWAYS ISOLATE THE FAN UNIT FROM THE POWER SUPPLY BEFORE REMOVING THE COVERS. When installed according to these instructions the iCONstant is completely safe. The materials used do not constitute a hazard.

Cleaning

The external housing of the fan can be wiped with a damp cloth. Do not use household cleaners containing abrasives. Note: Always isolate the fan when cleaning. Never clean any parts of the fan assembly by immersing in water or using a dishwasher.

Warranty

Applicable to units installed and used in the United Kingdom. Airflow guarantees the iCONstant for 3 YEARS from date of purchase against faulty material or workmanship. Warranty only covers the fan, not the re-installation of the fan if required. In the event of any defective parts being found, Airflow Developments Ltd reserve the right to repair or at our discretion replace without charge provided that the unit:

- 1. Has been installed and used in accordance with the fitting and wiring instructions supplied with each unit.
- 2. Has not been connected to an unsuitable electrical supply.
- 3. Has not been subjected to misuse, neglect or damage.
- 4. Has not been modified or repaired by any person not authorised by Airflow Developments Ltd.
- 5. Has been installed in accordance with latest Building Regulations and IEEE wiring regulations by a recognised competent installer.

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Boost activation

Pull Cord or switched live activation increases the trickle flow rate to boost for the selected timer period.

From 6 l/s trickle to 8 l/s From 8 l/s trickle to 13 l/s From 13 l/s trickle to 20 l/s







Delayed start

The delayed start function of the fan to its' boost function is only activated by a remote switch and not by the pull cord.

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Warranty cont'd

Airflow Developments Ltd shall not be liable for any loss, injury or other consequential damage, in the event of a failure of the equipment or arising from, or in connection with, the equipment excepting only that nothing in this condition shall be construed as to exclude or restrict liability for negligence.

This warranty does not in any way affect any statutory or other consumer rights.



Disposal

Do not dispose of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice.

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