AIRFLOW

iCONsmart™ Smart Fan Installation and Operation Guide

iCONsmart 15 - 72687221

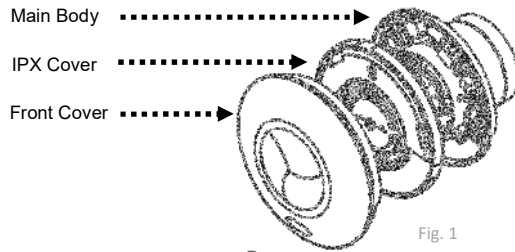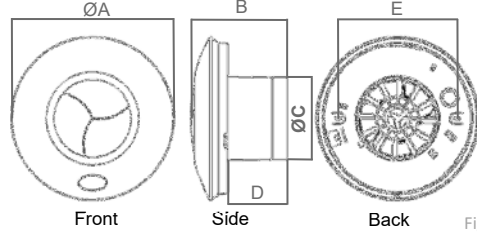## Electrical Installation

All electrical installation must be carried out by an approved electrician in accordance with Part "P" U.K. Building Regulations and to the latest IET standards, or the appropriate regulations in the country of installation.

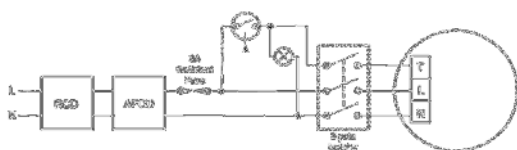The iCONsmart 15 requires a 110V—240V 50/60 Hz supply.

The iCONsmart is IPX5 rated and therefore it is suitable for mounting in bathrooms (in Zone 1 and 2).

For fans mounted in Zones 1 & 2 as defined in BS 7671:2018, additional protection must be provided by an RCD not exceeding 30mA as well recommends having an AFDD.

Basic Wiring

Switch Live Wiring

Important: Switches for fans should be selected and sited in accordance with BS 7671:2018.

Fan Overview

Main Body

IPX Cover

Front Cover

Fig. 1

ØA B E

ØC

D

Front Side Back Fig. 2

Model	A	B	C	D	E
iCONsmart 15	194	118	100	72	144

iCONsmart comes with flow sensing technology to automatically overcome duct system pressures.

Installation

1. Ensure selected power source being used is isolated.
2. Front cover iris leaves must be in the fully closed position.
3. Remove fixing screw from bottom of **front cover.** (Fig.4)
4. Hold main body, turn the front cover anticlockwise . Note front cover position for re-assembly purposes. Lift cover off. (Fig.1/4)
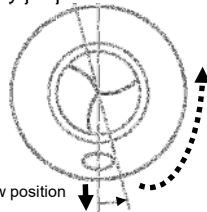
Screw position

Fig. 4

5. Undo the locking screw in the middle of the IPX cover. Lift IPX cover off. (Fig. 5)
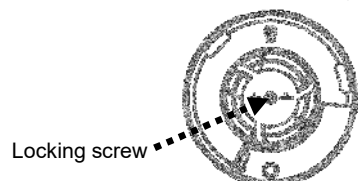
Locking screw

Fig. 5

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iCONsmart has several features included as standard, and can also be fitted with digital micro modules to give a range of extra control options.

Standard Features

- Bluetooth connection to smart device
- Set flow rates
- Change room name
- 15 minute overrun
- Commission / Notify NICEIC of install
- Keep 3 month rolling log of fan switch-on time and power usage
- Flow rate sensor

Module Controls

These include: Timer Module (TM) functionality that can be unlocked via a code (on a scratch card), Humidity Timer (HT), Motion Sensor Timer (MST) or a combination of all three (MSHT). These modules are available separately and can be fitted at the time of installation or retro-fitted.

(TM) (HT) (MST)

(If you have purchased a module, refer to module instructions now.)

6. Fix sealing grommet supplied into the cable entry hole. (Fig. 6)
7. Pierce grommet to allow the mains cable to be fed through whilst maintaining seal integrity.

L and R Symbols

Mains Terminal

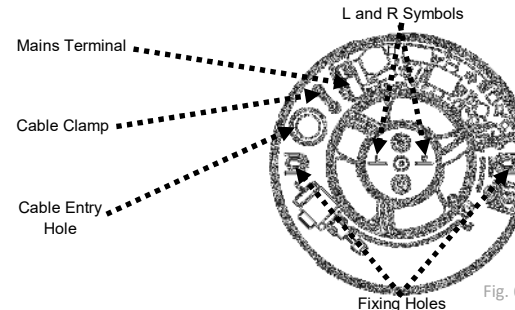Cable Clamp

Cable Entry Hole

Fixing Holes Fig. 6

8. Offer up supply cable to fan. Cut to length needed.
9. Position fan so cable entry and fixing holes align with those on mounting surface. Feed through cable and fix fan. (Fig. 6)
10. Wire fan to supply cable, referring to electrical installation guide. (Page 5)
11. Using cable clamp provided, secure mains cable into place.

Prepare Wall or Ceiling

The iCONsmart can be installed into a wall or ceiling.

When recessing fans in the ceiling, a plywood support (min 18mm thick) should be mounted between the ceiling joists. Fans should not be fitted to unsupported plasterboard. (See Fig. 3, Page 4)

possible cable routing

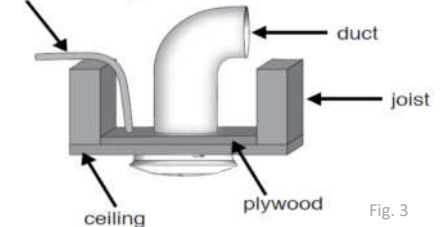duct

joist

ceiling plywood Fig. 3

1. Mark out and drill a spigot hole to suit 100mm diameter rigid ducting.
2. Make provision for the electric supply cable and wall plugs / appropriate fittings using the main body as a template. Level using guides below the L and R symbols. (see Fig. 6, page 7)
3. Fit the wall plugs provided or fixings as appropriate for the surface.

12. To replace IPX cover. Line up the L and R symbols on the main body of the fan (Fig. 6) with the L and R symbols on the IPX cover, (Fig .7). Lightly press IPX cover onto main body.
13. Refit the locking screw, checking the IPX cover is secure.
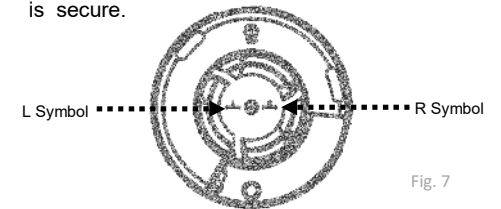
L Symbol R Symbol

Fig. 7

14. Position front cover over IPX cover in same orientation as it was removed. Lightly press front cover onto fan and rotate clockwise up to stop. Refit fixing screw. (Fig. 8)
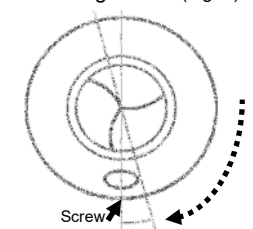
Screw Fig. 8

First Time Use

When the iCONsmart is first powered on, you will hear the initial reset for 10-15 seconds. This is normal and will also occur if the fan is reset.
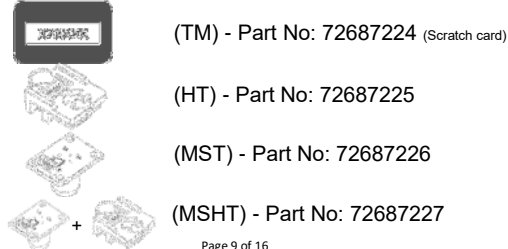
App Control and Setup

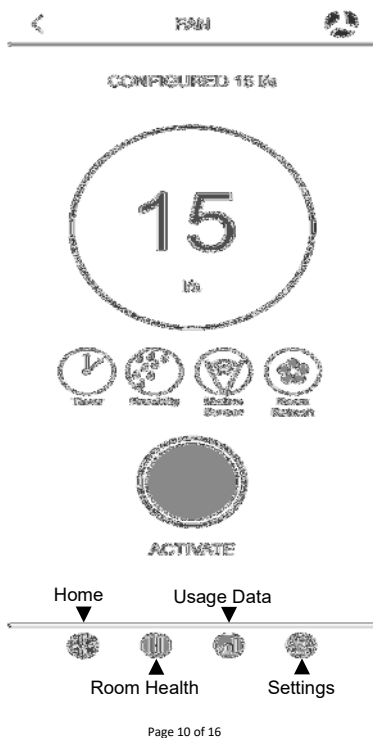To activate the iCONsmart and to set it up:

1. Download and install the 'myAirflow' app from the App Store or Google Play Store to your device.

2. Open the app, ensuring Bluetooth is enabled on your device.

3. Follow the intuitive setup process shown on screen.

This includes setting the flow rate, fan naming and module settings, (if installed).

Individual installation instructions are supplied with each module.

(TM) - Part No: 72687224 (Scratch card)

(HT) - Part No: 72687225

(MST) - Part No: 72687226

(MSHT) - Part No: 72687227

Ensure that flexible duct connections are not over tightened to the spigots. To maximise the air flow rigid ducting should be used where possible. The fan and ducting should be installed in accordance with the requirements of the Domestic Ventilation Compliance Guide, part of Part F of the Building Regulations.

Where flexible ducting is used ensure it is pulled to 90% of its full length.

CONFIGURED 15 l/s

15

l/s

Timer   Boost/Purge   Module Parameters   Room Refresh

ACTIVATE

Home   Usage Data

Room Health   Settings

Maintenance

SAFETY FIRST: ALWAYS ISOLATE THE FAN UNIT FROM THE POWER SUPPLY BEFORE DOING ANY WORK ON THE FAN / MODULE.

When installed by a competent installer, according to user instructions, the iCONsmart range is completely safe. The materials used do not constitute a hazard.

Cleaning

Fan and ducting should be inspected and cleaned on a regular basis to maintain fan performance. The external housing of the fan can be wiped with a damp cloth.

Do not use household cleaners containing abrasives. Cleaning of the internal parts such as the impeller should be carried out by using a soft brush. Never clean any parts of the fan assembly by immersing in water or using a dishwasher.

Home — From this page you can activate the fan, boost as well as view the installed/unlocked modules

Room Health — Shows the live state of the room on a graph with temperature against humidity. This requires a module with humidity function (HT or MSHT) for access. This graph will show a blue circle representing the optimum 'Health Zone' which the room should stay within. Too far in the top right will cause condensation, damp and mould. Too far in the bottom left can lead to respiratory problems.
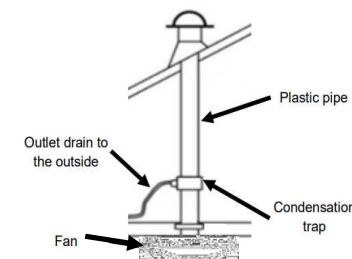
Usage Data — The iCONsmart stores a 3 month rolling log of power use, time-on and humidity levels (if you have the a module with humidity functionality).

Settings — Contains all adjustable settings from the setup and more: Setting Flow Rate, Fan Name, Unlock Timer functionality and all module parameters.

Warranty

Airflow guarantees the iCONsmart and iCONsmart modules for 5 years from date of purchase against faulty material or workmanship. Applicable to units installed and used in the UNITED KINGDOM.

Warranty covers the fan, not the reinstallation of this if required. In the event of any defective parts being found, Airflow Developments Ltd reserves the right to repair, or at our discretion replace without charge, provided the unit:

1. Has been installed 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.
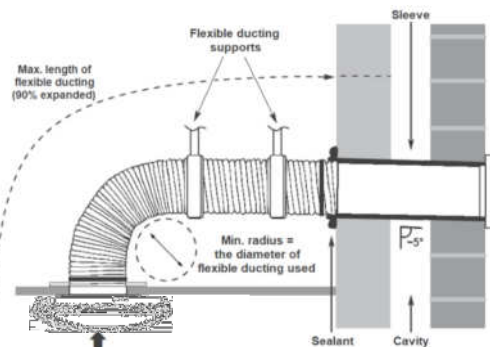

Best Practise Recommendations

Do not place the fan near direct heat sources, e.g. radiant heaters, or where the temperature can exceed 40°C (104°F).

To avoid the backflow of condensation into the fan in ceiling installations Airflow recommends fitting a condensation trap to the outlet duct of the fan.

Where flexible ducting is used the diameter must be maintained and it is good ventilation practice that the ducting is extended to a minimum of 90% its possible length in order to maintain the best possible air flow.

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Airflow Developments 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. Full details at airflow.com/terms

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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