AIRFLOW

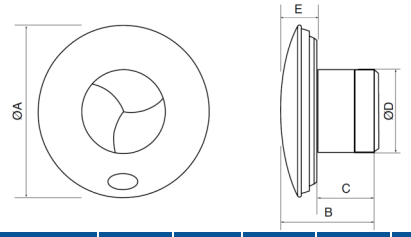
iCON®

230V Fan Range
Installation and Operating Guide

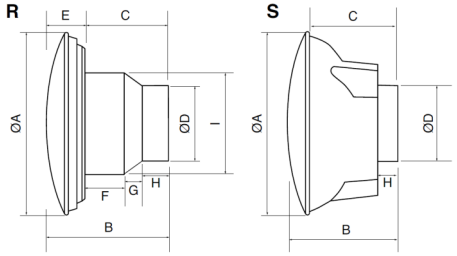
iCON 15 – 72683501
iCON 30 – 72591601
iCON 60 – 72591701

EVIA FMA beama RVA

Fan Dimensions



Model	A	B	C	D	E
iCON 15	197	108.5	67.5	100	40



R = Recessed without skirt **S** = Surface mounted with skirt

Model	A	B	C	D	E	F	G	H	I
iCON 30 (R)	225	144	101	97	43	51	20	30	148
iCON 30 (S)	225	144	92	97	-	-	-	29	-
iCON 60 (R)	280	165	110	148	55	38	20	52	177
iCON 60 (S)	280	165	80	148	-	-	-	46	-

Range Overview

iCON 230V fans are designed for ventilation domestic premises and available in three model sizes. They can be fitted to a wall or ceiling.

The iCON range can be used as a simple extract fan operated by a remote switch (standard), or can be fitted with an internal control module to give a range of control options (which includes: timer, humidity, motion sensor, pull cord or combinations of these functions).

These optional modules are available separately and can be fitted at the time of installation or retrofitted (see page 6).

iCON 15

iCON 30 & 60

Part no.	Model	Fan Size	Air flow [l/s / m³/h]	Power [W]	Current [A]	Noise level [dB(A) @ 3m]
72683501	iCON 15	100mm	19 / 69	9.4	0.05	28.8
72591601	iCON 30	100mm	32 / 117	26.4	0.17	33.3
72591701	iCON 60	150mm	72 / 260	66.3	0.45	41.6

Electrical Installation

All electrical installation work to be carried out by an approved competent person in compliance with U.K. Building Regulations and to the latest IET standards, or the appropriate regulations in the country of installation.

The fan requires a 230V 50Hz single phase supply, class II equipment (marked as stated in BS EN 60417). An external 3A fuse and a 30mA RCD is required for each fan unit.

The iCON 230V fan range is IPX4 rated and therefore it is suitable for mounting in bathrooms (incl. zones 1 and 2), toilets, kitchens and utility rooms, as long as it is not exposed to water jets (i.e. can be installed **above fixed shower head**).

iCON fan range also complies with the requirements of the EU norms and directives.

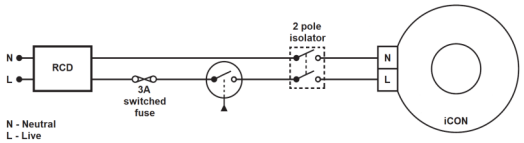
Important

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

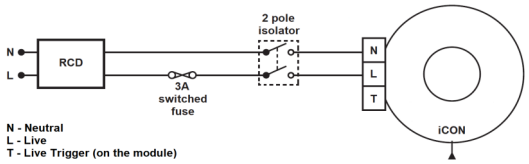
Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other fuel-burning appliances.

Electrical Installation

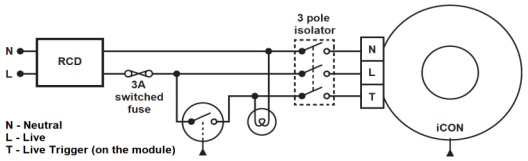
Wiring with no control module fitted:



Wiring for control modules with no external switching:



Wiring for control modules with external switching



Modules & Covers

iCON Optional Colour Covers

Cover / Fan	iCON 15	iCON 30	iCON 60
Chrome	52634502B	-	-
Anthracite	52634503B	52634506B	52634509B
Sandstone	52634505B	52634508B	52634511B
Silver	52634504B	52634507B	52634510B
Ultimate Grey	52634514B	52634517B	52634520B
Navy Blue	52634516B	52634519B	52634522B
Turquoise	52634515B	52634518B	52634521B

iCON 230V Optional Modules

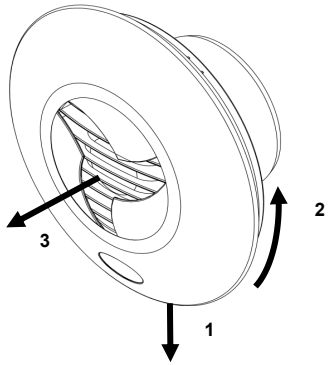
Part no.	Model	Description
72573602	PCM	Pull cord (Manual on/off)
72612601	TM	Timer (Run on timer 1-30 min)
72675702	DTM	Delayed timer (2 min delay, Run on timer 2-45 min, Pull cord)
72687103	HTM	Humidity timer (40-90% RH, Run on timer 2-45 min, Pull cord)
72687104	PRTM	PIR timer (Motion sensor, Run on timer 2-45 min)
72687102	PRHTM	PIR with humidity timer (Motion sensor, 40-90% RH, Run on timer 2-45 min)
72675703	2SHM*	2 speed humidity (Low speed 8 or 13 l/s, Boost at 40-90% RH, Pull cord)

* Not recommended for kitchen applications with iCON 15.

Front Cover Removal

To remove front cover assembly, first make sure **the fan is off, isolated from the power supply** and the **iris shutter is fully closed**.

1. Undo the locking screw at the bottom edge of the cover using a screwdriver.
2. Rotate the cover a few degrees anticlockwise until it clicks out from the fittings.
3. Remove the cover by pulling it out.



To refit the cover, reverse the above procedure. If when refitting the front cover the iris stays open, remove the cover and don't attempt to refit it for approx. two minutes (allowing the actuator to retract back in the closed position). Then try again.

Mechanical Installation

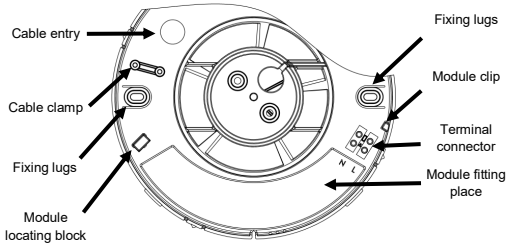
iCON fans can be recessed in a wall or ceiling (iCON 30 and 60 are also supplied with surface mounting kit). See pages 9 - 11 for details.

Always ensure free running of the fan impeller and that duct connections are not over tightened to the fan outlet spigot.

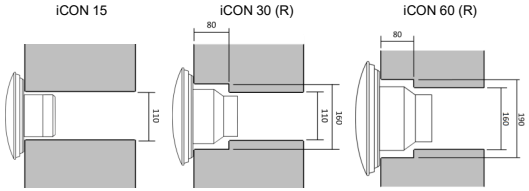
Fix the sealed grommet supplied into the cable entry hole. Pierce the grommet to allow the mains cable to be pulled through while maintaining the integrity of the seal.

Airflow Developments recommends that rigid ducting is used where possible instead of flexible ducting, this will ensure maximum performance.

Before carrying out the installation see pages 12 & 13 for best practise recommendations.



Wall Installation



Recessing fan in the wall

The **iCON 15** requires a 110mm diameter hole through the wall lined with a 100mm internal diameter duct.

The **iCON 30** requires a 110mm diameter hole through the wall, counter board 160mm to a depth of 80mm. The hole should be lined with a 100mm internal diameter duct.

The **iCON 60** requires a 160mm diameter hole through the wall, counter board 190mm to a depth of 80mm. The hole should be lined with a 150mm internal diameter duct.

Surface mounting fan on the wall

When surface mounting the iCON 30 or iCON 60 the supplied mounting skirt should be used.

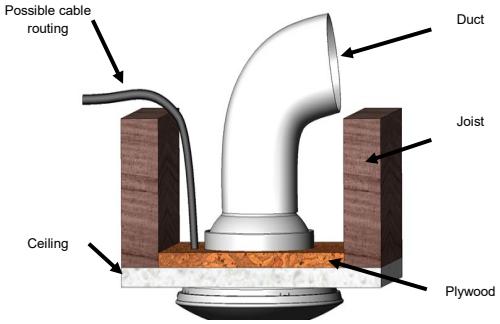
The **iCON 30** requires a 110mm diameter hole through the wall lined with a 100 mm internal diameter duct.

The **iCON 60** requires a 160mm diameter hole through the wall lined with a 150 mm internal diameter duct.

Ensure all vapour barriers are properly restored.

Ceiling Installation

Ceiling Recess



The fan should be fitted in the hole, fixed with the screws provided into the support.

The **iCON 15** requires a 110mm diameter hole through the ceiling.

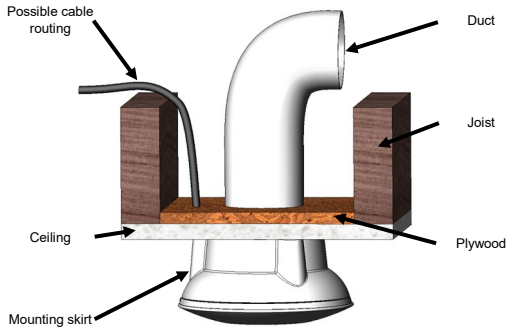
The **iCON 30** requires a 160mm diameter hole through the ceiling.

The **iCON 60** requires a 190mm diameter hole through the ceiling.

Where flexible duct is used the diameter must be maintained.

Ceiling Installation

Ceiling Surface Mounting



When surface mounting the iCON 30 and iCON 60, the mounting skirt provided should be used. The mounting skirt should be fixed, with the screws provided, into the support. The fan is then fitted into the skirt.

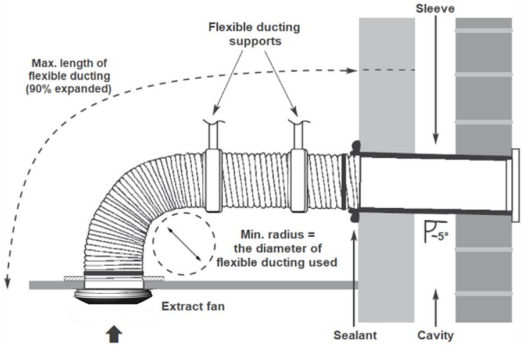
The **iCON 30** requires a 110mm diameter hole through the ceiling.

The **iCON 60** requires a 160mm diameter hole through the ceiling.

When recessing or surface mounting in the ceiling, a plywood support (min. 18mm thick) must be mounted between the ceiling joists. Any fixing screws should be fitted through the plaster board into the support.

Best Practice Recommendations

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 a minimum of 90% its possible length in order to maintain the best possible air flow.

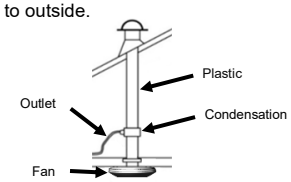
Ensure that flexible duct connections are not over tightened to the spigots.

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 the Building Regulations.

Best Practise Recommendations

To avoid the backflow of condensation into the fan **in ceiling installations** it is good practice to fit a condensation trap to the vertical outlet duct of the fan.

With **through the wall installation** fit the duct in an approx. 5° angle down to outside.



Measurements and Commissioning

The Building Regulations 2010, imposes a requirement that testing and reporting of mechanical ventilation performance (see Approved Document F1) is conducted in accordance with an approved procedure.

Compliance with this requirement by an assessed and registered 'Competent Person' should follow a 'Best Practise' process and adopt air flow measurement, Method A - The Unconditional Method - using a suitable UKAS certified measuring instrument. Generically referred to as 'Zero Pressure Air Flow Meter' or 'Powered Flow Meter'.

Further information on this method is detailed in NHBC Building Regulations Guidance Note G272a 10/13 and BSRIA Guide document BG 64/2016.

Maintenance

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

When installed according to these instructions the iCON 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 keep 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.

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 should not play with the appliance. Cleaning and user maintenance shall not be carried out by children without adult supervision.

Warranty

Airflow Developments Ltd guarantees the iCON for 3 years from date of purchase against faulty material or workmanship. Applicable to units installed and used in the United Kingdom.

You can register your warranty online (for more information check at www.airflow.com).

Warranty only covers the fan, not the reinstallation 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 IET wiring regulations by a person who is recognised as a competent installer who is part of a competent scheme provider (e.g. NICEIC Ventilation Scheme).

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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.

For detailed standard warranty terms and conditions see our website or contact Customer Service.

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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