

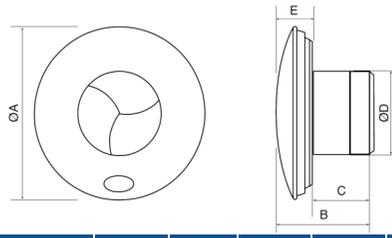


**SELV
12V DC**

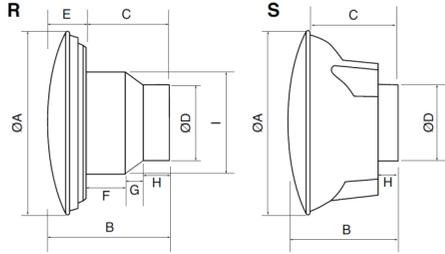
iCON 15S – 72683701
iCON 30S – 72683801



Fan Dimensions



Model	A	B	C	D	E
iCON 15S	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 30S (R)	225	144	101	97	43	51	20	30	148
iCON 30S (S)	225	144	92	97	-	-	-	29	-

Range Overview

iCON SELV 12V DC fans are designed for ventilation domestic premises and available in two model sizes. They are powered **Safety Extra Low Voltage** fans and can be fitted to a wall or ceiling.

The iCON SELV range can be used as a simple extract SELV 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 15S

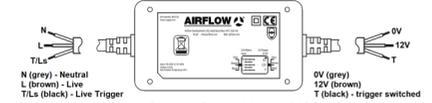
iCON 30S

Part no.	Model	Fan Size	Air flow [l/s / m ³ /h]	Power [W]	Current [A]	Noise level [dB(A) @ 3m]
72683701	iCON 15S	100mm	21 / 77	6.1	0.07	32.4
72683801	iCON 30S	100mm	37 / 132	12.2	0.10	36.2

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 12V DC supply (included in the box), class III equipment (marked as stated in BS EN 60417).



The power supply unit requires 100-240V 50/60Hz supply (class II). It is self resetting for over current and short circuit protection. An external 3A fuse and 30mA RCD is required for each unit. The LED indicator shows the unit is switched on

The iCON SELV 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**).

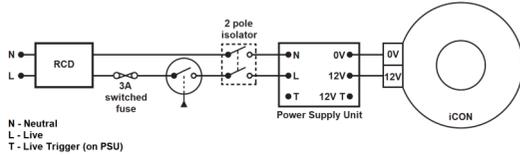
The power supply unit must be fitted outside of wet zones (usually outside of the room). The maximum length of wire between the unit and the fan should not exceed 5 meters using 1.5mm² wire. Never cover the power supply unit with thermal insulation materials.

Important

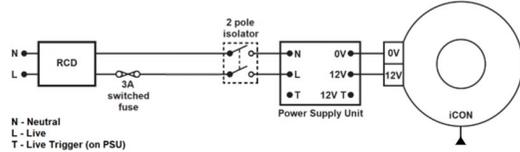
Do not place the ventilator near direct heat sources, e.g. radiant heaters, or where temperatures can exceed 40°C (104°F).

Electrical Installation

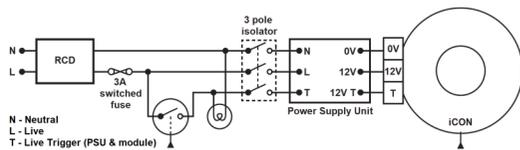
Wiring with no control module fitted:



Wiring for control modules with no external switching:



Wiring for control modules with external switching



Wiring and installation of iCON modules can be found in the Instructions included within the module packaging.

Modules & Covers

iCON Optional Colour Covers

Cover / Fan	iCON 15S	iCON 30S
Chrome	52634502B	-
Anthracite	52634503B	52634506B
Sandstone	52634505B	52634508B
Silver	52634504B	52634507B
Ultimate Grey	52634514B	52634517B
Navy Blue	52634516B	52634519B
Turquoise	52634515B	52634518B



iCON SELV 12V Optional Modules

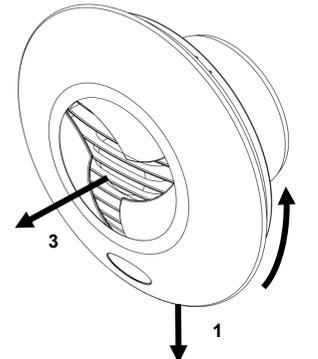
Part no.	Model	Description
72573603	PCS	Pull cord (Manual on/off)
72574204	PCTS	Pull cord timer (Run on timer 1-30 min)
72682307	DTS	Delayed timer (2 min delay, Run on timer 2-45 min, Pull cord)
72574202	HTS	Humidity timer (40-90% RH, Run on timer 2-45 min, Pull cord)
72574203	PRTS	PIR timer (Motion sensor, Run on timer 2-45 min)
72574201	PRHTS	PIR with humidity timer (Motion sensor, 40-90% RH, Run on



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.

- Undo the locking screw at the bottom edge of the cover using a screwdriver.
- Rotate the cover a few degrees anticlockwise until it clicks out from the fittings.
- 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

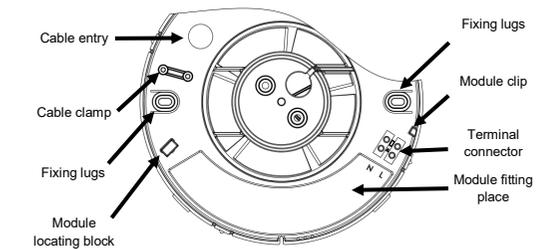
iCON fans can be recessed in a wall or ceiling (iCON 30S is supplied with surface mounting kit). See pages 9 -11 for details.

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

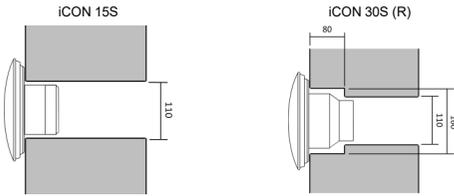
Fix the sealed grommet supplied into the cable entry hole. Pierce the grommet to allow the mains cable to be pulled through while maintaining the integrity of the seal.

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

The **iCON 30S** 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.

Surface mounting fan on the wall

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

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

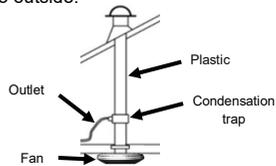
Ensure all vapour barriers are properly restored.

Page 9 of 16

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

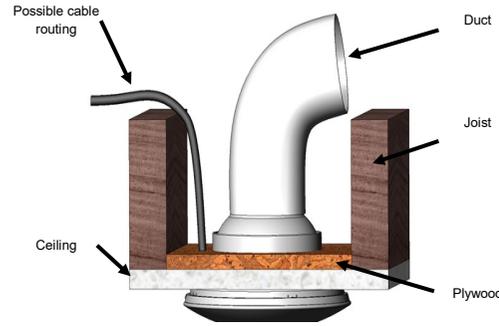
The Building Regulations 2010, imposes a requirement that testing and reporting of mechanical ventilation performance (see Approved Document F1) is conducted in accordance with an approved procedure.

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.

Page 13 of 16

Ceiling Installation Ceiling Recess



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

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

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

Where flexible duct is used the diameter must be maintained.

Page 10 of 16

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

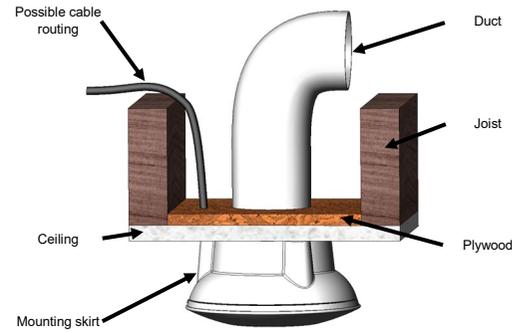
Fan and ducting should be inspected and cleaned on a regular basis to keep fan performance. The external housing of the fan can be wiped with a damp cloth. Do not use household cleaners containing abrasives. Cleaning of the internal parts such as the impeller should be carried out by using a soft brush. 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 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.

Page 14 of 16

Ceiling Installation Ceiling Surface Mounting



When surface mounting the iCON 30S, 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 30S** requires a 110mm 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.

Page 11 of 16

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.

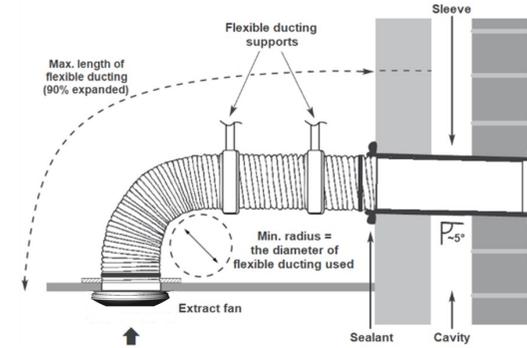
You can register your warranty online (for more information check at www.airflow.com).

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).

Page 15 of 16

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.

Page 12 of 16



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.	 UK Head-Office AIRFLOW DEVELOPMENTS LTD Aldelle House, Lancaster Road Cressux Business Park High Wycombe Buckinghamshire HP12 3QP United Kingdom Tel: +44 (0) 1494 525252 Email: info@airflow.com Web: www.airflow.com	Czech Republic AIRFLOW LUFTECHNIK GmbH o.s. Praha Hasičská 520 108 00 Praha 10 Malešice Czech Republic Tel: +42 (0) 2 7477 2230 Email: info@airflow.cz Web: www.airflow.cz	Germany AIRFLOW LUFTECHNIK GmbH Wolbersacker 16 53359 Rheinbach Germany Tel: +49 (0) 222 69205 0 Email: info@airflow.de Web: www.airflow.de
--	---	---	--

www.airflow.com

© Airflow Developments Ltd. Airflow Developments Limited reserve the right, in the interests of continuous development, to alter specifications without prior notice. All orders are accepted subject to our conditions of sale which are available on request.