



### iCON™eco

12V SELV Base Models:  
 iCON eco15S – 72683701  
 iCON eco30S – 72683801  
 iCON 15 Selv – 72591801  
 iCON 30 Selv – 72591901



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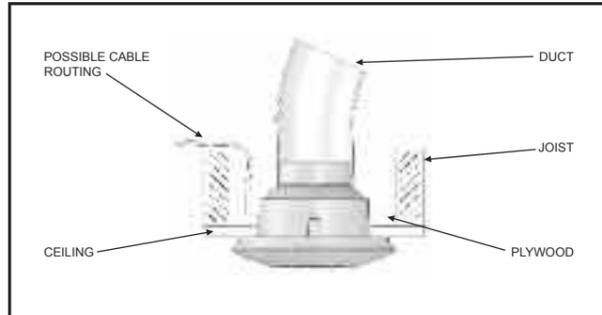
### Recessing iCON SELV/iCON eco S Fans in Wall

The iCON 15 SELV and iCON eco15S requires a 110mm diameter hole through the wall lined with a 100mm id (internal diameter) duct.  
 The iCON 30 SELV and iCON eco30S requires a 110mm diameter hole through the wall, counter bored 160mm diameter to a depth of 75mm. The 110mm hole should be lined with a 100mm id duct.

### Surface Mounting iCON SELV/iCON eco S Fans on Wall

When surface mounting the iCON 30 SELV and iCON eco30S the supplied mounting skirt should be used.  
 The iCON 30 SELV and iCON eco30S requires a 110mm diameter hole through the wall lined with a 100mm id duct.

### Recessing iCON SELV/iCON eco S Fans in 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 plaster board.

The iCON 15 SELV and iCON eco15S requires a 110mm diameter hole through the ceiling. The fan to be fixed, with the screws provided, through the plaster board into the support.

The iCON 30 SELV and iCON eco30S requires a 160mm diameter hole through the ceiling. The fan to be fixed, with the screws provided, through the plaster board into the support.

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### Airflow 12v iCON SELV and iCON eco S Domestic Fan

#### Installation, Maintenance and Use

iCON SELV (Safety Extra Low Voltage) and iCON eco S fans are available in 2 model sizes and can be fitted to a wall or ceiling. Each fan requires a suitable size hole through the wall or ceiling which connects into a duct venting to the outside. The external opening should be covered by a suitable external grill, available separately from Airflow Developments Ltd..

#### Airflow iCON SELV and iCON eco S Model Options

Model iCON eco15S -100mm Axial Fan with maximum capacity of 21.9 l/sec.  
 Model iCON eco30S -100mm Mixed Flow Fan with maximum capacity of 34.25 l/sec.  
 Model iCON 15 SELV -100mm Axial Fan with maximum capacity of 19.5 l/sec.  
 Model iCON 30S SELV -100mm Mixed Flow Fan with maximum capacity of 31 l/sec.

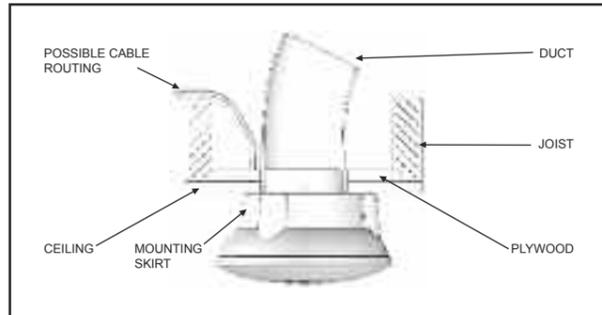
The iCON SELV and iCON eco S range can be used as a simple extract fan powered via the SELV transformer unit, and connected to either a remote switch, or can be fitted with an internal control module, supplied to give a range of control options including timer, humidity, motion sensor, pull cord, trickle speed or combinations of these functions. Optional modules are available separately and can be fitted at the time of installation or retrofitted.

The iCON SELV and iCON eco S fans have IP X4 rated housings, they are double-insulated and are suitable for fitting in Zone 1 or 2 of bathrooms, toilets, kitchens, utility rooms and inside shower cubicles as defined in Section 701 BS7161:2008 (IEEE Wiring Regulations, Seventeenth Edition). The iCON SELV and iCON eco S also complies with the Building Regulations, Approved Document F. The transformer unit, supplied with the fan, must be fitted outside of Zones 0, 1 and 2. It is usually installed outside the room.

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

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### Surface Mounting iCON SELV/iCON eco S Fans on Ceiling



When surface mounting the iCON 30 SELV/iCON eco30S the mounting skirt should be used.

The iCON 30 SELV/iCON eco30S requires a 110mm diameter hole through the ceiling. The surface mounted skirt to be fixed, with the screws provided, through the plaster board into the support. The fan is then fitted into the skirt.

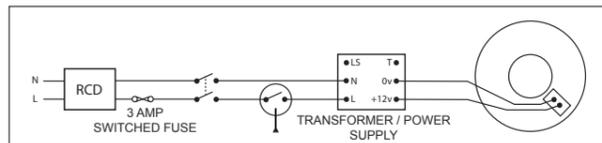
#### Electrical Installation

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.

The iCON SELV/iCON eco S transformer unit requires a 230V 50Hz supply, it is double insulated so does not require an earth.

The iCON SELV/iCON eco S fan requires a 12V dc supply via the transformer.

#### iCON SELV/iCON eco S wiring with no control module fitted.



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The iCON SELV transformer unit has a thermal protection device internally fitted, and an external 3A fuse is required for each transformer unit; therefore no internal fuse is fitted to the fan unit.

The iCON eco S power supply has resettable over current and short circuit protection. An external 3Amp fuse is still required with each power supply. The eco S (power supply) has a Led indicator to show that the unit is switched on and functioning correctly.

The transformer requires a 230V 50Hz single phase supply and has a 12V dc output for the iCON eco SELV fan. Class II equipment. BS EN 60417.

Note: Switches for fans shall be selected and sited in accordance with BS7161:2008

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.

ALWAYS ISOLATE THE TRANSFORMER AND FAN UNITS FROM THE POWER SUPPLY BEFORE REMOVING THE COVER.

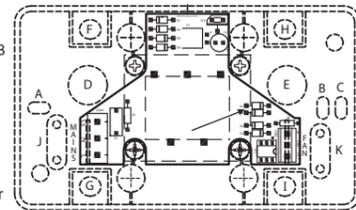
#### Mechanical Installation

##### Transformer

The iCON SELV transformer unit should not be fitted in Zone 0, 1 or 2 and must be sited out of reach of anyone using the bath, shower or sink. The units are usually installed outside the room or in an accessible roof space with adequate circulation of air around the transformer unit to avoid overheating.

The maximum distance between the transformer and fan units, when using 1.5mm2 cable is 5m.

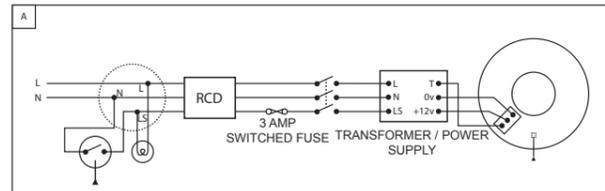
- Unscrew 2 retaining screws and remove the cover.
- Using the transformer base, spot through the fixing holes (A, B or C). Note: Choice of fixing positions (A, B or C) depends on the location.
- Ceiling or wall mounting: Drill to accept plastic wall plugs and screw the transformer unit to the support using the 2 mounting screws (Pan head, self tapping: 4mm x 32 long) supplied in fixing kit.
- Roof space: Screw the transformer unit to the support using the 2 mounting screws (Pan head, self tapping: 4mm x 32 long) supplied in the fixing kit.
- The 230V mains cable can be routed into the transformer unit via the knock out positions D (bottom), G (side) or F (side); whichever is most convenient.



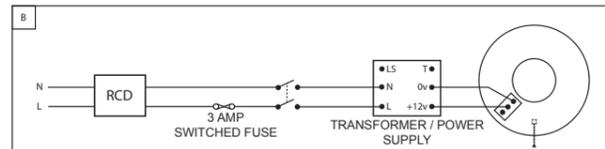
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### Optional Modules for iCON SELV/iCON eco S

iCON SELV/iCON eco S control module with external switching.



iCON SELV/iCON eco S control module with no external switching.



Refer to instructions supplied with (optional) modules for further information.

#### Maintenance

SAFETY FIRST: ALWAYS ISOLATE THE FAN UNIT FROM THE POWER SUPPLY BEFORE REMOVING THE COVER.

Warranty only covers the fan, not the reinstallation of this if required.

When installed according to these instructions the iCON SELV/iCON eco S fans are completely safe.

The materials used do not constitute a hazard. The module covers are made of a flame retardant material.

#### Cleaning

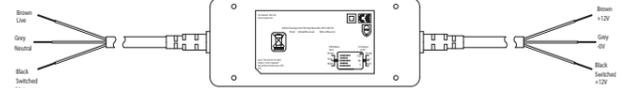
- The external housing of the fan can be wiped with a damp cloth. Do not use household cleaners containing abrasives.
- Cleaning of the internal parts such as the impeller should be carried out using a soft brush.
- Note: Always ensure that the fan unit is isolated from the power supply before inserting the brush into the impeller duct.
- Never clean any parts of the fan assembly by immersing in water or using a dishwasher.

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The output cable to the fan, typically is 1.5mm2 for a 5m cable run, can be routed into the transformer unit via the positions E (bottom), H (side) or I (side); whichever is most convenient.

Note: Never cover the transformer unit with thermal insulation or other materials.

#### iCON eco S Power Supply Unit



The iCON eco S power supply unit does not require dismantling and should be installed by a qualified electrician to BS7161:2008 (IEEE wiring standards 17th Edition). The maximum length of wire between the power supply and the fan should not exceed 5m using 1.5mm2 wire.

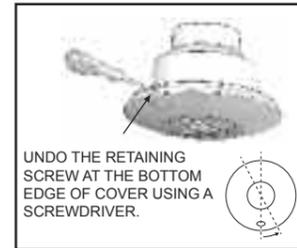
#### Fan Unit

The iCON SELV and iCON eco S range can be recessed in a wall or ceiling. A mounting skirt is provided for surface mounting the iCON 30 SELV and iCON eco30S.

To avoid the backflow of condensation into the fan in ceiling installation it is good practice to fit a CONDENSATION TRAP to the outlet duct of the fan.

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

To avoid reduced flow, an elbow plenum should be used for all installations which contain bending of ducting.



#### Front Cover Removal

The front cover of the iCON SELV and iCON eco S fan has a bayonet type fitting. To remove, undo the retaining screw at the bottom edge of the cover using a screwdriver, then rotate the cover a few degrees anticlockwise and remove. To refit, reverse the above procedure.

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### Warranty

Applicable to units installed and used in the United Kingdom. Airflow guarantees the iCON SELV/iCON eco S fan units and SELV/eco S modules for 3 YEARS from date of purchase against faulty material or workmanship. Warranty only covers the fan, not the reinstallation of this 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.

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.

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

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