

AIRTECH

Sensafan SA60 / SA60SELV
Datafan DA60 / DA60SELV



IPX4 (SA60/DA60)
IPX7 SELV (SA60SELV/DA60SELV)

Installation and Wiring Instructions



(Supplied with SELV models only)

SAFETY AND GUIDANCE NOTES

All wiring to be in accordance with the current I.E.E. Regulations, or the appropriate standards of your country and **MUST** be installed by a suitably qualified person.

The Fan should be provided with a local isolator switch capable of disconnecting all poles, having a contact separation of at least 3mm.

Ensure that the mains supply (Voltage, Frequency, and Phase) complies with the rating label.

The Fan should only be used in conjunction with the appropriate Airtech products.

The fan should only be used in conjunction with fixed wiring.

When the Fan is used to remove air from a room containing a fuel-burning appliance, ensure that the air replacement is adequate for both the fan and the fuel-burning appliance.

The Fan should not be used where it is liable to be subject to direct water spray for prolonged periods of time.

Where ducted Fans are used to handle moisture-laden air, a condensation trap should be fitted. Horizontal ducts should be arranged to slope slightly downwards away from the Fan.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Young children should be supervised to ensure that they do not play with the appliance.



This product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice.

DESCRIPTION

The SensaFan A60 range is a fully automatic 100mm (4") including safe extra low voltage high pressure axial fan options, for wall, ceiling or window fit applications in Zone 1. Energy efficient ball bearing 24V DC motor requires less than 3W of power when operating on trickle.

Supplied as a complete kit, comprising fan, remote humidity sensor & transformer. Upon removing the cover, power is cut to the fan allowing for safe access for cleaning and maintenance.

The Dynamic Humidity sensor is designed to operate when any rapid increase in the humidity is sensed.

When the water vapour has been extracted and the room returns to the previous humidity level, the Dynamic Controller will switch the fan off boost back to the pre-set trickle rate.

INSTALLATION

IMPORTANT: The fan will only switch on with the cover in place.

SITING

Site the SA/DA60 Controller on a wall away from any direct sources of heat.

The controller **MUST** be positioned about 75-100mm below ceiling level.

The controller **MUST** be in direct line of sight to the fan, ideally on an inside wall between the fan and the door of the room and not hidden behind a wall or cupboard projections, between shelving, etc. (i.e. placed in a dead spot).

The SA/DA60 Dynamic Humidity Controller is provided with its own plastic back box. **DO NOT USE A METALLIC MOUNTING BOX.**

IMPORTANT SITING INFORMATION

If installed in a kitchen the fan or controller **MUST NOT** be sited above a cooker.

The fan must not be vented into any duct that is used for any other purpose.

If there is a water heater, gas stove or boiler within the same room, the installer must ensure that air replacement is adequate for all of the appliances and **MUST** comply with all Regulations.

If installed in a bathroom the controller must be sited out of reach of a person using a fixed bath or shower. The A60SELV (24V) fan may be installed in Zones 1 & 2.

Fan **MUST NOT** be fitted where it could be submerged in water or regularly exposed to water spray.

PANEL/CEILING MOUNTING

1. Cut a 105-120mm diameter hole.
2. Loosen the screw at the bottom of the grille, and then remove the grille by carefully pulling away from the housing. (Figure 3)
3. Mark the screw centres through the holes in the fan back plate. Drill, plug and screw into position. Attach ducting as required for the installation.
4. Wire the fan as described in Section Wiring and Figures 1, 2 and 4.
5. After installation, ensure impeller rotates freely.
6. Replace the grille and tighten the retaining screw.
7. Position controller back box to the wall in the line of sight of the fan and around 100mm down from the ceiling.

8. Mark the screw centres through the holes in the back box. Drill, plug and screw into position.
9. Wire the controller to the fan and mains supply as described in Section Wiring.
10. Screw the controller to the back box using the 50mm electrical screws provided.

WALL MOUNTING

1. For wall mounting cut a 112mm diameter hole (or 117mm when installing using the Energysaver High Rise Cowl) through the wall and insert the wall sleeve. Slope the sleeve slightly downwards away from the fan. Where necessary cut to length and cement both ends into position flush with the wall faces.
2. Fix exterior grille into position with the louvres positioned downwards.
3. Loosen the screw at the bottom of the grille, and then remove the grille by carefully pulling away from the housing. (Figure 3)
4. Mark the screw centres through the holes in the fan back plate. Drill, plug and screw into position.
5. Wire the fan as described in Section Wiring and Figures 1, 2 and 4.
6. After installation, ensure impeller rotates freely.
7. Replace the grille and tighten the retaining screw.
8. Position controller back box to the wall in the line of sight of the fan and around 100mm down from the ceiling.
9. Mark the screw centres through the holes in the back box. Drill, plug and screw into position.
10. Wire the controller to the fan and mains supply as described in Section Wiring.
11. Screw the controller to the back box using the 50mm electrical screws provided.

WIRING

WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE.

IMPORTANT

SA60 SELV MUST BE USED WITH FIXED WIRING ONLY

The cross - sectional area of supply cord used should be ranged from 1 -1.5mm².

The cross-sectional area of the 4 core low voltage cable between the fan and controller should be 0.5 – 0.75mm².

The extraction fan is suitable for connection to 220-240V 50Hz supply.

The fan and controller are class II or class III SELV and **MUST NOT** be earthed.

1. Follow the appropriate wiring diagram (Figure 1 or 2).
2. Check all connections have been made correctly and ensure all terminal connections and supply wires are securely fastened. (Figure 4)
3. Ensure the impeller rotates and is free from obstructions.

Fig.1 - SA60/DA60

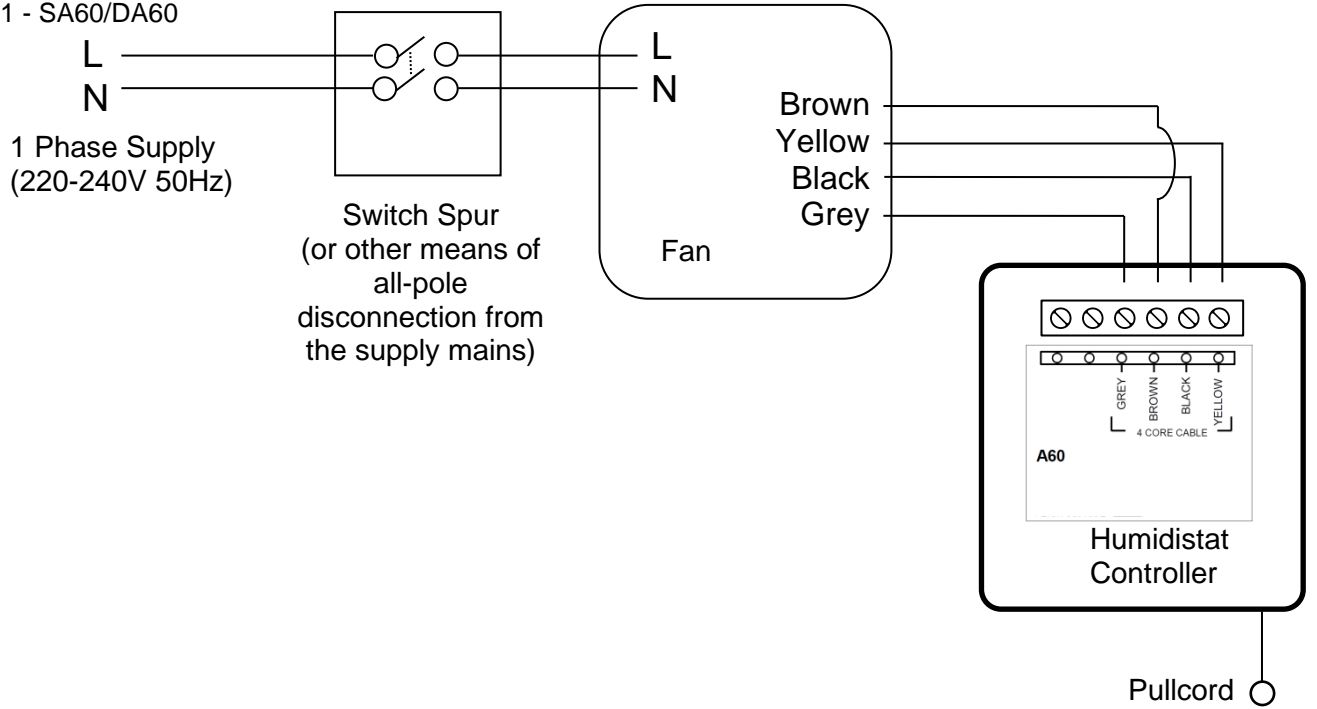
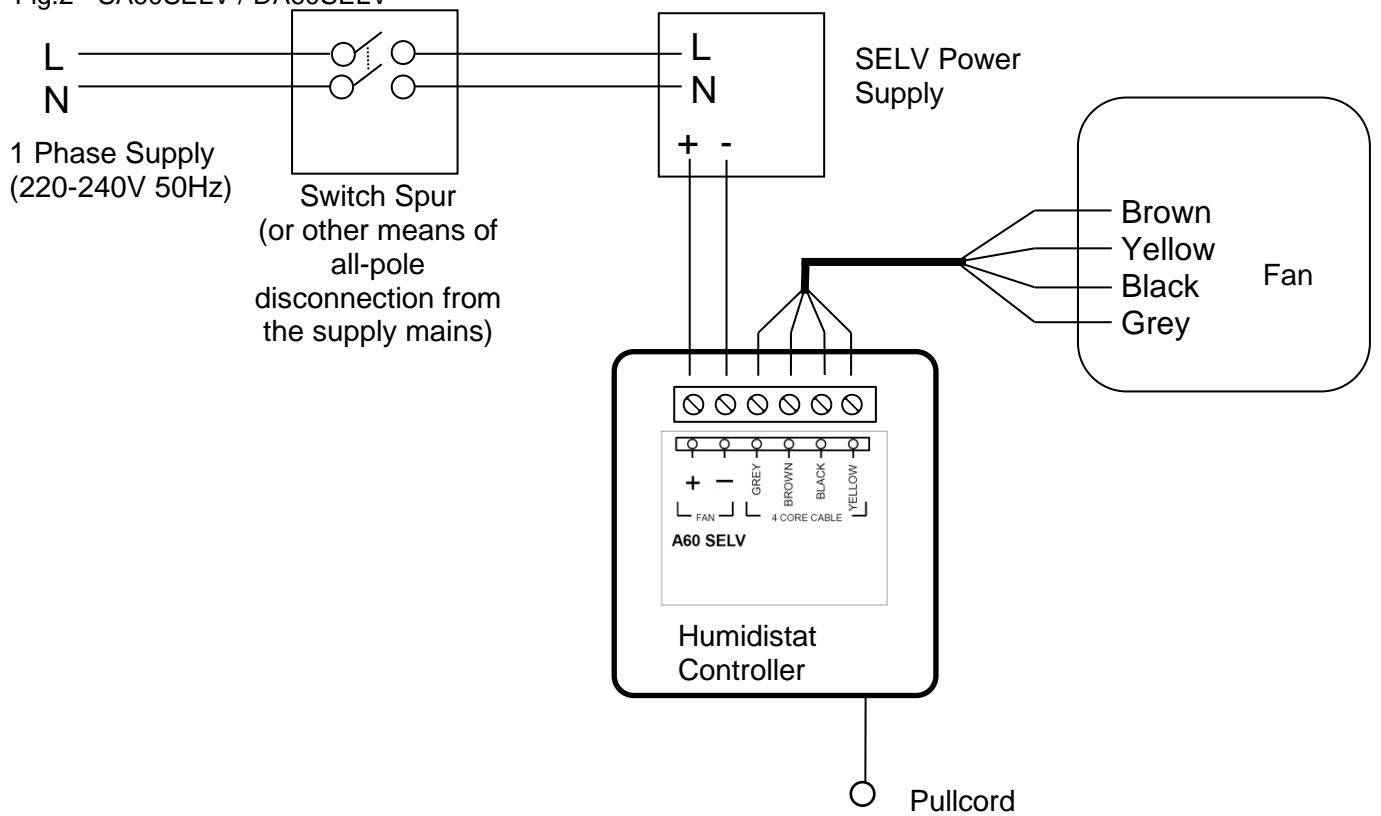


Fig.2 - SA60SELV / DA60SELV



OPERATION

The Dynamic Controller is designed to operate the A60/A60SELV extract fan continuously at a very low speed (TRICKLE).

The Dynamic Humidity sensor is designed to boost the fan to 15l/s speed setting when any rapid increase in the humidity is sensed (when under the 70% RH set point) (HUMIDISTAT 1).

When the integral humidistat senses that the humidity has reached the pre-set level of 70% RH the speed increases to 22l/s speed setting (HUMIDISTAT 2). If the humidity continues to rise above 85% RH the speed increases to 30l/s (HUMIDISTAT 3). When the humidity falls below the pre-set level, the fan returns to the trickle mode.

A pullcord will switch the fan on to run continuously at full speed (60l/s) (BOOST). Pulling the switch cord again will return the fan to automatic control. The fan will automatically return to automatic control after 30 minutes.

Mode	Speed (l/s)	LED
TRICKLE	6	Single green flash every 10 seconds
HUMIDISTAT 1	15	Green flash once a second
HUMIDISTAT 2	22	Green flash twice a second
HUMIDISTAT 3	30	Green on continuously
BOOST	60	Red light on continuously
(FAULT DETECTED)	-	Three quick red flashes

IMPORTANT

AFTER INSTALLATION, ALLOW AT LEAST 10 MINUTES FOR THE CONTROLLER TO BECOME ACCLIMATISED TO THE ROOM AND TO BECOME FULLY OPERATIONAL. IT IS POSSIBLE THE CONTROLLER WILL OPERATE THE FAN CONTINUOUSLY FOR A PERIOD OF TIME WHILE IT GRADUALLY STABILISES THE HUMIDITY WITHIN THE ROOM.

SERVICING AND MAINTENANCE

WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE.

1. At intervals appropriate to the installation, the fan should be inspected and cleaned to ensure there is no build up of dirt or other deposits.
2. Carefully pull the front panel off the inner grille.
3. Wipe the inlets and front face with a damp cloth until clean.

The fan has sealed for life bearings, which do not require lubrication.

Fig. 3. Removing the grille for wiring

1. Loosen the screw at the bottom of the grille.
2. Pull the grille as shown and lift away.

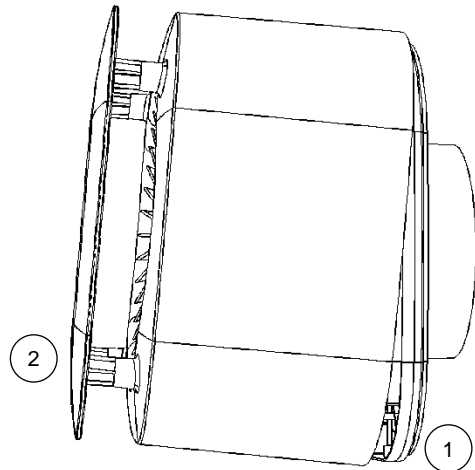
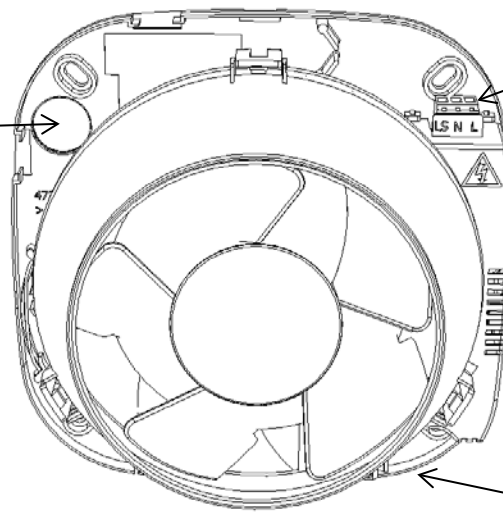
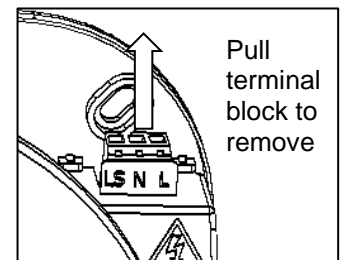


Fig. 4. Connections

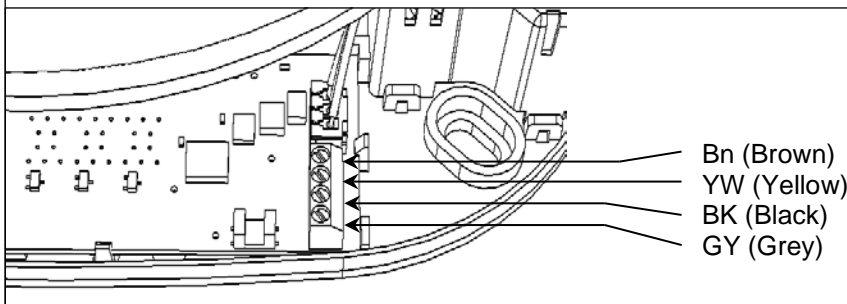
Cable entry
(Fixed wiring only)



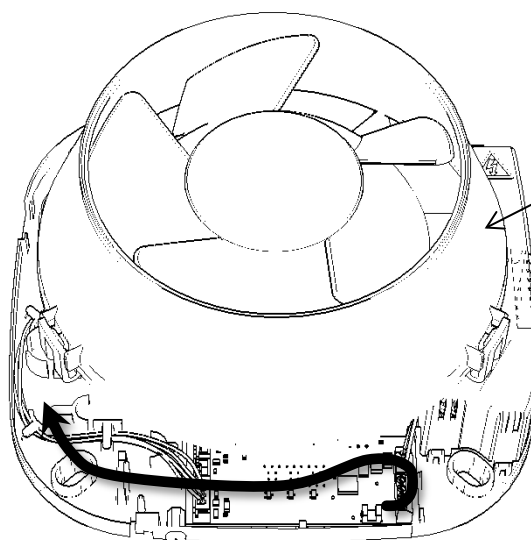
220-240V 50Hz
(A60 only)



Humidistat
Controller
Connections



IMPORTANT:
The fan will only
work with the
cover in place



Do not remove PSU cover
(A60 only)

Wiring connections
Route the Humidistat controller
cable from the connection PCB
clockwise as shown.



Disposal

This product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice.

AIRTECH

Warranty

Applicable only to products installed and used in the United Kingdom. For details of guarantee outside the United Kingdom contact your local supplier. Airtech guarantees this product for 5 years from date of purchase against faulty material or workmanship.

In the event of any part being found to be defective, the product will be repaired, or at the Company's option replaced, without charge, provided that the product:-

- Has been installed and used in accordance with the instructions given with each unit.
- Has not been connected to an unsuitable electricity supply. (The correct electricity supply voltage is shown on the product rating label attached to the unit).
- Has not been subjected to misuse, neglect or damage.
- Has not been modified or repaired by any person not authorised by the company.

IF CLAIMING UNDER TERMS OF WARRANTY

Please return the complete product, carriage paid to your original supplier by post or personal visit. Please ensure that it is adequately packed and accompanied by a letter clearly marked "Guarantee Claim" stating the nature of the fault and providing evidence of date and source of purchase. The guarantee is offered to you as an extra benefit, and does not affect your legal rights.

AIRTECH

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