

# Installation Instructions for the AVX 120 Range 120mm (5") Auto Shutter Extractor Fans

- Note:**
- (i) For best results this extractor fan should be fitted as high on the wall as possible, or if preferred, on the ceiling
  - (ii) Do not install the unit within a shower cubicle.
  - (iii) Switch off mains supply before making electrical connections. In any doubt contact a qualified electrician.
  - (iv) This fan is double insulated and does not require an earth.

- 1 Using the template provided, cut a 140mm (5½") [minimum diameter] hole in the wall. If the fan is to be fixed in the ceiling ensure that the hole is between the joists. (*1.8m from the floor when wall mounted*).
- 2 Fit 135mm (5¼") [internal diameter] ducting flush to the plaster.
- 3 Remove the cover from the fan by removing the two retaining Philips screws.
- 4 Hold the body of the fan against the wall or ceiling and mark the four screw holes and the cable entry.  
**IMPORTANT: Ensure that the fan is square on the wall or ceiling.**
- 5 Bring power cable into position, as marked. Allow an extra 230mm (9") protruding to facilitate connection
- 6 Make good around the duct and cable.
- 7 Drill holes to suit No. 8 x 1¼" screws and insert wall plugs
- 8 Screw the fan and connect power supply to terminals as shown in diagrams 1-8
- 9 Make good the external wall and fit cowl or grille over duct.

## **ELECTRONIC AUTOMATIC BACKDRAFT SHUTTERS**

The AVX 120 Range of automatic fans are fitted with an internal backdraft shutter system. The flaps of the backdraft shutter are operated by an electronic thermo actuator when the fan is switched on the flaps take 30–60 seconds to open and close when the fan is switched off.

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**10 Wiring of Standard Model AVX 120 SA** See Diagram 3

The fan can either be operated from a separate pullcord switch fitted to the ceiling of the room or can be connected to the light switch so that the fan will start when the light is switched on. A double pole fused spur having a contact separation of at least 3mm in all poles must be used and fitted with a 3amp fuse, and must be sited outside any room containing a shower or fixed bath. The fan must be accessible to a person using either the shower or the bath.

**11 Wiring of Pullcord Model AVX 120 PA** See Diagram 4

***This model is not suitable for ceiling mounting***

This fan has its own integral pullcord on/off switch. The cable from the fan must be connected to a double pole fused spur having a contact separation of at least 3mm in all poles must be used and fitted with a 3amp fuse, and must be sited outside any room containing a shower or fixed bath. The fan must not be accessible to a person using either the shower or the bath.

**12 Wiring of Timer Model AVX 120 TA** See Diagram 5

***Fitted with an electronic timer delay run.***

The fan can either be operated from a separate pullcord switch fitted to the ceiling of the room or can be connected to the light switch so that the fan will start when the light is switched on. A double pole fused spur having a contact separation of at least 3mm in all poles must be used and fitted with a 3amp fuse, and must be sited outside any room containing a shower or fixed bath. The fan must not be accessible to a person using either the shower or the bath.

**13 Wiring of Humidity Model AVX 120 HA** See Diagram 6

For the fan to operate as a normal time delay unit with humidity override i.e. when connected with a switched live coming from the light switch into the fan, the fan will operate when the light is switched on, and switch off after about 1 – 20 mins (timer is pre-set). However, should the humidity in the room rise above a pre-set level, the fan will switch on and keep running until the humidity falls to 5% below the pre-set level. In some cases, in a new house for example, the Fan will continue to run for extended periods, as the humidity will be high.

It is therefore advisable that in normal situations the fan is pre-set between 70% and 80% RH. In exceptional circumstances e.g., ery humid days in the Summer, the fan may well switch on at 80%. This is not unusual and a higher setting may be preferable. This can be adjusted by turning the adjustor knob as indicated.

#### 14 Wiring of Humidity Timer Model AVX 120 HTA See Diagram 7

This fan requires a switched live, a permanent live and a neutral supply. This fan will operate as the AVX 120 HA unit except when the fan unit has been switched off from the remote switch, the timer circuit inside the fan will keep running for the pre-set period of time (adjustable from 30 seconds to 20 minutes).

However should the humidity be higher than the pre-set level the fan will continue to run until the humidity falls 5% below the pre-set level.

In some cases, in a new house for example, the fan will continue to run for extended periods, as the humidity will be high.

#### 15 Wiring of Pull Cord Window Model AVX 120 WPA. See Diagram 8 TIMER ADJUSTMENT



A fan with a delay fitted will run approximately one minute after it has been switched off. The time delay can be increased by firstly switching off the power to the fan, remove the front cover and the inner timer cover. Insert a small screwdriver into the slot, as shown in Diagram 1. Turning clockwise reduces the time and turning anticlockwise increases the time. Only adjust with the power switched off.

**Note:** All wiring must be fixed securely and the cable to the fan should be a minimum of 1mm<sup>2</sup> in section. All wiring must comply with current IEE Regulations.

**IMPORTANT:** Switch off mains before making any electrical connections. If in any doubt contact a qualified electrician..

**Note:** Fan must be fitted a minimum of 2.2 metres from the floor.

Maximum Operating Temperature: 40°C

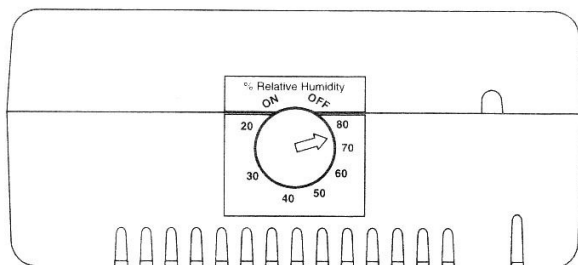
Rated: 220/240V ~50Hz 20W  

Airflow: max 75m<sup>3</sup> per hour, 21 litres per second.



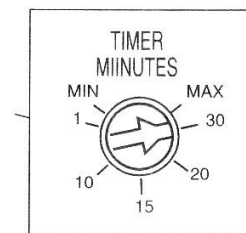
#### Diagram 1

Adjuster details viewed from below



#### Diagram 2

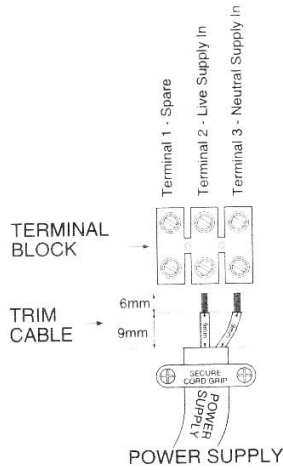
Time Adjuster



Detailed view

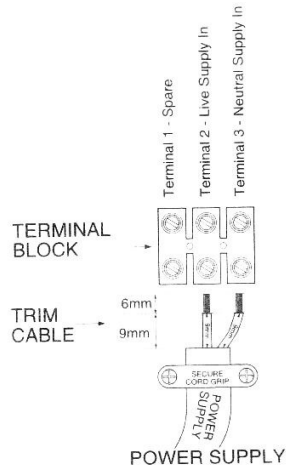
### Diagram 3

Wiring of  
Standard Model  
AVX 120 SA



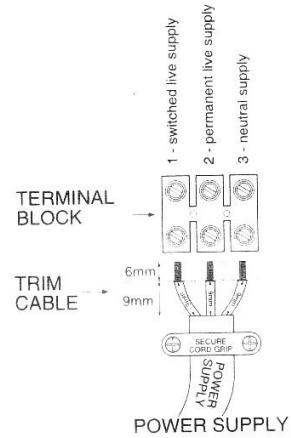
### Diagram 4

Wiring of Pull-Cord  
Model  
AVX 120 PA



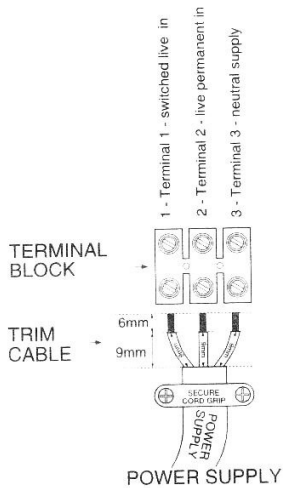
### Diagram 5

Wiring of Timer  
Model  
AVX 120 TA



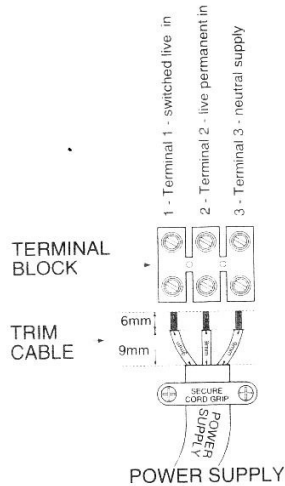
### Diagram 6

Wiring of  
Humidity Model  
AVX 120 HA



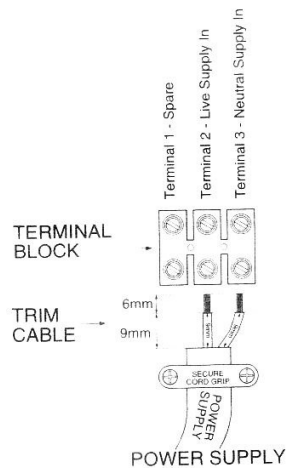
### Diagram 7

Wiring of Humidity  
Timer Model  
AVX 120 HTA



### Diagram 8

Wiring of Pull-Cord  
Window Model  
AVX 120 WPA



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