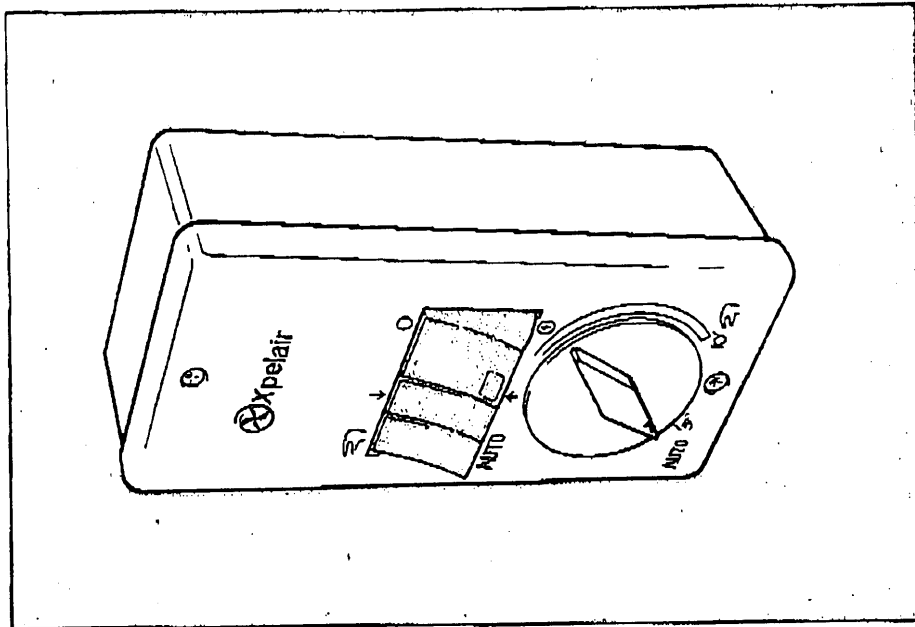


700-2725



AWC



XPELAIR LIMITED

Xpelair AWC Controller Installation and Operating Instructions

ONE Description

- Designed to minimise temperature variations in large buildings.
- For use with Xpelair Whisper ceiling sweep fans.
- Supplied with two sensors for low and high levels.
- Can control up to ten fans.
- Operates in either automatic or manual mode.
- In automatic mode, the fan speed varies automatically between its preset maximum and minimum values, as the difference in high and low level temperatures varies.

TWO What you will need

- A double pole isolating switch with a contact gap of at least 3mm.
 - Suitable 3-core cable to connect the controller to the mains.
 - Suitable 4-core cable to connect the controller to the first fan.
- If connecting to more than one fan:*
- Suitable 4-core cable to connect the fans together in parallel.

THREE Where to locate it

- Controller**
- At a convenient height within reach.
 - Can be either surface or recess mounted.
- Sensors**
- Pointing away from walls and other large obstacles, to ensure adequate ventilation.
 - Not where temperatures exceed 35°C.
 - High level sensor: above the fan mountings.
 - Low level sensor: within 1m of the controller.
- If installing in a chemically corrosive atmosphere, please get advice from Xpelair's Technical Services Division.*

FOUR Installing the mains cable

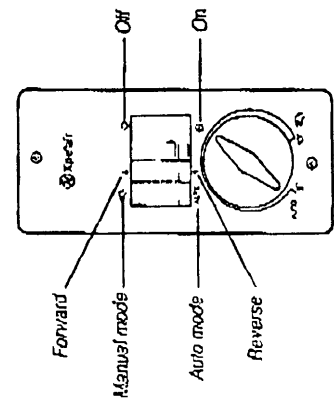
- If the fan is already installed*, disconnect the mains supply to the fan(s).
- Lay in the 3-core cable from the mains supply to the controller, via the double pole isolating switch.
- If the fan is not yet installed:*
 - Check that its voltage matches the mains supply.
 - Mount the fan, following the instructions supplied with it.
 - Ignore the fan's wiring instructions.
- Lay in 4-core cable from the controller to each fan.

FIVE Installing the controller

All installations and wiring must comply with current IEE or appropriate local regulations.

Warning: The appliance must be earthed.

SIX Operating the controller



- In automatic mode:**
- If the control knob is set to 3°C*, minimum fan speed occurs when the difference in high and low level temperatures is 3°C or less; maximum speed occurs when the difference is 6°C or more.
 - If the control knob is set to 10°C*, minimum fan speed occurs when the difference in high and low level temperatures is 10°C or less; maximum speed occurs when the difference is 13°C or more.
 - To reduce the temperature difference at which the fan speed will vary, turn the control knob anticlockwise. Increase by turning clockwise.

- In manual mode:**
- To reduce the fan speed, turn the knob anticlockwise.
 - To increase the fan speed, turn it clockwise.
- In automatic and manual modes:**
- The fan comes on automatically at full speed for the first 10 seconds before reverting to the speed selected.

SEVEN Guarantee and service

- The controller is guaranteed against defects for 1 year from the date of purchase (applies to UK only).
- Please keep your purchase receipt.
- If you have any problems, contact Xpelair's Service Division at PO Box 220, Daykin Avenue Wotton Birmingham B6 7JH.

1

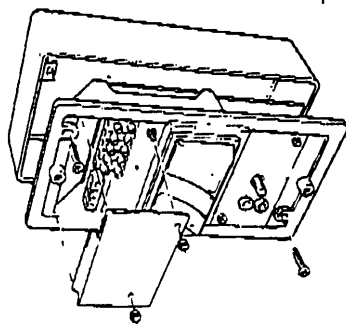
Remove the controller cover

- Make sure that the mains supply is off.
- Remove the two cross-headed screws on the front of the controller, and lift the cover away from the body.
- Check that the rating shown inside the front plate of the controller matches the mains supply.

2

Detach the mounting frame

- Detach the mounting frame from the metal wall box by removing the two cross-headed screws.
- Remove the two plastic nuts from the terminal block cover, and lift off the cover. Put it in a safe place.



3

Mount the sensors

- Using the two clips supplied, mount the temperature sensors horizontally, without touching the walls or ceiling:
- Mount the sensor with the 10m cable in the high level position.
 - Mount the sensor with the 1m cable in the low level position suitably protected.
 - Install the cables in closed conduits, leaving the other ends ready to wire into the controller.

4

Mount the wall box

If surface mounting

- Make entry holes for the sensor cables, mains and fan cables in the wall box and plastic surround by removing top or rear knockouts.
- Feed the cables through these holes, and fix the box and plastic surround to the wall.

If recess mounting

- Make a hole in the wall big enough to take the wall box. Discard the plastic surround.
- Make entry holes in the wall box for the sensor cables, mains and fan cables by removing top or rear knockouts.

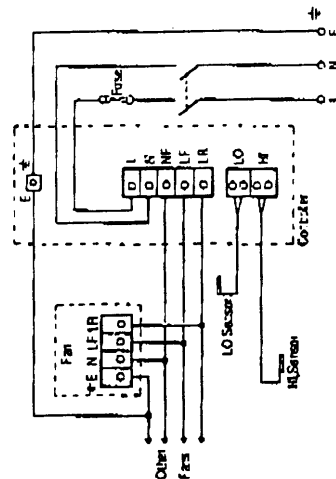
5

Wire the controller

Use the wiring diagram to:

- Connect the controller to the mains and to the first fan.
- Connect the sensor cables to the high and low sensor terminals.
- Connect any remaining fans in parallel.

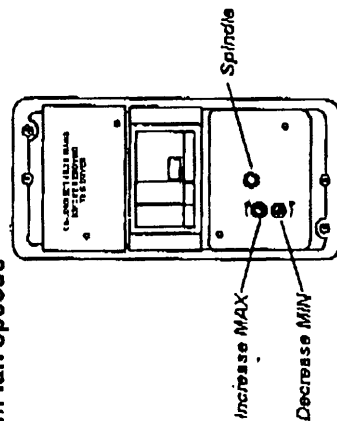
Then refit the terminal block cover, and fasten the plastic nuts.



6

Adjust the minimum and maximum fan speeds

- Turn on the mains and switch on the controller.
- Set the switches to Manual and Forward (see part SIX opposite).
- Turn the spindle of the control knob fully clockwise. Using a flat-edged screwdriver, adjust the MAX preset value of the fan speed.
- Now turn the spindle fully anticlockwise. Adjust the MIN preset value using the screwdriver.



- Refit the front cover.