Installing the fan

These appliances are intended for connection to fixed wiring. Check that the electrical rating shown on each fan matches the mains supply. THESE APPLIANCES ARE DOUBLY INSULATED AND DO NOT REQUIRE AN EARTH CONNECTION.

All installations must be supervised by a qualified electrician. Installations and wiring must conform to current IEE Regulations (UK), local or appropriate regulations (other countries). The installer’s responsibility to ensure that there is enough supply of mains wiring from above, leave the cable free to be fitted into labyrinth.

Refer to Building Regulations for specific requirements.

- Exhaust air must not be discharged into a flue used for exhausting of fumes from appliances supplied with energy other than electric. Requirements of all authorities concerned must be observed for exhaust air discharge and intake flow rates.

When intended for use in possible chemical corrosive atmospheres, consult out Technical Service Department. (For overseas markets contact your local Xpelair distributor).

Installing the isolating switch and cables

1. Check that the electrical rating shown inside the backplate matches your mains supply.
2. It is intended that this product is directly wired to a fixed outlet.
3. If no supply is readily available it will be necessary to install this wiring. This should be done by a qualified electrician.
4. It is acceptable to use the lighting circuit ring main for this product.
5. A suitable isolating switch is recommended, which must be situated so that it cannot be touched by persons making use of the bath, shower, or hand basin.
6. It is recommended an on/off switch is installed as well as the isolating switch.
7. Only when this wiring is in place should you proceed with the installation.

Preparing the hole

If working above ground floor level, safety precautions must be observed. WARNING: EYE PROTECTION MUST BE WORN DURING ALL DRILLING AND CHISELLING OPERATIONS.

If installing in a wall

1. Check there are no buried pipes or cables in the wall or obstructions on the outside e.g. electricity, gas, water. If in doubt, seek professional advice.
2. If installing in a wall the centre of the duct hole. The centre of the hole should be at least 110mm away from the edge of the mounting surface.
3. Use this centre mark to suit the wall duct (Ø115mm).

If installing in a ventilation shaft

1. Check there are no buried pipes or cables in the ventilation shaft.
2. Cut a hole Ø110mm, in the side of the shaft.
3. If the shaft has cavity wall, use the wall tube to bridge the cavity.
4. Fit ducting and condensation trap if necessary, positioning condensation trap as near to the fan as possible.

If installing in a ceiling

1. Check there are no buried pipes or cables in the ceiling/joists etc.
2. Cut a hole Ø115mm.

Preparing the fan for installation

Remove the front cover by pressing the release catches located on the sides of the unit with a 3mm screwdriver, whilst pulling the front cover forward (fig. G).

Mount the fan in the hole

If working above ground floor level, safety precautions must be observed. WARNING: EYE PROTECTION MUST BE WORN DURING ALL DRILLING AND CHISELLING OPERATIONS.

If installing in a wall, ceiling or vent

Mark the position of the backplate (fig A).

1. Hold the backplate so that the terminal block faces you in the top left hand corner and the lip points towards you. Press the tabs towards the backplate to allow the backplate to release.
2. Carefully insert the lip into the wall duct/ceiling or vent shaft.
3. Adjust the position of the backplate until it is level.
4. Mark on the wall/ceiling or vent shaft the positions of the four fixing holes in the backplate.
5. Remove the back plate from the ducting.
6. Drill screw holes in these positions if necessary, and fit wall plugs if necessary.

If installing in a window or panel

1. If installing in a window, an appropriate Vent Kit is required. Follow instructions provided.
2. If installing in a ceiling, appropriate termination ancillaries are required. Follow instructions provided.
3. If the wiring from back, remove knockout. Feed the mains cable through the cable entry hole in the back plate to the terminals (fig. C).
4. If wiring from above, leave the cable free to be fitted into labyrinth.
5. Insert the lip of the backplate into the wall/double glazing or vent shaft as before.
6. Fasten the backplate to the wall/ceiling or vent shaft using appropriate fasteners. If using screws, do not over tighten.
7. If installing in a wall, appropriate Wall Grill is required. Follow instructions provided.

If installing in a window or panel

1. If installing in a window or panel no more than 9mm thick, an appropriate Glass Kit is required. Follow instructions supplied.
2. Cutting back the Spigot (if required)

If installing in a window or panel less than 16mm thick, the fan spigot needs to be cut back to the visible step 20mm away from the rear of the back plate.
3. Remove the clip from the cutting forward.
4. Cut the spigot back to the step using a junior hacksaw, ensuring that the motor shaft is not marked by the hacksaw.
5. Remove any burns from the edge of the spigot.
6. Re-fit the impeller by locating it onto the shaft and pushing it fully.
Wire the electrical connections

- Make sure the mains supply is isolated.
- Wire the fan as shown in figure D check the fan model to diagram, feeding the cable between the two raised pegs, if wiring from above, and through labyrinth to terminal block.
- Switch off the mains electrical supply and remove fuses

For fixed wiring circuits the protective fuse for the appliance must not exceed 5A.

DX100BHT only – (fig. E)
- To adjust the over-run period turn the control (T) clockwise to increase and anti-clockwise to decrease.

DX100BHT & DX100BHP only – (fig. F)
- The pre-set humidity operation is factory set at approximately 75% Relative Humidity (RH), but can be adjusted between 65% and 85% RH by control H.
- The over-run timer is factory set to approximately 20 minutes, but can be adjusted between 2 mins and 30 mins by control T.
- Both controls are adjustable. Turn the controls clockwise to increase RH or time, and anti-clockwise to decrease.

Using the fan

DX100B & DX100BP only
- Operate the fan using the on/off switch. Repeat to switch off.

DX100BP only
- Operate the fan by pulling and releasing the cord. Repeat to switch off.

DX100BHT only (fig. E)
- Operate the fan using an on/off switch. When the switch is turned off, the fan continues to operate for the set time delay. To adjust the over-run period, turn the control “T” clockwise to increase and anti-clockwise to decrease.

DX100BHT only
- The fan automatically adjusts to slow changes in natural humidity levels without operating the fan. If the humidity levels increase at a rate slower than 5% RH in 5 minutes, up to the pre-set humidity level, the fan will not be triggered by humidity. This is to prevent nuisance triggering of the fan. If humidity levels increase quicker than 5% RH in 5 minutes the fan will operate. When relative humidity drops the fan continues to operate for the adjustable time delay.

DX100BHP only
- Automatic mode - The fan automatically adjusts to slow changes in natural humidity levels without operating the fan. If the humidity levels increase at a rate slower than 5% RH in 5 minutes, up to the pre-set humidity level, the fan will not be triggered by humidity. This is to prevent nuisance triggering of the fan. If humidity levels increase quicker than 5% RH in 5 minutes the fan will operate. When relative humidity drops the fan continues to operate for the adjustable time delay.

Manual mode – Use the integral pull cord switch. When the fan is switched off, it goes into automatic mode after the time delay. Light indicates when the fan is operating in manual mode.

Cleaning (This should be done by a qualified electrician)

1. Before cleaning, isolate the fan completely from the mains supply
2. Remove the front cover by pressing the release catches located on the sides of the unit with a 3mm screwdriver, whilst pulling the front cover forward (fig. G).
3. To clean the front cover, either wipe it with a damp, lint free cloth or wash it with warm soapy water. Thoroughly dry the front cover and refit.
4. Do not immerse the fan in water or other liquids to clean any other parts of the fan.
5. Do not use strong detergents, solvents or chemical cleaners
6. Allow fan to dry thoroughly before use.
7. Apart from cleaning, no other maintenance is required

Do’s and Don’ts

- Do read the entire instruction leaflet before commencing installation.
- Do install each fan with a means for disconnection in all poles in the fixed wiring.
- Do make sure the mains supply is switched off before attempting to make electrical connections or carry out any maintenance or cleaning.
- Don’t install this fan in any window/panel, which is less than 3mm thick.

Guarantee

UK only:
We, Applied Energy Products Ltd., provide a guarantee against faulty parts and manufacture for a period of 3 years from the date of purchase. In the unlikely event of a product breakdown during the guarantee period the product should be returned to the place of purchase or to Applied Energy Products Ltd.

Exclusions: This guarantee does not cover:
- Compensation for the loss of the product or consequential loss of any kind.
- Damage or defects to the product arising from incorrect installation.
- Transportation costs.

This guarantee does not affect your statutory rights

Customers outside UK - see international below.
UK: Xpelair have a comprehensive range of services including:
- Free technical advice help-desk from Engineers on all aspects of ventilation.
- Free design service, quotations and site surveys.
- Service and maintenance contracts to suit all requirements.

Please ask for details:
- By telephone on Techline: +44 (0) 844 372 7766
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