

Do's

- Do - Read all the instructions before commencing installation.
- Do - Install each fan with a double pole isolating switch.
- 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 these fans in any window/panel which is less than 4mm thick.

Guarantee**Customers outside UK - see international below.**

- UK: The fan is guaranteed against defects for 3 years from the date of purchase.
- Xpelair reserve the right to repair or replace at their option.
- Please keep your purchase receipt.
- If you have any problems, contact Xpelair's Head Office at the address shown below.

Technical advice and service**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)8709 000430**
- By fax on Techfax: **+44 (0)8709 000530**
- At the address below.

Head Office, UK Sales Office and Spares

Applied Energy Products Ltd, Morley Way, Peterborough, PE2 9JJ England

Telephone: **+44 (0)1733 456789**
 Fax: **+44 (0)1733 310606**
 Sales/Spares Hotline: **+44 (0)8709 000420**
 Sales/Spares Faxline: **+44 (0)8709 000520**
<http://www.xpelair.co.uk>

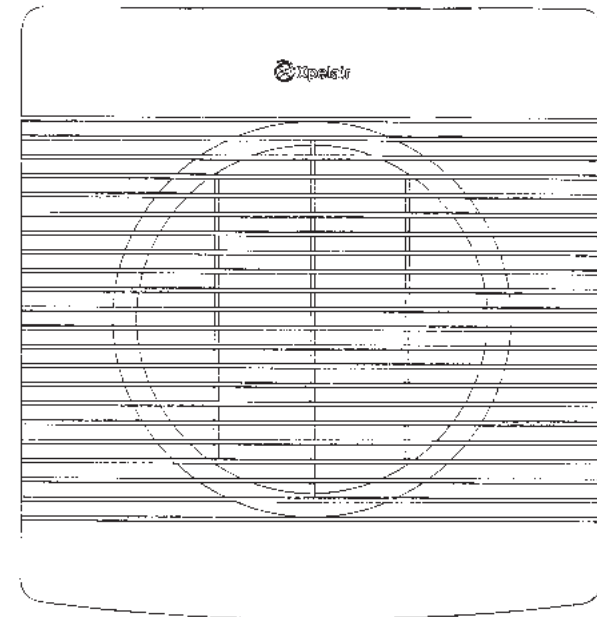
International

- Guarantee: Contact your local distributor or Xpelair direct for details.
- Technical Advice and Service: Contact your local Xpelair distributor.

WX9 & WX12

Installation and operating instructions

Retain for future reference



applied energy



Part No. 22339AA
Issue C



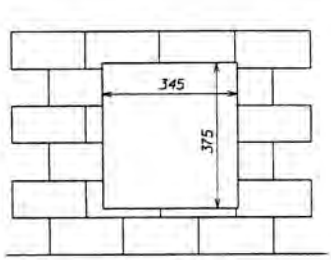


Fig. 1a WX9

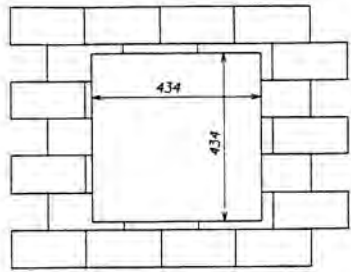


Fig. 1b WX12

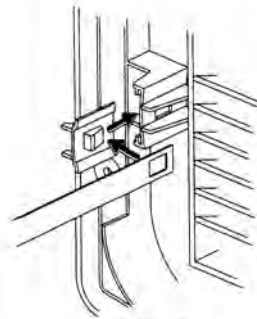


Fig. 2

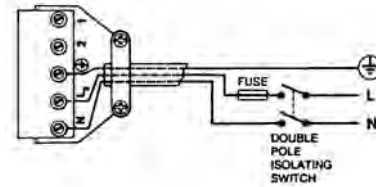


Fig. 6

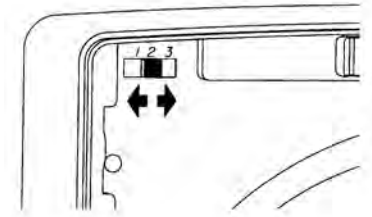


Fig. 7

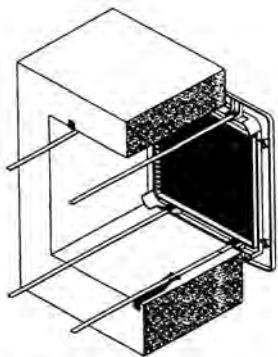


Fig. 3a WX9

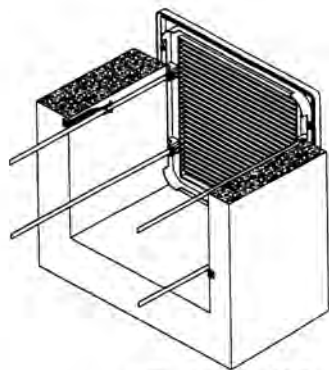


Fig. 3b WX12

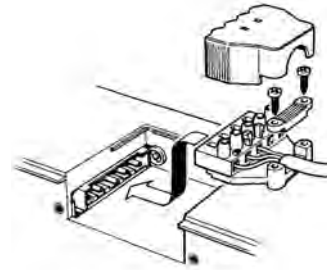


Fig. 8

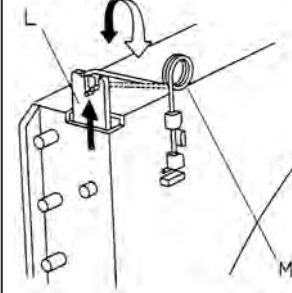


Fig. 9a WX9

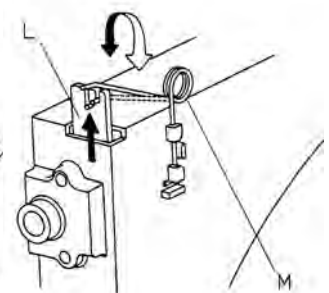


Fig. 9b WX12

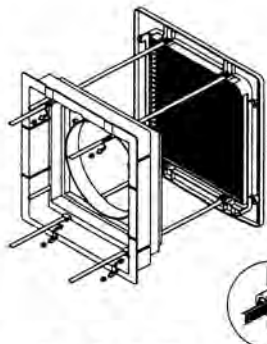


Fig. 4a WX9

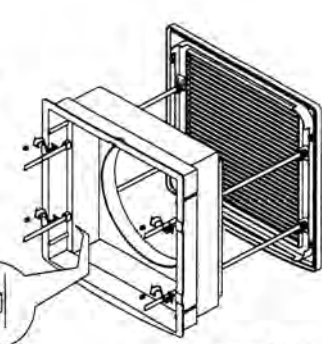


Fig. 4b WX12

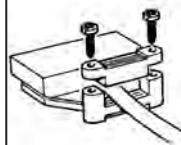


Fig. 5a

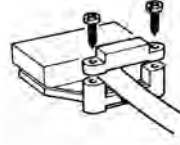


Fig. 5b

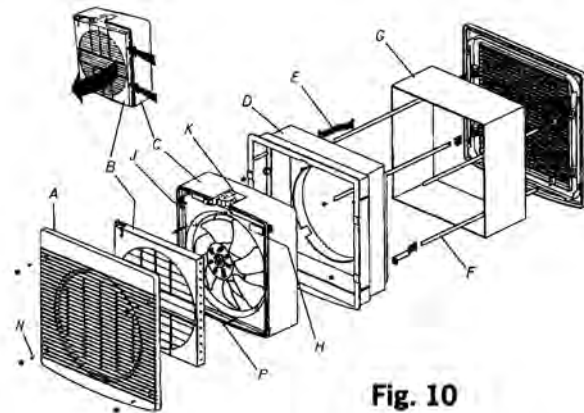
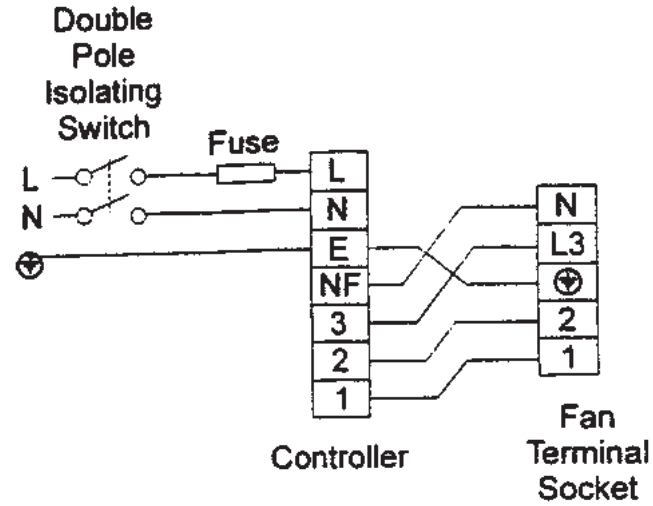
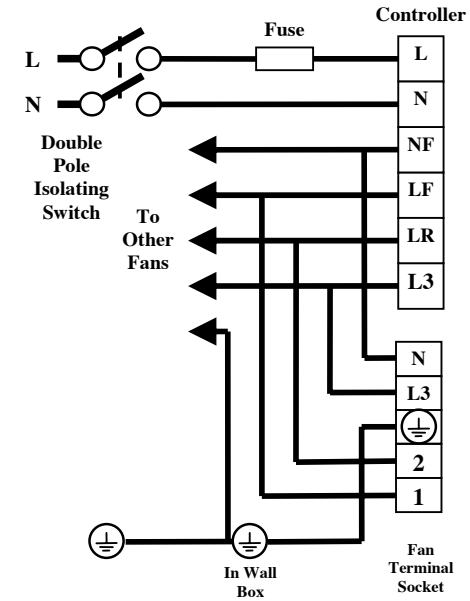


Fig. 10

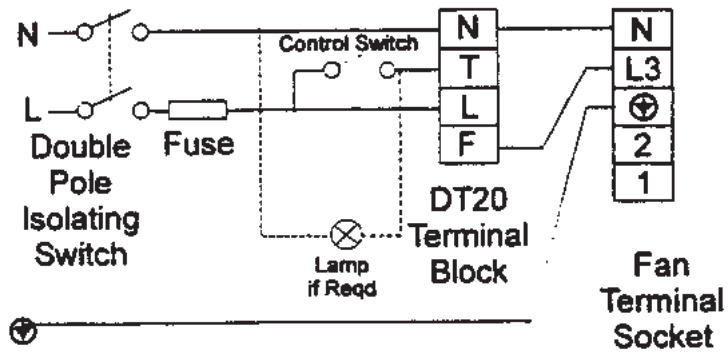
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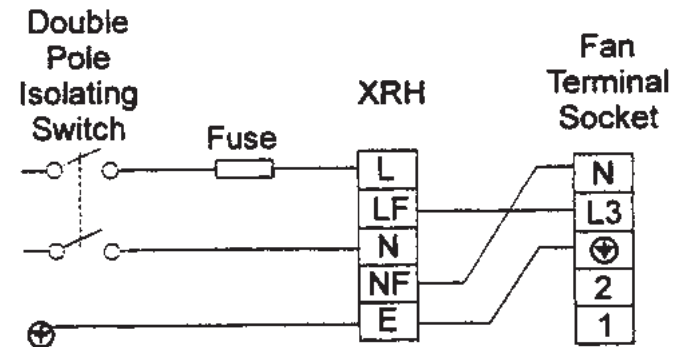
EC6H



DT20



XRH





INSTALLING THE FAN

These appliances are intended for connection to fixed wiring. Check that the electrical rating shown on the fan matches the Mains supply. **WARNING: THESE APPLIANCES MUST BE EARTHED.**

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). It is the installer's responsibility to ensure that the appropriate Building codes of Practice are adhered to.

This appliance is not intended for use by persons (including children and the infirm) 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. Children should be supervised to ensure that they do not play with the appliance.

If you have any queries before installing these products or after they have been installed, call the Xpelair Technical Hotline 08709 000430. Our Engineers are there to help you during Normal office hours (UK only) and may be faxed at all other Times 08709 000530. Customers outside the UK may contact your local Xpelair Distributor.

1 Description

The WX9 and WX12 fans have the following features:

- ◆ Can be flush mounted in a wall.
- ◆ Fitted with silent operation back draft shutters.
- ◆ The WX9 and WX12 fans can be extract, intake or "open shutter only", using an integral Fan Selector Switch.

- ◆ Trickle Ventilation setting.
- ◆ Removal of the inner Grille isolates these fans mechanically.
- ◆ Can be installed with a controller.

If used with a speed controller, these fans can intake or extract at selected speeds or at variable speed depending on the type of controller, if used with an on/off switch, these fans will intake or extract at high speed only.

2 What the installer will need

- ◆ A means for disconnection in all poles must be incorporated in the fixed wiring in accordance with the wiring regulations.

◆ **If metal switch boxes are used, earthing regulations must be followed.**

- ◆ Suitable rated 3-core cable.
- ◆ 6mm Blade Large Screwdriver, 3mm Blade Electricians Screwdriver, No's 1 & 2 Pozidriv Screwdrivers.
- ◆ Masonry drill, Hammer & Chisel (or Core Drill equipment if available). If installing the fan with an on/off switch:
- ◆ On/Off switch.

If installing the fan with a controller:

- ◆ Suitable rated 5-core cable (Available from Xpelair). Note: Please Check the instructions to the controller.

3 Where to locate the Fan

- ◆ Locate it as high as possible.

If installing a WX9:

- ◆ At least 255mm from the edge of the wall or ceiling to the centre of the hole.

If installing a WX12:

- ◆ At least 280mm from the edge of the wall or ceiling to the centre of the hole.

- ◆ As far away as possible from and opposite to the main source of air replacement to ensure airflow across the room (e.g. opposite the internal doorway).

- ◆ Near the source of steam or odours.
- ◆ Not where ambient temperatures are likely to exceed 50°C.
- ◆ **If installed in a kitchen fans must not be mounted immediately above a cooker hob, or eye level grill.**

◆ **When the fan is installed in a room containing a fuel burning appliance, precautions must be taken to avoid the backflow of gases into the room from the open flue of the fuel burning appliance.**

◆ **If the fan is intended to intake air, the inlet grille should be fitted at a distance of at least 0.5metre from the discharge outlet of a sited heating or cooking appliance.**

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

- ◆ **This product must not be installed in zone 0.**

4 Installing the Isolating Switch and Cables

1. Check there are no buried Pipes or Cables e.g. Electricity, Gas, Water behind the Switch location (in the Wall or above the Ceiling).
2. Lay in the Cable from the Isolating Switch to the Fan location via the on/off switch or controller.
3. Lay in the Cable from the Isolating Switch to the point of connection to the Mains Supply.
4. Install the Isolating Switch, and on/off switch or controller.
5. Make all connections within the Isolating Switch.

WARNING: Do not make any connections to the Electrical Supply at this stage.

Xpelair WX9 and WX12 Installation and Operating Instructions

LEAVE THIS INSTRUCTION LEAFLET
WITH THE FAN, FOR THE BENEFIT
OF THE USER.

5 Preparing the hole

If working above Ground Floor level, appropriate safety precautions must be observed.

WARNING: eye protection must be worn during all drilling and chiselling operations.

If installing a WX9:

- 1a. Make sure that the centre of the hole is located at least 255mm from the edges of the wall or ceiling.

If installing a WX12:

- 1b. Make sure that the centre of the hole is located at least 280mm from the edges of the wall or ceiling.

2. Check there are no buried pipes or cables in the wall or obstructions on the outside e.g. Electricity, Gas, Water.

3. Mark the outline of the hole on the wall as shown in Fig. 1a and Fig. 1b.

If core drill equipment is available:

- 4a. Use as directed by Core Drill manufacturer.

If core drill equipment is not available:

- 4b. Cut the hole. Do not cut right through the wall. The recommended method is to drill a series of holes, close together, around the edge of the cutting line and remove the brick between the holes with a chisel.

5. Go outside and cut a hole in the outer wall, repeating the process described above. Ensure alignment.

6 Separate the Fan from the Fan Mounting Box (Fig. 10)

1. Remove the Inner Grille by removing four screws (Item "F").
2. Remove the Back Draught Shutter by unclipping it (Item "B").
3. Unscrew the four cross-headed screws and lift off the Fan Assembly (Item "P").

7 Mounting the Fan Mounting Box and Outer Grille

If working above Ground Floor level, appropriate safety precautions must be observed.

1. Insert four colour matching screw covers (packed separately) in the fixing holes of the Outer Grille.
2. Secure the four ladder strips to the Outer Grille by positioning them over the hook mouldings (packed separately) and snapping these into position (Fig. 2).
3. Position the Outer Grille up to the outside of the wall ensuring the ladder strips protrude through to the interior. This can be done from the inside room.
4. Feed two of the ladder strips through the Retainers (packed separately) diagonally opposite each other and clamp to the inner wall (Fig. 3a and Fig. 3b).
5. Measure the wall thickness.

If installing a WX9:

- 6a. Cut the wall tube so that it is 86mm less than the wall thickness.

If installing a WX12:

- 6b. Cut the wall tube so that it is 130mm less than the wall thickness.
7. Locate the Wall Tube onto the back lip of the Fan Mounting Box (Fig. 10).
8. Offer the Fan Mounting Box to the inner wall face and locate ladder strips into their location fixings (Fig. 4a and Fig. 4b).
9. Pull the ladder strips through, locate the Fan Mounting Box in the wall and ensure the Wall Tube locates onto the Outer Grille.
10. Screw the slotted screws (packed separately) into the pockets of the Fan Mounting Box. (Fig. 4a and Fig. 4b). **Do not overtighten.**
11. Trim the Ladder Strips back to the required length: remove any sharp edges. (If necessary, apply a sealing mastic (not supplied) to the flanges of the Fan Mounting Box and the Outer Grille. This will provide additional seals and take out any unevenness on both wall faces).
12. Refit the Fan Assembly into the Fan Mounting Box. **Do not over tighten.**

8 Wire the electrical connections

1. The Fan Connector parts are packed separately.
2. Remove the two cable clamp screws (Fig. 5a and Fig. 5b).
3. If required, feed the cable through the grommet in order to fit to the cable entry of the Connector Plate.

◆ *If installing with an on/off switch:*

1. Wire the Fan Connector as shown in Fig. 6.
2. Set the Fan Selector Switch to Position 1 for intake, Position 2 for extract or Position 3 for "open shutter only" (Fig. 7).

◆ *If installing with a controller:*

1. Refer to the installation instructions for the controller.
2. If wiring to an existing controller, contact Xpelair Technical Services or in export markets, the Xpelair distributor.
3. Set the Fan Selector Switch to Position 3 if using a controller providing variable speed and/or direction. Otherwise, set the Fan Selector Switch to Position 1 for intake, Position 2 for extract or Position 3 for "open shutter only" (Fig. 7).

9 Fitting the Cable Clamp

For cable up to 8mm diameter, clamp the cable as shown in Fig. 5a. For cable equal to or greater than 8mm and up to 11.5mm diameter, clamp the cable as shown in Fig. 5b. For cable greater than 11.5mm diameter use the conduit entry provided (Europe only).

10 Fitting the Connector to the Fan

1. Ensure the cable is firmly retained by the clamp
2. Assemble the Fan Connector by snapping the Cover over the Connector (Fig. 8).
3. Plug the Fan Connector into the Fan Assembly.
4. Refit the Backdraught Shutter.
5. Refit the Inner Grille.
6. Insert four screw covers (packed separately) in the fixing holes in the Inner Grille. When removing the covers, place a 3mm blade electrician's screwdriver into the slot and lever off the cover.
7. **Switch off the mains electrical supply and remove fuses.**
8. Connect the cable from the isolation switch to the electrical supply wiring.
9. Replace the fuses, and switch on the mains electrical supply.
- ◆ **For fixed wiring circuits, the protective fuse for the appliance must not exceed 5A.**

USING YOUR FAN

11 Operating the Fan

Switch operated:

To switch on an off, use the switch on the wall or ceiling.

Controller operated:

Refer to the instructions for the controller.

◆ **The shutters are operated by a silent thermo-actuator which has a time delay on opening (30 - 50 secs) and closing (3 mins).**

12 Trickle Ventilation

◆ Trickle Ventilation is equivalent to that provided by an air brick or similar device.

1. Remove the Inner Grille and Back Draught Shutter (see section 5).
- ◆ *To allow trickle ventilation:*
2. Release the Shutter Return Spring as shown in Fig. 9.
3. Re-position the Shutter Return Spring into the L shaped slot.
4. Raise the Operating Bar to latch into position.
- ◆ *To fully close the shutters and stop any backdraught:*
2. Unlatch the Shutter Return Spring and re-position into the short slot.
3. Refit the Backdraught Shutter and Inner Grille.

LOOKING AFTER YOUR FAN

13 Cleaning

1. Before cleaning, isolate the fan from the mains supply. Allow 3 minutes for the impeller to stop rotating and the powered shutter to close.

2. Remove the inner grille and back-draught shutter (see section 6).

WARNING: Fan will still operate when the inner grille is removed.

3. Remove the impeller by unscrewing the knob at the front of the impeller anticlockwise.

4. Clean the inner grille, back-draught shutter and impeller by immersing in warm soapy water. Dry thoroughly.

Do not immerse the fan in water or other liquids to clean any other parts of the fan.

5. Refit the impeller by locating it over the motor shaft and aligning the arrow on the impeller with the white dot on the motor. Make sure the impeller is seated correctly.

6. Refit the knob making sure the ratchet at the rear of the knob is fully engaged.

◆ **Never use strong solvents to clean the fan.**

◆ Apart from cleaning, no other maintenance is required.

KEY (For Fig. 9 and Fig. 10)

Inner Grille....."A"	Rating Plate....."H"
Back Draught Shutter....."B"	Selector Switch....."J"
Fan Assembly....."C"	Customer Connector....."K"
Fan Mounting Box....."D"	Operating Bar....."L"
Retainer....."E"	Shutter Return Spring....."M"
Ladder Strips....."F"	Screws (M4 x 10mm)....."N"
Wall Tube....."G"	Screws (Inc. 8 x 55mm)....."P"

For Australia and New Zealand

Children must be supervised to ensure that they do not play with the appliance.

Young children and infirm persons must be supervised when using the appliance.